PART B – SHIRE OF NORTHAM

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

3.1 Future Lot 838 on Lot 881 (No.239) Yilgarn Avenue, Malabaine – Proposed medicinal cannabis hydroponic growing facility (unlisted use) – DAP/25/02943

4. Form 2 DAP Applications

Nil

5. Section 31 SAT Reconsiderations

Nil

FUTURE LOT 838 ON LOT 881 (#239) YILGARN AVENUE MALABAINE – PROPOSED MEDICINAL CANNABIS HYDROPONIC GROWING FACILITY – UNLISTED USE

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Regional DAP
Local Government Area:	Shire of Northam
Applicant:	Hidding Urban Planning
Owner:	Procon Developments (Australia) Pty Ltd
Value of Development:	$3 million ☐ Mandatory (Regulation 5) ☒ Opt In (Regulation 6)
Responsible Authority:	Shire of Northam
Authorising Officer:	Chadd Hunt, Executive Manager Development & Community Services
LG Reference:	P25075
DAP File No.:	DAP/25/02943
Application Received Date:	4 July 2025
Report Due Date:	22 October 2025
Application Statutory Process Timeframe:	90 Days, with an additional 20 days agreed.
Attachment(s):	1. Development Application - DAP Form 1 2. Location Plan 3. Certificate of Title 4. Applicant's Cover Letter 5. Development Plans: TP00 – Title Page and Site Locality Plan TP01 – Master Plan TP02 – Lot Plan TP03 – Site Plan TP04 – Ground & First Floor Plans TP05 – Roof Plan TP06 – Elevations TP07 – Sections 6. Landscape Plan 7. Stormwater Management Plan 8. Bushfire Management Plan 9. WAPC Subdivision Approval 10. First Advertising - Resident Submission

	11. First Advertising - Applicant Response to Resident Submission 12. First Advertising - Schedule of Submissions 13. Applicant's Update and Justification 14. Second Advertising - Resident Submission 15. Second Advertising - Applicant Response to Resident Submission 16. Second Advertising – Schedule of Submissions		
Is the Responsible Authority Recommendation the same as the Officer Recommendation?	☒ ☐	Yes N/A	Complete Responsible Authority Recommendation section.
	☐	No	Complete Responsible Authority and Officer Recommendation sections.

Responsible Authority Recommendation

That the Regional DAP resolves to:

Part 1

ACCEPT that the DAP Application reference DAP/25/02943 is appropriate for consideration as a 'Medicinal Cannabis Hydroponic Growing Facility' land use class not listed and is compatible with the objectives of the 'Light & Service Industry Zone', in accordance with clause 3.2.7 of the Shire of Northam Local Planning Scheme No. 6 (LPS6).

Part 2

APPROVE the DAP Application reference DAP/25/02943 and accompanying plans of development:

- TP00 – Title Page and Site Locality Plan,
- TP01 – Proposed Master Plan,
- TP02 – Proposed Lot Plan,
- TP03 – Proposed Site Plan,
- TP04 – Proposed Ground Floor and First Floor Plan,
- TP05 – Proposed Roof Plan,
- TP06 – Proposed Elevations,
- TP07 – Proposed Sections,
- DWG L-01 Rev 0 Landscape Plan, and
- Lot 838 AvonWest – Stage 1 #239 Yilgarn Avenue, Northam Stormwater Management Plan Rev B.

In accordance with clause 68 (Schedule 2 - deemed provisions) of the Planning and Development (Local Planning Schemes) Regulations 2015, and the provisions of the Shire of Northam Local Planning Scheme No. 6, subject to the following conditions:

General Conditions

1. The use of the premises is to be for a 'Medicinal Cannabis Hydroponic Growing Facility' that is to be operated generally within the scope of an 'industry' type of land use activity, as defined in the Shire of Northam's Local Planning Scheme No. 6 accordingly:

   "industry" means premises used for the manufacture, dismantling, processing, assembly, treating, testing, servicing, maintenance or repairing of goods, products, articles, materials or substances and includes premises on the same land used for -

   (a) the storage of goods;

   (b) the work of administration or accounting;

   (c) the selling of goods by wholesale or retail; or

   (d) the provision of amenities for employees, incidental to any of those industrial operations;

   A change of use from that outlined above shall require the approval of the local government.

2. The office shall be incidental to the predominant use, being the 'Medicinal Cannabis Hydroponic Growing Facility' and shall not be used for activities unrelated to the approved land use.

3. This decision constitutes development approval only and is valid for a period of four (4) years from the date of approval. If the development is not substantially commenced within that period, the approval shall lapse and be of no further effect.

4. In the event of any inconsistency between the stamped and approved development plans and a requirement of the conditions below, the conditions shall prevail.

5. The development must be carried out in accordance with the stamped and approved development plans to the specification and satisfaction of the local government, except as modified by these conditions or any approved amendments thereafter.

Conditions to be Met Prior to Commencement of Works

6. A detailed Schedule of External Materials, Finishes, and Colours must be submitted to and approved in writing by the local government. The approved schedule is to be implemented as part of the development.

7. A Construction Management Plan must be submitted and approved to the specification and satisfaction of the local government. The plan is to address, but not be limited to the following:

   (a) construction access and site management,

   (b) dust suppression,

   (c) hours of operation,

(d) noise management,

(e) contractor parking,

(f) waste management, and

(g) protection of street trees and public infrastructure.

8. A revised Landscape Plan must be submitted to include irrigation details that are approved to the specification and satisfaction of the local government prior to commencement of any landscaping works.

9. Stormwater management measures must be designed and implemented to the specification and satisfaction of the local government in accordance with the approved Stormwater Management Plan (Rev B) prepared by Porter Consulting Engineers, including the installation of:

(a) subsurface detention system,

(b) rainwater tanks,

(c) orifice-controlled outlet, and

(d) trapped pits and sediment control devices.

10. Any proposed fencing must be constructed to a minimum standard of black powder coated garrison / palisade or black PVC coated chain-link mesh (or similar) style of fence that is 1.8m up to a maximum height of 2.4m above finished ground level; or as otherwise approved by the local government.

Conditions to be Met Prior to Occupation

11. All vehicle access, manoeuvring, loading and parking areas are to be constructed, sealed, kerbed, and drained in accordance with the approved development plans to the specification and satisfaction of the local government.

12. Landscaping must be installed, completed and established in accordance with the revised detailed Landscape Plan, as approved to the specification and satisfaction of the local government, prior to occupation of the development.

13. Stormwater management and drainage infrastructure must be constructed and operational in accordance with the approved Stormwater Management Plan (Rev B) prepared by Porter Consulting Engineers, to the specification and satisfaction of the local government.

14. The developer is required to submit and strictly adhere to an approved Odour Management Plan (OMP) detailing the strategies and procedures for managing odour emissions, to the specification and satisfaction of the local government. This plan must outline how operations will prevent unacceptable impacts on surrounding properties and sensitive receptors.

Conditions Requiring Ongoing Compliance

15. All loading and unloading of goods, equipment or materials shall occur within the designated loading areas, as shown on the approved development plans, and shall be wholly contained within the lot / development site boundary.

16. All waste generated on-site must be managed to the specification and satisfaction of the local government as follows:
    (a) organic waste is to be directed to the approved Wastewater Treatment Facility on Lot 837, and
    (b) residual general waste is to be stored in screened bins and removed off-site by a licensed contractor.

17. Landscaping must be maintained in good condition and in accordance with the approved Landscape Plan to the specification and satisfaction of the local government at all times. Any dead, diseased, damaged, or removed plants must be replaced in a timely manner to the satisfaction of the local government.

18. Stormwater management and drainage infrastructure must be maintained in working order at all times, and all stormwater must be contained on-site and disposed of in accordance with the approved Stormwater Management Plan (Rev B) prepared by Porter Consulting Engineers, to the specification and satisfaction of the local government. No stormwater is to discharge from the premises onto adjoining properties or public roads.

Advice Notes

1. If the development is not substantially commenced within a period of four (4) years, or another period as specified in the approval after the date of the determination, the approval will lapse and be of no further effect.

2. Where an approval has so lapsed, no development must be carried out without the further approval of the local government having first been sought and obtained.

3. If an applicant or owner is aggrieved by this determination, there is a right of review by the State Administrative Tribunal in accordance with Part 14 of the *Planning and Development Act 2005*. An application must be made within 28 days of the determination.

4. A development approval is not an approval to commence any works associated with the development. A building permit must be obtained prior to the commencement of any site and building works. Please liaise with the Shire of Northam's Building Services department to ascertain the requirements to allow for a building permit to be issued.

5. An occupancy permit must be issued by the Shire of Northam before any Class 2 to Class 9 building can be legally occupied or use of the development is permitted, in accordance with the *Building Act 2011*.

6. This development approval is for the land use only. A medicinal cannabis licence and relevant permits are required to be issued in order to grow, produce or manufacture cannabis for medicinal or scientific purposes in accordance with the *Narcotic Drugs Act 1967* and associated Narcotic Drugs Regulation 2016 before starting activities. The applicant is advised to liaise with the federal government Office of Drug Control (ODC) regarding completing a medicinal cannabis licence application for body corporate applicants.

7. The use of the site is to comply with the Environmental Protection (Noise)

Regulations 1997 at all times. The applicant should ensure that the development complies with all other relevant legislation, including but not limited to, the *Environmental Protection Act 1986* and Regulations, *Health Act 2000* and Regulations, and the National Construction Code (NCC), as amended.

8. Signage for the development / premises is subject to a separate development application and is not included as part of this approval.

9. Fencing must be complaint with the Shire of Northam Fencing Local Law 2019. Specifically, that the use of barbed wire in boundary fencing of industrial premises must be greater than 2.0 metres above ground level. Any fence post angled (or cranked) towards the outside of the lot must be set back from the property boundary in order avoid encroachment on to adjoining land. Further, that the use of razor wire or electrified fencing requires the granting of a permit under Part 5 of the Local Law by the Shire of Northam.

10. The applicant is advised to liaise with all relevant service providers (including Western Power, Water Corporation and private contractors) to ensure servicing arrangements are coordinated and compliant with relevant regulations.

Details: outline of development application

Region Scheme:	N/A
Region Scheme Zone / Reserve:	N/A
Local Planning Scheme:	Shire of Northam Local Planning Scheme No. 6
Local Planning Scheme Zone / Reserve:	'Light & Service Industry Zone'
Structure Plan / Precinct Plan:	N/A
Structure Plan / Precinct Plan Land Use Designation:	N/A
Land Use Class and Permissibility:	Unlisted use of 'Medicinal Cannabis Hydroponic Growing Facility'.
Lot Size:	1.8083 ha portion (future Lot 838) of Lot 881 on DP 30581.
Existing Land Use:	Vacant land (n.b. undeveloped lot within approved subdivision).
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

Proposal:

The application seeks development approval for the construction and operation of a hydroponic growing facility for the purpose of producing medicinal cannabis products on future Lot 838, located within the newly subdivided AvonWest Industrial Estate in Northam. Key elements of the proposal in summary include:

Proposed Land Use:	Medicinal Cannabis Hydroponic Growing Facility (n.b. land use class not listed).
Proposed Net Lettable Area:	3,299m² gross floor area (GFA).
Proposed No. Storeys:	Two storeys (ground floor + mezzanine office level).
Proposed No. Dwellings:	Not applicable.

The facility includes growing rooms, drying and storage areas, packaging and warehouse space, a loading dock (i.e. for 19m vehicle access), parking for three (3) articulated trucks, rainwater tanks (3 x 300,000L), hardstand, 18 car parking bays, landscaping, and 2.4m high perimeter security fence.

The hydroponic growing facility will be used for the commercial production of pharmaceutical grade medicinal cannabis. If approved, the proponent will manufacture the medicinal cannabis product under license and with permit(s) issued by the federal government's Office of Drug Control (ODC).

Background:

- The subject site forms part of Lot 881 (#239) Yilgarn Avenue, Malabaine, which is currently undergoing staged subdivision as part of the AvonWest Industrial Estate.
- Subdivision approval (WAPC Ref: 200673) was issued on 15 November 2024, enabling the initial creation of large super lots. The proposed development is located on future Lot 838 within the industrial estate.
- Construction of the AvonWest subdivision is underway, with earthworks and services in progress.
- The facility is to be operated by Vitaponix, a Netherlands based company which produces a wide range of agricultural nutrition products designed to enhance plant growth, improve nutrient uptake and increase crop yields.
- The context of surrounding land use activities includes:
  - vacant industrial lots (under subdivision),
  - existing Main Roads Western Australia (MRWA) road train assembly area,
  - service station (Lot 860), and
  - proposed wastewater treatment facility (n.b. recently approved by the Regional DAP on future Lot 837).

Legislation and Policy:

Legislation

- *Planning and Development Act 2005*,
- Planning and Development (Local Planning Schemes) Regulations 2015, deemed provisions (Schedule 2),
- Shire of Northam Local Planning Scheme No. 6 (LPS6), and
- Cth *Narcotic Drugs Act 1967*.

State Government Policies

- State Planning Policy 3.7 Bushfire (SPP3.7),
- State Planning Policy 4.1 Industrial Interface (SPP4.1),
- State Planning Policy 7.0 Design of the Built Environment (SPP7.0),
- Transport Impact Assessment Guidelines (WAPC, 2016),
- Better Urban Water Management (WAPC, 2008), and
- EAP Guidance Statement No. 3 - Separation Distances Between Industrial and Sensitive Land Uses (June 2005).

Local Policies

- Shire of Northam Local Planning Strategy (2024),
- Local Planning Policy 17 - Industrial Development, and
- Local Planning Policy 20 - Advertising of Planning Proposals.

Commonwealth Narcotic Drugs Act

The ODC, as part of the Commonwealth Department of Health, Disability and Aging, is responsible for regulating the cultivation and production of cannabis and related products for medicinal purposes under the Cth *Narcotic Drugs Act 1967*.

The ODC assesses all applications for cannabis licences and relevant permits when deciding whether to grant approval to grow, produce or manufacture cannabis in Australia. The ODC also performs inspections of cannabis cultivation, production and manufacturing sites in order to monitor compliance with the Act, associated Narcotic Drugs Regulation 2016, and with the specific conditions of each licence.

The ODC must refuse to grant a licence if not satisfied that the applicant will:

- take all reasonable measures to ensure the physical security of cannabis, and
- ensure that there are suitable security arrangements at all locations where activity related to the licence will occur.

Consultation:

For proposals that fall under the category of a land use class not listed in the Scheme, clause 3.4.2 of the Scheme and likewise clause 18(4) of the model provisions apply, as such the determining authority may:

(a) determine that the use is consistent with the objectives of the 'Light & Service Industry Zone' and may be permitted,

(b) determine that the use may be consistent with the objectives of the zone and advertise the application for public comment, or

(c) determine that the use is not consistent with the objectives of the zone and not permitted.

Pursuant to clause 3.4.2 (b) of the Scheme, the local government determined that the proposed unlisted use was consistent with the objectives of the 'Light & Service Industry Zone'; and therefore, followed the advertising procedures of clause 64 of the deemed provisions in considering the application for development approval.

Consequently, the proposal was classified as a 'complex application' under clause 64 of the deemed provisions, given that it involved a land use class not listed in the zoning table, with public advertising for a minimum period of 28 days in accordance with clause 64(3) of the deemed provisions.

Public Consultation

Two periods of public advertising were undertaken, as the initial public notice was for a 'hydroponic growing facility', whereas the second period explicitly addressed that the hydroponic growing facility was for the production of medicinal cannabis products containing tetrahydrocannabinol (THC).

The following methods of consultation were employed:

Method	Detail
Website Notice:	Full proposal details, cover letter, and plans uploaded to the local government website.
Letters to Neighbours:	Letters sent to abutting landowners with a submission form.
Advertising Durations:	Two periods of 28 days each: • the first advertising period commenced on 21 August and closed on 18 September 2025, and • the second advertising period commenced on 21 October and closed on 18 November 2025.
Submissions Received:	Two for the first consultation period and one for the second.

Three submissions on the proposal were received, two being an objection from the same resident and one in support of the development from the Northam Race Club (see attachments 10 to 16 for submissions and responses).

Planning Assessment:

Background Information

The applicant has provided the following statement of intent for the proposal:

The proposed hydroponic growing facility (medicinal cannabis facility) will

comprise a specific building for the purposes of cultivating medicinal cannabis (i.e. medicine), but also includes other components associated with drying, trimming and storage, which requires a high level of control, according to government regulation.

The overall activity is considered to be classified as a light industrial activity to produce a medicinal product, as a specialised use and should be distinguished from agriculture. Since the facility requires specialised infrastructure, energy and specialised equipment, as well a secure environment, it is considered entirely appropriate in the light and service industry zone. The ODC also requires this type of operation to occur within industrial areas.

Zoning and Land Use

As outlined above, the subject land is included in the 'Light & Service Industry Zone' under the Shire of Northam Local Planning Scheme No. 6 (LPS6).

In categorising the proposal as being a land use class not listed under LPS6, it can be noted from the State Administrative Tribunal (SAT) decision in Kieu and Shire of Serpentine-Jarrahdale [2016] WASAT 84, dealing with hydroponics, that:

[Each] proposal must be looked at on its own merits. The classification of the proposed uses should not be carried out in either a mechanical or in an arbitrary way.[1]

In the WASAT 84 case, the term 'hydroponics' was at that time a listed land use, albeit not defined, in the Shire of Serpentine-Jarrahdale Town Planning Scheme No. 2. As such, the SAT determination reiterated that in circumstances where a proposal appears to fall within the general terms of more than one land use class, the tribunal adopted the 'best fit' approach.

Notwithstanding, the term hydroponic(s) is not defined or addressed as a land use category in the Shire of Northam's LPS6 nor under the model provisions. Hence, this assessment has relied upon the common definition of the word hydroponic(s) as given in the Macquarie Dictionary to mean:

the cultivation of plants by placing the roots in liquid nutrient solutions rather than in soil; soilless growing of plants.

Under LPS6 and the model provisions the term 'agriculture - intensive', which is a not permitted 'X' use in the 'Light & Service Industry Zone', is defined as follows:

premises used for commercial production purposes, including outbuildings and earthworks, associated with any of the following -

(a) the production of grapes, vegetables, flowers, exotic or native plants, or fruit or nuts;

(b) the establishment and operation of plant or fruit nurseries;

(c) the development of land for irrigated fodder production or irrigated pasture (including turf farms); or

(d) aquaculture.

[1] Gull Petroleum (WA) Pty Ltd v Nashville Investments Pty Ltd [1999] WASCA 12.

It is considered that the proposed development, while incorporating hydroponics as the method for producing a naturally occurring medicinal product (i.e. cannabis) as a pharmaceutical ingredient, does not naturally fall within the 'agriculture – intensive' categorisation. Therefore, the proposal can reasonably be considered as an 'unlisted use'. This determination was made on the basis that the hydroponic process is a component of the overall operations of the proposed facility - involving certified good manufacturing practices (GMP) for production of high value pharmaceutical grade cannabis, with industrial built form and land use characteristics involving:

- high security cultivation,
- laboratory testing,
- research and development,
- product processing and packaging, and
- warehousing and distribution.

Objectives of the Light & Service Industry Zone

The objectives of the 'Light & Service Industry Zone' (LPS6, clause 3.2.3) are:

- To provide for a range of light and service industries, including warehousing and distribution, that will not detrimentally impact nearby land uses.
- To encourage industries which contribute to the local employment base and support the rural and regional economy.

The proposed Medicinal Cannabis Hydroponic Growing Facility aligns with these objectives on the basis that it will:

- Operate in a controlled, enclosed environment with minimal emissions or impacts on surrounding uses to create pharmaceutical grade medicine.
- Contribute to the value-adding of cultivated inputs within a high-tech, employment-generating facility.
- The activity will be contained within an enclosed high security warehouse type facility with a relatively small footprint (0.33ha).
- The facility incorporates logistics, production, warehousing and distribution activities which align with the intent of the AvonWest Industrial estate.

Strategic Planning Implications

The Shire of Northam Local Planning Strategy (2024) identifies the need to encourage and support economic diversification through the development of diversified commerce and industry sectors – with flexibility to attract and accommodate new desired commercial and industrial activities. The strategy also identifies the need to foster agribusiness and associated value adding locally as a key economic driver.

Under the Strategy the subject land is designated as being for future light/service commercial/rural enterprise. The proposed facility is therefore consistent with the objectives of the Strategy; that being, a significant addition to the Shire's economy by providing greater economic diversity and facilitating the growth of high value / high technology clean industries.

Locality, Built Form and Site Layout

The subject site is located within the proposed AvonWest Industrial Estate, situated approximately 4 kms east of the Northam town centre, with Great Eastern Highway on the NE boundary and Yilgarn Road forming the southern boundary. To the west the estate abuts the Northam Racing Club and adjoining 'Rural Zone' land (see Figures 1 to 3).

Figure 1: Scheme Map.

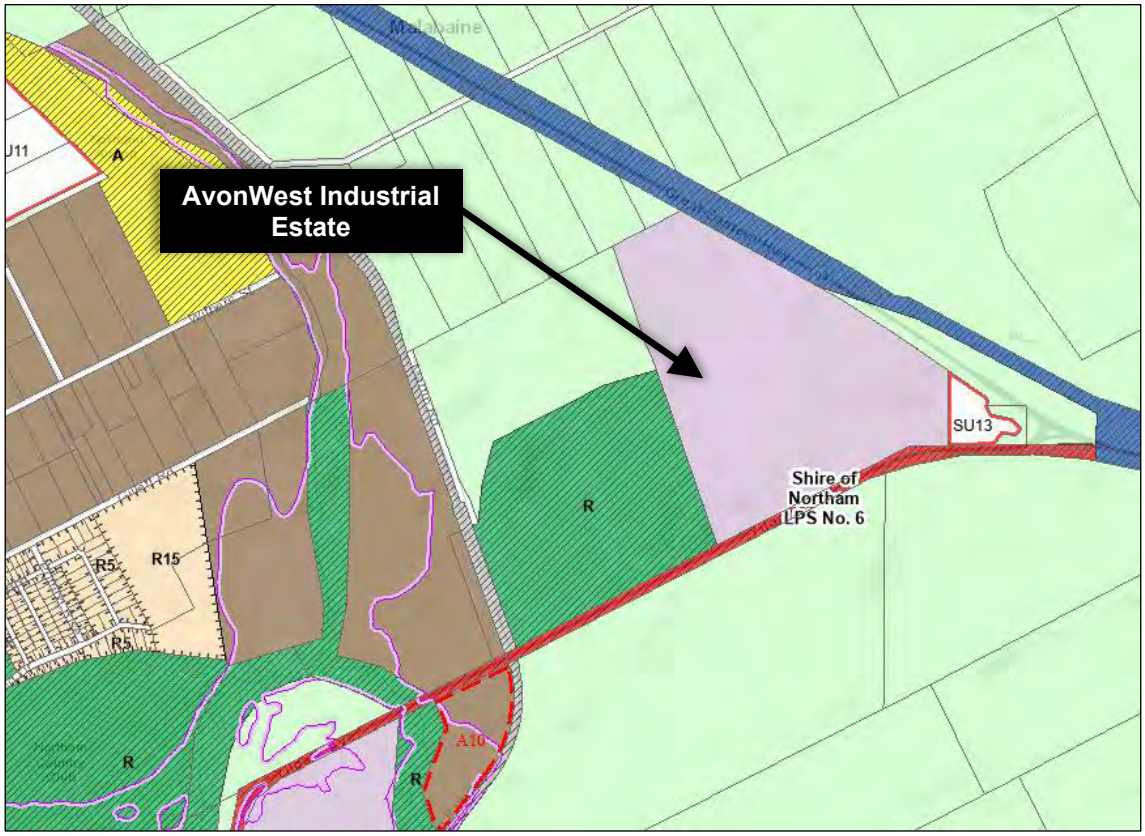


Figure 2: Locality Plan.

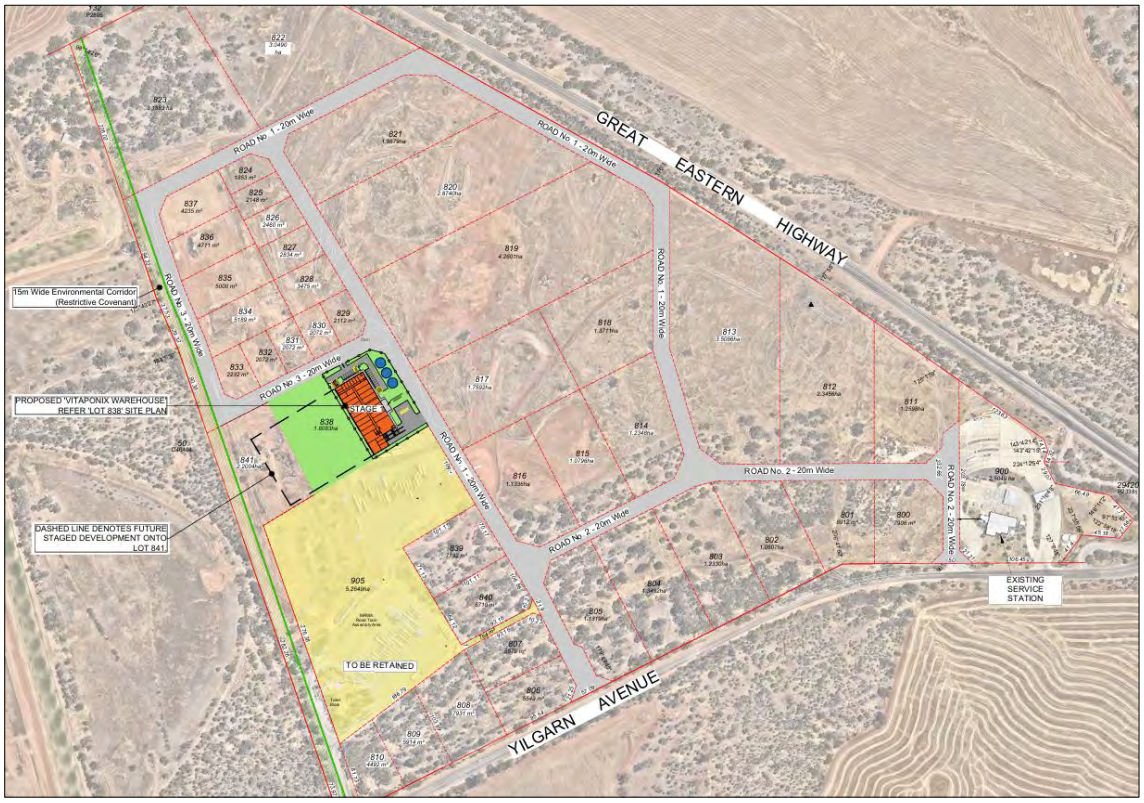
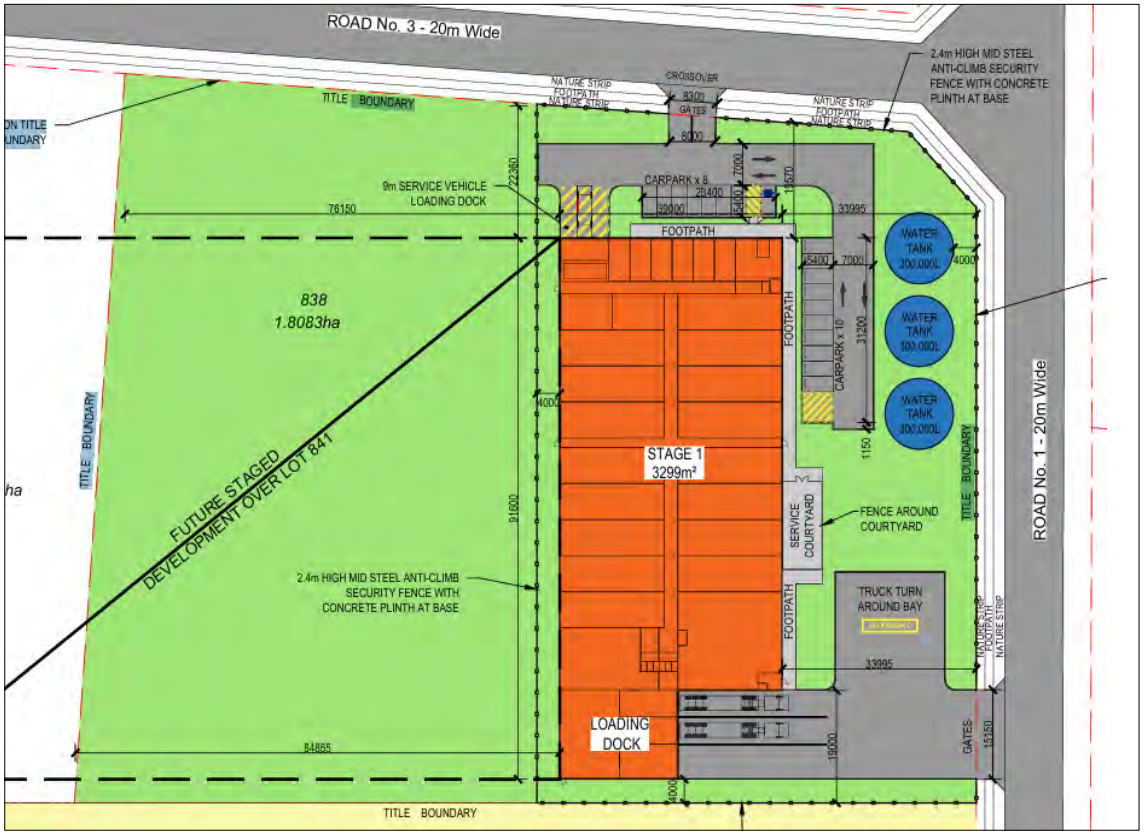


Figure 3: Site Plan.



The development will be the first project to be established within the AvonWest Industrial Estate, for which subdivision approval was granted on 15 November 2024. AvonWest will be a 62 hectare logistics estate designed to integrate with both interstate rail freight networks and Restricted Access Vehicle (RAV7) road network.

The proposed facility's built form consists of a 3,299m² concrete tilt-up building, constructed over two levels, comprising growing rooms, drying/packaging areas, storage, and administration.

Key built form considerations include:

- **Building Height:** 9.0m to apex, consistent with industrial bulk scale expectations.
- **Setbacks:** large setbacks (19.57m to north and 33.99m to east), facilitating landscaping and circulation.
- **Materials:** painted concrete with timber cladding accents and articulated façades facing both street frontages.
- **Security:** 2.4m high anti-climb perimeter fencing with access controlled gates.
- **Signage:** the submitted plans indicate signs located on buildings on the two road frontage facades; however, no details of materials, lighting, colours or content have been provided. The proposed scale of the signage is outside the parameters set out under Schedule 5 – Exempted Advertisements. A separate signage application will be required.

The design is considered to be appropriate for its context and is not expected to adversely impact adjoining industrial lots. Building articulation, landscaping, and large setbacks assist in mitigating bulk and enhance the visual quality of the estate.

Vehicle Access, Parking and Servicing

- **Access:** dual vehicle access points from the northern and eastern frontages to future subdivisional roads.
- **Parking:** 18 sealed car parking bays provided (i.e. staff and visitors), sufficient for current and foreseeable demand.
- **Servicing:**
  - dedicated loading docks (northern and southern ends),
  - truck access for a 19m semi-trailer is accommodated via on-site turnaround area, and
  - seven delivery movements per week and two incoming truckloads per week are projected.

Given the low volume and nature of vehicle movements, the proposal qualifies as a 'low impact development' under the WAPC's Transport Impact Assessment Guidelines – Volume 4.

The amount of traffic likely to be generated in relation to capacity of the local road network and probable effect on traffic flow and safety is expected to be minimal, with approximately:

- two (2) deliveries per week into the facility by a 19.0m semi-trailer vehicle, and
- seven (7) deliveries out from the facility per week by a dispatch van.

Therefore, the assessed volume of traffic generation is considered to be acceptable, and a Transport Impact Assessment (TIA) is not considered to be necessary.

Landscaping and Visual Amenity

The submitted detailed landscape plan proposes extensive native planting within the northern and eastern street setback areas. A total of 1,016 plants including trees, shrubs, groundcovers and native grasses will be installed. Notable species include:

- *Eucalyptus accedens*, *E. torquata*, *Melaleuca nesophila*, *Dianella revoluta*; and
- groundcovers such as *Grevillea laurifolia* ('royal mantle') and *Kennedia prostrata*.

The planting schedule meets standard expectations for industrial landscaping and will contribute to softening the built form and enhancing visual amenity.

The proposed development is considered to be compatible with the surrounding area and the industrial estate.

Stormwater Management

A Stormwater Management Plan (Rev B) has been prepared by Porter Consulting Engineers in accordance with the AvonWest Urban Water Management Plan (UWMP). Key features include:

- **On-site detention:** 2m³ storage capacity for every 65m² of lot area provided,
- **Reuse:** roof runoff collected via downpipes into three 300,000L water tanks for re-use in plant growing;
- **Quality Treatment:** use of trapped pits and baffles to manage sediment and larger particulates; and
- **Offsite Discharge:** controlled via orifice plate into street drainage network.

The proposal complies with the UWMP requirements and will not adversely impact surrounding drainage infrastructure.

Bushfire Risk Management

The locality is located within a designated bushfire prone area. The Bushfire Management Plan (BMP) previously prepared for the AvonWest subdivision applies to the subject site. The BMP has been accepted by the Shire of Northam. As such, it can be noted accordingly:

- future Lot 838 is expected to be within a BAL-12.5 or BAL-19 zone,
- structure is constructed of non-combustible materials (concrete panels),
- site layout supports vehicle turnaround and emergency access, and
- no habitable structures are proposed.

The bushfire risk is considered appropriately mitigated through prior subdivision design and the industrial nature of the use.

Servicing and Infrastructure

- **Water:** reticulated supply via Water Corporation as part of new infrastructure provided under subdivision.
- **Wastewater:** connected to the AvonWest Wastewater Treatment Facility (approved RDAP DAP/25/02881).
- **Electricity:** provided via underground service.
- **Waste Management:**
  - 90% organic (liquid) waste treated at the WWTF, and
  - 10% general waste removed off-site by licensed contractor.

All essential services are available and appropriately planned.

Potential Off-Site Impacts

The development site is not located adjacent to waterways or sensitive land uses. As such, there are generally no known or potentially significant impacts on the natural environment or water resources are anticipated.

Cannabis Odour

Literature published on the commercial growing of medicinal cannabis (e.g. Seltenrich, N., June 2022, 'Odor Control in the Cannabis Industry: Lessons from the New Kid on the Block', *Environmental Health Perspectives* (EHP)), indicates that concerns exist about odours produced especially during flowering, which typically lasts 4-5 weeks before harvest, and subsequent processing, which can take another 3-4 weeks.

The journal article by Seltenrich (2022) states that regardless of method, cannabis grown both indoors and outdoors releases odours throughout its growing cycle, especially just prior to harvest.

The applicant has advised that:

> *Through the combined use of multi-stage filtration, ARC technology, and VOC-destructive filters, the system ensures that no detectable VOCs or odours are exhausted from the building.*

Notwithstanding the above assurance, the proposed facility will be one of the first business activities to be established in the new industrial park; and as such, it would be prudent to require an Odour Management Plan (OMP) be submitted detailing the strategies and procedures for managing odour emissions. Noting that odour emissions are also addressed and monitored by the ODC.

Summary Assessment

An assessment of the applicable provisions of LPS6, including the deemed provisions and relevant local planning policies has been carried out as follows:

Provision	Requirement	Proposal	Assessment
LPS6 cl. 1.6	Aims of the Scheme include the following:	The proposed development will produce and distribute a medicinal	The proposal accords with the aims of the Scheme on the basis

Provision	Requirement	Proposal	Assessment
	(e) reinforce the Northam townsite's role as a regional centre providing shopping, commercial, industrial, civic, educational, administrative and welfare services to the surrounding region.	grade pharmaceutical product.	that: The development will make a contribution to local employment opportunities and the diversification of the local economy.
LPS6 cl. 3.3	Zoning Table: 'Light & Service Industry Zone'.	Land use of 'Medicinal Cannabis Hydroponic Growing Facility' is a use class not listed in the zoning table.	Advertising was undertaken in accordance with cl. 64 of the deemed provisions.
LPS6 cl. 4.5 cl. 4.28.4	Site and development standards: Building setbacks required are: • front - 7.5m, • rear - 7.5m, and • side - 4.0m.	Lot / development site area as proposed is 8,800m². Setbacks to: • southern boundary is 4.0m. • eastern road frontage setback is 34m. • northern road frontage setback is 20m. Landscaping element is 2,339m² (26.6%).	Complies with the 1,000m² required minimum lot area. Complies with building setback requirements. Satisfies the required landscaping 10% minimum.
LPS6 cl. 4.10	Maximum building height of up to 9.0 metres.	The proposed building height is 9.0m	Complies.
LPS6 cl. 4.13 Table 3	Car parking requirement for 'Industry - Light and Service' land uses: 1 bay / 50 m² GFA.	Proposed GFA is 3,299m², requiring 66 parking bays. Provision has been made for onsite parking of 18 vehicles, plus 3 articulated trucks. 2 semi-trailer vehicle deliveries per week are expected. Approximately 7 deliveries out from the facility per week by a dispatch van.	Acceptable variation. The applicant has stated that there will 6 full time staff with an additional contractor. The parking facilities are considered adequate to accommodate staff and distribution needs. cl. 4.6 of LPS6 allows for this variation.
LPS6 cl. 4.28.2	Comprehensive reticulated sewerage.	The development is to be connected to the proposed AvonWest Waste Water Treatment Facility (WWTF), with 90% of wastewater to be piped to that facility.	Complies.

Provision	Requirement	Proposal	Assessment
		Other waste streams will be removed from site by a private contractor.	
LPS6 cl. 4.28.3	Development in the 'General Industry Zone' and the 'Light & Service Industry Zone': Permitted fence height is 1.8-2.4m.	Proposed fence is 1.8m to 2.4m high security fence.	Complies.
LPS6 cl. 4.31	Development is to be generally in accordance with the following: • compatible form and scale. • buildings are to have coordinated or complementary materials. • visual impacts are to be minimised.	The proposed development has been designed using painted concrete panels, timber cladding features, expressed fascia's, glazing areas and industrial roller doors, which will be similar in design to other industrial developments that are intended for the AvonWest estate.	Complies. It is considered that the development will complement future industrial developments within the estate.
LPS6 cl. 4.38	Additional site and development requirements associated with Lot 881 (No. 239) Yilgarn Ave.	As part of the subdivision application that was approved, an Environmental Management Plan (EMP) was submitted and endorsed by Shire of Northam.	Complies. EMP requires a 15m wide vegetation corridor adjacent to the full length of the western property boundary of Lot 881.
LPS6 cl. 8.2(f)	Schedule 5 - Exempted Advertisements: Within industrial and warehouse premises a maximum of 4 signs affixed to walls of the building with a total area not exceeding 15m² is exempted.	Four signs on the primary building frontage with a total area of 28m² and three signs on the secondary frontage with an area of 27m².	A separate application will be required for the proposed signage indicating details of materials, lighting, colours and content.
SPP3.7	Bushfire: The locality is within a bushfire prone area.	Not addressed within scope of application for development approval.	A Bushfire Management Plan (BMP) was prepared as part of the subdivision application.
SPP7.0	Design of the Built Environment: Design principles set out in the policy are - context and character; landscape quality; built form and scale; functionality and build quality; sustainability; amenity; legibility; safety;	As per the submitted plans and elevation drawings of the proposed development.	The design of the facility includes design features which will enhance the appearance of the structure. The development is considered to be consistent with SPP7.0.

Provision	Requirement	Proposal	Assessment
	community; and aesthetics.		
EPA	Environmental Protection Authority (EPA) policy unde4r s.31(d) of *Environmental Protection Act 1986*.	Wastes produced at the site are to be either processed at the WWTF or removed by a private contractor.	The operation of the facility does not present potential environmental impacts that could give rise to non-compliance with the EP Act.
LPP17	Local Planning Policy 17 - Industrial Development, objectives: (a) To achieve a high standard of visual amenity. (b) To ensure a consistent and high quality approach to the development of the visual landscape. (c) To ensure screening of aspects of a development considered unsightly. (d) To provide convenient, functional and safe access arrangements into and out of industrial sites.	The proposed development has been designed using painted concrete panels, timber cladding features, expressed fascia's, glazing areas and industrial roller doors, which will complement future development within the AvonWest estate. Truck movements are accommodated via a truck turnaround allowing forward exits. Single vehicle access is from a separate exit point.	Complies.

Conclusion:

The proposed development involves the development of a hydroponic growing facility for the production of pharmaceutical grade medicinal cannabis. It is to be undertaken by the Netherlands based company, Vitaponix, an international operator with a long history of involvement in innovative nutrient production and growing solutions, on future Lot 838, located within the AvonWest Industrial Estate.

The proposal has been dealt with as a land use class not listed under the Shire of Northam Local Planning Scheme No. 6 and assessed as a complex application for development approval in accordance with clause 64 of the deemed provisions.

The proposed development incorporates a modern GMP industrial building with functional internal areas, vehicle access and loading arrangements, water reuse systems, and extensive landscaping. It will operate with minimal staff numbers and low vehicle traffic and generate minimal external impacts on surrounding land.

The proposal has been comprehensively assessed against and complies with the applicable planning framework including LPS6, local planning policies, State Planning Policies SPP2.5 and SPP3.7, Development Control Policy 4.2 and development servicing expectations. It also aligns with the vision for the AvonWest precinct as a high-standard industrial and logistics estate servicing the Wheatbelt and Perth

hinterland.

The development contributes positively to local employment, activates a newly created industrial estate, and sets a high design standard for future industrial development in the area. Importantly, the development is consistent with the objectives of the 'Light & Service Industry Zone' and satisfies all relevant planning considerations.

In light of the above investigations, the land use is considered to be an activity that may be approved within the locality and is compatible with the zoning of the site. On this basis, it is recommended that the application be supported, subject to appropriate conditions of approval.

DAP FORM 1

Notice of Development Application to be Determined by a Development Assessment Panel

Planning and Development Act 2005
Planning and Development (Development Assessment Panel) Regulations 2011 – regulations 6, 7, 10 and 21

Part A – Applicant Details

- By completing this notice, I declare that all the information provided in this application is true and correct.
- I understand that the information provided in this notice, and attached forming part of the development application will be made available to the public on the Development Assessment Panel and local government websites.

Name/Company	Hidding Urban Planning	
Contact Person	Nik Hidding	
Address	*Street Number/PO Box number, street name, suburb, state, postcode* PO Box 920 Subiaco WA 6904	
Contact Details	*Email* nik@hidding.com.au	*Phone* 0424 651 513
Signature		*Date* 27 June 2025

Please note: unless otherwise requested, the DAP Secretariat will contact you via your nominated email address provided above.

Part B - Application Details

Responsible Authority	*Name of local government and Western Australian Planning Commission (if applicable)* Shire of Northam	
Planning Scheme(s)	*Name of planning scheme(s) that applies to the prescribed land* Local Planning Scheme No. 6	
Land	*Lot number, street number, street name, town/suburb* Lot 881 (#239) Yilgarn Avenue, Malabaine	
Certificate of Title (provide copy)	*Volume Number* 2524	*Folio* 999
	Location Number	*Plan / Diagram Number* DP30581
Details of development application made to responsible authority	*Summary of Proposal* Proposed Hydroponic Growing Facility (Unlisted Use)	
Development Use	*Residential / Commercial / Industrial / Rural / Mixed Use / Community Housing/ Other* Industrial	
Estimated cost of development (GST Exc)	$ 3 million	

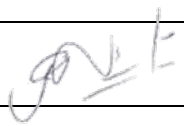
Part C – Election as DAP Application or Delegated Application

DAP Application	■ I give notice that I have elected to have the development application that accompanies this form determined by a Development Assessment Panel *(regulation 6 & 7)*
Delegated Application	☐ I give notice that I understand that this is an application of a class delegated to a Development Assessment Panel for determination *(regulation 19)*

Part D – Community Housing Provider

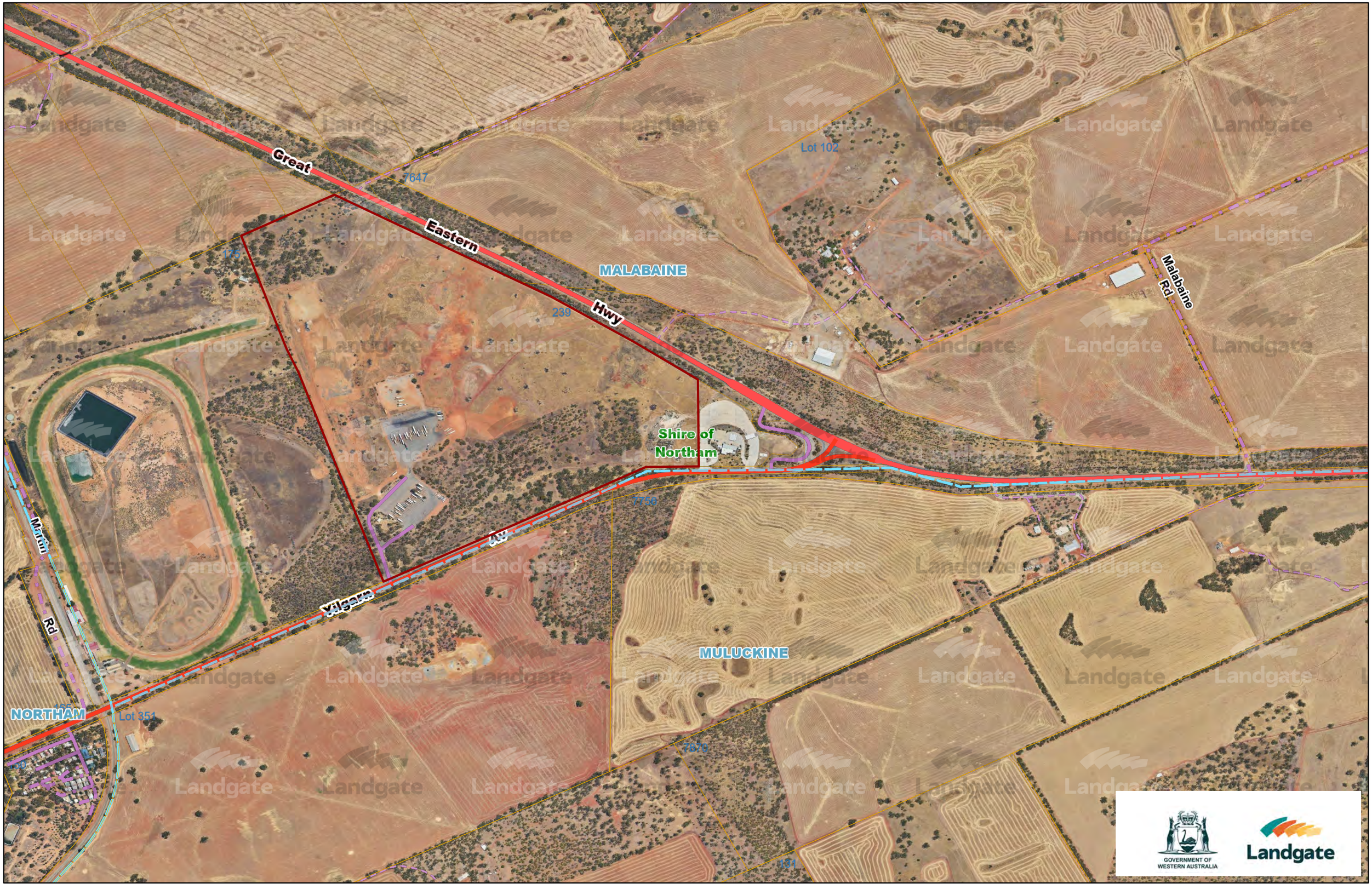
By completing this notice, I declare that the development is or includes community housing that is to be provided by a registered community housing provider as defined by Regulation 3.	
Provider's Name	
Contact Details	
DAP Community Housing Provider Register Reference	

Part E – Acknowledgement by Local Government

Responsible Authority	■ Local Government (LG) ☐ * Dual – Local Government and Western Australian Planning Commission	
* DUAL reporting details	*If DUAL is selected, please provide details of relevant provision (or within covering letter)*	
Fees for applications *(DAP Regulations - Schedule 1)*	$ 14,513.00 Amount that has been paid by the applicant $ 6,322.00 Amount to be paid by local government *(delegated applications only - regulation 22)*	
Statutory Timeframe *(regulation 12)*	☐ 60 days (advertising not required) ■ 90 days (advertising required or other scheme provision)	
LG Reference Number	P25075	
Name of planning officer *(Report Writer)*	Kobus Nieuwoud	
Position/Title	Contract Planner	
Contact Details	*Email* kobus@northam.wa.gov.au	*Phone* 0401898414
Date application accepted as per Clause 63A of the deemed provisions	4/07/2025	
Planning Officer's Signature		

Please note that Landowner(s) details are no longer required on this form. The landowner(s) consent as provided on the local government development application form is taken as agreement from the landowner(s) for the applicant to make this election for the subject application.

LOT 881 (#239) YILGARN AVE, MALABAINE - LOCATION PLAN



Author:

Created: 3 September 2025 from Map Viewer Plus https://map-viewer-plus.app.landgate.wa.gov.au/index.html

1:9,028

0 0.14 0.27 0.41 0.54 km

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Administrative Boundary

Local Government

Localities (L)

Roads

Proposed Roads

Other Roads

Minor Roads

Minor

Minor Unsealed

Laneway, Tracks

Laneway

Laneway Unsealed

Other

Tracks

Freeways, Highways & Main Roads (L)

Freeway Underground

Freeway On Off Ramp

Freeway

National/State Highway

Main and National/State Highway On Off Ramp

State Highway Unsealed

Main

Main Unsealed

Bridges / Tunnels (Line)

Bridge

Tunnel

Bridge / Tunnel (Point)

Bridge

Footbridge

Cadastre

Lot on Plan - Boundaries (16K)

Lot on Plan - Boundaries (64K)

Lot on Plan - Boundaries (256K)

House Numbers (16K)

House Numbers (64K)

House Numbers (256K)

House Numbers (All)

Property Information (16K)

Property Information (64K)

Property Information (256K)

Property Information (All)

Landgate WA Now Mosaic

WA Now Imagery

Red: Band_1

Green: Band_2

Blue: Band_3

WESTERN AUSTRALIA

TITLE NUMBER	
Volume	Folio
2524	**999**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 881 ON DEPOSITED PLAN 30581

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

PROCON DEVELOPMENTS (AUSTRALIA) PTY LTD OF 820 MOUNTAIN HIGHWAY BAYSWATER VIC 3153
(T O829907) REGISTERED 6/8/2021

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. P451779 MORTGAGE TO WESTPAC BANKING CORPORATION REGISTERED 15/2/2023.
2. P451780 CAVEAT BY COMMISSIONER OF MAIN ROADS AS TO PORTION ONLY LODGED 15/2/2023.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	DP30581
PREVIOUS TITLE:	2204-48, 2221-684
PROPERTY STREET ADDRESS:	239 YILGARN AV, MALABAINE.
LOCAL GOVERNMENT AUTHORITY:	SHIRE OF NORTHAM

LANDGATE COPY OF ORIGINAL NOT TO SCALE 27/03/2025 03:29 PM Request number: 67986278

Landgate
www.landgate.wa.gov.au

Hidding.
URBAN PLANNING

10 October 2025 *Our Ref: C2281-02*

Chief Executive Officer
Shire of Northam
PO Box 613
NORTHAM WA 6401

Attention: Chadd Hunt – Executive Manager Development Services

RE: PROPOSED HYDROPONIC GROWING FACILITY (UNLISTED USE) – DAP/25/02943
LOT 881 (#239) YILGARN AVENUE, MALABAINE (SHIRE OF NORTHAM)

Hidding Urban Planning acts for Procon Developments (Australia) Pty Ltd, owner of Lot 881 (#239) Yilgarn Avenue, Malabaine (Shire of Northam) in the matter of a proposed Hydroponic Growing Facility (Use Not Listed) in the new AvonWest industrial estate being progressed on the subject land.

The proposed Hydroponic Growing Facility is proposed on future Lot 838 in the AvonWest estate which will be 1.8083ha in area and comprises a corner lot. The lot will be created through a soon-to-be-submitted subdivision application.

An application for development approval for this project was submitted to the Shire of Northam in July 2025 and has been assessed by the Shire of Northam. The application was advertised for public submissions as required for a Use Not Listed proposal.

Following clarification of the proposed operation on the site, the Shire intends to re-advertise the application for further public submissions.

This updated submission provides more detail of the proposal for this purpose.

1.0 INTRODUCTION

Subdivision Approval was granted by the Western Australian Planning Commission (WAPC) on 15 November 2024 for a first stage super-lot subdivision for AvonWest that would initially enable earthworks, road construction and large lot areas that are intended for re-subdivision under future subdivision stages (WAPC Ref 200673).

AvonWest will be a premier 62-hectare logistics estate strategically positioned as one of the most well-connected centers outside of the Perth CBD. Designed to seamlessly integrate with both interstate rail freight networks and Restricted Access Vehicle (RAV7) road networks, AvonWest will be the gateway to efficient and expansive transportation solutions across Western Australia.

The AvonWest industrial project is expected to significantly contribute to the region's economic growth. By attracting large logistics and associated companies and facilitating increased commerce, the project will create thousands of jobs, both directly within the logistics facilities and indirectly through the supply chain and associated services**.**

Construction of the first stage super-lot subdivision has commenced, with earthworks occurring on the site.

A copy of the WAPC Subdivision Approval is included at **Annexure 1**.

As the development cost of the project is $3m, this application is being submitted as an opt-in Development Assessment Panel (DAP) Application, to be determined by the Regional DAP.

Application Forms are attached to this application and are authorised by the landowner.

PO Box 920, Subiaco WA 6904
Phone: 0424 651 513
email: nik@hidding.com.au website: hidding.com.au
NL Hidding Pty Ltd. ACN 610 081 724

2.0 SITE DETAILS

The site at Lot 881 (#239) Yilgarn Avenue, Malabaine is a 62ha site which has been approved for an industrial subdivision for the AvonWest estate.

The land is located approximately 103 km northeast of Perth and has frontage to Great Eastern Highway on its north-eastern side and Yilgarn Avenue on its southern side.

The subject land is shown in **Figure 1** Location Plan below in the context of the Northam townsite.

Lot 881 is currently vacant but contains the existing Road Train Assembly facility which is currently leased to Main Roads WA (MRWA).

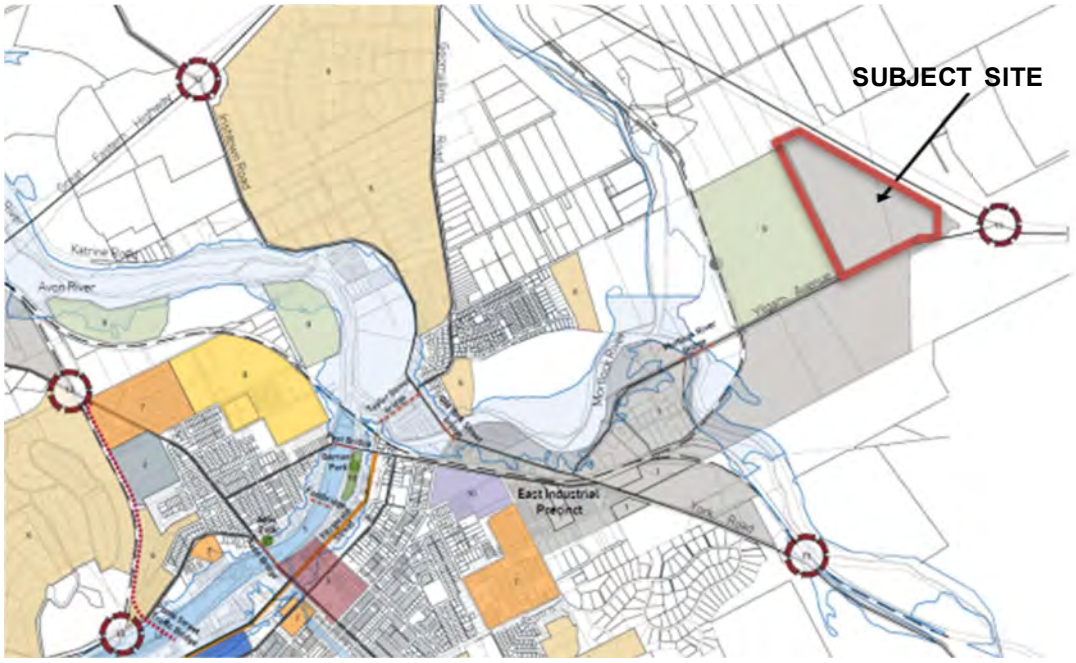


Figure 1: Location Plan

An Aerial Photograph of the subject land and its surrounds is included at **Figure 2**, below.

A Certificate of Title for the subject land is included at **Annexure 2**.



Figure 2: Aerial Photograph

3.0 PROPOSED DEVELOPMENT

The proposal is for a Hydroponic Growing Facility to be operated by Vitaponix for the purpose of cultivating medicinal cannabis (with THC) under strict federal regulation. This is not an open-field crop but a secure, enclosed indoor light industrial facility.

The facility will be regulated by the Office of Drug Control (ODC) and will manufacture, under license, the medicinal product.

Medicinal cannabis facilities are typically assigned to special/light industry or pharmaceutical manufacturing categories rather than intensive agriculture. This ensures compliance with industrial and health-related standards.

The proposed hydroponic growing facility (medicinal cannabis facility) will comprise a specific building for the purposes of cultivating medicinal cannabis (i.e. medicine), but also includes other components associated with drying, trimming and storage, which requires a high level of control, according to government regulation. The overall activity is considered to be classified as a light industrial activity to produce a medicinal product, as a specialised use and should be distinguished from agriculture. Since the facility requires specialised infrastructure, energy and specialised equipment, as well a secure environment, it is considered entirely appropriate in the light and service industry zone.

The proposed Hydroponic Growing Facility is proposed on future Lot 838 in the AvonWest estate which will be 1.8083ha in area and comprises a corner lot. The lot will be created through a soon-to-be-submitted subdivision application.

The location of future Lot 838 in relation to the AvonWest estate masterplan is captured below at **Figure 3**.

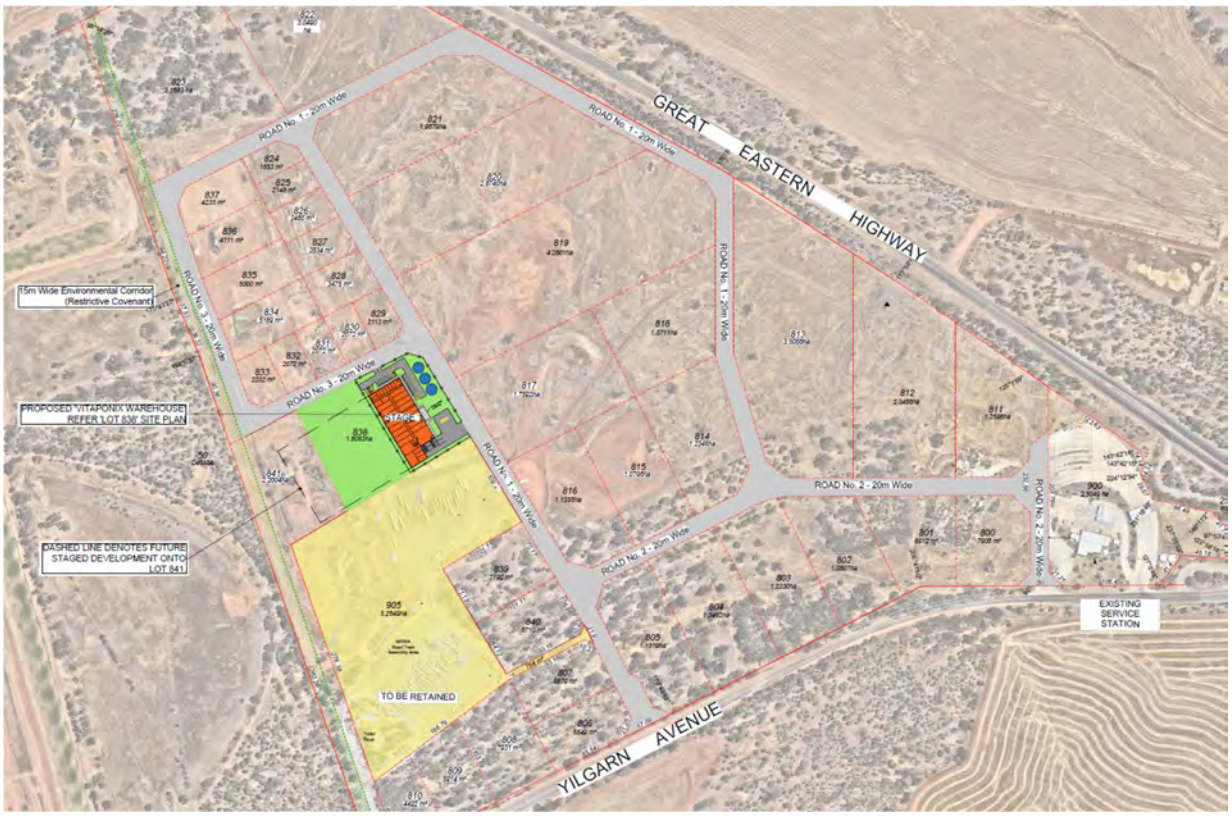


Figure 3: Future Lot 838 in relation to AvonWest Masterplan

The proposed Hydroponic Growing Facility will comprise a 3299m^2 building, loading docks and supporting car parking areas, water tanks and perimeter fencing, set in landscaped grounds.

Plans of the proposed facility are included at **Annexure 3**.

The building itself will comprise a series of growing rooms, drying rooms, storage area and warehouses for packaging. The facility will have loading docks for receival of organic material for use in the facility, as well as dispatch of materials grown and packaged at the facility, for distribution elsewhere. An administration/office area will occur on the upper level, comprising a waiting room, a series of offices, boardroom, kitchen/dining area and toilets.

The building will be constructed using tilt up concrete panels, to a maximum height of 9.00m.

The main façade of the building facing north towards the future subdivisional road will comprise painted concrete panels, windows, timber cladding, signage areas and an expressed fascia around the main entry windows and doorway, as well as around the north facing roller door dock area.

The eastern elevation of the building facing the other subdivisional road will comprise concrete panels, with a painted texture finish pattern and signage areas.

3x 300,000L rainwater tanks are proposed in the eastern part of the site and will sit 2.90m above ground. The water will be used in the facility for growing purposes.

A staff and visitor car park is proposed on the northern and eastern sides of the building, with a total of 18 car parking bays available, which would exceed the intended parking need at present time, but enables future expansion plans to be accommodated (which would be subject to a separate application). The expansion of the facility is indicated on the Development Plans.

The entire facility will be security fenced using 2.40m high mid steel anti-climb fence, with gates to driveway and loading areas.

The facility will be strictly following the Office of Drug Control (ODC) requirements for fencing (including concrete plinth), electrified perimeter, 24/7 monitored CCTV, biometric access, tamper detection systems and on-site security personnel. Regulators will oversee and enforce compliance (detailed security measures cannot be shared with public).

The facility will have a large setback of 19.57m to the future subdivisional road on the northern side of the site, and a 33.995m setback to the future subdivisional road on the eastern side. Large areas of landscaping are proposed in the setback areas and a Landscaping Plan has been prepared – refer **Annexure 4**.

The Facility has been designed for an estimated 95% water recapture via custom irrigation and HVAC. The remaining runoff will be directed to the approved AvonWest Waste Water Treatment Facility. Any other small general waste will be taken off site by a private waste contractor as needed.

No harmful pesticides or fungicides will be used in the cultivation. Climate control, filtration, and strict protocols safeguard plants and the environment and patients. Cleaning materials will all be compliant (any disinfectants will be left to dry on surfaces).

In terms of power demand, the proposed development, as well as the entire AvonWest estate, will be operational on its own microgrid. The WAPC has supported the AvonWest estate being powered in this way. Therefore, there will be no household impacts in Northam in respect of power consumption and there is no need to consult with Western Power.

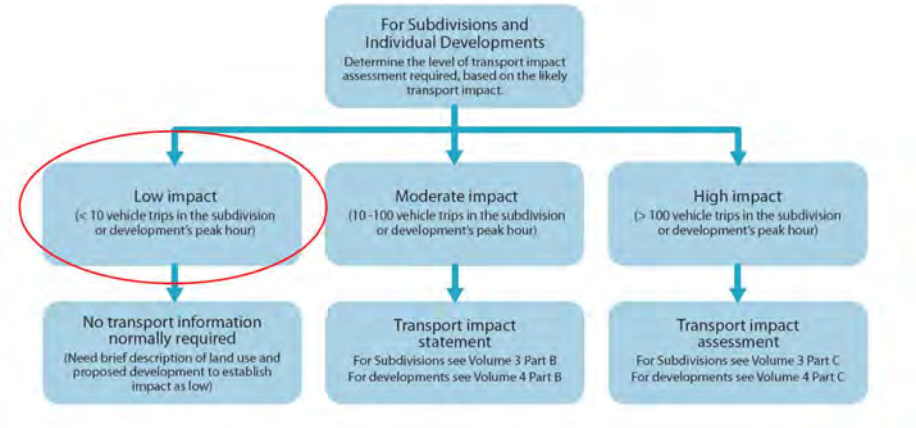
Another consideration of this proposal is the planned future stages of the project (as indicated on the plans) which will include a further 10,000m2 (approx) facility expansion for further activities including further growing, laboratory testing, R&D, GMP manufacture, packing and large distribution warehouse area. The development application currently being considered is a first stage production facility, with the stage 2 additional facility and manufacturing/distribution coming online in a couple of years.

The site will have low staff attendance, with approximately 6 staff on site at any one time, with an occasional sub-contractor attending during the course of the day, however this is infrequent. The operating hours of the facility will generally be 9:00am to 5:00pm on normal business days.

The anticipated number of truck movements to the site for the purposes of delivering material for use in the facility will be low; approximately 2 deliveries per week by a 19.0m vehicle (semi). Similarly, the number of dispatch deliveries out from the facility will be low; approximately 7 dispatch movements per week from the facility by a dispatch van.

9m service vehicles and vans will be using the northern loading dock. Larger 19m vehicles will be using the larger loading dock at the southern end of the facility, with space on site for reversing manoeuvres.

Given the low number of staff and low number of vehicle/truck movements to the site, there is no requirement to prepare a Transport Impact Statement, as the proposal is considered 'Low Impact' in respect of the WAPC *Transport Impact Assessment Guidelines – Volume 4 Individual Developments*, as noted below (extract from the Guidelines).



Technical information, plans and relevant information for the proposed Hydroponic Growing Facility are attached as follows:

- **Annexure 3** – Development Plans
- **Annexure 4** – Landscaping Plan
- **Annexure 5** – Stormwater Management Plan
- **Annexure 6** – Bushfire Management Plan (prepared for the AvonWest subdivision)

4.0 PLANNING CONSIDERATIONS

4.1 Shire of Northam Local Planning Scheme No. 6

4.1.1 Zoning

Lot 881 is zoned "Light & Service Industry" in the Shire of Northam Local Planning Scheme No. 6 (**LPS 6**).



Figure 4: Zoning Map

The subject land has frontage to Great Eastern Highway which is a "Regional Road" Local Scheme Reserve under LPS6. The subject land has frontage to Yilgarn Avenue which is a "Major Road" Local Scheme Reserve under LPS6 (refer to Zoning Map below at **Figure 4**).

4.1.2 Zone Objectives

Objectives of the Zones are included at Clause 3.2 of LPS 6.

The Objectives of the "Light & Service Industry" zone are as follows:

- *Provide for a range of light and service industries, wholesale sales, warehouses, showrooms, trade and services which, by reason of their scale, character and operational or land requirements, are not generally appropriate in or cannot conveniently or economically be accommodated in the commercial or mixed use zones.*
- *Provide for light and service industrial activities and associated uses that are compatible and acceptable in close proximity to rivers and residential areas.*
- *Encourage and facilitate employment-generating development which will contribute to the economic and social well-being of the Shire.*

4.1.3 Land Use

The proposed Hydroponic Growing Facility does not neatly fit within any of the defined use classes under LPS6.

Accordingly, it is our view that the proposed Hydroponic Growing Facility should be considered specially as a **Use Not Listed**, which is able to be considered in the Light and Service Industry zone as an activity capable of approval.

It is important to clarify that the proposed indoor medicinal cannabis facility is not an intensive farming operation but a specialised medical production site that uses plant material as its active input, with low volume produce (i.e not intensive).

The proposed facility operates with the following:

- **Controlled Indoor Environment:** Fully contained operations with no runoff.
- **Pharmaceutical Compliance:** Built to health and GMP (Good Manufacturing Practice) standards, not agricultural scale.
- **Compact Land Use:** Indoor cultivation suitable even in urban zones.
- **Medical Focus:** The sole purpose is to produce a regulated pharmaceutical-grade medicine, not high-volume produce.

<u>1. Purpose & End Product</u>

Medicinal Facility: Pharmaceutical-grade products for medical use, low volume.

<u>2. Regulatory Oversight</u>

Medicinal Facility: Governed by health authorities, GMP standards, Office of Drug Control regulation, and pharmaceutical licensing.

<u>3. Design & Environmental Controls</u>

Medicinal Facility: Controlled, cleanroom-style environments with strict climate/filtration controls, low-volume produce (i.e. low intensity).

<u>4. Distribution</u>

Medicinal Facility: Pharmacies and medical dispensaries under prescription.

<u>5. Land Use</u>

Medicinal Facility: Should be considered as a light industrial activity since its primary purpose is regulated medicine production. Accordingly, it is considered to be best placed as a Use Not Listed.

Pursuant to Clause 3.4.2 of the scheme, "*If a person proposed to carry out on land any use that is not specifically mentioned in the Zoning Table and cannot reasonably be determined as falling within the type, class or genus of activity of any other use category the local government may –*

a) Determine that the use is consistent with the objectives of the particular zone and is therefore permitted;

b) Determine that the use may be consistent with the objectives of the particular zone and thereafter follow the advertising procedures of clause 64 of the deemed provisions in considering an application for development approval; or

c) Determine that the use is not consistent with the objectives of the particular zone and is therefore not permitted."

In considering the above, it is our view that the use **IS** consistent with the objectives of the zone and is therefore permitted, or otherwise, at a minimum, **MAY BE** consistent with the objectives of the zone and can be considered following advertising of the application.

Either way, it is considered that the proposal (as a Use Not Listed) is capable of approval in accordance with either part (a) or part (b) of Clause 3.4.2 of LPS6.

Responses against the three Zone Objectives, are set out below.

1. The proposed development is an industrial activity which is complementary to normal light and service industry uses able to be developed in the AvonWest estate and is considered to fully meet the first zone objective. The proposed future stages of the development will include further industrial activities of packing and warehousing, which is considered to align with the first zone objective as well.
2. The proposed development provides an industrial activity that is compatible with AvonWest estate and is acceptable to be located on the site on which it is proposed. It will have no impact on residential areas or river environs with 95% water re-use and any resultant waste being discharged to the approved Waste Water Treatment Facility which will treat water and sludge for resource re-use. Accordingly, it is considered that the proposed development complies with the second zone objective.
3. The proposed development will contribute to the AvonWest industrial estate as a light industrial activity, offering further employment opportunities and innovation in pharmaceutical production. This is considered to fully meet the third zone objective.

Accordingly, given the proposed development accords with the Zone Objectives, the proposal, as a Use Not Listed, is capable of approval.

4.1.4 Development Standards

Table 2 of Clause 4.5 of LPS6 sets out the site and development standards for all zones which may be varied by the local government at its discretion to suit any specific requirements.

Table 2 of LPS6 sets out the following standards:

Table 2 Provision	**Proposed**
7.5m front setback	19.57m main front setback to northern future Road No. 3 33.995m to secondary road (as per Cl 4.18)
7.5m rear setback (not applicable, per Cl 4.18)	n/a
4m side setbacks	4m side setback achieved
10% landscaping area	The future lot will be 1.8083ha in area. A 10% landscaping requirement is 1808.3m^2. The proposed landscaping area is 11780m^2, however this area includes the future expansion area which will only be landscaped using

Table 2 Provision	Proposed
	hydroseeded native grass. The main landscaping areas around the proposed building will be comprehensively landscaped in accordance with the Landscaping Plan at Annexure 4. In any event, the 10% landscaping area will be achieved.

Any of these standards are able to be varied in accordance with Clause 4.6 'Variations to Site and Development Standards and Requirements' of LPS6, however no variations are required.

A number of other relevant development standards are set out in subsequent parts under Part 4 of LPS6, including the following:

Other Provisions	Proposed
Two Storey Height or 9m to highest point	9m proposed height - complies
Car Parking for Use Not Listed As determined by local government after considering the parking needs generated by the use	The parking needs are essentially to accommodate staff, of which (presently) there will be only 6-7 people. 18 car parking bays are proposed to cater for staff and allowing future expansion to occur.
Cl 4.28.3 Minimum standard fence 1.8m high to a maximum of 2.4m high link mesh fence	Development site contained by 2.4m high link mesh fence and sliding automatic gates.

Clause 4.17 of LPS6 applies, which speaks to requirements for a development proposal fronting an unconstructed road. The proposed development will have access to a future subdivisional road, however a subdivision application to create this road has not yet been approved. Clause 4.17 provides the ability for the Shire to recommend a condition which could effectively restrict operation of the facility to the time when the proposed Subdivisional Road is constructed (being a possible arrangement to ensure permanent access, per the terms of cl 4.17(c)).

Clause 4.18 of LPS6 applies, which requires development on a lot with more than one street frontage to comply with a front setback requirement (7.5m) to all street frontages, and that the remaining boundaries should be treated as side boundaries for the purposes of the Table 2 setback requirements (being a 4m setback requirement). These are complied with.

Clause 4.28 of LPS6 applies which relates to development standards for the Light & Service Industry zone. Clause 4.28.2 states that, *"Where a comprehensive reticulated sewerage system is not available to a proposed development or use in the General Industry or Light & Service Industry zones, the local government may grant development approval which permits on-site effluent disposal provided such usage does not generate a daily volume of wastewater exceeding 540 litres per 2,000m2 of lot size and site conditions are suitable for on-site effluent disposal."* Reticulated sewerage is not available to the AvonWest estate, however the Regional DAP has recently approved the use of a private Waste Water Treatment Facility to service the AvonWest estate, so the proposed development will be connected to that facility.

Clause 4.31 of LPS6 applies which relates to amenity of non-residential development. The provisions require the form and scale of development to be compatible with surrounding uses and to ensure quality materials are used. The proposed development has been designed using painted concrete panels, timber cladding features, expressed fascias, glazing areas and industrial roller doors, which will be similar in design to other industrial developments that are intended for the AvonWest estate. Accordingly, it is considered that the proposed development will be compatible with surrounding uses in terms of its design.

Clause 4.38 of LPS6 sets out Additional Requirements that apply to the subject land, as referenced in Table 4 of LPS6. The Additional Requirements sets out a need to prepare an Environmental Management Plan addressing the establishment of a 15m wide vegetation corridor adjacent to the

full length of the western property boundary of Lot 881. As part of the Subdivision Application that was approved, this Environmental Management Plan was prepared and submitted to the Shire and was supported. It will be implemented during the course of the creation of the subdivision.

Further, a setback requirement of 22.5m from the western boundary of Lot 881 applies under Table 4. The proposed development is well outside of the 22.5m setback from the western property boundary of Lot 881.

4.2 Local Planning Policy 17 – Industrial Development

The proposed development has been designed generally in accordance with the requirements of the Shire's Local Planning Policy 17 – Industrial Development (**LPP17**) and aligns with the following general requirements:

- Part 1 of the policy has been considered, as follows:
    - Development constructed using high quality materials, particularly those facing streets.
    - Secondary street facing façade design and constructed using similar architectural quality as the primary street façade.
    - Long windowless facades have been avoided where they face public streets, and where there are windowless areas, painted texture features and signage is proposed to break up the expanse of wall.
    - Use of different materials, colours, textures and features (such as expressed fascias) are proposed to provide additional interest and prominence.
    - Zincalume and reflective materials are not proposed.
    - Parapet walls are not proposed, so no consideration of parapet walls for this development is not applicable.
- There is no variation to building setbacks, so Part 2 of the policy is not applicable.
- There is no caretaker's dwelling, so Part 3 of the policy is not applicable.
- One crossover per street frontage is proposed, enabling efficient and safe vehicle movement, and separation of heavy vehicles from standard vehicles. All vehicles can enter the street in forward gear, in compliance with Part 4 of the policy.
- Car parking is proposed in accordance with Part 5 of the policy.
- Fencing is proposed in accordance with Part 6 of the policy.
- No outdoor storage areas are proposed, in accordance with Part 7 of the policy.
- A Landscaping Plan is included with our application, in accordance with Part 8 of the policy.
- All effluent will be directed to the approved AvonWest Waste Water Treatment Facility, and this will comply with the requirements of Part 9 of the policy.
- Use of second-hand materials is not being proposed, so Part 10 of the policy is not applicable.
- A Stormwater Management Plan is included with our application, in accordance with Part 11 of the policy.
- Advertising signage will be subject to a separate application, however nominal signage areas have been proposed. The separate signage application will address compliance with the Shire's Advertising Signage Policy, in accordance with Part 12 of the policy.
- Part 13 of the policy (relating to the Avon Industrial Park) is not applicable.
- All requirements of Part 14 of the policy relating to the Avon Logistics Hub (which is now called AvonWest) are complied with, including matters relating to parking and access.

Accordingly, the proposed development complies with the requirements of the Shire's Local Planning Policy 17 - Industrial Development and warrants approval accordingly.

4.3 SPP3.7 Planning in Bushfire Prone Areas

Parts of Lot 881 is identified as being within a designated bushfire prone area on the Department of Fire and Emergency Services (**DFES**) *Map of Bush Fire Prone Areas 2019* (refer **Figure 5**).

A Bushfire Management Plan (**BMP**) was prepared by Bushfire Prone Planning in relation to the subdivision application and is included at **Annexure 6**.

It is expected the estate will be developed and managed to ensure a low bushfire threat state.

With the clearing of vegetation on the land now completed to enact the subdivision approval, the bushfire risk has reduced further.



Figure 5: Map of Bushfire Prone Area (DFES)

The development area associated with this application is actually located outside of the mapped Bushfire Prone Area, so no further bushfire reporting is required.

5.0 CONCLUSION

This application proposes a Hydroponic Growing Facility for the purpose of cultivating a specialised medicinal product, being a suitable light industrial activity to be located in the new AvonWest estate at 239 Yilgarn Avenue, Malabaine. The facility is proposed on future Lot 838 in the estate.

The proposed use, considered as a Use Not Listed, is appropriate for the site and is able to be considered in accordance with the provisions of Clause 3.4.2 of the Shire of Northam LPS6, as a compatible use in the Light & Service Industry zone. The proposed development and use aligns with the Objectives of the Zone.

The proposal complies with the Development Standards of LPS6 as well as the requirements of the Shire's Local Planning Policy 17 – Industrial Development.

We therefore respectfully seek the Shire's support and to recommend approval to the Regional Development Assessment Panel (DAP) with appropriate conditions.

Should you have any queries, please do not hesitate to contact Nik Hidding on 0424 651 513.

Yours Faithfully



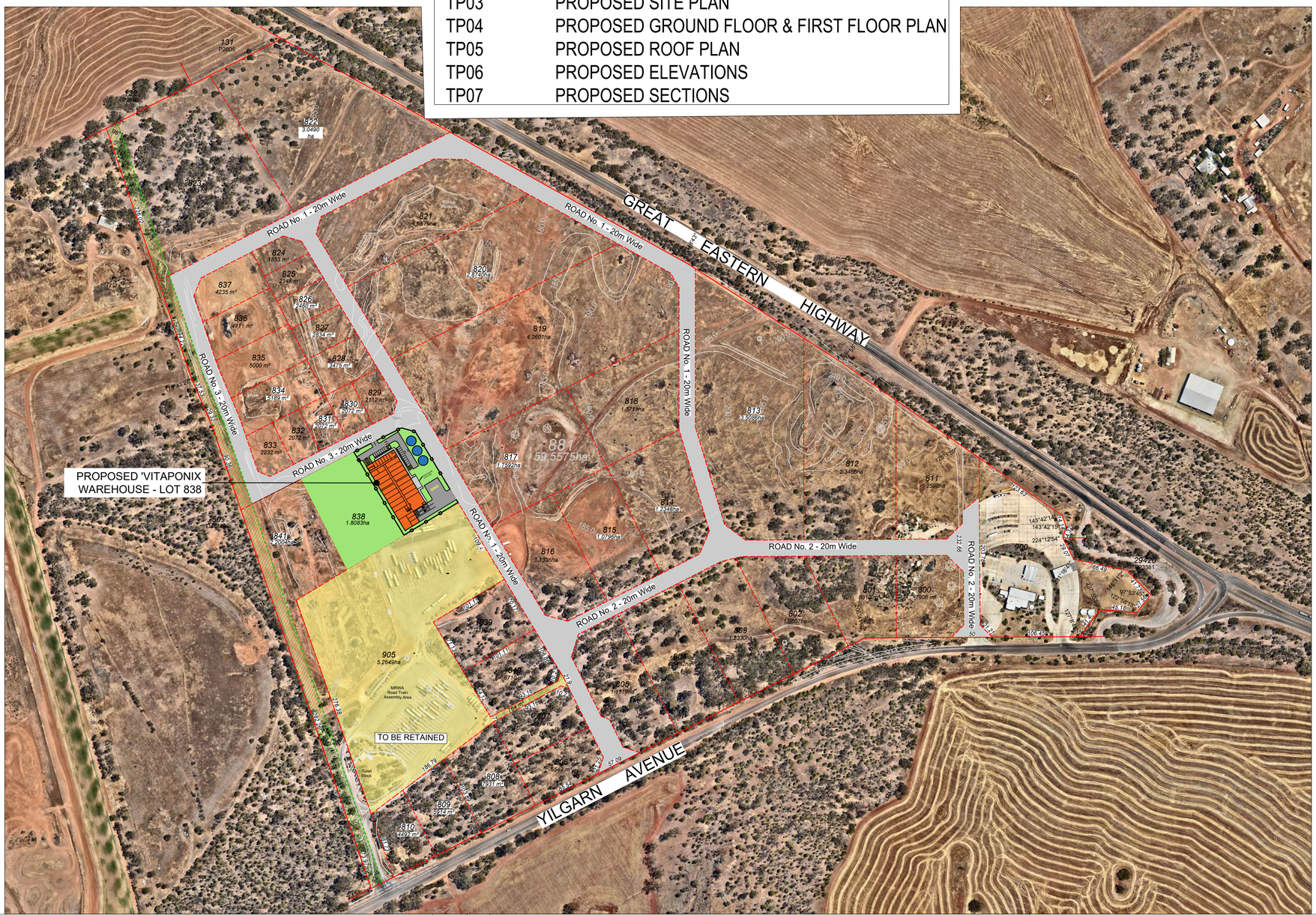
Nik Hidding
Director
HIDDING URBAN PLANNING

PROPOSED VITAPONIX WAREHOUSE - LOT 838

AT

AVON LOGISTICS HUB

ARCHITECTURAL DRAWING LIST:	
TP00	TITLE PAGE AND SITE LOCALITY PLAN
TP01	PROPOSED MASTER PLAN
TP02	PROPOSED LOT PLAN
TP03	PROPOSED SITE PLAN
TP04	PROPOSED GROUND FLOOR & FIRST FLOOR PLAN
TP05	PROPOSED ROOF PLAN
TP06	PROPOSED ELEVATIONS
TP07	PROPOSED SECTIONS



DA ISSUE

PROCON DEVELOPMENTS AUSTRALIA
PO Box 197, SEVILLE Vic 3139
Phone: (03) 9720 0817

AvonWest LOGISTICS & ENTERPRISE

Rev.	Reason.	Date.	Appr.
DA-2	DA ISSUE - LOT 838	24.04.25	MZ
DA-1	DA ISSUE - LOT 838	17.04.25	MZ

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Project.
AVON LOGISTICS HUB
LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
TITLE PAGE AND SITE LOCALITY PLAN

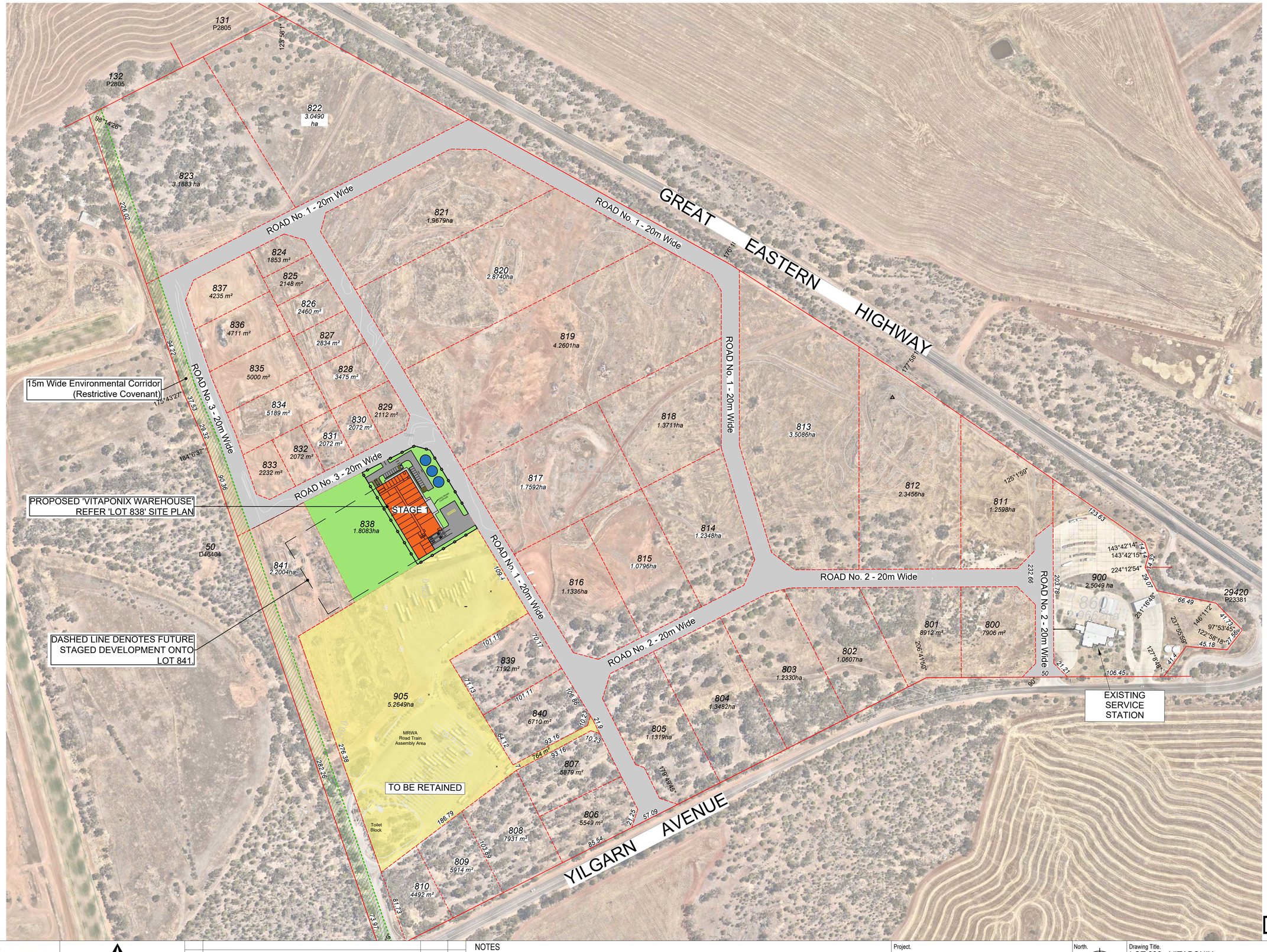
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AVON LOGISTICS HUB
LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED MASTER PLAN

Drawing No.
TP01

Client.
PROCON DEVELOPMENTS

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Job No.	Drawn By.	Checked By.	Date.	Plot date.	Revision
JO255.38	MZ	CG	MAR '25		DA-2

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NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED LOT PLAN

Drawing No.
TP02

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PROCON DEVELOPMENTS

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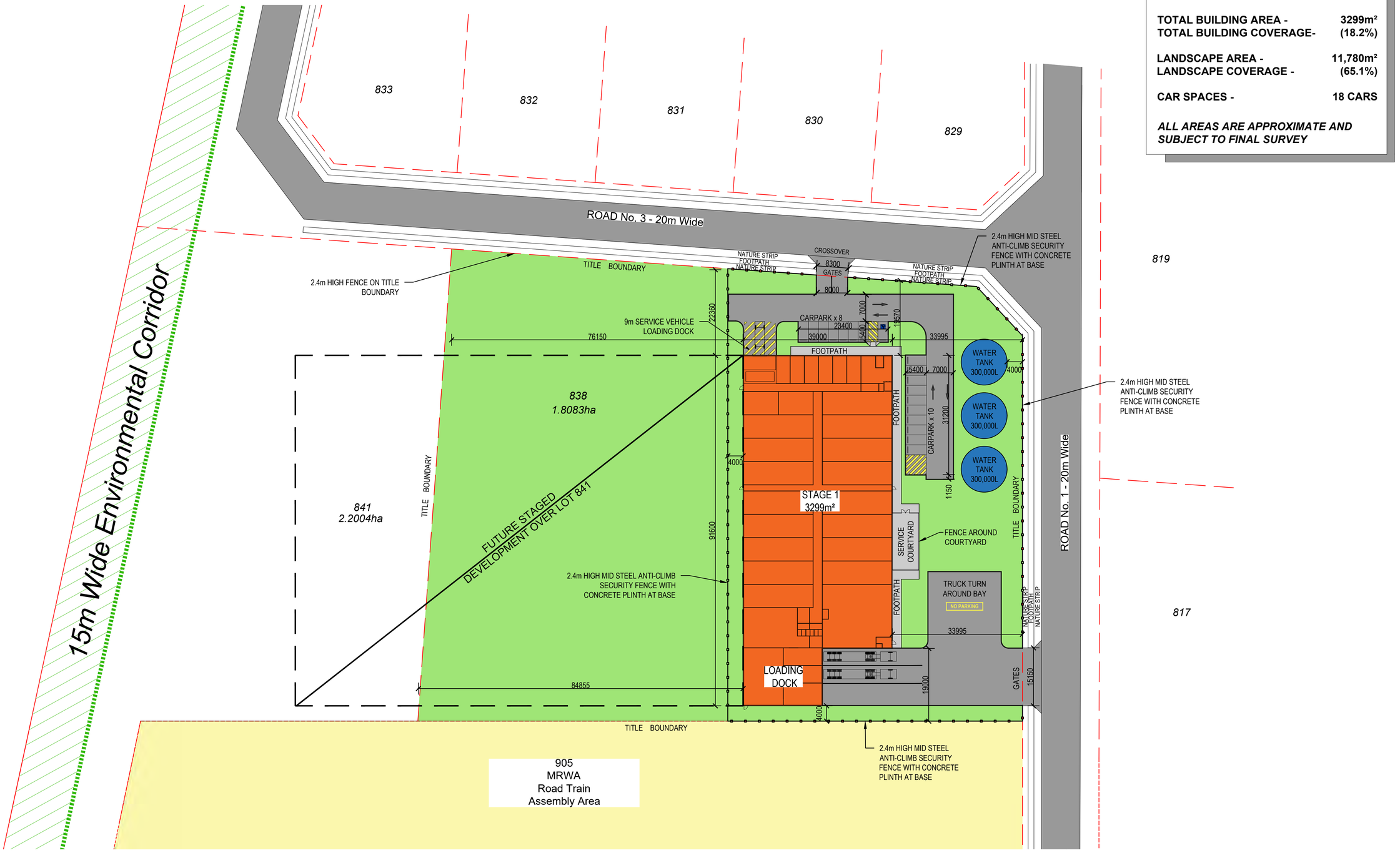
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JO255.38	MZ	CG	MAR '25		DA-1

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AREA SCHEDULE

TOTAL SITE AREA -	18083m²
TOTAL BUILDING AREA -	3299m²
TOTAL BUILDING COVERAGE-	(18.2%)
LANDSCAPE AREA -	11,780m²
LANDSCAPE COVERAGE -	(65.1%)
CAR SPACES -	18 CARS

ALL AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY



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DA-1	LOT PLAN - 838	17.04.25	MZ

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NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED SITE PLAN

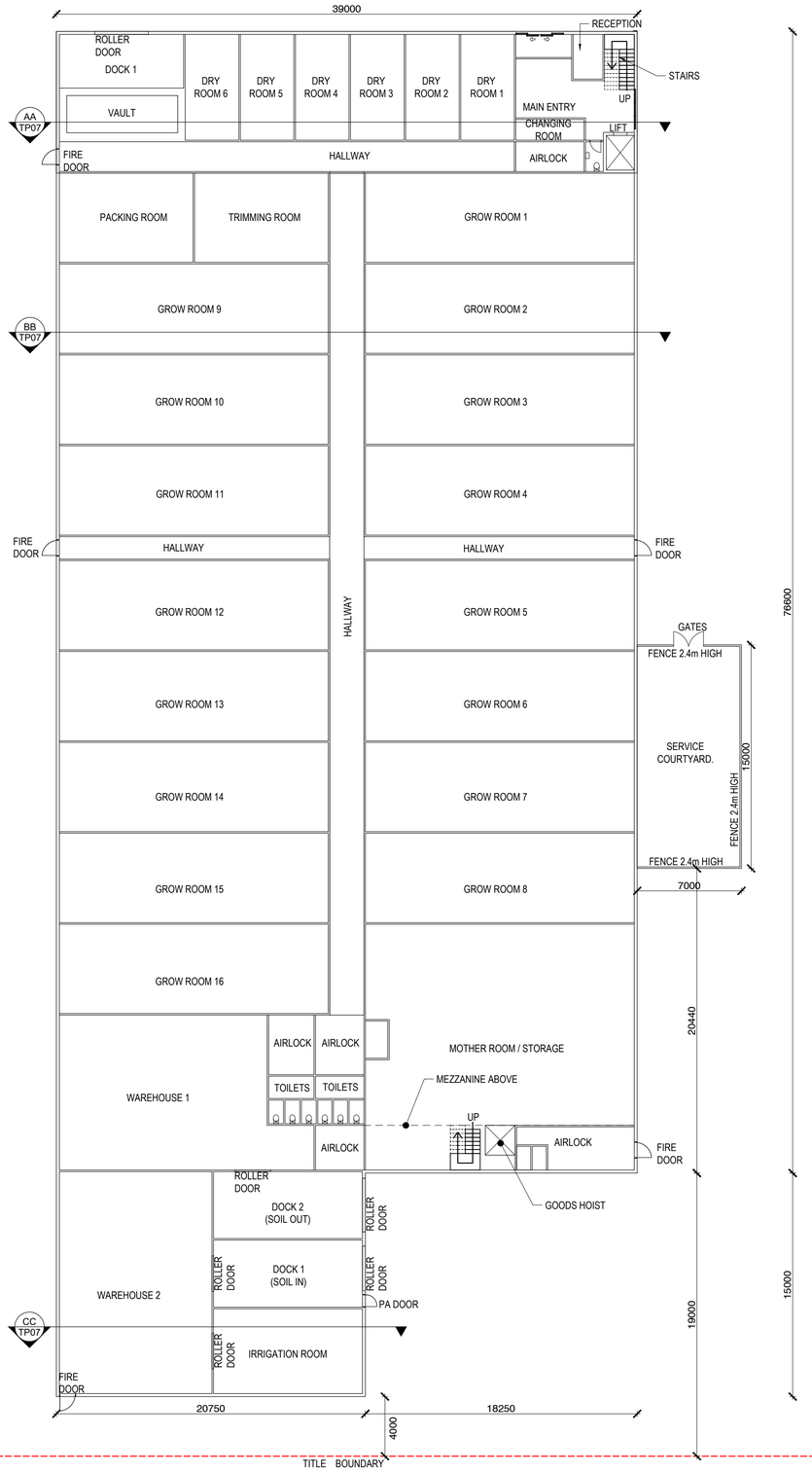
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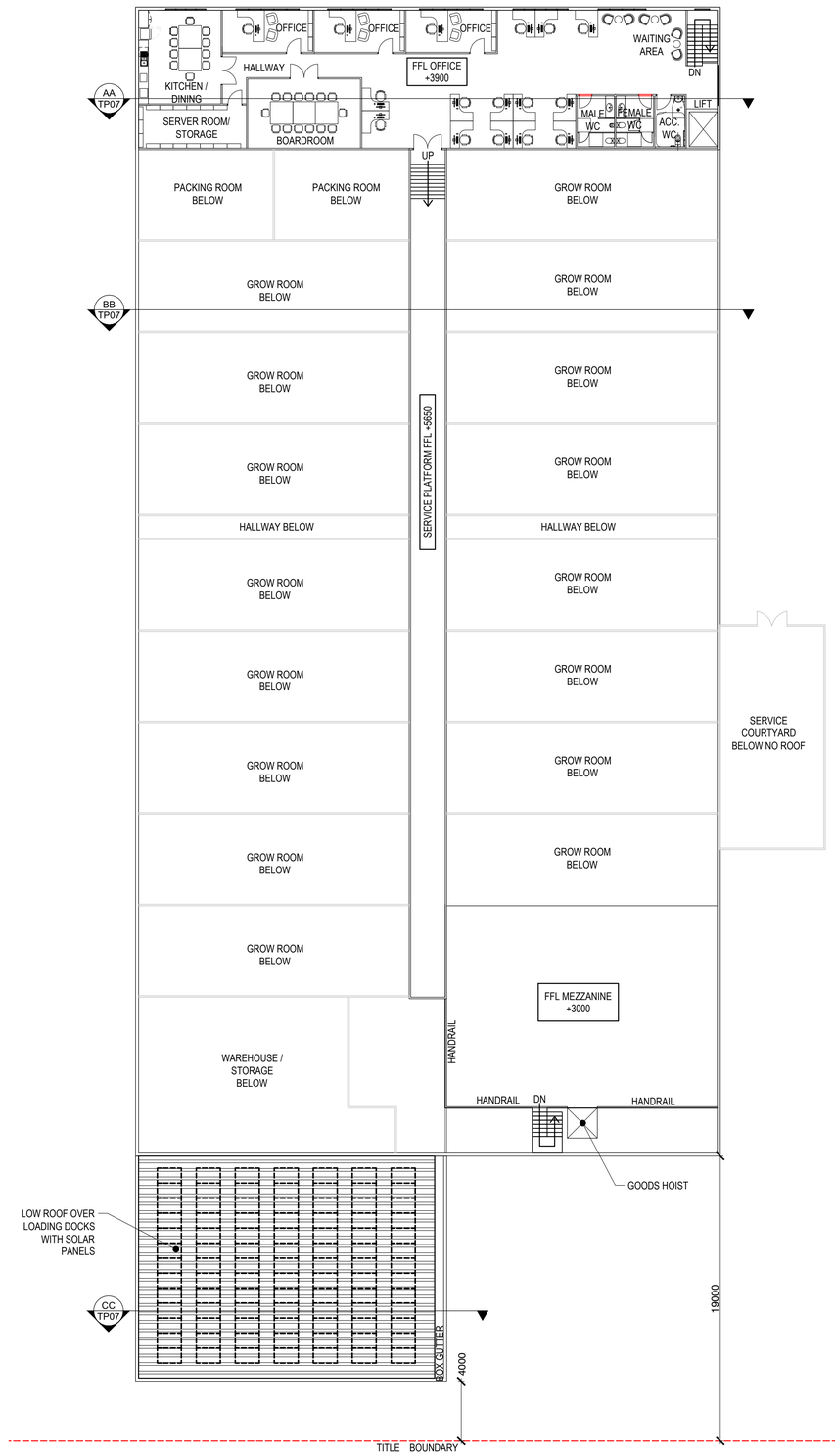
PROPOSED GROUND FLOOR PLAN

SCALE - 1:200 @ A1

AREA SCHEDULE

GROUND FLOOR -	**3299m²**
SERVICE COURTYARD -	**105m²**
FIRST FLOOR OFFICE -	**355m²**
SERVICE PLATFORM -	**130m²**
MEZZANINE -	**243m²**

ALL AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY



PROPOSED FIRST FLOOR PLAN

SCALE - 1:200 @ A1

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LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED GROUND FLOOR & FIRST FLOOR PLAN

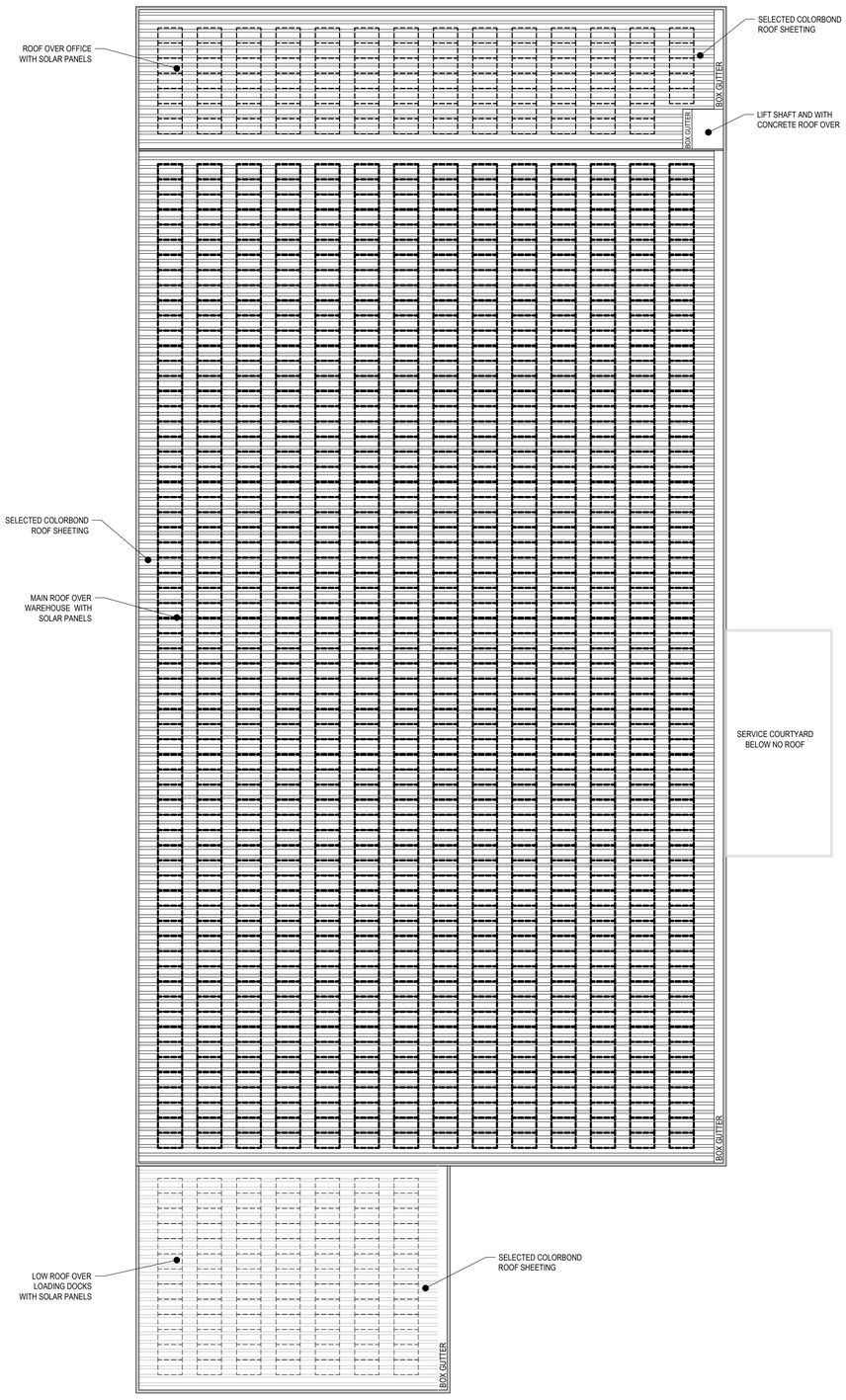
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PROPOSED ROOF PLAN

SCALE - 1:200 @ A1

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Project.
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LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED ROOF PLAN

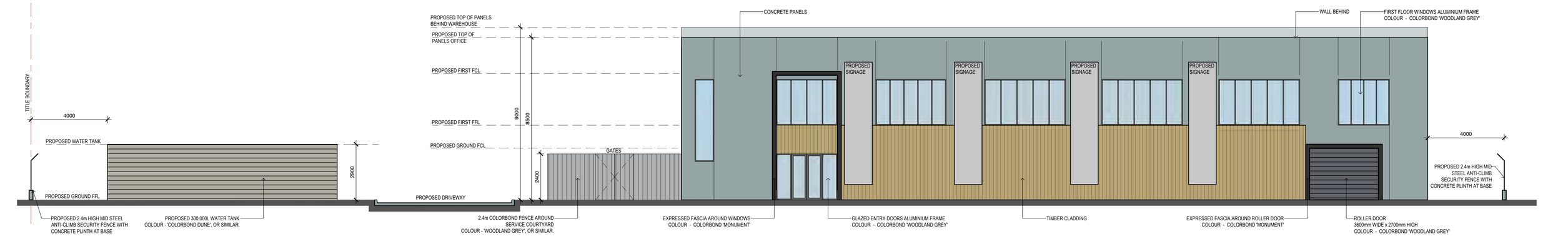
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PROCON DEVELOPMENTS

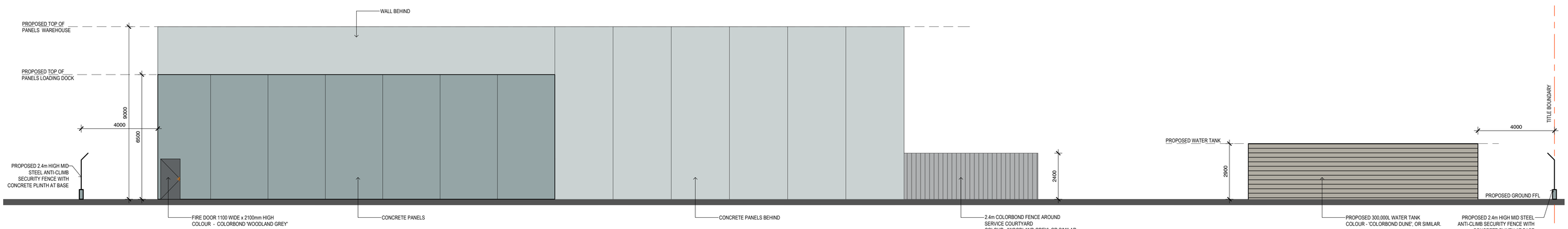
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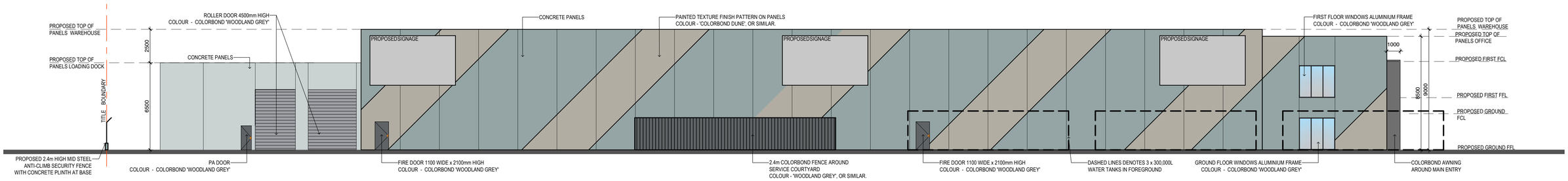
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1 NORTH ELEVATION
SCALE 1:100



2 SOUTH ELEVATION
SCALE 1:100



3 EAST ELEVATION
SCALE 1:150



4 WEST ELEVATION
SCALE 1:150

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Project.
AVON LOGISTICS HUB
LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED ELEVATIONS

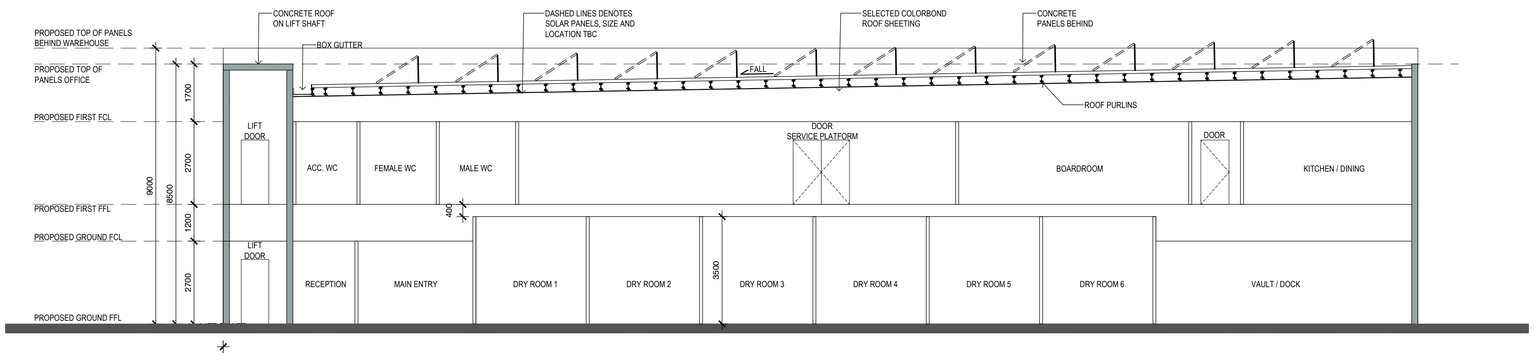
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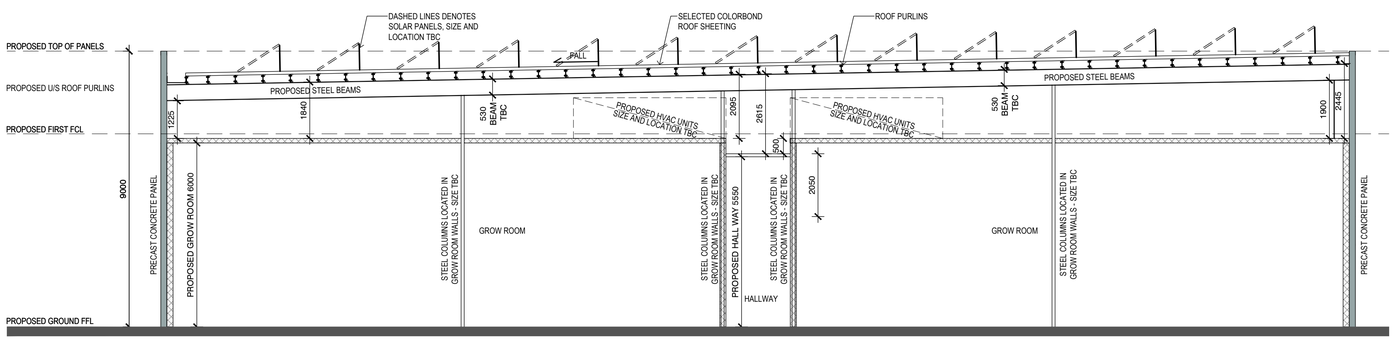
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AS NOTED

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JO255.38	MZ	CG	MAR '25		DA-1

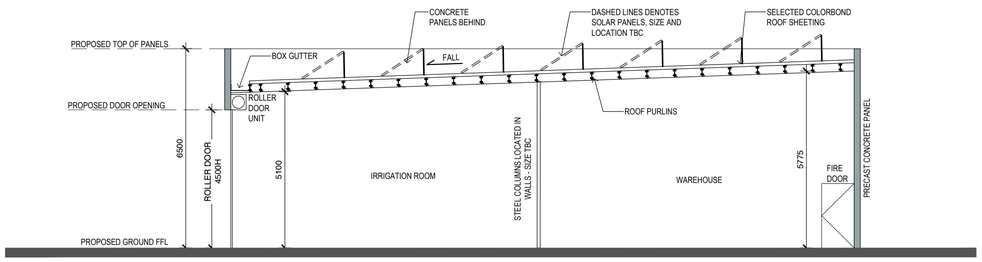
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AA TP04 SECTION AA - OFFICE
SCALE 1:100



BB TP04 SECTION BB - WAREHOUSE / GROW ROOMS
SCALE 1:100



CC TP04 SECTION CC - LOADING DOCK
SCALE 1:100

DA ISSUE

PROCON DEVELOPMENTS AUSTRALIA
PO Box 197, SEVILLE Vic 3139
Phone: (03) 9720 0817

AvonWest LOGISTICS & ENTERPRISE

Rev.	Reason.	Date.	Appr.
DA-2	DA ISSUE - LOT 838	24.04.25	MZ
DA-1	DA ISSUE - LOT 838	17.04.25	MZ

NOTES
- ANY ERRORS, DISCREPANCIES OR OMISSIONS IN THE DRAWINGS, NOTATIONS OR DIMENSIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION PRIOR TO WORKS COMMENCING.
- DO NOT SCALE FROM DRAWINGS, USE FIGURED DIMENSIONS ONLY. BUILDER / CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO PRODUCING SHOP DRAWINGS, ORDERING MATERIALS OR COMMENCING WORK ON SITE.
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- COPYRIGHT OF THE DESIGN, ALL DRAWINGS AND OTHER DOCUMENTS PROVIDED BY PROCON DEVELOPMENTS REMAIN VESTED IN PROCON DEVELOPMENTS UNLESS SPECIFICALLY ASSIGNED IN WRITING
- THE WORD "ARCHITECT" USED IN ALL DRAWINGS AND OTHER DOCUMENTS PROVIDED REFERS TO THE NOMINATED REPRESENTATIVE OF PROCON DEVELOPMENTS

Project.
AVON LOGISTICS HUB
LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED SECTIONS

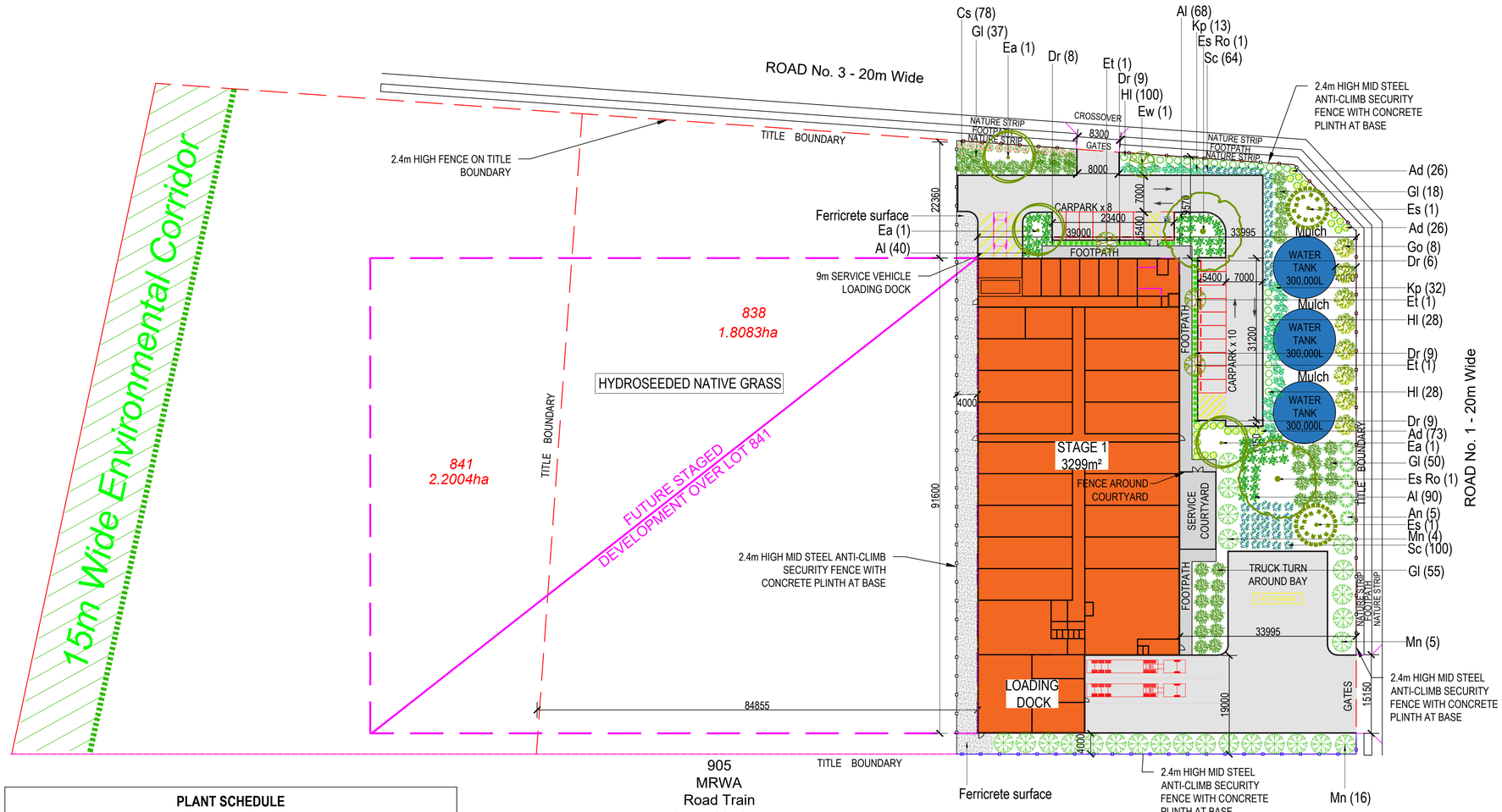
Drawing No.
TP07

Client.
PROCON DEVELOPMENTS

Scale.
AS NOTED

Job No.	Drawn By.	Checked By.	Date.	Plot date.	Revision
JO255.38	MZ	CG	MAR '25		DA-2

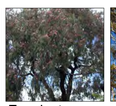
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PLANT SCHEDULE

Symbol	Code on plan	Botanic Name	Mature height x width	Minimum installation size	Density per m²	Quantity
TREE VARIETIES						
	Ea	Eucalyptus accedens	15m x 10m	45 Litre	Per symbol	3
	Es Ro	Eucalyptus sideroxylon 'Rosa'	20m x 15m	45 Litre	Per symbol	2
	Es	Eucalyptus salmonophloia	15m x 8m	45 Litre	Per symbol	2
	Et	Eucalyptus torquata	6m x 4m	45 Litre	Per symbol	3
	Ew	Eucalyptus wandoo	10m x 5m	45 Litres	Per symbol	1
SHRUB VARIETIES						
	Ad	Acaia drummondii	1.5m x 1.5m	14cm	2	125
	An	Atriplex nummularia	3m x 3m	14cm	Per symbol	5
	Cs	Calothamnus sanguineus	1.5m x 1.5m	14cm	2	78
	Go	Grevillea olivacea 'Yellow'	4m x 4m	5ltr	Per symbol	8
	Hl	Hakea lissocarpha	1.5m x 1.5m	14cm	2	156
	Mn	Melaleuca nesophila	4m x 4m	5Litre	Per symbol	25
GRASS VARIETY						
	Dr	Dianella revoluta	1m x 1m	14cm	Per symbol	41
GROUND COVER VARIETIES						
	Al	Acacia lasiocarpa prostrate	50cm x 2m	13cm	1	198
	Gl	Grevillea laurifolia x willsii 'Royal Mantle'	50cm x 3m	13cm	0.5	160
	Kp	Kennedia prostrata	10cm x 3m	13cm	0.5	45
	Sc	Scaevola crassifolia prostrate	50cm x 2m	13cm	1	164
TOTAL PLANTS						**1016**


Eucalyptus accedens


Eucalyptus sideroxylon 'Rosa'


Eucalyptus salmonophloia


Eucalyptus torquata


Eucalyptus wandoo

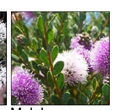

Acaia drummondii


Atriplex nummularia


Calothamnus sanguineus


Grevillea olivacea 'Yellow'


Hakea lissocarpha


Melaleuca nesophila


Dianella revoluta

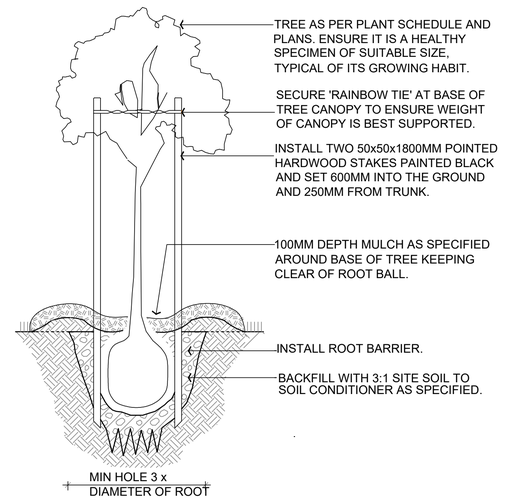

Acacia lasiocarpa prostrate


Grevillea laurifolia x willsii 'Royal Mantle'


Kennedia prostrata


Scaevola crassifolia prostrate

TYPICAL DRAWINGS



1 - TREE PLANTING DETAIL
TYPICAL SECTION
NOT TO SCALE

INSTALLATION SPECIFICATIONS

1. TREE AND PLANT MATERIAL SUPPLY AND PLANTING

1.1 PLANT MATERIAL

- ALL PLANT STOCK SUPPLIED BY CONTRACTOR SHALL BE OF THE SPECIES AND SIZES AS THOSE ON THE PLANT SCHEDULE. SHOULD THERE BE ANY DIFFICULTIES IN SOURCING PLANTS, THE CONTRACTOR SHALL RECOMMEND SIMILAR SUITABLE SUBSTITUTE SPECIES AND/OR SIZES TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTIONS SHALL TAKE PLACE WITHOUT WRITTEN APPROVAL BY THE SUPERINTENDENT.
- GREENLIFE MUST BE WELL KEPT: DELIVERED TO SITE ON DAY OF INSTALLATION, OUT OF FULL SUN, AWAY FROM ANIMALS AND PESTS AND ROOTS NOT ALLOWED TO DRY OUT AND SHALL:
  - BE TRUE TO SPECIES, SUBSPECIES AND VARIETY
  - BE IN FIRST CLASS CONDITION AND HEALTHY
  - BE OF GOOD FORM CONSISTENT WITH SPECIES AND VARIETY
  - AND BE PLANTED AS PER THE INSTRUCTIONS BELOW.
- HYDROMULCH SEEDED GRASS TO BE INSTALLED BY OTHERS.

1.2. GENERAL PLANTING INSTRUCTIONS

- SETTING OUT OF WORKS - WHERE UNDERGROUND SERVICES, MANHOLES, CABLE PITS, KERBING, PAVING, EXISTING TREE ROOTS AND OTHER OBSTRUCTIONS OCCUR, PLANT CLEAR OF SUCH SERVICES AND OBSTRUCTIONS AND PROTECT THEM FROM DAMAGE BY MACHINES AND EQUIPMENT.
- ALL PLANTS ADJACENT TO FOOTPATHS, SERVICES AND THE LIKE TO BE POSITIONED WITH APPROPRIATE OFFSET TO SIZE TO ENSURE PLANTS DO NOT GROW OVER FOOTPATHS AND SERVICES AT MATURE SIZE (MIMIMUM 500MM).
- REMOVE ALL PLANTS FROM THEIR CONTAINERS IN SUCH A MANNER AS TO DO AS LITTLE DISTURBANCE AS POSSIBLE TO THE ROOTS. WHERE NECESSARY, GENTLY TEASE OUT ROOTBALLS BEFORE PLANTING. PLACE TREES, SHRUBS AND PLANTS IN HOLES IN AN UPRIGHT POSITION AND BACKFILL LEVEL WITH TOP OF ROOTBALL. COMPACT SOIL BY HAND.
- REFER ADDITIONAL INSTRUCTIONS ON DETAILS 'TREE PLANTING DETAIL' AND 'POT PLANTING DETAIL' ON THIS PLAN.
- A ROOT BARRIER SHALL BE INSTALLED FOR ALL TREES.

1.3 SOIL CONDITIONER AND WETTING AGENT

- AFTER SITE WORKS AND BEFORE PLANTING, SUPPLY AND INSTALL SOIL CONDITIONER WITH WETTING AGENT TO ALL PLANTING AREAS.
- PRIOR TO PLACEMENT ENSURE ALL BASE MATERIAL IS CLEAN, FREE DRAINING AND FREE OF ALL BUILDER'S RUBBLE, RUBBISH, DELETERIOUS MATERIAL AND CONTAMINATION. ALL AREAS CONTAMINATED BY THE BUILDER OR OTHERS SHALL BE REMOVED AND REPLACE WITH CLEAN FILL SAND TO THE APPROVAL OF THE SUPERINTENDENT.
- PLACE SOIL CONDITIONER TO A DEPTH OF 15MM OVER THE FULL EXTENT OF AREAS TO BE CONDITIONED. ROTARY-HOE OR SPADE DIG WHERE NECESSARY SOIL CONDITIONER INTO EXISTING SITE SOIL TO A DEPTH OF 80MM TO PRODUCE A FULLY HOMOGENEOUS MIX. REMOVE ALL RUBBLE OR OTHER EXTRANEOUS AND DELETERIOUS MATTER EXPOSED AS A RESULT OF CULTIVATION, INCLUDING ANY BASE COURSE MATERIAL.
- SOIL CONDITIONER SHALL COMPLY WITH AS 4454COMPOSTS, SOIL CONDITIONERS AND MULCHES.

1.4 FERTILISING

- AFTER PLANTING AND AT TIME OF BACK FILLING ALL PLANTS ARE TO RECEIVE APPROVED PROPRIETY ITEM OF EIGHT TO NINE MONTH SLOW-RELEASE FERTILISER SUITABLE FOR AUSTRALIAN NATIVE PLANTS.
- FERTILISER TO BE APPLIED IN BACKFILL (BELOW GROUND) DURING PLANTING AT THE MANUFACTURERS' RECOMMENDED RATE FOR THE RELATIVE PLANT SIZE, AND AT A MINIMUM RATE AS FOLLOWS:
  - 45 LITRE POT SIZE PLANTS TO HAVE 100 GRAMS
  - 5 LITRE POT SIZE TO HAVE 25 GRAMS
  - 13CM - 14CM POT SIZE PLANTS TO HAVE TEN GRAMS

2. MULCH

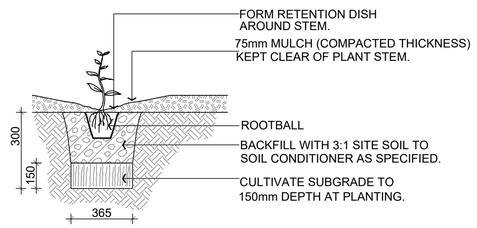
- ALL MULCH SHALL MEET AUSTRALIAN STANDARD 4454-2012.
- SITE MULCH SHALL BE CHUNKY PINE BARK WOOD CHIPS APPLIED TO A MINIMUM DEPTH OF 100MM, KEEPING CLEAR OF PLANT STEMS.
- MULCH IS TO BE COMPLETELY FREE OF ALL NOXIOUS WEEDS, SEEDS AND FUNGUS, INSECT PESTS AND OTHER DELETERIOUS MATERIAL.
- TIDY AND GRADE MULCH AFTER APPLICATION, FINISHING 20MM BELOW SURROUNDING HARD SURFACES.

3. FERRICRETE PATH SURFACE

- FERRICRETE TO BE INSTALLED WHERE INDICATED. ENSURE PATH SURFACE IS SITUATED SO AS TO NOT IMPEDE DOOR FUNCTION AND WITH AN APPROPRIATE STEP DOWN FROM BUILDING.
- INSTALL PRODUCT ON A PREPARED SUB-BASE IN EVEN LAYERS AS PER MANUFACTURER INSTRUCTION FOR PATH APPLICATION.
- COMPACT LAYERS THOROUGHLY WITH A COMPACTOR, LIGHTLY WATERING FOR DUST SUPRESSION.
- LEVEL SURFACE TO SMOOTH AND EVEN FINISH.
- AFTER CURING STAGE INSPECT SURFACE TO CONFIRM SUCCESSFUL COMPACTION AND INTEGRITY OF SURFACE.

4. IRRIGATION

- ALL GARDEN BEDS WITHIN STAGE 1 OF DEVELOPMENT TO BE IRRIGATED.
- WATER TO BE SUPPLIED FROM WATER TANKS.
- INSTALL A SUB-MULCH DRIP SYSTEM FOR ALL GARDEN BEDS AND INDIVIDUAL BUBBLERS FOR ALL TREES.
- CONTROLLER TO BE AUTOMATIC SYSTEM WITH RAIN SENSOR. LOCATION TO BE CONFIRMED ON SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR LAYOUT DESIGN AND INSTALLATION OF IRRIGATION SYSTEM AND APPROPRIATE CONNECTION TO TANKS.
- AT TIME OF COMPLETION THE IRRIGATION SYSTEM SHALL BE FULLY AUTOMATED, WORKING EFFICIENTLY AND EFFECTIVELY AND WATERING TIMES PROGRAMMED.
- FUTURE STAGE NATIVE GRASS AREA TO BE WATERED AFTER INSTALLATION AS PER HYDROSEED INSTALLER RECOMMENDATIONS.



2 - POT PLANTING DETAIL
TYPICAL SECTION
NOT TO SCALE

THIS PLAN MUST BE PRINTED IN BEST QUALITY COLOUR PRINT

URBAN Retreat GARDEN DESIGN

revision/issue	description	drawn	date
A	DEVELOPMENT APPLICATION	AC	23.05.2025

project: AVON LOGISTICS HUB
location: LOT 881 YILGARN AVENUE, NORTHAM, WA
for: PROCON DEVELOPMENTS
description: LANDSCAPE PLAN

URBAN RETREAT GARDEN DESIGN
COMMERCIAL AND RESIDENTIAL LANDSCAPE DESIGN SERVICES
www.urbanretreatgardens.com.au
E:amelia@urbanretreatgardens.com.au
M:0438 926 313

scale: 1:500 @ A1
project no: 25336
dwg no: L-01
rev: 0

Our Ref: RT/L136.25
Job No: 25-05-057

Level 2 Kishorn Court
58 Kishorn Road
Mount Pleasant WA 6153

PO Box 1036
Canning Bridge WA 6153

Tel: (08) 9315 9955
Email: office@portereng.com.au
www.portereng.com.au

29 May 2025

Procon Developments Australia
PO Box 197
SEVILLE VIC 3139

Attention: Matthew Zappia

Dear Matthew,

LOT 838 AVONWEST – STAGE 1
#239 YILGARN AVENUE, NORTHAM
STORMWATER MANAGEMENT PLAN REV B

This Stormwater Management Plan has been prepared in support of development approval application at proposed Lot 838 in Avonwest.

Lot 838 location is shown below in *Figure 1*. The site is bound by proposed road reserve to the north and east, industrial lot to the south and an environmental corridor to the west.



Figure 1 – Site location plan (overall subdivision bound in blue. Proposed site hatched in magenta).

PROPOSED DEVELOPMENT LAYOUT

The proposed development includes a warehouse facility with associated access and parking for trucks and light vehicles. A copy of the proposed development is presented in *Attachment A.*

Lot 838 will be developed across a number of stages with works initially limited to Stage 1. The development plans for the balance of lot were not available and such, an updated stormwater management plan is required when the balance of Lot 838 is developed.

LANDFORM

Lot 838 will be created as part of the Avon West subdivision. The proposed bulk earthworks plan for the subdivision layout shows the lot grades from a high of 177m in the south east boundary to a low of 168m in the north west boundary, an average grade of 3.5% or 1 in 28 from the south east to the north west.

The soils on site are expected to be Gravelly sands over clayey sand over hard ground and rock[1]. Infiltration rates on site are recommended at 0.5m per day with a minimum separation of

Groundwater is not expected to be within 8m of surface levels on site[2]. If groundwater is found during works, report to the engineer for further advice.

STORMWATER DESIGN PRINCIPALS

A requirement of the Avonwest subdivision was to prepare an Urban Water Management Plan (UWMP). This UWMP dictated on lot drainage requirements. All lots within Avon West must comply with the outcomes of the UWMP. *Table 1* provides a summary of these outcomes.

Aspect	UWMP Control
On lot detention	Systems are to be installed to detain $2m^3$ for every $65m^2$ of lot area
Offsite discharge	Outlet pipe to the street drainage network via the lot connection pit limited to the predevelopment 1EY 30-minute event.
Treatment	Appropriate water quality treatment measures are required depending on the intended lot use.
Infiltration	0m per day.
Flood Protection	All finish floor levels to be set 500mm above the lot maximum flood level for the 1% AEP event.

Table 1: UWMP Design Requirements

[1] Douglas Partners Geotechnical Investigation, *89055.00, July 2018*
[2] Oversby Consulting Urban Water Management Plan, *B24046, March 2025 V1 - Section 4*

STORWMATER DESIGN

The concept stormwater management plan is presented in *Attachment B*.

On Lot Detention

A combination of pits, pipes, drainage cells and rainwater harvesting tanks will be used to provide the minimum stormwater storage requirements for the lot. The storage shown in *Attachment B* complies with the UWMP's requirements.

The roof stormwater drainage will be conveyed to the below ground network by downpipes and discharge to the proposed rainwater tanks on site for storage and reuse within the commercial facility.

The remaining lot area will discharge to the below ground pit and pipe network with storage provided within the drainage cells below ground.

Offsite Discharge

An orifice plate will be installed on the outlet pipe to restrict flows compliant with the UWMP's requirements.

Treatment

The site's intended use is a warehouse and pavement for vehicles.

There is no vehicle wash down areas, fuel loading or other hydrocarbon uses. Hydrocarbon spills are not anticipated therefore a hydrocarbon separation is not required.

It is anticipated silts and larger objects are the likely water quality issues, these can be managed via the regular cleaning trapped pits and a baffle prior to the lot connection pit. These are documented in *Appendix B*.

Flood Protection

In the event of an extreme storm, the stormwater will flow north towards road where exits the site. All building floor levels are set compliant with UWMP.

CONCLUSION

The proposed site stormwater will be managed in accordance with the subdivision UWMP by the following measures:

1. Storage provided on site to detain $2m^3$ of stormwater for every $65m^2$ of lot area.
2. The building roof area will be discharged into rainwater storage tanks.
3. Low flow outlet pipe to the road drainage network, controlled by orifice plate
4. Trapped pits and a baffle are documented.
5. The building floor level are set compliant with the UWMP.

Yours faithfully,



RACHEL THOMSON
PROJECT ENGINEER

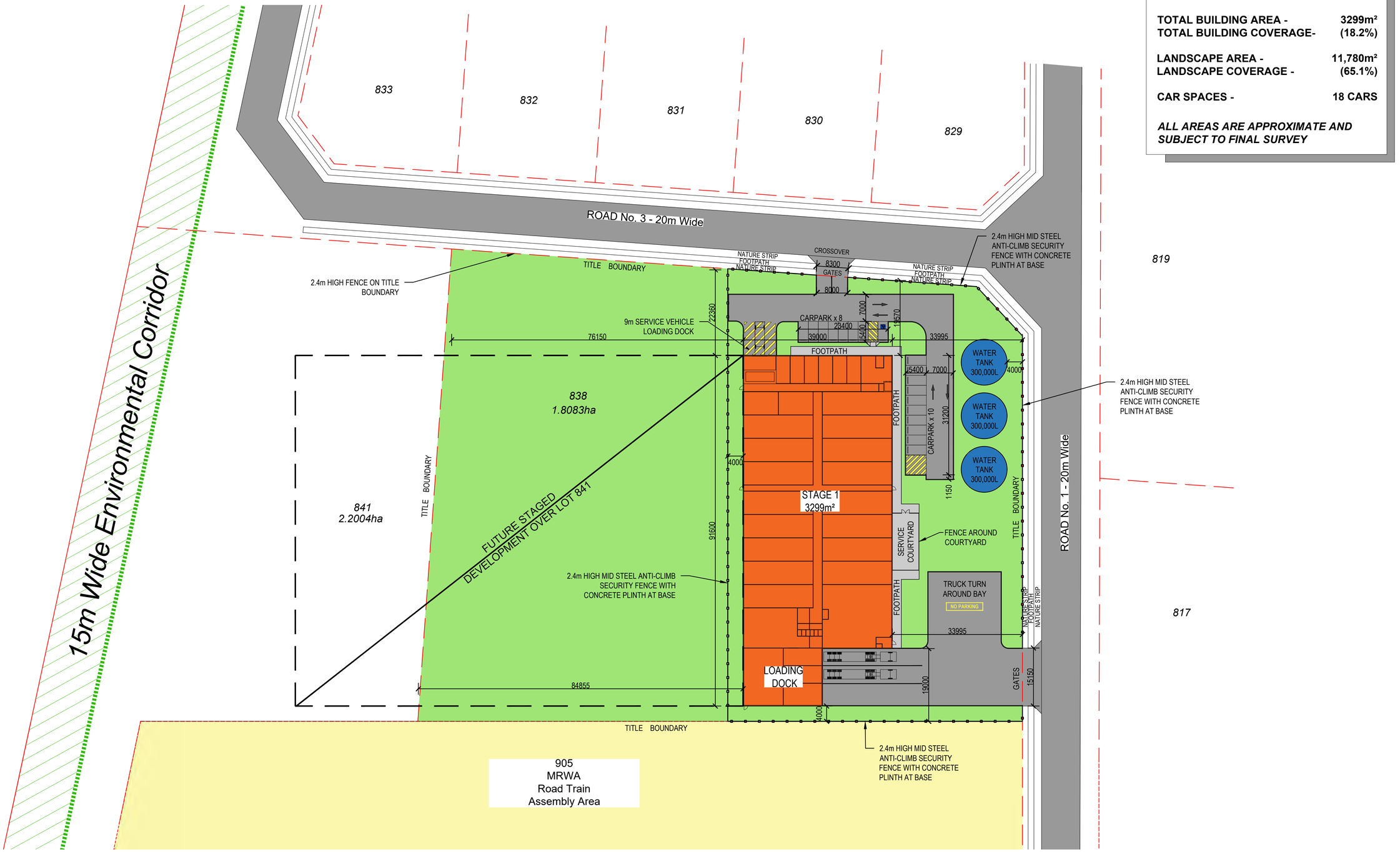
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ATTACHMENT A – CONCEPT DEVELOPMENT LAYOUT (STAGE 1)

AREA SCHEDULE

TOTAL SITE AREA -	18083m²
TOTAL BUILDING AREA -	3299m²
TOTAL BUILDING COVERAGE-	(18.2%)
LANDSCAPE AREA -	11,780m²
LANDSCAPE COVERAGE -	(65.1%)
CAR SPACES -	18 CARS

ALL AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY



DA ISSUE

PROCON DEVELOPMENTS AUSTRALIA
PO Box 197, SEVILLE Vic 3139
Phone: (03) 9720 0817

AvonWest
LOGISTICS & ENTERPRISE

Rev.	Reason.	Date.	Appr.
DA-2	DA ISSUE - LOT 838	24.04.25	MZ
DA-1	LOT PLAN - 838	17.04.25	MZ

NOTES
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Project.
AVON LOGISTICS HUB
LOT 881 YILGARN AVENUE
NORTHAM, WA 6401

North.

Drawing Title.
LOT 838 - VITAPONIX
PROPOSED SITE PLAN

Drawing No.
TP03

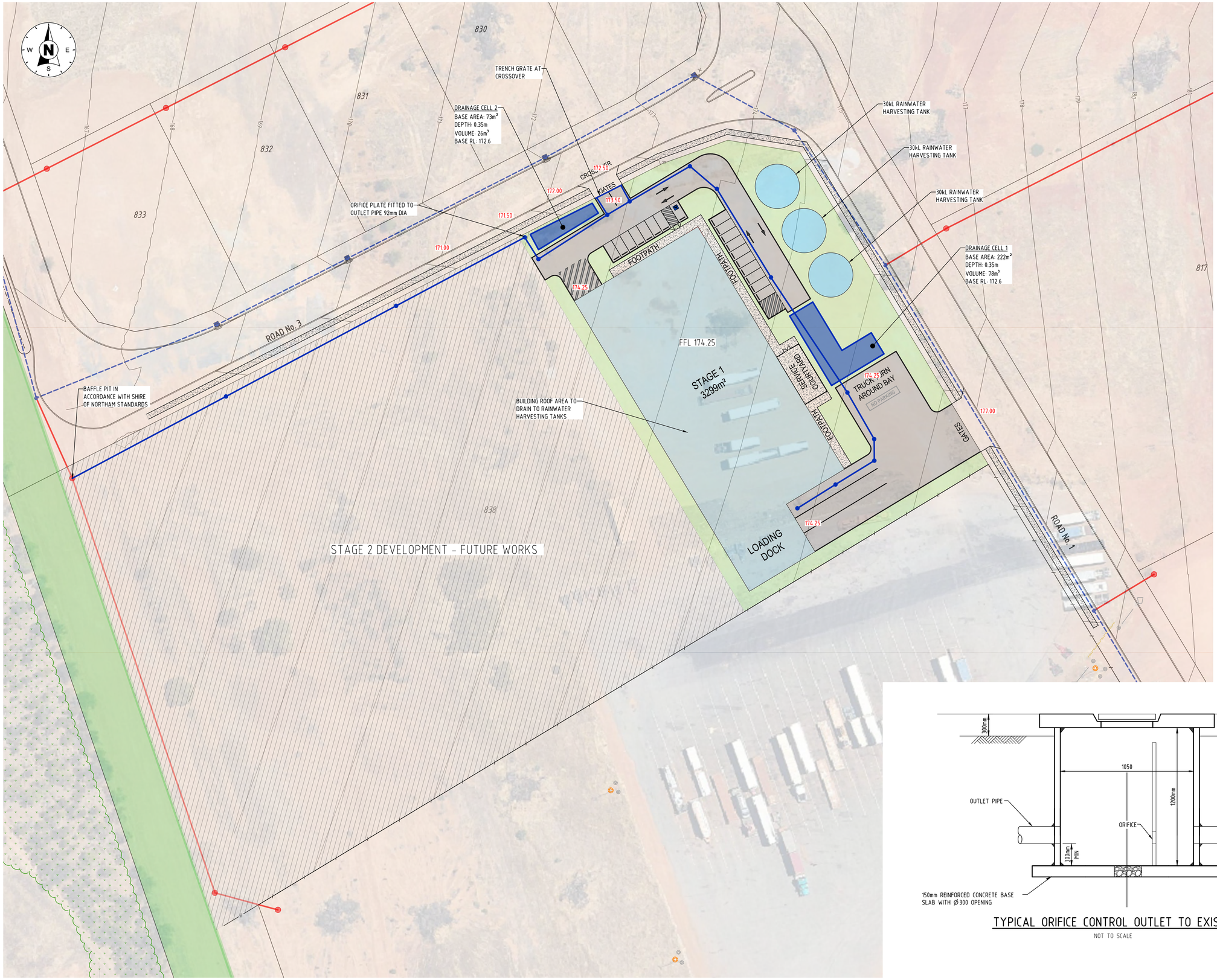
Client.
PROCON DEVELOPMENTS

Scale.
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Job No.	Drawn By.	Checked By.	Date.	Plot date.	Revision
JO255.38	MZ	CG	MAR '25		DA-2

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ATTACHMENT B - STORMWATER MANAGEMENT PLAN



LEGEND

- PROPOSED CONTOURS
- ENVIRONMENTAL CORRIDOR
- PROPOSED DRAINAGE PIPE
- SUBDIVISION DRAINAGE PIPE
- SUBDIVISION LOT CONNECTION PIPE
- UNDERGROUND STORAGE STRUCTURE
- AREA OF BUILDING
- AREA OF PAVEMENT
- AREA OF FOOTPATH
- AREA OF LAWN
- RAINWATER HARVESTING TANK
- PROPOSED ROAD/KERB
- LOT CONNECTION PIT (LCP)
- PROPOSED DRAINAGE PIT
- 174.25 PROPOSED FINISHED PAVEMENT LEVELS

DRAINAGE SUMMARY TABLE

THE ON SITE STORMWATER SYSTEM WILL MANAGE THE LOT STORMWATER, IN ACCORDANCE WITH AVONWEST SUBDIVISIONS UWMP.

DESIGN SUMMARY

OVERALL LOT AREA 2.75ha
STAGE 1 LOT AREA 0.88ha

LOT STORAGE - STAGE 1

LOT STORAGE REQUIRED

2m³ OF STORAGE FOR EVERY 65m² OF LOT AREA: 270m³

LOT STORAGE AVAILABLE

RAINWATER TANKS	3No.	= 99.1m³
SOAKWELLS	12 No. 1.8m dia x 1.2m deep	= 36.6m³
PIPE:	375mm DIA 275m LENGTH	= 30m³
DRAINAGE CELLS:	189m² BASE x 0.35m DEEP	= 103.7m³
TOTAL		= 270m³

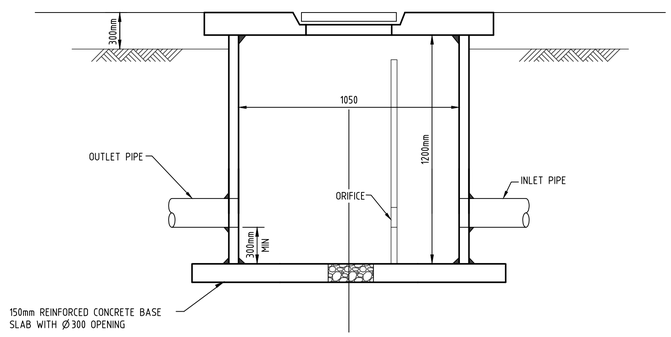
OUTLET CONTROL

OUTLET CONTROLLED TO 1EY 30 MINUTE EVENT PRE DEVELOPMENT FLOW RATE: 18l/s

ORIFICE PLATE DIAMETER: 92mm

EMERGENCY OVERFLOW

THE PROPOSED STORMWATER NETWORK WILL MANAGE THE 1% AEP CRITICAL EVENT. IN THE EVENT OF A MAJOR FAILURE WITHIN THE ON SITE STORAGE NETWORK, THE STORMWATER WILL OVERFLOW TO THE ROAD RESERVE ALONG THE NORTHERN BOUNDARY OF THE LOT



TYPICAL ORIFICE CONTROL OUTLET TO EXISTING PIT

NOT TO SCALE

0m 10 20 30m
1:500

BEFORE YOU DIG www.dyda.com.au

PROJECT:

LOT 838 AVONWEST
239 YILGARN AVE, NORTHAM

No.	DATE	REVISION	BY
B	29-5-2025	BASINS UPDATED, CALCULATIONS UPDATED	MEG
A	16-5-2025	ISSUED FOR APPROVAL	

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Porter Consulting Engineers

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PO Box 1036
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Tel (08) 9315 9955
Email office@portereng.com.au
www.portereng.com.au

TUOAD Pty Ltd ACN 670 097 148 as trustee for the Consulting Engineering Unit Trust trading as Porter Consulting Engineers ABN 78 636 396 385

CLIENT: PROCON DEVELOPMENTS AUSTRALIA

DRAWING: **STORMWATER MANAGEMENT PLAN**

STATUS: **FOR APPROVAL**

SCALE	1:500
DATE	May-25
DESIGN	RT
DRAWN	MEG
CHECK	
APP'D	

DRAWING No. **25-5-57/500**

REV No. **B**

ORIGINAL DRAWING SIZE **A1**

FILE NAME ..\25-05-057\ACAD\25557-500.dwg

Bushfire Management Plan Coversheet

This Coversheet and accompanying Bushfire Management Plan has been prepared and issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme.

Bushfire Management Plan and Site Details

Site Address / Plan Reference: Lot 881 (240) Yilgarn Avenue		
Suburb: Malambaine	**State:** WA	**P/code:** 6401
Local government area: Shire of Northam		
Description of the planning proposal: Subdivision Application		
BMP Plan / Reference Number: 190370	**Version:** v1.2	**Date of Issue:** 08/07/2024
Client / Business Name: Hidding Urban planning		

Reason for referral to DFES	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?	☐	☒
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the BPC elements)?	☐	☒
Is the proposal any of the following special development types (see SPP 3.7 for definitions)?		
Unavoidable development (in BAL-40 or BAL-FZ)	☐	☒
Strategic planning proposal (including rezoning applications)	☐	☒
Minor development (in BAL-40 or BAL-FZ)	☐	☒
High risk land-use	☐	☒
Vulnerable land-use	☐	☒

If the development is a special development type as listed above, explain why the proposal is considered to be one of the above listed classifications (E.g. considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

n/a

Note: The decision maker (e.g. local government or the WAPC) should only refer the proposal to DFES for comment if one (or more) of the above answers are ticked "Yes".

BPAD Accredited Practitioner Details and Declaration

Name	Accreditation Level	Accreditation No.	Accreditation Expiry
Kathy Nastov	Level 3	BPAD 27794	01/08/2024
Company Bushfire Prone Planning		**Contact No.** 6477 1144	

I declare that the information provided within this bushfire management plan is to the best of my knowledge true and correct

Signature of Practitioner  **Date** 24/05/2024

BUSHFIRE PRONE PLANNING

Bushfire Management Plan (BMP)

- *Assessment of potential bushfire impact*
- *Environmental conservation*
- *Assessment of the development's ability to acceptably mitigate bushfire risk through application of required and/or additional bushfire protection measures*
- *Creation of responsibilities to implement and maintain protection measures*



Produced to meet the relevant requirements of STATE PLANNING POLICY 3.7 Planning in Bushfire Prone Areas & Guidelines

240 Yilgarn Avenue, Malambaine

Shire of Northam

Subdivision Application

24 November 2023

Job Reference No: 190370

BPP GROUP PTY LTD T/A BUSHFIRE PRONE PLANNING

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VERSION HISTORY		
Version	Status/Details	Date
1.0	Original	24 November 2023
1.1	Updated Site plans	26 March 2024
1.2	Addition of Firebreak requirements	8 July 2024

BMP (Master) Template v9.17

DISTRIBUTION					
Destination		Version	No. Copies	Hard Copy	Electronic Copy
Person	Email				
Nik Hidding	nik@hidding.com.au	1.0	1	☐	☒
Nik Hidding	nik@hidding.com.au	1.1	1	☐	☒
Nik Hidding	nik@hidding.com.au	1.2	1	☐	☒

Limitations: *The protection measures that will be implemented based on information presented in this Bushfire Management Plan are minimum requirements and they do not guarantee that buildings or infrastructure will not be damaged in a bushfire, persons injured, or fatalities occur either on the subject site or off the site while evacuating.*

This is substantially due to the unpredictable nature and behaviour of fire and fire weather conditions. Additionally, the correct implementation of the required protection measures (including bushfire resistant construction) and any other required or recommended measures, will depend upon, among other things, the ongoing actions of the landowners and/or operators over which Bushfire Prone Planning has no control.

All surveys, forecasts, projections and recommendations made in this report associated with the proposed development are made in good faith based on information available to Bushfire Prone Planning at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.

Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences whether or not due to the negligence of their consultants, their servants or agents, arising out of the services provided by their consultants.

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SUMMARY STATEMENTS

THIS DOCUMENT – STATEMENT OF PURPOSE

The Bushfire Management Plan (BMP)

The BMP sets out the required package of bushfire protection measures to lessen the risks associated with a bushfire event. It establishes the responsibilities to implement and maintain these measures.

The BMP also identifies the potential for any negative impact on any environmental, biodiversity and conservation values that may result from the application of bushfire protection measures or that may limit their implementation.

Risks Associated with Bushfire Events

The relevant risks are the potential for loss of life, injury, or destroyed or damaged assets which results in personal loss and economic loss. For a given site, the level of that risk to persons and assets (the exposed elements) is a function of the potential threat levels generated by the bushfire hazard, and the level of exposure and vulnerability of the at risk elements to the threats.

Bushfire Protection Measures

The required package of protection measures is established by *State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7)*, its associated *Guidelines* and any other relevant guidelines or position statements published by the Department of Planning, Lands and Heritage. These measures are limited to those considered by the WA planning authorities as necessary to be addressed for the purpose of land use planning. They do not encompass all available bushfire protection measures as many are not directly relevant to the planning approval stage. For example:

- Protection measures to reduce the vulnerability of buildings to bushfire threats is primarily dealt with at the building application stage. They are implemented through the process of applying the Building Code of Australia (Volumes 1 and 2 of the national Construction Code) in accordance with WA building legislation and the application of construction requirements based on a building's level of exposure - determined as a Bushfire Attack Level (BAL) rating); or
- Protection measures to reduce the threat levels of consequential fire (ignited by bushfire and involving combustible materials surrounding and within buildings) and measures to reduce the exposure and vulnerability of elements at risk exposed to consequential fire, are not specifically considered.

The package of required bushfire protection measures established by the Guidelines includes:

- The requirements of the bushfire protection criteria which consist of:
    - Element 1: Location (addresses threat levels).
    - Element 2: Siting and Design of Development (addresses exposure levels of buildings).
    - Element 3: Vehicular Access (addresses exposure and vulnerability levels of persons).
    - Element 4: Water (addresses vulnerability levels of buildings).
    - Element 5: Vulnerable Tourism Land Uses (addresses exposure and vulnerability as per Elements 1-4 but in use specific ways and with additional considerations of persons exposure and vulnerability).
- The requirement to develop Bushfire Emergency Plans / Information for 'vulnerable' land uses for persons to prepare, respond and recover from a bushfire event (this addresses vulnerability levels).
- The requirement to assess bushfire risk and incorporate relevant protection measures into the site emergency plans for 'high risk' land uses (this addresses threat, exposure and vulnerability levels).

Compliance of the Proposed Development or Use with SPP 3.7 Requirements

The BMP assesses the capacity of the proposed development or use to implement and maintain the required 'acceptable' solutions and any additionally recommended bushfire protection measures - or its capacity to satisfy the policy intent through the justified application of additional bushfire protection measures as supportable 'alternative' solutions.

THE PROPOSED DEVELOPMENT/USE – BUSHFIRE PLANNING COMPLIANCE SUMMARY		
Environmental Considerations		**Assessment Outcome**
Will land with identified environmental, biodiversity and conservation values limit the full application of the required bushfire protection measures?		No
Will land with identified environmental, biodiversity and conservation values need to be managed in the implementation and maintenance of the bushfire protection measures - but not limit their application?		Yes
Required Bushfire Protection Measures The Acceptable Solutions of the Bushfire Protection Criteria (Guidelines)		**Assessment Outcome**
Element	The Acceptable Solutions	
1: Location	A1 Location	Fully Compliant
	A1.1 Development location	Fully Compliant
2: Siting and Design of Development	A2 Siting and Design of Development	Fully Compliant
	A2.1 Asset Protection Zone (APZ)	Fully Compliant
3: Vehicular Access	A3 Vehicular Access	Fully Compliant
	A3.1 Public roads	Fully Compliant
	A3.2a Multiple access routes	Fully Compliant
	A3.2b Emergency access way	N/A
	A3.3 Through-roads	Fully Compliant
	A3.4a Perimeter roads	N/A
	A3.4b Fire service access route	Fully Compliant
	A3.5 Battle-axe legs	N/A
	A3.6 Private driveways	N/A
4: Water	A4 Water	Fully Compliant
	A4.1 Identification of future water supply	N/A
	A4.2 Provision of water for firefighting purposes	Fully Compliant

Other Documents Establishing Bushfire Protection Measure Variations or Additions	Assessment Outcome
A 'Planning Approval' or a 'Notice of Determination' which contains 'Conditions' to be met.	N/A
A DPLH/WAPC 'Position Statement'	N/A
Bushfire Management Plan Guidance for the Dampier Peninsula (DPLH 2021 Rev B)	N/A
Other 'Bushfire Planning' Documents to Be Produced This necessity for additional documents is determined by the proposed development/use type and the requirements established by SPP 3.7 and the associated Guidelines (as amended). They may be produced concurrently or subsequent to the BMP. Relevant actions will be identified within Section 6 'Responsibilities for Implementation of Bushfire Protection Measures.	**Required**
Bushfire Emergency Plan: An operational document presenting prevent, prepare, respond and recover procedures and associated actions. As necessary, supporting information to justify determinations is included.	No
Bushfire Emergency Information (Poster): As a concise response information poster for certain vulnerable land uses.	No
Bushfire Emergency Information (Content): As content for inclusion into the Site's Emergency Plan for certain high risk land uses:	No
Bushfire Risk Assessment and Management Report:	No

1 PROPOSAL DETAILS AND THE BUSHFIRE MANAGEMENT PLAN

1.1 The Proposed Development/Use Details, Plans and Maps

The Proposal's Planning Stage For which certain bushfire planning documents are required to accompany the planning application.		Subdivision Application (lot division)
The Subject Land/Site		Lot 881 (240) Yilgarn Avenue, Malabaine/Northam
Total Area of Subject Lot/Site		59.5593 hectares
Number of Additional Lots Created		50
Primary Proposed Construction	**Type(s)**	N/A
	NCC Classification	N/A
Description of the Proposed Development/Use		
Subdivision of Lot 881 Yilgarn Avenue into 50 new lots for industrial use.		

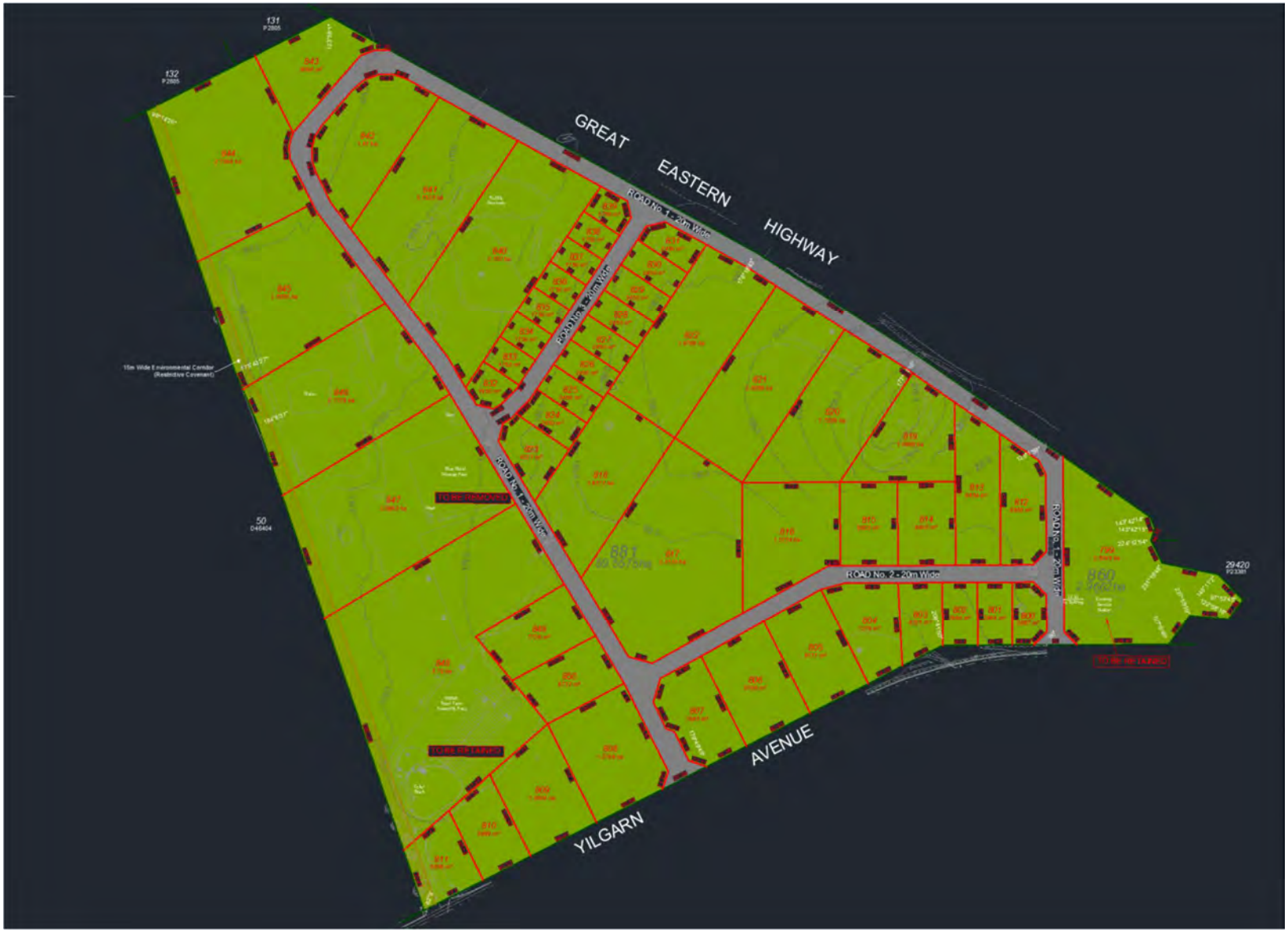

GREAT EASTERN HIGHWAY
YILGARN AVENUE
ROAD No. 1 - 20m Wide
ROAD No. 2 - 20m Wide
ROAD No. 3 - 20m Wide
ROAD No. 4 - 20m Wide
15m Wide Environmental Corridor (Restrictive Covenant)
TO BE REMOVED
TO BE RETAINED
131
P2805
132
P2805
50
D46404
29-420
P23381

Figure 1.2

Proposed Subdivision

Lot 881 on Plan 030581, Area : 59.5593 ha
240 Yilgarn Avenue
MALAMBAINE
NORTHAM

GREAT EASTERN HWY
YILGARN AV

------ LEGEND ------

- Subject Site
- Cadastral
- Hydrants

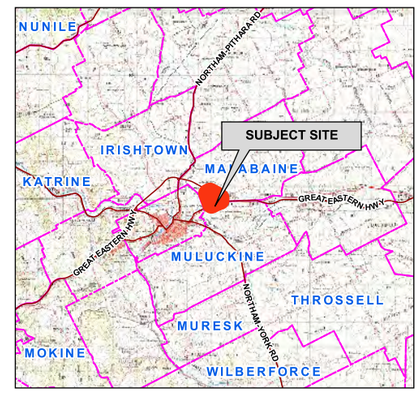
Boundaries

- Lot boundaries
- Environmental buffer

0 50 100 150 200 250

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Joy Graeber 26-03-2024
SCALE (A3): 1 : 5000

BUSHFIRE PRONE PLANNING

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Figure 1.2

Location Map

Lot 881 on Plan 030581, Area : 59.5593 ha
240 Yilgarn Avenue
MALAMBAINE
NORTHAM

------ LEGEND ------

- Subject Site
- Cadastral
- Reserves

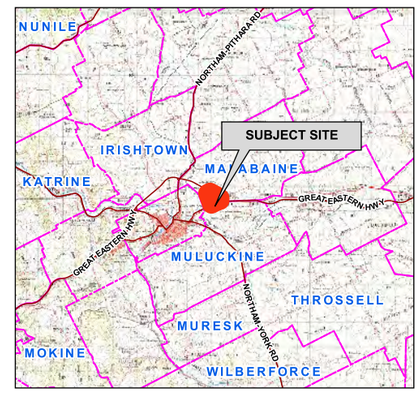
DFES Stations (DFES-023)

- Bush Fire Brigade
- State Emergency Service Unit
- Volunteer Fire & Rescue Service

0 500 1,000 1,500 2,000

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Joy Graeber 24-11-2023
SCALE (A3): 1 : 50000

BUSHFIRE PRONE PLANNING

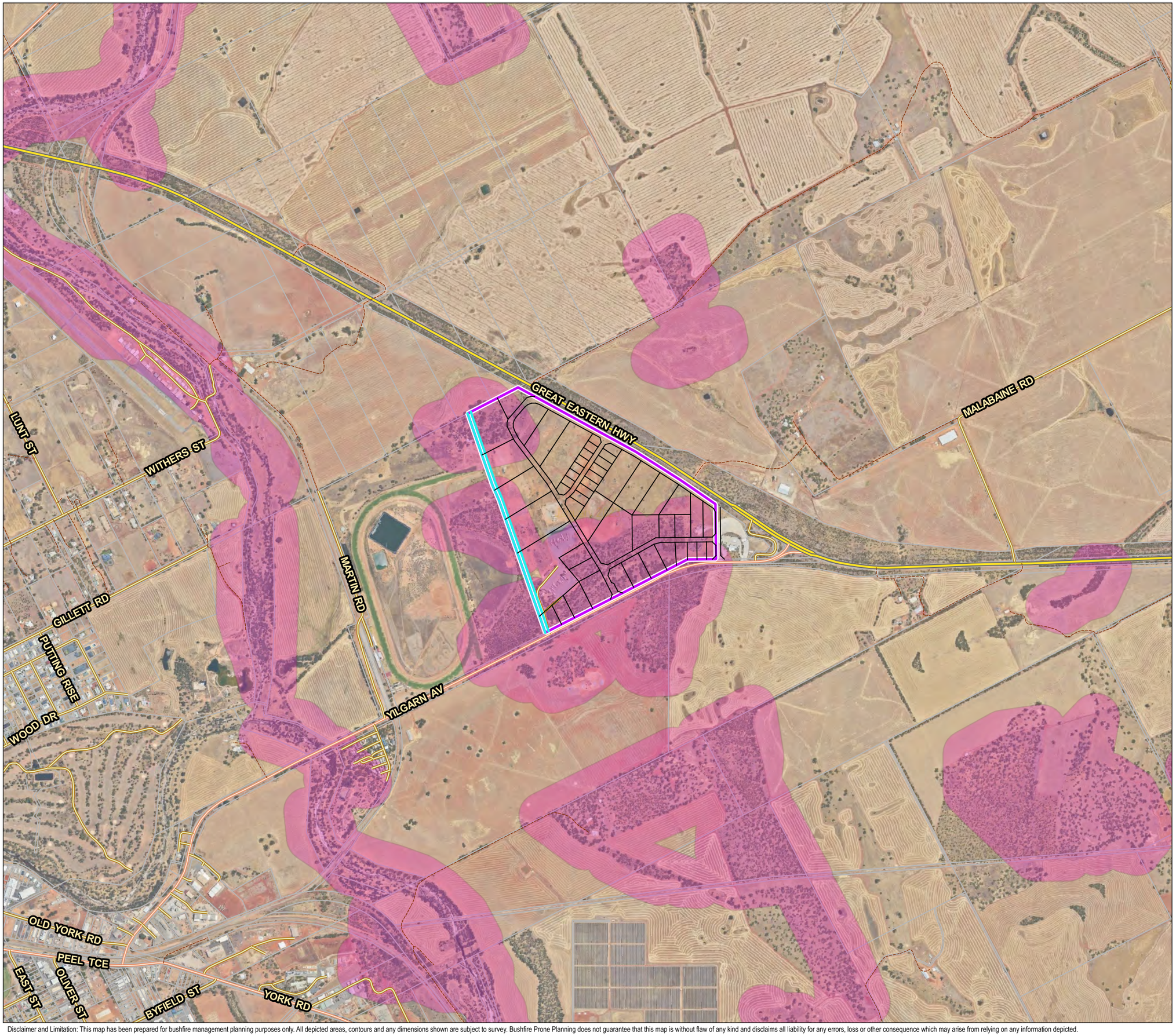
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190370_1-3_LOC_Lot 881 (240) Yilgarn Avenue Malabaine.qgz

Figure 1.3

Bushfire Prone Area

Lot 881 on Plan 030581, Area : 59.5593 ha
240 Yilgarn Avenue
MALAMBAINE
NORTHAM



------ LEGEND ------

- Subject Site
- Cadastral
- Bushfire Prone Areas 2021
- Hydrants

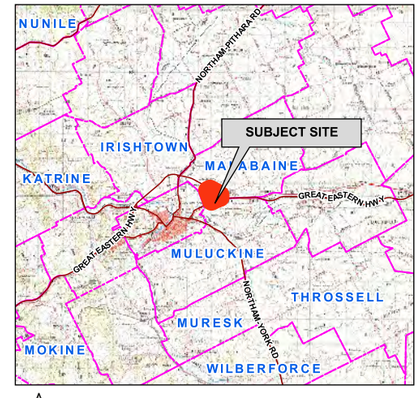
Boundaries

- Lot boundaries
- Environmental buffer

0 200 400 600 800

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

BUSHFIRE PRONE PLANNING

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Joy Graeber 26-03-2024
SCALE (A3): 1 : 15000

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1.2 The Bushfire Management Plan (BMP)

1.2.1 Commissioning and Purpose

Landowner / proponent:	Procon Developments
Bushfire Prone Planning commissioned to produce the BMP by:	Hidding Urban Planning
Purpose of the BMP:	To assess the proposal's ability to meet all relevant requirements established by State Planning Policy 3.7: Planning in Bushfire Prone Areas (SPP 3.7), the associated 'Guidelines and any relevant Position Statements; and To satisfy the requirement for the provision of a Bushfire Management Plan to accompany the subdivision application.
BMP to be submitted to:	Shire of Northam

1.2.1 Other Documents with Implications for Development of this BMP

This section identifies any known assessments, reports or plans that have been conducted and prepared previously, or are being prepared concurrently, and are relevant to the planned proposal for the subject. They potentially have implications for the assessment of bushfire threats and the identification and implementation of the protection measures that are established by this Bushfire Management Plan.

Table 1.4: Other relevant documents that may influence threat assessments and development of protection measures.

RELEVANT DOCUMENTS					
Document	Relevant	Currently Exists	To Be Developed	Copy Provided by Proponent / Developer	Title
Structure Plan	No	N/A	N/A	N/A	-
Bushfire Management Plan	Yes	Yes	No	N/A	Bushfire Management Plan written by BPP November 2023
Implications for this BMP: None					
Bushfire Emergency Plan or Information	No	No	No	N/A	-
Bushfire Risk Assessment and Management Report	No	No	No	N/A	-
Environmental Asset or Vegetation Survey	Yes	Yes	No	No	Environmental Assessment report prepared by Aurora Environmental.
Implications for the BMP: This lot was previously zoned as 'Environmental Conservation' and was then rezoned to 'Light Industry' through a Scheme amendment. The subsequent Environmental Assessment Report identified areas within Lot 881that are of significance to Black Cockatoos. This area is still being cleared for the subdivisional works with the condition of a revegetated corridor along the western lot boundary.					
Landscaping and Revegetation Plan	Yes	Yes	No	No	-

Implications for the BMP: Revegetation is planned along the western lot boundary, with 15m on either side of the lot boundary. This has influenced the classification of vegetation with the lot and the subsequent BAL Contour map. As the species composition is not known for the revegetation area, the area has been classified as worst case – Class A Forest. The implementation of a revegetation corridor will also incur a variation to the firebreak notice and installation of firebreaks along the western boundary of the affected lots.					
Land Management Agreement	No	No	No	N/A	-

2 BUSHFIRE PRONE VEGETATION – ENVIRONMENTAL & ASSESSMENT CONSIDERATIONS

2.1 Environmental Considerations – 'Desktop' Assessment

This 'desktop' assessment must not be considered as a replacement for a full Environmental Impact Assessment. It is a summary of potential environmental values at the subject site, inferred from information contained in listed datasets and/or reports, which are only current to the date of last modification.

These data sources must be considered indicative where the subject site has not previously received a site-specific environmental assessment by an appropriate professional.

Many bushfire prone areas also have high biodiversity values. Consideration of environmental priorities within the boundaries of the land being developed can avoid excessive or unnecessary modification or clearing of vegetation. Approval processes (and exemptions) apply at both Commonwealth and State levels.

Any 'modification' or 'clearing' of vegetation to reduce bushfire risk is considered 'clearing' under the ***Environmental Protection Act 1986*** (EP Act) and requires a clearing permit under the ***Environmental Protection (Clearing of Native Vegetation) Regulations 2004*** (Clearing Regulations) – unless for an exempt purpose.

Clearing native vegetation is an offence, unless done under a clearing permit or the clearing is for an exempt purpose. Exemptions are contained in the EP Act or are prescribed in the Clearing Regulations (note: these do not apply in environmentally sensitive areas).

The ***Department of Water and Environmental Regulation*** (DWER) is responsible for issuing 'clearing' permits and the framework for the regulation of clearing. Approvals under other legislation, from other agencies, may also be required, dependent on the type of flora or fauna present.

Local Planning Policy or Local Biodiversity Strategy: Natural areas that are not protected by the above Act and Regulation (or any other National or State Acts) may be protected by a local planning policy or local biodiversity strategy. Permission from the local government will be required for any modification or removal of native vegetation in these Local Natural Areas (LNA's). Refer to the relevant local government for detail.

For further Information refer to Guidelines v1.4, the Bushfire and Vegetation Factsheet - WAPC, Dec 2021 and https://www.der.wa.gov.au/our-work/clearing-permits

Figure 2.1

Environmental Considerations Map

Lot 881 on Plan 030581, Area : 59.5593 ha
240 Yilgarn Avenue
MALAMBAINE
NORTHAM

SUBJECT SITE

NORTHAM AND NORTHAM VFRSS SES
NORTHAM CENTRAL BFB

SOUTHERN BROOK RD
HITCHCOCK RD
Jurendine Creek
Malabaine Creek
Noggojerring
NORTHAM-PITHARA RD
GREAT EASTERN HWY
IRISHTOWN RD
LUNT ST
WITHERS ST
MALABAINE RD
CLYDESDALE RD
CHURCH ST
MOORE ST
GOOMALLING RD
KATRINE RD
GILLETT RD
MARTIN RD
Northam Racecourse
Mitchinson Creek
YILGARN AV
CHRISTMAS RD
SUBURBAN RD
CLARKE ST
Mortlock River North
Morrell Creek
Northam Country Club
Avonvale Education Support Centre
Mortlock River Enright Park
INKPEN ST
NEWCASTLE RD
KENNEDY ST
FORREST ST
BROOME TCE
MINSON AV
Jones Brook
East Northam
Northam Aboriginal Pre-School
MITCHELL AV
King Creek
CHIDLOW ST EAST
BURGOWE ST
LYON ST
GORDON ST
WOODLEY FARM DR
LOTON DR
Oakover Creek
Grass Valley Brook
Shire of Northam Administration Office
CHARLES ST
CROKE AV
LOCKYER AV
THROSSELL ST
NORTHAM-YORK RD
MULUCKINE RD
Seabrook
BORAMIN RD
Muluckine Creek

------ LEGEND ------

- Subject Site
- Cadastral
- Bushfire Prone Areas 2021
- Hydrants

Boundaries

- Lot boundaries
- Environmental buffer

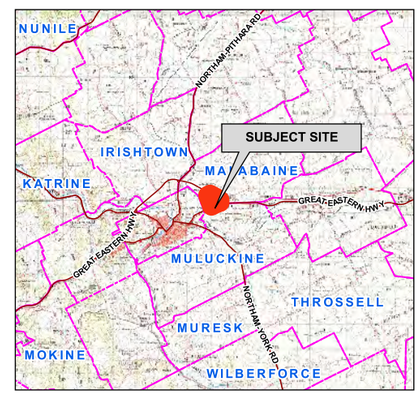
DFES Stations (DFES-023)

- Bush Fire Brigade
- State Emergency Service Unit
- Volunteer Fire & Rescue Service
- Reserves

0 500 1,000 1,500 2,000

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Joy Graeber 23-11-2023
SCALE (A3): 1 : 30000

BUSHFIRE PRONE PLANNING

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2.1.1 Declared Environmentally Sensitive Areas (ESA)

IDENTIFICATION OF RELEVANT ENVIRONMENTALLY SENSITIVE AREAS							
ESA Class	Relevant to Proposal	Influence on Bushfire Threat Levels and / or Application of Bushfire Protection Measures	Relevant Dataset	Information Source(s) Applied to Identification of Relevant Vegetation			Further Action Required
				Dataset	Landowner or Developer	Environmental Asset or Vegetation Survey	
Wetlands and their 50m Buffer (Ramsar, conservation category and nationally important)	No	No	DBCA-010 and 011, 019, 040, 043, 044	☒	☐	☐	None
Bush Forever	No	No	DPLH-022, SPP 2.8	☒	☐	☐	None
Threatened and Priority Flora + 50m Continuous Buffer	Unknown	Possible	DBCA-036	Restricted Scale of Data Available (security)	☐	☐	Data not obtained - confirm with relevant agency
Threatened Ecological Community	Unknown	Unknown	DBCA-038		☐	☐	Data not obtained - confirm with relevant agency
Heritage Areas National / World	No	No	Relevant register or mapping	☒	☐	☐	None
Environmental Protection (Western Swamp Tortoise) Policy 2002	No	No	DWER-062	☒	☐	☐	None

DESCRIPTION OF THE IDENTIFIED ENVIRONMENTALLY SENSITIVE AREAS:

Further consultation with relevant authority is required regarding accurate accounts of threatened and priority flora as well as threatened ecological communities within the site as this data has restricted access.

This lot was previously zoned as 'Environmental Conservation' but was rezoned to 'Light Industry' through a Scheme amendment. Relevant information can be found in the subsequent Environmental Assessments conducted by Aurora Environmental and Talis (as mentioned in Scheme Amendment Letter by Environmental Protection Authority).

Additional Environmental assessments have been conducted by Aurora Environmental. These reports provide a more detailed overview of environmentally significant area within the lot. The area was identified as providing significant habitat and foraging opportunities to the Black Cockatoo.

2.1.2 Other Protected Vegetation on Public Land

IDENTIFICATION OF PROTECTED VEGETATION ON PUBLIC LAND							
Land with Environmental, Biodiversity, Conservation and Social Values	Relevant to Proposal	Influence on Bushfire Threat Levels and / or Application of Bushfire Protection Measures	Relevant Dataset	Information Source(s) Applied to Identification of Relevant Vegetation			Further Action Required
				Dataset	Landowner or Developer	Environmental Asset or Vegetation Survey	
Legislated Lands (tenure includes national park/reserve, conservation park, crown reserve and state forest)	Yes	No	DBCA-011	☒	☐	☐	None
Conservation Covenants	Unknown	Unknown	DPIRD-023	Only Available to Govt.	☐	☐	Data not obtained - confirm with relevant agency
National World Heritage Areas	No	No	-	☒	☐	☐	None
Designated Public Open Space	No	No	-	☒	☐	☐	None

DESCRIPTION OF THE IDENTIFIED AREA(S) OF VEGETATION

Proponent may require further consultation with relevant authorities to obtain specific site information regarding Conservation Covenants within the site.

2.1.3 Response of Proposed Development to Identified Environmental Limitations

Consideration of the implications that identified protected areas of vegetation (i.e., those with environmental and subject to conservation) have for the proposed development.

PROPOSED DEVELOPMENT RESPONSE TO IDENTIFIED 'PROTECTED' VEGETATION	
The existence of 'protected' areas of vegetation has implications for the ability of the proposed development to reduce potential bushfire impact through modification or removal of vegetation.	No
Application of Design and/or Construction Responses to Limit Vegetation Modification or Removal	
Modify the development location to reduce exposure by increasing separation distance.	No
Redesign development, structure plan or subdivision.	Yes
Implementation of an Environmental Buffer on the eastern boundary of the lot creating decreased separation to classified vegetation for Lots 811, 844, 845, 846, 847 and 848.	
Reduction of lot yield where this can increase available separation distances.	No
Cluster development to limit modification or removal of vegetation.	No
Construct building(s) to the requirements corresponding to higher BAL ratings to reduce required separation distances.	No

2.2 Bushfire Assessment Considerations

2.2.1 Planned Onsite Vegetation Landscaping

Identification of areas of the subject site planned to be landscaped, creating the potential for increased or decreased bushfire hazard for proposed development.

PLANNED LANDSCAPING	
Relevant to Proposal:	Yes
The whole lot is to be cleared, with cut and fill works to be done throughout the site to level out. Revegetation works are planned on the eastern boundary in the 15m environmental buffer.	

2.2.2 Planned / Potential Offsite Rehabilitation or Re-Vegetation

Identification of areas of land adjacent to the subject site on which re-vegetation (as distinct from natural re-generation) will or may occur and is likely to present a greater bushfire hazard for proposed development.

POTENTIAL RE-VEGETATION PROGRAMS		
Land with Environmental, Biodiversity, Conservation and Social Values	Relevant to Proposal	Description
Riparian Zones / Foreshore Areas	No	
Wetland Buffers	No	
Legislated Lands	No	
Public Open Space	No	
Road Verges	No	
Other	Yes	The vegetation (Environmental) buffer is to extend 15m into the adjacent lot.

2.2.3 Identified Requirement to Manage, Modify or Remove Onsite or Offsite Vegetation

Identification of native vegetation subject to management, modification or removal.

REQUIREMENT TO MANAGE, MODIFY OR REMOVE NATIVE VEGETATION	
Has a requirement been identified to manage, modify or remove **onsite** native vegetation to establish the required bushfire protection measures on the subject site?	Yes
The whole lot is to be cleared for development and subdivisional works as seen in Figure 3.1 of this document.	
Is approval, from relevant state government agencies and/or the local government, to modify or remove **onsite** native vegetation required? (Note: if 'Yes' evidence of its existence should be provided in this BMP).	Yes
The Shire of Northam is required to provide approval of all native vegetation removal, particularly any Cockatoo habitat established in the Environmental assessment report.	
Has a requirement been identified to manage, modify or remove **offsite** native vegetation to establish the required bushfire protection measures on the subject site?	Yes

The proposed environmental buffer along the eastern boundary proposes an additional 10m to be revegetated on the adjacent lot. This is shown in Figure 3.1 of this report.	
Is written approval required, from relevant state government agencies and/or the local government, that permits the landowner, or another identified party, to modify or remove **offsite** bushfire prone vegetation and/or conduct other works, to establish an identified bushfire protection measure(s)? If 'Yes', appropriate evidence of the approval or how it is to be established, shall be provided in this BMP as an addendum.	Yes
The removal of any conservation land and environmentally significant flora and fauna will require relevant approval before any removal or management is undertaken.	
Is a written management agreement required that states the obligation of the landowner, or another responsible party, to manage defined areas of **offsite** bushfire prone vegetation, in perpetuity, to ensure the conditions of no fire fuels and/or low threat vegetation and/or vegetation managed in a minimal fuel condition, continue to be met? If 'Yes', appropriate evidence of the agreement or how it is to be established, shall be provided in this BMP as an addendum.	No

2.2.4 Variations to Assessed Areas of Classified Vegetation to be Applied

FOR THE PROPOSED DEVELOPMENT SITUATIONS TO BE ACCOUNTED FOR IN ASSESSING THE POTENTIAL BUSHFIRE IMPACT (BAL)	
Area(s) of land will be subject to future vegetation rehabilitation or re-vegetation that will require a change to a higher threat classification of vegetation on that land to. (Note: this is not regeneration to the mature natural state which is accounted for in the 'existing state' assessment in accordance with AS 3959:2018).	Yes
The planned revegetation has already been considered in the vegetation mapping and subsequent BAL Contour mapping (Figures 3.1 and 3.2 respectively). The proposed revegetation has already been classed as worst case scenario – Class A Forest vegetation.	
Modification of existing area(s) of classified vegetation due to the implementation of the proposed development and/or prior to the site's occupancy or use. This modification will require a change to a lower threat classification (or exclusion from classification) for that area of vegetation.	No
Complete removal of existing area(s) of classified vegetation due to the implementation of the proposed development and/or prior to the site's occupancy or use. This modification will require an exclusion from classification for that area of vegetation.	Yes
Refer to Figure 1.1 'Proposed Development Site Plan' and Figure 3.1. 'Classified Vegetation' in the document. The whole lot has been classified as excluded for the purpose of the BAL Contour map due to the large-scale vegetation and landscape modification. The area within the lot will undergo large scale clearing and landscape cut and fill to level the site. Taking into consideration the nature of the subdivision and the associated works, the lot has been classified as excluded.	

3 BUSHFIRE ATTACK LEVEL (BAL) ASSESSMENT

BUSHFIRE ATTACK LEVELS (BAL) - UNDERSTANDING THE RESULTS

The potential transfer (flux/flow) of radiant heat from the bushfire to a receiving object is measured in kW/m^2. The AS 3959:2018 BAL determination methodology establishes the ranges of radiant heat flux that correspond to each bushfire attack level. These are identified as BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ.

The bushfire performance requirements for certain classes of buildings are established by the Building Code of Australia (Vol. 1 & 2 of the NCC). The BAL will establish the bushfire resistant construction requirements that are to apply in accordance with AS 3959:2018 - *Construction of buildings in bushfire prone areas* and the NASH Standard – *Steel framed construction in bushfire areas (NS 300 2021),* whose solutions are deemed to satisfy the NCC bushfire performance requirements.

DETERMINED BAL RATINGS

A BAL Certificate can be issued for a determined BAL. A BAL can only be classed as 'determined' for an existing or future building/structure when:

1. It's final design and position on the lot are known and the stated separation distance from classified bushfire prone vegetation exists and can justifiably be expected to remain in perpetuity; or

2. It will always remain subject to the same BAL regardless of its design or position on the lot after accounting for any regulatory or enforceable building setbacks from lot boundaries as relevant and necessary (e.g., R-codes, restrictive covenants, defined building envelopes) or the retention of any existing classified vegetation either onsite or offsite.

If the BMP derives determined BAL(s), the BAL Certificate(s) required for submission with building applications can be provided, using the BMP as the assessment evidence.

INDICATIVE BAL RATINGS

A BAL Certificate cannot be issued for an indicative BAL. A BAL will be classed as 'indicative' for an existing or future building/structure when the required conditions to derive a determined BAL are not met.

This class of BAL rating indicates what BAL(s) could be achieved and the conditions that need to be met are stated.

Converting the indicative BAL into a determined BAL is conditional upon the currently unconfirmed variable(s) being confirmed by a subsequent assessment and evidential documentation. These variables will include the future building(s) location(s) being established (or changed) and/or classified vegetation being modified or removed to establish the necessary vegetation separation distance. This may also be dependent on receiving approval from the relevant authority for that modification/removal.

BAL RATING APPLICATION – PLANNING APPROVAL VERSUS BUILDING APPROVAL

1. **Planning Approval**: SPP.3.7 establishes that where BAL- LOW to BAL-29 will apply to relevant future construction (or existing structures for proposed uses), the proposed development may be considered for approval (dependent on the other requirements of the relevant policy measures being met). That is, BAL40 or BAL-FZ are not acceptable on planning grounds (except for certain limited exceptions).

   Because planning is looking forward at what can be achieved, as well as looking at what may currently exist, both determined and indicative BAL ratings are acceptable assessment outcomes on which planning decisions can be made (including conditional approvals).

2. **Building Approval:** The Building Code of Australia (Vol. 1 & 2 of the NCC) establishes that relevant buildings in bushfire prone areas must be constructed to the bushfire resistant requirements corresponding to the BAL rating that is to apply to that building. Consequently, a determined BAL rating and the BAL Certificate is required for a building permit to be issued - an indicative BAL rating is not acceptable.

3.1 BAL Assessment Summary (Contour Map Format)

INTERPRETATION OF THE BAL CONTOUR MAP

The BAL contour map is a diagrammatic representation of the results of the bushfire attack level assessment.

The map presents different coloured contours extending out from the areas of classified vegetation. Each contour represents a set range of radiant heat flux that potentially will transfer to an exposed element (building, person or other defined element), when it is located within that contour.

Each of the set ranges of radiant heat flux corresponds to a different BAL rating as defined by the AS 3959:2018 BAL determination methodology.

The width of each shaded BAL contour will vary dependant on both the BAL rating and the relevant parameters (calculation inputs) for the subject site. Their width represents the minimum and maximum vegetation separation distances that correspond to each BAL rating (refer to the relevant table below for these distances).

The areas of classified vegetation to be considered in developing the BAL contours, are those that will remain at the intended end state of the subject development once earthworks, clearing and/or landscaping and re-vegetation have been completed. Variations to this statement that may apply include:

- Both pre and post development BAL contour maps are produced; and/or
- Each stage of a development is assessed independently.

3.1.1 BAL Determination Methodology and Location of Data and Results

LOCATION OF DATA & RESULTS					
BAL Determination Methodology		Location of the Site Assessment Data			Location of the Results
AS 3959:2018	Applied to Assessment	Classified Vegetation and Topography Map(s)	Calculation Input Variables		Assessed Bushfire Attack Levels and/or Radiant Heat Levels
			Summary Data	Detailed Data with Explanatory and Supporting Information	
Method 1 (Simplified)	Yes	Figure 3.1	Table 3.2	Appendix A1	Table 3.1 Table 3.3 / BAL Contour Map

3.1.2 BAL Ratings Derived from the Contour Map

Table 3.1: Indicative and determined BAL(s) for future buildings/structures on the proposed lots.

BUSHFIRE ATTACK LEVEL FOR FUTURE BUILDINGS / STRUCTURES ON STATED LOT [1]		
Lot No.	Future Buildings / Structure	
	Indicative BAL [2]	Determined BAL [2]
814 – 818 & 823 – 828 & 832 – 836 & 849 - 850	BAL-LOW	Not Determined
829 & 830 & 837 & 838	BAL-12.5	Not Determined
812 & 813& 842	BAL-19	Not Determined
800 – 810 & 819 – 822 & 831 & 839 & 840 & 841	BAL-29	Not Determined
799 * & 811 * & 843 – 848 *	BAL-29*	Not Determined
[1] The assessment data used to derive the BAL ratings is sourced from Table 3.1 and Figure 3.2 'BAL Contour Map'. [2] Refer to the start of Section 3 for an explanation of indicative versus determined BAL ratings.		

*These lots are subject to BAL-FZ and BAL-40 but can achieve BAL-29 due to the size of the lot. A restrictive covenant to the benefit of the local government pursuant to section 129BA of the *Transfer of Land Act 1893,* is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a restriction on the use of land within areas that have been assessed a BAL-40 or BAL-FZ.

3.1.3 Site Assessment Data Applied to Construction of the BAL Contour Map(s)

RELEVANT CLASSIFIED VEGETATION	
Identification of Classified Vegetation that is Relevant to the Production of the BAL Contour Map(s)	Relevant Vegetation Map
The relevant vegetation is the classified vegetation external to the subdivision boundaries. All identified classified vegetation areas, or portions of areas, within the proposed subdivision are excluded. This approach is applied to indicate the achievable bushfire attack levels within the subdivision and the resultant area of developable land on all lots where buildings will be subject to BAL-29 or less. It is based on the following assumptions: 1. Any classified vegetation within the subdivision can potentially be managed or removed by the developer and/or landowner to meet asset protection zone standards; and 2. Future development and consequent removal/management of vegetation that may take place on any adjoining land cannot be part of considerations for the subdivision.	Figure No.3.1
The future revegetation for the Environmental buffer extending 15m into the lot boundary has been included in the vegetation mapping and the generation of the BAL contour map.	Figure No.3.1 & Figure 3.2
Supporting Assessment Details: None required.	

Table 3.2: The calculation inputs applied to determining the site specific separation distances corresponding to levels of potential radiant heat transfer (including BAL's).

SUMMARY OF CALCULATION INPUT VARIABLES APPLIED TO THE DETERMINATION OF SEPARATION DISTANCES CORRESPONDING TO RADIANT HEAT LEVELS [1]												
Applied BAL Determination Method		METHOD 1 - SIMPLIFIED PROCEDURE (AS 3959:2018 CLAUSE 2.2)										
The Calculation Variables Corresponding to the BAL Determination Method Applied												
Methods 1 and 2		Method 1	Method 2									
Vegetation Classification		FDI	Effective Slope		Site Slope	FFDI or GFDI	Flame Temp.	Elevation of Receiver	Flame Width	Fireline Intensity	Flame Length	Modified View Factor
			Applied Range	Determined								
Area	Class		degree range	degrees	degrees		K	metres	metres	kW/m	metres	% Reduction
1	(A) Forest	80	Upslope or flat 0	flat 0	-	-	-	-	-	-	-	-
2	(A) Forest	80	Downslope >0-5	1.2	-	-	-	-	-	-	-	-
3	(D) Scrub	80	Upslope or flat 0	flat 0	-	-	-	-	-	-	-	-
4	(D) Scrub	80	Downslope >0-5	1.3 - 4	-	-	-	-	-	-	-	-
5	(G) Grassland	80	Upslope or flat 0	flat 0	-	-	-	-	-	-	-	-
6	(G) Grassland	80	Downslope >0-5	1.2	-	-	-	-	-	-	-	-
7	Excluded cl 2.2.3.2(e & f)	N/A	N/A	-	-	-	-	-	-	-	-	-

[1] All data and information supporting the determination of the classifications and values stated in this table and any associated justification, is presented in Appendix A.

Where the values are stated as 'default' these are either the values stated in AS 3959:2018, Table B1 or the values calculated as intermediate or final outputs through application of the equations of the AS 3959:2018 BAL determination methodology. They are not values derived by the assessor.

Table 3.3: Vegetation separation distances corresponding to the radiant heat levels illustrated as BAL contours in Figure 3.2.

THE CALCULATED VEGETATION SEPARATION DISTANCES (METRES) CORRESPONDING TO THE STATED LEVEL OF RADIANT HEAT FLUX [1]									
Vegetation Classification		Bushfire Attack Levels						Specific Values	
		BAL-FZ	BAL-40	BAL-29	BAL-19	BAL12.5	BAL-LOW		
		Maximum Radiant Heat Flux							
Area	Class	>40 kW/m^2	40 kW/m^2	29 kW/m^2	19 kW/m^2	12.5 kW/m^2	N/A [2]	10 kW/m^2	2 kW/m^2
1	(A) Forest	<16	16-<21	21-<31	31-<42	42-<100	>100	-	-
2	(A) Forest	<20	20-<27	27-<37	37-<50	50-<100	>100	-	-
3	(D) Scrub	<10	10-<13	13-<19	19-<27	27-<100	>100	-	-
4	(D) Scrub	<11	11-<15	15-<22	22-<31	31-<100	>100	-	-
5	(G) Grassland	<6	6-<8	8-<12	12-<17	17-<50	>50	-	-
6	(G) Grassland	<7	7-<9	9-<14	14-<20	20-<50	>50	-	-
7	Excluded cl 2.2.3.2(e & f)	-	-	-	-	-	-	-	-

[1] All calculation input variables are presented in Table 3.2. A copy of the radiant heat calculator output for each area of classified vegetation is presented in Appendix A3.

[2] The BAL-LOW rating is not defined by the level of radiant heat flux. It applies when the vegetation separation distance is 100m or 50m for the Grassland vegetation classification.

Figure 3.1

Classified Vegetation & Topography (Existing)

Lot 881 on Plan 030581, Area : 59.5593 ha
240 Yilgarn Avenue
MALAMBAINE
NORTHAM

AREA 5
Class (G) Grassland
Effective Slope 0°

AREA 5
Class (G) Grassland
Effective Slope 0°

AREA 5
Class (G) Grassland
Effective Slope 0°

AREA 3
Class (D) Scrub
Effective Slope 0°

AREA 3
Class (D) Scrub
Effective Slope 0°

AREA 6
Class (G) Grassland
Effective Slope >0-5°

AREA 2
Class (A) Forest
Effective Slope >0-5°

AREA 6
Class (G) Grassland
Effective Slope >0-5°

AREA 4
Class (D) Scrub
Effective Slope >0-5°

AREA 2
Class (A) Forest
Effective Slope >0-5°

AREA 6
Class (G) Grassland
Effective Slope >0-5°

AREA 4
Class (D) Scrub
Effective Slope >0-5°

AREA 3
Class (D) Scrub
Effective Slope 0°

AREA 5
Class (G) Grassland
Effective Slope 0°

AREA 1
Class (A) Forest
Effective Slope 0°

AREA 7
Excluded

AREA 5
Class (G) Grassland
Effective Slope 0°

AREA 1
Class (A) Forest
Effective Slope 0°

GREAT EASTERN HWY

YILGARN AV

ENVIRONMENTAL BUFFER

843 844 842 841 840 839 838 837 836 835 834 833 832 831 830 829 828 827 826 825 824 823 822 821 820 819 818 817 816 815 814 813 812 799 847 846 845 849 848 850 806 807 805 804 803 802 801 800 808 809 810 811

3 4 5 6 7 8 9 10 11 12 1 2

155m 160m 165m 170m 175m 180m 185m 190m 195m 200m 205m 210m 215m

------ LEGEND ------

- Subject Site
- Cadastral
- Hydrants
- Photos
- 150m Assessment Area

Classified Vegetation

- Class A - Forest
- Class D - Scrub
- Class G - Grassland
- Exclusion 2.2.3.2

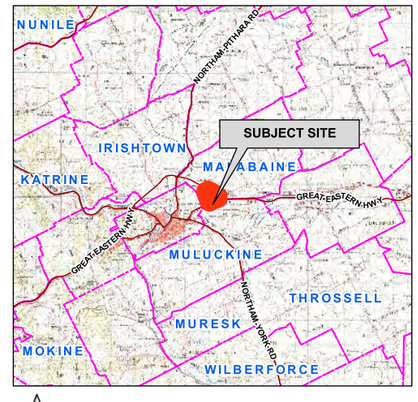
Boundaries

- Lot boundaries
- Environmental buffer
- buffer 8m
- buffer 9m
- Firebreak variation

0 50 100 150 200 250

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Joy Graeber 05-07-2024
SCALE (A3): 1 : 5000

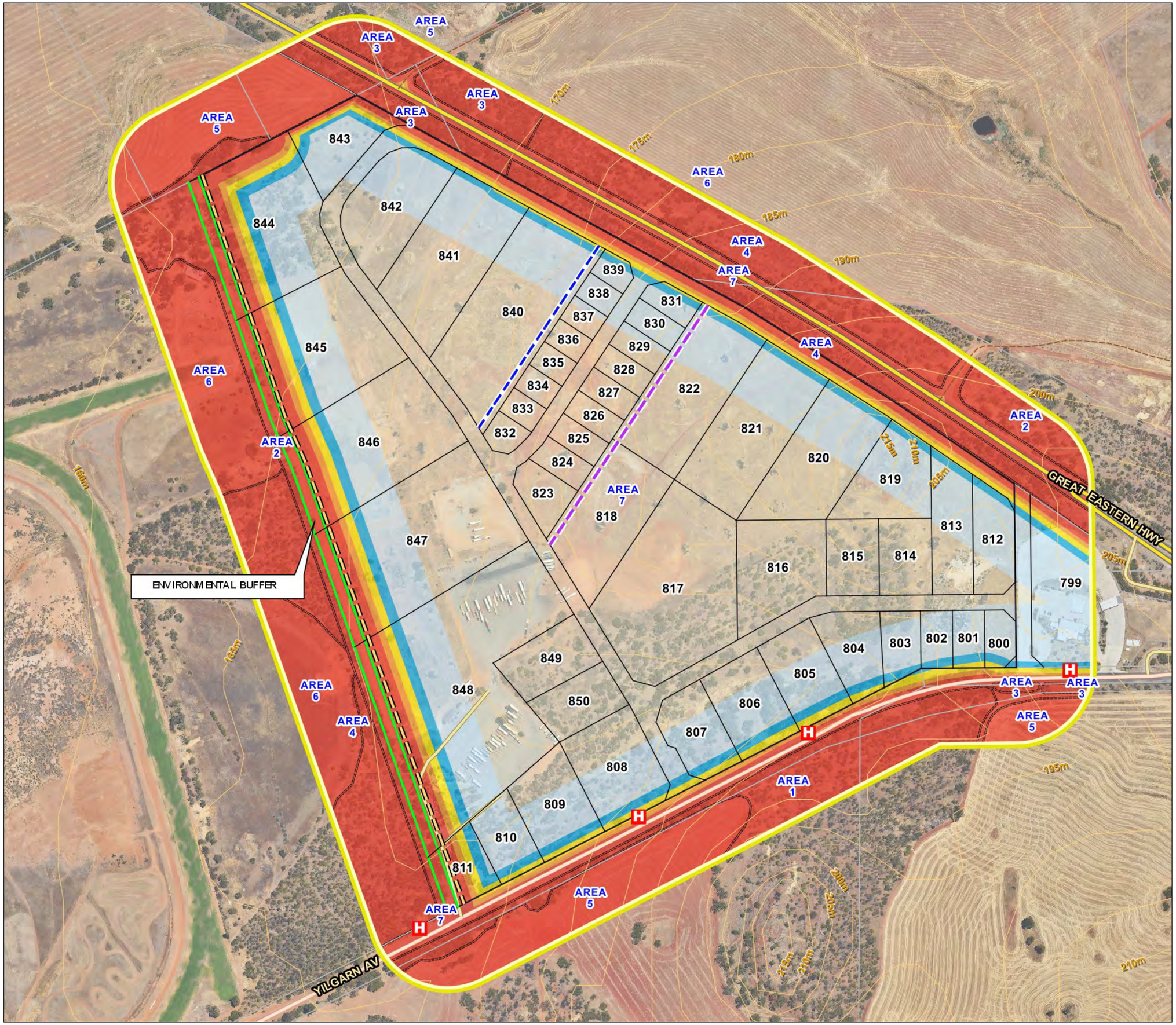
BUSHFIRE PRONE PLANNING

Disclaimer and Limitation: This map has been prepared for bushfire management planning purposes only. All depicted areas, contours and any dimensions shown are subject to survey. Bushfire Prone Planning does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence which may arise from relying on any information depicted.

Figure 3.1

Classified Vegetation & Topography (Existing)

Lot 881 on Plan 030581, Area : 59.5593 ha
240 Yilgarn Avenue
MALAMBAINE
NORTHAM



------ LEGEND ------

- Subject Site
- Cadastral
- 100m Assessment Area

Boundaries

- Lot boundaries
- Environmental buffer
- 8m Set back
- 9m Set back
- Firebreak variation

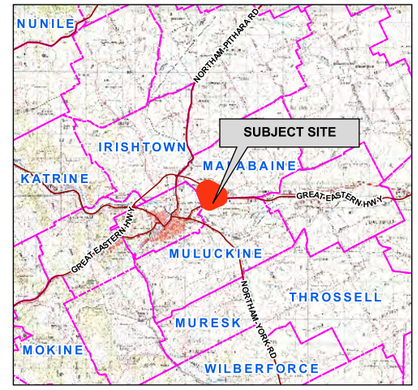
Bushfire Attack Levels

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW

0 50 100 150 200 250

Metres

------ LOCALITY ------



AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Merctaor Units: Metre
Map by: Joy Graeber 05-07-2024
SCALE (A3): 1 : 4500

BUSHFIRE PRONE PLANNING

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4 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES

The Guidelines for Planning in Bushfire Prone Areas (WAPC 2021 v1.4), Appendix 5, establish that the application of this section of the BMP is intended to support ***strategic planning*** proposals. At the strategic planning stage there will typically be insufficient proposed development detail to enable all required assessments, including the assessment against the bushfire protection criteria.

Strategic Planning Proposals

For strategic planning proposals this section of the BMP will identify:

- Issues associated with the level of the threats presented by any identified bushfire hazard;
- Issues associated with the ability to implement sufficient and effective bushfire protection measures to reduce the exposure and vulnerability levels (of elements exposed to the hazard threats), to a tolerable or acceptable level; and
- Issues that will need to be considered at subsequent planning stages.

All Other Planning Proposals

For all other planning stages, this BMP will address what are effectively the same relevant issues but do it within the following sections:

- Section 2 – Bushfire Prone Vegetation - Environmental and Assessment Considerations: Assess environmental, biodiversity and conservation values;
- Section 3 – Potential Bushfire Impact: Assess the bushfire threats with the focus on flame contact and radiant heat; and
- Section 5 – Assessment Against the Bushfire Protection Criteria (including the guidance provided by the *Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2'):* Assess the ability of the proposed development to apply the required bushfire protection measures thereby enabling it to be considered for planning approval for these factors.

Is the proposed development a strategic planning proposal?	No

5 ASSESSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA (GUIDELINES V1.4)

5.1 Bushfire Protection Criteria Elements Applicable to the Proposed Development/Use

APPLICATION OF THE CRITERIA, ACCEPTABLE SOLUTIONS AND PERFORMANCE ASSESSMENT

The criteria are divided into five elements – location, siting and design, vehicular access, water and vulnerable tourism land uses. Each element has an intent outlining the desired outcome for the element and reflects identified planning and policy requirements in respect of each issue.

The example acceptable solutions (bushfire protection measures) provide one way of meeting the element's intent. Compliance with these automatically achieves the element's intent and provides a straightforward pathway for assessment and approval.

Where the acceptable solutions cannot be met, the ability to develop design responses (as alternative solutions that meet bushfire performance requirements) is an alternative pathway that is provided by addressing the applicable performance principles (as general statements of how best to achieve the intent of the element).

A merit based assessment is established by the SPP 3.7 and the Guidelines as an additional alternative pathway along with the ability of using discretion in making approval decisions (sections 2.5, 2.6 and 2.7). This is formally applied to certain development (minor and unavoidable – sections 5.4.1 and 5.7). Relevant decisions by the State Administrative Tribunal have also supported this approach more generally.

Elements 1 – 4 should be applied for all strategic planning proposals, subdivision or development applications, except for vulnerable tourism land uses which should refer to Element 5. Element 5 incorporates the bushfire protection criteria in Elements 1 – 4 but caters them specifically to tourism land uses. (Guidelines DPLH 2021v1.4)

The Bushfire Protection Criteria	Applicable to the Proposed Development/Use
Element 1: Location	Yes
Element 2: Siting and Design	Yes
Element 3: Vehicular Access	Yes
Element 4: Water	Yes
Element 5: Vulnerable Tourism Land Uses	No

5.2 Local Government Variations to Apply

Local governments may add to or modify the acceptable solutions to recognise special local or regional circumstances (e.g., topography / vegetation / climate). These are to be endorsed by both the WAPC and DFES before they can be considered in planning assessments. (Guidelines DPLH 2021v1.4).	
Do endorsed regional or local variations to the acceptable solutions apply to the assessments against the Bushfire Protection Criteria for the proposed development /use?	None known or identified

5.3 Assessment Statements for Element 1: Location

LOCATION	
Element Intent	To ensure that strategic planning proposals, subdivision and development applications are located in areas with the least possible risk of bushfire to facilitate the protection of people, property and infrastructure.
Proposed Development/Use – Relevant Planning Stage	(Sb) Structure plan where the lot layout is known and subdivision application
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant	
E1 Location			**Compliant:**	Yes
A1.1 Development location	**Applicable:**	Yes	**Compliant:**	Yes

ASSESSMENT AGAINST THE REQUIREMENTS ESTABLISHED BY THE GUIDELINES

☑ ☐ ☐ The subdivision application is located in an area that is or will, on completion, be subject to either a moderate or low bushfire hazard level, or BAL-29 or below.

Supporting Assessment Details:

The proposed subdivision will provide an area of land within each lot that can be considered suitable for development as BAL-40 or BAL-FZ construction requirements will not be required to be applied. This meets the requirements established by Acceptable Solution A1.1 and its associated explanatory note. The size of the affected lots allows for development to take place in areas identified BAL-29 or lower in Figure 3.1 and Table 3.1 of this document.

ASSESSMENTS APPLYING THE GUIDANCE ESTABLISHED BY THE WAPC ELEMENT 1 & 2 POSITION STATEMENT (2019)

"Consideration should be given to the site context where 'area' is the land both within and adjoining the subject site. The hazards remaining within the site should not be considered in isolation of the hazards adjoining the site, as the potential impact of a bushfire will be dependent on the wider risk context, including how a bushfire could affect the site and the conditions for a bushfire to occur within the site."

Strategic Planning Proposals: Consider the threat levels from any vegetation adjoining and within the subject site for which the potential intensity of a bushfire in that vegetation would result in it being classified as an Extreme Bushfire Hazard Level (BHL). Identify any proposed design strategies to reduce these threats.

Structure Plans (lot layout known) and Subdivision Applications: As for strategic planning proposals but within the subject site the relevant threat levels to consider are the radiant heat levels represented by BAL-FZ and BAL-40 ratings.

The Hazard Within the Subject Site

The existing lot will be entirely non-vegetated during subdivisional works with the exception of the proposed revegetation along the 15m environmental corridor / buffer within the lot. As the proposed corridor will join classified vegetation outside of the lot boundaries, it poses an additional bushfire threat to the lots created within the subdivision. However, the ability to establish a BAL-29 dimensioned APZ within each proposed lot's boundaries removes the threat of greater levels of radiant heat or flame contact upon a future dwellings or infrastructure.

The primary bushfire threat from bushfire prone vegetation remaining within the proposed lot will be embers. This threat will be mitigated by the application of appropriate building design, bushfire construction requirements and the ongoing maintenance of the APZ to ensure the buildings will not be impacted by consequential fire within combustible materials used, stored, or accumulated within the APZ.

5.4 Assessment Statements for Element 2: Siting and Design

SITING AND DESIGN OF DEVELOPMENT					
Element Intent	To ensure that the siting and design of development minimises the level of bushfire impact. (BPP Note: not building/construction design)				
Proposed Development/Use – Relevant Planning Stage	(Sb) Structure plan where the lot layout is known and subdivision application				
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.				
Pathway Applied to Provide an Alternative Solution	N/A				
Acceptable Solutions - Assessment Statements *All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.*					
Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant		
E2 Siting and Design of Development				**Compliant:**	Yes
A2.1 Asset Protection Zone (APZ)		**Applicable:**	Yes	**Compliant:**	Yes

APZ DIMENSIONS – DIFFERENCES IN REQUIREMENTS FOR PLANNING ASSESSMENTS COMPARED TO IMPLEMENTATION

A key required bushfire protection measure is to reduce the exposure of buildings/infrastructure (as exposed vulnerable elements at risk), to the direct bushfire threats of flame contact, radiant heat and embers and the indirect threat of consequential fires that result from the subsequent ignition of other combustible materials that may be constructed, stored or accumulate in the area surrounding these structures. This reduces the associated risks of damage or loss.

This is achieved by separating buildings (and consequential fire fuels as necessary) from areas of classified bushfire prone vegetation. This area of separation surrounding buildings is identified as the Asset Protection Zone (APZ) and consists of no vegetation and/or low threat vegetation or vegetation continually managed to a minimal fuel condition. The required separation distances will vary according to the site specific conditions and local government requirements.

The APZ dimensions stated and/or illustrated in this Report can vary dependent on the purpose for which they are being identified.

> *Note: Appendix B 'Onsite Vegetation Management' provides further information regarding the different APZ dimensions that can be referenced, their purpose and the specifications of the APZ that are to be established and maintained on the subject lot.*

THE 'PLANNING BAL-29' APZ DIMENSIONS

Purpose: To provide evidence of the development or use proposal's ability to achieve minimum vegetation separation distances. To achieve 'acceptable solution' planning approval for this factor, it must be demonstrated that the minimum separation distances corresponding to a maximum level of radiant transfer to a building of 29 kW/m^2, either exist or can be implemented (with certain exceptions). These separation distances are the 'Planning BAL-29' APZ dimensions.

The 'Planning BAL-29' APZ is not necessarily the size of the APZ that must be physically implemented and maintained by a landowner. Rather, its sole purpose is to identify if an acceptable solution for planning approval can be met.

THE 'REQUIRED' APZ DIMENSIONS

Purpose: Establishes the dimensions of the APZ to be physically implemented by the landowner on their lot: These will be the minimum required separation distances from the subject building(s) to surrounding bushfire prone vegetation (identified by type and associated ground slope). These are established by:

A. The 'BAL Rating APZ' of the subject building(s) when distances are greater than 'B' below (except when 'B' establishes a maximum distance); or

B. The 'Local Government' APZ' derived from the Firebreak/Hazard Reduction Notice when distances are greater than 'A' above, other than when a maximum distance is established, in which case this will apply; or

C. A combination of 'A' and 'B'.

> *Within this Report/Plan it is the **'Planning BAL-29' APZ** that will be identified on maps, diagrams and in tables as necessary – unless otherwise stated.*
>
> *The **'Required' APZ** dimension information will be presented in Appendix B1.1 and on the Property Bushfire Management Statement, when required to be included for a development application.*

ASSESSMENT AGAINST THE REQUIREMENTS ESTABLISHED BY THE GUIDELINES

☑ ☐ ☐	**APZ Width:** The proposed (or a future) habitable building(s) on the lot(s) of the proposed development - or an existing building for a proposed change of use – can be (or is) located within the developable portion of the lot and be surrounded by a 'Planning BAL-29' APZ of the required dimensions (measured from any external wall or supporting post or column to the edge of the classified vegetation), that will ensure their exposure to the potential radiant heat impact of a bushfire does not exceed 29 kW/m^2.
☑ ☐ ☐	**Restriction on Building Location:** It has been identified that the current developable portion of a lot(s) provides for the proposed future (or a future) building/structure location that will result in that building/structure being subject to a BAL-40 or BAL-FZ rating. Consequently, it may be considered necessary to impose the condition that a restrictive covenant to the benefit of the local government pursuant to section 129BA of the Transfer of Land Act 1893, is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a restriction on the use of that portion of land (refer to Code F3 of Model Subdivision Conditions Schedule, WAPC June 2021 and Guidelines s5.3.2).
☑ ☐ ☐	**APZ Location:** The required dimensions for a 'Planning BAL-29' APZ can be contained solely within the boundaries of the lot(s) on which the proposed (or a future) habitable building(s) - or an existing building(s) for a proposed change of use – is situated.
☐ ☐ ⊘	**APZ Location:** The required dimensions for a 'Planning BAL-29' APZ can be partly established within the boundaries of the lot(s) on which the proposed (or a future) habitable building(s) - or an existing building(s) for a proposed change of use – is situated. The balance of the APZ would exist on adjoining land that satisfies the exclusion requirements of AS 3959:2018 cl 2.2.3.2 for non-vegetated areas and/or low threat vegetation and/or vegetation managed in a minimal fuel condition.
☐ ☐ ⊘	**APZ Location:** It can be justified that any adjoining (offsite) land forming part of a 'Planning BAL-29' APZ will: • If non-vegetated, remain in this condition in perpetuity; and/or • If vegetated, be low threat vegetation or vegetation managed in a minimal fuel condition in perpetuity.

☑ ☐ ☐	**APZ Management:** The area of land (within each lot boundary), that is to make up the required 'Landowner' APZ dimensions (refer to Appendix B, Part B1), can and will be managed in accordance with the requirements of the Guidelines Schedule 1 'Standards for Asset Protection Zones' (refer to Appendix B).
☐ ☐ ⊘	**Staged Subdivision:** The subdivision proposes development in stages and each stage is to comply with the relevant bushfire protection criteria. A balance lot is created or classified vegetation within a subsequent stage will be removed and/or modified and/or be subject to ongoing management, to ensure that proposed lots within the current stage of the subdivision achieve a development site subject to 29 kW/m^2 or below. The planned approach for achieving the required outcome is described in the supporting assessment details below.
☑ ☐ ☐	**Firebreak/Hazard Reduction Notice:** Any additional requirements established by the relevant local government's annual notice to install firebreaks and manage fuel loads (issued under s33 of the Bushfires Act 1954), can and will be complied with.

Supporting Assessment Details:

All future developments within the subdivision are able to implement a BAL-29 due to the size of the lots other than lots 823 - 839. For these smaller lots, 8m and 9m setbacks will need to be conditioned as part of the sale of lots 818, 822 and 840 to allow enough separation in the event of vegetation regrowth. Refer to Figure 3.1 and Figure 3.2 within this document and section 5.7.
As indicated in Figure 3.1 within this document, a variation to the firebreak notice has been implemented due to the environmental buffer along the western lot boundary.

ASSESSMENTS APPLYING THE GUIDANCE ESTABLISHED BY THE WAPC ELEMENT 1 & 2 POSITION STATEMENT (2019)

Strategic Planning Proposals: "At this planning level there may not be enough detail to demonstrate compliance with this element. The decision-maker may consider this element is satisfied where A1.1 is met."

Structure Plans (lot layout known) and Subdivision Applications: "Provided that Element 1 is satisfied, the decision-maker may consider approving lot(s) containing BAL-40 or BAL-FZ under the following scenarios.

Commercial and industrial sites that can demonstrate a building of sufficient size can be located so that it is subject to a maximum BAL rating of BAL-29. Any BAL-40 or BAL-FZ levels of radiant heat are restricted to areas of hard stand or that comply with relevant APZ standards.

5.5 Assessment Statements for Element 3: Vehicular Access

VEHICULAR ACCESS	
Element Intent	To ensure that the vehicular access serving a subdivision/development is available and safe during a bushfire event.
Proposed Development/Use – Relevant Planning Stage	(Sb) Structure plan where the lot layout is known and subdivision application
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

The technical construction requirements for access types and components, and for each firefighting water supply component, are also presented in Appendices C and D. The local government will advise the proponent where different requirements are to apply and when any additional specifications such as those for signage and gates are to apply (these are included in the relevant appendix if requested by the local government).

Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant

E3 Vehicular Access			**Compliant:**	Yes
A3.1 Public roads	**Applicable:**	Yes	**Compliant:**	Yes

☑ ☐ ☐	The technical construction requirements of vertical clearance and weight capacity (Guidelines, Table 6) can and will be complied with (Refer also to Appendix C in this BMP).
☑ ☐ ☐	All other applicable technical requirements of trafficable width, gradients and curves, are required to be in "accordance with the class of road as specified in the IPWEA Subdivision Guidelines, Liveable Neighbourhoods, Ausroad Standards and/or any applicable standard in the local government area" (Guidelines, Table 6 and E3.1. Refer also to Appendix C in this BMP). The assessment conducted for the bushfire management plan indicates that it is likely that the proposed development can and will comply with the requirements. However, the applicable class of road, the associated technical requirements and subsequent proposal compliance, will need to be confirmed with the relevant local government and/or Main Roads WA.
☑ ☐ ☐	A traversable verge is available adjacent to classified vegetation (Guidelines, E3.1), as recommended.

Supporting Assessment Details:

Yilgarn Avenue and Great Eastern Highway are likely to comply with associated technical road requirements. The roads to be constructed within the development will be compliant with the technical construction requirements outlined in the Guidelines and Local Government standards.

A3.2a Multiple access routes	Applicable:	Yes	Compliant:	Yes

☑ ☐ ☐	For each lot, two-way public road access is provided in two different directions to at least two different suitable destinations with an all-weather surface.
☑ ☐ ☐	The two-way access is available at an intersection no greater than 200m from the relevant boundary of each lot, via a no-through road.
☐ ☐ ⊘	The two-way access is not available at an intersection within 200m from the relevant boundary of each lot. However, the available no-through road satisfies the established exemption for the length limitation in every case. These requirements are: • Demonstration of no alternative access (refer to A3.3 below); • The no-through road travels towards a suitable destination; and • The balance of the no-through road that is greater than 200m from the relevant lot boundary is within a residential built-out area or is potentially subject to radiant heat levels from adjacent bushfire prone vegetation that correspond to the BAL-LOW rating (<12.5 kW/m^2).

Supporting Assessment Details:

The lots within the proposed subdivision will be accessible via a through road that has two access points onto Yilgarn Avenue. From there is possible to head west onto Great Northern Highway or turn west towards the town of Northam.

A3.2b Emergency access way	Applicable:	No	Compliant:	N/A

☐ ☐ ⊘	The proposed or existing EAW provides a through connection to a public road.
☐ ☐ ⊘	The proposed or existing EAW is less than 500m in length and will be signposted and gated (remaining unlocked) to the specifications stated in the Guidelines and/or required by the relevant local government.
☐ ☐ ⊘	The technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.2b. Refer also to Appendix C in this BMP), can and will be complied with.
☐ ☐ ⊘	The subdivision proposes development in stages and each stage is to comply with the relevant bushfire protection criteria. A temporary EAW is planned to facilitate the staging arrangements of a subdivision as an interim second access route until the required second access route is constructed as a public road in a subsequent stage. The planned approach for achieving the required outcome is described in the supporting assessment details below.

Supporting Assessment Details:

None required as the proposed subdivision complied with A3.2a.

A3.3 Through-roads	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⊘	A no-through public road is necessary as no alternative road layout exists due to site constraints.
☐ ☐ ⊘	The no-through public road length does not exceed the established maximum of 200m to an intersection providing two-way access (Guidelines, E3.3).
☐ ☐ ⊘	The no-through public road exceeds 200m but satisfies the exemption provisions of A3.2a as demonstrated in A3.2a above.

☑ ☐ ☐	The public road technical construction requirements (Guidelines, Table 6 and E3.1. Refer also to Appendix C in this BMP), can and will be complied with as established in A3.1 above.
☐ ☐ ⊘	The turnaround area requirements (Guidelines, Figure 24) can and will be complied with.
Supporting Assessment Details: The proposed development is not impacted by any no-through roads.	

A3.4a Perimeter roads	**Applicable**: No	**Compliant**: N/A
☐ ☐ ⊘	The proposed greenfield or infill development consists of 10 or more lots (including those that are part of a staged subdivision) and therefore should have a perimeter road. This is planned to be installed.
☐ ☐ ⊘	The proposed greenfield or infill development consists of 10 or more lots (including those that are part of a staged subdivision). However, it is not required on the established basis of: • The vegetation adjoining the proposed lots is classified Class G Grassland; • Lots are zoned rural living or equivalent; • It is demonstrated that it cannot be provided due to site constraints; or • All lots have existing frontage to a public road.
☐ ☐ ⊘	The technical construction requirements of widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.4a) can and will be complied with.
Supporting Assessment Details: None required.	

A3.4b Fire service access route	**Applicable**: Yes	**Compliant**: Yes
☑ ☐ ☐	The FSAR can be installed as a through-route with no dead ends, linked to the internal road system every 500m and is no further than 500m from a public road.
☑ ☐ ☐	The technical construction requirements of widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.4b. Refer also to Appendix C in this BMP), can and will be complied with.
☑ ☐ ☐	The FSAR can and will be signposted. Where gates are required by the relevant local government, the specifications can be complied with.
☑ ☐ ☐	Turnaround areas (to accommodate type 3.4 fire appliances) can and will be installed every 500m on the FSAR.
Supporting Assessment Details: Lots 811, 844 - 848 will be required to install firebreaks as required by the Shire of Northam Firebreak and Fuel Load Notice. The firebreaks will need to be installed at least 15m from the lot boundaries to separate the lots from the 15m environmental buffer.	

A3.5 Battle-axe access legs	**Applicable**: No	**Compliant**: N/A
☐ ☐ ⊘	A battle-axe leg cannot be avoided due to site constraints.

☐ ☐ ⊘	The proposed development is in a reticulated area and the battle-axe access leg length from a public road is no greater than 50m. No technical requirements need to be met.
☐ ☐ ⊘	The proposed development is not in a reticulated area. The technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.5. Refer also to Appendix C in this BMP), can and will be complied with.
☐ ☐ ⊘	Passing bays can and will be installed every 200m with a minimum length of 20m and a minimum additional trafficable width of 2m.
Supporting Assessment Details: None required. There are no battle axe lots within the proposed subdivision.	

A3.6 Private driveways	**Applicable**:	No	**Compliant**:	N/A

☐ ☐ ⊘	The private driveway to the most distant external part of the development site is within a lot serviced by reticulated water, is accessed via a public road with a speed limit of 70 km/hr or less and has a length is no greater than 70m (measured as a hose lay). No technical requirements need to be met.
☐ ☐ ⊘	The technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.6. Refer also to Appendix C in this BMP), can and will be complied with.
☐ ☐ ⊘	Passing bays can and will be installed every 200m with a minimum length of 20m and a minimum additional trafficable width of 2m.
☐ ☐ ⊘	The turnaround area requirements (Guidelines, Figure 28, and within 30m of the habitable building) can and will be complied with.
Supporting Assessment Details: None required.	

5.6 Assessment Statements for Element 4: Water

WATER	
Element Intent	To ensure water is available to enable people, property and infrastructure to be defended from bushfire.
Proposed Development/Use – Relevant Planning Stage	(Sb) Structure plan where the lot layout is known and subdivision application
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

The technical construction requirements for access types and components, and for each firefighting water supply component, are also presented in Appendices C and D. The local government will advise the proponent where different requirements are to apply and when any additional specifications such as those for signage and gates are to apply (these are included in the relevant appendix if requested by the local government).

Solution Component Check Box Legend ☑ Relevant & met ☒ Relevant & not met ⊘ Not relevant

E4 Water	**Compliant:**	Yes

A4.1 Identification of future firefighting water supply	**Applicable**:	No	**Compliant**:	N/A

☑ ☒ ⊘ It can be demonstrated that reticulated or sufficient non-reticulated water for firefighting can be provided at the subdivision and/or development application stage in accordance with the specifications of the relevant water supply authority or the requirements of Schedule 2.

Supporting Assessment Details:

Not required.

A4.2 Provision of water for firefighting purposes	**Applicable**:	Yes	**Compliant**:	Yes

☑ ☐ ☐ A reticulated water supply is available to the proposed development. The existing hydrant connection(s) are provided in accordance with the specifications of the relevant water supply authority.

☑ ☐ ☐ A reticulated water supply will be available to the proposed development. Hydrant connection(s) can and will be provided in accordance with the specifications of the relevant water supply authority.

☐ ☐ ⊘ A static water supply (tank) for firefighting purposes will be installed on each lot that is additional to any water supply that is required for drinking and other domestic purposes.

☐ ☐ ⊘ A strategic water supply (tank or tanks) for firefighting purposes will be installed within or adjacent to the proposed development that is additional to any water supply that is required for drinking and other domestic purposes. The required land will be ceded free of cost to the local government and the lot or road reserve where the tank is to be located will be identified on the plan of subdivision.

☐ ☐ ⊘	The strategic static water supply (tank or tanks) will be located no more than 10 minutes travel time from a subject site (at legal road speeds).
☐ ☐ ⊘	The technical requirements (location, number of tanks, volumes, design, construction materials, pipes and fittings), as established by the Guidelines (A4.2, E4 and Schedule 2) and/or the relevant local government, can and will be complied with.

Supporting Assessment Details:

A reticulated water supply is available at four (4) hydrants along Yilgarn Avenue on the south side of the proposed subdivision.

Hydrants will be installed to supply the northern lots within the proposed subdivision.

Refer to information contained in Appendix D for the firefighting water supply specifications and technical requirements.

5.7 Additional Bushfire Protection Measures to be Implemented

The following bushfire protection measures are recommended to be implemented and maintained. They are additional to, or a variation of, those established by the relevant acceptable solutions applied to the proposed development/use within Sections 5 of this BMP (as applicable to the proposed development).

The intent of their application is to improve the bushfire performance of the proposed development/use and reduce residual risk levels to persons and property from a bushfire event.

The development of these additional and/or varied protection measures originates the following potential sources (not exhaustive):

1. Out of the relevant merit based assessment when the Section titled 'Non-compliance – Additional Assessments' has been used in this BMP;
2. Out of the relevant performance based assessment when Section titled 'Non-compliance – Additional Assessments' has been used in this BMP;
3. Out of the development of any other required bushfire planning documents. These include a Bushfire Emergency Plan and the Bushfire Risk Assessment and Management Report;
4. Out of any additional bushfire planning guidance documents or position statements issued by the WA Department of Planning, Lands and Heritage;
5. From any 'Conditions' which may be applied to a 'Planning Approval' or a 'Notice of Determination; or
6. As a recommendation from the bushfire consultant.

The following table summarises the requirements/recommendations with the detail provided in the following sections.

When necessary, the implementation responsibility for these additional protection measures will be stated in Section 6 of this BMP and included in other operational documents as relevant.

5.7.1 Protection Measures to Reduce the Exposure and/or Vulnerability of Buildings/Structures to Bushfire Threats

Additional Protection Measure No. 1: Required set back maintenance.

For the smaller lots (Lots 823-839) to be developable and not subject to BAL-FZ or BAL-40 in the future, 8m and 9m setbacks will need to be conditioned as part of the sale of lots 818, 822 and 840 to allow enough separation in the event of vegetation regrowth. Refer to Figure 3.1 and Figure 3.2 within this document, which illustrate the required set back as calculated from the current grassland vegetation and considering the current slope of the land. This set back will need to be maintained in perpetuity by the landowner. These conditions need to be placed on the titles of lots 818, 822 and 840.

Additional Protection Measure No. 2: Variation to Firebreak Notice Requirements.

As the revegetation of the environmental corridor will prohibit the installation of a firebreak within 15m from the western lot boundary, Lots 811, and 844 - 848 will be required to install their firebreak adjoining the environmental corridor.

6 RESPONSIBILITY CHECKLISTS FOR THE IMPLEMENTATION AND MANAGEMENT OF BUSHFIRE PROTECTION MEASURES

The following sections and their associated tables establish:

- The bushfire protection measures that shall be initially implemented and those requiring ongoing maintenance to the stated requirements;
- The persons responsible for the implementation and maintenance of the required bushfire protection measures; and
- The persons responsible and the timing for compliance certification when required.

The necessity for the BMP to contain this information is established by the *Guidelines for Planning in Bushfire Prone Areas* (Version 1.4, WAPC 2021) in Appendices 3 and 5.

6.1 Developer Responsibilities Prior to Issue of Certificates of Title for New Lots

TABLE 6.1(A) REQUIRED BUSHFIRE PROTECTION MEASURES - IMPLEMENTATION ACTIONS (SUBJECT TO COMPLIANCE CHECK TO BE CONDUCTED BY A BUSHFIRE CONSULTANT)	
1	For the entire area of each new lot, ensure any retained vegetation can be regarded as 'low threat' when considering the relevant parameters of extent, connectivity, flammability, moisture or fuel load as per AS 3959:2018 s2.2.3.2. The requirements established by the following will also apply: • The standards established for an Asset Protection Zone (APZ) by the *Guidelines for planning in bushfire prone areas,* DPLH, 2021 v1.4, Schedule 1; or • The standards established for an Asset Protection Zone (APZ) by the relevant local government's requirements set out in a section 33 notice under the Bush Fires Act 1954 (annual firebreak/fuel load notice); or • An alternative standard in a gazetted local planning scheme; or • As specified in the Landscape Management Plan referenced in the approved BMP. If native vegetation is required to be modified or removed, ensure that approval has been received from the relevant authority (refer to the applicable local government for advice).
2	Clearing and/vegetation modification to be undertaken in accordance with requirements established by the BMP. If native vegetation is required to be modified or removed, ensure that approval has been received from the relevant authority (refer to the applicable local government for advice).
3	Construct the public roads (including no through roads and perimeter roads as relevant), to comply with the technical requirements referenced in the BMP.
4	Install the reticulated firefighting water supply and hydrants to comply with the technical requirements referenced in the BMP.

TABLE 6.1(A) REQUIRED BUSHFIRE PROTECTION MEASURES - IMPLEMENTATION ACTIONS (SUBJECT TO COMPLIANCE CHECK TO BE CONDUCTED BY A BUSHFIRE CONSULTANT)	
5	Implement the bushfire protection measures that have been established within Section 5.7 of this BMP as measures additional to those established by the acceptable solutions. This includes adding continuous maintenance measures on the titles of lots 818, 822 and 840 as well the variations to the firebreak notice in lots 811 and 844-848.
6	Developer to install a bare earth firebreak 3 meters wide immediately within 10m of the environmental buffer within the lots as a variation to the Firebreak Notice. All overhanging branches, trees, limbs etc, to be trimmed back from over the firebreak area to a minimum height of 4m where all overhanging branches are timed back to allow for a sage passage of fire appliances.

TABLE 6.1(B) REQUIRED BUSHFIRE PROTECTION MEASURES - IMPLEMENTATION ACTIONS (SUBJECT TO COMPLIANCE BEING ESTABLISHED BY THE WAPC AND/OR LOCAL GOVERNMENT)	
1	[Relevant when stated as a condition of planning approval] A subdivision condition may be imposed that establishes a requirement for information to be provided that demonstrates the required bushfire protection measures contained in Section 6.1 of this bushfire management plan have been implemented during subdivisional works. The relevant measures are those that can be checked for compliance by a bushfire consultant. The compliance certification is to be provided as a certificate or report.
2	[Relevant when stated as a condition of planning approval] A notification, pursuant to Section 165 of the *Planning and Development Act 2005*, is to be placed on the certificate(s) of title of the proposed lot(s) with a Bushfire Attack Level (BAL) rating of 12.5 or above, advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). 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 and is/may be subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land."* (Western Australian Planning Commission).
3	[Relevant when stated as a condition of planning approval] A plan is to be provided to identify areas of the proposed lot(s) that have been assessed as BAL-40 or BAL-FZ. A restrictive covenant to the benefit of the local government pursuant to section 129BA of the *Transfer of Land Act 1893*, is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a restriction on the use of land within areas that have been assessed a BAL-40 or BAL-FZ. Notice of this restriction is to be included on the diagram or plan of survey (deposited plan). The restrictive covenant is to state as follows: *"No habitable buildings are to be built within areas identified as BAL-40 or BAL-FZ".*

6.2 Developer Responsibilities Prior To Sale or Occupancy or Commencement of Operation

TABLE 6.2(A) REQUIRED BUSHFIRE PROTECTION MEASURES - IMPLEMENTATION ACTIONS (SUBJECT TO COMPLIANCE CHECK TO BE CONDUCTED BY A BUSHFIRE CONSULTANT)	
1	Prior to occupancy establish the 'Required' Asset Protection Zone (APZ) around habitable buildings (and other structures as required) to satisfy: • The minimum required dimensions established in Appendix B1; and • The standards established by the *Guidelines for planning in bushfire prone areas,* DPLH, 2021 v1.4, Schedule 1; or • The standards established for an Asset Protection Zone (APZ) by the relevant local government's requirements set out in a section 33 notice under the Bush Fires Act 1954 (annual firebreak/fuel load notice); or • An alternative standard in a gazetted local planning scheme; or • As specified in the Landscape Management Plan referenced in the approved BMP. If native vegetation is required to be modified or removed, ensure that approval has been received from the relevant authority (refer to the applicable local government for advice).
2	Prior to operation of the proposed telecommunications infrastructure, establish the required Asset Protection Zone (APZ) to satisfy: • The dimensions agreed with the planning decision maker as per Section 5.9.1; and • The standards established for an Asset Protection Zone (APZ) by the relevant local government's requirements set out in a section 33 notice under the Bush Fires Act 1954 (annual firebreak/fuel load notice); or • The standards established by the *Guidelines for planning in bushfire prone areas,* DPLH, 2021 v1.4, Schedule 1. If native vegetation is required to be modified or removed, ensure that approval has been received from the relevant authority (refer to the applicable local government for advice).
3	Prior to sale of the subject lots, and until the subsequent stage is developed, the required vegetation removal and/or modification identified in the BMP must be carried out.
4	Implement the additional bushfire protection measures that have been established within Section 5.7.1 of this BMP as measures additional to those established by the acceptable solutions.

TABLE 6.2(B) REQUIRED BUSHFIRE PROTECTION MEASURES - IMPLEMENTATION ACTIONS (SUBJECT TO COMPLIANCE BEING ESTABLISHED BY THE WAPC AND/OR LOCAL GOVERNMENT)	
1	Prior to sale of a new lot(s), each lot is to be compliant with current version of the Shire of Northam Firebreak and Fuel Load Notice issued under s33 of the Bushfires Act 1954. Where the Notice includes a standard for asset protection zones, this may differ from the standards established for an Asset Protection Zone (APZ) by the Guidelines DPLH, 2021 v1.4, Schedule 1 (refer to Appendix B), with the intent to better satisfy local conditions. An alternative standard in a gazetted local planning scheme may also apply to the subject lot(s).

TABLE 6.2(C) REQUIRED BUSHFIRE PROTECTION MEASURES - IMPLEMENTATION ACTIONS (NOT SUBJECT TO COMPLIANCE CHECK)	
1	Prior to relevant building work, inform the builder of the existence of this approved Bushfire Management Plan (BMP). The plan identifies that the development site is within a designated bushfire prone area and states the indicative (or determined) BAL rating(s) that may (or will) be applied to buildings/structures. A BAL assessment report may be required to confirm determined ratings and will be required when ratings are indicative. BAL certificates will need to be issued to accompany building applications. The BMP may also establish, as an additional bushfire protection measure, that construction requirements to be applied will be those corresponding to a specified higher BAL rating. Compliance with the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks). Other classes of buildings may also be required to comply with these construction when established by the relevant authority or if identified as an additional bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended).
2	Each property owner on sale of the allotment is provided with a copy of the BMP and informed of their responsibilities. A copy of the approved BMP should be attached to all contracts of sale for the lot.

6.3 Landowner / Occupier / Operator Responsibilities – Ongoing Management

TABLE 6.3 REQUIRED BUSHFIRE PROTECTION MEASURES – ONGOING MANAGEMENT ACTIONS	
1	Maintain the 'Required' Asset Protection Zone (APZ) around habitable buildings (and other structures as required) to satisfy: • The minimum required dimensions established in Appendix B1; and • The standards established by the *Guidelines for planning in bushfire prone areas,* DPLH, 2021 v1.4, Schedule 1; or • The standards established for an Asset Protection Zone (APZ) by the relevant local government's requirements set out in a section 33 notice under the Bush Fires Act 1954 (annual firebreak/fuel load notice); or • An alternative standard in a gazetted local planning scheme; or • As specified in the Landscape Management Plan referenced in the approved BMP.
2	Maintain any areas nominated to be revegetated in accordance with the vegetation classification and management standards as specified in the BMP and/or Landscape Management Plan/Environmental Assessment Plan.
3	Comply with the Shire of Northam Firebreak and Fuel Load Notice issued under s33 of the Bush Fires Act 1954. Check the notice annually for any changes.
4	Maintain vehicular access routes within the lot to comply with the technical requirements referenced in the BMP and the relevant local government's annual firebreak / hazard reduction notice.
5	Ensure that builders engaged to construct dwellings/additions and/or other relevant structures on the lot, are aware of the existence of this approved Bushfire Management Plan (BMP). The plan identifies that the development site is within a designated bushfire prone area and states the indicative (or determined) BAL rating(s) that may (or will) be applied to buildings/structures. A BAL assessment report may be required to confirm determined ratings and will be required when ratings are indicative. BAL certificates will need to be issued to accompany building applications. Compliance with the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks). The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended). As an additional bushfire protection measure, other classes of buildings may also be required to comply with these construction requirements when established by the relevant authority or if identified as an additional bushfire protection measure within the BMP. The BMP may also establish that construction requirements to be applied will be those corresponding to a specified higher BAL rating. When applicable, these requirements will be identified in Section 5.7.
6	Ensure all future buildings the landowner has responsibility for, are designed and constructed in full compliance with:

	• The bushfire resistant construction requirements of the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), as established by the Building Regulations 2012 (WA Building Act 2011); and • Any additional bushfire protection measures this Bushfire Management Plan has established are to be implemented.
7	Maintain the bushfire protection measures that have been established within Section 5.7 of this BMP as measures additional to those established by the acceptable solutions.
9	Ensure the ongoing implementation of the BMP, including providing successive landowners with a copy of the BMP and making them aware of the responsibilities it contains.
10	Where lot does not comply with section 3.2 of the Shire of Northam Firebreak and Fuel Load Notice, the landowner / operator must install and maintain a bare earth firebreak 3 meters wide immediately within 10m of the environmental buffer within the lots as a variation to the firebreak notice. All overhanging branches, trees, limbs etc, to be trimmed back from over the firebreak area to a minimum height of 4m where all overhanging branches are timed back to allow for a sage passage of fire appliances. This variation to the firebreak notice must be applied for with the Local Government.

6.4 Local Government Responsibilities – Ongoing Management

TABLE 6.4 REQUIRED BUSHFIRE PROTECTION MEASURES – ONGOING MANAGEMENT ACTIONS	
1	To be aware of the potential consequences of any significant changes in the local government's management of land, of which they have vested control (including re-vegetation), that could have an adverse impact on the determined BAL ratings that apply to adjacent existing or future buildings and where: • The determined BAL ratings have been established by an existing BMP or a BAL Assessment; and • The BAL has been correctly determined with appropriate consideration of what might reasonably be expected to potentially change in the future with regards to the classification of the vegetation being altered and/or management of the relevant area of vegetation.
2	Ensure that the variation to the firebreak notice has been activated.

APPENDIX A: DETAILED BAL ASSESSMENT DATA AND SUPPORTING INFORMATION

A1: BAL Assessment Inputs Common to the Method 1 and Method 2 Procedures

A1.1: FIRE DANGER INDICES (FDI/FDI/GFDI)

When using Method 1 the relevant FDI value required to be applied for each state and region is established by AS 3959:2018, Table 2.1. Each FDI value applied in Tables 2.4 – 2.7 represents both the Forest Fire Danger Index (FFDI) and a deemed equivalent for the Grassland Fire Danger Index (GFDI), as per Table B2 in Appendix B. When using Method 2, the relevant FFDI and GFDI are applied.

The values may be able to be refined within a jurisdiction, where sufficient climatological data is available and in consultation with the relevant authority.

Relevant Jurisdiction:	WA	Region:	Whole State	Method 1	Applied FDI:	80

A1.2: VEGETATION ASSESSMENT AND CLASSIFICATION

Vegetation Types and Classification

In accordance with AS 3959:2018 Clauses 2.2.3 and C2.2.3.1, all vegetation types within 100 metres of the 'site' (defined as "the part of the allotment of land on which a building stands or is to be erected"), are identified and classified. Any vegetation more than 100 metres from the site that has influenced the classification of vegetation within 100 metres of the site, is identified and noted. The maximum excess distance is established by AS 3959: 2018 Clause 2.2.3.2 and is an additional 100 metres.

Classification is also guided by the Visual Guide for Bushfire Risk Assessment in WA (WA Department of Planning February 2016) and any relevant FPA Australia practice notes.

Modified Vegetation

The vegetation types have been assessed as they will be in their natural mature states, rather than what might be observed on the day. Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its expected re-generated mature state. Modified areas of vegetation can be excluded from classification if they consist of low threat vegetation or vegetation managed in a minimal fuel condition, satisfying AS 3959:2018 Clause 2.2.3.2(f), and there is sufficient justification to reasonable expect that this modified state will exist in perpetuity.

The Influence of Ground Slope

Where significant variation in effective slope exists under a consistent vegetation type, these will be delineated as separate vegetation areas to account for the difference in potential bushfire behaviour, in accordance with AS 3959:2018 Clauses 2.2.5 and C2.2.5.

THE INFLUENCE OF VEGETATION GREATER THAN 100 METRES FROM THE SUBJECT SITE	
Vegetation area(s) within 100m of the site whose classification has been influenced by the existence of bushfire prone vegetation from 100m – 200m from the site:	None
Assessment Statement:	No vegetation types exist close enough, or to a sufficient extent, within the relevant area to influence classification of vegetation within 100 metres of the subject site.

VEGETATION AREA 1						
Classification	**A. FOREST**					
Types Identified	Low open forest A-04					
Exclusion Clause	N/A					
Effective Slope	Determined	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover of Tallest Plant Layer	30-70%	Shrub/Heath Height	1-2m	Tree Height	Up to 30m	
Justification Comments	Low open forest dominated by Eucalyptus and Melaleuca sp with dry grasses and small shrub understorey and ground cover.					
Post Development Assumptions:	N/A					



PHOTO ID: 1



PHOTO ID: 2

VEGETATION AREA 2						
Classification	**A. FOREST**					
Types Identified	Low open forest A-04					
Exclusion Clause	N/A					
Effective Slope	Determined	d/slope 1.3 degrees	Applied Range (Method 1)	Downslope >0-5 degrees		
Foliage Cover of Tallest Plant Layer	30-70%	Shrub/Heath Height	1-2m	Tree Height	Up to 30m	
Justification Comments	Low open forest dominated by Eucalyptus and Melaleuca sp with dry grasses and small shrub understorey and ground cover.					
Post Development Assumptions:	N/A					



PHOTO ID: 3



PHOTO ID: 4

VEGETATION AREA 3						
Classification	**D. SCRUB**					
Types Identified	Closed scrub D-13					
Exclusion Clause	N/A					
Effective Slope	Determined	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover of Tallest Plant Layer	>30%	Shrub/Heath Height	Up to 6m	Tree Height	Up to 30m	
Justification Comments	Found in areas of poor soil with shrubs all over 2m and up to 6m in height. Very little under storey, predominantly dominated by Banksia and Melaleuca sp. Grassy understorey, occasional tress over 6m in height (less than 10%). Very little elevated fuels (tree branches).					
Post Development Assumptions:	N/A					
						
PHOTO ID: 5						

VEGETATION AREA 4						
Classification	**D. SCRUB**					
Types Identified	Closed scrub D-13					
Exclusion Clause	N/A					
Effective Slope	Determined	d/slope 4 degrees	Applied Range (Method 1)	Downslope >0-5 degrees		
Foliage Cover of Tallest Plant Layer	>30%	Shrub/Heath Height	Up to 6m	Tree Height	Up to 30m	
Justification Comments	Found in areas of poor soil with shrubs all over 2m and up to 6m in height. Very little under storey, predominantly dominated by Banksia and Melaleuca sp. Occasional tress over 6m in height (less than 10%).					
Post Development Assumptions:	N/A					



PHOTO ID: 6



PHOTO ID: 7



PHOTO ID: 8

VEGETATION AREA 5						
Classification	**G. GRASSLAND**					
Types Identified	Tussock grassland G-22 Sown pasture G-26					
Exclusion Clause	N/A					
Effective Slope	Determined	flat 0 degrees	Applied Range (Method 1)	Upslope or flat 0 degrees		
Foliage Cover of Tallest Plant Layer	Select.	Shrub/Heath Height	Select.	Tree Height	Select.	
Justification Comments	Mostly unmanaged pastural land.					
Post Development Assumptions:	N/A					



PHOTO ID: 9

VEGETATION AREA 6						
Classification	**G. GRASSLAND**					
Types Identified	Tussock grassland G-22 Sown pasture G-26					
Exclusion Clause	N/A					
Effective Slope	Determined	d/slope 1.3 degrees	Applied Range (Method 1)	Downslope >0-5 degrees		
Foliage Cover of Tallest Plant Layer	N/A	Shrub/Heath Height	N/A	Tree Height	N/A	
Justification Comments	Mostly unmanaged pastural land.					
Post Development Assumptions:	N/A					
						
PHOTO ID: 10						

VEGETATION AREA 7						
Exclusion Clause	2.2.3.2 (e) non-vegetated areas and (f) vegetation managed in a minimal fuel condition.					
Effective Slope	Determined	N/A	Applied Range (Method 1)	N/A		
Foliage Cover of Tallest Plant Layer	N/A	Shrub/Heath Height	N/A	Tree Height	N/A	
Justification Comments	Areas that are excluded include the petrol station that is permanently non vegetated, roads and the currently existing truck stop.					
Post Development Assumptions:	The whole subdivision lot has been excluded based on the assumption that the earth works required for the cut and fill process as well as the removal of all vegetation within the current lot.					



PHOTO ID: 11



PHOTO ID: 12

A1.3: EFFECTIVE SLOPE

EXPLAINING THE ASSESSMENT METHODOLOGY APPLIED BY BUSHFIRE PRONE PLANNING

DEFINITION: Effective slope is "the slope under that classified vegetation which most influences the bushfire attack" (AS 3959:2018, Clause 1.5.11).

"The effective slope under the classified vegetation is not the same as the average slope for the land surrounding the site of the proposed building. The effective slope is that slope which most significantly influences bushfire behaviour" (AS 3959:2018, Clause CB4).

The slope is described as upslope, flat or downslope when viewed from an exposed element (e.g., building) and looking towards the vegetation. It is measured in degrees.

[Note: Additional relevant guidance provided by AS 3959:2018 and NSW RFS, Planning for Bushfire Protection (2019) is incorporated into the applied assessment methodology and is presented at the end of this explanation.]

COMPOUND SLOPES UNDER VEGETATION AND DETERMINING SLOPE SIGNIFICANCE

Non-Linear Slopes: When the slope of ground under the vegetation out to the distance to be assessed (100 m or further if necessary), is not a straight line or nearly straight line slope, then it is made up of several different slopes i.e., it is a compound slope. The different slope angles and lengths must be factored into the determination of the effective slope value to be applied. Different slopes will potentially influence the bushfire rate of spread and intensity, both increasing and decreasing it.

Significant Slope: The AS 3959:2018 bushfire attack level determination methodology, with default inputs, models a fully developed bushfire. Therefore, a 'significant' slope is one that will significantly influence bushfire behaviour. To be 'significant' the length of the slope must be 'sufficient' to support a fully developed fire on that slope. The angle of a significant slope could be the determined effective slope for the area of classified vegetation if it is the one that 'most influences the bushfire attack'.

Sufficient Slope Length: Is a slope that will, as a minimum, allow the entire flame depth (flaming zone) of a fully developed fire (100m flame width) to exist on that slope.

The expected flame depth of a fully developed bushfire is a function of the length of time the flaming phase will exist on a section of the fuel bed (the 'residence time') and the bushfire's 'rate of spread'. For a given rate of spread, longer residence times result in greater flame depths. Greater flame depths are correlated with greater flame temperatures and greater flows of radiant heat.

The primary factors that will increase the residence time are:

- Heavier fine fuel loads of grass, leaf litter, twigs, bark etc less than 6mm in width and existing within the surface and near surface layers (and elevated fuel layers when contiguous with the base layers); and
- A greater percentage of larger fine fuels within the fuel load.

The primary factors that increase the rate of spread (apart from fire weather factors), include finer fuels, drier fuels, horizonal continuity of fuel and steeper upward ground slope in the direction of fire travel.

Example values:

- Residence Time: Grassfire 5 – 15 seconds, Forest fire 25 -50 seconds.
- Rate of Spread: Grassfires of a few km/hr are considered fast moving, 5-10 km/hr is common and fastest in the order of 25km/hr. Forest fire typically recorded in metres/hour with 1-1.5 km/hr being considered fast moving and fastest in the order of 3–4 km/hr.
- Flame Depth: More typically, a few metres for grasses to tens of metres for forest fires.

An Isolated Slope: For scenarios where there is a single significant slope (based on the above criteria) additional consideration would need to be given to the time and distance consumed by a bushfire still in its 'developing' phase. This will require due consideration be given to how it is potentially ignited i.e., from a single or multiple points, as this will influence the time and distance required to fully develop. For such scenarios, a normally significant slope may not be sufficiently long. It may be necessary to determine the potential bushfire impact more accurately by

justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced headfire width (using short fire run modelling).

Determined Effective Slope: Only a 'significant' slope can potentially be the effective slope by itself. In which case, for a defined vegetation area, the worst significant slope under that vegetation is to apply.

The table below indicates Bushfire Prone Planning's considerations in assessing short and/or compound slopes to determine the effective slope.

Slope Length (m)	Considered a Significant Slope	Considerations in Determining the Effective Slope
< 5	No	The single length of slope can be ignored.
5-20	No	The influence of the slope, even though reduced, must still be recognised to an appropriate degree by the determined effective slope.
20-30	Possibly Not – But Requires Justification	Consider likely bushfire hazard threat levels (direct attack mechanisms) within the general assessment area as influenced by local topography, vegetation extents and types. Consider the potential for preheating and ignition source impacts from bushfire on adjoining or nearby land onto vegetation on the subject slope. Isolated slopes of this length are less likely to be considered significant. Consider if vegetation on the slope is likely be ignited by a single ignition point or is multipoint ignition possible from bushfire an adjoining slopes or the surrounding area. Single point ignition will require a fire to travel further before being fully developed (DFES considers less than 100m fire runs may be considered a short fire run for forest, woodland and scrub vegetation classifications). If considered not significant, the influence of the slope, even though reduced, must still be recognised to an appropriate degree by the determined effective slope.
>30	Yes	Will likely always be a significant slope (unless isolated – in which case, justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced headfire width.

BPP Approach - Slope Variation Within Areas of Vegetation

Where a significant variation in effective slope exists under a consistent vegetation type, these will be delineated as separate vegetation areas to account for the difference in potential bushfire behaviour and impact, in accordance with AS 3959:2018 clauses 2.2.5 and C2.2.5.

Effective Slope Variation Due to Multiple Development Sites

When the effective slope, under a single area of bushfire prone vegetation, will vary significantly relative to multiple proposed development sites (exposed elements), then the effective slopes corresponding to each of the different locations, are separately identified. The relevant (worst case) effective slope is determined in the direction corresponding to the potential directions of fire spread towards the subject building(s).

AS 3959:2018 EFFECTIVE SLOPE DETERMINATION - GUIDANCE

The Standard presents a broad set of guidance statements that indicate the intent of deriving an effective slope value for use in calculations, rather than detailing the 'in the field' determination process. These include:

- Highlighting the importance of the value by stating "The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, severity of the fire and the ultimate level of radiant heat flux" (Clause C2.2.5). [Note: A common rule of thumb is that for every 10 degrees of upslope, a fire will double its rate of spread if moving in the direction of the prevailing wind. Fires travel slower down a slope].
- It may be necessary to consider the slope under the classified vegetation for distances greater than 100 m in order to determine the effective slope for that vegetation classification.

- "Where there is more than one slope within the classified vegetation, each slope shall be individually assessed, and the worst case Bushfire Attack Level shall apply" (Clause 2.2.5).

NSW RFS 2019, PLANNING FOR BUSHFIRE PROTECTION - APPENDIX A1.5 - ADDITIONAL DETERMINATION GUIDANCE

- "In identifying the effective slope, it may be found that there are a variety of slopes covering different distances within the vegetation. The effective slope is considered to be the slope under the vegetation which will most significantly influence the bushfire behaviour for each aspect. This is usually the steepest slope. In situations where this is not the case, the proposed approach must be justified".

- "Vegetation located closest to an asset may not necessarily be located on the effective slope".

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

The effective slopes determined from the site assessment are recorded in Table 3.2 of this Bushfire Management Plan.

A1.4: SEPARATION DISTANCE

Measuring

The separation distance is the distance in the horizontal plane between the receiver (building/structure or area of land being considered) and the edge of the classified vegetation (AS 3959:2018, clause 2.2.4)

The relevant parts of a building/structure from which the measurement is taken is the nearest part of an external wall or where a wall does not exist, the supporting posts or columns. Certain parts of buildings are excluded including eaves and roof overhangs.

The edge of the vegetation, for forests and woodlands, will be determined by the unmanaged understorey rather than either the canopy (drip line) or the trunk (AS 3959:2018, clause C2.2.5).

Measured Separation Distance as a Calculation Input

If a separation distance can be measured because the location of the building/structure relative to the edge of the relevant classified vegetation is known, this figure can be entered into the BAL calculation. The result is a determined BAL rating.

Assumed Separation Distance as a Calculation Input

When the building/structure location within the lot is not known, an assumed building location may be applied that would establish the closest positioning of the building/structure relative to the relevant area of vegetation.

The assumed location would be based on a factor that puts a restriction on a building location such as:

- An established setback from the boundary of a lot, such as a residential design code setback or a restrictive covenant; or
- Within an established building envelope.

The resultant BAL rating would be indicative and require later confirmation (via a Compliance Report) of the building/structure actual location relative to the vegetation to establish the determined BAL rating.

Separation Distance as a Calculation Output

With the necessary site specific assessment inputs and using the AS 3959:2018 bushfire modelling equations, the range of separation distances that will correspond to each BAL rating (each of which represents a range of radiant heat flux), can be calculated. This has application for bushfire planning scenarios such as:

- When the separation distance cannot be measured because the exact location of the exposed element (i.e., the building, structure or area), relative to classified vegetation, is yet to be determined.

  In this scenario, the required information is the identification of building locations onsite that will correspond to each BAL rating. That is, indicative BAL ratings can be derived for a variety of potential building/structure locations; or

- The separation distance is known for a given building, structure or area (and a determined BAL rating can be derived), but additional information is required regarding the exposure levels (to the transfer of radiant heat from a bushfire), of buildings or persons, that will exist at different points within the subject site.

The calculated range of separation distances corresponding to each BAL rating can be presented in a table and/or illustrated as a BAL Contour Map – whichever is determined to best fit the purpose of the assessment.

For additional information refer to the information boxes in Section 3 'Bushfire Attack Levels (BAL) - Understanding the Results and Section 3.2. 'Interpretation of the BAL Contour Map'.

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

For the subject development/use the applicable separation distances values are derived from calculations applying the assessed site data. They are an output value, not an input value and therefore are not presented or justified in this appendix.

The derived values are presented in Section 3, Table 3.1 and illustrated as a BAL contour map in Figure 3.2.

APPENDIX B: ADVICE - ONSITE VEGETATION MANAGEMENT - THE APZ

THE ASSET PROTECTION ZONE (APZ) – DESCRIPTION AND OBJECTIVES

Description: The asset protection zone (APZ) is the area of land surrounding a building or structure on which any combustible materials will be located and/or managed to reduce the potential impact of the direct and indirect attack mechanisms (threats) of bushfire, and therefore reduce the associated risks of building/structure damage or loss, to acceptable levels.

When cultivated and/or natural vegetation exists within the zone it must present low potential threat levels from the direct fire attack mechanisms of flame contact, radiant heat and ember attack and fire driven wind, and the indirect attack mechanisms of debris accumulation, surface fire, tree strike and consequential fire.

The required low threat levels will be achieved as the result of factors that include persistent higher fuel moisture contents, lower flammability and/or minimal fuel loads, due to either limiting the existence of these fuels through removal and/or modification, and the subsequent ongoing management (reduction) of fuel loads.

When a bushfire attack level (BAL) is required to be determined for a building/structure to establish its bushfire construction requirements, the condition of the vegetation within the APZ must satisfy the requirements established by *clause 2.2.3.2 of AS 3959:2018 Construction of buildings in bushfire prone areas* - to be excluded from classification.

For other combustible structures/materials within the APZ, lower threat levels will be the result of factors such as their appropriate use, lowered vulnerability and location relative to the primary building/structure to be protected.

Objectives: The primary objectives of establishing a low threat area surrounding buildings/structures are to create that performs the following functions:

1. To establis an APZ of specified dimensions ensure the building is sufficiently separated from the identified bushfire hazard to limit the impact of its direct attack mechanisms. The required dimensions of the APZ must:
    - Remove the potential for direct flame contact on the building;
    - Reduce the level of radiant heat to which the building is exposed. The APZ dimensions should ensure that the potential level of radiant heat impact corresponds to the level of vulnerability of the building/structure - as determined by the degree to which bushfire resistant construction has been applied (or not). For example, when constructed to the requirements corresponding to its determined exposure to radiant heat (measured as a bushfire attack level) in accordance with AS 3959 or the NASH Standard.
    - Ensure some reduction in the threat level of the ember/burning debris attack mechanism when higher threat vegetation types are present in the vicinity. Note, the reduction in some scenarios will be minimal given the produced quantity, type, survival time and consequent distance that certain embers/burning debris can travel.

      Be aware of that research has identified that consequential fire, ignited by embers, is the primary cause (>80%) of building loss in past Australian bushfire events. In bushfire prone areas, the importance of applying protection measures to prevent ember entry to buildings/structures and minimising the existence of consequential fire fuels cannot be overstated.
2. To ensure any combustible fuels (debris and structures) or trees that remain within the APZ will be managed and located to limit the potential impact of the indirect attack mechanisms of bushfire by:
    - Minimising the accumulation of debris on, within and around buildings/structures to limit this source of fuel for consequential fires that will result in the direct fire attack mechanisms of flames and greater radiant heat existing closer to the buildings/structures, even though the bushfire hazard exists at a greater distance away;
    - To prevent surface fire moving through the APZ and closer to buildings/structures than the fire in the bushfire hazard itself can;

- Prevent fire weakened or windblown trees/branches impacting buildings/structures and allowing ember/burning debris entry;

- To ensure other combustible materials that can result in a consequential fire ignited by embers/burning debris), within both the APZ and parts of the building, are eliminated, minimised and/or appropriately located or protected (the explanatory notes in the Guidelines provide some guidance for achieving this objective and other sources are available); and

3. To provide a defendable space for firefighting activities.

B1: Asset Protection Zone (APZ) Dimensions

APZ DIMENSIONS – DIFFERENCES IN REQUIREMENTS FOR PLANNING ASSESSMENTS COMPARED TO IMPLEMENTATION

THE 'PLANNING BAL-29' APZ DIMENSIONS

The 'Planning BAL-29' APZ is not necessarily the size of the APZ that must be physically implemented and maintained by a landowner. Rather, its purpose is to identify if an acceptable solution for planning approval can be met i.e., can a specified minimum separation distance from bushfire prone vegetation exist.

An assessment against the Bushfire Protection Criteria is conducted for planning approval purposes. To satisfy 'A2.1: Asset Protection Zone', it must be demonstrated that certain minimum separation distances between the relevant building/structure and different classes of bushfire prone vegetation, either exist or can be created and will remain in perpetuity. These minimum separation distances determine the 'Planning BAL-29' APZ dimensions.

Dimensions: The minimum dimensions are those that will ensure the potential radiant heat impact on subject buildings does not exceed 29 kW/m^2. These dimensions will vary dependent on the vegetation classification, the slope of the land they are growing on and certain other factors specific to the subject site.

Note: For certain purposes associated with vulnerable land uses, the 'Planning BAL-29' APZ may be replaced with dimensions corresponding to radiant heat impact levels of 10 kW/m^2 and 2 kW/m^2 and calculated using 1200K flame temperature.

Location: The identified 'Planning BAL-29' APZ must not extend past lot boundaries onto land the landowner has no control over either now or potentially at some point in the future. Limited exceptions include:

- When adjoining land is not vegetated (e.g., built out, roads, carparks, drainage, rock, water body etc.);
- When adjoining land currently or, will in the short term, contain low threat vegetation and or vegetation managed in a minimal fuel condition as per AS 3959:2018 cl. 2.2.3.2. It must be reasonable (justifiable) to expect this low threat vegetation and/or level of management will continue to exist or be conducted in perpetuity and require no action from the owner of the subject lot.

  Such areas of land include formally managed areas of vegetation (e.g., public open space / recreation areas / services installed in a common section of land). For specific scenarios, evidence of the formal commitment to manage these areas to a certain standard may be required and would be included in the BMP.

  These areas of land can also be part of the required APZ on a neighbouring lot for which the owner of that lot has a recognised responsibility to establish and maintain; and
- When there is a formalised and enforceable capability and responsibility created for the subject lot owner, or any other third party, to manage vegetation on land they do not own in perpetuity. This would be rare, and evidence of the formal authority would be included in the BMP.

The bushfire consultant's 'Supporting Assessment Detail', that is presented in the assessment against the acceptable solution A2.1, will identify and justify how any adjoining land within the 'Planning BAL-29 APZ will meet the APZ standards. Or otherwise, explain how this condition cannot be met.

THE 'BAL RATING' APZ DIMENSIONS

The applicable BAL rating will have been stated in the BAL Assessment Data section of the BAL Assessment Report or BMP (as relevant). The BAL rating can be assessed as 'determined' or 'indicative' or be 'conditional', dependent of the specific conditions associated with the site and the stage of assessment or planning. It is the eventual assessment of the 'Determined' BAL that will establish both the BAL rating that is to apply and its corresponding 'BAL Rating' APZ dimensions.

Dimensions: The minimum dimensions of the 'BAL Rating' APZ to be established and maintained will be those that correspond to the determined BAL rating for the subject building/structure that has accounted for surrounding vegetation types, the slope of the land they are growing on and certain other factors specific to the subject site and surrounding land.

Establishing the 'BAL Rating' APZ will ensure that the potential radiant heat exposure of the building/structure will be limited to the level that the applied construction requirements are designed to resist when that building/structure is required to be constructed to the standard corresponding to the Determined BAL.

> *Note: For certain purposes associated with vulnerable land uses, the 'BAL Rating' APZ dimensions may be replaced with dimensions corresponding to the specific radiant heat impact levels of 10 kW/m^2 and 2 kW/m^2 and calculated using 1200K flame temperature.*

Location: The same conditions will apply as for the 'Planning BAL-29' APZ.

THE 'LOCAL GOVERNMENT' APZ DIMENSIONS

Some Local Government's establish the dimensions of the APZ that must be established surrounding buildings in their annual Firebreak/Hazard Reduction Notice. Or for a specific site they may establish a maximum allowable dimension (typically that corresponding to BAL-29). When established, the landowner will need to be comply with these.

THE 'REQUIRED' APZ DIMENSIONS

This is the APZ that is to be established and maintained by the landowner within the subject lot and surrounding the subject building(s). It will be identified on the Property Bushfire Management Statement when it is required to be included in this Report/Plan.

Dimensions: The 'Required APZ' dimensions are the minimum (or maximum when relevant) distances away from the subject building(s) that the APZ must extend. These distances will not necessarily be the same all around the building(s). They can vary and are dependent on the different vegetation types (and their associated ground slope) that can exist around the building(s), and specific local government requirements. The dimensions to implement are determined by:

A. The 'BAL Rating APZ' of the subject building(s) when distances are greater than 'B' below (except when 'B' establishes a maximum distance); or

B. The 'Local Government' APZ' derived from the Firebreak/Hazard Reduction Notice when distances are greater than 'A' above, other than when a maximum distance is established, in which case this will apply; or

C. A combination of 'A' and 'B'.

Location: The same conditions will apply as for the 'Planning BAL-29' APZ.

B1.1: THE APZ DIMENSIONS REQUIRED TO BE IMPLEMENTED BY THE LANDOWNER

DETERMINATION OF THE 'REQUIRED' APZ DIMENSIONS TO BE IMPLEMENTED AND MAINTAINED BY LANDOWNER WITHIN THEIR LOT											
Relevant Buildings(s)	Vegetation Classification [Refer to Fig 3.1]		Minimum Required Separation Distances from Building to Vegetation (metres)								
			Established by the 'BAL Rating' APZ Dimension						Established by the "Local Government' APZ Dimension		The 'Required' APZ Dimensions [see note]
			Determined Radiant Heat Impact		Stated 'Indicative' or 'Conditional' BAL				Firebreak / Hazard Reduction Notice	Maximum Allowed	
	Area	Class			BAL-29	BAL-19	BAL-12.5	BAL-LOW			
	1	(A) Forest	N/A	-	21-<31	31-<42	42-<100	>100	20	N/A	21
	2	(A) Forest		-	27-<37	37-<50	50-<100	>100	20		27
	3	(D) Scrub		-	13-<19	19-<27	27-<100	>100	20		20
	4	(D) Scrub		-	15-<22	22-<31	31-<100	>100	20		20
	5	(G) Grassland	N/A	-	8-<12	12-<17	17-<50	>50	20		20
	6	(G) Grassland		-	9-<14	14-<20	20-<50	>50	20		20
	7	Excluded cl 2.2.3.2(e & f)		-	-	-	-	-	-		-

Note: The 'Required' APZ Dimension corresponding to each area of vegetation is the greater of the 'BAL Rating' or the 'Firebreak/Hazard Reduction Notice' APZ dimensions - unless a local government maximum distance(s) is established as a result of their environmental assessment of the subject site. The area of the APZ will also be limited to the subject lot boundary unless otherwise justified in this Report/Plan. Final determination of the dimensions will require that any indicative or conditional BAL becomes a 'Determined' BAL.

Comments:

Building Protection Zones for habitable buildings must extend a minimum of 20 metres out from any external walls of the building.

B2: The Standards for the APZ as Established by the Guidelines (DPLH, v1.4)

Within the Guidelines (source: https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas), the management Standards are established by:

- Schedule 1: Standards for Asset Protection Zones (see extract below) established by the Guidelines; and
- The associated explanatory notes (Guidelines E2) that address (a) managing an asset protection zone (APZ) to a low threat state (b) landscaping and design of an asset protection zone and (c) plant flammability.

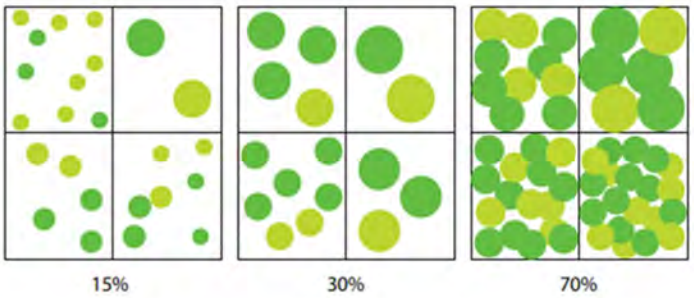


ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

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 <6 millimetres in thickness)	• Should be managed and removed on a regular basis to maintain a low threat state. • Should be maintained at <2 tonnes per hectare (on average). • Mulches should be non-combustible such as stone, gravel or crushed mineral earth or wood mulch >6 millimetres in thickness.
Trees* (>6 metres 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 <15 per cent of the total APZ area. • Tree canopies at maturity should be at least five metres apart to avoid forming a continuous canopy. Stands of existing mature trees with interlocking canopies may be treated as an individual canopy provided that the total canopy cover within the APZ will not exceed 15 per cent and are not connected to the tree canopy outside the APZ.

Figure 19: Tree canopy cover – ranging from 15 to 70 per cent at maturity



Shrub* and scrub* (0.5 metres to six metres in height). Shrub and scrub >6 metres 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 >5 square metres in area. • Clumps should be separated from each other and any exposed window or door by at least 10 metres.
Ground covers* (<0.5 metres in height. Ground covers >0.5 metres in height are to be treated as shrubs)	• 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 >100 millimetres in height.
Grass	• Grass should be maintained at a height of 100 millimetres 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 covers, grass and non-combustible mulches as prescribed above.
LP Gas Cylinders	• Should be located on the side of a building furthest 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.

** Plant flammability, landscaping design and maintenance should be considered – refer to explanatory notes*

B3: The Standards for the APZ as Established by the Local Government

Refer to the firebreak / hazard reduction notice issued annually (under s33 of the Bushfires Act 1954) by the relevant local government. It may state Standards that vary from those established by the Guidelines and that have been endorsed by the WAPC and DFES as per Section 4.5.3 of the Guidelines.

A copy of the applicable notice is not included here as they are subject to being reviewed and modified prior to issuing each year. Refer to ratepayers notices and/or the local government's website for the current version.

B4: Vegetation and Areas Excluded from Classification - Ensure Continued Exclusion

AS 3959:2018 establishes the methodology for determining a bushfire attack level (BAL). The methodology includes the classification of the subject site's surrounding vegetation according to their 'type' and the application of the corresponding relevant bushfire behaviour models to determine the BAL.

Certain vegetation can be considered as low threat or managed in a minimal fuel condition and can be excluded from classification. Where this has occurred in assessing the site, the extract from AS3959:2018 below states the requirements that must continue to exist for the vegetation on those areas of land to be excluded from classification (including the size of the vegetation area if relevant to the assessment).

2.2.3.2 *Exclusions—Low threat vegetation and non-vegetated areas*

The following vegetation shall be excluded from a BAL assessment:

(a) Vegetation of any type that is more than 100 m from the site.

(b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.

(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.

(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTES:

1 Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

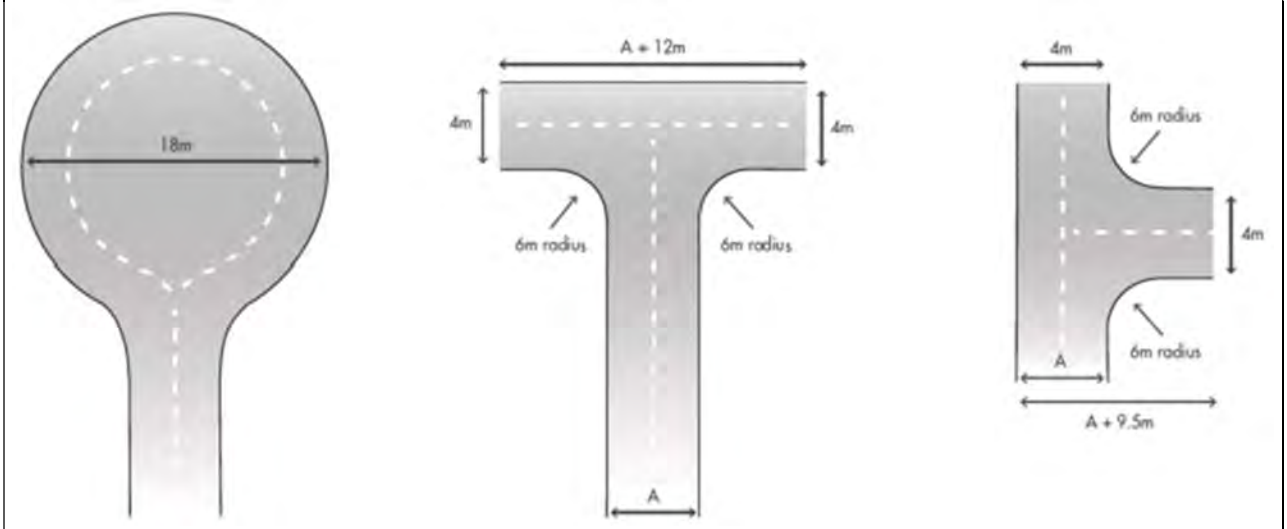
APPENDIX C: TECHNICAL REQUIREMENTS FOR VEHICULAR ACCESS

The design/layout requirements for access are established by the acceptable solutions of the Guidelines (DPLH, 2021 v1.4) Element 3 and vary dependent on the access component, the land use and the presence of 'vulnerable' persons. Consequently, the best reference source are the Guidelines. The technical requirements that are fixed for all components and uses are presented in this appendix.

GUIDELINES TABLE 6, EXPLANATORY NOTES E3.3 & E3.6 AND RELEVANT ACCEPTABLE SOLUTIONS

Technical Component	Vehicular Access Types / Components			
	Public Roads	Emergency Access Way [1]	Fire Service Access Route [1]	Battle-axe and Private Driveways [2]
Minimum trafficable surface (m)	In accordance with A3.1	6	6	4
Minimum Horizontal clearance (m)	N/A	6	6	6
Minimum Vertical clearance (m)	4.5			
Minimum weight capacity (t)	15			
Maximum Grade Unsealed Road [3]	As outlined in the IPWEA Subdivision Guidelines	1:10 (10%)		
Maximum Grade Sealed Road [3]		1:7 (14.3%)		
Maximum Average Grade Sealed Road		1:10 (10%)		
Minimum Inner Radius of Road Curves (m)		8.5		

Turnaround Area Dimensions for No-through Road, Battle-axe Legs and Private Driveways [4]



Passing Bay Requirements for Battle-axe leg and Private Driveway

When the access component length is greater than the stated maximum, passing bays are required every 200m with a minimum length of 20m and a minimum additional trafficable width of 2m (i.e. the combined trafficable width of the passing bay and constructed private driveway to be a minimum 6m).

Emergency Access Way – Additional Requirements

Provide a through connection to a public road, be no more than 500m in length, must be signposted and if gated, gates must be open the whole trafficable width and remain unlocked.

[1] To have crossfalls between 3 and 6%.

[2] Where driveways and battle-axe legs are not required to comply with the widths in A3.5 or A3.6, they are to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision.

[3] Dips must have no more than a 1 in 8 (12.5% or 7.1 degree) entry and exit angle.

[4] The turnaround area should be within 30m of the main habitable building.

APPENDIX D: TECHNICAL REQUIREMENTS FOR FIREFIGHTING WATER SUPPLY

D1: Reticulated Areas – Hydrant Supply

The Guidelines state "where a reticulated water supply is existing or proposed, hydrant connection(s) should be provided in accordance with the specifications of the relevant water supply authority."

The main scheme water suppliers / authorities in WA are The Water Corporation, AqWest – Bunbury Water Corporation and Busselton Water Corporation. Various local authority exists in other non-scheme and regional areas. However, most existing fire hydrants are connected to Water Corporation water mains.

Consequently, the hydrant location specifications from The Water Corporation's 'No 63 Water Reticulation Standard' (Ver 3 Rev 15) are provided in the extract below with the key distances relevant to bushfire planning assessments being highlighted. This Standard is deemed to be the baseline criteria for developments and should be applied unless different local water supply authority conditions apply. Other applicable specification will be found in the Standard.

Note: The maximum distance from a hydrant to the rear of a lot/building is generally interpreted as not applicable to large lot sizes where the maximum distance becomes an impractical limitation i.e., typically rural residential areas.

2.2.1.5 Appurtenances

c. Hydrants

Hydrants shall be screw-down hydrant with built-in isolation valve and installed only on DN100 or larger pipes. Hydrants shall be located:

- so that the maximum distance between a hydrant and the rear of a building envelope, (or in the absence of a building envelope the rear of the lot) shall be 120m;
- so that spacing (as measured by hose-run) between hydrants in non-residential or mixed use areas shall be maximized and no greater than 100m;
- so that spacing (as measured by hose-run) between hydrants in residential areas with lots per dwelling <10,000m² shall be maximized and no greater than 200m;
- so that spacing between hydrants (as measured by hose-run) in rural residential areas where minimum lots per dwelling is >10,000 m² (1ha) shall be maximized and no greater than 400m;
- centrally along the frontage of a lot to avoid being under driveways, unless the lot features a frontage 6m or less, in which case it shall be placed to the side opposite the driveway;
- at lots that have the widest frontage in the local area;
- where appropriate at the truncation of road junctions or intersections so that they can serve more than one street and can be readily located;
- on both sides of the major roads at staggered intervals where there are mains on both sides of the road;
- at major intersections on dual multi-lane roads, where two hydrants are to be sited on diagonally opposite corners;
- hydrants should be located at least 20m from traffic calming devices i.e., median slow points or chokers, chicanes, mini traffic circles, and intersection 'pop-outs' to ensure traffic is not impeded;
- in a position not less than 10m from any high voltage main electrical distribution equipment such as transformers and distribution boards, liquefied petroleum gas or other combustible storage;
- directly on top of the main using a tee unless proved to be impractical.

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GOVERNMENT OF WESTERN AUSTRALIA

Western Australian Planning Commission

WAPC ref: 200673
Date: 15 November 2024
Enquiries: Gary James
6551 9350

Nik Hidding,
Hidding Urban Planning
PO Box 920
Subiaco 6904

Transmitted via email only to: nik@hidding.com.au

Dear Nik

APPROVAL OF APPLICATION WAPC REF: 200673

Thank you for your application to subdivide Lots 860 & 881 Yilgarn Avenue, Malabaine.

The Western Australian Planning Commission (WAPC) has approved application WAPC Ref: 200673 and, once the attached conditions of approval are fulfilled, is prepared to endorse a Deposited Plan in accordance with the plan date-stamped 19 August 2024.

This decision is valid for four (4) years from the date of this letter. In order to implement this letter and have the new titles created, a request for the endorsement of a Deposited Plan (Form 1C) must be submitted to the WAPC within the term of the approval, that is by the close of business on 15 November 2028 or this approval will no longer be valid.

The Form 1C and a schedule of fees can be found on Planning Online: https://planningonline.dplh.wa.gov.au.

CONDITIONS:

1. The plan of subdivision is to be modified in accordance with the attached plan dated 28 October 2024 (Attachment A).

   (Western Australian Planning Commission)

2. Arrangements being made with a licensed water provider for the provision of a suitable water supply service to the lots shown on the approved plan of subdivision.

   (Water Corporation)

3. Arrangements being made with a licensed wastewater service provider for the provision of a sewerage service to each lot shown on the approved plan of subdivision.

   (Licensed service provider)

140 William Street, Perth, Western Australia 6000, Locked Bag 2506 Perth, 6001
Tel: (08) 6551 8002; Fax: (08) 6551 9001; Infoline: 1800 626 477
e-mail: info@dplh.wa.gov.au; web address http://www.dplh.wa.gov.au
ABN 35 482 341 493

4. Arrangements being made with a licensed electricity network operator for the provision of an underground electricity distribution system that can supply electricity to each lot shown on the approved plan of subdivision.

   (Licensed service provider)

5. Arrangements being made to the specification of Western Power for the removal, relocation and/or replacement of electricity supply infrastructure, including plant and/or equipment located on or near the lot(s) shown on the approved plan of subdivision.

   (Western Power)

6. Engineering drawings and specifications are to be submitted, approved, and subdivisional works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, to ensure that those lots not fronting an existing road are provided with frontage to a constructed road(s) connected by a constructed road(s) to the local road system and such road(s) are constructed and drained at the landowner/applicant's cost.

   As an alternative, and subject to the agreement of the Local Government the Western Australian Planning Commission (WAPC) is prepared to accept the landowner/applicant paying to the local government the cost of such road works as estimated by the local government and the local government providing formal assurance to the WAPC confirming that the works will be completed within a reasonable period as agreed by the WAPC.

   (Shire of Northam)

7. Engineering drawings and specifications are to be submitted and approved, and subdivisional works undertaken for construction of roads in accordance with the approved plan of subdivision, engineering drawings and specifications to ensure that:

   (a) street lighting in accordance with dark sky principles is installed on all new subdivisional roads to the standards of the relevant licensed service provider; and

   (b) roads that have been designed to connect with existing or proposed roads abutting the subject land are coordinated so the road reserve location and width connect seamlessly; and

   (c) embayment parking is provided within the/abutting the proposed.

   (Shire of Northam)

8. Satisfactory arrangements being made with the local government for the full cost of upgrading and/or construction of the subdivision road intersections with Yilgarn Avenue in the locations as shown on the plan dated 28 October 2024 (Attachment A) to a standard of the local government.

   (Shire of Northam)

9. Pursuant to Section 150 of the *Planning and Development Act 2005* and Division 3 of the *Planning and Development Regulations 2009* a covenant preventing vehicular access onto Yilgarn Avenue being lodged on the certificates of title of proposed Lots 900 and 901 at the full expense of the landowner/applicant. The covenant is to prevent access, to the benefit of the Shire of Northam, in accordance with the plan dated 28 October 2024 (Attachment A) and the covenant is to specify:

   "No vehicular access is permitted to and from Yilgarn Avenue."

   (Shire of Northam)

10. Pursuant to Section 150 of the *Planning and Development Act 2005* and Division 3 of the *Planning and Development Regulations 2009* a covenant preventing vehicular access onto Great Eastern Highway being lodged on the certificates of title of proposed lots 900 and 904 at the full expense of the landowner/applicant. The covenant is to prevent access, to the benefit of Main Roads Western Australia, in accordance with the plan dated 28 October 2024 (Attachment A) and the covenant is to specify:

    “No vehicular access is permitted to or from Great Eastern Highway.”

    (Main Roads Western Australia)

11. Engineering drawings and specifications are to be submitted, approved, and works undertaken in accordance with the approved engineering drawings, specifications and approved plan of subdivision, for grading and/or stabilisation of the site to ensure that:
    (a) lots can accommodate their intended use; and
    (b) finished ground levels at the boundaries of the lots the subject of this approval match or otherwise coordinate with the existing and/or proposed finished ground levels of the land abutting.

    (Shire of Northam)

12. Prior to the commencement of subdivisional works, an Urban Water Management Plan is to be prepared and approved, in consultation with the Department of Water and Environmental Regulation, consistent with any approved Drainage and Water Management Plan.

    (Shire of Northam)

13. Engineering drawings and specifications are to be submitted and approved, and works undertaken in accordance with the approved engineering drawings and specifications and approved plan of subdivision, for the filling and/or draining of the land, including ensuring that stormwater is contained on-site, or appropriately treated and connected to the local drainage system. Engineering drawings and specifications are to be in accordance with an approved Urban Water Management Plan (UWMP) for the site.

    (Shire of Northam)

14. Drainage easements and reserves as may be required by the local government for drainage infrastructure being shown on the diagram or plan of survey (deposited plan) as such, granted free of cost, and vested in that local government under Sections 152 and 167 of the *Planning and Development Act 2005*.

    (Shire of Northam)

15. Information is to be provided to demonstrate that the measures contained in Section 6; Table 6.1 of the bushfire management plan prepared by Bushfire Prone Planning (dated 24 November 2023) have been implemented during subdivisional works. This information should include a completed 'Certification by Bushfire Consultant' from the bushfire management plan.

    (Shire of Northam)

16. A notification, pursuant to Section 165 of the *Planning and Development Act 2005*, is to be placed on the certificates of title of the proposed lots with a Bushfire Attack Level (BAL) rating of 12.5 or above, advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). 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 and is subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land."

    (Shire of Northam)

17. Prior to the commencement of subdivisional works an environmental management plan for Lot 904 is to be prepared and approved to ensure the protection and management of the sites environmental assets with satisfactory arrangements being made for the implementation of the approved plan.

    (Shire of Northam)

18. A revegetation plan being prepared, approved and implemented for the revegetation of the environmental corridor shown on the plan dated 28 October 2024 (Attachment A) with appropriate native species to the specifications of the Local Government.

    (Shire of Northam)

19. A fence restricting vehicle access to the environmental corridor from Lot 904 is to be constructed on the internal boundaries shown on the plan dated 28 October 2024 (Attachment A) to protect native vegetation.

    (Shire of Northam)

ADVICE:

1. In regard to Condition 2, the landowner/applicant shall make arrangements with the Water Corporation for the provision of the necessary services. On receipt of a request from the landowner/applicant, a Land Development Agreement under Section 83 of the *Water Services Act 2012* will be prepared by the Water Corporation to document the specific requirements for the proposed subdivision.

2. In regard to Condition 3, the Western Australian Planning Commission will only clear these conditions upon written confirmation that the reticulated sewerage service has been provided in accordance with a licence issued by the Economic Regulation Authority, or a licensing exemption granted by the Minister for Water; and the works required to provide a reticulated sewerage service have been completed to the satisfaction of the sewerage service provider.

3. In regard to Condition 4, a licensed service provider provides only one underground point of electricity supply per freehold lot.

4. In regard to Condition 6, the landowner/applicant is advised that the road reserves, including the constructed carriageways, laneways, truncations, footpaths/dual use paths and car embayments, are to be generally consistent with the approved plan of subdivision.

5. In regard to Condition 7, the landowner/applicant is advised that to achieve the dark sky principles, new street lighting is to comply with a correlated colour temperature of 3,000 kelvins or less, shielded luminaires and in accordance with AS/NZS 4282:2019 - Control of the obtrusive effects of outdoor lighting.

6. The landowner/applicant and the local government are advised to refer to the Institute of Public Works Engineering Australasia Local Government Guidelines for Subdivisional Development (current edition). The guidelines set out the minimum best practice requirements recommended for subdivision construction and granting clearance of engineering conditions imposed.

7. Main Roads Western Australia advises the landowner/application with regard to the Great Eastern Highway
   (a) no earthworks are to encroach onto the road reserve;
   (b) no stormwater drainage is to be discharged onto the road reserve; and
   (c) the landowner/applicant shall make good any damage to the existing verge vegetation within the road reserve.

8. In regard to Conditions 6 and 8, the landowner/applicant is advised that the Western Australian Planning Commission expects construction of the roads and intersections to cater for the movement of restricted access vehicles (RAV) of RAV-7 category.

9. Condition 13 has been imposed in accordance with Better Urban Water Management Guidelines (WAPC 2008). Further guidance on the contents of urban water management plans is provided in 'Urban Water Management Plans: Guidelines for preparing and complying with subdivision conditions' (Published by the then Department of Water 2008)

10. The landowner/applicant is advised that no street verge trees are to be removed. Street verge trees are to be retained and protected from damage, including unauthorised pruning, unless otherwise approved by the local government. In this regard, the landowner/applicant is advised to liaise with the Shire of Northam prior to commencement of subdivisional works.

If further clarification is required, please review the attached information about your approval, or contact the planning officer listed at the top of this letter

Sam Boucher.

Ms Sam Boucher
WAPC Secretary
15 November 2024

APPLICATION DETAILS

Applicant	Nik Hidding, Hidding Urban Planning PO Box 920 Subiaco 6904
Owner	1. Procon Investments 6 Pty Ltd 2. Procon Developments (Australia) Pty Ltd
Application Receipt	14 August 2024
Lot Number	881, 860
Diagram / Plan	Plan 30581 / Diagram 30581, Plan 25781 / Diagram 25781
Location	Lots 860 & 881 Yilgarn Avenue, Malabaine
C/T Volume/Folio	2524/999, 2221/680
Street Address	Lots 860 & 881 Yilgarn Avenue, Malabaine
Local Government	Shire of Northam

What are conditions and how are they fulfilled?

Conditions and associated advice notes are an essential tool used by the WAPC to ensure compliance with its statutory responsibilities.

Condition(s) must be fulfilled before a request for endorsement of a deposited plan (Form 1C) can be lodged. This provides the basis to create the new land titles.

Each condition has a nominated clearing authority, noted at the end of each condition, and the landowner/applicant needs to liaise with that authority in order to fulfil the condition. Typically, conditions need to be addressed before any site works are commenced.

When the written advice of each clearing authority has been obtained, this advice is to be submitted to the WAPC with a Form 1C and a copy of the deposited plan (that has been lodged with Landgate). The Form 1C and schedule of fees are available on the WAPC website: https://planningonline.dplh.wa.gov.au

Can I request reconsideration/review of a condition or a decision?

There are two ways in which an applicant/owner may request reconsideration or review of a condition or a decision:

1. Seeking WAPC reconsideration - Sections 144 and 151(1) of the *Planning and Development Act 2005* provide for the landowner/applicant, within 28 days from the date of the decision, to make a written request to the WAPC to reconsider the decision, or conditions imposed. Such an application can be made via the Form 3A, which can be found, together with a schedule of fees, online from: https://planningonline.dplh.wa.gov.au

In seeking a reconsideration the applicant/landowner needs to provide new information or evidence that would warrant the WAPC making a different decision.

An application for reconsideration may be submitted to the WAPC prior to submission of an application for review of a decision through the State Administrative Tribunal.

2. Seeking a review by the State Administrative Tribunal – An applicant/landowner may also apply to the State Administrative Tribunal for review of a decision under Section 251 of the *Planning and Development Act 2005*.

An application should be lodged within 28 days of the date of the decision. Further details can be obtained at www.sat.justice.wa.gov.au

What if the clearing authority does not provide written confirmation?

The applicant/owner should make reasonable endeavour with the clearing authority to fulfil conditions. This may include the provision of supplementary information. If the clearing authority will not provide its written confirmation following reasonable endeavour, the applicant/owner should seek advice from the WAPC.

There is scope for the WAPC to clear conditions of subdivision through the Form 1C process; however, it is best to seek pre-lodgement advice so that the WAPC can advise if the clearing of

conditions would be a minor administrative matter, or whether it will require the WAPC to seek further advice or investigate the matter with the clearing authority.

Lodgement of deposited plans with the Western Australian Land Information Authority

The deposited plan is to be submitted to the Western Australian Land Information Authority (Landgate) for certification. Once certified, Landgate will forward it to the WAPC. A copy of the Deposited Plan should also be provided to the WAPC when the Form 1C is lodged.

Applying for new certificates of title

Once the WAPC has endorsed the Deposited Plan, then, under Section 146 the *Planning and Development Act 2005*, the landowner/applicant has two years to apply to Landgate for new certificates of title to be issued.

ATTACHMENT A - Modified Plan of Subdivision

Condition 10

AREA SCHEDULE

- Cadastral Boundary
- Proposed Boundary
- Application Area
- Restrictive Covenant

N° of original lots = 2
Lot 881 = 59.5575 ha
Lot 860 = 2.9662 ha

N° of proposed lots = 8
Lots 900 - 907

DEPARTMENT OF PLANNING, LANDS AND HERITAGE

DATE	FILE
28-Oct-2024	200673

GREAT EASTERN HIGHWAY

ROAD No. 1 - 20m Wide

ROAD No. 3 - 20m Wide

ROAD No. 2 - 20m Wide

YILGARN AVENUE

131 P2805

132 P2805

50 D46404

881 59.5575ha

860 2.9662ha

29420 P25381

902 17.2844 ha

903 6.2625 ha

904 15.3025 ha

905 5.2649 ha

906 1.3902 ha

907 2.9767 ha

900 2.5049 ha

901 5.6668 ha

15m Wide Environmental Corridor (Restrictive Covenant)

Caveat P451780

6m Wide Services Easement

7m Wide Access Leg (764m²)

TO BE REMOVED

TO BE RETAINED

Condition 9

Rubble Stockpile

Water

Dam

Blue Metal Storage Area

Shed

MRWA Road Train Assembly Area

Toilet Block

Existing Service Station

Symbol Legend

- Bollard
- Bollard Retract
- Light Pole
- Electrical Cable Pit
- Floor Level
- Flushing Point
- Scour Valve
- Sewer Service
- Telstra Service
- Litter Bin
- Natural Surface
- Sign (One Pole)
- Top of Wall
- Telstra Pit
- Road Level
- Tree
- Water Meter

Linestyle Legend

- Cadastral Boundary
- Kerb Line
- Top of Bank
- Bottom of Bank
- Building
- Wall
- Concrete Edge
- Bush Line
- Drainage Pipe
- Fence Line
- Eave Line
- Road Centreline
- 184.0 Contour Major 5.0m Intervals

Notes:
1. Boundary plotted from Landgate SCDB digital data only.
2. Boundary for WAPC Application purposes only.
3. True position of Boundary is subject to a re-establishment survey.
4. Heights established from SSM PERTH 19 via GPS connection.
5. Dimensions, Areas and Offsets subject to re-establishment survey.

Scale @A3 1:4000

0 50 100 150 200 250

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email: admin@jbasurveys.com.au
web: www.jbasurveys.com.au

18091-APS01-11.0.dwg

CLIENT: PROCON DEVELOPMENTS

JOB NO: 18091	TITLE: PROPOSED SUBDIVISION	DATUM	
PROJECT: LOT 860 ON DP25781 & LOT 881 ON DP30581 Nº 239 YILGARN AVENUE MALABAINE WA 6401 C/T 2221-680 & C/T 2524-999		VERT: AHD HORIZ: AGLIME94	N
		SCALE: 1:4000	
		DWG NO: 18091-APS01	VER: 11
SURVEYOR: NRW / DATE OF SURVEY: 09.07.2018 / DRAWN BY: MDB / APPROVED BY: NRW		SHEET NO: 1 OF 3	A3

ATTACHMENT A - Modified Plan of Subdivision

Condition 10

AREA SCHEDULE

- Cadastral Boundary
- Proposed Boundary
- Application Area
- Restrictive Covenant

N° of original lots = 2
Lot 881 = 59.5575 ha
Lot 860 = 2.9662 ha

N° of proposed lots = 8
Lots 900 - 907

DEPARTMENT OF PLANNING, LANDS AND HERITAGE

DATE	FILE
28-Oct-2024	200673

GREAT EASTERN HIGHWAY

ROAD No. 1 - 20m Wide

ROAD No. 3 - 20m Wide

ROAD No. 2 - 20m Wide

YILGARN AVENUE

131 P2805

132 P2805

50 D46404

881 59.5575ha

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15m Wide Environmental Corridor (Restrictive Covenant)

Caveat P451780

6m Wide Services Easement

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TO BE RETAINED

Condition 9

Rubble Stockpile

Water

Dam

Blue Metal Storage Area

Shed

MRWA Road Train Assembly Area

Toilet Block

Existing Service Station

Symbol Legend

- Bollard
- Bollard Retract
- Light Pole
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- Floor Level
- Flushing Point
- Scour Valve
- Sewer Service
- Telstra Service
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		SCALE: 1:4000	
		DWG NO: 18091-APS01	VER: 11
SURVEYOR: NRW / DATE OF SURVEY: 09.07.2018 / DRAWN BY: MDB / APPROVED BY: NRW		SHEET NO: 1 OF 3	A3

DEPARTMENT OF PLANNING, LANDS AND HERITAGE

DATE	FILE
19-Aug-2024	200673

- Cadastral Boundary
- Proposed Boundary
- Application Area
- Restrictive Covenant

AREA SCHEDULE

N° of original lots = 2
Lot 881 = 59.5575 ha
Lot 860 = 2.9662 ha

N° of proposed lots = 9
Lots 900 - 908

GREAT EASTERN HIGHWAY

ROAD No. 1 - 20m Wide

ROAD No. 2 - 20m Wide

ROAD No. 3 - 20m Wide

YILGARN AVENUE

131 P2805

132 P2805

50 D46404

29420 P23381

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TO BE REMOVED

TO BE RETAINED

Existing Service Station

Rubble Stockpile

Water

Dam

Blue Metal Storage Area

Shed

MRWA Road Train Assembly Area

Toilet Block

15m Wide Environmental Corridor (Restrictive Covenant)

6m Wide Services Easement

7m Wide Access Leg (764m²)

Symbol Legend

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		DWG NO: 18091-APS01	VER: 8.0
		SHEET NO: 1 OF 3	A3

SURVEYOR: NRW | DATE OF SURVEY: 09.07.2018 | DRAWN BY: MDB | APPROVED BY: NRW

AREA SCHEDULE

Cadastral Boundary
Proposed Boundary
Application Area
Restrictive Covenant

N° of original lots = 2
Lot 881 = 59.5575 ha
Lot 860 = 2.9662 ha

N° of proposed lots = 9
Lots 900 - 908

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ROAD No. 1 - 20m Wide

ROAD No. 2 - 20m Wide

ROAD No. 3 - 20m Wide

YILGARN AVENUE

131 P2805

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TO BE REMOVED

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Rubble Stockpile

Water

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MRWA Road Train Assembly Area

Toilet Block

15m Wide Environmental Corridor (Restrictive Covenant)

6m Wide Services Easement

7m Wide Access Leg (764m²)

Symbol Legend

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JOB NO: 18091 | TITLE: PROPOSED SUBDIVISION

PROJECT:
LOT 860 ON DP25781 & LOT 881 ON DP30581
Nº 239 YILGARN AVENUE
MALABAINE WA 6401
C/T 2221-680 & C/T 2524-999

DATUM
VERT: AHD
HORIZ: AGLIME94
SCALE: 1:4000

DWG NO: 18091-APS01 | VER: 8.0

SHEET NO: 3 OF 3 | A3

SURVEYOR: NRW | DATE OF SURVEY: 09.07.2018 | DRAWN BY: MDB | APPROVED BY: NRW

To the Chief Executive Officer, Shire of Northam

Public Comments on DAP/25/02943 Proposed Development of Hydroponic Growing Facility at Lot 881 Yilgarn Avenue, Malabaine

I am writing as a resident of Old York Rd Northam and a volunteer of Northam Environmental Hub community group to provide comments regarding the proposed Hydroponic Growing Facility, to be operated by Vitaponix, intended for future Lot 838 within the new Avon West industrial estate.

This type of modern development has potential to contribute positively to Northam's economy and growth, and it is exciting to see projects of this scale proposed. However, I have significant questions and concerns regarding security, land use compatibility, environmental management, infrastructure pressures, and governance transparency.

1. Purpose of Development and Security Concerns

The application does not specify which plants will be grown. According to Vitaponix's website (13 September 2025):

> "Vitaponix indoor solutions consists of a team of experienced experts who specialise in building and operating indoor facilities for growing cannabis plants."
> (Vitaponix commercial growers webpage)

If cannabis (including medical, hemp, or food-grade) is to be grown, this creates the following issues:

- **Confusion and Crime Risk:** Even if the plants contain low levels of psychoactives (e.g., hemp), they may still be mistaken for marijuana. In parts of Australia where they are grown, hemp or poppy crops are frequently stolen or vandalised by trespassers. This has historically led to increased crime where crops are not adequately managed.

- **Proximity to High-Risk Areas:** The facility is close to the MRWA Road Train Assembly Area and residential areas within 2 km. This increases the potential for opportunistic theft or unauthorised access.

- **Fence and Vehicle Access Risks:** While a 2.4m anti-climb fence is proposed, the proximity to the road train assembly area means it could be more easily circumvented, for example by ram-raiding or climbing from a parked vehicle.

Questions:

- What exact crops will be grown?
- Will security infrastructure include electrical cabling, light poles, and cameras?
- Has the WA Police and Main Roads WA been consulted on this development?

2. Products to Be Produced

Vitaponix's indicates they sell nutrients, additives, and substrates. It is unclear whether this facility will manufacture or distribute such products.

Questions:

- Will this facility produce only plants, or also other products such as crop nutrients and additives? If so, is this production of fertiliser covered under the light industry land use?
- If nutrients and substrates are produced, will they be sold to home gardeners, horticultural growers, or broadacre farmers?

3. Planning Approval and Missing Documentation

The application letter (from Nik Hidding to Chadd Hunt) states that subdivision approval was granted by the WA Planning Commission (WAPC) on 15 November 2024 for Avon West, to enable initial works. However:

- The WAPC Plan WA map currently lists only two deposited plans at Lot 881:
    - DAP/25/02881 (wastewater treatment plant), and
    - DAP/25/02943 (this proposed facility).
- DAP/25/02881 was noted as having been advertised for public comment (notice posted 1 July 2025), but as of 13 September 2025 there are no records on the Shire of Northam's website under past community consultations.

Concerns:

- Was the wastewater treatment facility needed for this hydroponic growing facility approved?
- Is this hydroponic facility dependent on its approval?
- Annexure 1 (WAPC Subdivision Approval) was not provided in the consultation materials, making it difficult to determine whether this application meets subdivision conditions.

4. Land Use Conflicts and Infrastructure Risks (Old York Rd Precinct & Lloyd Bridge)

Although the traffic impacts are stated as low, less than 10 vehicle movements per peak hour, Old York Rd (Local Road 4212022) 3km to the south of the proposed development is already experiencing significant conflict due to industrial encroachment. I am concerned the proposed hydroponic facility at Avon West industrial estate will add to this.

- **Traffic and Road Use:** Old York Rd connects Yilgarn Ave and Goomalling Rd. It includes a petrol station and several businesses but is primarily a residential street linked to housing by Lloyd Bridge.

- **Bridge Safety:** Lloyd Bridge (Shire Asset, Structure #4399) is a Shire-owned structure with a 14-tonne load limit, unsuitable for most transport trucks. It is one of only 63 highly weight-restricted bridges in WA. Despite this, Restricted Access Vehicles, including B-doubles, continue to enter the road due to a lack of adequate signage. Drivers only discover the weight limit once they reach the bridge, forcing sudden and dangerous manoeuvres. Main Roads WA have stated they are aware of frequent non-compliant use of this bridge.

- **Incidents:** Persistent traffic problems, including a recent car crash over Lloyd Bridge, will be worsened by the proposed development and that of the Avon West facility.

- **Residential Impact:** A 24-hour BP truck refuelling station and other industrial activities on the Yilgarn Ave side of Lloyd bridge have already increased noise and reduced safety in the neighbourhood.

Requests:

- Close Lloyd bridge or; Install signage at Goomalling Rd and Yilgarn Ave entries to Old York Rd advising of the 14-tonne bridge limit and install advance warnings on approach roads (Goomalling Rd M032, Yilgarn Ave 4212226, York Rd M031).
- In addition, provide adequate signage to Avon West at Great Eastern Highway × Yilgarn Ave to direct heavy vehicles away from Old York Rd and Goomalling Rd.

5. Water Use Efficiency and Biosecurity

- **Wastewater Reuse:** If crops are not for human or animal consumption, could treated wastewater from the proposed plant be reused to irrigate plants, improving water efficiency?

- **Waste Water Treatment Facility:** Could Northam's 50 year old wastewater treatment facility and sewerage network that is currently limiting the growth and expansion of Northam (Wheatbelt: Northam Land Supply Assessment 2025) be upgraded with the support of the applicants (Procon Developments), the Shire of Northam and the Water Corporation. This would benefit both

- **Biosecurity:** Annex 5: Storm Water Plan shows no wash-down facilities are planned. This is a significant concern given the location in a logistics hub between a road train yard and a petrol station. Has the Department of Primary Industries & Regional Development been consulted? Best practice would include:

    - Truck wash-down facilities.
    - Worker boot-cleaning stations.
    - Vegetation buffers using non-host species.

- **Chemical Use:** If insecticides or fungicides are applied, how will runoff be managed? Will residues enter stormwater or the wastewater plant?

Additional Concerns:

- Planting ornamental or non-host species such as eucalypts may still allow pests and diseases (e.g., myrtle rust, polyphagous shot-hole borer) to spread.
- Annex 5 states hydrocarbons are “not anticipated,” but oil leaks from trucks and cars are still possible. Without a hydrocarbon separator, spills could reach the Mortlock River (1.3 km downhill and a registered Aboriginal cultural heritage site).

6. Landscaping and Revegetation

- **Mulch Risks:** Mulch is planned in Annex 4: Landscaping Plan, but is a fire hazard and can block drains in flash floods. Gravel or recycled crushed rock would be more appropriate. Flood risk is already present 1 km downhill in light industry and residential areas (FPM 1 in 100 AEP floodway and flood fringe), where there are limited street drains.
- **Species Selection:** Annex 4 includes several species planned for the gardens of the development that are not native to the Wheatbelt: *Eucalyptus sideroxylon ‘Rosa’* (eastern states), *Eucalyptus torquata* (Goldfields origin), *Grevillea olivacea ‘Yellow’* (coastal WA), *Melaleuca nesophila* (Esperance coast), *Grevillea laurifolia × willisii ‘Royal Mantle’* (eastern states hybrids, *Scaevola crassifolia* (coastal WA)

These should be replaced with species native to the Wheatbelt (e.g., York gum, flooded gum, red morrel, gimlet, salmon gum, wandoo) to maximise effectiveness as wildlife refuges and corridors and to ensure best practice alongside the Shire of Northam's Biodiversity Plan. Refer to any environmental assessments of the site or the Shire of Northam Biodiversity Plan for suggested species compositions.

- **Local Procurement:** Plants should be sourced from local nurseries such as Misty Ridge Plant Farm or Boola Bardup Tree Nursery.

7. Power Supply and Lighting

Hydroponic facilities have high energy demands due to heating, cooling and lighting needs.

- **Power Demand:** What is the expected power demand? Will the facility be on a separate grid to prevent household impacts in Northam (Old York Rd, Wood Dr Residential Areas)? Has Western Power been consulted?

- **Power Backup:** No solar or generator backup appears to be planned. Solar connections require Western Power approval — will this be sought?

- **Lighting Risks:**

- Halogen lights pose risks of heavy metal contamination and fire hazard.
- Some grow light spectrums (UV, red edge LED) are harmful to human eyes. Will these be used, and if so, how will exposure be prevented for drivers on Yilgarn Ave and road train bay users?

- **Light Pollution:** Road train drivers often rest in the laydown yard. Excess artificial light (from grow lights or security lighting) should be minimised.

8. Waste Management

Beyond effluent:

- How will expired chemicals, fertilisers, and crop protection products be managed?
- What provisions exist for green waste, used substrates, plastics, electronic waste, and broken globes?

Given Avon Waste does not frequently collect along Yilgarn Ave, what arrangements will be made to manage litter and waste responsibly?

9. Stakeholder Consultation

Have the following stakeholders been contacted for comment, similar to the development application for the neighbouring fuel station that was proposed by the same developer:

Western Power, WA Police, Main Roads WA, Department of Primary Industries & Regional Development, Department of Fire and Emergency Services, Wheatbelt Development Commission, Wheatbelt Natural Resource Management, Northam Chamber of Commerce and AusVeg.

These agencies should have input given the security, infrastructure, and environmental issues raised.

10. Bushfire Risk and Emergency Planning

The application acknowledges that parts of Lot 881 fall within a bushfire-prone area, with a Bushfire Management Plan prepared (Annex 6). However:

- What fire or chemical hazards are posed by the hydroponic facility itself?
- What hazards does the wastewater treatment facility pose
- How will hydroseeded native grass and undeveloped area in the development plan (Annex 4) be managed to control weeds and fire hazards?

These risks need to be clearly assessed and managed.

11. Governance and Conflict of Interest

Lot 881 was sold by the Shire of Northam to Procon Developments in 2019 for $805,000 (ex GST), advertised under Section 3.58(3) of the Local Government Act 1995. This creates both actual and perceived risks of conflict of interest:

- **Actual conflict:** if councillors or staff involved in the sale are also involved in the planning decision.
- **Perceived conflict:** even if properly managed, the public may reasonably believe impartiality is compromised.

Best Practice Safeguards:

- Councillors and staff must declare financial or proximity interests.
- Independent planning panels or state government commissions should assess developments.
- Clear separation should be maintained between commercial land sales and regulatory planning decisions.

12. Offset Revegetation & Support of Local Environmental Groups

As per publicly available RDAP/47 DAP Meeting Documents this lot was previously zoned as 'Environmental Conservation' but was rezoned to 'Light Industry' through a Scheme amendment. Environmental Assessments by Aurora Environmental and Talis provided evidence of an environmentally significant area within the lot. The area was identified as providing significant habitat and foraging opportunities to the endangered Carnarby's Black Cockatoo. The broadscale clearing and earthworks occurring at Lot 881 for the proposed development removed trees identified as providing cockatoo habitat and leveled the naturally occurring slopes.

The Shire of Northam's Biodiversity Plan states that two biogeographical regions occur within the Shire of Northam; the Jarrah Forest and Wheatbelt Interim Biogeographic Regions of Australia (IBRA). Significant sections of the Wheatbelt IBRA are over-cleared, with remaining vegetation showing high levels of flora endemism.

In addition, The isolated granite outcrops support rich and diverse ecosystems that contribute to high biodiversity, endemism and rarity of species in the south-west of Western Australia. Due to the high degree of heterogeneity recorded between outcrop assemblages of fauna (invertebrates) and flora, a large proportion of granite outcrops in the Wheatbelt need to be protected (Pinder et al 2000, Yates et al 2003). A number of hills (Sugarloaf Hill, Mount Dick, Centenary Hill etc), some of which are small but are highly elevated, are also important geologically and for endemic flora found in these niches. The same is true for the breakaways that are associated with some of the hills found in the Shire. The site of the proposed development site between three unnamed undulating hill tops and is located to the south of the peak of Kunine Hill.

Suggestions

- Stop removal of any remaining native trees and vegetation.

- Offset, offsite revegetation should be conducted to the same size and vegetation composition to mirror the area and composition of cockatoo habitat trees that have already been removed.
- Grants and support should be provided to local environmental groups such as Julimar Conservation and Forest Alliance, Marsupial Mammas and Pappas Wildlife Care, Toodyay Friends of the River and Avon Valley Environment Society.

Conclusion

While the proposal may bring economic benefits, the issues above, spanning security, biosecurity, environmental risks, infrastructure, waste management, bushfire hazards, and governance, must be addressed before approval of DAP/25/02943.

Kind regards,

In respect of land use, we believe the specialised nature of the use for the cultivation of medicinal cannabis to require consideration of a Use Not Listed, as it doesn't fit neatly into the defined land uses in the scheme.

This specialised cultivation facility should be considered specially as a Use Not Listed.
The facility will cultivate medicinal cannabis (with THC) under strict federal regulation. This is not an open-field crop but a secure, enclosed indoor facility.

If cannabis (including medical, hemp, or food-grade) is to be grown, this creates the following issues:

- **Confusion and Crime Risk:** Even if the plants contain low levels of psychoactives (e.g., hemp), they may still be mistaken for marijuana. In parts of Australia where they are grown, hemp or poppy crops are frequently stolen or vandalised by trespassers. This has historically led to increased crime where crops are not adequately managed.

  The facility will be strictly following the Office of Drug Control (ODC) requirements with 2.8m fencing (including concrete plinth), electrified perimeter, 24/7 monitored CCTV, biometric access, and tamper detection systems and on-site security personnel. Regulators will oversee and enforce compliance (detailed security measures cannot be shared with public)

- **Proximity to High-Risk Areas:** The facility is close to the MRWA Road Train Assembly Area and residential areas within 2 km. This increases the potential for opportunistic theft or unauthorised access. The premises will employ security personnel and will accommodate necessary security measures to deal with this issue.

- **Fence and Vehicle Access Risks:** While a 2.4m anti-climb fence is proposed, the proximity to the road train assembly area means it could be more easily circumvented, for example by ram-raiding or climbing from a parked vehicle. On-site security personnel proposed.

Questions:

- What exact crops will be grown? The facility will cultivate medicinal cannabis (with THC) under strict federal regulation. This is not an open-field crop but a secure, enclosed indoor facility.
- Will security infrastructure include electrical cabling, light poles, and cameras? Yes. Strictly following Office of Drug Control (ODC) requirements with 2.8m fencing (including concrete plinth), electrified perimeter, 24/7 monitored CCTV, biometric access, and tamper detection systems. Regulators oversee and enforce compliance. (detailed security measures cannot be shared with public)

- Has the WA Police and Main Roads WA been consulted on this development? No requirement under planning legislation to refer the application to WA Police.

2. Products to Be Produced

Vitaponix's indicates they sell nutrients, additives, and substrates. It is unclear whether this facility will manufacture or distribute such products.

Questions:

- Will this facility produce only plants, or also other products such as crop nutrients and additives? If so, is this production of fertiliser covered under the light industry land use? Refer above.
- If nutrients and substrates are produced, will they be sold to home gardeners, horticultural growers, or broadacre farmers?

3. Planning Approval and Missing Documentation

The application letter (from Nik Hidding to Chadd Hunt) states that subdivision approval was granted by the WA Planning Commission (WAPC) on 15 November 2024 for Avon West, to enable initial works. However:

- The WAPC Plan WA map currently lists only two deposited plans at Lot 881:
    - DAP/25/02881 (wastewater treatment plant), and
    - DAP/25/02943 (this proposed facility).

  The above-mentioned numbers are DAP Application numbers, not deposited plans. Currently, Lot 881 still exists as it is, as no new titles have been applied for. It is the intention, and requirement, for the formal lots to be created prior to occupation of the proposed development (as well as other developments within the bounds of Lot 881).

- DAP/25/02881 was noted as having been advertised for public comment (notice posted 1 July 2025), but as of 13 September 2025 there are no records on the Shire of Northam's website under past community consultations. This is not relevant to this application, as the WWTF facility has already been approved by the DAP.

Concerns:

- Was the wastewater treatment facility needed for this hydroponic growing facility approved? The WWTF is for the purposes of servicing the entire AvonWest estate, as there is no reticulated wastewater network available. The WAPC, DAP and Shire have supported the use of a private WWTF. The WWTF is not for the sole use of the proposed hydroponic growing facility.
- Is this hydroponic facility dependent on its approval? All developments are dependent on the private WWTF, and all future proposals within AvonWest will connect to the WWTF via a gravity feed network.
- Annexure 1 (WAPC Subdivision Approval) was not provided in the consultation materials, making it difficult to determine whether this application meets subdivision conditions. The subdivision conditions have no material impact on the proposed development.

4. Land Use Conflicts and Infrastructure Risks (Old York Rd Precinct & Lloyd Bridge)

Although the traffic impacts are stated as low, less than 10 vehicle movements per peak hour, Old York Rd (Local Road 4212022) 3km to the south of the proposed development is already experiencing significant conflict due to industrial encroachment. I am concerned the proposed hydroponic facility at Avon West industrial estate will add to this. In what way? The proposed traffic associated with the proposed development is insignificant and below thresholds to even warrant its own Transport Impact Statement under the WAPC Transport Guidelines for Individual Developments. The entire AvonWest estate has been assessed through Transport Impact Assessment in two (2) previous Subdivision Approvals. Another subdivision application will soon be made to create the AvonWest estate lots.

- **Traffic and Road Use:** Old York Rd connects Yilgarn Ave and Goomalling Rd. It includes a petrol station and several businesses but is primarily a residential street linked to housing by Lloyd Bridge.

- **Bridge Safety:** Lloyd Bridge (Shire Asset, Structure #4399) is a Shire-owned structure with a 14-tonne load limit, unsuitable for most transport trucks. It is one of only 63 highly weight-restricted bridges in WA. Despite this, Restricted Access Vehicles, including B-doubles, continue to enter the road due to a lack of adequate signage. Drivers only discover the weight limit once they reach the bridge, forcing sudden and dangerous manoeuvres. Main Roads WA have stated they are aware of frequent non-compliant use of this bridge. This is a more-general issue for MRWA to consider, however the AvonWest project has been assessed.

- **Incidents:** Persistent traffic problems, including a recent car crash over Lloyd Bridge, will be worsened by the proposed development and that of the Avon West facility. This is a generic issue being raised, not specifically for the proposed Hydroponic Growing Facility, as the proposed development has insignificant levels of vehicle movements.

- **Residential Impact:** A 24-hour BP truck refuelling station and other industrial activities on the Yilgarn Ave side of Lloyd bridge have already increased noise and reduced safety in the neighbourhood. This matter is not relevant to the proposed development being considered.

Requests:

- Close Lloyd bridge or; Install signage at Goomalling Rd and Yilgarn Ave entries to Old York Rd advising of the 14-tonne bridge limit and install advance warnings on approach roads (Goomalling Rd M032, Yilgarn Ave 4212226, York Rd M031). This is irrelevant to the application being considered.
- In addition, provide adequate signage to Avon West at Great Eastern Highway × Yilgarn Ave to direct heavy vehicles away from Old York Rd and Goomalling Rd. This is a generic matter – please raise with MRWA directly.

5. Water Use Efficiency and Biosecurity

- **Wastewater Reuse:** If crops are not for human or animal consumption, could treated wastewater from the proposed plant be reused to irrigate plants,

improving water efficiency? All wastewater that is not recaptured will be directed to the private WWTF, which will then process the wastewater and produce a material for resource reuse (refer detail of WWTF proposal). The Facility has been Designed for an estimated 95% water recapture via custom irrigation and HVAC. The remaining runoff is directed to the AvonWest WWTF to support local farms, Avon West landscaping, or community initiatives.

- **Waste Water Treatment Facility:** Could Northam's 50 year old wastewater treatment facility and sewerage network that is currently limiting the growth and expansion of Northam (Wheatbelt: Northam Land Supply Assessment 2025) be upgraded with the support of the applicants (Procon Developments), the Shire of Northam and the Water Corporation. This would benefit both. This matter is a question that does not relate to the proposed development being currently considered by the Shire. In any event, the approved WWTF for AvonWest has the ability to take waste from external sites (via truck), therefore providing additional service to the Northam region more generally, and can take pressure off Northam WWTF, and/or be used as a back-up in case of emergency.

- **Biosecurity:** Annex 5: Storm Water Plan shows no wash-down facilities are planned. This is a significant concern given the location in a logistics hub between a road train yard and a petrol station. Has the Department of Primary Industries & Regional Development been consulted? Best practice would include:

    - Truck wash-down facilities.
    - Worker boot-cleaning stations.
    - Vegetation buffers using non-host species.

- **Chemical Use:** If insecticides or fungicides are applied, how will runoff be managed? Will residues enter stormwater or the wastewater plant? No harmful pesticides or fungicides are used. Climate control, filtration, and strict protocols safeguard plants and the environment and patients. Cleaning materials are all compliant (any disinfectants will be left to dry on surfaces)

Additional Concerns:

- Planting ornamental or non-host species such as eucalypts may still allow pests and diseases (e.g., myrtle rust, polyphagous shot-hole borer) to spread.
- Annex 5 states hydrocarbons are “not anticipated,” but oil leaks from trucks and cars are still possible. Without a hydrocarbon separator, spills could reach the Mortlock River (1.3 km downhill and a registered Aboriginal cultural heritage site). This is not relevant for the proposed development.

6. Landscaping and Revegetation

- **Mulch Risks:** Mulch is planned in Annex 4: Landscaping Plan, but is a fire hazard and can block drains in flash floods. Gravel or recycled crushed rock

would be more appropriate. Flood risk is already present 1 km downhill in light industry and residential areas (FPM 1 in 100 AEP floodway and flood fringe), where there are limited street drains. Noted. Shire can address by way of condition if necessary.

- **Species Selection:** Annex 4 includes several species planned for the gardens of the development that are not native to the Wheatbelt: *Eucalyptus sideroxylon 'Rosa'* (eastern states), *Eucalyptus torquata* (Goldfields origin), *Grevillea olivacea 'Yellow'* (coastal WA), *Melaleuca nesophila* (Esperance coast), *Grevillea laurifolia × willisii 'Royal Mantle'* (eastern states hybrids, *Scaevola crassifolia* (coastal WA). The landscaping plan can be assessed and conditioned by the Shire as required.

These should be replaced with species native to the Wheatbelt (e.g., York gum, flooded gum, red morrel, gimlet, salmon gum, wandoo) to maximise effectiveness as wildlife refuges and corridors and to ensure best practice alongside the Shire of Northam's Biodiversity Plan. Refer to any environmental assessments of the site or the Shire of Northam Biodiversity Plan for suggested species compositions.

- **Local Procurement:** Plants should be sourced from local nurseries such as Misty Ridge Plant Farm or Boola Bardup Tree Nursery. Agreeable.

7. Power Supply and Lighting

Hydroponic facilities have high energy demands due to heating, cooling and lighting needs.

- **Power Demand:** What is the expected power demand? Will the facility be on a separate grid to prevent household impacts in Northam (Old York Rd, Wood Dr Residential Areas)? Has Western Power been consulted? Western Power does not need to be consulted, as the proposed development, as well as the entire AvonWest estate, will be operational on its own microgrid. The WAPC has supported the AvonWest estate being powered in this matter. Therefore, there will be no household impacts in Northam in respect of power consumption.

- **Power Backup:** No solar or generator backup appears to be planned. Solar connections require Western Power approval — will this be sought? Refer point above. No need for generator back-up, as there will be adequate supply through the microgrid facility, which includes the use of Solapave, rooftop solar and a separate solar farm.

- **Lighting Risks:**
  - Halogen lights pose risks of heavy metal contamination and fire hazard.
  - Some grow light spectrums (UV, red edge LED) are harmful to human eyes. Will these be used, and if so, how will exposure be prevented for drivers on Yilgarn Ave and road train bay users? Not anticipated to be an issue, as all operations are within the building, with no windows to grow rooms.

- **Light Pollution:** Road train drivers often rest in the laydown yard. Excess artificial light (from grow lights or security lighting) should be minimised. Security lighting will be installed in accordance with Australian Standards.

8. Waste Management

Beyond effluent:

- How will expired chemicals, fertilisers, and crop protection products be managed? Private waste collection.
- What provisions exist for green waste, used substrates, plastics, electronic waste, and broken globes? Private waste collection.

Given Avon Waste does not frequently collect along Yilgarn Ave, what arrangements will be made to manage litter and waste responsibly? Private waste collection.

9. Stakeholder Consultation

Have the following stakeholders been contacted for comment, similar to the development application for the neighbouring fuel station that was proposed by the same developer:

Western Power, WA Police, Main Roads WA, Department of Primary Industries & Regional Development, Department of Fire and Emergency Services, Wheatbelt Development Commission, Wheatbelt Natural Resource Management, Northam Chamber of Commerce and AusVeg. Question for the Shire.

These agencies should have input given the security, infrastructure, and environmental issues raised.

10. Bushfire Risk and Emergency Planning

The application acknowledges that parts of Lot 881 fall within a bushfire-prone area, with a Bushfire Management Plan prepared (Annex 6). However:

- What fire or chemical hazards are posed by the hydroponic facility itself?
- What hazards does the wastewater treatment facility pose The WWTF is not the subject of this application and has already been approved.
- How will hydroseeded native grass and undeveloped area in the development plan (Annex 4) be managed to control weeds and fire hazards? Undeveloped areas can be managed with Shire conditions.

These risks need to be clearly assessed and managed.

Bushfire management matters can be conditioned, however the development site for this particular project does not sit within a bushfire prone area.

11. Governance and Conflict of Interest

Lot 881 was sold by the Shire of Northam to Procon Developments in 2019 for $805,000 (ex GST), advertised under Section 3.58(3) of the Local Government Act 1995. This creates both actual and perceived risks of conflict of interest:

- **Actual conflict:** if councillors or staff involved in the sale are also involved in the planning decision. The Shire is not the decision-maker in respect of the application. The application will be determined by the DAP.

- **Perceived conflict:** even if properly managed, the public may reasonably believe impartiality is compromised. The Shire is not the decision-maker in respect of the application. The application will be determined by the DAP.

Best Practice Safeguards:

- Councillors and staff must declare financial or proximity interests. This is normal
- Independent planning panels or state government commissions should assess developments. This is not a relevant submission. The planning system is being utilised as it was intended.
- Clear separation should be maintained between commercial land sales and regulatory planning decisions. The DAP (decision-maker) has had no involved in the land sale process. In any event, the DAP considers conflicts of interest at every meeting.

12. Offset Revegetation & Support of Local Environmental Groups

As per publicly available RDAP/47 DAP Meeting Documents this lot was previously zoned as 'Environmental Conservation' but was rezoned to 'Light Industry' through a Scheme amendment. Environmental Assessments by Aurora Environmental and Talis provided evidence of an environmentally significant area within the lot. The area was identified as providing significant habitat and foraging opportunities to the endangered Carnarby's Black Cockatoo. The broadscale clearing and earthworks occurring at Lot 881 for the proposed development removed trees identified as providing cockatoo habitat and leveled the naturally occurring slopes. The rezoning process was completed through regulatory approval processes with EPA, WAPC and Shire.

The Shire of Northam's Biodiversity Plan states that two biogeographical regions occur within the Shire of Northam; the Jarrah Forest and Wheatbelt Interim Biogeographic Regions of Australia (IBRA). Significant sections of the Wheatbelt IBRA are over-cleared, with remaining vegetation showing high levels of flora endemism. This is a generic statement not relevant to the proposed development.

In addition, The isolated granite outcrops support rich and diverse ecosystems that contribute to high biodiversity, endemism and rarity of species in the south-west of Western Australia. Due to the high degree of heterogeneity recorded between outcrop assemblages of fauna (invertebrates) and flora, a large proportion of granite outcrops in the Wheatbelt need to be protected (Pinder et al 2000, Yates et al 2003).

A number of hills (Sugarloaf Hill, Mount Dick, Centenary Hill etc), some of which are small but are highly elevated, are also important geologically and for endemic flora found in these niches. The same is true for the breakaways that are associated with some of the hills found in the Shire. The site of the proposed development site between three unnamed undulating hill tops and is located to the south of the peak of Kunine Hill.

Suggestions

- Stop removal of any remaining native trees and vegetation. This is a suggestion that has no relevance to the proposed development being considered.
- Offset, offsite revegetation should be conducted to the same size and vegetation composition to mirror the area and composition of cockatoo habitat trees that have already been removed. This is a suggestion that has no relevance to the proposed development being considered.
- Grants and support should be provided to local environmental groups such as Julimar Conservation and Forest Alliance, Marsupial Mammas and Pappas Wildlife Care, Toodyay Friends of the River and Avon Valley Environment Society. This is a suggestion that has no relevance to the proposed development being considered.

Conclusion

While the proposal may bring economic benefits, the issues above, spanning security, biosecurity, environmental risks, infrastructure, waste management, bushfire hazards, and governance, must be addressed before approval of DAP/25/02943.

All matters have been considered, or will be considered, in the determination of the application.

Shire of Northam Local Planning Scheme No.6

First Advertising

P25075 – Schedule of Submissions

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
A.	Manager, Northam Race Club	Stated that: 1. This proposed development and any future developments at AvonWest will create numerous job opportunities for local residents and neighbouring towns, whilst under construction and once completed. 2. The Northam Race Club is in full support of the AvonWest development and believes this logistics hub initiative will provide much needed growth for the region.		Noted
B.	Resident of Old York Rd Northam	Raised the following issues:		See below
		1. Purpose of Development and Security Concerns	- The facility will cultivate medicinal cannabis (with THC) under strict federal regulation. This is not an	The hydroponic growing facility will be used for the production of medicinal cannabis.

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		The application does not specify which plants will be grown. – What exact crops will be grown? – Will security infrastructure include electrical cabling, light poles, and cameras? – Has the WA Police and Main Roads WA been consulted on this development?	open-field crop but a secure, enclosed indoor facility. - The facility will be strictly following the Office of Drug Control (ODC) requirements with 2.8m fencing (including concrete plinth), electrified perimeter, 24/7 monitored CCTV, biometric access, and tamper detection systems and on-site security personnel. Regulators will oversee and enforce compliance (detailed security measures cannot be shared with public). - The premises will employ security personnel and will accommodate necessary security measures to deal with this issue.	Commonwealth legislation regulates the cultivation of this product. To legally cultivate cannabis the applicant is required to obtain a Medicinal Cannabis Cultivation Licence from the Office of Drug Control (ODC) under the Narcotic Drugs Act 1967. There is no requirement for the Shire to consult with WA Police in determining the application under LPS6. Main Roads WA was not consulted: o the subject site does not have direct access to or from a Main Roads (State) controlled road, o does not impact the operation of traffic signals on a local road, and o does not have the potential to impact the state road network's traffic efficiency, road safety, or Heavy Vehicle Services (HVS) access routes (RAV networks).
		2. Products to Be Produced Vitaponix indicates they sell nutrients, additives, and substrates. It is unclear whether this facility will manufacture or distribute such products.	Refer above.	- The applicant has stated that the hydroponic growing facility will be used for the production of medicinal cannabis. The production of fertiliser is not proposed. - No onsite or offsite adverse impacts from the proposed products were

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		– Will this facility produce only plants, or also other products such as crop nutrients and additives? If so, is this production of fertiliser covered under the light industry land use? – If nutrients and substrates are produced, will they be sold to home gardeners, horticultural growers, or broadacre farmers?		identified in the assessment of the application. It is considered that the scale and nature of the proposed hydroponic facility is consistent with expected landuses within the Light Industry zone. - The production and sale of nutrients and substrates is not proposed.
		3. Planning Approval and Missing Documentation The application letter states that subdivision approval was granted by the WA Planning Commission (WAPC) on 15 November 2024 for Avon West, to enable initial works. – The WAPC Plan WA map currently lists only two deposited plans at Lot 881. – Was the wastewater treatment facility needed for this hydroponic growing facility approved? – Is this hydroponic facility dependent on its approval? – Annexure 1 (WAPC Subdivision Approval) was not provided in the consultation materials, making it difficult to determine whether this	- The above-mentioned numbers are DAP Application numbers, not deposited plans. Currently, Lot 881 still exists as it is, as no new titles have been applied for. It is the intention, and requirement, for the formal lots to be created prior to occupation of the proposed development (as well as other developments within the bounds of Lot 881). - The WWTF is for the purposes of servicing the entire AvonWest estate, as there is no reticulated wastewater network available. - The WAPC, DAP and Shire have supported the use of a private WWTF. The WWTF is not for the sole use of the proposed hydroponic growing facility.	- The WAPC subdivision approval for Lot 860 & 881 Yilgarn Avenue granted on 15.11.2024 included a condition that: *Arrangements being made with a licensed wastewater service provider for the provision of a sewerage service to each lot shown on the approved plan of subdivision.* - The wastewater treatment facility was approved by the JDAP on 1.07.2025. - The subject land will be connected to the reticulated sewerage network to be constructed as part of the development of the estate.

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		application meets subdivision conditions.		
		4. Land Use Conflicts and Infrastructure Risks (Old York Rd Precinct & Lloyd Bridge) Although the traffic impacts are stated as low, less than 10 vehicle movements per peak hour, Old York Rd (Local Road 4212022) 3km to the south of the proposed development is already experiencing significant conflict due to industrial encroachment. – Close Lloyd bridge or; Install signage at Goomalling Rd and Yilgarn Ave entries to Old York Rd advising of the 14-tonne bridge limit and install advance warnings on approach roads. – In addition, provide adequate signage to Avon West at Great Eastern Highway × Yilgarn Ave to direct heavy vehicles away from Old York Rd and Goomalling Rd.	- The proposed traffic associated with the proposed development is insignificant and below thresholds to even warrant its own Transport Impact Statement under the WAPC Transport Guidelines for Individual Developments. The entire AvonWest estate has been assessed through Transport Impact Assessment in two (2) previous Subdivision Approvals. Another subdivision application will soon be made to create the AvonWest estate lots. - *Lloyd Bridge.* This is a more-general issue for MRWA to consider, however the AvonWest project has been assessed. - *Traffic Problems.* This is a generic issue being raised, not specifically for the proposed Hydroponic Growing Facility, as the proposed development has insignificant levels of vehicle movements.	- Traffic generation was considered as part of the assessment of the subdivision application for the industrial estate. - The Shire of Northam's Engineering Services Department has not raised concerns about the traffic movements expected to be generated by the proposed development. The Shire has no specific upgrade works are expected in the vicinity of Yilgarn Road as a result of vehicle movements associated with the proposal. - The suggestions regarding possible road improvements and additional signage are noted.
		5. Water Use Efficiency and Biosecurity	- All wastewater that is not recaptured will be directed to the private WWTF, which will then	- The treatment of wastewater was considered as part of the assessment of the subdivision

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		– Could treated wastewater from the proposed plant be reused to irrigate plants, improving water efficiency? – Could Northam's 50 year old wastewater treatment facility and sewerage network be upgraded? – Storm Water Plan shows no wash-down facilities are planned. This is a significant concern given the location in a logistics hub between a road train yard and a petrol station. – If insecticides or fungicides are applied, how will runoff be managed? Will residues enter stormwater or the wastewater plant?	process the wastewater and produce a material for resource reuse (refer detail of WWTF proposal). - The Facility has been Designed for an estimated 95% water recapture via custom irrigation and HVAC. The remaining runoff is directed to the AvonWest WWTF to support local farms, Avon West landscaping, or community initiatives. - *Northam's Existing Wastewater Treatment Facility.* This matter is a question that does not relate to the proposed development being currently considered by the Shire. In any event, the approved WWTF for AvonWest has the ability to take waste from external sites (via truck), therefore providing additional service to the Northam region more generally, and can take pressure off Northam WWTF, and/or be used as a back-up in case of emergency. - No harmful pesticides or fungicides are used. Climate control, filtration, and strict protocols safeguard plants and the environment and patients. Cleaning materials are all	application for the industrial estate and the development application for the wastewater treatment facility. - The establishment of the wastewater treatment facility will be consistent with the WA Government Sewerage Policy (2019) which requires new development to connect to a reticulated sewerage network. - The Shire's Engineering and Environmental Health Officers have not raised concerns about the potential impact of runoff from stormwater and insecticides and fungicides residues from the proposed development. - The condition of development approval requiring stormwater management measures to be implemented in accordance with the approved Stormwater Management Plan prepared by Porter Consulting Engineers addresses this issue.

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
			compliant (any disinfectants will be left to dry on surfaces).	
		6. Landscaping and Revegetation – Mulch Risks: Mulch is planned in Annex 4: Landscaping Plan, but is a fire hazard and can block drains in flash floods. – Species Selection: Annex 4 includes several species planned for the gardens of the development that are not native to the Wheatbelt.	- *Mulch risks.* Noted. Shire can address by way of condition if necessary. - *Species selection.* The landscaping plan can be assessed and conditioned by the Shire as required. - *Local Procurement.* Agreeable.	- With regards to mulch, it is considered that its use has been adequately addressed by the applicant noting that the submitted Landscaping Plan identifies that: • *All mulch used shall meet Australian Standard 4454-2012.* • *Site Mulch shall be chunky pine bark wood chips to a minimum depth of 100mm.* • *Mulch is to be completely free of all noxious weeds, seeds, and fungus, insect pests and other deleterious material.* • *Tidy and grade mulch after application, finishing 20mm below surrounding hard surfaces.* - The plant species identified in the plan are native Australian plants chosen on the basis that they are hardy, salt-tolerant native shrub, ideal for low-maintenance landscaping in arid and semi-arid environments.
		7. Power Supply and Lighting	- Western Power does not need to be consulted, as the proposed development, as well as the entire	- The applicant will be responsible for establishing a site connection to the power grid. It is noted that drawing

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		– What is the expected power demand? Will the facility be on a separate grid to prevent household impacts in Northam (Old York Rd, Wood Dr Residential Areas)? Has Western Power been consulted? – No solar or generator backup appears to be planned. Solar connections require Western Power approval — will this be sought? – Halogen lights pose risks of heavy metal contamination and fire hazard. – Some grow light spectrums (UV, red edge LED) are harmful to human eyes. Will these be used, and if so, how will exposure be prevented for drivers on Yilgarn Ave and road train bay users?	AvonWest estate, will be operational on its own microgrid. The WAPC has supported the AvonWest estate being powered in this matter. Therefore, there will be no household impacts in Northam in respect of power consumption. - *Power Backup.* Refer point above. No need for generator back-up, as there will be adequate supply through the microgrid facility, which includes the use of Solapave, rooftop solar and a separate solar farm. - *Lighting Risks.* Not anticipated to be an issue, as all operations are within the building, with no windows to grow rooms. - *Light Pollution*. Security lighting will be installed in accordance with Australian Standards.	TP05 indicates approximately 994 rooftop solar panels. - The WAPC subdivision approval for Lot 860 & 881 Yilgarn Avenue granted on 15.11.2024 included a condition that: Arrangements being made with a licensed electricity network operator for the provision of an underground electricity distribution system that can supply electricity to each lot shown on the approved plan of subdivision. - It is not anticipated that the development of the estate will place an undue load on the electricity network in the vicinity of the estate. - The proponent, in accordance with Australian workplace health and safety legislation, will be responsible for ensuring that any potential grow light spectrums will not have adverse health impacts on those working within the facility. The facility will be largely enclosed at the level of the growing beds, as such It is not anticipated that drivers on

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
				Yilgarn Ave or Road Bay Users would have extended exposure to this light.
		8. Waste Management – How will expired chemicals, fertilisers, and crop protection products be managed? – What provisions exist for green waste, used substrates, plastics, electronic waste, and broken globes? – Given Avon Waste does not frequently collect along Yilgarn Ave, what arrangements will be made to manage litter and waste responsibly?	*Waste management*. Private waste collection	- The application has advised that 90% of the waste generated at the site will be liquid wastes which will be directed to the estate's wastewater treatment facility. The remaining 10% of waste will be general waste, which will be taken off site by a private waste contractor as needed. - The Shire's Ranger Services are responsible for litter. Shire staff regularly address litter in parks, streetscapes, and other areas. It is not expected that the Shire's current roadside litter collection procedures will require modification in anticipation of the proposed development.
		9. Stakeholder Consultation Have the following stakeholders been contacted for comment: – Western Power, WA Police, Main Roads WA, Department of Primary Industries & Regional Development, Department of Fire and Emergency Services, Wheatbelt Development	Response - *Question for the Shire.*	There are no legislative requirements, other than those identified above, for the Shire to contact these Government departments, agencies and offices and other groups. The proposed development is consistent with the Shire's Local Planning Scheme No. 6. and in addition, the Shire's Strategic Plan

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		Commission, Wheatbelt Natural Resource Management, Northam Chamber of Commerce and AusVeg.		which outlines the strategies, objectives, and actions the Shire will take over a number of years to ensure that planning and investment decisions are aligned with community needs and priorities for growth and service delivery.
		10. Bushfire Risk and Emergency Planning – What fire or chemical hazards are posed by the hydroponic facility itself? – What hazards does the wastewater treatment facility pose? – How will hydroseeded native grass and undeveloped area in the development plan (Annex 4) be managed to control weeds and fire hazards?	Bushfire management matters can be conditioned, however the development site for this particular project does not sit within a bushfire prone area.	The development proposal does not raise bushfire risk and emergency issues that are outside of those that could be typically expected within a light industrial estate. The applicant has submitted a Bushfire Management Plan which addresses bushfire risk. Businesses operating in industrial estates are responsible for their own fire prevention and safety by providing a safe working environment, which includes identifying risks, maintaining fire safety equipment, training workers, developing emergency procedures, and complying with all relevant fire safety legislation and standards.
		11. Governance and Conflict of Interest	- *Conflicts of Interest*. The Shire is not the decision-maker in respect of the	The Shire of Northam's procedures for conflict of interest involve elected officials and staff adhering to their respective Codes of Conduct, which

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		Lot 881 was sold by the Shire of Northam to Procon Developments in 2019. This creates both actual and perceived risks of conflict of interest: – Actual conflict: if councillors or staff involved in the sale are also involved in the planning decision. – Perceived conflict: even if properly managed, the public may reasonably believe impartiality is compromised.	application. The application will be determined by the DAP. - *Best Practice Safeguards.* The DAP (decision-maker) has had no involved in the land sale process. In any event, the DAP considers conflicts of interest at every meeting.	are based on the Local Government Act 1995 and the Model Code of Conduct Regulations 2021. Key aspects include individuals identifying and managing conflicts, disclosing interests (financial, proximity, and impartiality) before meetings, and having these disclosures recorded in meeting minutes and the Interest Disclosure Register. The staff code of conduct requires that no private work for interested parties is undertaken.
		12. Offset Revegetation & Support of Local Environmental Groups This lot was previously zoned as 'Environmental Conservation' but was rezoned to 'Light Industry' through a Scheme amendment. Environmental Assessments by Aurora Environmental and Talis provided evidence of an environmentally significant area within the lot. Suggestions: – Stop removal of any remaining native trees and vegetation. – Offset, offsite revegetation should be conducted to the same size and vegetation composition to mirror the area and composition of	- The rezoning process was completed through regulatory approval processes with EPA, WAPC and Shire. - *Removal of Trees / Offsets / Grants.* This is a suggestion that has no relevance to the proposed development being considered.	The WAPC subdivision approval for Lot 860 & 881 Yilgarn Avenue granted on 15.11.2024 included conditions requiring environmental management and revegetation works. This is a separate matter to the current development application.

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
		cockatoo habitat trees that have already been removed. – Grants and support should be provided to local environmental groups such as Julimar Conservation and Forest Alliance, Marsupial Mammas and Pappas Wildlife Care, Toodyay Friends of the River and Avon Valley Environment Society.		

From: Nik Hidding
Sent: Tuesday, September 30, 2025 4:23 PM
To: Natasha Jurmann <natasha.jurmann@northam.wa.gov.au>
Cc: John M <jmeggitt1@gmail.com>; Chadd Hunt <chadd.hunt@northam.wa.gov.au>
Subject: RE: I142188 - Public Comments on DAP/25/02943 Proposed Development of Hydroponic Growing Facility at Lot 881 Yilgarn Avenue, Malabaine

Hi Natasha,

The operation will be regulated by Office of Drug Control (ODC) and will manufacture, under license, the medicinal product.

Medicinal cannabis facilities are typically assigned to special/light industry or pharmaceutical manufacturing categories rather than intensive agriculture. This ensures compliance with industrial and health-related standards.

The proposed hydroponic growing facility (medicinal cannabis facility) will comprise a specific building for the purposes of cultivating medicinal cannabis (i.e. medicine), but also includes other components associated with drying, trimming and storage, which requires a high level of control, according to government regulation. The overall activity is considered to be classified as a light industrial activity to produce a medicinal product, as a specialised use and should be distinguished from agriculture. Since the facility requires specialised infrastructure, energy and specialised equipment, as well a secure environment, it is considered entirely appropriate in the light and service industry zone. The ODC also requires this type of operation to occur within industrial areas.

The agriculture-intensive land use in the Shire's scheme speaks to the production of grapes, vegetables, flowers, exotic, native plants, fruits and nuts. The proposed facility does not comprise any of these, given it is designed to produce a medicine using plant material as its active input, regulated by the ODC.

Agriculture is the practice of farming, including cultivation of soil for the growing of crops. The plants are not grown in soil, which enables the facility to have very little waste and highly suited for the industrial zone.

The proposed use should be distinguished from the Intensive Agriculture use for the following reasons:

Distinction from Intensive Agriculture

It is important to clarify that the proposed **indoor medicinal cannabis facility** is not an intensive farming operation but a **specialised medical production site** that uses plant material as its active input, with low volume produce (i.e not intensive).

Intensive Agriculture involves:

- Heavy water use, soil degradation, and nutrient depletion
- Chemical runoff affecting water quality
- Large land requirements that conflict with zoning
- Reduced biodiversity from monoculture

Why the proposed facility is different:

- **Controlled Indoor Environment:** Fully contained operations with no runoff.
- **Pharmaceutical Compliance:** Built to health and GMP (Good Manufacturing Practice) standards, not agricultural scale.
- **Compact Land Use:** Indoor cultivation suitable even in urban zones.
- **Medical Focus:** The sole purpose is to produce a regulated **pharmaceutical-grade medicine**, not high-volume produce.

Comparison: Agriculture vs. Medicinal Cannabis Facility

1. **Purpose & End Product**
   - *Agriculture*: Food crops grown in soil and raw materials for mass consumption.
   - *Medicinal Facility*: Pharmaceutical-grade products for medical use, low volume.
2. **Regulatory Oversight**
   - *Agriculture*: Governed by farming and land-use regulations.
   - *Medicinal Facility*: Governed by health authorities, GMP standards, Office of Drug Control regulation, and pharmaceutical licensing.
3. **Design & Environmental Controls**
   - *Agriculture*: Open fields/greenhouses; yield-focused.

- *Medicinal Facility*: Controlled, cleanroom-style environments with strict climate/filtration controls, low-volume produce (i.e. low intensity).

4. **Distribution**

   - *Agriculture*: Food supply chains and markets.

   - *Medicinal Facility*: Pharmacies and medical dispensaries under prescription.

5. **Zoning Argument**

   - *Agriculture*: Classified based on scale and land use.

   - *Medicinal Facility*: Should be considered as a light industrial activity since its primary purpose is regulated medicine production. Accordingly, it is considered to be best placed as a Use Not Listed.

Importantly, another significant consideration is the planned future stages of the project (as indicated on the plans) which will include a further 10,000m2 (approx) facility expansion for further activities including further growing, laboratory testing, R&D, GMP manufacture, packing and large distribution warehouse area, which, if considered as a whole, falls squarely into an industrial operation that is appropriate in AvonWest. The development application currently being considered is a first stage production facility, with stage 2 additional facility and manufacturing/distribution coming online in a couple of years.

Overall, considering the specialised nature of the use, we believe it warrants consideration as a Use Not Listed.

Please contact me further if you want to discuss. In respect of timing for the RAR preparation, if needed, we would be happy to consent to additional time so that things are not rushed. Let me know.

Kind Regards,

Nik Hidding

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[redacted]

Summary of Key Concerns

This submission raises significant concerns that the proposed Vitaponix hydroponic medicinal cannabis facility at Lot 881 / Lot 904 Yilgarn Avenue is not compatible with surrounding and planned land uses, nor with the intent of the current planning framework for Northam Townsite Central East and Avon East. The development is located in an area identified for a complex mix of light industry, rural residential, residential infill, rural enterprise and conservation, and sits adjacent to an MRWA road train assembly area and environmental corridors with native vegetation.

- **Incompatible land use and character** – The scale, height and nature of a high-security, two-storey concrete warehouse is not compatible with nearby rural, rural residential, parks and recreation and conservation land uses, or with the desired future character set out in the Local Planning Scheme and Strategy.
- **Planning framework inconsistencies** – The "East Industrial Precinct" mapping used in the proponent's cover letter is inconsistent with LPS No. 6 and the Local Planning Strategy, which identify a mix of residential, rural residential, light industry/service commercial and conservation uses, and seek to maintain a clear distinction between agricultural land east and west of the Avon River.
- **Security, crime and drug risk** – A high-value narcotic crop located immediately beside a busy, publicly accessible MRWA road train assembly area heightens risks of theft, unauthorised access and crime, and appears difficult to reconcile with Office of Drug Control security guidelines.
- **Amenity impacts (odour, emissions, chemicals, bioaerosols)** – Cannabis cultivation facilities are known to produce strong odours, biogenic volatile organic compounds and bioaerosols, with potential impacts on workers, neighbours and users of nearby facilities (including the road train yard and service station). The proposal provides minimal detail on HVAC design, filtration, chemical and fertiliser use, plumbing and water recycling, making it difficult to assess compliance with "light industry" amenity objectives.
- **Water, power and microgrid servicing** – Hydroponic growing has high and continuous energy and water demands. There is limited information on actual water use, recycling capacity, stormwater and hydrocarbon management, or how the proposed microgrid (including any batteries and backup generators) interacts with land use definitions and servicing requirements for the Light & Service Industry zone.
- **Bushfire and structural fire risk** – Key documents such as the Bushfire Management Plan and drainage plan are missing from public consultation materials, limiting assessment of bushfire attack level (BAL), water supply for firefighting, hydrant spacing and internal fire safety in a high-hazard Class 8 style warehouse.
- **Biodiversity and land degradation** – The site contains mapped conservation areas and threatened ecological communities and sits within an over-cleared Wheatbelt landscape with significant granite and hill-top biodiversity values. There is an active investigation into native vegetation clearing on Lot 881 / Lot 904, and required environmental management and revegetation plans are not yet clearly demonstrated.

[redacted]

- **Traffic and community safety** – Existing traffic conflicts on Old York Road and Lloyd Bridge (with its low load limit and history of incidents), and the lack of safe pedestrian access on Yilgarn Avenue, suggest that further industrial activity in this corridor may exacerbate safety risks for residents, including elderly and caravan park residents.
- **Limited demonstrated local benefit** – The proposal anticipates low daily staffing and few vehicle movements, raising questions about the scale of economic benefit relative to the risks and impacts, particularly given the proponent's limited demonstrated experience with hydroponic cannabis production under Australian conditions and regulations.

In light of the above, and given the ongoing investigation into vegetation clearing on the subject land, this submission contends that approval of the development at this time would not represent orderly and proper planning, and that further specialist assessment, documentation and compliance with environmental and planning conditions are required before the site can be considered suitable.

[redacted]

1.0 Surrounding land use, development context & planning framework

1.1 Incompatible development & land use conflict

As a member of the public and nearby resident I am concerned about increased land use conflict, incompatible development and further land degradation in Northam Townsite Central East and Avon East, particularly for planned and existing residential, rural residential and rural areas. Development Control Policy 4.1 Industrial Subdivision states *"3.2.1: It is important that the design of an industrial area ensures compatibility with adjacent commercial and/or residential areas"*.

Figure 1 Location Plan in the 'HUP DA 2281 02 Vitaponix DA Cover Letter Rev 1 Amended Oct 2025' (Cover Letter) shows the subject site in the context of the Northam townsite, attempting to inappropriately establish that the proposed development suits the current or planned surrounding land uses. A portion of this map is coloured in grey and labelled the "East Industrial Precinct", and includes the subject site (See Fig 1, East Industrial Precinct Highlighted in Yellow). This incorrectly suggests that the proposed development fits well into the context of Northam. Figure 1 is not consistent with approved Northam Local Planning Scheme No. 6 (LPS) Map 10 for the Northam Townsite Central East (Figure 2), or the Strategy Plan Map for Northam Townsite from Northam's current Local Planning Strategy Northam (Figure 3). Figure 2 which shows Light Industrial, Rural, Rural Residential, Mixed Use and Residential Land Use areas as well as Restricted Uses and the Avon and Mortlock Special Control Areas (Figure 2) currently exist in the area labelled in the application cover letter as "East Industrial Precinct" (Figure 1).

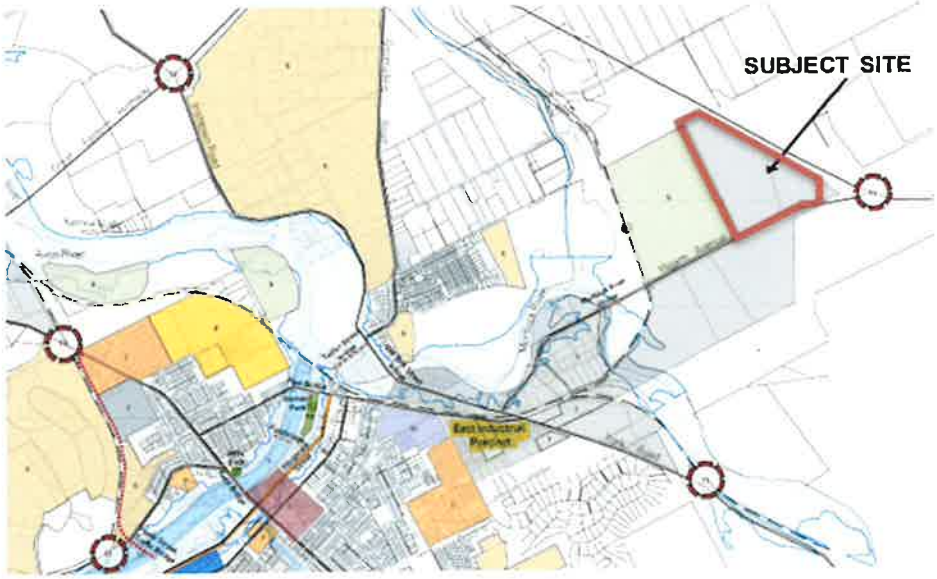


Figure 1: Location Plan

[redacted]

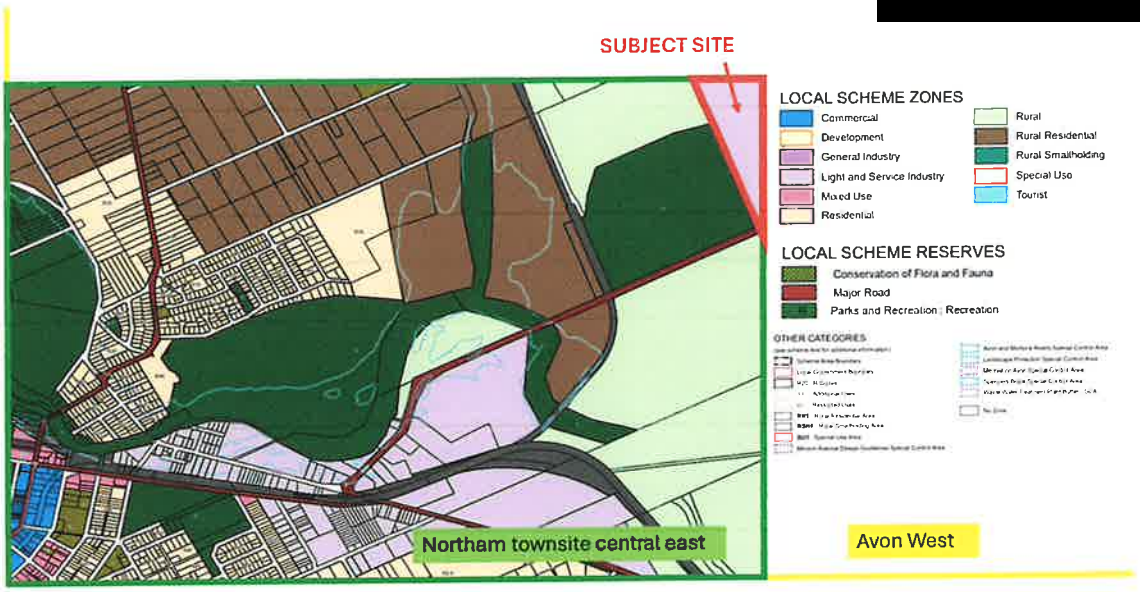


Figure 2. Northeast portion of Northam Local Planning Scheme No. 6 (LPS) Map 10. Accessed 17 Nov 2025 from www.wa.gov.au (2), with the subject site indicated in red.

Northam LPS Strategy Map (Figure 3) shows that this area labelled "East Industrial Precinct" in Figure 1, instead consists of planned Light Industry / Service Commercial, Rural Residential, Residential Infill and Rural Enterprise Land Uses. In addition, the subject site contains two Conservation areas on the North side of the lot, on the border of a planned rural residential area, and South side of the lot, along Yilgarn Ave. These conservation areas with Native vegetation (Figure 3) are currently planned for subdivision; however, they should be maintained as buffers as per Figure 3 to help minimise loss of rural amenity and land use conflict, which is likely due to the complexity of land uses currently existing and planned. In addition, the native vegetation in the conservation area can provide privacy and reduce crime risk for the proposed development.

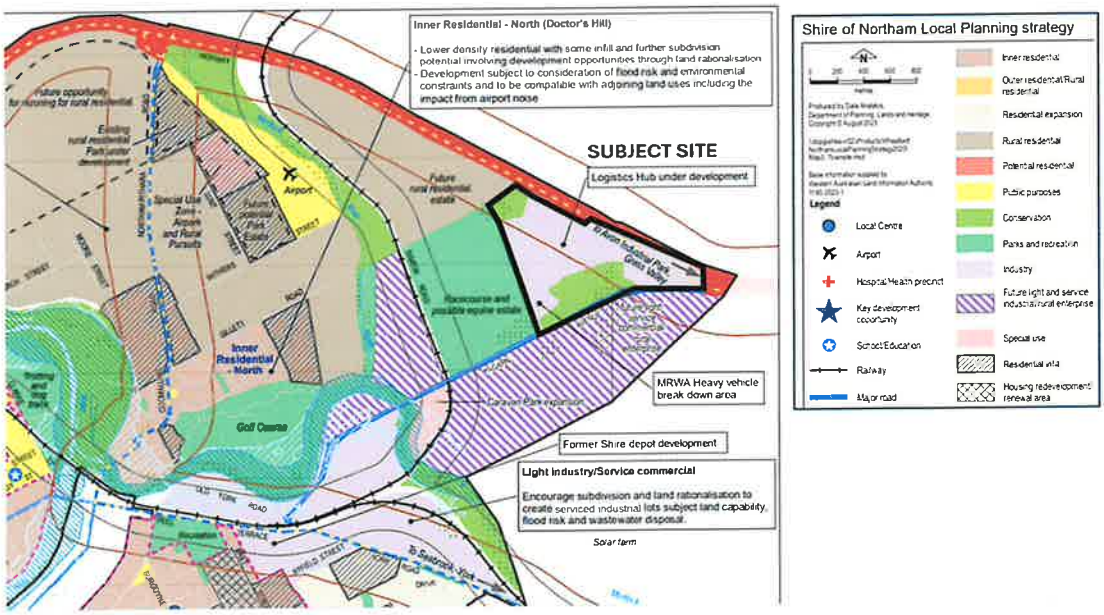


Figure 3. Northeast portion of Northam Local Planning Strategy, Map 3 Strategy plan, Northam townsite. Accessed 17 Nov 2025 from www.wa.gov.au (2), with the subject site indicated in black.

[redacted]

1.2 Development not consistent with planning framework

In addition to Figures 2 & 3, the Shire of Northam Planning Strategy (NPS) in 1.4.6.2 Northam Town Site states the short term goal to "*Rezone land along Yilgarn Ave for industry, subject to servicing and land capability assessment*" and 1.4.2.2 Commerce and Industry States "*Ongoing rezoning and subdivision of commercial and industrial land to be in locations identified on the LPS maps, including expansion of industrial land along Yilgarn Ave and having regard for land capability, servicing requirements and proposals outlined under Part 7 of this LPS*".

And 1.4.2.1 of the NPS which I support: "*Maintain the distinction between the agricultural land east and west of the Avon River to control development and limit conflicting land uses: Maintain the general presumption that subdivision of rural land, especially within the Avon East, Avon West and Darling Range South will not be supported unless for farm rationalisation or conservation purposes. In particular, subdivision of the Avon East Precinct (mostly comprising land east of Northam) will be avoided, and land is to be retained for primary production.*"

1.2.1 Development not compatible with its setting and desired future character

This proposed development is a two-story warehouse that is 9m in height constructed of concrete panels. I would say this is the tallest manufacturing warehouse in Northam townsite Central East. I feel it is not compatible with its setting surrounding parks and recreation, rural residential and rural land uses (Figure 2 & 3) as well as 1.4.2.1 of the Northam Planning Strategy / NPS.

1.3 Surrounding and existing land uses incompatible

The State Planning Policy 4.1 Industrial Interface states "Incompatible land uses are those considered to conflict with or be adversely affected by impacts arising from nearby industrial areas and land uses. For example, ... Land uses that attract a large number of people for an extended period of time are generally considered incompatible with land uses associated with off-site impacts and/or safety risks."

Cannabis, with greater than 1% tetrahydrocannabinol (THC), is a narcotic drug with a high illicit value (ODC, 2020).

Proximity to High-Risk Areas: The proposed hydroponic growing facility is next to the MRWA Road Train Assembly Area (Figure 4). This increases the potential for opportunistic theft or unauthorised access. The MRWA road train assembly area is publicly accessible and visited by hundreds of different trucks and road trains from around the country each week, to drop truck trailers due to limitations when driving to Perth or to sleep overnight. The high security needs of the hydroponic growing facility are not compatible with being adjacent to the publicly accessible, busy MRWA Road Train Assembly area.

Fence and Vehicle Access Risks: While a 2.4m anti-climb fence is proposed, the proximity to the road train assembly area means it could be more easily circumvented, for example by ram-raiding or climbing from a parked truck. Heavy vehicles can have a height of at least 4.3m.

Security of medicinal cannabis mandatory requirements (Office of Drug Control 2020):

- No external advertising of the business / cannabis not visible to the public & The site should be void of signs that identify the company or business.
    - Currently there is signage planned for the proposed development as per Annex 3.

[redacted]

- Through its physical design, the ability to covertly access the cannabis site is reduced and therefore intruders may be deterred from breaking in.
    - Having the subject site next to the MRWA road train facility increases the risk of covert access.
- Mechanisms to prevent entry from above or below the cannabis site.
    - No details provided of this.
- A room containing cannabis should not share a wall with the exterior of the building unless that exterior wall has additional controls.
    - Currently all grow houses share walls with the exterior of the building.
- Vehicles that identify the company should not be visible to the public.
    - Truck drivers could look over (or through) the fence from when sitting in their trucks etc. As there is only a small number of vehicles that will be visiting and there are standard operating hours (stated as 9am-5pm), there is a higher risk that they will be able to be memorised and recognised.

https://www.odc.gov.au/medicinal-cannabis/list-approved-medicinal-cannabis-cultivators-and-producers-australia

https://www.odc.gov.au/medicinal-cannabis/grow-produce-or-manufacture-cannabis-australia



Figure 4. Showing the proximity of the Proposed Vitaponix Hydroponic Marijuana (with THC) Growing Facility to the MRWA Road Train Assembly area (Yellow).

1.3.1 Environment component – Conservation

As per Figure 3, the subject site contains land with conservation values. The Shire of Northam's Local Planning Scheme states:

Where development is proposed that would affect Environmental Conservation zoned land, the proponent is to prepare an Environmental Management Plan at the time of structure planning, subdivision or development (as relevant), in consultation with the State government department responsible for biodiversity conservation. The plan is to be approved by the local



government with arrangements made for the implementation of the approved plan. The Environmental Management Plan is to address the following: (i) protection and management of the environmental values of the zoned land; (ii) property boundaries, the location of the building envelope(s) and access arrangements, taking into account environmental and visual landscape impacts; (iii) fencing, fire management, weed control, rehabilitation and control of domestic pets; and (iv) any other matters relevant to the site, as recommended by the State or local government.

In addition, 'Annex 1 WAPC Decision Letter' in the proposal states the following Condition 17 Prior to the commencement of subdivisional works an environmental management plan for Lot 904 is to be prepared and approved to ensure the protection and management of the sites environmental assets with satisfactory arrangements being made for the implementation of the approved plan. (Shire of Northam) 18. A revegetation plan being prepared, approved and implemented for the revegetation of the environmental corridor shown on the plan dated 28 October 2024 (Attachment A) with appropriate native species to the specifications of the Local Government. (Shire of Northam).

Has advice from the Department of Biodiversity and Conservation been provided to support the 15m wide environmental corridor, plant schedules and any offset revegetation works?

Planning framework that applies to the proposed development

Development proposal not consistent with light and service industry zone objectives – Amenity: Odorous emissions

The proposal states that the development is an enclosed indoor light industrial facility that is "*is considered consistent with the objectives of the Light & Service Industry zone*".

As per Northam's Planning Scheme No. 6:

"Industry – light" means an industry:

a) in which the processes carried on, the machinery used, and the goods and commodities carried to and from the premises do not cause any injury to or adversely affect the amenity of the locality;
b) the establishment or conduct of which does not, or will not, impose an undue load on any existing or proposed service for the supply or provision of essential services.

Amenity can be understood as "factors which combine to form the character of an area and include the present and likely future amenity.. consideration of loss of amenity is limited to unreasonable impact on a person from gaseous, dust, noise and odorous emissions and risk" (EPA, 2005).

Cannabis production and processing is known to produce pungent odours (Seltenrich, 2022).. "The smells are especially strong during flowering, which typically lasts 4–5 weeks before harvest, and subsequent processing, which can take another 3–4 weeks. These smells are distinct from those produced by burning cannabis; they are the aromas of the plants themselves (, with some varieties being described as smelling "skunky" or "balsamic".

For instance, studies have demonstrated that the odour from a cannabis cultivation facility with 1700 plants is equivalent to livestock operations with 30 pigs or 1600 chickens (Figure 5).

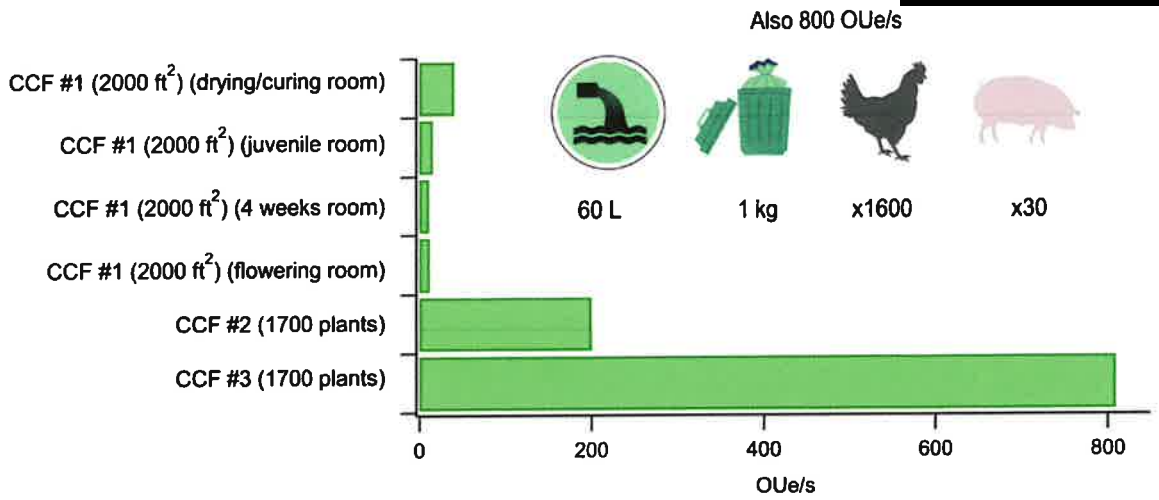


Figure 5. Emissions in Odour Units (Ous^{-1}) of different indoor cannabis cultivation facilities (CCF) by room and different plant growth stages.

De Ferreyro Monticelli et al. (2022) states "With more jurisdictions legalizing the consumption of cannabis for recreational purposes, the number of cannabis cultivation facilities (CCFs) has dramatically increased. In turn, environmental concerns over air emissions from CCFs have also grown, with emissions from CCFs recognized as contributors to regional odor. Biogenic volatile organic compounds (BVOCs) emitted can also increase the formation of health-damaging pollutants such as ground level ozone (O3) and particulate matter (PM). These BVOC emissions also occur indoors at CCFs, which may represent an occupational hazard. As a result, air quality regulators, public health agencies, and occupational health agencies ... are curbing BVOC emissions at CCFs"

"In addition to odor, emitted BVOCs can contribute to the formation of other secondary chemical species such as formic acid, mostly through reactions with hydroxyl radicals (OH), nitrate radicals (NO^3), or ozone (O^3)" (De Ferreyro Monticelli et al., 2022).

Cannabis pollen is considered as a potential allergen of public health significance. The pollen, oils and leaves, can induce immune-mediated responses including allergic rhinitis, contact urticaria, allergic conjunctivitis, bronchial asthma, and angioedema. The pollen release is seasonal, mainly during summer and autumn, coinciding with that of other local seasonal pollens such as grasses including rye grass, gumtrees, and acacias (wattle). The pollen is spherical and very light, enabling it to be dispersed over vast distances.

There is anecdotal evidence of allergic responses from contact to cannabis by law enforcement personnel (Davidson & Reed).

The development proposal cover letter briefly mentions that "*Controlled Indoor Environment: Fully contained operations with no runoff.*" and that "*custom HVAC*" will be used, however I don't think that this proposed development can be confirmed to be suited to light and service industry land use until the specialised Heating, Ventilation, and Air Conditioning (HVAC) system has been deemed suitable by an expert to ensure there are no odorous emissions from the facility. It would likely need to have custom filtration and agreed service and maintenance requirements.

Has the HVAC system for the proposed development been assessed for suitability? Has the building design, internal and external doors and windows been assessed in the context of

[redacted]

emissions control? What is the current risk of odorous emissions and particulates from the proposed development impacting users of the existing Main Roads WA Road Train Assembly area or petrol station?

Development proposal not consistent with light and service industry zone objectives – Service suitability & availability, Security & Renewable energy facility

The cover letter states *"In terms of power demand, the proposed development, as well as the entire AvonWest estate, will be operational on its own microgrid. The WAPC has supported the AvonWest estate being powered in this way. Therefore, there will be no household impacts in Northam in respect of power consumption and there is no need to consult with Western Power"*

Hydroponic growing facilities have high energy demands due to:

- Customised heating, ventilation and air conditioning systems essential for maintaining plants and dry rooms 24/7.
- Grow room lighting energy needs
- Security requirements such as security cameras, electrified fences, automatic doors, biometric security systems and electronic gates. (ODC, 2020).
- Disposal requirements of license and laboratory / sterilisation operations eg. incinerators and autoclaves.

Will the solar panels on the stage 1 warehouse (3299m2) and microgrid be sufficient to supply power to maintain the 24/7 security and operation of the production facility? Will back up power supplies be needed.

Is the microgrid a renewable energy facility? Will it be on its own lot and supply a number of different businesses and organisations on different premises.

Northam's Scheme Text states that renewable energy facilities are not compatible with light and service industry land uses, and defines a "Renewable energy facility" as a premises used to generate energy from a renewable energy source and includes any building or other structure used in, or relating to, the generation of energy by a renewable resource. It does not include renewable energy electricity generation where the energy produced principally supplies a domestic and/or business premises and any on selling to the grid is secondary.

Microgrids such as those in Kalbarri or prosed for Mullewa require litium ion batteries for power storage and diesel generators.

From MIDAP/19 Darlot Road, Mullewa - Proposed Microgrid Renewable Energy Facility (2024):

"Diesel Generation: Diesel generator improves the reliability performance by providing long term energy storage. In the event of a long duration grid supply outage during periods of low renewables generation leading to battery depletion the diesel generator switches on to recharge the battery. Also reduces the risk from renewable generation or battery failures as the diesel generation can support the load directly if necessary."

[redacted]



Kalbarri microgrid (Image source: Western Power).

Are microgrids renewable energy facilities? Are microgrids, including generators, compatible with light industry land uses?

Development proposal not consistent with light and service industry zone objectives – Amenity: Chemical use

The cover letter states "*The Facility has been designed for an estimated 95% water recapture via custom irrigation and HVAC. The remaining runoff will be directed to the approved AvonWest Waste Water Treatment Facility. Any other small general waste will be taken off site by a private waste contractor as needed... No harmful pesticides or fungicides will be used in the cultivation. Climate control, filtration, and strict protocols safeguard plants and the environment and patients. Cleaning materials will all be compliant (any disinfectants will be left to dry on surfaces).*"

From Davidson et al. (2018) : "Marijuana production facilities can have a number of hazards including the use of carbon dioxide added to growth chambers as a growth promoter. This procedure may expose workers to potentially hazardous levels (TWA = 5000 ppm, or STEL = 30,000 ppm) which may create oxygen deficient atmospheres if not controlled effectively, as well as the hazards associated with handling of compressed gases. Other chemical hazards that may be encountered during cultivation include the use of potentially corrosive and irritant propagation hormones, such as naphthaleneacetic acid or indolebutyric acid. Cannabis plants are also intentionally grown in warm, humid conditions and prone to the fungal diseases such as powdery mildew which may require application of fungicides"

Although it is stated that "no harmful" pesticides will be used, however without knowing the active ingredients and thus label and APVMA assessment, it's difficult to know what is meant by harmful? Also, fertilisers are not discussed, and these can have a negative impact on the environment through excess nutrients.

Little to no information is provided on the building's plumbing and water recycling system, so how is it possible to assess if the proposed development is well thought out and consistent with the light and service industry zone objectives of minimising contaminated run off and having correct servicing requirements?

Does each growth room have drains? Are there separate plumbing and water recycling systems for non-potable, potable and irrigation water? Is there gas piping for carbon dioxide through the building? Is the water recycling system capable of filtering out nutrients, cleaning and sanitation detergents?

A drainage plan is mentioned in the cover letter but not provided in the consultation documents.

[redacted]

Development proposal not consistent with light and service industry zone objectives – Amenity: Hydrocarbons

Although the cover letter states that the facility has been designed for 95% water recapture and the remaining 5% will be directed to the wastewater treatment facility, no details of drainage management or plumbing have been provided.

Oil leaks from staff trucks, vans and cars are possible. Without a hydrocarbon separator, spills could reach the Mortlock River (1.3 km downhill and a registered Aboriginal cultural heritage site). Is the lack of storm water and oil spill management consistent with the light and service industry land use? A drainage plan was not provided this is difficult to assess the risk of the development causing land degradation, erosion and pollution.

Development proposal not consistent with light and service industry zone objectives – Amenity: Biological hazards & biosecurity

Workers, visitors and neighbours can be exposed to high bioaerosol concentrations. Depending on the crop and production processes, workers could also be potentially exposed to elevated aerosol concentrations of volatile organic compounds (VOCs) such as terpenes or mycotoxins. Inhalation of bacteria and fungi can cause pulmonary infections, and respiratory diseases including non-allergic organic toxic dust syndrome or hypersensitivity pneumonitis [50,55]. Inhalation of antigens such as plant dusts, animal, and insect dander may also cause occupational asthma.

Indoor cannabis is grown at high temperatures and humidity, making it at risk of fungal infections and mould across production stages. From Davidson et al. (2018): "Fungi species identified from aerosols at cannabis farms include *Aspergillus* sp., *Penicillium* sp., *Alternaria* sp., and *Botrytis cinerea* spores. These fungi species are associated with hypersensitivity pneumonitis diseases including farmers' lung (*Aspergillus* sp.), suberosis from mouldy cork dust (*Penicillium* sp.) woodworker's lung = (*Alternaria* sp.), and wine makers' lung (*B. cinerea*). Bioaerosol sampling at outdoor cannabis operations identified abundant bacterial phyla including Actinomycetes (45%), Proteobacteria (26%), Firmicutes (15%), and Bacteroidetes (9%). Actinomycetes are also well-known agents of hypersensitivity pneumonitis, as well as chronic bronchitis, organic dust toxic syndrome and asthma in agricultural environments. Mycotoxins of *Aspergillus* sp. and *Penicillium* sp. can be found in inhalable cotton and grain dusts and may also present a health hazard in inhalable hemp-based dusts."

- Biosecurity: Are wash down facilities planned? This is a significant concern given the location in a logistics hub between a road train yard and a petrol station. Best practice would include:
    - Truck wash-down facilities.
    - Worker boot-cleaning stations.
    - Vegetation buffers using non-host species.
- Planting ornamental or non-host species such as eucalypts may still allow pests and diseases (e.g., myrtle rust, polyphagous shot-hole borer) to spread.

Industrial subdivision & servicing requirements - Water use

Development Control Policy 4.1 Industrial Subdivision states that:

[redacted]

3.7.2: Where a reticulated sewerage connection is not available and is not in early prospect, this requirement may be dispensed with when the Commission: a) is satisfied that development will be limited to 'dry' industry.

Is the hydroponic growing facility, which proposes to grow medicinal cannabis plants on irrigation considered 'dry industry?

I understand that the "The Facility has been designed for an estimated 95% water recapture via custom irrigation and HVAC. The remaining runoff will be directed to the approved AvonWest Waste Water Treatment Facility. Any other small general waste will be taken off site by a private waste contractor as needed." and that 3x 300,000L rainwater tanks are proposed for use in the facility, however there is limited information on the estimated water use of the growing facility.

How long does the custom irrigation system take to recycle water? What can the recycled water be used for? I.e. Is it suitable for drinking and handwashing? Are the rainwater tanks proposed suited to the expected water use of the toilets, dining area, garden beds, grow rooms and any other manufacturing or general activities such as cleaning? Has monthly rainfall variability been considered? Where are the drains? Is the recycling system capable of filtering out cleaning products eg. bleach?

What other specialists are needed to confirm the suitability of the development and building design?

For example:

- Architects with an understanding of Controlled Environment Agriculture
- Specialised Mechanical, Electrical & Plumbing (MEP) engineers
- Heating, Ventilation, and Air Conditioning design engineers
- A mechanical engineer who offers CFD (Computational Fluid Dynamics) to model airflow patterns in the room to determine the best approach for odour emissions and ventilation.

When working out the service use of water and power, and management of emissions it's important to ensure specialists have been contracted or asked for review. As per Surna (2022) "There are a number of facility design aspects that are unique to indoor agriculture that design teams must take into account. These design choices will have an effect on the functionality of the grow rooms and their climates. Architects must understand plants' growth cycles when creating floor plans. For example, a vertically integrated cannabis producer may require dedicated rooms for clones, veg, flower, drying, and extraction. These rooms usually have different size requirements. For instance, because its typical to dedicate one square foot of vegetative canopy for every four square feet of flowering canopy, veg rooms will be smaller and less numerous than flower rooms. MEP engineering teams must have a similar understanding. Each stage of the growth cycle also has its own set of climate parameters for optimal growth. Similarly, adjustments between watering schedules and volumes at various stages of plant maturity will also need to be taken into account when sizing cooling and dehumidification systems. These nuances are important to take into consideration early."

In the previously advertised public consultation, Annex 5 was provided in the documents and contained a drainage management plan. However only Annex 1, 3 and 4 were included in the documents for this public consultation (Appendix Figure 1), which makes it difficult to properly assess the suitability of drainage related issues of the site.

[redacted]

Land suitability, site servicing and community impacts – Bushfire risk

Developments that are not adequately designed for bushfires or structure fires can take limited firefighting resources away from the community during an emergency, result in unnecessary pollution or environmental put employees, emergency services volunteers and local properties at unnecessary risk. In addition, bushfire prone land may not be suitable for certain developments, such as complex tilt up structures like the proposed development.

3.7.1: Industrial development requires water for domestic and health uses, manufacturing processes and fire protection. Accordingly, each industrial lot will be required to connect to a reticulated water supply by arrangement with the relevant water authority.

This is mirrored by Annx 1 WAPC Decision Letter: "*Condition 2: Arrangements being made with a licensed water provider for the provision of a suitable water supply service to the lots shown on the approved plan of subdivision.*"

And; "*Condition 12: Information is to be provided to demonstrate that the measures contained in Section 6; Table 6.1 of the bushfire management plan prepared by Bushfire Prone Planning (dated 24 November 2023) have been implemented during subdivisional works. This information should include a completed 'Certification by Bushfire Consultant' from the bushfire management plan.*"

The proposal Cover letter states "*A Bushfire Management Plan (BMP) was prepared by Bushfire Prone Planning in relation to the subdivision application and is included at Annexure 6.*" However, Annexure 6, and Annexure 5, are not included in the public consultation documents on the Shire of Northam's website (Refer to Appendix Figure 1) making it difficult to determine whether this application meets subdivision conditions and legislative requirements and if the land is suitable for the proposed development.

Is there a BMP available that includes a completed 'Certification by a Bushfire Consultant' as per Condition 12?

This certification would help confirm that claims in the proposal Cover Letter that; "*The development area associated with this application is actually located outside of the mapped Bushfire Prone Area, so no further bushfire reporting is required.*" When overlaying TP01 proposed Masterplan onto the Department of Fire and Emergency Services Bushfire Prone areas, the bushfire risk to Lot 838 where the development is proposed comes from the neighbouring Parks and Recreation Land Use property's existing native vegetation (Figure 4). This bushfire prone area encroaches on Lot 904 and Lot 838 (Proposed).

[redacted]

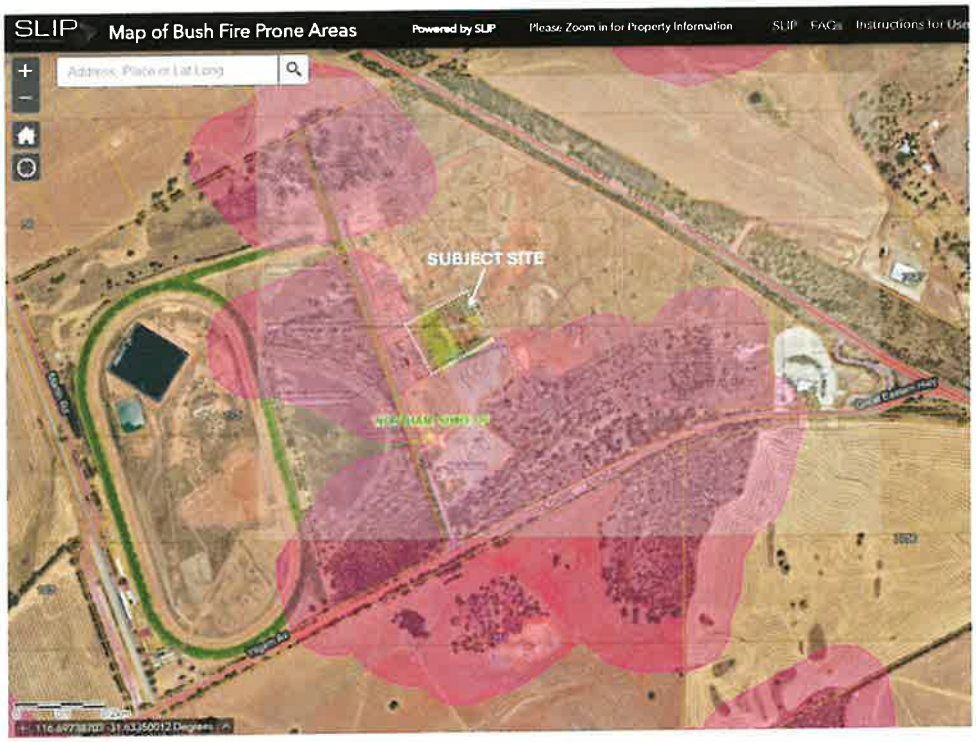


Figure 4. Lot 838 Vitaponix Proposed Master Plan TP01 mapped onto DFES Map of Bushfire Prone Areas https://maps.slip.wa.gov.au/landgate/bushfireprone/ Accessed 17 Nov 2025. Subject site indicated in white.

The Shire of Northam's 'Planning Services Bushfire Prone Areas Frequently Asked Questions' information sheet (3) states "*If the Map of Bush Fire Prone Areas covers only a small portion of your property, the entire property is still considered to be a Bushfire Prone Area.*" and "*A building/structure located within a bushfire prone area must comply with the current BAL Assessment, the Building Code of Australia and AS3959 Construction of Buildings in Bushfire Prone Areas.*" Does the proposed development comply with AS3959?

Although vegetation has been removed, other factors may contribute to bushfire risk, such as slope of the land and these need to be assessed by a certified bushfire consultant to confirm the final Bushfire Attack Level (BAL) of the subject site. What is the certified BAL level of Lot 940 / Lot 838?

From Yilgarn Ave, it seems like there are only 4 hydrants that are spaced between 150-250m apart. I don't think there are any other existing hydrants on the lot (eg. MRWA Road Train Assembly Area). Water Reticulation Design Standard DS 63 states "*The spacing, as measured by hose-run between hydrants in non-residential or mixed-use areas shall be maximised and no greater than 100m*". Is suitable water supplied to the proposed development?

If not, will there be a water tank with a minimum capacity of 10,000 litres fitted with a 55mm cam-lock fitting with a full flow valve to enable connection to firefighting appliances may be required (Shire of Northam LPP2: General development Guidelines)?

'Annex 3 Development plans – Proposed ground floor and first floor plan does not show doors on the Growth rooms, packing rooms or dry rooms. In the case that there is one entry/exit door this is a fire safety hazard.

[redacted]

Class 8 Buildings include factories, laboratories, manufacturers and warehouses are primarily classified as Class 8 buildings. The building can be used for production, assembling, altering, repairing, finishing, packing, or cleaning of goods or produce. Class 8 buildings are generally known to pose a high potential for fire hazards.

What fire detection, warning, control and intercom systems are required for the proposed development? Is a sprinkler system required for the warehouse? If so is a hydrant booster and separate tanks required?

Social, environmental and economic components

Social & legislative component - Community confidence & concern

According to https://vitaponix.com/about/; Vitaponix, the proponent, is based in the Netherlands and has experience building high-tech CBD glasshouses throughout Europe. Currently Vitaponix is not listed in the list of cannabis cultivation and production licensees in Australia who have consented to the publication of their details (7).

Does Vitaponix have any experience managing and designing hydroponic marijuana growing facilities in Australia? Australia has a different laws, regulations, climate, and availability of crop protection products, equipment, consumables and expertise in comparison to Europe that are likely to cause challenges.

You wouldn't expect a broadacre crop farmer from the Netherlands to come to Northam and be able to farm successfully without some failure, learning and changes to production processes. Although this is an indoor crop, many of the same principles apply. The building design does not show insulation, eg. double glazed windows, wall, roof and under floor insulation etc. so may still be subject to the high temperatures and thus high HVAC demand of Northam's hot, dry summer.

To get a medicinal cannabis licence and permits the applicant must give evidence showing: business experience, a sound and stable financial background, good repute, connections and associations and that the sites you will operate from are appropriate and secure. Would Vitaponix qualify for a medical cannabis license? Has the ODC been contacted about the suitability of the site and development proposal?

Environmental & zone suitability component – Landscaping plan & community impact

Mulch Risks: Mulch is planned in Annex 4: Landscaping Plan, but is a fire hazard and can block drains in flash floods. Gravel or recycled crushed rock would be more appropriate. Flood risk is already present 1 km downhill in light industry and residential areas (FPM 1 in 100 AEP floodway and flood fringe), where there are limited street drains.

Species Selection: Annex 4 Landscaping plan includes several species planned for the gardens of the development that are not native to the Wheatbelt: *Eucalyptus sideroxylon* 'Rosa' (eastern states), *Eucalyptus torquata* (Goldfields origin), *Grevillea olivacea 'Yellow'* (coastal WA), *Melaleuca nesophila* (Esperance coast), *Grevillea laurifolia* × *willisii* 'Royal Mantle' (eastern states hybrids, Scaevola crassifolia (coastal WA).

[redacted]

Economic component – Actual economic value to the community

The cover letter states in justifying the development that "AvonWest will be a premier 62-hectare logistics estate strategically positioned as one of the most well-connected centers outside of the Perth CBD. Designed to seamlessly integrate with both [road and freight networks].... The AvonWest industrial project is expected to significantly contribute to the region's economic growth. By attracting large logistics and associated companies and facilitating increased commerce, the project will create thousands of jobs, both directly within the logistics facilities and indirectly through the supply chain and associated services."

However, the cover letter also states that the site will have low staff attendance, approximately 6 staff on site per day and less than 10 deliveries per week. This doesn't seem like a significant contribution to jobs in the region, and I question whether this development with low vehicle movement is suited to development within the AvonWest Logistics Hub? I feel like the risks of the lack of demonstrated experience of the proponent in running a complex hydroponic growing facility in Australia with security needs may be greater than the economic benefits of this facility.

Environmental component – Active vegetation clearing investigation

There is an active investigation into the clearing of native vegetation on Lot 881 / Lot 904 by Department of Water and Environmental Regulation (ICMS 97270). Initially lodged on the 8th of October 2025, investigations are ongoing.

To achieve orderly and proper planning approval of this development should be postponed until the investigation into illegal clearing at the subject site has been completed, and the suitability of the subject site is confirmed.

The investigation may find that the Environmental Management Plan, Environmental Corridor, Landscape Plan and other environmental and biodiversity factors need to be reconsidered.

Site servicing requirements

Social & development context component – Traffic and community impacts & site suitability

Although the traffic impacts are stated as low, less than 10 vehicle movements per peak hour, Old York Rd (Local Road 4212022) 3km to the south of the proposed development is already experiencing significant conflict due to industrial encroachment. I am concerned the proposed hydroponic facility at Avon West industrial estate will add to this.

Development impact on Old York Rd & Nearby Residential Areas

- Traffic and Road Use: Old York Rd connects Yilgarn Ave and Goomalling Rd. It includes a petrol station and several businesses but is primarily a residential street linked to housing by Lloyd Bridge.
- Bridge Safety: Lloyd Bridge (Shire Asset, Structure #4399) is a Shire-owned structure with a 14-tonne load limit, unsuitable for most transport trucks. It is one of only 63 highly weight-restricted bridges in WA. Despite this, Restricted Access Vehicles, including B-doubles, continue to enter the road due to a lack of adequate signage. Drivers only discover the weight limit once they reach the bridge, forcing sudden and dangerous



manoeuvres. Main Roads WA have stated they are aware of frequent non-compliant use of this bridge.

- Incidents: Persistent traffic problems and incidents, including a recent car crash over Lloyd Bridge, will be worsened by the proposed development and that of the Avon West facility.
- Residential Impact: A 24-hour BP truck refuelling station and other industrial activities on the Yilgarn Ave side of Lloyd bridge have already increased noise and reduced safety in the neighbourhood.

Development impact on Yilgarn Ave pedestrians

A family member is a permanent resident at the Northam Caravan Park on Yilgarn Ave, as are a number of other elderly community members. Many permanent and temporary residents of the Caravan Park may be unable to drive or wish to walk into town. Currently, there is no pedestrian crossing across Mortlock River so residents have to walk / use mobility devices on the road on Leeder Bridge to access town. There is no pedestrian footpath across this bridge, which is a hazard to residents. Incidents due to this issue have already occurred here and been reported to the Shire.

There is already conflict and increased hazards to Yilgarn Ave pedestrians due to industrial encroachment from the MRWA Truck Rest Area. I am concerned the proposed hydroponic facility at Avon West industrial estate will add to this.

Likely impacts of the proposed development on the community

5.0 Security, crime and drug concerns

Although the Cover Letter States that

A room containing cannabis should not share a wall with the exterior of the building unless that exterior wall has additional controls.

The Cover Letter states *"The entire facility will be security fenced using 2.40m high mid steel anti-climb fence, with gates to driveway and loading areas. The facility will be strictly following the Office of Drug Control (ODC) requirements for fencing (including concrete plinth), electrified perimeter, 24/7 monitored CCTV, biometric access, tamper detection systems and on-site security personnel. Regulators will oversee and enforce compliance."*

2. Products to Be Produced

Vitaponix's indicates they sell nutrients, additives, and substrates. It is unclear whether this facility will manufacture or distribute such products.

Cannabis, with greater than 1% tetrahydrocannabinol (THC), is a narcotic drug with a high illicit value. The Cover Letter states that the proposed facility will cultivate medicinal cannabis with THC, is this THC greater than 1%?

Other items

- Has the WA Police and Main Roads WA been consulted on this development?

[redacted]

Environmental impacts

As per publicly available RDAP/47 DAP Meeting Documents this lot was previously zoned as 'Environmental Conservation' but was rezoned to 'Light Industry' through a Scheme amendment. Environmental Assessments by Aurora Environmental and Talis provided evidence of an environmentally significant area within the lot. The area was identified as providing significant habitat and foraging opportunities to the endangered Carnarby's Black Cockatoo. The broadscale clearing and earthworks occurring at Lot 881 for the proposed development removed trees identified as providing cockatoo habitat and leveled the naturally occurring slopes.

The Shire of Northam's Biodiversity Plan states that two biogeographical regions occur within the Shire of Northam; the Jarrah Forest and Wheatbelt Interim Biogeographic Regions of Australia (IBRA). Significant sections of the Wheatbelt IBRA are over-cleared, with remaining vegetation showing high levels of flora endemism.

In addition, The isolated granite outcrops support rich and diverse ecosystems that contribute to high biodiversity, endemism and rarity of species in the south-west of Western Australia. Due to the high degree of heterogeneity recorded between outcrop assemblages of fauna (invertebrates) and flora, a large proportion of granite outcrops in the Wheatbelt need to be protected (Pinder et al 2000, Yates et al 2003). A number of hills (Sugarloaf Hill, Mount Dick, Centenary Hill etc), some of which are small but are highly elevated, are also important geologically and for endemic flora found in these niches. The same is true for the breakaways that are associated with some of the hills found in the Shire. The site of the proposed development site between three unnamed undulating hill tops and is located to the south of the peak of Kunine Hill.

Data below from Environment online (Figure 6) shows that vegetation in the subject site area is mapped as "Threatened Ecological Communities (DBCA-038)".

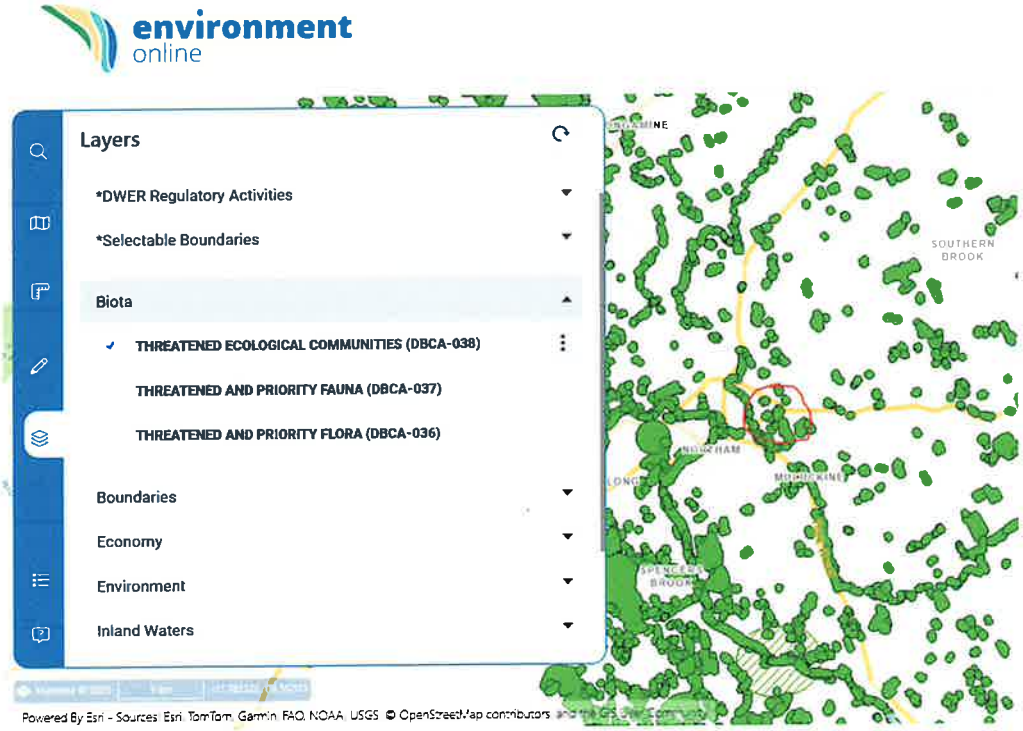


Figure 6. Threatened Ecological Communities (DBCA-038) with the subject site circled in red.

[redacted]

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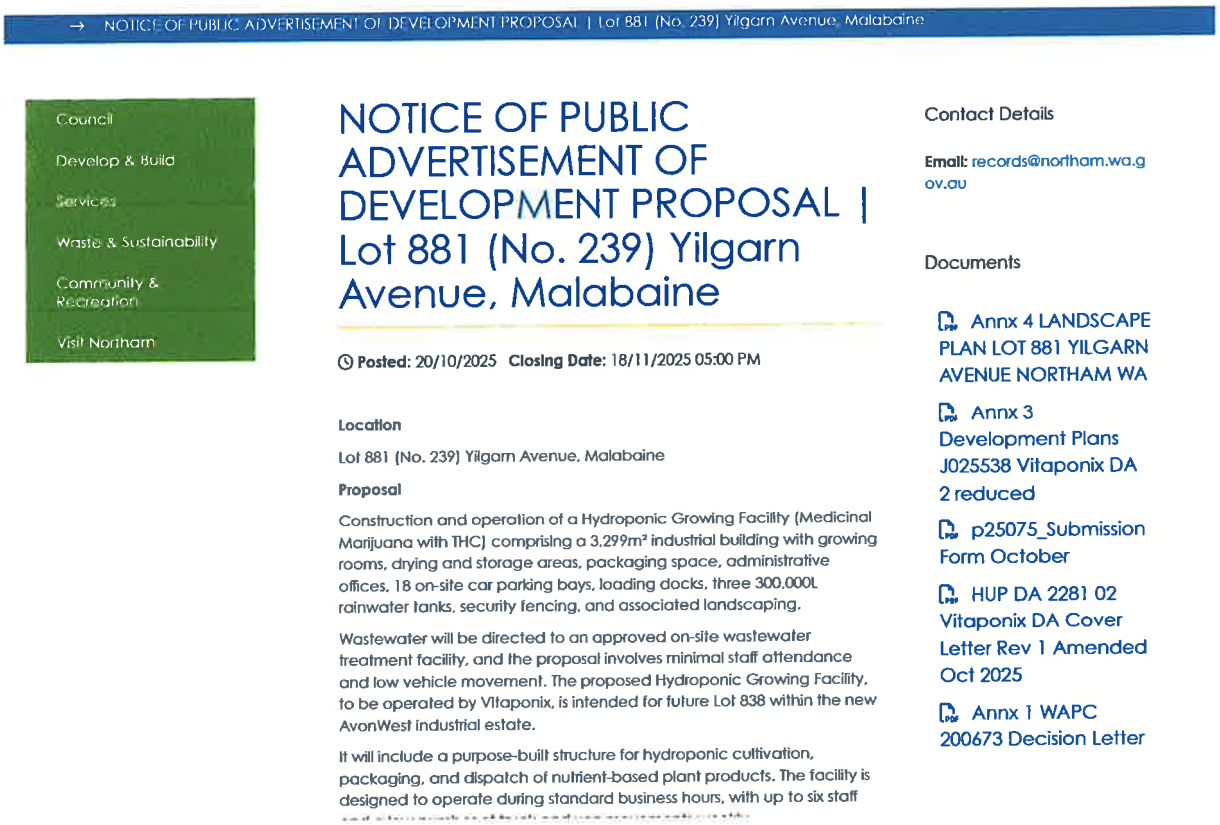
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[redacted]

Appendix



→ NOTICE OF PUBLIC ADVERTISEMENT OF DEVELOPMENT PROPOSAL | Lot 881 (No. 239) Yilgarn Avenue, Malabaine

Council
Develop & Build
Services
Waste & Sustainability
Community & Recreation
Visit Northam

NOTICE OF PUBLIC ADVERTISEMENT OF DEVELOPMENT PROPOSAL | Lot 881 (No. 239) Yilgarn Avenue, Malabaine

Posted: 20/10/2025 **Closing Date:** 18/11/2025 05:00 PM

Location

Lot 881 (No. 239) Yilgarn Avenue, Malabaine

Proposal

Construction and operation of a Hydroponic Growing Facility (Medicinal Marijuana with THC) comprising a 3,299m² industrial building with growing rooms, drying and storage areas, packaging space, administrative offices, 18 on-site car parking bays, loading docks, three 300,000L rainwater tanks, security fencing, and associated landscaping.

Wastewater will be directed to an approved on-site wastewater treatment facility, and the proposal involves minimal staff attendance and low vehicle movement. The proposed Hydroponic Growing Facility, to be operated by Vitaponix, is intended for future Lot 838 within the new AvonWest industrial estate.

It will include a purpose-built structure for hydroponic cultivation, packaging, and dispatch of nutrient-based plant products. The facility is designed to operate during standard business hours, with up to six staff

Contact Details

Email: records@northam.wa.gov.au

Documents

Annx 4 LANDSCAPE PLAN LOT 881 YILGARN AVENUE NORTHAM WA

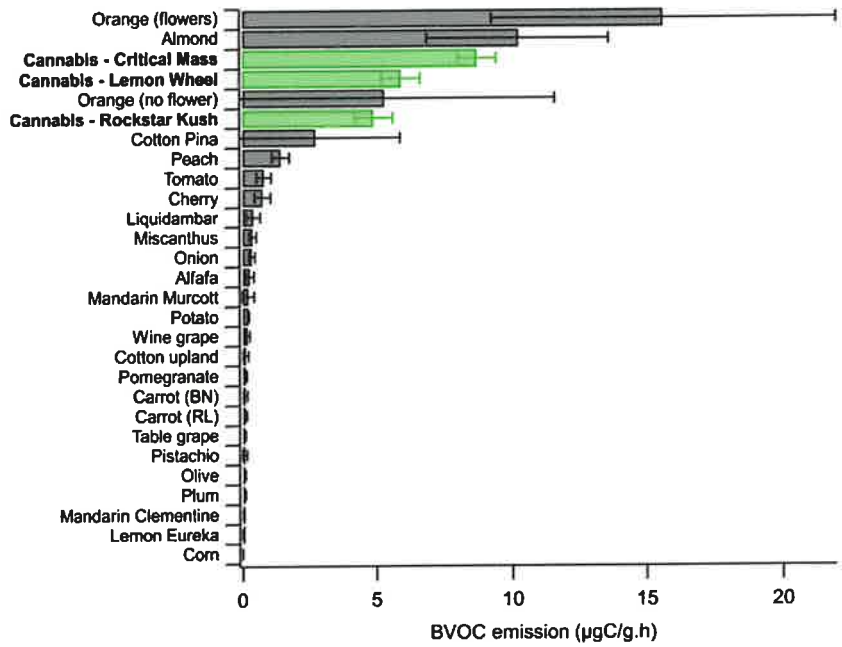
Annx 3 Development Plans J025538 Vitaponix DA 2 reduced

p25075_Submission Form October

HUP DA 2281 02 Vitaponix DA Cover Letter Rev 1 Amended Oct 2025

Annx 1 WAPC 200673 Decision Letter

Appendix Figure 1. Notice of general consultation for the development on the Shire of Northam's website as displayed at 7pm 17 November 2025 at https://www.northam.wa.gov.au/consultations/general/notice-of-public-advertisement-of-development-proposal-lot-881-(no-239)-yilgarn-avenue-malabaine



Appendix Figure 2. Comparison of emission factors from cannabis strains obtained in Samburova et al.6 (green) and common crops obtained in Gentner et al.68 (gray). Source: De Ferreyro Monticelli et al. (2022).

Nik Hidding <nik@hidding.com.au> 24 November 2025 at 14:44
To: Natasha Jurmann <natasha.jurmann@northam.wa.gov.au>

Hi Natasha,

Please find our responses below to the submissions raised. I've put comments under similar headings/themes that the submitter has made in their submission.

1.0 Incompatible land use and character.

The scale and height of the proposed building, being 9m in height, is fully compliant with the Shire's development requirements in LPS6 and compatible with the Light & Service Industry zone within which it is located. It is likely that other development in the estate will be of a similar scale and form (noting also that the Shire has approved the Crypto Mining Facility on the same AvonWest site, slightly lower in height at 7.50m).

2.0 Planning Framework Inconsistencies

The site is zoned Light & Service Industry in LPS6. The imaged use in Figure 1 of the cover letter submission was from the Northam Growth Plan, which is now finalised under the Shire's 2024 Local Planning Strategy. The Strategy identifies future development opportunities along Yilgarn Avenue in a similar way. In any event, the proposed development contained within the

subject land, almost centrally in it, is completely appropriate in the Light & Service Industry zone and poses so impact on any surrounding properties or zones. The development site it is proposed on will sit among many other industrial businesses in the fullness of time, as the AvonWest estate is developed.

Accordingly, there is no zoning issues that prevent the development application from being approved.

3.0 Security, crime and drug risk

The facility will be fully secured in accordance with government requirements. The operator will abide by ODC requirements, and the submitter is not best-placed to comment on compliance or otherwise of the ODC requirements.

Further, the adjacent Road Train Assembly Area is not accessible to the general public.

4.0 Amenity Impacts (Odour, Emissions, Chemicals, Bioaerosols)

Air Quality:

The facility will have the following air-quality controls:

- No unfiltered vents or openings
- HEPA filtration for particulates
- Sealed drying and processing areas
- No external recirculation
- HVAC filtration system
- ARC units

The HVAC system will ensure comprehensive containment and air safety with:

- Multi-stage HEPA and activated-carbon filtration.
- Tight temperature, humidity, and particulate control.
- Positive and negative pressure zoning for biological containment.
- Bi-polar ionisation for enhanced particulate reduction.
- Full environmental automation with compliance logging.
- ARC units integrated throughout the air-handling pathways.

The HVAC system will be engineered by the operator's lead HVAC specialist, who has 40 years experience in controlled-environment agriculture and indoor cultivation systems. The system will incorporate advanced filtration, air handling, and environmental control technologies specifically designed for this purpose. As a secondary odour-control measure, the facility will use **Active Radiant Catalysis (ARC)** units installed in each cultivation room, hallways, and within the HVAC air-distribution channels. In addition, proprietary **Odor Guard™** filters will be integrated into the filtration system. These biodegradable compounds neutralise VOCs and odorous molecules on contact. Through the combined use of multi-stage filtration, ARC technology, and VOC-destructive filters, the system ensures that **no detectable VOCs or odours are exhausted from the building**.

Water:

In terms of water recapture, irrigation systems, drainage, runoff handling and wastewater volumes:

The water system has been designed around maximising recapture, treatment, and safe reuse while ensuring full compliance with environmental and regulatory standards. Outdoor storage tanks function as a combined **water-treatment and recirculation system**. HVAC units contain **specialised condensate-recovery coils** that extract moisture from the air. This water is collected and returned to the main storage/treatment tanks. All cultivation and process water will be passed through a **reverse osmosis (RO)** purification system before reuse. Runoff water containing nutrients will be collected in a **below-ground tank system** fully separated from municipal drainage. Nutrient-rich water may be reused for alternative use following treatment; where reuse is not required, it will be redirected to the treatment tanks for sterilisation and controlled recirculation. As an alternative pathway, wastewater can be transported to the approved **AvonWaste Wastewater Treatment Facility**, subject to final engineering confirmation. Full hydraulic design, volumes, and flow diagrams will be detailed during the engineering phase following DA approval.

Chemicals:

Chemical handling and storage will align with all regulatory and safety requirements. Only limited chemicals (nutrients, pH adjusters, sterilisation agents) will be used onsite. If used all chemicals will comply with relevant standards and regulatory guidelines. A complete **chemical inventory** with updated **MSDS documentation** will be prepared in the next development stage. Chemicals will be stored in a **dedicated, ventilated, climatised storage room** in accordance with Australian Standards.

Hydrocarbon & Fuel Handling:

Hydrocarbon and fuel-handling measures will be finalised during detailed engineering, but the following controls will apply:

Environmental-protection procedures and spill-response protocols will be implemented to ensure a protected, compliant environment.

Biological Hazards & Biosecurity:

Biosecurity will be managed under GACP-aligned protocols and pharmaceutical-style containment.

- Differential HVAC pressure zones, clean rooms, and strict gowning procedures.
- HEPA filtration to prevent release of spores or pollen.
- Biological Integrated Pest Management (IPM) protocols.
- Active Radiant Catalysis (ARC) units for continuous air sanitation.
- Quarantine and regular testing of all new live plant material.

Waste Management:

- Plant material and growing media will be shredded, blended, and transported by a licensed contractor to a **Bio-Char processing facility**.
- General waste will be managed according to local regulatory requirements, with use of the Bio-Char facility where applicable.

Plumbing:

Plumbing will include:

- Sealed concrete slab.
- separated drain tanks, treated and recirculated
- Stormwater retention and treatment.
- to be detailed in detailed engineering stage post DA

5.0 Water, Power and Microgrid Servicing:

Details about water, power and use of the microgrid were detailed in the HUP Cover Letter submission.

The microgrid facility will comprise a solar farm and an integrated system which will include solar panels on all roof tops of buildings in the estate, as well as Solapave infrastructure in roadways. The microgrid proposal is for servicing the entire estate and does not require a land use approval as a Renewable Energy Facility. A backup Hydrogen Facility may also be proposed.

Energy planning incorporates efficiency, redundancy, and sustainability.

- LED horticultural lighting to minimise energy consumption.
- High-efficiency HVAC, dehumidification, and heat-distribution systems.
- A hydrogen-powered backup generator
- Rooftop solar systems and **Solapave** technology, linked with the AvonWest microgrid.

6.0 Bushfire and Structural Fire Risk

The development site is not actually within a bushfire prone area. However, the broader AvonWest estate has been supported with an overarching Bushfire Management Plan which has been provided to the Shire. The entire estate will be developed in a low threat state so the risk of a bushfire in the estate is low.

Fire protection systems for the facility will be fully defined at the detailed engineering stage.

7.0 Biodiversity and Land Degradation

These matters are not relevant to the application. Clearing of the land occurred through separate processes. An Environmental Management Plan for the broader AvonWest estate has been provided to the Shire as required by the Scheme Provisions.

8.0 Traffic & Community Safety

The proposed development does not warrant a full transport impact statement or transport impact assessment, due to low levels of traffic movements anticipated for the development. Matters associated with Old York Road and Lloyd Bridge have been raised by the submitter before, but are not relevant to this development application. Similarly, comments related other issues in the area, for example the BP service station or other traffic issues are not relevant to the consideration of this application.

Matters raised such as pedestrian crossings and pedestrian footpath across a bridge are not relevant to this application.

9.0 Limited demonstrated local benefit

The proposed development is for medicinal production which is aimed at providing relief for a range of ailments. A development of this nature is considered to provide benefit to community. The submitter's comment suggesting that the proponent has limited demonstrated experience with hydroponic cannabis production is false.

10.0 Other

Comments in relation to internal design and security:

The proposed facility is designed as a sealed indoor cultivation environment using a multi-layered security and containment approach.

Full detailed internal engineering is till be taken place post DA approval.

Key features include:

- sealed rooms with security access control systems
- concrete exterior walls, fitted with security doors
- strict material and people flow protocols
- all security measures are compliant with ODC's requirements

'1.3.1 Environmental Component – Conservation'

The subject land no longer contains land zoned "Environmental Conservation", as this area was rezoned to Light & Service Industry through a separate Scheme Amendment process approved by the Minister for Planning. The land is completely zoned Light & Service Industry.

An Environmental Management Plan has been prepared and submitted to the Shire as required, as a result of that process.

Industrial Subdivision & Servicing Requirements – Water Use

DCP4.1 Industrial Subdivision applies, and yes ordinarily, where a reticulated sewerage service is not available, the WAPC should limit development to dry industry. However, the AvonWest estate has been supported with the use of a Waste Water Treatment Facility which has been approved, so there is no requirement to restrict uses in the estate to Dry Industry.

Claims of Illegal Clearing

The submitter claims that there has been illegal clearing occurring – this is false. The proponent has followed every process correctly, through rezoning of land, supported by Environmental Assessment and Environmental Management Plan, EPA approval, subdivision approval, clearing permits and earthworks approvals and controlled burning. To date, the proponent has not received any communication from the Shire or DWER in respect of this issue.

We thank the Shire for the opportunity to respond to these submissions. We are happy for the Shire to copy these responses and place them in a formatted response document if required, or copy them into the Responsible Authority Report.

If you require anything further, please do not hesitate to contact me.

Kind Regards,

Nik Hidding

Director

M 0424 651 513

Hidding.
URBAN PLANNING

PO Box 920 Subiaco WA 6904

nik@hidding.com.au **| www.hidding.com.au**

Application P25075 DAP/25/02943

Advertising Period – 21 October to 18 November 2025

Hydroponic Growing Facility – Schedule of Submissions

No.	Name	Summary of Submission	Applicant's Response	Officer's Comment
A.	Resident of Old York Rd Northam	Raised the following issues:		See below
		1. Incompatible land use and character - The scale, height and nature of a high-security, two-storey concrete warehouse is not compatible with nearby rural, rural residential, parks and recreation and conservation land uses, or with the desired future character set out in the Local Planning Scheme and Strategy.	The scale and height of the proposed building, being 9m in height, is fully compliant with the Shire's development requirements in LPS6 and compatible with the Light & Service Industry zone within which it is located. It is likely that other development in the estate will be of a similar scale and form (noting also that the Shire has approved the Crypto Mining Facility on the same AvonWest site, slightly lower in height at 7.50m).	The proposed 9m height of the development complies with maximum permitted height of 9 metres under LPS6. The building's detailed design features, fenestration and landscaping establish a high standard for development within an area zoned for light industrial uses.
		2. Planning framework inconsistencies - The "East Industrial Precinct" mapping used in the proponent's cover letter is inconsistent with LPS No. 6 and the Local Planning Strategy, which	The site is zoned Light & Service Industry in LPS6. The imaged use in Figure 1 of the cover letter submission was from the Northam Growth Plan, which is now finalised under the	The subject land falls within a Light Industry and Service Industry zone under LPS6. Under the Shire of Northam Local Planning Strategy, the locality is designated Industry.

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		identify a mix of residential, rural residential, light industry/service commercial and conservation uses, and seek to maintain a clear distinction between agricultural land east and west of the Avon River.	Shire's 2024 Local Planning Strategy. The Strategy identifies future development opportunities along Yilgarn Avenue in a similar way.	
		3. Security, crime and drug risk - A high-value narcotic crop located immediately beside a busy, publicly accessible MRWA road train assembly area heightens risks of theft, unauthorised access and crime, and appears difficult to reconcile with Office of Drug Control security guidelines.	The facility will be fully secured in accordance with government requirements. The operator will abide by ODC requirements. Further, the adjacent Road Train Assembly Area is not accessible to the general public.	The hydroponic facility will be regulated by the Commonwealth Office of Drug Control (ODC). The ODC performs inspections of cultivation, production and manufacturing sites to monitor compliance with the Commonwealth Narcotic Drugs Act (1967), the Narcotic Drugs Regulation (2016) and with the specific conditions of each licence. The ODC will refuse to grant a licence if not satisfied that the applicant will: • Take all reasonable measures to ensure the physical security of cannabis. • Ensure that there are suitable security arrangements at all locations where activity related to the licence will occur.
		4. Amenity impacts (odour, emissions, chemicals, bioaerosols) – Cannabis	The facility will have the following air-quality controls:	It is recognised that cannabis plants produce odours and other emissions

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		cultivation facilities are known to produce strong odours, biogenic volatile organic compounds and bioaerosols, with potential impacts on workers, neighbours and users of nearby facilities (including the road train yard and service station). The proposal provides minimal detail on HVAC design, filtration, chemical and fertiliser use, plumbing and water recycling, making it difficult to assess compliance with "light industry" amenity objectives.	• No unfiltered vents or openings • HEPA filtration for particulates • Sealed drying and processing areas • No external recirculation • HVAC filtration system • ARC units Through the combined use of multi-stage filtration, ARC technology, and VOC-destructive filters, the system ensures that no detectable VOCs or odours are exhausted from the building. The water system has been designed around maximising recapture, treatment, and safe reuse while ensuring full compliance with environmental and regulatory standards. Outdoor storage tanks function as a combined water-treatment and recirculation system. Chemical handling and storage will align with all regulatory and safety requirements. Only limited chemicals (nutrients, pH adjusters, sterilisation agents) will be used onsite. If used all	especially during flowering and processing phases. The proponent indicates that strict measures will be undertaken to ensure that these emissions are contained within the facility. A condition of approval requires that an Odour Management Plan is submitted detailing the strategies and procedures for potential managing odour emissions. It is also noted that the containment of odour is an issue that the ODC addresses as part of its ongoing assessment / certification process.

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			chemicals will comply with relevant standards and regulatory guidelines. In regard to hydrocarbons and fuel handling - environmental-protection procedures and spill-response protocols will be implemented to ensure a protected, compliant environment. Biosecurity will be managed under GACP-aligned protocols and pharmaceutical-style containment. • Differential HVAC pressure zones, clean rooms, and strict gowning procedures. • HEPA filtration to prevent release of spores or pollen. • Biological Integrated Pest Management (IPM) protocols. • Active Radiant Catalysis (ARC) units for continuous air sanitation. • Quarantine and regular testing of all new live plant material. Plant material and growing media will be shredded, blended, and transported by a licensed contractor to a Bio-Char processing facility. General waste will be managed according to local regulatory	

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			requirements, with use of the Bio-Char facility where applicable. Plumbing will include: • Sealed concrete slab. • separated drain tanks, treated and recirculated • Stormwater retention and treatment.	
		5. Water, power and microgrid servicing - Hydroponic growing has high and continuous energy and water demands. There is limited information on actual water use, recycling capacity, stormwater and hydrocarbon management, or how the proposed microgrid (including any batteries and backup generators) interacts with land use definitions and servicing requirements for the Light & Service Industry zone.	Energy planning for the site incorporates efficiency, redundancy, and sustainability. • LED horticultural lighting to minimise energy consumption. • High-efficiency HVAC, dehumidification, and heat-distribution systems. • A hydrogen-powered backup generator • Rooftop solar systems and Solapave technology, linked with the AvonWest microgrid.	Noted.
		6. Bushfire and structural fire risk - Key documents such as the Bushfire Management Plan and drainage plan are missing from public consultation materials, limiting assessment of bushfire attack level (BAL), water supply for firefighting, hydrant spacing and internal fire	The development site is not actually within a bushfire prone area. However, the broader AvonWest estate has been supported with an overarching Bushfire Management Plan which has been provided to the Shire.	It is confirmed that a Bushfire Management Plan has been prepared for the industrial estate as part of the subdivision process. It is noted that Condition 15 of the subdivision approval dated 15.11.24

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		safety in a high-hazard Class 8 style warehouse.		recognises that the Bushfire Management Plan requires that: For the entire area of each new lot, ensure any retained vegetation can be regarded as 'low threat' when considering the relevant parameters of extent, connectivity, flammability, moisture or fuel load as per AS 3959:2018 s2.2.3.2.
		7. Biodiversity and land degradation - The site contains mapped conservation areas and threatened ecological communities and sits within an over-cleared Wheatbelt landscape with significant granite and hill-top biodiversity values. There is an active investigation into native vegetation clearing on Lot 881/Lot 904, and required environmental management and revegetation plans are not yet clearly demonstrated.	These matters are not relevant to the application. Clearing of the land occurred through separate processes. An Environmental Management Plan for the broader AvonWest estate has been provided to the Shire as required by the Scheme Provisions.	The environmental matters raised were addressed during the subdivision approval stage. The subdivision approval includes a requirement that an environmental management plan for Lot 904 is to be prepared and approved to ensure the protection and management of the sites environmental assets with satisfactory arrangements being made for the implementation of the approved plan.
		8. Traffic and community safety - Existing traffic conflicts on Old York Road and Lloyd Bridge (with its low load limit and history of incidents), and the lack of safe pedestrian access on Yilgarn Avenue, suggest that further industrial activity in this	The proposed development does not warrant a full transport impact statement or transport impact assessment, due to low levels of traffic movements anticipated for the development.	Seven delivery movements per week and two incoming truckloads per week are anticipated. The level of vehicle movements associated with the development is

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		corridor may exacerbate safety risks for residents, including elderly and caravan park residents.		within the capacity of the estate and surrounding road network.
		9. Limited demonstrated local benefit - The proposal anticipates low daily staffing and few vehicle movements, raising questions about the scale of economic benefit relative to the risks and impacts, particularly given the proponent's limited demonstrated experience with hydroponic cannabis production under Australian conditions and regulations.	The proposed development is for medicinal production which is aimed at providing relief for a range of ailments. A development of this nature is considered to provide benefit to community.	Noted.