

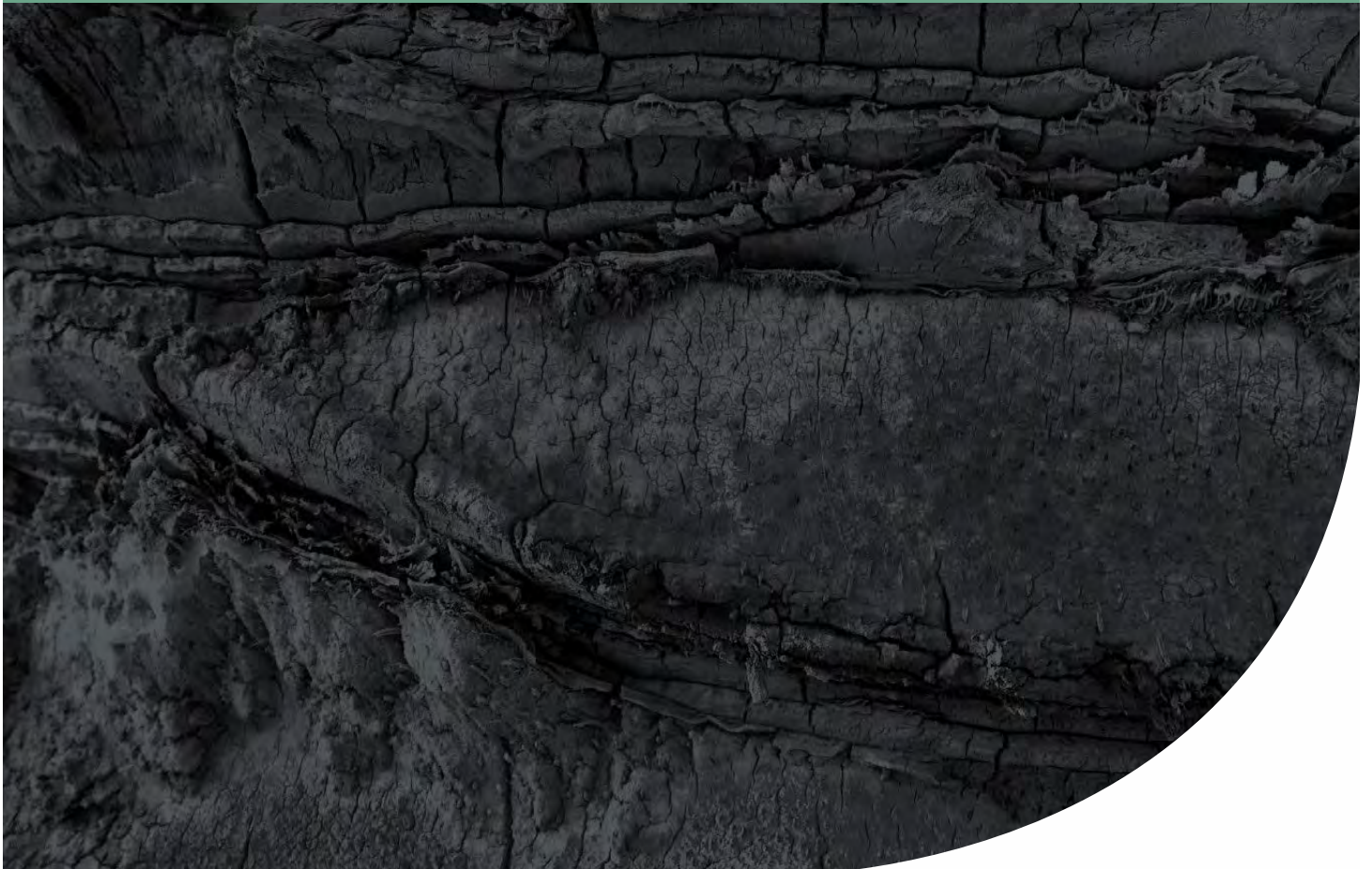
Bushfire Management Plan

Local Structure Plan - East Wanneroo

Precinct 3

Project No: EP24-169(01)

**Prepared for Satterley Property Group
March 2025**



Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



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This document has been prepared primarily to consider the layout of development and/or the appropriate building construction standards applicable to development, where relevant. The measures outlined are considered to be prudent minimum standards only based on the standards prescribed by the relevant authorities. The level of bushfire risk mitigation achieved will depend upon the actions of the landowner or occupiers of the land and is not the responsibility of the author. The relevant local government and fire authority (i.e. Department of Fire and Emergency Services or local bushfire brigade) should be approached for guidance on preparing for and responding to a bushfire.

Notwithstanding the precautions recommended in this document, it should always be remembered that bushfires burn under a wide range of conditions which can be unpredictable. An element of risk, no matter how small, will always remain. The objective of the Australian Standard AS 3959:2018 is to “prescribe particular construction details for buildings to reduce the risk of ignition from a bushfire” (Standards Australia 2018). Building to the standards outlined in AS 3959 does not guarantee a building will survive a bushfire or that lives will not be threatened by the effects of bushfire attack.

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Executive Summary

Satterley Property Group (the proponent) is progressing a Local Structure Plan (LSP) over 37 land parcels within the City of Wanneroo, in an area also referred to as Precinct 3 of the *East Wanneroo District Structure Plan* (EWDSP). The collective land parcels (herein referred to as 'the site') extend over a 140-hectare (ha) area situated approximately 20 km north of the Perth Central Business District and immediately to the east of the existing Hocking residential subdivision area.

The proposed Precinct 3 LSP will guide future subdivision of the site for a mix of uses including residential, a local centre, a primary school, public open space (POS) and parkland reserve (for retained native vegetation) areas, and is generally in accordance with the overarching EWDSP.

A significant portion of the site is located within 'Area 2' (designated bushfire prone) on the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024). The identification of the site within 'Area 2' necessitates a further assessment of the determined bushfire risk affecting the site in accordance with *Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* (AS 3959), and the satisfactory compliance of the proposal with the policy measures described in *State Planning Policy 3.7 Bushfire* (SPP 3.7) (WAPC 2024b) and the *Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire* (the Guidelines) (WAPC 2024a).

The purpose of this bushfire management plan (BMP) is to assess the bushfire hazards (risk), both within and near the site, and identify the 'management' strategies (risk treatments) required to ensure the future development of the land is consistent with the intent of SPP 3.7, which is:

"to implement effective, risk-based land use planning and development which in the first instance avoids the bushfire risk, but where unavoidable, manages and/or mitigates the risk to people, property and infrastructure to an acceptable level. The preservation of life and the management of bushfire impact are paramount."

The proposed LSP is in accordance with the existing zoning and currently approved EWDSP for the site, with the proposed LSP to be assessed by the outcomes applicable to Bushfire Protection Criteria 5 in the Guidelines.

This BMP has followed the requirements of SPP 3.7 to identify bushfire risks and the bushfire protection measures that will make the land suitable for its intended purpose. A Bushfire Attack Level (BAL) assessment involving the classification of vegetation and the effective slope has been undertaken in accordance with AS 3959, extending 150 m from the site in accordance with the Guidelines.

The following bushfire hazards were identified as applicable to the site following development:

- **Forest (Class A) vegetation** has been identified externally to the site to the north, east, and south within the broader EWDSP area. Forest vegetation is also identified internally to the site in areas proposed for future parkland reserves, where existing remnant native vegetation is proposed for retention.

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- **Woodland (Class B) vegetation** is present to the east within Nanovich Park, a horse trotting and training facility external to the site, with the vegetation adjacent to the park's interface with Benmuni Road. This area is also within the broader EWDSP area.
- **Grassland (Class G) vegetation** is identified externally to the east of the site within Nanovich Park as well as an external privately owned landholding to the north of Nanovich Park. These areas are also within the broader EWDSP area.

Existing classified vegetation within future subdivision and development areas within the site will be removed and converted to non-vegetated land and/or low threat vegetation. It is planned that the public open space (POS) in the site will be converted to low threat vegetation in accordance with Section 2.2.3.2 of AS 3959. An exception is the parkland reserve areas remaining in their existing conditions (forest).

All classified vegetation outside the site is assumed to remain in its existing condition and therefore pose a long-term bushfire risk to the site. The Shenton Road reserve to the south of the site has been assumed to be developed as part of this BMP due to likely future staging within the EWDSP. However, if at the time of subdivision, the road has not been constructed, the implementation of greater setbacks and a combination of perimeter roads and/or EAWs will be necessary to address siting and access considerations for the southern portion of the LSP.

Areas of land identified as low threat that are external to the site are assumed to continue to be managed in accordance with existing subdivision approvals and/or land management practices. Narrow nature strips associated with road reserves are considered a low threat without management, based on AS 3959.

Compliance Assessment

The bushfire protection criteria (BPC) provided in the Guidelines represent the risk treatment acceptable solutions applicable to achieving the intent and outcomes listed in SPP 3.7. The BPC are divided into five criteria with each having four elements aligning to an outcome. In this instance, the relevant criteria (category) are *Criteria 5: Structure plans and subdivision applications*. Compliance with each element (as a risk treatment) is required to demonstrate to the decision maker that the risk is within an acceptable level, either by compliance with the acceptable solution or by an outcome (alternate solution).

This BMP demonstrates that compliance with the acceptable solution at each element in BPC 5 can be achieved and is summarised below:

- **Location:** As the site has been identified as being within an 'Area 2' bushfire prone area under the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024), an assessment against Element 1 is necessary. It is noted that while the site sits within the broader EWDSP area which was most recently assessed against bushfire consideration in 2018 and therefore SPP 3.7), this assessment was conducted at a high level and noted that the area subject to this LSP would require further consideration to satisfy Element 1. On this basis, and in accordance with the Guidelines, a Broader Landscape Assessment has been completed, with the site having a point score of 5 meaning it is Broader Landscape Type A and can satisfy the acceptable solution.

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- **Element 2 Siting and design:** The BAL assessment conducted as part of the BMP indicates that all future habitable buildings within the proposed development can be sited to achieve BAL-29 or less. A number of the development cells have BAL-40 incursions as result of retained vegetation within the parkland reserves, however, the development cells are sufficiently sized to accommodate appropriately oriented lots at subdivision, allowing for in-lot setbacks to achieve BAL-29. Asset Protection Zones will be established for all lots through the management of residential lots, non-vegetated areas, and low-threat vegetation in the future subdivision design, including roadways and POS areas. It is noted that currently Shenton Road reserve to the south of the site is undeveloped, and until it is constructed will pose a temporary hazard to development within the site. The road reserve does result in BAL-FZ and BAL-40 extending into the site, but impacts can be managed through staging of development until the road is constructed (as proposed is the EWDSP). For the purposes of this BMP BALs have been shown with Shenton Road in a constructed state.
- **Element 3 Vehicular access:** The proposed Precinct 3 LSP offers multiple access and egress points that connect to the existing Benmuni Road to the east and Lenore Road to the west, as well as Nicholas Road and Elliot Road that occur within the site (and connect with Benmuni Road and Lenore Road). Currently, these roads provide access in multiple directions and will be supported by an interconnected road network proposed as part of the LSP. Egress to the south will also be available when Shenton Road is developed. As future development within the site may be staged, it will be essential to ensure that all occupiers and visitors have at least two vehicular access routes at all times during the short, medium, and long-term phases of development. If roads providing through traffic routes are not constructed before any given stage of subdivision within the site, temporary no-through roads with suitable turnaround areas will need to be provided, along with possible temporary emergency access ways.
- **Element 4 Water:** future development will be provided with a permanent and reticulated water supply to support onsite firefighting requirements and hydrants will be installed as per Water Corporation requirements.

The management/mitigation measures to be implemented through the proposed development of the site have been outlined as part of this BMP. If the current development layout changes at the future subdivision process, a revised BMP is likely to be required to support future subdivision applications. It may also be required where BAL-40 extends into lots, to demonstrate how the detailed lot layout has responded to BAL-40 incursion.

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Appendix A

Precinct 3 Local Structure Plan

Appendix B

East Wanneroo District Structure Plan

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Abbreviation Tables

Table A1: Abbreviations – General terms

General terms	
AS	Australian Standard
APZ	Asset Protection Zone
BAL	Bushfire Attack Level
BMP	Bushfire Management Plan
BPAD	Bushfire Planning and Design
CCW	Conservation category wetland
ESA	Environmentally sensitive area
FDI	Fire Danger Index
UFI	Unique feature identifier
BPC	Busfire Protection Criteria

Table A2: Abbreviations – Organisations

Organisations	
DBCA	Department of Biodiversity, Conservation and Attractions
DFES	Department of Fire and Emergency Services
DWER	Department of Water and Environmental Regulation
DPLH	Department of Planning, Lands and Heritage
OBRM	Office of Bushfire Risk Management
WAPC	Western Australia Planning Commission

Table A3: Abbreviations – Legislation and policies

Legislation	
AS 3959	<i>Australian Standard 3959:2018 Construction of buildings in bushfire prone areas</i>
Guidelines	<i>Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire (WAPC 2024a)</i>
SPP 3.7	<i>State Planning Policy 3.7 Bushfire (WAPC 2024b)</i>

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Table A4: Abbreviations – Planning and building terms

Planning and building terms	
LSP	Local Structure Plan
DPS	District Planning Scheme
MRS	Metropolitan Region Scheme

Table A4: Abbreviations – units of measurement

Units of measurement	
ha	Hectare
m	Metre
m AHD	m in relation to the Australian height datum

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1 Introduction

1.1 Background

Satterley Property Group (the proponent) is progressing a local structure plan (LSP) over 37 land parcels within the City of Wanneroo, in an area also referred to as Precinct 3 under the approved *East Wanneroo District Structure Plan* (EWDSP). The LSP plan is provided in **Appendix A**, while the approved EWDSP is provided in **Appendix B**.

The land parcels, referred to as ‘the site,’ cover an area of 140 hectares (ha) within the locality of Wanneroo. The site is generally bounded by remnant vegetation, part of Bush Forever site 471, and rural residential development to the north; Benmuni Road, rural development, Nanovich Park, and Bush Forever site 327 to the east; the future Shenton Road alignment and rural residential development to the south; and Lenore Road and existing residential subdivision to the west. It is situated approximately 20 km north of the Perth Central Business District. The location of the site, cadastral boundaries, and lot numbers are shown in **Figure 1**.

The proposed Precinct 3 LSP will guide future subdivision of the site for a mix of uses including residential, a local centre, a primary school, public open space (POS) and parkland reserve (for retained native vegetation) areas, and is generally in accordance with the overarching EWDSP.

The site is largely located within ‘Area 2’ (designated bushfire prone) on the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024) as shown in **Plate 1**. The identification of the site within ‘Area 2’ necessitates further assessment of the determined bushfire risk affecting the site in accordance with *Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* (AS 3959) and the satisfactory compliance of the proposal with the policy measures described in *State Planning Policy 3.7 Bushfire* (SPP 3.7) (WAPC 2024b) and the *Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire* (the Guidelines) (WAPC 2024a).

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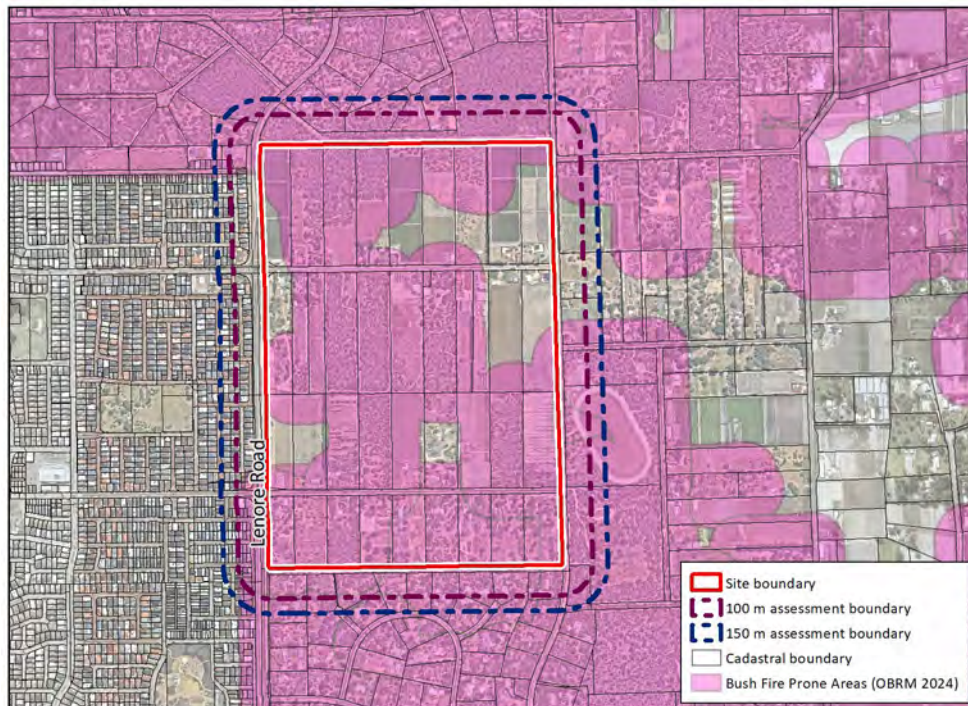


Plate 1: Areas within and surrounding the site, identified as Area 2 'designated bushfire prone' (under the state-wide Map of Bush Fire Prone Areas (OBRM 2024), is indicated in purple

1.2 Aim of this report

The purpose of this Bushfire Management Plan (BMP) is to assess bushfire hazards both within the site, and nearby, and demonstrate that the threat posed by any identified hazards can be appropriately mitigated and managed in future stages of development under the proposed LSP. This BMP has been prepared in accordance with SPP 3.7 (WAPC 2024b), the Guidelines (WAPC 2024a) and AS 3959 (Standards Australia 2018). The document includes:

- An assessment of the existing classified vegetation in the vicinity of the site (within 150 m) and consideration of bushfire hazards that will exist in the post-development scenario (**Section 3**).
- Commentary on how the future development can achieve *Bushfire Protection Criteria (BCP) 5: Structure Plans and subdivision applications* outlined within the Guidelines including an indication of Bushfire Attack Level (BAL) ratings likely to be applicable to development cells and future habitable buildings (**Section 5**).
- An outline of the roles and responsibilities associated with implementing this BMP (see **Section 6**).

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1.3 Statutory policy and framework

The following key legislation, policies and guidelines are relevant to the preparation of a bushfire management plan:

- *Bush Fires Act 1954*
- *Fire and Emergency Services Act 1998*
- *Planning and Development Act 2005* and associated regulations
- *Building Act 2011* and associated regulations
- *State Planning Policy 3.7 Bushfire (WAPC 2024b)*
- *Planning for Bushfire Guidelines – For the implementation of State Planning Policy 3.7 Bushfire (WAPC 2024a)*
- *Australian Standard AS 3959 – 2018 Construction of buildings in bushfire prone areas (Standards Australia 2018)*

1.4 Description of the proposed development

The proposed Precinct 3 LSP (**Appendix A**) provides a framework for the provision of future land use, subdivisions and development within the site, consistent with the overarching EWDSP which covers an 8,300 ha area across East Wanneroo, comprising 28 separate structure plan precincts.

The EWDSP outlines the land use rationale for each precinct and specifies the information which is required to inform the preparation of the LSP for each precinct.

With respect to the site, the EWDSP (**Appendix B**) proposes a residential community integrated with natural features for Precinct 3. The proposed LSP (**Appendix A**) identifies the following land uses within the site:

- Approximately 64 ha of mixed density residential development;
- Approximately 12 ha for public open space (POS) and 14.25 ha of parkland reserves (areas of retained native vegetation);
- A primary school in the central portion of the site;
- A 2.1 ha local centre in the north-western portion of the site; and
- A 1.9 ha church site.

The site is predominantly zoned 'Urban Deferred' (including areas proposed for intensification of development), with portions of the proposed parkland reserves being zoned 'Rural' under the Metropolitan Region Scheme (MRS), and zoned 'Rural' under the City of Wanneroo *District Planning Scheme No. 2* (DPS No. 2). The MRS zones and reserves are shown in **Plate 2**.

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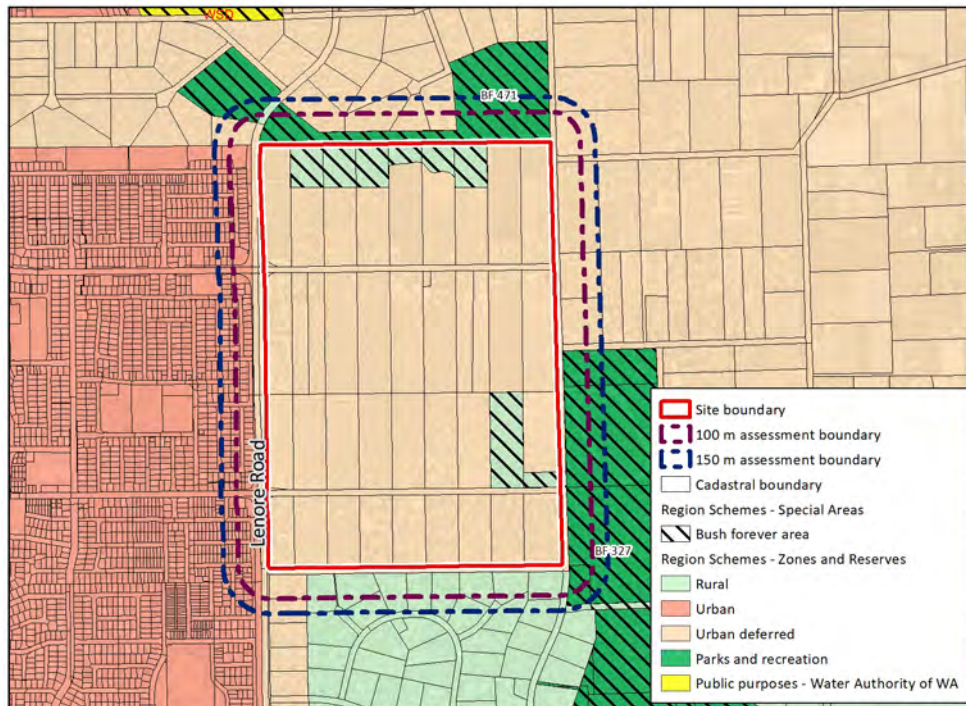


Plate 2: Metropolitan Region Scheme Zoning and Reserves, in and surrounding the site.

1.5 Description of land characteristics

Based on observed site conditions and a review of publicly available historical aerial photography, it has been determined that large portions of the site have been cleared or disturbed by activities associated with market gardens and rural residential development. It is noted that a number of lots consist of regrowth or remnant native vegetation with Bush Forever site 471 being present in the north and Bush Forever site 327 in the southeast of the site.

The general locality surrounding the site is characterised by urban fringe qualities, with existing land uses including:

- Bush Forever site 471 and rural residential development to the north;
- Market gardens, Nanovich Park (horse trotting and training facility) and Bush Forever site 327 to the east;
- The future Shenton Road reserve and rural residential development to the south; and
- Lenore Road and residential development to the west.

The existing rural residential areas to the north, south and east of the site are part of the EWDSP and proposed for future urban and residential development.

The topography of the site is characterised as generally flat with portions of the site including undulating terrain, resulting from natural sand dunes. The site generally falls from the southwest to the northeast with the highest point within the southwest at 85 m Australian Height Datum (m AHD). From this high point, the land slopes down in all directions, with the lowest point being at 50 m AHD in the northeast, as illustrated in **Figure 1**. As part of development, the topographic contours will be modified, as part of cut and fill requirements across the site.

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2 Environmental Considerations

In accordance with the *Bushfire Management Plan (BMP) Manual* (DPLH and WAPC 2024), this BMP has considered whether there are any environmental values that may require specific consideration through either protection, retention, or revegetation. To support this, a review of publicly available databases has been undertaken, with particular reference to the Shared Location Information Platform (SLIP) databases. A summary of the search results has been provided in **Table 1**.

Table 1: Summary of potential environmental considerations that may be associated with the site.

Key environmental feature (information in brackets refers to mapping data source)	Yes / no / potentially occurring within the site	If yes / potentially, describe the value that may be impacted
Conservation category wetlands and buffer (Geomorphic wetlands, Swan Coastal Plain (DBCA-019))	No	No conservation category wetlands (CCWs) or other geomorphic wetlands intersect the site.
RAMSAR wetlands (DBCA-010)	No	No RAMSAR wetlands are mapped as occurring within the site or in close proximity.
Threatened and priority flora (DBCA-036)	Yes	Existing remnant vegetation within the site varies in condition and could contain threatened and priority flora. Separate investigations are being progressed to understand the values associated with these areas and have informed the proposed areas for retention. Native vegetation within parkland reserve areas will be retained and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP. Areas proposed for retention are largely in accordance with the EWDSP.
Threatened and priority fauna (DBCA-037)	Yes	Existing remnant vegetation within the site varies in condition and will provide habitat for threatened and priority fauna species, including the federally and state protected black cockatoo species. Separate investigations are being progressed to understand the values associated with these areas and have informed the proposed areas for retention. Native vegetation within parkland reserve areas will be retained and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP. Areas proposed for retention are largely in accordance with the EWDSP.
Threatened ecological communities (DBCA-038)	Potentially	Investigations undertaken to support the EWDSP and this LSP indicate that areas of remnant native vegetation in the site contain the Banksia Woodlands of the Swan Coastal Plain threatened ecological community (TEC). Native vegetation within parkland reserve areas will be retained and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP. Areas proposed for retention are largely in accordance with the EWDSP.
Bush Forever areas (DPLH-019)	Yes	Two Bush Forever sites are present within the site and have been incorporated into the proposed parkland reserves. In the north of the site, Bush Forever site 471 is present, while site 327 is located in the southeast. Where these areas intersect with the site and remnant vegetation is present, they are proposed to remain vegetated and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP.

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Table 1: Summary of potential environmental considerations that may be associated with the site. (continued)

Key environmental feature (information in brackets refers to mapping data source)	Yes / no / potentially occurring within the site	If yes / potentially, describe the value that may be impacted
Clearing regulations – Environmentally sensitive areas (DWER-046)	Yes	Where remnant vegetation is present as part of Bush Forever sites 471 and 327, it has been designated as an environmentally sensitive area (ESA). Where these areas intersect with the site and remnant vegetation is present, they are proposed to remain vegetated and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP.
Swan Bioplan Regionally Significant Natural Areas 2010 (DWER-070)	No	Not applicable. No Regionally Significant Natural Areas are identified within the site or nearby.

2.1 Native vegetation – modification and clearing

The majority of the site is currently cleared of native vegetation (covered by market gardens and rural residential development); however, several remnant or regrowth patches of native vegetation are present within the site. Portions of the existing remnant or regrowth native vegetation are proposed to be retained in parkland reserve areas in an unmanaged state. These are identified within the LSP (**Appendix A**). It is noted that the clearing proposed as part of this LSP are following the expectations established under the EWDSP.

The retention of native vegetation in parkland reserves aligns with considerations detailed in the EWDSP as well as the proponent's aim to maximise vegetation retention within the LSP area due to the environmental and amenity benefits. Opportunities for tree retention outside the proposed parkland reserves exist within POS, road reserves, and future lot areas. However, these opportunities may be limited by requirements associated with implementing residential subdivision, such as cut and fill needs. Ultimately this will be considered during detailed design, with all landscaping (including vegetation retention) outside of the parkland reserves to be maintained (e.g., grass mown/slashed) to a low-threat standard in accordance with Section 2.2.3.2 of AS 3959. On this basis, the exact vegetation and/or trees selected for retention outside the proposed parkland reserves will be confirmed through future detailed landscape design processes.

Where clearing of native vegetation is undertaken in accordance with a subdivision approval under the *Planning and Development Act 2005*, it is exempt from requiring a clearing permit under Schedule 6 of the *Environmental Protection Act 1986* (EP Act). Additionally, a clearing permit will not be required where other exemptions pursuant to the EP Act or Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (where outside an ESA) exist, such as those associated with Section 33 of the *Bush Fires Act 1954* or a building licence, respectively.

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Vegetation to the south of the site within the future Shenton Road reserve has been assumed to be cleared and/or managed once future subdivision commences to allow for its construction in line with the expectations of the EWDSP. Although the exact timing has not been confirmed, it is assumed that by the time of subdivision, the road will have been constructed. If this has not occurred by the time of subdivision, a revised BAL assessment should be prepared to identify the bushfire hazard. All other vegetation outside the site has been assessed in its assumed mature state, post-development of the site.

2.2 Revegetation and landscape plans

It is possible that revegetation will occur but will be limited to the parkland reserve areas which are assumed to retain existing vegetation, and revegetation would not change the vegetation classification from a bushfire perspective.

POS areas within the site are intended to be utilised for recreation and drainage purposes. The detailed design of POS areas will be determined in collaboration with the City of Wanneroo as part of the standard development process and based on achieving the requirements of Liveable Neighbourhoods and community expectations for urban areas.

All POS areas will be designed to achieve low threat in accordance with Section 2.2.3.2 of AS 3959. Ongoing management is likely to include:

- Irrigation of grass and garden beds (where required).
- Regular removal of weeds and built-up dead material (such as fallen branches, leaf litter etc.)
- Low pruning of trees (branches below 2 m in height removed where appropriate).
- Application of ground/surface covers such as mulch or non-flammable materials as required.
- Regular mowing/slashing of grass to less than 100 mm in height.

The proponent will be responsible for the initial maintenance of the POS areas within the site and, following handover, the City of Wanneroo will be responsible for the ongoing long-term maintenance.

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3 Bushfire Assessment Results

Bushfire risk for the site has been appropriately considered with regard to the potential impact upon the site using AS 3959 and the Guidelines.

The objective of AS 3959 is to reduce the risk of ignition and loss of a building to bushfire. It provides a consistent method for determining a radiant heat level (radiant heat flux) as a primary consideration of bushfire attack. AS 3959 measures the BAL as the radiant heat level (kW/m^2) over a distance of 100 m. AS 3959 also prescribes deemed-to-satisfy construction responses that can resist the determined radiant heat level at a given distance from the fire. It is based on six BAL ratings: BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ.

A BAL contour plan has been prepared in accordance with Appendix A.3 of the Guidelines and Method 1 of AS 3959 to determine the BAL ratings likely to be applicable to future buildings. This has been based on the vegetation classifications and the effective slope under the vegetation (post-development scenario).

3.1 Assessment inputs

Vegetation classifications and effective slope have been detailed in **Table 2** and **Figure 2** (post-development) and a site assessment was completed on 21 January 2025.

3.1.1 Inputs and assumptions

The BAL assessment is based on the following inputs and assumptions:

- **Designated Fire Danger Index (FDI):** 80
- **Flame temperature:** 1090 K
- **Effective slope beneath classified vegetation:** flat/upslope, downslope 0-5 (see **Figure 2**)
- The site will be developed and managed to be largely clear of vegetation and excluded as non-vegetated in accordance with 2.2.3.2 (e) of AS 3959, or where landscaping (road verges, future residential gardens, POS) is present, this will be implemented and managed to achieve low threat in accordance with 2.2.3.2 (f) (unless otherwise stated).
- Areas designated for parkland reserve purposes have been assumed to retain existing native vegetation and remain unmanaged. These areas are assumed to maintain a forest classification.
- Areas of low threat vegetation outside the site will continue to be managed and/or considered to achieve low threat (in accordance with Section 2.2.3.2 of AS 3959) based on the completion of the subdivision process and/or the existing maintenance regimes.
- Classified vegetation in the Shenton Road reserve that directly interfaces with the proposed lots is assumed to be modified to a low threat or non-vegetated state at subdivision to align with the expectations set by the EWDSP
- Classified vegetation that has been identified outside of the proponent's landholdings has been assumed to remain in its current state (unless stated otherwise) and will therefore continue to be a bushfire hazard to development within the site.
- Areas of grassland can include up to 10% foliage cover from shrubs and trees, as per AS 3959.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



3.1.2 Vegetation classification

All vegetation within 150 m of the site was classified in accordance with Section 2.2.3 of AS 3959. The assignment of vegetation classifications is based on an assessment of vegetation structure, including consideration of the various fuel layers of different vegetation types, as outlined in **Plate 3**. Each distinguishable vegetation plot is described in **Table 2** and shown in **Figure 2**.

Not all vegetation is classified as a bushfire risk. Vegetation and ground surfaces that are exempt from classification as a potential hazard are identified as a low threat under Section 2.2.3.2 of AS 3959. Low threat vegetation includes the following:

- 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.*
- 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.*
- 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.*
- 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 wind breaks.*



Plate 3: The five fuel layers in a forest environment that could be associated with fire behaviour (Gould et al. 2007)

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Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)

Photo ID:	1	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south east of the site, on the eastern side of Benmuni Road associated with Bush Forever site 327. The area comprises tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 327 it has been assumed to remain unmanaged in the long term.			
Photo ID:	2	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site in private lots on the southern side of the unconstructed Shenton Road reserve. The area comprises tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is within external landholdings not subject to the proposed LSP and as such has been assumed to remain unmanaged in the long term.			
Photo ID:	3	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south (east portion) of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 - 15 m) with greater than 30% foliage cover over shrubs and grasses. Vegetation within the road alignment will be cleared for the construction of the road. Outside the road reserve, the vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long term.			

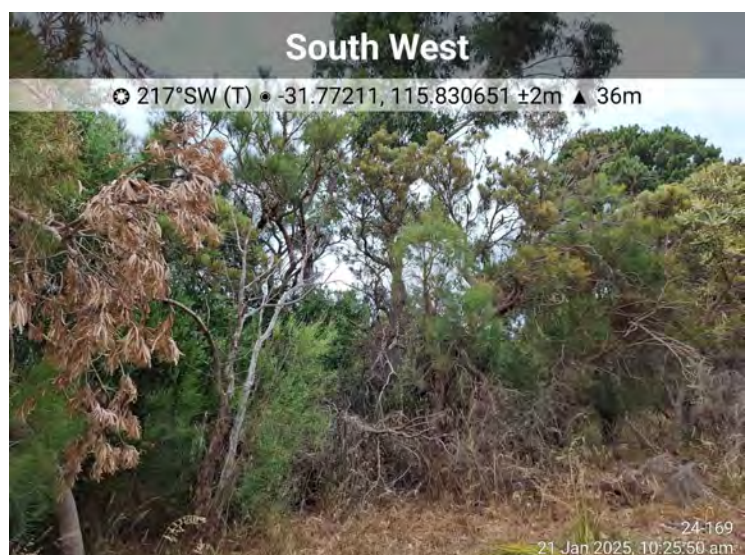


Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3

Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	4	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 - 15 m) with greater than 30% foliage cover over shrubs and grasses. Vegetation within the road alignment will be cleared for construction of the road and will not pose a threat long-term. Outside the road reserve, the vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long-term.			
Photo ID:	5	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 - 15 m) with greater than 30% foliage cover over shrubs and grasses. The vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long term.			
Photo ID:	6	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 -15 m) with greater than 30% foliage cover over shrubs and grasses. Vegetation within the road alignment will be cleared for construction of the road and will not pose a threat long-term. Outside the road reserve, the vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long-term.			

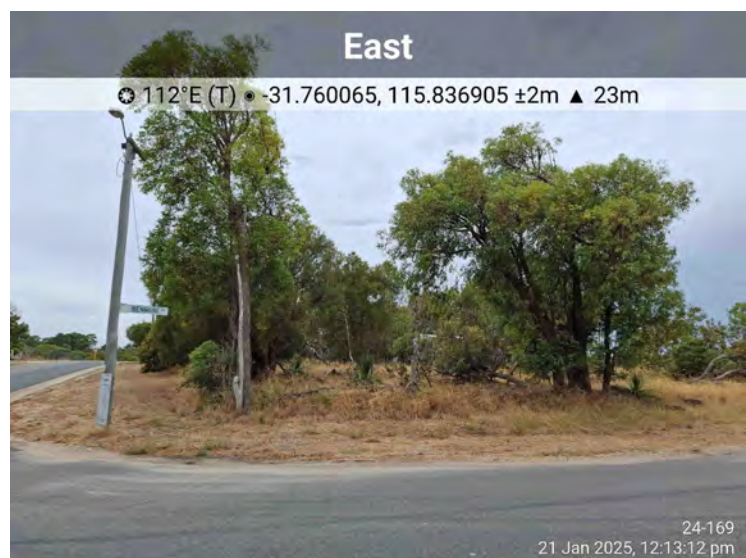


Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3

Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	7	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the east (central portion) of the site, on the eastern side of Benmuni Road associated northern portions of Nanovich Park. The area comprises tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is external to the site and as the timing for development in the area associated with the EWDSP is unknown, it has been assumed to remain unmanaged in the long term.			
Photo ID:	8	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the east (north portion) of the site, on the eastern side of Benmuni Road associated with an unmanaged portion of an external private landholding. The area comprises tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is external to the site and as the timing for development in the area associated with the EWDSP is unknown, it has been assumed to remain unmanaged in the long term.			
Photo ID:	9	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the north of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 471, it has been assumed to remain unmanaged in the long term.			



Bushfire Management Plan

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Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	10	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the north of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 471, it has been assumed to remain unmanaged in the long term.			
Photo ID:	11	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the north of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 471, it has been assumed to remain unmanaged in the long term.			
Photo ID:	12	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the north (west portion) of the site. The area is comprised largely of trees less than 6 m in height with a number of tall mature trees 10 – 20 m in height. Left unmanaged the area is assumed to experience regrowth inline with the surrounding forested areas and as such at maturity is expected to consist of large trees 10-15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses.			

North West

☉ 330°NW (T) • -31.759368, 115.834333 ±2m ▲ 29m



24-169
21 Jan 2025, 11:30:20 am

North

☉ 354°N (T) • -31.759299, 115.828971 ±2m ▲ 34m



24-169
21 Jan 2025, 11:40:46 am

North East

☉ 39°NE (T) • -31.759432, 115.826868 ±2m ▲ 40m



24-169
21 Jan 2025, 11:45:28 am

Bushfire Management Plan

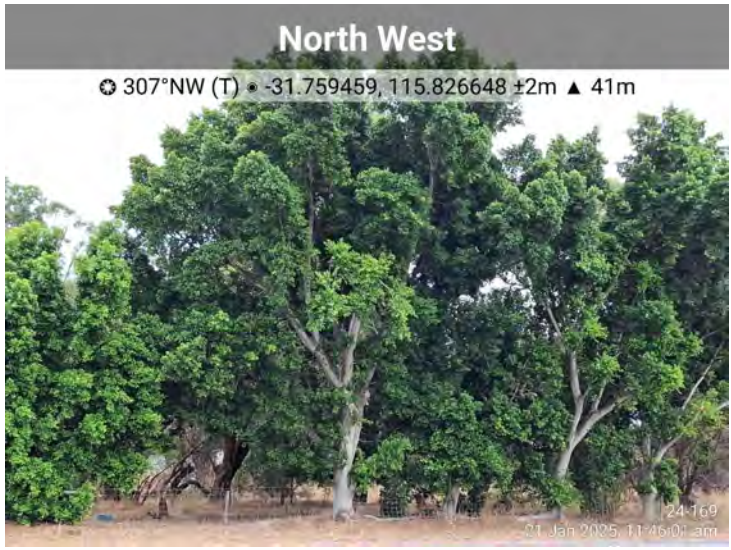
Local Structure Plan - East Wanneroo Precinct 3

Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	13	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the northwest of the site, on the western side of Lenore Road associated with an unmanaged portion of an external private landholding. The area is comprised of tall mature trees 15 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is external to the site and has been assumed to remain unmanaged in the long term.			
Photo ID:	14	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the south east portion of the site associated with Bush Forever site 327. The area is comprised of tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP within parkland reserve areas and has been assumed to remain unmanaged in the long term.			
Photo ID:	15	Plot:	1 & 2
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope) (plot 1) Class A - Forest (downslope 0-5) (plot 2)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the central portion of the site associated with a future parkland reserve area. The area is comprised of mature trees 6 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP and has been assumed to remain unmanaged in the long term.			

North West

☉ 307°NW (T) • -31.759459, 115.826648 ±2m ▲ 41m



24-169
21 Jan 2025, 11:46:01 am

North

☉ 7°N (T) • -31.769815, 115.835203 ±2m ▲ 32m



24-169
21 Jan 2025, 10:49:08 am

South East

☉ 149°SE (T) • -31.763914, 115.828916 ±2m ▲ 33m



24-169
21 Jan 2025, 11:55:10 am

Bushfire Management Plan

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Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	16	Plot:	1 & 2
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope) (plot 1) Class A - Forest (downslope 0-5) (plot 2)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the northern portion of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP within parkland reserve areas and has been assumed to remain unmanaged in the long term.			
Photo ID:	17	Plot:	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the northern portion of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP within parkland reserve areas and has been assumed to remain unmanaged in the long term.			
Photo ID:	18	Plot:	3 & 4
Vegetation classification or exclusion clause (and effective slope)			
Class B - Woodland (Flat/upslope) (plot 3) Class G - Grassland (Flat/upslope) (plot 4)			
Description / Justification for Classification			
Woodland (Class B) (plot 3) and Grassland (Class G) (plot 4) vegetation have been identified to the east of the site within Nanovich Park. Plot 3 is comprised of trees 6-12 m in height with foliage coverage between 10 and 30% over an understorey of grasses. In the background Plot 4 is comprised of unmanaged grasses with no trees. This vegetation will be subject to development in accordance with the EWDSP, however, timing is unknown and therefore is assumed to remain unmanaged.			

South East

☉ 160°SE (T) • -31.759392, 115.829428 ±2m ▲ 29m



24-169
21 Jan 2025, 11:39:50 am

South

☉ 199°S (T) • -31.759433, 115.834383 ±2m ▲ 29m



24-169
21 Jan 2025, 11:30:09 am

West

☉ 299°W (T) • -31.767732, 115.837081 ±2m ▲ 29m



24-169
21 Jan 2025, 11:05:22 am

Bushfire Management Plan

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Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	19	Plot:	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified to the east of the site associated with Benmuni Road. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted planted or managed grass (low-threat) verges are present but for ease of reference have been shown as non-vegetated.			
Photo ID:	20	Plot:	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified to the southwest of the site associated with Lenore Road and residential subdivision. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted verges are present within the existing subdivision area but for ease of reference have been shown as non-vegetated.			
Photo ID:	21	Plot:	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified to the west of the site associated with Lenore Road and residential subdivision. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted verges are present within the existing subdivision area but for ease of reference have been shown as non-vegetated.			

North

☉ 2°N (T) • -31.772455, 115.837224 ±2m ▲ 29m



24-169
21 Jan 2025, 9:51:03 am

South

☉ 195°S (T) • -31.772244, 115.826832 ±7m ▲ 54m



24-169
21 Jan 2025, 10:32:24 am

West

☉ 279°W (T) • -31.770161, 115.826744 ±4m ▲ 60m



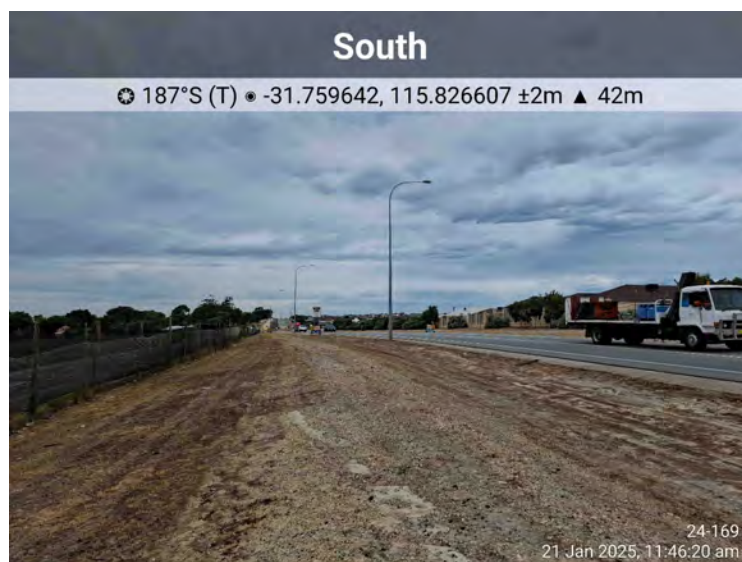
24-169
21 Jan 2025, 10:36:47 am

Bushfire Management Plan

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Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)

Photo ID:	22	Plot:	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified along the east of the site associated with Benmuni Road. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted or managed grass (low-threat) verges are present but for ease of reference have been shown as non-vegetated.			
Photo ID:	23	Plot:	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified along the west of the site associated with Lenore Road and residential subdivision. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted (low threat) or managed grass verges are present within the existing subdivision area but for ease of reference have been shown as non-vegetated.			
Photo ID:	24	Plot:	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified along the north of the site associated with established firebreaks. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, however It is noted that the firebreak also contains portions of slashed (and well managed) grasses however for ease of reference have been shown as non-vegetated.			



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3.2 Assessment outputs

The vegetation classifications determined in **Section 3.1** are summarised in **Table 3** and shown in **Figure 2** and incorporate the known changes to vegetation post-development within the site and the determined effective slope.

Table 3: AS 3959 vegetation classification and effective slope applicable to the site

Plot	Applied vegetation classification	Effective slope
1	Class A – Forest	Flat/upslope
2	Class A – Forest	Downslope 0 - 5
3	Class B – Woodland	Flat/upslope
4	Class G – Grassland	Flat/upslope
5	Exclusion 2.2.3.2(e)	Not applicable
6	Exclusion 2.2.3.2(f)	Not applicable

The resultant BAL ratings for the site are shown in **Figure 3**. The BAL ratings are based on the minimum distances outlined in Table 2.5 of AS 3959 for the applicable vegetation classifications and effective slope. The relevant setback distances for the BAL ratings from AS 3959 have been summarised for ease of reference in **Table 4**.

As outlined in **Section 1.5**, topography across the site varies and means that the effective slope applicable to future buildings will be dependent upon its location and staging of development when compared to retained vegetation. For this BMP the internal threats have been split to reflect the effective slope applicable to development in each direction, however it is anticipated that at more detailed subdivision phases, the effective slope assumptions will vary (e.g. more lots are likely to be subject to lesser slopes, or no downslope). The effective slope assumptions are therefore considered to be a conservative assessment.

The BAL assessment indicates that the majority of the site will be subject to BAL-LOW, except for areas within 50 m or 100 m of the external boundaries of the site or proposed parkland reserves. Where road interfaces do not meet the required setback to achieve BAL-29, the development cells will include BAL-40 incursions. These incursions, at most, would be 9 m. The provision of developable areas for habitable buildings can be addressed by appropriately orienting lots at the subdivision stage, and where required the minimum setbacks can be managed through in-lot setbacks (in addition to the road reserve) to ensure habitable buildings are located in BAL-29 or less.

In order to assist with the future design process, the minimum setback distances anticipated to be required to achieve a bushfire attack level (BAL) rating of BAL-29 have been provided in **Table 4**, to provide an understanding of the portion of future lots that may be subject to modification (e.g. an asset protection zone) and assist with the siting of habitable buildings (as part of subdivision).

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Table 4: Setback distances based on vegetation classification and effective slope and Table 2.5 of AS 3959, as determined by the method 1 BAL assessment.

Plot number (see Figure 2)	Vegetation classification (see Figure 2)	Effective slope (see Figure 2)	Distance to vegetation (from Table 2.5 of AS 3959)	BAL rating
Plot 1	Forest (Class A)	Flat/upslope	< 16 m	BAL-FZ
			16 - < 21 m	BAL-40
			21 - < 31 m	BAL-29
			31 - < 42 m	BAL-19
			42 - < 100 m	BAL-12.5
			> 100 m	BAL-LOW
Plot 2	Forest (Class A)	Downslope 0 - 5	< 20 m	BAL-FZ
			20 - < 27 m	BAL-40
			27 - < 37 m	BAL-29
			37 - < 50 m	BAL-19
			50 - < 100 m	BAL-12.5
			> 100 m	BAL-LOW
Plot 3	Woodland (Class B)	Flat/upslope	< 10 m	BAL-FZ
			10 - < 14 m	BAL-40
			14 - < 20 m	BAL-29
			20 - < 29 m	BAL-19
			29 - < 100 m	BAL-12.5
			> 100 m	BAL-LOW
Plot 4	Grassland (Class G)	Flat/upslope	< 6 m	BAL-FZ
			6 - < 8 m	BAL-40
			8 - < 12 m	BAL-29
			12 - < 17 m	BAL-19
			17 - < 50 m	BAL-12.5
			> 50 m	BAL-LOW

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4 Identification of Bushfire Hazard Issues

From a bushfire hazard management perspective, based on the requirements of SPP 3.7 and the Guidelines, the key issues that are likely to require management and/or consideration as part of future development within the site, particularly the creation of lots and subsequent construction of new habitable buildings, include:

- Provision of appropriate separation distance from bushfire hazards to ensure a BAL rating of BAL-29 or less can be achieved at buildings (built form) within subdivided lots. At structure planning, development cells should have sufficient area to accommodate future lots that can support areas subject to BAL-29.
- Ensuring that site access is designed, constructed and managed to enable safe access and egress for fire fighting vehicles and occupants. At the subdivision stage, staging of development will be a key consideration.
- Ensuring that site landscaping for POS areas is designed, implemented and managed to achieve low threat standards to reduce the risk of fires starting onsite were assumed to be low threat. Parkland reserves are assumed to remain in their existing condition (forest) and are not subject to management, apart from maintaining existing firebreaks.
- Ensuring that the provision of water for firefighting is sufficient and accessible by firefighting services.

4.1 Permanent hazards

The site is located adjacent to areas of classified vegetation to the north, east, south and northwest and is associated with various landholdings not under the control of the proponent, where timing for residential development in accordance with the EWDSP is unknown. In addition, parkland reserve areas within the site are designated for vegetation retention/ revegetation as part of implementing the proposed LSP and are therefore assumed to remain in the long term. Classified vegetation that will be applicable to the site on an ongoing basis includes:

- **Forest (Class A) vegetation** which has been identified to the north, east, and south external to the site within the broader EWDSP area and outside the Bush Forever sites is proposed for future redevelopment. This type of vegetation is also found internally to the site in areas proposed for future parkland reserves.
- **Woodland (Class B) vegetation** is present to the east within Nanovich Park, adjacent to the park's interface with Benmuni Road. This area is also within the broader EWDSP area and proposed for future redevelopment.
- **Grassland (Class G) vegetation** is identified to the east within Nanovich Park and an external privately owned landholding. These areas are also within the broader EWDSP area and are proposed for future redevelopment.

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4.2 Temporary hazards

Areas to the east or south of the site (where not identified as Bush Forever sites) may be considered temporary hazards that will be modified as development progresses in line with the EWDSP, however as the timing and exact design of these areas has not been confirmed they have been assumed to remain in their existing condition in the long term.

Notwithstanding the above, this BMP has been prepared under the assumption that the future Shenton Road Reserve area to the south will be developed prior to subdivision commencing within the southern portions of the site. If, at the time of subdivision, this road is not or will not be delivered, a revised approach to development in this area will be required. This will need to consider increased bushfire threat from the south (re-siting of lots away from BAL-FZ or BAL-40) and the implementation of additional perimeter roads and/or EAWs to satisfy access requirements. This can be addressed at subdivision.

It is also noted that, as part of the staged development to implement the LSP, temporary hazards are likely to be present within the site. These hazards are largely associated with remnant/regrowth vegetation that has not been identified for retention within parkland reserves. To ensure the findings of this BMP remain relevant where a staged approach to subdivision is implemented, a suitable width area (up to 27 m to achieve BAL-29 for forest vegetation with an effective slope of downslope 0-5, and up to 100 m for BAL-LOW) can be managed around each development stage within the proponent's landholding as long as the vegetation is not proposed for retention. These hazards and their management will be addressed in future, more detailed stages of the planning process, such as subdivision.

4.3 Vulnerable land use

The definition of vulnerable land use as outlined in SPP 3.7 is a land use which *“is designed to accommodate people who are less physically or mentally able and likely to present evacuation challenges; and/or due to the building design or use, or the number of people accommodated, likely to present evacuation challenges; and or involves visitors who are unfamiliar with the surroundings”* (WAPC 2024b). This generally includes (but is not limited to) schools, hospitals, aged care facilities and similar.

A future primary school site is identified as part of the proposed LSP, within the central portion of the site, adjacent to the southern-most parkland reserve. The primary school site has been designed to ensure a suitable developable area is provided (greater than 5 ha) to locate habitable structures outside of BAL-FZ or BAL-40 areas, away from any significant future bushfire threats. It is noted that over half of the primary school site will be situated on land designated as BAL-LOW. The school is surrounded by a suitable road network providing access to multiple destinations, and therefore the LSP provides a framework to enable bushfire risk to be suitably managed at more detailed stages of design and development. The school will be subject to separate development applications that will address bushfire risk in detail.

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5 Assessment Against the Bushfire Protection Criteria

5.1 Bushfire protection criteria

The bushfire protection criteria provided in the Guidelines represent the risk treatments applicable to achieving the intent and the objectives listed in SPP 3.7. The bushfire protection criteria vary depending upon the stage of the planning process and development type and are divided into four subsystems (elements). Each subsystem is provided with an outcome, or an acceptable solution method (predetermined solution). Compliance with each subsystem (as a risk treatment) is required to demonstrate to the decision maker that the risk is within acceptance.

The bushfire protection criteria identified in the Guidelines and addressed as part of this BMP are:

- Element 1: Location
- Element 2: Siting and design
- Element 3: Vehicular access
- Element 4: Water supply

*Bushfire Protection Criteria 5 (BCP 5): Structure plans and subdivision applications have been considered for the proposed LSP. The assessment demonstrates that the LSP and future development phases can achieve the objectives of SPP 3.7 and the acceptable solutions in BCP 5; as identified in **Table 5**.*

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications

Bushfire protection criteria 5		Proposed bushfire management strategies																						
Element 1: Location																								
A1.1a Broader Landscape Type		A landscape assessment, in accordance with Appendix A of the Guidelines, has been undertaken for the site and is outlined in Table A1.1 below. This assessment shows the site is a Broader Landscape Type A and therefore satisfies BCP 5 A1.1a. The site directly abuts a current local distributor road (Lenore Road), offering direct access to the surrounding road network which can disburse people to the north, south and west, as shown in Figure 4. The extent of local distributors will increase as the EWDSP is implemented, with Elliot Road is the site proposed to be a local distributor. Access roads proposed within the site will provide a legible road network. The vegetation mapping presented in Figure 4 is based on the native vegetation mapping prepared by DPIRD. Table A1.1: Landscape assessment in accordance with Appendix A Table 3 of the Guidelines <table><tr><th>Criteria</th><th>Assessment</th><th>Points</th></tr><tr><td><i>Proximity of the planning proposal to a suitable destination</i></td><td>1-10km. By road, the subdivision directly to the east is within 1 km.</td><td>1</td></tr><tr><td><i>The road pattern from the planning proposal to a suitable destination</i></td><td>Simple and/or direct, as shown in Figure 4.</td><td>1</td></tr><tr><td><i>The predominant vegetation pattern</i></td><td>A mosaic pattern of vegetation, is shown in Figure 4. This is based on current conditions, noting development in accordance with the EWDSP will result in existing vegetation being modified and reduced in some areas.</td><td>2</td></tr><tr><td><i>Exposure of the planning proposal to an identified external bushfire hazard (excluding grassland)</i></td><td>One aspect (northeast) has a minor vegetation corridor (broken connection) that abuts the site and extends up to 2km in patches</td><td>1</td></tr><tr><td colspan="2">Total points</td><td>5</td></tr><tr><td colspan="2">Landscape type</td><td>A</td></tr></table> The proposal complies with A1.1a.		Criteria	Assessment	Points	<i>Proximity of the planning proposal to a suitable destination</i>	1-10km. By road, the subdivision directly to the east is within 1 km.	1	<i>The road pattern from the planning proposal to a suitable destination</i>	Simple and/or direct, as shown in Figure 4 .	1	<i>The predominant vegetation pattern</i>	A mosaic pattern of vegetation, is shown in Figure 4 . This is based on current conditions, noting development in accordance with the EWDSP will result in existing vegetation being modified and reduced in some areas.	2	<i>Exposure of the planning proposal to an identified external bushfire hazard (excluding grassland)</i>	One aspect (northeast) has a minor vegetation corridor (broken connection) that abuts the site and extends up to 2km in patches	1	Total points		5	Landscape type		A
Criteria	Assessment	Points																						
<i>Proximity of the planning proposal to a suitable destination</i>	1-10km. By road, the subdivision directly to the east is within 1 km.	1																						
<i>The road pattern from the planning proposal to a suitable destination</i>	Simple and/or direct, as shown in Figure 4 .	1																						
<i>The predominant vegetation pattern</i>	A mosaic pattern of vegetation, is shown in Figure 4 . This is based on current conditions, noting development in accordance with the EWDSP will result in existing vegetation being modified and reduced in some areas.	2																						
<i>Exposure of the planning proposal to an identified external bushfire hazard (excluding grassland)</i>	One aspect (northeast) has a minor vegetation corridor (broken connection) that abuts the site and extends up to 2km in patches	1																						
Total points		5																						
Landscape type		A																						
Element 2: Siting and design																								
A2.1 Siting and design		All proposed development cells intended to support habitable buildings can accommodate lots that provide sufficient separation from classified vegetation to achieve developable areas of BAL-29 or below. The LSP ensures separation from permanent bushfire hazards (forest vegetation) through the strategic placement of public roads and managed POS areas (as shown in Figure 5). Additionally, development cells are of sufficient size to accommodate appropriately orientated lots at subdivision, allowing for in-lot setbacks sufficient to achieve BAL-29 where BAL-40 incursions occur (even with a road interface). Overall, the development cells within the site are suitably sized, in combination with the public road network, to meet the minimum separation distances outlined in Table 4 and shown in Figure 3. The proposal can comply with A2.1.																						

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications (continued)

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 2: Siting and design (continued)	
A2.2 Asset Protection Zone (APZ)	Development cells have been suitably sized to accommodate lots large enough to provide for minimum separation distances to achieve BAL-29 or below. Future lots will be required to be managed to a low threat standard in accordance with Section 2.2.3.2(e) or (f) with a minimum Asset Protection Zone (APZ) equivalent to enable BAL-29 to be achieved at future habitable buildings. APZs are typically contained within a lot, but can also include areas of low threat vegetation managed in accordance with Section 2.2.3.2 of AS 3959. For the site, this includes managed road reserves, firebreaks and areas of POS. The proposal can comply with A2.2.
A2.3 Clearing of native vegetation	The majority of the site is currently cleared, with several remnant or regrowth patches of native vegetation present within the site. The proponent aims to maximise vegetation retention within the LSP area as part of addressing the requirements of the EWDSP and to protect environmental and amenity values. Large patches of remnant and regrowth vegetation have been proposed for retention within future parkland reserves, with no modification assumed for these areas as part of this BMP. Existing firebreaks will be maintained. Opportunities for vegetation and/or tree retention outside the proposed parkland reserves exist within POS, road reserves, and future lot areas. However, these opportunities may be limited by requirements associated with implementing residential subdivision, such as cut and fill needs. Ultimately this will be considered during detailed design, with all landscaping (including vegetation retention) outside of the parkland reserves to be maintained (e.g., grass mown/slashed) to a low-threat standard in accordance with Section 2.2.3.2 of AS 3959. On this basis, the retention of trees outside of the parkland reserves would not change the assumptions within this BMP. Ultimately, it is anticipated that as part of the future subdivision process, more detailed landscape design and identification of vegetation for retention will occur, however, would not significantly change the assumptions for bushfire risks detailed in this BMP. The proposal complies with A2.3.
Element 3: Vehicular access	
A3.1 Public roads	The existing public roads surrounding the site as well as the proposed public roads can satisfy the requirements of Appendix B.3 and Table 10 of the Guidelines (an excerpt is provided in Plate 4 below). The requirements of Appendix B.3 Table 10 of the Guidelines will be referenced to inform subdivision and implementation. The proposal complies with A3.2.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications (continued)

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 3: Vehicular access (continued)	
A3.2 Access routes	The LSP provides for an interconnected road network (see Figure 5) with multiple access and egress points to the existing public road network via Elliot Road and Nicholas Road within the site, Benmuni Road to the east and Lenore Road to the west, offering access in different directions. There is also provision for connections to the future Shenton Road alignment to the south of the site, which has been assumed to be constructed between the site and the rural residential development further south as part of the subdivision implementation inline with the expectations of the EWDSP. If, at the time of subdivision, Shenton Road is not or will not be delivered, a revised approach to development in this area will be required. This will need to consider the implementation of additional perimeter roads and/or EAWs to satisfy access requirements. This can be addressed at subdivision. The public road access outlined in the LSP can satisfy the acceptable solution. The proposal can comply with A3.2.
A3.3a No-through roads	Through road access is provided for the majority of the site via an internal interconnected road network, which connects at several points to Benmuni Road to the east, Lenore Road to the west, and the future Shenton Road alignment to the south. A no-through road will be present within the northwest corner of the site; however, this is a loop road, and no lot would be more than 200 m from a road connection that provides access in multiple directions. The public road network outlined in the LSP can satisfy the acceptable solution. As identified above, if at the time of subdivision, Shenton Road is not or will not be delivered, a revised approach to development in this area will be required. This will need to consider the implementation of additional perimeter roads and/or EAWs to satisfy access requirements. This can be addressed at subdivision. As future development within the site may be staged, consideration is to be given to ensure that all occupiers and visitors have at least two vehicular access routes during all phases of development and/or no through roads meet the requirements of the Guidelines. Therefore, as subdivisions are implemented, temporary no-through roads with suitable turnaround areas and temporary emergency access ways may be required to meet access requirements at all stages of development. The proposal complies with A3.3a.
A3.3b No-through road requirements	As outlined above, upon completion, the proposed road network will have one no-through road located in the northwest of the site. This no-through road has been designed to loop back on itself, so it does not require a turn-around area and can meet the minimum technical standards for a public road as detailed in Table 10, Column 2 of Appendix B.3 of the Guidelines (Plate 4). Additionally, as already outlined, it is noted that future development within the site may be staged, and temporary access arrangements regarding no-through roads may be applicable. Where relevant, temporary no-through roads should not exceed 200 m in length and be developed in accordance with A3.3b, meeting the minimum technical standards for a public road as detailed in Table 10, Column 2 of Appendix B.3 of the Guidelines (Plate 4), and the turn-around area/head standards outlined in Figure 30 of the Guidelines. Where the road length is exceeded, temporary emergency access ways may be required and should also comply with Table 10, Column 2 of Appendix B.3 of the Guidelines (Plate 4). The proposal complies with A3.3b.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications (continued)

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 3: Access (continued)	
A3.4 Emergency access way	Not applicable given the proposal is compliant with A3.2 and A3.3. As already identified, as part of staged development, temporary emergency access ways may be required to ensure access to two different destinations. Emergency access ways should comply with the requirements of Appendix B.3 Table 10 column 3 of the Guidelines (Plate 4 below) or as agreed with the local government.
A3.5a Perimeter roads	A perimeter road is provided for all residential and commercial development areas where they abut identified or proposed forest, woodland or grassland vegetation. The primary school is provided with a POS interface where directly abutting a small or portion of a parkland reserve with forest vegetation. The proposal can comply with A3.5a.
A3.5b Fire service access route	No fire service access route is proposed or required to achieve compliance as the proposal complies with A3.5a based on implementing the subdivision. Therefore A3.5b is not applicable.
A3.6 Battle-axe access legs	No battle-axe legs are proposed and therefore A3.6 is not applicable.
Element 4: Water	
A4.1 Water supply for structure plans	The LSP will be serviced by a reticulated water supply, which is already available within the site bounds which will be extended as part of future development. The proposal complies with A4.1.
A4.2 Water supply for subdivision applications	A4.2 is not applicable to the structure planning stage.
A4.3 Water supply for existing habitable building(s)	Not applicable to the site. There are no existing habitable buildings proposed for retention within the site.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3

Table 10: Vehicular access technical requirements

	1		2		3		4		5	
TECHNICAL REQUIREMENTS	PERIMETER ROADS		PUBLIC ROADS		EMERGENCY ACCESS WAY ²		FIRE SERVICE ACCESS ROUTE ³		BATTLE-AXE & PRIVATE DRIVEWAYS ¹	
MAP OF BUSH FIRE PRONE AREAS DESIGNATION	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1
Minimum horizontal clearance (metres)	12	8	See note 5		10	6	10	6	6	
Minimum vertical clearance (metres)	4.5									
Minimum weight capacity (tonnes)	1.5									
Maximum grade unsealed road ^{2,4}	See note 5		See note 5		1:10 (10% or 6°)					
Maximum grade sealed road ^{2,4}					1:7 (14.3% or 8°)					
Maximum average grade sealed road					1:10 (10% or 6°)					
Minimum inner radius of road curves (metres)					8.5					

Notes:

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

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

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

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

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

Plate 4: Excerpt of Table 10 from Appendix B.3 of The Guidelines outlining vehicle access requirements

5.2 Additional management strategies

5.2.1 Future approval considerations

A BAL assessment has been prepared for the site to demonstrate that best practice management strategies can be adopted through future planning and implementation stages to ameliorate the bushfire hazards (i.e., habitable buildings can be located in areas of BAL-29 or less) that would otherwise impact upon its future development.

It is likely a BMP, or as a minimum a bushfire statement, will be required to support future subdivision for the site, to detail how the proposed development layout has or will address the bushfire protection criteria based on the recommendations outlined within this BMP, as well as to determine the likely BAL ratings applicable to the future lots based on hazards applicable to that stage of development.

Where proposed to be constructed and within a designated bushfire prone area, future Class 1, 2, 3 and 10a buildings in an area subject to a BAL rating of BAL-12.5 or higher will need to satisfy higher construction standards in accordance with the National Construction Code (NCC).

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



5.2.2 Vegetation management

5.2.2.1 Within the site

All residential and local centre lots, once created, are required to be managed by the relevant landowner to a minimal fuel condition and achieve low threat as per Section 2.2.3.2 of AS 3959, in accordance with this BMP and the City of Wanneroo Firebreak Notice (as published).

Road reserves and areas of POS will be managed to achieve low threat in accordance with Section 2.2.3.2 of AS 3959 (and described in **Section 2.2** of this BMP) and will be the responsibility of the proponent initially, and following handover, will be the responsibility of the City of Wanneroo. Nature strips can be excluded as low threat and do not require specific management.

Parkland reserves are assumed to not be subject to ongoing management for bushfire purposes, except for the ongoing maintenance of existing firebreaks.

5.2.2.2 Surrounding the site

Where indicated as low threat in **Figure 2**, it is assumed that areas surrounding the site will be managed by the applicable landowners/land managers in accordance with existing maintenance regimes and where relevant the City of Wanneroo Firebreak Notice (as published). This assumption also applies to the categorisation of the adjacent road reserves.

Where indicated as classified vegetation in **Figure 2**, areas have been assumed to remain a bushfire hazard in the long-term.

5.2.3 City of Wanneroo Firebreaks Notice

The City of Wanneroo releases a Firebreaks Notice on an annual basis to provide a framework for bushfire management within the City. The City of Wanneroo is able to enforce this notice in accordance with Section 33 of the *Bush Fires Act 1954*. In addition, Section 33 1(b) also provides the City with additional power to direct landowners to undertake works to remedy conditions conducive to the outbreak or spread of bushfire.

Until subdivision is progressed within the site, the proponent will be required to comply with the Fire Control Notice, including the maintenance of a minimum 3 m-wide perimeter firebreaks (or as agreed with the City of Wanneroo).

All landowners of future lots will be required to comply with the Fire Control Notice as published, which for residential lots under 4000 m² is likely to include ensuring that the property is cleared of all flammable material, except for living standing trees, and ensuring that grass height is no longer than 50 mm. For all larger lots, inclusive of the parkland reserves, a 3 metre wide trafficable firebreak as close as possible to all external boundaries should be installed.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



5.2.4 Public education and preparedness

Community bushfire safety is a shared responsibility between individuals, the community, government, and fire agencies. DFES has an extensive Community Bushfire Education Program including a range of publications, a website, and Bushfire Ready Groups. The DFES website (<https://www.dfes.wa.gov.au/bushfire/prepare/>) provides a range of materials to help the community prepare for and survive the bushfire season.

The City of Wanneroo provides bushfire safety advice to residents available from their website https://www.wanneroo.wa.gov.au/homepage/61/fire_information, qualified consultants also offer bushfire safety advice and relevant services to residents and businesses in high-risk areas in addition to that provided in this BMP.

In the case of a bushfire in the area, advice would be provided to residents by DFES, Department of Biodiversity Conservation and Attractions (DBCA) and/or the City of Wanneroo on any specific recommendations with regard to responding to the bushfire, including evacuation if required.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



6 Responsibilities for Implementation and Management of Bushfire Measures

Table 6 outlines the future responsibilities of the proponent (developer) and the City of Wanneroo associated with implementing the proposed LSP with reference to future mitigation measures to be accommodated as part of subdivision.

Table 6: Responsibilities for the implementation of this BMP

Developer/landowner	
No.	Implementation and Management actions
1	Where applicable, as part of the subdivision should provide: • A suitable public road network that provides egress to at least two different destinations and meets the technical requirements of Appendix B.3 of the Guidelines (or as otherwise determined by a bushfire consultant and relevant approval authority). This includes the provision of perimeter roads, as identified in the LSP between residential and commercial lots and areas of retained vegetation. • Where possible, avoid no through roads and battle-axe lots as part of the spatial layout. If these are proposed as part of future development, these will need to be justified from a planning/development perspective and be consistent with the minimum requirements outlined in Appendix B.3 of the Guidelines (or as otherwise determined by a bushfire consultant and relevant approval authority). This includes the provision of suitable turn-around areas. • Ensure future habitable buildings are able to be located in an area subject to BAL-29 or less. The minimum separation distances between habitable buildings and classified vegetation to achieve BAL-29 should be in accordance with Table 4 in this BMP or as specified in subsequent BAL assessments. These separation distances can be accommodated by locating public roads between the habitable building/s and classified vegetation, and/or the use of and in lot setbacks. Where in lot setbacks are required, lots will need to be deep enough to accommodate the required setback and a habitable building in BAL-29 or less. • Provide a water supply dedicated to firefighting purposes in the form of a reticulated network of water hydrants. Alternatively, in consultation with the City of Wanneroo this could also be addressed through a strategically located static water supply (i.e., water tank).
2	Following approval of the LSP, if required prepare a BMP or bushfire statement in accordance with SPP 3.7, the Guidelines and AS 3959 to support subdivision within portions of the site that are designated as bushfire prone areas under the <i>Map of Bush Fire Prone Areas</i>. The BMP should consider the proposed spatial layout of the development.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



7 Applicant Declaration

7.1 Accreditation

This assessment has been prepared by Emerge Associates who have been providing bushfire risk management advice for more than 10 years, undertaking detailed bushfire assessments (and associated approvals) to support the land use development industry. Emerge Associates have a number of team members who have undertaken Bushfire Planning and Design (BPAD) Level 1 and Level 2 training and are Fire Protection Association of Australia (FPAA) accredited practitioners.

Anthony Rowe is a FPAA Level 3 BPAD accredited practitioner (BPAD No. 36690) in accordance with clause 9.10 of the Guidelines.

7.2 Declaration

I declare that the information provided is true and correct to the best of my knowledge.

Reviewer signature:

A handwritten signature in black ink, appearing to read 'Anthony Rowe', written over a light grey dotted rectangular area.

Name: Anthony Rowe

Company: Emerge Associates/Envision Bushfire Planning

Date: 31/03/2025

BPAD Accreditation: BPAD No. 36690

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



8 References

8.1 General references

The references listed below have been considered as part of preparing this document.

Department of Biodiversity, Conservation and Attractions (DBCA) 2017, *Ramsar Sites (DBCA-010)*.

Department of Biodiversity, Conservation and Attractions (DBCA) 2022a, *Geomorphic Wetlands, Swan Coastal Plain (DBCA-019)*, Western Australia, <<https://catalogue.data.wa.gov.au/dataset/geomorphic-wetlands-swan-coastal-plain>>.

Department of Biodiversity, Conservation and Attractions (DBCA) 2022b, *Threatened Ecological Communities (DBCA-038)*, Perth, Western Australia <<https://catalogue.data.wa.gov.au/dataset/threatened-ecological-communities>>.

Department of Planning, Lands and Heritage (DPLH) 2019, *Bush Forever Areas 2000 (DPLH-019)*, <<https://catalogue.data.wa.gov.au/org/departments-of-planning-lands-and-heritage>>.

DPLH and WAPC 2024, *Bushfire Management Plan (BMP) Manual*, Planning.wa.gov.au.

Department of Water and Environmental Regulation (DWER) 2021, *Clearing Regulations - Environmentally Sensitive Areas (DWER-046)*, <<https://catalogue.data.wa.gov.au/dataset/clearing-regulations-environmentally-sensitive-areas-dwer-046>>.

Gould, J., McCaw, W., Cheney, N., Ellis, P. and Matthews, S. 2007, *Field Guide: Fuel Assessment and Fire Behaviour Prediction in Dry Eucalypt Forest*, CSIRO and Department of Environment and Conservation, Perth, Western Australia.

Office of Bushfire Risk Management (OBRM) 2024, *Map of Bush Fire Prone Areas*, Landgate, <https://maps.slip.wa.gov.au/landgate/bushfireprone/>.

Standards Australia 2018, *AS 3959:2018 Construction of buildings in bushfire-prone areas*, Sydney.

Western Australian Planning Commission (WAPC) 2024a, *Planning for Bushfire Guidelines*, Western Australia.

Western Australian Planning Commission (WAPC) 2024b, *State Planning Policy 3.7 Bushfire*, Western Australia.

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



8.2 Online references

The online resources that have been utilised in the preparation of this report are referenced in **Section 8.1**, with access date information provided in **Table R-1**.

Table R 1 Access dates for online references

Reference	Date accessed	Website or dataset name
Landgate 2024	29/2/2025	https://map-viewer-plus.app.landgate.wa.gov.au/index.html
(OBRM 2024)	29/2/2025	Bush Fire Prone Areas
(DBCA 2022a)	29/2/2025	Geomorphic Wetlands, Swan Coastal Plain
(DBCA 2017)	29/2/2025	Ramsar Sites
(DBCA 2022b)	29/2/2025	Threatened ecological communities
(DWER 2021)	29/2/2025	Environmentally Sensitive Areas
(DPLH 2019)	29/2/2025	Bush Forever areas

Bushfire Management Plan

Local Structure Plan - East Wanneroo Precinct 3



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Figures

Figure 1: Site Location and Topographic Contours

Figure 2: AS 3959 Vegetation Classification and Effective Slope

Figure 3: Bushfire Attack Level Contour Plan

Figure 4: Broader Landscape Assessment

Figure 5: Spatial Representation of Bushfire Management Strategies

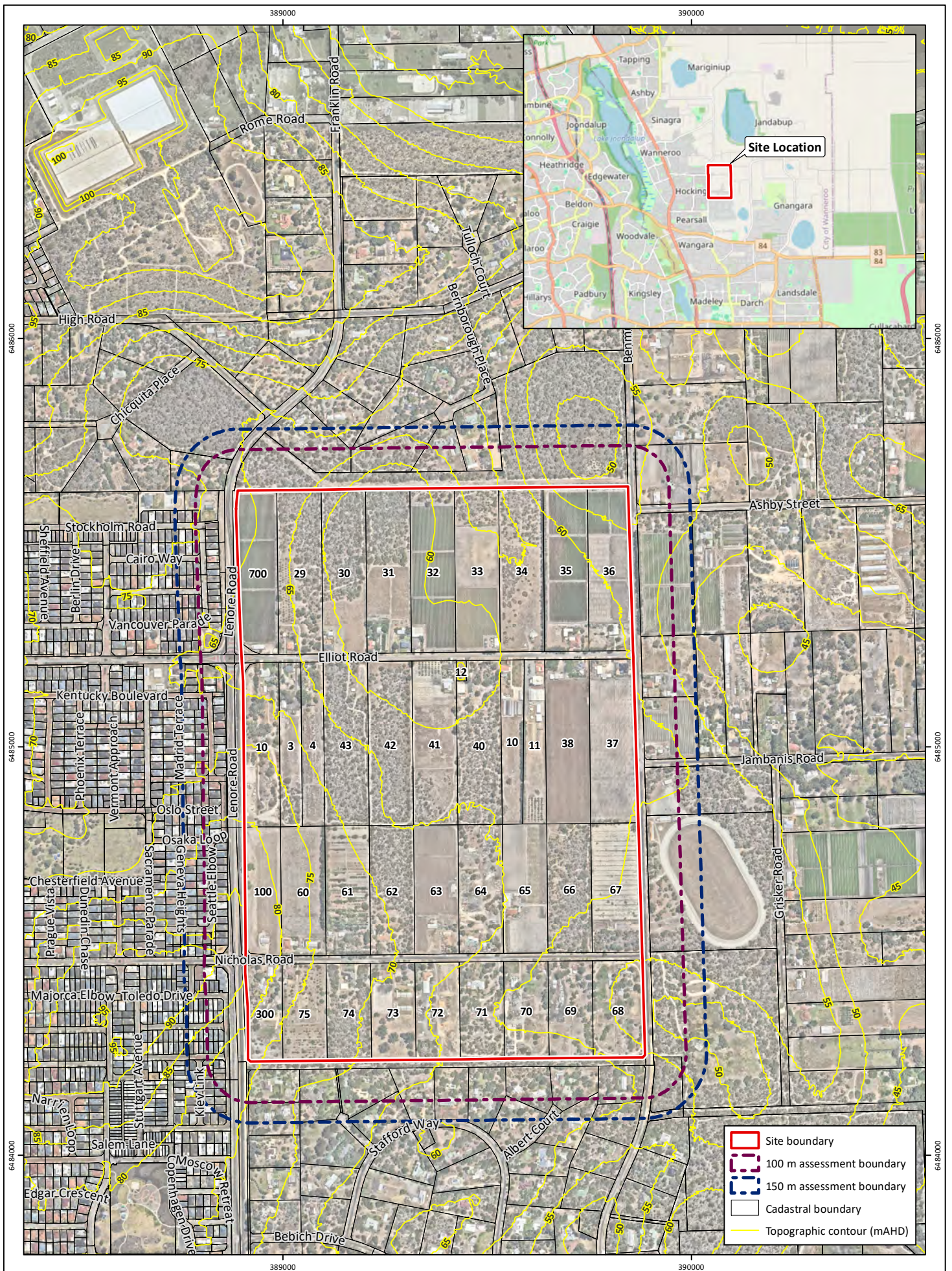


Figure 1: Site Location and Topographic Contours

Project: Bushfire Management Plan
Local Structure Plan - East Waverley Precinct 3

Client: Satterley Property Group

Plan Number: EP24-169(01)--F01
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 11/03/2025



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Metres
Scale: 1:12,000@A4
GDA 1994 MGA Zone 50



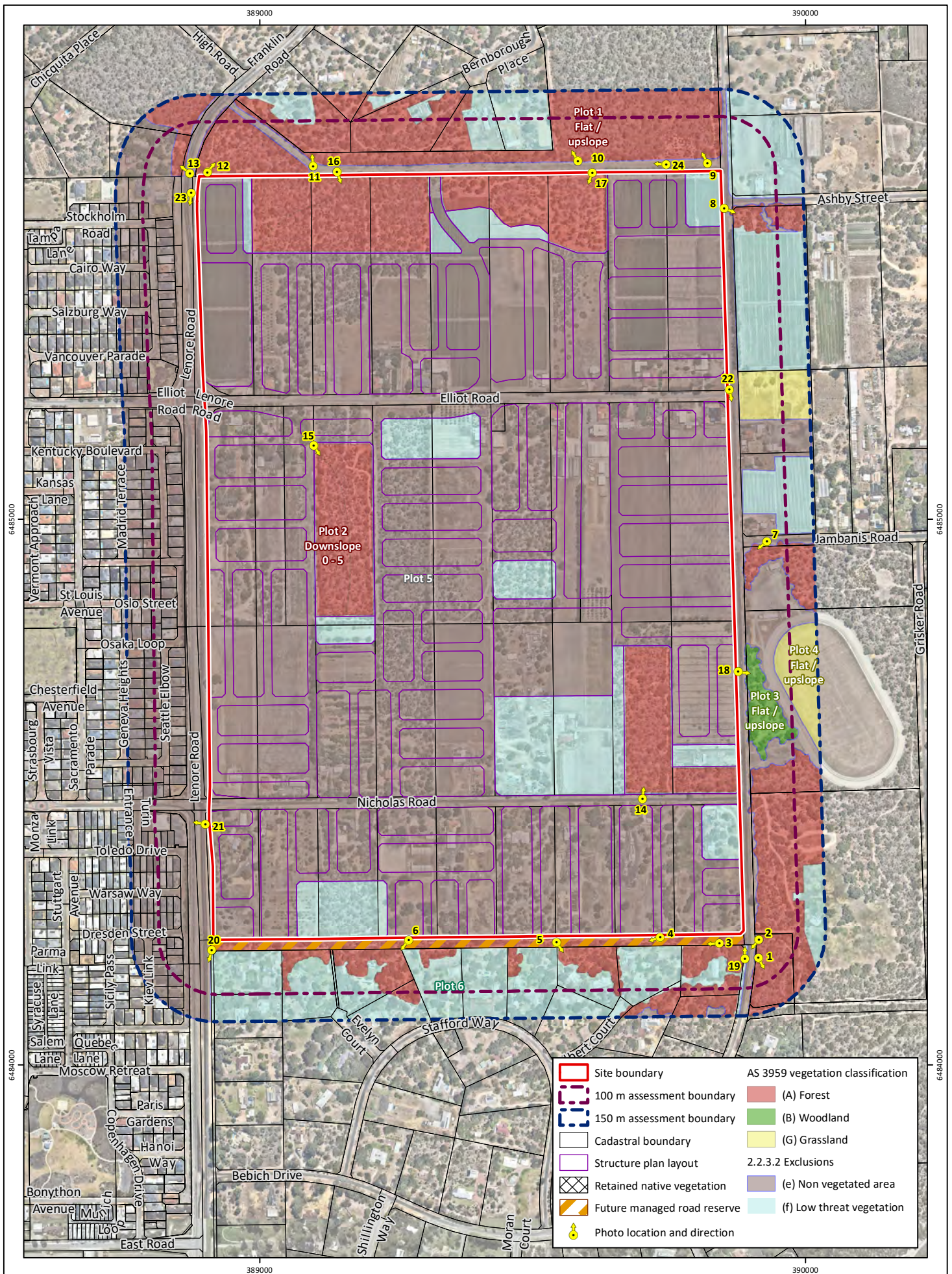


Figure 2: AS 3959 Vegetation Classification and Effective Slope

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

Client: Satterley Property Group

Plan Number: EP24-169(01)--F02a
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 27/03/2025



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Metres
Scale: 1:9,000@A4
GDA 1994 MGA Zone 50

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ASSOCIATES

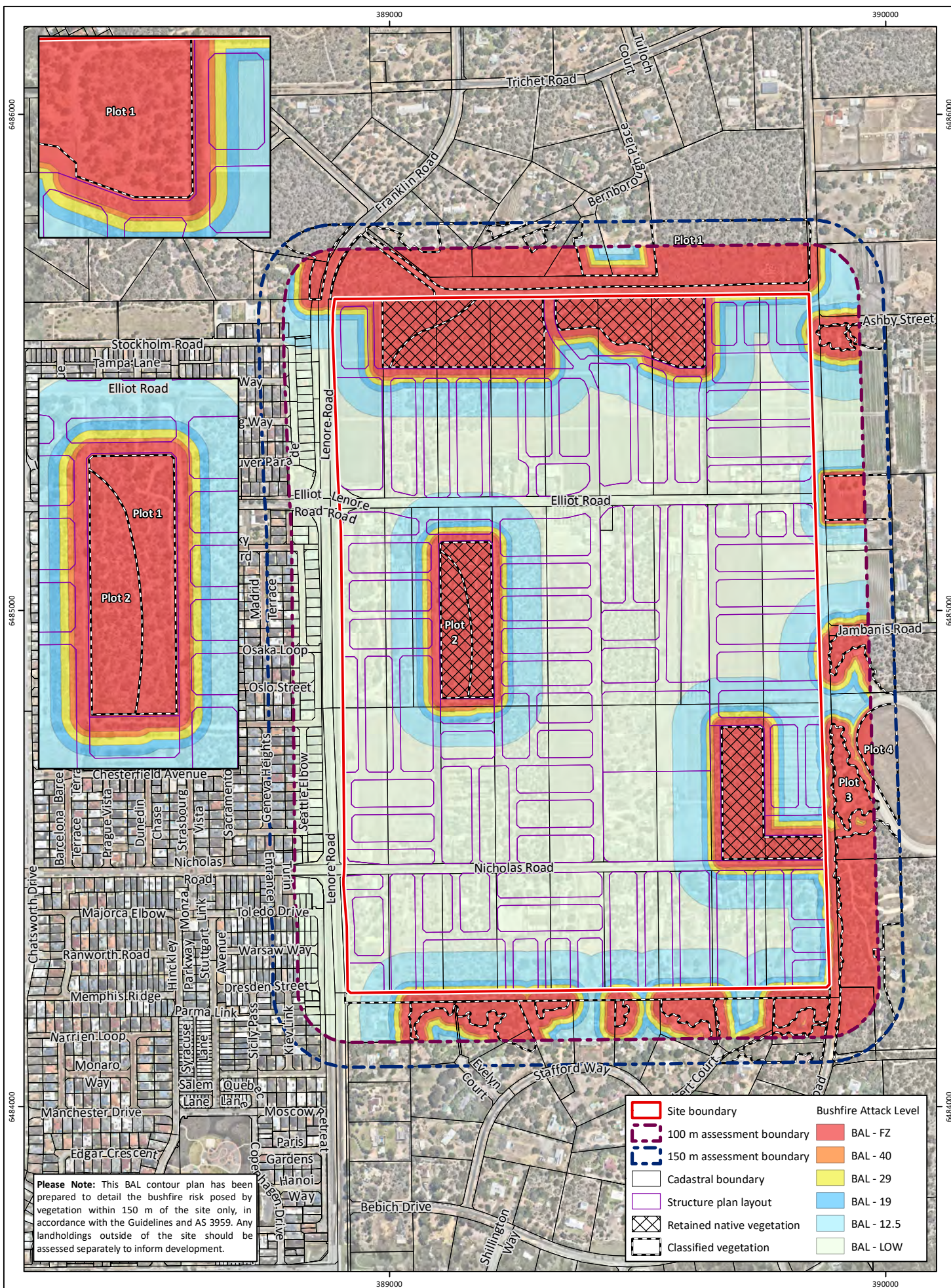


Figure 3: Bushfire Attack Level Contour Plan

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

Client: Satterley

Plan Number: EP24-169(01)-F03a
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 11/03/2025



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Metres
Scale: 1:10,000@A4
GDA 1994 MGA Zone 50



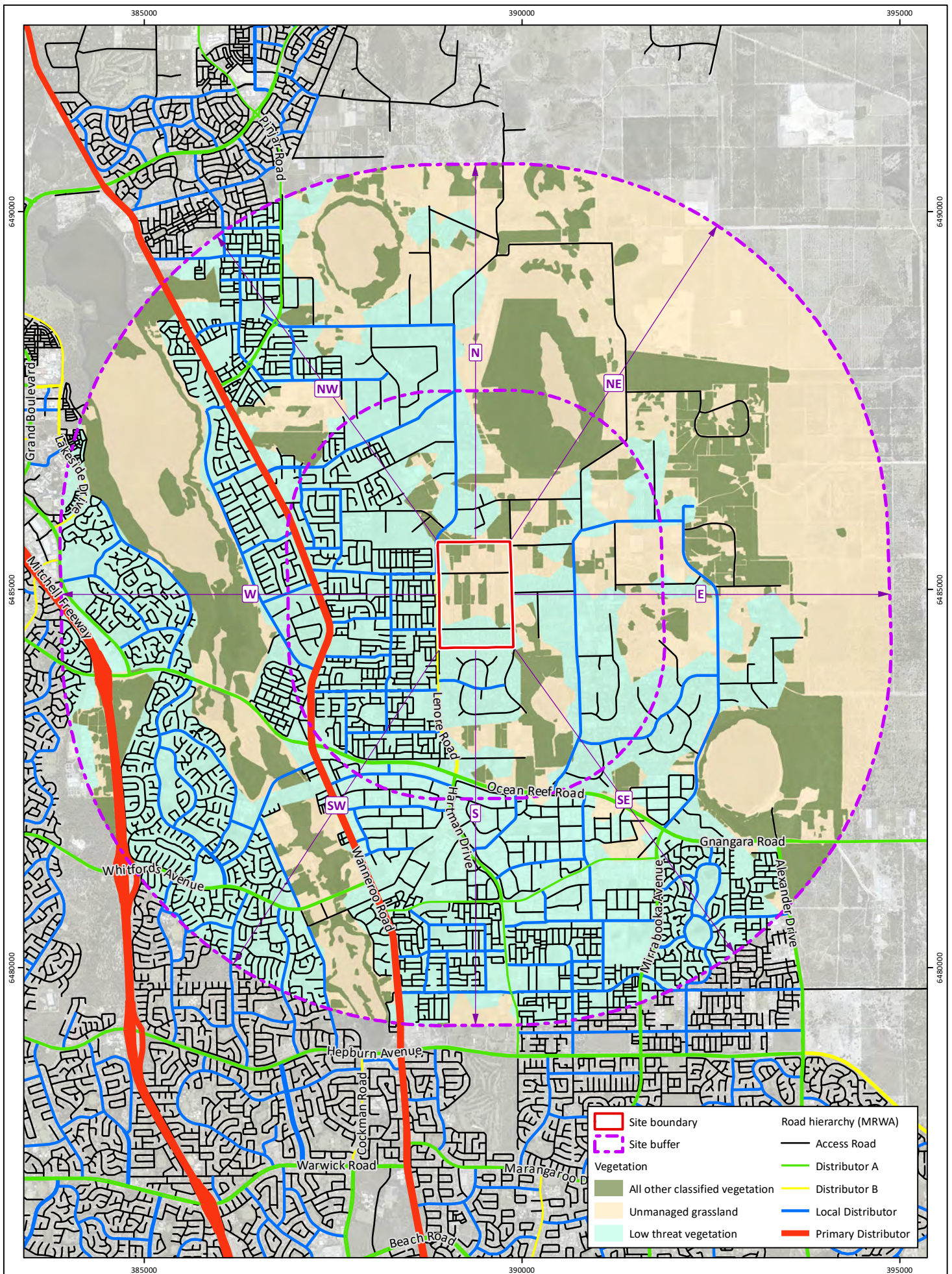


Figure 4: Broader Landscape Assessment

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

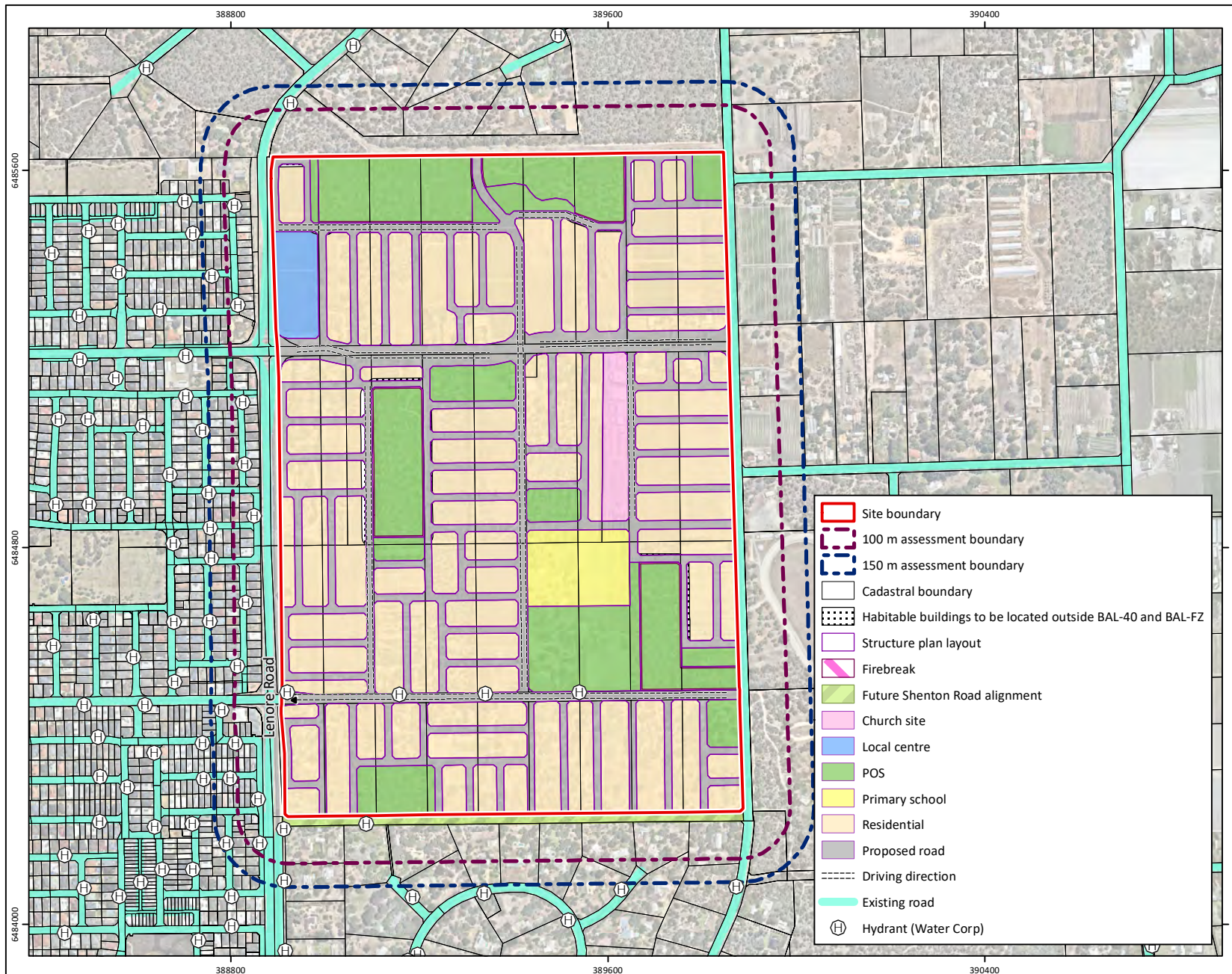
Client: Satterley

Plan Number: EP24-169(01)--F04
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 11/03/2025



Scale: 1:65,000@A4
GDA 1994 MGA Zone 50





Lot Siting

No habitable Lots should exceed BAL- 29 (determined in accordance with AS 3959).

Vehicle Access

+ All roads will meet the public road requirements as per Appendix B.3 of the Guidelines or as agreed with the City of Wanneroo.

+ Access to multiple destinations will be provided for each stage of development, unless otherwise agreed with the City of Wanneroo. This will be considered at the subdivision stage as part of a holistic or staged approach. Where required:

- Temporary emergency access ways can be used to facilitate access to multiple destinations if the road network is not fully constructed. These should meet the requirements of the Guidelines unless otherwise agreed.
- Temporary no through roads are to be provided with a suitable turning area and must satisfy the requirements of Appendix B.3 in the Guidelines.

Through Roads

The future development layout ensures that every lot has access to through routes for traffic. The structure plan demonstrates this with only two lots requiring access via a no-through road, which is less than 20 meters in length.

Access to Water

The area will be integrated with a reticulated water supply, ensuring a reliable and consistent source of water for firefighting purposes.

Figure 5: Spatial Representation of Bushfire Management Strategies

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3
Client: Satterley

Plan Number:
EP24-169(01)~F05a
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 27/03/2025



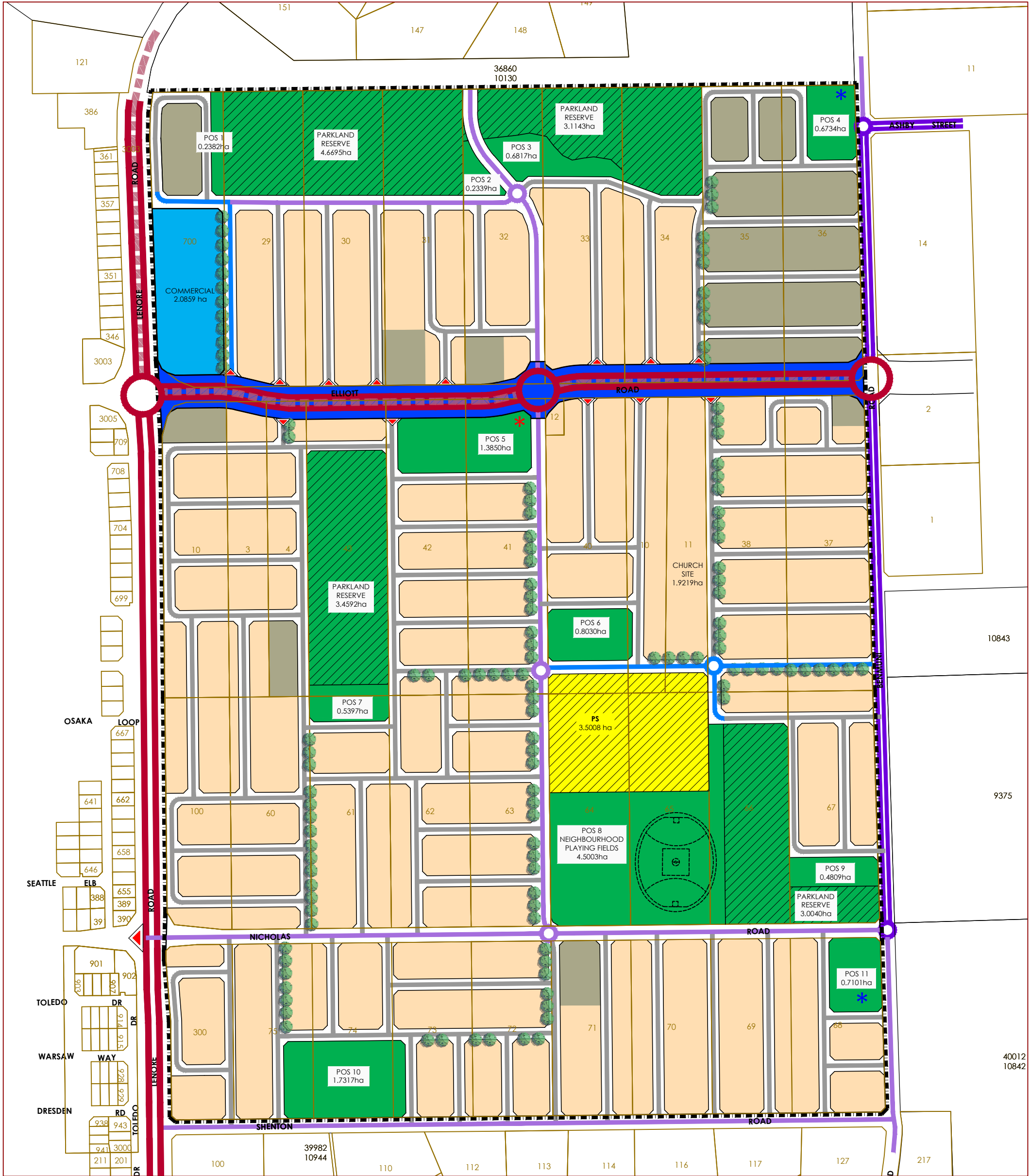
0 100 200 300
Metres
Scale: 1:12,000@A4
GDA 1994 MGA Zone 50

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Appendix A

Precinct 3 Local Structure Plan





LEGEND

STRUCTURE PLAN AREA

MRS RESERVES

PARKS AND RECREATION

LOCAL SCHEME

RESIDENTIAL R30-R60*

RESIDENTIAL R40-R80

PUBLIC OPEN SPACE

PUBLIC PURPOSES - PRIMARY SCHOOL

PERMANENT WWPS

TEMPORARY WWPS

COMMERCIAL

MOVEMENT NETWORK

TRANSPORT CORRIDOR (45m)

INTEGRATOR A (35m)

NEIGHBOURHOOD CONNECTOR A (25m)

NEIGHBOURHOOD CONNECTOR B (20m)

ACCESS STREET B (17.9m)

ACCESS STREET D (15.4m**)

ROUNDABOUT INTERSECTION***

LEFT IN/LEFT OUT INTERSECTION***

OTHER

GREEN STREET*

NOTES:

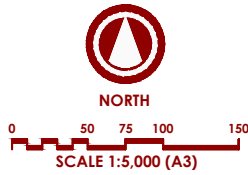
*REFER TO STRUCTURE PLAN REPORT FOR DETAIL.

**MAY BE REDUCED TO 13m ADJACENT TO PUBLIC OPEN SPACE (EXCLUDING AREAS IDENTIFIED FOR CONSERVATION PURPOSES), OR 10m WHERE USED AS A CONTROLLED ACCESS PLACE.

***ALL OTHER INTERSECTIONS TO BE PRIORITY CONTROLLED.



All areas and dimensions are subject to survey, engineering and detailed design and may change without notice. © Copyright of Burgess Design Group.



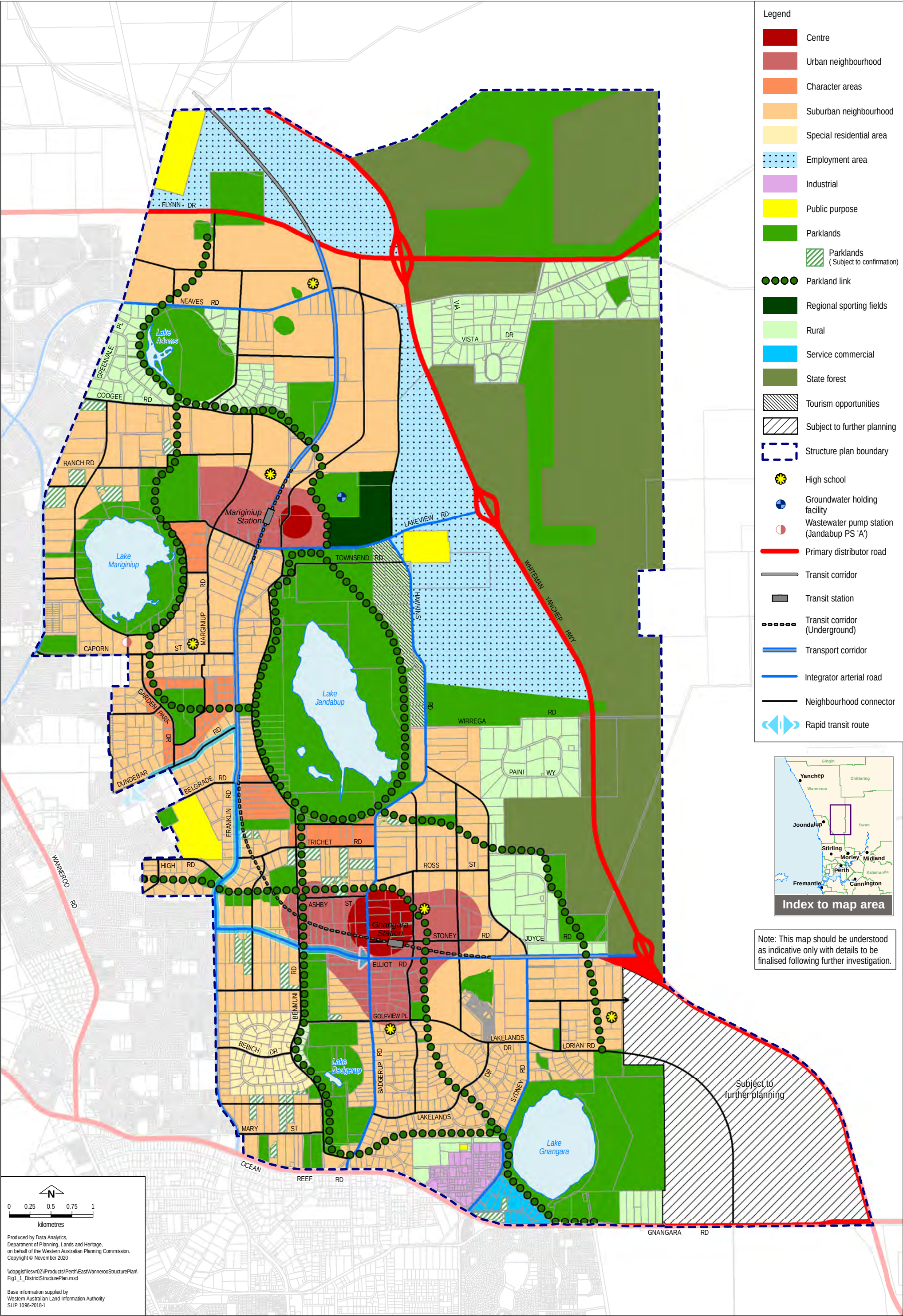
**LOCAL STRUCTURE PLAN
EAST WANNEROO PRECINCT 3
WANNEROO
CITY OF WANNEROO**

Appendix B

East Wanneroo District Structure Plan



Figure 1.1 East Wanneroo District Structure Plan



East Wanneroo District Structure Plan