



**Smith Bushfire Consultants** Pty Ltd

# **BUSHFIRE MANAGEMENT PLAN**

**Lot 7 Saponara Drive (48 Caporn Street),  
Wanneroo**

**City of Wanneroo**



Prepared by Ralph Smith  
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Site visited 15 September 2022; Report completed 23 January 2023

## Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address:

Site visit: Yes  No

Date of site visit (if applicable): Day  Month  Year

Report author:

WA BPAD accreditation level (please circle):

Not accredited  Level 1 BAL assessor  Level 2 practitioner  Level 3 practitioner

If accredited please provide the following.

BPAD accreditation number:  Accreditation expiry: Month  Year

Bushfire management plan version number:

Bushfire management plan date: Day  Month  Year

Client/business name:

	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Is the proposal any of the following (see [SPP 3.7 for definitions](#))?

	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Strategic planning proposal (including rezoning applications)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Minor development (in BAL-40 or BAL-FZ)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
High risk land-use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vulnerable land-use	<input type="checkbox"/>	<input checked="" type="checkbox"/>


None of the above

**Note:** Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local government or the WAPC) refer the proposal to DFES for comment.

Why has it been given one of the above listed classifications (E.g. Considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

The information provided within this bushfire management plan to the best of my knowledge is true and correct:

Signature of report author



Date

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## Full Content Detail

### Document control

Report Version	Purpose	Author/reviewer and accreditation details	Date Submitted
1	Support the development application	Ralph Smith	3 November 2022
1.1	Text changes requested by the City of Wanneroo	Ralph Smith	23 January 2023

### **DISCLAIMER**

This Bushfire Management Plan has been prepared in good faith. It is derived from sources believed to be reliable and accurate at the time of publication. Nevertheless, this plan is distributed on the terms and understanding that the author is not responsible for results of any actions taken based on information in this publication or for any error or omission from this publication.

Smith Bushfire Consultants Pty Ltd has exercised due and customary care in the preparation of this Bushfire Management Plan and has not, unless specifically stated, independently verified information provided by others.

Any recommendations, opinions or findings stated in this report are based on circumstances and facts as they existed at the time Smith Bushfire Consultants Pty Ltd performed the work. Any changes in such circumstances and facts upon which this document is based may adversely affect any recommendations, opinions or findings contained in this plan.

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## Section 1: Proposal Details

The proponent is seeking to subdivide the large lot into smaller lots. This will be a staged development where the land to the east is also being subdivided and is further advanced than this subdivision. As a consequence of the proponents working together the landscape plan that applies to the land to the east also applies to this subdivision.

One lot (Lot 729) will contain the current house, garage and other built assets. This lot is not affected by the proposed subdivision.

The site's address is also known as 48 Caporn Street, Sinagra. The entire site is declared as bushfire prone and therefore AS 3959 construction standards for the future dwellings will apply across the subdivision.

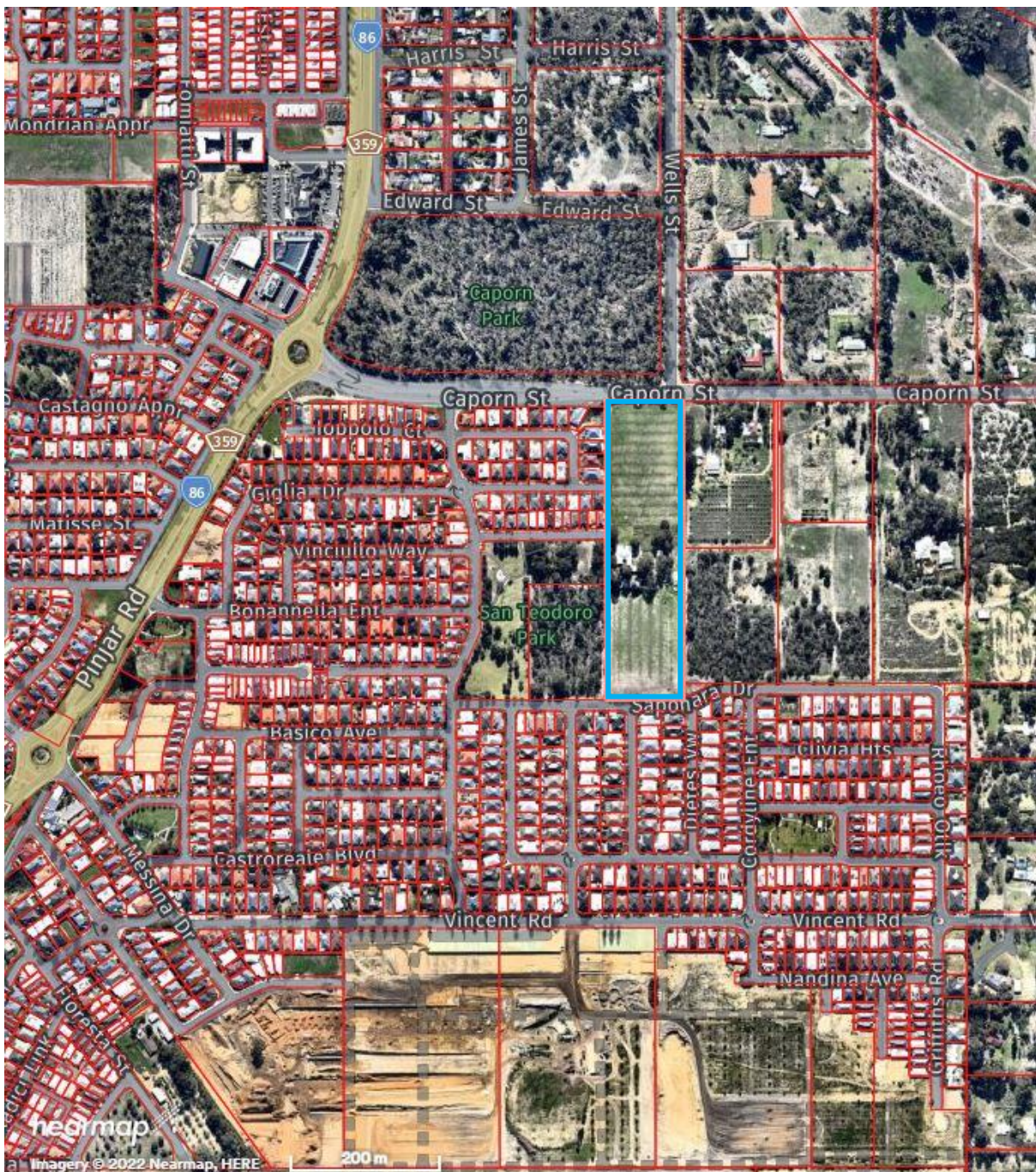


Figure 1. Aerial photograph showing the location of the subdivision.

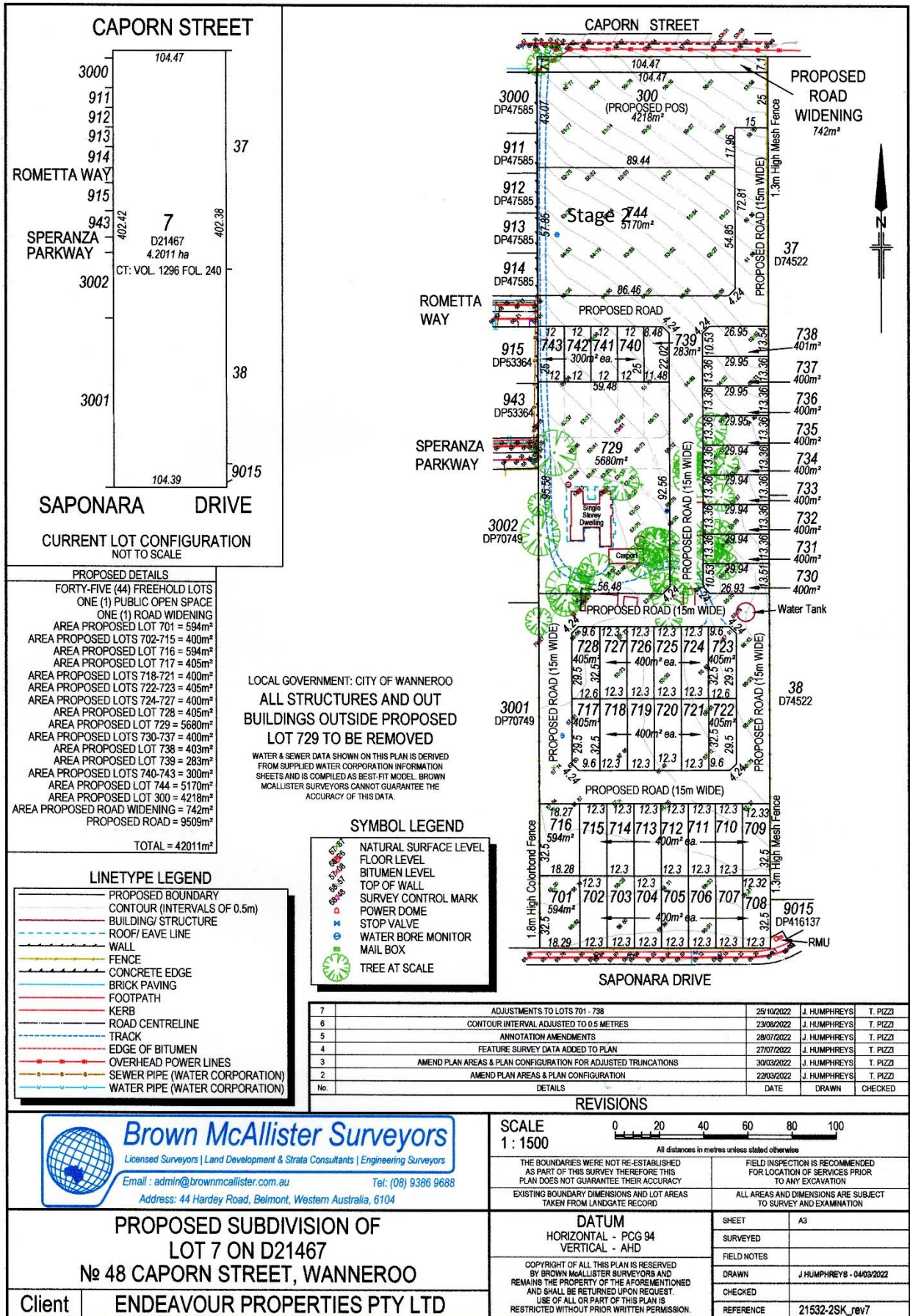


Figure 2. The copy of the site plan as provided with the structure plan/scheme amendment.

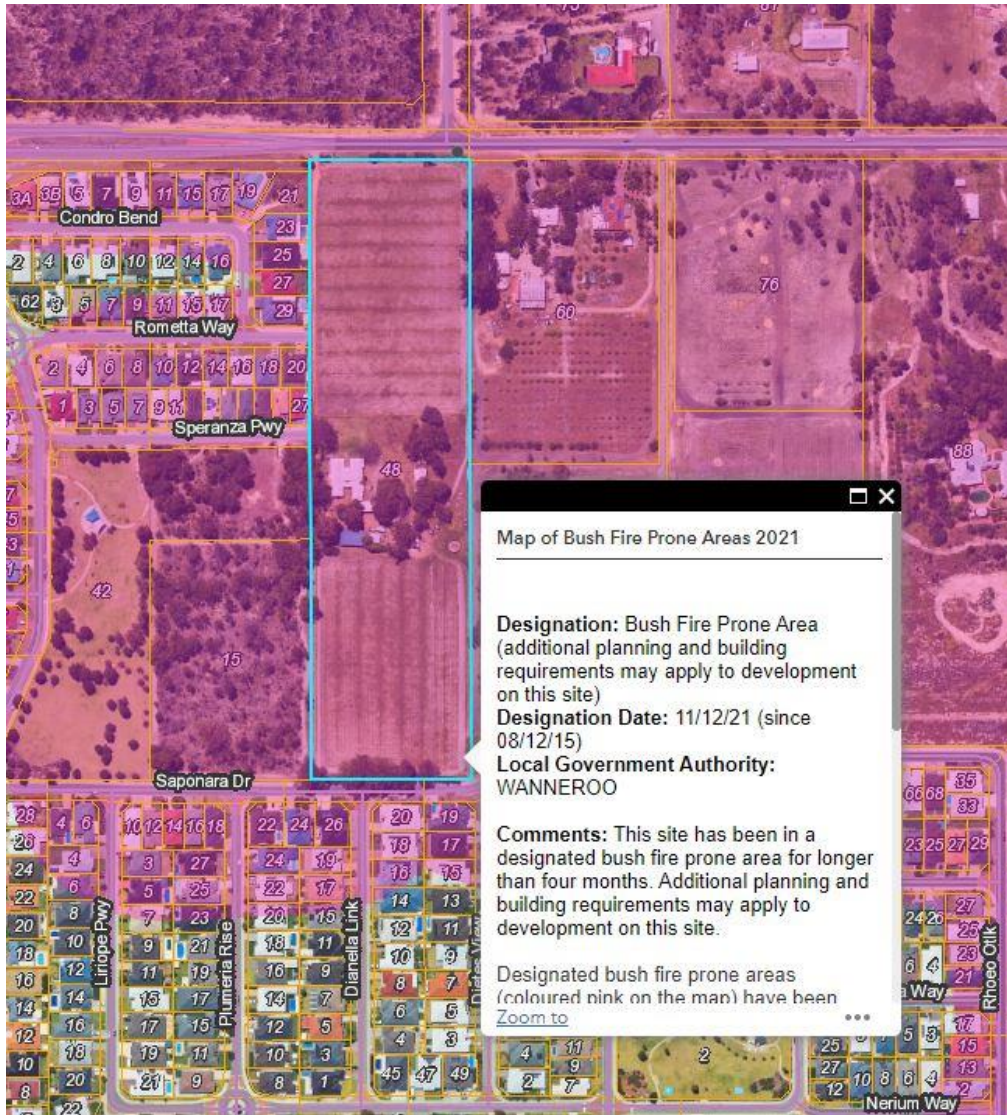


Figure 3. Screen shot of map of bushfire prone areas for the subject site.

## Section 2: Environmental Considerations

The State Planning Policy 3.7 recognises the need to consider bushfire risk management measures alongside environmental, biodiversity and conservation values. A desktop search has identified that the following are not registered for the development site or immediately surrounding area:

- Threatened and priority flora;
- Threatened and priority fauna;
- Contaminated site registration;
- Clearing Regulation – Environmental Sensitive area
- Black Cockatoo Breeding Sites; and
- Carnaby Cockatoo Confirmed roost sites.

The site is covered by the 6 km buffer for the Carnaby Cockatoo Confirmed roost sites

### **Subsection 2.1: Native Vegetation – modification and clearing**

There will not be a need to clear significant areas of native vegetation as a component of this development. The site was previously a commercial market garden, and therefore cleared of vegetation except for some perimeter vegetation which will be removed as a component of the subdivision.

### **Subsection 2.2: Re-vegetation/Landscape Plans**

This development is occurring and follows the subdivision of the land to the east. Both developers of the land have met and integrated the landscape master plans so that both subdivisions are applying the same landscape master plan. As a consequence the subdivisions are complementary when considering the vegetation classification to the east.

The northern proposed public open space (POS) within this subdivision does not yet have a landscape plan, but when developed, it will be compliant with the AS 3959 Exclusions – Low threat vegetation and non-vegetated areas.

## **Section 3: Bushfire Assessment Results**

Any dwellings located on the new lots must have BAL rating of BAL-29 or less, or a dwelling cannot be built until BAL-29 or less is achieved. There are some lots being Lot 701 and 716 which have portions of the lot within a BAL rating higher than BAL-29. Dwellings can only be built on the portions of the lot where the BAL rating is BAL-29 or less.

### **Subsection 3.1: Assessment Inputs**

The assessment inputs are shown in the forthcoming pages and are supported by a vegetation assessment, photographic evidence and text to support the vegetation assessment and a BAL Contour Map.



## Site Assessment

The assessment of the proposed subdivision was undertaken on 15 September 2022 for the purpose of determining the BAL Contour Map in accordance with AS 3959 (Method 1).



## Subsection 3.1: Assessment Inputs

### Vegetation Classification

All vegetation within 150 metres of the proposed subdivision as indicated on the site assessment plan was classified in accordance with the Western Australian Government criteria and Clause 2.2.3 of AS 3959 was applied. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below. AS 3959 only requires consideration of 100 metres between vegetation and the building and 50 metres between vegetation and the building for grassland.

#### Plot 1

Exclusion – Low threat vegetation and non-vegetated areas.  
Clause 2.2.3.2 (e) and (f).



**Photo ID: Photo 1** Looking at the established suburb to the south of the development site.



**Photo ID: Photo 2** Looking at the established suburb to the east of the development site.



**Photo ID: Photo 3** Looking at established suburb to the south-east of the development site



**Photo ID: Photo 4** Looking at the managed grassland road and suburb north-west of the development site.



15/09/2021 4:34:06 PM (+8.0 hrs) Dir=SW Lat=-31.73546 Lon=115.80761 Alt=1m MSL WGS84  
**Photo ID: Photo 5** Looking at the managed grassland within San Teodoro Park west of the development site.



15/09/2021 4:22:00 PM (+8.0 hrs) Dir=SSE Lat=-31.73357 Lon=115.8109 Alt=1m MSL WGS84  
**Photo ID: Photo 6** Looking at the dwelling on the neighbouring property to the east.



15/09/2021 4:10:50 PM (+8.0 hrs) Dir=WNW Lat=-31.73716 Lon=115.80974 Alt=1m MSL WGS84  
**Photo ID: Photo 7** Looking at the vegetation on the development site that will be cleared.



15/09/2021 4:12:09 PM (+8.0 hrs) Dir=N Lat=-31.73705 Lon=115.81048 Alt=1m MSL WGS84  
**Photo ID: Photo 8** Looking at the vegetation on the neighbouring lot development site that will be cleared.



15/09/2021 4:14:47 PM (+8.0 hrs) Dir=WNW Lat=-31.73669 Lon=115.81117 Alt=1m MSL WGS84  
**Photo ID: Photo 9** Looking at the vegetation on the neighbouring lot development site that will be cleared.



15/09/2021 4:16:55 PM (+8.0 hrs) Dir=N Lat=-31.73553 Lon=115.81119 Alt=1m MSL WGS84  
**Photo ID: Photo 10** Looking at the grassland on the neighbouring lot development site that will be cleared.



**Photo ID: Photo 11** Looking at the grassland on the neighbouring lot development site that will be cleared.



**Photo ID: Photo 12** Looking at the grassland on the neighbouring lot development site that will be cleared.



**Photo ID: Photo 13** Looking at the grassland that will be cleared on the development lot and the neighbouring development.

## Plot 2

Class B – Woodland (AS 3959 classification – B – 05)



**Photo ID: Photo 14** Looking at the woodland north-east of the development site.



**Photo ID: Photo 15** Looking at the woodland north of the development site.



**Photo ID: Photo 16** Looking at the woodland north of of the development site.



**Photo ID: Photo 17** Looking at the woodland.



**Photo ID: Photo 18** Looking at the woodland west of the development site in San Teodoro Park.



**Photo ID: Photo 19** Looking at the woodland west of the development site in San Teodoro Park.

## Notes to Accompany Vegetation Classification

### 1. Plot 1

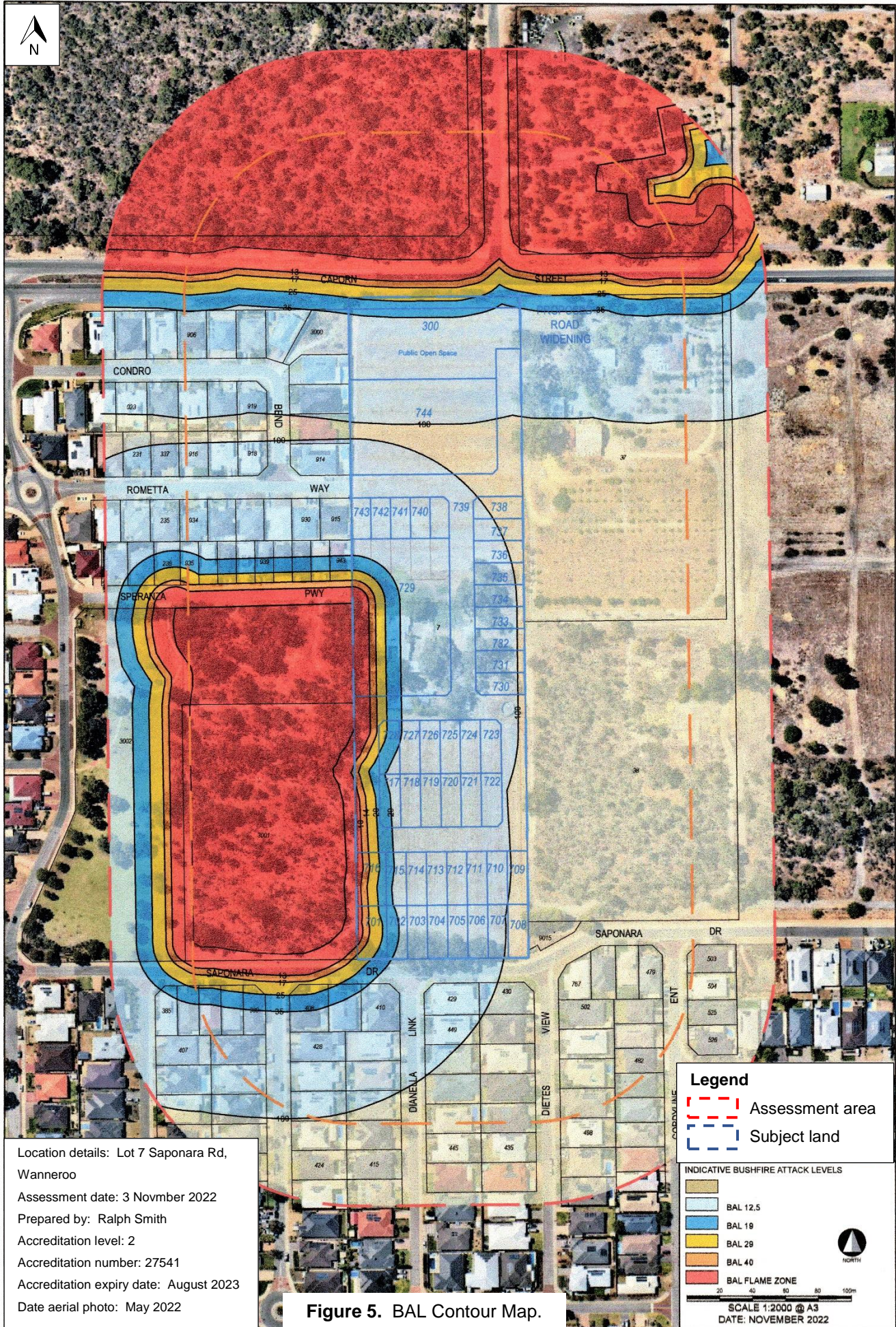
Exclusion – Low threat vegetation and non-vegetated areas  
Clause 2.2.3.2 (e) and (f)

This plot comprises the established suburb with dwellings, managed gardens, San Teodor Park managed grassland and roads. It also includes the future clearing of the development site.

### 2. Plot 2

Class B – Woodland (AS 3959 classification – B – 05).

This plot comprises the woodland on the northern and western side of the development site. The woodland to the north is separated from the development site by Caporn Street. The woodland within San Teodor Park is separated from the development by the firebreak that is managed by the City of Wanneroo. An onsite meeting with staff from the City of Wanneroo clearly identified the management of the boundary vegetation between San Teodor Park and the development site.



# Slope



Figure 6. Two-metre contour lines.

### Subsection 3.2: Assessment outputs

Plot	Applied Vegetation Classification	Effective Slope Under the Classified Vegetation (degrees)	Separation Distance to the Classified Vegetation (metres)	BAL Contour
1	Exclusion – Low threat vegetation and non-vegetated areas Clause 2.2.3.2 (e) & (f)	Not applicable	Not applicable	LOW
2	Class B – Woodland	>0-5°	8 m	FZ*

Note - \* indicates that to achieve a BAL-29 rating requires a minimum separation between the woodland vegetation and dwelling. .

### Section 4: Identification of bushfire hazard issues

The most significant bushfire hazard is the extensive native vegetation associated with the woodland on land neighbouring the development site to the north and west. The vegetation to the north is Bush Forever site 469 (Caporn Street Bushland, Mariginiup). The vegetation is assessed by the Department of Environmental Protection with a range of *Banksia spp.* and *Eucalyptus marginata*, *Corymbia calophylla* and scattered *Eucalyptus gomphocephala*.

San Teodoro Park has recently been prescribed burnt and therefore will not be a significant bushfire threat for several years.

The land to the east is being developed and is several months ahead of this subdivision development. This means that the vegetation to the east will be removed and become an AS 39595 Exclusion - low threat vegetation or non-vegetated areas.




## Section 5: Assessment against the Bushfire Protection Criteria

### Subsection 5.1: Compliance Table

Bushfire protection criteria	Method of Compliance	Proposed bushfire management strategies
	Acceptable solutions	
<b>Element 1: Location</b>	A1.1 Development location	The potential future dwellings will be located in an area that is restricted to the areas with a BAL rating that will be BAL-29 or less.
<b>Element 2: Siting and design</b>	A2.1 Asset Protection Zone (APZ)	Not applicable.
<b>Element 3: Vehicular Access</b>	A3.1 Two access routes	Caporn Street and Saponara Drive provide multiple access options for the proposed new lots, and the future development road network.
	A3.2 Public road	Caporn Street and Saponara Drive are constructed. New roads associated with the development will be built to comply with the Guidelines.
	A3.3 Cul-de-sac (including a dead-end-road)	All roads will be constructed to comply with the State's Guidelines.
	A3.4 Battle-axe	All roads will be constructed to comply with the State's Guidelines.
	A3.5 Private driveway longer than 50 m A private driveway is to meet detailed requirements contained within the Guidelines.	There will be no driveways longer than 50 m constructed with this subdivision.
	A3.6 Emergency access way	Nil will be constructed with this subdivision.
	A3.7 Fire service access routes (perimeter roads)	Nil will be constructed with this subdivision.
	A3.8 Firebreak width	During establishment, and after subdivision, firebreaks will be maintained so as to comply with the City's firebreak order.
<b>Element 4: Water</b>	A4.1 Reticulated areas	A reticulated scheme water system developed to comply with the State's requirements will be connected as a component of this development. This includes fire hydrants.
	A4.2 Non-reticulated areas	Not applicable.
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	Not applicable.



## LEGEND

Subject land 

Sealed roads 

## REQUIREMENTS

1. The site will be serviced by a reticulated scheme water system developed to comply with the State's requirements. It will be connected as a component of this development. This includes fire hydrants.
2. This is the principle hazard vegetation being a woodland.
3. These are the neighbouring lots undergoing subdivision that is further advanced than this subdivision.
4. Current dwelling and land area that will be retained and not subject to the subdivision.
5. Current significant access options.
6. Bush Forever site 469.

Location details: Lot 7 Saponara Rd, Wanneroo

Assessment date: 3 November 2022

Prepared by: Ralph Smith

Accreditation level: 2

Accreditation number: 27541

Accreditation expiry date: August 2023

Date aerial photo: May 2022

Version No: 1

**Figure 7.** Spatial representation of bushfire management strategies.

## Section 6: Responsibilities for Implementation and Management of the Bushfire Measures

This section is to set out the responsibilities of the developer/s, landowner/s and local government with regards to the initial implementation and ongoing maintenance of the required actions.

DEVELOPER – PRIOR TO ISSUE OF TITLES		
No.	Implementation Action	Subdivision Clearance
1	<p>A notification pursuant to Section 165 of the <i>Planning and Development Act 2005</i>, is to be placed on the certificate(s) of title of the proposed lot(s) with a Bushfire Attack Level (BAL) rating of 12.5 or above, advising the existence of a hazard or other factor.</p> <p>Notice of this notification is to be included in the diagram or plan of survey (deposited plan).</p> <p>The notification is to state as follows:</p> <p><i>“This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land”</i> (Western Australian Planning Commission).</p>	
2	Comply with the relevant local government annual firebreak notice issued under s33 of the Bush Fires Act 1954.	
3	The developer will be responsible for extending the reticulated scheme water network into the development that is compliant with the State’s requirements.	
4	The developer will be responsible for extending the road network into and through the development that is compliant with the State’s requirements.	
5	A restrictive covenant to the benefit of the local government, pursuant to section 129BA of the Transfer of Land Act 1893, is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a restriction on the use of the land within areas that have been assessed as BAL-40 or BAL-Flame Zone. Notice of this restriction is to be included on the diagram or plan of survey (deposited plan). The restrictive covenant is to state as follows: <i>“No habitable buildings are to be built within areas identified as BAL-40 or BAL-Flame Zone”</i> .(Local Government).	
LANDOWNER/OCCUPIER – ONGOING		
No.	Management Action	
1	Comply with the relevant local government annual firebreak notice issued under s33 of the Bush Fires Act 1954.	
2	Maintain the dwelling in good order so that it meets the appropriate AS 3959 constructions standards.	



## Appendix 1

Vehicle access technical requirements extract from the Guidelines.



Guidelines for  
Planning in  
Bushfire  
Prone Areas

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**Table 6:** Vehicular access technical requirements

<b>TECHNICAL REQUIREMENTS</b>	<b>1 Public roads</b>	<b>2 Emergency access way<sup>1</sup></b>	<b>3 Fire service access route<sup>1</sup></b>	<b>4 Battle-axe and private driveways<sup>2</sup></b>
Minimum trafficable surface (metres)	In accordance with A3.1	6	6	4
Minimum horizontal clearance (metres)	N/A	6	6	6
Minimum vertical clearance (metres)	4.5			
Minimum weight capacity (tonnes)	15			
Maximum grade unsealed road <sup>3</sup>	As outlined in the IPWEA Subdivision Guidelines	1:10 (10%)		
Maximum grade sealed road <sup>3</sup>		1:7 (14.3%)		
Maximum average grade sealed road		1:10 (10%)		
Minimum inner radius of road curves (metres)		8.5		

**Notes:**

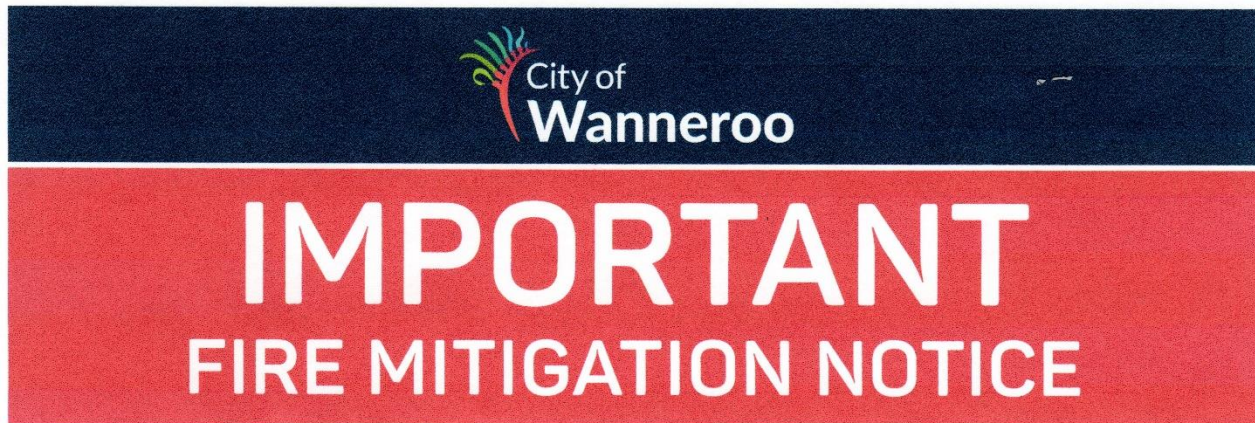
<sup>1</sup> To have crossfalls between 3 and 6%.

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

<sup>3</sup> Dips must have no more than a 1 in 8 (12.5% -7.1 degree) entry and exit angle.

## Appendix 2

The following is a copy of the City of Wanneroo "Fire Mitigation Notice 2022/2023."



**Fire mitigation measures must be in place by  
1 NOVEMBER and maintained until 30 APRIL EACH YEAR.**

**This is a requirement under the Bush Fires Act 1954 Section 33.  
Failure to comply with this Notice may incur penalties of up to \$5,000 and the works  
required by this Notice will be carried out at the expense of the owner/occupier.**

### **Fire management requirements for land LESS than 4000sqm**

- Maintain grasses and inflammable materials with the exception of living trees on the entire property to a height of no more than 50 millimetres. The entire property is required to be maintained below 50 millimetres from 1 November each year until 30 April the following year.
- OR
- A 3 metre wide trafficable firebreak as close as possible to all external boundaries of the property must be installed by 1 November each year and maintained until 30 April the following year.
  - If it is not possible to install the firebreak adjacent to the external boundary of the property due to naturally occurring obstacles, it is acceptable to install the firebreak around the obstacle. If this requires the firebreak to be greater than 5 metres away from the external boundary, a firebreak variation is required.
  - Ensure a minimum vertical clearance of 4 metres is maintained along the firebreaks to enable vehicles to drive along the firebreaks without access being obstructed.
- Where a property is affected by an approved bushfire management plan, property owners must still comply with all requirements in this Notice and with any additional requirements outlined within that plan.

### **Fire management requirements for land GREATER than 4000sqm**

- A 3 metre wide trafficable firebreak as close as possible to all external boundaries of the property must be installed by 1 November each year and maintained until 30 April the following year.
  - If it is not possible to install the firebreak adjacent to the external boundary of the property due to naturally occurring obstacles, it is acceptable to install the firebreak around the obstacle. If this requires the firebreak to be greater than 5 metres away from the external boundary, a firebreak variation is required.
  - Ensure a minimum vertical clearance of 4 metres is maintained along the firebreaks to enable vehicles to drive along the firebreaks without access being obstructed.
- Install and maintain a 20 metre bare earth area around all hay stacks and/or fuel dumps.
- Where a property is affected by an approved bushfire management plan, property owners must still comply with all requirements in this Notice and with any additional requirements outlined within that plan.

## All vacant land **GREATER** than 4000sqm

- A 3 metre wide trafficable firebreak as close as possible to all external boundaries of the property must be installed by 1 November each year and maintained until 30 April the following year.
- Ensure a minimum vertical clearance of 4 metres is maintained along the firebreaks to ensure vehicles can drive along the firebreaks without being impeded by tree branches.
- If the land is an area of 50,000sqm (5 hectares) or greater, the grass must be maintained on the land to a height no greater than 50 millimetres for a distance of 10 metres from any firebreak.

## Frequently asked questions

### I live in a residential area, does this notice apply to me?

Yes. All City of Wanneroo property owners must comply with the Bush Fires Act 1954.

Please refer overleaf for fire management requirements to be in place by 1 November to ensure your property is compliant.

Most properties under 1000sqm will automatically comply if gardens are maintained.

### How will inspections be carried out?

Inspections will be carried out by trained Fire Control Officers who are authorised to enter a property by foot, vehicle, quad bike and /or drone.

### Do I need a Bushfire Survival Plan?

If you live in, on or near bushland, you are at risk from a bushfire and developing a bushfire survival plan is critical.

Visit the Department of Fire and Emergency Services website for information on how to develop a plan for your property [dfes.wa.gov.au](http://dfes.wa.gov.au)

### I am concerned my neighbour's property is not compliant, what can I do?

All properties are required to be compliant by 1 November.

If you think your neighbour's property does not comply with the requirements as outlined in this Notice, please contact the Community Safety and Emergency Management team on **9405 5000**.

### I own a vacant lot, do I need a firebreak?

Yes. A 3 metre wide trafficable firebreak as close as possible to all external boundaries of the property must be installed by 1 November each year and maintained until 30 April the following year.

### I am unable to meet the requirements outlined, what should I do?

If it is considered impracticable for any reason to implement any of the requirements of this Notice, an application for a firebreak variation must be made to the City of Wanneroo by no later than 18 October of each year.

If permission is not granted, the requirements of this Notice must be complied with.

Visit the City's website [wanneroo.wa.gov.au/firebreakvariation](http://wanneroo.wa.gov.au/firebreakvariation) to apply for a variation.

### Where can I learn more about this Notice and bushfire management?

Visit the City's website [wanneroo.wa.gov.au/fireinformation](http://wanneroo.wa.gov.au/fireinformation) to learn more.

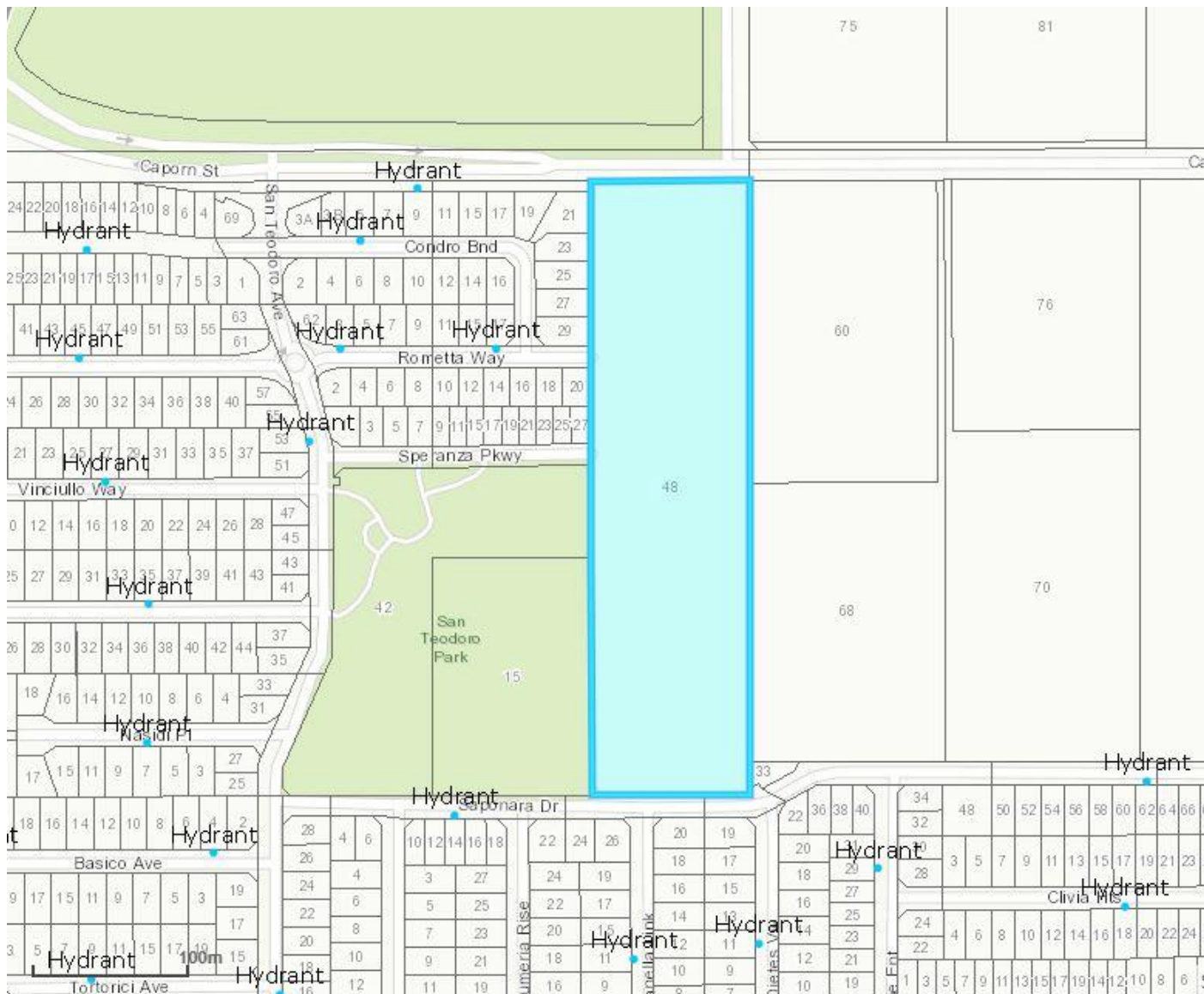
**Please note**, in addition to the requirements of this Notice, if a City of Wanneroo Fire Control Officer considers further works are necessary to reduce the risk of bushfire, Landowners will be notified via letter to the address shown on the City of Wanneroo rates record for the relevant land.

For further information call the City of Wanneroo Community Safety and Emergency Management Team on **9405 5000** or visit [wanneroo.wa.gov.au/fireinformation](http://wanneroo.wa.gov.au/fireinformation)

  
**TO REPORT ALL FIRES  
CALL 000**

### Appendix 3

Location of the current fire hydrants in the general area of the development and compliant with the Water Corporation standards. The site will be serviced by the reticulated scheme water system which includes the provision of fire hydrants and will be compliant with the State's requirements.





## Appendix 4

Location of the Carnaby Cockatoo confirmed roost site buffered by 6 km. There are no Carnaby Cockatoo roosting sites or breeding sites on the development site.



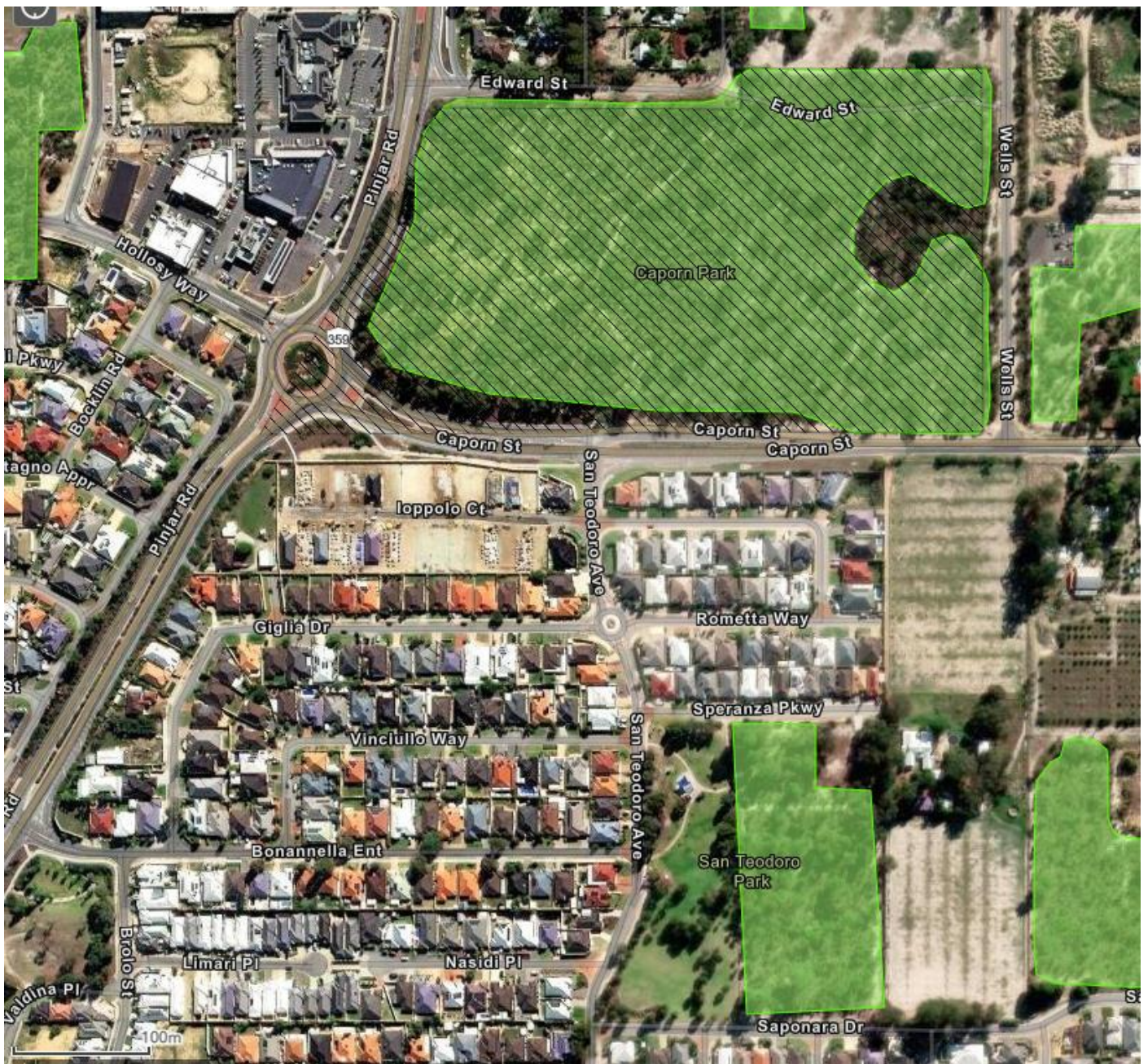
## Appendix 5

Location of the nearest environmentally sensitive area.



## Appendix 6

Location of the nearest Bush Forever (site 469) and the native vegetation extent. Bush Forever site is hatched and the native vegetation is green.



# Appendix 7

Landscape master plan for the management of the public open space (POS) on the neighbouring subdivision to the east. This POS is classified as AS 3959 Exclusion under s2.2.3.2.

## Northern POS

### PUBLIC OPEN SPACE

The two proposed public open space areas are small local parks and are intended to be passive in nature, easily accessible to local residents and interconnected by a footpath network. Where possible, the POS will be designed to enable the retention of existing trees as a part of the urban form. The southern POS will include a significant area of retained vegetation.

The POS's will provide rest areas, informal exercise opportunities, small kick-about area for unorganised active recreation. The northern POS will provide for the treatment of stormwater.

### FORM & FUNCTIONS

- Native, water wise planting. Deciduous used where appropriate.
- Maximise shade trees with emphasis on native species.
- Limited picnic facilities.
- Internal path network.
- Path network connecting into the broader path network.
- Drainage.
- Passive solar.
- Planting design to be zoned according to irrigation requirement, with full irrigation requirements to the informal turf area.
- Source local materials where possible.
- Consider the long term maintenance requirements for all materials.
- POS areas are to be maintained as managed Parklands / Landscape.



## Southern POS

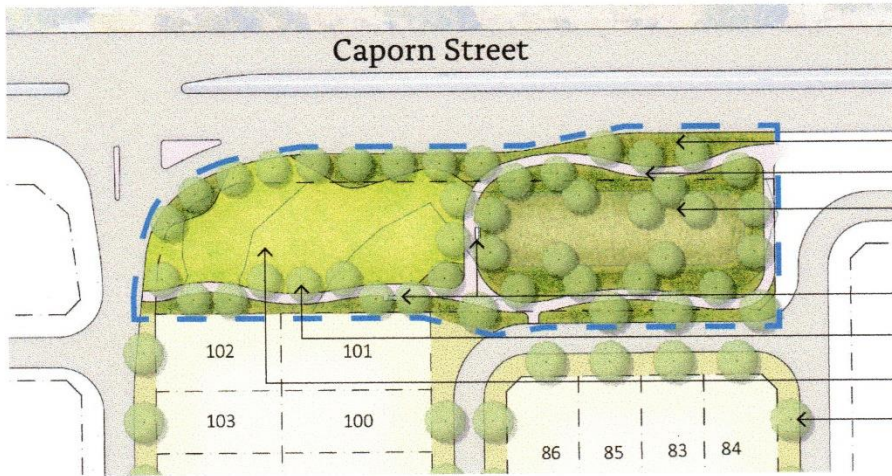


Drawing Number QCSMP : 001      Revision C  
 Date 28 Jan 2022      Scale 1:3000 @ A3

## QUBE Caporn Street (Lots 12, 36 & 38) Landscape Master Plan

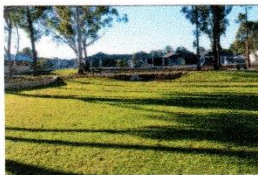
Landscape Architecture  
 Urban Design  
 Play Spaces  
 Residential Landscapes





### Northern POS

- Low height (irrigated) gardenbeds adjacent Caporn Street.
- Internal path network linked to greater path & cycle network.
- Vegetated stormwater detention basin. Note proposed size and location indicative and to be confirmed following detailed design and provision of the UWMP.
- Bench seating to provide areas of respite.
- Shade trees throughout POS & adjacent pedestrian pathways.
- Turf (irrigated) open space area.
- Street trees to each residential lot



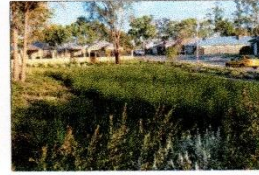
Open turf areas with shade trees



Bench seating adjacent path network



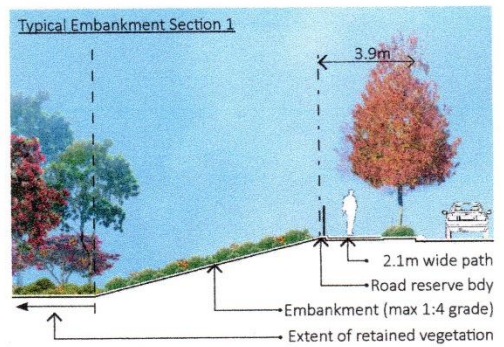
Vegetated stormwater detention basin with reed and sedge planting



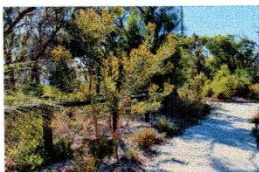
### Southern POS



- Street trees to each residential lot
- External path network linked to greater path & cycle network
- Shade trees adjacent pedestrian pathways
- Extent of existing vegetation retained and protected. (approx 9,150m<sup>2</sup>)
- Low height (irrigated) gardenbeds planting to embankment areas.



Low height (irrigated) gardenbeds adjacent Saponara Drive and proposed internal roads.



Path adjacent retained vegetation



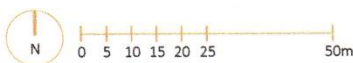
Existing site vegetation



Endemic shrub and tree species to proposed planting areas



Existing site vegetation



Drawing Number QCSMP : 002      Revision C  
Date 28 Jan 2022      Scale 1:1000@ A3

## QUBE Caporn Street (Lots 12, 36 & 38) POS Landscape Concept Plan

Landscape Architecture  
Urban Design  
Play Spaces  
Residential Landscapes



# Proposed Planting in the Public Realm

The provision of tree, shrub, groundcover & turf planting in public areas and streetscapes serves to provide character, shade, interest, function and habitat. The location and types of vegetation will include;

- Predominantly native tree species are to be nominated throughout the development.
- Street trees to increase shade and amenity, greatly improving the walkability and pedestrian orientated nature of the proposed development.
- Exotic specimen shade trees are to be nominated in high profile street or entry locations.
- Smaller scale exotic trees may be nominated in feature locations and avenue plantings to secondary residential streets,
- Bushland and habitat regeneration in disturbed embankment areas,
- Shrub planting to screening and to provide spatial definition,
- Groundcover planting to medians, roundabouts, planters and areas requiring clear sightlines and views,
- Reed and sedge planting to stormwater detention areas,
- Irrigated grass to informal usable space and recreation areas,
- Local species shall be used where suitable to maximise local habitat and minimise water dependence. Soil amendments will be used in order to reduce leaching and increase soil moisture holding capacity. All garden beds will be mulched to reduce water loss through evaporation.

The selection and placement of species shall consider adjacent elements so as to limit future maintenance and public health & safety issues. It will promote the survival and health of the existing vegetation while also provide ongoing social and visual benefits. Items of consideration may include;

- Proximity to traffic sightlines to ensure suitable view corridors,
- Proximity and alignment to underground services to ensure no adverse impact,
- Seasonal influence of shade on adjacent facilities and areas,
- Passive solar benefits influencing adjacent built form and residential dwellings,
- Bushfire management,
- Provision of seasonal visual colour,
- Provision of a seasonal food source to local fauna,
- Plant selection based on suitability to local climate, soils, rainfall and temperatures,
- Selection based on reduced maintenance, trimming, pruning, fertilising and watering.
- Buffer screening will be provided to residential or sensitive areas where required.
- Fringing vegetation to the surrounding areas is to be retained and protected.



Indicative sample plant species below. Final species to be confirmed following detailed design, City of Wanneroo review and availability.

## TREES



*Agonis flexuosa*



*Allocasuarina fraseriana*



*Banksia ashbyii*



*Corymbia ficifolia*



*Eucalyptus victrix*

## SHRUBS



*Conostylis candicans*



*Olearia axillaris*



*Melaleuca conothamnoides*



*Scaevola nitida*



*Westringia fruticosa*

## GROUNDCOVERS



*Eremophila glabra*



*Grevillea obtusifolia*



*Grevillea thelmanniana*



*Hemiandra pungens*

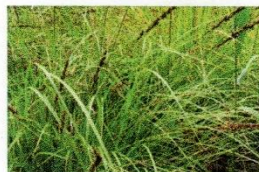


*Kennedia prostrata*

## SEDGES



*Baumea juncea*



*Carex appressa*



*Ficinia nodosa*



*Lepidosperma gladiatum*



*Lomandra longifolia*

Drawing Number QCSMP : 003  
Date 28 Jan 2022

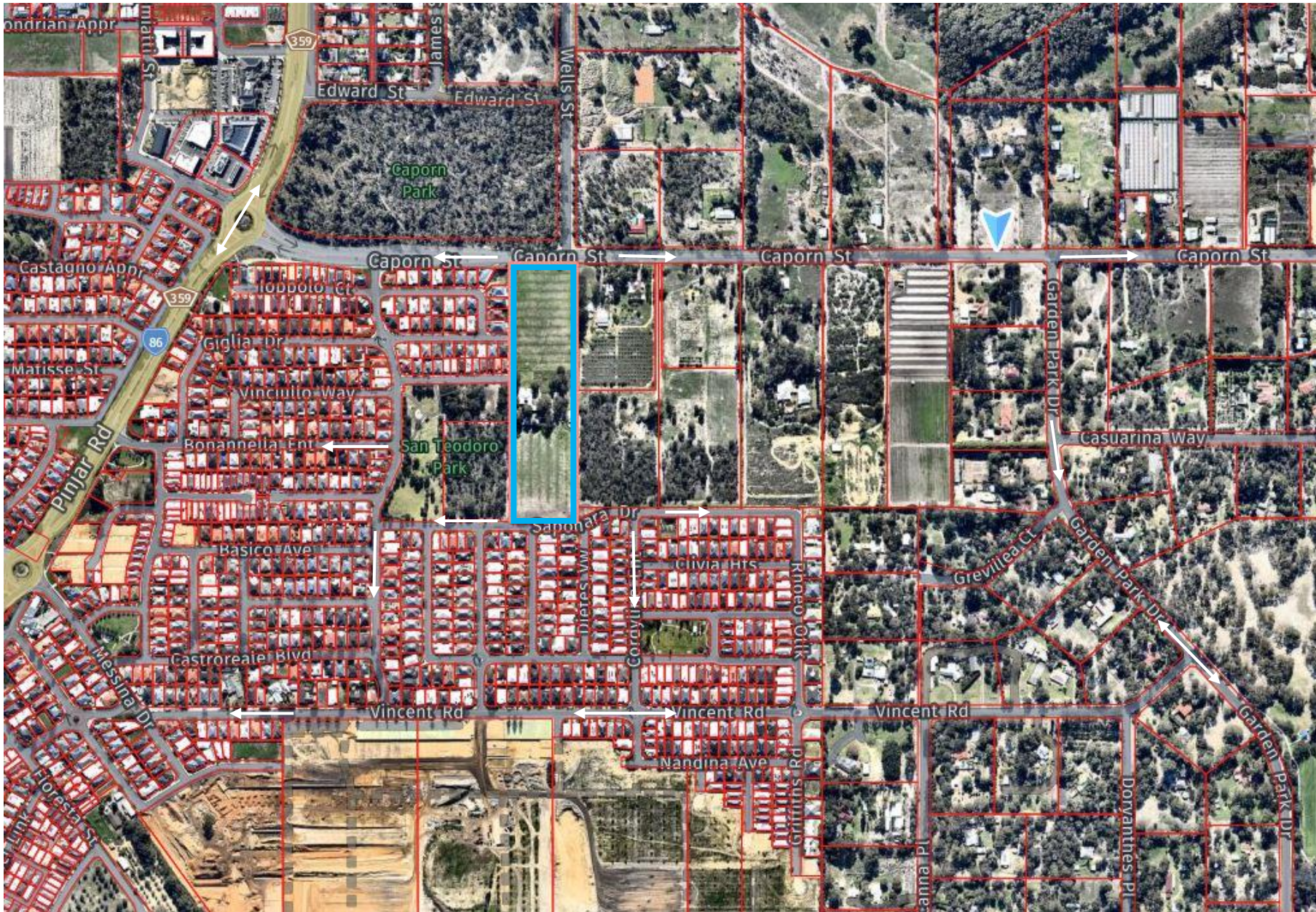
Revision C  
Scale nts

**QUBE Caporn Street (Lots 12, 36 & 38)**  
Softscape Palette

Landscape Architecture  
Urban Design  
Play Spaces  
Residential Landscapes

Considered  
Space

**Appendix 8**  
External access options.



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