

Signature of Practitioner



# **Bushfire Management Plan Coversheet**

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

Bushfire Management Plan and Site Details				
Site Address / Plan Reference: Various lots Armadale Road and Warton Road				
Suburb: Piara Waters		State:	WA	<b>P/code:</b> 6112
Local government area: City of Armadale				
Description of the planning proposal: Structure Plan				
BMP Plan / Reference Number: JBS&G60591/136,509	Version: R01 Rev 2		Date of Issue:	11/03/2022
Client / Business Name: Stockland				

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

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

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

BPAD Accredited Practitioner Details and Declaration					
Name Zac Cockerill	Accreditation Level Level 2	Accreditation No. BPAD37803	Accreditation Expiry 31/08/2022		
<b>Company</b> JBS&G Australia Pty Ltd T/A Strategen JBS&G		<b>Contact No.</b> (08) 9792 4797			

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

Date 11/03/2022



Stockland Bushfire Management Plan (Structure Plan)

Various lots Armadale Road and Warton Road, Piara Waters

11 March 2022 JBS&G60591/136,509 (Rev 2) JBS&G Australia Pty Ltd T/A Strategen-JBS&G



# **Table of Contents**

1.	Propo	osal detail	ls	1			
	1.1	Backgrou	und	1			
	1.2	Site description1					
	1.3	Purpose		1			
	1.4	Other pla	ans/reports	1			
2.	Envir	onmental	considerations	5			
	2.1	Native v	egetation – modification and clearing	5			
	2.2	Revegeta	ation / Landscape Plans	6			
3.	Busht	fire assess	sment results	8			
	3.1	Assessm	ent inputs	8			
		3.1.1	Vegetation classification	8			
		3.1.2	Effective slope	8			
		3.1.3	Pre-development inputs	8			
		3.1.4	Post-development inputs	9			
	3.2	Assessm	ent outputs	.13			
		3.2.1	Bushfire Hazard Level (BHL) assessment	.13			
4.	Ident	ification c	of bushfire hazard issues	.17			
	4.1	Bushfire	context	.17			
	4.2	Bushfire	hazard issues	.17			
5.	Asses	sment ag	ainst the bushfire protection criteria	.19			
	5.1	Complia	nce table	.19			
6.	Respo	onsibilitie	s for implementation and management of the bushfire measures	.21			
7.	Refer	ences		.23			
8.	Limita	ations		.24			

# List of Tables

Table 1: Summary of environmental values
Table 2: Summary of pre-development vegetation classifications/exclusions and effective         slope
Table 3: Post-development vegetation classification/exclusions and effective slope10
Table 4: BHL assessment results   13
Table 5: Compliance with the bushfire protection criteria of the Guidelines



# List of Figures

Figure 1: Concept Plan	3
Figure 2: Site overview	4
Figure 3: Pre-development vegetation classification and effective slope	11
Figure 4: Post-development vegetation classification and effective slope	12
Figure 5: Pre-development Bushfire Hazard Levels	14
Figure 6: Post-development Bushfire Hazard Levels	15
Figure 7: Indicative BAL contour map	16

# List of Plates

Plate 1: Map of Bush Fire	Prone Areas (DFES 2019)	2
---------------------------	-------------------------	---

# Appendices

Appendix A	Landscape Plan
Appendix B	Vegetation plot photos and description
Appendix C	APZ standards (Schedule 1 of the Guidelines)
Appendix D	Vehicular access technical standards of the Guidelines
Appendix E	Water technical standards of the Guidelines
Appendix F	City of Armadale Firebreak Notice (2021/22)



# 1. Proposal details

# 1.1 Background

Stockland Developments Pty Ltd (Stockland) is currently in the Structure Planning stage of a proposed residential development in Piara Waters. The Structure Plan area (project area) is located approximately 20 km south of Perth CBD and is 48.94 ha in area.

A Concept Plan for the Structure Plan is provided in Figure 1, which depicts the following proposed land uses within the site:

- approximately 653 residential lots
- Public Open Space (POS)
- internal public road network
- conservation wetland and buffer varying between 15–30m.

The project area was rezoned to 'Urban' under the Metropolitan Region Scheme (MRS) in 2020 and an amendment to the City of Armadale Town Planning Scheme No. 4 (TPS4) to align the zoning with the MRS is currently proposed.

## 1.2 Site description

The project area is situated within the City of Armadale and comprises:

- undeveloped land with scattered vegetation coverage to the north
- Armadale Road and conservation bushland to the south
- Interdominion View and existing urban development to the east/northeast
- Warton Road and conservation bushland to the west.

The project area is designated as bushfire prone on the *Map of Bush Fire Prone Areas* (DFES 2019; see Plate 1).

### 1.3 Purpose

This Bushfire Management Plan (BMP) has been prepared to address requirements under *Policy Measure 6.3 of State Planning Policy 3.7 Planning in Bushfire-Prone Areas* (SPP 3.7; WAPC 2015) and *Guidelines for Planning in Bushfire-Prone Areas* (the Guidelines; WAPC 2017).

### 1.4 Other plans/reports

Other reports that have been prepared for the project area include:

- Strategen-JBS&G (2021a), Environmental Due Diligence: Lots 99, 100, 151, 150, 13, 14, 15, 603 and 9001 Piara Waters
- Coterra Environment (2020), Environmental and Geotechnical Opportunities and Constraints Report: West Piara Waters Southern Precinct
- Focussed Vision Consulting (2020), Flora and Vegetation Assessment: West Piara Southern Development Precinct, Piara Waters, prepared for Coterra Environment
- Strategen-JBS&G (2021b), *Environmental Management Plan: Piara Waters WA*, prepared for Stockland Developments Pty Ltd
- Strategen-JBS&G (2021c), *Environmental Assessment Report: Piara Waters WA*, prepared for Stockland Developments Pty Ltd.





Plate 1: Map of Bush Fire Prone Areas (DFES 2019)



# DEVELOPMENT CONCEPT PLAN

Warton Road, South Forrestdale

**CLE Town Planning + Design** 







# 2. Environmental considerations

## 2.1 Native vegetation – modification and clearing

According to the Strategen-JBS&G (2021c) Environmental Assessment Report (EAR), the impacts associated with the proposed development include the removal of up to 6.11 ha of native vegetation and associated habitat disturbance to facilitate the development. A total of 1.96 ha of the vegetation proposed to be removed is in 'Good' condition; however no vegetation of 'Good to Very Good' or 'Very Good' condition will be impacted. The wetland retention area of 7.36 ha and associated wetland buffer is expected to return a good environmental outcome.

No significant impacts to flora and vegetation are considered to result from the proposed development, with no threatened or priority ecological communities confirmed on site and the retention of key environmental values (good-quality wetland vegetation, *Jacksonia gracillima* individuals and potentially the *Caladenia* sp. individuals if identified as *C. huegelii*) through the wetland retention area. For any threatened or priority flora later identified as occurring outside of the retention area, measures to retain or translocate threatened or priority flora will be undertaken where practicable.

A search of publicly available environmental data has been undertaken, along with a review of the EAR (Strategen-JBS&G 2021c) relating to the proposed conservation reserve. This information is summarised in Table 1.

Strategen-JBS&G understands that environmental impacts resulting from implementation of the proposal will be addressed under standard State and Federal environmental assessment and referral requirements under the *Environmental Protection Act 1986* and *Environment Protection and Biodiversity Conservation Act 1999*.

Environmental value	Mapped as occurring within or adjacent to the project area		Description	
	Within	Adjacent		
Environmentally Sensitive Area	~	~	A proportion of the project area is mapped as being an Environmentally Sensitive Area.	
Swan Bioplan Regionally Significant Natural Area	×	×	N/A	
Ecological linkages	~	~	Ecological linkages occur in the west and southwest corner of the project area.	
Wetlands	~	~	Multiple Use and Resource Enhancement Wetlands are located within project area, with a Conservation Category wetland located adjacent south. Wetland categories on site may be amended as a result of the proposal (subject to environmental assessment).	
Waterways	×	×	N/A	

### Table 1: Summary of environmental values



Environmental value	Mapped as occurring within or adjacent to the project area		Description	
	Within	Adjacent		
Threatened Ecological Communities (TECs) listed under the EPBC Act	×	~	Three areas were assessed under the criteria outlined in the conservation advice (TSSC 2016); however, they do not meet the condition and size thresholds to be confirmed as TECs. Therefore, no Banksia Woodlands of the Swan Coastal Plain TEC, or any other TEC or PEC, occurs within the site. TECs are mapped as occurring on adjacent land.	
Threatened and priority flora	✓	~	A small cluster of <i>Caladenia</i> sp. was recorded within the project area (Focused Vision Consulting 2020). Site assessment in September and October 2021 by Strategen-JBS&G was not able to confirm the presence of C. huegelii (Threatened-Endangered). Threatened and priority flora are mapped as occurring on adjacent land.	
Fauna habitat listed under the EPBC Act	~	✓	The project area may provide foraging and potential roosting habitat for Carnaby's Black Cockatoo, Forest Red-tailed Black Cockatoo and Quenda. 80 significant habitat trees were recorded within the project area, however, only two are endemic to Western Australia and confirmed to be used by Black Cockatoos ( <i>Eucalyptus</i> <i>marginata</i> ), while the rest are planted, non-endemic Eucalypt species. Fauna habitat for Black Cockatoos is also mapped as occurring on adjacent land.	
Threatened and priority fauna	$\checkmark$	$\checkmark$	The project area contains habitat for Carnaby's Cockatoo, Forest Red-tailed Black Cockatoo and Quenda, all of which are known to occur within the general area.	
Bush Forever Site	$\checkmark$	~	Bush Forever Site 390 is located west of the project area on the opposite side of Warton Road. Bush Forever Site 344 is located south of the project area on the opposite side of Armadale Road.	
DBCA managed lands and waters (includes legislated lands and waters and lands of interest)	✓	~	One DBCA managed area is located south of the project area opposite Armadale Road. This is Department-managed Crown Freehold land and forms part of Bush Forever site 344.	
Conservation covenants	×	×	N/A	

# 2.2 Revegetation / Landscape Plans

The MRS amendment process identified two wetlands that required investigation for the potential to be protected and managed through subsequent planning and development processes. These wetlands, UFI 7176 and UFI 13342 were evaluated as per *A methodology for the evaluation of wetlands on the Swan Coastal Plain, Western Australia* (DBCA 2017a). The wetlands were assessed individually, with results indicating UFI 7176 is representative of a Resource Enhancement wetland while UFI 13342 is representative of a Multiple Use wetland. Following the methodology, neither wetland met any criterion under the Preliminary Assessment to be classified as Conservation Category.

A wetland retention area of 7.36 ha will be comprised of the wetland core and a buffer that will be subject to rehabilitation and revegetation as outlined in the Landscaping Plan (refer to Appendix A, noting that an updated landscaping plan is currently in preparation). Of the 7.36 ha retention area, 3.37 ha of 'Good' or better quality vegetation will be protected and approximately 3.98 ha will be revegetated, which is expected to return a good environmental outcome. Management of POS between the revegetated buffer and road reserve will be utilised for a combination of amenity, recreation, and drainage.



Drainage basins located within the 30 m wetland buffer will be confined to the external 'active' buffer. This will provide the vegetation with additional protection whilst enabling a small portion of the area to be utilised for recreation and amenity.

The Urban Forest cover is expected to improve through the above measures to retain 75 mature trees (pending results of an arboriculture assessment and preparation of a Tree Retention Strategy by MNG 2021) and establish up to 1048 street trees, based on draft street-tree landscaping plans. Additional landscaping within proposed areas of POS will also contribute to the increase in Urban Forest cover.

For the purposes of this BMP, it has been assumed as a precaution that the wetland core will remain as per pre-development vegetation classifications of approximately 40% Class A Forest, 50% Class D Scrub and the remaining 10% as small pockets of Class G Grassland, as shown in Figure 4. As a precaution, the entire extent of the wetland buffer has been assigned a Class D Scrub classification, which is consistent with:

- the existing predominant vegetation within the buffer
- the anticipated planting species outlined in the Master Landscaping Plan that will be further refined at the subdivision stage
- previous approaches to wetland buffer classifications in the Piara Waters locality

Should it be determined at a later stage (e.g. subdivision) through preparation of a detailed landscape plan that a Class D scrub classification is inconsistent with the ultimate landscaping outcome within the wetland buffer, the classification can be amended consistent with the landscape plan, and BAL contours mapped accordingly. It is expected that any inconsistency will be due to a reduction in classification from Class D scrub to a potential Class C shrubland, Class G grassland and/or exclusion under AS3959.

The remaining POS areas will be excluded under various provisions of Clause 2.2.3.2 of AS 3959. Due to the expected level of tree retention, the larger central POS cell is likely to be excludable under Clause 2.2.3.2 (b), which does not require a vegetation classification (no planting limitations) as the retained vegetation area will be less than 1 ha and situated more than 100 m from other classified vegetation. The other small POS areas will likely fall under Clause 2.2.3.2 (c), (d), (e) and/or (f) and regarded as low threat vegetation.

The vegetation within the existing powerline corridor in the north of the project area is expected to be retained and enhanced by revegetation as part of the development; therefore, a precautionary classification of Class D Scrub has been applied.



# 3. Bushfire assessment results

### 3.1 Assessment inputs

## **3.1.1** Vegetation classification

Strategen-JBS&G assessed classified vegetation and exclusions within 150 m of the project area through on-ground verification on 16 April 2021.

Vegetation classifications have been assigned in accordance with *AS 3959—2018 Construction of Buildings in Bushfire-Prone Areas* (AS 3959; SA 2018) and the *Visual Guide for Bushfire Risk Assessment in Western Australia* (DoP 2016). Georeferenced site photos and a description of the vegetation classifications and exclusions are contained in Appendix B. Vegetation classification results are outlined in Table 2/Figure 3 (for pre-development conditions) and Table 3/Figure 4 (for anticipated post-development conditions).

Site observations indicate that the project area and adjacent 150 m comprises a broad variety of classified vegetation dispersed throughout the site, including:

- Class A Forest
- Class B Woodland
- Class D Scrub
- Class G Grassland.

Land excluded from classification under Clauses 2.2.3.2 (e) and (f) was also identified throughout existing non-vegetation areas and low threat managed vegetation.

### 3.1.2 Effective slope

Strategen-JBS&G assessed effective slope under classified vegetation through on-ground verification on 16 April 2021 in accordance with AS 3959. Results were cross-referenced with DPIRD 2m contour data and are outlined in Table 2/Figure 3 (for pre-development conditions) and Table 3/Figure 4 (for anticipated post-development conditions).

Site observations indicate that the project area is relatively flat, varying in elevation from 26 m AHD in the east and south to 36 m AHD in the northwest.

Class A Forest, Class D Scrub and Class G Grassland vegetation within the northwest boundary has an effective downslope ranging from >0 to 10°. The remainder of the external classified vegetation is located on land that is predominantly flat or upslope in relation to the project area.

On completion of the development, the retained areas of classified vegetation within the project area would be predominantly flat in relation to areas supporting habitable development.

### 3.1.3 Pre-development inputs

A summary of the assessed pre-development classified vegetation, exclusions and effective slope within the project area and adjacent 150 m are listed in Table 2 and illustrated in Figure 3.



Vegetation plot	Vegetation classification	Effective slope	Comments
1	Class A Forest	Flat/upslope (0°)	Areas of remnant forest vegetation within and
			around existing rural-residential properties
2	Class A Forest	Downslope >0–5°	Areas of remnant forest vegetation within rural-
			residential properties primarily in the
			northwest and southwest of the project area.
3	Class B Woodland	Flat/upslope (0°)	Treed vegetation with a grassy understorey
			within rural-residential properties to the south
			and north.
4	Class B Woodland	Downslope >0–5°	A small pocket north of the project area
			consisting of treed vegetation with a grassy
			understorey.
5	Class D Scrub	Flat/upslope (0°)	Scrub vegetation within rural-residential
			properties within and adjacent to the project
			area, as well as within Rose Shanks Reserve to
			the west and a large unmanaged area to the
			south.
6	Class D Scrub	Downslope >0–5°	Scrub vegetation subject to slope within the
			north of the project area.
7	Class D Scrub	Downslope >5–10°	Scrub vegetation subject to slope adjacent
			north of the project area.
8	Class G Grassland	Flat/upslope (0°)	Area of unmanaged grassland (>100 mm height
			within and external to the project area.
9	Class G Grassland	Downslope >0–5°	Area of unmanaged grassland (>100 mm height
			within and external to the project area,
			(predominantly in the northwest corner).
10	Excluded – Non-vegetated and Low	N/A	All currently developed, cleared and managed
	threat (Clause 2.2.3.2 [e] and [f])		land within and surrounding the project area.

### Table 2: Summary of pre-development vegetation classifications/exclusions and effective slope

### 3.1.4 Post-development inputs

A summary of the potential post-development classified vegetation, exclusions and effective slope within the assessment area and adjacent 150 m are listed in Table 3 and illustrated in Figure 4.

The post-development vegetation classifications for all land external to the project area are expected to remain the same as for the pre-development classifications. If external vegetation is altered prior to future planning stages, the change in vegetation condition is to be captured through a future BHL assessment or BAL contour map assessment prepared at that stage.



Vegetation plot	Vegetation classification	Effective slope	Comments
1	Class A Forest	Flat/upslope (0°)	Pockets of vegetation within and around the project area – flat or upslope of future development areas.
2	Class B Woodland	Flat/upslope (0°)	Treed vegetation with a grassy understorey north of the project area – flat or upslope of future development areas.
3	Class B Woodland	Downslope >0–5°	Treed vegetation with a grassy understorey north of the project area – downslope of future development areas.
4	Class D Scrub	Flat/upslope (0°)	Scrub vegetation within and around the project area.
5	Class D Scrub	Downslope >0–5°	Scrub vegetation downslope of future development areas.
6	Class D Scrub	Downslope >5–10°	Scrub vegetation north of the project area with a steeper downslope in relation to future development areas.
7	Class G Grassland	Flat/upslope (0°)	Area of unmanaged grassland (>100 mm) height external to the project area.
8	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	All currently developed, cleared and managed land within and surrounding the project area that is assumed to remain managed for the life of the proposed development (road, tracks, cleared land for future development).
9	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Areas within the site to be modified to a low threat as part of proposed development (POS, proposed development, roads and paths).

# Table 3: Post-development vegetation classification/exclusions and effective slope



File Name: W:\Projects\1)Open\Stocklandl60591 Piara Waters residential development\GIS\Maps\R01\_Rev\_1\60591\_03\_A3\_PreDevVegClass.mxc Image Reference: www.nearmap.com© - Imagery Date: 24. October 2021.



File Name: W:\Projects\1)Open\Stockland\60591 Piara Waters residential development\GIS\Maps\R01\_Rev\_1\60591\_04\_A3\_PostDevVegClass.mx Image Reference: www.nearmap.com© - Imagery Date: 24. October 2021.



### 3.2 Assessment outputs

## 3.2.1 Bushfire Hazard Level (BHL) assessment

Pre and post-development vegetation extents have been assigned a bushfire hazard level in accordance with the methodology detailed in Appendix Two of the Guidelines, as outlined in Table 4.

Bushfire hazard level	Characteristics*
Extreme	Class A Forest
	Class B Woodland (05)
	Class D Scrub
	<ul> <li>Any classified vegetation with a greater than 10° slope.</li> </ul>
Moderate	Class B Low Woodland (07)
	Class C Shrubland
	Class E Mallee/Mulga
	Class G Grassland, including sown pasture and crops
	Class G Grassland: Open woodland (06), Low open woodland (08), Open shrubland (09)
	Vegetation that has a low hazard level but is within 100 metres of vegetation classified as a
	moderate or extreme hazard, is to adopt a moderate hazard level.
Low	Low threat vegetation may include areas of maintained lawns, golf courses, public recreation
	reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips
	and windbreaks
	Managed grassland in a minimal fuel condition (insufficient fuel is available to significantly increase
	the severity of the bushfire attack). For example, short-cropped grass to a nominal height of 100
	millimetre
	<ul> <li>Non-vegetated areas including waterways, roads, footpaths, buildings and rock outcrops.</li> </ul>
*Vegetation class	sifications from AS 3959-2018 Table 2.3.

### Table 4: BHL assessment results

# 3.2.1.1 Pre-development BHL

Strategen-JBS&G has mapped the pre-development BHLs within the project area and adjacent 150 m wide assessment area. The BHLs have been assessed on the basis of the vegetation discussed in Section 3.1.3 (i.e. the current pre-development extent of vegetation within and surrounding the project area).

The pre-development BHL assessment (refer to Figure 5) shows that based on the existing vegetation, the project area contains land with Low, Moderate and Extreme BHLs.

### 3.2.1.2 Post-development BHLs

Strategen-JBS&G has mapped the potential post-development BHLs to demonstrate that the future bushfire hazard levels will be acceptable for future development to occur within the project area. The BHLs have been assigned on the basis of the vegetation discussed in Section 3.1.4 and the future expected vegetation extent within and surrounding the project area.

The post-development BHL assessment (refer to Figure 6) demonstrates that all future habitable development will be located on land with either a Low or Moderate BHL.

### **3.2.1.3 Post-development BAL contours**

Strategen-JBS&G has mapped the indicative post-development BAL contours over the project area (Figure 7). The BAL contours have been assessed on the basis of the vegetation discussed in Section 3.1.4 and the future expected vegetation extent within and surrounding the project area.

The BAL contours demonstrate that all proposed development cells can achieve BAL-29 or lower through provision of public roads/low threat POS at interfaces with classified vegetation, as well as consideration of internal development setbacks where required.









# 4. Identification of bushfire hazard issues

# 4.1 Bushfire context

The highest risk bushfire scenarios that could potentially impact the project area are from the west and south via long fire runs through predominantly scrub vegetation on flat to gently sloping land. These scenarios could result in elevated radiant heat and ember attack output at the proposed development interface, particularly under predominant summer afternoon wind conditions from the south/west. However, substantial buffers to these scenarios are in place via Warton Road (western site interface) and Armadale Road (southern site interface), which are expected to provide sufficient defendable space to assist in mitigating bushfire risk from these scenarios.

A mixed vegetation fire run from the north through predominant woodland, scrub and grassland fuels could also impact the site, however, internal road interfaces combined with BAL-rated construction is expected to be sufficient to mitigate this risk. Potential bushfire behaviour within the proposed scrub wetland core and 30 m wide buffer is also expected to be readily manageable through a combination of internal road interfaces working in concert with BAL-rated construction.

The development interface to the east is not expected to be subject to bushfire risk given the presence of existing urban development in this direction.

## 4.2 Bushfire hazard issues

Examination of strategic development design in accordance with the concept plan and pre and postdevelopment BHLs has identified the following bushfire hazard issues to be considered at future planning stages:

- 1. The project area contains on-site areas of Extreme BHL, not suitable for habitable development within areas of proposed vegetation retention/revegetation (i.e. the wetland core/buffer in the northeast and powerline corridor in the north). However, the post-development BHL assessment and indicative BAL contour map demonstrate that on completion of development, all habitable development will be located on land with a Low or Moderate BHL, with the potential to deliver BAL-29 or lower. A detailed BAL contour assessment will be commissioned at future planning stages (i.e. subdivision) to proof up lot design and demonstrate at a more detailed level that all development will be located within areas of BAL-29 or below. Therefore, the development can comply with Acceptable Solution A1.1 of the Guidelines.
- 2. Development design will include retention/revegetation of native vegetation within the on-site wetland core and associated buffer, which have been classified as Extreme BHL. Where habitable development is proposed within proximity to this vegetation, setbacks and/or APZs sufficient to achieve BAL-29 are to be employed as part of a compliant subdivision design. Lot size and orientation will need to be considered at future stages to ensure appropriate separation can be achieved.
- 3. The applicable habitable building setbacks from internal and external classified vegetation required to achieve BAL-29 are to be determined through site-specific BAL Contour map analysis at future planning stages, but are likely to be:

Vegetation classification	Effective slope	Separation to achieve BAL-29
Class A Forest	Flat/ Upslope	21 m
Class B Woodland	Flat/ Upslope	14 m
	Downslope >0 to 5 degrees	17m
Class D Scrub	Flat/ Upslope	13 m
	Downslope >0 to 5 degrees	15m
	Downslope >5 to 10 degrees	17m
Class G Grassland	Flat/ Upslope	8m



- 4. The BMP has classified the proposed wetland buffer as Class D Scrub (Extreme BHL) which Strategen-JBS&G considers a precautionary approach as it allows for revegetation of native species that is generally consistent of typical wetland areas (including banksia, melaleuca and/or leptospermum). This includes vegetation between 2–6m in height and foliage cover greater than 30%. It is acknowledged that the wetland buffer is also likely to include areas of open space and managed vegetation which may be excluded as non-vegetated and low threat areas in accordance with Clauses 2.2.3.2 [e] & [f] of AS 3959 and these will be reassessed and refined accordingly at the future subdivision stage as part of detailed BAL contour mapping.
- 5. Three interfaces along the project boundary are considered to pose the predominant bushfire risk, including the western boundary (Rose Shanks Reserve), the southern boundary and the northern boundary. These interfaces will need to be considered as setbacks may be applicable to achieve a lower BAL rating.
- 6. Although current Structure Plan design will ultimately deliver multiple access connections to the surrounding public road network (i.e. to the east, west and north), development is expected to occur in stages. Therefore, staging of development is to ensure that at least two access routes are always provided in accordance with acceptable solution A3.1 of the Guidelines. This may require provision of temporary staging measures such as temporary compliant cul-de-sacs and/or Emergency Access Ways (EAWs) to deliver compliant access outcomes for individual stages.
- 7. As the project area contains some areas of bushfire prone vegetation, staged construction at the subdivision stage of planning is to consider the BAL impacts from adjacent future stages that have not yet been developed. Low threat staging buffers may need to be implemented around the current stage of development to ensure there is no residual impact from vegetation that has not yet been cleared or landscaped to achieve a low threat state.
- 8. Fire service access routes (FSARs) may be required to provide access around the perimeter of the retained/rehabilitated vegetation where public roads are not proposed.

Based on the above, Strategen-JBS&G considers the bushfire hazards within and adjacent to project area and the associated bushfire risks are readily manageable through standard management responses outlined in the Guidelines and AS 3959. These responses will be factored into proposed development as early as possible at all stages of the planning process to ensure a suitable, compliant and effective bushfire management outcome is achieved for protection of future life, property and environmental assets.



# 5. Assessment against the bushfire protection criteria

# 5.1 Compliance table

An acceptable solutions assessment against the bushfire protection criteria is provided in Table 5.

|--|

Bushfire protection criteria	Method of compliance Acceptable solutions	Proposed bushfire management strategies		
Element 1: Location	A1.1 Development location	The post-development BHL assessment (Figure 6) and indicative BAL contour map (Figure 7) identifies that on completion of development, all developable land will comprise either a Low or Moderate BHL and has potential to deliver BAL-29 or lower. All habitable development is to be avoided on land with an extreme BHL and/or BAL-40/FZ rating.	$\checkmark$	
Element 2: Siting and design	A2.1 Asset Protection Zone	The required APZs are to be identified at future planning stages based on future subdivision/development design and following a detailed BAL contour assessment. APZs/setbacks are to be implemented and maintained in accordance with Schedule 1 of the Guidelines (Appendix C) and the City's Firebreak and Fuel Hazard Reduction Notice (see Appendix F).	~	
Element 3: Vehicular access	A3.1 Two access routes	On completion of development, the existing public road network and proposed public internal roads will provide all occupants with the option of travelling to more than two different destinations (see Figure 4), including via connections with Interdominion View to the east, Warton Road to the west and future development areas to the north. These connections will ultimately provide linkage through to Armadale Road, which provides access east and west. Warton Road also provides access north and south. In this regard, the proposed development is provided with at least two access routes, which meets the requirements of Acceptable Solution A3.1. Two access routes are also to be provided during staging of development.	$\checkmark$	
	A3.2 Public road	All public roads are to be constructed to the relevant technical requirements of the Guidelines (see Appendix D).	$\checkmark$	
	A3.3 Cul-de-sac (including a dead-end- road)	Cul-de-sacs are not advised, unless unavoidable (justification to be provided by the proponent). Any proposed cul-de-sacs (permanent or temporary) will be required to comply with Guideline requirements (see Appendix D), including a maximum length of 200 m and minimum 17.5 m diameter turn-around head.	✓	
	A3.4 Battle-axe	Battle-axes are not advised, unless unavoidable (justification to be provided by the proponent). Any proposed battle-axes will be required to comply with Guideline requirements (see Appendix D).	✓	
	A3.5 Private driveway longer than 50 m	Any proposed private driveways located further than 50 m from a public road will be required to comply with Guideline requirements (see Appendix D).	✓	
	A3.6 Emergency access way	Any proposed emergency access ways (permanent or temporary) will be required to comply with Guideline requirements (see Appendix D).	✓	
	A3.7 Fire service access routes (perimeter roads)	Any proposed fire service access routes will be required to comply with Guideline requirements (see Appendix D).	✓	



Bushfire protection criteria	Method of         compliance         Acceptable solutions		Compliance achievable at future planning stages
	A3.8 Firebreak width	Each stage of development is required to comply with the requirement of the City's Firebreak Notice as amended (refer to Appendix F).	~
		On completion of the development, it is expected that the majority of lots will be fully developed and would not require individual lot firebreaks	
Element 4: Water	A4.1 Reticulated areas	The project area will be serviced by a reticulated hydrant network through extension from surrounding urban development, compliant with Water Corporation DS-63 requirements (refer to Appendix E).	✓
	A4.2 Non-reticulated areas	N/A – the proposed subdivision is located within an existing reticulated area.	N/A
	A4.3 Individual lots within non-reticulated areas (Only for use if creating 1 additional lot and cannot be applied cumulatively)	N/A – the proposed subdivision is located within an existing reticulated area.	N/A



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

This BMP has been prepared as a strategic guide to demonstrate how development compliance will be delivered at future planning stages in accordance with the Guidelines. Aside from the preparation of future BMPs to accompany future subdivision and development applications where appropriate, there are no further items to implement, enforce or review at this strategic stage of the planning process.

Future BMPs prepared for subsequent subdivision and development applications are to meet the relevant commitments outlined in this strategic level BMP, address the relevant requirements of SPP 3.7 (i.e. Policy Measures 6.4 and 6.5 respectively) and demonstrate in detail how the proposed development will incorporate the relevant acceptable solutions or meet the performance requirements of the Guidelines. Future BMPs are to include the following detailed information:

- proposed lot layout and detailed landscaping for POS, reserve and drainage basin design
- post-development classified vegetation extent, effective slope and separation distances
- post-development BAL application requirements
- detailed BAL contour mapping demonstrating that proposed habitable development areas will achieve a rating of BAL–29 or lower
- width and alignment of compliant APZs, including any APZ setback requirements into lots
- confirmation of how bushfire management will be addressed regarding temporary bushfire hazards on adjacent future development stages, including low threat staging buffers or temporary quarantining of lots where required
- proposed approach to fuel management or AS 3959 application in response to on-site POS or easements (if and where required)
- vehicular access provisions, including demonstration that a minimum of two access routes will be achieved for each stage of development in accordance with acceptable solution A3.1 (may require consideration of temporary compliant access provisions such as cul-de-sacs and EAWs)
- provision of FSARs around the perimeter of vegetation hazards where required
- water supply provisions regarding reticulated water
- future requirements for any identified vulnerable land uses, such as provision of a Bushfire Emergency Evacuation Plan at the DA or building permit stage for the proposed school site
- future requirements for any future high-risk land uses, such as provision of a Bushfire Risk Management Plan
- provisions for notification on Title for any future lots with a rating of BAL-12.5 or greater as a condition of subdivision
- compliance requirements with the annual City firebreak notice
- assessment against the bushfire protection criteria
- proposed audit and compliance program outlining all measures requiring implementation and the appropriate timing and responsibilities for implementation.



Based on the information contained in this BMP, Strategen-JBS&G considers the bushfire hazards within and adjacent to the project area and the associated bushfire risks are readily manageable through standard management responses outlined in the Guidelines and AS 3959. Strategen-JBS&G considers that on implementation of the proposed management measures, the project area will be able to be developed with a manageable level of bushfire risk whilst maintaining full compliance with SPP3.7, the Guidelines and AS 3959.



# 7. References

Department of Fire and Emergency Services (DFES) 2019, *Map of Bush Fire Prone Areas*, [Online], Government of Western Australia, available from:

https://maps.slip.wa.gov.au/landgate/bushfireprone/, [24/05/2021].

- Department of Planning (DoP) 2016, *Visual guide for bushfire risk assessment in Western Australia*, Department of Planning, Perth.
- Standards Australia (SA) 2018, Australian Standard AS 3959–2018 Construction of Buildings in Bushfire-prone Areas, Standards Australia, Sydney.
- Strategen-JBS&G 2021, Environmental Assessment Report, Piara Waters, Strategen-JBS&G, Perth/Bunbury.
- Western Australian Planning Commission (WAPC) 2015, *State Planning Policy 3.7 Planning in Bushfire Prone Areas*, Western Australian Planning Commission, Perth.

Western Australian Planning Commission (WAPC) 2017, *Guidelines for Planning in Bushfire Prone Areas*, Version 1.3 August 2017, Western Australian Planning Commission, Perth.



# 8. Limitations

### Scope of services

This report ("the report") has been prepared by Strategen-JBS&G in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen-JBS&G. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

## **Reliance on data**

In preparing the report, Strategen-JBS&G has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, Strategen-JBS&G has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Strategen-JBS&G has also not attempted to determine whether any material matter has been omitted from the data. Strategen-JBS&G will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Strategen-JBS&G. The making of any assumption does not imply that Strategen-JBS&G has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. Strategen-JBS&G disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

# **Environmental conclusions**

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

Strategen-JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by Strategen-JBS&G, and should not be relied upon by other parties, who should make their own enquiries.



Appendix A Landscape Plan

# MASTERPLAN Overall site masterplan



# PIARA WATERS LSP PREPARED FOR STOCKLAND

LANDSCAPE MASTERPLAN DECEMBER 2021



M1.101 0 15 30

90

60

REV I 150m



# LEGEND

- 01 ENTRY ROAD INTO ESTATE WITH AVENUE OF TREES, GROUNDCOVERS TO VERGE AND FULLY LANDSCAPED MEDIAN ISLAND
- 02 MAIN NEIGHBOURHOOD CONNECTOR WITH CARRIAGEWAY OFFSET WITHIN ROAD RESERVE TO MAXIMISE LANDSCAPING OPPORTUNITIES TO ROAD VERGE AND CREATE NATURALISED CORRIDOR
- 03 RESIDENTIAL ACCESS ROAD WITH FOOTPATH TO ONE SIDE AND NEW STREET TREE PLANTING
- 04 BUFFER NATIVE TREE PLANTING TO SITE BOUNDARY TO PROVIDE SHADE AND AMENITY TO RESIDENTIAL LOTS, PARTICULARLY TO CUL-DE-SACS
- 05 POS 1 CONNECTION OPPORTUNITY TO EXISTING BUS STOP & PATHWAY/ BICYCLE NETWORKS OF ARMADALE AND WARTON ROADS - A WAYFINDING DESTINATION WITH RETAINED TREES AND SHADED RECREATION/ AMENITY SPACE FOR RESIDENTS
- 06 POS 2 PUBLIC OPEN SPACE AND ESTATE ENTRY WITH HIGH QUALITY LANDSCAPING, OPEN TURF AND PASSIVE RECREATION OPPORTUNITIES WITHIN A 'WILDFLOWER' THEME NARRATIVE
- 07 POS 3 CENTRAL PARK SPACE WITH ICONIC PLAY STRUCTURE, TURF AMENITY, ACTIVE AND PASSIVE RECREATION OPPORTUNITIES, PICNIC FACILITIES AND INTEGRATED ART CREATING COMMUNITY SPACE FOR RESIDENTS AND THE WIDER COMMUNITY
- 08 POS 4 WETLAND PUBLIC OPEN SPACE OFFERING BOTH ACTIVE AND PASSIVE RECREATION OPPORTUNITIES WITHIN A 'NATURAL' SETTING - WALKING TRAILS, REST AREAS, RETAINED VEGETATION, PLAYGROUND & PICNIC FACILITIES
- 09 POS 5 PASSIVE RECREATION OPPORTUNITY WITH FOOTPATHS, NATIVE TREE AND LOW SHRUB PLANTING FOR HABITAT CREATION, AND SEATING OPPORTUNITY. PATH CONNECTIONS PROVIDED TO RESIDENTIAL FABRIC EAST OF ESTATE

# KEY

INTEGRATED 'WILDFLOWER' ART SCULPTURE / PLAY ELEMENT TO FORM SERIES OF WAYFINDING ELEMENTS ACROSS THE SITE AND ENCOURAGE EXPLORATION

- 2M WIDE CONCRETE FOOTPATH (TO HIGH SIDE OF ROAD)
- 1.5M WIDE SHARED FOOTPATH (BOTH SIDES OF ROAD)
  - EXISTING 2.5M WIDE SHARED PATH (PEDESTRIAN & CYCLING)
- EXISTING 4M WIDE PRINCIPAL SHARED PATH (PEDESTRIAN & CYCLING)
- ACOUSTIC BUFFERING WALL
- ↑ SECTIONS REFER C2.101-C2.105



# LANDSCAPE ARCHITECTS

# CONCEPT PLAN



# PIARA WATERS LSP

PREPARED FOR STOCKLAND

PUBLIC OPEN SPACE CONCEPT PLAN - POS 1, POS 2 AND POS 5 DECEMBER 2021

# PUBLIC OPEN SPACE - EAST

JOB NO. 2103601 1:600 @ A1

C1.101 **REV E** 36 **0** 6 12 24

60m

COPYRIGHT THIS DOCUMENT IS AND SHALL REMAIN THE PROPERTY OF PLAN E

LΕ	GEND
01	ACOUSTIC BUFFERING WALL
02	ESTATE ENTRY WITH SWATHES OF LOW WILDFLOWER PLANTING, SWEEPING WALL PROVIDING ARTWORK/SIGN OPPORTUNITY
03	'WILDLFLOWER' ART SCULPTURE OPPORTUNITY WITHIN SWATHES OF LOW WILDFLOWER AND NATIVE PLANT GARDEN BEDS
04	TERRACED GARDEN BEDS BENEATH LARGE STATEMENT TREES (IE. <i>CORYMBIA</i> <i>MACULATA</i> )
05	OPEN IRRIGATED TURF SPACE PROVIDES PASSIVE RECREATION OPPORTUNITY FOR RESIDENTS
06	SMALL FENCED PLAY AREA WITH NATURE ELEMENTS AND SEATING ADJACENT TO SALES OFFICE
07	ENTRY ROAD INTO ESTATE WITH AVENUE OF TREES, GROUNDCOVERS TO VERGE AND FULLY LANDSCAPED WITH TEARDROP ISLAND TO SLOW TRAFFIC
08	RESIDENTIAL STREETS WITH FOOTPATH TO ONE SIDE AND NEW STREET TREES
09	MIX OF GROUNDCOVER PLANTING AND MULCH ONLY BENEATH EXISTING TREES
10	ART/ SCULPTURE OPPORTUNITY INCORPORATING ROCKWORK AND WAYFINDING
11	OPEN TURF SPACE PROVIDES RECREATION OPPORTUNITY AND AMENITY TO RESIDENTS
12	TREE PLANTING TO SITE BOUNDARY WITH GROVES OF TALL NATIVE TREES (IE. <i>CORYMBIA CALOPHYLLA &amp; EUCALYPTUS</i> <i>MARGINATA</i> ) TO AMELIORATE TRAFFIC NOISE WHERE POSSIBLE
13	DRAINAGE BASIN WITH NATIVE WINTER- WET REED AND SEDGE PLANTINGS AND TREES
14	LOW NATIVE GROUNDCOVER, SHRUB AND TREE REVEGETATION SPECIES
15	REST STOP WITH BENCH SEAT
ΚE	Y
+	EXISTING TREES TO BE RETAINED
	ACOUSTIC BUFFERING WALL
	1:1 STORMWATER EVENT

- 1:5 STORMWATER EVENT
- --- 1:100 STORMWATER EVENT



# LANDSCAPE ARCHITECTS

# CONCEPT PLAN



# PIARA WATERS LSP

PREPARED FOR STOCKLAND

JOB NO. 2103601 1:500 @ A1

C1.102 0 5 10

20

30

REV E

COPYRIGHT THIS DOCUMENT IS AND SHALL REMAIN THE PROPERTY OF PLAN E

# LEGEND

03

04

1	ENTRY ROAD INTO ESTATE WITH AVENUE OF LARGE DECIDUOUS TREES AND VERGE LANDSCAPING WITH FOOTPATHS TO LOT BOUNDARY	
	BUUNDARY	

02 RESIDENTIAL STREETS WITH FOOTPATH TO ONE SIDE AND MIX OF *PYRUS* SPECIES AND *AGONIS FLEXUOSA* STREET TREES

# NEIGHBOURHOOD CONNECTOR WITH AVENUE OF LARGE TREES AS WELL AS SMALL EUCALYPTUS SPECIES TO CREATE NATURALISED CORRIDOR

- ROUNDABOUT WITH FEATURE TREE
- 05 ENTRY ELEMENT TO PARK WITH STONE WALL AND LOW WILDFLOWER FEATURE PLANTING
- 06 ROADSIDE PARKING TO EDGE OF PARK
- 07 RAISED FLAT TURF AREA ADJACENT TO PLAY STRUCTURE PROVIDES USABLE SPACE AT STREET LEVEL
- PLAY TOWER (BOTANICAL/WILDFLOWER
   THEME) LOCATED AT END OF ENTRY ROAD VIEW
   AXIS
- 09 RAISED PLAY AREA WITH 'NATURE/ BOTANICAL' THEMED ELEMENTS
- 0PEN, NORTH FACING IRRIGATED TURF KICKABOUT SPACE (500MM CLEARANCE FROM SUBSOIL TO IRRIGATED TURF
- (1) INFORMAL NATURE PLAY ELEMENTS BENEATH EXISTING TREES, SURROUNDED BY LOW NATIVE GROUNDCOVER PLANTING
- 12 STEPPING STONES AND INTERACTION OPPORTUNITY WITH EPHEMERAL WATER IN BASIN
- 13 RAISED WALKWAY OPPORTUNITY TO LOW VEGETATED AREAS
- 14 PICNIC AREAS BENEATH EXISTING TREES AND GARDEN BED AREAS
- (15) SHADE STRUCTURES FOR GROUP GATHERINGS
- (16) WALLED 1:1 DRAINAGE BASIN WITH NATIVE WINTER-WET REED AND SEDGE PLANTINGS AND TREES
- 17 STEPPING STONE ACCESS TO RESIDENTIAL LOTS, WITH LOW SHRUB PLANTING
- 18ART SCULPTURE OPPORTUNITY TO RAISED<br/>PLATFORM CREATES A VISUAL LINK TO PLAY<br/>TOWER FROM EASTERN PARK ENTRY
- TOW



EXISTING TREES TO BE RETAINED EXISTING SPECIES INCLUDE: EUCALYPTUS BORTRYOIDES, E. CAMALDULENSIS & E. GRANDIS

- 1:1 STORMWATER EVENT
- 1:5 STORMWATER EVENT
- --- 1:100 STORMWATER EVENT



# LANDSCAPE ARCHITECTS

# CONCEPT PLAN



PREPARED FOR STOCKLAND

JOB NO. 2103601 1:750@ A1

C1.103 **0** 7.5 15

30

45

REV H 75m

COPYRIGHT THIS DOCUMENT IS AND SHALL REMAIN THE PROPERTY OF PLAN E



# LEGEND

03

ART/SCULPTURE OPPORTUNITY WITH LOW 'WILDFLOWER' FEATURE PLANTING TO 01 DEFINE ENTRY INTO POS

- 02 **BIOFILTRATION BASIN WITH NATIVE REED** & SEDGE PLANTING & WETLAND TREES (MAXIMUM 1.5M HIGH AT MATURITY AND TREES TO EDGE OF FOOTPATH/ KERB)
  - MEANDERING PATHWAY/ WALK TRAIL CONNECTING EDUCATION AND INTERPRETATION OPPORTUNITIES WITH VIEWS INTO WETLAND
- A SEATING AND PASSIVE RECREATION 04 OPPORTUNITY WITH INTERPRETATION/ INFORMATION SIGN FACILITIES REFERENCING INDIGENOUS FLORA & FAUNA, LOCATED WITHIN REVEGETATED SCRUB WETLAND BUFFER
- WETLAND REVEGETATION BUFFER 05 (LOW NATIVE SHRUBS, GROUNDCOVERS & MULCH WITH SPORADIC TREE PLANTING TO MAINTAIN SIGHTLINES TO WETLAND CORE)
- NATURALISED LANDSCAPE AREAS 06 WITHIN 10M ACTIVE BUFFER (MAINTAINED LOW VEGETATION WITH 5M MINIMUM SPACING BETWEEN TREES), MELALEUCA PREISSIANA, EUCALYPTUS RUDIS & EUCALYPTUS MARGINATA SPECIES
- MULCH ONLY AREAS LOCATED UNDER 07 EXISTING DENSE VEGETATION
- TURF AMENITY SPACE LOCATED OUTSIDE 08 OF WETLAND BUFFER ZONE
- POCKETS OF IRRIGATED GROUNDCOVER 09 'WILDLFOWER PLANTING'
- RESIDENTIAL STREET WITH FOOTPATH TO 10 ONE SIDE AND STREET TREES
- THRESHOLD TREATMENT TO INTERSECTION (11)
- FUTURE POS WITH TURF, PICNIC AND 12 NATURE PLAY FACILITIES, SEATING **OPPORTUNITIES & NATIVE TREE PLANTING**

# K E Y



EXISTING TREES TO BE RETAINED

- --- 1:1 STORMWATER EVENT
- ↑ SECTIONS REFER C2.105



# LANDSCAPE ARCHITECTS



# Appendix B Vegetation plot photos and description













Photo ID 3c	Photo ID 3d
Plot number	Plot 3
Vegetation classification	Class B Woodland
Description / justification	Trees 10–30 m high; 10–30% foliage cover with a prominent grassy understorey. May
	contain isolated shrubs. Flat/upslope (0°)





Vegetation classification	Class B Woodland
Description / justification	Trees 10–30 m high; 10–30% foliage cover with a prominent grassy understorey. May
	contain isolated shrubs. Downslope >0–5°





Photo ID 5a

© 311°NW (T) ● 32°8'0"S, 115°54'17"E ±16ft ▲ 87ft

© 293°NW (T) ● 32°7'54"S, 115°53'57"E ±16ft ▲ 131ft



Photo ID 5b E E SE S 1 0 0 1 1 0 0 32°7'55"S, 115°54'12"E ±16ft ▲ 105ft



Photo ID 5e





Photo ID 5c

330 | • | • ] • ] • | • | • | • | • | • |



 Moto ID 5f

 Y0
 Y0

 10
 500

 10
 40

 10
 70

 10
 320

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100

 10
 100



Photo ID 5g

Photo ID 5d

Photo ID 5h

Photo ID 5i



NE         E           © 61°NE (T)         ③ 32°8'0"S, 115°53'52"           Image: Second S	E ±16ft ▲ 121ft	W         NW         330         N           © 2999*NW (T)         © 32°8'15"S, 115°54'2"E ±16ft         109ft           Image: Comparison of the state of th	
Plot number	Plot 5		
Vegetation classification	Class D Scru	ıb	
Description / justification	Shrubs grea Flat/upslop	ater than 2 m high; 10–30% foliage cover v e (0°)	with a mixed species composition.









Photo ID 7a

Plot number	Plot 7
Vegetation classification	Class D Scrub
Description / justification	Shrubs greater than 2 m high; 10–30% foliage cover with a mixed species composition.
	Downslope >5–10°





Photo ID 8d





FILLOID DE	
Plot number	Plot 8
Vegetation classification	Class G Grassland
Description / justification	Unmanaged grassland and weeds greater than 10 cm in height. Flat/upslope (0°)





Plot number	Plot 9			
Vegetation classification	Class G Grassland			
Description / justification	Unmanaged grassland and weeds greater than 10 cm in height. Downslope >0–5°			







# Appendix C APZ standards (Schedule 1 of the Guidelines)

### Schedule 1: Standards for Asset Protection Zones

- Fences: within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.
- **Objects:** within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- Fine Fuel load: combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.
- Trees (> 5 metres in height): trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.



- Shrubs (0.5 metres to 5 metres in height): should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m2 in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- Ground covers (<0.5 metres in height): can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- Grass: should be managed to maintain a height of 100 millimetres or less.



# Appendix D Vehicular access technical standards of the Guidelines

Public roads					
Acceptable solution A3.2	A public road is to meet the requirements in Table 1, Column 1.				
Explanatory note E3.2	Trafficable surface: Widths quoted for access routes refer to the width of the trafficable surface. A six metre trafficable surface does not necessarily mean paving width. It could, for example, include four metre wide paving one metre wide constructed road shoulders. In special circumstances, where eight lots or less are being serviced, a public road with a minimum trafficable surface of four metres for a maximum distance of 90 metres may be provided subject to the approval of both the local government and Department of Fire and Emergency Services. Public road design: All roads should allow for two-way traffic to allow conventional two-wheel drive vehicles and fire appliances to travel safely on them.				
	<u>4 m paving</u> 1 m shoulder_ either side				



Cul-de-sac (including a dead-	end road)			
Acceptable solution A3.3	<ul> <li>A cul-de-sac and/ or a dead end road should be avoided in bushfire prone areas. Where no alternative exists (i.e. the lot layout already exists and/ or will need to be demonstrated by the proponent), the following requirements are to be achieved:</li> <li>Requirements in Table 1, Column 2</li> <li>Maximum length: 200 metres (if public emergency access is provided between cul-de-sac heads maximum length can be increased to 600 metres provided no more than eight lots are serviced and the emergency access way is no more than 600 metres)</li> <li>Turn-around area requirements, including a minimum 17.5 metre diameter head.</li> </ul>			
Explanatory note E3.3	In bushfire prone areas, a cul-de-sac subdivision layout is not favoured because they do not provide access in different directions for residents. In some instances it may be possible to provide an emergency access way between cul-de-sac heads to a maximum distance of 600 metres, so as to achieve two-way access. Such links must be provided as right of ways or public access easements in gross to ensure accessibility to the public and fire services during an emergency. A cul-de-sac in a bushfire prone area is to connect to a public road that allows for travel in two directions in order to address Acceptable Solution A3.1. 17.5 m cliameter			



Battle-axe	
Acceptable solution A3.4	<ul> <li>Battle-axe access leg should be avoided in bushfire prone areas. Where no alternative exists, (this will need to be demonstrated by the proponent) all of the following requirements are to be achieved:</li> <li>Requirements in Table 1, Column 3</li> <li>Maximum length: 600 metres</li> <li>Minimum width: six metres.</li> </ul>
Explanatory note E3.4	In bushfire prone areas, lots with battle-axe access legs should be avoided because they often do not provide two-way access and egress for residents and may be easily blocked by falling trees or debris. In some instances, however; it may be appropriate for battle-axe access to be used to overcome specific site constraints. Where used, they should comply with the minimum standards for private driveways. Passing bays should be provided at 200 metre intervals along battle-axe access legs to allow two-way traffic. The passing bays should be a minimum length of 20 metres, with the combined width of the passing bay and the access being a minimum of six metres. Turn-around areas should allow type 3.4 fire appliances to turn around safely (i.e. kerb to kerb 17.5 metres) and should be available at house sites and at 500 metre intervals along the access leg.



Private driveway longer than 50 metres						
Acceptable solution A3.5	A private driveway is to meet all of the following requirements:					
	Requirements in Table 1, Column 3					
	<ul> <li>Required where a house site is more than 50 metres from a public road</li> </ul>					
	Passing bays: every 200 metres with a minimum length of 20 metres and a minimum					
	width of two metres (i.e. the combined width of the passing bay and constructed					
	private driveway to be a minimum six metres)					
	<ul> <li>Turn-around areas designed to accommodate type 3.4 fire appliances and to enable</li> </ul>					
	them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres) and within					
	50 metres of a nouse					
	Any bridges or culverts are able to support a minimum weight capacity of 15 tonnes					
Fueleneten nete F2 F	All-weather surface (i.e. compacted gravel, limestone or sealed).					
Explanatory note E3.5	For a driveway shorter than 50 metres, fire appliances typically operate from the street					
	frontage nowever where the distance exceeds 50 metres, then fire appliances will need to					
	gain access along the unveway in order to detend the property during a businite. Where houses and					
	turnaround areas should be available for both conventional two-wheel drive vehicles of					
	residents and type 3.4 fire appliances.					
	Turn-around areas should be located within 50 metres of a house. Passing bays should be					
	available where driveways are longer than 200 metres and turn-around areas in drivew					
	that are longer than 500 metres. Circular and loop driveway designs may also be					
	considered. These criteria should be addressed through subdivision design.					
	Passing bays should be provided at 200 metre intervals along private driveways to allow					
	two-way traffic. The passing bays should be a minimum length of 20 metres, with the					
	combined width of the passing bay and the access being a minimum of six metres.					
	Turn-around areas should allow type 3.4 fire appliances to turn around safely (i.e. kerb to					
	kerb 17.5 metres) and should be available at the house sites and at 500 metre intervals					
	along the driveway.					
	4 m					
	17.5 m					
	4 m/					
	7.5 m					



Emergency access way			
Acceptable solution A3.6	<ul> <li>An access way that does not provide through access to a public road is to be avoided in bushfire prone areas. Where no alternative exists (this will need to be demonstrated by the proponent), an emergency access way is to be provided as an alternative link to a public road during emergencies. An emergency access way is to meet all of the following requirements: <ul> <li>Requirements in Table 1, Column 4</li> <li>No further than 600 metres from a public road</li> <li>Provided as right of way or public access easement in gross to ensure accessibility to the public and fire services during an emergency</li> <li>Must be signposted.</li> </ul> </li> </ul>		
Explanatory note E3.6	<ul> <li>Provided as right of way or public access easement in gross to ensure accessibility to the public and fire services during an emergency</li> <li>Must be signposted.</li> <li>An emergency access way is not a preferred option however may be used to link up with roads to allow alternative access and egress during emergencies where traffic flow designs do not allow for two-way access. Such access should be provided as a right-of-way or easement in gross to ensure accessibility to the public and fire emergency services during an emergency.</li> <li>The access should comply with minimum standards for a public road and should be signposted. Where gates are used to control traffic flow during non-emergency periods, these must not be locked. Emergency access ways are to be no longer than 600 metres and must be adequately signposted where they adjoin public roads.</li> <li>Where an emergency access way is constructed on private land, a right of way or easement in gross is to be established.</li> </ul>		



Fire service access routes (perimeter roads)					
Acceptable solution A3.7	<ul> <li>Fire service access routes are to be established to provide access within and around the edge of the subdivision and related development to provide direct access to bushfire prone areas for fire fighters and link between public road networks for firefighting purposes. Fire service access routes are to meet the following requirements: <ul> <li>Requirements in Table 1, Column 5</li> <li>Provided as right of ways or public access easements in gross to ensure accessibility to the public and fire services during an emergency</li> <li>Surface: all-weather (i.e. compacted gravel, limestone or sealed)</li> <li>Dead end roads are not permitted</li> <li>Turn-around areas designed to accommodate type 3.4 appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres)</li> <li>No further than 600 metres from a public road</li> <li>Allow for two-way traffic</li> <li>Must be signposted.</li> </ul> </li> </ul>				
Explanatory note E3.7	<ul> <li>Fire service access routes should be established to separate bushfire prone areas from developed areas, and to provide access within and around the edge of subdivisions and related development. Fire service access is used during bushfire suppression operations but can also be used for fire prevention work. Fire service access routes should:</li> <li>Link up with the road network at regular intervals - the development and road network forms part of the fire service access system</li> <li>Be adequately signposted</li> <li>Allow for two-way traffic - that is, two fire appliances must be able to safely pass each other</li> <li>Have an all-weather surface (i.e. compacted gravel, limestone or sealed)</li> <li>Have erosion control measures in place.</li> <li>Driveways may be used as part of the designated fire service access to properties and houses during fire emergencies.</li> <li>Where gates are used, these should be wide enough to accommodate type 3.4 fire appliances (minimum width of 3.6m) with the design and construction to be approved by the relevant local government. Gates on fire service access routes may be locked to restrict access provided that a common key system is used and such keys are made available for fire appliances and designated fire officers within the local government area and/or surrounding district. Gates should be in place to ensure that the maintenance of fire service access arrangements should be in place to ensure that the maintenance of fire service access arrangements should be in gross to ensure access routes where these fall on their property</li> <li>Providing such access ar angle-of-way or easement in gross to ensure accessibility to fire service access a a right-of-way or easement in gross to ensure accessibility to fire service access routes.</li> <li>Such arrangements should be documented in the relevant planning application (such as a structure plan, subdivision plan or development plan) and should be agreed to by local government.</li> </ul>				



Technical requirement	1	2	3	4	5
	Public road	Cul-de-sac	Private driveway longer than 50 m	Emergency access way	Fire service access routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal distance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	N/A	4.5	4.5	4.5
Maximum grade <50 m	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius	8.5	8.5	8.5	8.5	8.5
* Refer to E3.2 Public roads: Trafficable surface					



# Appendix E Water technical standards of the Guidelines

Reticulated areas	
Acceptable solution A4.1	The subdivision, development or land use is provided with a reticulated water supply in accordance with the specifications of the relevant water supply authority and Department of Fire and Emergency Services.
Explanatory note E4.1	Water supply authorities in Western Australia include the Water Corporation, Aqwest and the Busselton Water Board. The Water Corporation's 'No. 63 Water Reticulation Standard' is deemed to be the baseline criterion for developments and should be applied unless local water supply authorities' conditions apply.



Appendix F City of Armadale Firebreak Notice (2021/22)



# Fire-break and Hazard Reduction Notice 2021/2022



For updated information on alerts and warnings about fires, floods, storms, earthquakes, cyclones, hazardous material incidents and more visit:

emergency.wa.gov.au dfes.wa.gov.au Call 13 3337

# **BUSH FIRES ACT 1954**

Notice is hereby given to all owners and/or occupiers of land within the City of Armadale that pursuant to the powers conferred in Sections 33(1), 25(1a) and 24G(2) of the *Bush Fires Act 1954* the following requirements apply to prevent the outbreak, spread or extension of a bush fire within the district and deal with other fire related preparedness and prevention matters.

Pursuant to Section 33(1) of the *Bush Fires Act 1954,* all owners and/or occupiers of land are required to carry out fire prevention work in accordance with the requisitions of this Notice on or before the 30th day of November 2021, or within fourteen days of becoming the owner or occupier of land should this be after the 30th day of November 2021, and maintain the required fire prevention work up to and including the 31st day of March 2022.

# 1. Definitions

**Authorised Officer** means an employee of the City of Armadale appointed as a Bush Fire Control Officer.

**Bushfire Management Plan** means a plan that has been developed in accordance with *State Planning Policy 3.7*, and approved by the City of Armadale to reduce and mitigate fire hazards within a particular subdivision, lot or other area of land anywhere in the district.

**Driveway** means a point of access to a Habitable Building accessible for both conventional two wheel drive vehicles and firefighting appliances that is totally clear of Inflammable Matter and other objects or things.

**Fire-break** means an area of land constructed to a Trafficable surface and maintained totally clear of all Inflammable Matter leaving bare mineral earth, and includes the pruning and removal of any living or dead trees, scrub or any other material encroaching into the Vertical Axis of the fire-break area. Such firebreaks may be constructed by one or more of the following methods: ploughing, cultivating, scarifying, raking, burning, chemical spraying or other method as approved by an Authorised Officer.

**Fire Management Plan** has the same meaning as Bushfire Management Plan.

**Fuel Depot / Fuel Storage Area** means an area of land, building or structure where fuel (i.e. petrol, diesel, kerosene, or any other hydrocarbon liquid) is kept, excepting where the quantities of fuel being stored are considered "minor storage quantities" under Table 2.1 of *Australian Standard AS1940* The storage and handling of flammable and combustible liquids. **Habitable Building** means a dwelling, workplace, place of gathering or assembly and includes a building used for storage or display of goods or produce for sale by wholesale in accordance with classes 1 - 9 of the *Building Code of Australia*.

**Haystack** means any collection of hay including fodder rolls placed or stacked that exceeds 100m<sup>3</sup> in size (e.g. five (5) metres x five (5) metres x four (4) metres), whether in a shed, other structure or in the open air.

**Inflammable matter** means any tree, bush, plant, grass, mineral, vegetable, substance, object, thing or material (except for living trees, shrubs, plants and lawns under cultivation) or any other thing deemed by an Authorised Officer to be capable of combustion that may, or is likely to, catch fire and burn.

**Trafficable** means to be able to travel from one point to another in a four-wheel drive fire appliance on a clear surface, unhindered without any obstruction that may endanger such fire appliances. A Fire-break is not to terminate, or lead to a dead end without provision for egress to a safe place or a cleared turn around area of 17.5 metre radius.

**Vertical Axis** means a continuous vertical uninterrupted line at a right angle to the horizontal line of the Fire-break.

# 2. All Land greater than 5,000m<sup>2</sup>

- A three (3) metre wide Fire-break with a four (4) metre high Vertical Axis is to be constructed and maintained as close as practicable inside the property boundary but no more than ten (10) metres from the boundary around the entire perimeter of the property. Reticulated and maintained green lawn may be accepted in lieu of a Fire-break; and
- b. A three (3) metre wide Fire-break with a four (4) metre high Vertical Axis is to be constructed and maintained immediately surrounding all outbuildings, sheds, haystacks and groups of buildings situated on the land; and
- c. A three (3) metre wide driveway with a four (4) metre high Vertical Axis is to be installed and maintained.

# 3. All Land 5,000m<sup>2</sup> or less

 All Inflammable Matter on the entire property (noting that this does not include living trees, shrubs, plants and lawns under cultivation) is to be reduced and maintained to a height of less than five (5) centimetres; and, b. A three (3) metre wide driveway with a four
(4) metre Vertical Axis is to be installed and maintained.

# 4. Fuel Depot / Fuel Storage Areas

- a. All Inflammable Matter within the Fuel Depot / Fuel Storage Area is to be cleared leaving bare mineral earth; and
- b. A three (3) metre wide Fire-break with a four (4) metre Vertical Axis is to be installed and maintained immediately surrounding the Fuel Depot / Fuel Storage Area.

# 5. Hazard Reduction

The requirements of this Notice are considered to be the minimum requirement for fire prevention work, not only to protect individual properties but the district in general.

A separate Hazard Reduction Notice may be issued to individual landowners pursuant to Section 33 of the *Bush Fires Act 1954* to carry out further hazard reduction works with respect to anything upon the land, where in the opinion of an Authorised Officer, it is likely to be conducive to the outbreak and/or the extension of a bushfire.

# 6. Application to Vary Fire-break and Hazard Reduction Notice Requirements

If you consider, for any reason, that it is impractical to meet the requirements of this Notice, you may apply in writing to the City of Armadale, or its duly Authorised Officers, **no later than the 1st day of October 2021**, requesting authorisation to employ other methods of fire prevention. If permission is not granted by the City you must comply with the requirements of this Notice.

In some instances naturally occurring features such as rocky outcrops, natural watercourses or landscaping such as reticulated gardens, lawns or driveways may be an acceptable substitute for a Fire-break.

If approved the requirements of all approved variations to the Fire-break and Hazard Reduction Notice will need to be established on or before the 30th day of November 2021 (or within 14 days of you becoming the owner or occupier should this occur after that date) and be maintained up to and including the 31st day of March 2022.

Note: No Fire-break exemptions will be given. Please apply for a Variation if an alternative location for Fire-break installation is required.

# 7. Bushfire Management Plans

Where an approved Bushfire Management Plan (BMP), exists for an individual or group of properties as part of a development or subdivision approval, the owners and/or occupiers of those properties shall comply with the requirements and responsibilities of that BMP in its entirety. Some BMPs may also require compliance with this Notice. BMPs can be viewed on the City's website via https://www.armadale.wa.gov.au/bushfiremanagement-plans. If you have trouble accessing your BMP please contact the City's Customer Service Team on 9394 5000.

# 8. Bushfire Attack Level (BAL) Assessments

Where an approved Bushfire Attack Level assessment (BAL) has been developed in accordance with *Australian Standard 3959* as part of a development application, compliance with the requisitions of the BAL assessment is required in addition to the requirements contained within this Notice.

# 9. Camp or Cooking Fires

In accordance with the provisions of Section 25(1a) of the *Bush Fires Act 1954* the lighting of camp or cooking fires is prohibited on all land within the City of Armadale during the Prohibited Burning Time. This prohibition does not apply to a gas appliance that does not consume solid fuel comprising of a fire, the flame of which is encapsulated by the appliance.

# 10. Burning of Garden Refuse & Rubbish

For the purposes of this clause, *"Limited Burning Time"* means the 1st day of October 2021 through until the 31st day of May 2022 (inclusive and as varied pursuant to Sections 17 and 18 of the *Bush Fires Act 1954*) and the *"Prohibited Burning Time"* means the 1st day of December 2021 through until the 31st day of March 2022 (inclusive and as varied pursuant to Section 17 of the *Bush Fires Act 1954*).

- a. In accordance with the provisions of Section 24G of the Bush Fires Act 1954 the burning of garden refuse or rubbish in an incinerator that would otherwise be permitted under Section 24F is absolutely prohibited
  - i. on land 1,200m<sup>2</sup> in size or less, during the Limited Burning Time; and
  - ii. on land larger than 1,200m<sup>2</sup> in size, during the Prohibited Burning Time.

The effect of this clause is that the burning of garden refuse or rubbish in an incinerator or on the ground on land that is 1,200m<sup>2</sup> or less in size is prohibited during the Limited Burning Time and the burning of garden refuse or rubbish in an incinerator or on the ground is prohibited on all land within the district during the Prohibited Burning Time.

- In addition to the restrictions under Clause 10(a), garden refuse or rubbish in an incinerator must be burnt in accordance with the following conditions –
  - i. There is no inflammable matter (other than that being burnt) within five (5) metres of the fire at any time while the fire is burning; and

- ii. The fire is lit between 6.00pm and 11.00pm and is completely extinguished before midnight on the same day; and
- iii. At least one person is present at the site of the fire at all times until it is completely extinguished; and
- iv. When the fire is no longer required, the person who lit the fire must ensure that the fire is completely extinguished by the application of water or earth; and
- v. Only one pile (up to one (1) cubic metre in size) of garden refuse burnt on the ground may be alight at any one time; and
- vi. The person intending to light the fire must telephone the Department of Fire and Emergency Services' Communications Centre (COMCEN) on 08 9395 9209 and register the burn immediately prior to lighting the fire.
- c. Any time when there is in force a fire danger forecast issued for the district by the Bureau of Meteorology in Perth of Catastrophic, Extreme, Severe or Very High, a Total Fire Ban (TFB) or any other prohibition is in effect under the *Bush Fires Act 1954*, burning of garden refuse or rubbish in an incinerator or on the ground is prohibited on all land within the district.

The City Of Armadale Environment, Animals and Nuisance Local Laws 2002 further restricts and or prohibits burning of rubbish or refuse on land in the district.

# 11. No Burning on Sundays or Public Holidays

In accordance with Clause 49(2)(a) of the *City Of Armadale Environment, Animals and Nuisance Local Laws 2002* an owner and/or occupier of land shall not set fire to, or cause or allow to be set on fire, any bush, rubbish or refuse whatsoever on a Sunday or a day that is a Public Holiday, except when specifically authorised to do so for the purpose of fuel reduction by a Bush Fire Control Officer (BFCO) duly appointed under Section 38 of the *Bush Fires Act 1954.* 

# 12. Clearing of Remnant Native Vegetation – Rural Living & Special Rural Zone

In accordance with the *City of Armadale Town Planning Scheme No.4*, a separate Development Approval to clear native vegetation on properties zoned Rural Living or Special Rural may need to be obtained. Generally, clearing to satisfy necessary bush fire protection measures as determined by the local government or other relevant authority is exempt from planning approval. Please refer to the following sections of *Town Planning Scheme No.4* for further information:

- Clause 4.7.5 deals with clearing where a property contains a development envelope;
- Clause 4B.7 deals with clearing in the Rural Living and General Rural zones; and,
- Clause 4C.9 deals with clearing in the Strategic Regional Centre, District Centre, Local Centre and Mixed Business/Residential zones.

# See link - https://www.armadale.wa.gov.au/sites/ default/files/assets/documents/docs/Planning\_ and\_Land\_Use/Town\_Planning\_Scheme\_No4.pdf

Specific situations where development approval is required for the clearing of remnant native vegetation is outlined within the following info sheet:

https://www.armadale.wa.gov.au/sites/default/ files/assets/documents/docs/Planning\_and\_ Land\_Use/Info\_Clearing\_Vegetation\_Fire\_Hazard\_ Reduction.pdf

# **13. Penalties**

Failure or neglect to comply with the requisitions of this Notice is an offence and can result in a penalty of up to \$5000.

Furthermore, Authorised Officers, servants, workmen, contractors, vehicles, machinery and appliances (as the officers deem fit) may enter upon the land and carry out the requisitions of this Notice that are not complied with by the time specified in the Notice, and the amount of any costs and expenses incurred may be recovered from you as the owner and/or occupier of the land.

By order of the City of Armadale

Chief Executive Officer Joanne Abbiss

# **Important Numbers**

IN ALL EMERGENCIES CALL 000 | FIRE AMBULANCE POLICE

Western Australian Bureau of Meteorology 1300 183 341

City of Armadale Rangers 9394 5000 | After Hours 1300 886 885

To obtain a fire permit 9394 5000





© JBS&G Australia Pty Ltd T/A Strategen-JBS&G

This document is and shall remain the property of Strategen-JBS&G. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Report version	Pay No.	Purpose	Author	Reviewed and Approved for Issue	
	KEV NO.			Name	Date
Draft Report	Rev A	For review by client	Ben Musitano	Zac Cockerill (BPAD 37803, Level 2)	26 May 2021
Final Report	Rev 0	Issued for use: to accompany Structure Plan submission	Zac Cockerill (BPAD 37803, Level 2)	Zac Cockerill (BPAD 37803, Level 2)	2 June 2021
Final Report	Rev 1	Issued for use: updated to address revised Structure Plan	Jasmin Culverwell	Zac Cockerill (BPAD 37803, Level 2)	2 December 2021
Final Report	Rev 2	Issued for use: updated to include indicative BAL contour map at City of Armadale request	Zac Cockerill (BPAD 37803, Level 2)	Zac Cockerill (BPAD 37803, Level 2)	11 March 2022

### **Document Status**

