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07 February 2024

Our ref: 600-23PER6977

City of Rockingham PO Box 2142 ROCKINGHAM WA 6967

Attention: Planning Officer

Dear Sir/Madam,

RE: Bushfire Attack Levels: Stage 10 Brightwood Estate, Baldivis

The information below has been provided to inform subdivision clearance approval for 22 lots within Stage 10 of Brightwood Estate, Baldivis (the subject site; Figure 1). These lots are identified as Lots 315-320, 330-333 & 373-384 on the Deposited Plan (Appendix A) and are subject to Western Australian Planning Commission (WAPC) subdivision approval (WAPC Ref. 156448) issued on 2 July 2018 and associated plan for conditions dated 26 March 2018 (Appendix B).

This letter provides information required to clear Condition 9 and 10 of the subdivision approval as follows:

- 9. Proposed lots referenced as 'Condition 9' on the plan dated 26 March 2018 (attached) are excluded from the approved plan of subdivision until such time as bushfire risk presented by the adjacent land to the west is either permanently removed, or it is demonstrated to the satisfaction of the Western Australian Planning Commission that a bushfire attack level (BAL) of BAL-29 or below can be achieved for the development of the lots. (Local Government)
- 10. A Notification, pursuant to Section 165 of the Planning and Development Act 2005 is to be placed on the certificate(s) of title of the proposed lot(s) with a Bushfire Attack Level (BAL) rating of 12.5 or above, advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:

'This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and may be subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land' (Western Australia Planning Commission)

The subject site is located within a designated bushfire prone area as per the *Western Australia State Map of Bush Fire Prone Areas* (DFES 2021) and proposed lots were subject to Bushfire Attack Levels (BALs) as detailed in the Bushfire Management Plan (BMP) prepared to support subdivision approval (Natural Area Consulting 2017).

With respect to Condition 9, due to vegetation located adjacent to the western side of the site depicted in the BMP (Natural Area Consulting 2017), 21 of the proposed lots that form part of the Brightwood Estate were to be withheld from construction until the bushfire risk was removed. Four of these lots, identified as Lots 330-333 on the Deposited Plan (Appendix A), are located within the subject site. However, as can be seen in Figure 1 and Appendix C the vegetation which resulted in the BALs for proposed lots 330 - 333 (within the 21 original withheld) has been removed for development as confirmed by a site assessment completed on 05/12/2023. Consequently, the bushfire risk has been removed and no Bushfire Attack Level (BAL) ratings will apply to proposed lots 330-333.

With respect to Condition 10, data obtained during a recent site assessment completed on the 5 December 2023 was utilised to determine the Bushfire Attack Level (BAL) in accordance with Australian Standard AS 3959: 2018 Construction of Buildings in Bushfire Prone Areas (SA 2018) Simplified Procedure (Method 1). Results are depicted in the Bushfire Attack Level (BAL) Assessment Report (Appendix D) which demonstrates that the bushfire risk has been removed and all lots within the subject site have a BAL rating of BAL-LOW. ELA, therefore, are under the understanding that no notifications on Titles related to BAL ratings are required for proposed lots within the subject site (Lots 315-320, 330-333 & 373-384 as Stage 10 of Brightwood Estate, Baldivis).

Regards,

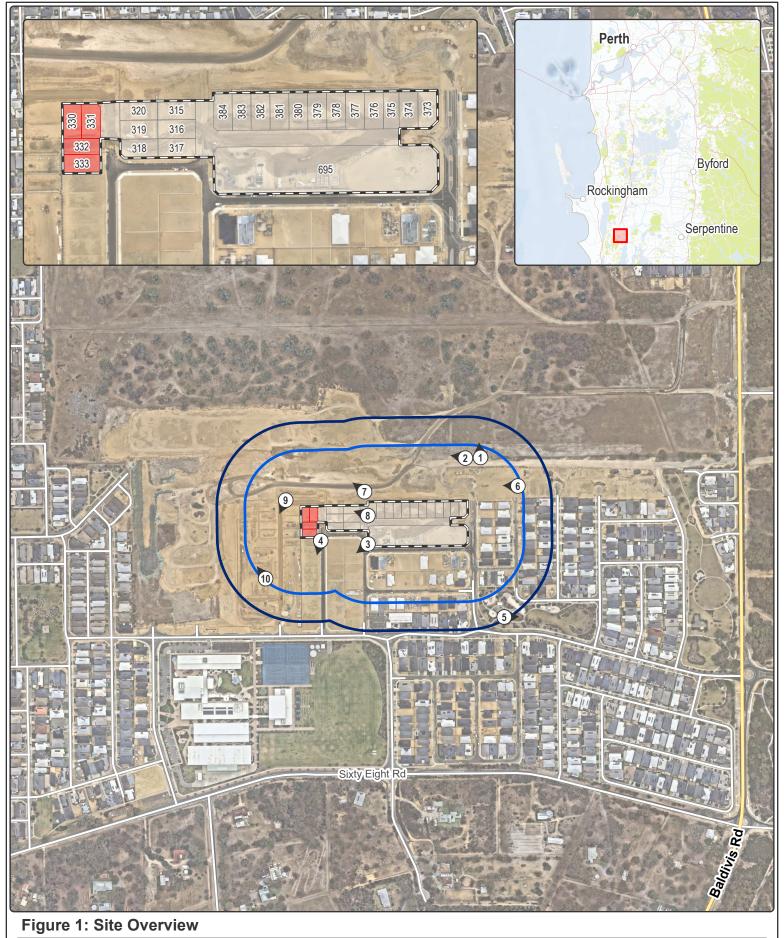
Eva Cronin

Bushfire Team Lead – Western Australia

Senior Bushfire Consultant



Enclosed: Figure 1: Site overview, Appendix A, Appendix B, Appendix C and Appendix D.



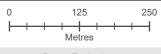


Proposed lot affected by Condition 9

100m site assessment

150m site assessment

Photo location



Datum/Projection: GDA 1994 MGA Zone 50

23PER6997-SM Date: 6/02/2024





Appendix A Deposited Plan		

	Plan Information		Survey Details			
Tenure Type	Freehold		Field Records	131385		
Plan Type	Deposited Plan		Declared as Special Survey Area	Yes		
Plan Purpose	Subdivision	Subdivision				
Plan Heading			Survey and Plan Notation	on		
Lots 315-320, 330-333,	373-384, 695, 9037, 9038 & Roads					
			Survey carried out under Reg	. 26A(1) Deferred Final Marking Approval.		
Locality & Local G	overnment			y Month Year : Landgate File xxxxx-xxxx		
Locality	Baldivis		Limited in Depth to 60.96 met	res as to Lot 9036 only		
Local Government	City of Rockingham		-			
Domanton ant of Dis-						
Department of Piai	nning, Lands and Heritage		-			
File Number						
Examination			Survey Method Regulat	tory Statement		
			Survey carried out under Reg			
			Guidelines. See survey sheet	(s) to determine the true final		
Examined		Date	position and type of all survey marks placed for this plan.			
Planning Approval		1	Survey Certificate - Reg	rulation 54		
Planning Approval	WAPC		Survey Certificate - Ret	guiation 54		
Reference	156448		I, Paul C. C. Rhodes	accurate and is a correct representation of the		
releterice	130440		(a) survey; and	accurate and is a correct representation of the		
			` '	surements recorded in the field records,		
Dalamatad undan C. 16	D9D A-+ 2005	Data	undertaken for the purposes of written law(s) in relation to when the purposes of the purpose of	of this plan and that it complies with the relender. Solution it is lodged.		
Delegated under S. 16	P&D Act 2005	Date				
		Date				
In Order For Deali		Date				
In Order For Deali		Date	written law(s) in relation to wh	nich it is lodged.		
In Order For Deali		Date	written law(s) in relation to wh	nich it is lodged.		
In Order For Deali		Date	written law(s) in relation to whe	nich it is lodged. Date		
Delegated under S. 16 In Order For Dealin Subject To		Date	Licensed Surveyor Survey Organisation Name	Date VERIS		
In Order For Deali		Date	Licensed Surveyor Survey Organisation Name Address	Date VERIS JOLIMONT 6014		
In Order For Dealin			Licensed Surveyor Survey Organisation Name Address Phone	Date VERIS JOLIMONT 6014 6241 3333		
In Order For Deali		Date	Licensed Surveyor Survey Organisation Name Address Phone Fax	Date VERIS JOLIMONT 6014 6241 3333 6241 3300		
In Order For Dealin Subject To For Registrar of Titles			Licensed Surveyor Survey Organisation Name Address Phone Fax Email	Date VERIS JOLIMONT 6014 6241 3333 6241 3300 lodgements.wa@veris.com.au		
In Order For Dealin		Date	Licensed Surveyor Survey Organisation Name Address Phone Fax Email	Date VERIS JOLIMONT 6014 6241 3333 6241 3300 lodgements.wa@veris.com.au		
In Order For Dealin Subject To For Registrar of Titles			Licensed Surveyor Survey Organisation Name Address Phone Fax Email	Date VERIS JOLIMONT 6014 6241 3333 6241 3300 lodgements.wa@veris.com.au		



New Lot / Land	Parent Plan Number	Parent Lot Number	Title Reference	Subject Land Description
Lots 373-381 & 9038	DP 420155	Lot 9035	C/T 4039/850	
Lots 382 & 695	DP 420155 DP 424279	Lot 9035 Lot 9036	C/T 4039/850 C/T 4039/892	
Lots 315-320, 330-333, 383, 384 & 9037	DP 424279	Lot 9036	C/T 4039/892	

Former Tenure Interests and Notifications

Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
33b J 33b K	Easement (Sewerage)	Sec 167 of the P & D Act Reg 33(b)	DP 412121	Lot 9038	Water Corporation	
\bigotimes	Restrictive Covenant	Sec 129BA of the TLA	Doc	Lot 695	Electricity Networks Corporation	Fire Separation

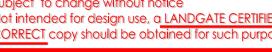
New Notifications and Memorials

Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments
	Notification	Sec 165 of the P & D Act	Doc	Lots		Bushfire Management Plan

Vesting Lots

Lot	Purpose	Statutory Reference	Origin	Comments
Lot 695	Reserve For Recreation	Vests in the Crown Under Sec 152 of the P & D Act	This Plan	

PRELIMINARY ONLY UNLODGED VERSION SUBJECT TO LANDGATE AUDIT This plan is -Current as at 01.11.2023
-Subject to change without notice
-Not intended for design use, a LANDGATE CERTIFIED CORRECT copy should be obtained for such purposes.









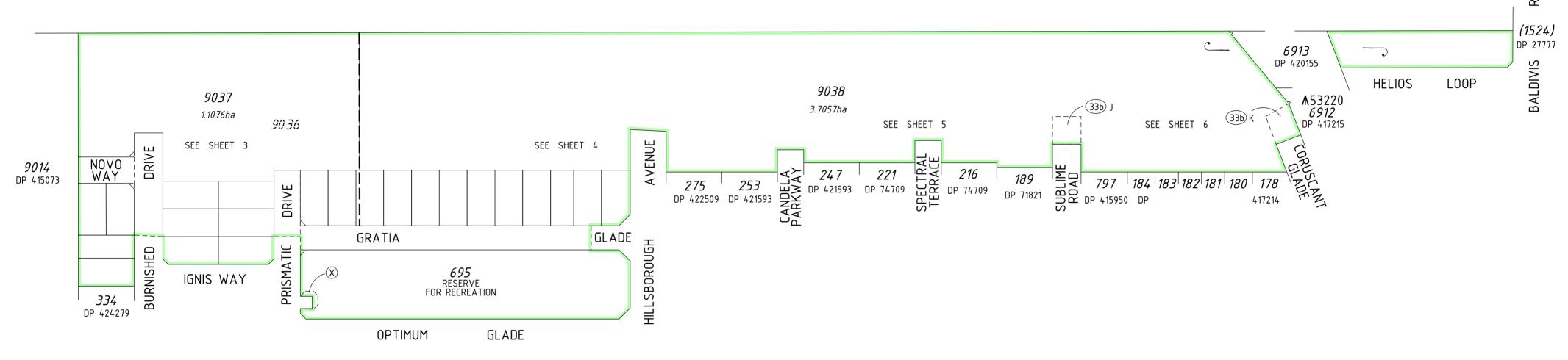


ADDITIONAL SHEETS Survey Sheet(s)

SHEETS 6 OF

SHEET

VERSION NUMBER



PRELIMINARY ONLY UNLODGED VERSION SUBJECT TO LANDGATE AUDIT This plan is

This plan is
-Current as at 01.11.2023

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Landgate

SCALE: 1:1500 AT A2 SIZE

Veris
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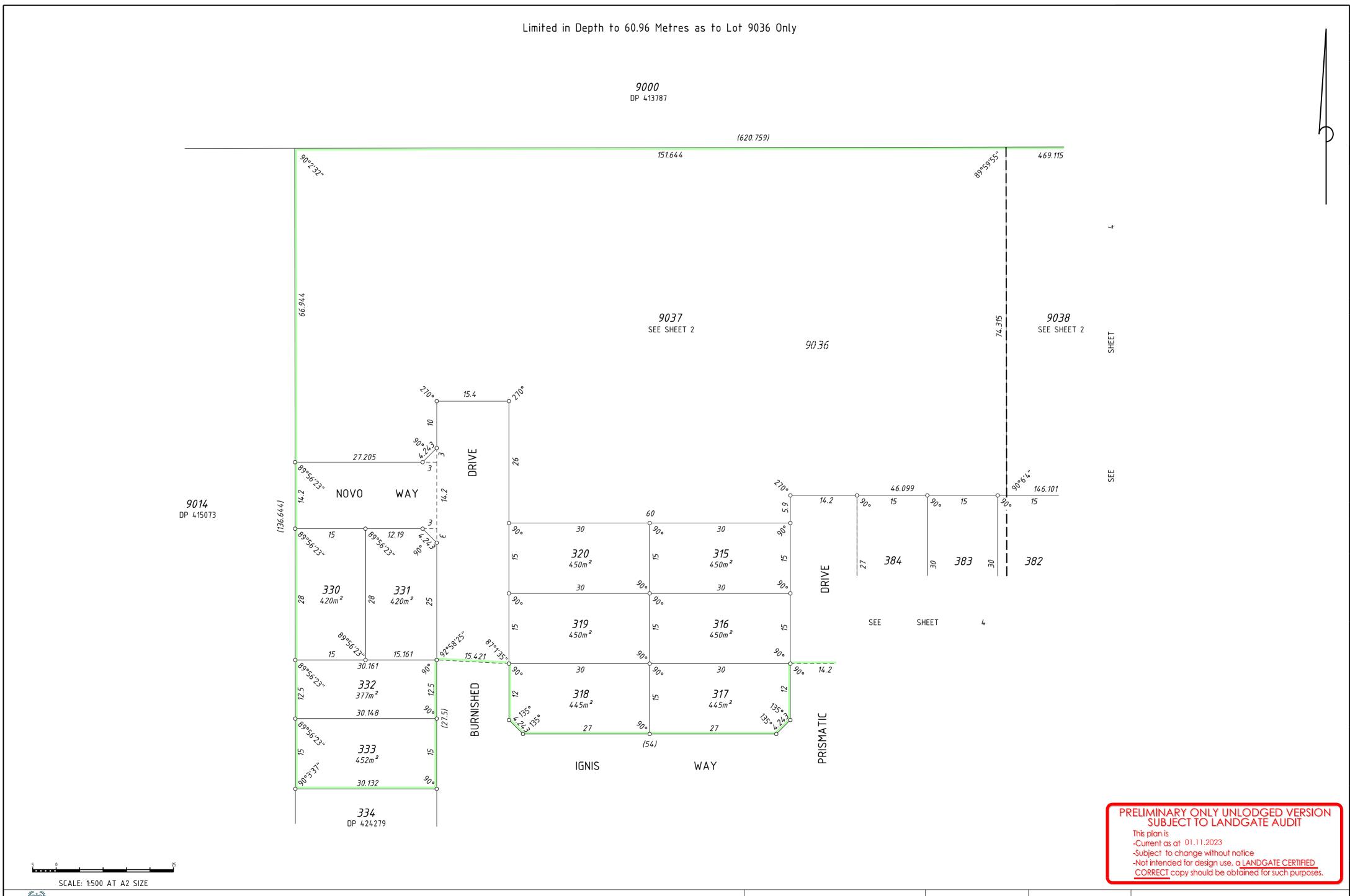
ADDITIONAL SHEETS
Survey Sheet(s)

SHEET SHEETS

OF 6

VERSION NUMBER

deposited plan 426542





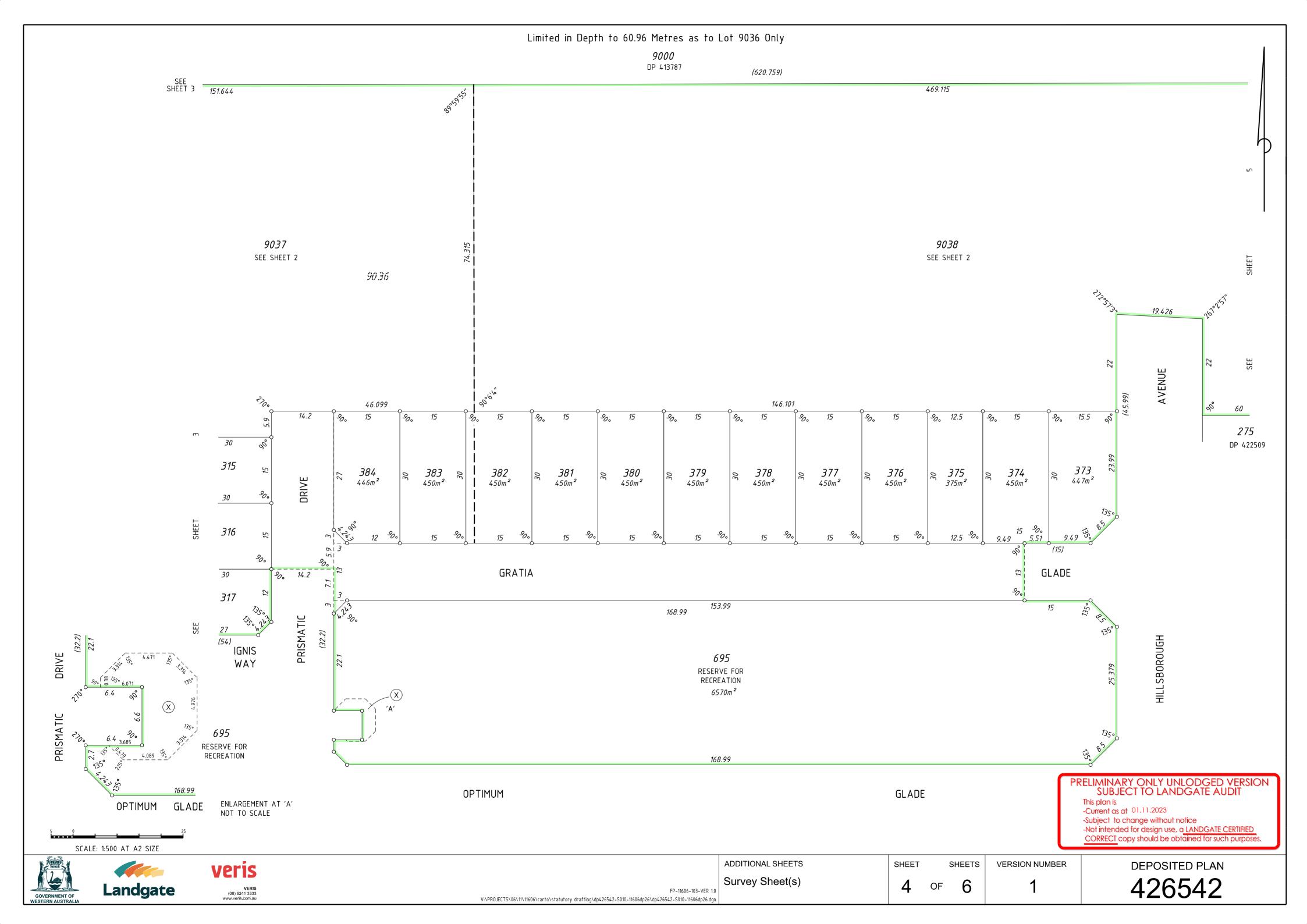


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ADDITIONAL SHEETS Survey Sheet(s)

SHEET SHEETS 6 OF

VERSION NUMBER



9000 DP 413787

(620.759)

469.115

9038 SEE SHEET 2 (33b) J 14.2 SEE SEE *15.4* 14.2 TERRACE SUBLIME ROAD CANDELA PARKWAY 30 SPECTRAL *221* DP 74709 60 247 DP 421593 216 *111.052* 189 DP 74709 797 275 *253* DP 71821 DP 422509 DP 421593 DP 415950

PRELIMINARY ONLY UNLODGED VERSION SUBJECT TO LANDGATE AUDIT

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CORRECT copy should be obtained for such purposes.

SCALE: 1:500 AT A2 SIZE

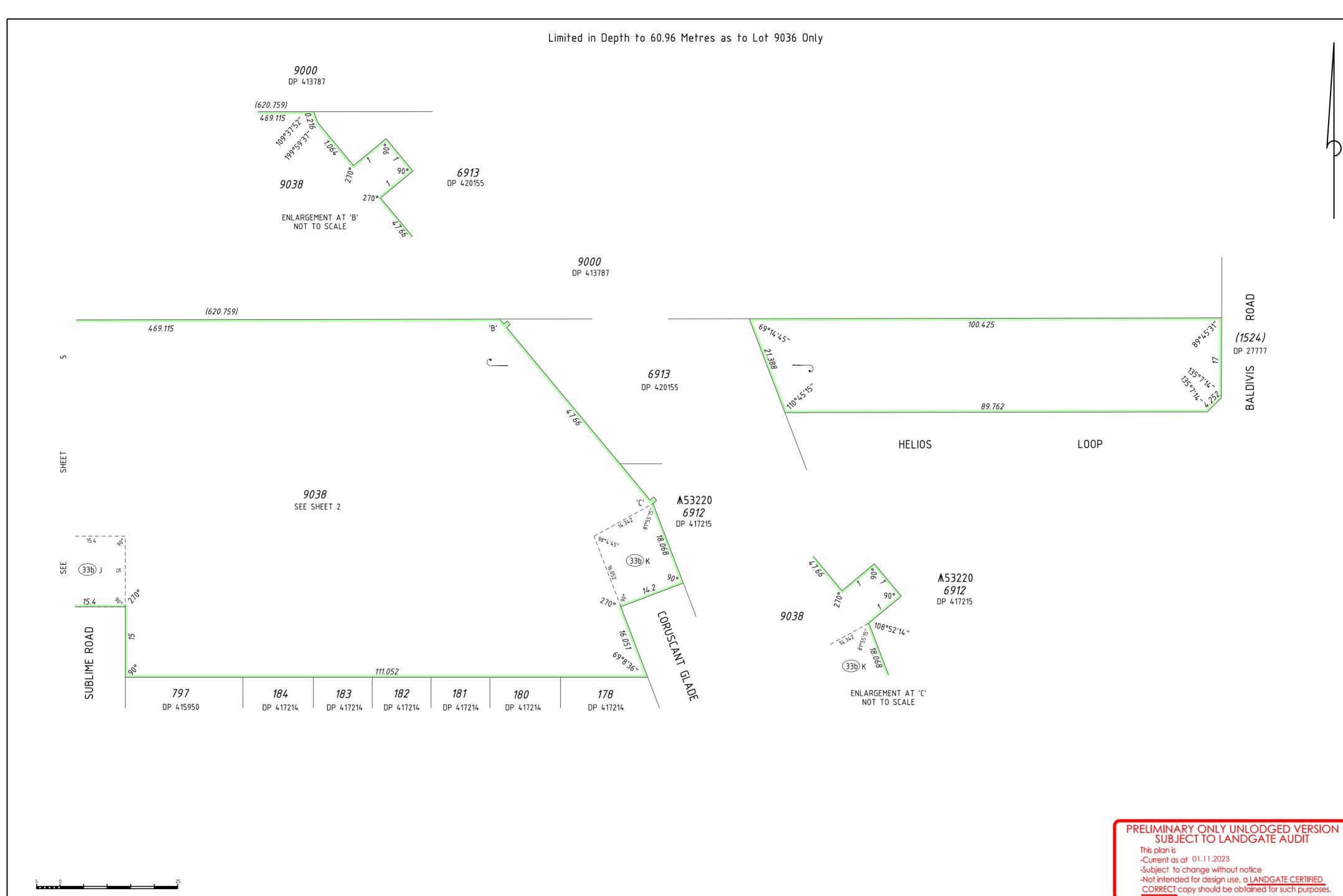




ADDITIONAL SHEETS Survey Sheet(s)

SHEET SHEETS 6 OF

VERSION NUMBER





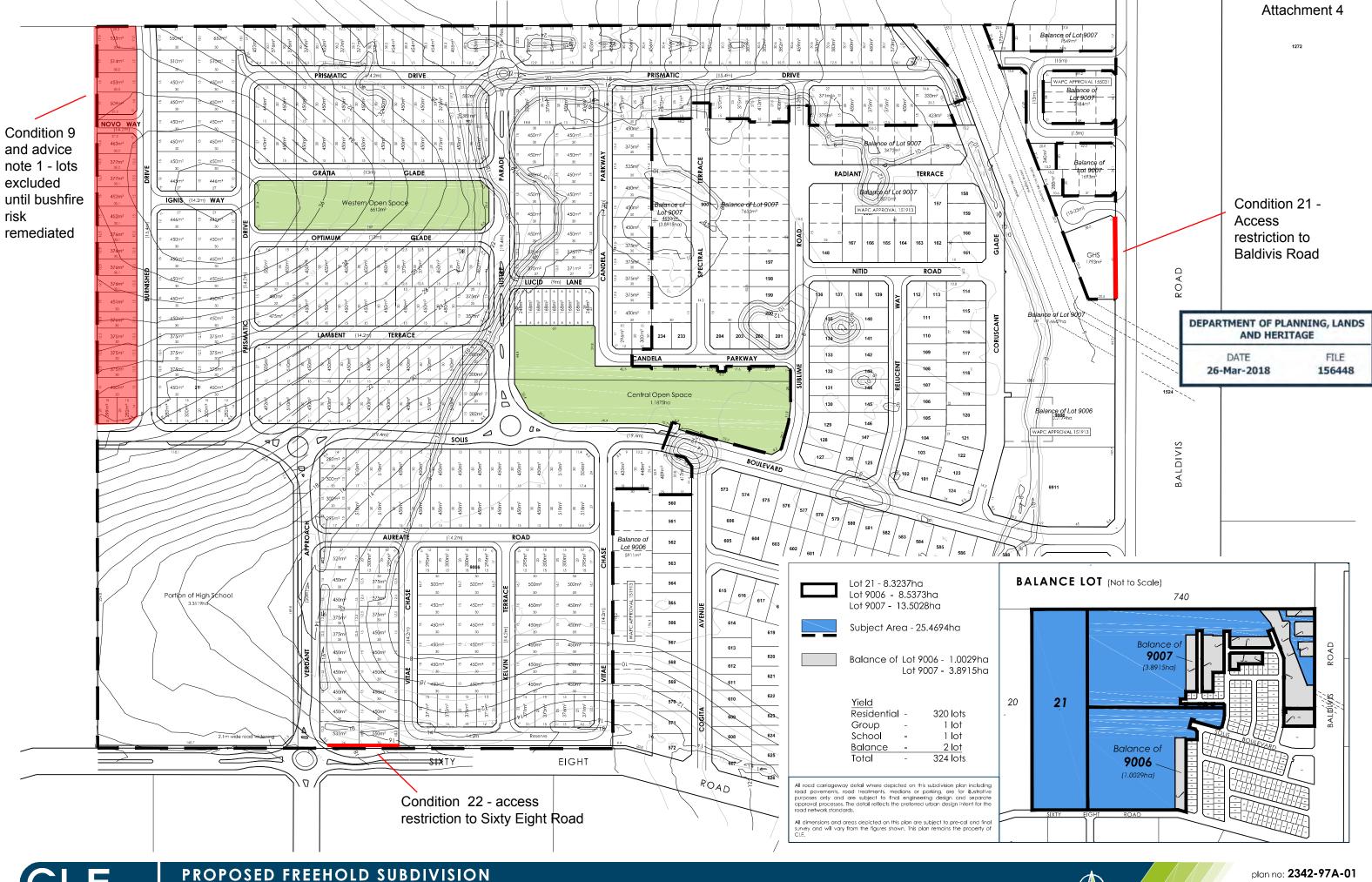


ADDITIONAL SHEETS Survey Sheet(s)

SHEET SHEETS 6 6 OF

VERSION NUMBER

Appendix B 2018	Plan	for	WAPC	Approval	Condition	9 Lots	dated	26	March





Brightwood Estate Lot 21Sixty Eight Road, 9006 & 9007 (no street address), Baldivis





Appendix C Photographic evidence of compliance



Plate 1: Remnant vegetation (Class G Grassland) located >150 m northeast of the lots affected by Condition 9.



Plate 2: Remnant vegetation (Class G Grassland) located >150 m northeast of the lots affected by Condition 9 (located in background of associated photo).



Plate 3: Evidence of external area to lots affected by Condition 9 being cleared and maintained to low threat.



Plate 4: Evidence of external area to lots affected by Condition 9 being cleared and maintained to low threat.



Plate 5: Evidence of external area located >150 m east of the lots affected by Condition 9 being maintained to low threat (i.e. maintained parkland).

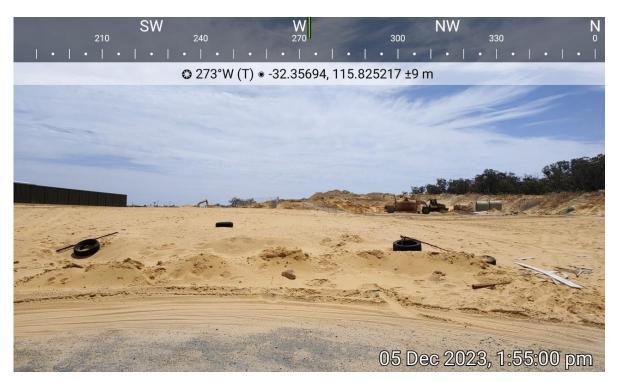


Plate 6: Evidence of external area to lots affected by Condition 9 being cleared and maintained to low threat.



Plate 7: Evidence of external area to lots affected by Condition 9 being cleared and maintained to low threat.



Plate 8: Evidence of internal area to lots affected by Condition 9 being cleared and maintained to low threat.



Plate 9: Evidence of external area to northwest of the lots affected by Condition 9 being cleared and maintained to low threat.



Plate 10: Evidence of external area to west of lots affected by Condition 9 being cleared and maintained to low threat.

Appendix D Bushfire Attack Level (BAL) Assessment Report					



Bushfire Attack Level (BAL) Assessment Report for Stage 10 Brightwood Estate, Baldivis

Site Details						
Address: Stage 10 Brightwood Estate, Baldivis						
Suburb:	Baldivis, 6171	St	tate	Western Australia		
Local Government Area:	City of Rockingham					
Description of building works:	Residential development					

Report details				
Report/Job number:	23PER6977	Report version:	v1	
Assessment date:	5/12/2023	Report date:	7/02/2024	
Author:	Maitland Ely	Review:	Eva Cronin 45482)	(BPAD Level 2-



SITE ASSESSMENT AND SITE PLAN

The assessment of the 22 residential lots was undertaken on 5 December 2023 for the purpose of determining the Bushfire Attack Level (BAL) in accordance with *Australian Standard AS 3959: 2018 Construction of Buildings in Bushfire Prone Areas* (SA 2018) Simplified Procedure (Method 1). An overview of the site is presented in Figure 1.

VEGETATION CLASSIFICATION

All vegetation within 100 m of the 22 residential lots was classified in accordance with Clause 2.2.3 of AS 3959: 2018. Each distinguishable vegetation class with the potential to determine the BAL is identified below and presented in Figure 1.

Plot 1 Classification or Exclusion Clause

Class G Grassland

Photo Point 1 (background)

Classified vegetation within this plot is comprised of grasses.

Slope under this plot was assessed as upslope/flat land.



Plot 1 Classification or Exclusion Clause

Class G Grassland

Photo Point 2

Classified vegetation within this plot is comprised of grasses.

Slope under this plot was assessed as upslope/flat land.



Plot 2 Classification or Exclusion Clause

Excluded AS 3959: 2018 2.2.3.2 (e) & (f)

Photo Point 3

Non-vegetated area that is permanently cleared of vegetation (i.e., footpaths, roads and residential housing).

Vegetation within this plot is regarded as low threat due to factors such as flammability, moisture content and fuel load as it is managed landscaping and yards.



Plot 2 Classification or Exclusion Clause

Photo Point 4

Non-vegetated area that is permanently cleared of vegetation (i.e., cleared areas within subject site for future roads and residential development).

Excluded AS 3959: 2018 2.2.3.2 (e)



Plot 2 Classification or Exclusion Clause

Photo Point 5

Non-vegetated area that is permanently cleared of vegetation (i.e., cleared areas for future roads and residential development).

Excluded AS 3959: 2018 2.2.3.2 (e)



Plot 2 Classification or Exclusion Clause

Photo Point 6

Non-vegetated area that is permanently cleared of vegetation (i.e., footpaths and playground area).

Vegetation within this plot is regarded as low threat due to factors such as flammability, moisture content and fuel load as it is managed landscaping and parkland.

Excluded AS 3959: 2018 2.2.3.2 (e) & (f)



RELEVANT FIRE DANGER INDEX

The fire danger index for this site has been determined in accordance with Table 2.1 of AS 3959: 2018.

Relevant Fire Danger Index			
FDI 40 □	FDI 50 □	FDI 80 ☑	FDI 100 □
Table 2.4.5	Table 2.4.4	Table 2.4.3	Table 2.4.2

POTENTIAL BUSHFIRE IMPACTS

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified below, Table 1 and Figure 1.

Table 1: BAL Analysis AS 3959: 2018

Diet	Vacatation Classification	Effective Slope	Separation distances required					
PIOL	Plot Vegetation Classification	Effective Slope =	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5	
1	Class G Grassland	All upslopes and flat land (0 degrees)	<6	6-<8	8-<12	12-<17	17-<50	
2	Excluded AS 3959: 2018 2.2.3.2 (e) & (f)	-	No separation distances required – BAL-LOW					

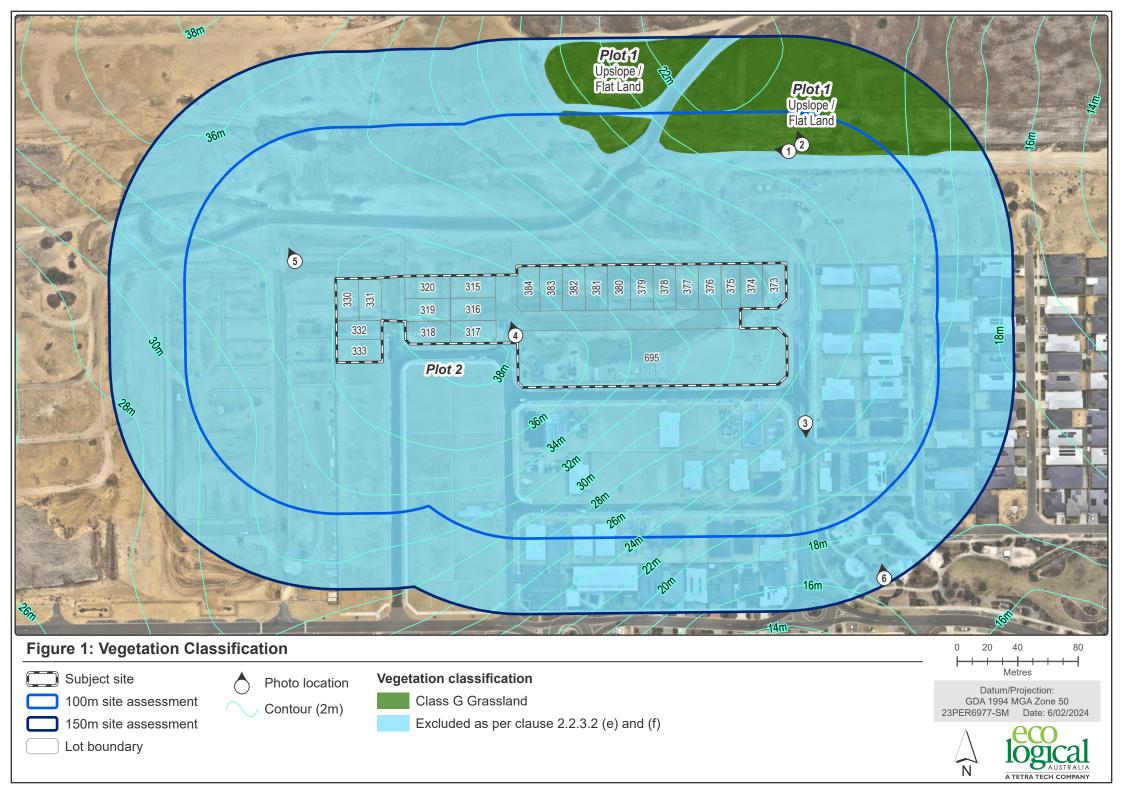
DETERMINED BUSHFIRE ATTACK LEVEL (BAL)

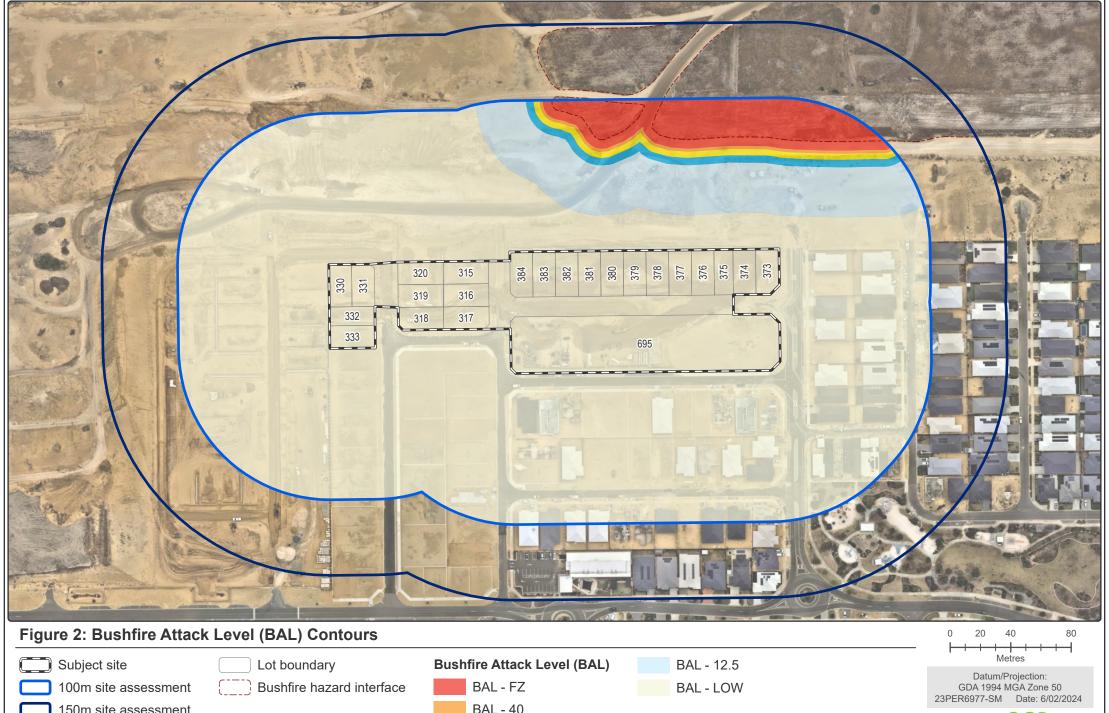
The determined Bushfire Attack Level (highest BAL) for the proposed works has been determined in accordance with Clause 2.2.6 of AS 3959: 2018 relevant data from the site assessment shown in Table 2 and Figure 2.

Table 2: BAL Assessment summary

BAL	Affected lots	Construction sections to be consulted in AS 3959- 2018
BAL-LOW	All proposed lots	4

Note: This BAL rating is based on the information current at the date of this document and is valid for 12 months.





BAL - 40 150m site assessment BAL - 29 BAL - 19

Appendix A – Additional Information / Advisory Notes

This assessment was undertaken as per AS 3959: 2018. It is important that the current version of AS 3959, is consulted for construction purposes.

This BAL rating is based on the information current at the date of this letter and is valid for 12 months from the date of this letter.

Bushfire Attack Level (BAL) as set out in the *Australian Standard 3959 Construction of Buildings in Bushfire-Prone Areas* (AS 3959), as referenced in the *Building Code of Australia*.

Bushfire Attack Level (BAL)	Classified vegetation within 100 m of the site and radiant heat flux exposure thresholds	Description of predicted bush fire attack and levels of exposure	Construction Section as per AS 3959
BAL-LOW		There is insufficient risk to warrant specific construction requirements.	4
BAL-12.5	≤12.5 kW/m²	Ember attack	3 and 5
BAL-19	>12.5 kW/m2 ≤19 kW/m²	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing radiant heat flux.	3 and 6
BAL-29	>19 kW/m2≤29 kW/m²	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing radiant heat flux	3 and 7
BAL-40	>29 kW/m2≤40 kW/m²	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing radiant heat flux with the increased likelihood of exposure to flames.	3 and 8
BAL-FZ	>40 kW/m²	Direct exposure to flames from fire front in addition to radiant heat flux and ember attack	3 and 9

Source: "AS 3959: 2018 Construction of buildings in bushfire-prone areas" published by Standards Australia, Sydney