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LOGAN CITY COUNCIL

APPROVED DOCUMENT

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MCUI/12/2024

Teys Road Mixed Use Development

PRELIMINARY APPROVAL DOCUMENT

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Tey's Road Mixed Use Development

PRELIMINARY APPROVAL DOCUMENT

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Prepared for Development Holdings Pty Ltd

20 June 2024

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1. ABOUT THE PRELIMINARY APPROVAL DOCUMENT

1.1. Introduction

This Preliminary Approval Document (“PAD”) forms part of the Variation Request made under s.50(3) of the *Planning Act 2016*, that seeks to vary the effect of the *Logan Planning Scheme 2015* (Version 9) (“Planning Scheme”) to facilitate the establishment of the Stoneleigh Way Preliminary Approval Area Development.

The document establishes a town planning framework to facilitate development of the site for small scale, low impact, business uses, as an alternative to residential development of the site, which is unable to occur due to the environmental constraints associated with the site’s proximity to Teys Abattoir at 112-148 Logan River Road, Beenleigh.

This document will become a local categorising instrument for the subject site and prevail over the Planning Scheme to the extent of any inconsistency between the two instruments. Specifically, this document establishes the category of assessment and assessment benchmarks for particular development within the Preliminary Approval Area.

1.1.1. Purpose

The planning intent for the PAD is to establish a small scale mixed business development which provides a transition between high impact industrial uses to the north, and residential uses to the south. In addition, the development will support the surrounding residential catchments by providing non-residential uses that will improve the nature and standard of services available to residents and create local business and employment opportunities.

1.1.2. Application

The PAD applies to land within the Preliminary Approval Area (“PAA”) at 21-31 Stoneleigh Way, Holmview QLD 4207, described as Lot 901 on SP202036, as illustrated at **Figure 1**. Where Lot 901 on SP202036 is subdivided, the PAD continues to apply to the resulting lot(s) to the extent the lot(s) is within the PAA.

1.1.3. Components

The PAD comprises the following elements: -


- a. About the Preliminary Approval Document;
- b. Tables of Assessment;
- c. Assessment Benchmarks;
- d. Structure Plan;
- e. Approved Documents.



Figure 1 - Preliminary Approval Area

Scale - NTS

Source - Near Map

Legend -  Preliminary Approval Area

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1.2. Interpretation

1.2.1. Relationship with Planning Scheme

1. In the event of any inconsistency between the provisions of the PAD and the *Logan Planning Scheme 2015* (Version 9), the provisions of the PAD prevail.
2. In the absence of an equivalent provision within the PAD, the provisions of the *Logan Planning Scheme 2015* (Version 9) apply.

1.2.2. Definitions

1. A term used in the PAD has its ordinary meaning unless that term is defined by one of the following:-
 - a. The PAD;
 - b. The *Logan Planning Scheme 2015* (Version 9);
 - c. The *Planning Act 2016*;
 - d. The *Planning Regulation 2017*.

1.2.3. Staging

1. The PAD does not preclude the assessment of a development application within the PAA in part or in stages.

2. TABLES OF ASSESSMENT

2.1. Categories of Development, Categories of Assessment and Assessment Benchmarks – Material Change of Use

The categories of development and assessment benchmarks that are applicable to a Material Change of Use within the PAA is identified at **Table 1**.

Table 1 – Material Change of Use – PAA		
Development	Categories of Development and Assessment	Assessment Benchmarks for assessable development and requirements for accepted development
Food and Drink Outlet where excluding a drive through facility	Accepted Development (subject to requirements) If all of the following are met – <ul style="list-style-type: none"> a. A maximum of two (2) tenancies within the PAA with a combined gross floor area of 630m² or less; b. Involves minor building work. 	<ul style="list-style-type: none"> ■ Section A of the Stoneleigh Way PAA Code
	Code Assessment If not accepted development (subject to requirements) and the combined gross floor area is 630m ² or less; or If involving the sale and consumption of alcohol.	<ul style="list-style-type: none"> ■ Stoneleigh Way PAA Code ■ Infrastructure Code ■ Servicing, access and parking code ■ Filling and excavation code ■ Landscape Code
	Impact Assessment If the combined gross floor area of food and drink outlet(s) is more than 630m ² in the PAA.	The Logan Planning Scheme 2015
	Indoor Sport and Recreation	Accepted Development (subject to requirements) If all of the following are met-

	<p>a. Located in the Teys Road Precinct of the Structure Plan at Appendix A.</p> <p>b. A maximum of two (2) tenancies in the Teys Road Precinct; and</p> <p>c. Involves minor building work.</p>	
	<p>Code Assessment</p> <p>If not accepted development (subject to requirements), in the Teys Road Precinct, and two (2) tenancies or less are in or proposed in the Teys Road Precinct.</p>	<ul style="list-style-type: none"> ■ Stoneleigh Way PAA Code ■ Infrastructure Code ■ Servicing, access and parking code ■ Filling and excavation code ■ Landscape Code
	<p>Impact Assessment</p> <p>If more than two (2) tenancies are in or proposed in the Preliminary Approval Area; or</p> <p>If proposed in Tenancy 9 on the Development Plan at Appendix C.</p>	<p>The Logan Planning Scheme 2015</p>
Service Industry	<p>Accepted Development (subject to requirements)</p>	<ul style="list-style-type: none"> ■ Section A of the Stoneleigh Way PAA Code
	<p>If -</p> <p>a. The gross floor area of any individual tenancy is 600m² or less;</p> <p>b. In the Teys Road Precinct;</p> <p>c. The combined gross floor area of Service Industry uses in the Teys Road Precinct is 2,085m² or less; and</p> <p>d. Involving minor building work.</p>	
	<p>Code Assessment</p> <p>If not accepted development (subject to requirements), located in the Teys Road Precinct, and the combined gross floor area of service industry</p>	<ul style="list-style-type: none"> ■ Stoneleigh Way PAA Code ■ Infrastructure Code ■ Servicing, access and parking code

	uses in the Teys Road Precinct is 2,085m ² or less.	<ul style="list-style-type: none"> ■ Filling and excavation code ■ Landscape Code
	Impact Assessment	The Logan Planning Scheme 2015
	If the combined gross floor area of service industry uses is more than 2085m ² in the PAA; or If proposed in Tenancy 9 on the Development Plan at Appendix C.	
Showroom	Accepted Development (subject to requirements)	<ul style="list-style-type: none"> ■ Section A of the Stoneleigh Way PAA Code
	If - <ul style="list-style-type: none"> a. Located in Tenancies 2, 3, 4, 5, 6 and/or 7 of the Development Plan at Appendix C. b. The gross floor area of any individual tenancy is 600m² or less; c. The combined gross floor area of Showroom uses in the Teys Road Precinct is 1,622m² or less; and d. Involving minor building work. 	
	Code Assessment	<ul style="list-style-type: none"> ■ Stoneleigh Way PAA Code ■ Infrastructure Code ■ Servicing, access and parking code ■ Filling and excavation code ■ Landscape Code
	If not accepted development (subject to requirements), located in the Teys Road Precinct and the combined gross floor area of showroom uses in the Teys Road Precinct is 1,622m ² or less.	
Impact Assessment	The Logan Planning Scheme 2015	
If the combined gross floor area of the showroom uses is more than 1,622m ² in the Preliminary Approval Area; or		

	If proposed in Tenancy 9 on the Development Plan at Appendix C.	
Warehouse (self-storage facility only)	Accepted Development (subject to requirements)	<ul style="list-style-type: none"> ■ Section A of the Stoneleigh Way PAA Code
	If - <ul style="list-style-type: none"> a. Located in the Self Storage Precinct of the Structure Plan provided at Appendix A; b. The combined gross floor area of Self storage facilities is 3,100m² or less in the Preliminary Approval Area; and c. Involves minor building work. 	
	Code Assessment	<ul style="list-style-type: none"> ■ Stoneleigh Way PAA Code ■ Infrastructure Code ■ Servicing, access and parking code ■ Filling and excavation code ■ Landscape Code
	If- <ul style="list-style-type: none"> a. Not accepted development (development subject to requirements); and b. Located in the Self Storage Precinct; and c. Has a gross floor area of 3,100m² or less. 	
	Impact Assessment	The Logan Planning Scheme
	If the combined gross floor is more than 3,100m ² in the Preliminary Approval Area; or If proposed in Tenancy 9 on the Development Plan at Appendix C.	

For any other Material Change of Use not listed in sub-section 2.4, Table 1, ~~the categories of development and assessment in the Logan Planning Scheme 2015 (Version 9) apply,~~ **the development will be Impact Assessable and the relevant assessment benchmarks in the Logan Planning Scheme 2015 (Version 9) will apply.**

2.2. Categories of Development and Assessment – Building Work

The categories of development and assessment for building work from the *Logan Planning Scheme* (Version 9) apply.

2.3. Categories of Development and Assessment – Reconfiguring a Lot

The categories of development and assessment for reconfiguring a lot from the *Logan Planning Scheme* (Version 9) apply.

2.4. Categories of Development and Assessment – Overlays

Table 2 identifies variations to the categories of development and assessment stated in Table 5.10.3 – *Bushfire Hazard Overlay* of the *Logan Planning Scheme* (Version 9). For all other overlays, the categories of development and assessment from the *Logan Planning Scheme* (Version 9) apply.

Table 2 – Bushfire Overlay – PAA		
Development	Categories of Development and Assessment	Assessment Benchmarks for assessable development and requirements for accepted development
Building work	Accepted Development (subject to requirements)	■ A01 of the Stoneleigh Way PAA code
	If undertaken in accordance with the Bushfire Management Plan at Appendix B.	
	Code Assessment	■ Bushfire hazard overlay code
	If not accepted development (subject to requirements).	
Material change of use or reconfiguring a lot	Accepted Development (subject to requirements)	■ A018 of the Stoneleigh Way PAA code
	If undertaken in accordance with the Bushfire Management Plan at Appendix B.	
	Code Assessment	

	If not accepted development (subject to requirements).	■ Bushfire hazard overlay code
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3. PAA CODE

3.1. Preliminary

Where a code identified in Part 2 is not included in Part 3, the code included in the *Logan Planning Scheme 2015* (Version 9) applies.

The following code is included in this PAD as a variation to the *Logan Planning Scheme 2015* (Version 9):-

- a. Stoneleigh Way PAA Code

3.2. Stoneleigh Way PAA Code

3.2.1. Application

1. This code applies to:
 - a. Accepted development (subject to requirements) and code assessable material change of use for which the Stoneleigh Way PAA Code is identified in the assessment benchmarks for assessable development requirements for accepted development column in Table 1 - Material Change of Use - PAA and Table 2 - Bushfire Overlay - PAA.

3.2.2. Purpose

1. The purpose of the Stoneleigh Way PAA Code is to provide a variety of small scale and low impact business uses which facilitate a land use transition from higher impact industries to the north and residential uses to the south, and provide local employment opportunities.
2. The purpose of the Stoneleigh Way PAA code will be achieved through the following outcomes:
 - a. If in the Self Storage Precinct:-
 - i. Land use comprises a Warehouse which operates exclusively as a Self-storage facility;
 - ii. The design and built form:
 1. Is responsive and sensitive to the nearby residential land uses;
 2. Has a building height and form that is responsive and commensurate to the surrounding residential uses;
 3. Avoids overshadowing residential streets and premises;
 4. Provides a 6m landscape buffer to Stoneleigh Way;
 5. Sets back buildings 10.5m from Stoneleigh Way;
 6. Provides an 8m landscape buffer to residential boundaries;
 7. Sets back buildings 14m from the southern residential boundary.
 - iii. Development facilitates a safe, legible and connected movement network
 - iv. Development protects the amenity of the surrounding residential land.

- b. If in the Teys Road Precinct:-
 - i. Land uses comprise Indoor Sport and Recreation, Food and Drink Outlet, Showroom and Service Industry;
 - ii. The design and built form:
 - 1. Is responsive and sensitive to the nearby residential land uses, providing generous setbacks and landscaping to residential boundaries;
 - 2. Contributes positively to the Teys Road streetscape locating carparking and buildings behind landscape buffers to the street;
 - 3. Has a building height and form that is response and commensurate to the surrounding residential land;
 - 4. Provides a range of small tenancies facilitating local employment opportunities;
 - 5. Avoids overshadowing residential premises;
 - iii. Development facilitate a safe, legible and connected movement network;
 - iv. Development protects the amenity of the surrounding residential land.
- c. Development provides a pedestrian link between Stoneleigh Way and Teys Road.

3.2.3. Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 3 – Stoneleigh Way PAA Code	
Section A - For accepted development (subject to requirements) and assessable development	
P01 A use is for a use identified in Table 1 and does not exceed the maximum gross floor area for the use listed in Table 1.	A01 A use is for a use identified in Table 1 and does not exceed the maximum gross floor area for the use listed in Table 1.
P02 An office function is ancillary to a use identified in Table 1 does not exceed 40 percent of the gross floor area of a tenancy.	A02 An office function, that is ancillary to a use identified in Table 1, does not exceed 40 percent of the gross floor area of a tenancy.
Food and drink outlet	
P03	A03

<p>A Food and drink outlet:</p> <ul style="list-style-type: none"> a. is small-scale; b. serves the local residents and workforces' daily needs. 	<p>A Food and drink outlet:</p> <ul style="list-style-type: none"> a. Maintains a maximum of two (2) tenancies in the Teys Road Precinct; and b. Maintains a maximum combined gross floor area of 630m² for the use in the Teys Road Precinct.
Indoor sport and recreation	
<p>P04</p> <p>An Indoor sport and recreation facility:</p> <ul style="list-style-type: none"> a. is small scale; b. serves the local residents and workforces' daily needs. 	<p>P04</p> <p>An Indoor sport and recreation facility:</p> <ul style="list-style-type: none"> a. Has a maximum gross floor area of 600m² per tenancy; and b. Maintains a maximum of two (2) tenancies in the Teys Road Precinct.
Service industry	
<p>P05</p> <p>A Service industry facility:</p> <ul style="list-style-type: none"> a. Is small scale; b. Does not result in off-site air, noise or odour emissions. 	<p>A05</p> <p>A Service industry facility:</p> <ul style="list-style-type: none"> a. Has a maximum gross floor area of 600m² per tenancy; b. Maintains a maximum combined gross floor area of 2,005m² for the use in the Teys Road Precinct; and c. Does not result in off-site air noise or odour emissions.
Showroom	
<p>P06</p> <p>A Showroom is small scale.</p>	<p>A06</p> <p>A Showroom:</p> <ul style="list-style-type: none"> a. Maintains a maximum combined gross floor area of 1,622m² for the use in the Teys Road Precinct.
Warehouse (self storage facility)	
<p>P07</p> <p>A Self storage facility is of an appropriate scale and has hours of</p>	<p>A07.1</p> <p>A Self storage facility maintains a maximum combined gross floor area of 3,100m² for the use in the Self Storage Precinct.</p>

operation that protects the amenity of the nearby sensitive uses.	A07.2 A Self storage facility has staffed hours of operation of 7am to 6pm Monday to Sunday but may provide 24 hour access to users.
	A07.3 Access by a Medium Rigid Vehicle or larger vehicle only occurs between 7am to 10pm.

Design

Building Height

P08

A building has a height that:

- a. is responsive to the topography of the site;
- b. is compatible with the height of surrounding buildings;
- c. avoids overshadowing of premises in the residential zone category;
- d. transitions to the residential zone category land to protect:
- e. visual amenity;
- f. privacy.

A08

A building has a maximum building height of ~~8.5m~~

8 metres in the Teys Road Precinct and 7 metres in the Self Storage Precinct.

Boundary clearance

P09

Development provides boundary clearances that:

- a. allows for the separation of buildings or structures necessary to ensure the impacts on residential amenity and privacy are minimised;
- b. provides access to natural light and ventilation;
- c. are consistent with the character for the zone;
- d. relates to the existing streetscape character.

A09

Development, other than an existing lawful building, provides:

- a. a road boundary clearance:
 - 1. a minimum of four metres; or
 - 2. where the building or structure aligns with the building setback of one or more adjoining buildings;
- b. a minimum side and rear boundary clearances of three metres.

Built form	
<p>P010</p> <p>Development provides an attractive built form by:</p> <ul style="list-style-type: none"> a. Providing a built form that is compatible with and sympathetic to the surrounding residential character and nearby residential zoned land; b. orientating the building to the primary road frontage; c. providing a well-articulated façade; d. incorporating detailed design measures for visual aesthetics; e. integrating with public open space; f. integrating with the street; g. having a human scale at the ground floor; h. incorporating a variety of facade colours and treatments. <p>Note - Planning scheme policy 8 - Urban design provides guidelines on how to achieve this outcome.</p>	<p>A010</p> <p>No acceptable outcome provided.</p> <p>Note - As Accepted Development Subject to Requirements on contemplates minor building work, no acceptable outcomes applies here.</p>
Amenity	
General emissions	
<p>P011</p> <p>Development protects the intended amenity for the zone and precinct of an adjoining premises by having regard to:</p> <ul style="list-style-type: none"> a. noise emissions; b. air emissions; c. light emission; 	<p>A011</p> <p>Development complies with the following emissions standard of Planning scheme policy 3 - Environmental management:</p> <ul style="list-style-type: none"> a. Table 3.2.1.1 - Noise emission standards for the protection of residential amenity where adjoining a premises in a zone specified in 3.2.1(1)(a) of Planning scheme policy 3-Environmental management; b. Table 3.2.1.2 - Noise emission standards for the protection of general amenity where adjoining a premises in a zone specified in 3.2.1(1)(b) of Planning scheme

	<p>policy 3 - Environmental management;</p> <p>c. Table 3.2.2.1 - Air emission standards;</p> <p>d. Table 3.2.3.1 - Light emission standards;</p>
Interface with surrounding land	
<p>P012</p> <p>Development protects the visual amenity of premises in adjoining residential areas by providing a 6m landscape buffer to Stoneleigh Way, and an 8m landscape buffer to land in the residential zones category.</p>	<p>A012</p> <p>Development provides a minimum 2 metre wide landscaped buffer and an acoustic fence where adjoining the pedestrian access link shown on the Development Plan at Appendix C; or</p> <p>Where fronting Stoneleigh Way provides a minimum 6m wide landscaped buffer and an acoustic fence.</p>
<p>P013</p> <p>Development presents an attractive landscaped interface to publicly accessible land.</p>	<p>A013.1</p> <p>Development provides a minimum 4m wide landscape buffer along the western boundary of the Self Storage Precinct.</p>
	<p>A013.2</p> <p>Development provides a minimum 2m wide landscape buffer to Teys Road.</p>
Service areas and parking	
<p>P014</p> <p>Development ensures vehicle entrances, servicing and parking are designed and located to minimise disruption to building frontages, pedestrian environment and to reduce the visual impact on the streetscape.</p>	<p>A014</p> <p>A development:</p> <ul style="list-style-type: none"> a. locates any new parking areas behind a 2m wide landscape buffer to the street; b. screens plant, equipment, services and outdoor storage of materials from public view; c. provides crossovers only to Teys Road, with a maximum of two (2) crossovers at a maximum width of 6.5m per crossover (excluding splays).

<p>P015</p> <p>Development provides on-site carparking for each use that is sufficient to cater to the peak demand for the use so that off site carpark is not relied upon.</p>	<p>A015</p> <p>Development provides on-site carparking in accordance with the rates provided in the Servicing, Access and Parking Code of the Logan Planning Scheme 2015.</p>
<p>P016</p> <p>Development provides a safe and functional vehicle manoeuvring area.</p>	<p>A016</p> <p>Development provides vehicle manoeuvring areas that accommodate HRV design vehicles.</p>
<p>Natural Hazards</p>	
<p>Bushfire</p>	
<p>P017</p> <p>Development achieves compliance with the outcomes of the Bushfire hazard overlay code of the Planning Scheme.</p> <p>Note: an assessment against the outcomes of the Bushfire hazard overlay code is to be undertaken by an appropriately qualified person to demonstrate compliance with this outcome.</p>	<p>A017.1</p> <p>Development occurs in accordance with the recommendations of Section 6 of the Bushfire Management Plan provided at Appendix B of this PAD.</p> <p>A017.2</p> <p>No buildings are to be located within the 29kW/m² heat flux contour shown in the Bushfire Mitigation Plan figure of the Bushfire Management Plan.</p>
<p>Section B - For assessable development only</p>	
<p>Design</p>	
<p>Built Form</p>	
<p>P018</p> <p>Development ensures that glass or any other surface likely to reflect specular rays does not impose undue nuisance, discomfort or hazard on the surrounding locality.</p>	<p>A018</p> <p>No acceptable outcome provided.</p>
<p>Crime prevention through environmental design</p>	
<p>P019</p> <p>Development supports the safety of users and adjoining public open spaces by</p>	<p>A019</p> <p>No acceptable outcome provided.</p>

<p>utilising crime prevention through environmental design principles by:</p> <ul style="list-style-type: none"> a. providing casual surveillance; b. providing easy way finding for pedestrians; c. deterring unintended and illegitimate access to premises; d. limiting the opportunities for graffiti and vandalism. <p>Note - Planning scheme policy 1 - Crime prevention through environmental design outlines the appropriate measures to be taken into account to achieve this outcome.</p>	
<p>Streetscape</p>	
<p>P020</p> <p>Development provides a consistent and cohesive streetscape, which creates visual interest, a sense of place and a safe pedestrian environment that is consistent with the intended character of the zone through the use of:</p> <ul style="list-style-type: none"> a. footpath paving; b. street trees; c. landscaping. 	<p>A020</p> <p>No acceptable outcome provided.</p>
<p>Social and health impact</p>	
<p>P021</p> <p>Development enhances the positive impacts and mitigates or avoids the negative impacts for the uses stated in Table 2.1.2.1 of Planning scheme policy 7 - Social and health impact assessment.</p>	<p>A021.1</p> <p>Development meets the criteria for the uses stated in Table 2.1.2.1 of Planning scheme policy 7 - Social and health impact assessment where involving the sale or consumption of liquor.</p> <hr/> <p>A021.2</p> <p>Development does not provide for gaming.</p>

APPENDIX A

Preliminary Approval Structure Plan

STRUCTURE PLAN - 21-31 STONELEIGH WAY, HOLMVIEW



LEGEND:



PRELIMINARY APPROVAL AREA



SELF STORAGE PRECINCT



TEYS ROAD PRECINCT

SCALE: NTS SOURCE: NEARMAP

THE CONTENT OF THIS DOCUMENT INCLUDES THIRD PARTY DATA. PROPERTY PROJECTS AUSTRALIA PTY LTD DOES NOT GUARANTEE THE ACCURACY OF SUCH DATA.

REVISION 01
13 DECEMBER 2023



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APPENDIX B

Bushfire Management Plan

Bushfire management plan

Proposed development | 21-31 Stoneleigh Way | Holmview | Queensland
Prepared for Development Holdings Pty Ltd | 14 December 2023

Bushfire management plan

Final V1

Report 23076 | Development Holdings Pty Ltd | 14 December 2023

Approved by Robert Janssen

Position Managing principal

Signature



Date 14 December 2023

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at or under the times and conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.

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Document control

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Draft	7 December 2023	R. Janssen	LEC
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Appendix

- Appendix 1 Proposed site plan
- Appendix 2 Radiant heat exposure assessment
- Appendix 3 Bushfire hazard overlay code assessment

Disclaimer

Notwithstanding the precautions adopted in this report, it should always be remembered that bushfires burn under a range of conditions. An element of risk, no matter how small always remains, and although AS 3959-2018 is designed to improve the performance of such buildings, there can be no guarantee, because of the variable nature of bushfires, that any building will withstand bushfire attack on every occasion.

It should be noted that upon lodgement of a development proposal, State Government, council and/or the fire service may recommend additional construction requirements.

Although every care has been taken in the preparation of this report, Land and Environment Consultants Pty Ltd accept no responsibility resulting from the use of the information in this report.

1 Introduction

Land and Environment Consultants Pty Ltd (LEC) was engaged to prepare a bushfire management plan (BMP) for the preliminary approval for material change of use for variation request and development permit for a material change of use— mixed use development (warehouse (self-storage), warehouse, showroom, food and drink, indoor sports and recreation and service industry) (**proposed development**) at 21-31 Stoneleigh Way, Holmview (**the site**), properly described as lot 901/SP202036. A development application for the proposed development will be made under the Logan Planning Scheme 2015.

The site is identified as a bushfire hazard area by the Logan Planning Scheme 2015 *Bushfire hazard overlay map OM-03.00 (Bushfire hazard overlay map)*. Therefore, the development application for the proposed development is subject to compliance with the Logan Planning Scheme 2015 *Bushfire hazard overlay code (Bushfire hazard overlay code)*.

This BMP has been prepared in accordance with the Logan Planning Scheme 2015 Policy 6 – *Management of bushfire hazard (Bushfire planning scheme policy)* and *Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience – Bushfire'* (QFES 2019a) (**Bushfire resilient communities**). Bushfire resilient communities was prepared by the Queensland Fire and Emergency Services (QFES) to provide technical guidance for the implementation of the *Natural Hazards, Risk and Resilience – Bushfire, State Planning Policy State Interest guidance material* (DSDMIP 2019).

This BMP documents the bushfire hazard assessment of the site and demonstrates how the proposed development will comply with the Bushfire hazard overlay code. It includes:

- an introduction (this section) and description of methods and information resources used for the preparation of this BMP;
- description of the site and proposed development;
- bushfire hazard assessment;
- identification of bushfire hazards associated with the site and proposed development;
- radiant heat exposure assessment;
- a plan for mitigating bushfire hazards; and
- assessment of the proposed development against the Bushfire hazard overlay code.

1.1 Method

To meet requirements of the Bushfire planning scheme policy and Bushfire resilient communities, the following tasks were undertaken:

- review of the Bushfire hazard overlay map in Logan City Council's online mapping system (LCC 2023) and the Queensland regional ecosystem map, vegetation hazard class (**VHC**) map, severe fire weather map and fire history map in the QFES online mapping system (QFES 2023) (**Catalyst**);
- inspection of land within 100 metres (**m**) of the site for vegetation characteristics, current land management practices, slope and evidence of previous fires;
- bushfire hazard assessment in accordance with the method in Bushfire resilient communities;
- radiant heat exposure assessment using the Fire Protection Association of Australia *BAL calculator V4.9 (BAL calculator)* which models the 'method 2' bushfire attack level assessment procedure in the *Australian Standard (AS 3959-2018) Construction of buildings in bushfire prone areas*; and

- assessment of the proposed development against the Bushfire hazard overlay code.

Aerial imagery of the site and measuring tools were accessed online from Google Earth and the Queensland Globe to assist with validating observations and measurements made during the site assessment.

1.2 Suitably qualified person

This BMP was prepared by Robert Janssen who is a suitably qualified and experienced bushfire management consultant.

Robert is the managing principal at LEC and has over 25 years of experience in bushfire planning and operations. He has prepared BMPs for residential, commercial and industrial property developments, utilities, government facilities and conservation estates.

Robert's formal qualifications as an environmental scientist and consulting experience are coupled with 10 years of experience as a nationally accredited fire-fighter with the national parks and wildlife service in New South Wales and Queensland.

2 Description of the site and proposed development

This chapter provides a description of the site and proposed development.

2.1 Site description

The location of the site is shown in Figure 2.1. The site is 0.89 hectares (**ha**), has frontage to Teys Road and Stoneleigh Way and access to mains water.

The site is undeveloped but has been cleared of bushland vegetation.

There are areas of bushland vegetation and tall grass adjacent to the northern, part of the southern and eastern boundaries of the site. Tall grass in the rural paddocks to the east of the site is setback from the site boundary by the Teys Road reserve.

Developed land, ie residential properties, the Stoneleigh Way road reserve and a mown recreation park, occurs adjacent to the other boundaries of the site. That is, the other part of the southern boundary and western boundary of the site.

2.2 Proposed development

The master plan for the proposed development is provided in Appendix 1 and shows the proposed layout of the self-storage facility, service industry tenancies, carparking, new driveways and driveway connections.

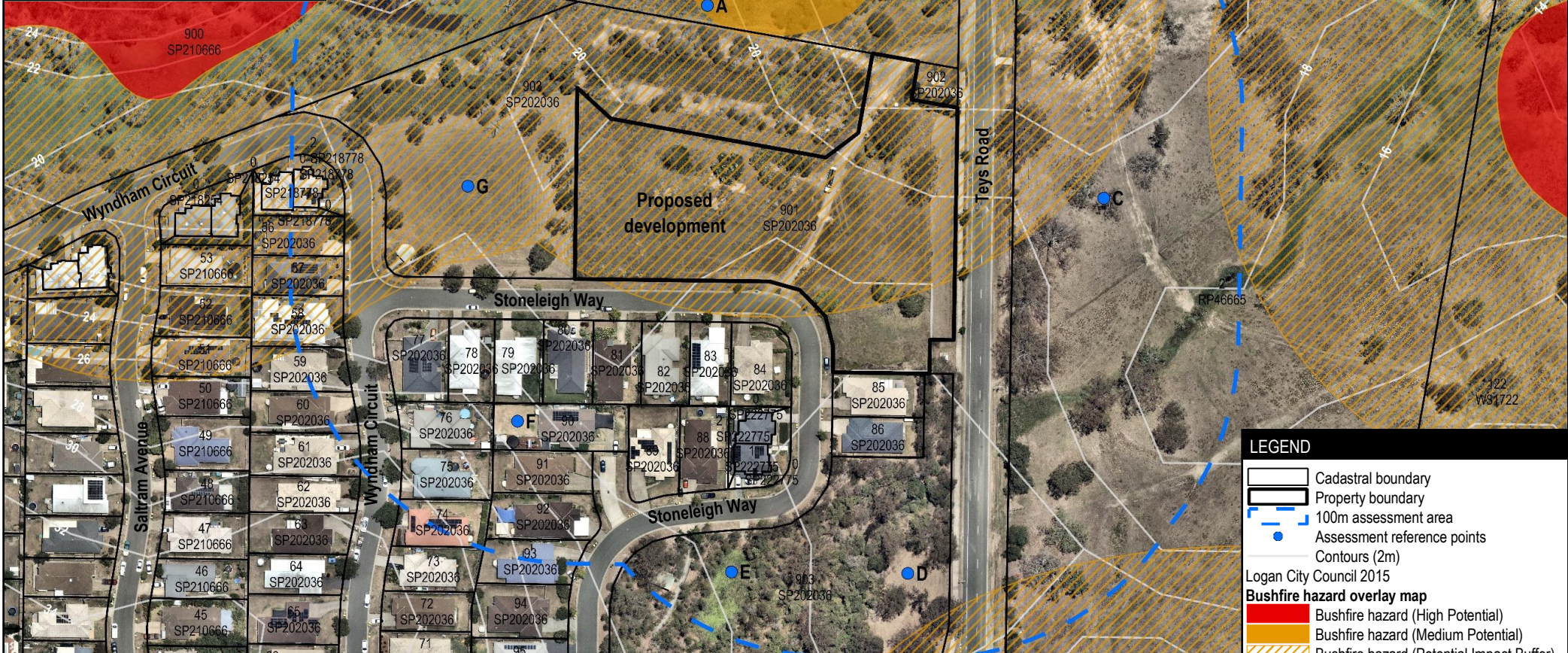
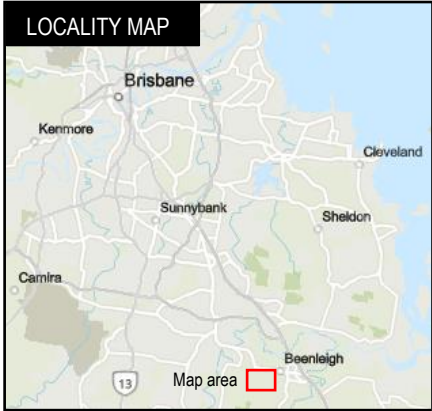
The proposed development will be constructed as a staged development, ie the self-storage facility delivered in one stage and the service industry tenancies delivered in one stage. The proposed development will be designed to provide the flexibility to deliver the stages in any order.

Access and egress for the proposed development will be provided via new driveway connections to Teys Road.

The proposed development will be connected to mains water and will have an appropriately designed hydrant system.

2.3 Bushfire hazard overlay map

The Bushfire hazard overlay map for the site is shown in Figure 2.1 and indicates the site is affected by a potential impact buffer from medium and high potential bushfire hazard areas which occur to the north of the site. Verification of the bushfire hazard areas shown in the Bushfire hazard overlay map is provided via the bushfire hazard assessment in Chapter 3.



LEGEND

- Cadastral boundary
- Property boundary
- 100m assessment area
- Assessment reference points
- Contours (2m)

Logan City Council 2015
Bushfire hazard overlay map

- Bushfire hazard (High Potential)
- Bushfire hazard (Medium Potential)
- Bushfire hazard (Potential Impact Buffer)

Aerial image: Nearmaps
 Scale: 1:2,000

<p>Land and environment consultants</p>	<p>Development Holdings Pty Ltd</p> <p>Client</p>	<p>Bushfire management plan</p> <p>21-31 Stoneleigh Way</p> <p>Holmview</p> <p>Project</p>	
	<p>Design: Land and Environment Consultants Date: 30.11.2023</p> <p>Drawn: LW</p> <p>Scale: 1:2000</p> <p>File: J23076_Figure2.1_30Nov23.pdf</p>	<p>Site locality and</p> <p>Bushfire hazard overlay map</p> <p>Title</p>	<p>Figure</p> <p>2.1</p>
	<p>© Land and Environment Consultants. While every care is taken to ensure the accuracy of data, LEC makes no representation or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability in negligence for all expenses, losses, damages (including indirect consequential damage) and cost which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason.</p>		
	<p>Development Holdings Pty Ltd</p>		

© Land and Environment Consultants. While every care is taken to ensure the accuracy of data, LEC makes no representation or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability in negligence for all expenses, losses, damages (including indirect consequential damage) and cost which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason.

3 Bushfire hazard assessment

This chapter provides details about the desktop review, site inspection and bushfire hazard assessment.

3.1 Severe fire weather

The severe fire weather map in Catalyst indicates the 5 % annual exceedance probability forest fire danger index (**FFDI**) for the site is 54. This FFDI value has been used for the potential bushfire intensity calculations in Section 3.5 and the radiant heat exposure assessment in Section 5.6.

3.2 Fire history

Fire history data in Catalyst indicates that no fires have occurred within 1 kilometre (**km**) of the site during the past 10 years.

3.3 Site inspection

LEC inspected land within 100 m of the site on 22 August 2023. Observations were recorded about current land use and management, vegetation characteristics, the slope of land and evidence of previous fires.

The locations of assessment reference points used for the bushfire hazard assessment are shown in Figure 2.1. Table 3.1 provides a summary of observations from the site inspection and notes about the bushfire hazard assessment of assessment reference points. Examples of VHCs observed during the site inspection are shown in Photographs 3.1-3.7.

Table 3.1 Site observations

Assessment reference point	Catalyst VHC	Ground truthed VHC	Notes
A	VHC 10.1 <i>Spotted gum dominated open forests (VHC 10.1)</i> and VHC 41.4 <i>Discontinuous low grass or tree cover (VHC 41.4)</i>	VHC 40.4 <i>Continuous low grass or tree cover (VHC 40.4)</i>	Tall grass in a drainage line and constructed stormwater management area.
B	VHC 10.1	VHC 10.1	Bushland vegetation.
C	VHC 40.4 and VHC 41.4	VHC 40.4	Teys Road and rural paddocks with tall grass.
D	VHC 41.4	VHC 41.4	Public recreation park with mown grass.
E	VHC 41.4	VHC 10.1	Assessment reference point E is a corridor of VHC 10.1 which contains waterbodies, park infrastructure is generally < 50 m wide. It has been assessed in Section 3.4 against the small patch and narrow corridor mapping rules in Section 4.2.6 of Bushfire resilient communities.
F	VHC 42.6 <i>Nil to very low vegetation cover (VHC 42.6)</i>	VHC 42.6	Stoneleigh Way and residential development with nil to very low vegetation cover.
G	VHC 10.1 and VHC 41.4	VHC 41.4	Public recreation park with mown grass.



Photograph 3.1 VHC 40.4 at A



Photograph 3.2 VHC 10.1 at B



Photograph 3.3 VHC 40.4 at C



Photograph 3.4 VHC 41.4 at D



Photograph 3.5 VHC 10.1 at E



Photograph 3.6 VHC 42.6 at F



Photograph 3.7 VHC 41.4 at G

3.4 Small patch and narrow corridor mapping rules

The narrow corridor of VHC 10.1 at assessment reference point E, shown in Figure 2.1, was assessed against the small patch and narrow corridor mapping rules in Section 4.2.6 of Bushfire resilient communities which 'reflect the likelihood of lower fireline intensities in smaller vegetation patches and narrow vegetation corridors'.

The narrow corridor of VHC 10.1 at assessment reference point E is generally < 50 m wide and adjoins maintained land within a public recreation park and residential lots, ie VHC 41.4 and VHC 42.6, which are defined in Bushfire resilient communities as having discontinuous bushfire fuels and as being a low hazard, ie these adjoining areas will not carry a bushfire. Therefore, the narrow corridor of VHC 10.1 at assessment reference point E is assessed as meeting the criteria for the 'narrow corridors filter' in Bushfire resilient communities.

Bushfire resilient communities recognises that narrow corridors of vegetation which meet the criteria for the narrow corridors filter are less likely to ignite due to their disconnection with large bushland areas that can carry a full intensity running fire front. Therefore, if a narrow corridor of vegetation is ignited it will likely be from a point ignition which requires both distance and area to develop into a running fire front of considerable hazard. On this basis, if a fire front did emerge from the narrow corridor of VHC 10.1 at assessment reference point E, it would be narrow in width and significantly less in intensity than a fire front which has had sufficient time and area to develop. As a result, Bushfire resilient communities assigns narrow corridors of vegetation which meet the narrow corridors filter a potential bushfire intensity of < 4,000 kilowatts/m (**kW/m**) and deems them to be a non-bushfire hazard class for the purpose of land use planning and development assessment.

3.5 Potential bushfire intensity calculations

The potential bushfire intensity of assessment reference points was determined using the Queensland Public Safety Business Agency *Potential Bushfire Intensity Calculator* (version November 2014) which is an Excel spreadsheet calculator that models the bushfire hazard assessment method in Bushfire resilient communities.

Bushfire resilient communities define bushfire hazard classes as follows:

- very high – potential bushfire intensity > 40,000 kW/m;
- high – potential bushfire intensity 20,000-40,000 kW/m;
- medium – potential bushfire intensity 4,000-20,000 kW/m; and
- non-bushfire hazard – potential bushfire intensity < 4,000 kW/m.

Results of the potential bushfire intensity calculations which determine the bushfire hazard class of assessment reference points shown in Figure 2.1 are presented in Table 3.2.

Table 3.2 Potential bushfire intensity

Assessment reference point	VHC	Potential fuel load (tonnes/ha) ¹	Slope (°) ²	Potential bushfire intensity (kW/m)	Bushfire hazard class
A	VHC 40.4	5	0	837	Non-bushfire hazard class
B	VHC 10.1	20.8	5	20,452	High
C	VHC 40.4	5	3	1,029	Non-bushfire hazard class
D	VHC 41.4	3	0	301	Non-bushfire hazard class
E	VHC 10.1	-	-	< 4,000 ³	Non-bushfire hazard class
F	VHC 42.6	2	0	134	Non-bushfire hazard class
G	VHC 41.4	3	0	301	Non-bushfire hazard class

Notes

- 1 Potential fuel load taken from Bushfire resilient communities.
- 2 Slope defaults to 0° for VHC 41.4 and VHC 42.6 which have discontinuous bushfire fuels.
- 3 Assessment reference point was assessed in Section 3.4 as meeting the narrow corridors filter in Section 4.2.6 of Bushfire resilient communities.

3.6 Bushfire hazard areas

Results of the potential bushfire intensity calculations in Table 3.2 confirms the Bushfire hazard overlay map shown in Figure 2.1 is generally correct and the site is within a bushfire hazard area. Therefore, the development application for the proposed development is subject to compliance with the Bushfire hazard overlay code.

4 Bushfire hazards associated with the site

This chapter identifies bushfire hazards associated with the site.

4.1 Fire danger season

The fire danger season at the site starts in August, peaks in September and will begin to fall when consistent summer rainfall occurs. Typically, the worst fire weather conditions will be experienced during the fire danger season when the wind direction is from the north or west.

An FFDI of 54 will be associated with hot, dry and windy conditions. If a bushfire starts and takes hold under these conditions, it will be difficult to control and fast moving in large areas of bushland vegetation.

4.2 Fire history

As discussed in Section 3.2, fire history data indicates no fires have occurred within 1 km of the site during the past 10 years. On this basis, it is considered unlikely the proposed development will be directly exposed to bushfire attack in the future.

4.3 Potential directions of bushfire attack

Although unlikely, the proposed development could be exposed to bushfire attack from assessment reference point B, shown in Figure 2.1, where hazardous vegetation occurs.

The bushland vegetation at assessment reference point B is separated from the site by tall grass, ie VHC 40.4 at assessment reference point A, which is defined as grassfire prone in Bushfire resilient communities. The tall grass at assessment reference point A could carry a surface fire from the bushland vegetation at assessment point B to the proposed development. Therefore, bushfire attack from assessment reference point B, is based on a grassfire attack scenario through assessment reference point A. This grassfire attack scenario is further analysed in Section 5.6.

4.4 Potential bushfire hazards from adjacent land use

The fire history data does not indicate the residential and rural uses adjacent to the site are a bushfire hazard to the proposed development.

4.5 Water and access for emergency services

The site has access to mains water and a public road network which will provide access and egress for emergency services and future occupants.

5 Bushfire hazards associated with the proposed development

This chapter identifies potential bushfire hazards associated with the proposed development.

5.1 Siting and design

The proposed development will be designed to mitigate the risk of bushfire hazards determined by the bushfire hazard assessment in this BMP:

- there will be an appropriately designed setback between the development footprint of buildings and hazardous vegetation to the north of the site;
- the new driveway and driveway connections to Teys Road will be designed to accommodate an urban fire truck; and
- the proposed development will be connected to mains water and will have an appropriately designed hydrant system.

5.2 Staging

The proposed development will be designed to provide the flexibility to deliver stages in any order.

Each stage will be designed to include:

- an appropriately designed setback between the development footprint of buildings and hazardous vegetation;
- driveways and turnaround areas for an urban fire truck; and
- an appropriately designed hydrant system.

Vegetation within the balance of the site after stage 1 will be maintained in a low bushfire fuel hazard condition with discontinuous bushfire fuels, ie regular removal of woody regrowth and slashing of grass.

5.3 Land uses

The proposed development will not involve any of the vulnerable uses or community infrastructure uses defined in Table SC1.2.2 of the Logan Planning Scheme 2015.

The proposed development may involve the storage or distribution of hazardous chemical. However, this will be in accordance with the industry thresholds of the Logan Planning Scheme 2015 for low impact industry and will not involve the following:

- a) manufacturing processes;
- b) exceeding a manifest quantity under the Queensland *Work Health and Safety Regulation 2011*;
- c) exceeding a threshold for a hazardous chemical facility as defined under Schedule 24 of the Queensland *Planning Regulation 2017*;
- d) refrigeration systems or cold stores that operate using anhydrous ammonia.

5.4 Fire-fighter water supply

The proposed development will be connected to mains water and will have an appropriately designed hydrant system which complies with specifications in *Fire Hydrant and Vehicle Access Guidelines for Residential, Commercial and Industrial Lots* (QFES 2019b) (**Fire hydrant and vehicle access guidelines**).

5.5 Access and egress

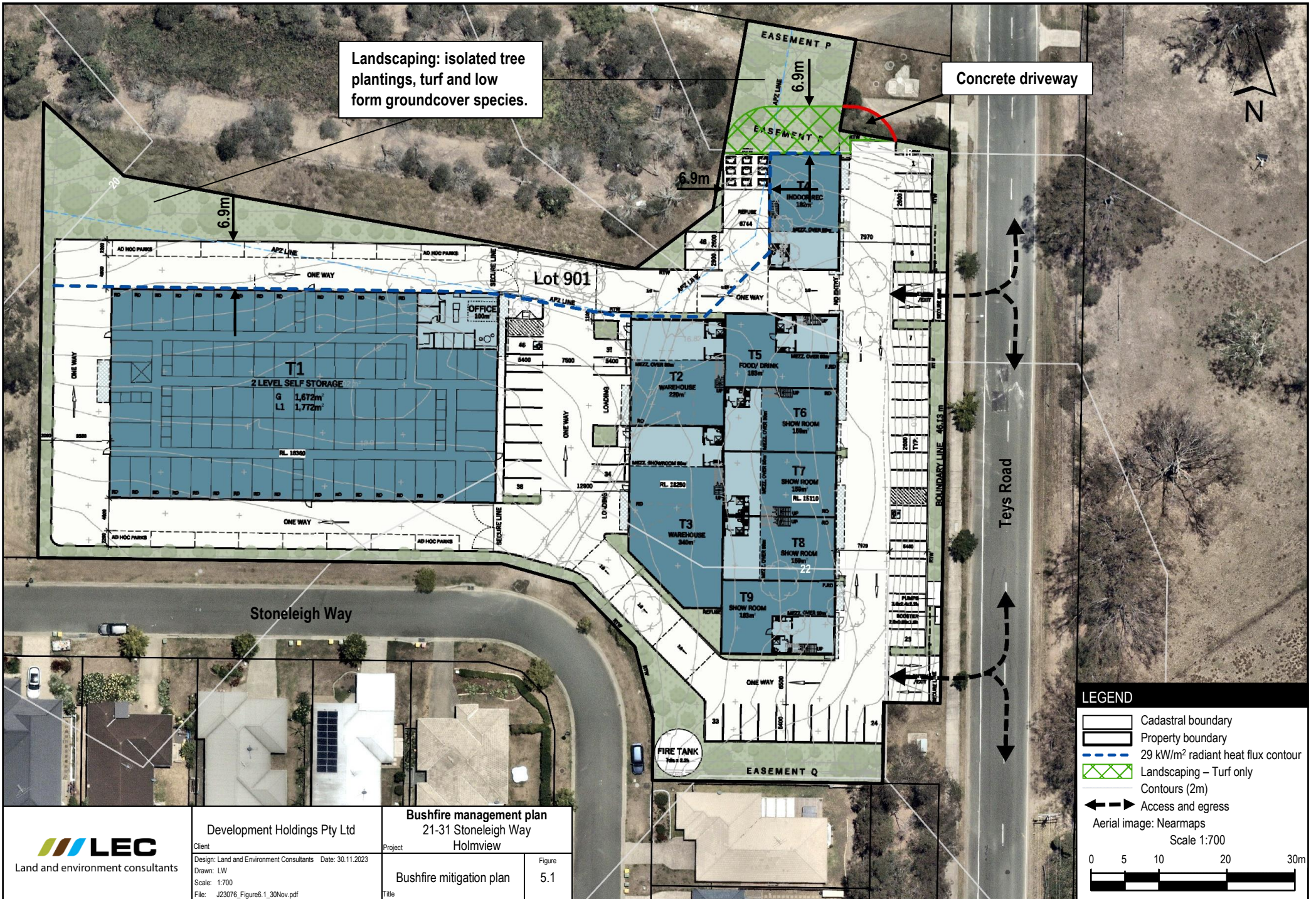
The proposed development will be accessed via new driveway connections to Teys Road. Driveways and driveway connections to Teys Road will be designed and constructed to accommodate an urban fire truck in accordance with specifications in Fire hydrant and vehicle access guidelines.

5.6 Radiant heat exposure

The Bushfire hazard overlay code provides guidance about the acceptable level of radiant heat exposure for development within bushfire hazard areas. It requires development to be setback from hazardous vegetation by a distance which achieves a radiant heat flux level $\leq 29 \text{ kW/m}^2$ at the development footprint of buildings.

As discussed in Section 4.3, although unlikely, the proposed development could be exposed to grassfire attack from assessment reference point A, shown in Figure 2.1, where hazardous vegetation occurs. The radiant heat profile of this grassfire attack scenario was analysed using the BAL calculator. Inputs used in the BAL calculator and results are provided in Appendix 2.

The setback required from hazardous vegetation to achieve a radiant heat flux level $\leq 29 \text{ kW/m}^2$ is 6.9 m and is shown in Figure 5.1. Figure 5.1 demonstrates the proposed location of buildings achieve a radiant heat flux level $\leq 29 \text{ kW/m}^2$ and comply with the Bushfire hazard overlay code.



Landscaping: isolated tree plantings, turf and low form groundcover species.

Concrete driveway



Teys Road

Stoneleigh Way

Lot 901

LEGEND

- Cadastral boundary
- Property boundary
- 29 kW/m² radiant heat flux contour
- Landscaping – Turf only Contours (2m)
- Access and egress

Aerial image: Nearmaps
Scale 1:700

<p>Land and environment consultants</p>	<p>Development Holdings Pty Ltd</p> <p>Client</p>	<p>Bushfire management plan</p> <p>21-31 Stoneleigh Way Holmview</p> <p>Project</p>	
	<p>Design: Land and Environment Consultants Date: 30.11.2023</p> <p>Drawn: LW</p> <p>Scale: 1:700</p> <p>File: J23076_Figure6.1_30Nov.pdf</p>	<p>Bushfire mitigation plan</p> <p>Title</p>	<p>Figure 5.1</p>

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6 Bushfire mitigation plan

This chapter identifies mitigation measures that must be implemented as part of the proposed development to comply with the Bushfire hazard overlay code.

It is the total of the mitigation measures in this chapter that will reduce the risk of bushfire hazard to a tolerable level. Failure to implement all actions in their entirety could result in an increased level of exposure to bushfire hazards.

6.1 Landscaping

Landscaping within the site must be designed in accordance with Part 5 of *Bushfire Resilient Building Guidance for Queensland Homes* (QRA 2020) (**Bushfire resilient building**) which is publicly available online. Plant selection must favour the list of plant species in Appendix E of Bushfire resilient building.

Landscaping in the areas adjoining the northern boundary of the site, which are identified in Figure 5.1, must consist of isolated canopy tree plantings, turf and low form groundcover species only. Isolated canopy tree plantings mean the tree plantings will not form connected canopy cover as they reach maturity. No shrub or low form tree plantings are permitted within these areas.

A 6.9 m wide area adjoining the north elevation of building T4, which is identified in Figure 5.1, must be landscaped with turf only.

Vegetation debris and rubbish must be removed from landscaped areas at regular time intervals during the calendar year. Areas of turf must be maintained as lawn at a nominal height of 10 centimetres.

6.2 Fire-fighter water supply

The proposed development must be connected to mains water. The mains water connection must be tested (and if required, augmented) to ensure that it always has sufficient flow and pressure characteristics for fire-fighting purposes, ie minimum flow and pressure of 10 litres/second at 200 kilopascals.

The hydrant system must be designed and constructed in accordance with specifications in Fire hydrant and vehicle access guidelines which defer to the local water retailer's specifications and the *Australian Standard* (AS 2419.1-2021) *Fire hydrant installation, system design, installation and commissioning*.

Where there are differences between the local water retailer's specifications and AS 2419.1-2021, the higher level of standard should prevail.

6.3 Access and egress

Driveways and the driveway connections to Teys Road must be designed and constructed to accommodate an urban fire truck in accordance with Fire hydrant and vehicle access guidelines which defers to the *Road Planning and Design Manual – 2nd Edition* (DTMR 2013) for load bearing capacity, geometry and turning radii.

Access and egress is shown in Figure 5.1.

6.4 Hazardous materials

Hazardous materials must not be manufactured within the site.

The storage of hazardous materials within the site must be in accordance with *A guide for flammable and combustible liquids under the Queensland Work Health and Safety Act 2011 (WSQ 2018)* and the *Australian Standard (AS 1940-2004) The storage and handling of flammable and combustible liquids*.

6.5 Service installation

Services to buildings must be installed underground.

7 Conclusion

This BMP was prepared by a suitably qualified person and is in general accordance with the Bushfire planning scheme policy and Bushfire resilient communities.

A bushfire hazard assessment determined the site is affected by bushfire hazard and the proposed development is subject to compliance with the Bushfire hazard overlay code.

Mitigation measures that must be implemented as part of the proposed development are specified in Chapter 6. With the implementation of these mitigation measures the proposed development complies with the Bushfire hazard overlay code as demonstrated in Appendix 3.

References

Logan City Council (LCC) 2023, *PD Hub – Interactive Mapping*, accessed online at <https://loganhub.com.au/interactive-mapping>, December 2023

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Queensland Fire and Emergency Service (QFES) 2019a, *Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest ‘Natural Hazards, Risk and Resilience – Bushfire’*, October 2019

Queensland Fire and Emergency Service (QFES) 2019b, *Fire Hydrant and Vehicle Access Guidelines for Residential, Commercial and Industrial Lots*, March 2019

Queensland Fire and Emergency Services (QFES) 2023, *Catalyst – Sustainable development mapping system*, QFES Sustainable Development Unit, accessed online at <https://catalyst.qfes.qld.gov.au/sdu/> via user login, November 2023

Queensland Reconstruction Authority (QRA) 2020, *Bushfire Resilient Building Guidance for Queensland Homes*, July 2020

Standards Australia Limited (Standards Australia) 2004, *Australian Standard (AS 1940-2004) The storage and handling of flammable and combustible liquids*, Fifth edition, January 2004

Standards Australia Limited (Standards Australia) 2021, *Australian Standard 2419.1-2021 Fire hydrant installation, System design, installation and commissioning*, Sixth edition, September 2021

Standards Australia Limited (Standards Australia) 2018, *Australian Standard 3959-2018 Construction of buildings in bushfire prone areas*, Fourth edition, November 2018

Worksafe Queensland (WSQ) 2018, *A guide for flammable and combustible liquids under the Queensland Work Health and Safety Act 2011; PN11391, Version 3, Last updated January 2018*

Appendix 1 Proposed site plan



DEVELOPMENT NUMBERS

SITE	
SITE AREA	8,902m ²
EX. BUILT FORM	0m ²
DEMO BUILT FORM	0m ²
ADDED BUILT FORM	3,352m ²
TOTAL	3,352m ²
SITE COVERAGE	37.7%

NEW BUILT FORM AREAS	
SELF STORAGE	3,544m ²
WAREHOUSE	760m ²
INDOOR REC	232m ²
SHOWROOM	860m ²
FOOD/ DRINK	233m ²

GRAND TOTAL	5,628m ²
SITE YIELD	63.2%

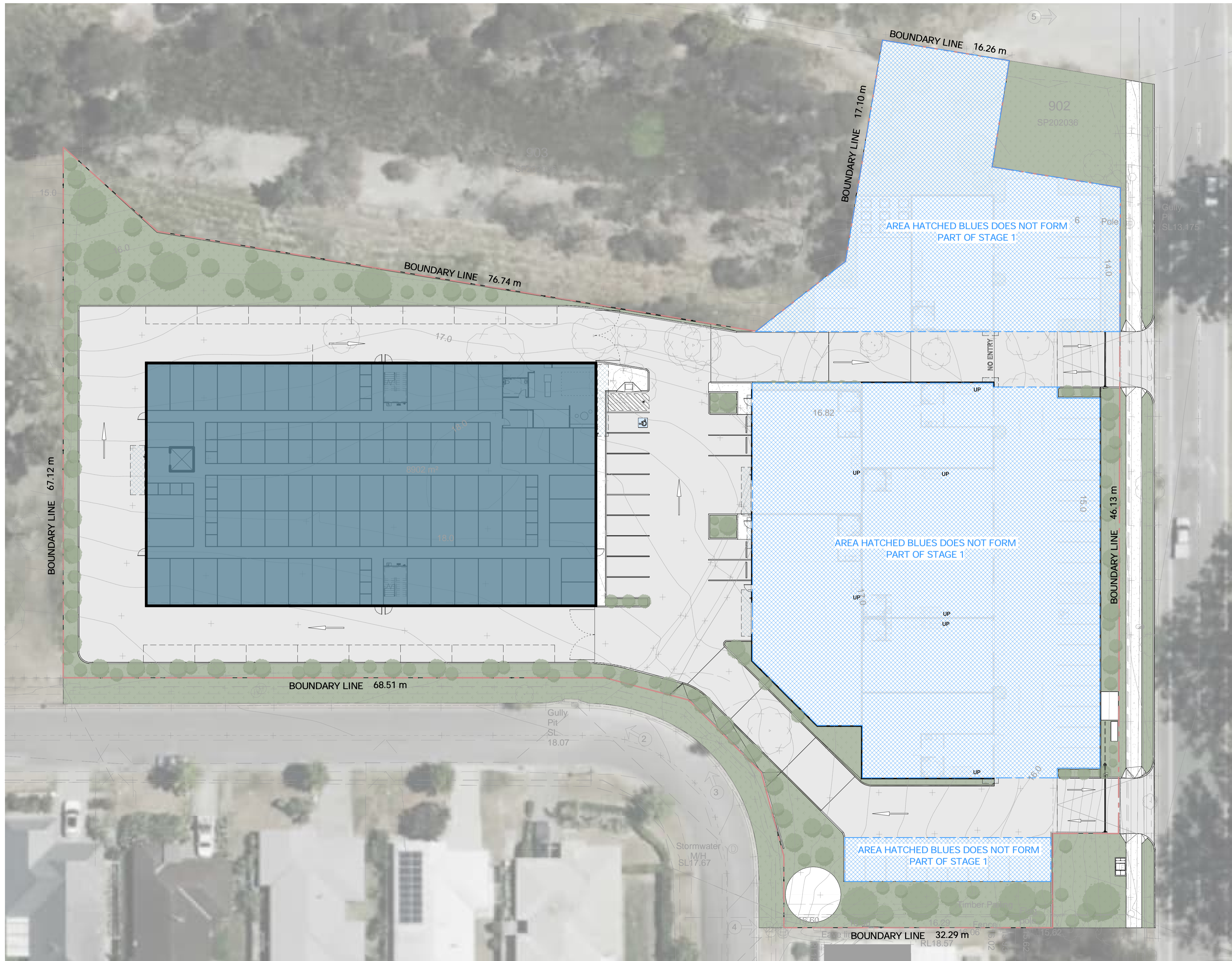
PROPOSED PARKING	
EX. APPROVED CAR PARKS	0
ADDED CAR PARKS	48
TOTAL	48

NOTES: ALL FIGURES ARE SUBJECT TO VERIFICATION OF A LICENSED SURVEYOR, TRAFFIC ENGINEER & RELEVANT DEVELOPMENT PLANNING CODE REQUIREMENTS

LEGEND

- EX. BUILT FORM
- NEW BUILT FORM
- BITUMEN PAVEMENT
AREA ADDED - 3,880m²
- CONCRETE HARDSTAND
AREA ADDED - 0m²
- LANDSCAPED AREAS
- VARIETY OF MATURE HEIGHT NATIVE TREE PLANTING & UNDER PLANTING GROUND COVERS.
REFER LANDSCAPE PLANS FOR DETAILS
- CANOPIES OVER
- DEMO. BUILT FORM

LEGEND	
CODE	DESCRIPTION
EF-1	2400h EXTERNAL PRESSED METAL SPEAR TIP FENCING. COLOURBOND MONUMENT.
EF-2	2500h EXTERNAL SHEET METAL FENCING. COLOURBOND BASLAT



PROJECT No. ADL22026
 ADDRESS TEYS ROAD, HOLMVIEW QLD 4207

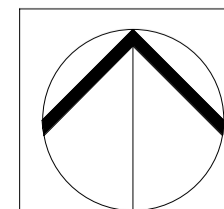
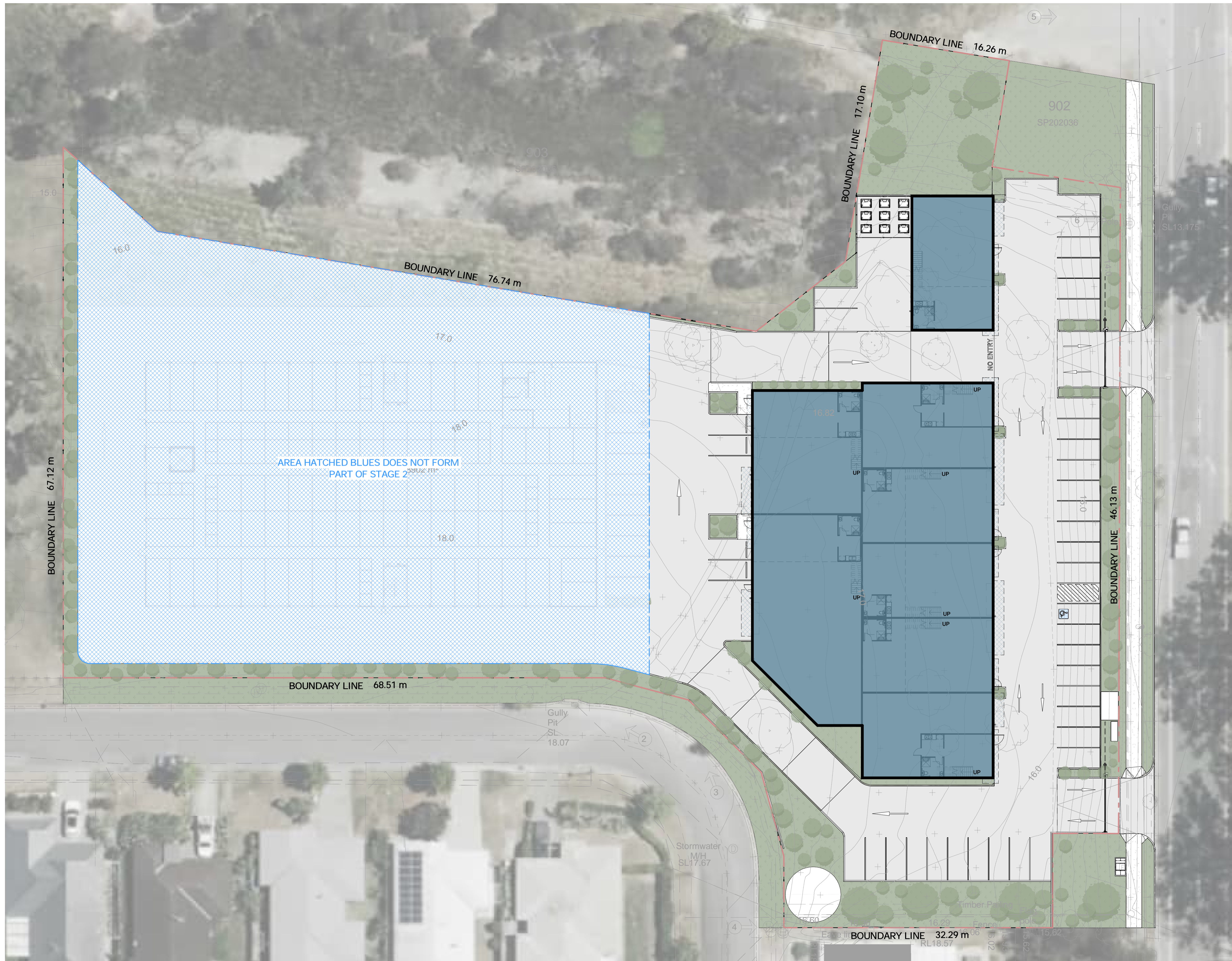
Project Name: MIXED USE DEVELOPMENT

SCALE 1 : 250
 DRAWN ADL ISSUED 13.12.2023
 0m 7.5m 15m 22.5m 30m

Drawing Title: PROPOSED STAGING PLAN - STAGE 01
 A LensArc E contact@lensarc.com.au W lensarc.com.au

FOR APPROVAL
 DA-006 Rev. 3

A1



PROJECT No. ADL22026

Project Name:

MIXED USE DEVELOPMENT

SCALE 1 : 250

DRAWN ADL

ISSUED 13.12.2023

Drawing Title:

PROPOSED STAGING PLAN - STAGE 02

FOR APPROVAL

ADDRESS TEYS ROAD, HOLMVIEW QLD 4207

0m 7.5m 15m 22.5m 30m

A LensArc

E contact@lensarc.com.au

W lensarc.com.au

DA-007

Rev. 3

A1

Appendix 2 Radiant heat exposure assessment

Bushfire attack from assessment reference point A

- Forest fire danger index - 54
- Grassland fire danger index - 76
- Vegetation - VHC 40.4 *Continuous low grass or tree cover*
- Understorey fuel load – 5 tonnes/hectare (**t/ha**)
- Total fuel load – 5 t/ha
- Effective slope – 0° slope
- Site slope – 0° slope
- Flame width – 100 metres (**m**)

Note Inputs used for the radiant heat exposure assessment are in accordance with Section 7.3 of *Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience – Bushfire (QFES 2019a) (Bushfire resilient communities)*.



Calculated August 30, 2023, 9:30 am (MDC v.4.9)

J23076

Minimum Distance Calculator - AS3959-2018 (Method 2)			
Inputs		Outputs	
Grassland Fire Danger Index	76	Rate of spread	9.880000000000001 km/h
Vegetation classification	Grassland	Flame length	6.02 m
Understorey fuel load	5 t/ha	Flame angle	54 °, 64 °, 73 °, 78 °, 80 ° & 85 °
Total fuel load	5 t/ha	Elevation of receiver	2.43 m, 2.7 m, 2.87 m, 2.94 m, 2.96 m & 2.99 m
Vegetation height	n/a	Fire intensity	25,523 kW/m
Effective slope	0 °	Transmissivity	0.89, 0.88, 0.865, 0.847, 0.836 & 0.761
Site slope	0 °	Viewfactor	0.5903, 0.4298, 0.2858, 0.1935, 0.1572 & 0.0431
Flame width	100 m	Minimum distance to < 40 kW/m ²	5 m
Windspeed	n/a	Minimum distance to < 29 kW/m ²	6.9 m
Heat of combustion	18,600 kJ/kg	Minimum distance to < 19 kW/m ²	10.4 m
Flame temperature	1,090 K	Minimum distance to < 12.5 kW/m ²	15.3 m
		Minimum distance to < 10 kW/m ²	18.7 m

Rate of Spread - Noble et al. 1980

Flame length - Purton, 1982

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

Appendix 3 Bushfire hazard overlay code assessment

8.2.3 Bushfire hazard overlay code

8.2.3.1 Application

1. This code applies to accepted development (subject to requirements) and assessable development for which the Bushfire hazard overlay code is identified in the 'assessment benchmarks for assessable development and requirements for accepted development' column in Table 5.10.3.1 - Bushfire hazard overlay map OM-03.00 in Part 5 - Tables of assessment.
2. When using this code, reference should be made to section 5.3.2 - Determining the category of development and category of assessment and, where applicable, section 5.3.3 - Determining the requirements for accepted development and assessment benchmarks and other matters for assessable development located in Part 5 - Tables of assessment.

Note - Pursuant to section 32(a) of the *Building Act 1975* and section 12 of the *Building Regulation 2006*, land identified as a Bushfire hazard area on Bushfire hazard overlay map OM-03.00 is a 'designated bushfire prone area' for the Building Code of Australia and the Queensland Development Code.

8.2.3.2 Purpose

1. The purpose of the code is to protect people and premises in a Bushfire hazard area.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development protects people and premises from bushfire risk:
 - i. through allotment design and siting of development envelope areas and asset protection zones;
 - ii. by providing vehicular access, fire maintenance trails and evacuation routes that are safe and facilitate easy way finding;
 - iii. by providing an accessible water supply for firefighting purposes;
 - iv. by ensuring the function of community infrastructure is not adversely impacted by bushfire;
 - v. by protecting personal health and safety and the environment from hazardous materials.

8.2.3.3 Assessment benchmarks for assessable development and requirements for accepted development

Part A - Requirements for accepted development (subject to requirements) and assessment benchmarks for assessable development

Table 8.2.3.3.1 - Bushfire hazard overlay code: accepted development (subject to requirements) and assessable development

Performance outcomes	Acceptable outcomes	Comments
For accepted development (subject to requirements) and assessable development		
Location, design and siting of development		
<p>PO1 Development is designed to:</p> <ul style="list-style-type: none"> a. minimise risk of bushfire hazard; b. provide safe premises; c. create efficient emergency access for fire-fighting and other emergency vehicles. <p>Note - Planning scheme policy 6 - Management of bushfire hazard provides guidelines on how to achieve this outcome.</p>	<p>AO1 Development:</p> <ul style="list-style-type: none"> a. does not increase the number of persons living in, or lots in, the Bushfire hazard area identified on Bushfire hazard overlay map OM-03.00; or b. is on a site that a bushfire hazard assessment prepared in accordance with the methodology in Planning scheme policy 6 - Management of bushfire hazard determines is of low bushfire hazard. 	<p>Complies with AO1</p> <p>A bushfire management plan (BMP) has been prepared for the proposed development which meets requirements of the Logan Planning Scheme 2015 Policy 6-<i>Management of bushfire hazard</i> and <i>Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience – Bushfire' 2019 (Bushfire resilient communities)</i>.</p> <p>The BMP identifies mitigation measures that will reduce the risk of bushfire hazard to a tolerable level, by way of compliance with this overlay code.</p>
<p>PO2 Development is sited and constructed to minimise the bushfire hazard and maximise the protection of life and property from bushfire. Editor's note - Planning scheme policy 6 - Management of bushfire hazard contains guidance on the preparation of bushfire management plans.</p>	<p>AO2 Development is located and constructed:</p> <ul style="list-style-type: none"> a. where there is no bushfire management plan approved by an existing development approval: <ul style="list-style-type: none"> i. such that the bushfire attack level is less than or equal to BAL-29; ii. away from the most likely direction of a fire front; iii. so that elements of the development least susceptible to fire are sited closest to the bushfire hazard; 	<p>Complies with PO2</p> <p>The radiant heat exposure assessment in Appendix 2 of the BMP and Figure 5.1 of the BMP, demonstrate the development footprint of buildings are separated from hazardous vegetation by a distance which achieves a radiant heat flux level ≤ 29 kilowatt/metre square (kW/m²) at the development footprint of buildings.</p>

	<ul style="list-style-type: none"> iv. such that asset protection zones are sited on land with a slope less than 18 degrees; v. such that asset protection zones are entirely within the boundaries of the private property of the development site; or <p>b. where an approved bushfire management plan directs development to be located.</p> <p>Note - BAL = Bushfire attack level is the radiant heat flux a building will experience during a bushfire and is a measure of heat energy impacting on a surface expressed as kW/m². BAL is calculated from the following factors; vegetation type, fuel loads, distance to vegetation, Forest Fire danger Index (FDI), flame length, fire behaviour/intensity and slope. BAL is used to determine the required construction level of a building and the size of asset protection zones (inner and outer radiation zones). Further information on calculating the BAL can be obtained from AS3959-2009.</p> <p>Editor's note - Asset protection zones are not located on slopes greater than 18 degrees to ensure maintenance is practical, soil stability is not compromised and the potential for crown/canopy fires is reduced.</p>	<p>The setbacks are entirely within the boundary of the site, except for a small area within lot 902/SP202036. This lot has Logan City Council (Council) sewerage infrastructure and the part of the lot affected by the setback is aligned with a concrete maintenance access track. Given the existing development within this lot, the setback will be retained in perpetuity and will not encumber Council with any maintenance burden.</p>
<p>PO3 Reconfiguring a lot ensures that lots are designed to minimise bushfire hazard and provide safe sites for people, property and buildings.</p>	<p>AO3 Lots:</p> <ul style="list-style-type: none"> a. are suitable for people, property and buildings by: <ul style="list-style-type: none"> i. having a bushfire attack level less than or equal to BAL-29; or ii. containing a development envelope area that has a bushfire attack level less than or equal to BAL-29; b. provide asset protection zones that: <ul style="list-style-type: none"> i. are located on land with a slope less than 18 degrees; 	<p>Not applicable</p> <p>The proposed development does not involve the reconfiguration of a lot.</p>

	ii. are located on the same lot.	
Vehicular access and fire maintenance trails		
<p>PO4 Access for fire management and evacuation is provided by access that:</p> <ol style="list-style-type: none"> separates premises from adjoining vegetation; is safely accessible by fire fighting vehicles; has regular vehicular access points for bushfire management, response and evacuation; has regular vehicle passing and turning areas for bushfire management, response and evacuation; allows access at all times for fire fighting vehicles; allows for maintenance, burning off and bushfire response; has vehicular links to an alternative through road; is readily maintained. <p>Editor's note - Planning scheme policy 6 - Management of bushfire hazard provides details on alternative solutions for providing fire management access and evacuation</p>	<p>AO4 Access for fire management and evacuation is provided by vehicular access in the form of a perimeter road:</p> <ol style="list-style-type: none"> with a minimum reserve width of 20 metres; located between the premises and adjoining vegetation; with a maximum gradient of 12.5 percent; constructed to otherwise comply with section 3.4 - Movement infrastructure standards of Planning scheme policy 5 - Infrastructure; that has a layout that does not include a cul-de-sac. 	<p>Complies with AO4</p> <p>The development footprint of buildings will be separated from hazardous vegetation by driveways and carpark which will be on a constructed landform that has a maximum gradient < 12.5 %.</p> <p>The proposed development will have two driveway connections to Teys Road.</p> <p>Driveways and driveway connections to Teys Road will be designed and constructed to accommodate an urban fire truck in accordance with <i>Fire Hydrant and Vehicle Access Guidelines for Residential, Commercial and Industrial Lots 2019 (Fire hydrant and vehicle access guidelines)</i> which defers to the <i>Road Planning and Design Manual – 2nd Edition 2013</i> for load bearing capacity, geometry and turning radii.</p>
Water supply		
<p>PO5 Development has access to adequate water supply for fire fighting purposes.</p>	<p>AO5 Development:</p> <ol style="list-style-type: none"> is connected to a reticulated water supply scheme that has sufficient flow and pressure characteristics for fire fighting purposes at all 	<p>Complies with AO5</p> <p>The proposed development will be connected to mains water. The mains water connection will be tested (and if required, augmented) to ensure that it always has sufficient flow and</p>

	<p>times with a minimum pressure and flow of 10 litres per second at 200kPa; or</p> <p>b. has an on-site water storage in accordance with Table 8.2.3.3.2 - Water storage for fire fighting, dedicated or retained for fire fighting purposes that is made of fire resistant materials and is:</p> <ul style="list-style-type: none"> i. a separate tank; or ii. a reserve section in the bottom part of the main water supply tank. <p>Editor's note - The requirement in AO5 is: - in addition to the requirement for potable water supply/storage in AO2 in Table 9.4.3.3.1 - Infrastructure code: accepted development (subject to requirements) and assessable development.; - reflected in AO5 in Table 9.4.3.3.1 - Infrastructure code: accepted development (subject to requirements) and assessable development.</p>	<p>pressure characteristics for fire-fighting purposes, ie minimum flow and pressure of 10 litres/second at 200 kilopascals.</p> <p>The hydrant system will be designed and constructed in accordance with specifications in Fire hydrant and vehicle access guidelines which defer to the local water retailer's specifications and the <i>Australian Standard (AS 2419.1-2021) Fire hydrant installation, system design, installation and commissioning.</i></p>
For assessable development		
Community infrastructure		
<p>PO6 Community infrastructure is not located in a bushfire hazard area or is able to function effectively during and immediately after a bushfire event.</p>	<p>AO6 Community infrastructure is:</p> <ul style="list-style-type: none"> a. not located in a Bushfire hazard area identified on Bushfire hazard overlay map OM-03.00; or b. located to ensure that: <ul style="list-style-type: none"> i. the core services provided by the community infrastructure is able to function effectively during bushfire events; ii. access to the community infrastructure is not compromised by bushfire events; 	<p>Not applicable</p> <p>The proposed development does not involve community infrastructure.</p>

	iii. the safe storage of valuable records, public records and items of cultural or historic significance is able to be maintained during a bushfire event.	
Hazardous materials		
PO7 Public safety and the environment are not adversely affected by the adverse impacts of bushfire on hazardous materials including fuels, explosives and flammable chemicals manufactured or stored in bulk on premises.	AO7 Hazardous materials: a. storage is in compliance with AS1940 - The storage and handling of flammable and combustible liquids; b. manufacturing does not occur in a Bushfire hazard area on Bushfire hazard overlay map OM-03.00.	Complies with AO7 The proposed development will not involve the manufacture of hazardous materials within the site. The storage of hazardous materials within the site will be in accordance with <i>A guide for flammable and combustible liquids under the Queensland Work Health and Safety Act 2011 – 2018</i> and the <i>Australian Standard (AS 1940-2004) The storage and handling of flammable and combustible liquids</i> .

Table 8.2.3.3.2 - Water storage for fire fighting

Column 1 Lot size / use type	Column 2 Water requirement
For each residential lot:	
(a) less than 1,000m ²	5,000 litres
(b) between 1,000m ² and less than 1 hectare	10,000 litres
(c) greater than 1 hectare	20,000 litres
Multiple dwelling	5,000 litres per dwelling up to a maximum of 20,000 litres

A use other than Multiple dwelling	5,000 litres or the prevailing rural fire brigade standard
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APPENDIX C

Development Plan



DEVELOPMENT NUMBERS

SITE	
SITE AREA	8,902m ²
EX. BUILT FORM	0m ²
DEMO BUILT FORM	0m ²
ADDED BUILT FORM	3,032m ²
TOTAL	3,032m ²
SITE COVERAGE	34.0%

NEW BUILT FORM AREAS	
SELF STORAGE	2,962m ²
SERVICE INDUSTRY	691m ²
INDOOR REC	209m ²
SHOWROOM	883m ²
FOOD/ DRINK	228m ²

GRAND TOTAL	4,973m ²
SITE YIELD	55.8%

PROPOSED PARKING	
EX. APPROVED CAR PARKS	0
ADDED CAR PARKS	36
TOTAL	36

NOTES: ALL FIGURES ARE SUBJECT TO VERIFICATION OF A LICENSED SURVEYOR, TRAFFIC ENGINEER & RELEVANT DEVELOPMENT PLANNING CODE REQUIREMENTS

LEGEND

- EX. BUILT FORM
- NEW BUILT FORM
- BITUMEN PAVEMENT
AREA ADDED - 3,880m²
- CONCRETE HARDSTAND
AREA ADDED - 0m²
- LANDSCAPED AREAS
- VARIETY OF MATURE HEIGHT NATIVE TREE PLANTING & UNDER PLANTING GROUND COVERS. REFER LANDSCAPE PLANS FOR DETAILS
- CANOPIES OVER
- DEMO. BUILT FORM

LEGEND	
CODE	DESCRIPTION
EF-1	2400h EXTERNAL PRESSED METAL SPEAR TIP FENCING. COLOURBOND MONUMENT.
EF-2	2500h EXTERNAL SHEET METAL FENCING. COLOURBOND BASLAT