



Appendix F

Bushfire constraints assessment



**UPDATED
BUSHFIRE CONSTRAINTS ASSESSMENT
FOR THE
GEORGES COVE VILLAGE PLANNING PROPOSAL
No. 146 NEWBRIDGE ROAD,
MOOREBANK**

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UPDATED

BUSHFIRE CONSTRAINTS ASSESSMENT

FOR THE

GEORGES COVE VILLAGE PLANNING

PROPOSAL

No. 146 NEWBRIDGE ROAD,

MOOREBANK

Assessment Number	Document	Preparation Date	Issue Date	Directors Approval
B234034 - 3	Final	27.06.2023	26.07.2023	<i>G.L.Swain</i>

EXECUTIVE SUMMARY

Australian Bushfire Protection Planners Pty Limited has been commissioned to prepare a Bushfire Constraints Assessment Report for the proposed rezoning of the land within the Georges Cove Village, No. 146 Newbridge Road at Moorebank.

This report updates the previous report prepared for the construction of mixed-use development on the site.

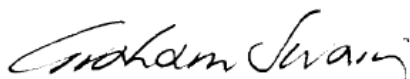
The new Planning Proposal seeks to amend the permitted uses to include the provision for a mixed-use retail development including a Supermarket and light industrial options to accompany the low density Mirvac Residential Estate.

The site is identified on the Liverpool Council Bushfire Prone Land Map as containing the buffer zone to Category 1 Bushfire Prone Vegetation on the reserve land to the west.

Therefore, pursuant to Ministerial Direction No. 4.3 – ‘*Planning for Bushfire Protection*’ [under Section 9.1(2) of the *Environmental Planning & Assessment Act – 1979*], Liverpool Council, in the preparation of a planning proposal that effects, or is in proximity to land mapped as bushfire prone land, must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under Section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of Clause 4, Schedule 1 to the EP&A Act and take into account any comments so made.

This Bushfire Constraints Report therefore undertakes an assessment of the bushfire protection measures required to address the potential bushfire risk to the future retail/commercial development from the vegetation in the reserve, consistent with the Ministerial Direction No. 4.3 – ‘*Planning for Bushfire Protection*’ [under Section 9.1(2) of the *Environmental Planning & Assessment Act – 1979*].

The characteristics of the site, as discussed in this report, together with the fire protection measures recommended, provide that the Planning Proposal is suitable in terms of its intended retail / commercial.



Graham Swain

Managing Director

Australian Bushfire Protection Planners Pty Limited.

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SECTION 1

INTRODUCTION

1.1 Statutory Requirements.

This assessment has been prepared having regard to the following legislative and planning requirements:

1.1.1 Legislation.

(a) *Environmental Planning and Assessment Act (EPA Act)*

Planning and development within NSW are regulated by the *Environmental Planning & Assessment Act, 1979* (EPA Act).

In relation to a Planning Proposal that is in close proximity to bushfire prone land Ministerial Direction No. 4.3 – *Planning for Bushfire Protection* [under Section 9.1(2) of the *Environmental Planning & Assessment Act – 1979*] applies to all Councils that are required to prepare a bushfire prone land map under Section 10.3 of the *Environmental Planning & Assessment Act*.

Pursuant to Ministerial Direction No. 4.3 – Planning for Bushfire Protection, the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under Section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of Clause 4, Schedule 1 to the EP&A Act and take into account any comments so made:

A planning proposal must:

- Have regard to Planning for Bushfire Protection 2019;
- Introduce controls that avoid placing inappropriate developments in hazardous areas, and;
- Ensure that bushfire hazard reduction is not prohibited within the APZ.

A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:

(a) Provide an Asset Protection Zone [APZ] incorporating at a minimum:

- An Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and
- An Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road.

- (b) For infill development [that is development within an already subdivided area], where an appropriate APZ cannot be achieved, provide for an appropriate performance standard in consultation with the NSW Rural Fire Service. If the provisions of the draft LEP permit Special Fire Protection Purposes [as defined under Section 100B of the *Rural Fires Act 199*], the APZ provisions shall be complied with;
- (c) Contain provisions for two-way access roads which link to perimeter roads and/or to fire trail networks;
- (d) Contain provisions for adequate water supply for fire fighting purposes;
- (e) Minimise the perimeter of the area of land interfacing the hazard which may be developed;
- (f) Introduce controls on the placement of combustible materials in the Inner Protection Area, and;

A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Planning Secretary [or an officer of the Department nominated by the Secretary] that the Council has obtained written advice from the Commissioner of the NSW Rural Fire Service, to the effect that, notwithstanding the non-compliance, the NSW Rural Fire Service does not object to the progression of the planning proposal.

1.1.2 Planning Policies.

Planning for Bushfire Protection – 2019. (NSW Rural Fire Service)

This document provides guidance on the planning and development control processes in relation to bushfire protection measures for development in bushfire prone areas. The Commissioner may determine, under Section 100B of the *Rural Fires Act*, additional measures that are considered necessary to protect the development against the impact of bushfire.

1.2 Planning Proposal.

This updated Bushfire Constraints Assessment Report has been prepared for a Planning Proposal seeks to amend the permitted uses to include the provision for a mixed-use retail development including a Supermarket and light industrial options to accompany the low-density Mirvac Residential Estate, located to the south of the site.

Figure 1 – Site Plan.

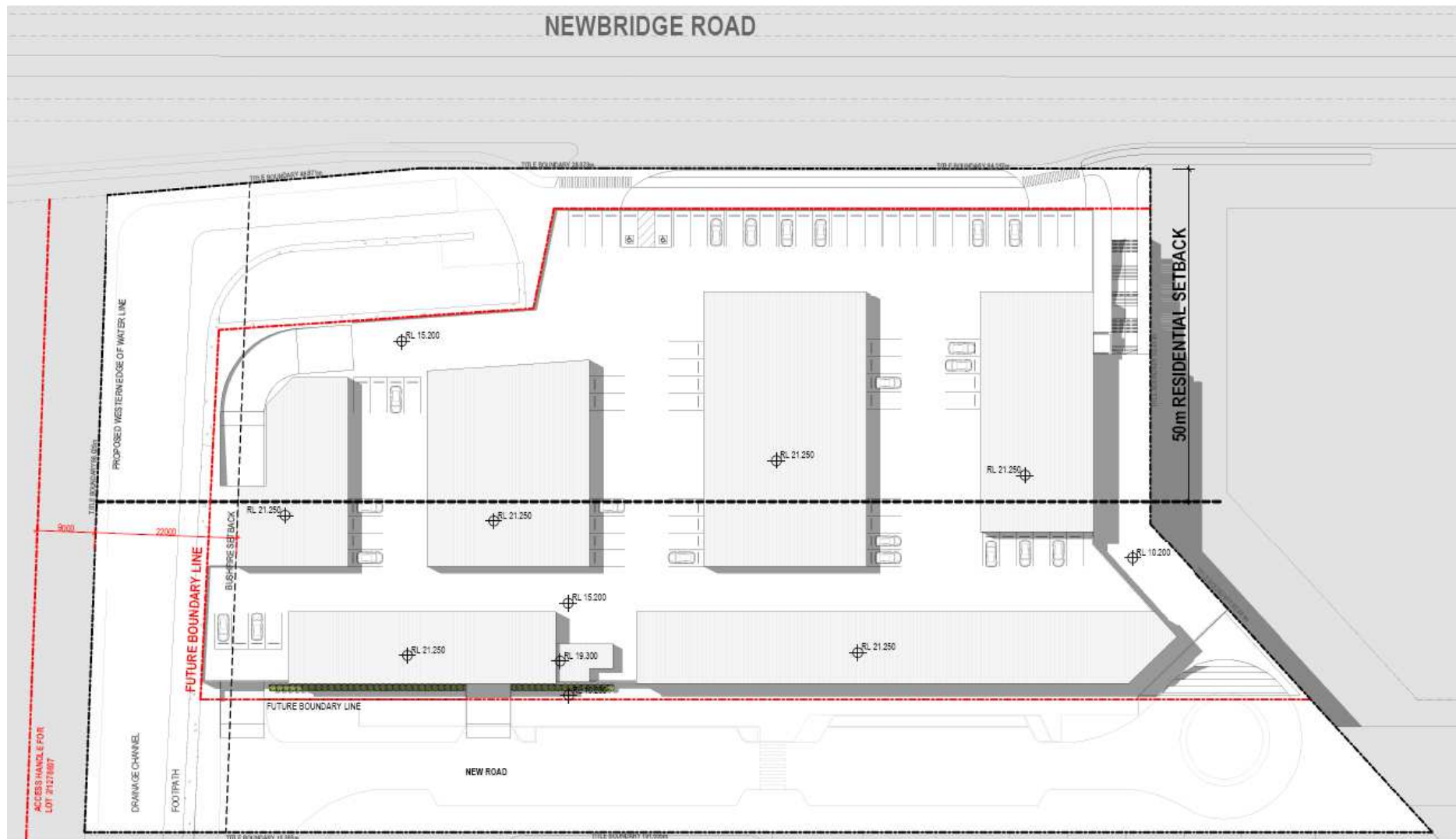
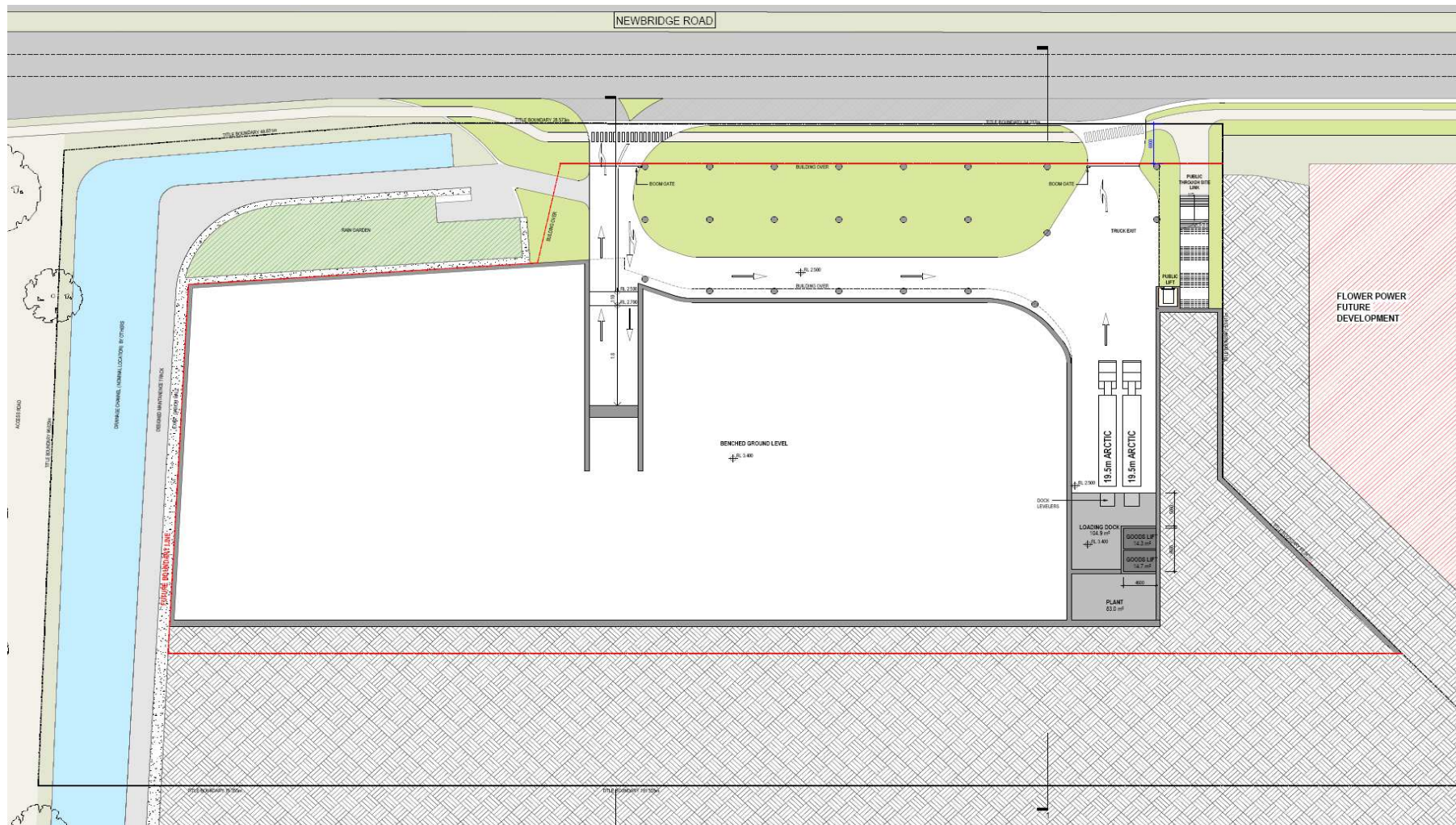
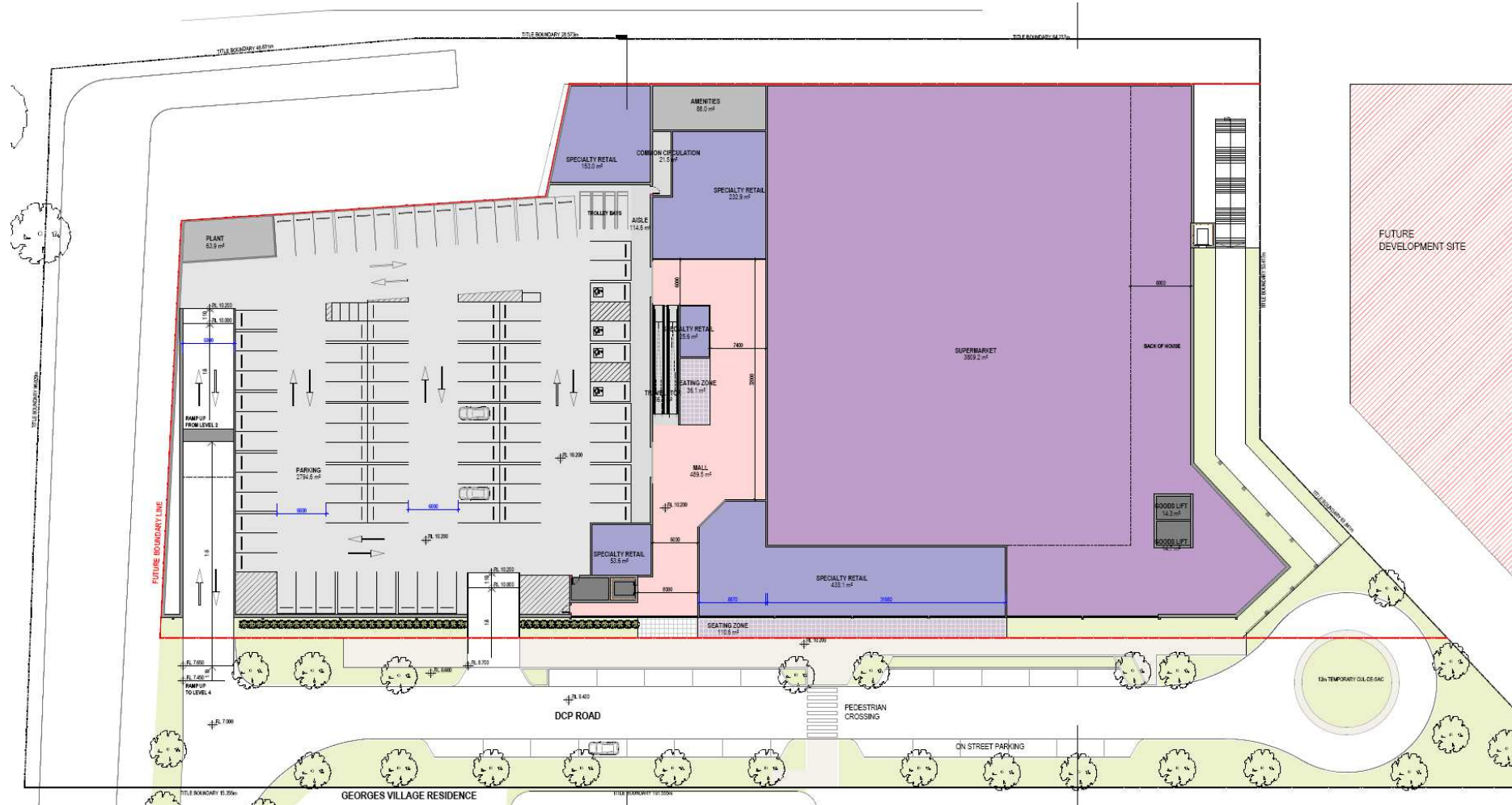


Figure 2 – Dock Plan.



[illegible]

Figure 4 – Level 3 Retail Floor Plan.



[illegible]

The site plan illustrates the layout of the Flower Power Future Development. The development is bounded by a red line labeled 'FUTURE BOUNDARY LINE'. The site is divided into several sections by 'TITLE BOUNDARY' lines. The buildings are primarily composed of 'MEZZANINE OFFICE' spaces, with individual room areas ranging from 31.9 m² to 53.9 m². A central area is marked 'FLOWER POWER FUTURE DEVELOPMENT'. The plan also shows surrounding streets, including 'ST. JAMES STREET' and 'ST. JAMES STREET', and a 'FUTURE BOUNDARY LINE' running along the bottom. A scale bar indicates a distance of 1000 units. The plan includes various boundary lines and a north arrow.

Figure 7 – Sections.

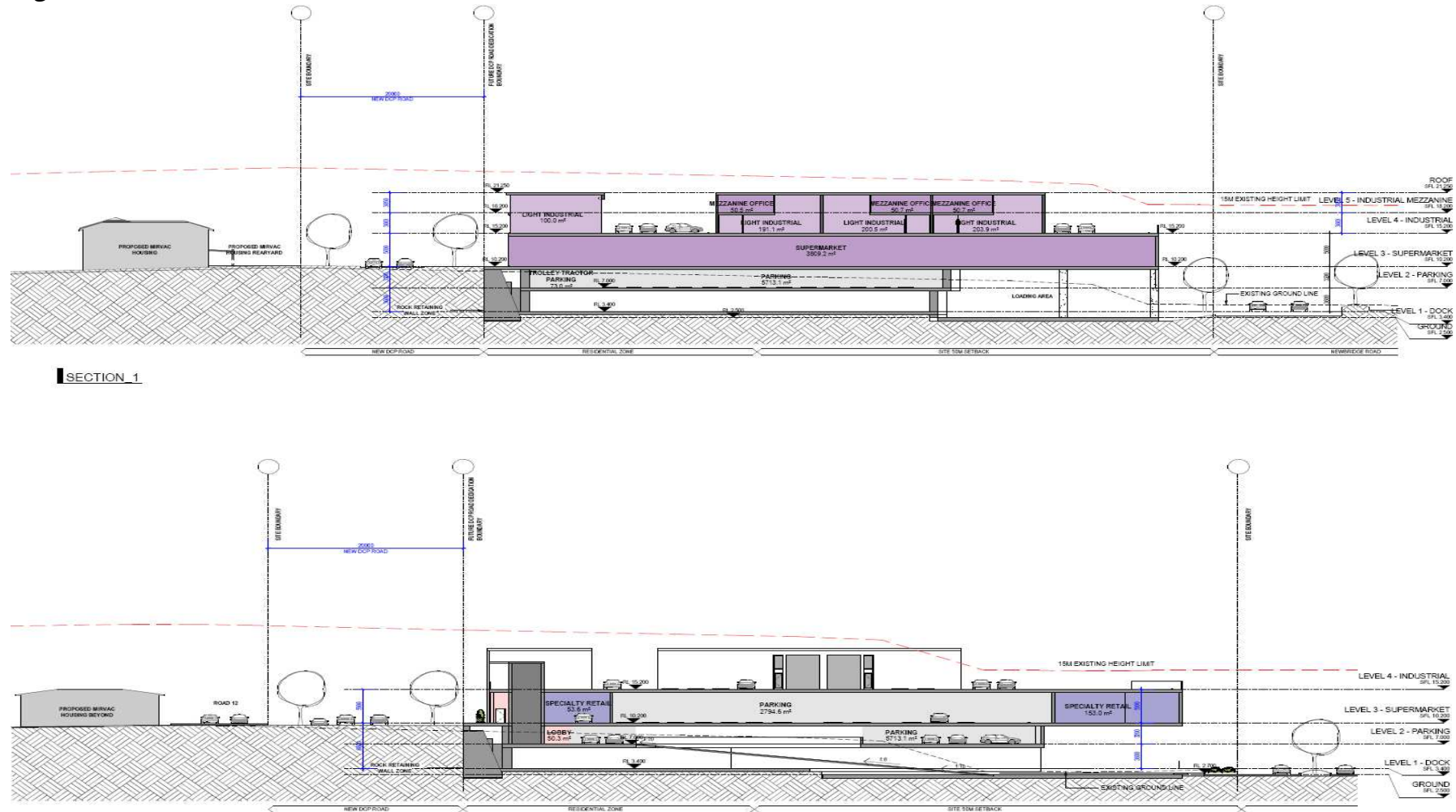


Figure 8 – Newbridge Road Perspective.



Figure 9 – Street Perspective.



1.3 Documentation reviewed in this Assessment.

- *Planning for Bushfire Protection 2019* prepared by the NSW Rural Fire Service/Planning N.S.W;
- Australian Standard AS3959 - 2018 *Construction of Buildings in Bushfire Prone Areas*;
- *Rural Fires Regulation 2021*;
- Liverpool Bushfire Prone Land Map;
- Concept Plans prepared by Rothelowman;
- SEPP 65 Statement prepared by Rothelowman;
- Planning Proposal Documents prepared by Rothelowman;

1.4 Site Inspection.

Graham Swain of Australian Bushfire Protection Planners Pty Limited inspected the site on 11th September 2017 to assess the topography, slopes and vegetation classification within and adjoining the site.

Adjoining properties were also inspected to determine the surrounding land use / land management.

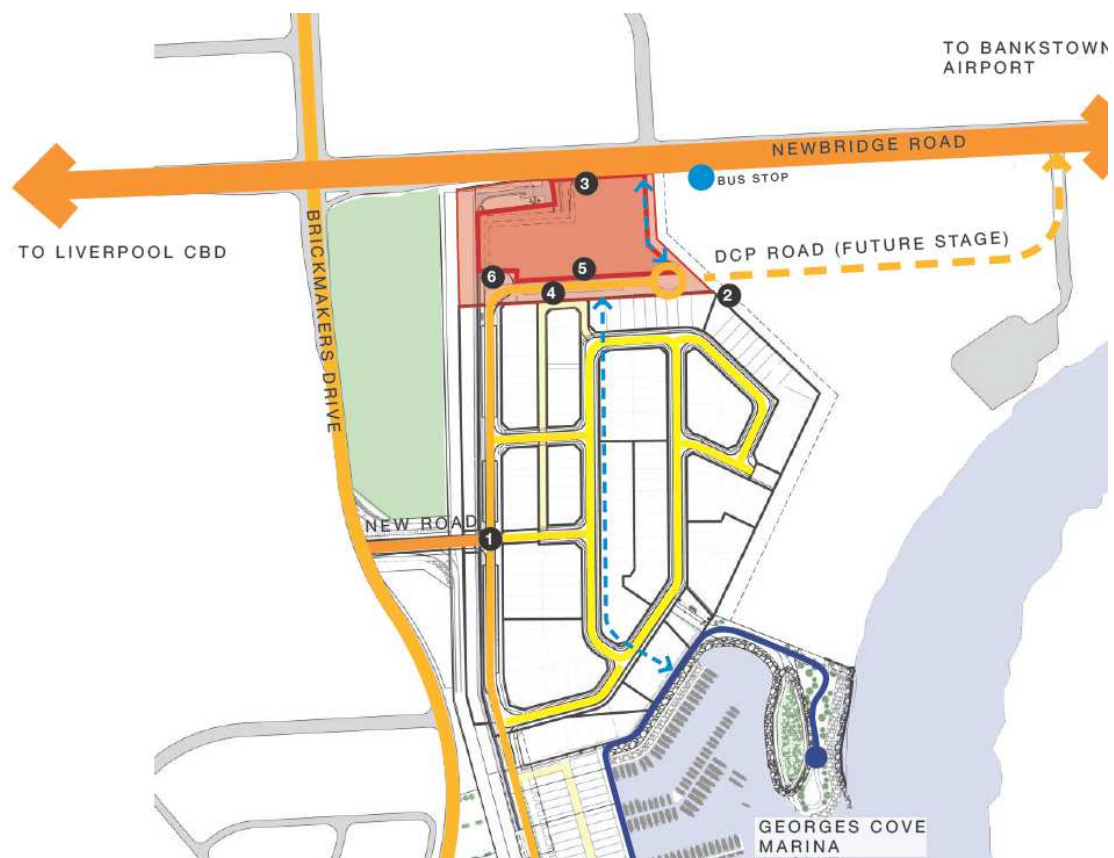
SECTION 2

DESCRIPTION OF THE LAND WITHIN THE REZONING PRECINCT

2.1 Location.

The Georges Cove Village occupies the northern portion of Lot 101, No 146 Newbridge Road, Moorebank – refer to Figure 10 below.

Figure 10 – Location of the Georges Cove Village site.



Legend

	Subject Site
	Collector Street 20m
	Main Access Street 15m
	Other Local Access Street
	Pedestrian Walkways
	Foreshore Walk

Figure 11 – Aerial Photograph of the Georges Cove Village site.



2.2 Existing Land Use.

The site currently accommodates a materials recycling operation.

2.3 Landuse adjoining the George Cove Village.

The land to the north of the site contains the Newbridge Road corridor.

Beyond the road corridor the land contains industrial development.

The land to the east of the site contains a retail plant nursery. The land to the south contains the Mirvac residential estate which is currently under construction.

The land to the west of the site consists of a private access handle and Public Reserve.

2.4 Topography.

Appendix A1.4 of *Planning for Bushfire Protection 2019* states that the effective slope is the slope of the land under the classified vegetation which will most significantly influence bushfire behaviour.

The only aspect to the site which contains bushfire prone vegetation is on the Public Reserve to the west. The land within the Public Reserve is level.

2.5 Vegetation.

Cumberland Ecology undertook an Ecological Constraints Assessment in 2009 and found that the vegetation within the Public Reserve to the west of the Georges Cove Village site contains Cooks River Castlereagh Iron Bark Forest [EEC] – refer to Figure 12.

Figure 12 – Plan of Vegetation Communities prepared by Cumberland Ecology.



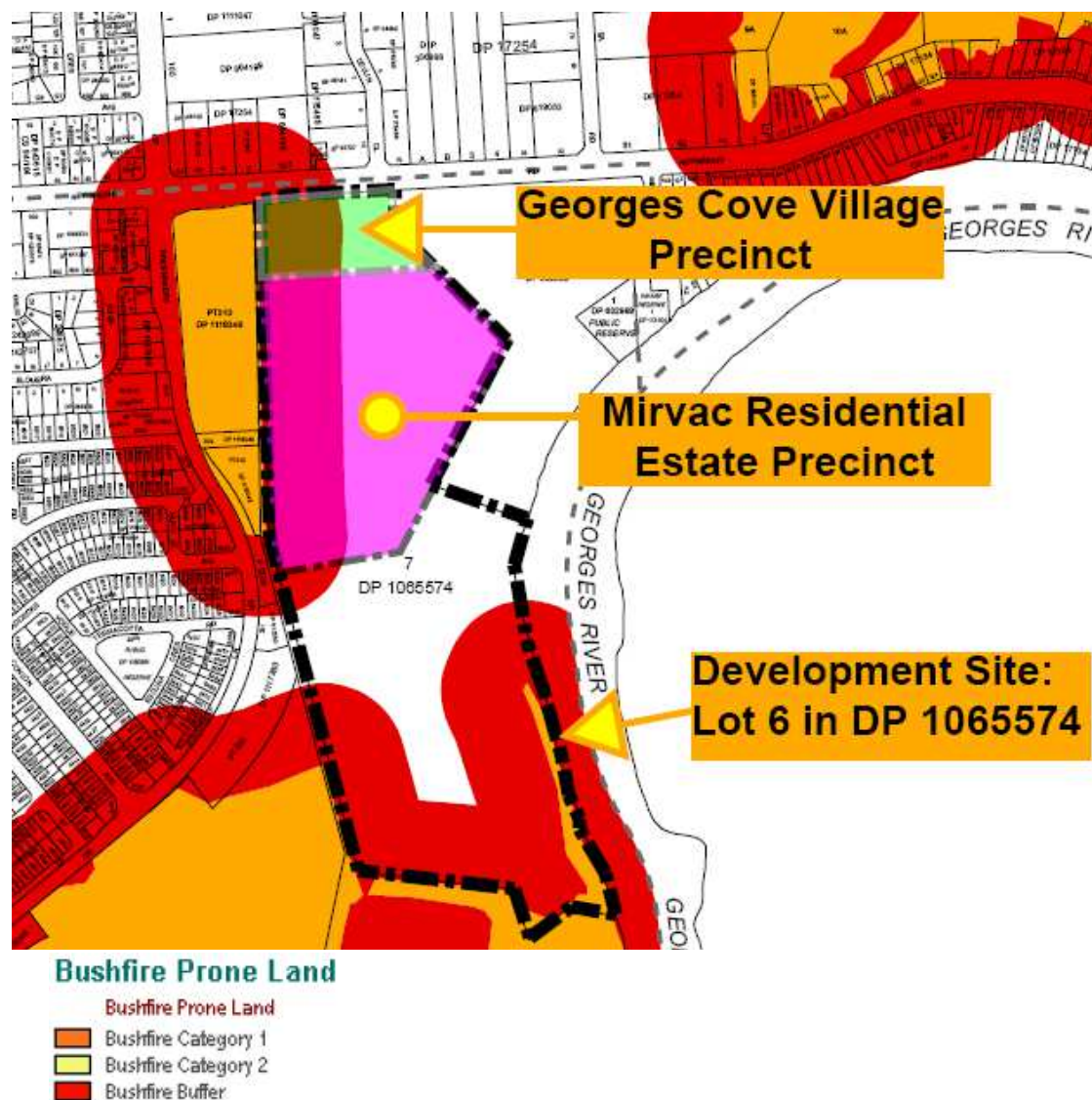
SECTION 3

BUSHFIRE PRONE LAND MAP

The Liverpool Council has prepared a Bushfire Prone Land Map pursuant to the requirements of Section 10.3 of the *Environmental Planning & Assessment Act 1979*.

Figure 13 below provides an extract of the Certified Bushfire Prone Land Map for the site and shows that the land is mapped as containing the buffer zone to the Category 1 Bushfire Prone Vegetation found within the Public Reserve, to the west of the site.

Figure 13 – Extract from the Liverpool Bushfire Prone Land Map.



SECTION 4

BUSHFIRE CONSTRAINTS ASSESSMENT

4.1 Introduction.

Under Ministerial Direction 4.3 a planning proposal must, where development is proposed, comply with the following provisions, as appropriate:

- (a) Provide an Asset Protection Zone [APZ] incorporating at a minimum:
 - An Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and
 - An Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road.
- (b) For infill development [that is development within an already subdivided area], where an appropriate APZ cannot be achieved, provide for an appropriate performance standard in consultation with the NSW Rural Fire Service. If the provisions of the draft LEP permit Special Fire Protection Purposes [as defined under Section 100B of the *Rural Fires Act 1997*], the APZ provisions shall be complied with;
- (c) Contain provisions for two-way access roads which link to perimeter roads and/or to fire trail networks;
- (d) Contain provisions for adequate water supply for fire fighting purposes;
- (e) Minimise the perimeter of the area of land interfacing the hazard which may be developed; and
- (f) Introduce controls on the placement of combustible materials in the Inner Protection Area.

These requirements are examined in the following sections of this report.

4.2 Asset Protection Zones.

Appendix 1 of *Planning for Bushfire Protection 2019* provides the following procedure for determining setback distances (Asset Protection Zones):

- (a) *Determine vegetation formations as follows:*
 - Identify all vegetation in all directions from the site for a distance of 140 metres;
 - Consult Figure A2.1 to determine the predominant vegetation type;

- (b) *Determine the effective slope of the land under the predominant vegetation Class;*
- (c) *Determine the appropriate fire [weather] area;*
- (d) *Consult Table A1.12.5 and determine the appropriate setback [Asset Protection Zone] for the assessed land use, vegetation formation and slope range.*

The Liverpool Bushfire Prone Land Map identifies that the site is impacted by the buffer zone to the Category 1 Bushfire Prone Vegetation within the Public Reserve, located to the west of the site.

This vegetation has a width of approximately ninety [90] metres and therefore presents a high level of hazard to the proposed Georges Cove Village.

The Planning Proposal is for mixed landuse including:

- Retail;
- Commercial/Office.

For retail and commercial development, the aim of *Planning for Bushfire Protection 2019* is to position buildings so that they are not subject to flame contact.

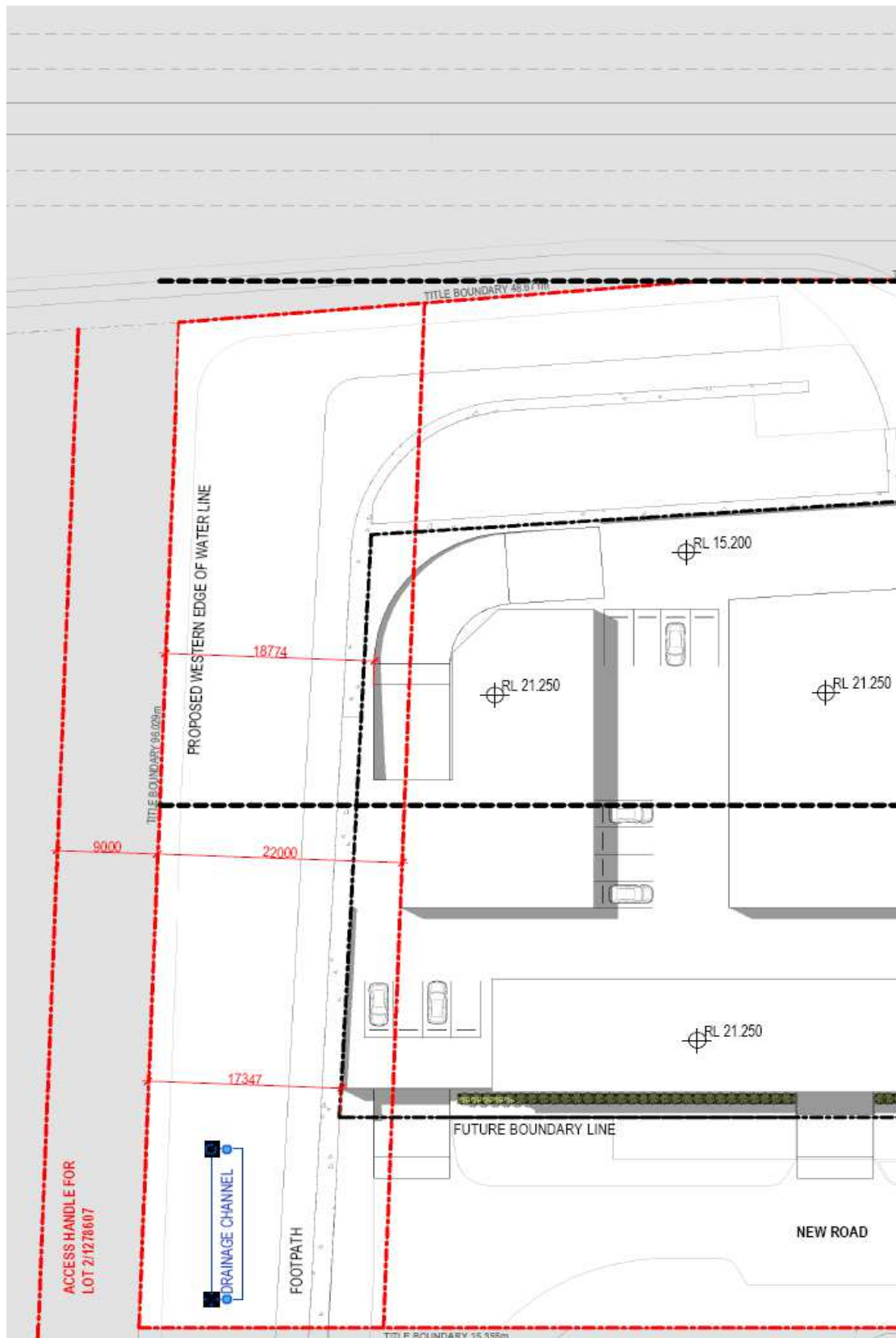
In order to satisfy this requirement, the minimum separation distance to the Category 1 Bushfire Prone Vegetation on the land to the west of the site is 22 metres.

The Planning Proposal provides a Defendable Space width less than 22 metres to the Carpark floors, resulting in this part of the complex being in the Flame Zone. The construction of the Carpark will include non-combustible walls with an FRL of 240/240/240 therefore addressing the Flame Zone construction requirements.

The floors containing the Light Industrial and retail development are set back to achieve the Defendable Space width of 22 metres. This setback includes the width of the Drainage Channel, Maintenance Track, Retaining Wall and setback to the building.

Refer to Figure 14 Plan of Asset Protection Zone on Page 23.

Figure 14 – Plan of Asset Protection Zone/Defendable Space to the west of the proposed development.



4.3 Access for Firefighting Operations.

Access for fire-fighting operations is directly off Newbridge Road and the new road network within the Mirvac Estate, to the south.

4.4 Water Supplies for Firefighting Operations.

Existing fire-fighting hydrants are in Newbridge Road and the new road network in the Mirvac Estate, to the south.

4.5 Construction Standards to the future buildings.

The nominated minimum width of the Defendable Space for the Light Industrial/Office components of the complex has been determined in order to mitigate flame contact on these components of the development.

The required bushfire construction standard for western elevation the Industrial/Office buildings is BAL 40, pursuant to A.S. 3959 – 2018.

The Planning Proposal provides a Defendable Space width less than 22 metres to the Carpark floors, resulting in this part of the complex being in the Flame Zone. The construction of the Carpark will include non-combustible walls with an FRL of 240/240/240, therefore addressing the Flame Zone construction requirements.

REFERENCES:

- N.S.W Rural Fire Service – *Planning for Bushfire Protection 2019*;
- *Environmental Planning & Assessment Act – 1979*;
- *Rural Fires Act – 1997*;
- *Rural Fires Regulation 2022*;
- NSW Rural Fire Service – *Guideline for Bushfire Prone Land Mapping 2015*;
- *Bushfire Environmental Assessment Code 2022*;
- Building Code of Australia;
- Australian Standard A.S. 3959-2018 “*Construction of Buildings in Bushfire Prone Areas*”;
- *Liverpool Bushfire Prone Land Map*.