

Part 5 Bushfire Hazard Assessment

New Primary and High School in Huntlee

Prepared for

School Infrastructure NSW (SINSW) on behalf of the NSW
Department of Education (DoE)



2 September 2025

Version v1.3

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1. Executive Summary

The project (activity) is seeking approval for a development without consent application under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (Transport and Infrastructure) 2021 (TI SEPP), which requires a Review of Environmental Factors (REF). This document guides the consultant team in preparing their documentation to accompany a REF for the construction and operation of Huntlee Public School and Huntlee High School.

The purpose of this report is to consider bushfire risk and assess the potential environmental impacts that could arise from the activity. The activity is currently on designated Bushfire Prone Land (BPL). The intent is to undertake works and amend the BPL Map so that by construction stage the school buildings are not within designated BPL or likely to be subject to bushfire attack (buildings are separated by >100m from hazard vegetation). Once this is achieved neither *Planning for Bushfire Protection* (PBP) or *National Construction Code Specification 43* requirements are applicable to the school buildings or within the site. There are no requirements for the provision of Specification 43.

The significance of a Review of Environmental Factors (REF) in relation to bushfire lies in its role in evaluating potential fire hazards and ensuring that proposed activities align with fire safety standards and mitigation strategies. This assessment is essential to protect life, property, and environmental values, reducing the likelihood and impact of bushfires on the project area and surrounding communities.

Mitigation measures are essential components of this Bushfire Assessment Report, aimed at assessing bushfire risk to the site and future occupants and reducing or eliminating potential environmental impacts associated with the proposed activity. These measures have been carefully developed based on rigorous bushfire assessments, applicable legislation, and the requirements of *Planning for Bushfire Protection 2019* (PBP 2019) to ensure bushfire protection. By implementing these mitigation measures, the project seeks to address identified risks, enhance bushfire and environmental outcomes, and promote sustainable development practices, ensuring compliance with bushfire regulatory requirements and alignment with broader environmental objectives.

Following the amendment of the Bushfire Prone Land Map, the High School site will not be designated Bushfire Prone Land. A small area in the northwest corner of the Primary School site will remain designated Bushfire Prone Land, however will have no buildings on this area.

The extent and nature of potential bushfire impacts are low and will not have significant impact on the locality, community and/or the environment. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment, and not pose any impacts or risks to the use of the schools. Mitigation measures are provided in Table 10 to ensure the activity is compliant with the NSW and national framework for bushfire mitigation.

2. Introduction

This Bushfire Assessment Report (BAR) has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (The Department) for the construction and operation of the new primary school and high school for Huntlee (the activity).

The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

This document has been prepared in accordance with the *Guidelines for Division 5.1 assessments* (the Guidelines) by the Department of Planning, Housing and Infrastructure (DPHI) as well as the *Addendum Division 5.1 guidelines for schools*. The purpose of this report is to consider bushfire risk and assess the potential environmental impacts that could arise from the activity. The activity will not be on designated Bushfire Prone Land (BPL) following the amendment of the BPL Map. The school buildings will not be within designated BPL or likely to be subject to bushfire attack (buildings will be separated by >100m from hazard vegetation) and as such, Specification 43 is not applicable to the school buildings or within the site. There are no requirements for the provision of Specification 43.

3. Site Description

The current street address is 32 Persoonia Boulevard and part of 1823 Wine Country Drive, North Rothbury. The legal description of the site is 495/DP1246814 (Primary School), Lot 449/-/DP1289939 and Lot 696/-/DP1263808 (the High School). The Primary School site is regular in shape is has a total approximate area of 3 hectares. The High School site is irregular in shape and has a total approximate area of 5 hectares.

The site is approximately 18km northwest of Cessnock and 20km southeast of Singleton within the Hunter Valley. The catchment area for the proposed primary school is bound by the respective catchments of Kirkton Public School to the northwest, Branxton Public to the north and Greta Public School to the east. The high school intake catchment is bound by the catchments of Singleton High School to the north west, Rutherford Technology High School, Maitland Grossman High School and Maitland High School to the east.

The immediately surrounding land is described as follows:

- **North:** Land to the north currently includes areas of vegetation with Branxton Town Centre located on the northern side of the Hunter Expressway. Branxton Station is also located along the Hunter Trainline located 1km to the north.
- **East:** Low density residential subdivision has occurred to the east of the site and accommodates recently constructed detached dwelling houses serviced by new roads. Huntlee Shopping Centre and Huntlee Learning Centre are located to the northeast of the site providing services to the new residential areas.
- **West:** Low-density residential subdivision has occurred to the west of the site.
- **South:** Areas to the south of the site are currently undeveloped land and includes areas of existing vegetation.



Figure 1 Aerial photograph of the Site (Urbis, 2025)

4. Project Background

Huntlee is a new Urban Release Area gazetted by the Minister for Planning on the 31st of December 2010. Huntlee is located 20km north of Cessnock and 25km southeast of Singleton. The amendment to Schedule 3 of the former *State Environmental Planning Policy (Major Development) 2005* identified zoning and land use controls.

The school sites are located within Huntlee Town Centre Stage 1, approved under MP10_0137 by the Planning Assessment Commission (PAC) under the delegation of the Minister for Planning and Infrastructure on the 24 April 2013.

The development approved under MP_0137 (as modified) includes the following:

- Subdivision to create 2,272 residential allotments
- 123 large lot residential allotments
- 94 infrastructure, community, commercial and mixed-use allotments
- 2 allotments for a primary school and a high school
- Landscaped areas, drainage, public open space and recreation areas
- Associated bulk earthworks, and
- Infrastructure including roads, drainage works and utility services provision.

As part of the rezoning, Huntlee was required to enter into a voluntary planning agreement with the Minister for Planning and the Minister for the Environment (SEPP VPA). Notably, pursuant to the SEPP VPA, Huntlee was required to provide Education Contribution Land within the town centre for a future primary school. The developer was required to also make various environmental conservation contributions to offset the impacts of the Development.

The VPA was amended in 2019 due to the approval of MP_0137_MOD 9. This modification was approved on 13 December 2019 and changed the location and configuration of the Education Contribution Land. The VPA includes the provision of a primary school. MOD 15 subsequently approved on the 7 December 2020 subdivided the education super lot located within the Town Centre stage 5 area into two lots. These two lots now make up the subject PS and HS sites.

5. Proposed Activity Description

Main Works Contractor Delivery

Construction of a new preschool, primary school and high school in Huntlee including earthworks, public domain works and landscaping (Figure 2).

Specifically, the proposal involves:

- 1 x Preschool for 60 children.
- 3 x Primary School buildings for 500 students including:
 - General Learning Spaces (GLS)
 - General Learning Spaces (Support) (SLU)
 - Multipurpose Rooms
 - School Hall
 - Canteen
 - Library
 - Administration area
- 4 x High School buildings for 1000 students including:
 - General Learning Spaces (GLS)
 - General Learning Spaces (Support) (SLU)
 - Science Learning Hubs
 - Visual Arts Learning Hubs
 - Wood and Metal Technology Learning Hubs
 - Food and Textiles Learning Hubs
 - Health and PE Learning Hubs
 - Performing Arts Learning Hubs
 - VET Hospitality Hubs
 - Multipurpose Rooms
 - Library
 - Gymnasium
 - Administration Areas
 - Staff Support Areas
- Landscaped open space including:
 - Playing Fields
 - Covered Outdoor Learning Areas (COLAs)
- Car parking
- Public domain upgrades

6. Credentials and Approach to the Report.

This bushfire hazard assessment details the proposed bush fire protection measures and demonstrates compliance with PBP 2019. This assessment has been prepared by David Lemcke (Senior Planner & Bushfire Specialist) and Lew Short (Principal) (FPAA BPAD Level 3 Certified Practitioner No. BPAD16373) who is recognised by the RFS as qualified in bushfire risk assessment and has been accredited by the Fire Protection Association of Australia as a suitably qualified consultant to undertake alternative solution proposals.

Lew Short and David Lemcke are Bushfire Experts and Lew is Director at Blackash Bushfire Consulting and have the qualifications and experience contained in Curriculum Vitae (refer Appendix 2).

This report has been independently prepared by a qualified bushfire expert to assess the proposed activity against relevant bushfire provisions, ensuring unbiased compliance with safety and bushfire standards and requirements. The assessment identifies potential bushfire risks and outlines measures to mitigate these risks in line with current bushfire management practices and regulations.

David Lemcke completed inspections of the site and surrounding area on 30 June and 22 July 2025.

7. Project Proponent and Stakeholders

The Department is the proponent and determining authority pursuant to Section 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Minister for Education is the current landowner of the primary school site. Huntlee Pty Ltd is the current landowner of the High School site. The Department has commenced land acquisition negotiations (having exchanged contracts) to reinforce project control.

Blackash has not undertaken any agency consultation in the preparation of this report. The project team will need to consult with relevant agencies and authority stakeholders, including the Rural Fire Service (RFS) to inform this project (where needed). In particular, an Urban Release Area amendment to the Bushfire Prone Land Map is being undertaken by The Department which will require formal consultation with the RFS and Cessnock City Council.

8. Legislative Framework and Planning Context

Figure 4 presents the current version of the BPL Map. Figure 5 presents the Huntlee Urban Release Area which permits for a streamlined BPL Map update to be undertaken by a developer. In this case the developer is The Department. Figure 6 presents the updated version of the BPL Map that is being requested for amendment by the RFS at the request of The Department.

Ultimately following the amendment to the BPL Map (September 2025 – to be confirmed) the High School site will not be on designated Bushfire Prone Land (BPL). A small area in the northwest corner of the Primary School site will remain designated BPL, however will have no buildings on this portion. Section 9 of this report outlines the process The Department is undertaking to have the BPL Map amended. Section 10 onwards of this report considers the development context following the future amendment of the BPL Map and its Certification by the Commissioner of the RFS, based on Figure 6.

The project is seeking approval for a Development Without Consent through a Review of Environmental Factors (REF) application under Part 5 of the EP&A Act. The Part 5 assessment is exempt from requiring a Bush Fire Safety Authority (BFSA) from the RFS.

Under Part 5 of the EPA Act, the consultation process requires public authorities to assess the environmental impact of activities and consider potential risks before proceeding.

9. Bushfire Prone Land Map amendment process

Currently (27 August 2025) the High School site is designated Bushfire Prone Land (BPL). A small area in the northwest corner of the Primary School site is designated BPL, however will have no buildings on this portion. This map has not been updated to keep pace with rapid development in the local area and is now very inaccurate.

This is reflected by the series of approvals granted by Department of Planning, Housing and Infrastructure (DPHI) for the Huntlee New Town Stage 1 MP_0137 Masterplan Approval which over a series of Modifications has facilitated development through the inclusion of expanding 100m wide temporary APZ. Modification 24 is current at time of writing. The temporary 100m wide APZ consistently applied across the MP_0137 Modifications has been applied from the future road reserve boundary surrounding the school sites as shown in Figure 3. This results in an additional 20m of APZ setback along Persoonia Boulevard and additional 15m APZ setback along Morning Star Crescent on top of that provided for in the formal APZ. The outcome will result in BAL-Low applying to the school building envelopes in these areas. The amendment of the BPL Map will formalise this position in the regulatory framework.

The efficient development of the school sites requires physical vegetation works to establish the new temporary APZ, legal agreements to manage ongoing maintenance, and an amendment to the BPL Map. Blackash is acting under instruction of The Department to assist progressing the BPL Map amendment in a timely fashion. The ultimate outcome will be that all proposed school buildings will be assessed as BAL-Low (>100m from identified bushfire hazard) and that no specific bushfire risk mitigation requirements will be applicable under PBP or Specification 43 of the National Construction Code.

Commercial arrangements have been entered into by The Department and the landowner to establish the 100m wide temporary APZ shown in Figure 6. This generally aligns with the approved 100m temporary APZ shown in Mod-24 of the Huntlee Masterplan. These physical works are now approximately 95% complete. All primary vegetation works are now complete including tree and stump removal, complete removal of the shrub layer and ground cover as at 27 August 2025. The final mulching and tub grinding of the vegetation is continuing and expected to be completed by 29 August 2025. Blackash has scheduled a site inspection for 1 September 2025 to confirm the satisfactory completion of works and gather evidence for the package of material for The Department's application to the RFS to amend the BPL Map.

A draft plan of subdivision PP DP1299003 has been prepared as part of the commercial arrangements. This includes reference to a draft 88B instrument and positive covenant to maintain the 100m wide APZ in perpetuity or until no longer required due to further development around the site occurring. These draft documents are provided as Appendix 3 to this report. These documents will be finalised prior to

land acquisition and commercial arrangements finalised to ensure the maintenance of the 100m APZ to required RFS standards as referenced in Appendix 4 of PBP.

Following final site inspection scheduled for 1 September 2025, Blackash will finalise the package of mapping files, photographs and a supporting memo and provide these to The Department in the week of 1 September 2025. The Department will formally apply to the RFS to have the BPL Map amended. This application will emphasise the critical timelines for the construction program and seek assistance of the RFS to expedite the certification of the new map. This process is expected to take 14-21 days and includes time for formal consultation with Cessnock City Council. The target timeframe for the adoption of the amended new certified BPL Map is the week of 22 September 2025.

Following the certification of the BPL Map, this REF report will be updated to reflect the contemporary position. The assessment of the bushfire hazard and mitigation measures is therefore able to be progressed by the assessment team with a high degree of certainty as to the final outcome. There is no physical, legislative or administrative rationale for the RFS not to update the Bushfire Prone Land Map in a timely fashion to support a 'whole of government' approach to providing critical educational infrastructure for the rapidly expanding Huntlee community.

Sections 10-19 of this report are to be read with the understanding that the essentially administrative process of formalising the BPL Map amendment have been completed.



1 SITE CONTEXT CONCEPT
1:1000

Issue No.	Date	Description	Chgd	Changes to this Revision REF
1	2023.05.19	Issue for Draft REF		
4	2023.07.31	Issue for Draft REF		
3	2023.07.25	Issue for Draft REF		
2	2023.07.17	Issue for Information		
1	2023.07.11	Issue for Coordination		

Drawing Title
SITE CONTEXT CONCEPT

Project
New PS & HS in Huntlee
at
32 PERSOONIA BOULEVARD NORTH ROTHBURY, NSW
NSW Education

NBRS
+61 2 9622 2344
Nominated Architect:
Cristina Curtis NSW/0522
NBRS & Partners Pty Ltd VIC 51193
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Date 19/08/2025 9:29:54 PM
Scale 1:1000 @ A1
NBRS Project # 24410
Drawing Reference HPSHS-NBRS-00-00-DR-A-REF-0200 5
Revision 1

REF ISSUE

Figure 2 Site plan

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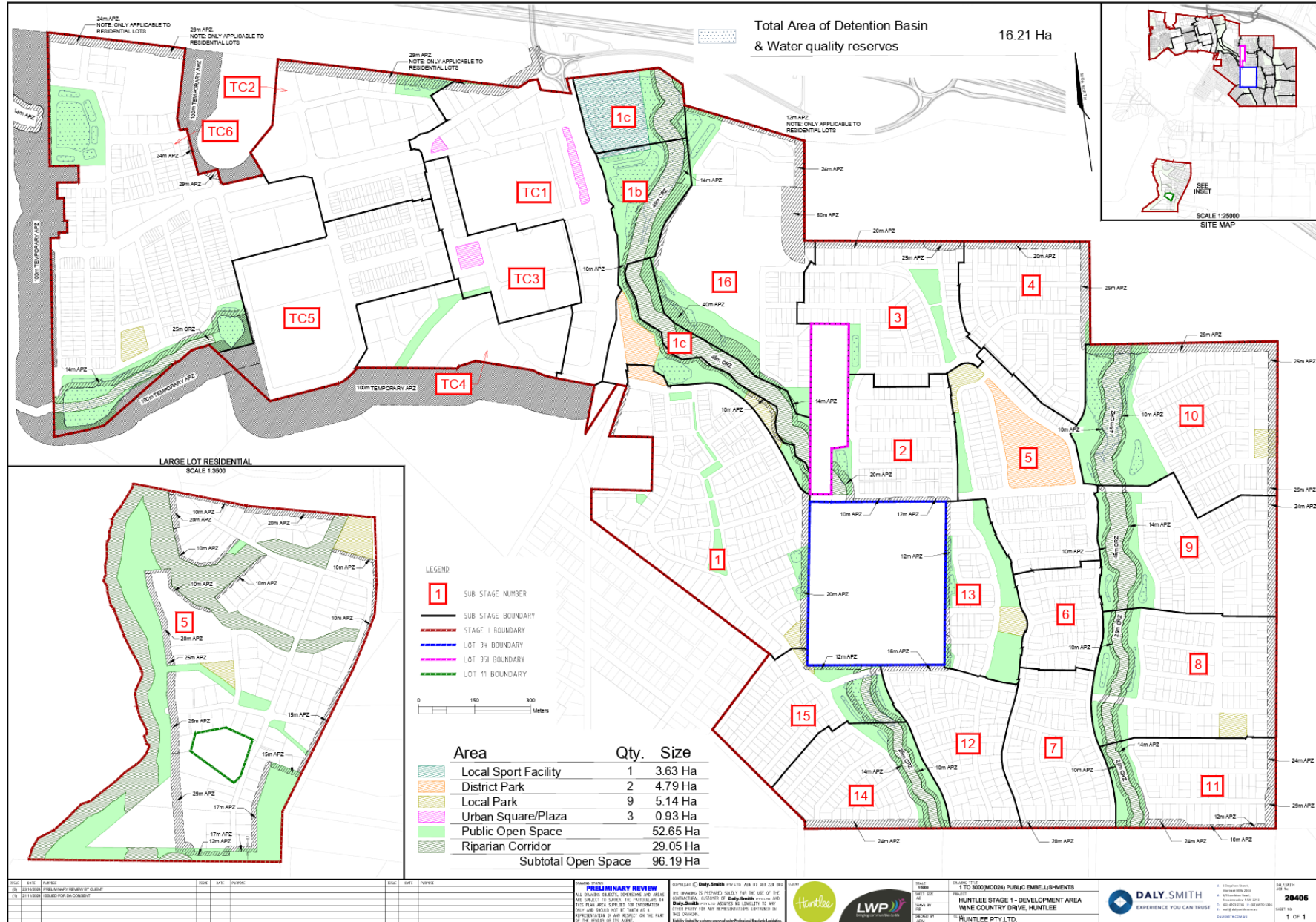
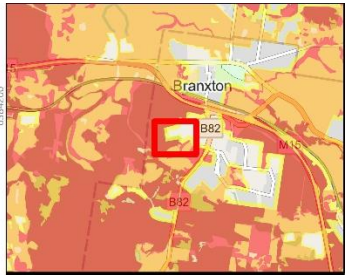
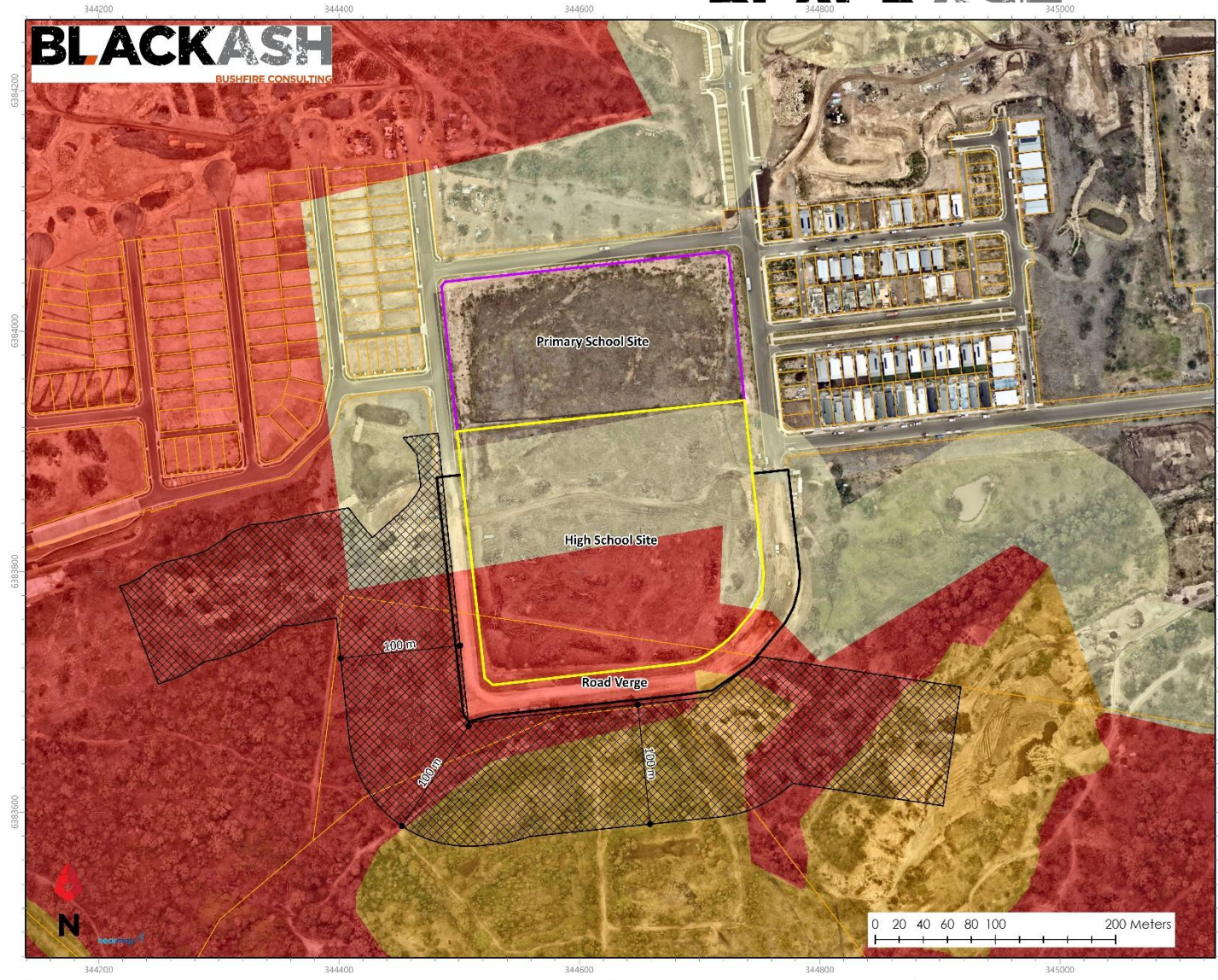


Figure 3 Site Planning Context – TC5 on the Plan shows the school sites. The approved temporary 100m APZ is shown to south and west of High School



BFPL and APZ

NSW land and Property

- Lot boundary

Subject Site

- High School Site
- Primary School Site
- Road Verge

APZ Mod24

- 100m Temporary APZ

NSW Bush Fire Prone Lands

Category 1: highest risk for bush fire. Vegetation category consists of areas of forest, woodlands, heaths (tall and short), forested wetlands and timber plantations

Category 3: medium bush fire risk vegetation (higher than category 2, and the excluded areas, but lower than Category 1. Vegetation category consists of grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands

Category 0: bush fire prone vegetation buffer polygons

DTM, Contours and Slope Analysis interpolated from ELVIS LiDAR classified point data. Captured 2020.

Subject Site digitised from aerial rectified plan image. Users are advised to refer to registered surveyor for accurate location and dimensions.

Base Layers - NSW Govt Open Source Data - July 2025

Although all care has been taken WIZARDTECH Spatial Services accepts no responsibility from the use or inaccuracies of this map and spatial data.

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<p>SITE: 32 PERSOONIA BOULEVARD NORTH ROTHBURY</p> <p><small>Folder: D:\OneDrive\WIZARDTECH\2025_2026\PROJECTS\BlackAsh\BA250707 North Rothbury Schools (1961)</small></p>	<p>DATE : 27/08/2025 Map Version: 1_4</p> <p>Scale: 1:3,000</p>	<p>Aerial Imagery: Nearmap 29/07/2025</p> <p>Projected Coordinate System: Name: GDA2020 MGA Zone 56 Projection: Transverse Mercator</p>
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Figure 4: Current Bushfire Prone Land Map at 27 August 2025 – with Modification 24 APZ overlay

10. Bushfire Assessment Framework

10.1. Planning for Bushfire Protection 2019

PBP 2019 is the formal NSW guideline which provides development standards for planning, designing and building on bushfire prone lands in NSW. PBP 2019 details specific provisions for SFPP development considering site specific risk, occupant vulnerability and the appropriate suite of bushfire protection measures (BPMs).

PBP 2019 sets out an overall framework consisting of an aim and objectives, specific objectives for defined development types, types of BPMs which may be employed in a development or risk assessment, and performance criteria for each BPM.

10.2. General Objectives of Planning for Bushfire Protection

All development on BPL must satisfy the aim and objectives of PBP 2019. The aim of PBP 2019 is to *provide for the protection of human life and minimise impacts on property from the threat of bushfire, while having due regard to development potential, site characteristics and protection of the environment.*

The objectives are to:

- I. *afford buildings and their occupants protection from exposure to a bush fire;*
- II. *provide for a defensible space to be located around buildings;*
- III. *provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;*
- IV. *ensure that appropriate operational access and egress for emergency service personnel and occupants is available;*
- V. *provide for ongoing management and maintenance of BPMs; and*
- VI. *ensure that utility services are adequate to meet the needs of firefighters.*

See Table 10 for a summary of compliance.

10.3. Specific Objectives for SFPP Development

The proposed school is a designated SFPP, defined in Section 100B(6) of the *Rural Fires Act 1997*. PBP 2019 states that:

“An SFPP development is one which is occupied by people who are identified as at-risk members of the community. In a bushfire event, these occupants may be more susceptible to the impacts of radiant heat and other bushfire effects. Evacuating at-risk members of the community is more challenging because they may be physically or psychologically less able to

relocate themselves or are unfamiliar with their surroundings. Examples of SFPP developments are schools, hospitals, nursing homes and tourist accommodation."

The specific objectives within PBP 2019 for SFPP developments are to:

- I. minimise levels of radiant heat, localised smoke and ember attack through increased APZ, building design and siting;*
- II. provide an appropriate operational environment for emergency service personnel during firefighting and emergency management;*
- III. ensure the capacity of existing infrastructure (such as roads and utilities) can accommodate the increase in demand during emergencies as a result of the development; and*
- IV. ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants.*

By demonstrating compliance with PBP 2019, the Objectives and Specific Objectives are met.

10.4. Specification 43 Building Code of Australia

Specification 43 Bushfire protection for certain Class 9 buildings (Specification 43) is the acceptable solution within the National Construction Code 2022 (NCC) for certain Class 9 buildings including schools on designated bushfire prone areas. The 2022 edition of the NCC contains amendments to its bushfire protection provisions. This includes a suite of new provisions for Class 9 buildings on designated bushfire prone areas that accommodate a school. The Building Code of Australia component of NCC is given legal effect through the EPA Act.

In NSW, all new buildings and new building work must comply with the NCC. NCC contains bushfire protection requirements that operate in conjunction with the bushfire protection measures (BPMs) in PBP 2019. Accordingly, buildings on bushfire prone areas must comply with both the requirements of PBP 2019 and the NCC.

The RFS *Planning for Bushfire Protection – Addendum 2022* states (p. 5) that:

NCC 2022 identifies additional bush fire provisions for the construction, separation and access requirements for certain Class 9 buildings accommodating vulnerable occupants on bush fire prone land.

Class 9 buildings include some Special Fire Protection Purpose (SFPP) developments under section 100B of the Rural Fires Act 1997, such as Class 9a hospitals, Class 9b schools and child care centres and Class 9c residential care buildings.

Additional Performance Criteria and Acceptable Solutions relevant to BPMs within PBP for SFPP Class 9 buildings are identified in Appendix B of this Addendum. These Acceptable Solutions are consistent with the relevant provisions of NCC 2022.

Consistent with section 100B of the Rural Fires Act 1997, proposed SFPP 's that are Class 9 Buildings in bush fire prone areas may be required to have bush fire protection measures additional to those specified in NCC 2022.

Further, the RFS released an additional guidance document dated 17 March 2025 for the Development and Construction of Class 9 Buildings that are Special Fire Protection Purpose Development on Bushfire Prone Land which states (p. 1) that:

*Part G5 of the NCC 2022 is applicable to construction of **buildings** on designated bushfire prone areas.*

And

The definition of designated bushfire prone area will therefore capture bush fire prone land, being land designated on a bush fire prone land map certified by the Commissioner of the NSW Rural Fire Service (RFS) in accordance with section 10.3 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

*Where the subject **building(s)** is to be constructed on land mapped as bush fire prone (that is, within mapped Category 1, 2 or 3 Vegetation or the Vegetation Buffer), the construction is captured by Part G5 of the NCC.*

Additional clarity is provided by the RFS Application of section 100B of the Rural Fires Act 1997 (Bush Fire Safety Authority) Guidance Document 23 July 2025:

Not all SFPP developments located on a lot which is partially mapped as bush fire prone land constitute a development of bush fire prone land for a SFPP for the purposes of section 100B(1)(b) of the RF Act.

The proposed development is a development of bush fire prone land where it involves doing any of the acts, matters or things specified in section 1.5(1) of the EP&A Act, on the bush fire prone land portion of the land. It is only where any of those acts, matters or things are proposed to be done on the bush fire prone land portion of the land for a SFPP listed in section 100B(6) of the RF Act, that a BFSA will be required.

*Cadastral (lot) boundaries are **not** relevant to the assessment of whether a development is on bush fire prone land.*

The school buildings are **not** located on the portion of the site affected by designated Bushfire Prone Land. The school buildings are therefore **not** subject to PBP 2019 or Specification 43.

Finally, as detailed in Australian Standard 3959:2018:

This Standard does not provide construction requirements for buildings assessed in bushfire-prone areas in accordance with Section 2 as being BAL-Low.

The Bushfire Attack Level BAL-Low is based on insufficient risk to warrant specific bushfire construction requirements. It is predicated on low threat vegetation and non-vegetated areas (see Clause 2.2.3.2).

As the buildings on the site are **not** affected by designated Bushfire Prone Land (Figure 5), the school buildings are not subject to PBP 2019, Specification 43 or the *Australian Standard for Construction of Buildings on Bushfire Prone Land 2018 (AS3959:2018)*.

11. Significance of Environmental Impacts

The site (Figure 1) is cleared and managed for future development purposes. The activity will provide managed lands that do not present a bushfire risk.

An assessment of significant environmental features, threatened species, population or ecological communities under the *Biodiversity Conservation Act 2016* that may potentially be affected by the proposed bushfire protection measures has not been undertaken in this report as it is covered by other technical deliverables (if required) prepared to support the REF.

No Asset Protection Zone (APZ) setback for the activity buildings is required within the site. As such, there is no APZ environmental impact within the site.

12. Bushfire Prone Land Mapping

Bushfire Prone Land (BPL) is designated in accordance with s.10.3 of the EP&A Act. BPL is land which can support a bushfire or is subject to bushfire attack, that has been identified and mapped by the local council and certified by the Commissioner of the RFS. The BPL map provides a trigger for formal assessment of new development and compliance with PBP 2019.

The buildings on the site are **not** on the portion of the land identified as 'bush fire prone land' (see Figure 5) for the purposes of Section 10.3 of the EPA Act and the legislative requirements for PBP 2019 are not applicable.

The Cessnock City Council BPL map has been recently amended at the request of The Department in accordance with Section 6.2 Process for Amendments and Certification of a Bush Fire Prone Land Map for Urban Release Areas (URA) in the RFS *Bushfire Prone Mapping Guidelines 2015* (RFS Mapping Guidelines). The URA map for the area is shown as Figure 5.

The site in context following the certification of an amended BPL Map (second half September 2025) is at Figure 6 which shows the primary school site is marginally identified as BPL in the northwest corner of the site, however **no** buildings are located in this portion of the Lot. The high school site is **not** identified as BPL. The riparian area to the west of the site consists of a constructed detention basin and a narrow riparian corridor only.

All land within the area shown as 'Buffer' (yellow) on the BPL map at Figure 6 will remain constantly managed under legal easement agreements with the landowners until future development occurs. This maintenance as an APZ is part of the legal obligation for the sale of the land. The school sites are therefore 'managed land' for the purposes of this bushfire assessment.

For the purposes of this Bushfire Hazard Assessment, the BPL Map has been used as a base for assessment, although the vegetation assessment has been completed independent of the BPL map as is required by PBP 2019.

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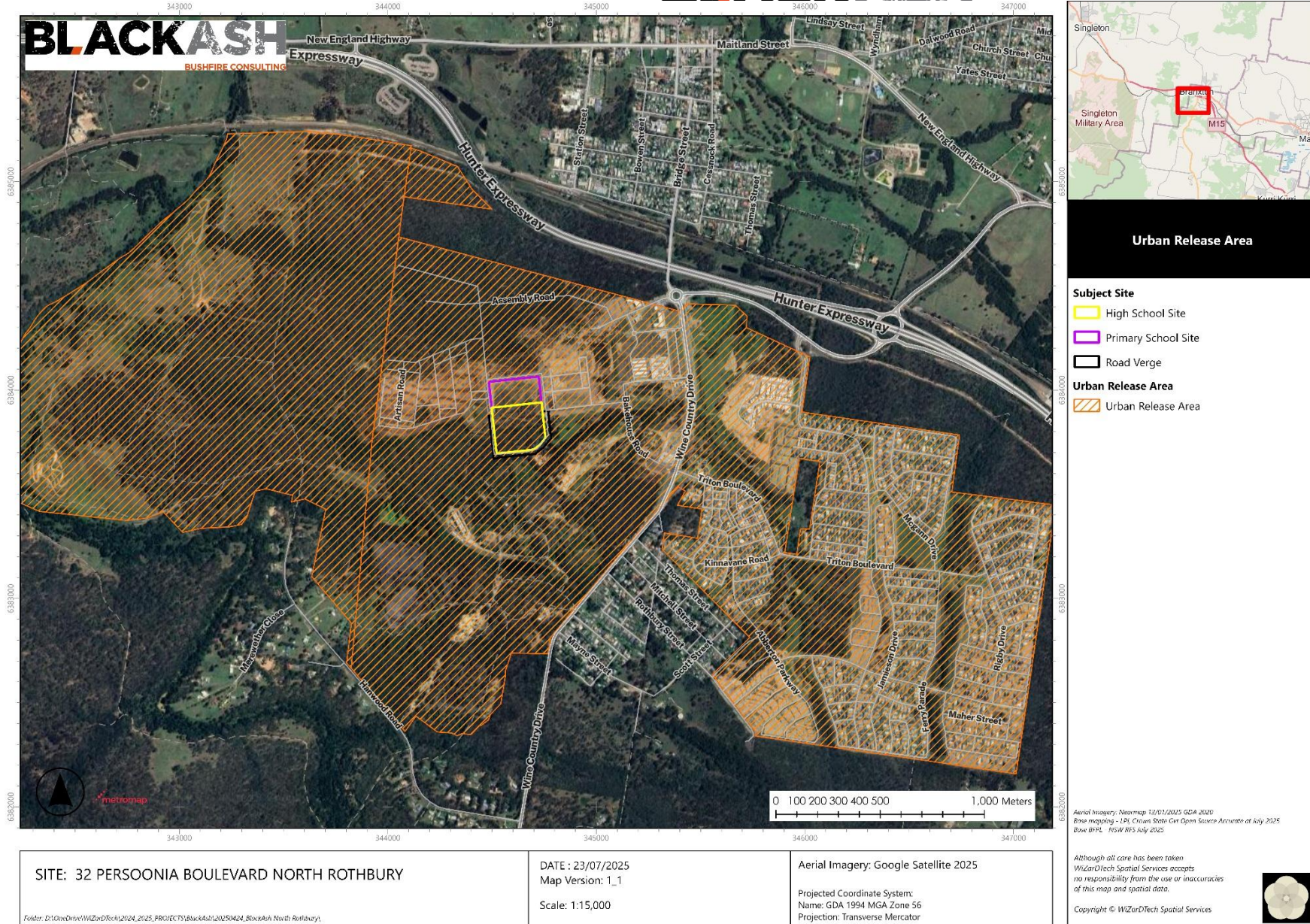


Figure 5: Huntlee Urban Release Area map and school sites in context

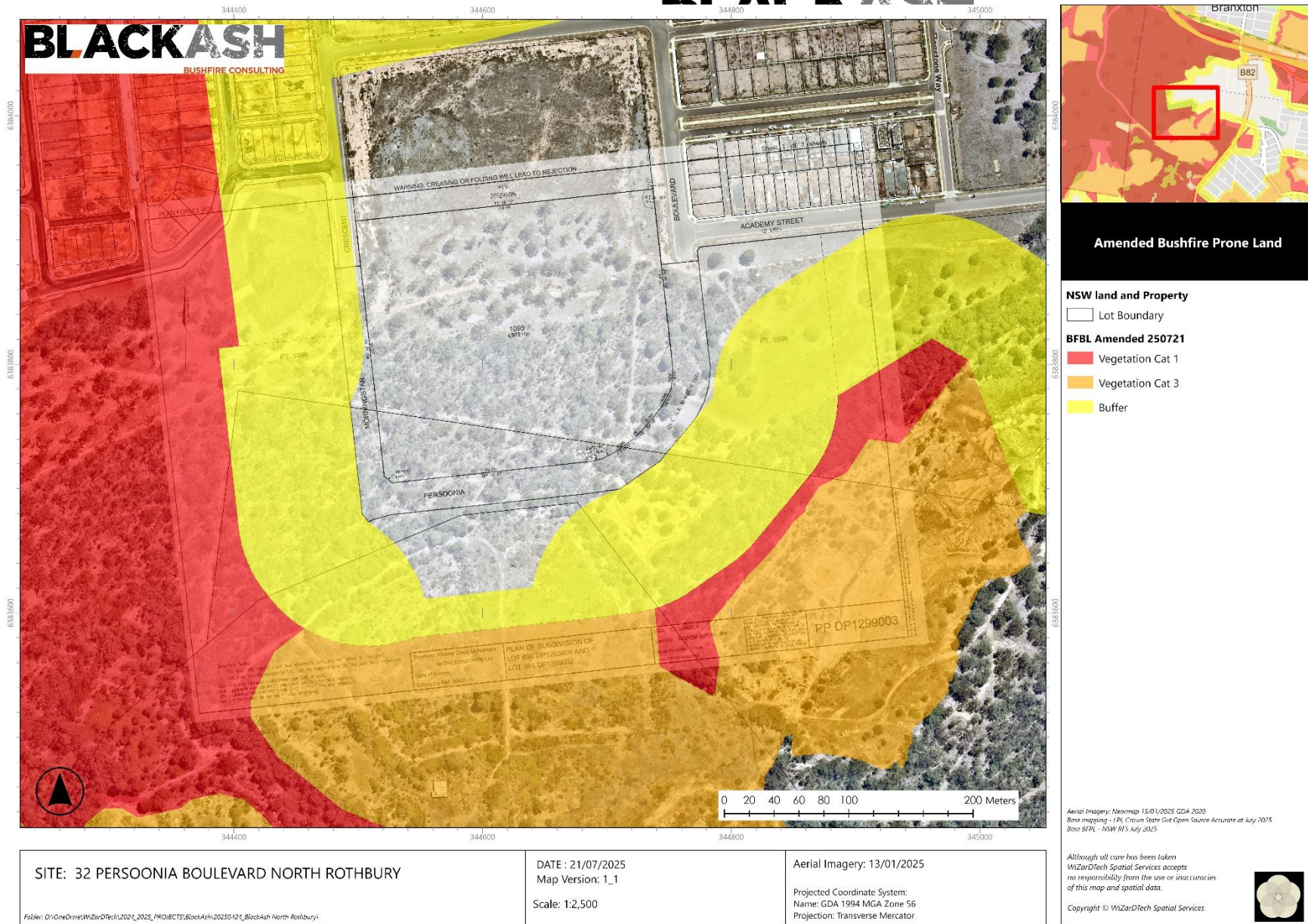


Figure 6: Future Bush Fire Prone Land Map extract showing school sites (yet to be finalised – expected second half September 2025)

13. Landscape Scale Assessment

A bushfire landscape assessment considers the likelihood of a bushfire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape.

Bushfires in the Hunter region are primarily driven by prevailing westerly to north westerly winds and fuelled by dense vegetation. Potential fire runs into the site are significantly limited by existing development and clearing for future development stages. Landscape scale fires cannot impact the school sites, although there is a possibility of local scale fires occurring.

The site has direct access to existing developed areas to the north, east and south of the site. These areas offer refuge potential with multiple access and emergency egress routes out of the area.

As shown on Figure 7, there is very limited fire history of significance in the local area and none directly impacting the site.

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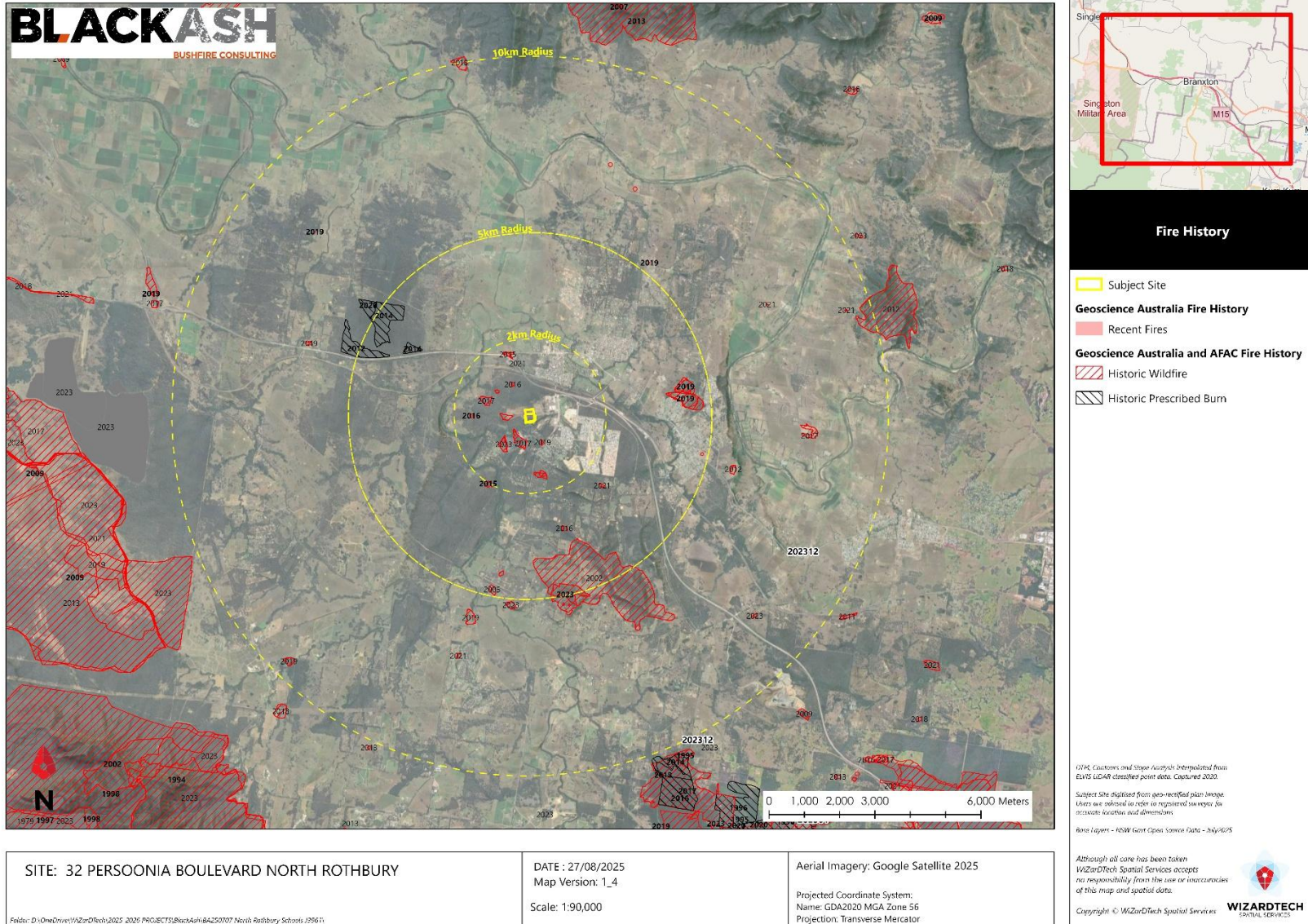


Figure 7: Bushfire history for local area (Geoscience Australia database)

13.1. Blackash Landscape Scale Assessment Tool

The bushfire landscape assessment considers the likelihood of a bushfire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape. The likelihood of a bushfire, its severity and intensity, and the potential impact on life and property varies depending on where a site is located in the landscape. Two types of considerations are relevant in terms of assessing the bushfire hazard including:

- landscape scale hazard – where large expanses of vegetation over tens to hundreds of hectares are located in immediate proximity to, and may traverse, urban periphery suburbs/townships
- localised hazard – which is most commonly presented by fragmented areas of vegetation larger than 1 hectare in size

The Blackash Landscape Scale Assessment Tool (LSAT) combines quantitative and qualitative techniques which are scaffolded by the Landscape Scale Threat Assessment and associated documentation. The LSAT is shown in Table 2 and uses elements of the Bayesian decision making model and Expert Judgment techniques backed by data. Bayesian decision making has been used where there is both objective and subjective data to analyse, and decisions need to be made on the probability of successful outcomes where there are high levels of uncertainty. Expert Judgment has been used in the assessment and determination of the landscape scale risk.

- Key considerations in our assessment have included:
 - extent and continuity of vegetation
 - topography
 - prevailing winds
 - the potential fire run and area that is likely to be impacted by the fire
 - the impact on evacuation routes to safer places considering road networks, distances, and landscape factors
 - the location and exposure of the development to bushfire
 - the ability to seek bushfire shelter on site or at alternative locations
 - the extent of neighbourhood-scale damage the bushfire may produce.

Landscape scale fires are those that can span many kilometres or tens of kilometres, and that burn for days or weeks at a time. Typically, these fires can be many thousands of hectares in size with fire fronts many kilometres in length. On the east coast of Australia this scale of fire is only possible where there are very large areas of forested vegetation, typically National Parks and State Forests that also adjoin substantial areas of private bushland.

There is no potential for a landscape scale fire to affect the site.

The LSAT is heavily weighted to life safety and places significant emphasis on the ability for the future community to be able to shelter in place or evacuate safely, whilst emergency services can access the site at the same time.

When the individual factors are scored, after consideration of the landscape context, the site design complying with PBP 2019, and the large urban area, the overall Landscape Scale Threat for the site is assessed as **Low Risk**. The summary and weighted scores are presented in Table 2 below.

Table 1 Landscape Scale Risk Assessment

Landscape Scale Assessment Tool					
Parameter	Low landscape scale threat	Moderate landscape scale threat	High landscape scale threat	Extreme landscape scale threat	Rating
1. Surrounding Vegetation	Bushfire cannot directly approach the site as it is surrounded by urban development and non-mapped vegetation or managed land.	Bushfire can only approach from one aspect and the site is within a suburban, township or urban area considered managed land. Typically an island of bushfire vegetation within a wider urban development area; site with highly fragmented vegetation nearby; or interface site impacted only by linear vegetation corridors of 100m width or less.	Bushfire can approach from more than one aspect and site is on the bushland-urban interface with the developed area considered as managed land. Typically contiguous bushfire vegetation with a typical fire run in any direction of 0.1-2.0 km distance.	Bushfire can approach from more than one aspect and/or fires have many hours or days to grow and develop before impacting and/or site is surrounded by significant unmanaged vegetation. Typically large areas of contiguous bushland with fire runs of more than 2 km possible.	High
2. Bushfire Behaviour	Extreme bushfire behaviour at the site is not possible given the broader landscape.	Extreme bushfire behaviour at the site is unlikely in this broader landscape due to combination of factors of vegetation type, vegetation fragmentation, aspect and topography.	Extreme bushfire behaviour at the site is likely in this broader landscape due to combination of factors of vegetation type, vegetation fragmentation, aspect and topography.	Extreme bushfire behaviour is very likely in this broader landscape due to combination of factors of vegetation type, vegetation fragmentation, aspect and topography.	Low
3. Impact of severe fire behaviour (FFDI 80 or 100 as relevant) coming onto site from wider fire catchment	There is little vegetation beyond 150 metres of the site (except grasslands and low-threat vegetation) and will not result in neighbourhood scale destruction of the site.	The type and extent of vegetation beyond 150m from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to the site.	The type and extent of vegetation beyond 150m is likely to result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to the site.	The type and extent of vegetation beyond 150m will result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to the site.	Low
4. Vegetation Corridors	Vegetation within the site cannot enable fire to enter and move through the site by a continuous fire path from the primary fire source.	Vegetation within the site is unlikely to enable fire to enter and move through the site by a continuous fire path from the primary fire source.	Vegetation within the site may enable fire to enter and move through the site by a continuous fire path from the primary fire source.	Vegetation corridors on site provide for passage of fire to enter and move through the site from the primary fire source.	Low
5. Separation	Hazard separation between extreme bushfire hazard and buildings of greater than 100m. Extreme bushfire hazard does not include vegetated corridors of less than 100m width or grasslands.	Hazard separation between extreme bushfire hazard and buildings of 50-100m. Extreme bushfire hazard does not include vegetated corridors of less than 100m width or grasslands.	Hazard separation between extreme bushfire hazard and buildings of 20-50m. Extreme bushfire hazard does not include vegetated corridors of less than 100m width or grasslands.	Hazard separation between extreme bushfire hazard and buildings of <20m. Extreme bushfire hazard does not include vegetated corridors of less than 100m width or grasslands.	Low
6. Shelter	Immediate access is available to a place that provides shelter from bushfire. This includes existing or proposed buildings on site constructed in accordance with PBP.	Access is readily available to a place that provides shelter from bushfire. This will often be the surrounding developed area.	Access to a place that provides shelter from bushfire is not certain during a wildfire and existing buildings are not built to PBP standards.	Access to a place that provides shelter from bushfire is not possible during a wildfire.	Low
7. Evacuation	Multiple evacuation routes are available and unlikely to be impacted by fire.	Evacuation to alternate location that provides life safety refuge is <1km and can be completed by foot or vehicle.	Evacuation to alternate location that provides life safety refuge is 1km-10km.	Evacuation to alternate location that provides life safety refuge is > 10km.	Low
8. Isolation and emergency services	Seamless integration with existing settlement - no impact on evacuation or access for emergency services.	Short bushland pinch points that may carry fire across roads and restrict access briefly during passage of fire. Unlikely impact on evacuation or access for emergency services.	Short bushland pinch points that are likely to carry fire across roads and restrict access temporarily. Likely impact on evacuation or access for emergency services.	Large areas of bushland or multiple pinch points that are likely to carry fire across roads in forest areas and will block evacuation or emergency service access routes for extended time.	Low
9. Firefighting water supplies	Site is within urban area and has access to reticulated water supply OR site has dedicated firefighting water supply in accordance with PBP requirements.	Site is on the periphery of urban area and has access to reticulated water supply that may be more susceptible to interruption.	Site is outside urban area and relies on an on site water supply not in accordance with PBP.	Site is in an isolated area and relies on an on site water supply not in accordance with PBP.	Low
Overall Threat Rating			Low Risk	Total	110
Assessed at Forest Fire Danger Index of 100 as the design fire, using Method 1 in accordance with PBP 2019					
The scoring system uses a multiplier for each Threat level based on a conservative life safety approach.					
The scaled scores for each Threat assessment are totalled and final scores are placed within a range to produce the final Risk Rating					

14. Site Specific Assessment

14.1. Methodology

PBP 2019 provides a methodology to determine the bushfire threat and commensurate size of any asset protection zone (APZ) that may be required to offset possible bushfire attack. These elements include the potential hazardous landscape that may affect the site and the effective slope within that hazardous vegetation.

The following assessment is prepared in accordance with Section 100B of the RF Act, Clause 44 of the RF Reg and PBP 2019. This assessment is based on the following resources:

- Planning for Bush Fire Protection (NSW RFS, 2019);
- Council Bushfire Prone Land Map;
- Aerial mapping; and
- Detailed GIS and Site analysis.
- Site inspection

The methodology used in this assessment is in accordance with PBP 2019 and is outlined in the following sections.

14.2. Bushfire Hazard

An assessment of the Bushfire Prone Land is necessary to determine the application of bushfire protection measures such as APZ locations and future building construction levels. The vegetation formations (bushfire fuels) and the topography (effective slope) combine to create the bushfire threat that may affect bushfire behavior at the site, and which determine the planning and building response of PBP 2019.

14.3. Fire Weather

The fire weather is dictated by PBP 2019 and assumes a credible worst-case scenario and an absence of any other mitigating factors relating to aspect or prevailing winds. The site has a Fire Danger Index (FDI) of 100 as per PBP 2019.

14.4. Vegetation Assessment

The RF Regulation requires a classification of the vegetation on and surrounding the property (out to 140 metres from the boundaries of the property) in accordance with the system for classification of vegetation contained in PBP 2019.

Predominant vegetation is classified by structure or formation using the system adopted by Keith (2004) and by the general description using PBP 2019. Vegetation types give rise to radiant heat and fire behaviour characteristics. There are 7 vegetation formations (with sub-formations) identified in PBP 2019.

The predominant vegetation has been determined over a distance of at least 140 metres in all directions from the property boundary on the site. Where a mix of vegetation types exist, the type providing the greater hazard is said to predominate.

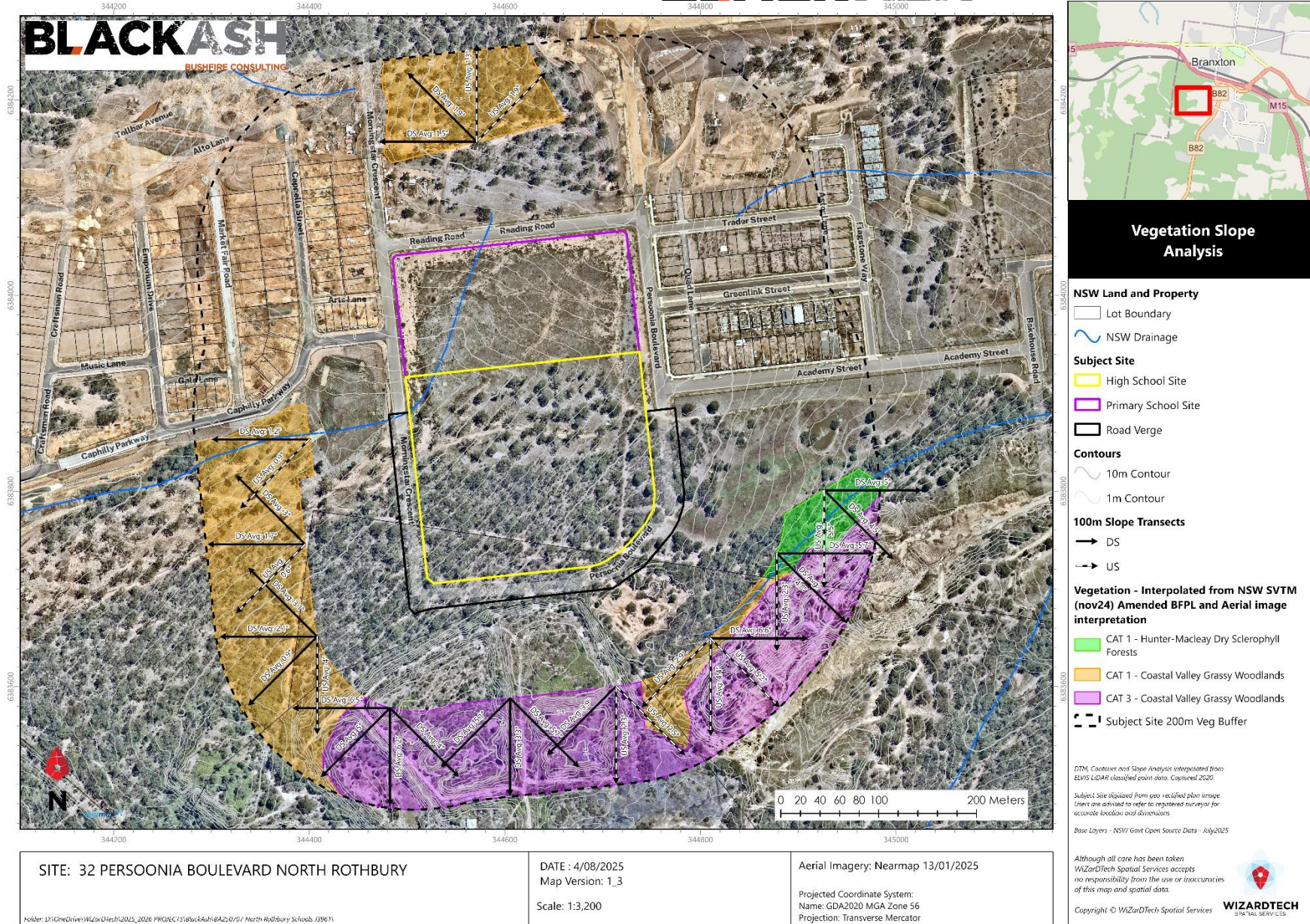
The land surrounding the site is cleared for approximately 100m and the remaining vegetation is predominantly Hunter Ironbark-Spotted Gum Forest, classified as Coastal Valley Grassy Woodlands for the purposes of bushfire assessment. The riparian area to the west of the site consists of a constructed detention basin and a narrow riparian corridor only.

Vegetation within the site will be managed land.

The nearest bushfire hazard vegetation is more than 100m from the site, with the exception of a very small area in the northwest of the Primary School site.

The vegetation surrounding the managed lands including the new APZ are shown on Figure 8.

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<p>SITE: 32 PERSOONIA BOULEVARD NORTH ROTHBURY</p> <p>Holder: D:\100mDrive\WIZARDTECH\2025_2026_PRC\REC1\5\BlackAsh\B22\070 / North Rothbury Schools_139611</p>	<p>DATE : 4/08/2025</p> <p>Map Version: 1_3</p> <p>Scale: 1:3,200</p>	<p>Aerial Imagery: Nearmap 13/01/2025</p> <p>Projected Coordinate System: Name: GDA2020 MGA Zone 56 Projection: Transverse Mercator</p>
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Figure 8: Vegetation and slope assessment map

14.5. Ecological Issues

The site is being bio-certified as suitable for urban development, and subject to the finalisation of the biodiversity certification process, ecological assessment is not required for the REF.

14.6. Slopes Influencing Bushfire Behaviour

The RF Reg requires an assessment of the slope of the land on and surrounding the property (out to 100 metres from the boundaries of the property or from the proposed development footprint).

The effective slope' influencing fire behavior approaching the sites has been assessed in accordance with the methodology specified within PBP 2019. The effective slope is the slope of the ground under the hazard (vegetation).

The slopes are a mixture of moderate up and down slopes surrounding the managed lands including the new APZ. Relevant slopes are shown on Figure 8.

14.7.Asset Protection Zones

An APZ is a fuel-reduced area surrounding a built asset or structure which provides a buffer zone between a bushfire hazard and an asset. The APZ includes a defensible space within which firefighting operations can be carried out. An APZ is land that has vegetation removed or maintained to a level that limits the spread and impact of bushfire. This may include:

- developed land (residential, commercial, or industrial),
- permanent roads, bike paths, parking areas,
- golf course fairways, playgrounds, sports fields,
- vineyards, orchards, cultivated ornamental gardens and commercial nurseries,
- most common will be gardens and lawns within curtilage of buildings.

For new SFPP developments on BPL, the APZ requirements must result in radiant heat levels at new buildings being below 10kW/m². Figure 9 is an extract from PBP 2019 and shows the minimum APZ distances for a range of slope and vegetation combinations. The school sites are surrounded by managed land. The school buildings are all more than 100m from vegetation and exceed all the requirements of PBP 2019.

No APZs are required **within the site** as the nearest hazard vegetation is more than 100m from any school buildings. The proposed development satisfies the relevant bushfire protection requirements through other compliant measures, and vegetation surrounding the site meets the criteria to be excluded as a bushfire hazard in accordance with the applicable guidelines.

APZ compliance is at Table 2.

Table A1.12.1

Minimum distances for APZs – SFPP developments (≤10kW/m², 1200K)

KEITH VEGETATION FORMATION	EFFECTIVE SLOPE				
	Up slopes and flat	>0°-5°	>5°-10°	>10°-15°	>15°-20°
	Distance (m) from the asset to the predominant vegetation formation				
Rainforest	38	47	57	69	81
Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	67	79	93	100	100
Grassy and Semi-Arid Woodland (including Mallee)	42	50	60	72	85
Forested Wetland (excluding Coastal Swamp Forest)	34	42	51	62	73
Tall Heath	50	56	61	67	72
Short Heath	33	37	41	45	49
Arid-Shrublands (acacia and chenopod)	24	27	30	34	37
Freshwater Wetlands	19	22	25	28	30
Grassland	36	40	45	50	55

Figure 9: SFPP development APZ requirements (PBP 2019 Table A1.12.1)

Table 2 APZ Compliance

<p>Intent of Measures</p> <p>PBP 2019 Table 6.8a</p> <p>APZ</p>	<p><i>to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.</i></p>	
<p>Performance Criteria</p>	<p>Acceptable Solution as per PBP</p>	<p>Compliance</p>
<p><i>Radiant heat levels of greater than 10kW/m² (calculated at 1200K) will not be experienced on any part of the building.</i></p>	<p><i>the building is provided with an APZ in accordance with Table A1.12.1 in Appendix 1.</i></p>	<p>NA</p> <p>No APZ required within the site. Offsite APZ established under legal easements and reflected in the updated BPL map.</p>
<p><i>APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.</i></p>	<p><i>APZs are located on lands with a slope less than 18 degrees.</i></p>	<p>NA</p>
<p><i>APZs are managed and maintained to prevent the spread of fire to the building.</i></p> <p><i>the APZ is provided in perpetuity.</i></p>	<p><i>the APZ is managed in accordance with the requirements of Appendix 4 of this document, and is wholly within the boundaries of the development site;</i></p> <p><i>APZ are wholly within the boundaries of the development site; and</i></p> <p><i>other structures located within the APZ need to be located further than 6m from the refuge building.</i></p>	<p>NA</p> <p>No APZ required within the site. Offsite APZ established under legal easements and reflected in the updated BPL map.</p>

14.8. Bushfire Attack Levels

The Bushfire Attack Level or BAL is a means of measuring the severity of a building's potential exposure to ember attack, from ember attack, radiant heat and direct flame contact. In the NCC, the BAL is used as the basis for establishing the requirements for construction to improve protection of building elements. The BAL levels are shown in Table 4 and Figure 10 maps the BAL in from the retained vegetation.

Table 3 Bushfire Attack Levels and Bushfire Attack

BAL	Heat flux threshold (kW/m ²)	Predicted bushfire attack and level of exposure
BAL-12.5	≤ 12.5	Significant ember attack, burning debris and radiant heat up to a level of 12.5 kW/m ² .
BAL-19	12.5 – 19	Increasing levels of ember attack, burning debris and radiant heat up to a level of 19 kW/m ² .
BAL-29	19 – 29	Increasing levels of ember attack, burning debris and radiant heat up to a level of 29 kW/m ² .
BAL-40	29 – 40	Increasing levels of ember attack, burning debris and radiant heat up to a level of 40 kW/m ² . Flames from the bushfire front may intermittently contact the building.
BAL-FZ	≥ 40	Increasing levels of ember attack, burning debris and radiant heat in excess of 40 kW/m ² . Flames from the bushfire front are likely to engulf part or all of the building.

The BAL is determined in accordance with Appendix 1 of PBP 2019 or the site assessment methodology within AS3959. Both approaches are the same and rely on an assessment of vegetation and slope with the separation of a building to determine the BAL. The site is not classified Bushfire Prone Land and as such, the BAL for the site is **BAL-Low**.

Table 4 Compliance Construction

<p>Intent of Measures</p> <p>PBP 2019 Table 6.8a</p> <p>Construction</p>	<p><i>to provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants.</i></p>	
<p>Performance Criteria</p>	<p>Acceptable Solution</p>	<p>Compliance</p>
<p><i>the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat and flame contact.</i></p>	<p><i>landscaping is in accordance with Appendix 4; and fencing is constructed in accordance with section 7.6.</i></p>	<p>NA</p> <p>No APZ required within the site.</p> <p>No BAL affecting the site as the buildings are more than 100m from any hazard vegetation.</p>

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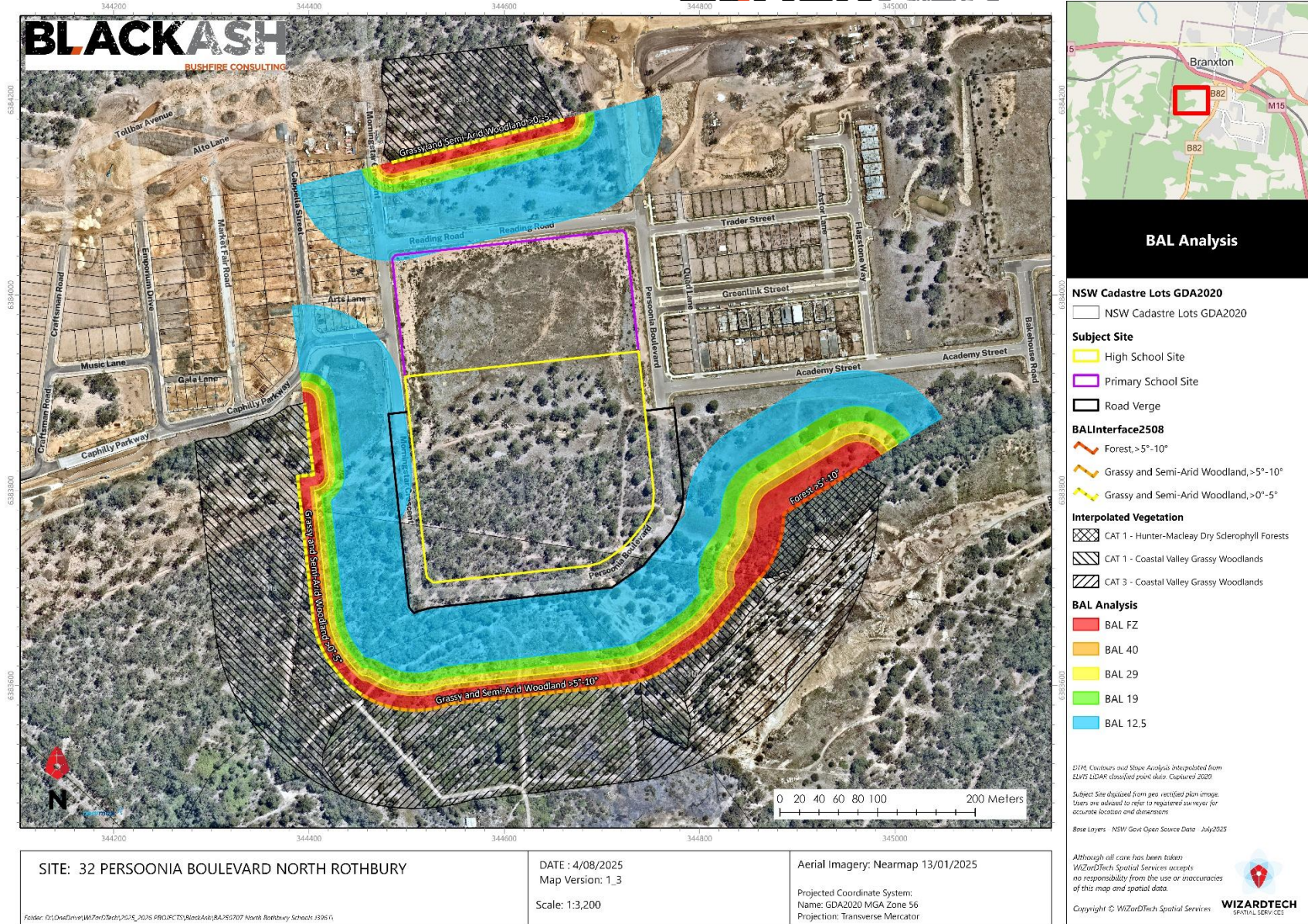


Figure 10: Bushfire Attack Level map - all school buildings are BAL-Low

14.9. Water Supplies

The site is adequately supplied by installed water services associated with the existing developed areas. The site is serviced by reticulated water mains. The site is serviced by reticulated water supply, with hydrants located at regular intervals can comply with AS2419 and PBP 2019. All buildings are connected to the reticulated town's water main. No changes to the water supply are proposed. This complies with PBP 2019. Water compliance is at Table 5.

Table 5 Water Compliance

<p>Intent of Measures</p> <p>PBP 2019 Table 6.8c</p> <p>Water Supply</p>	<p><i>To provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.</i></p>	
<p>Performance Criteria</p>	<p>Acceptable Solution</p>	<p>Compliance</p>
<p><i>An adequate water supply for firefighting purposes is installed and maintained</i></p>	<p><i>reticulated water is to be provided to the development, where available</i></p>	<p>Complies</p> <p>Activity serviced by reticulated water supply.</p>
<p><i>water supplies are located at regular intervals. the water supply is accessible and reliable for firefighting operations.</i></p>	<p><i>fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005; hydrants are not located within any road carriageway; and reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads.</i></p>	<p>To Comply</p> <p>Fire hydrants will be designed and installed in accordance with AS2419:2021.</p>
<p><i>flows and pressure are appropriate</i></p>	<p><i>fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005</i></p>	<p>To Comply</p> <p>Fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005</p>

<i>the integrity of the water supply is maintained.</i>	<i>all above-ground water service pipes external to the building are metal, including and up to any taps.</i>	To Comply All above-ground water service pipes external to the building are metal, including and up to any taps.
<i>water supplies are adequate in areas where reticulated water is not available</i>	NA	To Comply Mains water available

14.10. Gas and electrical supplies

The site is adequately supplied by services. Any gas services installed should be maintained in accordance with Australian Standard AS/NZS 1596 'The storage and handling of LP Gas' (Standards Australia 2008) and Table 6.

Table 6 Gas & Electricity Compliance

Intent of Measures PBP 2019 Table 6.8c Gas and Electrical Supply	<i>To provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building.</i>	
Performance Criteria	Acceptable Solution	Compliance
<i>location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.</i>	<i>where practicable, electrical transmission lines are underground</i>	To Comply
<i>location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.</i>	<ul style="list-style-type: none"> <i>reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant</i> 	To Comply

	<p>authorities, and metal piping is used;</p> <ul style="list-style-type: none">• all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;• connections to and from gas cylinders are metal; if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion;• polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used; and• above-ground gas service pipes external to the building are metal, including and up to any outlets	
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14.11. Access

The site and surrounding lands have largely been cleared as part of ongoing urban development. As the site is not on BPL there are no specific requirements under PBP 2019.

The school sites are surrounded by perimeter roads to collector road standard accommodating buses and provide access via the multiple road connections into the surrounding public road network. previous construction. These roads will provide two-laned sealed surfaces of 10-12m width within a 20m road reserve.

Table 7 Access Compliance

<p>Intent of Measures</p> <p>PBP 2019 Table 6.8.2</p> <p>Gas and Electrical Supply</p>	<p><i>To provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area.</i></p>
<p>Performance Criteria</p>	<p>Compliance</p>
<p><i>firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.</i></p>	<p>No requirement Complies</p> <p>Perimeter roads are not required under PBP 2019; however the site is surrounded by perimeter roads. All buildings can be accessed via the existing road infrastructure and managed areas within the site. Additional internal vehicular access is not necessary for bushfire management.</p>

14.12. Landscaping

The site is outside Bushfire Prone Land and does not require land within the site to be managed as an APZ.

Table 8 Landscaping Compliance

<p>Intent of Measures</p> <p>PBP 2019 Table 6.8a</p> <p>Landscaping</p>	<p><i>landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.</i></p>	
<p>Performance Criteria</p>	<p>Acceptable Solution</p>	<p>Compliance</p>
<p><i>landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.</i></p>	<p><i>landscaping is in accordance with Appendix 4; and fencing is constructed in accordance with section 7.6.</i></p>	<p>N/A</p> <p>The site is outside Bushfire Prone Land and does not require land within the site to be managed as an APZ. Landscaping within the school will meet the definition of managed land being gardens and lawns within curtilage of buildings.</p>

14.13. Emergency Management Arrangements

PBP 2019 and the RFS require the preparation of a 'Bushfire Emergency Management and Evacuation Plan' prior to occupation of new schools. Prior to occupation, a Plan is to be prepared in accordance with the NSW Rural Fire Service document 'A Guide to Developing a Bushfire Emergency Management and Evacuation Plan' (RFS 2014). Emergency management compliance is at Table 9.

Table 9 Emergency Management Compliance

<p>Intent of Measures</p> <p>PBP 2019 Table 6.8d</p> <p>Emergency Management Planning</p>	<p><i>To provide suitable emergency and evacuation arrangements for occupants of SFPP developments.</i></p>	
<p>Performance Criteria</p>	<p>Acceptable Solution</p>	<p>Compliance</p>
<p><i>Bush Fire Emergency Management and Evacuation Plan is prepared</i></p>	<p><i>Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the: The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan;</i></p> <p><i>NSW RFS Schools Program Guide;</i></p> <p><i>Australian Standard AS 3745:2010 Planning for emergencies in facilities; and</i></p> <p><i>Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable).</i></p>	<p>N/A</p> <p>To Comply</p>
	<p><i>the Bush Fire Emergency Management and Evacuation Plan should include planning for</i></p>	<p>NA</p> <p>To Comply</p>

	<p>the early relocation of occupants.</p>	
	<p>A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.</p>	<p>To Comply</p>

15. Specification 43 requirements

The school buildings are **not** on Bush Fire Prone Land (land that can support a bushfire or is likely to be subject to bushfire attack). Bushfire Attack Level BAL-Low applies to all buildings onsite.

Specification 43 is not applicable to school buildings that are not identified as being on Bush Fire Prone Land. There are **no** requirements for the provision of Specification 43.

16. Risk Based Approach

Considering the site's low bushfire risk (see Sections 13 & 14), no bushfire construction or other mitigation measures are required. A *Bushfire Emergency Management and Evacuation Plan* could be provided to cater for Catastrophic Fire Danger weather to provide triggers for closure.

17. Mitigation Measures

Mitigation measures are essential components of this Bushfire Assessment Report, aimed at assessing bushfire risk to the site and future occupants and reducing or eliminating potential environmental impacts associated with the proposed activity. These measures have been carefully developed based on rigorous bushfire assessments, applicable legislation, and the requirements of PBP 2019 to ensure bushfire protection while balancing protection of the environment and risk mitigation. By implementing these mitigation measures, the project seeks to address identified risks, enhance bushfire and environmental outcomes, and promote sustainable development practices, ensuring compliance with bushfire regulatory requirements and alignment with broader environmental objectives.

The following mitigation measures in Table 10 have been made within this report to ensure the activity is compliant with the NSW and national framework for bushfire mitigation.

Table 10 Mitigation Measures

Project No.	Project Stage Design Construction Operation	Mitigation Name	Mitigation Measure	Reason for Mitigation Measure
1.	Construction	Bushfire Prone Land Map	<ul style="list-style-type: none"> The amended BPL Map will be certified by the RFS Commissioner prior to start of construction. Plan of subdivision and 88B instrument finalised prior to start of construction. 	<ul style="list-style-type: none"> Confirmation that no specific bushfire mitigation measures are required and NCC Specification 43 does not apply.
2.	Operation	Emergency Management Arrangements	<ul style="list-style-type: none"> Develop a <i>Bushfire Emergency Management and Evacuation Plan</i> prior to occupation. This to be prepared in accordance with the NSW Rural Fire Service document 'A Guide to Developing a <i>Bushfire Emergency Management and Evacuation Plan</i>' (RFS 2014). 	<ul style="list-style-type: none"> To ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants in a wider area where there is some bushfire risk. Relates specifically to clear arrangements for school activities and pickups / drop offs should there be a bushfire in the wider area.

18. Statement of Evaluation of Environmental Impacts

The environmental impacts of the proposed activity have been systematically evaluated in this Bushfire Assessment Report to identify potential bushfire risks and ensure compliance with applicable bushfire legislation and standards. This assessment considers the site-specific conditions that relate to the provision of bushfire requirements such as the provision of asset protection zones.

The buildings on the site are **not** on the portion of the land identified as 'bush fire prone land' once the BPL Map is amended (see Figure 6) and the legislative requirements for PBP 2019 are not applicable.

The extent and nature of potential bushfire impacts are low and will not have significant impact on the locality, community and/or the environment. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment, and not pose any impacts or risks to the use of the schools.

19. Conclusion and Declaration of Significance

Subject to implementing the mitigation measures set out in Section 17 of this report, the conclusion of this assessment is that the proposed activity is not likely to significantly affect the environment in relation to bushfire matters.

Based on a review of the activity, site context, surrounding environment, and the applicable bushfire planning framework, it is determined that the bushfire impacts associated with the proposed development are not significant. The site conditions, combined with the implementation of appropriate bushfire protection measures, ensure that bushfire risk can be effectively and appropriately mitigated to achieve acceptable outcomes consistent with relevant policy and legislative requirements.



David Lemcke | Senior Planner & Bushfire Specialist

Blackash Bushfire Consulting

B.A., Grad. Dip. Urban & Regional Planning; Master of Environmental Planning; Grad. Dip. Bushfire Protection; Adv. Dip. Of Public Safety (Emergency Management); Dip. Management



Lew Short | Principal

Blackash Bushfire Consulting

B.A., Grad. Dip. (Design for Bushfires); Grad. Cert. of Management (Macq); Grad. Cert. (Applied Management); Fire Protection Association of Australia BPAD Level 3 BPD-PA 16373



Appendix 1: References

Councils of Standards Australia AS3959 (2018) – *Australian Standard Construction of buildings in bushfire-prone areas*

Councils of Standards Australia AS2419 (2014) – *Fire Hydrant Installations*

Keith, David (2004) – *Ocean Shores to Desert Dunes – The Native Vegetation of New South Wales and the ACT*. The Department of Environment and Climate Change

NSW Rural Fire Service (2015) *Guide for Bushfire Prone Land Mapping*

NSW Rural Fire Service (2019). *Planning for Bushfire Protection: A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners*. Draft for Public Exhibition

NSW Government (1979) *Environmental Planning and Assessment Act 1979*. NSW Government Printer.

Appendix 2 Curriculum Vitae

BLACKASH

BUSHFIRE CONSULTING

Curriculum Vitae

Lew Short

Director BlackAsh Bushfire Consulting

T: 0419 203 853 E: lew.short@blackash.com.au

Summary

Lew is an experienced leader in the government and emergency sector. He has an intimate knowledge of the workings of government and how emergency service organisations operate. He is not only a technical expert but a practitioner who has deep industry knowledge.

Lew has extensive experience providing national leadership in building community resilience representing AFAC and the FPAA. Lew's technical expertise is in bushfire consequence management, risk assessment and mitigation, specifically the planning and design of new developments in high bushfire risk areas to comply with legislative and planning requirements.

Lew has worked with some of Australia's leading organisations including NSW Rural Fire Service, Country Fire Authority, Emergency Management Victoria, Lend Lease, Mirvac, Victorian State and Local Governments, Sydney Water Corporation, Great Lakes and Warringah Councils. Lew has a deep operational understanding of how fire works in the Australian landscape. He has multifaceted insight into how governments respond to this threat. Lew provides unique strategies to comply with regulatory requirements and safety outcomes.

Lew established and led the Community Resilience Group for the New South Wales Rural Fire Service (RFS). His areas of responsibility included land use planning, community engagement, education, vulnerable communities, bunkers, Neighbourhood Safer Places, business systems and projects, social media, integrated risk management and environmental management. He was responsible for the establishment, management and leadership of the development assessment function for the RFS at a State level where he was responsible for the assessment of over 80,000 development applications in Bush Fire Prone Areas.

Areas of Expertise

- Landuse planning & consequence management
- Legal strategy, Land & Environment Court and Expert Witness
- Bushfire planning, design & construction requirements in accordance with National Standards
- Insurance threat, vulnerability and constraints assessments
- Bushfire Prone Mapping, hazard mapping and risk assessments
- Australian Standard AS3959 Construction of Buildings in Bushfire Prone Areas
- Bushfire Management Plans
- Alternative & performance based solutions
- Evacuation planning and implementation
- Technical and Strategic advice



Qualifications / Accreditation

BPAD Level 3 Accredited Practitioner
Fire Protection Association of Australia

Graduate Diploma of Bush Fire Design
University of Western Sydney, 2006

Graduate Certificate of Applied Management
Australian Institute of Police Management, 2005

Graduate Certificate of Management Macquarie
Graduate School of Management Macquarie University, 2001

Bachelor of Arts, Resource and Environmental Management
Macquarie University, 1994



Curriculum Vitae

David Lemcke

Senior Planner & Bushfire Specialist

BlackAsh Bushfire Consulting

T: 0439 220 464 E: david.lemcke@blackash.com.au



Summary

David is an experienced bushfire, planning and land management professional with over 20 years in local government and 4 years as a private sector bushfire consultant. He has undertaken a wide range of development assessments and strategic planning projects in both regulatory and proponent roles. He was Central Coast Council's bushfire subject matter expert for over 15 years, including representation in the Land & Environment Court and numerous working groups. He has a deep understanding of contemporary, practical bushfire management from a range of perspectives due to decades of experience as a public land manager and a Rural Fire Service (RFS) volunteer, and now applies this expertise with a range of clients across the private and public sectors.

David has served as Council's staff representative on the Wyong and Central Coast Bushfire Management Committees since 2007 and was instrumental in developing and contributing to emergency management planning including preparation of Bush Fire Risk Management Plans, Fire Access & Fire Trail Plan, developing local policy and pre-incident planning, and delivering community engagement.

From 2010 he was the program manager for the Wyong Shire Council and then Central Coast Council (CCC) bushfire program. These programs won several awards, sponsored research and were renowned for innovation and improvement of local government bushfire management. The CCC program included management of over 220 fire trails, management of 275 mechanical Asset Protection Zones, Hazard Reduction burning, access management, environmental protection and community engagement using both contractors and internal staff teams.

David has been active in policy development at State level, being the Local Government NSW representative on numerous RFS policy committees including the Review of the Bushfire Environmental Assessment Code and delivering numerous conference presentations.

David is an active senior RFS volunteer, with 23 years in the service, having been a field officer for 18 years.

Areas of Expertise

- Rezoning and strategic bushfire studies
- Residential, commercial and industrial development assessment
- Infrastructure vulnerability and consequence management
- Bushfire planning, design & construction requirements in accordance with National Standards
- Bushfire Management Plans for large and small scale holdings
- Evacuation planning and implementation
- Technical and strategic advice
- Innovative policy development

Qualifications

Graduate Diploma of Bushfire Protection

Western Sydney University, 2025.

Advanced Diploma of Public Safety (Emergency Management)

Australian Emergency Management Institute, 2015

Diploma of Management

Management Consultancy International, 2012

Master of Environmental Planning

Macquarie University, 2005

Graduate Diploma Urban & Regional Planning

University of New England, 2000

Certificate 2 Bush Regeneration

Blue Mountains TAFE, 2000

Bachelor of Arts (Geography)

University of New England, 1998

Rural Fire Service

Various foundational, technical, specialist and incident management qualifications
2002 - current

Appendix 3 Draft Deposited Plan and 88B instrument

INSTRUMENT SETTING OUT TERMS OF EASEMENTS OR PROFITS À PRENDRE INTENDED TO BE CREATED OR RELEASED AND OF RESTRICTIONS ON THE USE OF LAND OR POSITIVE COVENANTS INTENDED TO BE CREATED PURSUANT TO SECTION 88B CONVEYANCING ACT 1919

(Sheet 1 of 5 Sheets)

Plan: Plan of Subdivision of Lot 696
DP1263808 and Lot 991 DP1299002
covered by Subdivision Certificate No.

Full name and address of the owner of the land: **Huntlee Pty Limited** (ACN 143 744 745)
1 Triton Boulevard, NORTH ROTHBURY
NSW 2335

PART 1 (Creation)

Number of item shown in the intention panel on the plan	Identity of easement, profit a` prendre, restriction or positive covenant to be created and referred to in the plan	Burdened lot(s) or parcel(s):	Benefited lot(s), road(s), bodies or Prescribed Authorities:
1	Restriction on the Use of Land	1095	1096 3/813163
2	Positive Covenant (A1)	Pt-1096 Area designated (A1)	Cessnock City Council

PART 2 (Terms)

Definitions:

For the purposes of this Section 88B instrument:

- (a) **Benefited Lot** means any Lot which has the benefit of an easement, right of way or restriction on the use of land created by the Plan.
- (b) **Burdened Lot** means any Lot Burdened by a restriction on the use of land, right of way or an easement created by the Plan and includes each and every part of that Burdened Lot.
- (c) **Plan** means the Plan of Subdivision to which this Instrument relates.

Terms of Restriction on the Use of Land numbered 1 in the Plan:

The owner of each Burdened Lot shall not:

- (a) subdivide the Burdened Lot unless by way of strata title subdivision;
- (b) Use the Burdened Lot for anything other than educational purposes;
- (c) connect or cause to be connected a drinking water supply, recycled water supply, or sewer discharge service to the Lot Burdened that is not provided by

Initials x _____

(Sheet 2 of 5 Sheets)

Plan: Plan of Subdivision of Lot 696 DP1263808
and Lot 991 DP1299002 covered by
Subdivision Certificate No.

Altogether Huntlee Pty Ltd (or any replacement provider approved by Huntlee Pty Limited, such approval not to be unreasonably withheld or delayed) without the prior written consent of Altogether Huntlee Pty Ltd (or any replacement provider, as may be the case);

- (d) discharge any waste or cause any waste to be discharged into the stormwater drainage system other than stormwater runoff generated by the Burdened Lot.

This Restriction on the Use of Land shall automatically expire and cease to have effect from and including the 31st day of December 2035.

Terms of Positive Covenant numbered 2 in the Plan:

- (a) The area designated 'A1' on the plan shall be managed **temporarily** by the owner of the burdened lot as an asset protection zone (APZ) to the standard of an inner protection area (IPA) in accordance with the requirements of the current version of the Planning for Bushfire Protection document for the time being (howsoever called), published by the NSW Rural Fire Service (or its successor).
- (b) **This positive covenant and the obligations applicable to it shall cease to have any force or effect as regards to the part of the site being further developed from time to time.**

Name of entity empowered to release, vary or modify the restriction numbered 1 in the plan

HUNTLEE PTY LIMITED (ACN 143 744 745)

Name of entity whose consent is required to release, vary or modify the positive covenant numbered 2 in the plan

CESSNOCK CITY COUNCIL

Initials x _____

(Sheet 3 of 5 Sheets)

Plan:

Plan of Subdivision of Lot 696 DP1263808
and Lot 991 DP1299002 covered by
Subdivision Certificate No.

EXECUTED for and on behalf of **CESSNOCK CITY COUNCIL** by its authorised delegate pursuant to s.377 *Local Government Act 1993* whose consent is required to release vary or modify the positive covenant numbered 2 in the plan in the presence of.

Witnessed

(Signature) _____

I certify that I am an eligible witness and that the delegate signed in my presence.

Full Name: _____
(print)
Authorised Delegate

_____ (Signature of witness)

_____ (Name of witness)

Electronic signature of me,

_____ (Address of witness)

.....
[Name]

affixed by me, or at my direction,

Electronic signature of me,
[Name]

on
[Date]

affixed by me, or at my direction, on
[Date]

Initials x _____

(Sheet 4 of 5 Sheets)

Plan:

Plan of Subdivision of Lot 696 DP1263808
and Lot 991 DP1299002 covered by
Subdivision Certificate No.

EXECUTED for and on behalf of)
COMMONWEALTH BANK OF)
AUSTRALIA (ACN 123 123 124) by its)
attorney under power of attorney dated **1**)
October 2012, registered number **Book**)
4639 No 422 in the presence of;)

Signature of witness

Signature of attorney

Full name of witness [please print]

Full name of attorney [please print]

Address of witness [please print]

Position of attorney

The witness confirms that this document was signed in the witness presence or signed in counterpart and witnessed over audio visual link in accordance with section 14G of the Electronic Transactions Act 2000 (NSW).

Initials x _____

(Sheet 5 of 5 Sheets)

Plan:

Plan of Subdivision of Lot 696 DP1263808
and Lot 991 DP1299002 covered by
Subdivision Certificate No.

EXECUTED for and on behalf of **HUNTLEE**)
PTY LIMITED (ACN 143 744 745) by)
Stephen Thompson its duly appointed)
Attorney under Power of Attorney No 921)
Book 4814)

.....
Signature of Stephen Thompson

.....
Signature of Witness

.....
Full Name of Witness

.....
Qualification and Address of Witness

Initials x _____

