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Statement of Environmental Effects -Industrial Subdivision and General Industry Development

2-10 Bowman Rd, Moss Vale

SAAS Aus Pty Ltd

Jackson Environment and Planning Pty Ltd
Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
T: 02 8056 1849 | E: admin@jacksonenvironment.com.au
W: jacksonenvironment.com.au

This report has been prepared by the following staff of Jackson Environment and Planning Pty Ltd, Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060.

Author 1: Chloe Rich, Senior Consultant, B.MrneSc.

Author 2: Dr Mark Jackson, Director and Principal Consultant, B.Sc. (Hons), PhD, Grad. Cert. Mgmt., Exec. Masters Public Admin. (USYD), Certified Environmental Practitioner CEnvP (1542), Impact Assessment Specialist (IA11071), NSW Registered Environmental Assessment Practitioner REAP (R80020).

We declare that:
The report contains all available information that is relevant to the assessment of the subject site and proposed development, activity or infrastructure to which the report relates, and the information contained in the report is neither false nor misleading.

Report version	Authors	Date	Reviewer	Approved for issue	Date
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Executive Summary

SAAS Aus Pty Ltd (SAAS) proposes to create an industrial subdivision on the properties at 2 Bowman Road (Lot 1, DP103123 and Lot 2, DP1070888) and 10 Bowman Road, Moss Vale (Lot 51, DP130176). The proposal also includes the construction of industrial buildings and associated office space and hardstand areas on three of the lots within the proposed subdivision. This Statement of Environmental Effects (SEE) has been prepared by Jackson Environment and Planning Pty Ltd to assist the Southern Regional Planning Panel with the assessment of the proposed development.

Lot 1, DP103123 is zoned C3 Environmental Management. This lot is located on the southern side of Whites Creek. No development is proposed on this lot, and the lot will not be affected by the proposed subdivision. Lot 2, DP1070888 is a split-zoned lot consisting of E4 General Industrial zoned land in the north (formerly IN1 General Industrial and IN2 Light Industrial) and RU2 Rural Landscape land in the south. Lot 51, DP130176 is predominantly zoned RU2 Rural Landscape. A 12,500m^2 portion of the property in the north, adjacent to the boundary with Lot 2, is zoned E4 General Industrial. The proposed subdivision will better support the use of land within each land use zone in a manner consistent with the zone objectives under the *Wingecarribee Local Environmental Plan* 2010 and achieves the minimum Lot Size requirements. The subdivision will result in the following lots:

- Created Lot 1 – approximately 2.88ha of land zoned E4 General Industrial;
- Created Lot 2 – approximately 2.64ha of land zoned E4 General Industrial;
- Created Lot 3 – approximately 2.62ha of land zoned E4 General Industrial; and
- Created Lot 4 – approximately 54.6ha of RU2 Rural Landscape zoned land.

Buildings with ancillary office space are proposed to be constructed on the three lots to be created within the E4 zone. The use of the buildings is categorised as General Industry under the *Wingecarribee Local Environmental Plan* 2010 as they will be used for the storage, assembly, maintenance, transport, and hire of scaffolding equipment for SAAS's three scaffolding business currently based in Sydney, NSW. The proposed building development will include the following:

- Extension of the existing Bowman Road, and creation of part of Hutchinson Road to provide access to the proposed industrial buildings, including;
    - Construction of an industrial cul-de-sac at the termination of Hutchinson Road to accommodate turning of up to 26m B-Double vehicles;
    - Creation of an easement within the RU2 portion of land on the southern side of Hutchinson Road to facilitate construction of the cul-de-sac;
    - Stormwater management system with an outfall on the southern side of Hutchinson Road within the RU2 portion of land; and
    - Street lighting and landscaping in accordance with Wingecarribee Shire Council and Australian Standard requirements;
- Construction of three buildings for the purposes of scaffolding material storage, assembly, maintenance, transport, and hire. Each building will include:
    - Internal office space, staff amenities and training rooms;
    - On-site parking;
    - Haul road and hardstand surrounding each building;
    - Stormwater management system including stormwater treatment devices, on-site detention basin, and rainwater storage;
    - Internal fire sprinkler system and 200kL static water supply; and
    - Outdoor lighting and perimeter landscaping in accordance with Wingecarribee Shire Council and Australian Standard requirements.

Development for the purposes of roads is permitted within RU2 land use zones under the *Wingecarribee Local Environmental Plan* 2010. Development for the purposes of stormwater management is permissible with consent on any land under Clause 2.138 of the *State Environmental Planning Policy (Transport and Infrastructure)* 2021. General Industry is a permissible use on E4 General Industrial zoned land under the *Wingecarribee Local Environmental Plan* 2010.

The proposed development is considered integrated development as approval will be required under Section 138 of the *Roads Act* 1993. and under Chapter 3, Part 4 of the *Water Management Act* 2000 for water management work. Approval under the *Roads Act* 1993 will be required for the construction of the Bowman Road extension and Hutchinson Road. Approval under the *Water Management Act* 2000 is required for construction of the stormwater drainage outfall for the proposed development under Section 90(3), and for works within the mapped watercourses under Section 91(2).

As the estimated cost of the development exceeds $30 million, the proposed development is declared to be regionally significant development under Clause 2.19 of the *State Environmental Planning Policy (Planning Systems)* 2021. As per Clause 4.5 of the *Environmental Planning and Assessment Act* 1979, the regional planning panel for the area in which the development is to be carried out is the consent authority. Therefore, the Southern Regional Planning Panel will be the consent authority for this development application.

The proposed development is expected to create up to 60 construction jobs over a two-year period, and 120 full-time jobs once operational. The construction of the subdivision and General Industry development has an anticipated cost of $73.85 million (including GST), with labour and materials to be sourced locally wherever possible. The proposed development represents a significant economic boost to the Southern Highlands region.

An environmental assessment has been undertaken to support the development application and is documented in this report. The assessment has considered the potential impacts of or to local traffic, soil and water, flooding, bush fire, biodiversity, environmental and Aboriginal cultural heritage, and visual amenity. The assessment includes recommended mitigation measures to be implemented and has concluded that all potential impacts can be mitigated to ensure there will be no significant impacts on the surrounding environment or neighbouring properties. A summary of findings from the investigations is outlined as follows:

Site contamination

A Preliminary Site Investigation was conducted for the proposed development site to consider the potential for contaminated land to exist within the site. The subject site has historically been used as grazing land, with development limited to the construction of a single dwelling with detached garage, and two open-sided farm sheds. No evidence of potential land contamination, or contaminating activities, was observed across the subject site. As the proposed development includes the construction of warehousing surrounded by sealed hardstand, the potential for soil contamination to arise from the proposed development is negligible.

Geotechnical conditions

A Geotechnical Investigation of the subject site was carried out to identify potential geotechnical risks and provide engineering design information. The investigation concluded that treatments are required across the Site to provide for heavy vehicle and machinery access due to existing soil conditions, and the engineering of foundations must consider the potential for surface movement. Likely seasonal changes occurring within the water table may affect earthworks where groundwater is encountered requiring specific management of the groundwater during construction. The investigation also identified the likely presence of acid sulfate soils within the central and southern parts of the subject site, thus requiring an Acid Sulfate Soils Management Plan to be prepared prior to any soil disturbance.

Traffic and transport

A Traffic Impact Assessment (TIA) has been prepared for the proposed development. The TIA demonstrates that the proposed development has been suitably designed to accommodate all vehicles expected to access each proposed building, including fire appliances and up to 26m B-Double trucks, and to provide for the entry and exit of all vehicles in the forward direction. Each proposed building site has been designed to accommodate parking in accordance with the rates specified by the Moss Vale Enterprise Corridor Development Control Plan. The TIA also concludes that the proposed development will not negatively impact access to surrounding properties, parking availability, public transport, or the broader road network.

Water

The potential impacts of the proposed development on water quality, natural flow regimes, existing waterways, and the existing water supply and sewerage networks have been assessed through a number of studies. The studies have concluded the following:

- On-site detention for each proposed building is required for post-development flows to achieve pre-development conditions;
- The proposed stormwater treatment trains for each building meet the Neutral of Beneficial Effect on Water Quality requirements;
- Two minor hydrolines will be realigned through the proposed stormwater system. Modelling of stormwater flows demonstrates that there will be no impacts to flood levels, flood behaviour, or to overland flows through neighbouring properties;
- Upgrades to the existing water supply system along Berrima and Bowman Road will be required to service the proposed development; and
- Upgrades will be required to the sewer reticulation network to accommodate the proposed development, including additional emergency storage at a downstream pumping station, and an upgrade of pump flow rates at the sewage treatment plant.

Bush fire

As a portion of the subject site is mapped as Bush Fire Prone Land Vegetation Buffer and Vegetation Category 1 a Bush Fire Hazard Assessment was prepared for the proposed development. The assessment concluded that the proposed development could accommodate all required Asset Protection Zones within the proposed footprint, that each building has suitable access for fire appliances, and the building construction can achieve relevant standards for construction within a Bush Fire Prone area.

Biodiversity

A Biodiversity Assessment has been prepared for the proposed development. Due to the historic use of the Site as grazing land, the biodiversity values are low, with minimal native vegetation dominated by weed species. The proposed development will require the removal of seven isolated *Eucalyptus radiata* trees and nine hollow-bearing trees. A Test of Significance was prepared to assess the potential impact of removal of hollow-bearing trees on the Southern Myotis. The test concluded that only two of the hollow-bearing trees provide suitable nesting hollows, and their removal is not considered important to the survival of the species. No further assessment is considered necessary. The proposed development is unlikely to have a significant impact on a threatened species, population or community listed under the BC Act.

Visual Amenity

A Visual Impact Assessment has been prepared for the proposed development. As the proposed development is to occur on largely undeveloped farmland, the local visual character will be altered. The extent of the alteration is

dependent on the viewer angle and the subsequent surrounding landscape context. Due to the surrounding topography, vegetation, and existing development, proximity views into the site are restricted, so this change in land use will be mostly observed from 500m and further from the Site. The viewer number from these locations shall be low. It is anticipated that this change in land use shall be viewed as an extension of the existing industrial development and the proposal shall have a low - moderate accumulative visual impact on the surrounding area.

Waste Management

A waste management plan has been prepared for the proposed development. The plan provides details of the location of waste storage areas and bin types to be used during demolition, construction, and operation of the proposed development, as well as the proposed methods of reuse, recycling, or disposal including suggested receiving facilities, for each waste stream. The plan also includes provisions for the monitoring and review of the plan to ensure it is updated to adequately reflect waste management issues at all stages of the project.

Conclusion

This SEE demonstrates that the proposed development is permissible on the E4 zoned land and will be designed, operated, and managed in accordance with best practice and the requirements of local planning controls. The proposed development will not result in on-site or off-site impacts on sensitive receptors. The proposed development is therefore considered appropriate for the subject site and will not impact negatively on the surrounding environment. This development application is recommended for approval.

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1. Introduction

This Statement of Environmental Effects (SEE) has been prepared to support a development application by SAAS Aus Pty Ltd (SAAS) to create an industrial subdivision on the properties at 2 Bowman Road (Lot 1, DP103123 and Lot 2, DP1070888) and 10 Bowman Road, Moss Vale (Lot 51, DP130176). The proposal also includes the construction of industrial buildings and associated office space and hardstand areas on three of the lots within the proposed subdivision. This report summarises the relevant planning provisions and potential environmental impacts and identifies the mitigation measures that will be implemented as part of the proposal.

1.1. The proponent

SAAS Aus Pty Ltd (SAAS) are suppliers of access equipment products, including a range of fixed and mobile scaffolding, for sale or hire. SAAS's NSW business currently operates from a building in Beverley Hills. Given the company's growth, and the significant growth of the construction industry, SAAS requires additional space to store and maintain equipment and vehicles. SAAS purchased property in Moss Vale to allow for the construction of a range of suitable spaces that would support current operations and allow for future expansion and growth as opportunities become available.

The proposed development will house the operations of the following four businesses owned by SAAS, with each business operated as a separate commercial and legal entity:

- Synergy Access & Scaffolds – specialising in the supply, sale and hire of scaffolding equipment and labour hire services related to the assembly and disassembly of scaffolding;
- Technocraft Australia Pty Ltd – specialising in the retail and commercial sale and hire of steel scaffolding, ringlocks and formwork systems to support the construction industry;
- Screen It Pty Ltd – specialising in the supply of hydraulic lifted screens and related plant and equipment for edge protection to support the construction industry; and
- Bayside Scaffolding Services Pty Ltd – specialising in the supply, sale and hire of scaffolding equipment.

1.2. Planning pathway overview

SAAS are seeking approval to subdivide 2 Bowman Road (Lot 1, DP103123 and Lot 2, 1070888) and 10 Bowman Road (Lot 51, DP130176). The subdivision and boundary adjustments will follow the boundaries of the land use zoning affecting the land (E4 General Industrial and RU2 Rural Landscape), resulting in all created lots having a single land use zone. This approach will better support the use of land within each land use zone in a manner consistent with the zone objectives under the *Wingecarribee Local Environmental Plan* 2010 (WLEP).

The industrial zoned portions of the property are within the Local Industry Precinct, which is located within the Moss Vale Enterprise Corridor. The WLEP and the *Moss Vale Enterprise Corridor Development Control Plan* 2008 (MVEC DCP) do not specify a minimum lot size for industrial land within this precinct. However, the industrial lots proposed for the subdivision will each be greater than 25,000m^2 and provide sufficient space to accommodate a range of industrial uses and vehicle movements. The RU2 zoned portion of the properties is shown on the WLEP Lot Size Map as having a minimum lot size of 40 hectares. The proposed subdivision will result in an RU2 zoned lot of approximately 54.6ha.

The proposed subdivision of land, and boundary adjustments, will result in the following lots:

- Created Lot 1 – 28,800m^2 of land zoned E4 General Industrial;
- Created Lot 2 – 26,400m^2 of land zoned E4 General Industrial;
- Created Lot 3 – 26,200m^2 of land zoned E4 General Industrial; and

- Created Lot 4 – 54.6ha of land zoned RU2 Rural Landscape.

No changes are proposed to Lot 1, DP103123 which forms part of 2 Bowman Road.

This SEE also includes the construction of industrial buildings and associated offices for general industrial purposes, with adjacent hardstand areas on the three created lots with industrial land use zoning. Under the WLEP, general industrial uses are permitted with consent within E4 land use zones. The proposed development will require works within a portion of the RU2 land for the purposes of a stormwater outfall and an easement to facilitate construction of an industrial cul-de-sac. No other development is proposed within the RU2 land.

To facilitate the proposed development, the proposal includes the extension of Bowman Road from the existing cul-de-sac to the intersection with the Hutchinson Road reserve, and the creation of Hutchinson Road along the southern boundary of Created Lot 3, terminating in an industrial cul-de-sac. Consequently, the proposal is considered integrated development under Clause 4.46 (1) of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) as approval will be required under Section 138 of the *Roads Act* 1993. Further, approval for the development will be required under Chapter 3, Part 4 of the *Water Management Act* 2000 for water management work and construction of the stormwater outfall (drainage work). This approval is required for works that will impact the mapped watercourses that pass through Created Lot 1 and Created Lot 3.

The subdivision and building construction is not considered designated development under Schedule 3 of the *Environmental Planning and Assessment Regulation* 2021.

As the estimated cost of the development exceeds $30 million, the proposed development is declared to be regionally significant development under Clause 2.19 of the *State Environmental Planning Policy (Planning Systems)* 2021. As per Clause 4.5(b) of the *Environmental Planning and Assessment Act* 1979, the regional planning panel for the area in which the development is to be carried out is the consent authority. Therefore, the Southern Regional Planning Panel will be the consent authority for this development application.

Legal advice has also been sought to confirm the planning pathway for this Proposal. This legal advice is provided in Appendix AA.

1.3. Pre-lodgement meeting and DA checklist

A pre-lodgement meeting was held with a Senior Town Planner and Development Engineer from Wingecarribee Shire Council (WSC) on 14th March 2023. WSC identified a number of key points to be addressed by this SEE. The outcomes of this meeting are discussed further in Section 7.3.1. Table 1.1 summarises the information requirements identified for this application and identifies the relevant sections of this report addressing each requirement.

Table 1.1. Supporting information requirements for the development application as identified during the pre-lodgement meeting, and as required by Wingecarribee Shire Council generally.

Requirement	Response
Pre-lodgement Meeting	
Clause 7.5 of *Wingecarribee Local Environmental Plan* 2010	Sections 8.5.2 and 8.5.3. Appendix Q
Chapter 8 of SEPP Biodiversity and Conservation – Sydney Drinking Water Catchment	Sections 8.5.2 and 8.5.3. Appendix Q
Chapter 4 of SEPP Resilience and Hazards – Remediation of Land	Section 8.2 and Appendix L
Water and Sewer Concept Plan including modelling	Section 8.5 and Appendix S
Concept Civil Works Package including all stormwater management works	Appendix G
Flood report and modelling for watercourse modification proposals	Section 8.5 and Appendix R
Traffic Impact Study including upgrades to Bowman Road	Section 8.4 and Appendix N and O
Wingecarribee Council DA Checklist	
Plans	
Site Plan	Appendix F
Floor Plans	
Elevations and Sections	
Notification Plans	
Cut and Fill Plans	Appendix G
Erosion and Sediment Control Plan	Appendix G and P
Statement of Environmental Effects	This report
Bushfire Assessment	Section 8.6 and Appendix T
Biodiversity Report	Section 8.7 and Appendix U
Owner's Consent	Appendix A

2. Site Description

2.1. General location

The property is located at 2 and 10 Bowman Road, Moss Vale (the subject site) (Figure 2.1). The subject site is approximately 2km north-west of the Moss Vale central business district in the area defined as the Moss Vale Enterprise Corridor. The property shares its northern boundary with the Moss Vale Resource Recovery Centre and Community Recycling Centre, and Anderson Waste Services is located immediately east of the property. The Moss Vale Sewage Treatment Plant is located south of the property on the opposite side of Whites Creek. Much of the broader surrounding land is used for primary production and other rural operations.

The property at 2 Bowman Road is a split zoned site comprising of two lots—Lot 1, DP103123 and Lot 2, DP1070888 (Figure 2.2). Lot 1, DP103123 is located on the opposite side of Whites Creek to the remainder of the property. It is approximately 0.8ha in area and consists entirely of C3 Environmental Management land zoning. No development is proposed on this portion of land.

Lot 2 covers an area of approximately 14.2ha and is divided into three areas by the Bowman Road easement. These areas are herein referred to as Area 1, Area 2, and Area 3 (Figure 2.2). The Lot consists of the following land use zones:

- E4 General Industrial; and
- RU2 Rural Landscape.

The adjacent property at 10 Bowman Road (Lot 51, DP130176) is a 48-hectare rural property, adjacent to the western boundary of Lot 2. The majority of the property is zoned RU2 with the exception of an area of approximately 12,500m^2 in the north-east portion of the Lot zoned E4 (Figure 2.2).

2.2. Site conditions

The Site consists of predominantly cleared rural land previously used for cattle grazing. A 350m long unsealed road connects the existing dwelling within the RU2 zone at the southern end of Area 1, to the cul-de-sac on Bowman Road. The road also provides access to two large rural storage/stock sheds within the E4 zone. A small row of mature trees is located adjacent to the storage sheds and a number of mature trees have been retained around the existing dwelling. The remainder of the property is covered by pasture grasses.

2.3. Site topography and drainage

The land slopes generally from the north down towards Whites Creek, with the slope increasing at the southern end of Area 2 and through the paper road reserve. Drainage is via overland flow towards a small tributary of Whites Creek that traverses the south-east corner of Area 2 and centrally through Area 3. The north-western portion of Lot 2 has a slight slope downwards to the west.

2.4. Waterways

Two drainage lines, that are mapped waterways, pass through the property and the development area (Figure 2.4). One consists of a slight drainage depression that passes through Area 1 and flows in a north-westerly direction towards a large dam on the northern side of Abattoir Road. The second is in the southern part of Area 2 and flows from a small dam on the eastern neighbouring property to the dam in Area 3. The drainage line then flows from the dam in a south-easterly direction to join Whites Creek at the eastern end of Area 3. Both waterways are ephemeral in nature and are

likely to only flow during heavy rainfall events. The effects of the proposed development on the waterways and overland flow are addressed in Section 8.5.

2.5. Adjoining premises and sensitive receivers

The Site is surrounded by a mix of commercial and industrial premises, and rural dwellings. Nearby businesses and premises are shown in Figure 2.5. The activities of the adjoining businesses are summarised in Table 2.1.

Table 2.1. Adjoining and nearby businesses.

Address	Business	Description of Business
177 Berrima Road	Moss Vale Service Centre	Waste / recycling business
177 Berrima Road	Resource Recovery Centre and Community Recycling Centre	Waste / recycling business
177 Berrima Road	Wingecarribee Animal Shelter	Animal Shelter
3 Bowman Road	Mulreadys Bulk Haulage	Heavy equipment hire and bulk quarried materials supply
12/14 Old Dairy Close	Anderson Waste Services	Waste / recycling business
21-23 Old Dairy Close	Coach House Timbers	Lumber store
54 Berrima Road	Gubbins Pulbrook Mitre 10 Moss Vale	Hardware store
LOT 121 Berrima Road	Concrite	Ready mix concrete supplier
Unnamed Road	Moss Vale Sewage Treatment Plant	Sewage Treatment Plant

The closest residential properties are located approximately 600m to the east of the subject site.

Other nearby businesses, outside a 500m radius include the Moss Vale Abattoir and Wingecarribee Shire Council's Southern Regional Livestock Exchange. It is understood that the Moss Vale Abattoir has not been operating for 25 years and is being remediated.

2.6. Traffic

The subject site is accessed from Bowman Road, Moss Vale. Bowman Road joins Berrima Road approximately 220m north-east of the property boundary. Bowman Road between the property and Berrima Road consists of a 12.5m wide, sealed, two-way road that terminates in a cul-de-sac at the property boundary. The Bowman Road reserve extends a further 425m to the south-west, dividing Areas 1 and 2 of the property. Bowman Road is classified as a local road.

Traffic on Bowman Road consists of both heavy and passenger vehicles due to providing access to the Mulreadys Bulk Haulage depot and the Council Resource Recovery Facility which includes the Wingecarribee Community Recycling Centre.

Berrima Road is classified as a Regional Road and provides a major link between the Moss Vale town centre and Illawarra Highway in the south-east, and New Berrima, Berrima and the Hume Motorway (M31) in the north-west. Berrima Road is a designated 25m/26m B-Double route within the Higher Mass Limits network.

2.7. Site history and approvals

A request for information on the history of development consent on the subject properties was submitted to Wingecarribee Shire Council under the *Government Information (Public Access) Act 2009* (GIPA request). Table 2.2 provides a summary of the development consents identified.

Table 2.2. Development consent history for the properties at 2 and 10 Bowman Road, Moss Vale.

Consent Number	Date	Description
Building Permit 98/77	01/06/1977	Concrete batching plant and office
Building Permit 203/79	03/09/1979	Garage and carport
DA 32/27/1481/82	14/09/1982	Extension of existing workshop
BA 1044/81	17/01/1983	Steel garage/shed
DA 02/0598	29/05/2002	Boundary adjustment
LUA01/1674	21/03/2002	Combined Construction Certificate and Water Plumbing, stormwater, sanitary drainage and septic tank approval

2.8. Easements and covenants affecting the property

Areas 1 and 2, and Lot 51 are affected by a 25m wide high pressure gas transmission pipeline easement owned and operated by APA Group (APA). The easement accommodates APA's Moomba to Sydney Ethane Pipeline and Moomba to Wilton Natural Gas Pipeline. Consultation with APA, including conduct of a risk management workshop during the design phase of the project, has been ongoing. Details of the consultation and APA's requirements for works within the easement are detailed in Section 7.3.2.

2.9. Other matters noted in the Planning Certificate

The s10.7(2&5) planning certificate notes that part of the land is within the flood planning area and the probable maximum flood area (Appendix B). Part of the land is subject to flood related development controls. The affected portion of land is within the RU2 zoned land of Lot 2, DP1070888 adjacent to Whites Creek. It is proposed to construct a stormwater outfall within this portion of land, near to the boundary of Hutchinson Road, and create an easement to allow space for the construction of an industrial cul-de-sac at the termination of Hutchinson Road. Both elements will be located above the flood planning level. No other structures or development works are proposed within this area.

The northern corner of Lot 51, DP130176, including the E4 zoned land, is mapped as bush fire prone land. The land to be included within the proposed building development is mapped as Vegetation Buffer. A Bush Fire Risk Assessment has been prepared for the proposal (Section 8.6 and Appendix T).

The land is unsewered land to which *State Environmental Planning Policy (Sydney Drinking Water Catchment)* 2011 applies. A Sewer Connectivity Feasibility Study and Neutral or Beneficial Effect on Water Quality Assessment have been prepared for the proposal (Section 8.5.1.4 and Appendix S, and Section 8.5.2.2 and Appendix Q respectively).

The land is identified by the WLEP as being environmentally sensitive land. The proposal has been designed to avoid direct impacts to the more sensitive land adjacent to Whites Creek and within the RU2 and C3 land use zones by excluding those zones from the development. A biodiversity assessment has also been prepared (Section 8.7 and Appendix U), along with a stormwater management plan that addresses Water Sensitive Urban Design and management of run-off volumes and water quality (Section 8.5.2.3 and Appendix R).

Figure 2.1. Location of the properties at 2 and 10 Bowman Road, Moss Vale NSW 2577. Property boundaries shown in red.

Date	Revision	Drawn By	Site description
02/08/2022	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)

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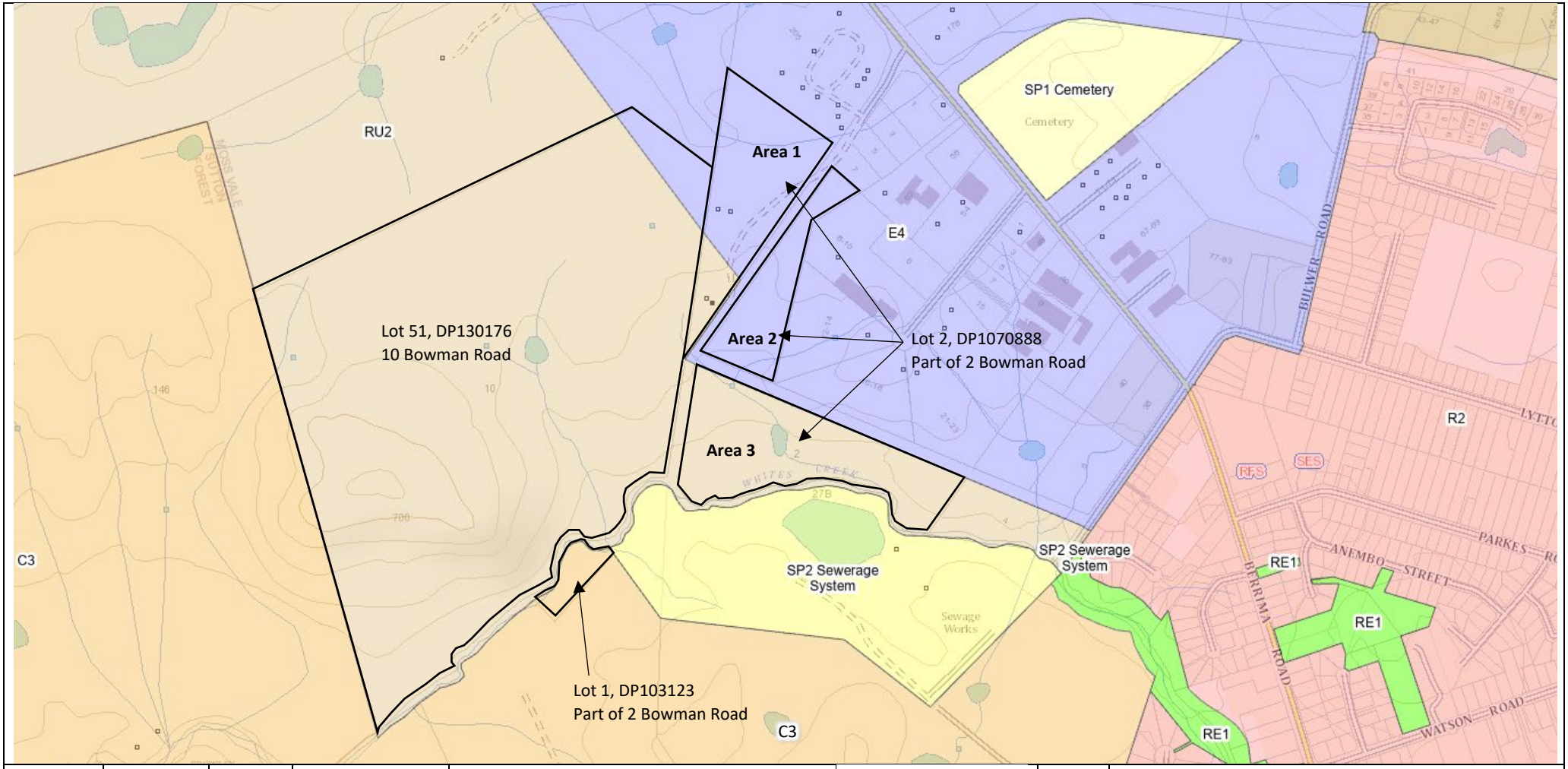
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Location of 2 and 10 Bowman Road, Moss Vale NSW 2577.
Scale	Not to scale
Source	Nearmap

Figure 2.2. Property boundaries and land use zoning for 2 and 10 Bowman Road, Moss Vale NSW 2577.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
01/05/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Property Boundaries and Land Use Zones
						Scale	Not to scale
						Source	NSW Crown Copyright – Department of Planning and Environment

Figure 2.3. Boundary of the proposed development area (shown in red).

Date	Revision	Drawn By	Site description
02/08/2022	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)

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E: admin@jacksonenvironment.com.au
T: 02 8056 1849
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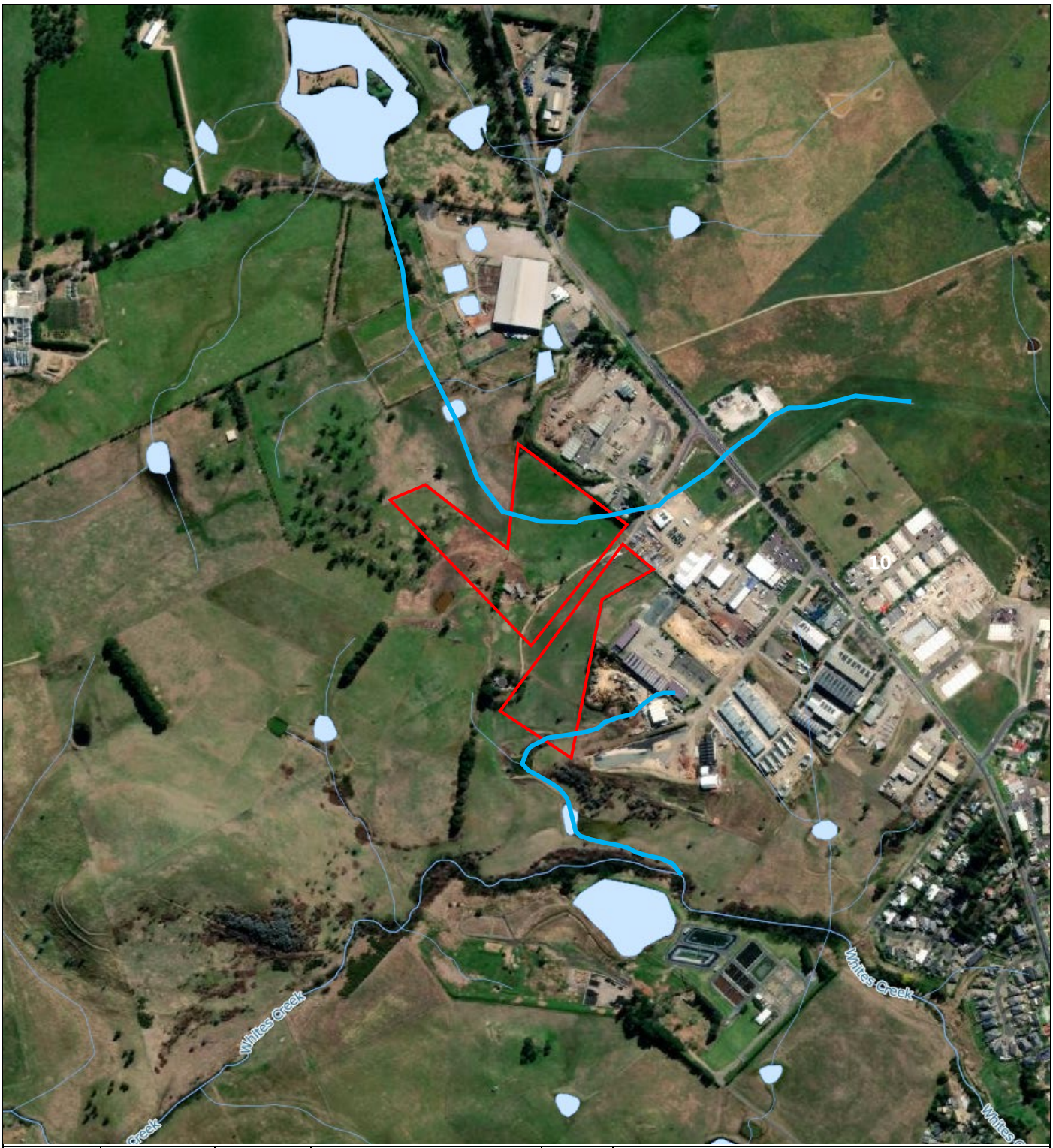
Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Proposed Development Area
Scale	Not to scale
Source	Nearmap

Figure 2.4. Location of mapped waterways within and surrounding the proposed development site.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
12/08/2022	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Mapped Watercourses
				Source	Water Management (General) Regulation 2018 hydroline spatial data 1.0

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Figure 2.5. Location of neighbouring businesses. The blue circle indicates a 500m radius from the development area (shown in red).

Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
02/08/2022	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Location of Neighbouring Businesses
						Scale	Not to scale
						Source	Nearmap

3. Proposed Development

The proposed development includes the subdivision of the existing Lot 2, DP1070888 and Lot 51, DP130176, construction of three industrial buildings on the created industrial lots, and formation of the Bowman Road extension and partial formation of Hutchinson Road to facilitate access to the subdivision.

3.1. Proposed subdivision

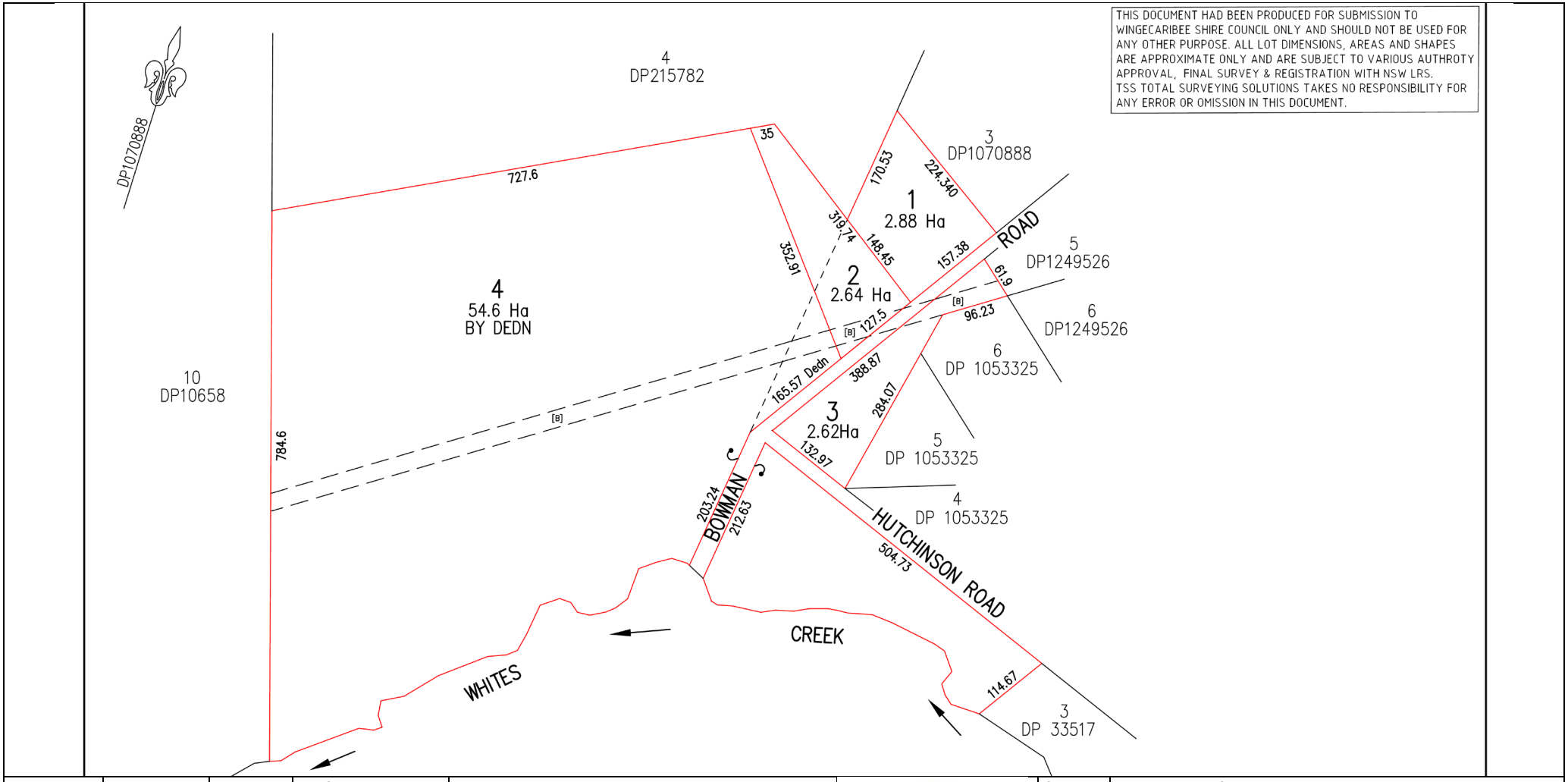
The proposed subdivision will involve the property at 2 Bowman Road (Lot 1, DP103123 and Lot 2, DP1070888) and the property at 10 Bowman Road (Lot 51, DP130176) (the subject properties). Both properties have multiple land use zones under the WLEP, as shown on Figure 2.2. The proposed subdivision has been designed to maximise the potential of industrial zoned land within the subject properties, and to better support the management of rural and conservation zoned land, in line with the zone objectives specified in the WLEP.

The proposed subdivision excludes the C3 zoned land described as Lot 1, DP103123. No changes are proposed to this Lot.

The proposed subdivision will result in the creation of the following four lots as shown in Figure 3.1:

- Created Lot 1 – approximately 2.88ha of land zoned E4 General Industrial. Access to the lot will be directly from Bowman Road at the eastern end of the lot. The road frontage will be approximately 157m, and the depth of the lot will vary from approximately 148m on the southern boundary, to approximately 224m on the northern boundary;
- Created Lot 2 – approximately 2.64ha of land zoned E4 General Industrial. This lot will be formed by adjusting the boundaries of Lot 51 and Lot 2 to match the land use zone boundaries. This lot has a frontage to Bowman Road at the south-eastern end of the lot approximately 127m wide. The lot will be approximately 353m deep, tapering to a width of approximately 35m at the north-western boundary. This lot is affected by the gas pipeline easement at the south-eastern end;
- Created Lot 3 – approximately 2.62ha of land zoned E4 General Industrial. This is an irregularly shaped lot with a frontage to Bowman Road of approximately 389m. This lot also has a frontage of approximately 133m to the unformed paper road, Hutchinson Road, on the southern boundary. The northern portion of this lot is affected by the gas pipeline easement; and
- Created Lot 4 – approximately 54.6ha of RU2 Rural Landscape zoned land. This is an irregularly shaped lot that includes the RU2 zoned land from the existing Lot 51 and the RU2 zoned land from the existing Lot 2. This Lot is divided by the southern end of the Bowman Road reserve and is affected by the gas pipeline easement. The southern boundary of this lot is defined by Whites Creek, and portions of the Lot are within Wingecarribee Shire Council's Flood Planning Area.

Figure 3.1. Proposed subdivision layout.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
08/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Proposed Subdivision Layout
						Scale	Not to scale
						Source	Total Surveying Solutions

3.2. Roadways

To support the proposed subdivision and provide access to all created Lots, the proposal includes the southern extension of Bowman Road and the formation of part of Hutchinson Road (Figure 3.2 and Figure 3.3 and Appendix G). The proposal includes the following:

- Extension of Bowman Road along the existing road reserve in a south-westerly direction. The extension will commence at the existing cul-de-sac and extend for approximately 430m;
- Formation of Hutchinson Road within the existing paper road reserve along the southern boundary of Area 2. The road will extend south-east from the intersection with Bowman Road for approximately 160m and will terminate in an industrial standard cul-de-sac;
- Additional engineering, as per APA Group's specifications, for the crossing of the gas pipeline easement;
- Installation of stormwater infrastructure as per the stormwater management design in Appendix G;
- Installation of lighting within the public road reserve suitable for a local road primarily used for access to abutting properties; and
- Landscaping, including the use of street trees and pedestrian footpaths.

3.3. Building development

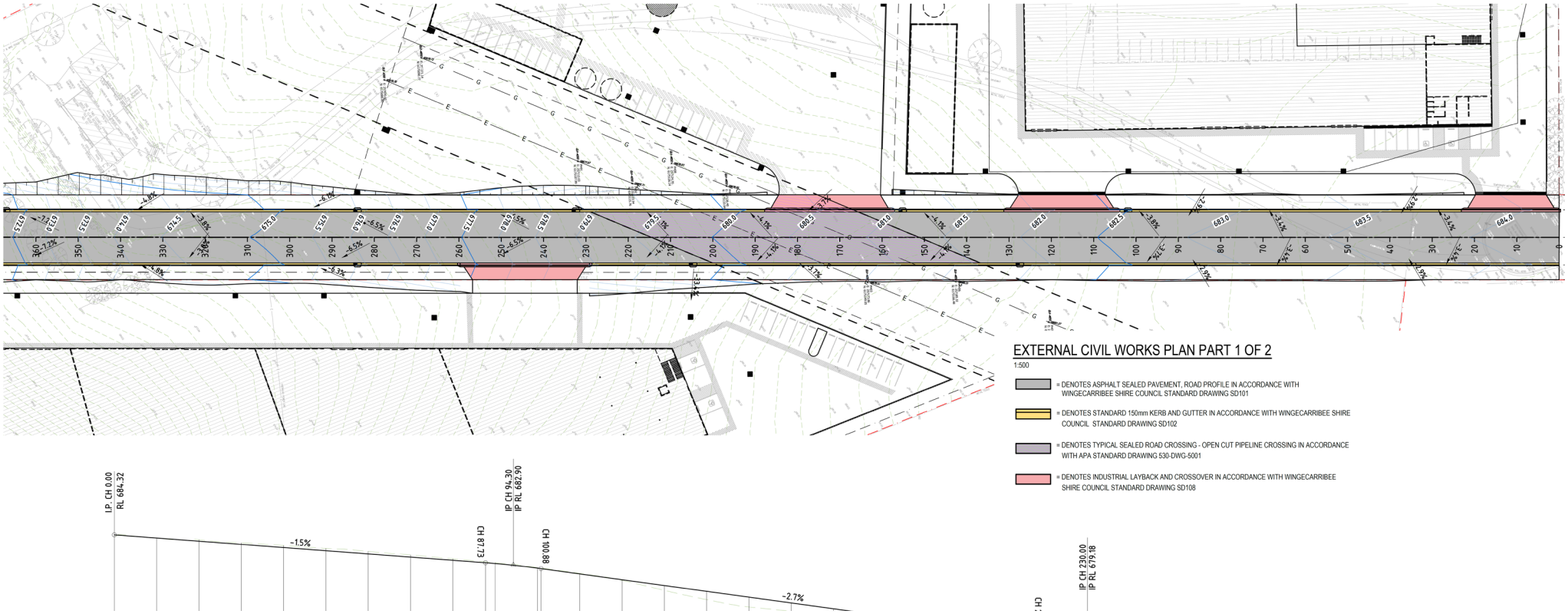
The proposed development includes the construction of a large, industrial buildings on each of Created Lots 1, 2 and 3 of the subdivision (Figure 3.4). These buildings are referred to as Building 1 (on created Lot 1), Building 2 (on created Lot 2) and Building 3 (on created Lot 3) throughout this report.

3.3.1.Earthworks

The proposed buildings have been designed with respect to the natural topography of the subject site in order to minimise the need for cutting and filling. However, the cut and fill model predicts an additional 63,535m^3 of fill will be required for the proposed development, with the greatest application of fill to occur towards the western end of Building 1 and at the southern end of the subject site, alongside Hutchinson Road (Figure 3.5 to Figure 3.8 and Appendix G) for Building 3.

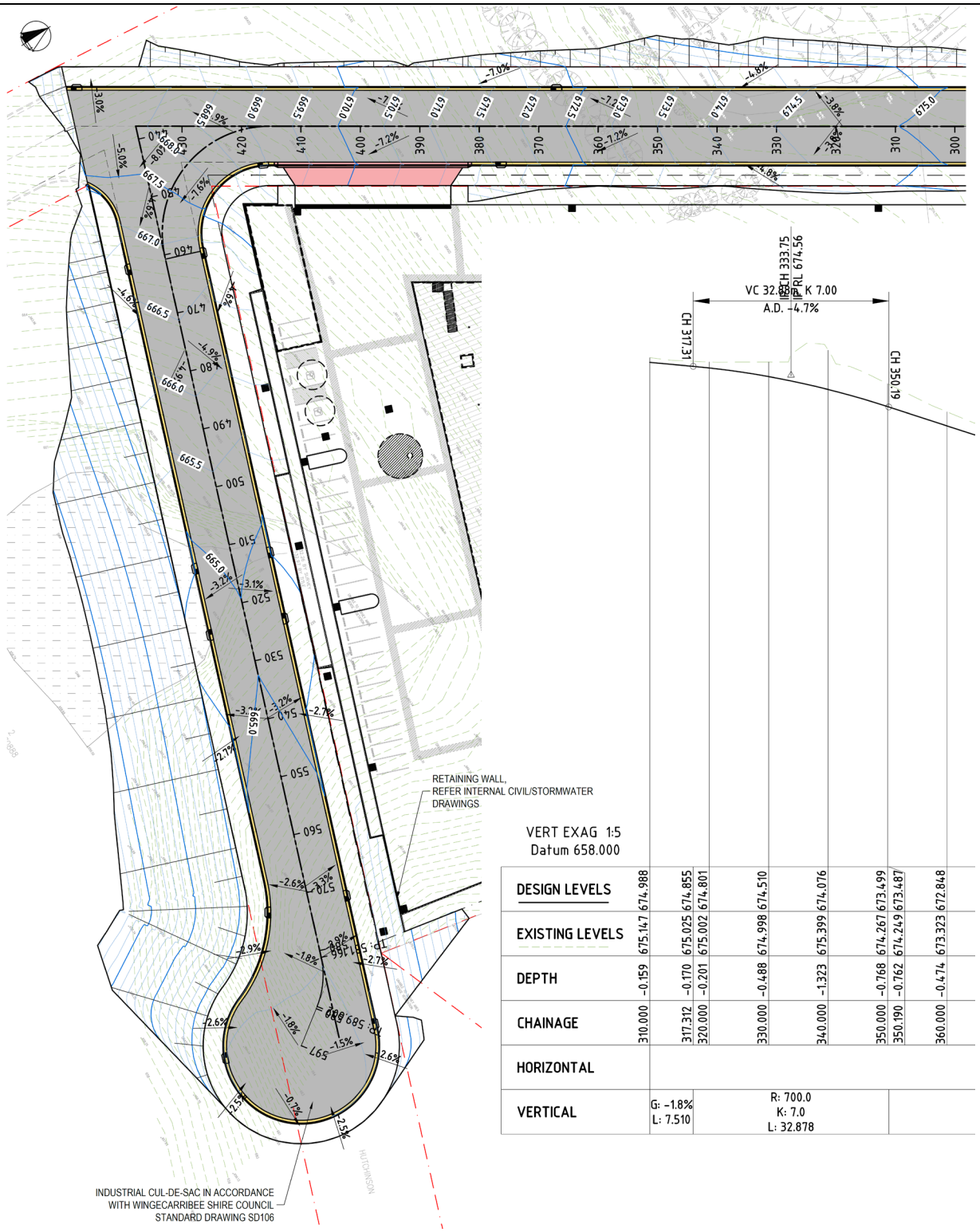
SAAS intends to reuse all material excavated from the subject site, along with a combination of virgin excavated natural material, excavated natural material, and suitable material that meets the requirements of a resource recovery order and exemption and where the material can achieve the required engineering and environmental standards defined in the relevant resource recovery orders and exemptions. Use of such waste materials as fill will reduce the construction costs for the project and provide for the beneficial reuse of recovered resources in line with the *NSW Waste and Sustainable Materials Strategy 2041* (NSW Department of Planning, Industry and Environment, 2021).

Figure 3.2. Proposed development of Bowman Road and Hutchinson Road – northern section.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
08/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Proposed Development of Bowman Road and Hutchinson Road
						Scale	Not to scale
						Source	ECLIPSE Consulting Engineers

Figure 3.3. Proposed development of Bowman Road and Hutchinson Road – southern section.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
08/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Proposed Development of Bowman Road and Hutchinson Road
				Source	ECLIPSE Consulting Engineers

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T: 02 8056 1849
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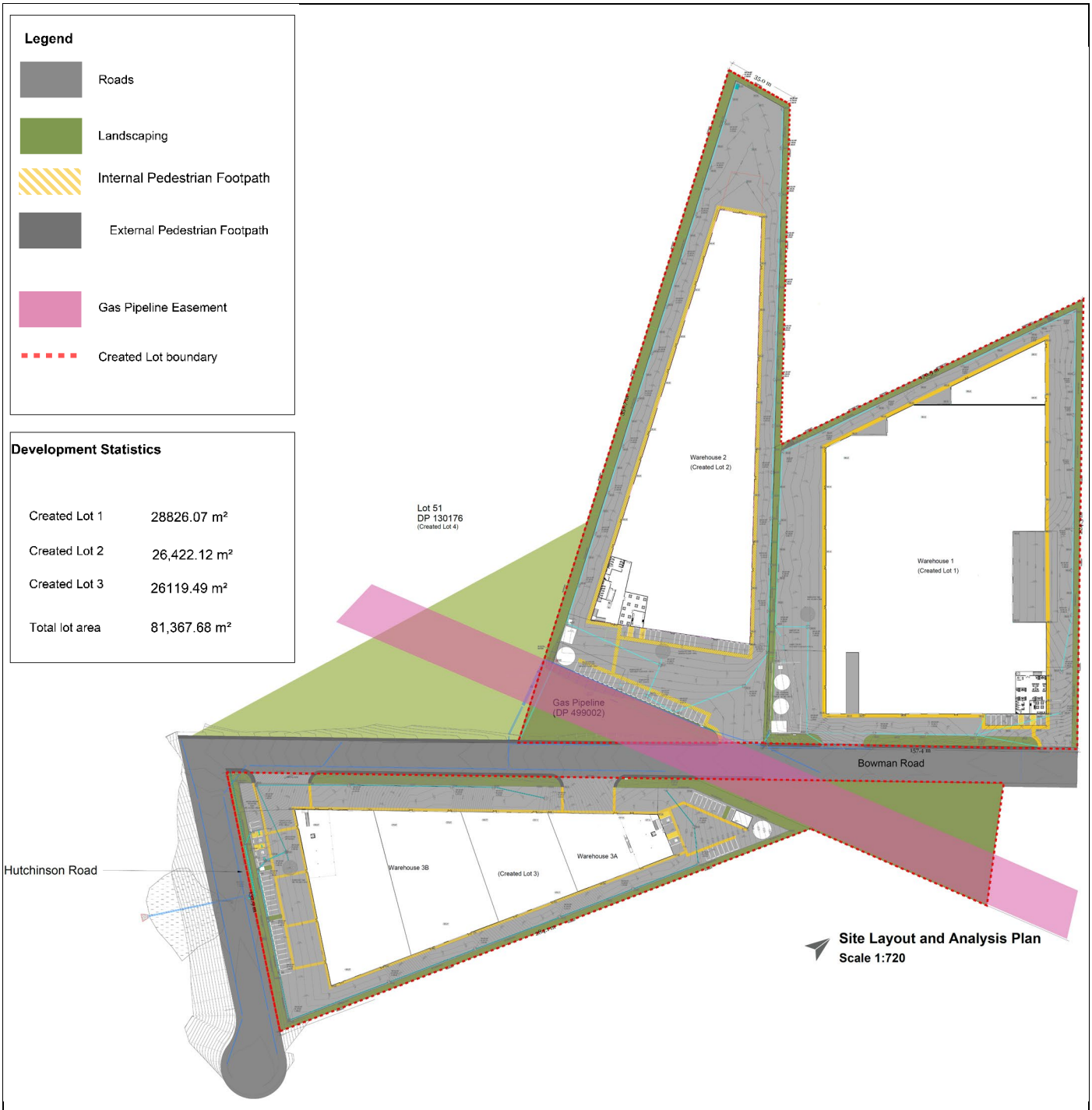
Figure 3.4. Proposed general arrangement of the building development within the proposed subdivision.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Proposed General Arrangement
				Source	Jackson Environment and Planning Pty Ltd

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A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
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T: 02 8056 1849
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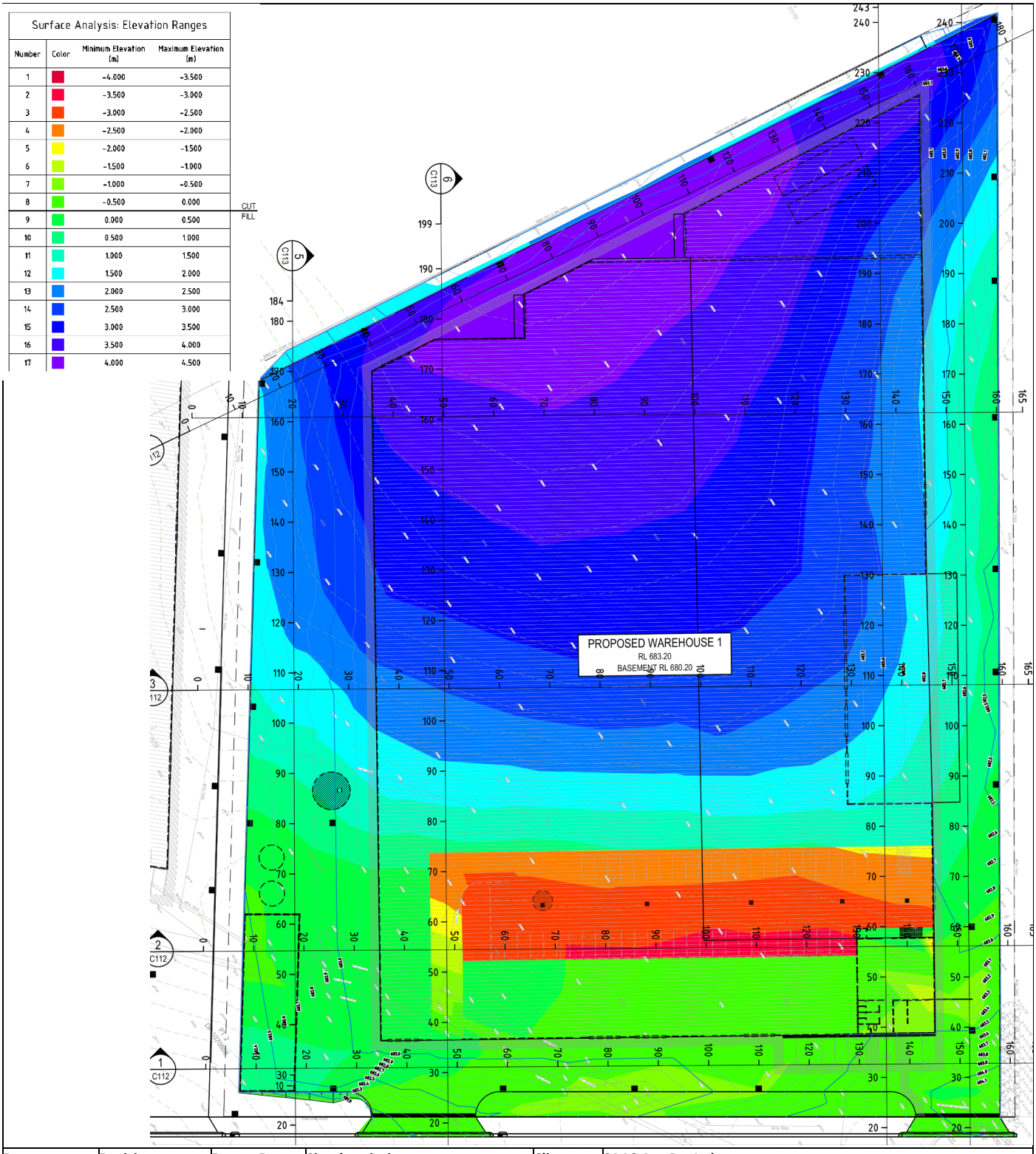
Figure 3.5. Proposed cut and fill plan for B1.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Cut and Fill Plan – B1
				Source	ECLIPSE Consulting Engineers

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A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
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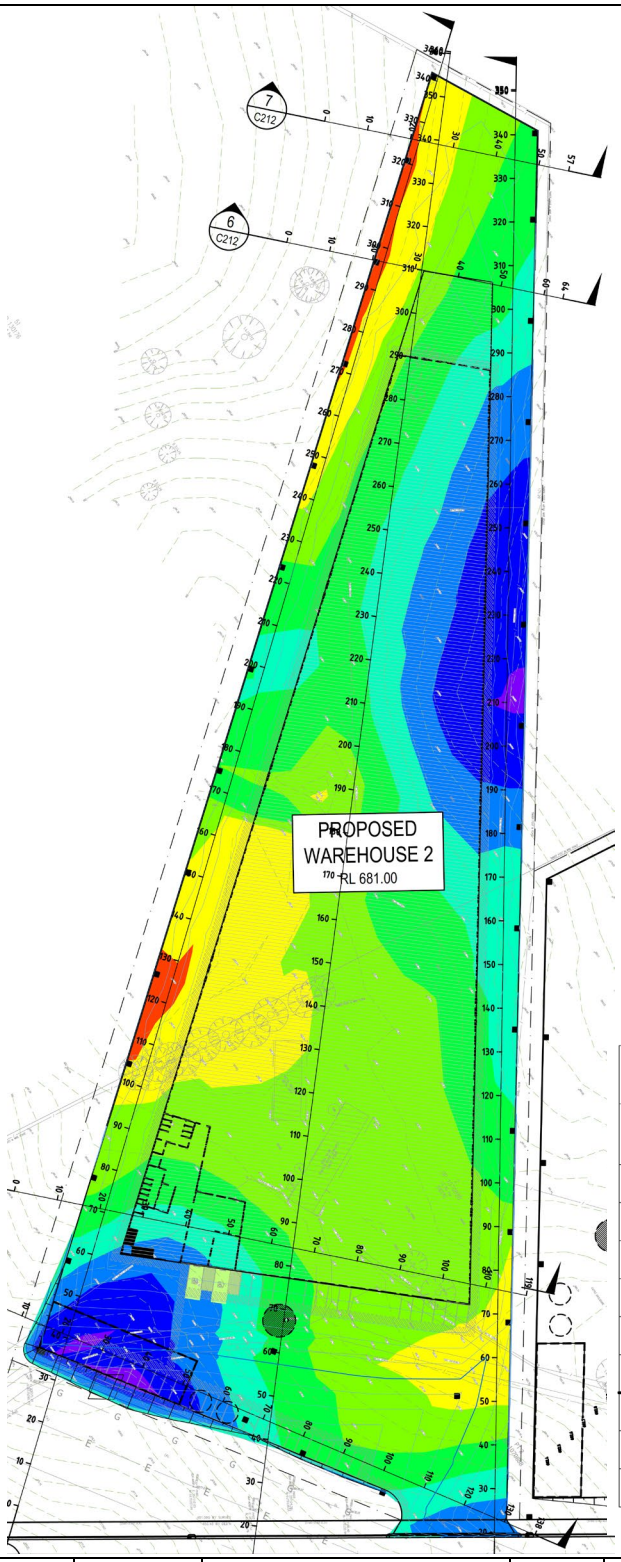
Figure 3.6. Proposed cut and fill plan for B2.



Surface Analysis: Elevation Ranges

Number	Color	Minimum Elevation (m)	Maximum Elevation (m)	
1		-3.000	-2.500	
2		-2.500	-2.000	
3		-2.000	-1.500	
4		-1.500	-1.000	
5		-1.000	-0.500	
6		-0.500	0.000	CUT
7		0.000	0.500	FILL
8		0.500	1.000	
9		1.000	1.500	

Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Cut and Fill Plan – B2
				Source	ECLIPSE Consulting Engineers

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T: 02 8056 1849
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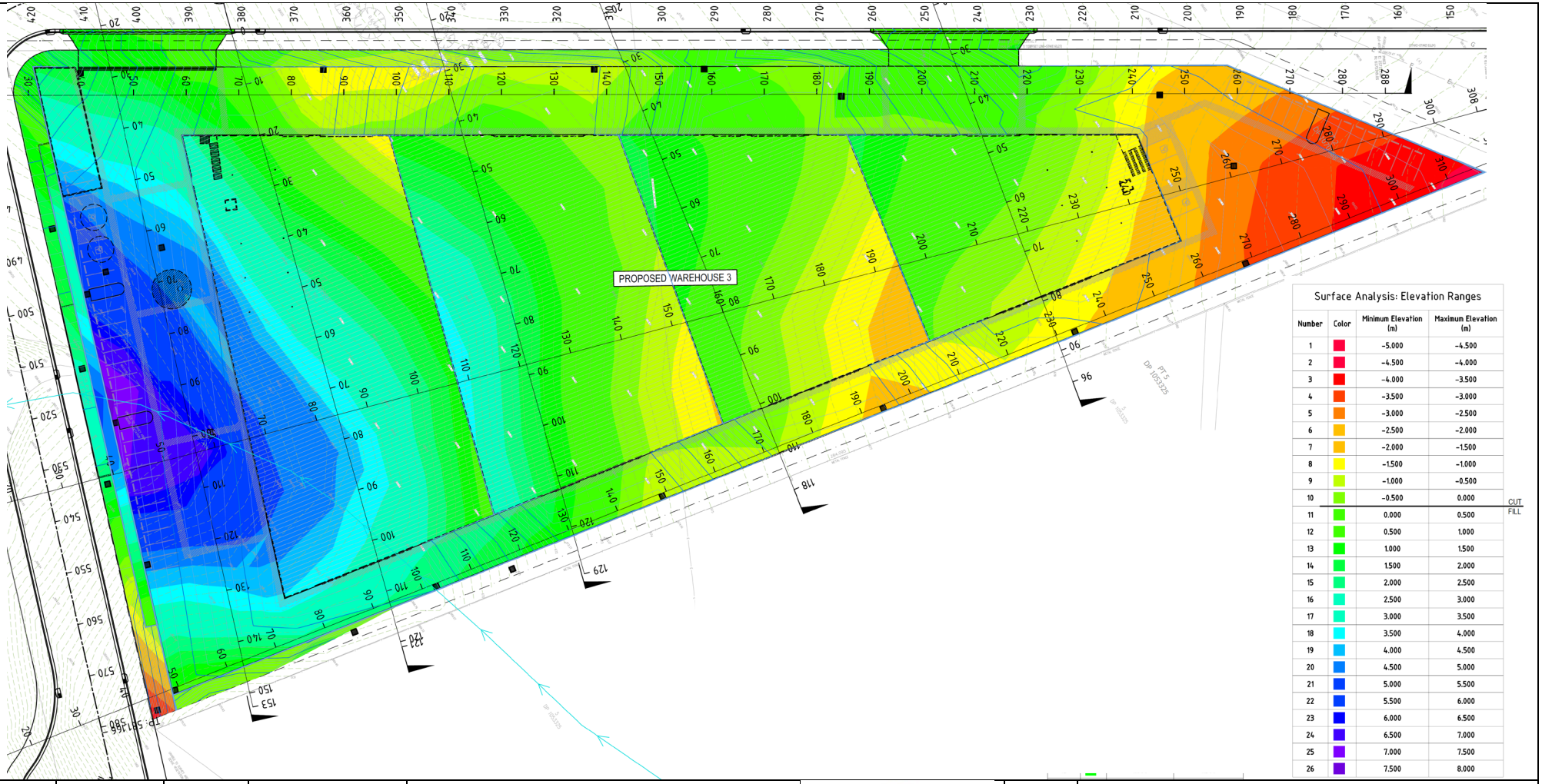
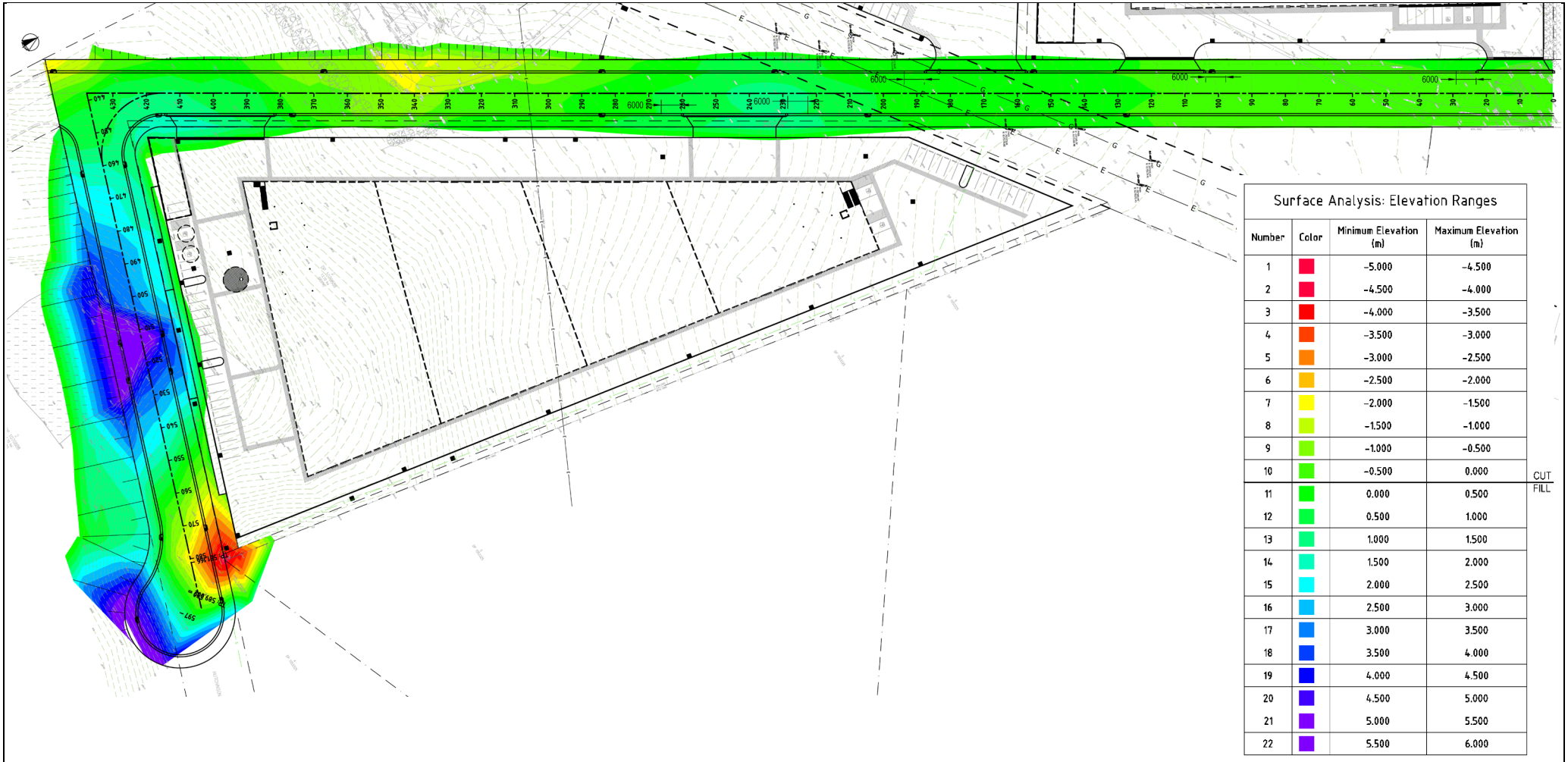
Figure 3.7. Proposed cut and fill plan for B3.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
08/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Cut and Fill Plan – B3
						Scale	Not to scale
						Source	ECLIPSE Consulting Engineers

Figure 3.8. Proposed cut and fill plan for Bowman Road and Hutchinson Road.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
08/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Cut and Fill Plan – Bowman Road and Hutchinson Road
						Scale	Not to scale
						Source	ECLIPSE Consulting Engineers

3.3.2.Building 1

Building 1 is to be constructed on the E4 zoned Created Lot 1 in the north of the subject site. Building 1 will consist of an irregularly shaped building with a gross floor area of 17,370.73m^2 entirely surrounded by hardstand that includes a haul road around the building, nine visitor parking spaces, and outdoor truck parking (Figure 3.9). The internal haul road runs around the entire perimeter of the building providing access to the truck parking area, a workshop in the north-western corner of the building to support maintenance activities. A basement carpark will be constructed at the eastern end of the building to provide an additional 50 parking spaces. Two parking spaces will be designated accessible spaces (Figure 3.10).

The north-east corner of the building will include office space over three levels that will be accessible via stairs or a lift from the basement carpark and from the street frontage adjacent to the visitor parking area (Figure 3.11). The total floor area of the office space is 956m^2: ground floor 293.22m^2; first floor 341.6m^2; and second floor 321.61m^2. Each floor of office space includes two male, two female and one accessible toilet, open plan office area and staff kitchen and dining area. The first and second floor offices will also host a server room.

The building will feature nine roller doors along the northern wall and four along the eastern wall providing flexibility for the internal fit out and use of the building. The majority of the building will be constructed from Colorbond® sheeting in Pale Eucalypt, with a Colorbond® roof in Evening Haze. The external walls of the office area will be constructed from Coen Composite Wood Panel in oak, being a sustainable wood and recycled plastic composite building product (or equivalent). The roof will feature translucent panels through the centre to provide natural light in the building, as well as a large solar array. Landscaping will be provided around the entire perimeter of the site to soften the appearance of the building (Figure 3.12). A 3D render of the building is provided in Figure 3.13.

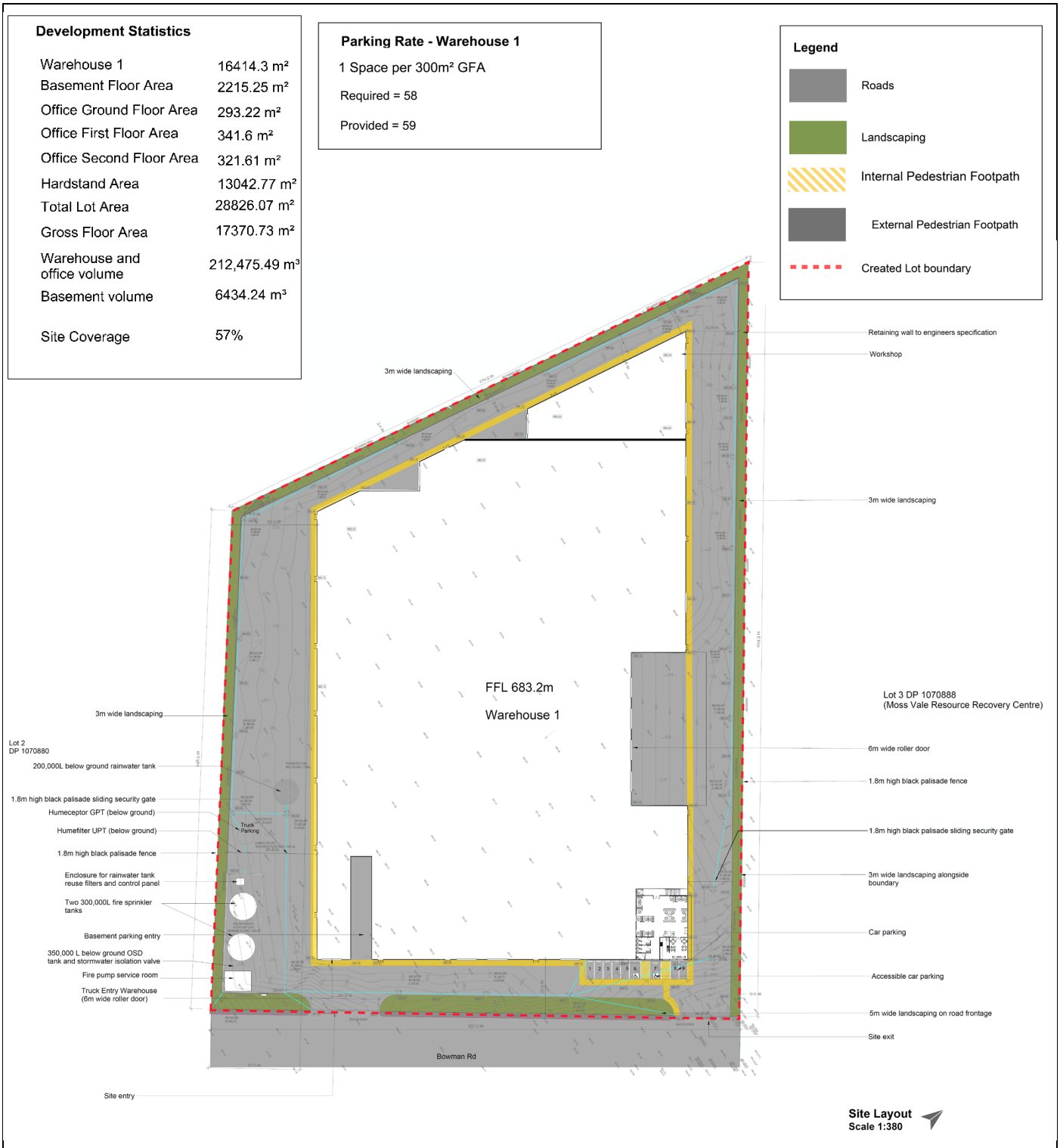
The building and offices will be fitted with a fire sprinkler system and two 300kL static firewater tanks will be installed (Appendix F). A 200kL underground rainwater tank will be installed within the southern hardstand area to capture rainwater from the roof. The rainwater tanks will capture the first 10mm of building roof water for storage and reuse on-site for landscaping irrigation, toilet flushing, truck washing, and any other on-site processes as appropriate.

A 350m^3 below ground stormwater detention tank (OSD) will be constructed in the south-east corner of the site to capture all stormwater runoff from hardstand areas, and overflow from the rainwater tank. Prior to entering the OSD, all stormwater will pass through the HumeCeptor® Gross Pollutant Trap (GPT) and HumeFilter® Universal Pollutant Trap (UPT) treatment devices. The OSD will discharge treated stormwater to the drainage system along Bowman Road. Further details of the stormwater management system are provided in Section 8.5 and Appendix G.

Vehicles will enter the site directly from Bowman Road through a dedicated site entrance towards the southern end. Passenger vehicles will enter the Site and either proceed directly ahead into the basement carpark (entry on the eastern frontage) or turn right towards the visitor parking. Passenger vehicles exiting the car park will turn left and travel on the internal haul road past the visitor parking and exit the site onto Bowman Road through the dedicated site exit in the north-east corner. Trucks will enter the building through a roller door adjacent, and immediately south of, the basement car park entrance. Trucks will circulate through the building in a clockwise direction and exit through a roller door at the western end of the northern wall. Trucks will proceed to the site exit along the internal haul road on the northern side of the site. Further details of vehicle movements and traffic impacts are provided in Section 8.4.

Building 1 will be used by Synergy Access & Scaffolds to support its scaffolding supply, sale and hire business. The main building floor area will be used for the assembly, maintenance, temporary storage, sale, hire and transport of scaffolding equipment for supply to customers. The workshop area will be used to maintain plant and equipment used within the main building. Office space will be used to accommodate sales, marketing, engineering, technical, and labour hire staff to support the business operations.

Figure 3.9. Proposed site layout for Building 1 on Created Lot 1.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	**Project**	Industrial Subdivision and General Industry Development
				Title	Proposed Site Layout – Building 1
				Source	Jackson Environment and Planning Pty Ltd

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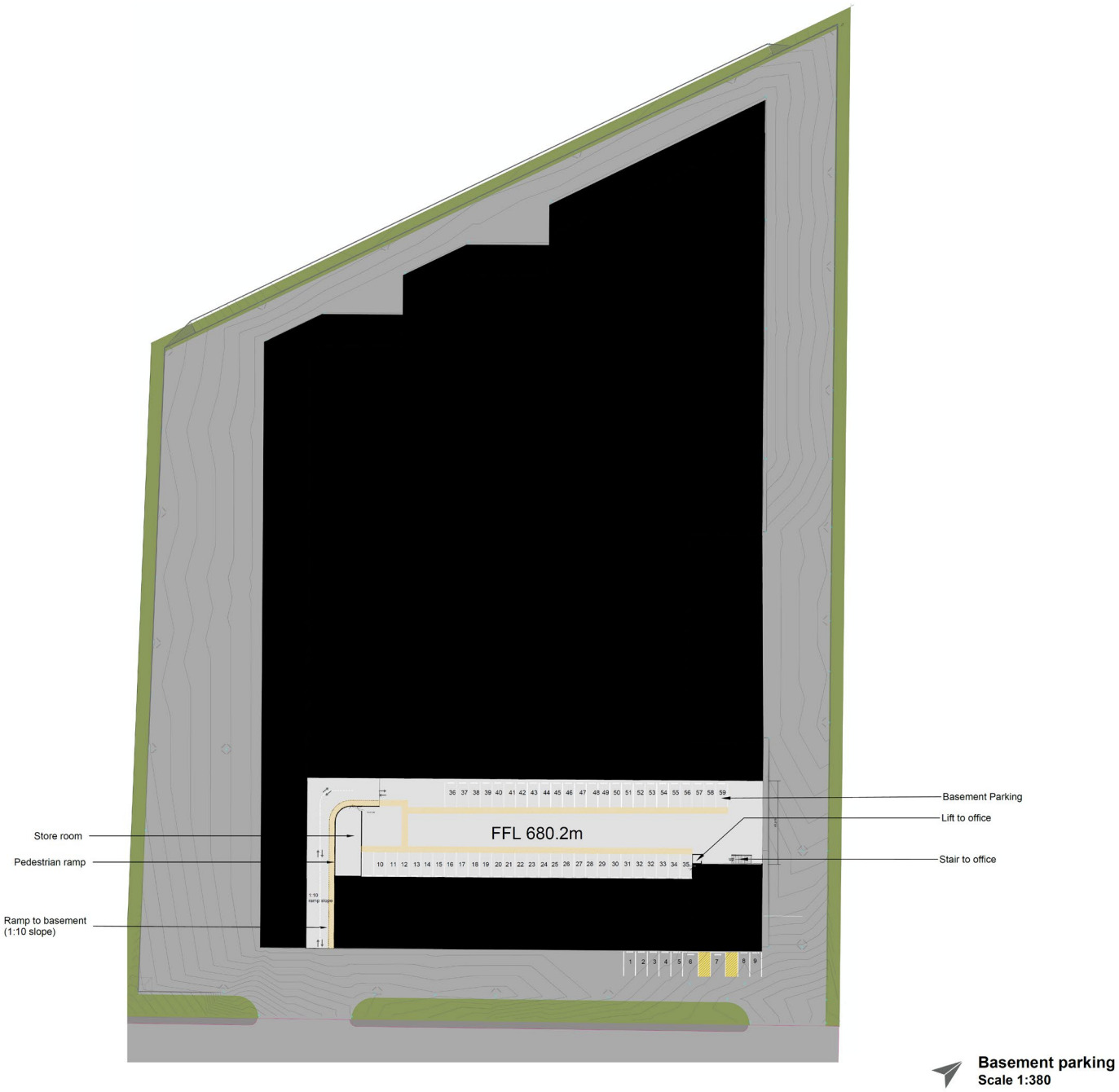
Figure 3.10. Proposed basement carpark for Building 1.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	**Project**	Industrial Subdivision and General Industry Development
				Title	Proposed Basement Carpark – Building 1
				Source	Jackson Environment and Planning Pty Ltd

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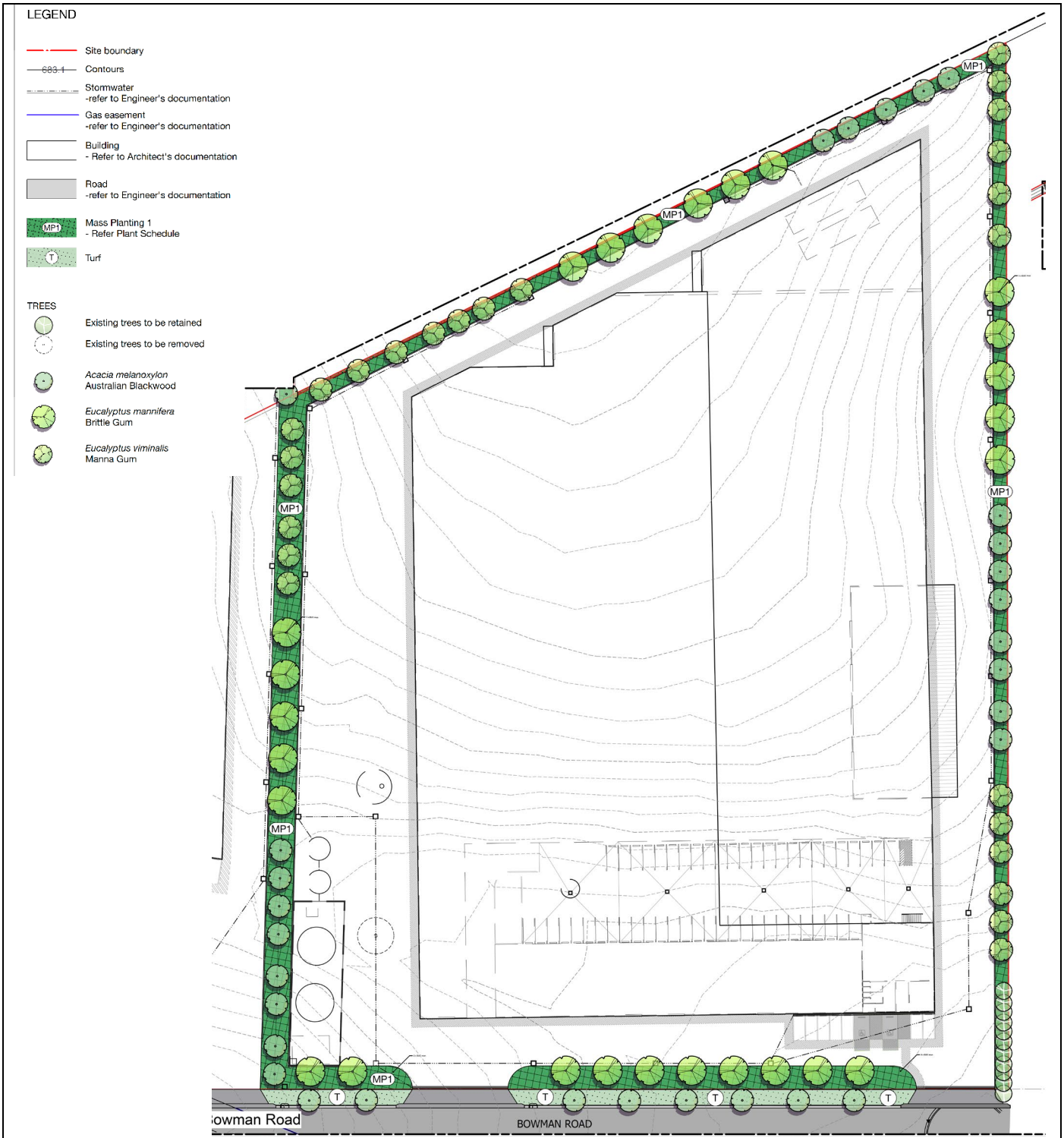
Figure 3.11. Proposed office floor plans for Building 1.

Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Proposed Office Floor Plan – Building 1
						Scale	Not to scale
						Source	Nearmap

Figure 3.12. Proposed landscaping plan for Building 1.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
13/07/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Proposed Landscaping Plan – Building 1
				Source	Moir Landscape Architects

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Figure 3.13. 3D render of proposed Building 1 viewed from Bowman Road.

Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	3D Render of Building 1
						Scale	Not to scale
						Source	Jackson Environment and Planning Pty Ltd

3.3.3.Building 2

Building 2 is to be constructed on the E4 zoned Created Lot 2, immediately south of Building 1. Building 2 will consist of an irregularly shaped building with a gross floor area of 12,795.35m^2 entirely surrounded by hardstand. The hardstand will include a haul road around the building, an undercover loading/unloading area at the rear of the building, 42 parking spaces including two accessible spaces, landscaping around the perimeter of the Site, and a large, landscaped area within the gas pipeline easement along the site frontage (Figure 3.14).

The south-east corner of the building will include office space over two levels, accessible via doors on the street frontage. The total floor area of the office space is 1,931.67m^2: ground floor 607.07m^2; and first floor 1,324.6m^2 (Figure 3.15). The ground floor office space will provide one accessible, three male, and three female toilets, three male and three female showers, a staff locker room, staff kitchen, and dining room. The first floor will include a large open plan office space, conference room, and training room. Access between floors is provided by a lift and stairwell.

The building will feature four roller doors along the southern wall, five along the northern wall, and two on both the eastern and western walls providing flexibility for the internal fit out and use of the building. The majority of the building will be constructed from Colorbond® sheeting in Pale Eucalypt, with a Colorbond® roof in Evening Haze. The external walls of the office area will be constructed from Coen Composite Wood Panel in oak, being a sustainable wood and recycled plastic composite building product (or equivalent). The roof will feature skylights throughout the length of the building to provide natural light, as well as a large solar array. Landscaping will be provided around the entire perimeter of the Site to soften the appearance of the building, and the area affected by the gas pipeline at the eastern end of the site will be maintained as lawn (Figure 3.16). A 3D render of the building is provided in Figure 3.17.

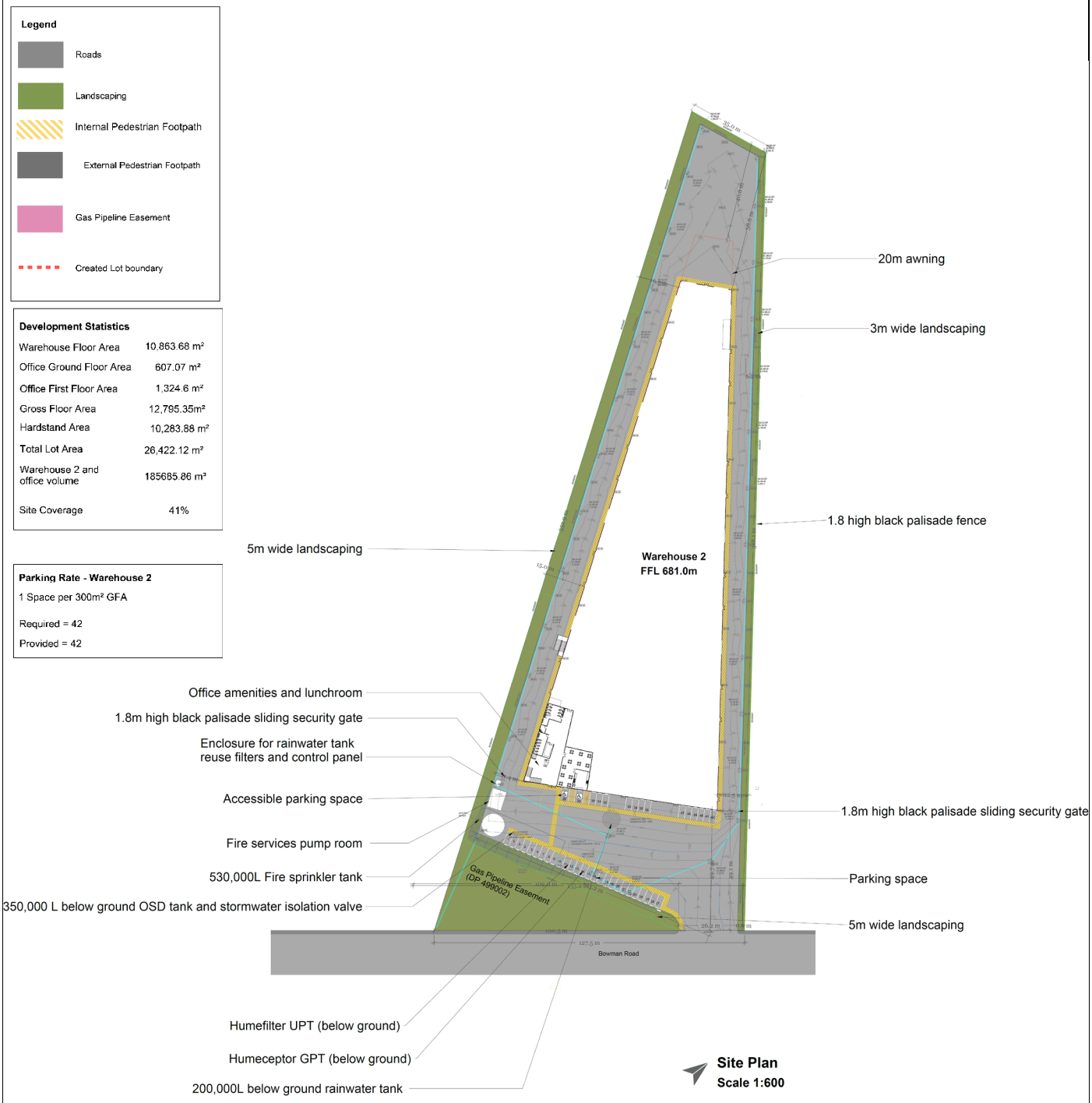
The building and offices will be fitted with a fire sprinkler system and a 530kL static firewater tank will be installed within the hardstand (Appendix F and G). A 200kL underground rainwater tank will be installed under the car parking area to capture runoff from the building roof area. The rainwater tank will capture the first 10mm of building roof water for storage and reuse on-site for landscaping irrigation, toilet flushing, and any other on-site processes as appropriate.

A 350m^3 below ground stormwater detention tank (OSD) will be constructed in the south-east corner of the Site to capture all stormwater runoff from hardstand areas, and overflow from the rainwater tank. Prior to entering the OSD, all stormwater will pass through the HumeCeptor® Gross Pollutant Trap (GPT) and HumeFilter® Universal Pollutant Trap (UPT) treatment devices. The OSD will discharge treated stormwater to the drainage system along Bowman Road. Further details of the stormwater management system are provided in Section 8.5 and Appendix G.

The location of the site entry and exit has been constrained by the presence of the gas pipeline easement. The site entry is located in the north-east corner to avoid the need for construction of roads or parking within the easement. Trucks will circulate around the haul road in a clockwise direction or will enter the building through the large roller door on the eastern wall. Line marking within the carpark and haul road will be used to direct the flow of traffic.

Building 2 will be used by Technocraft Australia Pty Ltd. Technocraft specialises in the retail and commercial sale and hire of steel scaffolding, ringlocks, and formwork systems. The main building floor area will be used for the assembly, maintenance, temporary storage and transport of scaffolding and formwork equipment for supply to customers. Offices spaces will accommodate sales, marketing, engineering, and technical staff to support business operations.

Figure 3.14. Proposed site layout for Building 2 on Created Lot 2.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Proposed Site Layout – Building 2
				Source	Jackson Environment and Planning Pty Ltd

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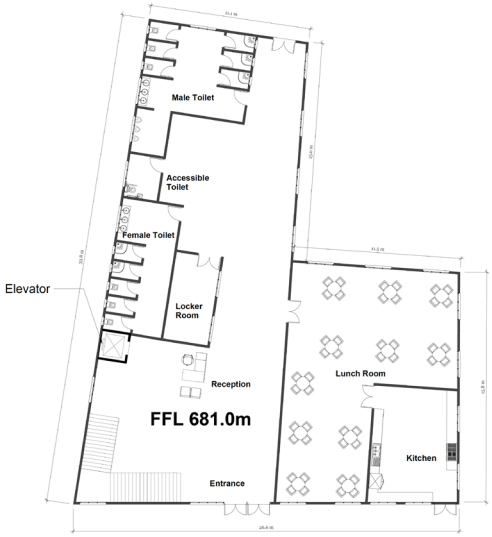
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Figure 3.15. Proposed office floor plans for Building 2.



Office Ground Floor Plan
Scale 1:150

Office First Floor Plan
Scale 1:100

Date	Revision	Drawn By	Site description
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)

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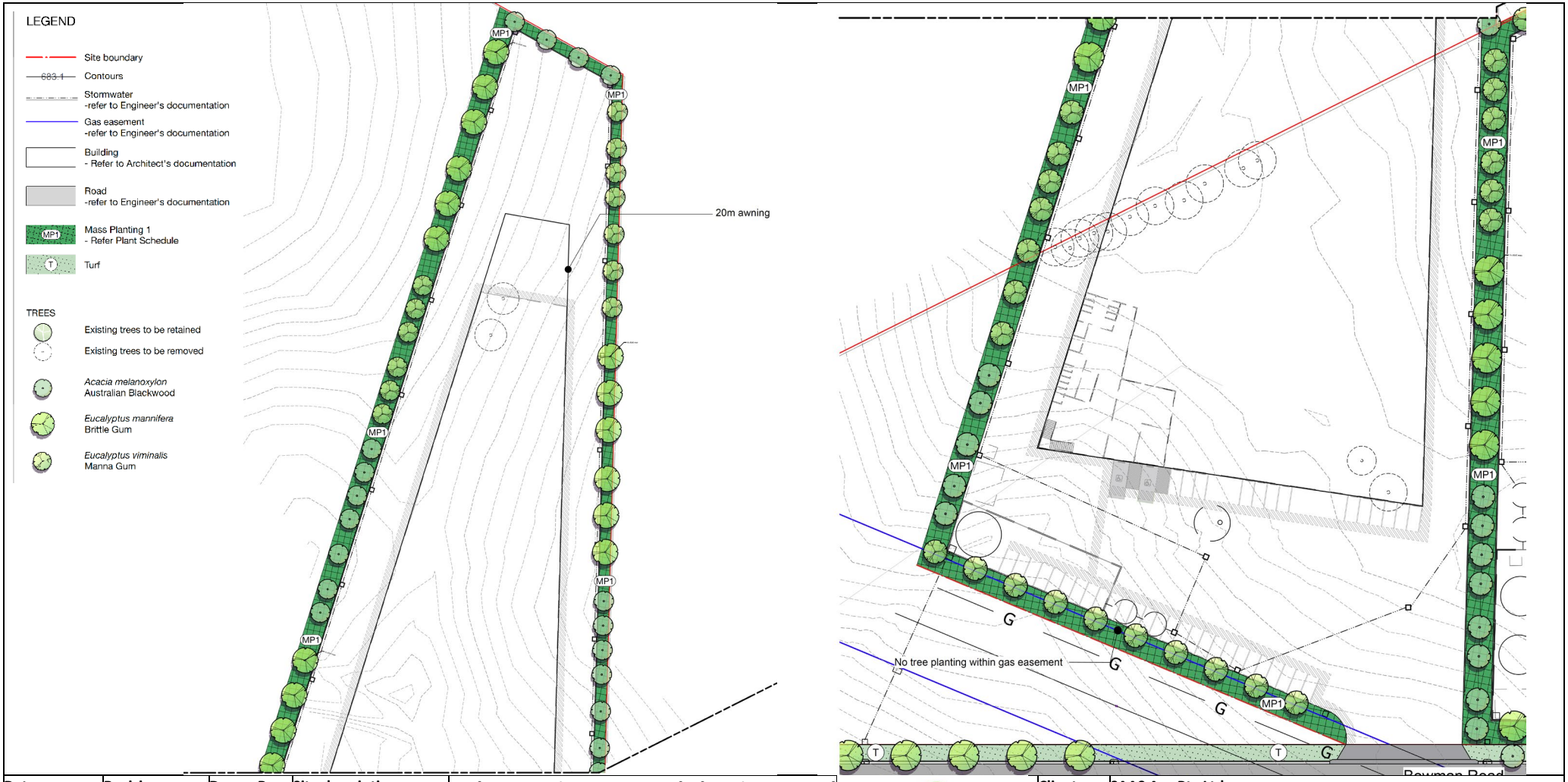
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Proposed Office Floor Plan – Building 2
Scale	Not to scale
Source	Jackson Environment and Planning Pty Ltd

Figure 3.16. Proposed landscaping plan for Building 2.



Date	Revision	Drawn By	Site description
13/07/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)

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E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Proposed Landscaping Plan – Building 2
Scale	Not to scale
Source	Jackson Environment and Planning Pty Ltd

Figure 3.17. 3D render of proposed Building 2 viewed from Bowman Road.

Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd	Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au	Project	Industrial Subdivision and General Industry Development
					Title	3D Render of Building 2
					Scale	Not to scale
					Source	Jackson Environment and Planning Pty Ltd

3.3.4.Building 3

Building 3 is to be constructed on the E4 zoned Created Lot 3 on the eastern side of Bowman Road. Building 3 will be a split-level construction due to the slope of the ground and will be divided into two separate buildings—Building 3A at the northern end and Building 3B at the southern end—with each being split into two sections (Figure 3.18). The gross floor area of the building will be 10,993.04m^2 and will be entirely surrounded by hardstand. The hardstand will include a haul road around the building, 17 parking spaces at the northern end including two accessible spaces, 26 parking spaces at the southern end including two accessible spaces, and landscaping around the perimeter. The northern portion of the Created Lot is affected by the gas pipeline easement, therefore works will be limited to the provision of suitable landscaping only.

Separate office space will be provided for Buildings 3A and 3B. Building 3A will feature a mezzanine level office space in the north-west corner with a floor area of 690.67m^2 including the ground floor entry foyer. The space will include an open plan office area, one accessible, three male, and three female toilets, a shared locker room, server room, and staff kitchen and dining area (Figure 3.19). Access to the office will be via an entrance on the northern wall directly from the parking area with an open stairwell and lift. The mezzanine office space in Building 3B will offer the same features as 3A over a floor area of 893.77m^2 including the ground floor entry foyer. Access will be via an entrance on the southern wall directly from the parking area (Figure 3.20). Each of the four sections of the building will feature two roller doors on the western wall and two on the eastern wall. The majority of the building will be constructed from Colorbond® sheeting in Pale Eucalypt, with a Colorbond® roof in Evening Haze. The external walls of the office areas will be constructed from Coen Composite Wood Panel in oak, being a sustainable wood and recycled plastic composite building product (or equivalent). The roof will feature skylights throughout the length of the buildings to provide natural light, as well as a large solar array. Landscaping will be used around the site perimeter to soften the appearance of the building (Figure 3.21). A 3D render of the building is provided in Figure 3.22.

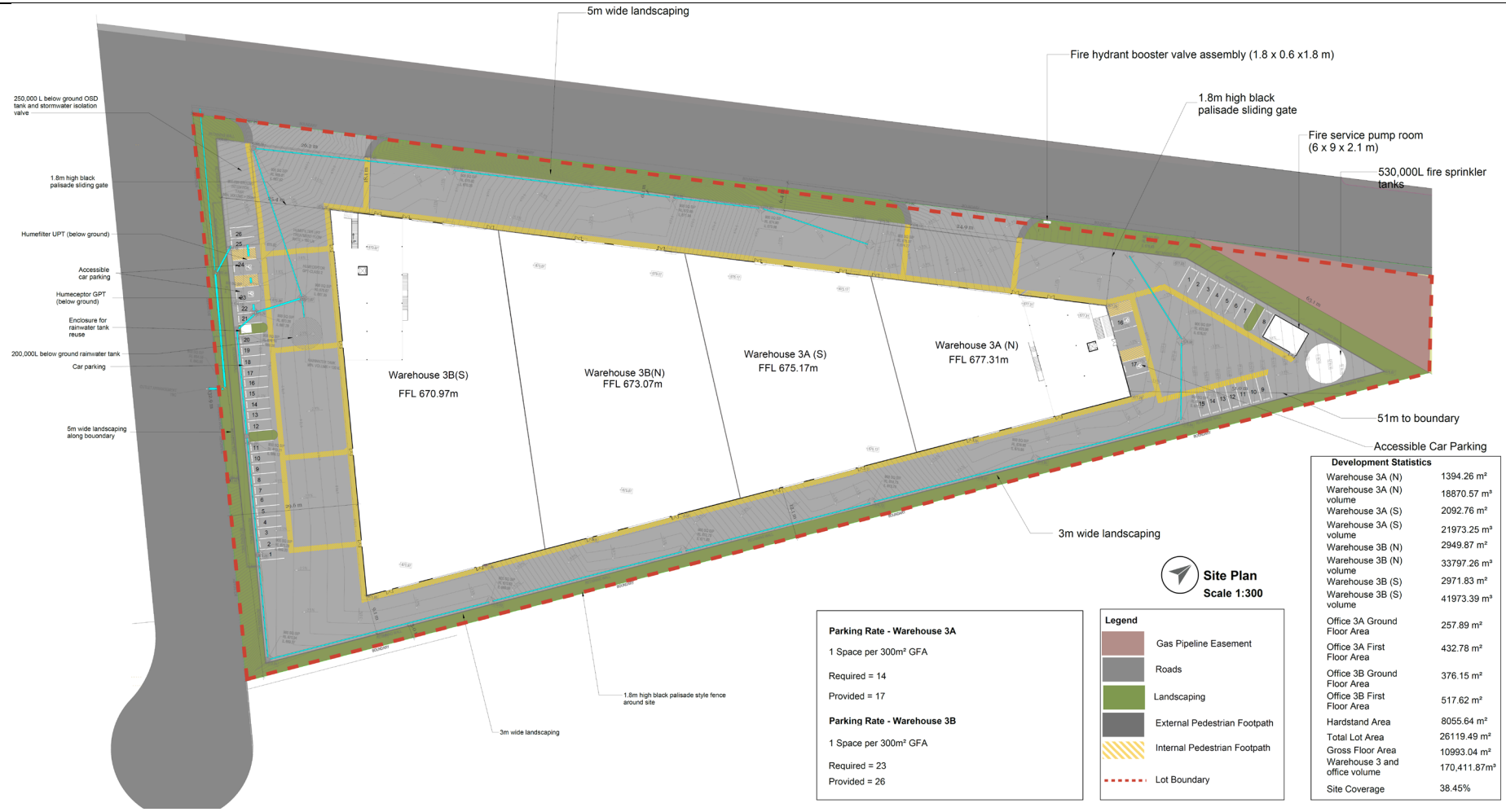
All sections of building and the offices will be fitted with a fire sprinkler system and a 530kL static firewater tank will be installed. A 120kL underground rainwater tank will be installed under the car parking area of 3B to capture runoff from the building roof area. The rainwater tank will capture the first 10mm of building roof water for storage and reuse on-site for landscaping irrigation, toilet flushing, and any other on-site processes as appropriate.

A 250m^3 below ground stormwater detention tank (OSD) will be constructed in the south-west corner of the site to capture all stormwater runoff from hardstand areas, and overflow from the rainwater tank. Prior to entering the OSD, all stormwater will pass through the HumeCeptor® Gross Pollutant Trap (GPT) and HumeFilter® Universal Pollutant Trap (UPT) treatment devices. The OSD will discharge treated stormwater to the drainage system along Hutchinson Road. Further details of the stormwater management system are provided in Section 8.5 and Appendix G.

Vehicles will enter the Site through the dedicated entrance towards the northern end of the site. Trucks will enter the buildings through the roller doors on the western walls and exit to the eastern side. Trucks will circulate along the haul road in a clockwise direction and exit through the dedicated site exit towards the southern end of the Site. Line marking within the carpark and haul road will be used to direct the flow of traffic.

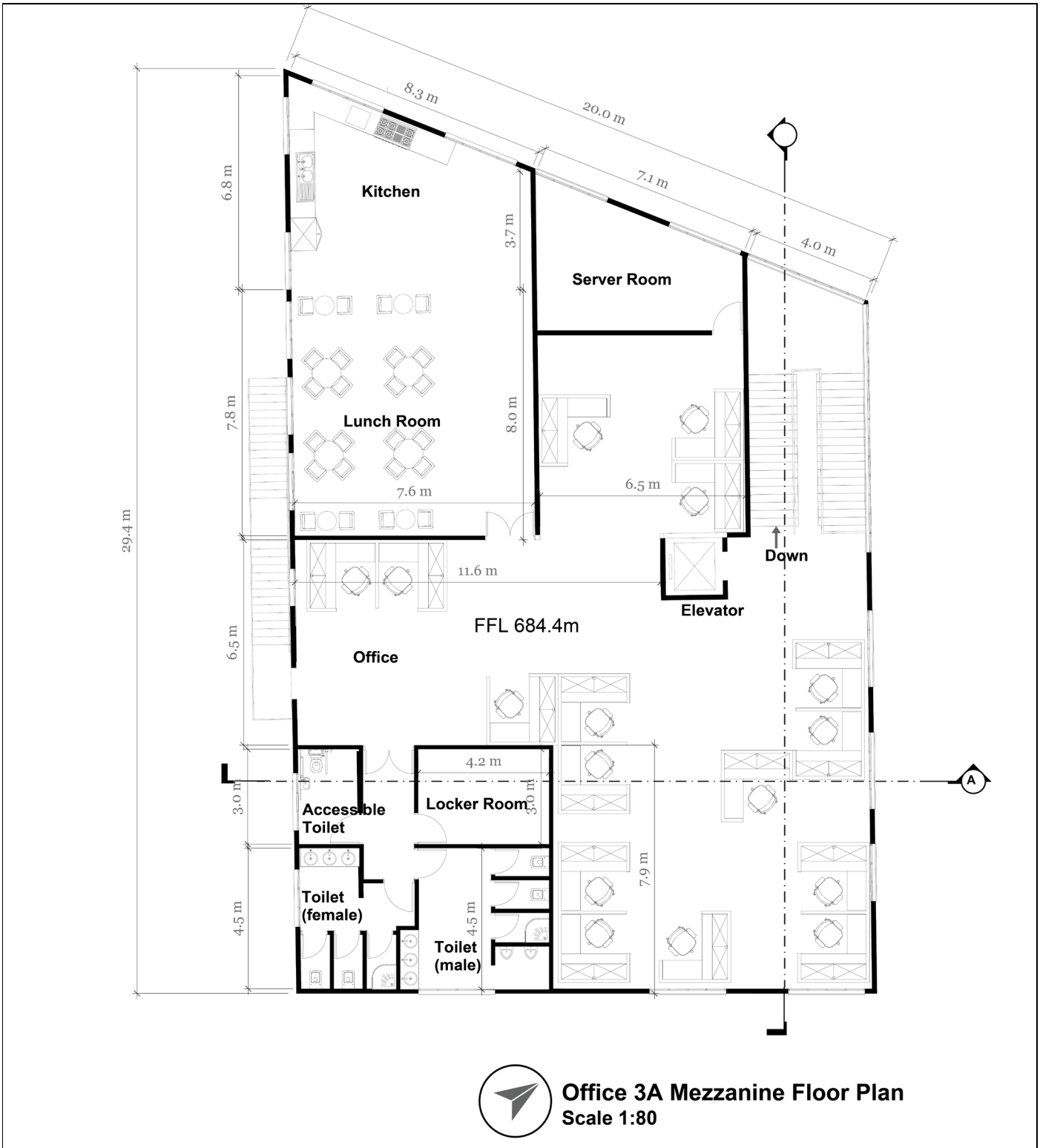
Building 3 will be shared by Screen It Pty Ltd (to be located in 3A) and Bayside Scaffolding Services Pty Ltd (to be located in 3B). Screen It will use the main building floor area for the assembly, maintenance, temporary storage and transport of hydraulic lifted screens and related plant and equipment available for commercial hire. Bayside will use the main building floor area for the assembly, maintenance, temporary storage and transport of scaffolding equipment available for commercial hire or sale. Both businesses will use the respective office spaces to accommodate sales, marketing, engineering and technical and labour hire staff to support the business, with Bayside also providing labour hire services for the assembly/disassembly of scaffolding equipment.

Figure 3.18. Proposed site layout for Building 3A and 3B on Created Lot 3.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Proposed Site Layout for Building 3
						Scale	Not to scale
						Source	Jackson Environment and Planning Pty Ltd

Figure 3.19. Proposed office floor plans for Building 3A.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Proposed Office Floor Plan – Building 3A
				Source	Jackson Environment and Planning Pty Ltd

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E: admin@jacksonenvironment.com.au
T: 02 8056 1849
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Figure 3.20. Proposed office floor plans for Building 3B.

Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Proposed Office Floor Plan – Building 3A
				Source	Jackson Environment and Planning Pty Ltd

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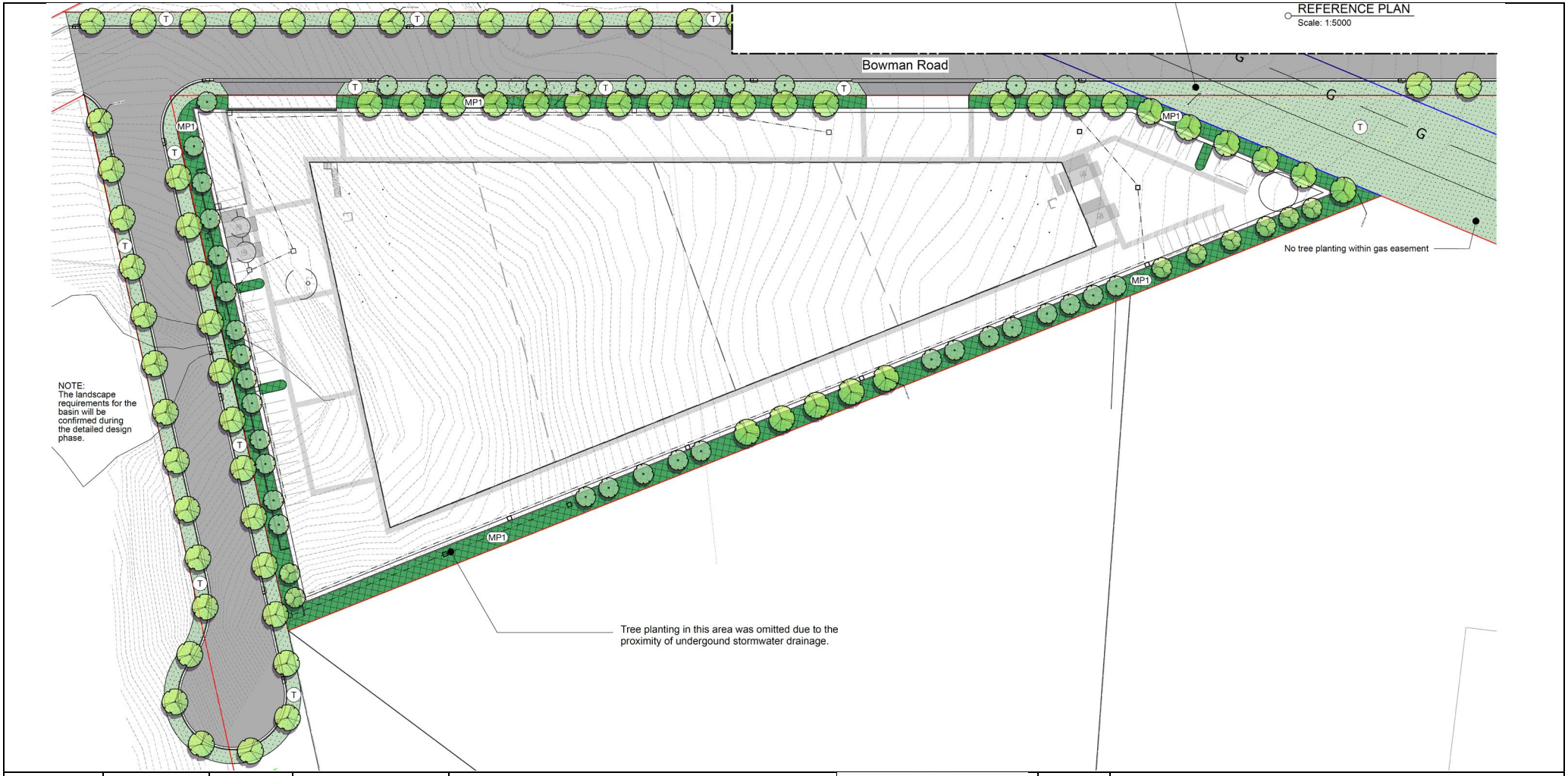
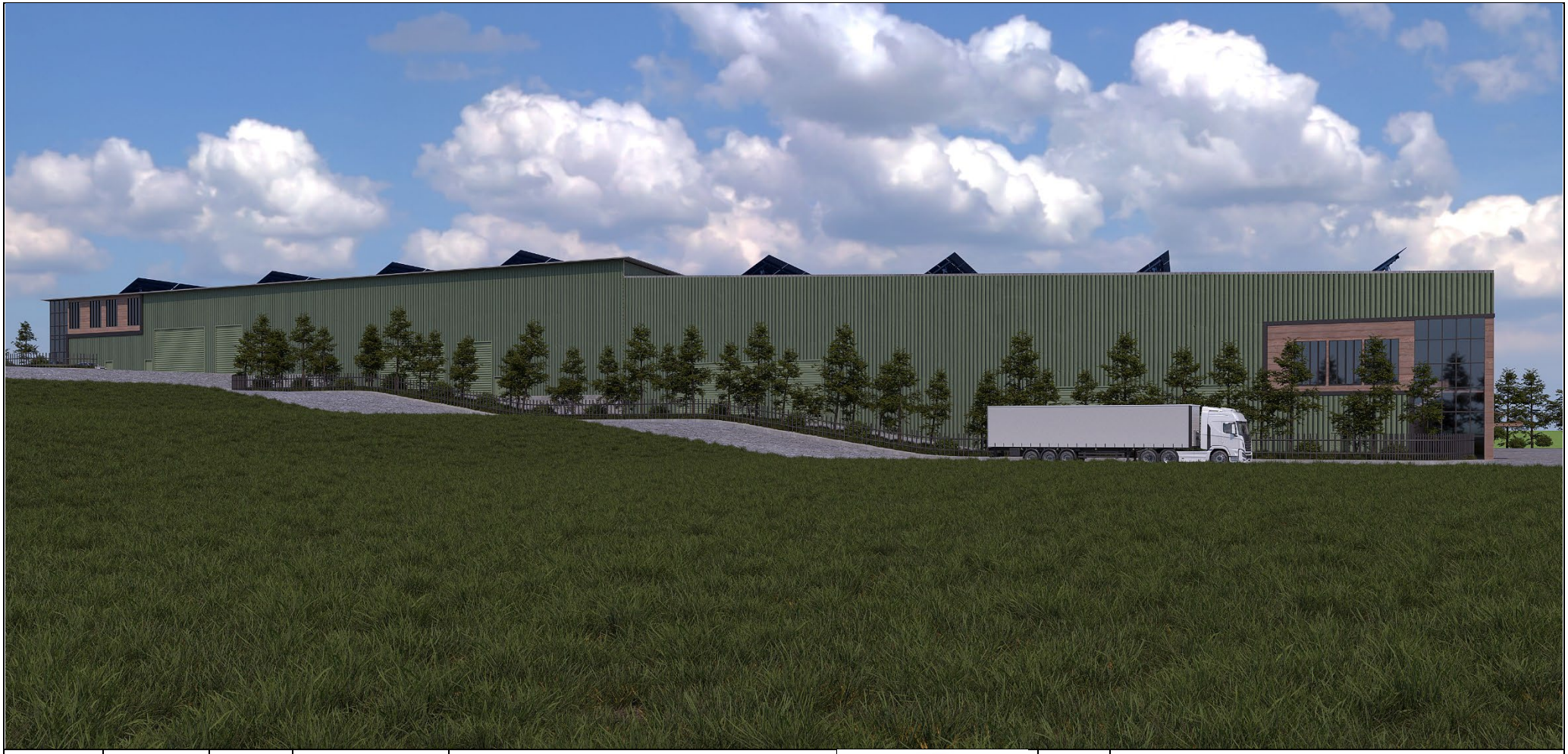
Figure 3.21. Proposed landscaping plan for Building 3.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
13/07/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	**Strategy | Infrastructure | Compliance | Procurement** **A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060** **E:** admin@jacksonenvironment.com.au **T: 02 8056 1849** **W:** http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	Proposed Landscaping Plan – Building 3
						Scale	Not to scale
						Source	Moir Landscape Architects

Figure 3.22. 3D render of proposed Building 3A and 3B viewed from Bowman Road.



Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	SAAS Aus Pty Ltd
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Industrial Subdivision and General Industry Development
						Title	3D Render of Building 3
						Scale	Not to scale
						Source	Jackson Environment and Planning Pty Ltd

3.3.1.Operational hours

All three buildings are proposed to have the same operating hours as defined in Table 3.1.

Table 3.1. Proposed operational hours for all proposed office and building spaces.

	Offices	Building
Monday – Friday	7am – 5:30pm	5am – 8pm
Saturday	8am – 2pm	6am – 3pm
Sunday/Public Holidays	Closed	8am – 2pm

3.4. Landscaping

The proposed development will include landscaping around the perimeter of each of the three industrial lots to be created in the subdivision (Appendix I). The landscape concept design has been prepared in accordance with the MVEC DCP and the *Site Planning and Landscape National Guidelines* (APA Group, 2020) for landscaping within and adjacent to the gas pipeline easement.

A mix of trees and mass planted groundcovers will be used within the landscaped areas surrounding the hardstand areas. The vegetation will provide shade to the hardstand areas, including car parks, and soften the visual impact of the proposed development. The species selected include native species with low water requirements and species representative of the endangered ecological community *Southern Highlands Shale Woodlands in the Sydney Basin Bioregion.*

Irrigation for landscaping will be provided by rainwater captured in underground storage tanks to be included in each proposed building development.

3.5. BCA compliance

A preliminary assessment of the proposed building developments against the National Construction Code 2022, Volume 1 (NCC) has been prepared by National BCA (Appendix J). The assessment confirms the following:

- Each building must stand on a separate allotment prior to issue of an Occupation Certificate;
- Buildings 1, 2 and 3 are assessed as large, isolated buildings;
- The building classifications for each building are outlined in Table 3.2;
- The assessment has not considered racking systems, partitions, etc. within the buildings. To be considered during detailed design;
- The buildings are not occupancies of excessive hazard;
- Egress from the building space of B1 will require a performance solution to be considered during detailed design; and
- The buildings are all provided with perimeter vehicle access that provides for emergency vehicle access.

Table 3.2. Building classifications and construction types for each proposed building in accordance with the National Construction Code.

Building	Building Section	Building Classification	Construction Type
B1	Building area	7b	Type C
	Office space	5	Type B*
	Basement parking	7a	Type C
	Workshop	8	Type C
	Awnings	10a	Type C
B2	Building area	7b	Type C
	Office space	5	Type C
B3	Building area	7b	Type C
	Office space	5	Type C

**The building can be of Type C construction if separated from the office section by a firewall with FRL criterion of 240 minutes, and all openings in the firewall are fitted with self-closing fire doors of FRL -/240/30.*

The assessment also notes requirements for the construction and location of skylights within each building. These requirements can be met and will be specified in the final detailed designs following development approval.

4. Statutory Planning and Strategies

4.1. Commonwealth legislative requirements

4.1.1. *Environment Protection and Biodiversity Conservation Act* 1999

The *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places—defined in the EPBC Act as matters of national environmental significance ((MNES). The EPBC Act requires actions which are likely to have a significant impact on MNES, or which have a significant impact on Commonwealth land, to be referred to the Commonwealth Minister for the Environment for approval.

The nine Matters of National Environmental Significance protected under the EPBC Act are:

- World heritage properties;
- National heritage places;
- Wetlands of international importance (listed under the Ramsar Convention);
- Listed threatened species and ecological communities;
- Migratory species protected under international agreements;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park;
- Nuclear actions (including uranium mines); and
- A water resource, in relation to coal seam gas development and large coal mining development.

A biodiversity assessment completed by Biosis Pty Ltd in September and October 2022 found that no threatened ecological communities and threatened species listed under the EPBC Act were recorded or assessed to have a medium or greater potential to occur within the study area. Therefore, assessments against the Significant Impact Criteria (CoA 2013) are not required. Further detail is provided in Section 8.7 and Appendix U.

No other Matters of National Environmental Significance occur within the subject site.

4.2. State legislative requirements

4.2.1.*Environmental Planning and Assessment Act* 1979

Section 5 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) and the accompanying Regulation provide the framework for environmental planning in NSW. It includes provisions to ensure that proposals which have the potential to impact the environment are subject to detailed assessment and to provide opportunity for public involvement. The proposed development is consistent with the overall objectives of the EP&A Act and is considered capable of fulfilling the statutory requirements.

Division 4.2, clause 4.5 of the EP&A Act, states that the regional planning panel for the area in which the development is to be carried out is the consent authority for any development that is declared regionally significant under an environmental planning instrument. The proposed development is declared to be regionally significant under the *State Environmental Planning Policy (Planning Systems)* 2021 as the cost of development will exceed $30 million. The consent authority for the application will be the Southern Regional Planning Panel.

Under Division 4.8, clause 4.46 of the EP&A Act, the proposal is considered integrated development as it will require approval under the *Roads Act* 1993 for the formation of Bowman Road and Hutchinson Road. The proposed development will also require approval under the *Water Management Act* 2000 for works within a watercourse. Two

mapped watercourses are located within Lot 2—one within the northern portion of the lot where Building 1 will be constructed and one in the southern portion of the land where Building 3 will be constructed.

4.2.2.Environmental Planning and Assessment Regulation 2021

While the EP&A Act provides the overarching framework for the planning system in NSW, the *Environmental Planning and Assessment Regulation* 2021 (the EP&A Regulation) supports the day-to-day requirements of this system. It supplements the broader provisions of the Act and covers matters such as local environmental plans and development control plans, which are used by councils to manage growth and development through the use of land use zoning, development standards and other planning mechanisms. It also contains key operational provisions relating to the development assessment and consent process, requirements associated with development contributions, and fees for planning services.

The proposed subdivision and General Industry development is not considered designated development under Schedule 3 to the EP&A Regulation. Therefore, the proposed development should be assessed as a local development under Part 4 of the EP&A Act.

4.2.3.*Biodiversity Conservation Act* 2016

The *Biodiversity Conservation Act* 2016 (BC Act) is the main legislation that identifies and protects threatened species populations and ecological communities in NSW. The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development. The BC Act sets out the processes and requirements for the listing of species and ecological communities as threatened under the categories critically endangered, endangered, and vulnerable, and supports and guides conservation efforts. The BC Act has also established a scientific method for assessing the likely impacts on biodiversity values of proposed development and land use change, for calculating measures to offset those impacts and for assessing improvements in biodiversity values.

One threatened species listed under the BC Act has a medium or greater likelihood of occurring within the study area, Southern Myotis. A test of Significance has been prepared for this threatened entity (refer to Section 8.7 and Appendix U) and concluded that a significant impact was not likely to result from the project. This is due to the highly mobile nature of Southern Myotis, the availability of similar habitat resources within the locality, and that mitigation measures will be implemented to avoid disturbance or harm to Southern Myotis. The Test of Significance indicated that a significant effect is not likely to result from the proposal. A Species Impact Statement is therefore not required.

The proposed development does not trigger the Biodiversity Offset Scheme (BOS) under the BC Act as vegetation clearing will not exceed the clearing threshold, the subject site is not mapped on the Biodiversity Values map, and the proposal is unlikely to result in a significant impact on a threatened species, population, or community. Consideration of the BOS is not warranted, and a Biodiversity development Assessment report (BDAR) is not required.

4.2.4.*Protection of the Environment Operations Act* 1997

The *Protection of the Environment Operations Act* 1997 (POEO Act) prohibits any person from causing pollution of waters, or air and provides penalties for air, water and noise pollution offences. Section 48 of the Act requires a person to obtain an Environment Protection License from the NSW Environment Protection Authority before carrying out any of the premise-based activities described in Schedule 1 of the Act.

The proposed development is not considered a scheduled activity and does not require a licence under the POEO Act. However, measures will be implemented to ensure the construction and operation of the proposed development does not result in pollution of air, land, or waters.

4.2.5. *Water Management Act* 2000

The *Water Management Act* 2000 (WM Act) is based on the concept of ecologically sustainable development to ensure the sustainable and integrated management of the state's water resources for the benefit of current and future generations. The WM Act provides for the protection and management of water resources through the development of water sharing plans that allocate water for specified uses and set rules for water trading, and through control of activities within and adjacent to natural water resources.

Section 4.46 of the EP&A Act specifies that any development (that is not State significant development or complying development) that requires approval under sections 89, 90, or 91 of the WM Act be considered integrated development. The construction of the stormwater outfall within the RU2 portion of the property constitutes drainage work and requires a water management work approval under Section 90(3) of the WM Act. Further, as the proposed development is to be constructed within the extents of two mapped watercourses (refer to Section 8.5 for details), a controlled activity approval is required under Section 91(2) of the WM Act.

4.2.6. *Roads Act* 1993

The *Roads Act* 1993 (Roads Act) sets out procedures for opening and closing public roads, provides for the classification of roads (e.g., local, regional or state), and establishes the authorities responsible for each road classification. The Roads Act also provides authority for the conduct of road work and traffic regulation required for the protection of roads, as well as the regulation of works, structures and activities within road reserves.

As the proposed development includes the construction of an extension to Bowman Road, and part of Hutchinson Road, consent will be required under clause 138 of the Roads Act and Transport for NSW (TfNSW) will be a concurrence agency.

4.3. Environmental planning instruments and policies

4.3.1. *State Environmental Planning Policy (Resilience and Hazards)* 2021

The State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) replaces and repeals the following State Environmental Planning Policies (SEPPs):

- SEPP (Coastal Management) 2018;
- SEPP 33 – Hazardous and Offensive Development; and
- SEPP 55 – Remediation of Land

Under Chapter 4 of the Resilience and Hazards SEPP, applicants for consent must carry out a preliminary site investigation for any development consent sought on land previously used for activities that may cause contamination. Specifically, Clause 4.6 requires the approval authority to have regard to certain matters before granting approval. These matters include:

- Whether the land is contaminated;
- Whether the land is, or would be, suitable for the purpose for which development is to be carried out;
- If remediation is required for the land to be suitable for the proposed purpose, whether the land will be remediated before the land is used for that purpose.

A contaminated land assessment of the subject site was undertaken and is discussed further in Section 8.2. The assessment concluded that the land is not considered contaminated and is suitable for the proposed use.

4.3.2. *State Environmental Planning Policy (Biodiversity and Conservation)* 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 (BC SEPP) consolidates and repeals the following State Environmental Planning Policies (SEPPs):

- SEPP (Vegetation in Non-Rural Areas) 2017;
- SEPP (Koala Habitat Protection) 2020;
- SEPP (Koala Habitat Protection) 2021;
- Murray Regional Environmental Plan No 2 – Riverine Land;
- SEPP No 19 – Bushland in Urban Areas;
- SEPP No 50 – Canal Estate Development;
- SEPP (Sydney Drinking Water Catchment) 2011;
- Sydney Regional Environmental Plan No 20 – Hawkesbury – Nepean River;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment; and
- Willandra Lakes Regional Environmental Plan No 1 – World Heritage Property.

The following sections discuss the sections of the BC SEPP that are applicable to the proposed development.

4.3.2.1. Chapter 2 – Vegetation in non-rural areas

As the site of the proposed development is zoned E4 General Industrial, this chapter of the BC SEPP applies to the development. This chapter specifies the approval requirements for the clearing of native vegetation in non-rural areas. As noted in the biodiversity assessment undertaken for the proposal, the clearing of vegetation is very limited and largely requires the clearing of weed species. Refer to Section 8.7 for further details.

4.3.2.2. Chapter 4 – Koala Habitat Protection

This chapter aims to protect areas of natural vegetation that provide koala habitat to support permanent populations and assist to reverse the decline of the population. The subject site is within the koala management area designated for the Wingecarribee local government area as listed in Schedule 2 of the BC SEPP. Before a consent authority may grant consent to a DA, it must satisfy itself whether or not the land is potential Koala habitat and core Koala habitat.

The subject site is not within an area with an approved Koala Plan of Management.

The subject site supports one species of Koala feed tree—Ribbon Gum *Eucalyptus viminalis*. Two trees exist as isolated individuals surrounded by exotic pastureland with little connectivity to feed tree species or other use tree species. These trees will not be removed as part of the proposed development. The vegetation within the proposed development footprint is not considered potential koala habitat.

4.3.2.3. Chapter 6 - Water Catchments

The proposed development subject site is located within the Sydney Drinking Water Catchment and is therefore subject to the provisions of chapter 6 of the BC SEPP. Prior to granting consent to development on land within a drinking water catchment, the consent authority must consider the impacts on water quality and quantity, aquatic ecology, flooding, recreation and public access, and total catchment management.

To demonstrate compliance with chapter 6, the development application is supported by the following assessments and plans:

- An assessment conducted in accordance with the *Neutral or Beneficial Effect on Water Quality Assessment Guideline* (WaterNSW, 2021);

- Stormwater system design to capture and treat run-off prior to discharge from the subject site. The design will include stormwater retention and reuse to manage discharge volumes; and
- An assessment of impacts to overland flow from the proposed development, including impacts resulting from the diversion of two mapped waterways.

Details of the stormwater management system are presented in Section 8.5 and Appendices G, Q and R.

4.3.3. *State Environmental Planning Policy (Industry and Employment)* 2021

The *State Environmental Planning Policy (Industry and Employment)* 2021 (Industry and Employment SEPP) consolidates, transfers and repeals the following SEPPs:

- SEPP (Western Sydney Employment Area) 2009; and
- SEPP 64 – Advertising and Signage.

Chapter 3 Advertising and signage aims to ensure that signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of a high-quality finish and design. This Policy does not regulate the content of signage and does not require consent for a change in the content of signage.

The proposed development will only include business identification signs and building identification signs. Therefore, no further assessment is required under the Industry and Employment SEPP.

4.3.4. *State Environmental Planning Policy (Transport and Infrastructure)* 2021

The *State Environmental Planning Policy (Transport and Infrastructure)* 2021 (Transport and Infrastructure SEPP) consolidates and repeals the following SEPPs:

- SEPP Infrastructure 2007;
- SEPP Educational Establishments and Childcare Facilities 2017;
- SEPP Major Infrastructure Corridors 2020; and
- SEPP Three Ports 2013.

The Transport and Infrastructure SEPP aims to benefit communities by providing a more efficient planning framework for infrastructure in NSW.

Chapter 2, Division 12A, Subdivision 2 of the Transport and Infrastructure SEPP relates to development adjacent to pipeline corridors. Under this subdivision, land is considered to be within a pipeline corridor if the land is located within 20m of land the subject of an easement for a relevant pipeline. As the subject site adjoins a gas pipeline easement owned and operated by APA Group, this subdivision applies to the proposed development. This subdivision requires that the consent authority be satisfied that potential safety risks or risks to the pipeline have been adequately identified and considered, must notify the pipeline operator and consider any response from the operator.

Extensive consultation has been undertaken with the pipeline operator, APA Group, to identify potential risks and design requirements for the proposed development. All plans were reviewed by APA Group prior to submission of the development application.

4.3.5. *State Environmental Planning Policy (Planning Systems)* 2021

State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP) aims to identify development that is State significant development, State significant infrastructure, critical State significant infrastructure or regionally significant development.

The proposed development is defined as 'General Industry' under the WLEP, meaning:

> ***General industry*** *means a building or place (other than a heavy industry or light industry) that is used to carry out an industrial activity.*
> *Note—*
> *General industries are a type of industry—see the definition of that term in this Dictionary.*

The Dictionary of the LEP defines an "industrial activity" as (underlined for emphasis):

> *Industrial activity means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.*

Development for the purposes of 'General Industry' is not specified in Schedules 1 or 2 to the Planning Systems SEPP, therefore the proposed development is not considered State Significant.

Legal advice regarding the characterisation of the use of each building and the application of the Planning Systems SEPP as described above has been provided by Mr Ross Fox (Principal Lawyer, Accredited Specialist Planning and Environment) of Fishburn Watson O'Brien (Appendix AA).

Under Schedule 6 to the Planning Systems SEPP, triggers for regionally significant development are provided. Under Clause 2, 'General development' over $30 million is considered regionally significant development.

Given the proposed capital cost of the development is estimated to be $73.85 million (refer to Section 10 and Appendix Z), the proposed development is considered regionally significant development. The application will need to be assessed by the Southern Regional Planning Panel.

4.4. Other applicable legislation or strategies

4.4.1. Planning for Bush Fire Protection 2019

Planning for Bush Fire Protection 2019 (PBP) provides development standards for designing and building on bush fire prone land in NSW. All development proposed on land that is mapped as bush fire prone land must meet the requirements of PBP.

The portion of land that will form Created Lot 2 in the proposed subdivision is mapped as Vegetation Category 1 and Vegetation Buffer on the bush fire prone land map. Therefore the proposed building development must meet the requirements of PBP. A bush fire threat assessment has been prepared for the proposed development and concludes that the development can comply with the requirements of PBP and other national construction standards that apply to development within bush fire prone areas. Refer to Section 8.6 and Appendix T for further details.

5. Local Planning Framework

The following section provides the local planning and legislative framework for the proposed development. The purpose of this section is to outline the approval process and identify the applicable local planning controls that relate to the development under the *Wingecarribee Local Environmental Plan* 2010 (WLEP) and the *Moss Vale Enterprise Corridor Development Control Plan* 2008 (MVEC DCP).

5.1. *Wingecarribee Local Environmental Plan* 2010

5.1.1. Zone objectives

The industrial zoned land on the property was previously zoned as IN1 General Industrial and IN2 Light Industrial. New employment zoning was introduced on 26th April 2023 which amalgamated the IN1 and IN2 zones into a new E4 General Industrial zone. Where zones have been amalgamated, the zone objectives and land use table for the more intensive industrial zone have been applied. Therefore, the objectives of the previous IN1 General Industrial zone are applicable to the proposed development:

- To provide a wide range of industrial and warehouse land uses;
- To encourage employment opportunities;
- To minimise any adverse effect of industry on other land uses;
- To support and protect industrial land for industrial uses;
- To allow a range of non-industrial land uses, including selected commercial activities, that provide direct services to the industrial activities and their workforce or that, due to their type, nature or scale, are appropriately located in the zone without impacting on the viability of business and commercial centres in Wingecarribee; and
- To ensure that new development and land uses incorporate measures that take account of their spatial context and mitigate any potential impacts on neighbourhood amenity and character, or the efficient operation of the local or regional road system.

The proposed Subdivision and General Industry development has been designed to support the objectives of the E4 zone. The proposed development will introduce significant new facilities designed to provide flexibility in the use of each building and the ancillary office spaces. The proposal is expected to create up to 60 local jobs during construction and 120 during operation and inject up to $73.85 million in construction costs alone.

The proposed subdivision will result in boundary changes to the existing Lot 51 that excise the C3 land from the property and include the RU2 land from the existing Lot 2. This boundary change will allow for improved management of the RU2 land and ensure consistency with the objectives of the RU2 zone:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base;
- To maintain the rural landscape character of the land;
- To provide for a range of compatible land uses, including extensive agriculture; and
- To provide opportunities for employment-generating development that is compatible with, and adds value to, local agricultural production through food and beverage processing and that integrates with tourism.

5.1.2. Land use permissibility

Under Part 4, 4.1 of the WLEP, development consent for subdivision of any land shown on the Lot Size Map is not permissible if any lot resulting from the subdivision will be less than the minimum lot size. By combining the RU2 land from the existing Lot 2 and Lot 51, the resulting lot will be approximately 54.6ha. The proposed layout provides a more

practical division of the land that aligns with the land use zoning which will likely lead to improved management outcomes, particularly for the remaining portions of RU2 land.

The proposed building development will be located within the E4 General Industrial land use zone and will be used for the storage, assembly, maintenance, transport, and hire of scaffolding equipment to support the construction industry. The proposed development is considered 'General Industry' and is permissible on E4 General Industrial zoned land under the WLEP. 'General Industry' is defined in the dictionary of the WLEP as:

> *General industry means a building or place (other than a heavy industry or light industry) that is used to carry out an industrial activity.*
>
> *Note—*
>
> *General industries are a type of industry—see the definition of that term in this Dictionary.*

The Dictionary of the WLEP defines an "Industrial activity" as:

> *Industrial activity means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.*

A stormwater outlet for the proposed development and an easement to facilitate construction of the industrial cul-de-sac on Hutchinson Road will be located within the RU2 land use zone. Development for the purpose of a road is permitted within RU2 land use zones under the WLEP. Development for the purposes of stormwater management is not listed as a permissible development under the WLEP and is therefore considered prohibited. However, stormwater management systems, which includes works for the discharge of stormwater, are permissible with consent on any land under Clause 2.138 of the Transport and Infrastructure SEPP. As the provisions of the Transport and Infrastructure SEPP prevail over those of the WLEP, the proposed stormwater management works are permissible on the RU2 land.

5.1.3.Natural resources sensitivity – water

Clause 7.5 Natural resources sensitivity—water of the WLEP applies to land identified on the Natural Resources Sensitivity Map and aims to maintain hydrological functions:

1) *The objective of this clause is to maintain the hydrological functions of riparian land waterways and aquifers, including—*
    - *(a) protecting water quality, and*
    - *(b) protecting natural water flows, and*
    - *(c) protecting stability of the bed and banks of waterways, and*
    - *(d) protecting groundwater systems.*

The Natural Resources Sensitivity Map identifies Whites Creek as Category 2 – Aquatic & Terrestrial Habitat and the two drainage lines passing through the subject site as Category 3 – Bank Stability & Water Quality. Under this Clause, the consent authority must consider the following before granting development consent:

3) *Before granting development consent for development on land to which this clause applies, the consent authority must consider any potential adverse impact of the proposed development on the following—*
    - *(a) the natural flow regime,*
    - *(b) the water quality of receiving waters,*
    - *(c) the waterway's natural flow paths,*
    - *(d) the stability of the waterway's bed, shore and banks,*
    - (e) *the flow, capacity and quality of groundwater systems.*

4) *Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that—*
    (a) the development is designed, sited and managed to avoid any potential adverse environmental impact, or
    (b) if that impact cannot be avoided—the development is designed, sited and will be managed to minimise that impact, or
    (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

The proposed development will remove the two drainage lines and replace them with the proposed stormwater management system. Section 8.5 provides details of the potential impacts and proposed mitigation measures, and demonstrates that the proposed development can comply with Clause 7.5.

5.2. *Moss Vale Enterprise Corridor Development Control Plan 2008*

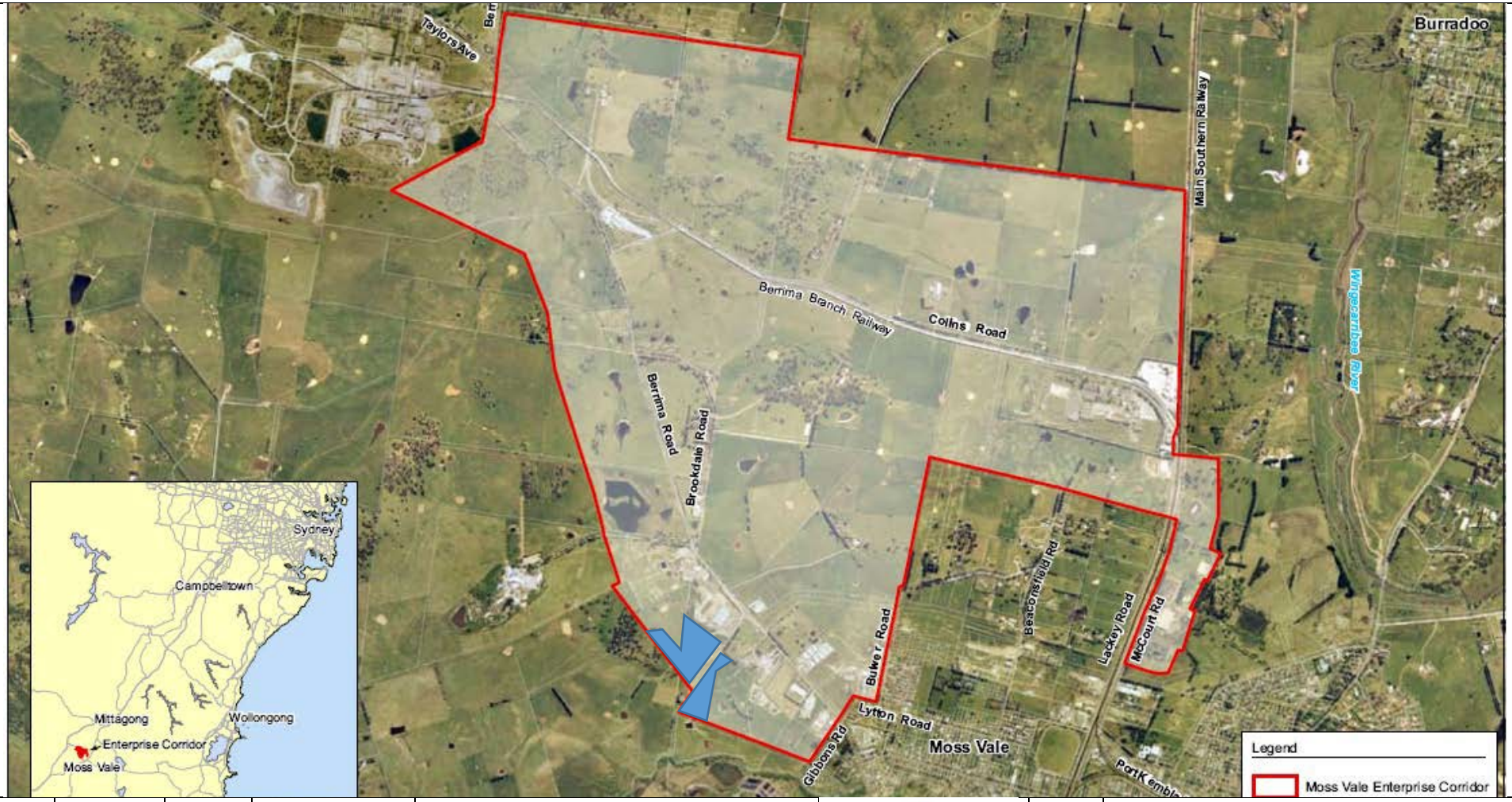
The *Moss Vale Enterprise Corridor Development Control Plan* 2008 (MVEC DCP) applies to the land between Berrima and Moss Vale that surrounds Berrima Road and the Berrima Branch Railway as shown in Figure 5.1. The plan aims to support the development and management of land for employment and economic purposes, as well as necessary infrastructure, whilst protecting the heritage, environment and rural amenity of the area.

Land within the MVEC has been classified into Conservation Areas and Employment Areas. The Conservation Areas comprise land with significant environmental or heritage constraints, including sites of Aboriginal cultural significance and important habitat areas including riparian corridors. This area also includes flood-prone land that is unsuitable for development. The Employment Area is further divided into the following precincts:

- **Enterprise Precinct** – includes land closest to the Moss Vale township and seeks to provide a buffer between residential areas and heavier industrial uses within the MVEC. This land accommodates a mix of light industrial and commercial operations;
- **General Industrial Precinct** – this land encompasses most of the northern portion of the MVEC surrounding the Berrima Branch Railway. This land accommodates a range of industrial and warehouse uses including rail freight terminal facilities.
- **Local Industry Precinct** – this precinct encompasses the southern portion of the MVEC, to the south of Berrima Road. It includes the Wingecarribee Resource Recovery Centre and the livestock saleyards.

The proposed development is located within the Local Industry Precinct. The proposed subdivision and General Industry development has been designed to meet or exceed the relevant objectives and controls within the MVEC DCP, including the siting and design of the buildings, vehicle access and parking, landscaping, waste management and water sensitive urban design. Table 5.1 below identifies the planning controls within the MVEC DCP and provides details on how the proposed development complies with those controls.

Figure 5.1. Land application map for the Moss Vale Enterprise Corridor. The proposed development area is shown in blue.



Date	Revision	Drawn By	Site description
12/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)

Jackson Environment and Planning Pty Ltd
Strategy | Infrastructure | Compliance | Procurement
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Moss Vale Enterprise Corridor Land Application Map
Scale	Not to scale
Source	Connell Wagner (2008). *Moss Vale Enterprise Corridor Development Control Plan*.

Table 5.1. Application of the controls specified in the *Moss Vale Enterprise Corridor Development Control Plan* 2008 to the proposed development.

Part	Controls	Notes
3. Development Controls		
3.1 Land Use	Objectives • To achieve a balanced outcome between industrial development and the conservation of land within the Enterprise Corridor based on legitimate development and constraint data. • To encourage development and the conservation of designated precincts while minimising land use conflict within and between development sites. • Externalities generated by existing heavy industrial uses are recognised as potential constraints to future development. • Land use and development is consistent with the Development Concept Plan. • The land proposed for development is suitable for the intended use. Rules 1. The use of land in the Moss Vale Enterprise Corridor must comply with the Development Concept Plan. 2. Proposed development within the vicinity of existing heavy industrial land uses must demonstrate an understanding of the noise/air and amenity impacts of existing development as part of their development proposal. The Development Concept Plan addresses the following: 1. Land Use Areas and Precincts; 2. Potential Constraint Areas; 3. Access and Movement – including roads, pedestrian and cyclist movement, and bus services; 4. Services Infrastructure; and 5. Rail Infrastructure	Compliant The proposal is consistent with the aims of the MVEC DCP and the Development Concept Plan: • The proposal will create industrial space within the Local Industry Precinct of the Employment Area; • The proposal is consistent with neighbouring land uses; • The proposed development footprint is not mapped as containing any environmental or heritage constraints; • A Traffic Impact Assessment has demonstrated the proposal will not significantly affect traffic flows in the surrounding area (Appendix N). • The proposal will not impact on access to neighbouring properties; • The unformed portion of Bowman Road and part of Hutchinson Road will require construction to facilitate the proposed development; • The proposal does not impact on existing or future rail infrastructure.
3.3 Access and movement	Objectives • An efficient and interconnected road system is established to service the area. • Internal roads are designed to an appropriate standard for industrial traffic. • Site access arrangements do not compromise the safe and efficient generation of the surrounding road network. • Road reserves provide for pedestrian and cyclist movement to increase transport choices and reduce reliance on the private car.	Compliant Access to the property is from the cul-de-sac on Bowman Road, which joins Berrima Road to the north. There is an existing dedicated left turn lane in to Bowman Road from Berrima Rd for traffic

<table>
<tr><th>Part</th><th>Controls</th><th>Notes</th></tr>
<tr><td></td><td>
The Enterprise Corridor is serviced by a local bus route to encourage public transport use and reduce reliance on the private car.
Rules

The major road network shall be developed in accordance with the Section 94 Development Contributions Plan.
New internal access roads must be designed with a minimum road reserve of 20 metres and must accommodate pedestrian and cycle facilities.
Intersection treatments are to be designed in accordance with the relevant Austroads guidelines based on a traffic generation determined through a traffic impact assessment for the development.
Direct vehicular access onto the main roads will not be permitted. All development must have access to internal roads. Refer to Road Classification System and Access Rules in Appendix One.
No additional road connections will be permitted to Berrima Road or the Moss Vale Bypass. Refer to Road Classification System and Access Rules in Appendix One.
~~Access points and connections to the Main Southern Railway must be designed to meet Australian Rail Track Corporation and/or other relevant rail authority's requirements.~~
Vehicle access arrangements must comply with minimum standards set by applicable Australian Standards in addition to Council's Endorsed Technical Specifications (to be endorsed); Design (Vol 1 and Construction (Vol 2) and must be adequate to meet the needs of the development and associated vehicular traffic.

</td><td>from the south-east and dedicated right turn lane for traffic from north-west.
The development will require the construction of the Bowman Road extension and may require upgrades to the Bowman Road/Berrima Road intersection as specified by WSC.
All roads, driveways and accessways will be designed and constructed in accordance with relevant Australian Standards. Additional design requirements specified by APA Group for construction within the gas pipeline reserve will be included in the design.</td></tr>
<tr><td>3.4 Building siting and design</td><td>
Objectives

The bulk and scale of new development is appropriate to the area.
The size and siting of buildings within lots maintains the open rural character of the area.
The siting of buildings ensures that important natural or cultural features within lots are protected.
The bulk and scale of new development does not compromise the scenic amenity of the area.
Development is not visible from public viewpoints along Berrima Road and from surrounding townships.
Buildings are designed to reduce water and energy use.
Buildings are sited and designed to minimise bushfire hazard

Rules

~~The height of buildings and other structures located within 50m of Berrima Road must not exceed 15 metres above ground level.~~
The height of buildings and other structures must otherwise not exceed 20 metres above ground level.
~~The minimum building setback from any property boundary adjacent to Berrima Road, the Moss Vale Bypass and Arterial Roads is 15 metres~~.
The minimum building setback from other roads is 10 metres.
~~The minimum building setback required to side and rear lot boundaries next to rural zoned land is 15 metres.~~

</td><td>Compliant

No building or structure within the proposed development will exceed 20m above ground level.

All buildings are set back more than 10m from Bowman and Hutchinson Road. Landscaping is proposed around the perimeter of each building in accordance with the DCP. Car parking and internal haul roads are also included within the building setbacks. No outdoor storage is proposed.
<table>
<tr><th>Building</th><th>Building Footprint m²</th><th>Site Area m²</th><th>% Coverage</th></tr>
<tr><td>B1</td><td>17,370.73</td><td>28,826.07</td><td>57</td></tr>
</table>
</td></tr>
</table>

Part	Controls	Notes			
	6. Front building setback areas must be used for landscaping or staff and visitor car parking. Open storage is not permitted. 7. Building footprints must not exceed 65% of the total site area. ~~8. Development proposed within the Scenic Protection Constraint Area must be accompanied by a visual impact statement prepared by a suitably qualified person. The visual impact statement must demonstrate that the development will not result in a significant adverse visual impact on the surrounding area.~~ 9. Building materials should be non-reflective and external colours are to be muted earth and bush vegetation tones. Dark colours and large areas of white or vibrant colours are to be avoided. 10. Building design is to include measures to reduce water and energy use. These measures (including the energy efficiency measures set out in section 3.5 and water conservation measures such as recycling and reuse of treated waste water) are to be documented in a building sustainability statement prepared by a suitably qualified person submitted with the development application. 11. The siting of buildings and other structures should consider the mature size and height of existing vegetation and proposed landscape treatments to protect assets and occupants. ~~12. The siting and design of buildings within bushfire prone land must demonstrate compliance with the requirements of *Planning for Bushfire Protection 2006* published by the NSW Rural Fire Service.~~	B2	12,795.35	26,422.12	**41**
		B3	10,993.04	21,394.42	**39**
		All buildings are to be constructed predominantly from COLORBOND® sheeting with Pale Eucalypt for walls and Evening Haze for roofs. The external walls of the office areas will be constructed from Coen Composite Wood Panel in oak (or equivalent). All buildings will be fitted with the following: • Roof-mounted solar arrays; • Skylights throughout building sections; • Large windows throughout office sections to maximise natural light; • Underground rainwater capture and storage for reuse on-site (e.g., toilet flushing and landscape irrigation).			

Part	Controls	Notes
		
3.5 Energy efficiency	Objectives • Buildings are designed to minimise energy use. • Greenhouse gas emissions from new development are minimised. • The thermal performance of buildings is maximised. • Innovative technologies are incorporated in new developments where possible to reduce ongoing energy use and maintenance costs. Rules 1. Building design demonstrates an appropriate response to local climate and to the Site and its context.	Compliant All buildings will incorporate clear roof panels or skylights and all offices will incorporate large windows across the facades to maximise natural light.

<table>
<tr><th>Part</th><th>Controls</th><th>Notes</th></tr>
<tr><td></td><td>2. Passive solar and passive ventilation is incorporated into the design of buildings to minimise reliance on electrical and mechanical systems.
3. New development must consider building design and operation measures that reduce energy consumption relative to conventional buildings. These measures could include:
a. use of renewable energy sources such as solar or heat pump water systems
b. use of renewable or recyclable building materials
c. insulation of roof and walls to comply with relevant Australian Standards
d. use of sustainable energy technologies such as photovoltaic cells and cogeneration where appropriate
4. Maximise the use of natural light to internal spaces through window type and location and insulated roof windows.
5. Use energy efficient (low energy demand) fittings and switches.</td><td>Each building will feature a roof-mounted solar array sufficient to provide for all day-time energy requirements.

Ventilation, insulation, and energy efficiency of all fixtures and fittings will be defined during the detailed design phase of the project.</td></tr>
<tr><td>3.6 On-site parking and loading facilities</td><td>Objectives
• Adequate on-site vehicle parking is provided for employees and visitors.
• On-site loading facilities and vehicle manoeuvre areas are adequate for the operational needs of site development.
• Large open hardstand areas are screened and landscaped to reduce visual impact.
Rules
1. The number of car parking spaces to be provided on site shall be determined in accordance with the Car Parking Schedule below. The number of car parking spaces required shall be rounded up or down in accordance with normal mathematical practise. Warehouse = 1 space per 300 sq m of gross floor area. <s>The loss of any on-street parking as a result of the development including new vehicular entry points or loading zones shall be compensated for by providing on-site parking equal to the number of lost spaces.</s>
2. Council will require the provision of adequate on site turning facilities for commercial vehicles.
3. Under no circumstances will Council permit the reversing of vehicles onto main or arterial road or future by-pass route.
4. For the design of off-street commercial vehicle facilities refer to AS 2890.2: 2004 for guidelines.
5. Loading and unloading of materials and goods must take place within the Site.
6. Loading bays are not to be used for the storage of goods or waste storage other than during the loading/unloading process.
7. Open parking areas should be designed to incorporate a 2.5 metre wide landscape bay for tree planting every 6 to 8 car bays.
8. Other open hardstand areas should be screened from public view with appropriate landscape treatments.</td><td>Compliant

Parking Requirements
<table><tr><th>Building</th><th>Required</th><th>Provided</th></tr><tr><td>B1 – GFA 17,370.73m^2</td><td>58</td><td>59</td></tr><tr><td>B2 – GFA 12,795.35m^2</td><td>42</td><td>42</td></tr><tr><td>B3A – GFA 4,177.69m^2</td><td>14</td><td>17</td></tr><tr><td>B3B – GFA 6,815.47m^2</td><td>23</td><td>26</td></tr></table>The MVEC DCP does not specify a parking rate for general industrial uses, therefore the rate for warehouses has been adopted. The proposed development provides off-street parking for each building in excess of the MVEC DCP requirements.</td></tr>
</table>

Part	Controls	Notes
		Buildings 1 and 2 have been designed to permit access for 26m B-Double vehicles, with all vehicles entering and exiting in the forward direction. Building 3 has been designed to permit access for 19m Semi-Trailers, with all vehicles entering and exiting in the forward direction. All loading/unloading bays are accommodated wholly within the Site and designated storage areas for waste and goods have been provided to ensure storage does not occur within loading areas. Landscaping plans can be viewed in Appendix I.
3.7 Signage	Objectives • The location and size of signage balances business identification needs and visual impact. • The content of signage relates to site development. • The design of signage is integrated with building design. Rules 1. Signage shall comply with Appendix 2. 2. Signage must be contained within the site and must be limited to information that relates to the use of the site and the name of the premises or occupier. 3. The number of signs within a site is to be minimised and sited in accordance with a signage strategy submitted with development applications. 4. Signage must be designed as an integral part of site development and building design. Design details must be provided in a signage strategy prepared by a suitably qualified person submitted with a development application.	Compliant Business operation signs to be included on each shed: ***a business operation sign**, being a sign located below awning level no part of which is less than 2.6 metres above finished ground levels or 4.0 metres in height above finished ground level in the case of buildings without awnings, which relates to the place to which it is affixed and that describes such directions or cautions as are usual or necessary relating to the place or premises or any occupation or activity carried on there.*
3.8 Fencing	Objectives • New boundary fencing is designed to secure development sites without adverse visual impact. Rules 1. Transparent or open-style fencing along street frontages is encouraged and should not be located forward of the building line. 2. The integration of landscaping with fence lines is encouraged. 3. Fencing details must be submitted as part of a development application.	Compliant Palisade-style fencing is to be used around each proposed building for security purposes. Landscaping has been provided along all boundaries to minimise visual impacts. Refer to Appendix I.

Part	Controls	Notes
3.9 External lighting	Objectives • Adequate external lighting is provided for operational and security purposes. • Light spill and glare from external lighting does not impact on surrounding properties or compromise road safety. • • The design of external lighting minimises visual impact on surrounding areas. Rules 1. An external lighting strategy must be submitted with development applications and must indicate the location and design of lighting and the proposed hours of use. 2. A light spill impact assessment prepared by a suitably qualified person must be submitted with development applications for land located next to rural or residential zones and land within the Scenic Protection Constraint Area.	Compliant The External Lighting Strategy and Light Spill Impact Assessment is provided in Appendices W and X. Outdoor lighting has been designed to meet operational and security requirements without adverse impacts to neighbouring rural lands.
3.10 Landscaping	Objectives • Landscape treatments integrate existing native vegetation within the development site where possible. • Landscape treatments complement the area and create consistent and attractive streetscapes. • Landscape treatments reduce the visual impact of development and enhance the amenity of users. • Water use for maintenance of landscaped areas is minimised. Rules 1. A landscape concept plan prepared by a suitably qualified person is to be submitted with a development application. The landscape concept plan must indicate the location and nature of proposed landscape treatments within the development site including identification of species and mature heights. ~~2. A minimum 5 metre deep landscaped area is to be established along any lot boundary adjacent to Berrima Road (see Figure 2a) in the Local Industry Precinct.~~ ~~3. A minimum 10 metre wide landscaped area is to be established along any lot boundary adjacent to the Moss Vale Bypass or Arterial Road.~~ 4. A minimum 15 metre wide landscaped area is to be established along lot frontages to internal access roads and along boundaries with rural zoned land outside the Enterprise Corridor. 5. A minimum 3 metre wide landscaped area is to be established along the side and rear boundaries of a site unless otherwise specified above. 6. The height and density of vegetation within building setback areas must be sufficient to provide effective visual softening to buildings and other structures and open hardstand areas. 7. Landscaping should be integrated with existing native vegetation and should use compatible local native species selected from the council native species list. 8. Strategic landscaping within other parts of the Site should be established to provide shade to car parking areas and to soften the appearance of large expanses of hardstand areas.	Compliant A Landscape Concept Plan has been prepared by Moir Landscape Architecture – Appendix I. The plan utilises plant species from the *Southern Highlands Shale Woodlands in the Sydney Basin Bioregion* endangered ecological community as much as practicable. The landscaping plan has considered the visual impacts of the proposed building development and the requirements for provision of shade to hardstand areas, as well as the requirements for landscaping within the gas pipeline easement. Irrigation for landscaping will be provided by rainwater tanks provided with each building.

Part	Controls	Notes
	9. Native plant species should be used for Riparian areas and a mix of exotic and native plants should be used in all landscape areas with emphasis on water efficient species. The plant species must be selected from the council native species list and must be compatible with existing native vegetation within the Site. 10. Reticulated water must not be used for irrigation purposes.	
3.11 Utility services	Objectives • The Moss Vale Enterprise Corridor is serviced with essential utility services with adequate capacity to meet future demand. • There is adequate land set aside for the provision of essential utility services and associated infrastructure. Rules ~~1. A servicing strategy prepared by a suitably qualified person must accompany development applications for the subdivision of land and must be consistent with the Development Concept Plan.~~ 2. Lots must be connected to essential utility services before development can proceed. 3. Utility services must be adequate to meet the demands generated by the proposed development. ~~4. A water storage reservoir site may need to be set aside as indicated on the Development Concept Plan. The need for the site will be confirmed by a water modelling exercise and could require an area in the order of 1000 to 2000 square metres.~~ 5. ~~Six 1000 square metre sewerage pump station sites are to be set aside as indicated on the Development Concept Plan~~. 6. ~~Three 5000 sq m electricity zone substation sites are to be set aside as indicated on the Development Concept Plan~~.	Compliant Sections 8.5, and Appendices G, H, and S identify the utility services connection requirements for the proposed development.
3.12 Biodiversity conservation	Objectives • Significant remnant native vegetation is retained. • Threatened plant species and endangered ecological communities are protected. • Threatened fauna species and important habitat and habitat corridors are protected. Rules 1. The requirements of relevant biodiversity conservation legislation must be met. ~~2. Development proposals within the Biodiversity Conservation and Riparian Constraint Area identified on the Development Concept Plan (Figure 3) must consider the biodiversity conservation value of these areas.~~ ~~3. A threatened species assessment for land identified in Figure 3 prepared by a suitably qualified person in accordance with Department of Environment and Climate Change (DECC) guidelines must be submitted to the relevant State Government Agencies (currently Department of Water and Energy (DWE), and the DECC) with any proposals for off-sets and bio-banking.~~ ~~4. Targeted surveys for threatened flora and fauna species as identified in the Moss Vale Enterprise Corridor Flora and Fauna Assessment prepared by Total Earth Care Pty Ltd (February 2007) must be undertaken in accordance with DECC and Council guidelines as part of the threatened species assessment.~~	Compliant The property largely consists of open paddocks covered by pasture grasses. The proposal will result in the removal of 7 isolated Narrow-leaved Peppermint, *Eucalyptus radiata*, trees, nine hollow-bearing trees, and clearance of 0.16ha of urban/native exotic vegetation and 7.9ha of exotic pastureland. The proposed development has been sited to minimised impacts to existing habitat features and sensitive environmental areas. The proposed development will result in the removal of priority weed species (Blackberry and Willow). Landscaping included in the

Part	Controls	Notes
	~~5. A Vegetation Management Plan and confirmation of the negotiated agreement with these Departments are required to be submitted with all development applications within the Figure 3 area.~~ 6. The siting of development must consider the presence of remnant vegetation. Mature trees are to be retained where possible. 7. Watercourses should be retained as natural drainage corridors with suitable buffers where significant. 8. Remnant native vegetation and conservation areas within development sites must be managed in accordance with an approved Vegetation Management Plan.	proposed development will use plant species from the local threatened ecological communities wherever appropriate. Two minor drainage lines will be impacted by Building 1 and Building 3B. Section 8.5 and Appendices G, Q and R outline the protection and mitigation measures to be implemented to maintain drainage requirements and ensure there are no off-site impacts.
3.13 Heritage protection	Objectives • Sites and artefacts of Aboriginal heritage significance are protected. Rules 1. The requirements of relevant heritage protection legislation must be met. ~~2. Areas with significant Aboriginal cultural heritage values are to be protected.~~ 3. ~~Development proposals within the Heritage Constraint Area identified on the Development Concept Plan must consider and assess the potential impact on Aboriginal cultural material. A heritage assessment prepared by a suitably qualified person must be submitted with development applications in these areas.~~	Compliant The property is not within an area of significant Aboriginal cultural heritage values. The AHIMS database does not identify any records of Aboriginal sites or objects within the property or within 1km of the property. No heritage listed items are located on the property. The closest item of general heritage significance is located in the adjacent property to the west of the site (identified as 146 Oldbury Road Sutton Forest 2577 – Lot 10, DP 10658). A State Heritage Register Curtilage area is located approximately 1.5km to the southwest of the site (217 Oldbury Road Sutton Forest 2577 – Lot 2, DP 123550). An unexpected heritage finds protocol will be included in the construction management plan for the proposed development.
3.14 Noise	Objectives • Noise emissions from future development do not adversely impact on surrounding rural and residential uses. • Externalities generated by existing heavy industrial uses are recognised as potential constraints to future development. Rules	Compliant The proposed development will be used for the storage, assembly, maintenance, transport and hire of scaffolding equipment. No activities

Part	Controls	Notes
	1. Development must comply with the requirements of the NSW Industrial Noise Policy and Environmental Protection Authority (EPA) requirements. 2. A noise impact statement prepared by a suitably qualified person must be prepared for development proposals within 500 metres of a rural or residential zone boundary. The noise impact statement must demonstrate that noise from the proposed development will not result in a significant adverse impact on the amenity of surrounding rural or residential properties based on accepted noise criteria. 3. Proposed development within the vicinity of existing heavy industrial land uses must demonstrate an understanding of the noise impacts of existing development as part of their development proposal.	likely to result in excessive noise generation are expected. The proposed development is located more than 500m from the nearest residential receivers. The proposed development is not within the vicinity of existing heavy industrial land uses that may generate noise impacts for the proposed development.
3.15 Air quality	Objectives • Development does not adversely impact on ambient local air quality. • Air emissions from development do not cause nuisance or health issues for surrounding properties. • Externalities generated by existing heavy industrial uses are recognised as potential constraints to future development. Rules 1. Air emissions from development must comply with relevant legislation and EPA requirements. 2. An air quality impact statement prepared by a suitably qualified person must be submitted with a development application for development proposals with the potential to generate significant air pollutants such as odour or particulates. 3. Proposed development within the vicinity of existing heavy industrial land uses must demonstrate an understanding of the air impacts of existing development as part of their development proposal.	Compliant Air quality impacts from particulate matter may occur during the construction phase and will be addressed through a construction management plan. The proposed building development will not result in any operational air quality impacts. The proposed development is not within the vicinity of existing heavy industrial land uses that may generate air quality impacts for the proposed development.
3.16 Flood-prone land and stormwater management	Objectives • Flood-prone land is protected from development. • The risk to life and property due to flooding is not increased by development. • Stormwater is managed on-site to ensure post-development runoff does not exceed pre-development levels. • Development does not adversely impact on water quality in local watercourses. • Sustainable development practices form part of the stormwater management strategy for site development. Rules 1. Flood-prone land is incorporated into the conservation zone delineated on the Development Concept Plan. 2. Development proposals on land within the Water Inundation Constraint Area as identified on the Development Concept Plan must be accompanied by a flood assessment. The assessment must demonstrate	Compliant Only the southern RU2 zoned portion of the property (Area 3) is affected by flooding. Development within this portion of the property will be restricted to the construction of a stormwater outlet adjacent to the southern side of Hutchinson Road, and a small road easement to facilitate construction of the industrial cul-de-sac on Hutchinson Road. All

Part	Controls	Notes
	the land is suitable for development and that development will not increase the potential for downstream flooding. 3. Development shall comply with the requirements of Appendix 3. 4. A stormwater management plan prepared by a suitably qualified person must be submitted with development applications. The plan must address the requirements set out below: • A minor drainage system collecting runoff from roads and hardstand areas must be provided. This shall include a pipe drainage system designed for a 1 in 20 year storm event. • Overland flow paths to accommodate flows in excess of the 1 in 20 year storm and up to the 1 in 50 year storm event must be provided. • Detention basins to limit post-development flows to pre-development flows for all storm durations. • Details of water quality devices to ensure pollutants do not contaminate water leaving the site. • Sustainable development and water sensitive urban design measures proposed. 5. An erosion and sediment control plan must accompany development applications. This must detail measures proposed to prevent soil erosion and sediment transport. 6. Stormwater management facilities should be integrated with conservation areas or proposed landscape areas where possible.	works will be located above the Flood Planning Level.
3.17 Waste management	Objectives • To minimise the volume of waste generated during demolition and construction phases of development. • To promote demolition and construction techniques which maximise recycling and reuse opportunities of waste materials. • To minimise the volume and type of waste going to landfill. • To avoid illegal dumping of waste across Wingecarribee Shire. • Waste minimisation and management practices are implemented in new developments. Rules Prior to Construction 1. A Waste Management Plan is required for all demolition works and /or construction works (with a value greater than $50,000). 2. Consideration must be given to re-using existing materials, or parts thereof, on the subject site for the proposed use. 3. Applicants must demonstrate a commitment to waste minimisation by completing a Waste Management Plan that will minimise material going to landfill. 4. The Waste Management Plan must address the following requirements (as a minimum): • Volume and type of waste, land fill and recyclables to be generated. • Storage and treatment of waste and recyclables onsite. • Facilities proposed to receive residual waste and recyclables.	Compliant A Waste Management Plan for the proposed development is provided in Appendix Y.

Part	Controls	Notes
	5. Where the building contains asbestos, Council will ask for verification of the disposal technique used, the amount removed and the disposal location for the asbestos materials. This documentation will need to be submitted within 7 days of off-site disposal. 6. Receipts from the disposal of residual waste and recyclables are required to be retained by the applicant in order to confirm the lawful disposal of these materials. During Construction 7. Construction activities are to be managed so that waste is sorted, reused or recycled, where possible. Potentially windblown rubbish such as foam, cardboard or plastic must be stored on the Site within a receptacle with a tight fitting, secure lid. 8. Any fill removed from the site shall only be placed on an approved waste disposal facility and as detailed in the Waste Management Plan. 9. It is not acceptable to dispose of all waste material generated from construction to landfill. Instead, applicants must demonstrate a commitment to waste minimisation. The Waste Management Plan must demonstrate implementation of the following during construction (as a minimum): • Installation of waste storage receptacles, and • Sorting of waste into material types. 10. Receipts from the disposal of residual waste and recyclables are required to be retained by the applicant in order to confirm the lawful disposal of these materials. A Waste Management Plan Template is available at Council or on Councils website as part of the land use application forms.	
Part 4, Appendix 2 Signage		
SIGNS THAT DO NOT REQUIRE COUNCIL APPROVAL Group A	The erection of an advertising structure and the display of an advertisement on it or the display of an advertisement that is not affixed to an advertising structure, in any of the following cases: (5) **a business operation sign**, being a sign located below awning level no part of which is less than 2.6 metres above finished ground levels or 4.0 metres in height above finished ground level in the case of buildings without awnings, which relates to the place to which it is affixed and that describes such directions or cautions as are usual or necessary relating to the place or premises or any occupation or activity carried on there, or particulars or notifications required or permitted to be displayed by or under any State or Commonwealth Act, but only if such development: (a) is not illuminated unless required by or under any State or Commonwealth Act, and (b) does not advertise any product or business name to which it relates.	Compliant Only business operation signs will be erected on the sheds.
Part 4, Appendix 3 FLOOD-PRONE LAND AND STORMWATER MANAGEMENT		

Part	Controls	Notes
4.3.1 Introduction	This Section applies to any development for which consent is required that is located on land affected by flooding (flood liable or flood prone land).	Compliant No development is proposed within the portion of the property affected by flooding. The proposed development will impact on two minor drainage lines. However, mitigation measures will be implemented to ensure the development does not produce off-site impacts related to drainage and overland flow.
4.3.8 Controls for Overland Flow	The effects of overland flow, also defined as local overland flooding, are to be assessed in the same manner as mainstream flooding. In addition there are other specific considerations as outlined below. **4.3.8.2 Performance Criteria** The performance criteria for general flood prone land apply. **4.3.8.3 Prescriptive Controls** The prescriptive controls for overland flow are: a) Proposals involving collecting and piping overland flow through the subject property or upgrading a section of Council's existing pipe infrastructure, will generally not be acceptable for the following reasons: • there is a substantial potential for system blockage due to the limited number of inlets available; • the natural detention storage available within the catchment is reduced and flow velocities are increased; and • due to greater rates of flow, it may cause localised increases in hazard at the system outlet and greater scour of natural creeks and/or disturbance of the downstream river bed. b) Proposed land subdivisions of lots affected by overland flow will not be approved unless the applicant can demonstrate to Council that it is possible to provide a development on the newly created lot that realises the full floor space ratio (FSR) potential of the lot and provides suitable private open space while meeting the overland flow management criteria outlined in this document.	Partially complies The proposed development will result in the removal of two minor waterways, and replacement with the on-site stormwater management system described in Sections 3.3 and 8.5. The proposed stormwater management system includes gross pollutant traps and on-site detention to address reduce the potential for blockages, and to manage outlet flow velocities. The stormwater outlet will be located above the flood planning level on the vacant RU2 land immediately south of Hutchinson Road. The outlet will include an energy dissipator and a new on-site dam to reduce flow velocities.
4.3.9 Information Requirements	4.3.9.3 Information Requirements a) Applications must include information that addresses all relevant controls listed above, and the following matters as applicable. b) Applications for Concessional Development to an existing dwelling on flood liable land shall be accompanied by documentation from a registered surveyor confirming existing floor levels. c) A survey plan showing: - • The position of the existing building/s or proposed building/s;	Compliant The site survey plan is provided in Appendix C. A Flood Study Report is provided in Appendix R.

Part	Controls	Notes
	• The existing ground levels to Australian Height Datum (AHD) around the perimeter of the building and contours of the site; and • The existing or proposed floor levels to AHD. d) Applications for earthworks, filling of land and subdivision shall be accompanied by a survey plan (with a contour interval of 0.25m) showing relative levels to AHD. e) For large scale developments, or developments in critical situations a flood study using a fully dynamic one or two dimensional computer model may be required. For smaller developments a suitable flood study may be required together with any relevant Council Drainage Design Code and the Floodplain Development Manual. From a flood study, the following information shall be submitted in plan form: • water surface contours (including the 100 year flood and PMF extents); • velocity vectors; • velocity and depth product contours; • delineation of Flood Risk Precincts relevant to individual floodplains; and • both existing and proposed flood profiles for the full range of events for total development including all structures and works (such as revegetation/ enhancements). This information is required for the pre-developed and post-developed scenarios. f) Where the controls for a particular development proposal require an assessment of structural soundness during potential floods, the following impacts must be addressed: • hydrostatic pressure; • hydrodynamic pressure; • impact of debris; and • buoyancy forces. Foundations need to be included in the structural analysis	

5.3. *Rural Lands Development Control Plan* 2010

The *Rural Lands Development Control Plan* 2010 (Rural Lands DCP) applies to the following land use zones within the Wingecarribee Shire area: RU1 Primary Production, RU2 Rural Landscape, C2 Environmental Conservation, C3 Environmental Management, and SP3 Tourist. The Section 10.7 Planning Certificate for the property indicates the Rural Lands DCP applies due to the RU2 zoning in Areas 1 and 3, and the C3 zoning in Lot 1, DP103123.

No development or subdivision of the C3 zoned Lot 1, DP103123 will occur as part of this proposed development.

Development within the RU2 zoned portion of the properties will be limited to realignment of the property boundaries to separate the rural zoned land from the industrial zoned land, and construction of a stormwater outlet and road easement to facilitate the industrial cul-de-sac within the RU2 zoned land referred to as Area 3 in Figure 2.2.

Section A2.7 of the Rural Lands DCP discusses the subdivision of rural land and notes the minimum lot size of 40ha for rural subdivision. The following principles have been adopted as the basis for assessing rural subdivision proposals:

a) The minimisation of rural land fragmentation;
b) The minimisation of rural land use conflicts, particularly between residential land uses and other rural land uses;
c) The consideration of the nature of existing agricultural holdings and the existing and planned future supply of rural residential land when considering lot sizes for rural lands;
d) The consideration of the natural and physical constraints and opportunities of land; and
e) That planning for dwelling opportunities takes account of those constraints.

The proposed subdivision aligns with these principles and is consistent with the current land use zoning. As all rural zoned land from the properties to be subdivided will be consolidated into one lot with an area of 54.6ha, the proposed subdivision complies with the minimum lot size requirements.

6. Project Justification

Over their three businesses—Synergy Access & Scaffolds, Bayside Scaffolding, and ScreenIt—SAAS operates one of the largest scaffolding and labour hire companies in Australia, with 35,000 tonnes of scaffolding currently available for hire by builders and developers. The operations are currently based in Beverley Hills, south of Sydney, in an area with limited opportunities for future growth and expansion due to the high density of existing development. The proposed development site provides the company the space necessary to meet current needs while allowing for future growth.

The property in Moss Vale has the following benefits for SAAS:

- Lower land cost than the Sydney metropolitan area allowing more economical development of large warehousing space;
- Sufficient space to meet all staff, visitor and truck parking requirements on-site;
- Sufficient space to include ancillary facilities including office spaces and staff training areas on-site; and
- Direct B-Double access to the Hume Motorway (north and southbound).

The project will also have significant economic benefits for the Southern Highlands region as all business operations will be relocated to Moss Vale. The proposed development is expected to create up to 60 construction jobs over a two-year period, and 120 full-time jobs once operational. The construction of the subdivision and General Industry development has an anticipated cost of $73.85 million, with labour and materials to be sourced locally wherever possible.

The proposed development has been sited and designed to take advantage of industrial zoned land within the WSC region, whilst providing protection and improved management outcomes for rural zoned land within the affected properties. Best-practice measures are included in the design of the proposed development, including energy efficiency measures such as the use of solar power, and stormwater capture and treatment devices to improve the quality of runoff compared to the current, unmanaged scenario.

7. Consultation

Consultation is a key aspect of the environmental impact assessment process. It helps build understanding of the Proposed Development and its potential effects and enables stakeholder knowledge and views to be considered by the project team in project development and assessments, and by the government in its assessment and approval decisions.

A Community and Stakeholder Engagement Plan (Appendix K) was prepared for the proposed development to identify methods for the following actions:

- Inform the community and stakeholders about the proposed development, the environmental effects, and opportunities for participation;
- Help people understand the proposed development and its environmental effects;
- Encourage participation and seek input to identify issues of potential concern, obtain local insight, and gain feedback on measures to address concerns;
- Use and respond to public input; and
- Incorporate responses in the management plans to address local concerns and issues, as and where applicable.

7.1. Stakeholders

The proposed development was expected to attract the greatest interest from the neighbouring businesses on Bowman Road that were most likely to be impacted by the development, government and statutory authorities, and local community groups. The following stakeholders and community representatives were targeted for consultation, noting that the nearest residential properties are located more than 600m from the proposed development site and impacts on these properties is expected to be negligible:

- Wingecarribee Shire Council – a pre-lodgement meeting was held to determine the Council's assessment requirements and to understand potential compliance issues with the MVEC DCP and WLEP;
- APA Group – APA own and operate the high pressure gas pipelines within the easement affecting the property. Extensive consultation, including a design workshop attended by the project civil engineer and landscape architects, has been undertaken to ensure the proposed design complies with APA's requirements. All plans were reviewed and approved by APA;
- Department of Planning and Environment, Water – email correspondence regarding the proposed realignment of waterways within the proposed development site;
- Businesses and landholders within 500m of the site – these businesses may be directly impacted by the construction and/or operation of the proposed development. Consultation focused on informing businesses and landholders of the potential impacts and understanding the project rationale and benefits. Businesses were provided with a project factsheet and were invited to attend a webinar presentation; and
- Community groups – the Illawarra Local Aboriginal Land Council and WinZero (Wingecarribee Net Zero Emissions), as representatives of the local community, were provided with project details and invited to attend individual videoconference meetings.

7.2. Communication activities and program

Table 7.1 summarises the communication tools employed for community and stakeholder engagement and Table 7.2 outlines the program for consultation associated with the proposed development project. Copies of the consultation factsheet and letters are contained in Appendix K.

Table 7.1. Communication tools used for stakeholder and community consultation.

Communication Tools	Description
Webpage	• A webpage, hosted on the Jackson Environment and Planning website, provided a central location for information about the project Industrial Subdivision and General Industry Development, Moss Vale; • The webpage hosts all information relating to the consultation including dates and timelines for consultation, project description, factsheet, detailed scoping report, webinar recording, and details for the provision of feedback.
Factsheet	• The factsheet provides a brief summary of the project, the potential impacts on neighbours and residents, environmental protection measures, and benefits to the community.
Letters	• Letters sent to local businesses provided a project summary and details for the provision of feedback; • Letters sent to government agencies provided specific details regarding elements of the proposed development relevant to the statutory responsibilities of the agencies.
Webinar	• A community webinar was hosted on Wednesday 5th April 2023 and was available to all stakeholders and members of the local community. The webinar was recorded and is available for viewing on the project webpage Community Webinar Recording - General Industry Development, Moss Vale; • The webinar presented maps, photographs, and illustrations of the proposed development to demonstrate the location and potential impacts of the development; • The webinar provided an opportunity to capture stakeholder feedback.
Videoconference meetings	• Community groups were invited to attend individual videoconferences following receipt of a letter and project factsheet; • The meetings were used to present maps, photographs, and illustrations of the proposed development to demonstrate the location and potential impacts of the development; • The meetings allowed detailed discussion of the proposal and the feedback received.
Feedback	• Stakeholders and community members were offered three options for the provision of feedback on the proposed development: ○ Email: admin@jacksonenvironment.com.au ○ Post: Suite 102, Level 1, 25-29 Berry Street, North Sydney, NSW 2060 ○ Phone: (02) 8056 1849

Table 7.2. Community and stakeholder engagement action plan.

Date	Engagement Activities	Key Message	Communication Tool	Responsibility	Stakeholders
March 2023	• Preparation of the Community and Stakeholder Engagement Plan	• How the community and stakeholders will be consulted	• Community and Stakeholder Engagement Plan (this document)	• JEP	• Internal project team
March 2023	• Send letters to government agencies	• Provide project overview • Invite to stakeholder briefing	• Letter and fact sheet	• JEP	• Decision makers • NSW Government and statutory authorities
March 2023	• Letterbox drop to identified residential landholders and nearby businesses and community groups	• Invite involvement in engagement activities and provide details on how to contact the project team with any enquiries • Opportunity to subscribe to an email distribution list for all project related updates / information etc.	• Letter and fact sheet	• JEP • SAAS Aus Pty Ltd	• Local businesses within 500 m of the site • WinZero • Illawarra Local Aboriginal Land Council
April 2023	• Stakeholder briefing through webinar (for businesses)	• Provide project overview • Seek feedback and answer questions	• Copy of communication material • Meeting schedule • Meeting Minutes	• JEP • SAAS Aus Pty Ltd	• Local businesses
April 2023	• Meetings with community groups (via videoconference if requested by the group)	• Provide project overview • Seek feedback and answer questions	• Copy of communication material • Meeting schedule • Meeting Minutes • Videoconference (Zoom)	• JEP • SAAS Aus Pty Ltd	• Community groups
May 2023	• Prepare draft Feedback Summary Report (and chapter in SEE) • Finalise Feedback Summary Report (and chapter in SEE)	• Summarise and analyse feedback received from all engagement activities	• Summary Report (PDF format) • Website update	• JEP	• All

7.3. Community and stakeholder feedback

This section summarises all feedback received through the community and stakeholder consultation process.

7.3.1.Wingecarribee Shire Council

A pre-lodgement meeting was held with WSC on 14th March 2023 to discuss the proposed subdivision and general industry development. Those present at the meeting were:

- Dr Mark Jackson – Jackson Environment and Planning Pty Ltd (JEP);
- Alex Soukie – SAAS Aus Pty Ltd;
- Jafar Tanana – SAAS Aus Pty Ltd;
- Peter Malloy – Senior Town Planner, WSC; and
- Jocelyn Do – Development Engineer, WSC.

The following issues and requirements were raised by Council and have been addressed within this report and its appendices:

- WSC would prefer the proposed land subdivision to consolidate all RU2 zoned land into one lot. The subdivision plan has been modified to accommodate this preference;
- Two Category 3 streams are located in the subject site within the proposed footprints of B1 and B3. The development application is to address Clause 7.5 of the WLEP (refer to Section 8.5) and provide a flood report and modelling for any proposed modifications to the streams and for the culvert crossing design where Bowman Road will cross the stream (Appendix G);
- The application must address Chapter 8 of the BC SEPP – Sydney Drinking Water Catchment (refer to Section 8.5 and Appendix Q);
- An ecological report is to be provided where native vegetation is proposed to be removed. The report should address vegetation type/threatened ecological communities and possible Koala habitat protection, and should include specific reference to the Narrow-leaved Peppermint, *Eucalyptus radiata*, trees that will be removed (refer to Section 8.7 and Appendix U);
- The application must address Chapter 4 Remediation of Land of the Resilience and Hazards SEPP (refer to Section 8.2 and Appendix L);
- The application must address the applicable controls in the MVEC DCP, including the subdivision requirements of Section 3.2 (refer to Section 5.2);
- Landscaping should include Southern Highland Shale Woodland Critically Endangered Ecological Community species (refer to Appendix I);
- The proposed development is integrated development as the subdivision includes bush fire affected land, and is within 40m of a defined watercourse. Approval is required under s100B of the *Rural Fires Act* 1997 and the *Water Management Act* 2000;
- WSC indicated a preference that the development application for the subdivision be submitted and approved prior to separate applications being submitted for each building. However, SAAS would like to progress with a single development application to reduce wait times associated with the development application process;
- Water and sewer modelling is recommended to be submitted with the development application, including water and sewer concept designs (refer to Section 8.5 and Appendix S);
- The Bowman Road upgrade is to follow the existing width of the road and provide an industrial cul-de-sac at the end of the road suitable for B-Double turning movements;
- A traffic impact assessment is required (refer to Section 8.4 and Appendix N);

- Consideration is to be given to the design of the Moss Vale Bypass as the proposed development is within close proximity. The project civil engineer requested details from WSC regarding the bypass design, however, no response was received;
- The proposed buildings will need to comply with the Building Code of Australia (refer to Section 3.5 and Appendix J); and
- The development application should be supported by the following:
    - Statement of Environmental Effects (this report);
    - Flood Assessment Report (Appendix R);
    - Water and Sewer Modelling Report (Appendix S);
    - Traffic Report (Appendix N);
    - MUSIC Modelling and Water Quality Management Report (Appendix Q); and
    - Flora and Fauna Assessment Report (Appendix U).

7.3.2.APA Group

As the owner and operator of the gas pipeline easement that affects portions of the subject site, consultation with APA Group was initiated in May 2022 during the early design and scoping stage. APA Group provided an initial summary of their approvals process for any works within or near the pipeline easement, and general design guidelines that apply to all proposed works that have the potential to impact the pipeline. This information guided the initial design of the proposed building development. Table 7.3 summarises the additional consultation that has occurred with APA Group.

Table 7.3. Summary of consultation with APA Group.

Date	Method of Communication	Summary of Outcomes
03/08/2022	Videoconference	• JEP and SAAS presented the initial concept design for Building 1 and highlighted potential future crossings of the pipeline easement; • APA Group provided general advice regarding the extent of controls around the pipeline easement; • APA Group advised a risk-based workshop would be required between APA Group, JEP and the project engineer, during which a threat register would be prepared, and the proposed design would be discussed in detail; and • APA Group would provide additional information including standard drawings for works within the easement and a commercial agreement for third part works within the easement.
26/09/2022	Email	• APA Group issued the Third Party Works Agreement permitting works to be undertaken within the pipeline easement for the purposes of investigations to support the proposed development of Building 1.
14/12/2022	Letter	• JEP contacted APA Group to present the revised proposed development design that included the proposed subdivisions and Buildings 2 and 3; and • The letter included a copy of the project scoping report that was presented to WSC during the pre-lodgement meeting and requested a booking for the design workshop.

08/02/2023	Videoconference	• The design workshop was held with the following attendees:
		  ○ Denis Winterburn, Paul Walters, Omar Ashour, Cath Greenhalgh – APA Group
		  ○ Dr Mark Jackson – JEP
		  ○ Anthony Healey – ECLIPSE Consulting Engineers Pty Ltd
		  ○ Tim Buykx, Cor Nepgen – Moir Landscape Architects
		  ○ Jafar Tanana, Alex Soukie – SAAS;
		• APA Group would need to inspect pipelines prior to construction to determine whether recoating of the pipeline would be required. A recoverable works agreement would be required to cover the cost of coating works;

Date	Method of Communication	Summary of Outcomes
		• Concrete slabs are required over the pipelines at all pipeline crossings in accordance with APA Group's standard drawings; • APA Group noted preferred landscaping within the easement (grass or low shrubs) and fencing requirements to ensure 24/7 access to the easement; • A potholing survey was recommended to confirm the exact location and depth of the pipelines to facilitate design of civils and utility services ensuring compliance with all minimum clearance requirements; • Main risk to pipeline is from the cutting required for the northern end of B3. APA Group specified construction requirements for retaining walls and the need for vibration monitoring; • APA requires a Safety Management Study prior to DA lodgement, including a qualitative risk assessment, review of land classification and an additional workshop ;and • APA Group happy to review design plans prior to DA submission.
09/02/2023	Email	• APA Group provided the set of standard drawings.

A good relationship has been established with APA Group and will be maintained throughout the life of the project to ensure the proposed development is compliant with all of APA Group's requirements.

7.3.3.Endeavour Energy

Endeavour Energy's (EE) Moss Vale Field Service Centre is located at 8 Old Dairy Close, Moss Vale on land adjoining the south-eastern boundary of the subject site. A general enquiry form was submitted through the EE website on 24th March 2023 providing details of the proposed development and requesting feedback from EE. A response was received from Cornelis Duba, Development Application Specialist at EE, on 13th April 2023. A summary of the feedback is provided here:

- No easements benefiting EE are located within the subject site. However, 11kV high voltage overhead powerlines cross parts of the subject site and are regarded as protected works under the *electricity Supply Act* 1995 and protected works may be managed as if an easement is in place;
- All encroachments and /or activities (works) within or affecting an easement or protected works need to be referred to Endeavour Energy's Easements Officer for assessment and possible approval if they meet the minimum safety requirements and controls;
- Reference is made to the standard conditions that may apply to the proposed development to identify the potential matters that may arise;
- An Accredited Service Provider (ASP) of an appropriate level and class of accreditation will need to be engaged to assess the electricity load and the proposed method of supply for the development. The assessment should include location and design recommendations for any required padmount substations to be located within the property;
- An extension and/or augmentation of the existing local network will be required;
- Other factors such as the size and rating/load on the conductors and voltage drop, etc. need to be assessed. However, the extent of any works required will not be determined until the final load assessment is completed;
- Minimum safety clearances apply to all temporary and permanent buildings and structures, and to all work conducted near overhead power lines. The clearances are to be assessed by an ASP; and
- The landscape designer will need to ensure any planting near electricity infrastructure achieves Endeavour Energy's vegetation management requirements.

A package of standard documents relating to building, construction, and safety around powerlines was also provided for information.

An ASP will be engaged during the detailed design phase of the project to consider the electricity load. Each building will include a significant solar array to provide most of the project's electricity needs.

7.3.4.WinZero

A letter was sent to WinZero on 24th March 2023 providing background on the proposed development, including the fact sheet, and inviting WinZero representatives to attend the community webinar and/or meet via videoconference to discuss any feedback. The Secretary, Derek White, advised that WinZero members would be unlikely to attend the webinar due to a conflict with another event, but a date for a separate videoconference would be set.

A videoconference was held on 27th April 2023 with representatives from JEP, SAAS, and all WinZero board members. Table 7.4 provides a summary of the issues raised by WinZero and the proponent's response.

Table 7.4. Summary of issues raised in consultation with WinZero.

Issue Raised by WinZero	Proponent Response
Traffic is a major issue from the Wingecarribee Resource Recovery Facility, queues are long – how will the development impact the traffic?	The proposed development can accommodate the expected peak truck and passenger vehicle volumes to be generated by the proposal. Therefore, the proposed development will not contribute to queues on the public roads.
Concerns that Berrima Road, and other local roads, are not approved for heavy vehicles – how will this be managed?	Berrima Road is an approved B-Double route. Trucks will only use the existing approved heavy vehicle routes and will not travel into Moss Vale.
Concerns over native vegetation dieback in the local area. Requested to review the landscape concept design and offer advice on the local species to be used for landscaping.	The landscape concept design is to be provided to WinZero once finalized for review of the species list.

7.3.5.Other feedback

Table 7.5 summarises other feedback received during the consultation program.

Table 7.5. Summary of other community feedback received.

Name	Position	Summary of Response	Date
Arnold Williams	Local business owner: Coach House Timbers 21-23 Old Dairy Close	Specialist timber supplies for residential and commercial developments. Interested in providing construction material.	03/04/2023
Mrs. EJ Macpherson	Owner – 'Browley' 146 Oldbury Road, Sutton Forest	Browley is a significant rural property that surrounds the northern and western boundaries of 2 and 10 Bowman Road. Mrs. Macpherson wrote to JEP to express concerns about water from the proposed development entering the Browley property, particularly in the vicinity of the Wingecarribee Resource Recovery Centre and the cattle saleyards. Historically, run-off from these properties has caused issues with contamination in the stock watering dam and ponding of stormwater within the property. Mrs. Macpherson also described court action taken against the previous owners of 2 and 10 Bowman Road regarding the state of the boundary fence and the lack of weed management affecting the operations at Browley.	24/04/2023
		Ms. Tas Rangwala spoke to Mrs. Macpherson by phone to provide further details about the proposed development. Ms. Rangwala explained the following:	26/04/2023

Name	Position	Summary of Response	Date
		• The proposed development must demonstrate it can meet the water quality objectives for the Sydney Drinking Water Catchment; • The proposed stormwater system will divert the majority of run-off away from Browley, through a treatment system, before directing it towards Whites Creek; • At the time of consultation, modelling was being undertaken to confirm the proposed development would not create any localised flooding issues; • Weeds would be removed from the development area and landscaping would complement the local, endangered plant community; and • An environmental management plan would be developed for construction and operation. The plan would include weed management measures. Mrs. Macpherson confirmed she would review the plans when placed on public exhibition and provide additional feedback if required.	

7.4. Project modifications resulting from feedback

The location of the gas pipeline easement, and the requirements for construction within the easement, has heavily influenced the project design. The location and layout of the proposed buildings and associated hardstand, parking, and landscaped areas, have been developed to avoid works within the easement as much as possible. The initial building design included car and truck parking within the easement at the northern end of Area 2 (refer to Figure 2.2). However, due to the pavement design required to prevent damage to the pipeline from vehicle movements, the design was revised to provide parking for B1 within a basement car park, and to reduce the size of B3 to provide all parking requirements outside the easement. Similarly, B2 has been set back approximately 49m from Bowman Road to provide parking at the front of the building without requiring works in the easement.

8. Site Suitability and Assessment of Environmental Impacts

A project team was engaged to assess the impacts of the proposed development on the environment. The project team consisted of the following:

- Town planning and general environmental assessment – Jackson Environment and Planning Pty Ltd;
- Architectural design – Jackson Environment and Planning Pty Ltd;
- Community consultation – Jackson Environment and Planning Pty Ltd;
- Land contamination – Consulting Earth Scientists;
- Geotechnical Investigation – Consulting Earth Scientists;
- Biodiversity – Biosis Pty Ltd;
- Bush Fire Assessment – Harris Environmental Consulting;
- Stormwater Management – ECLIPSE Consulting Engineers;
- Wastewater Management – Urban Water Solutions;
- Traffic Impact Assessment and vehicle turning paths – SECA Solution Pty Ltd;
- Waste Management Plan – Jackson Environment and Planning Pty Ltd;
- Visual Impact Assessment – Terras Landscape Architects; and
- Surveying – Total Surveying Solutions.

The following sections provide an assessment of baseline environmental conditions, potential impacts, and proposed mitigation measures as appropriate to ensure that the development is designed in line with best practice and does not negatively impact on people or the local environment. These issues have been considered based on guidance from the pre-lodgement meeting with WSC and consideration of key requirements of the *Moss Vale Enterprise Corridor Development Control Plan* 2008.

8.1. General site suitability

8.1.1.Existing conditions and potential impacts

Table 8.1 addresses the general suitability of the site for the proposed industrial subdivision and General Industry development.

Table 8.1. Summary of existing site conditions and potential impacts of the proposed development.

Consideration	Existing Conditions	Potential Impact
Land Use Zone	The portion of the subject site affected by the proposed building development is zoned E4 General Industrial. The remainder of the subject site is zoned RU2 Rural Landscape.	Nil
Landslip	The subject site is not within a known landslip area.	Nil
Mine subsidence	The subject site is not within a Mine Subsidence District	Nil
Soil Erosion	No soil erosion issues have been identified at the subject site.	Nil
Traffic and Access	B-Double access is available to the subject site. The proposed development will not impact access to surrounding properties or parking availability.	Low
Water	Minor impacts to poor quality natural waterways are anticipated, though these impacts can be adequately mitigated. The subject site is within the Sydney Drinking Water Catchment. The proposed development can achieve a Neutral or Beneficial Effect on Water Quality. Reticulated water and sewer services are available though some system upgrades will be required.	Low
Bush Fire	A portion of the subject site is mapped as Vegetation Buffer on the Bush Fire Prone Land Map.	Low
Terrestrial Biodiversity	The riparian land immediately adjacent to Whites Creek is identified on the Biodiversity Values Map. No works are proposed in this area. The affected area consists predominantly of exotic pasture grasses with limited habitat value.	Low
Visual Amenity	The proposed development is to occur on cleared agricultural land adjacent to industrial land uses. It is anticipated that this change in land use shall be viewed as an extension of the existing industrial development and the proposal shall have a low - moderate accumulative visual impact on the surrounding area	Low - Moderate
Waste Management	The proposed development will increase waste generation at the subject site due to the change in use, and the increased intensity of use. Waste generation can be suitably managed on-site throughout the demolition, construction, and operational phases of the project.	Low
Heritage	No objects or sites of environmental or Aboriginal cultural heritage significance are known to occur on the subject site. Objects or sites of significance are unlikely to occur to due historical land clearing.	Nil

8.1.2.Mitigation measures

Table 8.2 outlines the general environmental management and mitigation measures, in addition to those specified in the following sections, that will be implemented to minimise the potential for adverse impacts on the local environment and surrounding receptors during demolition, construction, and operation.

Table 8.2. General management and mitigation measures.

Mitigation Measures	Responsibility	Timing / Frequency
SAAS Aus Pty Ltd will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the proposal.	Construction Manager Operations Manager	On-going
Adequate fire fire-fighting capacity will be maintained on-site.	Construction Manager Operations Manager	Prior to commencement of works / On-going
Employees and contractors will be suitably inducted and trained prior to commencing any work on site.	Construction Manager Operations Manager	Inductions prior to commencing employment / contract. As needed toolbox talks.
Contact details will be displayed on signage at the entrance to the site.	Construction Manager Operations Manager	On-going
All plant and equipment used during demolition and construction will be maintained and operated in a proper and efficient manner.	Construction Manager	On-going
SAAS Aus Pty Ltd will repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Development.	Construction Manager Project Manager	As required

8.2. Site contamination

Chapter 4 of the Resilience and Hazards SEPP requires that a consent authority consider whether land is contaminated prior to the issuing of consent to carry out any development. To satisfy this requirement, a preliminary site investigation (PSI) of the subject site was undertaken by Consulting Earth Scientists (CES) in October 2022. The report (contained in Appendix L) was prepared generally in accordance with the following:

- *National Environmental Protection Measures (Assessment of Site Contamination) Measure 1999 – Schedule B2* (NEPC), 2013); and
- *Contaminated Land Guidelines: Consultants Reporting on Contaminated Land* (NSW EPA, April 2020).

The investigation included a desktop review of the site history, topography, soil conditions and hydrology, complemented by a site walkover. The results of the desktop review and observations from the walkover were used to develop a conceptual site model in accordance with the NEPC.

8.2.1.Existing conditions

8.2.1.1.Desktop review

The desktop review conducted by CES provides the following descriptions of the subject site:

Site Use and History

The subject site predominantly comprises grassed open space used for cattle grazing and dairy production.

Aerial photography between 1949 and now does not indicate that any use potentially contaminating land uses have occurred on the subject site.

Geology

The subject site is underlain by residual and alluvial deposits of Quaternary age, which in turn are underlain by Bringelly Shale of Triassic age.

Soil

The Australian Soils Map indicates the soils are predominantly sodosols. The Atlas of Australian Acid Sulfate Soils indicates there is a low probability of acid sulfate soil occurrence.

Hydrology

Information on groundwater flow is not currently available for the subject site. However, given the topography, it is likely that shallow groundwater will flow south towards Whites Creek.

There are no groundwater monitoring bores on the subject site, but three are located immediately to the north. These may be associated with the Moss Vale Resource Recovery Centre.

Environmentally Sensitive Zone

The subject site is not within an Underground Petroleum Storage System (UPSS) environmentally sensitive zone. UPSS environmentally sensitive zones are areas likely to be vulnerable to contamination from leaking UPSS due to geology or groundwater conditions.

NSW Contaminated Site Register

There are no sites within a 1km radius of the subject site listed as contaminated on the NSW EPA Contaminated Lands Register. Therefore, it is unlikely that the subject site is impacted by contamination from off-site sources.

A notice from 1990 under the *Environmentally Hazardous Chemicals Act* 1985 is recorded for the Moss Vale Resource Recovery Centre for the acceptance and storage of asbestos waste.

Per- and Polyfluoroalkyl Substances (PFAS)

The subject site is not subject to the NSW EPA PFAS Investigation Programme and is not located near any site that is subject to the investigation. The subject site does not have a history of bulk fuel storage likely to have required the use and retention of PFAS containing foams for firefighting. A search did not return any records of historic fires at the subject site. Consequently, PFAS contamination has not been considered as a possibility.

8.2.1.2.Site walkover

A walkover of the subject site was undertaken to look for evidence of potential site contamination that was not identified by the desktop review. The walkover did not identify any signs of distressed vegetation, surface staining indicative of potential spills, any structures that were not identified by the desktop review, or any asbestos containing materials (ACM).

8.2.2.Potential impacts

The proposed building development has the potential to cause land contamination from hydrocarbon spills from vehicles and machinery used during construction and operation. However, no further potentially contaminating activities are proposed for the ongoing operation of the proposed development. Potential contamination from hydrocarbon spills during construction is likely to be minor, localised, and easily controlled through the use of spill kits. As the proposed building development includes hardstand areas and internal haul roads, the risk of spills causing land contamination during operation of the development is further reduced.

The conceptual site model was developed to consider whether the subject site is suitable for the proposed use. Based on the desktop review of the subject site and surrounding industrial uses, and the site walkover, the likelihood of contamination from on- or off-site sources is considered low. The subject site is considered suitable for the proposed use.

8.2.3.Mitigation measures

The potential for land contamination from the proposed development is considered low and limited to localised hydrocarbon spills during construction works that can be easily controlled using standard spill kits. A construction management plan will be implemented and will specify measures to reduce the potential for spills and any subsequent impacts. Table 8.3 identifies other general mitigation measures that will be employed during construction and operation to ensure the development does not result in any unforeseen land contamination.

Table 8.3. Management and mitigation measures to prevent land contamination during construction and operation.

Mitigation Measure	Responsibility	Timing / Frequency
SAAS Aus Pty Ltd will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the proposal.	Construction Manager	On-going
A Construction Environmental Management Plan is to be prepared and implemented.	Construction Manager	Prior to construction commencing
Employees and contractors will be suitably inducted and trained prior to commencing any work on site.	Construction Manager / Operations Manager	Prior to commencement of employment/contract
All plant and equipment used during construction will be maintained in a proper and operated in a proper and efficient manner.	Construction Manager	On-going
All chemicals, fuels and oils used on site will be stored in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participant's Manual* 2007	Construction Manager / Operations Manager	On-going
Accidental spillage or poor management of fuels, oils, lubricants, hydraulic fluids, solvents and other chemicals during the construction will be controlled through spill management actions to prevent water quality and ecological impacts.	Construction Manager	On-going
All waste generated during construction will be segregated and stored in appropriate bins. When full, bins will be taken to a facility that can lawfully accept and process the waste.	Construction Manager / Waste Collection Contractor	Waste storage area to be established prior to commencements of works / On-going
Appropriate erosion and sediment runoff controls will be installed around all areas of vegetation and soil disturbance, and all material stockpiles.	Construction Manager	Prior to construction commencing / As required

8.3. Geotechnical conditions

A Geotechnical Investigation was carried out at the subject site by Consulting Earth Scientists (CES) during October and November 2022 to identify geotechnical risks and provide engineering recommendations (Appendix M). The GI included the drilling of eight boreholes across the subject site and laboratory analysis of soil samples collected during drilling.

8.3.1.Existing conditions

The GI determined that subsurface materials are generally consistent across the subject site, consisting of Topsoil/Fill (Unit 1) overlying residual soils consisting of Silty Clay/Clayey Silt (Unit 2a), Clay (Unit 2b) and Clayey Sand (Unit 2c) followed by extremely to slightly weathered rock of Weathered Shale (Unit 3). The depths of weathered shale generally vary approximately from 1.7m to 4.5m across the subject site. The fill encountered in Unit 1 is described as topsoil fill and consists of clayey silt containing organic material and rootlets. The GI did not identify any uncontrolled or anthropogenic fill materials within the boreholes.

Field screening for acid sulfate soils (ASS) was carried out on samples from each borehole in accordance with *Acid Sulfate Soils Manual* (Stone *et al*, 1998). Samples with the highest pH change were selected for laboratory testing. Field testing indicated the following:

- Field pH (pH_f) measurements recorded on-site ranged from 4.6 to 7.4 indicating the soils are not acidic. A pH_F of <4 typically indicates actual acid sulfate soils (AASS); and
- Field pH following oxidation (pH_{fox}) measurements recorded on-site ranged from 4.1 to 6.3 indicating potential acid sulfate soils (PASS) are unlikely to be present at the site. A pH_{fox} of <3 typically indicates PASS.

Based on the field screening results, nine samples were collected from the boreholes for Suspension Peroxide Oxidation Combined Acidity and Sulfur (SPOCAS) testing. The SPOCAS tests indicated an acceptable level of Titratable Sulfidic Acidity (TSA) across the subject site, with all samples being below threshold levels. However, the results of Titratable Peroxide Activity (TPA) in samples from BH01 (located towards the north-western end of proposed Building 2) and BH08 (located approximately centrally within the proposed Building 3 footprint) exceeded the action limit potentially indicating organic acidity or acidity from the oxidation and/or titration of iron-containing or manganese-containing compounds. This acidity may be present regardless of any potential sulfidic acidity.

The results from BH01 could indicate that the soil contains a large amount of pyrite and carbonate and does not necessarily suggest a requirement for the management of ASS. However, the results from BH08 indicate the presence of ASS is plausible. As the samples from BH01 and BH08 were not saturated and were located well above the groundwater table, it is considered that any potential acid generating compounds are likely to have been previously oxidized and no longer pose a threat in these parts of the subject site.

Two samples from BH03 (located slightly north-east of the existing livestock sheds) and BH07 (located at the northern end of the proposed Building 3 footprint) exceeded the action criteria for both Titratable Actual Acidity (TAA) and TPA. The BH07 sample collected at a depth of 0.5-1.0m had a pH of 3.8 indicating AASS are present. The BH03 sample collected at a depth of 2.0-2.2m had a pH of 4.0 which is the threshold for AASS.

The laboratory results indicate that ASS are likely to be present in the centre and south of the subject site.

8.3.2.Potential impacts

The GI has identified the following geotechnical risks:

- Soil Units 1 and 2 are expected to provide poor conditions for site trafficability by heavy vehicles and machinery;

- Soil Units 1 and 2 are considered to be moderately to highly reactive subgrade with the potential for surface movements between 20 and 60mm;
- The groundwater encountered during drilling is inferred to be a perched water table and may fluctuate depending on seasonal changes and drainage conditions. Construction activities may become problematic where groundwater is encountered, particularly within the proposed basement area of B1;
- Heavy vehicles and equipment have the potential to cause vibrations that could negatively impact nearby structures including the gas pipeline; and
- ASS is likely to be present within the centre and southern parts of the subject site. Ineffective management of ASS can result in the production of sulfuric acid that can drain into waterways causing severe short and long-term environmental and socio-economic impacts.

8.3.3.Mitigation measures

All recommendations made within the GI report will be implemented during detailed design and construction of the proposed development to adequately account for the geotechnical conditions of the subject site. These recommendations and other mitigation measures are outlined in Table 8.4.

Table 8.4. Management and mitigation of geotechnical conditions and risks.

Mitigation Measure	Responsibility	Timing / Frequency
Prepare a detailed Construction Management Plan	Construction Manager	Prior to construction commencing
The gas pipeline easement is to be clearly marked and considered in all earthwork activities at the subject site.	Construction Manager	Prior to construction commencing
During construction, a thin compacted rock layer (min. 200mm) is to be placed over the subgrade to provide temporary pavements for heavy construction traffic.	Construction Manager	Prior to construction commencing
Design of footings and floor slabs to consider potential for surface movements of underlying subgrade.	Structural Engineer	During detailed design
Provisions to be made for excavations that may encounter groundwater to allow efficient water drainage during heavy rainfall. This may include the use of trenches and pumping from locally excavated sumps.	Construction Manager	As required
The use of heavy equipment that may cause vibrations is to be limited and must comply with APA Group standards.	Construction Manager	As required
A qualified geotechnical engineer is to inspect excavation works to determine whether actual geotechnical conditions vary from those identified during the GI.	Construction Manager	During excavation
A qualified geotechnical engineer is to observe boring of piles to confirm the foundation conditions and pile footing elevations are suitable.	Construction Manager	During construction
An Acid Sulfate Soils Management Plan is to be prepared for the relevant proposed structures in the centre and south of the subject site.	Construction Manager	Prior to construction commencing

8.4. Traffic and transport

A Traffic Impact Assessment (TIA) was prepared by SECA Solution Pty Ltd (SECA) in accordance with the *Guide to Traffic Management* (Austroads, 2020) and section 2.3 of *Guide to Traffic Generating Developments* (Roads and Traffic Authority, 2002) (Appendix N).

8.4.1.Existing conditions

The proposed development is located at 2 Bowman Road, with connection to the broader road network via the intersection of Bowman Road and Berrima Road. Bowman Road connects to Berrima Road via a give way-controlled intersection, with Berrima Road being the priority road. Bowman Road provides a single lane of travel in each direction and currently terminates at a cul-de-sac at the entry to the property. No lights or pedestrian footpath are provided. Bowman Road is not approved for B-Double use.

Berrima Road forms part of the Regional Road network and connects via Taylor Avenue to the Hume Highway in the north, and via Waite Street to Argyle Street/Illawarra Highway in the south. Berrima Road provides a single lane of travel in each direction for the majority of its length. In the vicinity of the intersection with Bowman Road, the speed limit on Berrima Road is 80km/h and there are streetlights over the intersection. The intersection includes a sheltered right turn lane and a left turn deceleration lane for vehicles turning from Berrima Road into Bowman Road. Berrima Road is approved for B-Double use.

SECA undertook traffic surveys at the intersection of Bowman and Berrima Roads in October 2022, covering the morning and afternoon peak periods (Table 8.5). Of the vehicles observed, 11% of vehicles using the intersection during the AM peak and 6% of vehicles during the PM peak were heavy vehicles.

Table 8.5. Peak hour traffic counts obtained on Wednesday 19/10.22 and Thursday 20.10.22.

Road	AM Peak	PM Peak
Berrima Road – southbound	258	178
Berrima Road – northbound	244	213
Berrima Road – two-way	502	391
Bowman Road – two-way	12	7

Observations of traffic flow indicate that the Bowman and Berrima Road intersection works very well with minor delays for all turning movements. The sheltered right turn lane and left turn deceleration lane reduce delays for the dominant through traffic. Traffic flows on Berrima Road were observed to flow smoothly due to the low volume, with bunching of traffic created by the occasional slower moving vehicle.

A review of accident data provided by the Centre for Road Safety shows no accidents were recorded at the Bowman and Berrima Road intersection for the 2017-2021 period. Less than 20 accidents have been recorded along the length of Berrima Road between Moss Vale and the Hume Highway over the same period. The Bowman and Berrima Road intersection is well laid out with good visibility on intersection approaches. The road network in the vicinity of the subject site is considered to provide an acceptable level of overall road safety.

No on-street parking is provided on Bowman Road or Berrima Road, and no public off-street parking is available in the vicinity of the subject site. There is no public transport available to the subject site. The Moss Vale train station is located approximately 3.5km south-east of the subject site and whilst a bus service runs along Berrima Road, there are no stops within the vicinity of the subject site. No pedestrian footpaths or cycling lanes are provided along Berrima Road.

There are currently no other significant developments proposed within the vicinity of the subject site to consider cumulative impacts.

8.4.2.Potential impacts

8.4.2.1.Access

Access to the proposed development will be via an extension to Bowman Road along the existing paper road reserve, with the individual building lots having access directly from this road extension. Part of the paper Hutchinson Road will also be constructed along the southern boundary of the B3 site. There is currently no posted speed limit for Bowman Road, indicating the speed limit is 80km/h (as is the speed limit at the Berrima Road intersection). It is recommended that Council, as the road authority, consider a review of the Bowman Road speed limit to 60km/h for the road extension.

The Bowman Road extension will provide a straight road alignment with sight distances in excess of the minimum 83m specified by AS2890.2 for roads with a 60km/h speed limit to the north and south for all driveways, including for the existing residence, except the exit driveway for the B3 site. The B3 exit driveway offers a sight distance of approximately 20m to the south due to its location near the corner of Bowman Road and Hutchinson Road. Vehicles approaching this driveway from the south will be travelling at speeds below 60km/h as they will be turning from Hutchinson Road onto Bowman Road.

The proposed development has been designed to accommodate vehicles up to 26m B-Doubles within the B1 and B2 sites, and up to 19m semitrailers within the B3 site. The site entries/exits, and vehicle circulation areas have been located and sized to ensure the design vehicles can enter, circulate and leave the sites in the forward direction with entry and exit manoeuvre being able to be performed in a single turning movement. Each entry and exit point, and the direction of circulation has been designed to avoid the need for entering and exiting vehicles to cross paths, minimising the need for queueing on the public road and improving safety. Swept path diagrams to demonstrate there is sufficient space for the largest proposed vehicle to manoeuvre within and around each of the three building sites are shown in Appendix O.

Bowman Road is not currently approved for B-Double access. Berrima Road is an approved B-Double route and provides access to the wider B-Double network. The extension of Bowman Road and Hutchinson Road will be constructed to the relevant standards for B-Double access (Appendix G).

Given the size of the design vehicles, the proposed development will permit safe access to all potential service vehicles, including emergency services vehicles. Vehicular access around all buildings complies with the *Fire safety guideline: Access for fire brigade vehicles and firefighters* (NSW Fire and Rescue, 2019).

As no public transport is available near the subject site, and Berrima Road does not provide pedestrian footpaths along its length, external pedestrian movements associated with the proposed development are not expected. However, pedestrian footpaths will be provided along the Bowman Road extension to permit pedestrian movement between the proposed buildings and line marking will be used to demarcate pedestrian routes throughout internal haul roads.

8.4.2.2.Parking

The MVEC DCP does not specify parking rate for ‘general industry’ developments, therefore the specified rate for warehouse developments was used. The MVEC DCP specifies a car parking rate of 1 space per 300m^2 of gross floor area for warehouse developments. The proposed development will include off-street parking for passenger vehicles at each building site in excess of the MVEC DCP requirements (Table 8.6) with the exception of B2, which provides one space less than that required. Additionally, the internal haul roads around each building provide for temporary truck parking if required. Details of parking for each building are contained in Appendix F.

The proposed development will also provide for on-street parking of passenger vehicles and trucks on both sides of Bowman Road as appropriate. The Bowman Road reserve is 20m wide and is sufficient to provide the following in accordance with the current *Engineering Design Specification: D05 Geometric Road Layout* (Wingecarribee Shire Council):

- 6.5m wide vehicle lane in each direction of travel; and
- 3.5m wide verge to provide for a pedestrian footpath, landscaping, and installation of street lighting on each side of Bowman Road.

Table 8.6. Provision of car parking spaces for each building in the proposed development.

Building	Required	Provided
B1 – GFA 17,370.73m^2	58	59
B2 – GFA 12,795.35m^2	42	41
B3A – GFA 3,744.91m^2	14	17
B3B – GFA 6,297.85m^2	23	26

Given the provision for off-street parking in excess of MVEC DCP requirements, and the ability to provide on-street parking along both sides of Bowman Road, the proposed development is unlikely to impact on parking arrangements of nearby properties and public streets.

8.4.2.3.Traffic generation

As the *Guide to Traffic Generating Developments* (Roads and Traffic Authority, 2002) does not specify a traffic generation rate applicable to the proposed development, the assessment has been based on estimated truck (heavy and light vehicles) and passenger vehicle movements for the proposed operations. It is estimated that the proposed building developments will generate less than 50 vehicle movements per hour (entry and exit movements). Total daily traffic flows during the week are anticipated to be 530 movements. Lower traffic movements are expected on weekends.

Passenger vehicle movements are expected to be highest during the morning and afternoon peak hours. Truck movements are expected to be distributed fairly evenly throughout the span of operational hours. With a peak demand of 502 vehicles/hour on Berrima Road, the road currently operates at a level of service C. This level of service has an hourly limit of 920 vehicles for rural roads. As the expected peak flow demand for the proposed development is less than 50 vehicles, the additional traffic flow will not change the existing level of service for Berrima Road.

Sidra modelling of peak hour traffic flows through the Berrima Road/Bowman Road intersection was conducted. Modelling concluded that the current intersection controls have adequate capacity to cater for the development traffic and will continue to be sufficient when accounting for background growth to 2032. Delays and queues at the intersection will remain relatively low and acceptable when assessed against criteria provided by Traffic for NSW (TfNSW).

8.4.2.4.Gas pipeline easement

The movement of heavy vehicles during construction and operation has the potential to impact on the gas pipelines within the pipeline easement. However, the potential for impacts is considered to be very low with the adoption of all recommended mitigation measures.

8.4.3.Mitigation measures

8.4.3.1.Construction

A detailed construction management plan will be prepared during the detailed design stage. The plan will detail measures to minimise the impact of heavy vehicles accessing the site during construction. The plan will also designate appropriate areas for construction staff parking wholly within the subject site.

8.4.3.2.Gas pipeline easement

SAAS has maintained close consultation with the gas pipeline operator, APA Group, throughout the project development and design stage to ensure there are no impacts to the pipeline. Consultation included a design workshop involving the project engineers (ECLIPSE Consulting Engineers), landscape architects and APA Group engineers to discuss the design specifications for all activities and construction works within and adjacent to the pipeline. APA Group has provided detailed specifications for the following aspects:

- Potholing to confirm the exact location of the pipeline within the construction footprint (Appendix D);
- Temporary heavy vehicle crossing construction;
- Utility crossings above and beneath the pipeline;
- Finished sealed road construction; and
- Standard conditions for works near the pipeline.

All provided specifications have been incorporated into the proposed development design and APA Group have reviewed and approved all plans. With all necessary design and management specifications implemented, the proposed development is unlikely to have an impact on the gas pipeline.

8.4.3.3.Operation

As the proposed development is not expected to have a significant impact on traffic flows or the surrounding network, no specific mitigation or road upgrade measures are proposed.

8.5. Water

The following modelling and assessment has been undertaken to determine the potential impacts from the proposed development to water, including the water and sewer systems, flood behaviour, and natural waterways:

- *Soil and Water Management Report*. ECLIPSE Consulting Engineers, 2023 (Appendix P);
- *Stormwater Management Plan Report*. ECLIPSE Consulting Engineers, 2023 (Appendix Q);
- *Flood Study Report*. ECLIPSE Consulting Engineers, 2023 (Appendix R);
- *Industrial Subdivision and General Industry Development – 2 Bowman Road, Moss Vale – Development Assessment Report – Sewer and Water Modelling*. Urban Water Solutions, 2023 (Appendix S).

8.5.1.Existing conditions

8.5.1.1.Waterways

Two drainage lines, that are mapped waterways, pass through the property and the development area (Figure 2.4). One consists of a slight drainage depression that passes through Area 1 and flows in a north-westerly direction towards a large dam on the northern side of Abattoir Road and drains to Stony Creek further to the north. The second is in the southern part of Area 2 and flows from a small dam on the eastern neighbouring property to the dam in Area 3. The drainage line then flows from the dam in a south-easterly direction to join Whites Creek at the eastern end of Area 3. Both waterways are ephemeral in nature and are likely to only flow during heavy rainfall events.

During the field investigation for the biodiversity assessment, the ecologists noted that the northern drainage line and associated riparian vegetation was not present despite fieldwork being undertaken during a wet period in September 2022. The Berrima West monitoring station recorded 17.2mm of rainfall in the five days prior to the fieldwork, and a further 10.6mm in the 24 hours immediately prior to the fieldwork (Bureau of Meteorology Daily Rainfall data). Mapping of this waterway shows it originating on the northern side of Berrima Road adjacent to the Moss Vale General Cemetery, however it is not clear whether a pipe culvert exists under the road to direct the flow. No clear flow path through the properties at 1-5 Bowman Road is visible on aerial imagery. It is likely that existing development has resulted in the diversion or loss of this waterway.

Total Surveying Solutions undertook a survey of the property in August 2022. During this survey, the land surrounding the tributary of Whites Creek was recorded to be swampy and inaccessible, requiring the surveyors to attend the Site again. The tributary was also observed to be present during the biodiversity field investigation in September 2022, however, was considered to be in low condition due to the riparian vegetation being dominated by priority weed species.

Whites Creek forms the southern boundary of the existing Lot 2 and Lot 51. Whites Creek originates to the south of the Moss Vale town centre, within the Moss Vale Golf Club, and flows north through the town towards the industrial area where it begins to flow in a south-westerly direction. Whites Creek drains into the Medway Rivulet approximately 3km south-west of the subject site.

Both drainage lines are mapped as Category 3 – Bank Stability and Water Quality (within 10m from the top of the stream bank on either side) on the Natural Resources Sensitivity Map under the WLEP. Whites Creek is mapped as Category 1 – Environmental Corridor (within 50m from the top of stream bank on each side).

8.5.1.2.Flooding

The *Review of Whites Creek Floodplain Risk Management Study & Plan: Final Report* (Catchment Simulation Solutions, 2020) indicates the southern RU2 portion of Lot 2 is subject to flooding along Whites Creek. The property is also subject to overland flows from multiple water sources, with two mapped drainage lines (refer to Sections 2.4 and 8.5.1.1).

8.5.1.2.1. Northern area

The northern drainage line flows toward the natural waterbody at Abattoir Road. This is the first waterbody downstream of the drainage line that is permanently wet. A review of satellite and aerial imagery noted that the drainage line is rarely wet, and the small dam to the north-west is intermittently dry. This suggests the drainage line is not indicative of a natural watercourse and is more likely an overland flow route for the movement of stormwater in large rainfall events. Accessible flood records suggest this flow route has not been used in a flood event.

The upstream catchment area for this drainage line consists of the following areas:

- An approximately 110,000m^2 area to the north of Berrima Road. Flows from this catchment are intercepted by development on Berrima Road and the existing industrial sites on Bowman Road and Old Dairy Road and directed elsewhere (shown in pink in Figure 8.1;
- An approximately 8,000m^2 area at 1 Bowman Road that appears to collect stormwater runoff from Berrima Road and areas upstream. When street drainage from Bowman and Berrima Road exceeds the capacity of the drainage system it spills into the Site at 1 Bowman Road and forms a basin up to 2m depth. When the basin overflows it is assumed it spills into the northern drainage line within the subject site (shown in yellow in Figure 8.1);
- The Wingecarribee Resource Recovery Centre. This site is approximately 62,000m^2 and it is assumed that all stormwater is managed on-site. Satellite and aerial imagery indicate overflows from this site are disposed of to the west, not within the subject site (shown in red in Figure 8.1); and
- An approximately 43,700m^2 area in the north-west of the subject site through which the drainage line runs (shown in green in Figure 8.1).

8.5.1.2.2. Southern area

The southern drainage line includes one line commencing near the existing residence, and another commencing within the Anderson Waste Services property on Old Dairy Road. These lines drain to the existing dam at the southern end of the E4 zoned area. The drainage line passes from the dam, through a second dam in the RU2 zone prior to discharging into Whites Creek. Satellite imagery and aerial photography indicate that significant overflows from the two dams causing streamflow behaviour are rare, and stormwater entering these waterbodies is likely to infiltrate into groundwater between rainfall events.

The catchment area for this drainage line consists of the following areas:

- The industrial area on the western side of Old Dairy Road. This catchment covers an area of approximately 105,000m^2. Information was unavailable at the time of writing regarding the nature of existing drainage assets in this area, however satellite and aerial imagery suggests this area contributes stormwater to the southern drainage line in the subject site. It is assumed that the industrial sites within this catchment meet WSC requirements for disposal of stormwater at rates not greater than pre-development rates (shown in orange in Figure 8.1); and
- The remainder of the catchment flowing into the southern drainage line consists of land within the subject site. An area of approximately 41,900m^2 on the south-eastern side of the existing gravel driveway contributes overland stormwater flows to this drainage line (shown in blue in Figure 8.1).

Figure 8.1. Overview of catchment areas affecting the drainage lines within the subject property.

Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	Catchment Areas Affecting the Subject Site
				Source	ECLIPSE Consulting Engineers

Jackson Environment and Planning Pty Ltd
Strategy | Infrastructure | Compliance | Procurement
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

8.5.1.3.Water supply

WSC provided a calibrated InfoWorks WS Pro hydraulic model of the water supply system to assess the impact of the additional demand from the development at 2 Bowman Road, Moss Vale on the water supply network. Analysis of the existing and future network including the proposed development was undertaken for the Peak Day Demand (PDD) scenario.

Properties at Bowman Road are currently serviced by a DN100 MPVC main which is supplied by a DN150 AC main along Berrima Road. This main is supplied by the reservoir RES-BU5 at Hill Road and the Wingecarribee Water Treatment Plant (WTP). Within RES-BU5 zone, all demand nodes have a predicted minimum pressure above 20m. The lowest predicted pressure is 27.0m at node NV02783. This node is located on the DN375 AC main near Moss Vale High School.

181 nodes and 443 fire hydrants with demand within zone RES-BU5 are predicted to experience maximum pressures exceeding 90m. The highest pressure experienced at a node with demand attached is 134.9m at ND04305 (653.7m AD) which also experiences a minimum pressure of 86.9m. This node is just north of the Wingecarribee River at Loyalty Lane.

Reservoir RES-BU5 has a storage volume of 10 ML. The peak day demand (PDD) zone consumption for RES-BU5 is 4.0ML/day pre-development which means the WSC requirement of having a reservoir sized for 24 hours of PDD is met. The minimum volume reached over the simulation period is 3.7ML which is more than 12 hours of PDD (2.0ML). This satisfies the minimum volume requirement.

There are 81 pipes and 46 valves with a diameter of 300 mm or less in zone RES-BU5 that are predicted to experience a maximum headloss greater than 5m/km. There are 31 pipes and 5 valves with a diameter greater than 300mm in zone RES-BU5 that are predicted to experience a maximum headloss greater than 3m/km. Four pipes and 4 valves are predicted to experience velocities above 2m/s in zone RES-BU5 in the Base Case scenario. The highest velocity predicted in this zone is 14.8m/s which results in a predicted headloss of 3.1m.

8.5.1.4.Sewerage

The InfoWorks ICM version 10.5 hydraulic model of the Moss Vale sewerage network was used to assess the current system performance and effects from the new development. The model was updated to include recent residential developments and system upgrades. The wet weather baseline performance of the Moss Vale Sewer Model was assessed with a suite of 1 in 2-year design storms with durations ranging from 30 minutes to 24 hours being applied to average dry weather flow conditions. The 24 hour duration storm has been deemed the critical event as this is the only event predicted to cause overflow.

Under the 24 hour design storm, five manholes were predicted to overflow within the catchment. Three of the overflows occurred in parts of the catchment that are hydraulically independent from the proposed development and will not be affected. One manhole at the corner of an industrial area upstream of the Lackey Road Sewage Pumping Station (MV4) has the potential to overflow into a field next to the industrial area. The pumping station wet well and storage area located at the Young Road development area (MV18) are predicted to overflow by a combined 4.5kL. This is likely to be a future problem with the network rather than a current issue and sewage from the proposed development will not pass through this pumping station.

Additionally, overflow is predicted at the pumping station and storage area (MV17) located at the downstream end of the catchment at the Sewage Treatment Plant (STP). Flows from Bowman Road flow through this pumping station to reach the STP. The overflow is a result of current limitations at the STP. Overflows at this pumping station and storage area will be directly impacted by the proposed development.

Overall, the design storms indicate that the current sewerage network does not meet the WSC sewer design standards. However, the emergency storage available in the downstream pumping station is considered adequate for the existing storage requirements.

8.5.2.Potential impacts

8.5.2.1.Waterways

As discussed in Section 5.1.3, Clause 7.5 of the WLEP aims to maintain the hydrological functions of riparian land waterways and aquifers, including protecting water quality, flow regimes, physical stability, and groundwater systems. Under this clause, the consent authority must consider the potential adverse impacts of proposed development on land shown on the Natural Resources Sensitivity Map on the hydrological functions of riparian land waterways. The proposed development will require the removal of the Category 3 drainage lines on the subject site and replacement with the stormwater management system. Table 1.1 summarises the potential impacts of the proposed development on the drainage lines and demonstrates compliance with Clause 7.5.

Table 8.7. Summary of the proposed development's compliance with Clause 7.5 of the Wingecarribee Local Environmental Plan 2010.

WLEP Clause	Compliance
(3) Before granting development consent for development on land to which this clause applies, the consent authority must consider any potential adverse impact of the proposed development on the following—	See below.
(a) the natural flow regime,	The proposed development will increase the volume of runoff from the subject site. To maintain pre-development flows into the receiving environment, on-site detention and rainwater capture will be provided for each proposed building. The stormwater outlet will discharge across an energy dissipator to a storage dam downstream of the proposed development. The proposed development will result in a small increase (<2%) in stream flow within Whites Creek during major flood events but will not cause changes to flood behaviour in the local area. Refer to Section 8.5.2.3 for details.
(b) the water quality of receiving waters,	The proposed development will include stormwater treatment devices to treat all runoff prior to discharge. MUSIC modelling demonstrates that the proposed development meets the Neutral of Beneficial Effect on Water Quality (NorBE) requirements – refer to Section 8.5.2.2 for details.
(c) the waterway's natural flow paths,	The northern drainage line was not visible during a field inspection conducted during a wet period, suggesting that the flow of this drainage line has been interrupted by upstream industrial developments. Similarly, the southern drainage line is not well-defined with upstream flows likely interrupted by other industrial developments. The flow path of the southern drainage line downstream of the proposed development will not be impacted as the stormwater outlet for the proposed development will be located within the existing drainage line and pre-development flows will be maintained through the use of on-site detention,

WLEP Clause	Compliance
	rainwater capture and an energy dissipator at the outlet.
(d) the stability of the waterway's bed, shore and banks,	The drainage lines within the subject site are not defined, therefore the stability of the bed and banks of the drainage lines outside the development footprint is not meaningfully impacted. No development is proposed in close proximity to Whites Creek.
(e) the flow, capacity and quality of groundwater systems.	The proposed development is not expected to impact on groundwater flow, capacity, or quality. The geotechnical investigation indicates that groundwater may only be encountered during excavation for the B1 basement parking if heavy rainfall occurs. Appropriate management provisions will be included in the Construction Environmental Management Plan.
(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that—	See below.
(b) if that impact cannot be avoided—the development is designed, sited and will be managed to minimise that impact,	The impacts to the existing drainage lines cannot be avoided, however the proposed development has been designed to improve runoff water quality and maintain existing flow regimes.

8.5.2.2.Water quality

Due to the significant earthworks, including the clearance of vegetation, across the proposed development site, construction has the potential to negatively impact water quality through erosion and sediment run-off.

An erosion risk assessment for the subject site was conducted using the Revised Universal Soil Loss Equation (RUSLE). The following soil losses were calculated for each building catchment:

- Building 1: 107 tonnes/ha/year;
- Building 2: 93 tonnes/ha/year; and
- Building 3: 514 tonnes/ha/year.

The calculated soil loss of less than 150 tonnes/ha/year results in a low-risk classification for the B1 and B2 catchments. With a predicted soil loss of more than 500 tonnes/ha/year. B3 is classified as high-risk. The mitigation measures required to protect water quality during construction are discussed in Section 8.5.3.1.

The property is located within the Sydney Drinking Water Catchment and is therefore subject to the requirements of Chapter 6, Part 6.5 Sydney Drinking Water Catchment of the *State Environmental Planning Policy (Biodiversity and Conservation)* 2021. This Part requires an assessment of the proposed development's effect on water quality using the Neutral or Beneficial Effect on Water Quality assessment tool (NorBE Tool). The MUSIC tool was used to assess the proposed development's ability to achieve the following:

- Compare annual pollutant loads before and after development for Total Suspended Solids, Total Phosphorus, and Total Nitrogen. The modelling results should aim for an improvement of 10% to ensure the neutral of beneficial effect (NorBE) on water quality requirement can be met given the uncertainty in the modelled outcomes.
- The modelling results must compare cumulative frequency curves of pollutant concentrations before and after development. They must show that pollutant concentrations after development will be better to or equal to previous pollutant concentrations for 50-98% of the time.

For each of the three building catchments, the post-development MUSIC model layout included the following:

- Rainfall runoff from the roof, pavement, and landscaped areas;
- Roof water captured in a rainwater tank; and
- Runoff from pavement and landscaped areas, and overflow from the rainwater tank pass through a Class 2 HumeCeptor, then through a HumeFilter, and through a trash screen, prior to discharge.

The treatment properties for the HumeCeptor and HumeFilter were obtained from the manufacturer's documentation. All other inputs used in the MUSIC model, including climate data, base and storm flow pollutant concentration parameters, rainfall threshold values, soil storage capacities and field capacities, were adopted based on the recommendations in *Using MUSIC in Sydney Drinking Water Catchment* (WaterNSW, 2023) (refer to Appendix Q for further details).

The MUSIC model output demonstrates that, on a mean annual load basis, neutral or beneficial effect on water quality has been achieved by the stormwater treatment trains for each building compared to the pre-development scenarios (Table 8.8). The impact of the increased post-development flows are discussed in Section 8.5.2.3. For total suspended solids, total nitrogen and total phosphorous, the flow-based cumulative frequency charts indicate that the post-development pollutant loads are lower than the pre-development scenario between the 50th and 98th percentiles (refer to Appendix Q).

The MUSIC model confirms that the proposed stormwater treatment trains to be installed within each proposed building catchment meet the NorBE requirements. It should be noted that the total annual flow is not subject to NorBE requirements. Therefore, the predicted increase in flows depicted in Table 8.8 do not affect the ability of the proposed development to comply with NorBE.

Table 8.8. Stormwater runoff treatment train performance for each proposed building catchment.

Pollutant	Pre-Development Residual Load	Post-Development Residual Load	Reduction %
B1			
Flow (ML/year)	6.75	20.32	-201.25
Total Suspended Solids (mg/L)	1083.30	26.82	97.52
Total Phosphorous (mg/L)	3.07	1.65	46.35
Total Nitrogen (mg/L)	22.88	18.52	19.04
Gross Pollutants (mg/L)	34.68	0.00	100.00
B2			
Flow (ML/year)	5.75	16.03	-178.99
Total Suspended Solids (mg/L)	901.15	44.50	95.06
Total Phosphorous (mg/L)	2.66	2.28	14.31
Total Nitrogen (mg/L)	18.84	16.05	20.04
Gross Pollutants (mg/L)	29.54	0.00	100.00
B3			
Flow (ML/year)	4.82	13.61	-182.40
Total Suspended Solids (mg/L)	793.71	18.28	97.70
Total Phosphorous (mg/L)	2.15	1.19	44.59
Total Nitrogen (mg/L)	15.41	12.36	19.78
Gross Pollutants (mg/L)	24.78	0.00	100.00

8.5.2.3.Stormwater flows and flooding

The proposed building development will result in the following total roof water catchment areas:

- B1 – 17,730m^2;
- B2 – 11,234m^2; and
- B3 – 10,042m^2.

In accordance with the *Wingecarribee Development Control Plan* 2021 (WDCP), industrial developments must include rainwater tanks sized to capture the first 10mm of rainfall runoff from all building roofs proposed. A water balance analysis has been undertaken to identify the volume of rainwater to be captures and determine the potential reduction in use of potable water that may be achieved through the reuse of rainwater (Table 8.9).

Table 8.9. Stormwater retention and reuse analysis.

	B1	B2	W3
Required capture volume (kL)	177.3	112.3	100.4
Design volume of rainwater storage (kL)	200	120	120
Toilet reuse demand (kL/day)	1.5	0.7	1.7
Landscape irrigation reuse demand (kL/yr)	866.8	1224.8	933.2
Reuse demand met (%)	98.99	92.41	90.31
Overflow frequency (%)	17.37	15.28	14.22

The proposed development is entirely above the flood planning level. Therefore, no structures are expected to be impacted during a flood, and the proposed development will not result in any changes to landform within flood zones.

The proposed development will capture all stormwater within the proposed building lots, Bowman Road and Hutchinson and drain it to the southern side of Hutchinson Road within the RU2 land. The proposed development will modify overland flow paths and result in changes to the flow regime of Whites Creek and Stony Creek. Stony Creek will be affected as flows from the upstream catchment areas that currently drain through the northern drainage line will be directed to the south.

A DRAINS model was prepared to examine the impacts to flow regimes and flood behaviour. The model used rainfall depth data from the Bureau of Meteorology station at Sutton Forest, less than 1km west of the subject site, in conjunction with the procedures outlined in *Australian Rainfall and Runoff: A Guide to Flood Estimation* (Geoscience Australia, 2019). The assessment considered critical flows in both the minor storm event (5% AEP) and major storm event (1% AEP) for pre- and post-development scenarios. The critical flows for each catchment (as defined in Figure 8.1) occur in events between five minutes and one hour. Table 8.10 shows the pre- and post-development flows at the outlets of the northern and southern drainage lines.

Table 8.10. Expected maximum flows at the outlet of the northern and southern drainage lines during the 5% AEP and 1% AEP events under existing and post-development conditions.

Location	5 min	10 min	1 hour	6 hour	24 hour	72 hour	168 hour
			5% AEP – Mean Maximum Flow (m^3/s)				
Northern Drainage Line Outlet							
Pre-development	1.863	1.550	1.023	0.453	0.777	0.556	0.258
Post-development	0	0	0	0	0	0	0
Change	-100%	-100%	-100%	-100%	-100%	-100%	-100%
Southern Drainage Line Outlet							
Pre-development	4.861	4.673	3.121	1.466	0.830	0.532	0.476
Post-development	5.002	5.657	3.569	1.793	1.251	0.877	0.638
Change	2.9%	21.1%	14.3%	22.3%	50.7%	64.8%	34.0%
			1% AEP – Mean Maximum Flow (m^3/s)				
Northern Drainage Line Outlet							
Pre-development	2.552	2.404	1.275	0.604	1.094	1.155	0.672
Post-development	0	0	0	0	0	0	0
Change	-100%	-100%	-100%	-100%	-100%	-100%	-100%
Southern Drainage Line Outlet							
Pre-development	7.226	7.638	3.995	1.962	1.037	0.756	0.654
Post-development	7.451	7.975	4.692	2.424	1.712	1.291	1.045
Change	3.1%	4.4%	17.4%	23.5%	65.1%	70.8%	59.8%

The DRAINS model demonstrates that no stormwater will be disposed to the northern drainage line from the proposed development and will instead be redirected to the southern drainage line. In shorter events where stormwater volumes are dominated by the Old Dairy Road catchment, increases at the southern drainage line outlet are likely to be small, in the order of 5 to 15%. However, in longer events with more persistent flows, increases reaching over 50% can be expected, reaching a maximum of 70.8% increase in the 1% AEP 72 hour event. The capacity of this drainage route to convey stormwater during major flows is not likely to be an issue as excess flows have adequate space to be discharged as overland sheet flow when drainage channels overflow.

Modelled flood levels at the Moss Vale Sewage Treatment Plant (STP) [from the *Review of Whites Creek Floodplain Risk Management Study & Plan: Final Report* (Catchment Simulation Solutions, 2020)], being the closest modelled levels to the subject site, indicate the peak flood level at this location is 657.97mAHD. The entire proposed development is to be constructed above 659mAHD. Therefore, the proposed development is unlikely to be inundated by flooding of Whites Creek in any rainfall events, meaning there are no tailwater effects to be considered for the discharge design for this development.

Mean values for the 1% AEP flood flows at the STP were provided in the review of the flood study and have been used to calculate the expected increase in flow due to the proposed development (Table 8.11). The modelling indicates the proposed development will result in an up to 2% increase in stream flow within Whites Creek in major flooding events. The proposed development is expected to have a small but non-negligible impact on receiving waters downstream of the subject site. With appropriate design consideration, the outlet structures at the discharge point could be designed to effectively manage increased flows and ensure excessive scour and downstream flooding are minimised.

Table 8.11. Relative increase to downstream stream flow during a 1% AEP flood event.

	Outlet Stream Flow, 1% AEP (m^3/s)			
	10 min	**1 hour**	**6 hour**	**24 hour**
Southern Drainage Pre-development	7.638	3.995	1.962	1.037
Southern Drainage Post-Development	7.975	4.692	2.424	1.712
Southern Drainage Increase	0.337	0.697	0.462	0.675
Moss Vale STP Flow	23.201	48.121	53.198	45.515
Relative Increase to Downstream Flooding	1.5%	1.4%	0.9%	1.9%

8.5.2.4.Water supply

Post development minimum pressures at all demand nodes within zone RES-BU5 are predicted to be above 20m. The lowest pressure is predicted at the same node as in the pre-development scenario. The minimum pressure at this node post-development is 25.5m compared to 27.0m pre-development. Within zone RES-BU5, the largest decrease in minimum pressure is 3.3m at node NV04659Y. This node is on the existing dead-end line that services Bowman Road and the proposed development. The predicted minimum pressure at node NV04659Y decreases from 50.8m to 47.5m.

Only one additional hydrant within the RES-BU5 zone is predicted to experience maximum pressures exceeding 90m post-development. This additional hydrant is near the subject site. It has no demand allocated in the pre-development model but has the future consumption from the proposed development assigned to it.

The highest pressure experienced at a node with demand attached is predicted at the same node as in the pre-development scenario. It recorded a maximum pressure of 134.9m pre-development and is expected to reach a maximum pressure of 134.8m post-development.

The modelled post-development PDD consumption in zone RES-BU5 is 4.4ML/day. This consumption is less than reservoir RES-BU5's storage capacity (10ML) and so, the WSC requirement for a minimum of 24 hours of PDD is met. The requirement for a reservoir minimum depth exceeding 12 hours of PDD (2.2ML) is also met. The increase in

demand at RES-BU5 triggers a reservoir fill cycle earlier post-development which results in less drawdown during the peak hours of the second day.

There is an increase of 9 pipes and 5 valves with a diameter of 300mm or less that are predicted to experience a maximum headloss greater than 5m/km under the post-development scenario. There is an increase of 1 meter with a diameter of greater than 300mm predicted to experience a maximum headloss greater than 3m/km.

Fire flow simulations were run to determine if the existing reticulation network and the proposed pipes within the development site could meet the 20L/s flow requirement for firefighting for industrial lots while maintaining 15m of residual pressure at 19:00 hours (peak demand time). Initial simulations showed that there is insufficient pressure and pipe capacity in the local network to supply 20L/s of water through the single existing DN100 pipe along Bowman Road while maintaining 15m of residual head. The headloss through the existing pipe is too high and modifications are required to the existing system (refer to Section 8.5.3.3).

8.5.2.5. Sewerage

The sewer modelling assessment considered two servicing scenarios for the proposed development using the 24 hour storm as the critical event:

1. Gravity sewer system including a syphon to cross the gas pipeline easement; and
2. Two pressure sewer units north of the gas pipeline easement with a shallow pressure main connecting into a gravity sewer connecting Building 3.

Both sewer servicing options increase the predicted overflow volumes at the MV17 pumping station and storage as expected given they are already at capacity. Overflow is also predicted at a manhole upstream of the pumping station MV13. The duty flow rate at this station is approximately 4.3L/s and the estimated peak wet weather rate entering this station post-development exceeds 6.0L/s. The predicted overflow volumes have a similar magnitude for both servicing scenarios, though option two has a lower overflow volume due to flow attenuation in the individual wet wells.

8.5.3.Mitigation measures

8.5.3.1.Construction

A Soil and Water Management Plan has been prepared to identify the erosion risk during earthworks and construction, and to specify the erosion and sediment controls to be implemented (Appendix P). The plan was developed in accordance with the principles outlined in *Managing Urban Stormwater* (Landcom, 2004) ("The Blue Book"). The plan recommends the integration of drainage, erosion, and sediment control measures across the subject site, including the following:

- Clean water drains around the work area using flow diversion berms;
- Temporary catch drains with energy dissipaters (rock check dams) to minimise slope length and direct surface runoff to sedimentation basins;
- Stabilised site entry and exit points to be a rumble grid or rock riprap;
- Sediment fences around disturbed areas and hay bales adjacent to sediment basin areas;
- Coagulation and flocculation processes to ensure the separation of stormwater runoff and dispersible fine sediment during excavation and construction;
- All disturbed areas that are not being worked on shall be stabilised;
- Non-rewettable binder shall be used in all hydromulch/hydroseed/polymer mixes on slopes.

Additional controls will be required for the B3 catchment due to the high-risk nature of the soils, including:

- Conducting site preparation works outside of the February and April period; and

- Construction of a sediment basin with a minimum volume of 144m^3. The existing on-site dam may be effectively used as a temporary sediment basin for this catchment with the inclusion of specific control measures to be determined prior to construction.

The proposed development will require the relocation of the existing on-site dam to the RU2 portion of land on the southern side of Hutchinson Road. If this relocation is to occur prior to the site preparation works for proposed Building 3, an assessment of the new dam will be required to determine its suitability as a temporary sediment basin during construction. A sediment basin will be required if the new dam location is not suitable for the collection of sediment from the Building 3 site.

All erosion and sediment controls will be documented in detail in a Construction Management Plan. The construction will be staged to minimise the area of exposed soil at any one time.

8.5.3.2.Post-development stormwater flows and water quality

Following construction, the proposed development can meet the NorBE water quality requirements and post-development flow requirements due to the inclusion of the following:

- Rainwater storage tanks;
- Stormwater runoff treatment devices (Humeceptor, HumeFilter, and trash screens); and
- On-site stormwater detention.

All proposed OSD tanks will be fitted with isolation valves. The isolation valves can be triggered in the event of contamination entering the stormwater system that cannot be adequately treated by the proposed stormwater treatment train.

The existing on-site dam (within Created Lot 3) will be relocated to the RU2 portion of land immediately south of Hutchinson Road to facilitate the proposed development. The new dam will have a minimum storage volume equivalent to the existing dam and will form part of the stormwater outlet system to assist in regulating flows leaving the subject site. Prior to the new dam, the stormwater outlet will feature an energy dissipator to prevent erosion and scouring of the downstream land. An indicative design for the energy dissipator is provided in Appendix G, however, this will need to be refined during the detailed design phase of the project to ensure it is appropriately sized.

Prior to commissioning of the stormwater capture and treatment system, a long-term inspection and maintenance program will be established for each building. The inspection and maintenance program will be developed in accordance with relevant manufacturer's specifications and best-practice operations.

8.5.3.3.Water supply

The results of the hydraulic modelling indicate that the additional demand from this development has a minor impact on the overall performance of the water supply network during PDD. However, it will be necessary at a minimum to upgrade or duplicate the water main in Bowman Road to achieve satisfactory fire flow. To achieve this, the following is required:

- The diameter of the proposed assets needs to be at least DN150;
- Increase the existing water main in Bowman Rd from DN100 to at least DN150 (upsize or duplication would work); and
- Install a DN150 cross connection between the DN150 and DN200 AC mains in Berrima Rd.

8.5.3.4.Hydraulic services

Hydraulic services designs have been prepared for each proposed building (Appendix H) providing details of the required fire and water services to achieve compliance with the NCC.

Each proposed building will be equipped with the following:

- Fire sprinkler tanks with suction and booster valves to provide a static water source for fire sprinklers;
- Fire services pump room within the hardstand area, in close proximity to each site entry, accommodating fire sprinkler pumps and fire hydrant pumps;
- Fire hydrant booster valve assembly, within an enclosure, at each site entry to ensure the on-site hydrant system can achieve suitable pressures;
- Double-headed fire hydrants fitted to the external walls of each proposed building to ensure full site hydrant coverage; and
- Fire hose reels fitted to the internal walls of each building to ensure full coverage of the proposed floor area.

8.5.3.5.Sewerage

The sewer assessment concludes the following:

- Implementation of servicing scenario 2 as per WSC's preference;
- The inclusion of the proposed development will increase average dry weather flows by approximately 1.1 L/s but will not create any dry weather pipe capacity issues within the gravity sewer reticulation network;
- Additional emergency storage of 28kL is required at the pumping station at MV13 to accommodate the proposed development;
- The model predicts that the current sewer network is unable to contain the 24 hour storm. The addition of the proposed development increases the predicted overflow volumes in several locations; and
- The upgrade of the pumping station at MV17 from 45 L/s to 50 L/s will be required to resolve all the predicted overflow issues caused by the proposed development. This will be included in WSC's plans to upgrade the STP to more than double the current capacity. The plans are currently in the design phase.

8.6. Bush fire

A bush fire hazard assessment was prepared by Accredited Practitioner Level 2 Letara Judd of Harris Environmental Consulting in September 2022 (Appendix T). The assessment confirmed the Bush Fire Attack Level (BAL) for construction of each building in accordance with relevant Australian standards and Planning for Bush Fire Protection (NSW Rural Fire Service, 2019) (PBP), as well as the Asset Protection Zone (APZ) requirements for each proposed building.

8.6.1.Existing conditions

A portion of the subject site is mapped as Vegetation Buffer on the bush fire prone land mapping. This mapping affects the north-western half of the B2 site and a small section in the south-west of the B1 site (Figure 8.2). The mapping correlates with an area of Southern Highlands Shale Woodland that is considered to be a disturbed and fragmented remnant. The individual trees are sparsely spaced (more than 5m separation) with a grassland understory and little fuel continuity. The woodland is slightly upslope of the proposed B2 development site. The vegetation to the south of the development footprint consists of downslope grassland.

8.6.2.Potential impacts

The bush fire assessment determined that there is potential for bush fire attack at this site. The highest BAL identified was BAL-40 for parts of B2 resulting from downslope grassland (Table 8.12). The required APZs (refer to Section 8.6.3) can be accommodated within the development areas of each building and the adjacent Bowman and Hutchinson Road reserves.

Table 8.12. Bush fire attack levels for the proposed building developments.

Building	Bush Fire Attack Level (BAL)	Location
1	BAL-29	Floor, roof, northern, southern and western facades
	BAL-19	Eastern facades
2	BAL-40	Floor, roof, north-eastern and north-western facades
	BAL-29	South-eastern and south-western facades
3	BAL-19	Roof, floor, eastern and southern facades
	BAL-12.5	Northern and western facades

The bush fire assessment has determined that the subject site currently provides adequate turning space for a fire tanker, and that road surfaces are sufficient to carry fully loaded firefighting vehicles. As the proposed building developments have been designed to accommodate vehicles up to 26m B-Doubles (B1 and B2) and 19m semi-trailers (B3), the access and turning areas will comply with the PBP requirements for fire appliance access.

8.6.3.Mitigation measures

The proposed building development will be constructed to the appropriate standards as specified by the National Construction Code and PBP to address the BAL specified in the bush fire assessment. All buildings will include fire sprinkler systems which will include two 100,000L water tanks per building designated for firefighting purposes only. Fire hydrant provisions are specified in the hydraulic services plans provided in Appendix H.

The bush fire assessment identifies requirements for APZs to be established from the commencement of building works and maintained in perpetuity as outlined in Table 8.13.

Table 8.13. Size of Asset Protection Zones (APZs) required to be established and maintained around each proposed building.

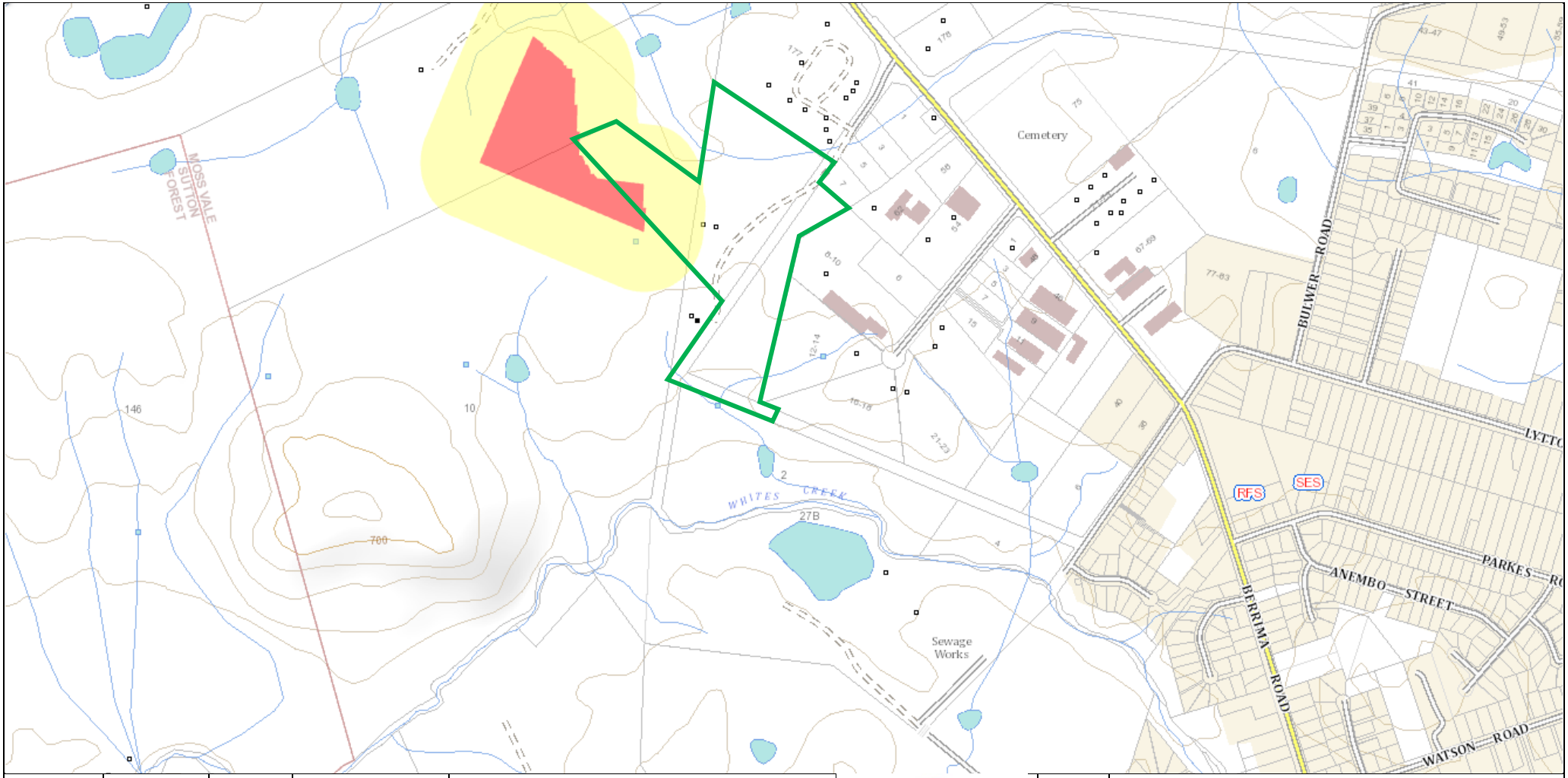
Building	APZ Distance	Location
1	15m	Northern, western and southern elevations
	To property boundary	Eastern elevation
2	9m	Northern and eastern elevations
	12m	Southern and western elevations
3	22m	Northern and western elevations
	28m	Southern elevation
	To property boundary	Eastern elevation

Table 8.14 summarises other mitigation measures to be implemented to reduce the risk of bush fire.

Table 8.14. Management and mitigation measures to reduce the risk of bush fire at the subject site.

Mitigation Measure	Responsibility	Timing / Frequency
Clear signage and line marking along all internal haul roads will be provided to support firefighting activities and evacuation	Site Manager	Temporary signage erected prior to construction. Permanent signage erected prior to operation.
Access routes to be always maintained free of obstructions	Operations Manager	On-going
Construction to comply with National Construction Code structural fire protection measures	Building designer	During detailed design
Asset Protection Zones to be established and maintained as per Table 8.13	Site Manager	At commencement of construction
Landscaping has been designed in accordance with Appendix 4 of PBP	Landscape Architect	During preliminary design
Water, electricity, and gas supply to comply with PBP	Building designer	During detailed design
Bush fire evacuation planning to be incorporated into emergency evacuation plans for the development	Construction Manager / Site Manager	Prior to commencement of construction and on-going

Figure 8.2. Bush fire prone land mapping on the subject site. The approximate development footprint is shown in green.



Date	Revision	Drawn By	Site description
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)

Jackson Environment and Planning Pty Ltd
Strategy | Infrastructure | Compliance | Procurement
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	SAAS Aus Pty Ltd
Project	Industrial Subdivision and General Industry Development
Title	Bush Fire Prone Land Mapping
Scale	Not to scale
Source	Crown Copyright – Department of Planning and Environment

8.7. Biodiversity

A biodiversity assessment of the subject site was undertaken in September and October 2022 by Biosis Pty Ltd (Appendix U). The assessment aimed to describe the ecological values and constraints associated with the proposed development. The assessment was designed to determine the presence/absence of any threatened ecological communities (TECs) and, where applicable, assess the impacts of the proposed development on any threatened species, populations and/or communities or their habitat.

The assessment included a desktop review of the following databases:

- Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) Protected Matters Search Tool for matters protected by the EPBC Act;
- NSW Department of Planning and Environment (DPE) BioNet Atlas of NSW Wildlife, for items listed under the BC Act;
- The NSW Department of Primary Industries (DPI) Spatial Data Portal for *Fisheries Management Act* 1994 listed threatened species, populations and communities;
- NSW DPI priority weeds for the South East Local Land Services (LLS) area; and
- DPE Vegetation Information System (VIS) mapping, including:
    - Southeast NSW Native Vegetation Classification and Mapping - SCIVI. VIS_ID 2230.

The desktop review was supported by a field investigation of the subject site. The random meander technique was employed over six person hours. Vegetation was classified by Plant Community Type (PCT) as defined by the *Biodiversity Assessment Method* (Office of Environment and Heritage, 2017) (BAM). Hand-held GPS was used to mark the vegetation boundaries for each PCT. A habitat assessment was also completed to determine the presence of suitable habitat for threatened species previously recorded or predicted to occur within 5km of the subject site.

8.7.1.Existing conditions

The assessment identified the property to have relatively low biodiversity values due to historical clearing of the property for use as grazing pasture and the dominance of exotic species, including two priority weed species (Willow and Blackberry).

An assessment of the threatened flora and fauna species most likely to have habitat within the proposed development area was conducted. These species were identified through a desktop study that considered actual species records and predicted species ranges. A total of five flora species and 11 fauna species were identified and targeted searches were conducted during the field investigation. The assessment concluded that, due to historic clearing, modification through weed ingress and grazing pressure, the subject site did not meet the habitat requirements for the flora species.

The field investigation resulted in the following observations:

- The area has been largely cleared and is dominated by exotic species with numerous patches of the priority weed Blackberry;
- Remnant Eucalypts within the north-western portion of the subject site are isolated and heavily impacted by bell miner associated dieback, therefore are unlikely to provide an important function as feed trees;
- Ten hollow-bearing trees were identified though they are considered degraded, offering marginal habitat. Two trees to be removed contain small hollows that could offer potential roosting habitat for the Southern Myotis;
- The livestock stalls (farm sheds) on the subject site are unsuitable as roosting habitat for Southern Myotis as they are not enclosed, thus are not dark enough during the day, and the uninsulated roof would result in fluctuating temperatures;

- The riparian vegetation within the tributary of Whites Creek and the farm dam in the southern portion of the property consists predominantly of weed species, including the priority weeds Willow and Blackberry. Long-term agricultural use of the property has also resulted in frequent disturbance making them unlikely to provide habitat for target fauna species;
- The subject area is regularly used by the exotic pest, European rabbit, with multiple individuals observed and numerous burrows present;
- No threatened flora, fauna or ecological communities were recorded during the field investigation;
- The vegetation within the subject site does not conform to any of the native PCTs known to occur across the broader surrounding landscape, instead consisting of Urban Native and Exotic vegetation, and Exotic Pastureland;
- The subject site contains two individual koala feed trees, *Eucalyptus viminalis* (Ribbon Gum), though these occur outside the proposed development footprint.

8.7.2.Potential impacts

The proposed development will involve the following impacts to vegetation on the subject site:

- Clearing of 0.16 ha urban/native exotic vegetation;
- Clearing of 7.9ha exotic pastureland;
- Removal of seven isolated Narrow-leaved Peppermint *Eucalyptus radiata* trees; and
- Loss of nine hollow-bearing trees.

A Test of Significance (ToS) was prepared to assess the potential impact of removal of hollow-bearing trees on the Southern Myotis. The ToS concluded that the proposed activity is not likely to significantly impact populations of Southern Myotis within the subject site or wider locality as:

- Works are limited to removal of two hollow-bearing trees containing suitable hollows for Southern Myotis as well as disturbance to an artificial dam representing potential marginal foraging habitat, which both occur within agricultural land and adjacent to existing infrastructure and disturbed areas;
- The localised nature of the proposed works will not significantly trigger or exacerbate any key threatening processes for Southern Myotis;
- The habitat to be removed is not considered important to the survival of the species; and
- Protocols for erosion and sedimentation control as well as properly inspecting and removing hollow-bearing trees will be implemented to minimise potential disturbance or harm to Southern Myotis.

As the ToS concluded that the proposed activity is not likely to significantly impact the Southern Myotis population, no further assessment is required, and a Species Impact Statement or Biodiversity Development Assessment Report is not necessary.

The field investigation identified two individual Ribbon Gum trees, a koala feed tree species. These trees are outside the proposed development footprint and will be retained. The trees exist in an isolated state surrounded by exotic pastureland with no connectivity to other feed or habitat trees. Therefore, the proposed development will not impact on koala habitat.

The proposed development will not trigger the Biodiversity Offsets Scheme (BOS) under the BC Act for the following reasons:

- The total clearing of the remnant Eucalypt trees does not exceed the minimum clearing threshold of 0.5ha for the subject site;
- The proposed development will not impact any areas mapped within the Biodiversity Values map; and

- The proposed development is unlikely to have a significant impact on a threatened species, population or community listed under the BC Act.

8.7.3.Mitigation measures

Whilst the impacts of the proposed development on biodiversity are expected to be minimal, the mitigation measures in Table 8.15 have been recommended to avoid disturbance of any native vegetation or fauna habitat outside the development footprint.

Table 8.15. Management and mitigation measures to minimise impacts to biodiversity.

Mitigation Measure	Responsibility	Timing / Frequency
To the fullest extent possible, minimise disturbance to any native vegetation outside the development footprint.	Construction Manager	On-going
Where possible, any trees to be retained should be protected in accordance with Australian Standard AS4970 – 2009 *Protection of trees on development sites*, during construction, operation, and decommissioning of the site compound.	Construction Manager / Operations Manager	On-going
In the unlikely event that unexpected threatened species are identified during the project, works will cease, and an ecologist will be contacted.	Construction Manager	As required
Soil transportation should be minimised within, into or out of the study area to reduce the spread of weeds.	Construction Manager	On-going
A Weed Management Plan is to be developed and implemented to minimise the spread of the two priority weed species identified.	Construction Manager	Prior to commencement of construction
Appropriate erosion and sediment control measures should be installed at all sites to avoid sedimentation of receiving water bodies or other indirect impacts to surrounding biodiversity values.	Construction Manager	Prior to commencement of construction / As required
Retain dead tree trunks or logs in-situ unless they are in the impact area and moving is unavoidable. Reposition material elsewhere on the site. If native fauna is likely to be present, a licensed ecologist should inspect the removal and undertake fauna relocation.	Construction Manager	As required during construction
Hollow-bearing trees are to be removed in a two-stage process: • Stage 1: Any surrounding vegetation to be cleared and grubbed. • Stage 2: 24 to 48 hours later the hollow-bearing trees to be inspected by an ecologist. If resident fauna is observed, the hollow section is to be lowered to the ground and the animal allowed to move on of its own volition. If injured, the fauna to be taken to a WIRES carer or appropriate veterinarian for care.	Construction Manager	As required during construction

8.8. Visual amenity

A Visual Impact Assessment (VIA) was prepared by Terras Landscape Architects in November 2022 (Appendix V). The VIA was conducted in accordance with the *Guidelines for Landscape Character and Visual Impact Assessment* (Roads and Maritime Services, 2013). The VIA was carried out following the below steps:

- Assess the visibility of the proposal. This includes a review of the existing visual environment/landscape setting of the locality;
- Identify key existing viewpoints and their sensitivity. This requires the preparation of a viewpoint analysis using a representative number of viewpoints located within a reasonable distance of the site located within its visual catchment; and
- Assess visual impacts. A brief description of the proposal is included within this section followed by an assessment of the likely impacts based on a composite of the sensitivity of the view and the magnitude of the proposal being a combination of scale, size and character having regard to the proximity of the viewer.

In addition to the VIA, a Light Spill Impact Assessment and External Lighting Strategy (LSIA) was prepared to address the potential for impacts from external lighting around the proposed development on the adjoining rural lands (Appendices W and X). The LSIA was prepared by JHA Consulting Engineers in accordance with the following Australian Standards:

- AS/NZS 1158.3.1:2020 - *Lighting for roads and public spaces*;
- AS/NZS 1158.3.1:2020 – *Lighting for roads and public spaces – Entry roadway*; and
- AS/NZS 4282:2019 - *Control of the obtrusive effects of outdoor lighting*.

8.8.1.Existing conditions

8.8.1.1.Site character

The properties at 2 and 10 Bowman Road cover an extent of approximately 65ha of largely undeveloped rural land. Structures on the properties include a double storey weatherboard residence with separate garage and sheds located approximately 300m from the property entrance on Bowman Road. Approximately 100m north of the residence are two stables/open-sided dairy sheds and associated fenced enclosures. The stables and residence are accessed by an unformed access track from the property entrance. A cluster of native and exotic vegetation surrounds the residence and a line of trees is located on the western side of the stables forming a windbreak. It is estimated the structures occupy approximately 225m^2 with the remainder of the properties consisting of grazed pastures.

Views from the site entrance are as follows:

- Panoramic rural views to the west, south and south-east, including a single residence at a distance to the south, and two large farm sheds beyond the western boundary;
- Endeavour Energy and Anderson Waste Services industrial operations, along with powerlines, and a pole-mounted satellite dish to the immediate east; and
- Industrial shed and carparking, partially screened by mature vegetation and a constructed earth mound, associated with the Wingecarribee Resource Recovery Centre to the immediate north-west.

8.8.1.2.Landscape character

The Moss Vale township to the south-east of the subject site is typical of many established regional towns in SW. The central commercial precinct dates to the mid to late 1800s and is surrounded by a combination of heritage and contemporary residences.

Berrima Road is the only connecting road between Moss Vale and Berrima to the north-west. Beyond the Moss Vale residential zone, Berrima Road features light industrial buildings alongside the wide, sparsely vegetated road verges. Where views are not obstructed by industrial buildings and structures, the landscape character broadens to a rural outlook across largely cleared paddocks with distant views to vegetated hillsides.

The subject sites historical use for cattle grazing has resulted in the clearing of most endemic canopy vegetation and it is devoid of any other structures except for those associated with the residence and cattle yards. The landscape characters associated with the site are therefore pastoral lands, rural residential and fragmented native vegetation.

8.8.1.3.Lighting

The main existing light sources surrounding the subject site include the industrial operations at the Wingecarribee Resource Recovery Centre to the north, the Endeavour Energy and Anderson Waste Services yards to the east, and the sewage treatment works to the south. No major light sources are present within the subject site.

8.8.2.Potential impacts

8.8.2.1.Visual amenity

The VIA included a viewpoint analysis. The analysis considered the views and sight lines back to the subject site from nine viewpoints and provides an objective analysis and subjective professional judgement of the potential impact of the proposed development on the visual amenity from these locations. The location of the viewpoints is shown in Figure 8.3. The assessment criteria to assess the visual impact of the proposed development as a whole are summarised inTable 8.16. Table 8.17 provides a summary of the anticipated visual impacts at each of the viewpoints. The potential impacts at the individual viewpoints also consider the viewer position in the assessment of visual sensitivity, i.e., an inferior position where the viewer is looking up at the proposed development, neutral where the development is generally in the viewers horizontal line of sight, or superior where the viewer is looking down on the development.

As the proposed development is to occur on largely undeveloped farmland, the local visual character will be altered. The extent of the alteration is dependent on the viewer angle and the subsequent surrounding landscape context. Due to the surrounding topography, vegetation, and existing development, proximity views into the site are restricted, so this change in land use will be mostly observed from 500m and further from the Site. The viewer number from these locations shall be low. It is anticipated that this change in land use shall be viewed as an extension of the existing industrial development and the proposal shall have a low - moderate accumulative visual impact on the surrounding area.

Figure 8.3. Location of viewpoints included in the Viewpoint Analysis.

Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd	Client	SAAS Aus Pty Ltd
09/06/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au	Project	Industrial Subdivision and General Industry Development
					Title	Location of Viewpoints
					Scale	Not to scale
					Source	Terras Landscape Architects

Table 8.16. Visual Impact Assessment criteria and the overall impact of the proposed development.

Assessment Criteria	Description of Criteria	Overall Project Impact
Visual Quality	An assessment of how viewers may respond to designated scenery. Ratings (Low, Medium, High) are based on the following categories: • Visual quality increases as relative relief and topographic ruggedness increases (Landform/Relief); • Visual quality increases as vegetation pattern variations increase (Vegetation); • Visual quality increases due to the presence of natural and/or agricultural landscapes (Naturalness); • Visual quality increases owing to the presence of water forms (without becoming common) and related to water quality and associated activity (Water); and • Visual quality increases with increases in land use compatibility (Development).	Low – Medium • Landform/Relief – Undulating terrain dominant, little contract or ruggedness, ridgelines prominent in only half or less of landscape units – Medium. • Vegetation – One or two vegetation types present in foreground, uniformity along skyline – Low. • Naturalness – Some evidence of development but not dominant – Medium. • Water – Little or no view of water/water in the background without prominence/presence of polluted water or stagnant water – Low. • Development – Presence of established small scale industrial, etc. in middle ground, presence of sports and recreation facilities – Medium.
Viewer Access	Considers the relative number and type of viewers, viewer distance, viewing duration, and view context.	Viewer access at viewpoints ranges from Very Low to Low, increasing with usage of the cattle saleyards, with viewer distances of >500m.
Visual Sensitivity	Estimates the significance that a change will have on a landscape to those viewing it. Considers variables including: the number of people affected, viewer location, surrounding land use, and degree of change. The following principles generally apply: • Visual sensitivity decreases as the viewer distance increases. This occurs as changes to the scenic environment must be assessed over a broader viewshed which is comprised of a greater number of competing elements. • Visual sensitivity decreases as the viewing time decreases. • Visual sensitivity can also be related to viewer activity (e.g. a person viewing an affected site while engaged in recreational activities will be more strongly affected by change than someone passing a scene in a car travelling to a desired destination).	Visual sensitivity varies from Low to High with an average rating of Moderate.
Visual Effect	The interaction between a proposal and the existing visual environment. It is often expressed as the level of visual contract of the proposal against the setting or background in which it is viewed.	Visual effect considered to be Low due to distant views from most locations, proposed use of recessive material colours, and boundary landscape screening.
Visual Impact	The assessment of changes in the appearance of the landscape as the result of some interventions to the visual quality of an area with regard to the visual sensitivity and visual effect.	A moderate visual sensitivity impact combined with a low visual effect impact results in a Low overall visual impact.

Table 8.17. Visual impacts assessed at nine viewpoints surrounding the subject site.

Viewpoint	Distance from Site	Description	Visual Evaluation Criteria				
			Viewer Position	Viewer Access	Visual Sensitivity	Visual Effect	Visual Impact
V1 2 Bowman Rd	0m	The highest likely visual impact as it offers unfiltered views in very close proximity to the proposed development. Whilst Viewer Access is high due to moderate to long viewing duration, Visual Sensitivity is considered low as it is within an existing industrial area. Views from the adjoining recycling centre will be highly impacted, though the actual impact is influenced by the layout of the recycling centre and the existing vegetation that surrounds the centre.	Neutral	High	Low	High	Moderate
V2 Berrima and Bowman Rd intersection	200m	Viewer Access is high due to the volume of traffic using Berrima Road, but the viewing duration is very short. Whilst Berrima Road is a tourist road, the proposed development is within an industrial area, therefore the Visual Sensitivity rating is lowered. A very small portion of the proposed development will be visible from the intersection; therefore the visual impact will be low.	Inferior	High	Moderate	Low	Low
V3 205 Berrima Rd	300m	Viewer access is rated as high due to the volume of traffic using Berrima Road, but the viewing duration is very short and shall be generally experienced by vehicles in transit, except when visiting the saleyards. The subject site is not observable from this location; however it is likely that Building 2 will be visible from the rear of the saleyards as it is in an elevated position and separated by cleared paddocks.	Inferior	High	Moderate	Low	Low
V4 Between 30 & 325 Berrima Road	1km	This viewpoint was selected due to its potential to provide direct views to the site from vehicles travelling towards Moss Vale, however all views are obstructed by existing foreground vegetation. The subject site is therefore not observable from this location and although the tourist road affords it a high Visual Sensitivity, the Visual Impact is low (nil).	Neutral	High	High	Low	Low

Viewpoint	Distance from Site	Description	Visual Evaluation Criteria				
			Viewer Position	Viewer Access	Visual Sensitivity	Visual Effect	Visual Impact
V5 Saleyards entrance on Abattoir Rd	600m	Viewer access is generally limited to the occupants of the two rural residences of Abattoir Road. However, viewer volumes increase on stockyard sale days. The moderate rating is an average of the two scenarios. Visual Sensitivity is considered moderate as it is an agricultural area within 1km of the subject site. The proposed development will be visible from this location but does not breach the existing canopy line. The use of natural colours will assist in integration with the surrounding environment. More of the building mass of the proposed development may be visible from within the saleyard.	Inferior	Moderate	Moderate	Low	Low
V6 Entrance to Charleston Pastoral Company, Abattoir Rd	500m	As this is located at the end of the road, Viewer Access is limited to clients and employees of the company and shall be of a brief duration from this location. Views for a longer duration are likely from within the premises, depending upon the site layout and extent of landscaping within. Visual Sensitivity is considered moderate as it is an agricultural area within 1km of the subject site. The proposed buildings will be visible from this location and will breach the background vegetation line. A landscaped buffer containing large trees along the subject site's western boundary is recommended to filter views of the built form. The use of natural colours will assist in integration with the surrounding environment.	Inferior	Low	Moderate	Moderate	Moderate
V7 16-18 Old Dairy Road	200m	As this is located on private property within a cul-de-sac at the end of the road, Viewer Access is limited to employees and may be variable in duration, depending upon the site usage. Longer duration views are likely from within the site of Anderson Waste Services, however aerial imagery suggests that they may be partially restricted by on-site industrial buildings.	Neutral	Low	Low	Low	Low

Viewpoint	Distance from Site	Description	Visual Evaluation Criteria				
			Viewer Position	Viewer Access	Visual Sensitivity	Visual Effect	Visual Impact
		Visual Sensitivity is low as it is an industrial area. Unobstructed views from this viewpoint take in the RU2 portion of the subject site that will not be developed. The existing earth mound within Anderson Waste Services is expected to obstruct any views of B3.					
V8 **4 Gibbons Road**	600m	Viewer Access is limited to residents of 27 Gibbons Road and those accessing Morrice Court. Residents at 1 Morrice Court could be impacted, however there is established screen planting at the Gibbons Road interface. Views to the proposed development will be largely obstructed by existing buildings, but the rear of B3 may be visible. B3 will likely be viewed as a continuation of the existing industrial developments rather than an isolated structure. The use of natural colours will assist in integration with the surrounding environment.	Neutral	Low	High	Low	Low
V9 **Sewage Treatment Works**	1km	Viewer Access is limited from the rear yard of residents occupying the western side of Kennedy Close. Employees of the Sewerage Treatment Works (STW) will have a closer view of the Site, but it may be filtered by vegetation. The topographic depression bisecting the viewshed along the creek line allows for a relatively unobstructed view across the paddocks to the Site. The proposal shall not be viewed in isolation as the existing industrial development on the eastern side of Old Dairy Road is very evident, resulting in an estimated moderate to high Visual Impact.	Inferior	Low	High	Moderate	Moderate

8.8.2.2. Light spill assessment

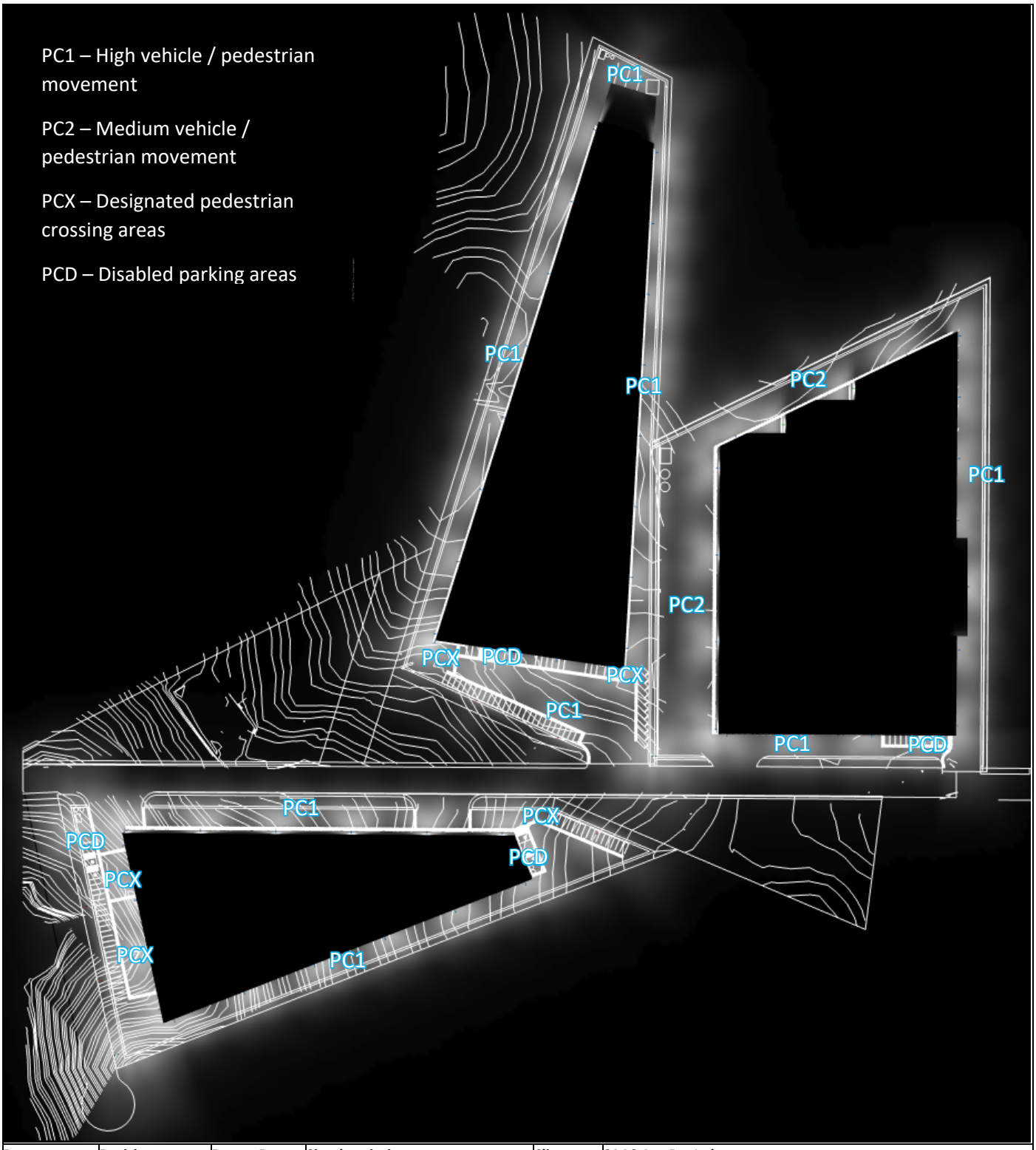
The proposed development has the potential to generate light spill impacts from the increase in lighting associated with the Bowman Road and Hutchinson Road construction, as well as the need for external lighting around each proposed building for operational safety and security.

The required level of illuminance and the horizontal spill from each external light considers the volume of vehicle and pedestrian traffic in the area, the fear of crime, and the need to enhance amenity, and varies across the proposed development. Selection of lighting within the Bowman Road and Hutchinson Road reserves is appropriate for a local road or street used primarily for access to abutting properties. The anticipated night time pedestrian or cycle activity, the fear of crime and the need to enhance amenity are assumed to be low giving an applicable lighting subcategory of PR5. The recommended lighting categories range from PR1, with the highest illuminance and horizontal spread, to PR6 with the lowest illuminance and horizontal spread.

The category of lighting surrounding each proposed building varies based on the particular use of each area and during the proposed operational hours (see Section 3.3.1 for operational hours). These categories define the maximum lighting category for each area. The selection of lighting is based on the expected night time vehicle and/or pedestrian movements and fear of crime for parking spaces, aisles, and circulation roadways (subcategories PC1 to PC3). Two additional categories are defined for designated disabled parking spaces (PCD) and designated pedestrian crossing areas (PCX). Figure 8.4 shows the expected spread of light from the proposed development and notes the lighting categories applicable to each area.

The obtrusive lighting calculation included in the LSIA demonstrates that lighting for the proposed development can comply with AS/NZS 4828:2019 *Control of the obtrusive effects of outdoor lighting,* specifically to A1 Dark, whilst achieving required lighting levels for roadways and external areas.

Figure 8.4. Details of lighting categories to be implemented across the proposed building development.



Date	Revision	Drawn By	Site description	Client	SAAS Aus Pty Ltd
23/02/2023	Revision A	C. Rich	2 and 10 Bowman Road, Moss Vale NSW (Lot 1, DP103123, Lot 2, DP1070888, Lot 51, DP130176)	Project	Industrial Subdivision and General Industry Development
				Title	External Lighting Strategy
				Source	JHA Consulting Engineers

Jackson Environment and Planning Pty Ltd
Strategy | Infrastructure | Compliance | Procurement
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

8.8.3.Mitigation measures

The VIA and the light spill assessment have recommended mitigation measures to minimise impacts of the proposed development. These are summarised in Table 8.18.

Table 8.18. Management and mitigation measures to reduce visual amenity and outdoor lighting impacts.

Mitigation Measure	Responsibility	Timing / Frequency
Provide boundary landscaping in accordance with the Landscaping Design Plan	Landscape Architect	During design
Allow for the establishment of medium and large canopy trees where possible within the landscaped areas for screen planting	Landscape Architect	During design
Use recessive colours for the proposed building materials	Architect	During design
External lighting in all spaces to be reduced to the lowest lighting subcategory (PC3) outside of operational hours	Operations Manager	On-going
High-efficiency, optically controlled, pole-mounted lighting to be installed throughout the proposed development	Site Management	During detailed design / On-going
Pole-mounted lighting to be located on the pedestrian side of Bowman and Hutchinson Roads	Site Management	During detailed design / On-going
Pole lights with Type I or Type II lighting distribution and sharp rear light spill cut-off to be used along roadways to minimise light spill to neighbouring properties	Site Management	During detailed design / On-going

8.9. Waste Management

8.9.1.Existing conditions

The subject site currently contains a single residence and two livestock sheds, with the majority of the property used for cattle grazing. Waste generated on the subject site is likely to include typical domestic waste from the residence, agricultural and veterinary chemical containers (e.g., pesticide drums), and garden wastes (e.g., grass, weeds, tree trimmings).

Waste generated on the site is either disposed of through the kerbside collection, taken directly to the Wingecarribee Resource Recovery Centre or burnt on-site. The Wingecarribee Resource Recovery Centre is a collection point for the *drumMUSTER* program, collecting agricultural and veterinary containers. The property is located within the area of the Wingecarribee Shire that is permitted to undertake backyard burning of vegetation piles provided the necessary permits from Fire and Rescue NSW or the NSW Rural Fire Service are obtained, and all other conditions met.

8.9.2.Potential impacts

The proposed development will result in an increase in the volume of waste produced at the subject site.

Demolition required for the proposed development is expected to generate approximately 670 tonnes of waste material. The waste is expected to consist of concrete, steel (i.e., star pickets, wire fencing, and frames from the sheds, old water tanks), timber, garden organics (i.e., trees, pasture grasses, and other fallen plant materials) and general rubbish encountered across the subject site. The garden organics will be mixed with topsoil. The majority of waste generated from demolition works is expected to be recycled.

The construction and earthworks phase of the project is expected to generate up to 930.6 tonnes of waste. A significant volume of soil is to be removed during earthworks, though it is expected that the soil will be reused as fill material elsewhere on the subject site. Other waste materials likely to be generated which will be fully reused or recycled include timber, plasterboard, tile, PVC pipe, concrete, asphalt, and steel. Plastic film that cannot currently be recycled will likely be generated from packaging. Some consumer packaging and residual waste will be generated by contractors on-site. Construction and fit out of the office areas may also result in the generation of liquid wastes (e.g., paints, lacquers), carpet, and glass. Construction is expected to achieve an overall recycling rate of 92%.

Operational waste generation was estimated using the *Multi-unit and Commercial Development Waste and Recycling Generation Rates Calculator* provided by Sustainability Victoria. The calculator has been developed to assist the estimating the number or garbage and recycling bins, and size of storage areas required for new developments based on the floor area of the included spaces. The estimated total across all three buildings is 54m^3 of general rubbish and 54m^3 of recyclables per week. This includes the estimate for a typical building space and a typical office space. Expected waste streams within the buildings include broken scaffolding components (metal), timber pallets, plastic film packaging, paper and cardboard, co-mingled recycling, general waste, and food organics.

8.9.3.Mitigation measures

A waste management plan (WMP) has been prepared for the proposed development (Appendix Y). The WMP provides details of the location of waste storage areas and bin typesto be used during demolition, construction, and operation of the proposed development, as well as the proposed methods of reuse, recycling, or disposal including suggested receiving facilities, for each waste stream. The WMP also includes provisions for the monitoring and review of the WMP to ensure it is updated to adequately reflect waste management issues at all stages of the project.

9. Summary of Mitigation Measures

Impacts associated with the construction of the proposed development will be managed through a Construction Environmental Management Plan to be prepared during the detailed design stage of the project once a suitable contractor has been appointed. An Unexpected Finds Protocol will be prepared for the works to provide guidance to personnel in the event that an unexpected heritage find is encountered.

Construction will comply with the *NSW Interim Construction Noise Guidelines* (Department of Environment & Climate Change, 2009) with all construction works limited to the industry standard hours:

- Monday to Friday – 07:00 to 18:00;
- Saturday – 08:00 to 13:00; and
- No works on Sundays and public holidays.

A range of mitigation measures to prevent or minimise impacts from the proposed development have been detailed in Section 8. This section compiles those considered necessary to minimise impacts and maximise positive outcomes on the physical, social and economic environments of the local area and the wider region.

The recommended mitigation measures and strategies will be implemented and managed, so the development complies with approvals. These measures will be updated during the detailed design phase if necessary to ensure impacts are avoided or minimised. The proposed mitigation measures are summarised in Table 9.1

Table 9.1. Summary of mitigation measures to be implemented to minimise or avoid impacts to the environment and human health from the proposed development.

Issue	Mitigation Strategy
General	SAAS Aus Pty Ltd will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the proposal.
	Adequate fire fire-fighting capacity will be maintained on-site.
	Employees and contractors will be suitably inducted and trained prior to commencing any work on site.
	Contact details will be displayed on signage at the entrance to the Site.
	All plant and equipment used during demolition and construction will be maintained and operated in a proper and efficient manner.
	SAAS Aus Pty Ltd will repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Development.
Site Contamination	SAAS Aus Pty Ltd will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the proposal.
	A Construction Environmental Management Plan is to be prepared and implemented.
	Employees and contractors will be suitably inducted and trained prior to commencing any work on site.
	All plant and equipment used during construction will be maintained in a proper and operated in a proper and efficient manner.
	All chemicals, fuels and oils used on site will be stored in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participant's Manual* 2007
	Accidental spillage or poor management of fuels, oils, lubricants, hydraulic fluids, solvents and other chemicals during the construction will be controlled through spill management actions to prevent water quality and ecological impacts.
	All waste generated during construction will be segregated and stored in appropriate bins. When full, bins will be taken to a facility that can lawfully accept and process the waste.
	Appropriate erosion and sediment runoff controls will be installed around all areas of vegetation and soil disturbance, and all material stockpiles.
Geotechnical Conditions	Prepare a detailed Construction Management Plan
	The gas pipeline easement is to be clearly marked and considered in all earthwork activities at the subject site.
	During construction, a thin compacted rock layer (min. 200mm) is to be placed over the subgrade to provide temporary pavements for heavy construction traffic.
	Design of footings and floor slabs to consider potential for surface movements of underlying subgrade.
	Provisions to be made for excavations that may encounter groundwater to allow efficient water drainage during heavy rainfall. This may include the use of trenches and pumping from locally excavated sumps.
	The use of heavy equipment that may cause vibrations is to be limited and must comply with APA Group standards.
	A qualified geotechnical engineer is to inspect excavation works to determine whether actual geotechnical conditions vary from those identified during the GI.
	A qualified geotechnical engineer is to observe boring of piles to confirm the foundation conditions and pile footing elevations are suitable.
	An Acid Sulfate Soils Management Plan is to be prepared for the relevant proposed structures in the centre and south of the subject site.

Issue	Mitigation Strategy
Traffic	Prepare a detailed construction management plan that includes provisions for construction traffic management including the location of temporary parking for staff and contractor vehicles, and construction plant and equipment.
	Construct temporary pipeline crossing pavements in accordance with APA Group specifications.
	Provide car parking in accordance with the architectural plans. Ensure construction is compliant with the relevant Australian Standards.
	Construct the Hutchinson Road cul-de-sac to WSC's industrial standard ensuring dimensions permit the turning circle of B-Double trucks.
Water Supply	Increase the existing water main in Bowman Rd from DN100 to at least DN150 (upsize or duplication would work) and install a DN150 cross connection between the DN150 and DN200 AC mains in Berrima Rd.
Sewerage Management	Additional emergency storage of 28kL is required at the pumping station at MV13.
	Upgrade the pumping station at MV17 from 45 L/s to 50 L/s.
Bush Fire	Clear signage and line marking along all internal haul roads will be provided to support firefighting activities and evacuation.
	Access routes to be always maintained free of obstructions.
	Construction to comply with National Construction Code structural fire protection measures.
	Asset Protection Zones to be established and maintained as per Table 8.12.
	Landscaping has been designed in accordance with Appendix 4 of PBP.
	Water, electricity, and gas supply to comply with PBP.
	Bush fire evacuation planning to be incorporated into emergency evacuation plans for the development.
Biodiversity	To the fullest extent possible, minimise disturbance to any native vegetation outside the development footprint.
	Where possible, any trees to be retained should be protected in accordance with Australian Standard AS4970 – 2009 *Protection of trees on development sites*, during construction, operation, and decommissioning of the site compound.
	In the unlikely event that unexpected threatened species are identified during the project, works will cease, and an ecologist will be contacted.
	Soil transportation should be minimised within, into or out of the study area to reduce the spread of weeds.
	A Weed Management Plan is to be developed and implemented to minimise the spread of the two priority weed species identified.
	Appropriate erosion and sediment control measures should be installed at all sites to avoid sedimentation of receiving water bodies or other indirect impacts to surrounding biodiversity values.
	Retain dead tree trunks or logs in-situ unless they are in the impact area and moving is unavoidable. Reposition material elsewhere on the site. If native fauna is likely to be present, a licensed ecologist should inspect the removal and undertake fauna relocation.
	Hollow-bearing trees are to be removed in a two-stage process: • Stage 1: Any surrounding vegetation to be cleared and grubbed. • Stage 2: 24 to 48 hours later the hollow-bearing trees to be inspected by an ecologist. If resident fauna is observed, the hollow section is to be lowered to the ground and the animal allowed to move on of its own volition. If injured, the fauna to be taken to a WIRES carer or appropriate veterinarian for care.
Visual Amenity	Provide boundary landscaping in accordance with the Landscaping Design Plan
	Allow for the establishment of medium and large canopy trees where possible within the landscaped areas for screen planting
	Use recessive colours for the proposed building materials
	External lighting in all spaces to be reduced to the lowest lighting subcategory (PC3) outside of operational hours

Issue	Mitigation Strategy
	High-efficiency, optically controlled, pole-mounted lighting to be installed throughout the proposed development
	Pole-mounted lighting to be located on the pedestrian side of Bowman and Hutchinson Roads
	Pole lights with Type I or Type II lighting distribution and sharp rear light spill cut-off to be used along roadways to minimise light spill to neighbouring properties
Waste Management	All recommendations made in the Waste Management Plan are to be implemented during demolition, construction, and operation.
	Waste storage and management practices to be regularly reviewed and updated where necessary.
	Waste generation to be considered at the procurement stage. Recycled or recyclable materials are to be used wherever possible.

10. Capital Investment Value

A Capital Improvement Value (CIV) Estimate was prepared by HD Quantity Surveyors Pty Ltd for the proposed development. The total estimated project costs (including GST) is estimated to be $73,851,250. A summary is provided in Table Table 10.1 below. The full CIV estimate is contained in Appendix Z.

Table 10.1. Summary of Capital Investment Value Estimate.

Location	Gross Floor Area (m^2)	Cost/m^2 ($)	Cost ($)
Proposed Lot 1 Basement	2,215	2,000	4,430,000
Proposed Lot 1 Building Open Space	16,412	1,500	24,618,000
Proposed Lot 1 Office Space	957	2,000	1,914,000
Proposed Lot 2 Building Open Space	10,864	1,500	16,296,000
Proposed Lot 2 Office Space	1,932	2,000	3,864,000
Proposed Lot 3 Building Open Space	9,409	1,500	14,113,500
Proposed Lot 3 Office Space	951	2,000	1,902,000
		Total ex GST	$67,137,500
		GST	$6,713,750
		Total inc GST	**$73,851,250**

11. Conclusion

SAAS is seeking approval for subdivision of the properties at 2 and 10 Bowman Road, Moss Vale (Lot 1, DP103123, Lot 2, DP1070888, and Lot 51, DP130176). Lots 2 and 51 contain land zoned RU2 Rural Landscape and E4 General Industrial. Lot 1 is zoned C3 Environmental Management. This lot will be excluded from the proposed development. The properties are bounded by industrial land uses to the north and east, including the Wingecarribee Resource Recovery Centre, rural land to the west, and Whites Creek to the south. The E4 land forms part of the Local Industry Precinct of the Moss Vale Enterprise Corridor.

The proposed development includes subdivision of the properties to create four new lots, each with a single land use zone. The subdivision will create three E4 General Industrial zoned lots and consolidate all RU2 land into a single lot with an area of 54.6ha. The proposed subdivision will better support the use of land within each land use zone in a manner consistent with the zone objectives of the WLEP. Buildings with ancillary office space are proposed to be constructed on the three lots to be created within the E4 zone. The proposed building development will include the following:

- Extension of the existing Bowman Road, and creation of part of Hutchinson Road to provide access to the proposed industrial buildings, including;
    - Construction of an industrial cul-de-sac at the termination of Hutchinson Road to accommodate turning of up to 26m B-Double vehicles;
    - Creation of an easement within the RU2 portion of land on the southern side of Hutchinson Road to facilitate construction of the cul-de-sac;
    - Stormwater management system with an outfall on the southern side of Hutchinson Road within the RU2 portion of land; and
    - Street lighting and landscaping in accordance with Wingecarribee Shire Council and Australian Standard requirements;
- Construction of three buildings for the purposes of scaffolding material storage. Each building will include:
    - Internal office space, staff amenities and training rooms;
    - On-site parking;
    - Haul road and hardstand surrounding each building;
    - Stormwater management system including stormwater treatment devices, on-site detention basin, and rainwater storage;
    - Internal fire sprinkler system and 200kL static water supply; and
    - Outdoor lighting and perimeter landscaping in accordance with Wingecarribee Shire Council and Australian Standard requirements.

This SEE has addressed the following concerns and development constraints that apply to the subject site: local traffic; soil and water; flooding; bush fire; biodiversity; environmental and Aboriginal cultural heritage; visual amenity; and waste management.

The major constraint affecting development of the subject site is the location of the high pressure gas pipeline easement. Due to the risks associated with development within the pipeline easement, the proposed development has been designed to minimise works within the easement as far as possible. Works will only be required within the easement to construct the Bowman Road crossing, including the installation of services, and to install landscaping.

The proposed development will also require the diversion of two Category 3 waterways within the subject site. The biodiversity assessment indicates that the diversion of the waterways is unlikely to impact any habitat as one waterway was not evident despite being investigated during a rainfall event, and the other waterway is heavily impacted by weed species. An assessment of water quality impacts has demonstrated that the proposed stormwater treatment

systems can achieve a neutral or beneficial effect on water quality, and the inclusion of on-site detention within each building catchment will allow the proposed development to achieve WSC's requirements regarding post-development flows without significantly affecting flood behaviour in the Whites Creek catchment.

The proposed development will also have implications for the reticulated water supply and sewerage system, though this can be managed through some system upgrades. Upsizing or duplication of water main assets in Bowman Road will be required to achieve satisfactory flow rates and a new cross connection will be required within the Berrima Road assets. For the sewerage system upgrades, WSC prefers the installation of two pressure sewer units north of the gas pipeline easement with a shallow pressure main connecting into a gravity sewer connecting Building 3. Additional emergency storage of 28kL is required at the pumping station located at the southern end of Gibbons Road, Moss Vale to accommodate the proposed development an upgrade of the pumping station at the STP from 45 L/s to 50 L/s will be required to resolve all the predicted overflow issues caused by the proposed development. This will be included in WSC's plans to upgrade the STP to more than double the current capacity.

The SEE, and the supporting technical investigations, have concluded that the proposed development can proceed without negative impacts to human health, the environment, and the continued use of surrounding land provided all recommended design and mitigation measures are employed.

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Appendix A – Owner's Consent

Appendix AA – Legal Advice on Planning Pathway

Appendix B – Section 10.7(2&5) Planning Certificate

Appendix C – Site Survey

Appendix D – Potholing Survey

Appendix E – Proposed Subdivision Plan

Appendix F – Architectural Plans

Appendix G – Civil Engineering Drawings

Appendix H – Hydraulic Services Design

Appendix I – Landscape Concept Design

Appendix J – Preliminary NCC Assessment

Appendix K – Community and Stakeholder Consultation Plan

Appendix L – Preliminary Site Investigation

Appendix M – Geotechnical Investigation

Appendix N – Traffic Impact Assessment

Appendix O – Swept Path Analysis

Appendix P – Soil and Water Management Report

Appendix Q – Stormwater Management Plan

Appendix R – Flood Study Report

Appendix S – Sewer and Water Connection Report

Appendix T – Bush Fire Assessment

Appendix U - Biodiversity Assessment

Appendix V - Visual Impact Assessment

Appendix W – External Lighting Strategy

Appendix X - Light Spill Assessment

Appendix Y – Waste Management Plan

Appendix Z – Capital Investment Value Estimate

Appendix AA – Legal Advice in Relation to Planning Pathway