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Allera

PROJECT: 86 Bryant Street, Padstow

1 Introduction

This Statement of Environmental Effects (SEE) has been prepared by Allera Planning Pty Ltd on behalf of BJ Architects International to support a Development Application (DA) submitted to City of Canterbury Bankstown Council.

This DA seeks consent for demolition of the existing industrial building, construction of a warehouse, and strata subdivision at 86 Bryant Street, Padstow. The Site is legally defined as Lot 21 DP 732054. The proposed development is permitted with consent and is consistent with the zone objectives.

This SEE has been prepared pursuant to Part 4 of the *Environmental Planning & Assessment Act 1979* (EP&A Act) and Part 3 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).

Given the assessment below, the proposed development is considered to warrant support from Canterbury Bankstown Council.

2 Site Analysis

2.1 Site Location & Existing Site Characteristics

The Site subject to this SEE is 86 Bryant Street, Padstow (Lot 21 DP 732054). The Site is located on the northern side of Bryant Street with vehicular access also provided via a single vehicle crossover from Bryant Street. The Site is regular in shape and is zoned IN2 Light Industrial pursuant to the *Canterbury Bankstown Local Environmental Plan 2023* (CBLEP 2023).

The Site presently contains a automotive hail repair workshop and is located approximately 2.6km south of Bankstown and 17km south west of the Sydney Central Business District (CBD). The property is surrounded primarily by industrial land with the M5 Motorway to the north (rear) of the Site.

The Site and its surrounding context are shown in **Figure 1** and **Figure 2** below. Further a Survey Plan is provided at **Appendix 2** of this SEE.

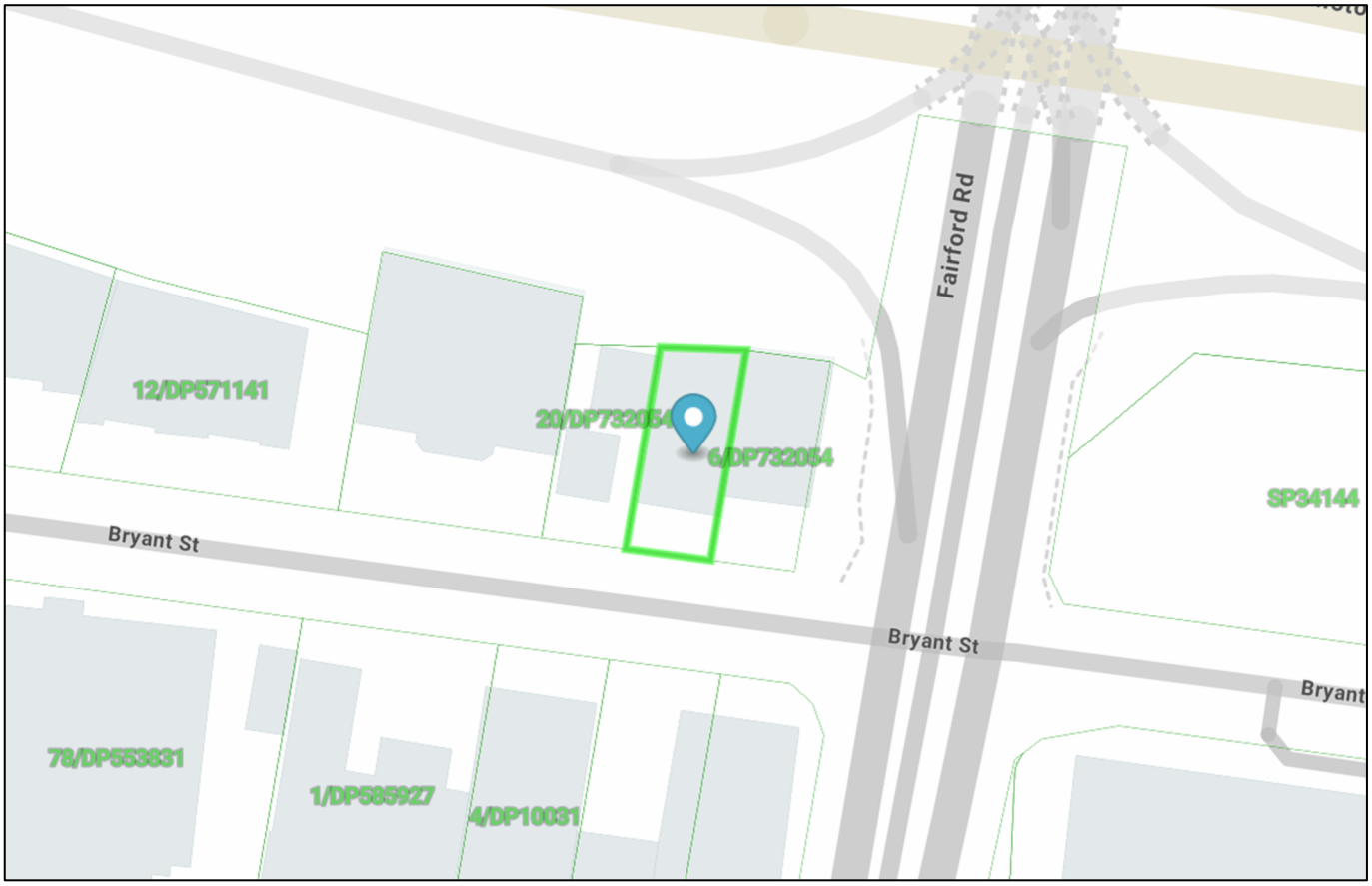

Figure 1. Cadastral Map of Site (Mecone Mosaic, 2024)

Figure 2. Aerial Map of Site (Mecone Mosaic, 2024)

2.2 Land Ownership

The Site is owned by Xianglin He. Signed owner's consent is provided at **Appendix 1** of this SEE.

2.3 Site Context

The Site is located within Canterbury Bankstown Local Government Area (LGA) and is subject to the provisions of the CBLEP 2023. The site is zoned IN2 Light Industrial zone pursuant to the CBLEP 2023 and is surrounded by industrial development. Padstow Train station is located approx. 1.15km to the south and Riverwood Train Station 2km to the south east of the Site. Bus Stops are also located on Davies Road approx. 50m to the east of the Site.

2.4 Relevant Development Application History

A review of Council's development application register shows the relevant development application history for the Site. **Table 2** below provides the most recent development history of the Site.

Table 1. Relevant Development Application History (Canterbury Bankstown Council, 2024)

DA Reference	Description	Decision
BA-466/1994	*Spray Booth*	Approved
DA-770/1992	*Use of Site for Smash Repairs & Spray Painting.*	Approved, 29/01/1993
DA-1010/2024	*Alterations and additions to the existing industrial building including raising the wall and roof height and construction of an internal mezzanine floor, change of use from vehicle repair workshop to warehouse, and strata subdivision into two (2) lots.*	Approved, 23/12/2024

DA-1010/2024 was approved for the alterations and additions to the existing industrial building and a change of use to a warehouse including strata subdivision. It has been identified that the existing slab on site is not capable of facilitating the future warehouse development and as such, the full demolition is proposed pursuant to this Development Application. This overall outcome is considered to remain the same as the previous Development Application except for some minor internal alterations.

3 Proposal

3.1 Development Overview

This DA seeks consent for demolition of the existing industrial building, construction of a warehouse, and strata subdivision. The details of the proposed development are provided in **Table 2** below and accompanying Architectural Plans (**Appendix 3**). The proposed development includes a staff room, bathroom, intertenancy wall, stairs leading to mezzanine level, waste storage areas, associated parking and landscaping.

3.2 Development Statistics

This DA seeks consent for the demolition of the existing industrial building, construction of a warehouse, and strata subdivision.

DA-1010/2024 was approved for the alterations and additions to the existing industrial building and a change of use to a warehouse including strata subdivision. It has been identified that the existing slab on site is not capable of facilitating the future warehouse development and as such, the full demolition is proposed pursuant to this Development Application. This overall outcome is considered to remain the same as the previous Development Application except for some minor internal alterations.

Table 2 below provides a summary of the proposed, whilst **Figure 3.** *Proposed Demolition Plan (Source: BJ Architects International, 2025)*

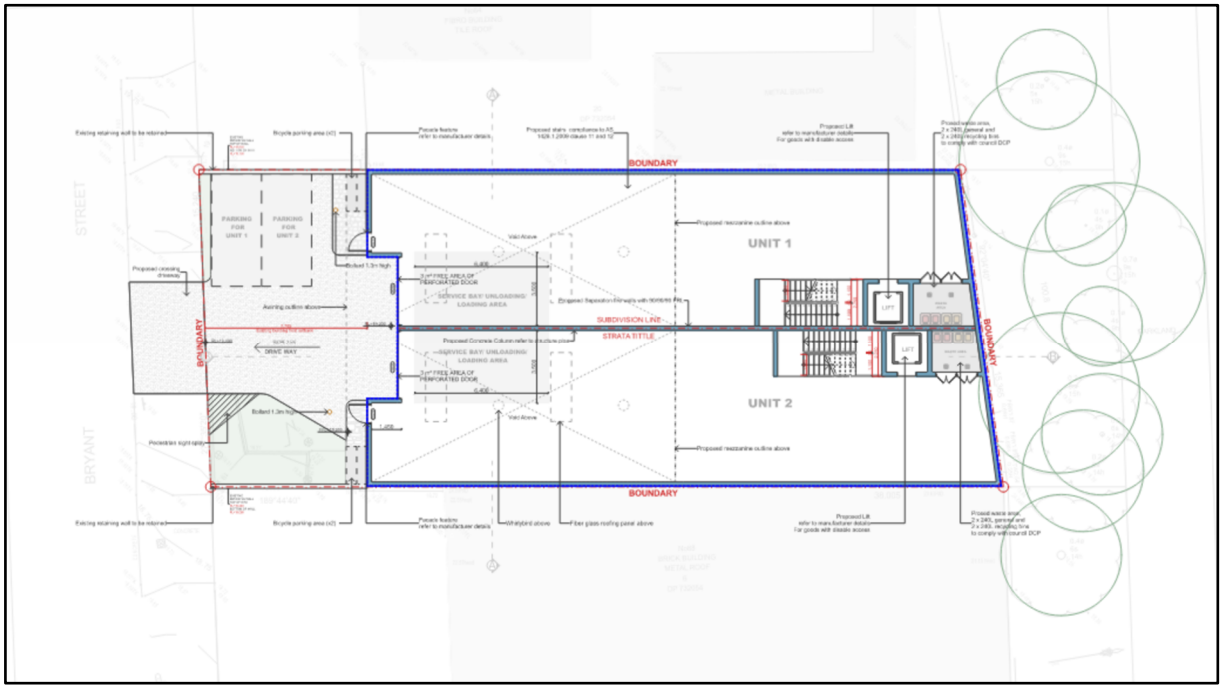

Figure 4 and **4** provide an extract from the proposed ground and mezzanine floor plan.

Table 2. Development Particulars

Component	Proposed
Site Area	567.5m^2
Demolition	Demolition of the existing industrial building.
Land Use	Existing: Smash repair and spray booth Proposed: Warehouse
Gross Floor Area (GFA)	Existing GFA: 420.9m^2 Proposed GFA: 560.1m^2

Component	Proposed
Floor Space Ratio (FSR)	Existing FSR: 0.74:1 Proposed FSR: 1:1
Height of Building (HOB)	Proposed HOB: 12.5m
Number of Tenancies	Two (2)
Landscaping	Existing Landscaped Area: 18m^2 Proposed Landscaped Area: 22.2m^2
Vertical Circulation	Stairs and a lift have been provided for vertical circulation between ground and first floor.
Car Parking	Two (2) car parking spaces comprising one (1) for each tenancy located within the front setback.
Hours of Operation	Monday to Saturday: 7am to 7pm Sunday and Public Holidays: 9am to 6pm
Loading / Unloading	The design of the warehouse is suitable for SRVs only and loading and unloading will be undertaken within the warehouse. Given the size of the warehouse, loading and unloading is expected to be infrequent. Swept paths for SRV have been provided in the Traffic Impact Assessment.
Waste requirements	A waste storage area has been provided on the south eastern portion of the site that includes space for 2 x 240L General Waste and 2 x 240L Recycling Bins as well as room for a bulky waste area. Waste bins with then be taken to the kerb for collection which is considered appropriate for a smaller warehouse operation such as this.
Staff Numbers	This application is for the construction of the warehouses and the number of staff members are not yet known. However, given the size of the proposed warehouses, it is expected that there would be a maximum of 1-2 staff members per warehouse at any given time.

The proposed development has been prepared by BJ Architects International and are attached at **Appendix 3**. Extracts of the demolition plan, proposed ground plan and mezzanine floor plan are provided in **Figure 3.**
Proposed Demolition Plan (Source: BJ Architects International, 2025)

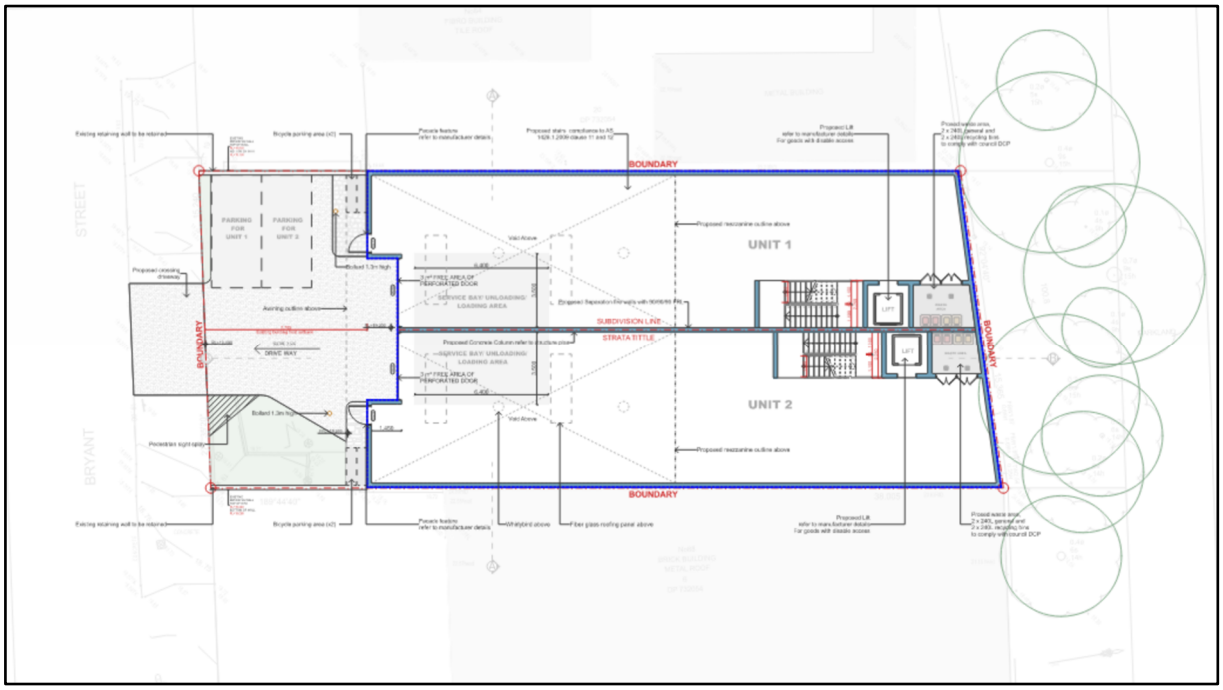

Figure 4, **4** and **5** below.

Figure 3. Proposed Demolition Plan (Source: BJ Architects International, 2025)

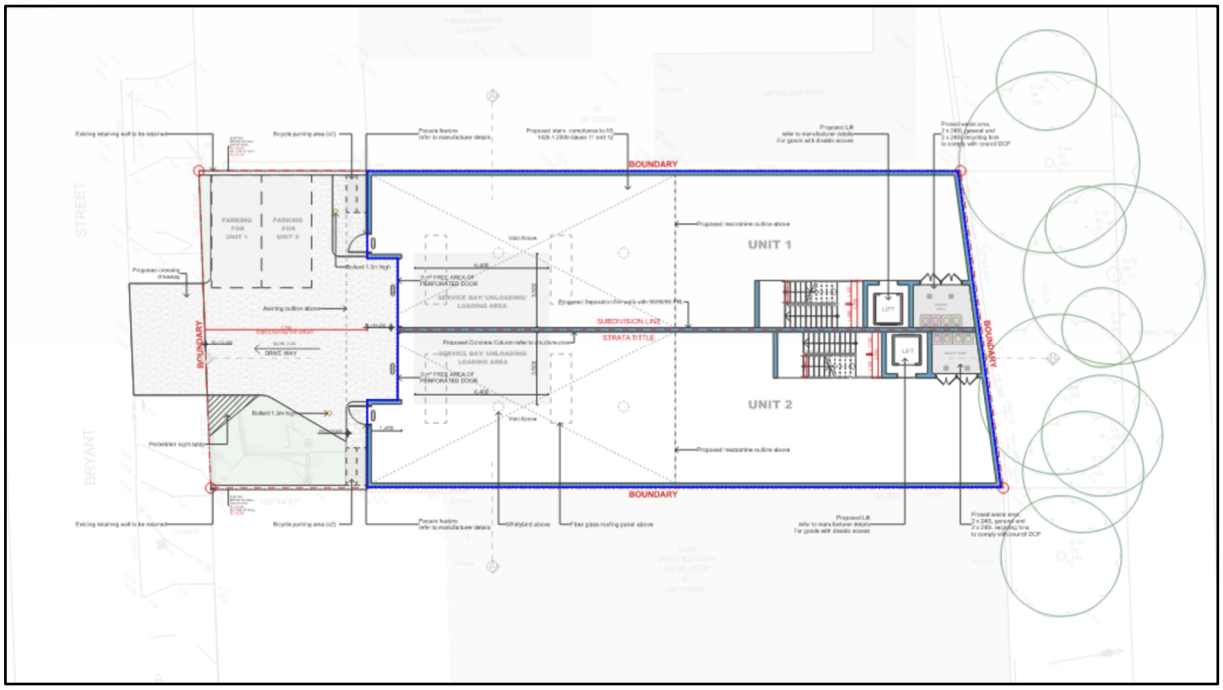

Figure 4. Proposed Ground Floor Plan (Source: BJ Architects International, 2025)

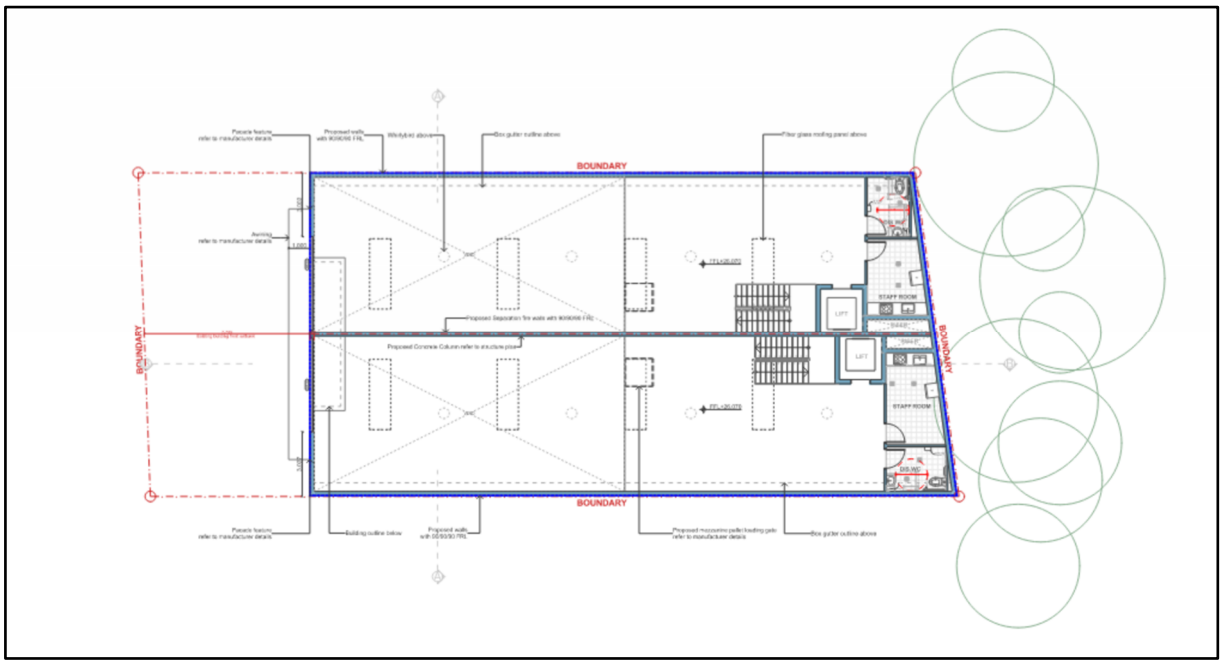

Figure 5. Proposed Mezzanine Plan (Source: BJ Architects International, 2025)

The proposal is considered the physical realisation of the zone objectives providing warehouse units within an IN2 Light Industrial zone.

The proposed cost of works is $1,130,000 excluding GST, a Quantity Surveyor's Report is provided at **Appendix 5** of this SEE.

4 Legislative Framework

4.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the overarching statutory planning legislation in NSW. The EP&A Act provides the legislative framework for assessment and approval of the proposed development. The objects of the Act are as follows:

a) *to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,*
b) *to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
c) *to promote the orderly and economic use and development of land,*
d) *to promote the delivery and maintenance of affordable housing,*
e) *to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
f) *to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),*
g) *to promote good design and amenity of the built environment,*
h) *to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,*
i) *to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,*
j) *to provide increased opportunity for community participation in environmental planning and assessment.*

The Site has been identified for industrial development by virtue of its IN2 Light Industrial zoning. The proposed development is entirely consistent with the strategic planning vision for the Site and is therefore consistent with the objects of the Act.

4.1.1 Integrated Development

Section 4.46(1) *What is "integrated development"?* of the EP&A Act determines whether the proposed development is integrated development and requires approval under another Act. The table below assesses whether the proposed development is integrated development.

Table 3. EP&A Act 1979 - Integrated Development (NSW Legislation, 2022)

Act	Provision	Approval	Response
Coal Mine Subsidence Compensation Act 2017	*s 22*	*approval to alter or erect improvements, or to subdivide land, within a mine subsidence district*	No
Fisheries Management Act 1994	*s144*	*aquaculture permit*	No
	s201	*permit to carry out dredging or reclamation work*	No
	s205	*permit to cut, remove, damage or destroy marine vegetation on public water land or an aquaculture lease, or on the foreshore of any such land or lease*	No
	s219	*permit to—* *a) set a net, netting or other material, or* *b) construct or alter a dam, floodgate, causeway or weir, or* *c) otherwise create an obstruction, across or within a bay, inlet, river or creek, or across or around a flat*	No
Heritage Act 1977	*s58*	*Approval in respect of the doing or carrying out of an act, matter or thing referred to in s 57 (1)*	No

Act	Provision	Approval	Response
Mining Act 1992	*ss63 and 64*	*grant of mining lease*	No
National Parks and Wildlife Act 1974	*s90*	*grant of Aboriginal heritage impact permit*	No
Petroleum (Onshore) Act 1991	*s16*	*grant of production lease*	No
Protection of the Environment Operations Act 1997	*ss 43(a), 47 and 55*	*Environment protection licence to authorise carrying out of scheduled development work at any premises.*	No
	ss 43(b), 48 and 55	*Environment protection licence to authorise carrying out of scheduled activities at any premises (excluding any activity described as a "waste activity" but including any activity described as a "waste facility").*	No
	ss 43(d), 55 and 122	*Environment protection licences to control carrying out of non-scheduled activities for the purposes of regulating water pollution resulting from the activity.*	No
Roads Act 1993	*s 138*	*consent to—* *a) erect a structure or carry out a work in, on or over a public road, or* *b) dig up or disturb the surface of a public road, or* *c) remove or interfere with a structure, work or tree on a public road, or* *d) pump water into a public road from any land adjoining the road, or* *e) connect a road (whether public or private) to a classified road*	No
Rural Fires Act 1997	*s100B*	*authorisation under section 100B in respect of bush fire safety of subdivision of land that could lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes*	No
Water Management Act 2000	*ss 89, 90, 91*	*water use approval, water management work approval or activity approval under Part 3 of Chapter 3*	No

The proposed development is not considered integrated development pursuant to the EP&A Act.

4.2 Biodiversity Conservation Act 2016

The purpose of the *Biodiversity Act 2016* (BC Act) is to maintain a healthy, productive, and resilient environment for the well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

Part 4, Division 2 and 5 lists threatened species, ecological communities, and key threatening processes to be considered under s7.3. S7.3 sets out the test for determining whether the proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats. Further, Part 6 establishes an offsets scheme which aims to ensure there is no net loss of biodiversity values. Entry into the offset scheme is triggered by exceeding the thresholds as outlined in Part 7 of the BC Reg, specifically:

- Clearing of native vegetation 1 ha or more (based upon minimum lot size of 1 ha to less than 40 ha).
- Clearing of land within the Biodiversity Values Map, which identifies areas of high biodiversity value.
- Development that will significantly affect threatened species or ecological communities, or their habitats (according to s7.3 of the BC Act).

The proposal does not seek to clear any native vegetation nor is it identified as being of high biodiversity value on the Biodiversity Values Map. Therefore, further consideration of the BC Act is not warranted.

4.3 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.

Under the WM Act, development untaken on waterfront land requires Controlled Activity Approval (CAA), where waterfront land is defined as any land within 40m from the highest bank of a river, lake or estuary.

The Site is not located within 40m of waterfront land and thus a CAA is not required.

4.4 State Environmental Planning Policy (Planning Systems) 2021

The *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) identifies what is State significant development, State significant infrastructure and regionally significant development.

The proposed subdivision would facilitate the future development of the Site consistent with the General Industrial zoning. 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.

The proposed development is not State significant development, State significant infrastructure or regionally significant development pursuant to Planning Systems SEPP.

4.5 State Environmental Planning Policy (Resilience and Hazards) 2021

State Environmental Planning Policy (Resilience and Hazards) 2021 Chapter 4 refers to the remediation of land. Under the provision of Chapter 4 of the Resilience and Hazards SEPP, where a development application is made concerning land that is contaminated, the consent authority must not grant consent unless:

(1) A consent authority must not consent to the carrying out of any development on land unless—
- *(a) it has considered whether the land is contaminated, and*
- *(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- *(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

(2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subsection (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

A Detailed Site Investigations is attached at **Appendix 13,** a Remedial Action Plan is attached at **Appendix 14** and a HAZMAT Inspection and Register Report is provided at **Appendix 15**. This is further summarised in **Section 5.9** of this SEE.

4.6 State Environmental Planning Policy (Transport and Infrastructure) 2021

The *State Environmental Planning Policy (Transport and Infrastructure) 2021* includes provisions to achieve permissibility for the development of certain activities for a range of infrastructure types. The Transport and Infrastructure SEPP indicates whether an activity is permissible with or without consent on what land the activity is permissible.

In accordance with Subdivision 2 *Development adjacent to pipeline corridors*, Clause 2.77 *Determination of development applications* this application has been referred to Jemena Gas for comment.

Schedule 3 of the Transport and Infrastructure SEPP lists the types of development that are defined as Traffic Generating Development. The referral thresholds for 'Warehouse or distribution centres' are:

- *8,000m^2 in site area or (if the site area is less than the gross floor area) gross floor area where the site with access to a road (generally); and*
- *8,000m^2 in site area or (if the site area is less than the gross floor area) gross floor area where the site has access to a classified road or to a road that connects to a classified road (if access is within 90 metres of connection, measured along the alignment of the connecting road).*

The proposed development comprises a total GFA of 560.1m^2 and a Site area of 567.5m^2. Therefore, the proposed development would not require referral to TfNSW.

4.7 Canterbury Bankstown Local Environmental Plan 2023

CBLEP 2023 is the primary Environmental Planning Instrument applying to the Site. The Site is located within the IN2 Light Industrial zone pursuant to the CBLEP 2023. The relevant provisions of the CBLEP 2023 are addressed in the table below.

Table 4. CBLEP 2023 - Relevant development standards

Clause	Control	Response
Zone IN2 Light Industrial	• *To provide a wide range of light industrial, warehouse and related land uses.* • *To encourage employment opportunities and to support the viability of centres.* • *To minimise any adverse effect of industry on other land uses.* • *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.* • *To support and protect industrial land for industrial uses.* • *To promote a high standard of urban design and local amenity.*	The proposed development is consistent with the objectives of the zone as it will deliver two (2) tenancies for the purposes of speculative warehouse, providing employment generation, with positive economic benefits for the local economies. Furthermore, the Site is surrounded by industrial-zoned land, therefore compatible with the surrounding context. The proposed development is considered to satisfy the objectives of the IN2 Light Industrial zone.
Permitted without consent	*Nil*	N/A
Permitted with consent	*Agricultural produce industries; Building identification signs; Business identification signs; Depots; Garden centres; Hardware and building supplies; Industrial training facilities; Landscaping material supplies; Light industries; Neighbourhood shops; Oyster aquaculture; Places of public worship;*	The proposed warehouse or distribution centre is permissible with consent within the IN2 zone.

Clause	Control	Response
	Plant nurseries; Resource recovery facilities; Restaurants or cafes; Roads; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; ***Warehouse or distribution centres****; Any other development not specified in item 2 or 4*	
Prohibited	*Agriculture; Air transport facilities; Airstrips; Amusement centres; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Community facilities; Correctional centres; Crematoria; Early education and care facilities; Eco-tourist facilities; Educational establishments; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Health services facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home businesses; Home occupations; Home occupations (sex services); Industries; Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Port facilities; Public administration buildings; Recreation areas; Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Signage; Tourist and visitor accommodation; Transport depots; Truck depots; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities*	N/A
Clause 4.1 Minimum subdivision lot size	The Site has a prescribed minimum subdivision lot size of 1,000m^2 pursuant to CBLEP 2023.	The existing lot size is 567.5m^2. This is not proposed to be altered pursuant to this application. The proposed development seeks consent for strata subdivision in which Clause 4.1 does not apply to as stated in Clause 4.1(4) which states: *(4) This clause does not apply in relation to the subdivision of any land—* ***(a) by the registration of a strata plan or strata plan of subdivision under the Strata Schemes Development Act 2015, or*** *(b) by any kind of subdivision under the Community Land Development Act 2021.*

Clause	Control	Response
		Therefore, no further consideration of Clause 4.1 is warranted on this occasion.
Clause 4.3 Height of buildings	The Site is not subject to a maximum height of building pursuant to CBLEP 2023.	N/A. Notwithstanding, the proposal comprises a maximum building height of 12.5m. The proposal is considered commensurate with surrounding development.
Clause 4.4 Floor space ratio	The Site has a prescribed maximum floor space ratio of 1:1 pursuant to CBLEP 2023.	The proposal comprises a GFA of 560.1m^2 resulting in a FSR of 1:1 being compliant with Clause 4.4.
Clause 5.10 Heritage conservation	The Site is not identified as a heritage item nor is the Site located within a heritage conservation area.	The proposed development comprises demolition of the existing and construction of a warehouse including strata subdivision. No further consideration of Clause 5.10 is warranted.
Clause 5.21 Flood Planning	The Site is not located in a flood zone according to the Fairford Road stormwater catchment flood study.	N/A. The Site is not located within a flood area as shown on the Fairford Road stormwater catchment flood study. Further, the proposal would not impact flood storage as it is largely located within the existing built form footprint and increases the permeable areas on Site.
Clause 6.1 Acid Sulfate Soils	The Site is identified as containing Class 5 Acid Sulfate Soils pursuant to CBLEP 2023.	The proposal comprises consent for minor earthworks. Therefore, further consideration of Clause 6.1 is not warranted on this occasion.
Clause 6.3 Stormwater management and water sensitive urban design	*(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development—* *(a) is designed to maximise the use of water permeable surfaces on the land having regard to the soil characteristics affecting on-site infiltration of water, and* *(b) includes, if practicable, on-site stormwater retention for use as an alternative supply to mains water, groundwater or river water, and* *(c) avoids significant adverse impacts of stormwater runoff on the land on which the development is carried out, adjoining properties and infrastructure, native bushland and*	A Stormwater Management Plan has been prepared Cates Consulting Plan and is attached at **Appendix 6.** A pit and pipe, and grated drain system is considered adequate to cater for the proposed stormwater runoff. Further, the proposal incorporates greater landscaping (permeable areas) to catch rainfall. The proposal is considered capable of complying with Clause 6.3.

Clause	Control	Response
	receiving waters, or if the impact cannot be reasonably avoided, minimises and mitigates the impact, and *(d) includes riparian, stormwater and flooding measures, and* *(e) is designed to incorporate the following water sensitive urban design principles—* *(i) protection and enhancement of water quality, by improving the quality of stormwater runoff from urban catchments,* *(ii) minimisation of harmful impacts of urban development on water balance and on surface and groundwater flow regimes,* *(iii) integration of stormwater management systems into the landscape in a way that provides multiple benefits, including water quality protection, stormwater retention and detention, public open space and recreational and visual amenity.*	
6.9 Essential Services	Development must be able to be appropriately and adequately serviced.	The proposal results in the demolition of the existing industrial building and the construction of a warehouse including strata subdivision. As such, the subject Site is currently serviced and access to appropriate services are available.

As can be seen above, the proposed development is compliant with the CBLEP 2023. The land zoning map is provided in **Figure 6** below.

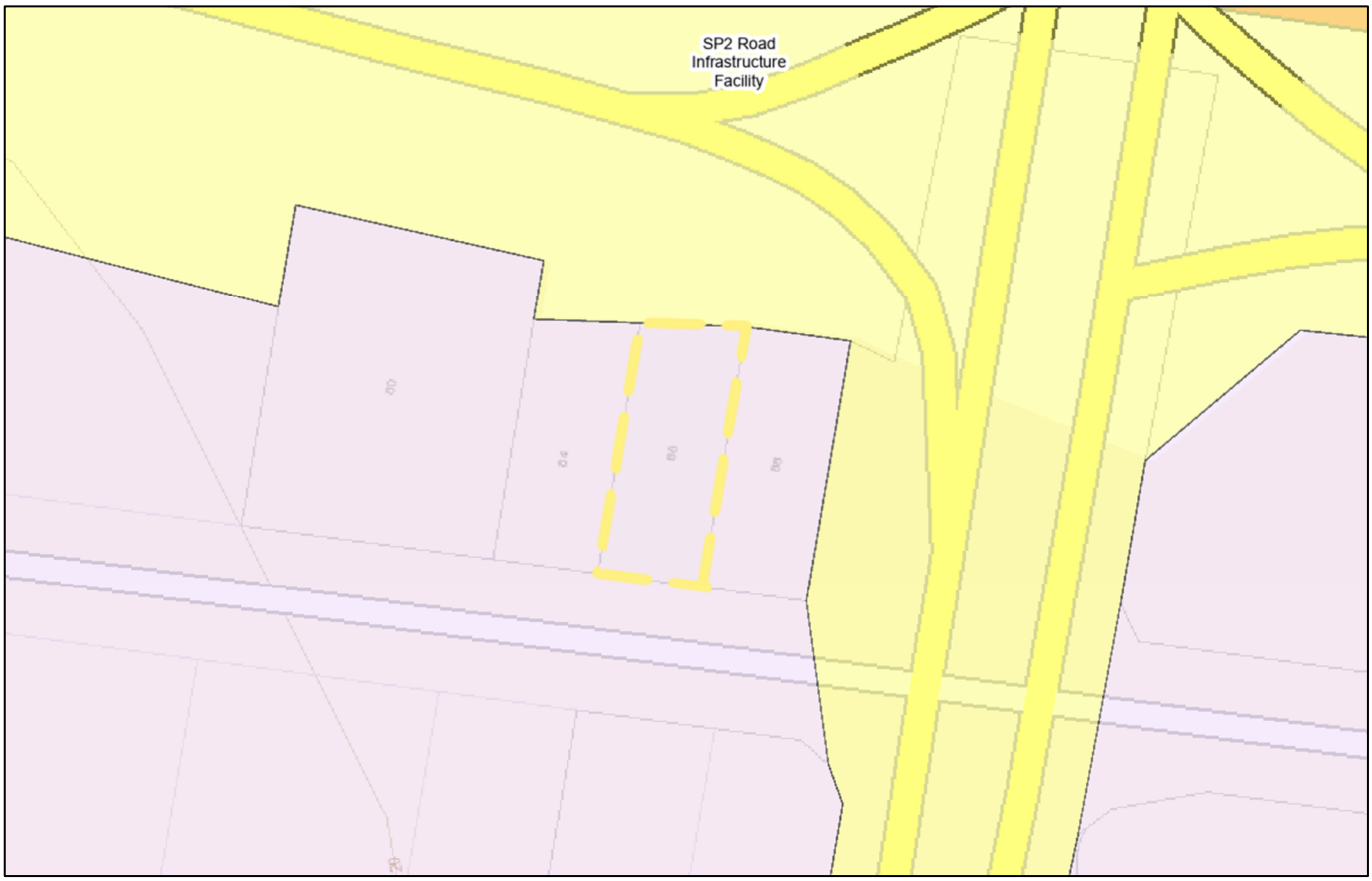

Figure 6. Land Zoning Map (NSW Planning Portal, 2025)

4.8 Canterbury Bankstown Development Control Plan 2023

The *Canterbury Bankstown Development Control Plan 2023* (CBDCP 2023) was adopted on the 25 May 2021 and came into effect on 23 June 2023. An assessment against the relevant provisions of the CBDCP 2023 has been provided at **Appendix 8**.

Under Section 4.15 of the EP&A Act, the consent authority is required to take into consideration the relevant provisions of the DCP in determining applications for development within the Canterbury Bankstown LGA. The principal purpose of a DCP is set out by Section 3.42(1) of the EP&A Act which states:

> ***3.42 Purpose and status of development control plans (cf previous s 74BA)***
>
> *(1) The principal purpose of a development control plan is to provide guidance on the following matters to the persons proposing to carry out development to which this Part applies and to the consent authority for any such development—*
> *(a) giving effect to the aims of any environmental planning instrument that applies to the development,*
> *(b) facilitating development that is permissible under any such instrument,*
> *(c) achieving the objectives of land zones under any such instrument.*
>
> *The provisions of a development control plan made for that purpose are not statutory requirements.*

As noted above, the primary principle of a DCP is to facilitate development that is permissible with consent and in accordance with the objectives of the zone. In this instance, the proposed development is permissible with consent and meets the objectives of the IN2 Light Industrial zone pursuant to the CBDCP 2023.

Given the assessment attached, we consider that the proposed development generally accords with the CBDCP 2023.

5 Environmental Assessment

5.1 Context and Setting

The Site is located within an IN2 Light Industrial zone to the CBLEP 2023. The proposed development is considered commensurate of the surrounding industrial development and is appropriate in its setting.

The proposal does not exhibit any significant environmental impacts and is not considered to adversely impact on the surrounding amenity of adjoining sites. The proposal is permitted with consent and align with the objectives of the zone. The proposed development is considered appropriate in its context and commensurate with the surrounding development.

5.2 Amenity

The Site is surrounded by industrial uses to the south, east and west. Additionally, the Site adjoins the M5 Motorway to the north. As such, the proposal is not considered to give rise to any undue amenity impacts and is commensurate of the surrounding development.

5.3 Traffic and Parking

A Traffic Impact Assessment has been prepared by Fernway Engineering and accompanies this application as **Appendix 7**.

Fernway Engineering has completed a traffic and parking assessment for the proposed development at 86 Bryant Street, Padstow, which comprises the demolition of the existing industrial building, construction of a warehouse, and strata subdivision. The proposed plan includes two car parking spaces in the front setback, which complies with the requirements of the CBDCP 2023. This represents a significant improvement as the existing Site has a deficit of approximately nine spaces. The assessment also notes the provision of two bicycle parking spaces which complies with the CBDCP 2023.

In terms of design and utility, the development features a loading / unloading activities for Small Rigid Vehicles (SRVs) internally to the proposed warehouses, which optimises the use of the limited space available. The configuration has been assessed and confirmed to generally comply with the Australian Standard AS2890 Parts 1, 2, and 3. Minor deviations from these standards have been evaluated and deemed acceptable in the context of their specific applications within the development.

Traffic generation from the development is expected to be minimal, with an increase of two trips in the peak hour and seven trips daily. A safety review conducted as part of the assessment process indicates that the development meets all relevant AS2890 safety standards necessary for integrating with public roads, including pedestrian sight splays and Safe Intersection Sight Distance (SISD). The continuity of access location and similarity in traffic patterns suggest no significant impact on existing road safety or operational conditions.

The proposal is considered acceptable in terms of parking and traffic matters.

5.4 Stormwater and Flood Management

A Stormwater Management Plan has been prepared by Cates Consulting Engineers and are attached as **Appendix 6**.

The erosion and sediment control plan proposes the implementation of a maintained construction ingress/egress, sediment fencing downstream to the proposed stockpile, and sediment fencing downstream to the proposed construction activities.

Further, the stormwater management plan shows that the stormwater runoff will be captured by downpipes and a grated drain which filters the runoff in to a pipe system that leads to a silt arrestor pit located at the south eastern corner of the Site.

The erosion and sediment control plan and stormwater management plan are considered to adequately address stormwater management during construction and operation of the Site.

5.5 Landscape

A Landscape Plan has been prepared by Yue Rao Landscape Architect and is attached at **Appendix 4**. The existing landscaped area is 18m². The proposal seeks to increase the landscaped area on Site to 25m² which is considered an improvement to the Site.

The Landscape Plan demonstrates the proposed planting which comprises a combination of groundcovers, shrubs, and trees (including one street tree). The proposed Landscape Plan also shows a proposed outdoor rest area for the workers which is considered to result in a positive social impact for employees on the Site.

5.6 BCA

A Building Code of Australia Report has been prepared by Silver End Pty Ltd and is attached at **Appendix 11**.

Based on a review of the proposed plans, the building code assessment confirms that the proposed works are capable of compliance with the Deemed-to-Satisfy (DtS) / Performance criteria of the Building Codes of Australia (BCA).

5.7 Access

An Access Report has been prepared by Obvius Access and is attached at **Appendix 9**.

Based on a review of the proposed plans, the building code assessment confirms that the proposed works are capable of compliance all relevant standards. Further, assessment will be provided at the detailed design stage.

5.8 Section J

A NCC 2022 Section J report has been prepared by AENEC and is attached at **Appendix 10**.

The NCC2022 Section J report demonstrates that it is capable of meeting the DtS requirement of the relevant standards. The report outlines special conditions that must be incorporated into the Construction Certificate prior to the issue of a Construction Certificate. Subject to the implementation of these special conditions prior to Construction Certificate, the proposal is considered to comply with the relevant standards of Section J.

5.9 Contamination

A Detailed Site Investigations is attached at **Appendix 13,** a Remedial Action Plan is attached at **Appendix 14** and a HAZMAT Inspection and Register Report is provided at **Appendix 15**.

Based on the findings of the Detailed Site Investigation (DSI), which included a limited desktop review, site walkover, and targeted sampling program, several potential contamination issues were identified. Metal parts were found beneath the slab near BH03, and fill materials with stained clay or sandy clay silt were observed at shallow depths in BH03 and BH04. Bonded asbestos was detected in one sample (BH04_0.1–0.4) at a concentration below the hazardous screening level, while asbestos fines were also found in BH03_0.1–0.45 at trace levels. These findings indicate the need for further assessment and careful management during any disturbance of subsurface materials.

To manage the identified risks, a Remedial Action Plan (RAP) with appropriate contingency measures should be prepared before any disturbance of the slab, particularly for lift and footing construction. An asbestos clearance certificate must be obtained following removal works, in accordance with NSW Work Health and Safety Regulation (2017) and relevant codes. Waste classification reports will be required for disposal of any excavated fill, and a validation report must be prepared upon completion of remediation and earthworks to

confirm site suitability for the intended use. Due to the limited nature of the investigation, unexpected contamination may still be present. Therefore, contingency procedures should be in place during construction to address any unforeseen finds such as asbestos-containing materials, buried waste, staining, or odours, with further assessment and waste classification to determine appropriate disposal or reuse.

As per the DSI, A RAP and HAZMAT Inspection and Register Report have been prepared.

Given the previous land use and the DSI, the Site is considered suitable for the proposed use as a warehouse.

5.10 Waste

A Demolition and Construction Waste Management Plan has been prepared by BJ Architects and is attached at **Appendix 12**.

Where practical and feasible, all construction materials will be recycled either onsite or through reuse.

In terms of ongoing waste management, the proposed plans provide a waste storage area on the south eastern corner of the site with space to accommodate 2 x 240L general waste bins, 2 x 240L recycling bins, and space for bulky waste. The waste bins will be taken to the kerb for collection which is considered appropriate given the size of the proposed warehouses.

5.11 Social and Economic

The proposed development facilitates the use of the Site for warehouse or distribution centre which is consistent with the intentions for the land. The Site is located within an established industrial area and is separated from sensitive land uses.

Further, the proposed development will support construction jobs as well as the ongoing use of the Site for employment generating purposes, in accordance with the long-term strategic planning objectives for the area.

5.12 Suitability of Site

The Site is located within an established industrial area and is zoned IN2 Light Industrial pursuant to the CBLEP 2023. The proposed development is consistent with both the zoning of the land and the land use pattern of the locality. The proposed development would support the use of the Site as a warehouse or distribution centre which is commensurate for the Site and locality.

Accordingly, the Site is considered suitable for the proposed development and is consistent with the aims and objectives of the IN2 Light Industrial zone.

5.13 Submissions

No submissions have been received in relation to the proposed development at the time of writing. However, the applicant is willing to address any submissions, should they be received by Council.

5.14 Public Interest

The proposed development is in the public interest given the following:

- Results in an improvement to an existing building and provides two (2) strata subdivided warehouses for future occupation.
- The proposal results in greater landscaped area on Site and provides a rest area for future staff which would result in an enhanced visual and social outcome.
- The proposed development would not result in any significant or measurable environmental or amenity impacts.
- The proposed development is commensurate with the surrounding development.

The proposed development aligns with the zone objectives and as such, the proposed development is in the public interest.

6 Conclusion

The purpose of this SEE outlines the proposed the demolition of the existing industrial building, construction of a warehouse, and strata subdivision in two (2) warehouse units and to assess its potential impacts having regards to Section 4.15(1) of the EP&A Act.

The proposal is considered to warrant a favourable determination for the following reasons:

- It is permissible with development consent and consistent with the objectives of the IN2 Light Industrial zone;
- The proposed development has been designed to maximise the potential of industrial zoned land within the subject Site;
- The proposed development would be an orderly and economically appropriate development for the Site;
- It is appropriate within the context of the Site and surrounding locality; and
- The proposed development would not comprise any significant environmental impact.

Considering the merits of the proposed development and in absence of any significant environmental impact, the proposed development warrants support by Council.

APPENDIX 1 – Owner's Consent

CANTERBURY BANKSTOWN

Owners Consent

SECTION A. Location and Title Description of the Property

Unit No.		Street No.	86	Street	Bryant St		
Suburb	Padstow			State	NSW	Postcode	2211
Lot No.	21			Section No.			
Deposited Plan/Strata Plan No.	DP 732054						

SECTION B. Owner(s) Consent

As owner(s) of the land to which this application relates, I/we consent to this application. I/we also give consent for authorised Council Officers or agents to enter (without prior notice) the land to carry out inspections. I/we accept that all communication regarding this application will be through the nominated applicant..

Owner 1 Name	XIANGLIN HE		
Signature		Date	02/09/2024
Owner 1 email	Bennyinteriors@hotmail.com		
Owner 2 Name			
Signature		Date	
Owner 2 email			

If the owner is a Company, owner's consent is to be provided with signatures of 2 directors or a director and company secretary (unless it has a sole trader). Please attach ASIC extract verifying directors and or secretary of Company.

Owner Company Name	ABN
Director 1 Name	Director or Secretary Name
Signature Director 1	Signature Director 2 or Secretary
Company email	Date

If the owner is an owner's corporation, owner's consent is to be provided with a signature of the secretary of the body corporate.

Body corp. Secretary Name	Signature
Body corp. email	Date

If you are signing on the owner's behalf as the owner's legal representative, please state the nature of your legal authority and attach documentary evidence.

(e.g. Power of attorney, executor, trustee, company director, ASIC search)

ABN

SECTION C. Owner's Declaration

To be signed by the owner, if a Company/Owner's Corporation, this must be signed by a director/secretary or authorised delegate.

- ✔ I authorise the applicant to apply for consent to carry out the development as described for this application on the NSW Planning portal..
- ✔ I understand that the information supplied on this form and any related document will be made accessible to the public on Council's website and may be copied at Council under the GIPA Act 2009.
- ✔ I understand that if incomplete the application may be delayed, rejected or returned and that additional information may be requested.
- ✔ I understand Councils preferred method of communication is via the NSW Planning portal, and hard copy documents will not be generated.
- ✔ I understand that Council will liaise with the Applicant.
- ✔ If Company owned, I have attached an ASIC extract.

Name	XIANGLIN HE
Signature	
Date	02/09/2024

PRIVACY NOTICE
Council is required under the Privacy and Personal Information Protection Act 1998 (PPIPA) to collect, maintain and use your personal information in accordance with the Privacy Principles and other relevant requirements of the PPIPA.
Personal information requested on this form will only be used to fulfil the purpose for which it is being collected. Provision of this information is voluntary and is required to help process your application. Council is regarded as the agency that holds the information and access is restricted to council officers and other authorised people. You may apply to access or amend the information. For further information or clarification please contact the Privacy Contact Officer at Council.

APPENDIX 2 – Survey Plan

LINETYPE LEGEND

- BOUNDARY
- BUILDING EDGE
- GUTTER / RIDGE LINE / AWNING
- FENCE
- AERIAL ELECTRICITY LINE
- MAJOR CONTOURS
- MINOR CONTOURS

STREET

BRYANT

No84
FIBRO BUILDING
TILE ROOF

20
DP 732054

METAL BUILDING

No86
BRICK BUILDING
METAL ROOF

21
DP 732054
567.5m²

No88
BRICK BUILDING
METAL ROOF

6
DP 732054

PARKLAND

CONCRETE

GRATED DRAIN

OFFICE
FFL19.19

LUNCH
ROOM
FFL19.33

WC

LAUNDRY

SHOWER

2.18H ROLLER DOOR

189°44'40"

277°35'20"

92°04'40"

15.240

36.530

100.8

15.365

38.005

IMPORTANT NOTES:
1 THIS PLAN IS PREPARED FROM A COMBINATION OF FIELD AND EXISTING RECORDS FOR THE PURPOSE OF DESIGNING NEW STRUCTURES ON THE LAND AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.
2 THE BOUNDARIES (AND EASEMENTS, IF PRESENT) SHOWN HEREON HAVE BEEN COMPILED FROM INFORMATION HELD BY LAND REGISTRY SERVICES NSW AND ARE APPROXIMATE ONLY.
3 MARKS INDICATING LOCATION OF NEW STRUCTURES AND/OR BOUNDARIES MUST BE PLACED BY A REGISTERED SURVEYOR PRIOR TO ANY CONSTRUCTION COMMENCING.
4 DO NOT SCALE OFF THE PLAN, POSITION OF IMPROVEMENTS SHOWN IS DIAGRAMMATIC ONLY. WHERE RELATION OF STRUCTURES TO BOUNDARY IS CRITICAL, FURTHER SURVEY MAY BE REQUIRED.
5 CONTOURS (IF SHOWN) DEPICT GENERAL TOPOGRAPHY, EXCEPT AT SPOT LEVELS. THEY DO NOT NECESSARILY REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT ALONG THE CONTOUR.
6 THIS NOTE FORMS AN INTEGRAL PART OF THIS PLAN.

SYMBOL LEGEND

- COMMUNICATIONS PIT SINGLE
- POWER POLE
- BOLLARD
- SEWER LAMP HOLE
- SEWER VENT PIPE
- WATER AIR VALVE
- WATER TAP
- SIGN

GUT DENOTES GUTTER
RID DENOTES RIDGE
FFL DENOTES FINISHED FLOOR LEVEL
TK DENOTES TOP OF KERB
CL DENOTES UNDERSIDE OF BEAM (MIDDLE)
USB UNDERSIDE BEAM
W WINDOW
D DOOR
FBW FLOOR TO BOTTOM WINDOW
H HEIGHT WINDOW
HEAD DOOR TOP
FTW FLOOR TO TOP WINDOW

TREE
0.1 Ø — TRUNK DIAMETER
1 S — TREE SPREAD
1 H — TREE HEIGHT

DIAL BEFORE YOU DIG www.1100.com.au

REV	DATE	REVISIONS	Drn	Chk
A	2.07.2024	ORIGINAL	I.T.	J.E.

DRAWN: I.T.
CHECKED: J.E.
DATUM: AHD
ORIGIN OF LEVELS: CORSNET GNSS
CONTOUR INTERVAL: 0.25
SCALE: 1:200

A2

Ensure Consulting Pty Ltd
ABN: 20 624 253 032
Unit 8, 10-12 Sylvester Avenue,
Unanderra NSW 2526 Australia
Po Box 283, Unanderra NSW 2526
Tel: 02 4210 4143
Email: office@ensureco.com.au

PLAN SHOWING LEVELS, DETAILS AND CONTOURS 86 BRYANT STREET, PADSTOW

REGISTERED SURVEYOR
Ziemowit Tomasz Wierzchowski No 8651

DATE: 2.07.2024 | SHEET 1 OF 1 | Rev

DRAWING No: 241137 DE-01 A

APPENDIX 3 – Architectural Plans

DEVELOPMENT APPLICATION

DEMOLITION OF EXISTING STRUCTURE AND CONSTRUCTION OF A TWO STORY WAREHOUSE

86 Bryant St, Padstow NSW 2211

DRAWING LIST

	LAYOUT	REVISION
A001	Titlepage	A
A002	General Notes	A
A101	Existing Site Plan	A
A102	Existing Floor Plan	A
A103	Demolition Plan	A
A104	Subdivision Plan	A
A105	Site Analysis	A
A106	Proposed Roof Plan	A
A107	Proposed Ground Floor Plan	A
A108	Proposed Mezzanine Floor Plan	A
A201	Proposed - N&S Elevations	A
A202	Proposed - E&W Elevations	A
A301	Proposed - Sections	A
A401	Existing GFA Diagram	A
A402	Proposed GFA Diagram	A
A403	Existing Landscape Diagram	A
A404	Proposed Landscape Diagram	A
A405	Proposed Shadow Diagram	A
A501	Schedule Of Window & Door	A
A502	Schedule Of External Finish & Materials	A
A503	Streetview Elevations	A

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

BJ ARCHITECTS INTERNATIONAL
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NSW ARB # 10864

LEGEND
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4. All work to be carried out in accordance with the requirements of the Principal Certifying Authority, current NCC & Australian Standard.

PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

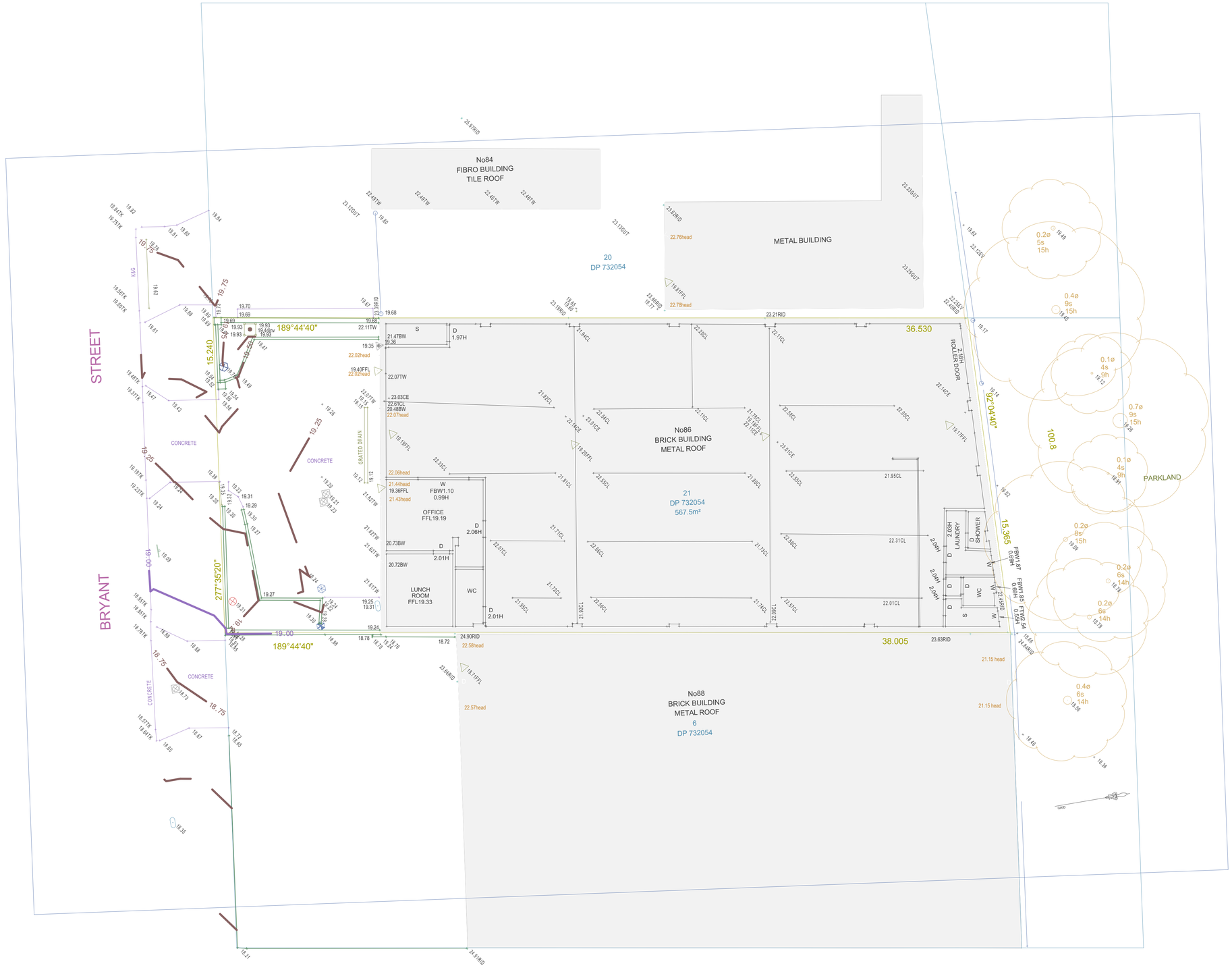
NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Titlepage - Titlepage

DRAWING NO **A001**

ISSUE **A**

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



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86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Existing Site Plan

SCALE
1:100@A1

DRAWING NO
A101

ISSUE
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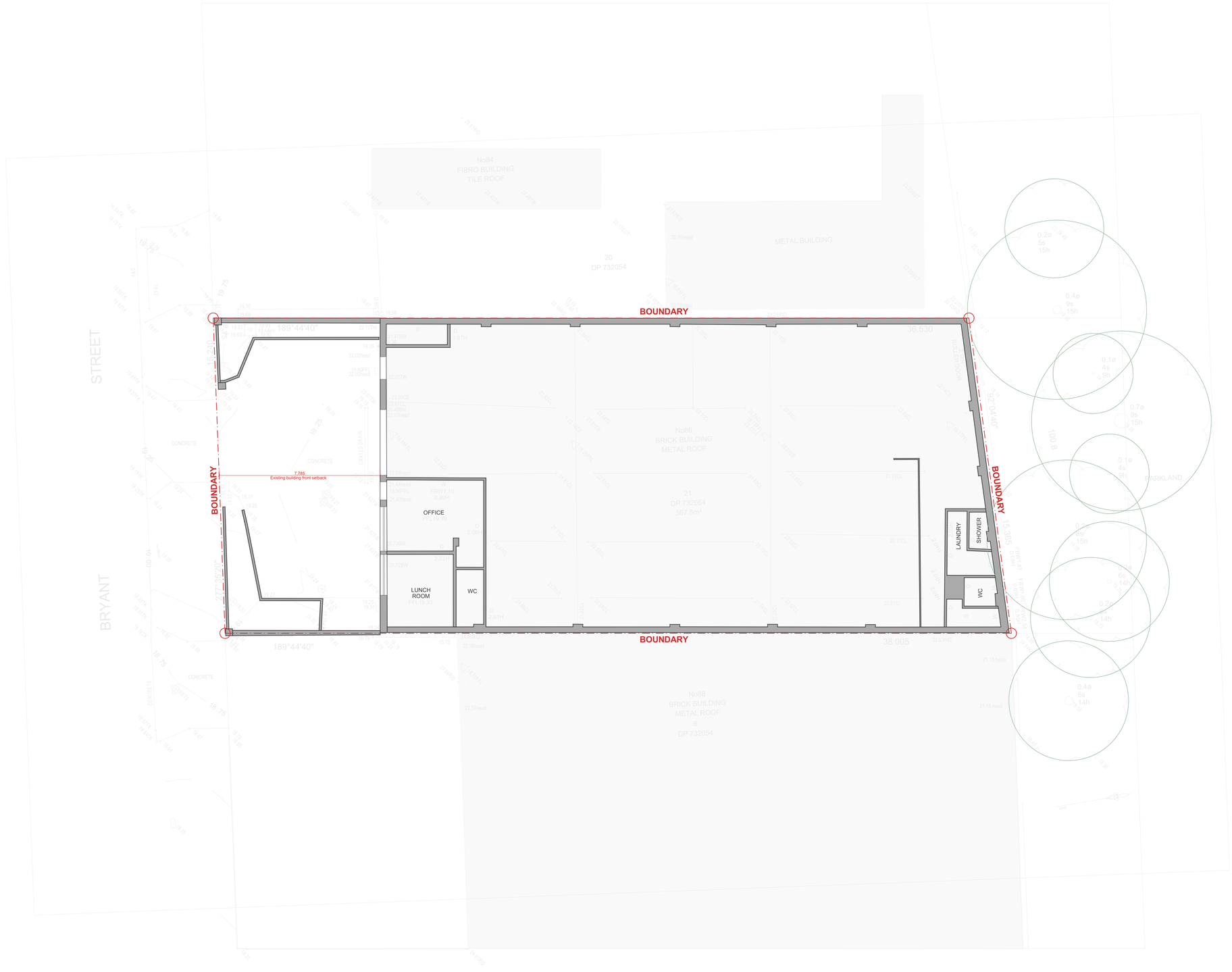
ISSUE DATE: 2025.04.03



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86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Existing Floor Plan

SCALE
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DRAWING NO
A102

ISSUE
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FOR DEVELOPMENT APPLICATION
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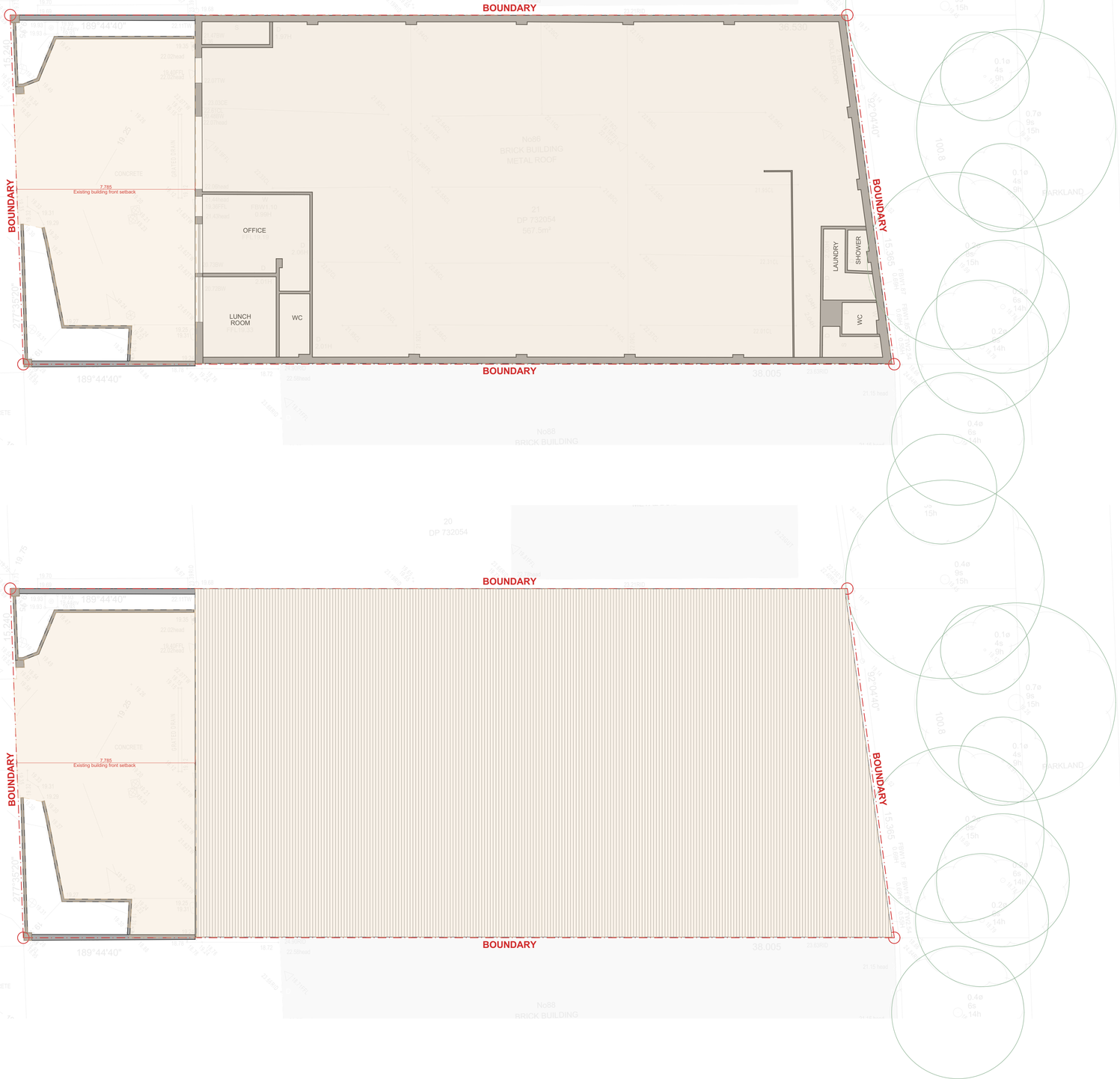
ISSUE DATE: 2025.04.03



EXISTING STRUCTURE
TO BE DEMOLISHED

EXISTING BUILDING
TO BE DEMOLISHED

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DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Demolition Plan

SCALE
1:100@A1

DRAWING NO
A103

ISSUE
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FOR DEVELOPMENT APPLICATION
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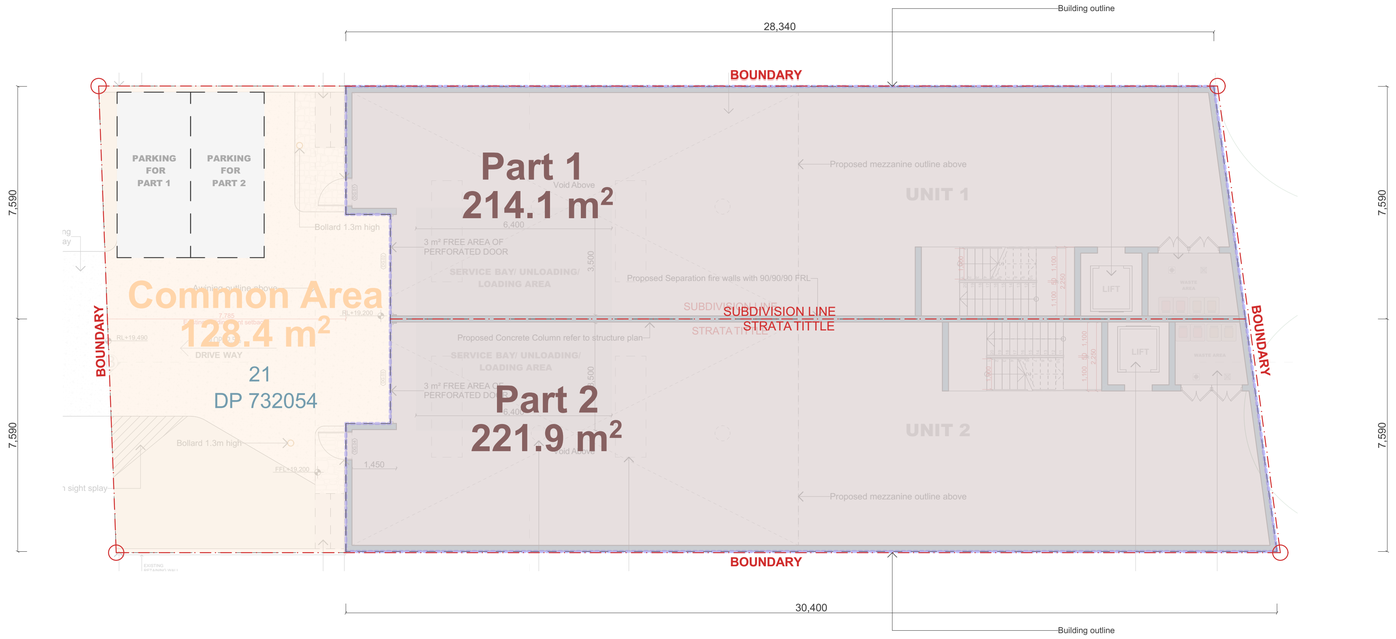
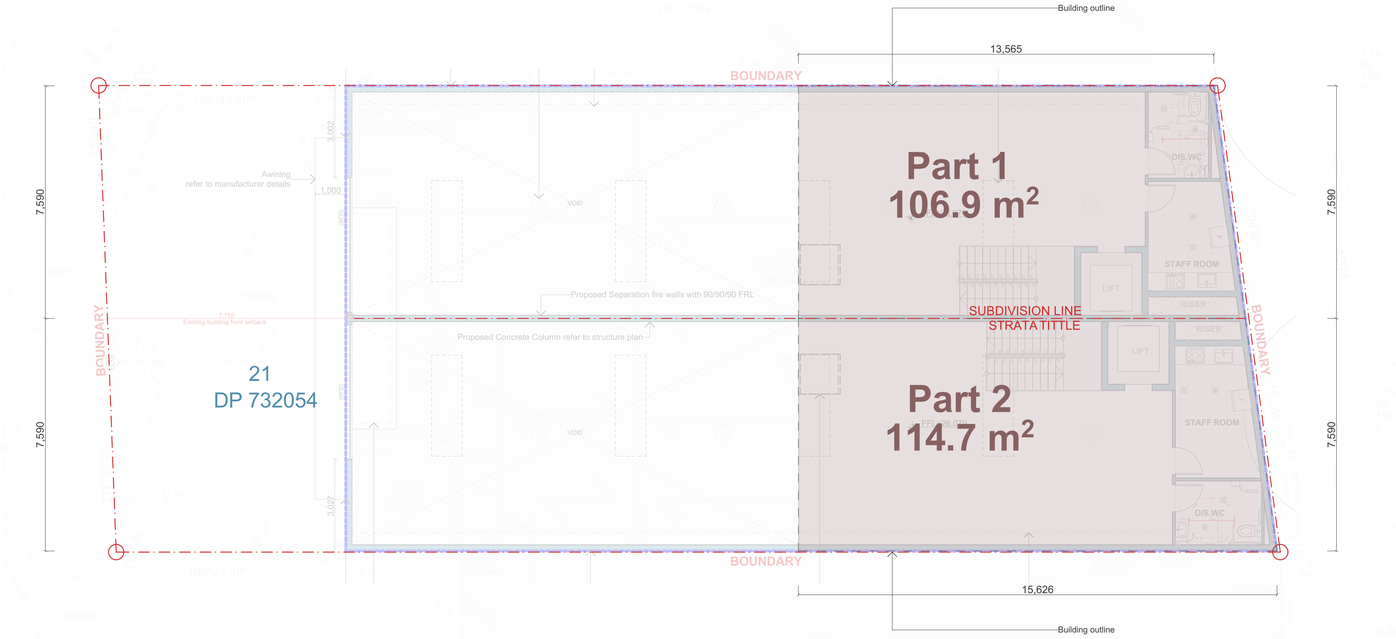
ISSUE DATE: 2025.04.03



Ground Floor



Mezzanine

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86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Subdivision Plan

SCALE
1:100@A1

DRAWING NO
A104

ISSUE
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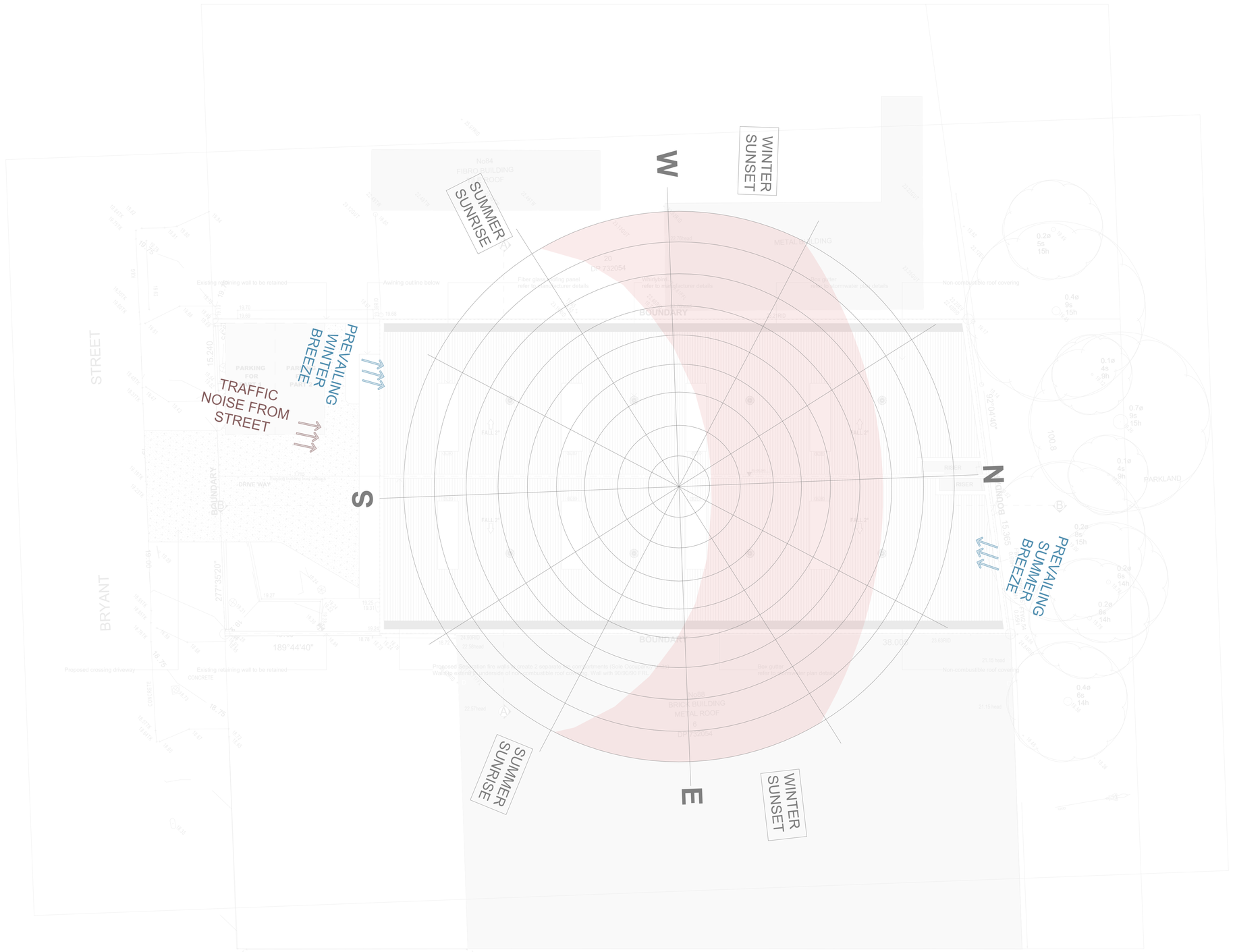
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



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86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Site Analysis

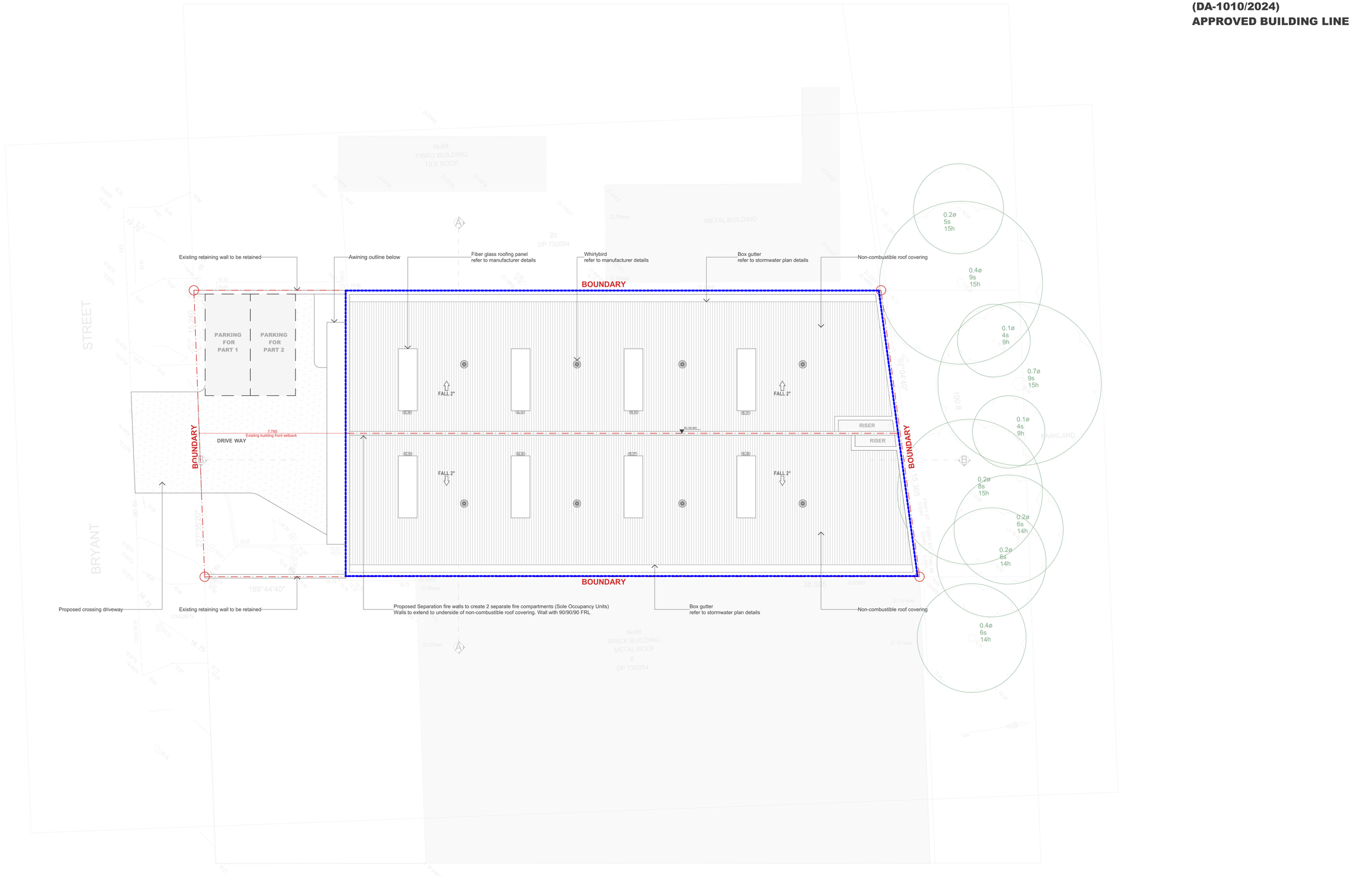
SCALE
1:100@A1

DRAWING NO
A105

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

DEVELOPMENT APPLICATION
(DA-1010/2024)
APPROVED BUILDING LINE



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DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Proposed Roof Plan

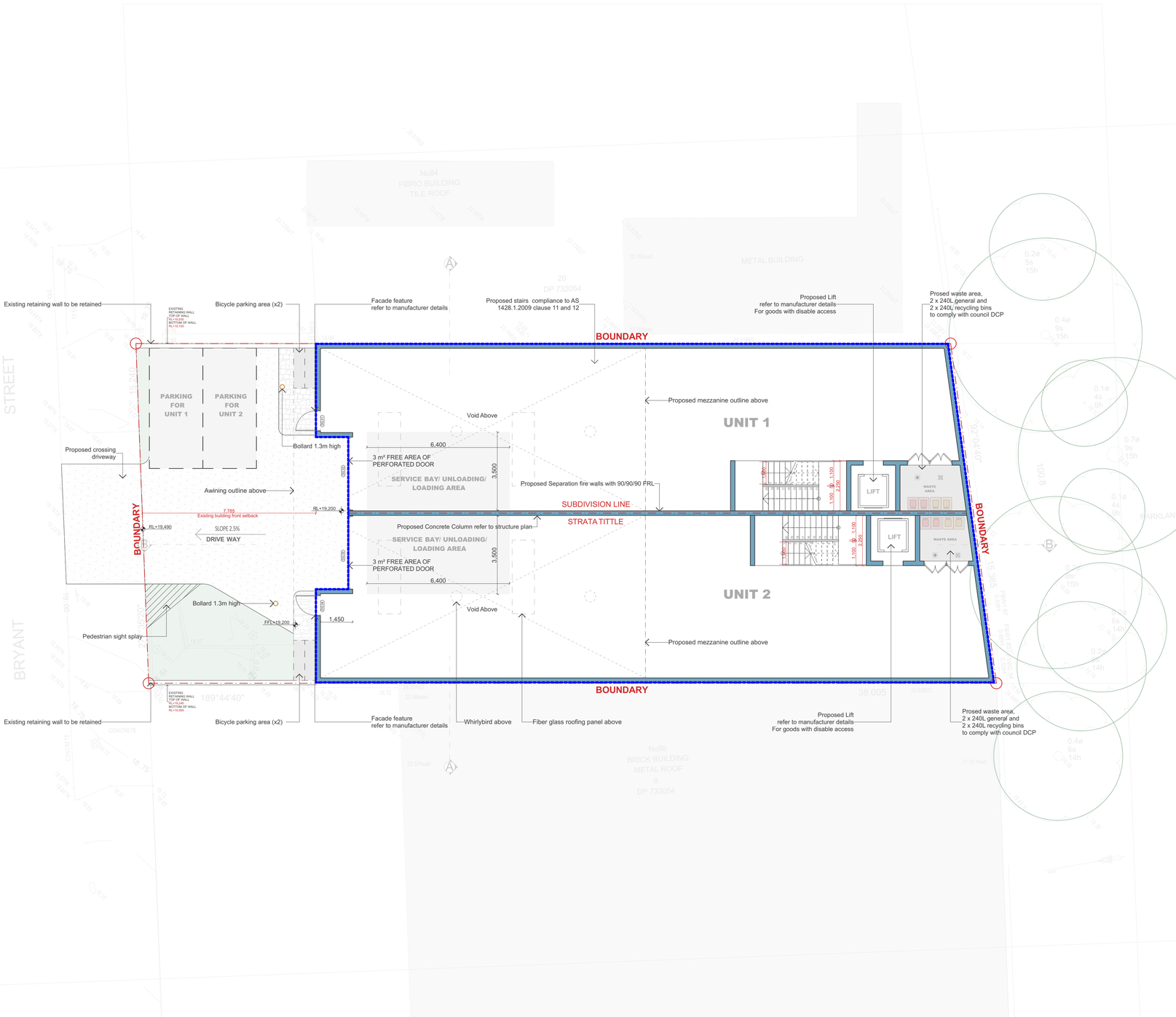
SCALE
1:100@A1

DRAWING NO
A106

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

DEVELOPMENT APPLICATION (DA-1010/2024)
APPROVED BUILDING LINE



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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Proposed Ground Floor Plan

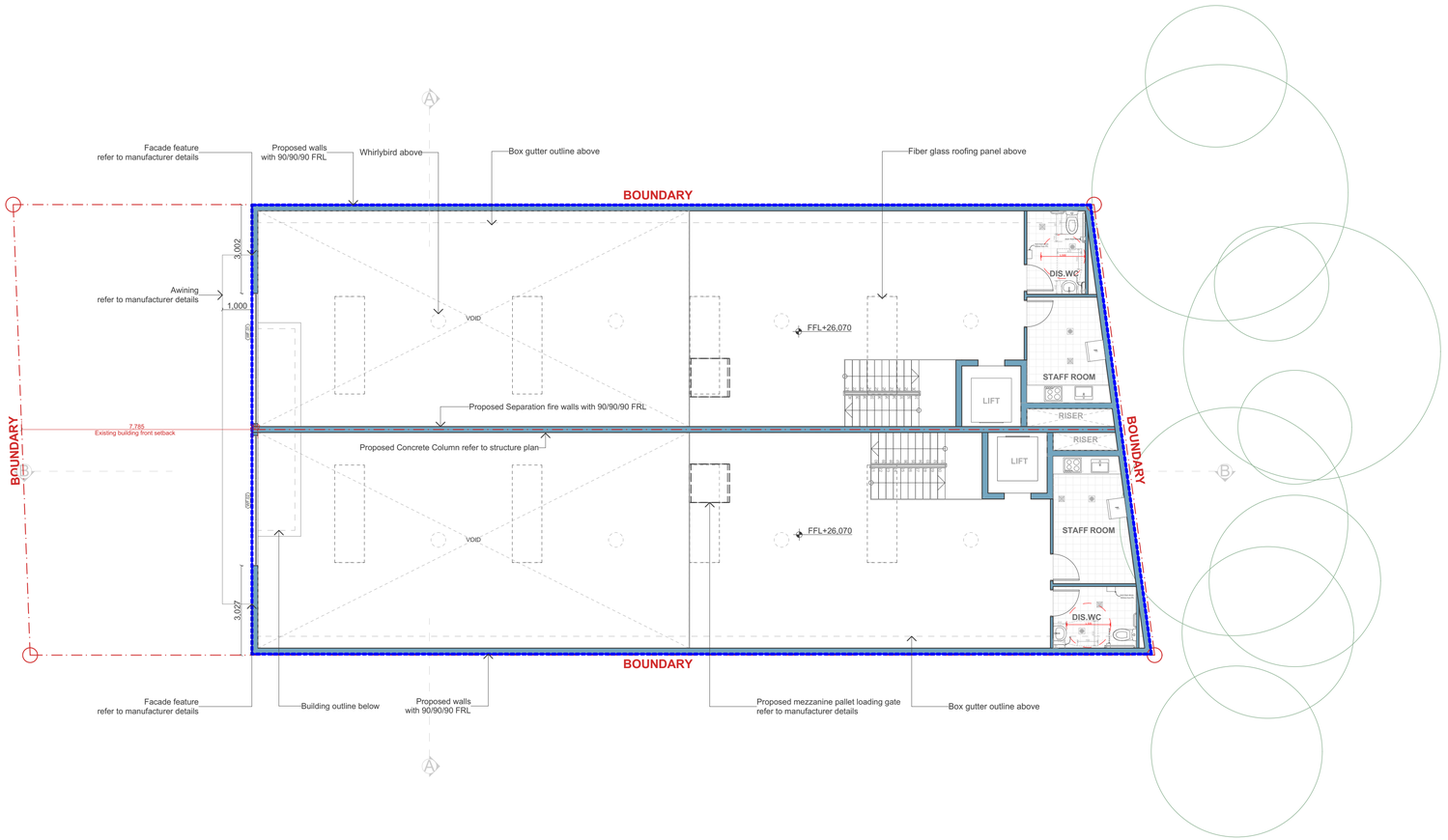
SCALE
1:100@A1

DRAWING NO
A107

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

DEVELOPMENT APPLICATION
(DA-1010/2024)
APPROVED BUILDING LINE



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DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

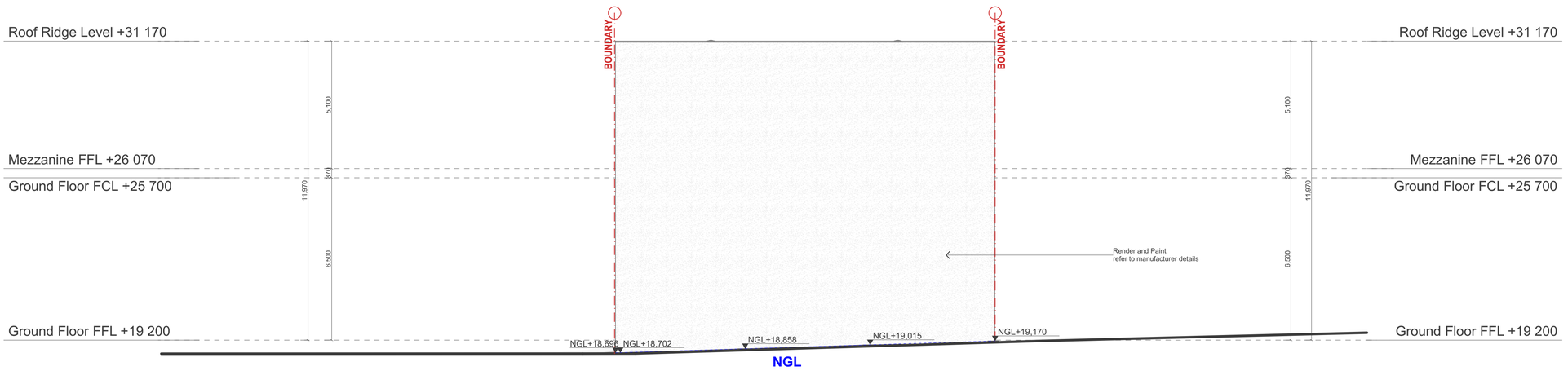
DRAWING
Plans - Proposed Mezzanine Floor Plan

SCALE
1:100@A1

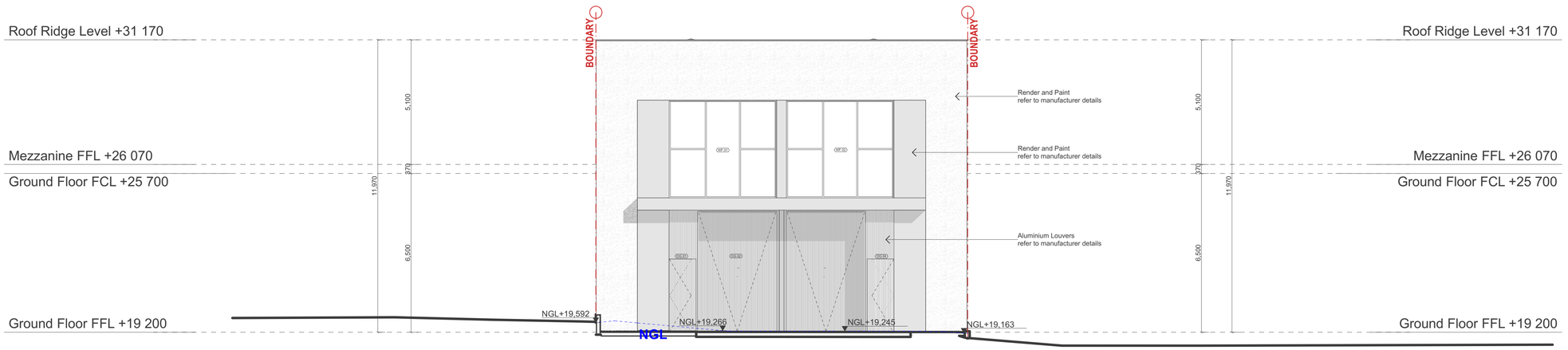
DRAWING NO
A108

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



NORTH



SOUTH

WALL TYPE SCHEDULE

note: - drawings may not contain all items listed below
- refer to BASIX certificate for insulation requirements

WE - Existing wall

WD - To-be-demolished wall

WP - Proposed wall

BJ ARCHITECTS INTERNATIONAL
ABN 94 634 347 201 | ACN 634 347 201
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T: 02 9066 3919
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W: www.bjarchitects.com.au
NSW ARB # 10884

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

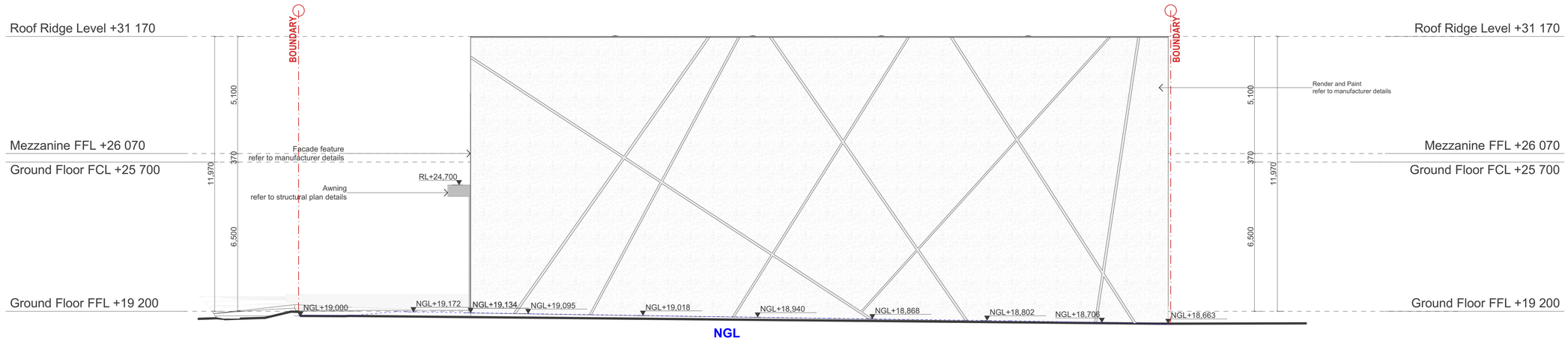
DRAWING
Elevations - Proposed - N&S Elevations

SCALE
1:100@A1

DRAWING NO
A201

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



EAST

WEST

WALL TYPE SCHEDULE

note: - drawings may not contain all items listed below
- refer to BASIX certificate for insulation requirements

WE - Existing wall

WD - To-be-demolished wall

WP - Proposed wall

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

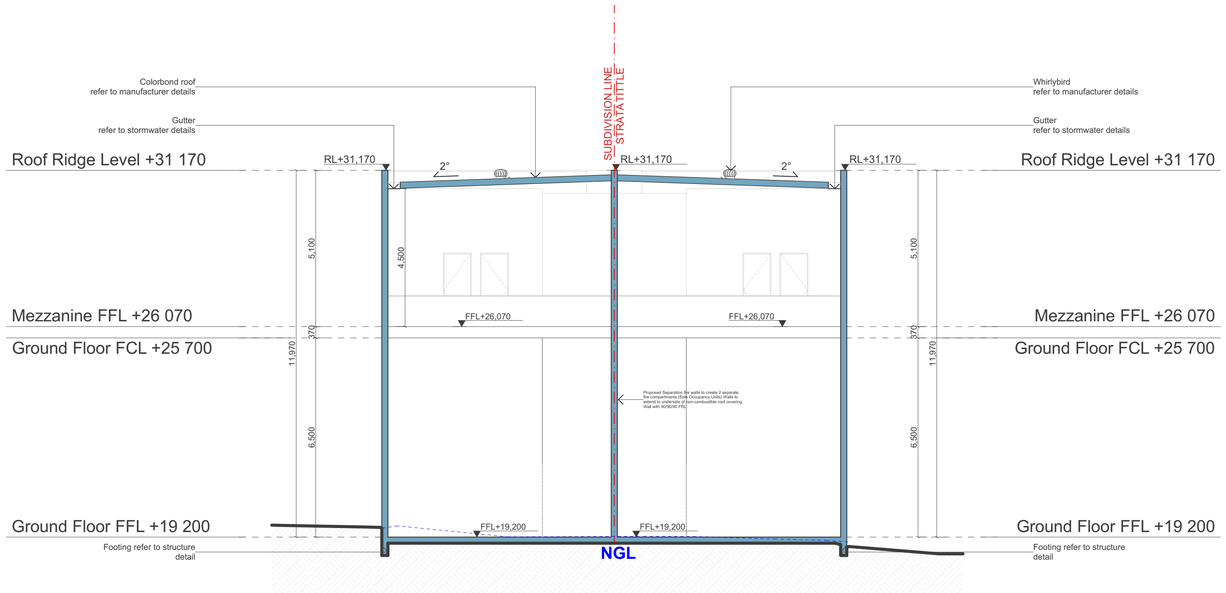
DRAWING
Elevations - Proposed - E&W Elevations

SCALE
1:100@A1

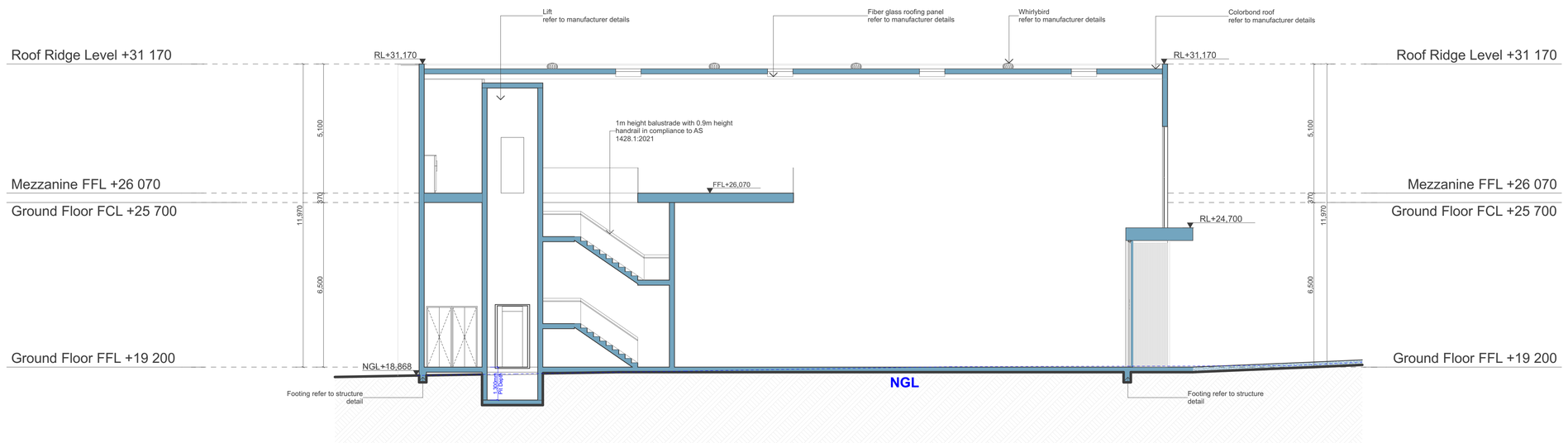
DRAWING NO
A202

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



A



B

WALL TYPE SCHEDULE

note: - drawings may not contain all items listed below
- refer to BASIX certificate for insulation requirements

WE - Existing wall

WD - To-be-demolished wall

WP - Proposed wall

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

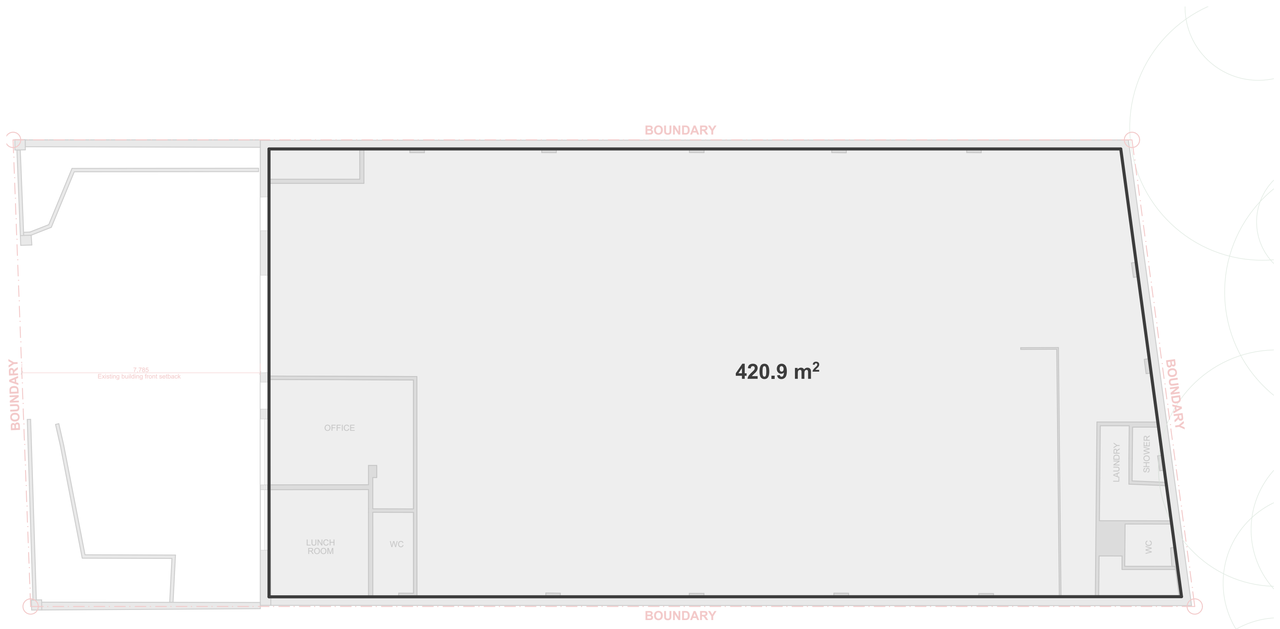
DRAWING
Sections - Proposed - Sections

SCALE
1:100@A1

DRAWING NO
A301

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Existing Floor Plan

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

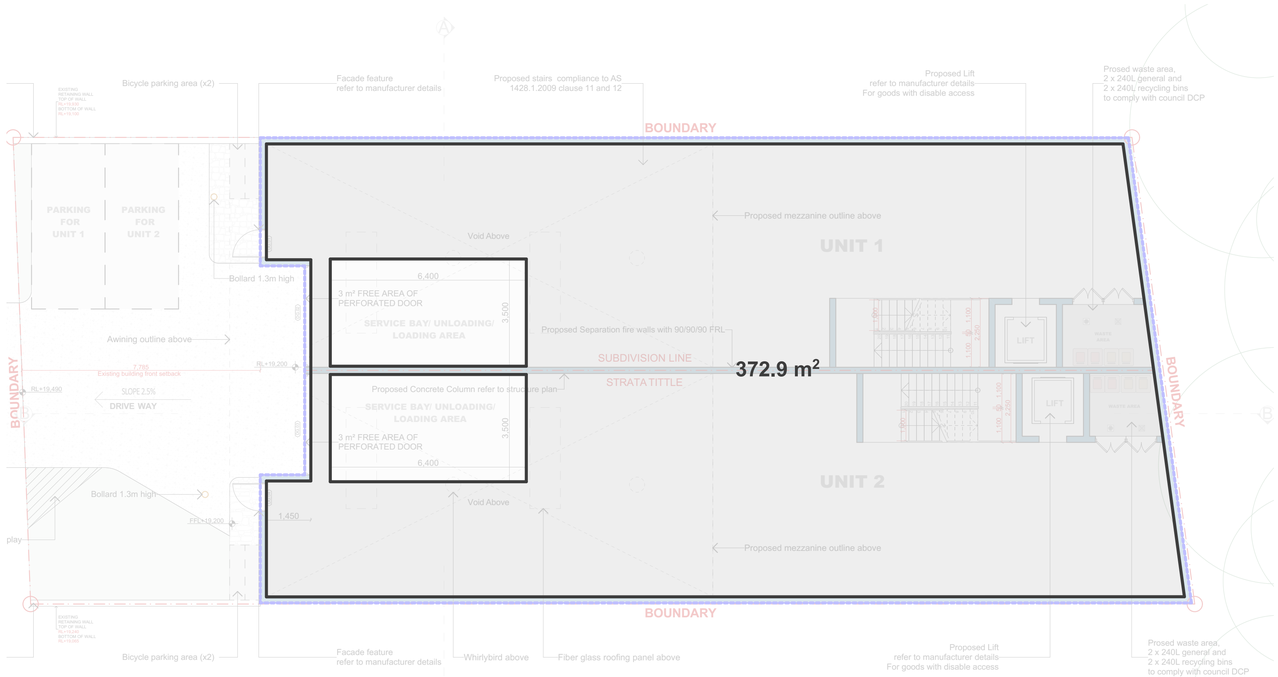
DRAWING
Diagram - Existing GFA Diagram

SCALE
1:100@A1

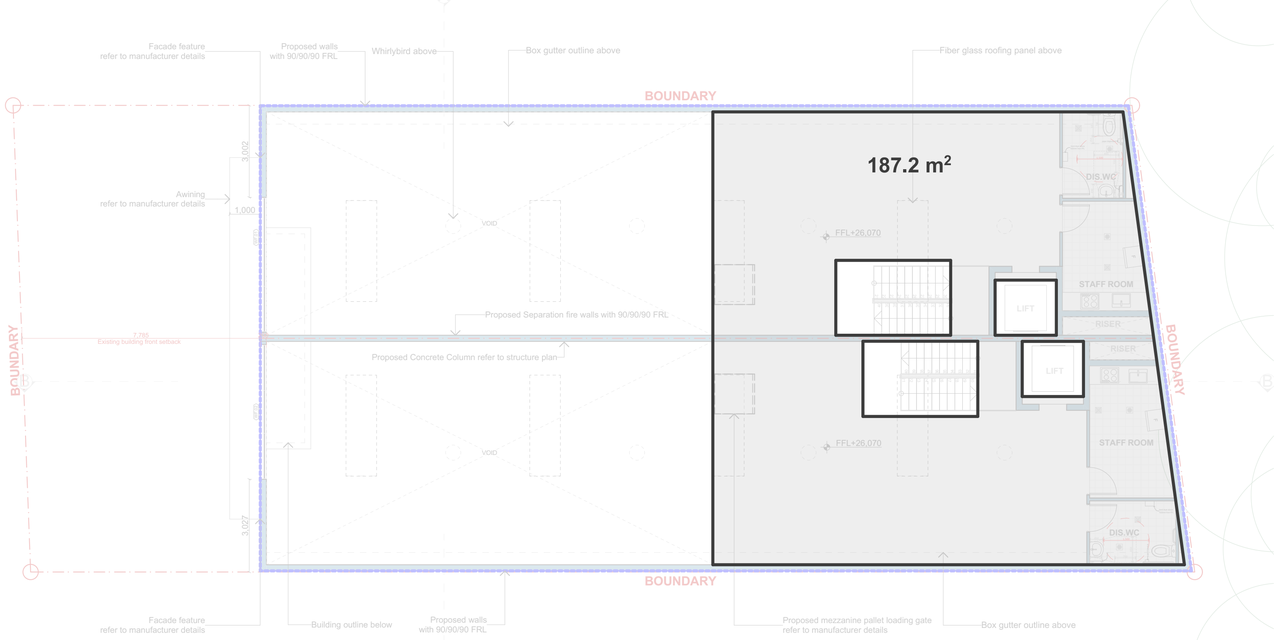
DRAWING NO
A401

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Ground Floor



Mezzanine

PROPOSED AREA INFO

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FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

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SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

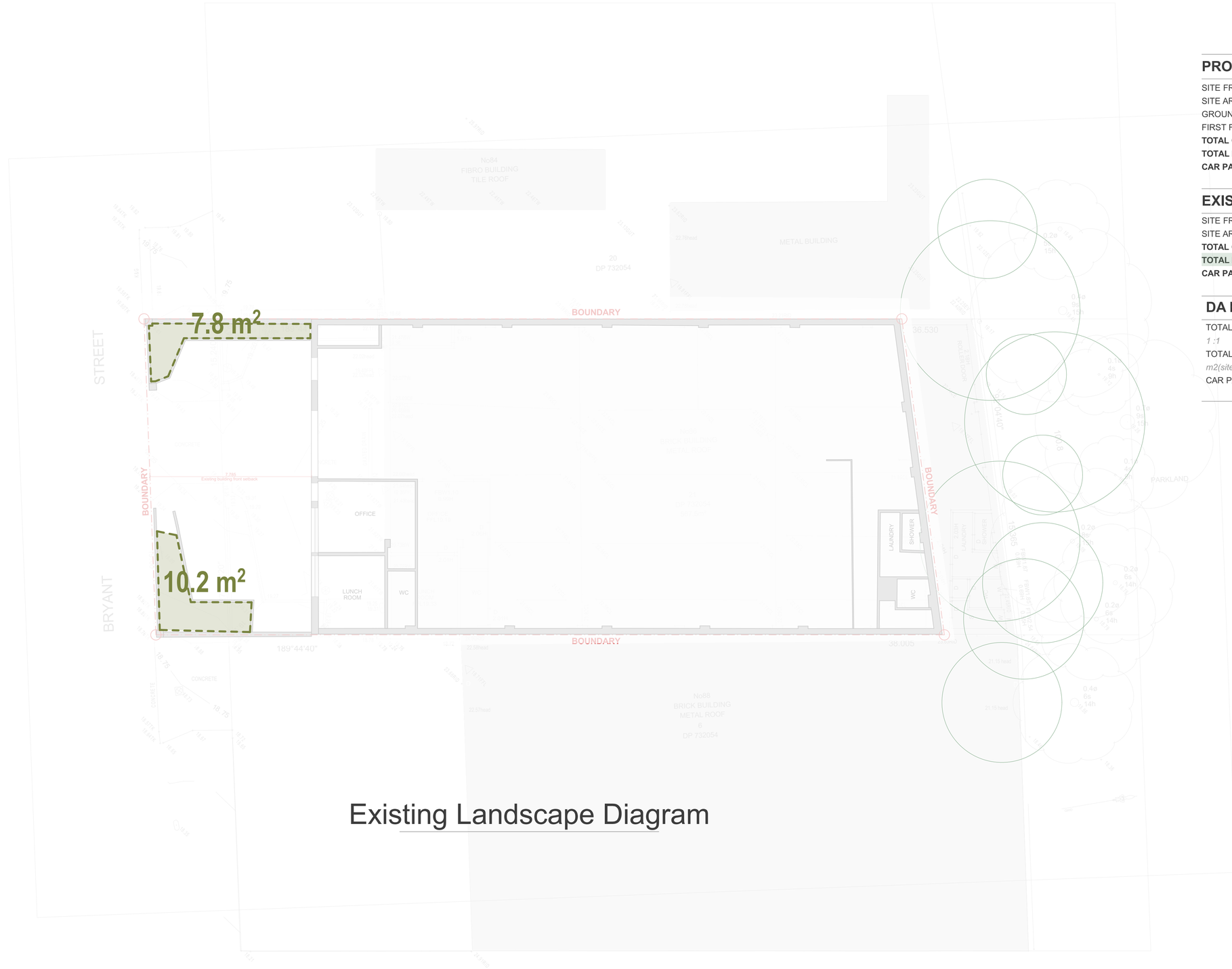
DRAWING
Diagram - Proposed GFA Diagram

SCALE
1:100@A1

DRAWING NO
A402

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Existing Landscape Diagram

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

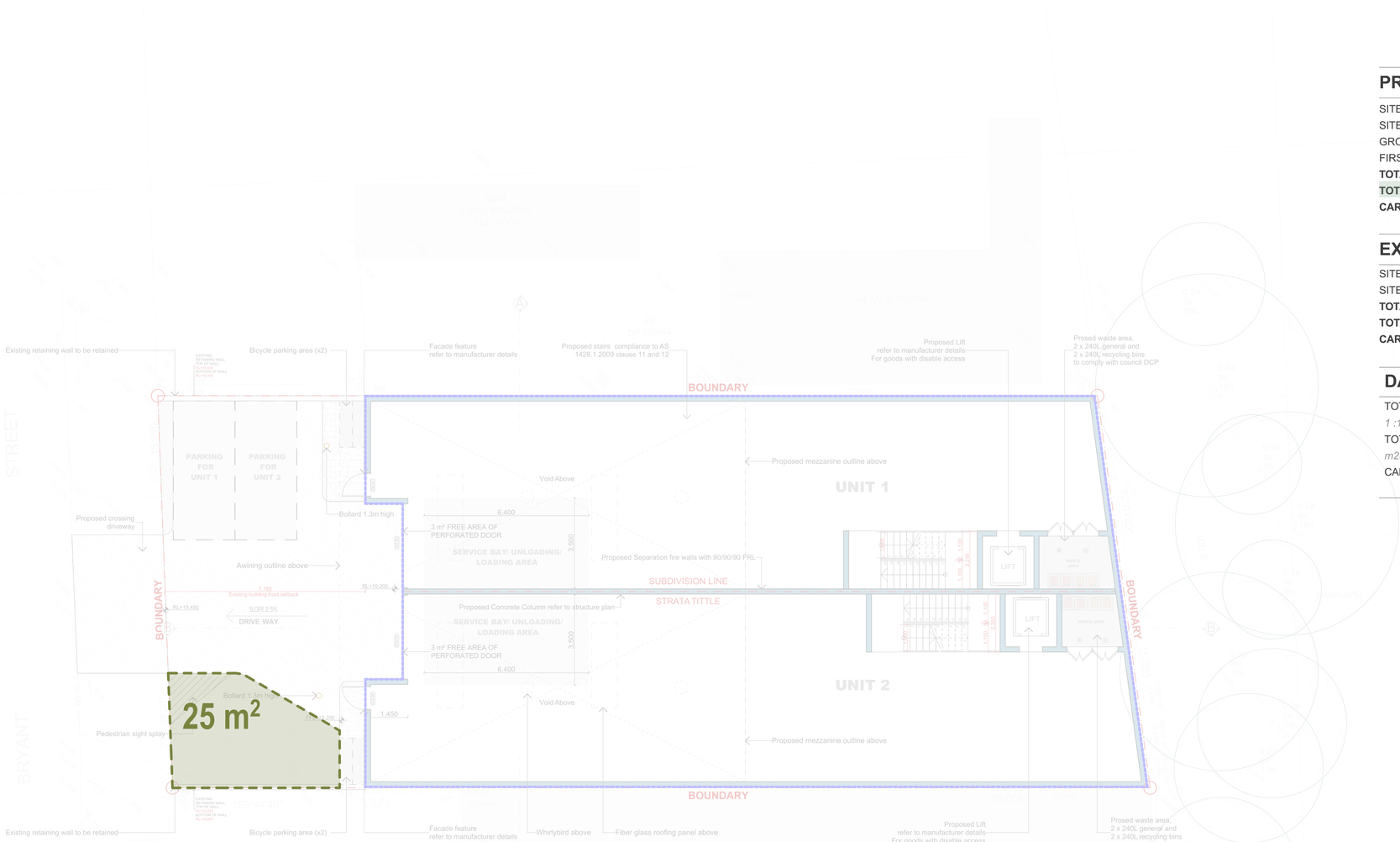
DRAWING
Diagram - Existing Landscape Diagram

SCALE
1:100@A1

DRAWING NO
A403

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Proposed Landscape Diagram

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

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SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

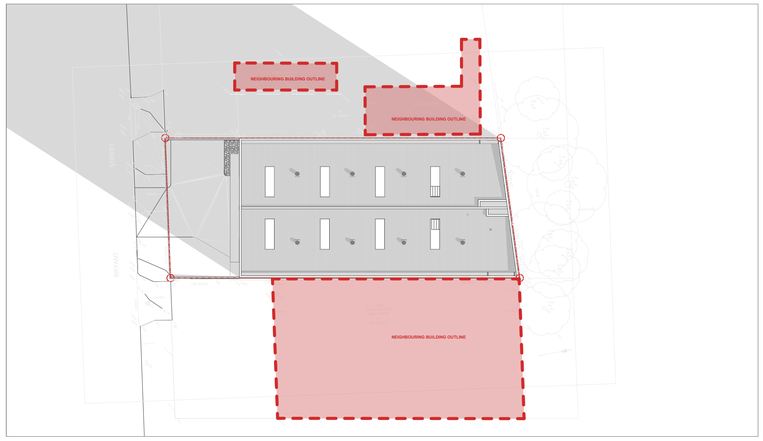
DRAWING
Diagram - Proposed Landscape Diagram

SCALE
1:100@A1

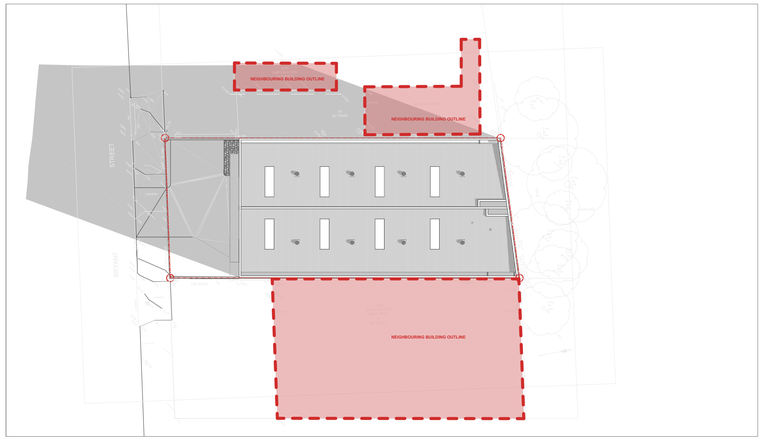
DRAWING NO
A404

ISSUE
A

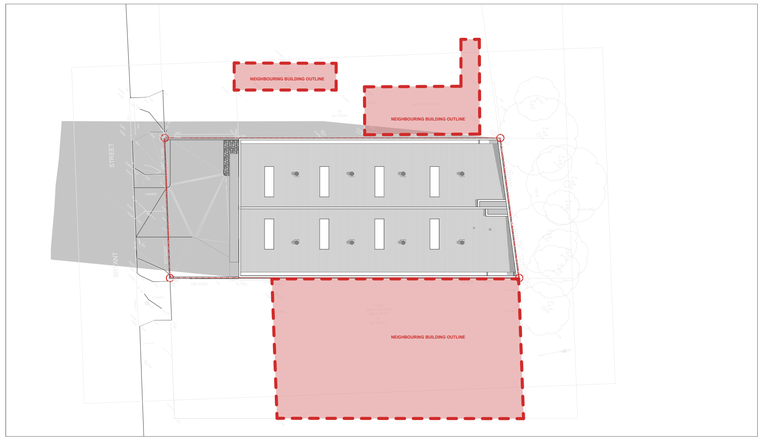
FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



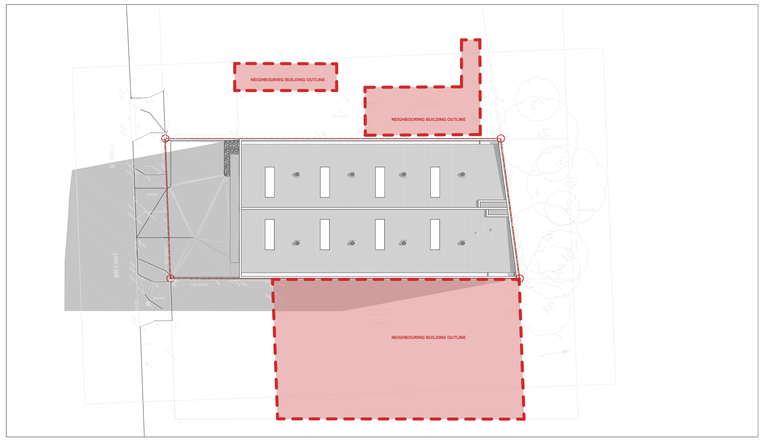
Shadow Diagram 09am 06.21



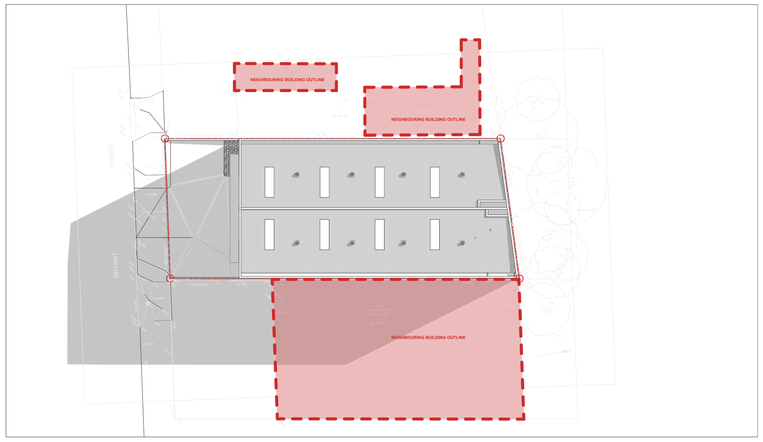
Shadow Diagram 10am 06.21



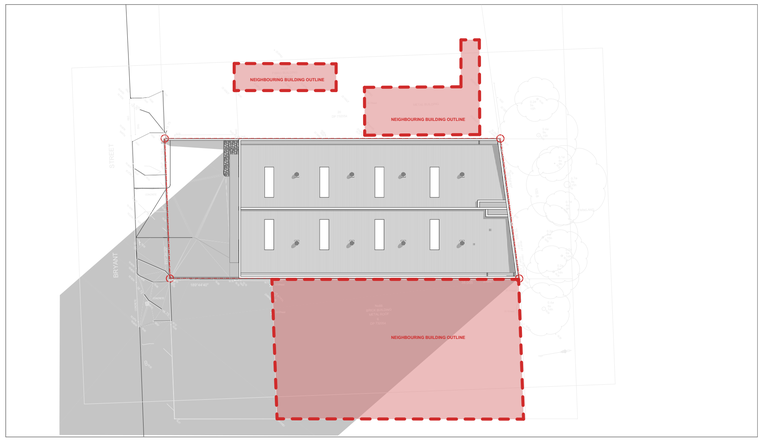
Shadow Diagram 11am 06.21



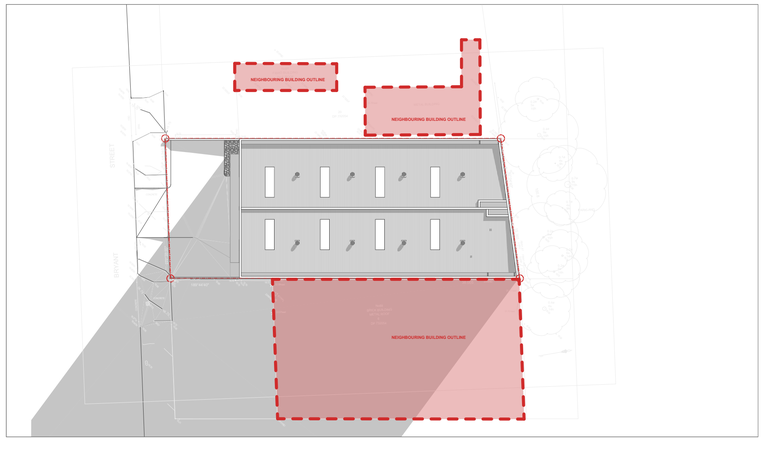
Shadow Diagram 12pm 06.21



Shadow Diagram 1pm 06.21



Shadow Diagram 2pm 06.21



Shadow Diagram 3pm 06.21

NEIGHBOUR PROPERTY

BJ ARCHITECTS INTERNATIONAL
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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

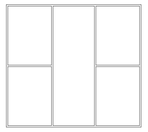
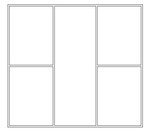
NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Diagram - Proposed Shadow Diagram

DRAWING NO **A405**

ISSUE **A**

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

WINDOW SCHEDULE		
WINDOW NUMBER	WF.01	WF.02
UNIT DIMENSIONS	4,400×4,000	4,400×4,000
W/D NONIMAL SILL HEIGHTS	0	0
VIEW FROM OPENING SIDE		

DOOR SCHEDULE				
DOOR NUMBER	DG.01	DG.02	DG.03	DG.04
UNIT DIMENSIONS	920×3,000	3,275×5,000	3,275×5,000	920×3,000
VIEW FROM OPENING SIDE				

SKYLIGHT SCHEDULE								
SKYLIGHT NUMBER	SL.01	SL.02	SL.03	SL.04	SL.05	SL.06	SL.07	SL.08
UNIT DIMENSIONS	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300
3D Front View								

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Additional Info - Schedule Of Window & Door

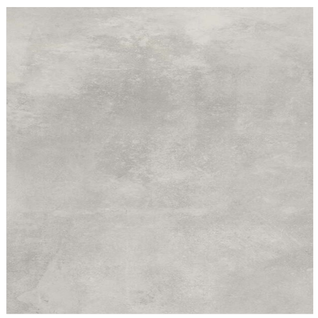
SCALE
1:100@A1

DRAWING NO
A501

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

SCHEDUEL OF EXTERNAL FINISHES



1

RENDER AND PAINT
Refer to manufacturer details

2

RENDER AND PAINT
Refer to manufacturer details

3

CUSTOM WINDOW
Refer to manufacturer details

4

ALUMINIUM LOUVERS
Refer to manufacturer details

BJ ARCHITECTS
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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

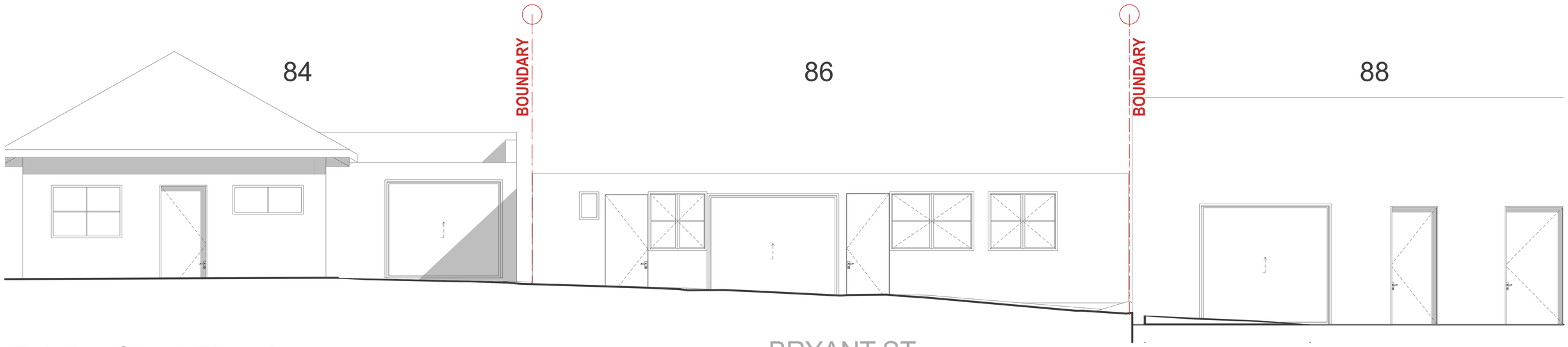
AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Additional Info - Schedule Of External Finish & Materials

DRAWING NO **A502** ISSUE **A**

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Existing Street Elevation

BRYANT ST

Proposed Street Elevation

BRYANT ST

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W: www.bjarchitects.com.au
NSW ARB # 10984

LEGEND

1. Architectural drawings shall be read in conjunction with other consultant drawings and specifications. Any discrepancies shall be referred to BJ Architects International before proceeding with the work.
2. All dimensions and levels are in millimeters unless noted otherwise. No dimension shall be obtained by scaling the drawings.
3. All dimensions to be checked on site with any discrepancies referred to BJ Architects International before proceeding with work.
4. All work to be carried out in accordance with the requirements of the Principal Certifying Authority, current NCC & Australian Standard.

PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Additional Info - Streetview Elevations

DRAWING NO A503
ISSUE A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

APPENDIX 4 – Landscape Plan

86 BRYANT STREET, PADSTOW, NSW

LANDSCAPE DOCUMENT SET FOR CDC

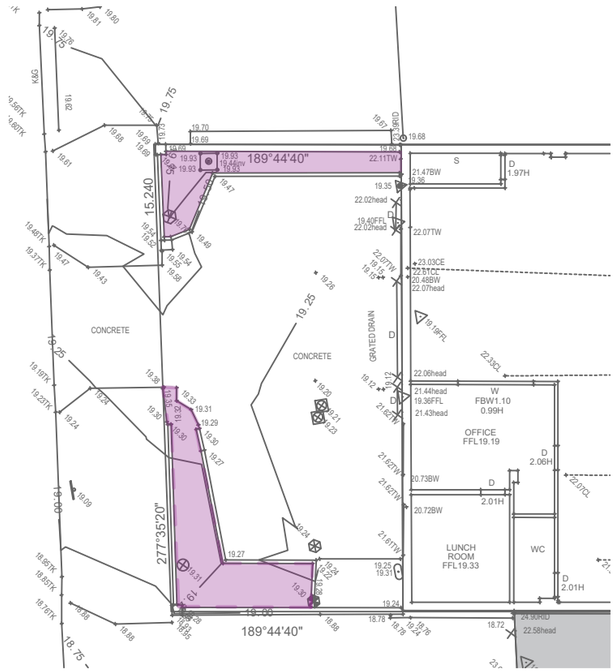
DRAWING LIST

NO.	DRAWING NAME	SCALE
LA-101	COVER SHEET	1:200 @ A3
LA-201	GENERAL ARRANGEMENT PLAN	1:100 @ A3
LA-301	LANDSCAPE DETAILS	AS SHOWN
LA-401	SPECIFICATION	N/A

GENERAL NOTES

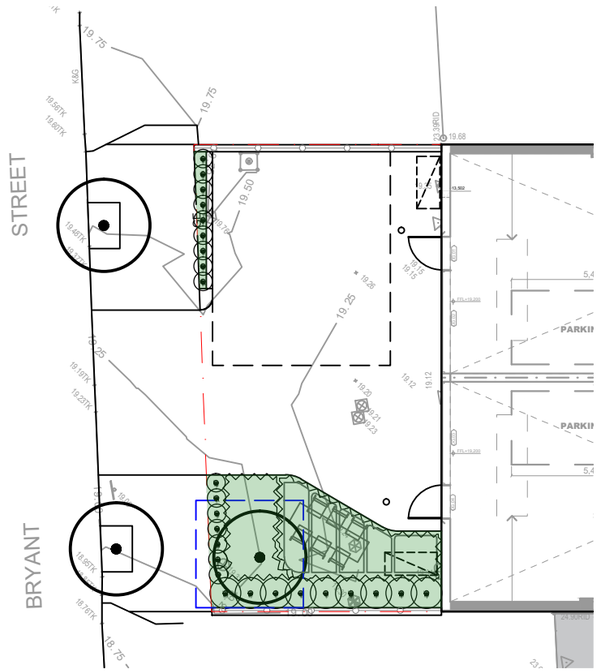
1. REFER TO ARCHITECT'S DRAWINGS FOR ALL INTERNAL BUILDING LAYOUT AND PROPOSED BUILDING LEVELS.
2. ALL DRAINAGE AND STRUCTURAL DETAILS AS PER ENGINEER'S DRAWINGS.
3. THIS DOCUMENTATION SET SHALL BE READ IN CONJUNCTION WITH ARCHITECT'S, CIVIL, STORMWATER, AND STRUCTURAL ENGINEER'S DRAWINGS.
4. LOCATE AND PROTECT ALL UNDERGROUND SERVICES PRIOR TO ANY EXCAVATION. PROPOSED TREES TO BE LOCATED MINIMUM 6M FROM ANY EXISTING SEWER LINES, ALL UNDERGROUND SERVICES TO BE LOCATED AND PROTECTED PRIOR TO ANY EXCAVATION AND INSTALLATION OF TREES.
5. ANY DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT OF WORKS.
6. DO NOT SCALE DRAWINGS, FIGURED DIMENSIONS HAVE PREFERENCE OVER SCALED DIMENSIONS.
7. CONTRACTOR TO CHECK EXISTING LEVELS ALONG SITE BOUNDARY TO CONFIRM EXTENT AND HEIGHT OF PROPOSED RETAINING WALLS. OBTAIN APPROVAL FROM SUPERINTENDENT AND PROJECT LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
8. THIS LANDSCAPE DOCUMENTATION SET IS PRODUCED FOR DA PURPOSE ONLY. IT SHALL NOT BE USED SOLELY AS FOR TENDER OR FOR CONSTRUCTION DRAWINGS.

EXISTING LANDSCAPE AREA - 1:200@A3



ORIGINAL LANDSCAPE AREA: 20 SQM

PROPOSED LANDSCAPE AREA - 1:200@A3



PROPOSED LANDSCAPE AREA: 28.2 SQM

LEGEND

- SITE BOUNDARY
- EXISTING CONTOUR REFER TO SURVEY (95.00)
- PROPOSED CONTOUR (90.40)
- [98.50] EXISTING SPOT LEVEL
- 95.55 PROPOSED LEVEL GENERAL
- TW91.00 PROPOSED TOP OF RETAINING WALL LEVEL
- BW90.10 PROPOSED BOTTOM OF RETAINING WALL LEVEL

HARDWORKS

- GE PROPOSED GARDEN EDGING REFER TO SPECIFICATION
- RW PROPOSED RETAINING WALL
- EW EXISTING RETAINING WALL; RETAIN AND MAKE GOOD
- F1 PROPOSED FENCE TYPE 1 METAL FENCE
- ST PROPOSED STEPPING STONE
- CO PROPOSED CONCRETE SURFACE

SOFTWORKS

- PROPOSED SHRUB; DETAILS REFER TO PLANTING SCHEDULE
- TU; PROPOSED TURF; REFER TO SPECIFICATION AND LANDSCAPE DETAIL

PLANTING SCHEDULE

ID	BOTANICAL NAME	COMMON NAME	POT SIZE	MATURE HEIGHT	SPREAD	SPACING	NATIVE	QTY
TREES								
Ma-fl	*Malus floribunda*	Crab apple	45lt	5m	5m	As Shown	N	1
SHRUBS								
Rh-co	*Cosmic Pink™Rhaphiolepis indica 'RAPH02' PBR*	Indian Hawthorn Cosmic Pink	200mm	0.4-0.8m	0.4-0.8m	As Shown	Y	/
Rh-in	*Rhaphiolepis indica 'Oriental Pearl'*	Indian Hawthorn Oriental Pearl	200mm	1m	1m	As Shown	Y	/
GROUNDCOVER & GRASS								
Li-am	*Amethyst™ Liriope muscari*	Amethyst™ Liriope	75mm	0.4m	0.4m	6/sqm	Y	/
Zo-sp	*Zoysia spp. 'ZOY01'*	Lilly Pilly	tube	0.1-0.2m	1m	6/sqm	Y	/

DESIGN INTENT

Boundary Fence - 1.2m tall

YUE RAO LANDSCAPE ARCHITECT
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FOR DEVELOPMENT APPLICATION ONLY

ISSUE	COMMENTS	DATE
D1	DRAFT FOR REVIEW	14.08.2024
A	FOR DEVELOPMENT APPLICATION	06.09.2024

1:200 @ A3

N

86 Bryant Street, Padstow, NSW

CLIENT: **Xiang Lin He** ARCHITECT: **BJ ARCHITECTS**

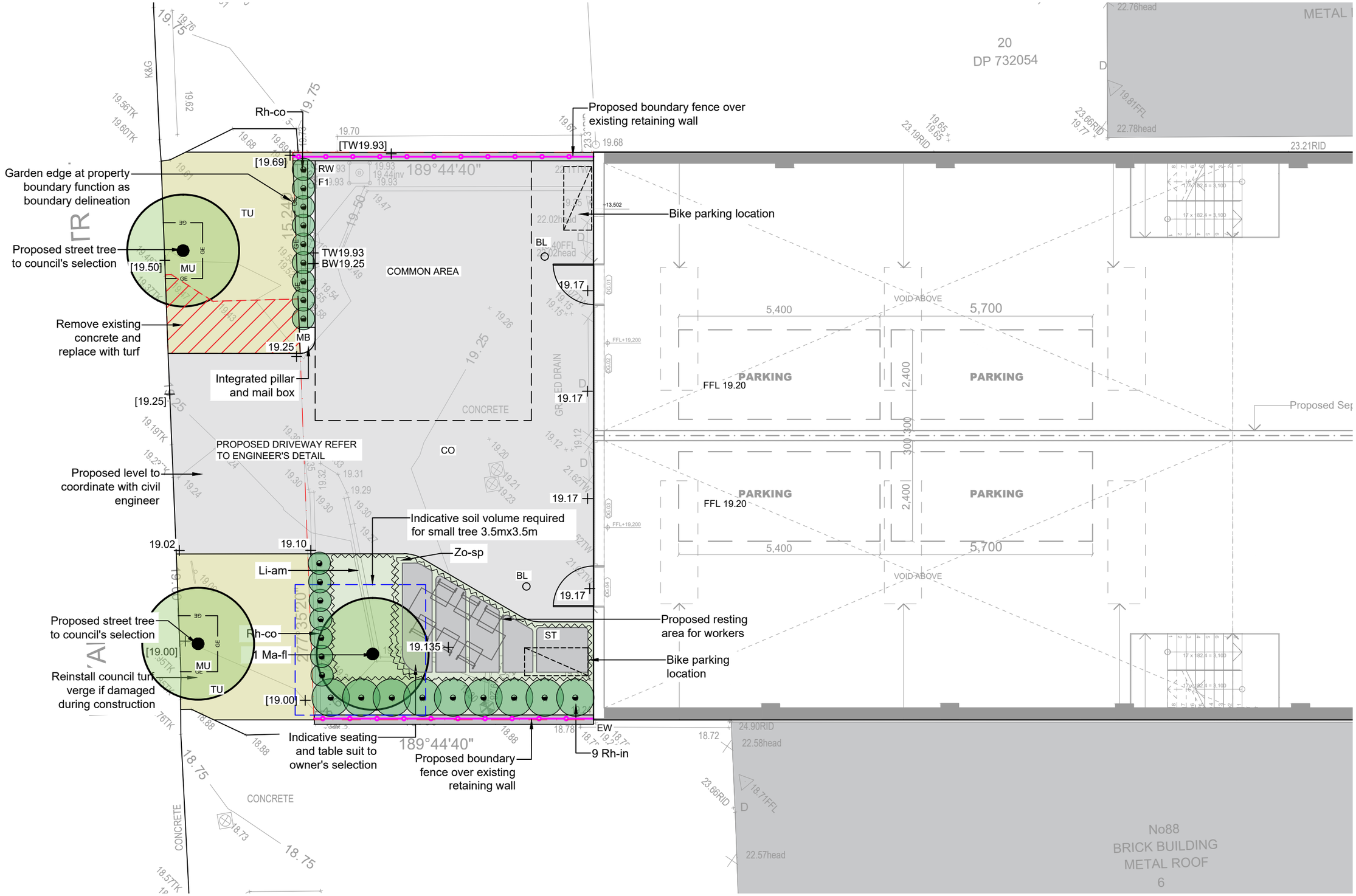
DRAWN: YR CHECKED: YR DATE CREATED: 08. 2024

COVER SHEET

LA-101

ISSUE **A**

GENERAL ARRANGEMENT PLAN - 1:125@A3



YUE RAO LANDSCAPE ARCHITECT Registration number: 14978	FOR DEVELOPMENT APPLICATION ONLY t: +61 451613982 e: raoyue@outlook.com 	1:100 @ A3 N

ISSUE	COMMENTS	DATE
D1	DRAFT FOR REVIEW	14.08.2024
A	FOR DEVELOPMENT APPLICATION	06.09.2024

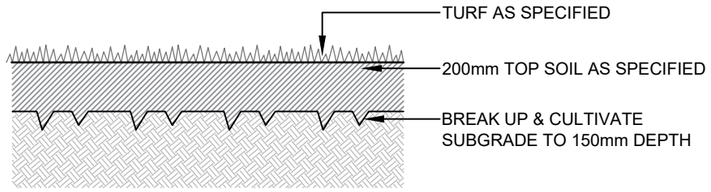
86 Bryant Street, Padstow, NSW

CLIENT: **Xiang Lin He** ARCHITECT: **BJ ARCHITECTS**

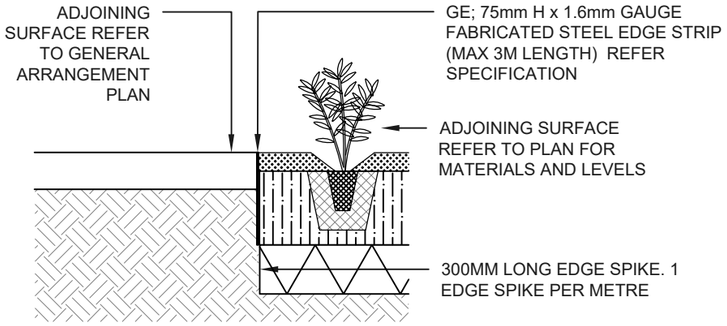
DRAWN: YR CHECKED: YR DATE CREATED: 08. 2024

GENERAL ARRANGEMENT PLAN

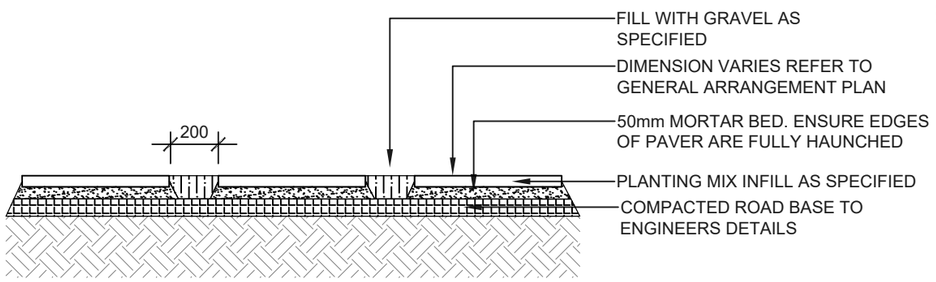
LA-201 ISSUE **A**



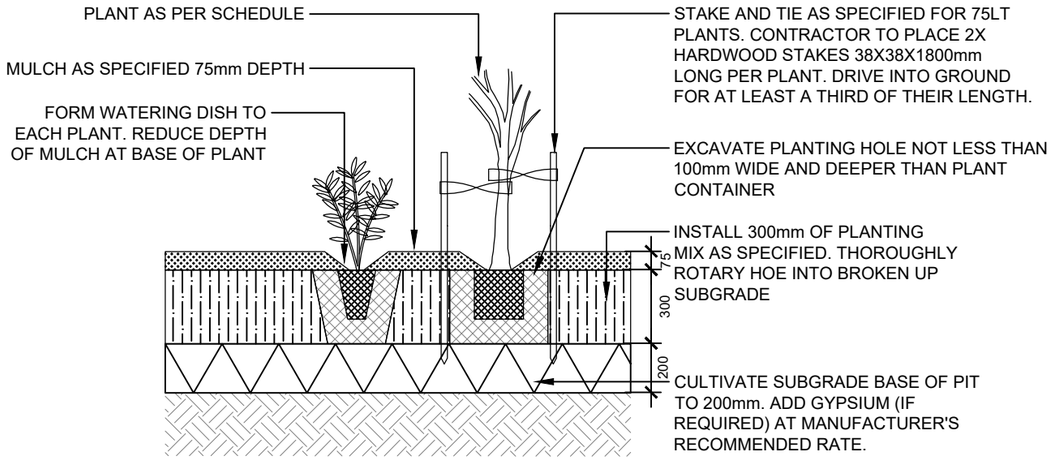
01 TURF
TYPICAL DETAIL 1:25



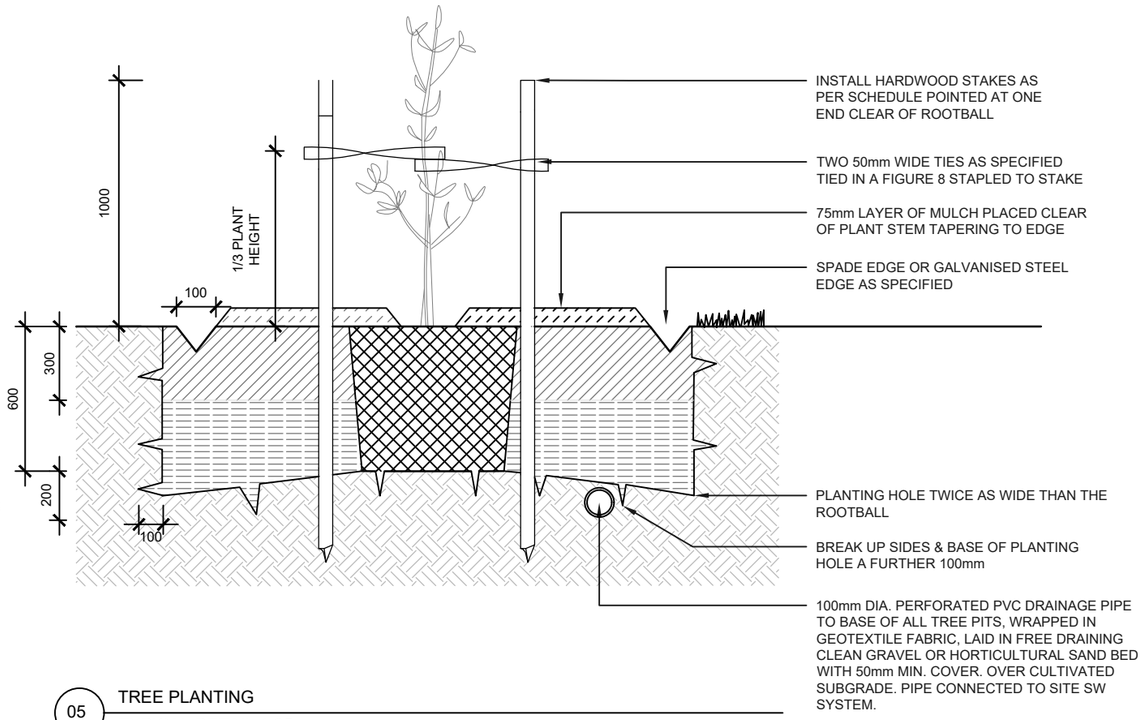
02 STEEL GARDEN EDGE
TYPICAL DETAIL 1:25



03 STEPPING STONE IN MULCH
TYPICAL DETAIL 1:25



04 MASS PLANTING
TYPICAL DETAIL 1:25



05 TREE PLANTING
TYPICAL DETAIL 1:25

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FOR DEVELOPMENT APPLICATION ONLY

ISSUE	COMMENTS	DATE
D1	DRAFT FOR REVIEW	14.08.2024
A	FOR DEVELOPMENT APPLICATION	06.09.2024

AS SHOWN
A3

N

86 Bryant Street, Padstow, NSW

CLIENT: **Xiang Lin He** ARCHITECT: **BJ ARCHITECTS**

DRAWN: YR CHECKED: YR DATE CREATED: 08. 2024

LANDSCAPE DETAILS

LA-301

ISSUE **A**

SPECIFICATION NOTES

GENERAL NOTES

References
All plans and details included in the project documents shall be read in conjunction with this specification. All structural and civil works components of the landscape design shall be referenced to engineers' details and specifications. Read this specification in conjunction with the plant and materials schedules on the drawings. If in doubt about any detail or if conflicts are found in the documents, seek advice.

Workmanship and Materials
The whole of the landscape works shall be carried out by a competent, trained and qualified landscape contractor who is experienced in horticultural practices, landscape construction and planting techniques. The landscape contractor shall hold a current Building Contractors License and/or be a financial member of LNA Landscape Association NSW & ACT or equivalent organisations in other states.

HARDWORKS

Furniture, Handrails, Balustrades
Supply and install the scheduled items in accordance with the manufacturer's recommendations, as detailed and in the locations shown on Provide all footings and fixings required for the items to be stable and in accordance with applicable codes, BCA, and Australian standards.

Garden walls, fences, steps, and Edging
Construct garden walls, fences, steps, and edging as shown on plan, as detailed and of the material scheduled. Provide footings, step nosings, to comply with BCA, Australian Standards and applicable legislation. Refer to engineer's details for structural retaining walls, heavy duty slabs, concrete stairs, concrete strength, reinforcing and joint placement.

Continuous, Unit and Loose Pavement
Install the scheduled material pavement to the locations shown on plan. Ensure that all sub-grade / subsurface works are complete prior to commencing paving. Confer with the engineer to ensure the structural integrity of the sub-grade. Ensure that the base course under paved surfaces is a continuous plane offering a constant depth of bedding material not exceeding 50mm.

Samples
Samples to be provided for each type of landscape material for client's approval prior to ordering and installation. Confirm with superintendent for quantity of samples to be provided.

SOFTWORKS

Soil Testing
Where site soil is to be retrieved from and stored for reuse on site, undertake at least two (2) soil tests, in locations as advised by the Project Manager. Provide results and recommendations regarding soil additives for the benefit of healthy plant growth and to adjust the soil components to achieve an appropriate planting medium for successful plant development.

Subsoil
Excavate and/or fill all garden beds to bring the top of subsoil to at least 300mm below finished design soil levels. Excavate all turf areas to bring the subsoil to at least 100mm below finished design levels. In all areas shape the subsoil to fall to subsoil drains where applicable. Do not excavate within the drip line of trees and shrubs to be retained. Cultivate or rip the subsoil to a further depth of 100mm before placing top soil. Remove stones of size exceeding 25mm, clods of earth exceeding 50mm, and weeds, rubbish or other deleterious material brought to the surface during cultivation. Do not disturb services or existing tree roots. If necessary cultivate these areas by During cultivation, thoroughly mix in materials required to be incorporated into the subsoil, as recommended in the soil testing results and to manufacturer's recommendations. Trim the surface to design levels again after cultivation.

Topsoil
Import topsoil for the garden and turf areas, unless the topsoil can be provided from material recovered from the site, as recommended in the soil testing results. Spread the topsoil on the prepared subsoil and grade evenly, compact lightly and uniformly in 150mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface
which has the following characteristics:

- Finished to design levels, allowing for mulch or turf, which is to finish flush with adjoining hard surfaces such as paths and edges
- Smooth and free from inorganic matter, stones or clods of soil
- Graded to drain freely, without ponding, to catchment and/or sub-soil drains
- Graded evenly to adjoining surfaces
- Ready for planting

Non-Australian native garden beds to have soil installed consisting of 50% existing site topsoil and 50% new topsoil equal or equivalent to 'Organic Garden Mix' as supplied by Australian Native Landscapes. Australian native garden beds to have soil installed consisting of 50% existing site topsoil and 50% new topsoil equal or equivalent to 'Native Low 'P' Mix' as supplied by Australian Native Landscapes. Topsoil to be installed to depth of 300mm for tree and mass planting garden beds, 100mm of turf underlay should be used under turf areas.

Compost
Provide, in accordance with AS 4454, well rotted vegetative material or animal manure, free from harmful chemicals, inorganic matter, grass, weeds and the reproductive parts of unwanted plants.

Fertiliser
Provide proprietary fertilisers, delivered to the site in sealed containers marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses, application rates and safety procedures. Apply appropriate fertiliser suited to the provenance of plants (indigenous or exotic) included in the design.

Plants
Supply plants in accordance with the landscape design drawings and schedules, which have the following characteristics:

- Large healthy root systems, with no evidence of root curl, restriction or damage;
- Vigorous, well established, free from disease and pests, of good form consistent with the species/variety;
- Hardened off, not soft or forced, and suitable for planting in the natural climatic conditions prevailing at the site in full sun, partial shade or full shade conditions;
- Grown in final containers for not less than twelve weeks;
- Trees, unless required to be multi-stemmed, shall have a single leading shoot; and
- Containers shall be free from weeds and of appropriate size in relation to the specified plant size.

Plant Installation
Following excavation of the planting hole, place and spread 15gms of wetting agent pre-mixed with one (1) litre of water. Place the plant correctly orientated to north or for best presentation. Backfill the planting holes with specified topsoil mixture. Lightly tamp and water to eliminate air pockets. Ensure that the backfill soil is not placed over the top of the root ball and that the root ball is not higher than the soil in which it is planted. Apply fertiliser, as specified around the plants in the soil at the time of planting.

Embankment Stabilisation
Where necessary and shown on the drawings prevent soil erosion or soil movement by stabilising embankments as follows. As a minimum this should be on slopes steeper than or equal to 1:3 gradient. Stabilise embankments using biodegradable fibre reinforced heavy weight jute fabric. Lay fabric from top to bottom of slope. Install in accordance with manufacturer's specification, including 300 x 300mm anchor trench at top and bottom of slope, backfilled with soil over the fabric and compacted into the trenches. Using U-shaped galvanised steel pegs at 1000 mm centres generally and 250mm centres at edge overlaps, secure the fabric to the prepared soil surface. Plant through the fabric after it is installed.

Root Barrier
Supply and install root control barriers to all new tree plantings adjacent to walls, paths, kerbs and all service trenches, where their proximity poses a threat to the stability of the built infrastructure. Install in accordance with manufacturer's recommendations.

Mulch
Unless noted otherwise, mulch shall be approved proprietary recycled wood fibre or pine bark material. Place mulch in all garden beds to a depth of 75mm after all specified plants are installed. Keep mulch clear of all plant stems and rake to an even plane, flush with the surrounding surfaces evenly graded between design surface levels. Over fill to allow mulch to settle to the specified depth. Mulching to be:

Pine Bark Mini Nuggets by ANL (or approved equivalent)
https://anlscape.com.au/Products/garden-mulch/pine-bark-mini-nuggets

Stakes and ties
Stakes shall be durable hardwood, straight, free of knots and twists, pointed at one end, in the following quantities and sizes for each of the various plant pot sizes:

- Plants (>25 lt): 1 off 38 x 38 x 1200mm;
- Semi-advanced plants (>75 lt): 2 off 50x50x 1800mm;
- Advanced (>100 lt): 3 off 50 x 50 x 2400mm.

Turfing
Turf shall be delivered to site as 25mm minimum thick cut rolls. Obtain turf from a specialist grower of cultivated turf. Turf shall have an even thickness, free from weeds and other foreign matter. Deliver turf to the site within 24 hours of being cut and lay it within 24 hours of delivery. Prevent it from drying out between cutting and laying. Lay the turf in the following manner:

- In stretcher pattern, joints staggered and close butted;
- Parallel long sides of level areas, with contours on slopes; and
- To finish flush, after lightly tamping, with adjacent finished surfaces and design levels.

Turf to be:
'Sapphire' Soft Leaf Buffalo - by All About Turf (or approved similar)
https://allaboutturf.com.au/turf-variety/sapphire-buffalo-turf/

IRRIGATION

All proposed landscape areas shall be irrigated.

The irrigation system shall be an automatic permanent system, with an irrigation controller self operated via a soil moisture sensor. The system shall be calibrated to deliver the optimum rate and volume of water appropriate to the type of plants in the design. The system shall be adjustable and fully serviceable. The layout of the entire irrigation system shall focus on delivering the required amount of water to maintain healthy and vigorous growth. The irrigation system shall be such that, component theft, vandalism, over-spray and wetting of paths shall be reduced to a minimum or completely eliminated by the use of drip, pop-up sprinklers and judiciously placed fixed spray emitters. Generally do not use fine mist emitters that provide a drifting mist that may wet paths and the buildings unless specifically required by the design.

DRAINAGE

All landscape areas are to have positive drainage to SW systems. If areas of poor drainage are identified on site then this should be brought to the site superintendents attention. Install agg lines if required.

TREE PROTECTION NOTES

1. The tree protection zone (TPZ) is a radial distance measured from the centre of the trunk of the tree and calculated in accordance with AS 4970-2009 (Protection of Trees on Development Sites)
2. The Structural Root Zone (SRZ) provides the bulk of mechanical support and anchorage for a tree. This is also a radial distance measured from the centre of the trunk and calculated in accordance with AS 4970-2009 (Protection of trees on development sites).
3. Incursions within the SRZ are not recommended as they are likely to result in the severance of woody roots which may compromise the stability of the tree or lead to its decline and demise.
4. Tree protection shall be in accordance with AS 4970-2009 (Protection of trees on development sites.)
5. Tree Protection Fence - All trees within the site to be retained shall be protected prior to and during construction from all activities that may result in detrimental impact by erecting a suitable protective fence beneath the canopy to the full extent of the tree protection zone.
6. As a minimum, the fence should consist of temporary chain wire panels of 1.8m in height, supported by steel stakes as required and fastened together and supported to prevent sideways movement using corner braces where required. The fence shall be erected prior to the commencement of any work on-site and shall be maintained in good condition for the duration of construction. Where tree protection zones merge together a single fence encompassing the area is deemed to be adequate. Existing site boundary fences may form part of the enclosure.
7. Tree Protection Signs - Signs shall be installed on the tree protection fence to prevent unauthorised movement of plant and equipment or entry to the tree protection zone. The signs shall be securely attached to the fence using cable ties or equivalent. Signs shall be placed at minimum 10 metre intervals. The wording and layout of the sign shall comply with AS 4970-2009
8. Trunk Protection - Where provision of tree protection fencing is in impractical due to its proximity to the proposed building footprint, trunk protection shall be erected around nominated trees to avoid accidental damage. The trunk protection shall consist of a layer of carpet underfelt (or similar) wrapped around the trunk, followed by 1.8m lengths of softwood timbers (90x45mm in section) aligned vertically with 2mm galvanised wire or galvanised hoop strap. Recycled timber (such as demolition waste) may be suitable for this purpose, subject to the approval of the project arborist. The timber shall be wrapped around the trunk (over the carpet underfelt), but not fixed to the tree to avoid mechanical injury or damage to the trunk. Trunk protection should be installed prior to any site works and maintained in good condition for the duration of the construction period. Carpet underfelt (alone) is sufficient for trees with a trunk diametre of less than 200mm.
9. Demolition and excavation within the tree protection zones of trees to be retained shall be undertaken under the supervision of the site arborist.
10. Tree Damage - Care shall be taken when operating cranes, drilling rigs and similar equipment near trees to avoid damage to tree canopies (foliage and branches). Under no circumstances shall branches be torn-off by construction equipment. Where there is potential conflict between tree canopy and construction activities, the advice of the site arborist must be sought.
11. In the event of any tree becoming damaged for any reason during the construction period, a consulting arborist (Australian Qualification Framework Level 5) shall be engaged to inspect and provide advice on any remedial action to minimise any adverse impact. Such remedial action shall be implemented as soon as practicable and certified by the arborist.

LANDSCAPE MAINTENANCE

The Landscape Contractor shall rectify defects during installation and that become apparent in the works under normal use for the duration of the contract Defects Liability Period. Unless contracted otherwise, the Landscape Contractor shall maintain the contract areas by the implementation of industry accepted horticultural practices for 52 weeks from Practical Completion of the works. The landscape maintenance works shall include, but not be limited to:

- Replacing failed plants
- Pruning
- Insect and pest control
- Fertilising
- Maintaining and removing stakes and ties
- Maintaining mulch
- Mowing and top dressing
- Irrigation and watering
- Erosion control
- Weed and rubbish removal

Maintenance Log Book
Implement and keep a maintenance log book recording when and what maintenance work has been undertaken and what materials, actions and decisions have been used, implemented and concluded to keep the landscape always looking its best. Enter data daily and review information every 2 weeks. Observe trends and develop a maintenance regime around seasonal and observed event occurrences.

Maintenance Activities
During the defects maintenance period schedule the following activities to occur on a timely basis.

- **Plant replacement** - Replace plants that have failed to mature, die or are damaged. Replacement plants shall be in a similar size and quality and identical species or variety to the plant that has failed. Replacement of plants shall be at the cost of the landscape contractor unless advised otherwise. If the cause of the failure is due to a controllable situation then correct the situation prior to replacing plants. Observe and replace failed plants within 2 weeks of observation.

- **Pruning** - Prune dead wood, broken limbs, dead or infected foliage and as needed to develop strong, healthy plants to achieve the shape and form expected of the plant type. Observe daily and prune plants on a needs basis.

- **Insect, disease and pest control** - Avoid spraying:
  a. if ever possible
  b. in wet weather or if wet weather is imminent
  c. if target plants are still wet after rain
  d. in windy weather
  e. if non-target species are too close

Immediately report to the Project Manager any evidence of intensive weed infestation, insect attack or disease amongst plant material. Submit all proposals to apply chemicals and obtain approval before starting this work. When approved, spray with herbicide, insecticide, fungicide as appropriate in accordance with the manufacturers' recommendations. Observe daily and act as necessary to control any infestation or disease. Record in the logbook all relevant details of spraying activities including:
  a. Product brand / manufacturer's name
  b. chemical / product name
  c. chemical contents
  d. application quantity and rate
  e. date of application and location
  f. results of application, and
  g. use approval authority

- **Fertilising** - Fertilise gardens with a proprietary slow release fertiliser applied in accordance with the manufacturer's directions and recommendations. Apply 6-12 monthly. Record in the logbook all relevant details of fertilising including:
  a. Product brand / manufacturer's name
  b. Fertiliser / product name
  c. Application quantity and rate, and
  d. Date of application and location

- **Stakes and ties** - Adjust and replace as required to ensure plants remain correctly staked. Remove those not required at the end of the planting establishment period (Defects Liability Period). Inspect and act at least every 2 weeks.

- **Maintaining mulch** - Maintain the surface in a clean, tidy and weed free condition and reinstate the mulch as necessary to ensure correct depth as specified. Observe weekly and replenish mulch as required.

- **Mowing and top dressing** - Mow the turf to maintain a grass height of between 30-50mm. Do not remove more than one third of the grass height at any one time. Remove grass clippings from the site after each Top dress to a maximum of 10mm to fill depressions and hollows in the surface. Mow weekly/fortnightly in warmer months. Mow monthly or as required in cooler months. Top dress at approximately 6 monthly intervals.

- **Irrigation and watering** - Maintain the irrigation system to sure that each individual plant receives the required amount of water to maintain healthy and vigorous growth. Adjust and calibrate as required. Provide additional watering, if necessary but inspect irrigation weekly and make repairs as necessary.

- **Erosion control** - Where necessary, maintain the erosion control fabric in a tidy and weed free condition and reinstate as necessary to ensure control measures are effective where deemed necessary. Inspect every 2 weeks and act to repair any damage as soon as possible.

- **Weeding and rubbish removal** - During the plant establishment period remove by hand, rubbish and weed growth that may occur or re-occur throughout all planted, mulched and paved areas. The contractor shall target weeds that are capable of producing a major infestation of unwanted plants by seed distribution. Whenever possible, time weed removal to precede flowering and seed set. Constant observation and removal of weeds is essential.

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LANDSCAPE ARCHITECT
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FOR DEVELOPMENT APPLICATION ONLY

ISSUE	COMMENTS	DATE
D1	DRAFT FOR REVIEW	14.08.2024
A	FOR DEVELOPMENT APPLICATION	06.09.2024

N/A
A3

N

86 Bryant Street, Padstow, NSW

CLIENT: **Xiang Lin He** ARCHITECT: **BJ ARCHITECTS**

DRAWN: YR CHECKED: YR DATE CREATED: 08. 2024

SPECIFICATION

LA-401

ISSUE **A**

APPENDIX 5 – QS Report

RealEst.
QUANTITY SURVEYORS

ESTIMATED DEVELOPMENT COST REPORT (EDC)

DATE

14TH APRIL 2025

PROJECT

86 BRYANT ST PADSTOW

PREPARED FOR

CANTERBURY-BANKSTOWN COUNCIL

Real Est Pty Ltd
Members of the Australian Institute of Quantity Surveyors
info@realest.com.au | realest.com.au | 0481 879 400

Real Est Pty Ltd
ABN 46 610 531 354
Kogarah, NSW 2217

Mob: 0481 879 400
Email: info@realest.com.au

14th April 2025

Dear Sir/Madam,

RE: Estimated Development Cost Report (EDC) – 86 Bryant St Padstow

We have been instructed to provide an Estimated Development Cost Report for a proposed warehouse development.

Estimated Development Cost $1,130,000 (Excluding GST)

Please refer to the information contained within this report for details relating to the Estimated Development Cost.

The attached EDC report is to be used as part of a DA submission to Canterbury-Bankstown Council and for no other purposes.

Should you require any clarification please contact the undersigned on 0481 879 400

Regards,

Nick Musarevski (BCons, DipCivEng, MAIQS, CQS)

Quantity Surveyor
Real Est Pty Ltd

RealEst.
QUANTITY SURVEYORS

Purpose

We have been instructed to undertake a review of the available drawings and other information provided to objectively determine the Estimated Development Cost (EDC) for consideration by the relevant consent authority (Canterbury-Bankstown Council)

Location

The subject property is located at 86 Bryant St Padstow, approximately 21km south-west of the Sydney CBD.

Description

The proposal generally involves the construction of a proposed warehouse and subdivision works. The scope of works includes, but not limited to:

- Site establishment
- Demolish existing industrial building
- Subdivision works
- Proposed warehouse and mezzanine level
- Metal roofing
- Bathrooms and staff rooms
- External services
- Minor landscaping

Gross Floor Area Analysis

The Gross Floor Area is measured in accordance with the AIQS Australian Cost Management Manual (ACMM) – Volume 1

GFA Analysis	FECA (m2)	UCA (m2)
Ground Floor	418	-
Mezzanine	212	-
TOTAL	**630**	**-**

F.E.C.A (Fully Enclosed Covered Area): The sum of all such areas at all building floor levels, including basements (except unexcavated portions), floored roof spaces and attics, garages, penthouses, enclosed porches and attached enclosed covered ways alongside building, equipment rooms, lift shafts, vertical ducts, staircases and any other fully enclosed spaces and useable areas of the building, computed by measuring from the normal inside face of exterior walls but ignoring any projections such as plinths, columns, piers and the like which project from the normal inside face of exterior walls. It shall not include open courts, light wells, connecting or isolated covered ways and net open areas of upper portions of rooms, lobbies, halls interstitial spaces and the like which extend through the storey being computed.

U.C.A (Unenclosed Covered Area): The sum of all such areas at all building floor levels, including roofed balconies, open verandahs, porches and porticos, attached open covered ways alongside buildings, under-crofts and useable space under buildings, unenclosed access galleries (including ground floor) and any other trafficable covered areas of the building which are not totally enclosed by full height walls, computed by measuring the area between the enclosing walls or balustrade (i.e. from the inside face of the UCA excluding the wall or balustrade thickness). When the covering element (i.e. roof or upper floor) is supported by columns, is cantilevered or is suspended, or any combination of these, the measurements shall be taken to the edge of the paving or to the edge of the cover, whichever is the lesser. UCA shall not include eaves overhangs, sun shading, awnings and the like where these do not relate to clearly defined trafficable covered areas, nor shall it include connecting or isolated covered ways.

RealEst.
QUANTITY SURVEYORS

Estimated Development Cost

The calculation of the estimated development cost represents the full scope of the proposed works to be undertaken as at the date of this report.

Description	Amount ($)
Total Construction Cost (Excl GST)	$1,095,000
Add	
Consultant Fees	$35,000
Total Estimated Development Cost (Excl GST)	**$1,130,000**
GST	$113,000
Total Estimated Development Cost (Incl GST)	**$1,243,000**

Basis of Preparation

The Estimated Development Cost Report is prepared in general accordance with (where applicable):

- NSW Government Planning Circular PS 24-002 – Calculation of development costs for planning purposes
- AIQS Practice Standard for calculating EDC
- Australian Standard Method of Measurement

The EDC has been prepared using a schedule of quantities and rates prepared by Real Est Pty Ltd. Market rates are current as at the date of this report and are derived from a combination of our in-house cost database and various industry cost manuals. These rates are periodically benchmarked and adjusted to ensure our costings are in line with current market conditions.

The EDC has been prepared based on a review of documentation supplied, namely:

Consultant	Drawing/Report	Issue
Architect (BJ Architects International Pty Ltd)	Architectural Drawings A001, A101, A102, A103, A104, A105, A106, A107, A108, A201, A202, A301, A401, A402, A403, A404, A405, A501, A502, A503	Issue A dated 3/4/25

The EDC may provide no more than an indication to the probable cost of the proposed works. Costs may vary noticeably due to a range of variables including but not limited to:

- DA conditions
- Detailed documentation
- Method of procurement
- Contract conditions
- Site conditions

Exclusions

The following items have been excluded from this report:

- Development Management Fees
- Land Acquisition Costs, Legal costs
- Taxes, levies and charges
- Interest and finance fees
- Major service diversions

- Excavation in rock
- Remediation works
- Asbestos removal
- Escalation
- Contingency

Limitations

The following items have been identified as limitations within this report:

- The level of design information to date is preliminary in nature
- Real Est Pty Ltd would require further information to ascertain a more robust costing.
- Real Est Pty Ltd has not performed any independent investigations to ascertain the accuracy of the received documentation that this report is based on.

Disclaimer

This report is an expression of opinion based upon received documentation and/or information provided by third parties. This report is not to be used for any other purposes whatsoever without the prior written consent of Real Est Pty Ltd. This report is confidential to the party to whom it is addressed. Any form of contractual, tortuous and other form of liability for any consequences, loss or damage which may result from other persons acting upon this report will not be accepted.

Regards,

Nick Musarevski, BCons (UTS) DipCivEng, MAIQS, CQS
Senior Quantity Surveyor

Trade Summary

Project: 86 BRYANT ST PADSTOW
Building: 86 BRYANT ST PADSTOW
Details: 86 BRYANT ST PADSTOW

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
	86 BRYANT ST PADSTOW						
	PROPOSED WAREHOUSE DEVELOPMENT				1,130,000		1,130,000
	SUBTOTAL				**1,130,000**		1,130,000
	GST				113,000		113,000
	TOTAL				**1,243,000**		1,243,000

Trade Detail

Project: 86 BRYANT ST PADSTOW
Building: 86 BRYANT ST PADSTOW
Details: 86 BRYANT ST PADSTOW

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
PROPOSED WAREHOUSE DEVELOPMENT							
	PRELIMINARIES				118,000		118,000
	DEMOLITION				46,000		46,000
	GROUNDWORKS				23,000		23,000
	CONCRETE WORKS				421,000		421,000
	STRUCTURAL STEEL				77,000		77,000
	CARPENTRY				39,000		39,000
	ROOFING				52,000		52,000
	WINDOWS				21,000		21,000
	WALL AND CEILING LININGS				6,000		6,000
	WATERPROOFING				4,000		4,000
	TILING				10,000		10,000
	PLUMBING AND DRAINAGE				30,000		30,000
	ELECTRICAL SERVICES				54,000		54,000
	MECHANICAL SERVICES				4,000		4,000
	METALWORK & GLAZING				39,000		39,000
	JOINERY & BENCHTOPS				8,000		8,000
	FIXTURES AND FITTINGS				2,000		2,000
	LIFT				90,000		90,000
	PAINTING				37,000		37,000
	EXTERNAL WORKS				14,000		14,000
	PROFESSIONAL FEES				35,000		35,000
	PROPOSED WAREHOUSE DEVELOPMENT				**1,130,000**		**1,130,000**

Development Application

Estimated Development Cost

Purpose

This form is to be used to support the lodgement of a development application in accordance with Clause 24 of the Environmental Planning and Assessment Regulation 2021. On completion, this form must be lodged through the NSW Planning Portal along with other supporting documentation.

This form is adapted from assessment sheets provided in Circular PS 24-002: Calculating the estimated development cost (EDC), published by the NSW Department of Planning, Housing and Infrastructure.

The EDC captures cost components such as design and erection of a building, carrying out a work, demolition of a work or building and fixed or mobile plant and equipment. Please note that Council will check the estimated cost provided on the application form. If the estimate is understated, the figure will need to be adjusted. Additional application fees may be applicable.

Council has endorsed the NSW Government's recommended approach to EDC:

VALUE OF DEVELOPMENT	METHOD OF COST ASSESSMENT
Less than $100,000	Estimated cost and methodology provided by either the applicant or a suitably qualified person*
Between $100,000 and $3 million	Estimated cost and methodology provided by a suitably qualified person*
Greater than $3 Million	A detailed cost report provided by a registered quantity surveyor

*a suitably qualified person is: a builder who Is licensed to undertake the proposed works, a registered architect, a qualified and accredited building designer, a registered quantity surveyor or a person who is licensed and has the relevant qualifications and proven experience in costing development works at least to a similar scale and type as is proposed.

Part 1 - Cost Summary Table (For Development under $3 Million)

ELEMENT	COST (Including GST)
Demolition, excavation and site preparation Includes clearing vegetation, demolition, excavation and remediation, as well as disposal of any material.	$ 50,900
Substructure, columns, external walls and upper floors Substructure is the structurally sound and watertight base upon which to build. Substructure includes all work up to but excluding the lowest floor finish. Columns include internal and external columns from tops to bases, column casings and all protective non-decorative coatings. External walls include structural walls, basement walls, glazed screen walls, any balcony walls and balustrades. Upper floors are the floor structures above the lowest level.	$ 549,100
Staircases Structural connections between two or more floor levels or to roof, plant rooms and motor rooms together with associated finishes.	$ 33,200
Roof The structurally sound and watertight covering over the building.	$ 57,600
Windows, internal walls, doors and screens	$ 121,800
Surface finishes Finishes and decoration applied to internal and external surfaces such as walls, floors and ceilings (e.g., painting, cladding, rendering, carpeting, etc.)	$ 58,700
Fitments	$ 11,100

Includes built-up fitments and fixed items (e.g., joinery, benches, plaques, mirrors, etc). Loose furniture and finishes are not included.	

Part 1 (Cont.) - Cost Summary Table (For Development under $3 Million)

Special equipment Special equipment is fixed equipment that is necessary to the use for which consent is sought.	$ N/A
Building services Internal and external services necessary for the functioning of the building and property (e.g., stormwater, gas supply, electrical systems, mechanical ventilation, lifts, etc).	$ 197,100
External works Works external to the building other than external building services (e.g., soft landscaping, footpaths, decks, retaining walls, etc).	$ 15,500
Professional fees Professional service fees associated with the design and construction of a development (e.g., architect, project manager, town planning consultant, etc).	$ 35,000
Estimated Development Cost (The sum of the above cost elements, exclusive of GST*)	$ 1,130,000
GST	$ 113,000
Estimated Development Cost plus GST	$ 1,243,000

Part 2 - Declaration

I certify that:

- I have provided a genuine estimate of the costs of the proposed development and that those costs are based on industry recognised prices.
- I acknowledge that Council may review the information provided and may seek further information or make its own cost estimate.

Title: Mr

Given Name: Nick

Family Name: Musarevski

Position / Qualification: Senior Quantity Surveyor, BCons, DipCivEng, MAIQS, CQS

Address: PO BOX 591 Rockdale NSW 2216

Phone Number: 0481 879 400

Email: info@realest.com.au

Applicants signature: 

Date: 14/4/25

Various commercial entities publish building and construction cost guides/calculators which can be referenced. The Australian Institute of Quantity Surveyors provides technical guidance on estimating costs and methods of measurement in the Australian Cost Management Manuals.

APPENDIX 6 – Stormwater Plans

A1

ALTERATIONS TO EXISTING WAREHOUSE
86 BRYANT ST, PADSTOW NSW 2211

GENERAL NOTES:

1. MAIN STORMWATER DRAINS ≥ 300mm DIAMETER SHALL FALL AS NOTED. HOWEVER, ALL OTHER BRANCH DRAINS SHALL HAVE A MINIMUM GRADE OF 1%.
2. STORMWATER DRAINS SHALL BE RUBBER RING JOINTED FRC (CLASS 2) OR RCP OF EQUIVALENT CLASS. PIPES OF SIZE LESS THAN 300mm SHALL BE DWV GRADE PVC WITH SOLVENT CEMENT JOINTS.
3. STORMWATER PIT LIDS LOCATED IN DRIVEWAY AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - CLASS D.
4. STORMWATER PIT LIDS TO LANDSCAPED AND PEDESTRIAN AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - CLASS A.
5. ALL WORKS SHALL BE CARRIED OUT TO THE REQUIREMENTS OF THE RELEVANT COUNCIL / AUTHORITY, AS 3500.3, AS 2032, AS 3996 AND AS 3725.
6. AT THE COMPLETION OF THE WORKS PROVIDE A "WORK AS EXECUTED" PLAN OF THE STORMWATER DRAINAGE AND DETENTION SYSTEM. THE PLAN SHALL BE PREPARED AND CERTIFIED BY THE REGISTERED SURVEYOR AND SHOW ALL PIPE SIZES, INVERTS, PIT COVER AND BASE LEVELS AND ALL DETENTION TANK DIMENSIONS, SURFACE LEVELS AND THE ORIFICE PLATE SIZE (IF APPLICABLE).
7. PITS SHALL BE CI & D PRECAST CONCRETE OR APPROVED EQUAL WITH EXTENSION RISERS AS REQUIRED. PITS SHALL BE BEDDED ON A 50mm LAYER OF 4:1 CEMENT MORTAR AND BACKFILLED WITH EXCAVATED MATERIAL IN 200mm THICK COMPACTED LAYERS TO FINISHED SURFACE LEVEL.
8. COVERS TO PITS LOCATED WITHIN PAVED AREAS SHALL BE CAST IN WITH THE CONCRETE POUR. ALL OTHER PIT COVERS SHALL BE PROVIDED WITH A 150mm CONCRETE SURROUND.
9. PROVIDE TO EACH STORMWATER PIT A 1m LONG SECTION OF SUB-SOIL DRAINAGE, Ø75mm WITH GEOTEXTILE, LAID WITHIN THE UPSTREAM TRENCH.
10. PROVIDE 25mm DIAMETER GALVANIZED STEP-IRONS AT INTERVALS OF 300mm WHERE THE INTERNAL DEPTH OF THE PIT EXCEEDS 1000mm, TO AS 4108.
11. RETENTION TANK TO BE CLEANED & ALL SLUDGE REMOVED ON AN ANNUAL INSPECTION.
12. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE THE POSITION & LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
13. LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
14. THE GRATES (HEAVY DUTY IN THE DRIVEWAYS) SHALL BE HINGED AND LOCKABLE.
15. THE PLANS SHALL INDICATE THAT DRIVEWAYS AND LAYBACKS MUST BE CONSTRUCTED AT LEAST 1-METRE CLEAR OF STORMWATER PITS/LINTELS, TREES, TELSTRA PITS AND EXISTING POWER POLES.
16. REFER TO ENGINEER ANY SERVICES THAT INTERFERE WITH THE REQUIREMENTS OF THESE PLANS.

SITEWORKS NOTES:

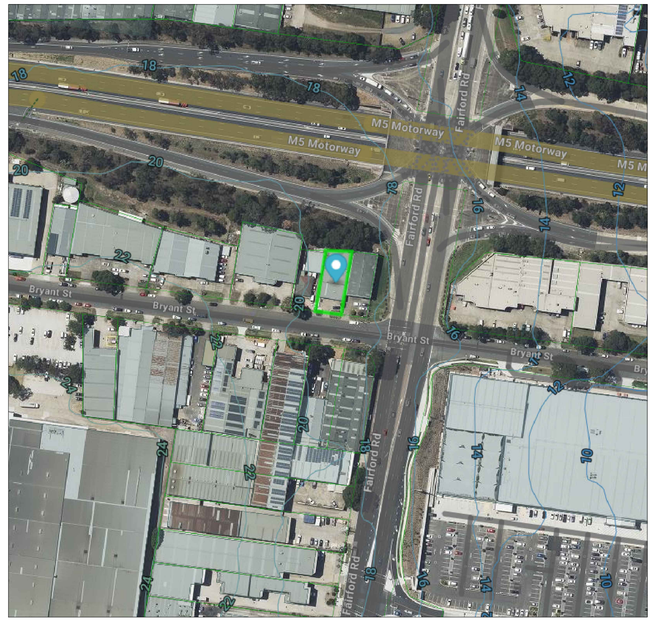
1. DATUM A.H.D.
2. ORIGIN OF LEVELS. REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
3. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
4. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF THE SUPERINTENDENT.
5. EXISTING SERVICES UNLESS SHOWN ON SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
6. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS ACHIEVED.
7. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
8. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATION IS TO BE UNDERTAKEN OVER TELSTRA OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
9. CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
10. MAKE SMOOTH TRANSITION NEW TO EXISTING SURFACES AND MAKE GOOD AS APPLICABLE.
11. THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED LANDSCAPE, ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED RELATING TO DEVELOPMENT AT THE SITE BY THE SUPERINTENDENT.
12. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING.
13. ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN 80Ø uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.
14. GRADES TO PAVEMENTS TO BE AS INDICATED ON PLAN . GRADE EVENLY BETWEEN NOMINATED RL'S. AREAS EXHIBITING PONDING GREATER THAN 5mm DEPTH WILL NOT BE ACCEPTED UNLESS IN A DESIGNATED SAG DRAINAGE LOCATION.
15. ALL COVERS AND GRATES ETC. TO EXISTING SERVICE UTILITIES ARE TO BE ADJUSTED TO SUIT NEW FINISHED SURFACE LEVELS WHERE APPLICABLE TO AUTHORITY REQUIREMENTS.

EROSION CONTROL NOTES:

1. ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH 'MANAGING URBAN STORMWATER, 4th EDITION PRODUCED BY LANDCOM.
2. ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS, AND ALL SILT TRAPS ARE TO HAVE DEPOSITED SILT REMOVED REGULARLY DURING CONSTRUCTION.
3. ALL TREES ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECT'S OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXCEPT IN AREAS CLEARED FOR BUILDINGS, PAVEMENTS ETC.
4. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER.
5. NOT WITHSTANDING DETAILS SHOWN IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATERS ACT. DISCHARGE TURBIDITY NOT TO EXCEED 50mg/L

CHARGED PIPE SYSTEMS

1. GENERAL REQUIREMENTS FOR CHARGED PIPE SYSTEMS:
   - (A) WHERE THE BOUNDARY LEVEL IS ABOVE ANY KERB WITHIN 15m OF THE SITE OR A COUNCIL PIPE IS AVAILABLE, THE ROOF WATER IS TO DRAIN BY GRAVITY FROM THE BOUNDARY TO THE COUNCIL SYSTEM VIA A SILT/LITTER ARRESTOR PIT. WHERE A GRAVITY DISCHARGE TO THE COUNCIL SYSTEM IS NOT VIABLE THE CHARGED PIPE MAY CONNECT DIRECTLY TO THE KERB.
   - (B) FLAP (REFLUX) VALVES ARE TO BE INSTALLED ON THE OUTLET PIPES FROM THE CHARGED SYSTEM THAT DISCHARGE TO THE SILT/LITTER ARRESTOR PIT TO MINIMISE MOSQUITO NUISANCE.
   - (C) THE LOWEST LEVEL OF THE CHARGED SYSTEM SHALL DRAIN BY GRAVITY TO A SMALL INSPECTION PIT (600mm x 600mm MIN.) WITH SUMP FOR CLEANING. There shall be a minimum of ONE METRE OF PIPE FROM THE LAST DOWNPIPE TO THE INSPECTION PIT. THE CONNECTION TO THE PIT IS TO HAVE A SEALED SCREW CAP TO ALLOW FOR PERIODIC CLEANING AND REMOVAL OF RUBBISH. THE CAP IS TO HAVE A 5mm DRIBBLE HOLE TO ALLOW TRAPPED WATER TO DISCHARGE SLOWLY. REFER TO CHARGED PIPE CLEAN-OUT PIT DETAIL.
   - (D) ONLY SEWER GRADE PVC OR PRESSURE PIPES ARE TO BE USED TO CONVEY CHARGED FLOWS.
   - (E) ALL PIPES AND DOWNPIPES ARE TO BE SEALED TO A MINIMUM OF 0.5m ABOVE THE MAXIMUM WATER LEVEL IN THE SYSTEM. THE SYSTEM SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING. THE USE OF EXPOSED PIPELINE SHALL BE MINIMISED.
   - (F) ALL GUTTERS MUST HAVE LEAF GUTTER GUARDS INSTALLED AND UNDERTAKE REGULARLY CLEANING OF THE DOWNPIPES TO ENSURE EFFECTIVENESS OF THE SYSTEM.
2. REQUIREMENTS FOR CHARGED PIPE SYSTEMS FOR ROOF SYSTEMS:
   - (A) THE EAVE GUTTER LEVEL SHALL BE A MINIMUM OF 0.6m AN PREFERABLY 1.6m ABOVE THE HIGHER OF THE TOP OF THE KERB OUTLET OR THE TOP STORAGE LEVEL (E.G. RAINWATER TAKN). WHERE THE HEIGHT IS BEWTEEN 0.5m AND 1.5m AN ANALYSIS OF HEAD LOSSES SHALL BE PROVIDED.
3. REQUIREMENTS FOR CHARGED PIPE SYSTEMS FOR ABOVEGROUND RAINWATER TANKS:
   - (A) THE OVERFLOW FROM THE RAINWATER TANK IS TO BE A MINIMUM OF 0.5m AND PREFERABLY 1.5m ABOVE THE TOP OF THE KERB OUTLET. WHERE THE HEIGHT IS BEWTEEN 0.5m AND 1.5m AN ANALYSIS OF HEAD LOSSES SHALL BE PROVIDED.
   - (B) THE INLET PIPES FROM THE ROOF SYSTEM TO THE RAINWATER TANK MAY ENTER DIRECTLY, OR THROUGH A CHARGE SYSTEM, WHERE A CHARGE SYSTEM IS USED EACH LINE WILL HAVE A CLEAN-OUT PIT.
   - (C) FLAP VALVES ARE TO BE INSTALLED ON THE INLET PIPES TO THE RAINWATER TANK FROM THE CHARGED SYSTEM TO MINIMISE MOSQUITO NUISANCE.
   - (D) THE DESIGN AND INSTALLATION SHALL COMPLY WITH HB 230 - RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK.



FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

BEFORE YOU DIG www.byda.com.au

CLIENT: X. L. HE

ARCHITECT: BJ ARCHITECTS INTERNATIONAL

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

PROJECT: ALTERATIONS TO EXISTING WAREHOUSE 86 BRYANT ST, PADSTOW NSW 2211

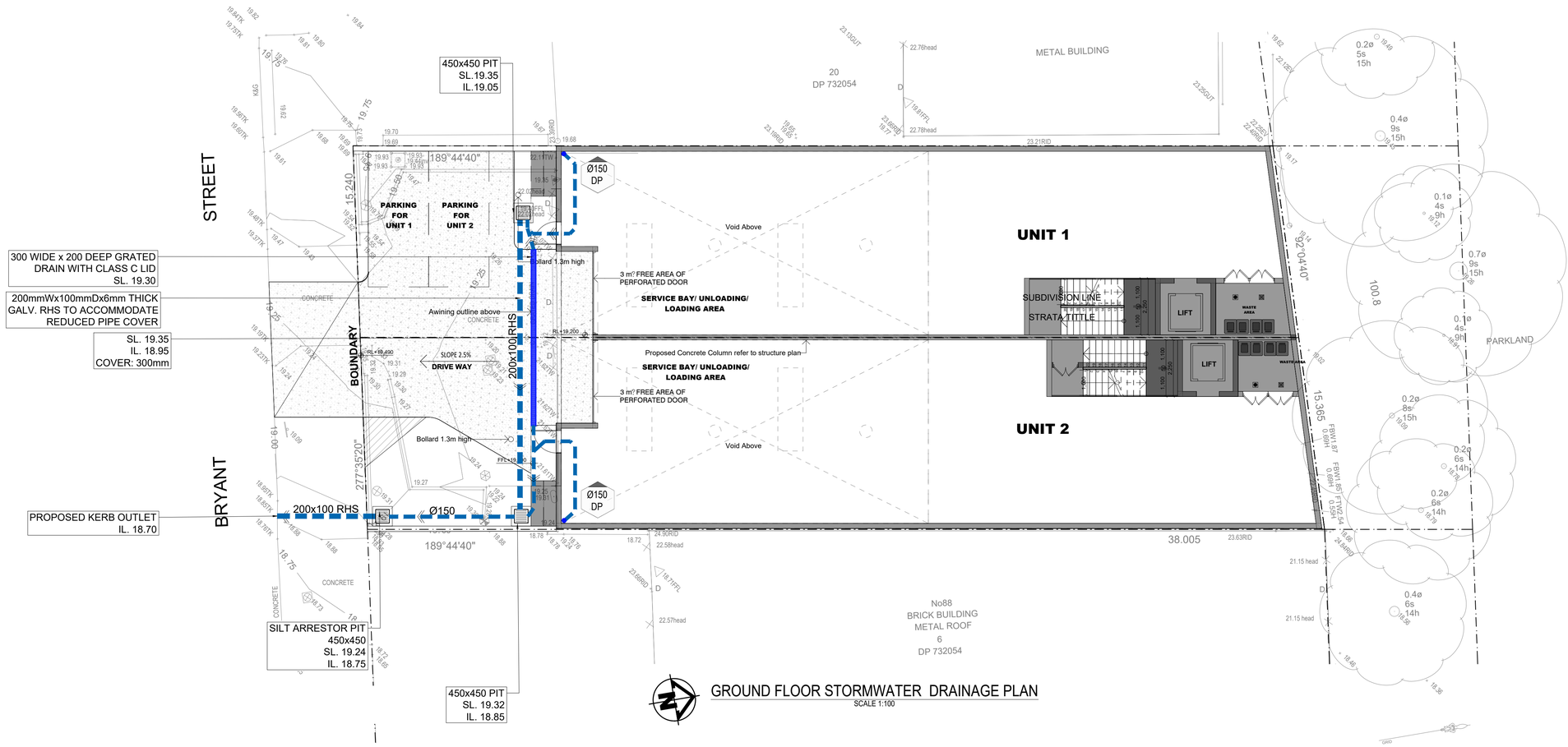
TITLE: GENERAL NOTES & LOCALITY PLAN

DRAWN	DESIGNED	DATE
HW	HW	AUGUST 2024
CHECKED	APPROVED	SCALE
DY	DY	NOT TO SCALE

DRAWING NUMBER: 24166C1.00

REVISION: B

A1



GROUND FLOOR STORMWATER DRAINAGE PLAN

SCALE 1:100

LEGEND

- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP DOWNPIPE FROM ABOVE
- Ø100 DP DOWNPIPE CONTINUES UNDER
- ØXXX CHARGED PIPE SIZE AS NOMINATED
- ØXXX UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- PO PLANTER OUTLET
- FW FLOOR WASTE
- RO ROOF OUTLET
- GRATED DRAIN
- SP DOWNPIPE SPREADER

STORMWATER DRAINAGE NOTES

CANTERBURY-BANKSTOWN DCP 2023

SITE AREA: 567.5m^2
PRE-DEVELOPMENT IMPERVIOUS AREA: 547m^2
POST-DEVELOPMENT IMPERVIOUS AREA: 532m^2

ON-SITE DETENTION PROVISION IS TO CONTROL THE POST-DEVELOPMENT SITE DISCHARGE TO PRE-DEVELOPMENT CONDITION, THEREFORE ON-SITE DETENTION IS NOT REQUIRED FOR THE DEVELOPMENT AS THE POST-DEVELOPMENT SITE IMPERVIOUSNESS IS LESS THAN PRE-DEVELOPMENT.

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
E	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
3	UPDATED RLS	WG	DY	24/02/2025
2	REVISED DRAWING	WG	DY	19/02/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
D	REVISED DRAWING	HW	DY	28/10/2024
C	REVISED DRAWING	HW	DY	26/10/2024
B	REVISED DRAWING	HW	DY	06/09/2024
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

CLIENT
X. L. HE

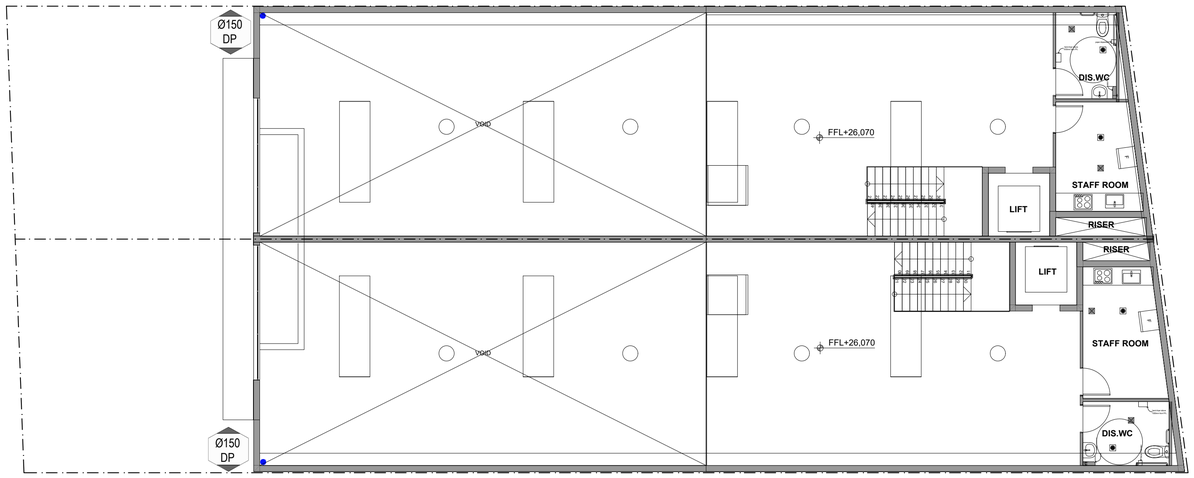
ARCHITECT
BJ ARCHITECTS INTERNATIONAL

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

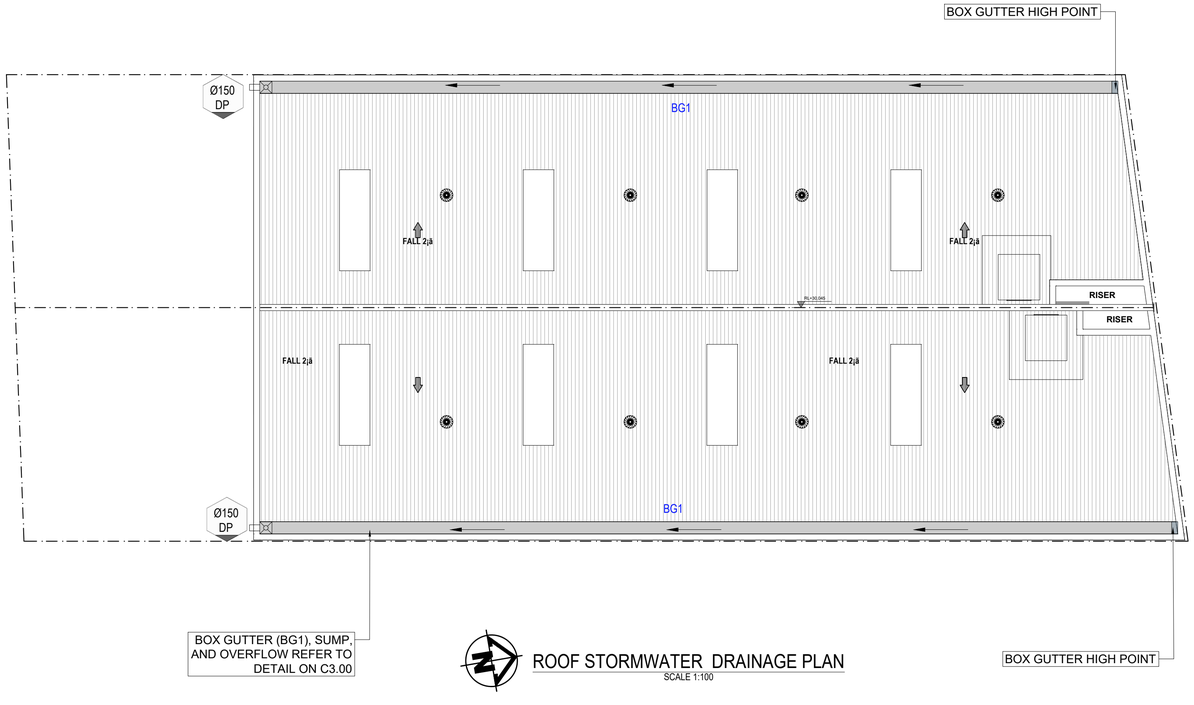
BEFORE YOU DIG www.byda.com.au

PROJECT: ALTERATIONS TO EXISTING WAREHOUSE 86 BRYANT ST, PADSTOW NSW 2211	DRAWN: HW	DESIGNED: HW	DATE: AUGUST 2024
	CHECKED: DY	APPROVED: DY	SCALE: 1:100
TITLE: STORMWATER DRAINAGE PLAN - 1	DRAWING NUMBER: 24166C2.00		REVISION: E

A1



MEZZANINE STORMWATER DRAINAGE PLAN
SCALE 1:100



BOX GUTTER (BG1), SUMP, AND OVERFLOW REFER TO DETAIL ON C3.00

ROOF STORMWATER DRAINAGE PLAN
SCALE 1:100

BOX GUTTER HIGH POINT

LEGEND

- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP DOWNPIPE FROM ABOVE
- Ø100 DP DOWNPIPE CONTINUES UNDER
- ØXXX CHARGED PIPE SIZE AS NOMINATED
- ØXXX UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- PO PLANTER OUTLET
- FW FLOOR WASTE
- RO ROOF OUTLET
- GRATED DRAIN
- SP DOWNPIPE SPREADER

BOX GUTTER NOTES:

ALL BOX GUTTERS SHALL BE INSTALLED WITH AN ABSOLUTE MIN. 1:200 LONGITUDINAL BASE SLOPE TO THE OUTLET (1:100 DESIRABLE BASE SLOPE).

ALL BOX GUTTERS SHALL BE FITTED WITH EMERGENCY OVERFLOW MEASURES - REFER TO PLAN & COMPLIANCE TABLE FOR DETAILS OF OVERFLOW PROVISIONS.

BOX GUTTERS SHALL BE ADEQUATELY SEALED TO THE RECEIVING RAINWATER HEAD / INTERNAL SUMP AND DISCHARGE WITHOUT CHANGES IN DIRECTION.

ALL EXPANSION JOINTS AND MINIMUM EXPANSION SPACE SHALL COMPLY WITH AS3500.3 CLAUSE 4.3.2

FIRST FLOOR & ROOF NOTES:

INSTALL 50mm uPVC SPITTER PIPES 20mm ABOVE SURFACE LEVEL FOR BALCONY AND CONCRETE ROOF AREAS TO ALLOW FOR EMERGENCY OVERFLOW INCASE OF BLOCKAGES DURING HEAVY STORMS. PLUMBER TO CONFIRM LOCATION DURING CONSTRUCTION.

ALL BUILDING AND HYDRAULIC SERVICES TO BE PROPERLY CO-ORDINATED WITH STORMWATER PIPES AND ENSURE NO CLASHES ARE PRESENT DURING CONSTRUCTION (TYP).

STORMWATER PIPE ARRANGEMENT TO BE CO-ORDINTED WITH STRUCTURAL SLAB AND BEAMS WHERE REQUIRED (TYP).

BALCONY, TERRACE & CONCRETE ROOF AREAS TO SLOPE TOWARDS RAINWATER OUTLETS WHERE REQUIRED (TYP).

ARROW DENOTES THE SLOPE OF FINISHED SURFACE LEVEL (TYP).

DOWNPIPES SHOWN ON PLAN ARE TO BE Ø100mm uPVC U.N.O. (TYP).

ALL EAVES GUTTERS SHALL BE 145mm WIDE x 75mm DEEP (OR EQUIVALENT) AND LAID AT MIN. 1:500 SLOPE.

ALL GUTTERS TO BE FITTED WITH ADEQUATE OVERFLOW MEASURES IN ACCORDANCE WITH AS3500.3:2018.

PROPOSED DOWNPIPE LOCATIONS ARE NOMINAL AND TO BE CONFIRMED DURING CONSTRUCTION (TYP).

INSTALL DOWNPIPE WITH SPREADER (IF REQUIRED) TO DISPERSE STORMWATER ONTO LOWER ROOF AREAS EFFECTIVELY.

PROVIDE SURFACE DRAINAGE FOR ALL CONCRETE AND BALCONY ROOF AREAS WHERE REQUIRED.

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
E	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
D	REVISED DRAWING	HW	DY	28/10/2024
C	REVISED DRAWING	HW	DY	26/10/2024
B	REVISED DRAWING	HW	DY	06/09/2024
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

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CLIENT
X. L. HE

ARCHITECT
BJ ARCHITECTS INTERNATIONAL

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

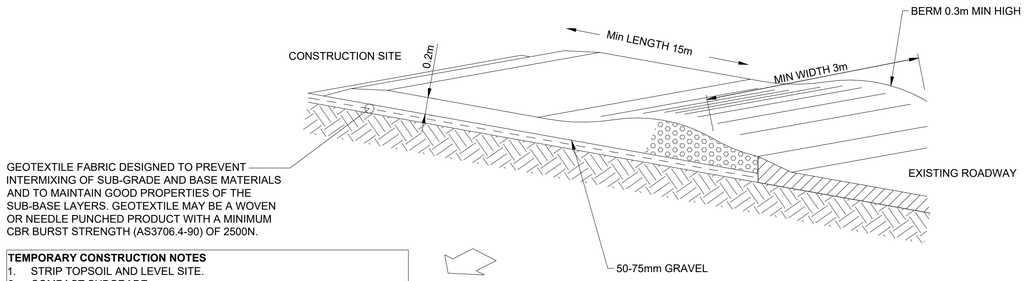
PROJECT
ALTERATIONS TO EXISTING WAREHOUSE
86 BRYANT ST, PADSTOW NSW 2211

TITLE
STORMWATER DRAINAGE PLAN - 2

DRAWN	DESIGNED	DATE
HW	HW	AUGUST 2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

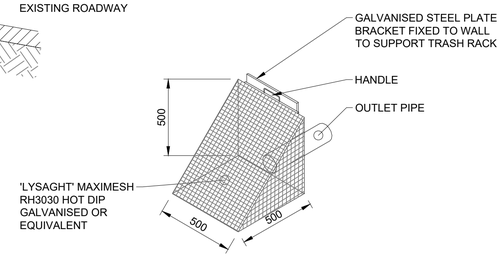
DRAWING NUMBER: 24166C2.01
REVISION: E

A1

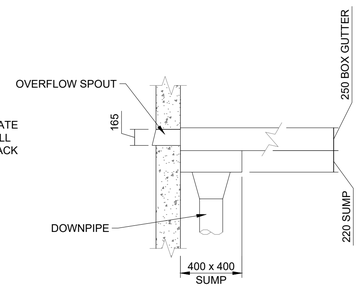


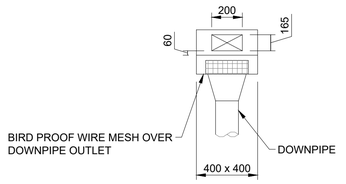
TEMPORARY CONSTRUCTION NOTES
1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUBGRADE.
3. COVER THE AREA WITH NEEDLE PUNCHED GEOTEXTILE.
4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROAD-BASE OR 30mm AGGREGATE. MINIMUM LENGTH 15m OR TO BUILDING ALIGNMENT, MINIMUM 3m WITDTH.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT DEVICE.

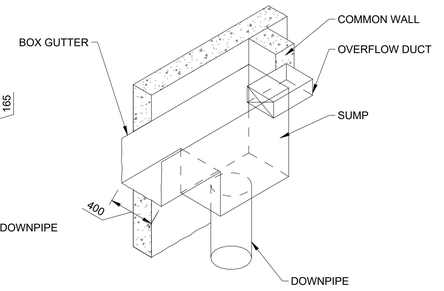
TEMPORARY CONSTRUCTION EXIT DETAIL
SCALE 1 : 20



TYPICAL LITTER GUARD DETAIL
SCALE 1:20



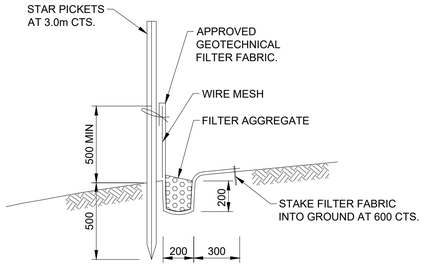




BOX GUTTERS, SUMPS, OVERFLOWS & DOWNPIPES TO AS/NZS 3500.3:2021

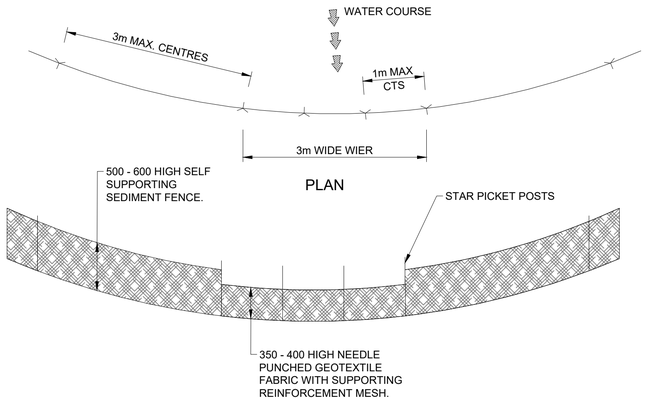
NOTES:
1. THE SUMP AND OVERFLOW CHANNEL TO BE FULLY SEALED TO THE BOX GUTTER.
2. MAINTENANCE TO CLEAN OUT DEBRIS WITHIN BOX GUTTER SYSTEM SHOULD BE CARRIED OUT A MINIMUM OF FOUR TIMES PER YEAR.

TYPICAL BOX GUTTER DETAIL - SIDE OVERFLOW
SCALE 1:20



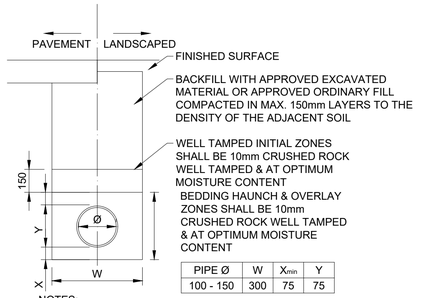
SILT FENCE DETAIL

SEDIMENT SILT FENCE DETAIL
SCALE 1 : 20



ELEVATION

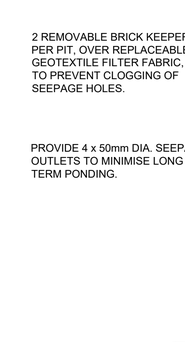
SEDIMENT FENCE WEIR AT CONCENTRATED FLOW LOCATIONS
SCALE 1 : 20



PIPE Ø	W	X_{min}	Y
100 - 150	300	75	75

NOTES:
1. BACKFILL CRUSHED ROCK WETMIX. PLACED & COMPACTED IN MAX. 150mm LAYERS TO 95% MODIFIED MAX. DRY DENSITY.
2. REFER TO PIPE LAYING SPECIFICATIONS FOR DETAILS

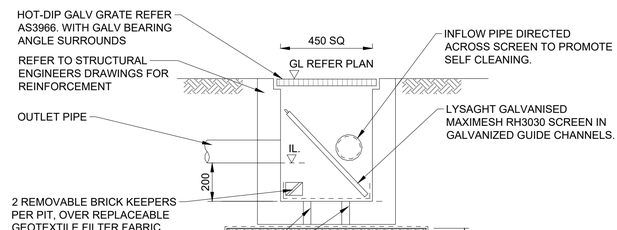
TYPICAL PIPE LAYING DETAILS
N.T.S.



CONNECTION TO KERB DETAIL
N.T.S.

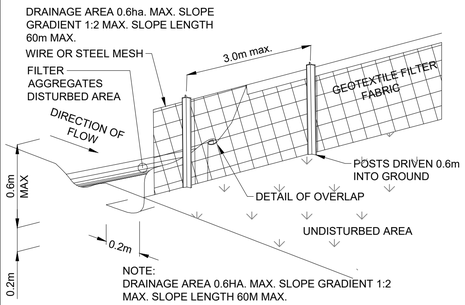
CONNECTION TO KERB NOTES:

1. CONVERT 150mm DIA. PIPE WITHIN PROPERTY, TO A 200x100x6 RHS (GALVANISED) ACROSS THE FOOTPATH. A JUNCTION PIT 300x300 OR 450x450 SHALL BE CONSTRUCTED WITHIN THE PROPERTY.
2. CONNECTION TO THE KERB ACROSS THE FOOTPATH IS TO BE MAXIMUM OF 45 DEGREES FROM THE KERB TO THE PROPERTY LINE.



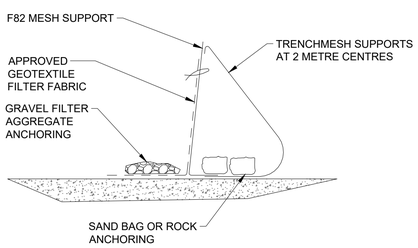
NOTE:
MAINTENANCE OF SILT ARRESTOR PIT IS TO BE CARRIED OUT AT LEAST EVERY SIX MONTHS AND AFTER EVERY SIGNIFICANT STORM EVENT.

SILT ARRESTOR PIT DETAIL
SCALE 1:20



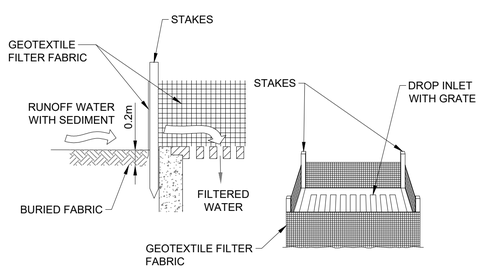
SEDIMENT FENCE

GENERAL CONSTRUCTION NOTES
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. DRIVE 1.5m LONG STAR PICKETS IN GROUND 3m APART.
3. DIG A 200mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE FABRIC TO BE ENTRENCHED.
4. BACKFILL TRENCH OVER BASE OF FABRIC
5. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
6. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150m OVERLAP.

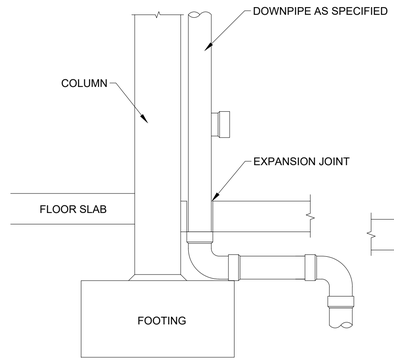


GENERAL CONSTRUCTION NOTES:
1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
2. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
3. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP.
4. REFER TO DETAIL SD 6-9 "BLUE BOOK"

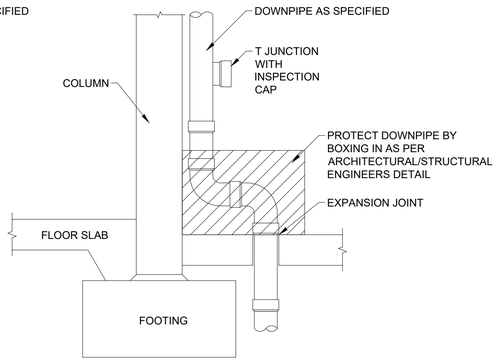
SEDIMENT FENCE - ALTERNATIVE
SCALE 1 : 20



GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP DETAIL
SCALE 1:20



SUFFICIENT CLEARANCE FROM TOP OF COLUMN FOOTING TO PAVEMENT SLAB



TOP OF COLUMN FOOTING AT SHALLOW PATH

DOWNPIPE ADJACENT TO COLUMN - TYPICAL DETAIL
SCALE 1:20

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B	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

CLIENT: X. L. HE

ARCHITECT: BJ ARCHITECTS INTERNATIONAL

CATES CONSULTING ENGINEERS
Address: Suite 2, 1 King Street, Concord West NSW Australia 2137
Email: info@CATES.com.au

PROJECT: ALTERATIONS TO EXISTING WAREHOUSE
86 BRYANT ST, PADSTOW NSW 2211

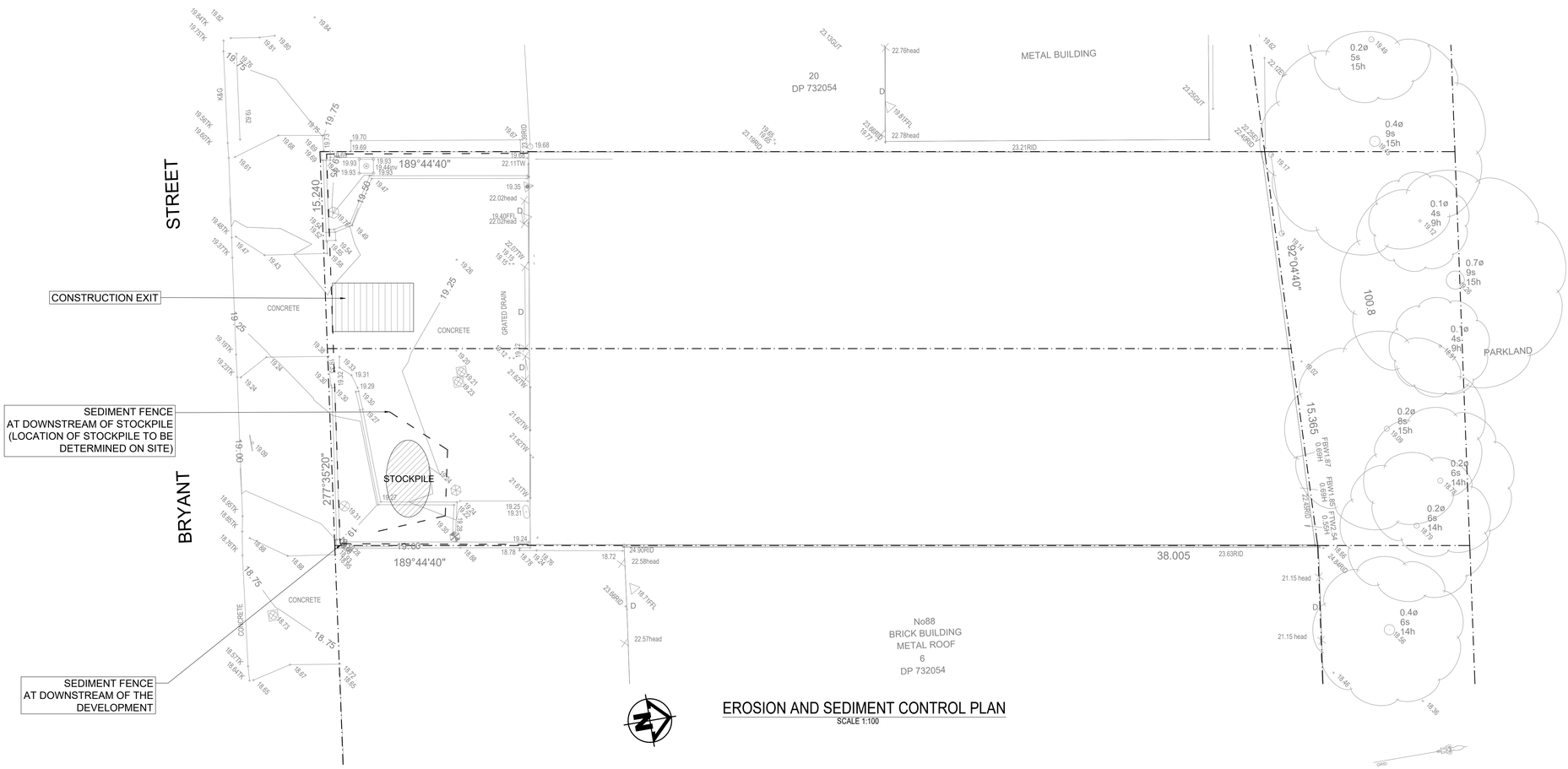
TITLE: STORMWATER DRAINAGE DETAIL

DRAWN	DESIGNED	DATE
HW	HW	AUGUST 2024
CHECKED	APPROVED	SCALE
DY	DY	1:20

DRAWING NUMBER: 24166C3.00

REVISION: B

A1



EROSION AND SEDIMENT CONTROL PLAN
SCALE 1:100

LEGEND

- PROPOSED BOUNDARY
- PROPOSED SILT FENCE
- 25.90 PROPOSED SPOT LEVEL
- PROPOSED SURFACE INLET PIT
- Ø100 DP DOWNPIPE FROM ABOVE
- Ø100 DP DOWNPIPE CONTINUES UNDER
- ØXXX CHARGED PIPE SIZE AS NOMINATED
- ØXXX UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- PO PLANTER OUTLET
- FW FLOOR WASTE
- RO ROOF OUTLET
- GRATED DRAIN
- SP DOWNPIPE SPREADER

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

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Email: info@CATES.com.au

PROJECT: ALTERATIONS TO EXISTING WAREHOUSE
86 BRYANT ST, PADSTOW NSW 2211

TITLE: EROSION AND SEDIMENT CONTROL PLAN

DRAWN	DESIGNED	DATE
HW	HW	AUGUST 2024
CHECKED	APPROVED	SCALE
DY	DY	1:100

DRAWING NUMBER: 24166C4.00

REVISION: B

A1

EXISTING DRIVEWAY TO BE REINSTATED WITH KERB AND GRASS AS PER CCB COUNCIL'S SPECIFICATIONS

SAW CUT AND BOX OUT EXISTING PAVEMENT 300 WIDE AND 240 DEEP.REINSTATE PAVEMENT WITH 40 THICK AC14 OVER AC20 LAID IN 50-100 THICK LAYERS

PROPOSED HEAVY DUTY DRIVEWAY AS PER CCB COUNCIL'S SPECIFICATIONS

STREET

BRYANT

BOUNDARY

15.240

277°35'20"

189°44'40"

189°44'40"

19.00

PARKING FOR UNIT 1

PARKING FOR UNIT 2

LS1

LS2

RCL:19.37

RCL:19.07

LIP:19.19

IG:19.15

LB:19.37

BDY:19.49

LIP:18.89

IG:18.85

LB:19.07

BDY:19.27

GR:19.20

GR:19.20

RL+19.490

RL+19.200

FFL+19.200

CONCRETE

CONCRETE

CONCRETE

SLOPE 2.5%

DRIVE WAY

Awining outline above

Bollard 1.3m high

Bollard 1.3m high

GRATED DRAIN

Void Above

Void Above

3 m² FREE AREA OF PERFORATED DOOR

3 m² FREE AREA OF PERFORATED DOOR

SERVICE BAY/ UNLOADING/ LOADING AREA

SERVICE BAY/ UNLOADING/ LOADING AREA

Proposed Concrete Column refer to structure plan

20
DP 732054

No88
BRICK BUILDIN
METAL ROOF
6
DP 732054

DRIVEWAY PLAN
SCALE 1:50

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
E	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
3	REVISED DRAWING	WG	DY	24/02/2025
2	REVISED DRAWING	WG	DY	19/02/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
D	FOR S138 APPLICATION	HW	DY	13/12/2024
C	REVISED DRAWING	HW	DY	26/10/2024
B	REVISED DRAWING	HW	DY	06/09/2024
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

CLIENT
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PROJECT
ALTERATIONS TO EXISTING WAREHOUSE
86 BRYANT ST, PADSTOW NSW 2211

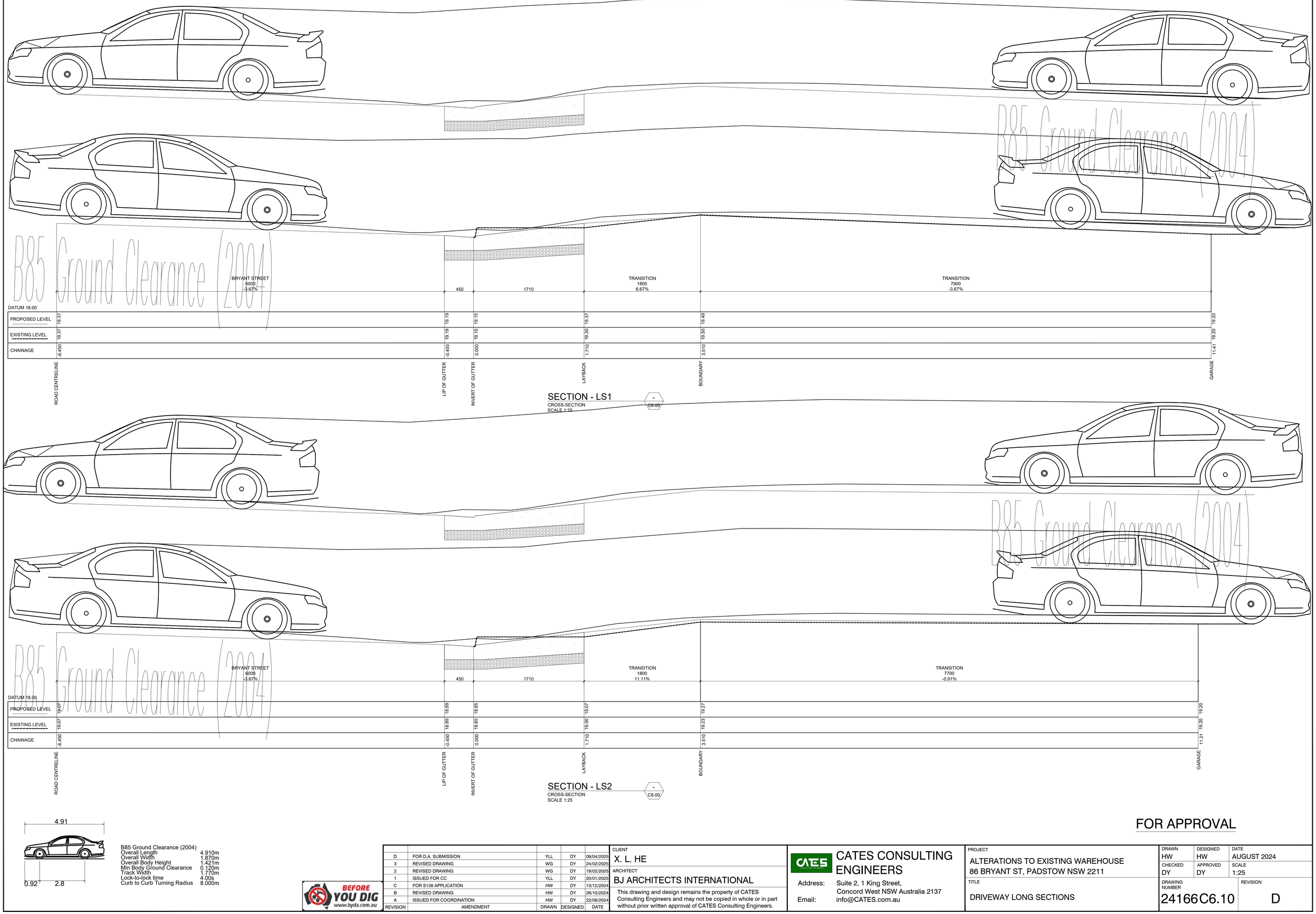
TITLE
DRIVEWAY PLAN

DRAWN	DESIGNED	DATE
HW	HW	AUGUST 2024
CHECKED	APPROVED	SCALE
DY	DY	1:50

DRAWING NUMBER
24166C6.00

REVISION
E

A1



SECTION - LS1
CROSS-SECTION
SCALE 1:25

- C6.00

SECTION - LS2
CROSS-SECTION
SCALE 1:25

- C6.00

B85 Ground Clearance (2004)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.120m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	8.000m

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REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
D	FOR D.A. SUBMISSION	YLL	DY	09/04/2025
3	REVISED DRAWING	WG	DY	24/02/2025
2	REVISED DRAWING	WG	DY	19/02/2025
1	ISSUED FOR CC	YLL	DY	20/01/2025
C	FOR S138 APPLICATION	HW	DY	13/12/2024
B	REVISED DRAWING	HW	DY	26/10/2024
A	ISSUED FOR COORDINATION	HW	DY	22/08/2024

CLIENT
X. L. HE

ARCHITECT
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Email: info@CATES.com.au

PROJECT
ALTERATIONS TO EXISTING WAREHOUSE
86 BRYANT ST, PADSTOW NSW 2211

TITLE
DRIVEWAY LONG SECTIONS

DRAWN	DESIGNED	DATE
HW	HW	AUGUST 2024
CHECKED	APPROVED	SCALE
DY	DY	1:25

DRAWING NUMBER
24166C6.10

REVISION
D

APPENDIX 7 – Traffic Impact Assessment

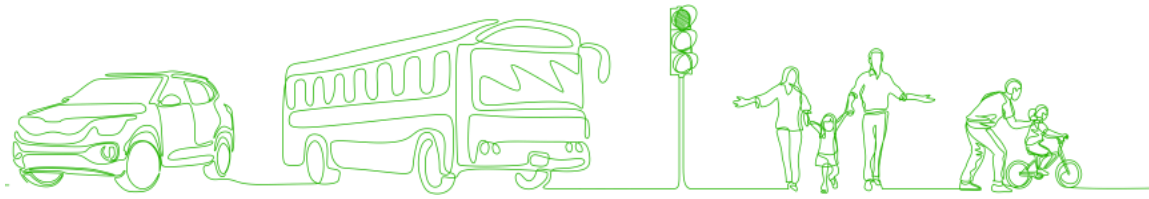
fernway
engineering

Transport Impact Assessment

86 Bryant Street, Padstow NSW 2211

Subdivision & Construction of Industrial Warehouse

April 2025



Type of Report: Transport Impact Assessment

Site Location: 86 Bryant Street, Padstow NSW

Prepared for: Xiang Lin He

Prepared by: Fernway Engineering

ACN 642 585 546

www.fernway.net.au

Version	Author	RPEQ	Position	Release Date
DRAFT	Chris Saunders	24648	Principal Transport Engineer	22.8.2024
1.0	Chris Saunders	24648	Principal Transport Engineer	9.9.2024
1.1	Chris Saunders	24648	Principal Transport Engineer	10.9.2024
1.2	Chris Saunders	24648	Principal Transport Engineer	11.9.2024
2.0	Chris Saunders	24648	Principal Transport Engineer	15.10.2024
2.1	Chris Saunders	24648	Principal Transport Engineer	24.10.2024
3.0	Chris Saunders	24648	Principal Transport Engineer	09.04.2025

Table of Contents

1. Introduction

Fernway Engineering has been engaged by the Applicant to provide a traffic impact assessment for the proposed subdivision of the site located at 86 Bryant Street, Padstow NSW.

The scope of this report is as follows:

- Review the project background along with the existing traffic and parking conditions in the vicinity of the subject site,
- Assess the sufficiency of the proposed on-site car parking and servicing provisions, based on the statutory parking provision requirements applicable to the proposal,
- Review the proposed on-site car parking, pedestrian, servicing and site access designs against the relevant AS2890 Australian Standard requirements, as relevant to the proposed modifications,
- Identify the anticipated additional traffic generations from the proposed development and assess the potential impacts this may have on the safety and operations of the local road network; and,
- Make a conclusion on the proposed development from a traffic and parking perspective, based on the above findings,

2. Background

2.1 Site Context

The subject site is located at 86 Bryant Street, Padstow NSW. The land is approximately 567.5m² with a 15.24m frontage to Bryant Street. The site is currently occupied by an automotive repair business.

The site lies within the centre of a Light Industrial (E1) zone, and is typical in size and character to the surrounding land use. Some significant features near the site include:

- The M5/A6 interchange abuts the northeast boundary of the site,
- The nearest residential precinct is 450m west,
- The nearest school, being Padstow North Public School, is 1.18km travel from the site,
- The site is not proximate to any hospitals, schools, local centres or other sensitive sites,

Figure 1 shows the site location from an aerial perspective.

Figure 2 shows the site frontage as seen from a street view.

Figure 3 shows the site in the context of the wider road network.

Figure 1: Aerial View of the Subject Site (Source: Nearmaps)

Figure 2: Streetview of Subject Site on Bryant Street, Facing East (Source: Google maps)

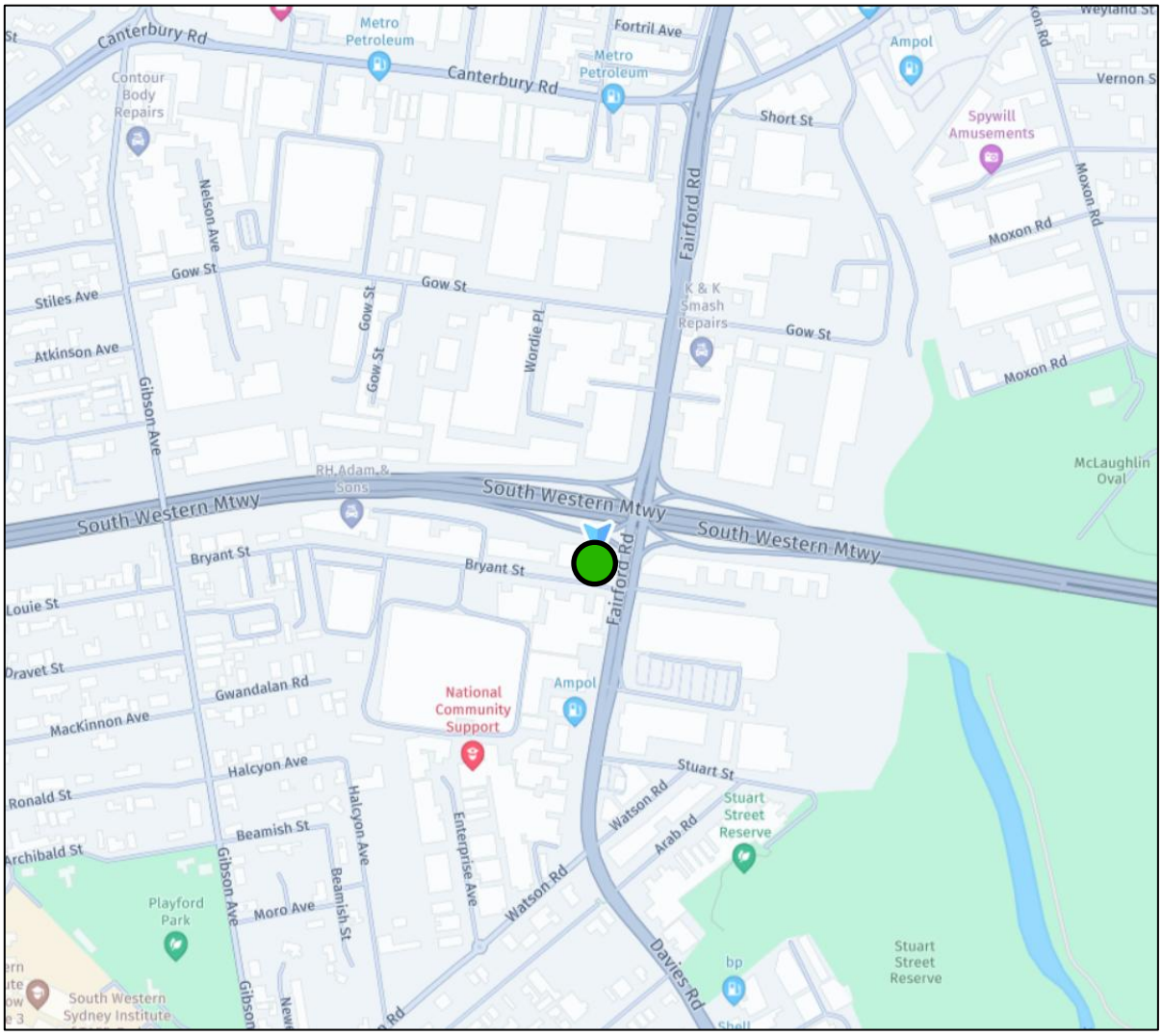


Figure 3: Map of Local Road Network (Source: Nearmaps)

2.2 The Proposal

The application proposes to subdivide the property into two lots, as well as demolish the existing building and construct two adjoining warehouse units. This will result in a net GFA increase of 139.2m².

The combined gross floor area of the two proposed units is 560.1m² space, inclusive of a proposed mezzanine level. With respect to vehicle arrangements, the site proposes the following provisions:

- Reposition and widen the single existing driveway.

- Provision of 1 parking space for each lot
- Provision of one SRV loading bay for each unit.

The proposed site plan has been provided below.

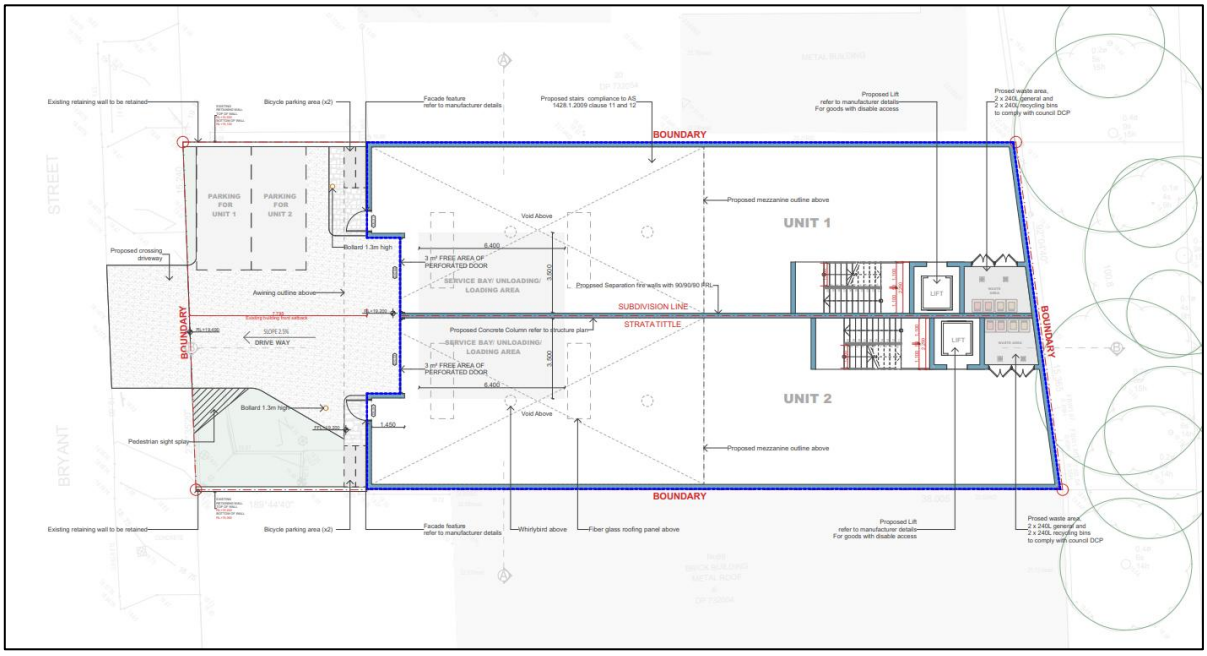


Figure 4: Proposed Site Plan

2.3 Local Road Network

The local road network is summarised as follows:

Table 1 - Local Road Network Summary

Road	Description
Bryant Street (Site Access)	**Description:** A local two-way, two-lane road aligned east-west between Fairford Street and Gibson Ave. It primarily serves as access for adjoining properties. **Proximate Intersections:** 1. Unsignalised 4-leg intersection (minor leg) with Fairford Road (Stop Controlled) **Restrictions:** None. **Road Authority:** Council **Signed speed limit:** 50kph (Local Traffic Area) **Parking:** Typically unrestricted both sides. **Bus Route:** No. **Bike Path:** No dedicated facilities. **Footpath:** None present. **Traffic Calming:** None present. **School Zone:** No.
Fairford Road (A6)	**Description:** Fairford Road is a divided two-way, 6-lane arterial road forming part of the major A6 north-south corridor. **Proximate Intersections:** 1. Signalised level separated interchange with M5. 2. Unsignalised 4-leg intersection (major leg) with Bryant Street Road (Stop Controlled) **Restrictions:** No Right Turn, from Fairford Road into Bryant St. **Road Authority:** Transport for NSW **Signed speed limit:** 70kph **Parking:** Subject to Clearway restrictions. . **Bus Route:** Yes – M91. **Bike Path:** No. **Footpath:** Present on both sides. **School Zone:** No.
South Western Motorway (M5)	**Description:** The M5 motorway is a divided two-way, 6-lane motorway forming the southern corridor of Sydneys Orbital Road Network. **Proximate Intersections:** 1. Signalised level separated interchange with A6. **Road Authority:** TfNSW **Signed speed limit:** 100kph **Parking:** No parking permitted. **Bus Route:** Yes – numerous routes. **Bike Path:** Marked paths on shoulders. **Footpath:** None. **School Zone:** No.

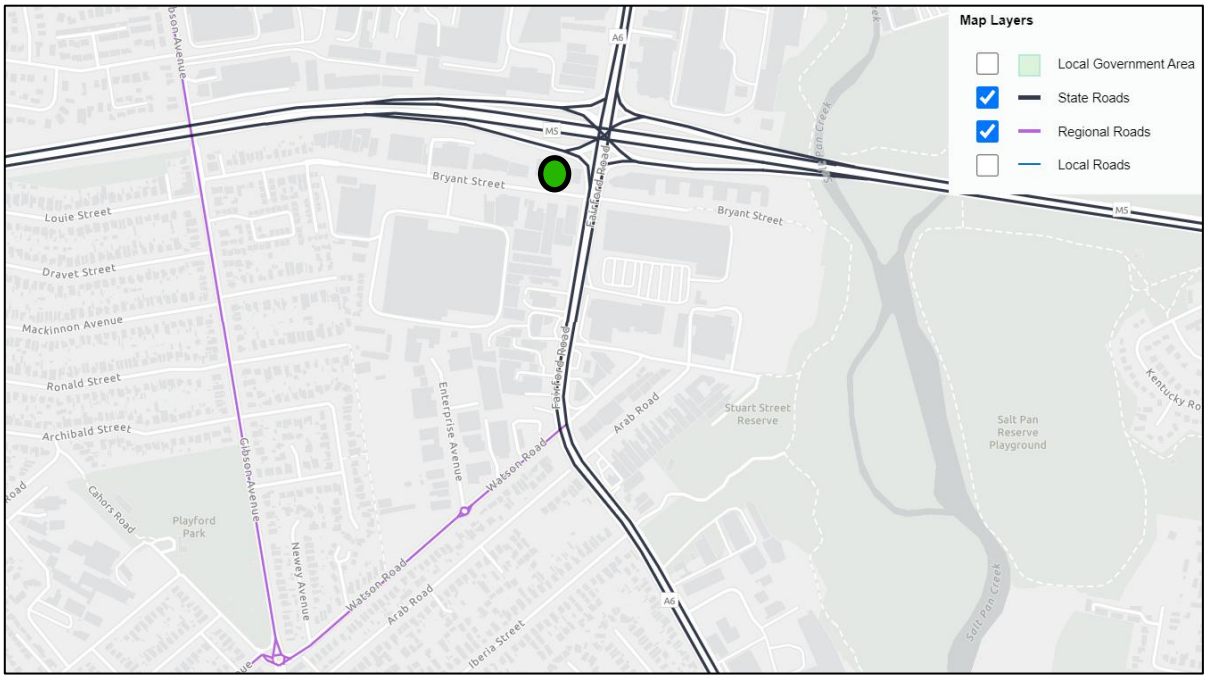


Figure 5: Classified Road Network (Source: TfNSW)

2.4 Public Transport Accessibility

The subject site has been assessed in the context of accessibility via public transport.

With regard to trains, the site is a 20-minute walk to Padstow Station. This is considered lying outside the typical 'comfortable' walking catchment, but is nonetheless a feasible transport option for many potential staff, and offers regular train services across a wide catchment of Sydney.

With respect to buses, the site is better served, being located less than 100m from the high frequency M91 service amongst other local routes.

In summary, the site has good access via public transport, noting the high frequency of nearby services, and coverage of key centres including Parramatta, Hurstville and Blacktown.

Details of the public transport services are provided in the table below.

Table 2 – Local Public Transport Services

Service	Coverage	Peak Frequency	Proximity to Site (Walking)
BUSES			
M91 (Fairford Rd)	Hurstville to Parramatta via Padstow & Chester Hill	10 minutes (Weekdays) 20 minutes (Weekends)	80m (1 minute)
927 (Gibson Ave)	One Tree Point to Padstow	30 minutes (Weekdays)	700m (10 minutes)
960 (Gibson Ave)	Sutherland to Bankstown	15 minutes (Weekdays) 20 minutes (Weekends)	700m (10 minutes)

2.5 Active Transport Accessibility

The site has also been assessed for its accessibility by means of walking and cycling by staff.

With regard to walking, it was found that the 1km catchment does not comprise a dense residential population, and as such, walking is not expected to form a significant form of travel to this site, notwithstanding multi-modal trips with buses.

With regard to cycling, however, the 30-minute cycling catchment encompasses a much greater residential population. With respect to cycling infrastructure, the site is quite well situated, being located adjacent to several key cycling corridors, including:

- M5 offers a significant east-west corridor via a combination of marked shoulders and off-road routes)
- Salt Pan Creek Track offers a significant north-south corridor via off-road paths

In summary, the site is relatively well situated for cycling, which may offer an attractive option for some staff.

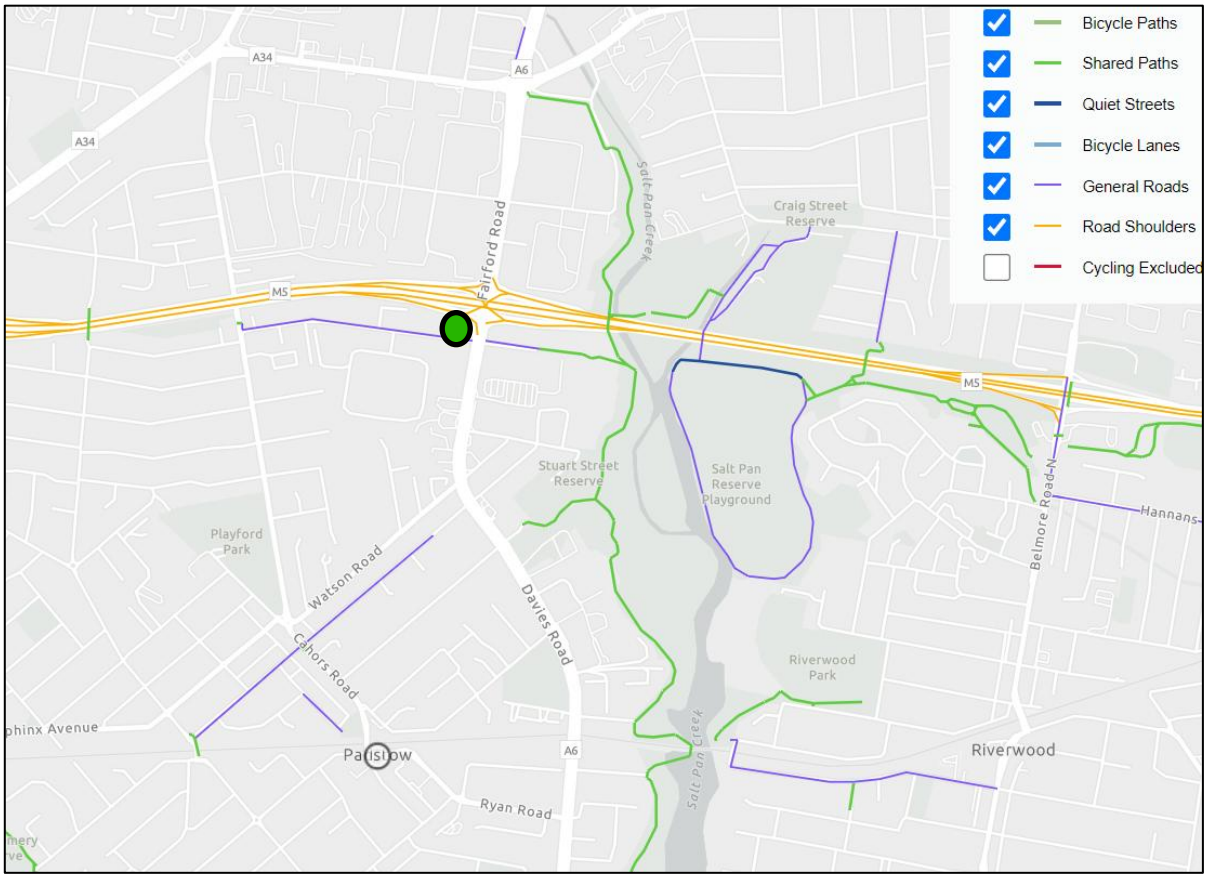


Figure 6: Local Cycling Network (Source: TfNSW Cyclefinder)

3. Parking Provision Assessment

3.1 Car Parking Provisions

Car parking provisions for the proposed development have been determined with reference to the Canterbury Bankstown Development Control Plan (DCP) 2023.

The applicable car parking provisions for warehouses are provided in the Off-Street Parking Schedule of Chapter 3.2 of the DCP. This has been applied to both the existing scenario (vehicle repair business) and the proposal, as per the table below.

Table 3 - Parking Provision Summary

Component	Rate	Unit of Measurement	Required Provision	On-Site Provision	Status
EXISTING					
Vehicle Body Repair Workshop	6 spaces per work bay	2 workbays	12	3	**Shortfall (-9 spaces)**
PROPOSED					
Warehouse	1 space/300m² GFA	560.1m²	2	2	**Compliant**

The proposed parking provisions satisfy DCP parking requirements.

3.2 Accessible Parking Provisions

Section 2.7 of the DCP stipulates that, for facilities with less than 10 car spaces, disabled parking is not required.

3.3 Bicycle Parking Provisions

The applicable *bicycle* parking provisions for warehouses are provided in the Off-Street Parking Schedule of Chapter 3.2 of the DCP. This has been applied to the proposal as per the table below.

Table 4: Bicycle Parking Summary

Bicycle Requirement	Total Staff	Required Bicycle Spaces	Proposed Bicycle Spaces	Status
1 space per 20 staff	Below 20	1	2	**Compliant**
	TOTAL:	**1**	**2**	**Compliant**

The application therefore satisfies the bicycle parking requirements of the DCP.

3.4 Service Vehicles

A loading bay has been allocated within each unit. Each loading bay has been designed for up to 6.4m Small Rigid Vehicles (SRV), with 6.4mx3.5m dimensions and level gradients. Swept path analysis confirmed that an SRV may enter and exit each loading bay in a standard 3-point manoeuvre. A single reverse movement is required either from, or onto the roadway to achieve this. This is permitted under AS2890.2:2018 Section 3,2,3,2 for minor roads, and is considered appropriate for the scale of this proposed development, Swept paths are provided in **Appendix A**.

4. Parking and Access Design Review

The proposed parking arrangements have been reviewed in accordance with AS2890.1:2004 (Car Parking Facilities), AS2890.2 (Commercial vehicles), AS2890.3:2015 (Bicycle Facilities) and AS2890.6:2009 (Accessible Parking). Swept path testing has similarly been carried out for critical parking and circulation movements as per swept path testing guidelines outlined in AS2890.1:2004. The outcome of this assessment is provided below.

4.1 AS 2890 Design Compliance

A review of parking design elements has been summarised in the table below. This review found the development to be in full compliance with the relevant sections of AS2890 parking standards.

Table 5 - Car Park Compliance Summary

Design Element	Requirement	Able to Comply	Compliant	Note
ACCESS				
Access Category				**Section 4.2**
Located outside restricted intersection clearances	Figure 3.1, AS2890.1		✓	
Pedestrian Sight Splays maintained	Figure 3.3, AS2890.2		✓	
Driveway Sight Distances	Figure 3.3, AS2890 Part 2		✓	**Section 4.5**
PARKING MODULES				
Parking Class	1			
Bay Width (min)	2.4m		✓	
Bay Length (min)	5.4m		✓	
Aisle Width (min)	5.8 +300mm to wall		✓	
Door Clearances and entry splays (min)	0.3m As per Figure 5.2, AS2890.1		✓	
Blind Aisle extensions (min)	1m		✓	
Pavement Slope (maximum)	5%		✓	
CIRCULATION – See Note 1				

Maximum grade within 6m of property boundary	5%		✓	
Maximum Grade (AS2890.2)	1:6.5 (15.4%)		✓	
Maximum Transition (AS2890.2)	1:16 (6.25%) over 7m		✓	
Circulation Road Width	3.5m for a single lane (AS2890.2)		✓	
SERVICE BAYS				
Service Bay	3.5m x 8.8m (MRV) 3.5m x 6.4m (SRV)	✓		**Note 1**
Service Area Headroom	4.5m		✓	
Service Area Grade	1:25 (4%)		✓	
HEADROOM				
Minimum Clearance	2.2m		✓	
Minimum Clearance above Disabled Parking bays	2.5m		✓	
Service Vehicle Headroom	4.5m			
BICYCLE PARKING (AS2890.3)				
Horizontal Bay	1.8m x 0.5m		✓	
COMMENTS				
Note 1	The architectural plans shall be updated to indicate loading bays in each unit with dimensions 3.5m x 6.4m. This requirement can be conditioned for construction certification.			
Note 2	This table is intended to represent a summary of key design elements, and is not an exhaustive list of all design elements assessed in accordance with AS2890.			

4.2 Vehicle Manoeuvrability Conditions

To investigate the anticipated manoeuvrability conditions of vehicles entering and exiting the proposed parking spaces, swept path assessments were undertaken using AutoTURN software (the industry standard vehicle swept path assessment software).

It is noted that the design vehicle, being the largest anticipated on-site during operation, is a 6.4m Small Rigid Vehicle (SRV).

The swept path assessment demonstrated the following:

- An SRV may access and egress each loading bay in a standard 3-point turn.
- Vehicles may enter and exit the site in a forwards direction when accessing each of the proposed parking bays.
- All staff parking spaces can be accessed in a standard 3-point turning manoeuvre by a B85 vehicle.
- All turning manoeuvres can maintain a 300mm safety clearance to physical obstructions.

Attachment A shows the results of the swept path tests obtained. The **Black** colour of the swept paths indicates the vehicle body envelope, while the **blue** lines indicate the wheel path and the **Red** lines indicate the 300mm clearance envelope of vehicles).

4.3 Driveway Sight Distance

The sight distance of the proposed driveway has been assessed against the requirements of AS2890.2, Figure 3.3. Bryant Street has a signed speed limit of **50kph**. As such, a minimum safe intersection sight distance (SISD) of 69m must be achieved, with the desirable 8s gap being 111m.

Figure 7: SISD Assessment of the Proposed Driveway

When undertaking this SISD assessment, the following road conditions were noted:

- Bryant Street has a straight horizontal alignment in both directions
- To the west, there is a road crest, however, this is located approximately 110m from the driveway, beyond the minimum SISD.
- Bryant Street terminates 38m to the east, at the intersection with Fairford Road. Whilst this is less than the minimum 5s gap for a 50kph road, traffic entering from Fairford Road can be expected to be travelling below 50kph when turning into Bryant Street. On this basis, there is considered to be reasonable separation from the intersection with Fairford Road. It is noted that this is an existing condition, along with several other driveways that

are similarly operating within 69m of the intersection. Crash data does not indicate any historical crash patterns associated with this arrangement.

- Some areas of the SISD splay coincide with on-street parking areas, which is generally unavoidable in urban areas. Whilst on-street parking may result in partial and non-permanent visual obstructions, the risk is considered relatively low, noting that this is a pre-existing condition.
- On-street parking also creates a traffic calming effect, and in practice, enables vehicles to pull further into the road before entering the effective through-traffic lane.
- Whilst parking restrictions are not recommended in this report, Council manage on-street parking based on internal policies, and may determine whether parking restrictions are warranted.

In light of the above, the sight distance availability at the proposed driveway in considered acceptable.

5. Traffic Impact Assessment

An assessment has been undertaken to identify the traffic generating potential of the site, and assess the implications of that traffic on the local road network. For warehouse development, TfNSW (formerly RMS) conducted and published two sets of relevant survey data:

- *Guide to Traffic Generating Developments (2002)*
- *Updated Traffic Surveys (TDT 2013/04),*

The original guide is considered applicable to both the existing and proposed site.

5.1 Site Traffic Generation

Under this application, the proposed land use shall be for warehouse/storage.

The proposal will result in a GFA increase of 139.2m², being a slight increase in scale. Applying the traffic generation rates of Guide to Traffic Generating Developments (2002) for *warehouses*, results in predicted net traffic increases of 1-2 trips in the peak hour, and 7 daily trips overall. This is summarised in the Table below.

Table 6- Traffic Generation Summary of ***Proposed*** *Site*

Weekday Rates	**Rate per 100m² GFA**	**Net GFA (m²)**	**Net Additional Trips**
Daily vehicle trips	5	139.2	**7**
Morning peak hour vehicle trips	1	139.2	**1-2**

With regard to type of traffic, the RMS Updated Traffic Surveys (TDT 2013/04a) identified that for industrial estates, commercial vehicles made up between 6-28%. For this development, it is assumed around 17% of vehicles at this site will be commercial service vehicles.

When assessing the potential impact on road operations based on the above information, the following considerations were noted:

- The net traffic increase of 1-2 peak hour trips is marginal.
- In practice, the existing utilisation of the site as a car repair station is considered being among the higher traffic generating land uses for industrial applications. This redevelopment has the potential to generate considerably less traffic as warehouse units.
- The proposed access point is in a similar location to existing.

As such, the proposal is not likely to have any material impact on the existing operating performance of the local road network.

5.2 Crash Review and Traffic Safety

This section considered potential safety implications of the proposal on the road network. A review of crash statistics was carried out in the immediate area, using NSW Centre of Road Safety statistics, which currently shows data for the 5 year period between 2018-2022.

This review identified that there is a large volume of crashes at the interchange of the M5 and A6. This is not uncommon for an interchange, and must be considered in the context of the high volume of traffic passing through the intersection. Notwithstanding, as road manager, TfNSW regularly reviews and seeks to improve safety performances on the classified road network.

The review also identified quite a significant crash rate between Bryant Street and Fairford Road, with a total of 20 crashes occurring in this 5 year period. The

prevailing pattern of crashes is related to cross traffic collisions. Whilst a detailed crash analysis lies outside the scope of this report, this may be due to the significant number of lanes on Fairford Road that traffic on Bryant St may cross, being 4 in the northbound direction and 3 in the southbound direction. The proposed application is not expected to have a material influence on this existing crash pattern, given that it will generate very similar traffic characteristics to the present situation. Notwithstanding, the high volume of crashes places this intersection in the 'Black Spot' category, and should be considered by the Road Manager for safety upgrades under this funding program. It is recommended that prospective staff are made aware of the hazards of this intersection, and to drive with caution.

Finaly, on Bryant Street itself, 2 crashes have been recorded in the past 5 years. These are located along different sections of the road, and do not suggest a crash pattern.

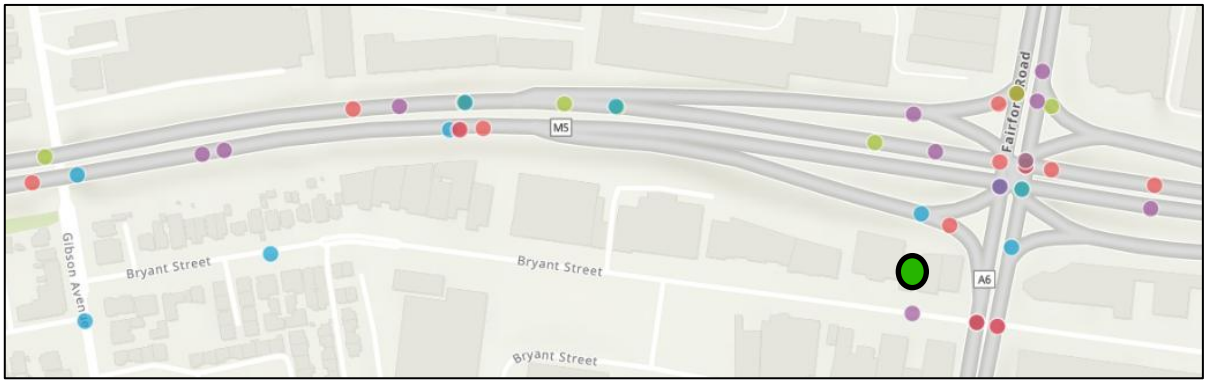


Figure 8: Crash Map (Past 5 Years)

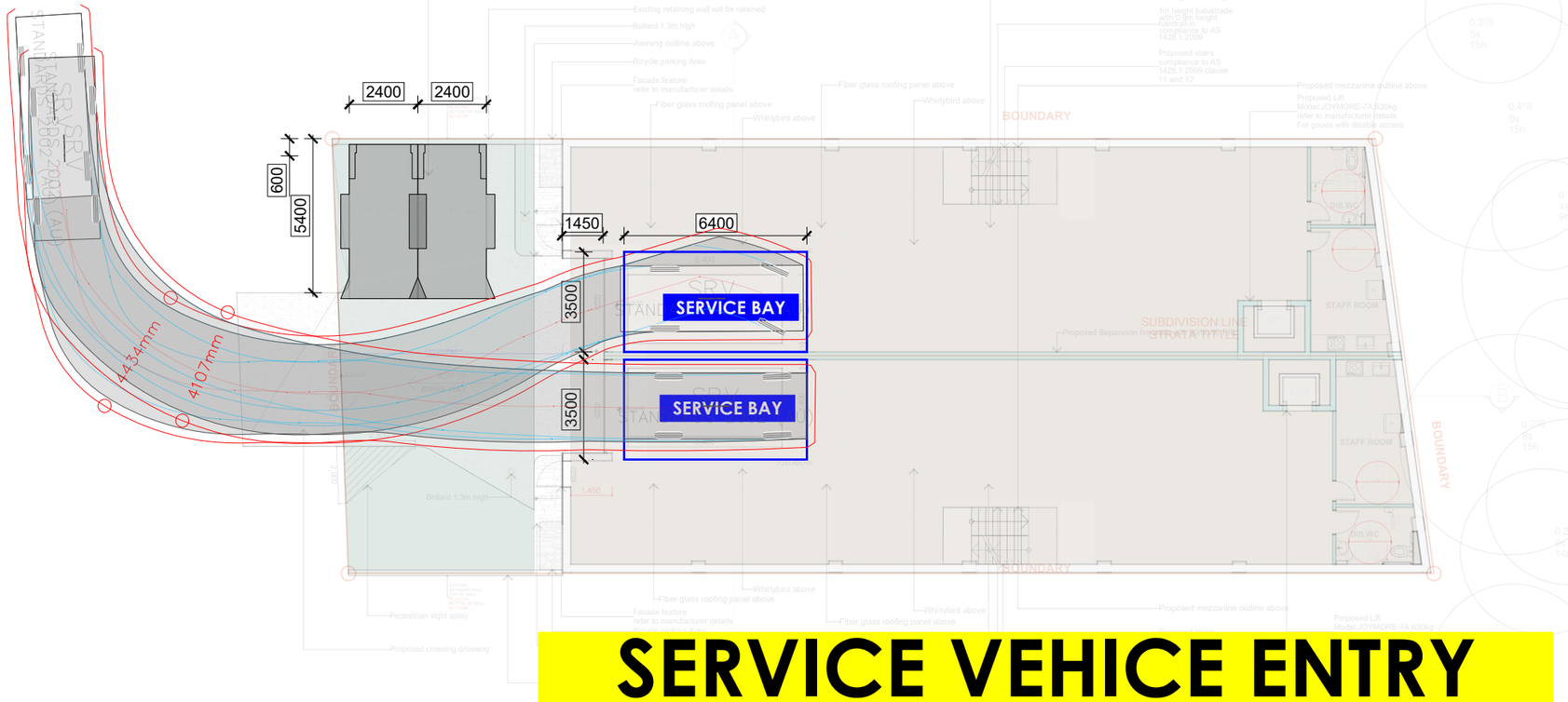
6. Conclusions

Fernway Engineering has conducted a comprehensive traffic and parking assessment of the proposed development at 86 Bryant Street, Padstow NSW. This assessment is summarised as follows:

- The proposal is for a subdivision, demolition of the existing building and the construction of two new warehouse units.
- The provision of 2 parking spaces meets the DCP parking requirements.
- 2 bicycle parking spaces have been provided, exceeding the DCP requirements. This should be considered on merit, noting the site has strong connectivity via several bicycle routes,
- Each unit is proposed to include a covered loading bay designed for SRVs in accordance with AS2890.2:2018,
- A design review of the access, parking and servicing arrangements was carried and confirmed that the facility generally complies with AS2890 Parts 1, 2 and 3. Where any deviations were identified, these were professionally assessed and deemed fit-for-use on the grounds described in this report,
- The proposal could be expected to generate an additional 1-2 trips and 7 trips in the peak hour period and daily period, over an equivalent land-use. In practice however, it is likely to result in lower traffic generations than the existing use as a car repair facility, which tends to generate higher traffic volumes than warehouses, due to the higher visitor volumes.
- The proposal is not anticipated to have any material impact on road operations,
- A safety review was also carried out. It found that the site achieved the relevant AS2890 requirements for safely integrating with a public road, including pedestrian sight splays. Given access is proposed in a similar location, and traffic characteristics are expected to remain similar to existing, there is no reason that the proposal should result in any new or worsening traffic hazards.

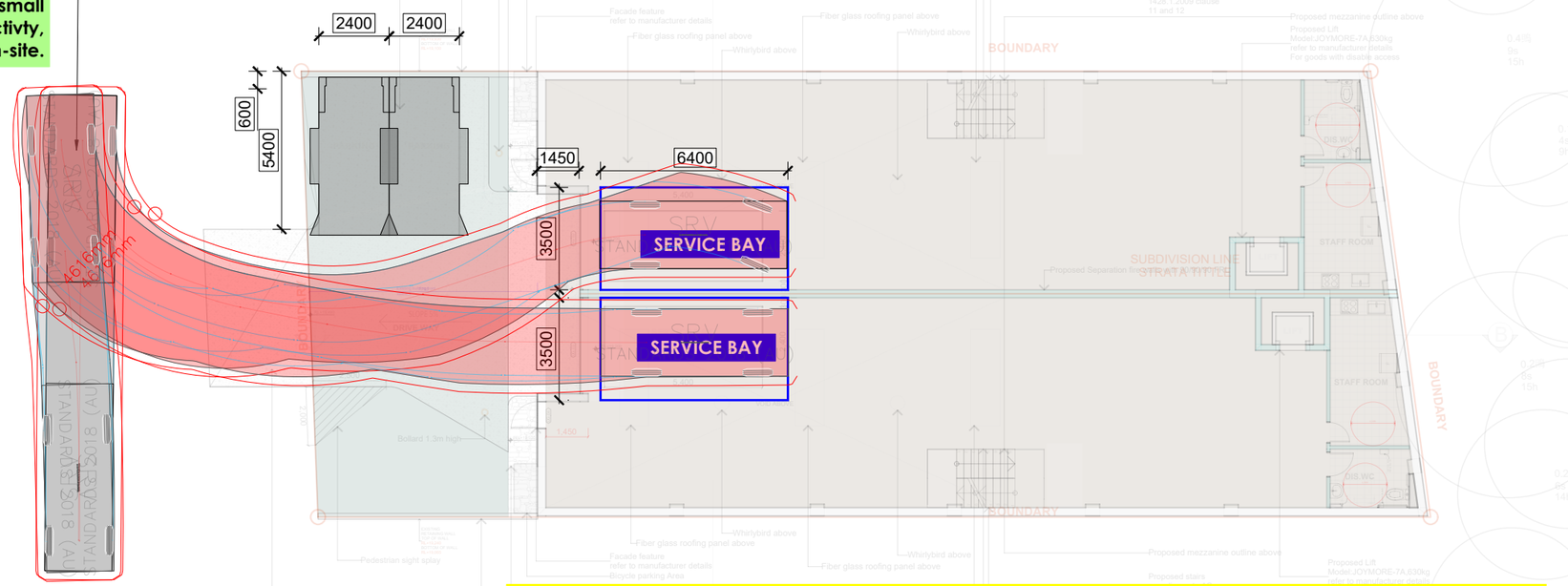
In light of the above, the proposal is considered supportable in the context of parking and traffic. Should you require any further information concerning this assessment, please do not hesitate to contact our office.

ATTACHMENT A – Swept Path Analysis



SERVICE VEHICE ENTRY

AS2890.2:2018 Part 3.2.3.2 (Minor Road Access) allows for service vehicles to make UP TO 1 REVERSE manoeuvre either onto, or off the street. This is considered common practice on Bryant Street, and reasonable given the that this is a small scale industrial site, with minimal vehicular activty, and limited space available on-site.



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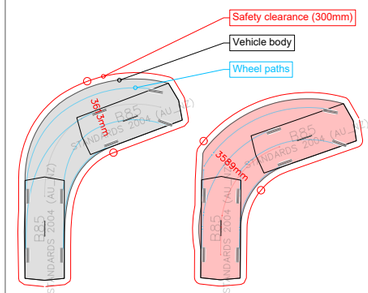

REV:	DESCRIPTION:	BY:	DATE:
STATUS:			

fernway engineering

CLIENT:
Xiang Lin He

SITE:
86 Bryant St, Padstow NSW

TITLE:
Swept Path Analysis

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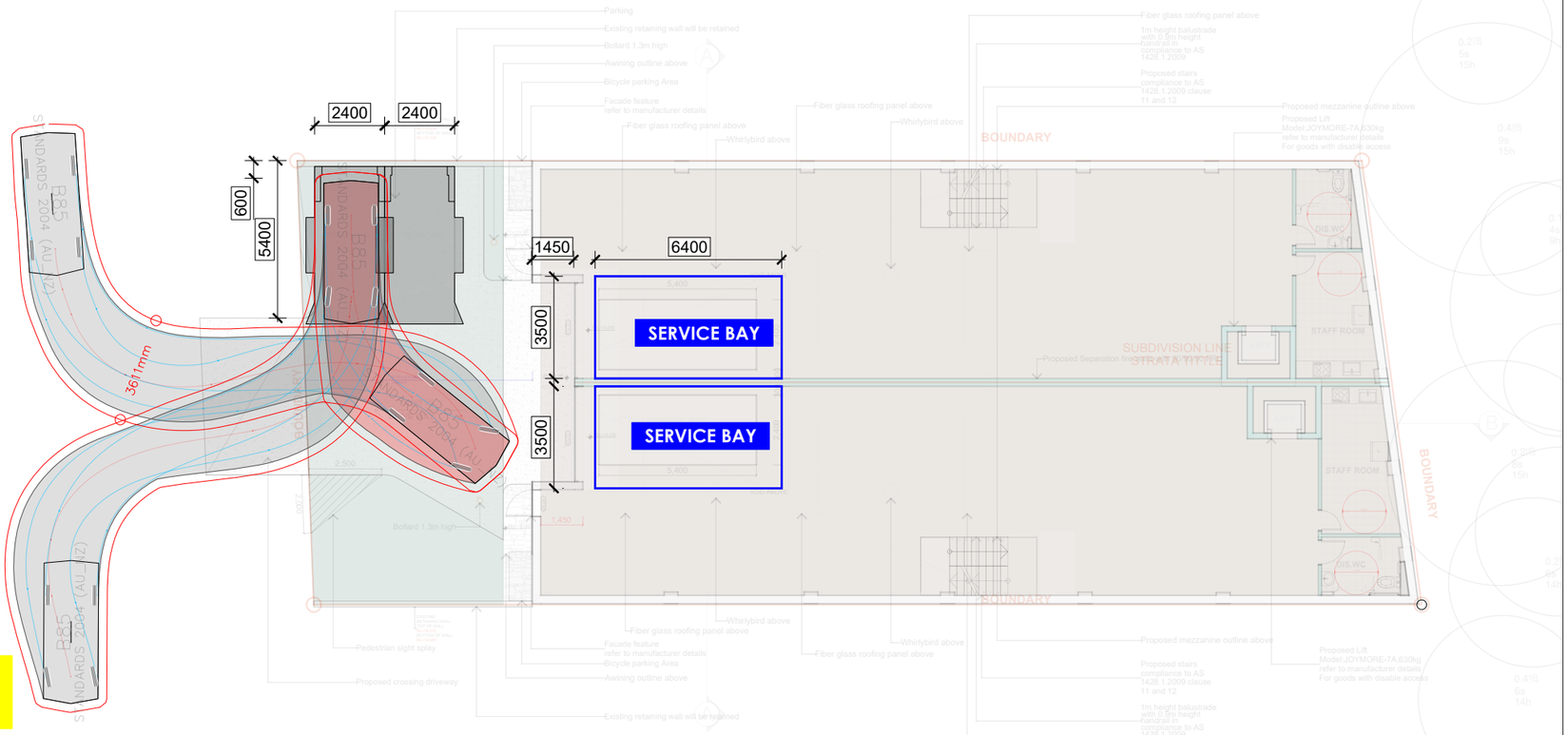

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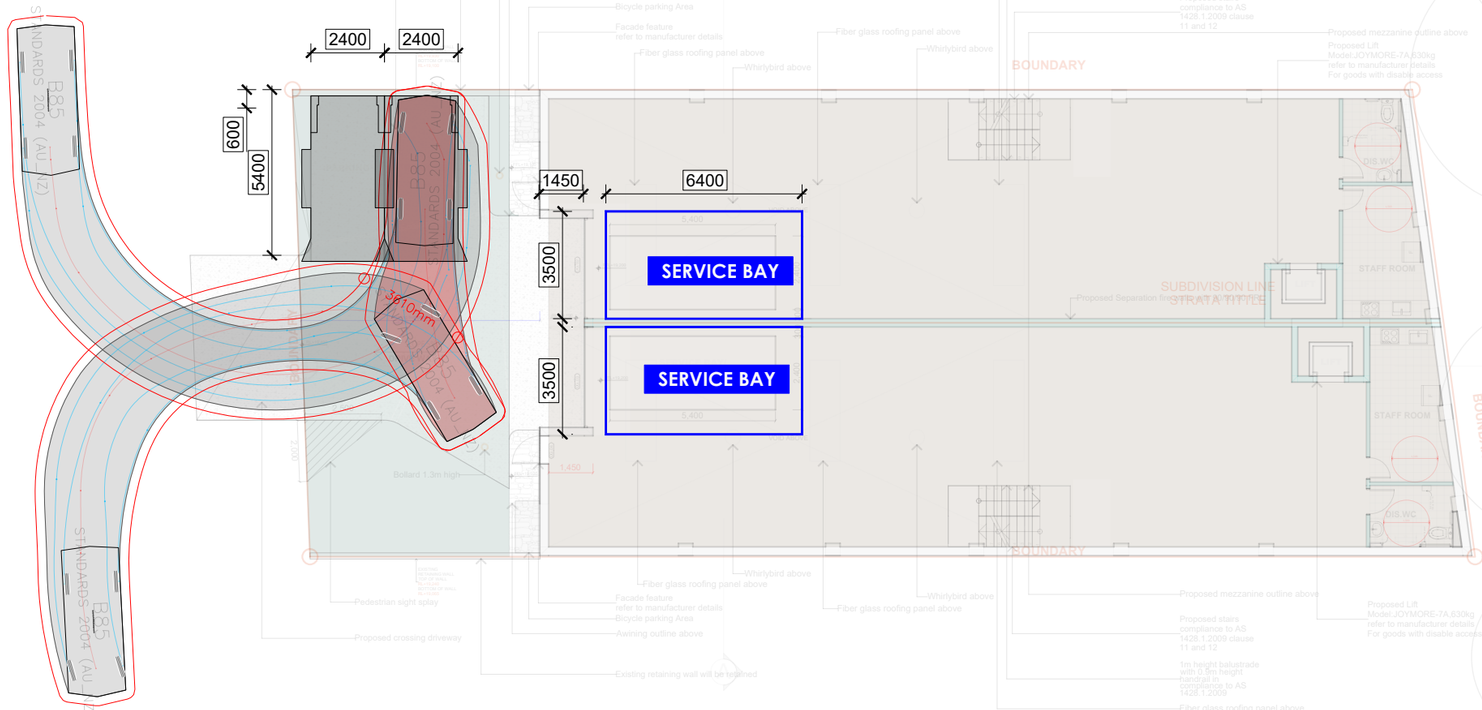

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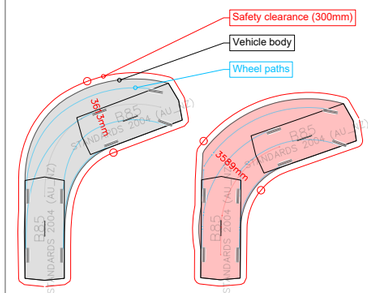

REV:	DESCRIPTION:	BY:	DATE:
STATUS:			

fernway engineering

CLIENT:
Xiang Lin He

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86 Bryant St, Padstow NSW

TITLE:
Swept Path Analysis

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:200	22.8.2024	CS	SP
PROJECT NO:	DRAWING NO:		REVISION:
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APPENDIX 8 – DCP Compliance Assessment Table

<table>
<tr><th>Control</th><th>Description</th><th>Response</th></tr>
<tr><td colspan="3">Chapter 3 General Requirements
Chapter 3.2 - Parking</td></tr>
<tr><td>Section 2–Off-Street Parking Rates</td><td>Off-street parking rates

2.1 Development must use the Off-Street Parking Schedule to calculate the amount of car, bicycle and service vehicle parking spaces that are required on the site.

<table>
<tr><th>Land use</th><th>Car spaces</th><th>Bicycle spaces</th></tr>
<tr><td>Warehouse or distribution centres</td><td>1 car space per 300m² GFA or 1 car space per 2 staff, whichever is the greater.

Note 1: Where a retailing component is involved and provided this does not exceed 15% of the gross floor area (covering the retail component only), 1 car space per 100m² gross floor area is to be provided.

Note 2: Where an office component is involved and provided this does not exceed 20% of the total gross floor area, 1 car space per 100m² gross floor area is to be provided. Any additional office space will be assessed at a rate of 1 car space per 40m² gross floor area.</td><td>1 space per 20 staff</td></tr>
</table></td><td>Complies

Each of the warehouses comprises one car parking spaces which will be located internal to the warehouse.</td></tr>
<tr><td>Section 3–Design and Layout</td><td>Parking location

3.1 Development must not locate entries to car parking or delivery areas:

(a) close to intersections and signalised junctions;
(b) on crests or curves;
(c) where adequate sight distance is not available;
(d) opposite parking entries of other buildings that generate a large amount of traffic (unless separated by a raised median island);
(e) where right turning traffic entering may obstruct through traffic;
(f) where vehicles entering might interfere with operations of bus stops, taxi ranks, loading zones or pedestrian crossings; or
(g) where there are obstructions which may prevent drivers from having a clear view of pedestrians and vehicles.</td><td>Complies

In terms of design and utility, the development features a loading / unloading activities for Small Rigid Vehicles (SRVs) internally to the proposed warehouses, which optimises the use of the limited space available. The configuration has been assessed and confirmed to generally comply with the Australian Standard AS2890 Parts 1, 2, and 3. Minor deviations from these standards have been evaluated and deemed acceptable in the context of their</td></tr>
</table>

		specific applications within the development.
	Access driveway width and design *3.8 The location of driveways to properties should allow the shortest, most direct access over the nature strip from the road*	**Complies** The access is confirmed to be adequate for access for Small Rigid Vehicles (SRVs) swept path diagrams have been provided to demonstrate ingress and egress.
	Loading and unloading facilities *3.15 The design of loading docks must:* *(a) be separate from parking circulation or exit lanes to ensure safe pedestrian movement and uninterrupted flow of other vehicles in the circulation roadways;* *(b) allow vehicles to enter and leave the site in a safe manner; and* *(c) have minimum dimensions of 4m by 7m per space.*	**Complies** In terms of design and utility, the development features a loading / unloading activities for Small Rigid Vehicles (SRVs) internally to the proposed warehouses, which optimises the use of the limited space available. The configuration has been assessed and confirmed to generally comply with the Australian Standard AS2890 Parts 1, 2, and 3. Minor deviations from these standards have been evaluated and deemed acceptable in the context of their specific applications within the development.
	Sight distance requirements *3.19 For all development, adequate sight distance must be provided for vehicles exiting driveways. Clear sight lines are to be provided at the street boundary to ensure adequate visibility between vehicles on the driveway and pedestrians on the footway and vehicles on the roadway.*	**Complies** Adequate site distances have been demonstrated by the Traffic Impact Assessment and the Architectural Plans.
	Pedestrian access *3.20 Parking areas should be designed so that through-traffic is excluded, and pedestrian entrances and exits are separate from vehicular entrances and exits.*	**Complies** Pedestrian entrances are separate to vehicle entrances.
Chapter 3.7 - Landscape		

Section 2– Landscape Design	*Existing vegetation and natural features* *2.1 New landscaping is to complement the existing street landscaping and improve the quality of the streetscape.*	**Complies** The existing landscaped area is 18m². The proposal seeks to increase the landscaped area on Site to 25m² which is considered a significant enhancement of the Site.
	2.2 Development, including alterations and additions, is to minimise earthworks (cut and fill) in order to conserve site soil. Where excavation is necessary, the reuse of excavated soil on site is encouraged.	**Complies** The proposal has sought to minimise the cut and fill where possible.
	Design and location of landscape *2.3 The landscape design is to contribute to and take advantage of the site characteristics.*	**Complies** The landscape has been designed to take advantage of the site characteristics. In particular, the proposal includes a staff rest area which would contribute positively to the Site.
	2.4 The landscape design is to improve the quality of the streetscape and communal open spaces by: *(a) providing appropriate shade from trees or structures;* *(b) defining accessible and attractive routes through the communal open space and between buildings;* *(c) providing screens and buffers that contribute to privacy, casual surveillance, urban design and environmental protection, where relevant;* *(d) improving the microclimate of communal open spaces and hard paved areas;* *(e) locating plants appropriately in relation to their size including mature size;* *(f) softening the visual and physical impact of hard paved areas and building mass with landscaping that is appropriate in scale;* *(g) including suitably sized trees, shrubs and groundcovers to aid climate control by providing shade in summer and sunlight in winter.*	**Complies** The proposal represents greater landscaping than the existing Site and is considered visually and socially enhance the Site. Further, 2 street trees have been proposed in the frontage which is considered to have a positive impact.
	2.5 The landscape of setbacks and deep soil zones must:	**Complies**

	(a) provide sufficient depth of soil to enable the growth of mature trees; *(b) use a combination of groundcovers, shrubs and trees;* *(c) use shrubs that do not obstruct sightlines between the site and the public domain; and* *(d) where buffer or screen planting is required, use continuous evergreen planting consisting of shrubs and trees to screen the structure, maintain privacy and function as an environmental buffer.*	The landscape scheme has sought to maximise the soft landscaped area by collating in one location.
	Trees *2.6 Development must consider the retention of existing trees, including street trees, in the building design.*	**Complies** There are currently no street trees or trees on the Site. The proposal includes 1 additional tree on Site and 2 street trees.
	2.7 Development must plant at least one canopy tree for every 12m of front and rear boundary width and: *(a) Canopy trees are to be of a minimum 75 litre pot size.* *(b) Use deciduous trees in small open spaces, such as courtyards, to improve solar access and control of microclimate.* *(c) Place evergreen trees well away from the building to allow the winter sun access.* *(d) Select trees that do not inhibit airflow.* *(e) Provide shade to large hard paved areas using tree species that are tolerant of compacted/deoxygenated soils.*	**Complies** The proposal includes 2 street trees.
	2.8 Development must provide street trees that will contribute to the canopy where possible.	**Complies** The proposal includes 2 street trees.
Chapter 9 Industrial Precincts **Chapter 9.1 - General Requirements**		
Section 1– Introduction	*Desired character* *C2 Light Industrial Precinct The Light Industrial Precinct will continue to support successful employment and economic activity as its primary role. This precinct is vital to Canterbury-Bankstown's position and future economic success in the Central River City, and will continue to offer residents jobs closer to home.*	**Complies** The Site is located within an IN2 Light Industrial zone to the CBLEP 2023. The proposed development is considered commensurate of the surrounding development and is appropriate in its setting.

	The built form will be mostly contemporary light industries, warehouses and urban services within a safe and high quality environment. These uses would be 'light' in nature, meaning they would not cause nuisance or adversely affect the surrounding amenity by way of noise or emissions. Non-industrial development will be limited to land uses that are compatible with the primary employment role of the precinct.	The proposal does not exhibit any significant environmental impacts and is not considered to adversely impact on the surrounding amenity of adjoining sites. The proposal is permitted with consent and align with the objectives of the zone. The proposed development is considered appropriate in its context and commensurate with the surrounding development.
Section 2–Building Form and Landscape	*Site cover* *2.1 The sum of the total area of building(s) on the ground floor level must not exceed 70% of the site area.*	**Complies on Merit** The proposed site coverage is consistent with the existing building.
	Street setbacks *2.2 This clause applies to land within the former Bankstown Local Government Area:* *(a) Where sites adjoin a state or regional road (refer to Appendix 1), the minimum setback to the primary and secondary street frontages is 15m.* *(b) Where sites do not adjoin a state or regional road, the minimum setback to:* *(i) the primary street frontage is 10m; and* *(ii) the secondary street frontage is 3m.*	**Complies on Merit** The proposal is consistent with the setbacks of the existing building.
	2.3 This clause applies to land within the former Canterbury Local Government Area: *(a) The minimum setback to the primary street frontage is 5m.* *(b) The minimum setback to the secondary street frontage is 2m*	**N/A**
	2.4 Despite clauses 2.2 and 2.3, Council may vary the minimum setback provided the development: *(a) complies with any statutory alignment that applies to the site; or*	**Complies** The proposal utilises the built form envelope of the existing industrial

	(b) provides adequate space to meet the vehicle access, car parking, loading and landscaping controls; or *(c) demonstrates compatibility with the building alignment of neighbouring development or the desired character of the area; or* *(d) achieves an appropriate bulk and scale.*	building and maintains the existing setback.
	Side and rear setbacks *2.5 Council may require minimum setbacks to the side and rear boundaries of the site:* *(a) to maintain reasonable solar access or visual privacy to neighbouring dwellings; or* *(b) to avoid an easement or tree dripline on the site or adjoining sites; or* *(c) to comply with any multi-level risk assessment undertaken for a development that ascertains the need for an appropriate setback or buffer zone between the development and any adjoining or neighbouring land within a residential zone.*	**Complies** The proposal utilises the built form envelope of the existing industrial building and maintains the existing setback.
	2.6 The design of buildings must ensure that: *(a) At least one living area of a dwelling on an adjoining site must receive a minimum three hours of sunlight between 8.00am and 4.00pm at the midwinter solstice. Where this requirement cannot be met, the development must not result with additional overshadowing on the affected living areas of the dwelling.* *(b) A minimum 50% of the required private open space for a dwelling that adjoins a development receives at least three hours of sunlight between 9.00am and 5.00pm at the equinox. Where this requirement cannot be met, the development must not result with additional overshadowing on the affected private open space.*	**Complies** The Site is surrounded by industrial uses.
	Open space *2.10 Development must provide a landscaped area along the primary and secondary street frontages of a site in accordance with the following minimum widths:*	**Complies on Merit** Whilst the proposal does not strictly comply with this control, the proposal results in greater permeable area on the Site than the existing. As such, the proposal is considered to comply on merit.

	<table><tr><th>Site area</th><th>Sites adjoining a state or regional road Minimum width for landscaped area</th><th>Sites not adjoining a state or regional road Minimum width for landscaped area to the primary street frontage</th><th>Sites not adjoining a state or regional road Minimum width for landscaped area to secondary street frontage</th></tr><tr><td>Less than 600m²</td><td>2.5m</td><td>2.5m</td><td>2.5m</td></tr></table> *Despite this clause, Council may vary the minimum setback provided the development complements a high quality landscaped image of neighbouring development or the desired future character of the area.*	
	2.11 Development must: *(a) retain and protect any existing trees identified by Council on the site and adjoining sites; and* *(b) must not change the ground level (existing) within 3m of the base of the trunk or within the dripline, whichever is the greatest.*	**Complies** The proposal does not seek to remove any flora and fauna.
	2.12 Development must plant at least one street tree at 5m intervals along the length of the primary and secondary street frontages. Council may vary this requirement in response to proposed tree species, site constraints limit their inclusion or a street tree already exists in good condition.	**Complies** The proposal has incorporated 2 street trees.
	2.13 Development must plant trees in the landscaped area at a minimum rate of one canopy tree per 30m2 of the landscaped area. The canopy tree must be capable of achieving a mature height greater than 5m.	**Complies** The proposal incorporates a soft landscaped area of 25m² and as such, one tree is proposed.
	2.14 Where development proposes an outdoor car park with 20 or more car parking spaces, the car park design must include at least one tree per 5 car parking spaces to the following specifications: *(a) a tree must be a single trunk species to allow a minimum visibility clearance of 1.5m measured above the ground level (existing); and* *(b) a tree must be planted in an island bed that is a minimum 2m in width and 4m in length.*	**N/A**
	Employee amenities *2.15 Development must provide an outdoor employee amenity area with a minimum area of 25m2 . This area should include a combination of grass,*	**Complies**

	plantings, pavement, shade, and seating to allow employees to engage in a pleasant working environment.	The proposal incorporates an employee amenity area / landscape area of 25m².
	2.16 Development must locate the employee amenity area away from sources of intrusive noise (such as loading and servicing, and heavy machinery), dust, vibration, heat, fumes, odour or other nuisances.	**Complies** The employee amenity area is located away from sources of intrusive noise, dust, vibration, heat, fumes, odours or other nuisances.
Section 3–Building Design	*Facade design* *3.1 Development must articulate the facades to achieve a unique and contemporary architectural appearance that:* *(a) unites the facades with the whole building form;* *(b) composes the facades with an appropriate scale and proportion that responds to the use of the building and the desired contextual character;* *(c) combines high quality materials and finishes;* *(d) considers the architectural elements shown in Figure 3a; and* *(e) considers any other architectural elements to Council's satisfaction.*	**Complies.** The proposal incorporates contemporary warehouse façades that would positively contribute to the Bryant Street and Fairford Road streetscape.
	3.2 Development may have predominantly glazed facades provided it does not cause significant glare nuisance.	**N/A**
	3.3 Industrial retail outlets must incorporate shopfront style windows with clear glazing so that people can see into the premises and vice versa. Council discourages the use of obscure or opaque glass, or other types of screening.	**N/A**
	3.4 Where development proposes a portal frame or similar construction, Council does not allow the 'stepping' of the parapet to follow the line of the portal frame.	**N/A**
	Facade design (materials) *3.6 Development must use:* *(a) quality materials such as brick, glass, and steel to construct the facades to a development (Council does not permit the use of standard concrete block); and* *(b) masonry materials to construct a factory unit within a building, and all internal dividing walls separating the factory units. Despite this clause,*	**Complies** The proposal incorporates robust and durable materials that would be low maintenance. The proposal incorporates a contemporary warehouse façade that would positively contribute to the Bryant Street streetscape.

	Council may consider a small portion of the street facade to comprise metal sheet or other low maintenance material provided it complies with the Building Code of Australia.	
	Roof design *3.7 Development must incorporate an innovative roof design that:* *(a) achieves a unique and contemporary architectural appearance; and* *(b) combines high quality materials and finishes.*	**Complies** The proposal incorporates a 5 degree pitch roof design which is commensurate of the area.
	Safety and security *3.8 The front door to buildings should face the street.*	**Complies** The front door faces the street.
	3.9 The administration offices or industrial retail outlets must locate at the front of buildings.	**N/A**
	3.10 Windows on the upper floors of a building must, where possible, overlook the street.	**Complies.** The proposal incorporates windows that face the street.
	3.11 Access to loading docks or other restricted areas in buildings must only be available to tenants via a large security door with an intercom, code or lock system.	**N/A**
	3.12 Unless impractical, access to outdoor car parks must be closed to the public outside of business hours via a lockable gate.	**N/A**
	3.13 Development must provide lighting to the external entry paths, common lobbies, driveways and car parks using vandal resistant, high mounted light fixtures.	**Complies** Security lighting at the front of the building can be secured by a condition of consent.
	3.14 Where the site shares a boundary with a railway corridor or an open stormwater drain, any building, solid fence, or car park on the site should, wherever practical, be setback a minimum 1.5m from that boundary. The setback distance must be: *(a) treated with hedging or climbing vines to screen the building, solid fence, or car park when viewed from the railway corridor or open stormwater drain; and*	**N/A**

	(b) the hedging or climbing vines must be planted prior to the completion of the development using a minimum 300mm pot size; and *(c) the planter bed area must incorporate a commercial grade, sub-surface, automatic, self-timed irrigation system; and* *(d) the site must be fenced along the boundary using a minimum 2m high chainwire fence; and* *(e) the fence provides an appropriate access point to maintain the landscaping within the setback area; and* *(f) where a car park adjoins the boundary, hedging or climbing vines must also be planted along the sides of any building or solid fence on the site that face the railway corridor or open stormwater drain.* *If a setback for landscaping under this clause is impractical, other means to avoid graffiti must be employed that satisfies Council's graffiti minimisation strategy.*	
	General 3.15 Council must take into consideration the following matters for development in the industrial zones: *(a) whether the proposed development will provide adequate off-street parking, relative to the demand for parking likely to be generated;* *(b) whether the site of the proposed development will be suitably landscaped, particularly between any buildings and the street alignment;* *(c) whether the proposed development will contribute to the maintenance or improvement of the character and appearance of the locality;* *(d) whether access to the proposed development will be available by means other than a residential street but, if no other means of practical access is available, the consent authority must have regard to a written statement that:* *(i) illustrates that no alternative access is available otherwise than by means of a residential street; and* *(ii) demonstrates that consideration has been given to the effect of traffic generated from the site and the likely impact on surrounding residential areas; and* *(iii) identifies appropriate traffic management schemes which would mitigate potential impacts of the traffic generated from the development on any residential environment;* *(e) whether goods, plant, equipment and other material used in carrying out the proposed development will be suitably stored or screened;*	**Complies** The proposed warehouse development includes: • Adequate off street parking. • An enhanced landscaping outcome. • A positive contribution to the Bryant Street streetscape. • Ingress/egress via Bryant Street (industrial street). • No significant machinery or plant equipment. Further, the proposal is not located within proximity of any residential areas.

	(f) whether the proposed development will detract from the amenity of any residential area in the vicinity; and *(g) (g) whether the proposed development adopts energy efficiency and resource conservation measures related to its design, construction and operation.*	
Section 4– Environmental Management	*Acoustic privacy* *4.1 Development must:* *(a) consider the Noise Policy for Industry and the acoustic amenity of adjoining residential zoned land; and* *(b) may require adequate soundproofing to any machinery or activity that is considered to create a noise nuisance.*	**Complies** The Site does not adjoin residential land.
	Pollution control *4.2 Development must adequately control any fumes, odour emissions, and potential water pollutants in accordance with the requirements of the relevant public authority.*	**Complies** The proposal is for a warehouse and as such, does not include significant emissions.
Section 5–Site Facilities	*Storage areas* *5.1 The storage and use of hazardous materials must comply with the requirements of WorkCover NSW and other relevant public authorities.*	**Complies** The storage areas will be capable of complying with the requirements of WorkCover NSW.
	5.2 The storage and use of dangerous goods must comply with the Dangerous Goods (Road and Rail Transport) Act 2008 and its regulations, and any other requirements of WorkCover NSW.	**Complies** The storage of any dangerous goods will be in accordance with the relevant standards.
	Building design (utilities and building services) *5.3 The location and design of utilities and building services (such as plant rooms, hydrants, equipment and the like) must be shown on the plans.*	**Complies** Building services have been shown on the plan.
	5.4 Utilities and building services are to be integrated into the building design and concealed from public view.	**Complies**

		Utilities and building services have been incorporated into the building design.
	5.5 External lighting to industrial development must give consideration to the impact of glare on the amenity of adjoining residents.	**Complies** The proposal does not adjoin residential development.

APPENDIX 9 – Access Report

Obvius Access

Accessibility Consultants and Designers

Warehouse Development,
86 Bryant Street,
Padstow,
NSW, 2211.

Development Application (DA) Access Report

08 April 2025
Obvius Access Consultants
For Qianyu Liu of BJ Architects.

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Development Application (DA) Access Report
– Warehouse Development, 86 Bryant St, Padstow, NSW, 2211.

Introduction

This Development Application (DA) Access Report is for the purpose of BJ Architects to prioritise and recommend actions to be undertaken in accordance with the Access to Premises-Building Standards 2010, the NCC Part D4, E3, F4 and the Disability Discrimination Act (Cwlth) 1992 (DDA) in relation to access and mobility for people with disabilities.

Obvius Access was commissioned by Qianyu Liu of BJ Architects on behalf of client Xiang Lin He to undertake a DA Access Report of the Alterations and Additions to the existing warehouse development located at 86 Bryant St, Padstow, NSW, 2211.

The existing single storey warehouse building development comprising a building Class 7b/8 (Warehouse) at 86 Bryant St, Padstow, NSW is to be provided as two subdivided tenancies. A new mezzanine level is proposed for each subdivided tenancy at the development.

Vehicle Access and pedestrian entry to the development is from Bryant Street via an internal combined driveway and pedestrian walkway. A total of two onsite external carparking spaces are proposed at the allotment.

Each tenancy is proposed to be provided with one external car parking space. On the ground floor at each tenancy an internal service bay/ Loading area, and a waste room are proposed. On the mezzanine level one accessible sanitary facility and one staff room is proposed at each tenancy. Passenger lift and stairway access is provided at both tenancies.

The Areas of the development subject to this Access Report are as follows:

- The accessible pedestrian path of travel from the allotment boundary to the building principal entrances of each tenancy;
- The two external carparking spaces;
- Access to ground floor waste area;
- Access to the mezzanine level unisex accessible sanitary facility and Staff room;
- Stair Access to the mezzanine level; and
- Lift Access to the mezzanine level.

Scope of Report

This report offers advice regarding developing improved levels of accessibility for people with disabilities, and thereby reducing the risk to the client of complaint under Disability Discrimination Laws at both State and Federal Level.
The main aim of this Access Report is to identify any areas of non-compliance with Disability Discrimination Law and provide prioritised recommendations for action, to support in improving access for all, but particularly for people with disabilities who use the Warehouse facility.

The Access Report is structured in a user-friendly accessible format and includes Appendix 'A' with illustrations, at the back of this report to assist in highlighting some access issues identified and to support interpretation and implementation of recommendations for action.

The information in this report is only relevant to the referenced areas of this project and is not transferable to other projects.

Executive Summary

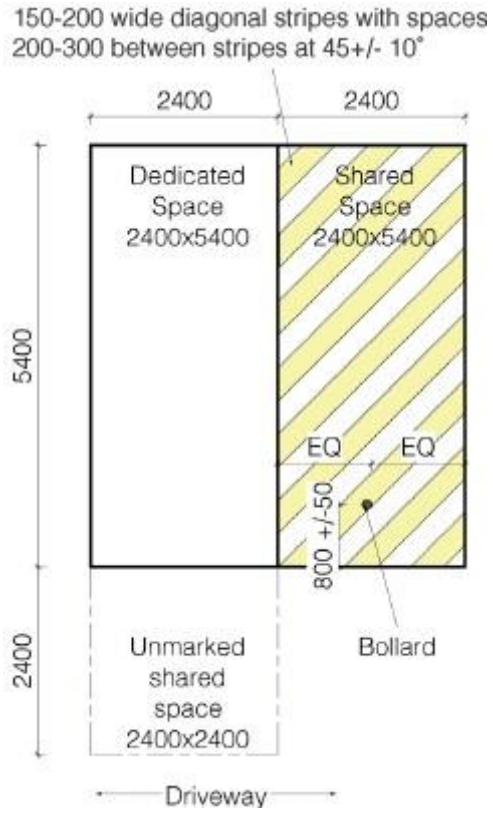
Proposed Accessible Car Parking at the Premises

For a Class 5,7 or 8 building in accordance with NCC Part D4D6 (2) one designated accessible carparking space to comply with AS 2890.6:2009 is required for every 100 carparking spaces.

NCC Part D4D6 (1)(d) states that for a Class 5,7 or 8 building with 5 or less carparking spaces, accessible carparking spaces need not be provided with signage and markings to designate an accessible carparking space.

There is a total of two standard carparking spaces proposed to be provided at the allotment's carpark. An accessible car parking space with signage and markings to comply with AS 2890.6:2009 is not proposed at the allotment's car park. This is due to the allotment only having capacity for two standard car parking spaces.
One standard size carparking space is to be allocated to each tenancy. If the two 2400mm wide standard carparking spaces were to be provided as one accessible parking space, comprising a 2400mm wide designated space and a 2400mm wide shared area and bollard to comply in accordance with AS 2890.6:2009, this would limit the allotment's carpark

to one car parking space. Refer to the illustration below showing the dimensions of an AS 2890.6:2009 accessible car parking space.



AS 2890.6:2009 Accessible Car Parking Space

The justification for not providing a marked AS 2890.6:2009 carparking space is in keeping with the intent of NCC D4D6 clause (1)(d) as the number of car parking spaces is less than 5. The justification for NCC D4D6 clause (1)(d) is to not restrict the carparking space only for people with a disability.

<u>Access from the property boundary to the building principal entrances.</u>

New work to the existing warehouse buildings is subject to the compliance requirements of the Disability (Access to Premises-Buildings) Standards 2010.
The Access to Premises Standards only apply to the part of the building that is the subject of the building approval application and the 'affected part'.

For example, if in a five-storey building an upgrade of the fourth level was being undertaken, which triggered the need for building approval, the

Premises Standards would only apply to the new work on level 4 and the 'affected part'.

Therefore, the application of the Access to Premises Standards to new work in an existing building does not trigger the need to upgrade the whole building or parts of the building outside the new work that is subject to the building approval application. The Access to Premises Standards states the following:

Disability (Access to Premises-Buildings) Standards 2010
Part 2.1 *(Buildings to which Standards apply -Class 3,5,6,7,8,9 or 10 building.*

Subsection 2.1(4)

4) A part of a building is a new part of the building if it is an extension to the building or a modified part of the building about which:

(a) an application for approval for the building work is submitted, on or after 1 May 2011, to the competent authority in the State or Territory where the building is located

Subsection 2.1(5)

(5) An affected part is:

(a) the principal pedestrian entrance of an existing building that contains a new part; and

(b) any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

Subsection 2.1(5) defines the term 'affected part' of a building.

Diagram above illustrating the extent of the affected part

The requirement for upgrading of the 'affected part' of buildings recognises that there is little value in improving access in new parts of existing buildings if people with disability cannot get to those new parts.

Affected part means the path of travel between (and including) the principal pedestrian entrance of an existing building to the 'new part' or modified part of the building. This path of travel must provide a continuous accessible path of travel from the principal pedestrian entrance to the new part or modified part of the building. The Affected part does not extend from the principal entrance to the allotment boundary or any required carparking spaces on the allotment.

Therefore, the definition of 'affected part' of a building is limited to the area between (and including) the principal pedestrian entrance and the new work to the building.

Subsection 2.1(5) 'Affected part' – Access from the property boundary to the building principal entrances.

When constructing a new building the Premises Standards in D3.2(1)(a) and NCC in D4D3(1)(a) requires an accessway from the main points of a

pedestrian entry at the allotment boundary to a building required to be accessible.
Separate to this the Premises Standards in D3.2(2) and NCC D4D3(2) also requires an accessway through the principal pedestrian entrance.

However, where new work on an existing building triggers the 'affected part' upgrade a continuous accessible path of travel is only required from the principal pedestrian entrance to the area of new work to the building.
The 'affected part' does not extend to the allotment boundary or any required carparking spaces on the allotment.
Therefore, in accordance with the Premises Standards Subsection D2.1(5) there is no requirement to upgrade the continuous accessible path of travel from the allotment boundary to the building principal entrances or any required carparking spaces on the allotment to the building principal entrances.

Where an access barrier, such as a step, steep doorway landing gradient or non-compliant doorway circulation space dimensions is provided at the threshold of a principal pedestrian entrance, the 'affected part' upgrade would require an upgrade of the principal entrance doorway to comply with AS1428.1:2009.

Referenced Laws, Regulations and Standards

This Accessibility Report in an assessment against the following compliance criteria requirements of current and applicable disability Laws, Regulations and Standards:

Commonwealth Disability Discrimination Act (1992);
Disability Discrimination Act (1992)-Section 23 Access to Premises;
Disability Discrimination Act (1992)-Section 24 Access to Goods Services and Facilities;
Disability (Access to Premises Buildings) Standards 2010 (Premises Standards);
Australian Human Rights Commission- Advisory Notes on Streetscape Public Outdoor areas, Fixtures, Fittings and Furniture;
Australian Standard 1428.1 (2009) Design for access and mobility – General Requirements for access – New building work;
Australian Standard 1428.1 (2009) supplement;
Australian Standard 1428.2 (1992); Design for access and mobility - Enhanced and additional requirement-Buildings and facilities;
Australian Standard 1428.4.1 (2009) Design for access and mobility - Means to assist the orientation of people with vision impairment - Tactile Ground Surface Indicators;
Australian Standard 1428.4.2 (2018) Design for access and mobility - Means to assist the orientation of people with vision impairment – Wayfinding Signs;
Australian Standard 2890.6 (2009) Parking facilities - Off-street parking for people with disabilities;
Australian Standard 2890.1 (2004) Parking facilities—Off-street car parking;
Australian Standard 1158.3.1 (2020) Lighting for roads and public spaces - Pedestrian area (Category P) lighting - Performance and design requirements;
Australian Standard 1735.12 (1999); Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities;
Australian Standard 4586 (2013) Slip Resistance Clarification of New Pedestrian Surface Materials;
National Construction Code 2022;
NSW Anti-Discrimination Act (1977); Section 49M Provision of Goods and Services; and
Australian Standard 1428.5 (2010) Design for access and mobility – Communication for people who are deaf or hearing impaired.

Project Drawings/Details referenced receive from BJ Architects issue date 21.03.2025.

Dwg No	Title	Issue	Dwg No	Title	Issue
A001	Titlepage	A	A106	Proposed Mezzanine Floor Plan	A
A002	General Notes	A	A301	Proposed - Sections	
A101	Existing Site Plan	A	A201	Proposed - N&S Elevations	A
A102	Existing Floor Plan	A	A202	Proposed - E&W Elevations	A
A103	Demolition Plan	A	A401	Schedule of Window & Door	A
A104	Proposed Roof Plan	A	A402	Schedule of External Finish & Materials	A
A105	Proposed Ground Floor Plan	A			

Disability Discrimination Act 1992

The following, such as Property Developers, Property Owners, Building Designers, Builders, Building Certifiers, Project Managers, and Project Lessees have a responsibility, under the Federal Disability Discrimination Act (DDA), to provide equitable, dignified access to goods and services and to premises used by the public. Premises are broadly defined and would include all areas within the premises.

The DDA provides uniform protection against unfair and unfavourable treatment for people with a disability in Australia. It also makes it unlawful to discriminate against a person who is an 'associate' (such as a friend, carer, or family member).

Disability is broadly defined and includes disabilities which are:

- Physical;
- intellectual;
- psychiatric;
- neurological;
- cognitive or sensory (a hearing or vision impairment;
- learning difficulties;
- physical disfigurement; and
- the presence in the body of disease-causing organisms.

This broad definition means that everyone with a disability is protected.

When a person with a disability wants to utilise, premises including all buildings, outdoor spaces, car parking areas, pathways, and facilities, then equitable, dignified access must be provided. A complaint can be made under the DDA if appropriate access is not provided, or direct or indirect discrimination has occurred.

The Disability (Access to Premises – Buildings) Standards 2010

The Disability (Access to Premises – Buildings) Standards 2010 (the Premises Standards/Access Code) commenced on 1 May 2011. Any application for a building approval for a new building or upgrade of an existing building on or after that date will trigger the application of the Premises Standards/Access Code.
The Premises Standards harmonise the requirements of the NCC and the DDA in relation to access to buildings through incorporation of the Access Code into the NCC. The Access Code forms *Schedule 1* of the Premises Standards and contains its technical requirements. The Premises Standards provide greater access to buildings for people with a disability and provide certainty to the building industry by establishing building standards, which comply with the intent of the DDA.

National Construction Code (NCC)

The National Construction Code, (NCC) in conjunction with the DDA, applies to new buildings and buildings undergoing significant refurbishment or alteration. Sections of the NCC require compliance with a range of access provisions. The NCC outlines a variety of building classifications and the requirements for access to buildings within each classification.

NCC Part D4D5 Exemption

The NCC Part D4D5 exemption allows the following:

D4D5 Exemptions

The following areas are not required to be accessible:

(a) an area where access would be inappropriate because of the particular purpose for which the area is used.

(b) an area that would pose a health or safety risk for people with a disability.

(c) any path of travel providing access only to an area exempted by (a) or (b).

NCC Part D4D5 sets out some general exemptions from the requirement to meet the Deemed-to-Satisfy Provisions of the NCC and provides details on buildings or parts of buildings not required to be accessible under the Premises Standards and NCC.

D4D5(a)

Paragraph D4D5(a) states that accessways are not required to certain areas within buildings where providing access would be 'inappropriate' because of the nature of the area or the tasks undertaken in that area.

D4D5(b)

Paragraph D4D5(b) states that areas that would impose a health or safety risk for people with disability are also not required to be accessible.

These areas could generally include:

- Loading Dock areas;
- Warehouse Areas;
- Cleaner's rooms and Storage Rooms; and
- Main switch board room

D4D5(c)

In accordance with the NCC Part D4D2 general building access requirements, buildings and parts of buildings must be accessible as required, unless exempted by Part D4D5.

This Development Application Access Report covers the following 1-19 checklist items requirements regarding accessibility to the building and associated facilities:

1. Continuous Accessible Paths of travel
2. Principal Pedestrian Entrances
3. Lighting
4. Wayfinding
5. Accessible car parking
6. Walkway Ramps and Landings
7. Stairway
8. Lifts
9. Tactile Ground Surface Indicators
10. Doorways
11. Internal Walkways and Corridors
12. Hearing Augmentation
13. Fittings and furniture
14. Sanitary Facilities – Accessible WC
15. Sanitary Facilities – General
16. Sanitary Facilities – Shower
17. Sanitary Facilities - Ambulant Facilities
18. Signage
19. Emergency Egress

Access and Egress:

Consideration regarding egress provisions must be considered in accordance with the NCC, including travel distances and number of required exits in accordance with the NCC Performance Requirements D1P4 and D1P6.

DA Submission Access Report

Prepared By: John Bedwell, Accredited Member 382 Association of Consultants Access Australia (ACAA) NDIS SDA Accredited Assessor No SDA00042 - LHA Design Guideline Assessor Registration No 20258- Changing Places Assessor CP047

Note: The objective of the reference *Capable of compliance TBA at CC Stage* (to be advised at construction stage) as listed in the compliant column is to provide the DA Assessment Panel the assurance that the compliance requirements are recognised and must be an essential part of the post DA submission as part of the design development process and will be implemented prior to the construction stage (CC) submission.

This report is produced in a tabulated format, of which we have found is preferred by the majority of audit reviewers.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
1.1	Continuous Accessible Path of Travel.	Access to the building from the allotment boundary.	Any creation of an impediment, which does not provide a continuous access path of travel, may prevent the premises from being safely negotiated by people with disabilities.	A continuous accessible path of travel to comply with National Construction Code (NCC) D4D3(1) is not required from the allotment boundary at Bryant Street to the building principal entrances. Refer to executive summary *Subsection 2.1(5) 'Affected part' – Access from the*	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				property boundary to the building principal entrances. A continuous accessible path of travel is to be provided from the building principal entrance to the 'new part' or modified part of the building.	
1.2	Continuous Accessible Path of Travel.	Floor and Ground Surfaces.	Safety must be ensured using slip resistant surfaces with a smooth transition of 0mm to prevent slippage, trips, stumbles or falls.	Floor and ground surfaces must comply with AS 1428.1:2009 Clause 7 .1, 7.2, 7.3, 7.4 and 7.5. Recessed matting on the accessible path of travel at the principal entrance must comply with AS1428.1:2009 Clause 7.4.2 which states where a metal and bristle type matting or similar is provide the surface must be no more than 3mm if vertical or 5mm if rounded or bevelled above or below the surrounding surface.	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				If a matt or carpet type material is provided the fully compressed surface must be level with the surrounding surface with a level difference no greater than 3mm if vertical or 5mm if rounded or bevelled.	
1.3	Continuous Accessible Path of Travel.	The pathway to the principal entrance.	The pathway must allow enough circulation space for a person in an electric wheelchair or electric scooter.	In accordance with The Disability (Access to Premises – Buildings) Standards 2010 and the NCC an accessway must be a minimum width of 1000mm.	Yes.
1.4	Continuous Accessible Path of Travel.	Access to the building from the allotment boundary.	Any creation of an impediment, which does not provide a continuous access path of travel, may prevent the premises from being safely negotiated by people with disabilities.	In accordance with NCC Part D4D4(c) (ii) (B) provide a minimum turning space of 2070mm in the path of travel and 1540mm width at intervals of a maximum of every 20m along an accessway. A space of 2070mm x 1540mm must be relatively	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				flat with a gradient no steeper than 1:40 for a concrete ground surface and provided at intervals to enable a person in a mobility device to manoeuvre 180°along the pathway leading from the allotment boundary at Byrant Street to the principal entrance. If a direct line of sight is not available at the pathway a passing space 2000mm x 1800mm must also be provided every 20m along the pathway in accordance with NCC Part D4D4(c) (i).	
2.1	Principal Pedestrian Entrance.	Principal public pedestrian entrances shall include wide level step free access for use by all people in	In accordance with Disability (Access – Buildings) Standards 2010 Part 2.1 (1)(b) (iii) access which complies with AS 1428.1:2009 (as a minimum)	The principal entrances must comply with the NCC Part D4D3(2). A clear opening width of 850mm must be provided to the active leaf of double	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
		accordance with AS.1428.1:2009.	must be provided to the principal entrance.	doors in accordance with the NCC Part D4D3(5). It is suggested to have the principal entrances doors swinging outwards for egress, as these entry doors are the only doors provided at the premises. Fire engineer to confirm egress requirements.	
2.2	Principal Pedestrian Entrance.	Principal public pedestrian entrances shall include wide level step free access for use by all people in accordance with AS.1428.1:2009.	To meet compliance with this section the principal entrance must comply with AS 1428.1:2009. Accordingly, should the weight of the external door to the principal entrance be too heavy or the door controls difficult to operate this may create a barrier to people who use mobility devices, people who are ambulant or older people.	Automation to the principal entrance would be best practice. If automation is provided to the principal entrance, it should ideally be by means of a sliding door with motion sensor. Alternatively, should doors be power operated by manual controls for a swing door they must comply with Clause AS 1428.1:2009 13.5.3 (e) & 13.5.4. The door control press to open button must be a minimum 25mm	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				diameter, proud of the surface with minimum 30% luminance contrast against the surrounding surface, no closer than 500mm from an internal corner and between 500mm to 1000mm from the arc of the hinged door leaf. If the door is automated for a frontal approach neither circulation space for the WL or WH dimension is required.	
2.3	Principal Pedestrian Entrance.	Principal public pedestrian entrance.	Frameless glazing and glazed doors that do not have a transom or chair rail must still be distinguished from an opening, where there is no handrail or transom provided to the glass.	Where glass walls or glass doors are evident, and no transom exists, a band of luminance contrast must be provided, which has 30% contrast with the surface viewed against at 45 degrees, to prevent the glazing from being mistaken for an opening.	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				The band of luminance contrast must be opaque and placed on both sides of the glazing in accordance with AS1428.1-(2009) Clause 6.6. The band of luminance contrast must be solid, 75mm wide and extend across the full width of the glazing and be located with the lower edge of the bottom of the band between 900mm and 1000mm above the FFL. Refer to Appendix 'A' Fig 35.	
2.4	Principal Pedestrian Entrance.	Principal Pedestrian Entry.		Circulation space must be provided to the principal entrance doors with clearance space available to the latch side (WL dimension) hinge side (WH dimension) and length (L dimension) in accordance	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				with AS 1428.1-2009 Clause 13.3. Ensure external safety bollards located in front of the principal entrance doors are clear of the required doorway circulation space. Refer to Appendix 'A' Fig 1 and Fig 2.	
2.5	Principal Pedestrian Entrance.	Threshold Ramp along a continuous accessible path of travel (if required) at the doorway of the pedestrian entry.	If raised thresholds are provided to doorways, they can be difficult for users of mobility devices to negotiate.	At a building entrance a threshold ramp to comply with AS1428.1:2009 Clause 10.5 must be provided at the principal entrance, if a threshold exists that exceeds 3mm in height. Accordingly, the Threshold Ramp must not exceed a height of 35mm or exceed a length of 280mm or exceed a gradient of 1:8 and be located within 20mm of the door to which it serves.	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				The edges of the Threshold Ramp shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall in accordance with AS 1428.1 Clause 10.5. Refer to Appendix A Fig 4 (at the back of this report). The ramp must have slip resistance in accordance with the NCC Table D3D15 and AS 4586:2013.	
3.1	Lighting External.	Lighting levels to the external path of travel to the building.	A continuous accessible path of travel should have enough illumination levels to ensure safety for the staff, visitors, and people with vision impairment, some of whom require enhanced levels of illumination.	As a minimum requirement external lighting must comply with AS 1158.3.1 (2020). Internal lighting must comply with AS 1680.0 :(2009). To ensure safety and to meet best practice the illumination of external ramps, landing and stairs should be a minimum of 100 lux.	Electrical consultant to confirm external lighting levels.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
3.2	Lighting Internal.	Lighting to internal spaces.	Artificial and natural lighting must avoid pools of light, shadows, and glare. Accordingly, strong beams of light and shadow should be minimised.	Both natural and artificial lighting must provide enough illumination of interior surfaces and enough luminance of surfaces. Accordingly, a balance of artificial and natural daylight will assist a person with vision impairment. The following lighting levels should be achieved in accordance with AS 1428.2:1992. Signage – 200lx Recreation and Visitable Spaces – 150lx Accessways – 150lx Toilets – 200lx	Electrical consultant to confirm internal lighting levels.
4.1	Wayfinding signage.	Wayfinding signage indicating the location of the accessible building entrance.	The accessible entrance to the building needs to be clearly defined.	Wayfinding signage should identify the location of the accessible path of travel where the accessible path of travel is not readily apparent	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				from the direction of approach.	
5.1	Accessible Car parking.	NCC Part D4D6(b) states that for a Class 5/7b building, 1 for every 100 car parking spaces or part thereof must be a designated accessible space for a person with a disability. NCC Part D4D6 (1)(d) states that for a Class 5,7 or 8 building with 5 or less carparking spaces, accessible carparking spaces need not be provided with signage and markings to designate an accessible carparking space.	The location of the designated accessible car parking space should be located close to the building entrance. A car parking space should be designated and accessible for a person with a disability.	There is a total of two standard carparking spaces proposed to be provided at the allotment's carpark. An accessible car parking space with signage and markings to comply with AS 2890.6:2009 is not proposed at the allotment's car park in accordance with NCC Part D4D6 (1)(d). Refer to executive summary for proposed accessible car parking requirements at the premises.	N/A.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
6.1	Walkways, Ramps and Landings.	Circulation requirements from walkways, corridors, and doorways.	There must be a smooth transition, which does not exceed 3mm to prevent slippage, trips, stumbles or falls.	To comply with the NCC Part D4D2 access must be provided to all areas that the occupants would normally use except for the areas identified as part of the NCC Part D4D5 Exemption.	Yes.
6.2	Walkways, Ramps and Landings.	Accessible ramps and walkways for people with disabilities.	Steep slopes present a hazard to wheelchair users and people with ambulant disabilities.	In accordance with the NCC Part D4D4 a 1:14 ramp must comply with AS.1428.1:2009 Clause 10.3. Refer to Appendix A Fig 8 (at the back of this report).	N/A.
6.3	Walkways, Ramps and Landings.	Accessible ramps and walkways for people with disabilities.	Steep slopes present a hazard to wheelchair users and people with ambulant disabilities.	In accordance with AS.1428.1:2009 Clause 10.2 Ensure Walkways with a gradient of 1:20 – 1:33 are provided with a minimum 600mm wide flat surface running parallel with the walkway on either side at the same grade with a different firm texture, or wall which is a minimum of	N/A

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				450mm high, or a kerb complying 150mm high or Kerb and handrail which comply with AS 1428.1:2009 Clause 12 and Fig 19 and 29. Refer to Appendix A Fig 12 and 13 (at the back of this report).	
6.4	Walkways, Ramps and Landings.	Accessible ramps and walkways for people with disabilities.	Steep slopes present a hazard to wheelchair users and people with ambulant disabilities.	Provide compliant walkways with landings in accordance with AS.1428.1 Clause 10. Accordingly, landings are required at all changes of direction at the top and bottom of walkways, and at pre-determined intervals. For 1:20 walkways a landing must be provided at intervals no greater than 15m with gradients no steeper than 1 in 40.	N/A.
6.5	Walkways, Ramps and Landings.	Accessible ramps and walkways for people with disabilities.	Accessible ramps and walkways must allow enough circulation space for	In accordance with AS1428.1:2009 clause 6.5.1. Provide a turning space a	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			a person in an electric wheelchair or electric scooter.	minimum 1500 x 1500mm clear of handrails at turns from 60° to 90°. Or provide a permitted splay in accordance with AS1428.1-2009 Clause 6.5 figure 4. Refer to Appendix 'A' Fig 11 (at the back of this report).	
6.6	Walkways, Ramps and Landings.	Accessible ramps and walkways for people with disabilities.	Accessible ramps and walkways must allow enough circulation space for a person in an electric scooter.	In accordance with AS1428.1:2009 Clause 10.4(d) curved walkways at the development must be provided with a minimum width of 1500mm.	N/A.
6.7	Walkways, Ramps and Landings.	Accessible ramps and walkways for people with disabilities.	Accessible ramps and walkways must allow enough circulation space for a person in an electric scooter.	In accordance with AS1428.1:2009 clause 6.5.2. a 1000mm wide angled ramp or walkway has insufficient width to allow for a 30° to 60° turn. The ramp or walkway must be provided with a minimum 1200mm width at the angled	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				section or provided with the required 500mm splay to comply with AS1428.1-2009 Clause 6.5 figure 4. Refer to Appendix 'A' Fig 11 (at the back of this report).	
6.11	Walkways, Ramps and Landings.	Kerb ramps in accordance with AS.1428.1:2009 Clause 10.7.	Kerb ramps should provide a smooth transition from the pathway to the roadway or car space for users of mobility devices. In addition, compliant Kerb Ramps also provide a tactile cue for people with vision impairment with sharp splayed sides to aid navigation when approaching a roadway. A gradient steeper than a 1:8 provides difficulties for wheelchair users.	Kerb ramps must be provided to comply accordance with AS 1428.1:2009 Clause 10.7. Install Kerb Ramps with compliant side profile splayed to 45° in accordance with AS:1428.1.2009 Clause.10.7.2. Refer to Appendix 'A' Fig 36, Fig 37 and Fig 38. Warning TGSI's are only to be provided to kerb ramps when required in accordance with AS1428.1:2009 C3 Kerb Ramps.	N/A.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
7.1	Stairway.	All stairways serving a change in level.	Stairways must provide access for staff, visitors such as older people, and people who are ambulant, avoiding any trips and falls.	The stairway in the building must comply with AS 1428.1:2009 Clause 11. The construction criteria for the stairway must have 'Goings', Risers' and tread profiles that comply with the National Construction Code Part D3D14 as a minimum. Refer to Appendix 'A' Fig 15. Stair Barriers must also comply with NCC D3D17-D3D21 and D3D22 Handrails. The risers of stair treads must be solid and opaque in accordance with AS 1428.1:2009 Clause 11. and must not be open risers.	Capable of compliance. TBA at CC Stage.
7.2	Stairway.	All stairways serving a change in level.	Luminance contrast is required to all stair nosing so that they are clearly defined.	Bands of luminance contrast on stair nosing must be provided in accordance with AS.1428.1:2009 Clause	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				11.1(f) and (g) with a band of luminance contrast of 50-75mm wide. Refer to Appendix 'A' Fig 16. All stair surfaces such as nosing contrast, treads and landings must have slip resistance in accordance with the NCC Table Table D3D15 and AS 4586:2013.	
7.3	Stairway.	All stairways serving a change in level.	Loss of balance ascending or descending stairways.	Handrails must be provided on both sides of stairways in all accessible spaces in accordance with AS1428.1-2009 clause 11 and 12. A minimum clear width of 1000mm between stairway handrails must be provided to comply with the NCC Part D2D8 and AS1428.1;2009 Refer to Appendix 'A' Fig 17.	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
7.4	Stairway.	Warning Tactile Ground Surface Indicators (TGSIs) to all Stairways.	Where required, TGSIs must have a minimum 30% luminance contrast with the surrounding surface (for integrated units) or 45% for discrete units or 60% for composite units. This is to enable people with vision impairment to identify the location of TGSIs in accordance with AS: 1428.4.1 2009 Clause 2.2.	The stairs in accordance with AS1428.1:2009 clause 11 and 1428.4.1:2009 must contain Warning TGSIs to the top and bottom of the stairway setback 300mm 10+/- from the hazard. The Warning Tactile Ground Surface Indicators TGSIs must contrast with the surrounding surface by a factor of 30% or 45% if discrete units or 60% if composite units are used. The profile of all Warning TGSIs must comply with AS 1428.4.1:2009 Fig 2.1. Refer to Appendix 'A' Fig 18.	Capable of compliance.
7.5	Stairway.	Profile of handrails to all stairways.	Handrails must be provided to all stairways to ensure stability for people who are ambulant, who have a mobility impairment or vision impairment. The handrail	Handrails must comply with AS1428.1-2009. Clause 11 and 12 and Fig 29 (a) and (b). The heights of the handrail must be between 865mm-1000mm above nosing of	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			profile must ensure a continuous passage of the hand along the handrail with no obstruction within a 270° arc of the handrail.	the stairway tread or the plane of the finished floor. The stairs must be provided with horizontal handrail extensions of at least 300mm. At the bottom of the stairs the handrail must extend one tread depth parallel to the line of the stair nosing plus a minimum 300mm extension horizontally past the nosing of the last riser. At the top of the stairs, the handrail must have a minimum 300mm horizontal extension past the top riser as shown in AS1428.1:2009 Figure 26 (B). Refer to Appendix 'A' Fig 13, Fig 18 and Fig 19. The handrails must terminate with a downturn	

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				at the handles of 180° at the beginning and end of the stairs. Alternatively, the handrail can be returned to the ground, or fully to end post or wall face. Where the stairs are at an intersection with a corridor or walkway the stairs must be set back in accordance with AS1428.1:2009 Clause 11 FIGURE 26B. Refer to Appendix 'A' Fig 18.	
7.1	Lifts.	Passengers lift to serv a change of level.	The passenger lift must meet the requirements of the NCC part E3D7, E3D8 and E3D3. The lift should be a 'Through lift' on all levels to avoid the need to turn around in the lift.	The passenger lifts must comply with the *NCC part E3D7 Passenger lift types and their limitations* and *NCC part E3D8 Accessible features required for passenger lifts.* Accordingly, the lift must comply with the following:	Capable of compliance. TBA at CC Stage. Lift consultant to advise

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				• If the lift travels less than 12m the Internal lift car size of 1100mm x 1400mm as a minimum (between linings) must be provided. However, a larger lift car size of 1400mm x1600mm is recommended as best practice. • A low-rise, low-speed pressure lift must be enclosed if travel is more than 2m. • A clear opening of the doors must comply with AS 1735:12:1999 with a clear opening of at least 900mm. • Passenger protection system complying with	

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				AS 1735:12, (if the lift is to be provided with a power operated door). • Lift car and landing control buttons complying with AS 1735.12:1999. • Lighting in accordance with AS 1735.12:1999. • Handrail complying with the provisions of AS 1735.12:1999. • E3D8 (k)- Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received, for	

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				all lifts except a stairway platform lift.	
7.2	Lifts.	Passenger lifts to serv a change of level.	A passenger lift must provide independent access by ensuring a person can operate the lift controls. The constant pressure controls can be a barrier for people with a disability for reasons that they disadvantage people such as older people or people with impaired motor skills, or other hand impairment. Consequently, these impairments may prevent a person from sustaining pressure on the controls during the journey.	The passenger lifts must comply with the *NCC part E3D7 Passenger lift types and their limitations* and *NCC part E3D8 Accessible features required for passenger lifts* as a minimum, which states the following: *In an accessible building, E3D7 (2) states:* *A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed.* (must not be a lift that operates by maintaining	TBA at CC Stage. Lift consultant to advise.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				pressure on a control button). Therefore, automated controls that comply with AS 1735.12:1999 and NCC part E3D7 and E3D8 are necessary, requiring only single activation with a reduced force of 2-5 Newton or if tactile symbols are located on the buttons a force of 3.5-5 Newton. The lifts must comply with all requirements of the NCC as applicable under Part E3.	
9.1	Tactile Ground Surface Indicators (TGSIs).	Application of Warning TGSIs to distinguish the pedestrian pathway from the hazard of the carriageway at the same grade.	A hazard could exist for pedestrians with vision impairment at the carriageway/pedestrian crossing if the car park driveway or carriageway is at the same grade as the pedestrian pathway	If the pedestrian pathway and vehicular carriageway intersection are at the same grade, provide warning TGSIs setback 300mm +/- 10mm from the vehicular accessway in accordance with Fig C12 AS	Capable of compliance. TBA at OC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			intersections and the view for the motorist is obstructed when appearing from the driveway. Consequently, a blind person or person with vision impairment could accidentally stray from the pathway into the path of an approaching vehicle.	1428.4.1:2009 and Clause 2.5 to warn a pedestrian with a vision impairment they are approaching a driveway or carriageway. Note that clear sightlines for motorists should be provided to the entrance of the car park to ensure the safety of pedestrians on the pathway; particularly pedestrians, whom of which may have vision impairment. The clear sight lines for a motorist must comply with AS 2890.1:2004 Fig 3.3.	
10.1	Doorways.	Circulation space required to access and egress doorways and gates.	Enough circulation space must exist for a user of a mobility device to ensure independent access through doorways in both directions.	In accordance with the Premises Standards Part 2.1 (1)(b) (iii) and NCC Part D4D2 all doors, such as swing doors and sliding doorways must have clearance space	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			Accordingly latch side and hinge side clearance is required to operate the door and is defined as 'WL' values and 'WH' values under AS 1428.1:2009.	available to the latch side (WL dimension) and hinge side (WH dimension) in accordance with AS 1428.1-2009 Clause 13.3.	
10.2	Doorways.	Luminance contrast to all doorways, both external and internal.	A person with vision impairment may not be able to distinguish the doorway from surrounding surfaces.	All doorways and circulation space at doorways should have luminance contrast of 30% provided to the doorway and the architrave and adjacent wall. The minimum width of the area of luminance contrast must be no less than 50mm in accordance with AS.1428.1 Clause 13.1.	Capable of compliance. TBA at OC Stage.
10.3	Doorways.	Door controls forming part of a continuous accessible path of travel.	A door may be unable to be opened or locked by a person with limited dexterity or a person who cannot grasp or twist their wrist.	All doors at the buildings must have 'D' handles for people with a hand impairment or limited dexterity. In accordance with AS1428.1:2009 clause 13.5 Refer to Appendix 'A' Fig 20.	Capable of compliance. TBA at OC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
10.4	Doorways.	Door controls forming part of continuous accessible path of travel.	A door may be unable to be opened should the door be heavy or contain a door closer.	All doors must not exceed a required force at the door handle of 20N in accordance with AS 1428.1:2009 Clause 13.5.	Capable of compliance. TBA at OC Stage.
10.5	Doorways.	The clear opening width of the doorway to the principal entrance and the remaining internal doorways.	Insufficient clearance dimensions for wheelchair users.	In accordance with the NCC D4D3(5) and AS1428.1:2009 all doors, which the occupants of the building normally use, must have a clear opening width of at least 850mm. Where a doorway has multiple door leaves one of those leaves must have a clear opening width of not less than 850mm.	Capable of compliance. TBA at CC Stage.
11.1	Internal Walkways and Corridors.	The finishes applied to external ground surfaces and internal floor surfaces	All wet areas should be slip resistant. If a carpet is provided to the dry areas the thickness of the pile of carpet and the use of spongy underlay can	All surfaces such as external and internal areas must comply with NCC Table D3D15 Slip resistance classification and AS 4586:2013 to ensure slip resistance.	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			present a problem for wheelchair users.	Where carpet tiles are to be used, the pile thickness and the backing, underlay must be in accordance with In NCC D4D4(g) and (h). The carpet pile height or pile thickness dimension, carpet backing thickness dimension and the combined dimensions must be a maximum of 11mm, maximum of 4mm and a maximum of 15mm respectively.	
11.2	Internal Walkways and Corridors.	Circulation space to internal areas, rooms and entrances.	Should insufficient circulation space or non-compliant ramps and walkways exist for a user of a mobility device this could prevent independent access to internal spaces.	In accordance with NCC Part D4D4(c) (ii) (A) provide a minimum space of 2070mm in the path of travel and 1540mm width at the end of an internal or external communal corridor or walkway within 2m of the end of the corridor. A space of 2070mm x 1540mm	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				must be relatively flat with a gradient no steeper than 1:40 and provided at the end of a corridor to enable a person in a mobility device to manoeuvre 180°.	
11.3	Internal Walkways and Corridors.	Circulation space to internal areas, rooms and entrances.	Should insufficient circulation space or non-compliant ramps and walkways exist for a user of a mobility device this could prevent independent access to internal spaces.	In accordance with NCC Part D4D4(c) (ii) (B) provide a minimum space of 2070mm in the path of travel and 1540mm width at intervals of a maximum of every 20m along an internal or external corridor or walkway. A space of 2070mm x 1540mm must be relatively flat with a gradient no steeper than 1:40 and provided at intervals to enable a person in a mobility device to manoeuvre 180°as mentioned above.	Yes.
11.4	Internal	Circulation space to	Should insufficient	In accordance with	Yes, internal

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
	Walkways and Corridors.	internal areas, rooms and entrances.	circulation space or non-compliant ramps and walkways exist for a user of a mobility device this could prevent independent access to internal spaces.	Australian Standard AS 1428.1:2009 Clause 10.1 (c) level landings must be provided outside doorways to entrances.	rooms and entrances.
11.5	Internal Walkways and Corridors.	Circulation space to common areas room entrances.	Should insufficient circulation space or non-compliant ramps and walkways exist for a user of a mobility device this could prevent independent access to internal spaces.	In accordance with AS.1428.1 Clause 6.5.3 a clear circulation space of 2070mm x 1540mm width must be provided outside the lift to allow for 90 - 180°turn for a person in a wheelchair and at the end of corridors to common areas. Refer to Appendix 'A' Fig 10.	Yes.
12.1	Hearing Augmentation.	Hearing augmentation installed in building, an auditorium, conference room or meeting room.	Hearing augmentation is important for people with a hearing impairment to receive information and participate in a range of activities.	In accordance with the Access Code and NCC Part D4D8 a Hearing Augmentation System must be provided where an inbuilt amplification system, other than one used only for	N/A.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				emergency warning is installed. A hearing augmentation system must comply with the following: (a) an induction loop, must be provided to not less than 80% of the *floor area* of the room or space served by the inbuilt amplification system; or (b)a system requiring the use of receivers or the like, it must be available to not less than 95% of the *floor area* of the room or space served by the inbuilt amplification system, and the number of receivers provided must be not less than: Provide a sound amplification system with	

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				either an induction loop or receiver augmentation system in any Meeting Rooms, when there is seating capacity for five or more participants.	
12.3	Hearing Augmentation.	In accordance the NCC Part D4D8 hearing augmentation should be provided where an in-built amplification system is provided at any reception desk where the public is screened from the service provider.	Hearing Augmentation will be particularly important given that the background noise of the building services. Hearing Augmentation is recommended if the reception desk is screened from the public.	If a reception desk is screened, it should be provided with Hearing Augmentation such as an assistive listening system such an Audio Frequency Induction Loop, infrared or radio transmission in accordance with standard for Hearing Augmentation AS 1428.5:2010 Clause 3.1. Enough lighting of 150 lux should also be provided to the reception desk to provide enough illumination of the receptionist face for lip reading, which would benefit	N/A.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				people with hearing Impairment. The International symbol for Deafness should also be displayed to the reception desk in accordance with AS 1428.5:2010 Clause 5.1.	
13.1	Furniture and Fitments.	Circulation to tables, Servery counters and worktops.	Worktops should not present a barrier to a person who is a wheelchair user. This can restrict visitors and occupants of the building from independent access to facilities under Section 24 of the DDA.	In accordance with best practice to meet the intent of the DDA an accessible section underneath the Staff room kitchen sink bench top should be provided to comply with AS.1428.2 (1992). Clause 24, FIGURE 25. Provide the accessible section for a wheelchair user a minimum clear width of 800mm width and a height of 850mm -/+ 20mm incorporating enough knee and footplate clearance of	Best Practice requirement. Capable of compliance. This inbuilt fixture is not mandated by the Premises Standards or NCC, however, it should be provided to ensure compliance

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				640mm to 650mm to the underside beneath the bench top. Refer to Appendix 'A' Fig 23 and 24.	with the intent of the DDA.
13.2	Furniture and Fitments.	Operation of taps, door, and Cupboard handles.	All controls such as sink taps should be operable with one hand and not require tight grasping pinching or twisting of the wrist. This could be a barrier for people who are arthritic or have hand impairment and possibly restrict a person from independent access to facilities under Section 24 of the DDA.	The controls to water taps should be lever handles to ensure ease of operation for people with limited dexterity. Accordingly, the tap controls should comply with AS 1428.1:2009 Clause 15.2.1. To meet best practice all kitchen drawers and cupboards should contain 'D' handles to ensure enough grip for somebody with limited dexterity.	Best Practice requirement Capable of compliance. Theses kitchen fixtures are not mandated by the Premises Standards or NCC, however, it should be provided to ensure compliance with intent of the DDA.
13.3	Furniture and Fitments.	Layout of kitchen appliances, cooktops, and counters.	Insufficient internal circulation space for a person using a wheelchair to	In accordance with best practice to meet the intent of the DDA provide a space	Best Practice requirement

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			easily enter, move around and independently access sinks and other equipment.	of at least 1550mm x 1550mm in front of kitchen appliances such as the sink and fridge.	Capable of compliance. 1500mm x 1500mm space is not mandated by the Premises Standards or NCC, however, it should be provided to ensure compliance with intent of the DDA.
14.1	Sanitary Facilities - Accessible WC.	Where two or more accessible unisex toilets are provided in a building, the number of left- and right-hand mirror image facilities must be provided as evenly as possible.	Should there be no availability of alternate unisex accessible sanitary facilities, with a combination of left and right grabrail combinations, this may present a barrier to a person who is hemiplegic and	In accordance with the NCC Part F4D5 (g) where two or more of each type of accessible unisex facility are provided, the number of left and right-handed transfer facilities must be provided as evenly as possible.	Yes.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			transfers to the WC pan from one side.		
14.2	Sanitary Facilities - Accessible WC.	The layout to the Accessible compartment.	Insufficient internal circulation space.	The accessible toilet must be designed to comply with AS1428.1-2009 Fig 43 and Fig 52 as a minimum, allowing extra space for the incorporation of a washbasin, which should not encroach on the required circulation space of 2300mm x 1900mm by a distance greater than 100mm. Refer to Appendix 'A' Fig 25 and Fig 26. The required circulation space of the accessible WC layout must be clear of wall finishes and wall skirting etc.	Capable of compliance. TBA at CC Stage.
14.3.	Sanitary Facilities - Accessible WC.	The doorway to the Accessible WC.	Should there be insufficient circulation space at the doorway this may prevent a user of a large mobility device such as an electric	The required circulation space must comply with AS 1428.1:2009 Clause 13.3 *Circulation spaces at doorways on a continuous*	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			wheelchair from being able to access the Accessible WC.	*path of travel'* and the corresponding Fig 31 and 32. Accordingly, enough circulation must be provided to the 'latch side' (WL dimension) and 'hinge side' (WH dimension) of the door as well as providing enough length for circulation. Refer to Appendix 'A' Fig 1, Fig 2 and Fig 3.	
14.4	Sanitary Facilities - Accessible WC.	Doorway controls to the Accessible WC.	The sanitary facilities must have an accessible lock and exit mechanism, both to the Accessible WC, and other sanitary compartments.	The internal door furniture to the sanitary facilities must have 'D' handles in accordance with AS 1428.1:2009 Clause 13.5, so that a person with limited dexterity can open the door. Refer to Appendix 'A' Fig 20. Accordingly, a 'Snib' catch if used must have a snib handle of 45mm from the centre of the spindle in accordance with AS	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				1428.1:2009 Clause 15.2.9 (b).	
14.5	Sanitary Facilities - Accessible WC.	Luminance contrast to the doorway.	A person with vision impairment may not be able to distinguish the Accessible WC door from the surrounding surfaces.	All doorways, architraves and adjacent walls must have luminance contrast of 30% provided, the minimum width of the area of luminance contrast must be no less than 50mm in accordance with AS.1428.1 Clause 13.1.	Refer to item 10.2 compliance column.
14.6	Sanitary Facilities - Accessible WC.	The washbasin and tap fittings to the Accessible WC.	The washbasin must be provided within the accessible WC and contain clearance to the underside for the footplate and knees of a wheelchair user. Water taps must be lever handles and accessible for people with limited dexterity and reachable by a person in a wheelchair.	The washbasin must comply with AS 1428.1:2009 Clause 15.3 and Fig 46 and have enough circulation. Refer to Appendix 'A' Fig 42. Ensure there is a minimum 300mm clearance from the edge of the door swing to the side of the washbasin as shown in the attached AS1428.1 figure 51(A) (c)&(a). Refer to Appendix 'A' Fig 43 and Fig 27.	Refer to item 14.3 compliance column.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
14.7	Sanitary Facilities - Accessible WC.	The required layout to the Accessible WC.	Essential internal fixtures or fitting must be provided in the Accessible WC.	Fixtures and fittings such as clothes hanging hooks must be installed between 1200mm and 1350mm above the finished floor and located 500mm from the internal corner of the wall in accordance with AS 1428.1-2009 Clause 15.4.4. Also, consideration must also be given soap dispensers and towel dispensers, hand dryers which must be provided between the heights of 900mm and 1100mm above the floor and be operationally reachable from the washbasin. Australian Standard AS.1428.1:2009 Clause 15.4	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				lists and specifies the requirements for various fixtures and fittings within sanitary facility such as mirrors, sanitary disposal units and lever taps. Refer to Appendix 'A' Fig 42. Ensure the 300m length WC grabrail at the back wall is terminated a maximum 50mm from edge of the cistern. Refer to Appendix 'A' Fig 39. Ensure all grabrails are provided in accordance with AS1428.1:2009 Clause 15.	
14.8	Sanitary Facilities - Accessible WC.	Shelf to the Accessible WC.	A shelf is required for colostomy bags and placement of other sanitary equipment.	Shelves must be provided within the Accessible WC and must be securely fixed at a height between 900mm and 1000mm above the finished floor. The shelves provide storage for sanitary equipment, accessories and	Refer to item 14.7 compliance column.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				must comply with AS 1428.1:2009 Clause 15.4.2. Refer to Appendix 'A' Fig 42.	
14.9	Sanitary Facilities - Accessible WC.	Backrest to the Accessible WC.	A backrest is required to an accessible toilet at an enough angle to provide adequate support to a person while seated.	Provide a backrest, which complies with AS 1428.1:2009 Clause 15.2.4. Refer to Appendix 'A' Fig 40 and 41.	Refer to item 14.7 compliance column.
14.10	Sanitary Facilities - Accessible WC.	Mirror to the Accessible WC.	A mirror is required either above or adjacent to the washbasin.	A mirror must be provided in accordance with AS 1428.1:2009 Clause 15.4.1. Refer to Appendix 'A' Fig 42.	Refer to item 14.7 compliance column.
14.11	Sanitary Facilities - Accessible WC.	Light switches.	If a light switch is provided it must be accessible to a person with a disability.	In accordance with the AS 1428.1:2009 Clause 14.2, if a light switch is provided to an accessible sanitary facility, it must be a rocker action switch with a minimum dimension of 30mm x 30mm. Push-pad switches, if provided must have a minimum dimension of 25mm in diameter.	Capable of compliance. TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				The light switches and general-purpose outlets to an accessible sanitary facility must be located not less than 500mm from an internal corner and not less than 900mm -1100mm from the finished floor for light switches and not less than 600mm -1100mm from the finished floor for GPOs.	
15.1	Sanitary Facilities General.	The number of sanitary facilities in a building must comply with the NCC Part F4D3 and F4D4. Accessible sanitary facilities must be provided in accordance with NCC Part F4D5 and comply with AS.1428.1 Clause 15 and Clause 16.	The number of WC pans and urinals must meet the requirements of NCC table F4D4.	The number of sanitary facilities required for class 7 and 8 building must be provided in accordance with NCC table F4D4b.	Capable of compliance. Certifier to advise.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
16.1	Sanitary Facilities- Showers.	In accordance with the NCC Part F4D5 Accessible Showers must be provided in accordance with F4D7. Where accessible showers are required to be provided by F4D5(b). 1 shower per 10 must be provided as accessible to comply with AS.1428.1:2009 Clause 15.5 and F4D7(d).	Where showers facilities are provided in a building an accessible shower to facilitate a person with a disability should be also be provided.	In class 5, 6, 7, 8 and 9 buildings, accessible showers are only required where the NCC F4D4 requires showers to be provided in the first place. Providing Showers in a class 5 or class 7b building is not a requirement under NCC F4D4. If showers are provided voluntarily in buildings, e.g., in an office building, in accordance with best practice and the intent of the DDA provide 1 unisex accessible shower per 10 to comply in accordance with AS1428.1:2009 clause 15.5 and NCC F4D7(d).	N/A.
17.1	Sanitary Facilities - Ambulant Facilities.	In accordance with the NCC Part F4D5 (c) a sanitary compartment suitable for a person	If vestibules or airlocks are provided as part of the path of travel to amenities containing facilities for a	In addition to unisex accessible toilets there is requirement to provide ambulant facilities with	N/A

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
		with an ambulant disability must comply with AS 1428.1:2009 Clause 16.	person with an Ambulant disability, there must be a 900mm x 900mm clearance space between door swings in the airlock.	circulation 900mm clear of swing doors in accordance with AS1428.1 2009 Clause 13.4 and Fig 34. Refer to Appendix 'A' Fig 28.	
17.2	Sanitary Facilities - Ambulant Facilities.	A male and female sanitary compartment for people with ambulant disabilities is advocated in each bank of toilets in accordance with AS.1428.1:2009 Clause 16.	Sanitary compartments in either the male or female banks or a unisex compartment, which can facilitate a person with an ambulant disability.	Male and female WCs must be provided with Ambulant compartments. Ambulant compartments must be a width of 900-920mm wide between wall surfaces. The toilets must comply with the NCC Part F4D5 (c) in which a compartment suitable for a person with an ambulant disability must be provided to each of the male and female toilets to comply with AS.1428.1:2009 Clause 16. Refer to Appendix 'A' Fig 29 Fig 30 and Fig 31.	N/A
18.1	Signage.	Signage to Accessible Sanitary facilities.	Signage to indicate an Accessible WC must have	The accessible sanitary compartment for people	Capable of compliance.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
			Braille and tactile characters, which are placed in an accessible position.	with disabilities must be identified by the International Symbol of Access, characters and provided with luminance contrast as specified in AS.1428.1:2009 Clause 8.1 and 8.2 The signage to a unisex accessible sanitary facility should be applied to the latch side of the door a distance 50mm - 300mm. The requirements of Braille characters and position must comply with the Premises Standards Part D4 and NCC Specification 15-Braille and Tactile signs. The height from FFL of the braille and tactile text component of the signage is to be within the range band	TBA at CC Stage.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				of 1250-1350mm. Refer to Appendix 'A' Fig 32 and 33.	
18.2	Signage.	Signage to Fire Exits.	Signage to emergency exits must convey information for people with vision impairment.	Signage must be provided in both Braille and tactile characters complying with NCC Specification 15-Braille and Tactile signs to identify each door required by E4D5 to be a required exit. The signage should be provided to the latch side of the fire exit door. The height from FFL of the braille and tactile text component of the signage must be within the range band of 1250-1350.	Capable of compliance. TBA at CC Stage.
19.1	Emergency Egress.	Emergency egress for people with disabilities.	Consideration must be given to egress for people who use wheelchairs or have mobility impairment.	An Emergency Evacuation Plan which includes people with disabilities in accordance with AS3745 – Planning for Emergencies should be considered as best practice.	Operational Facilitation.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				The requirements for egress for people with disabilities must be discussed with the relevant certifier such as a Building Certifier and Fire and Rescue NSW Service.	
19.2	Emergency Egress.	Emergency egress for people with disabilities.	Emergency Egress clearance.	The doorways to each exit point must meets the minimum clear unobstructed width requirements in accordance with NCC Part D2D9. This would apply to any required exit.	Yes
19.3	Emergency Egress.	Emergency egress for people with disabilities.	Emergency Thresholds.	To comply with the NCC D3D16, the threshold of a doorway serving a required exit must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf, unless it is provided with a threshold ramp or step ramp complying with AS 1428.1. The ramp must have slip	Capable of compliance. Certifier to advise.

Item	Element	Design Criteria	Potential Risk	Recommendation	Compliance
				resistance in accordance with the NCC Table D3D15 and AS 4586:2013.	
19.4	Emergency Egress	Emergency egress general.	The travel distances in relation to the occupancy and class of the building must be considered in accordance with the Premises Standards Performance Requirements D1P4 and D1P6.	This performance requirement must be achieved, therefore confirmation from a Certifier must be provided regarding the travel distances to a required exit or exits.	Certifier to advise.

Conclusion

This DA Access report is an assessment to which I conclude that I am satisfied that the proposal can achieve compliance with the NCC Part D4, F4 & E3, Premises Standards and pertaining access standards,

Accordingly, this DA Access report has appraised checklist items 1-19 for the requirements relative to people with disabilities regarding accessibility to the building and associated facilities.

DA Access Report
Prepared by

John Bedwell
Director
Date 08.04.2025.

ACAA Accredited Member **382-** NDIS SDA Accredited Assessor No **SDA00042**- Changing Places Assessor Registration No **CP047**- LHA Design Guideline Assessor Registration No **20258**

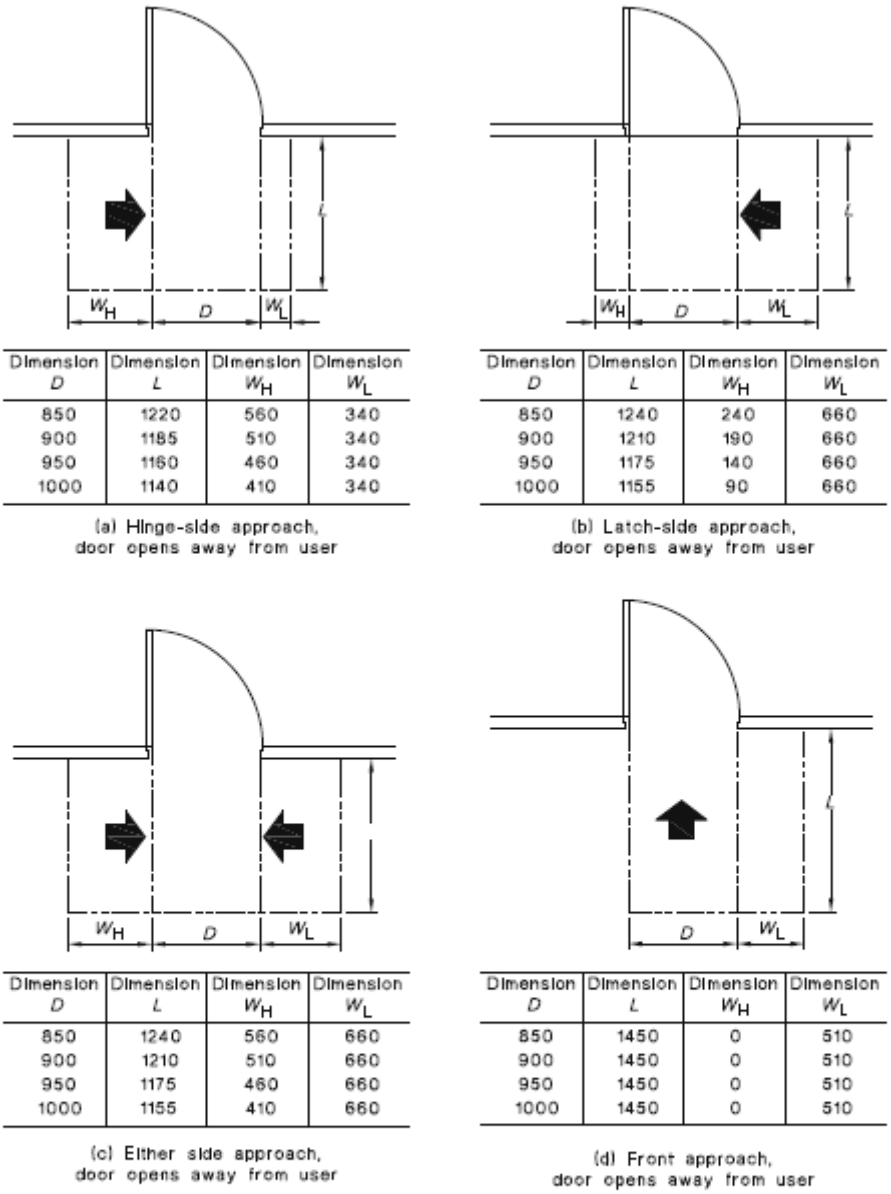
Disclaimer

Due care has been taken by Obvius Access in preparing this DA Report. The consultant believes the contents to be fair and accurate. Obvius Access does not accept responsibility or liability for the results of specification taken based on this information nor for any errors or omissions. The points raised are specific to the status and may need to be evaluated further as the design develops.

Legal issues in disability and anti-discrimination law are in a constant process of change. In addition, changes are occurring in relation to the Australian Standards relating to disability access. Due reference should be given to these and other relevant Standards.

From June 2015 the Disability (Access to Premises – Buildings) Standards is currently undergoing a review by the Department of Industry and Science, in conjunction with Attorney – General's Department in preparation for a report for Ministerial consideration by the 1 May 2016. Therefore, due reference should be given to any potential amendments to the Premises Standards following this review.

Appendix A:



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1220	560	340
900	1185	510	340
950	1160	460	340
1000	1140	410	340

(a) Hinge-side approach, door opens away from user

Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1240	240	660
900	1210	190	660
950	1175	140	660
1000	1155	90	660

(b) Latch-side approach, door opens away from user

Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1240	560	660
900	1210	510	660
950	1175	460	660
1000	1155	410	660

(c) Either side approach, door opens away from user

Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	0	510
900	1450	0	510
950	1450	0	510
1000	1450	0	510

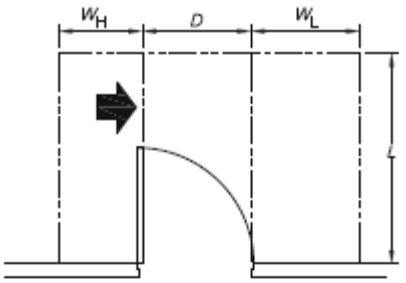
(d) Front approach, door opens away from user

LEGEND:
D = Clear opening of width of doorway
L = Length
W_H = Width—hinge side
W_L = Width—latch side
= Direction of approach
= Circulation space

DIMENSIONS IN MILLIMETRES

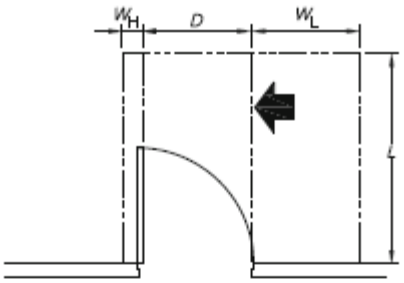
FIGURE 31 (in part) CIRCULATION SPACES AT DOORWAYS WITH SWINGING DOORS

Fig 1



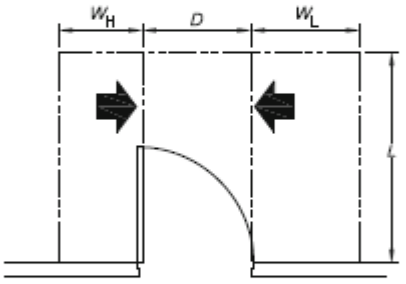
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1670	660	900
900	1670	610	900
950	1670	560	900
1000	1670	510	900

(e) Hinge-side approach, door opens towards user



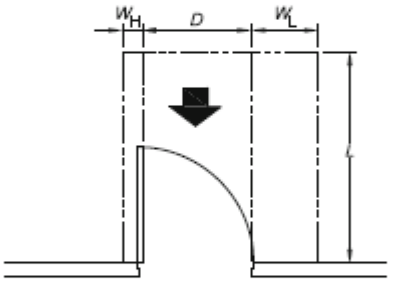
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1670	110	900
900	1670	110	900
950	1670	110	900
1000	1670	110	900

(f) Latch-side approach, door opens towards user



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1670	660	900
900	1670	610	900
950	1670	560	900
1000	1670	510	900

(g) Either side approach, door opens towards user



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	110	530
900	1450	110	530
950	1450	110	530
1000	1450	110	530

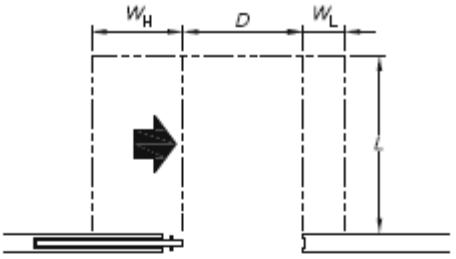
(h) Front approach, door opens towards user

LEGEND:
D = Clear opening of width of doorway
L = Length
W_H = Width—hinge side
W_L = Width—latch side
= Direction of approach
= Circulation space

DIMENSIONS IN MILLIMETRES

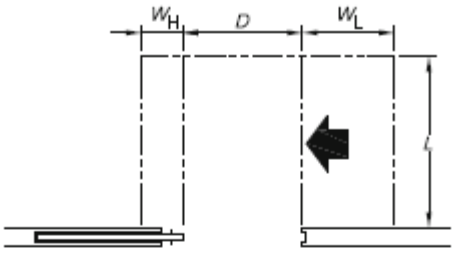
FIGURE 31 (in part) CIRCULATION SPACES AT DOORWAYS WITH SWINGING DOORS

Fig 2



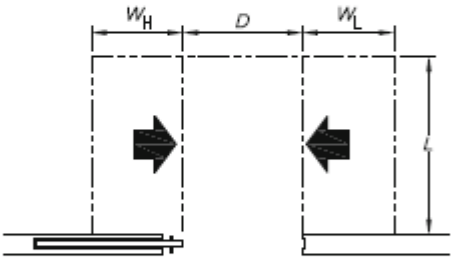
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1280	660	395
900	1280	610	395
950	1280	560	395
1000	1280	510	395

(a) Slide-side approach



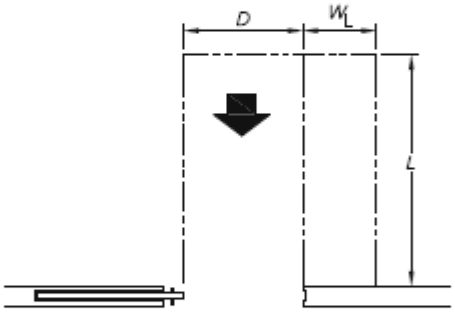
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1230	185	660
900	1230	180	660
950	1230	180	660
1000	1230	180	660

(b) Latch-side approach



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1280	660	660
900	1280	610	660
950	1280	560	660
1000	1280	510	660

(c) Either side approach



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	0	530
900	1450	0	530
950	1450	0	530
1000	1450	0	530

(d) Front approach

LEGEND:
D – Clear opening of width of doorway
L – Length
W_H – Width—hinge side
W_L = Width—latch side
➡ – Direction of approach
– – – = Circulation space

DIMENSIONS IN MILLIMETRES

FIGURE 32 CIRCULATION SPACES AT DOORWAYS WITH SLIDING DOORS

Fig 3

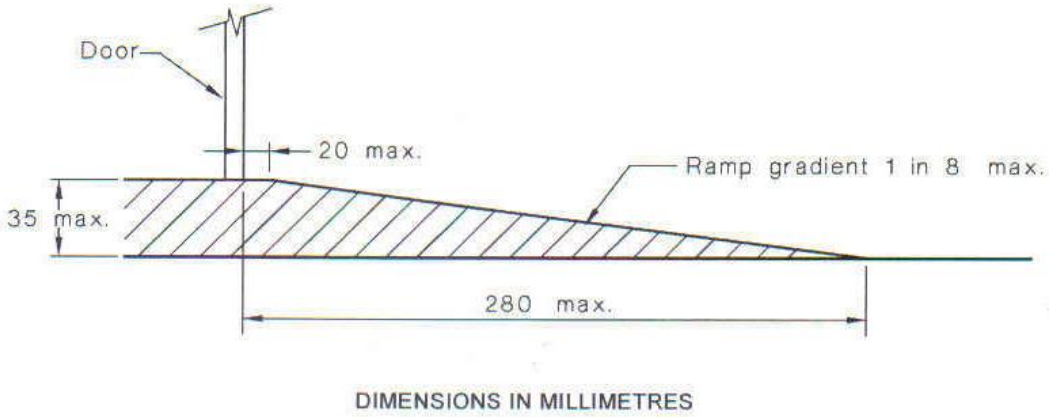
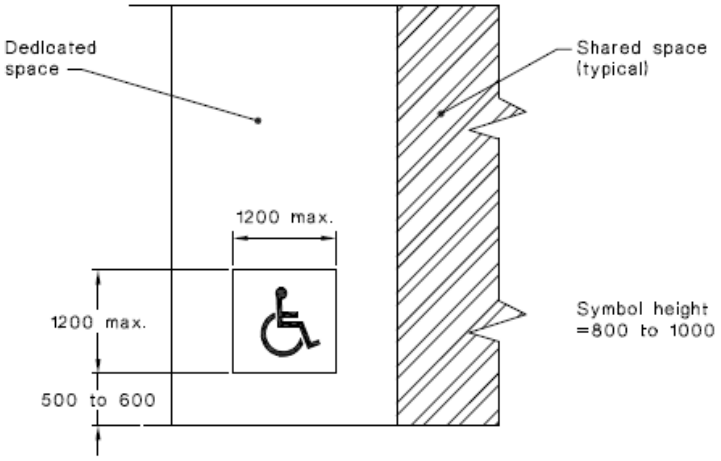

Door
20 max.
Ramp gradient 1 in 8 max.
35 max.
280 max.
DIMENSIONS IN MILLIMETRES

Fig 4

3.1 SPACE IDENTIFICATION

Each dedicated space shall be identified by means of a white symbol of access in accordance with AS 1428.1 between 800 mm and 1000 mm high placed on a blue rectangle with no side more than 1200 mm, placed as a pavement marking in the centre of the space between 500 mm and 600 mm from its entry point as illustrated in Figure 3.1.

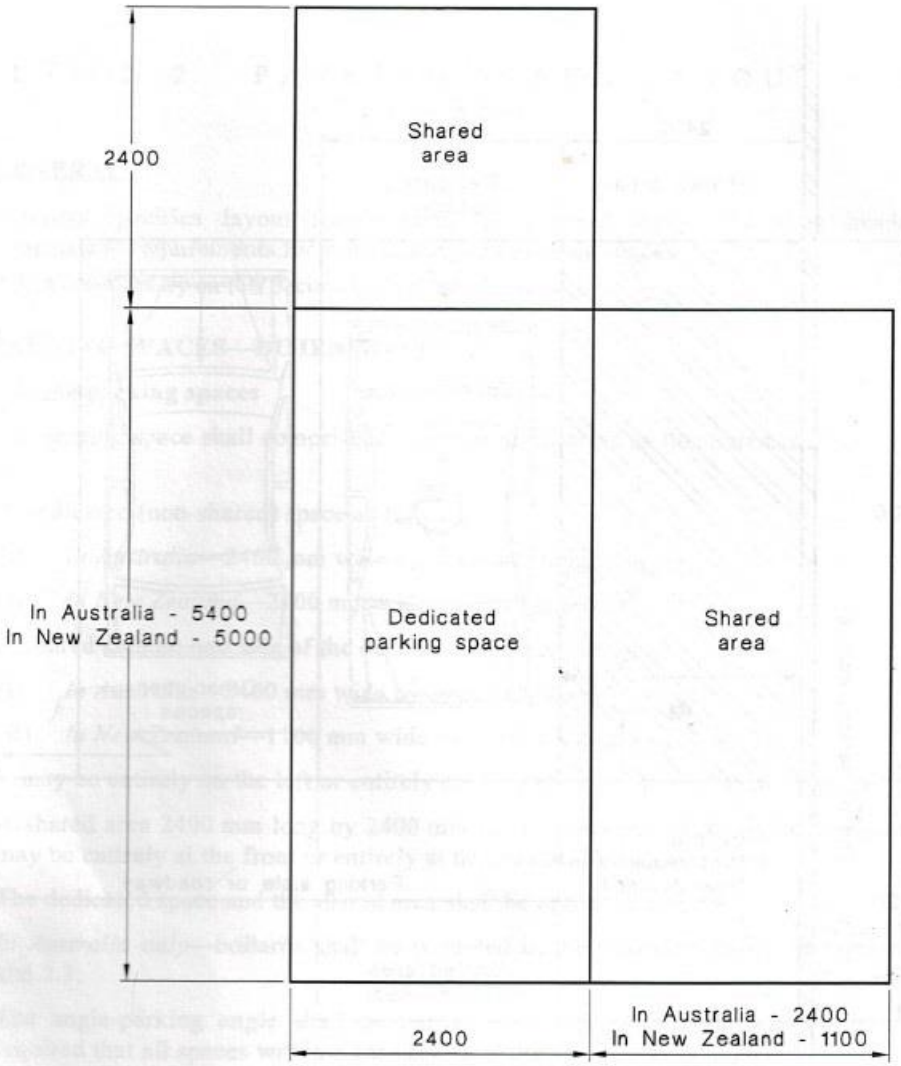


DIMENSIONS IN MILIMETRES

FIGURE 3.1 USE OF SYMBOL OF ACCESS TO IDENTIFY SPACES

Fig 5

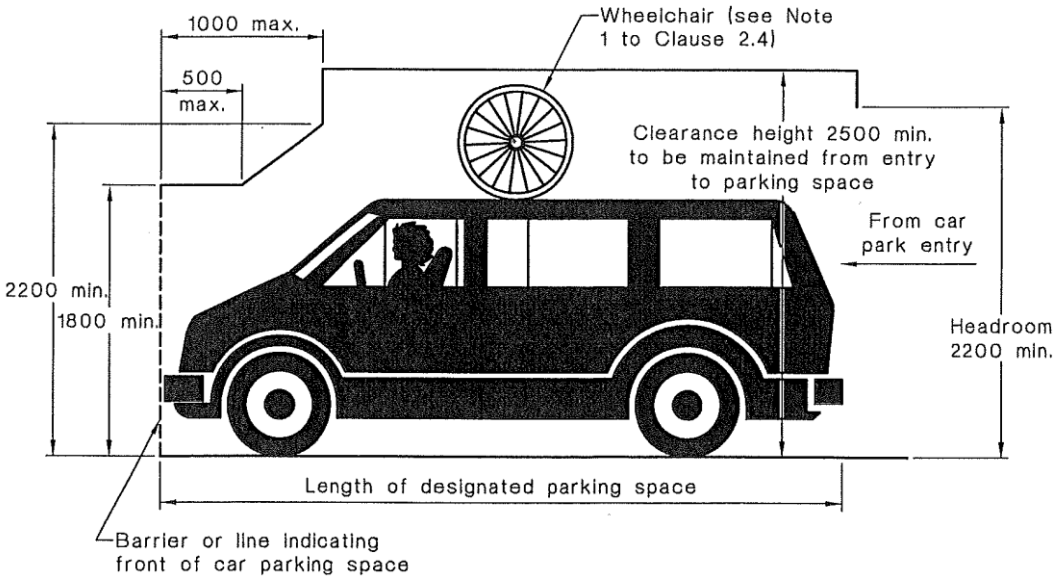
AS/NZS 2890.6:2009



DIMENSIONS IN MILLIMETRES

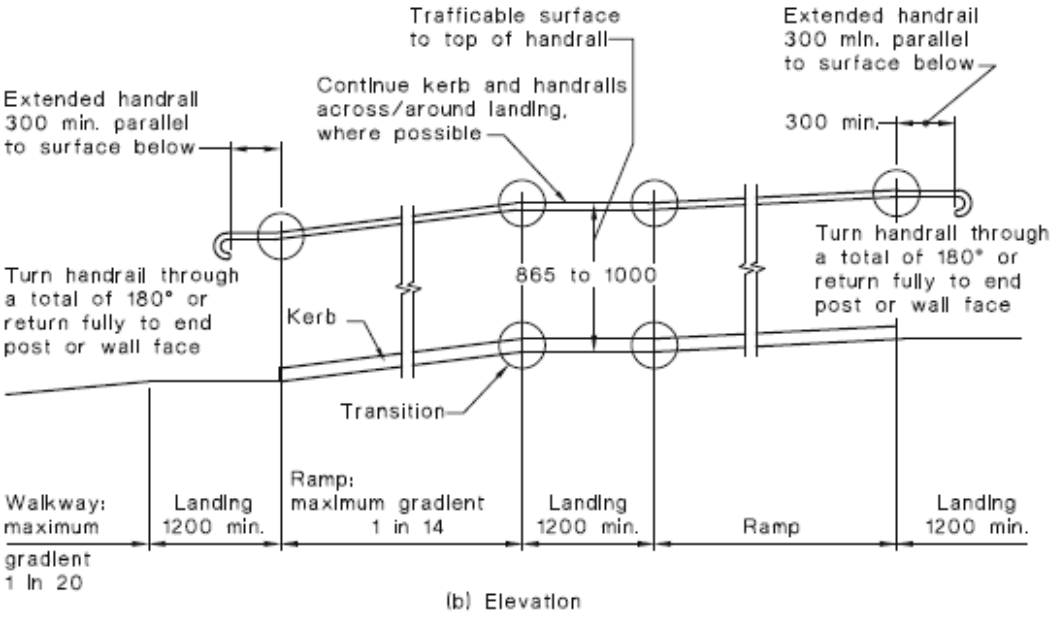
FIGURE 2.1 DIMENSIONS OF ANGLE PARKING SPACES

Fig 6



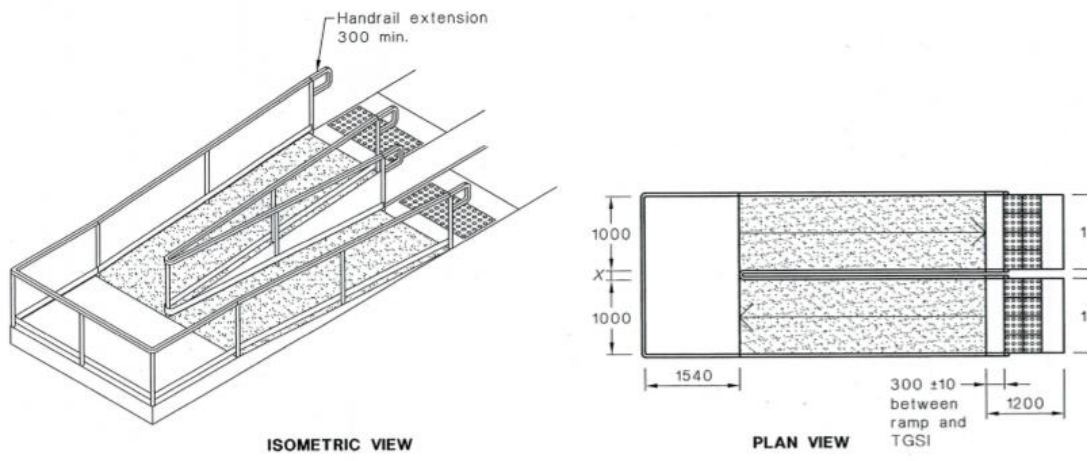
DIMENSIONS IN MILLIMETRES

Fig 7



(b) Elevation

Fig 8



ISOMETRIC VIEW

PLAN VIEW

Fig 9

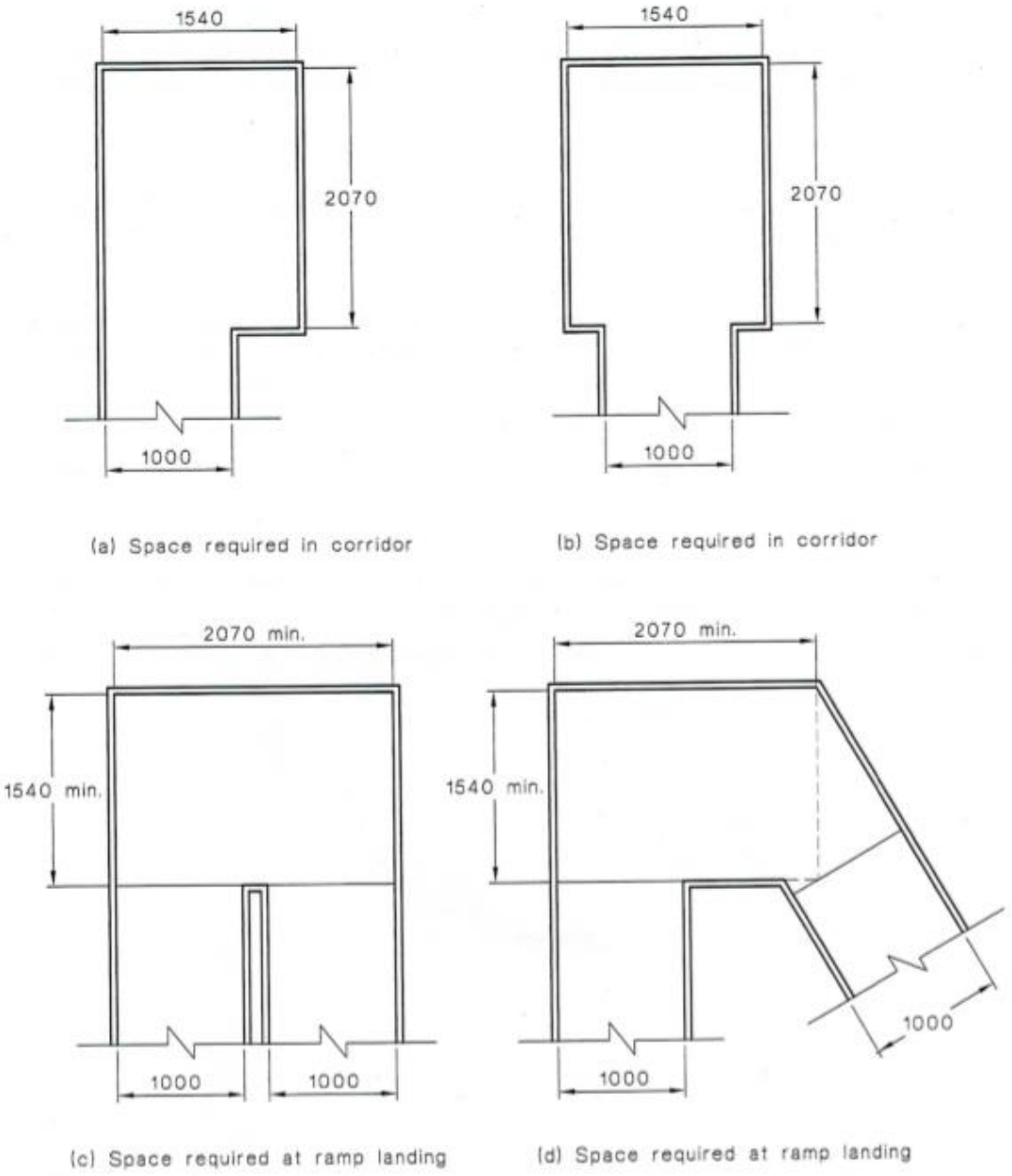


FIGURE 5 SPACE REQUIRED FOR A >90° TO 180° TURN

Fig 10

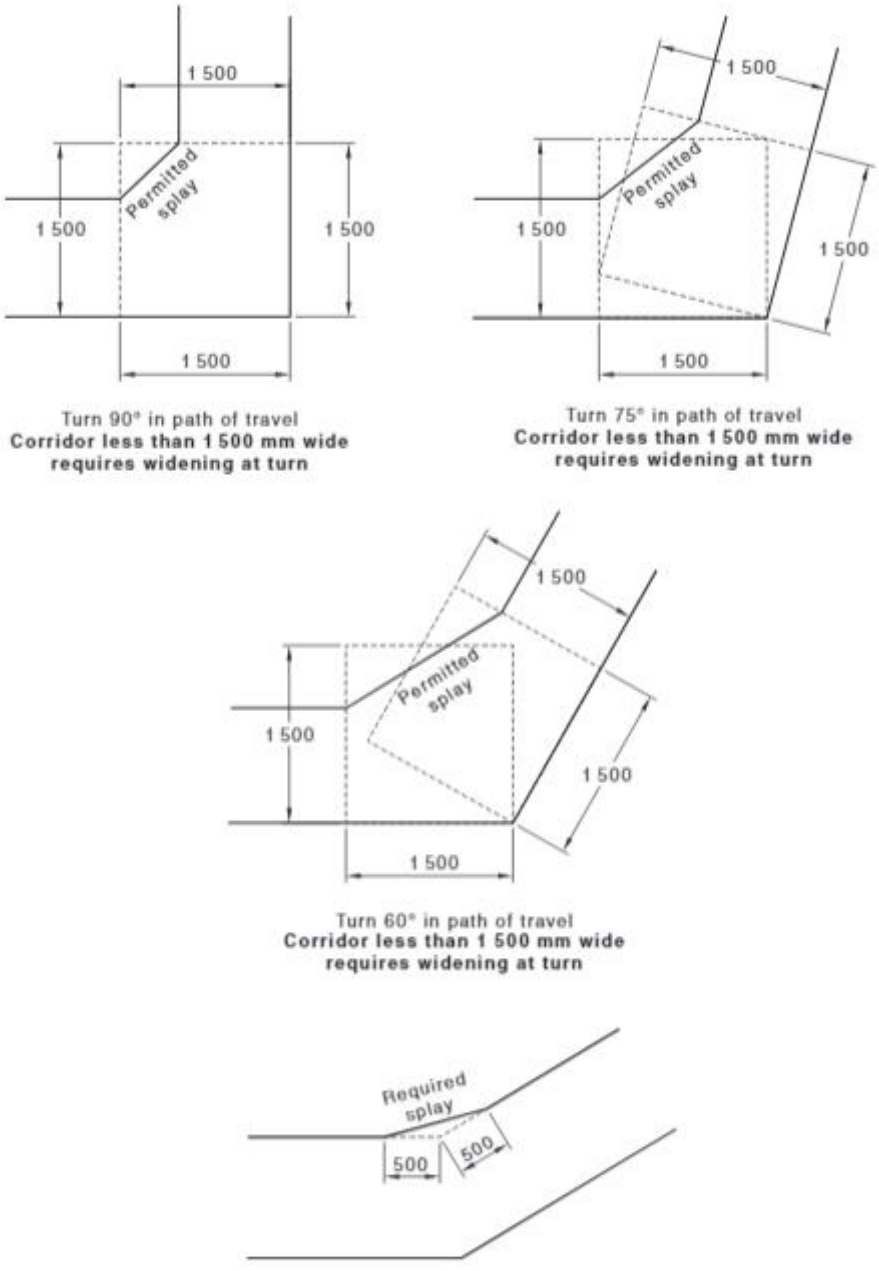


Figure 4 — Space required for a 30° to 90° turn

Fig 11

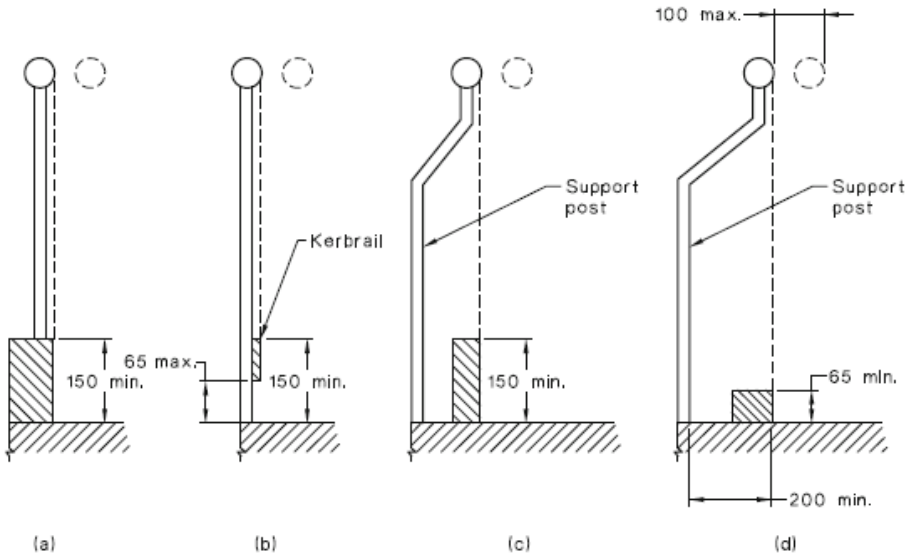

100 max.
Support post
Kerbrail
65 max.
150 min.
150 min.
150 min.
Support post
65 min.
200 min.
(a)
(b)
(c)
(d)
NOTE: See Appendix A for further clarification.

Fig 12

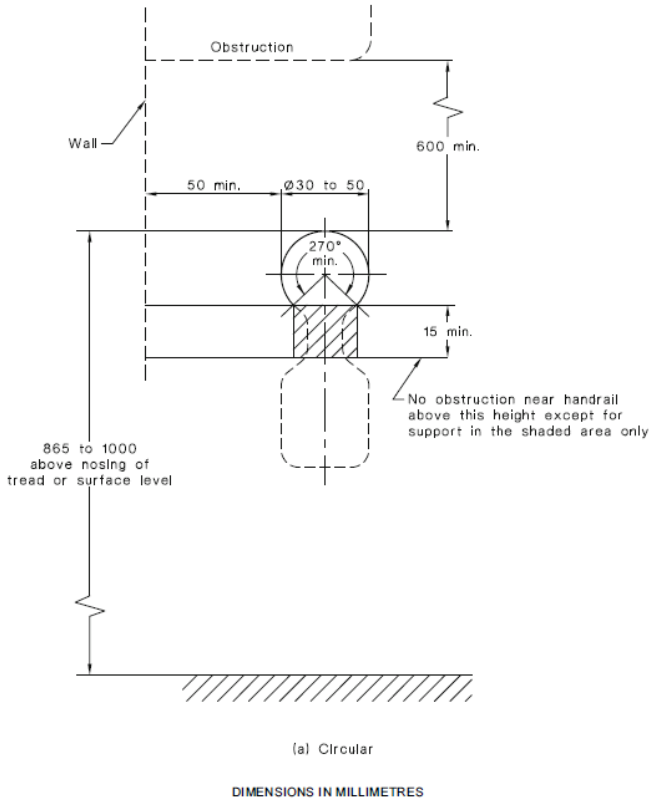
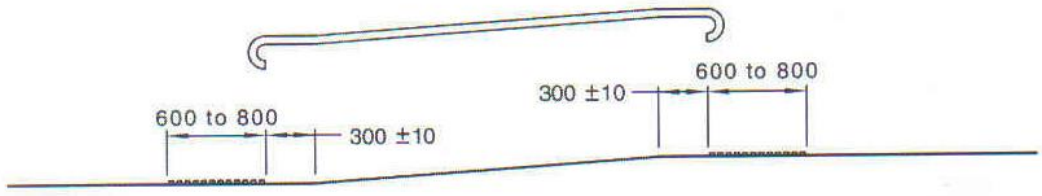

Obstruction
Wall
600 min.
50 min.
Ø30 to 50
270° min.
15 min.
No obstruction near handrail above this height except for support in the shaded area only
865 to 1000 above nosing of tread or surface level
(a) Circular
DIMENSIONS IN MILLIMETRES

Fig 13



(c) Side elevation where top and bottom of ramp leads to an open area

Fig 14

Table D3D14: Riser and going dimensions

Stairway location	Riser (R)		Going (G)[Note 3]		Quantity (2R + G)	
	Max	Min	Max	Min	Max	Min
Public	190	115	355	250	700	550
Private [Note 1]	190	115	355	240	700	550

Figure D3D14: Riser and going dimensions

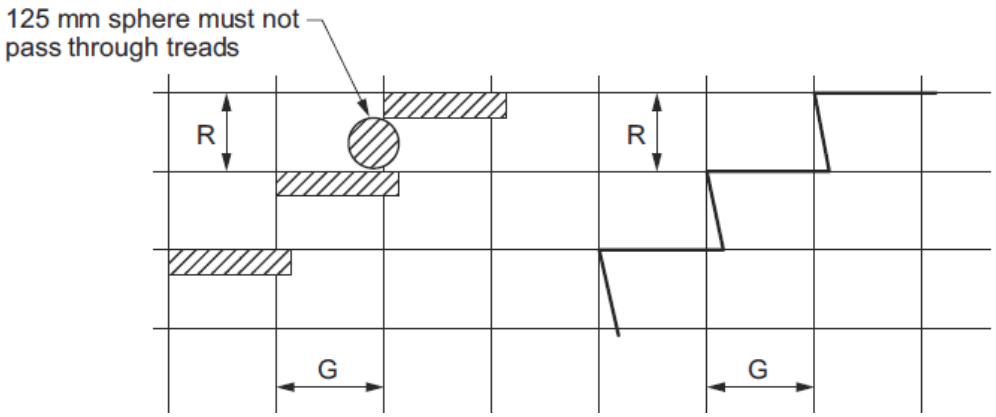
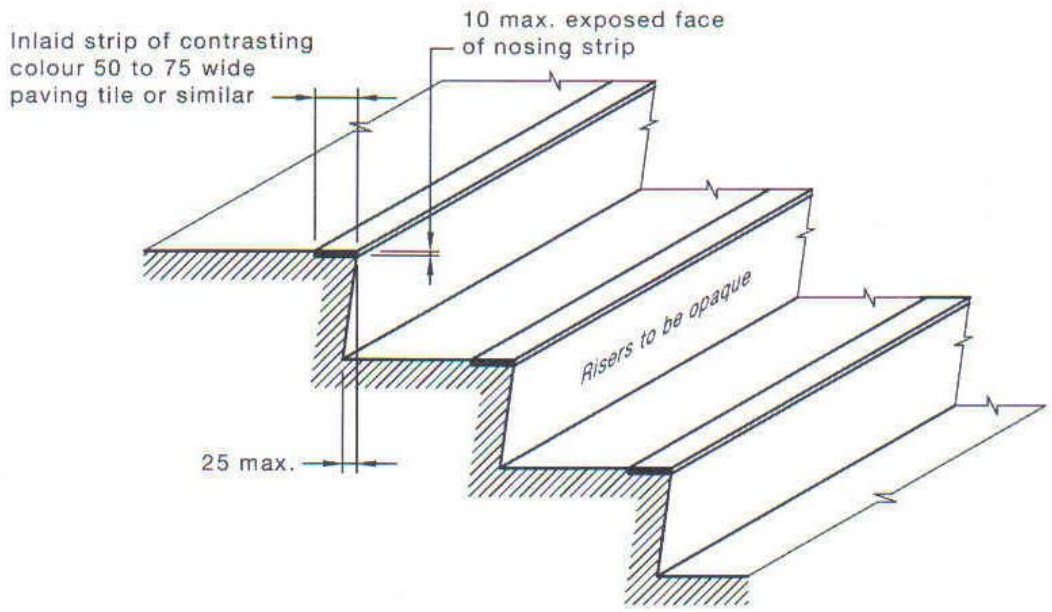


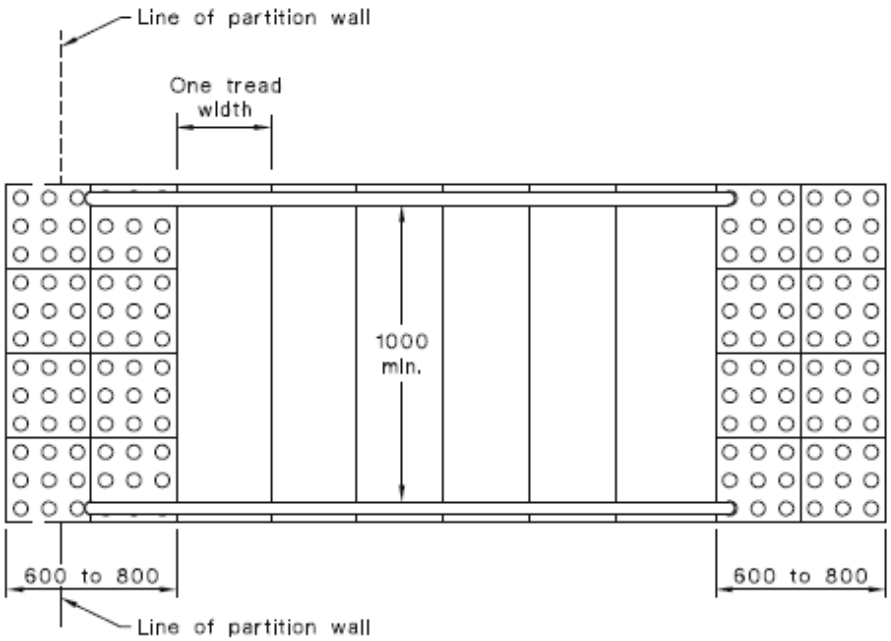
Fig 15



DIMENSIONS IN MILLIMETRES

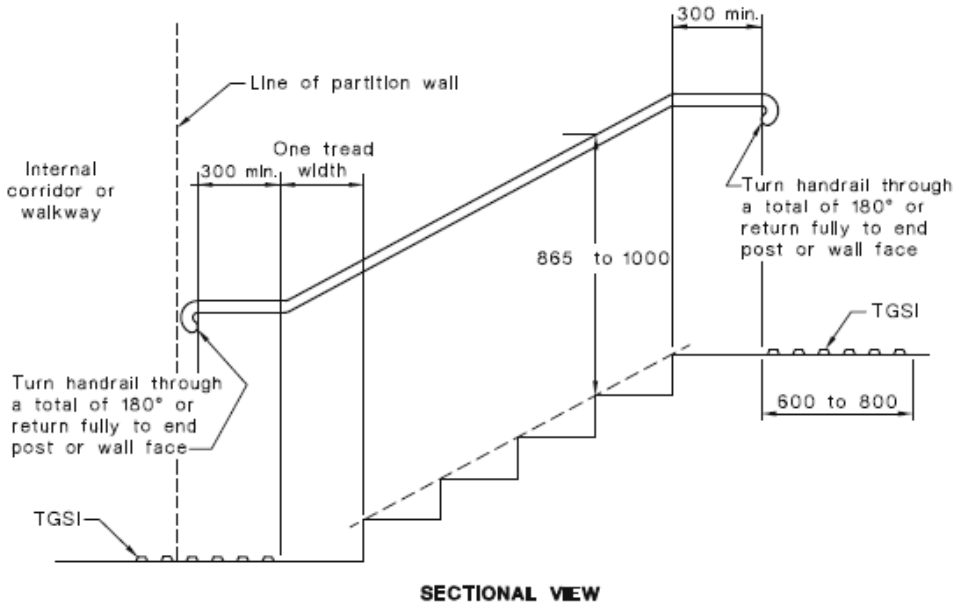
FIGURE 27(B) A TYPICAL STAIR NOSING PROFILE WITH EXPOSED NOSING STRIP

Fig 16



PLAN

Fig 17



AS1428.1:2009 FIGURE 26(B)

Fig 18

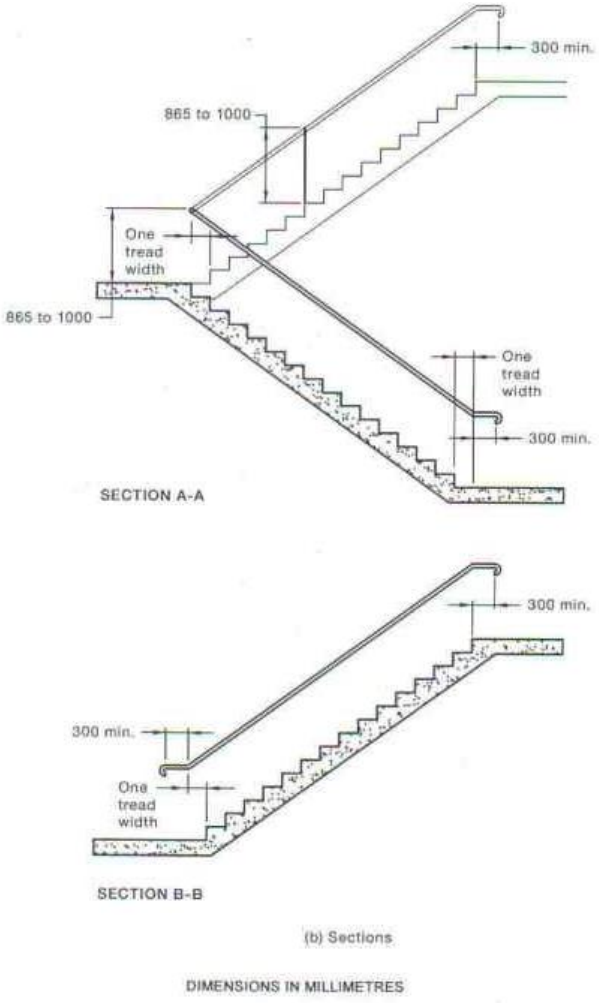

300 min.
865 to 1000
One tread width
865 to 1000
One tread width
300 min.
SECTION A-A
300 min.
300 min.
One tread width
SECTION B-B
(b) Sections
DIMENSIONS IN MILLIMETRES

Fig 19

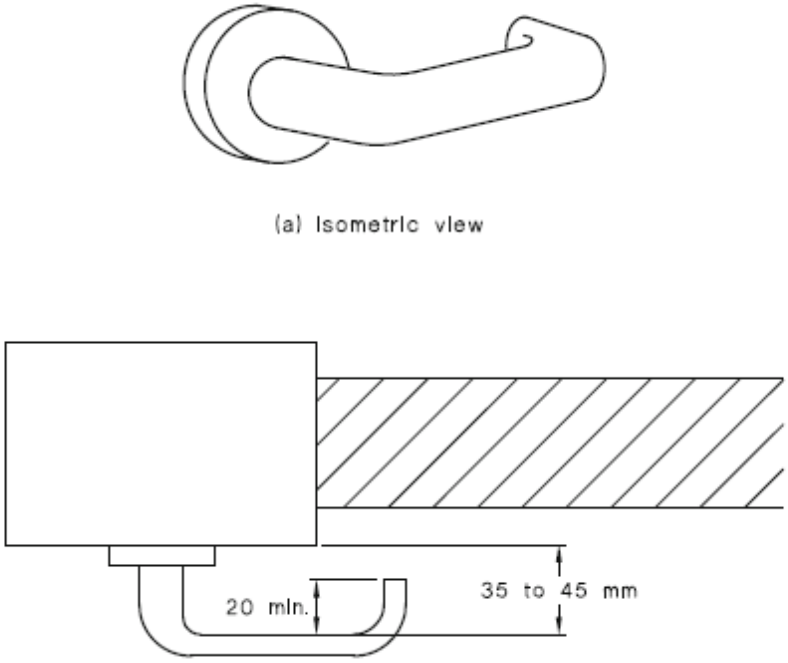


Fig 20

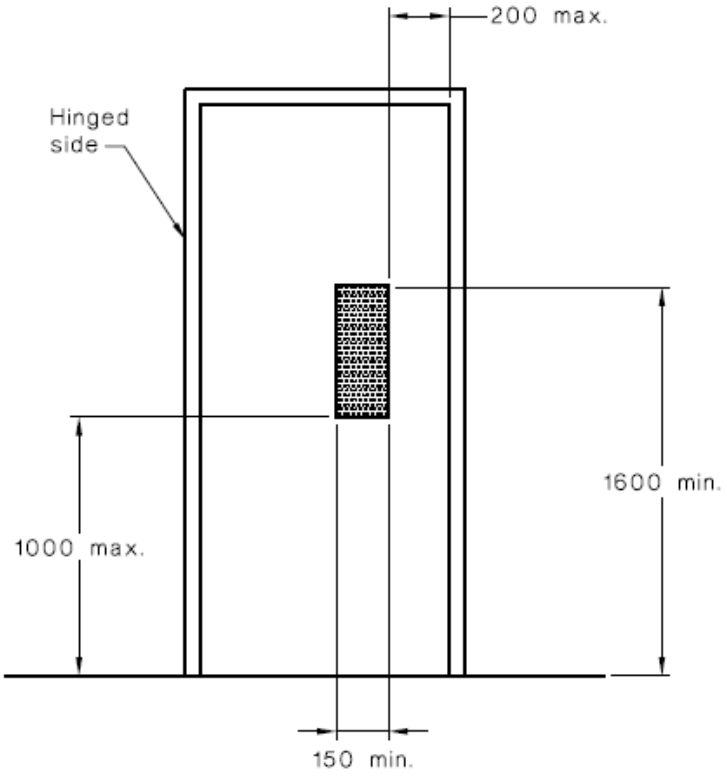
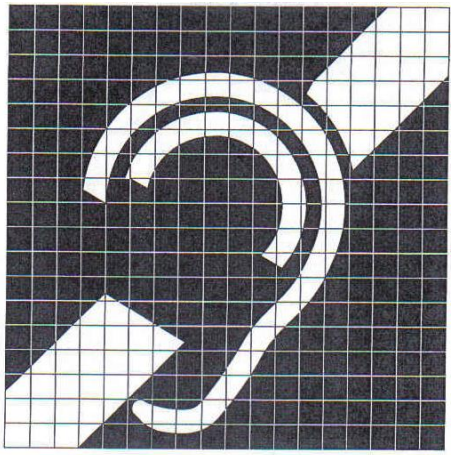

200 max.
Hinged side
1600 min.
1000 max.
150 min.
DIMENSIONS IN MILLIMETRES

Fig 21



This * is fitted with an audio frequency induction loop assistive listening system.

To use this system, ask for Loop receiver, and/or use hearing aid T-switch if you have one.

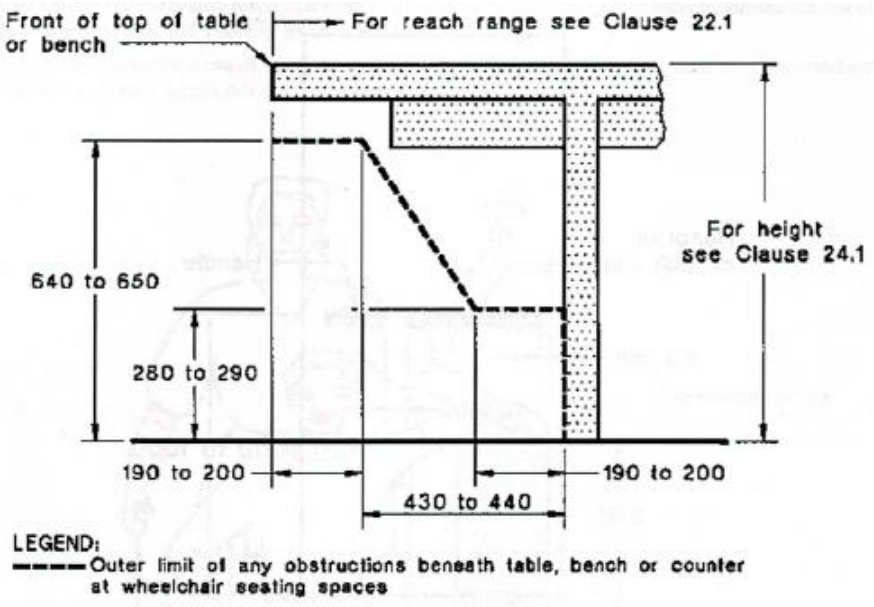
+

* Insert appropriate description of space (e.g., room, conveyance, counter, etc.)

† If only part of the area is covered, insert wording and map/floor plans here

Fig 22

Fig 23



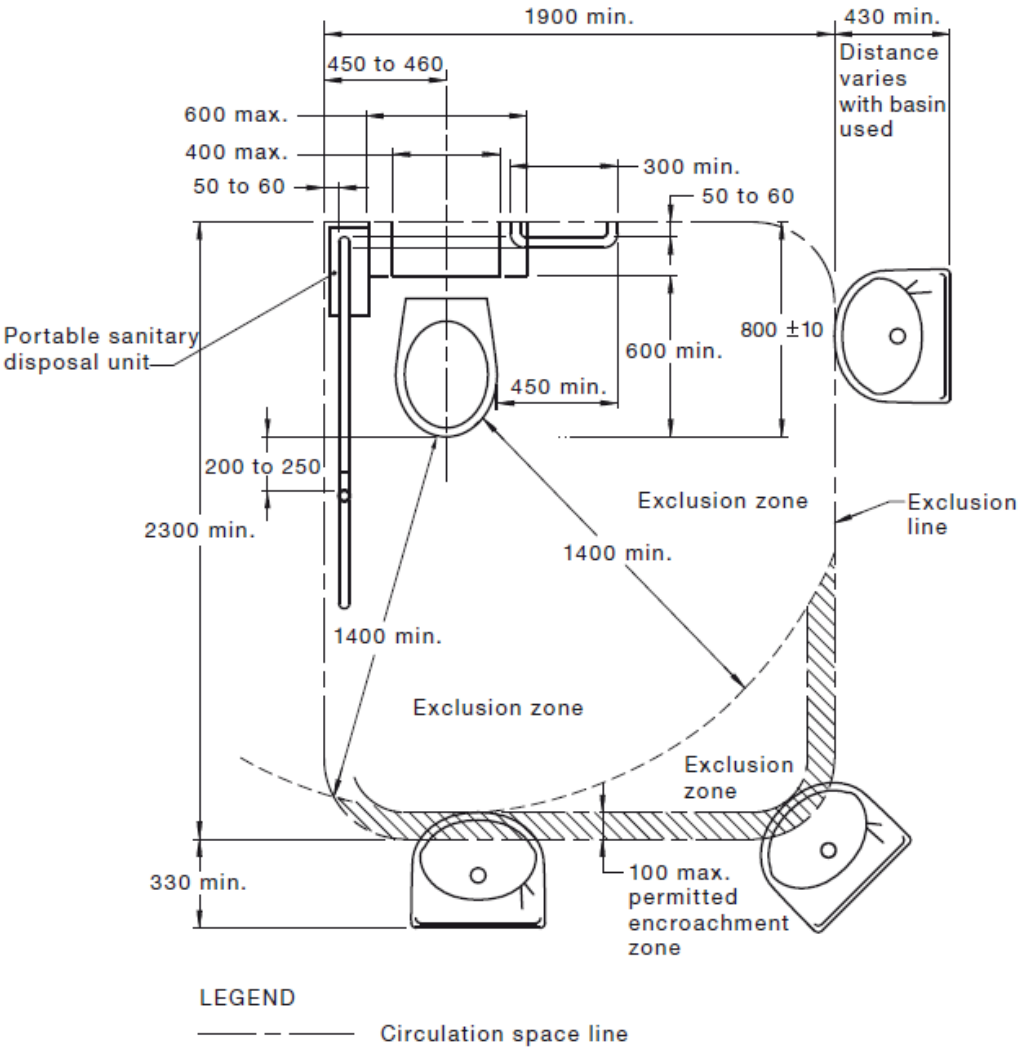
NOTE: For width of seating spaces see Clause 24.1.3.

DIMENSIONS IN MILLIMETRES

FIGURE 25 KNEE AND FOOT CLEARANCE BENEATH A TABLE, BENCH OR COUNTER

Illustration of AS.1428.2 (1992). Clause 24, FIGURE 25.

Fig 24

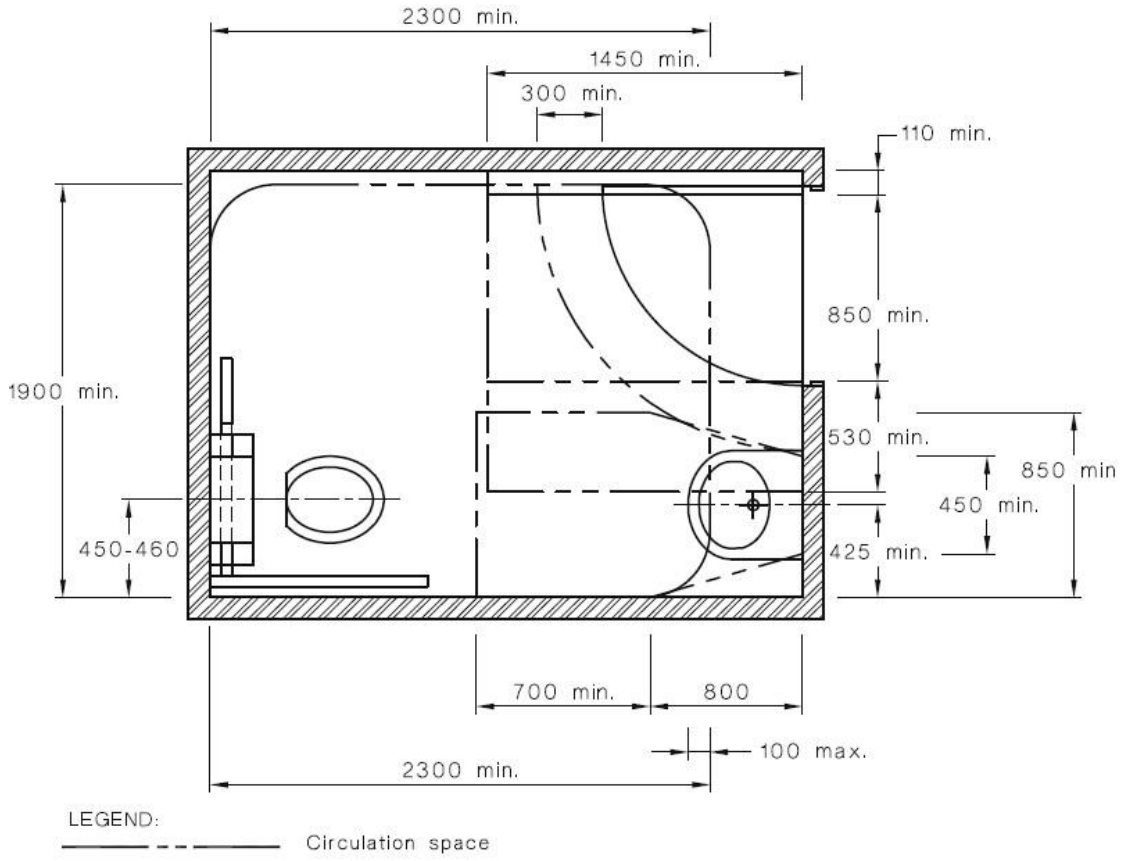


NOTE: This circulation space may overlap any other circulation spaces specified in this Standard.

DIMENSIONS IN MILLIMETRES

FIGURE 43 CIRCULATION SPACE FOR WC PAN—RIGHT-HAND TRANSFER (LEFT-HAND TRANSFER IS MIRROR REVERSED)

Fig 25



DIMENSIONS IN MILLIMETRES

FIGURE 52 EXAMPLE OF OVERLAPPING CIRCULATION SPACES IN A SANITARY COMPARTMENT

Fig 26

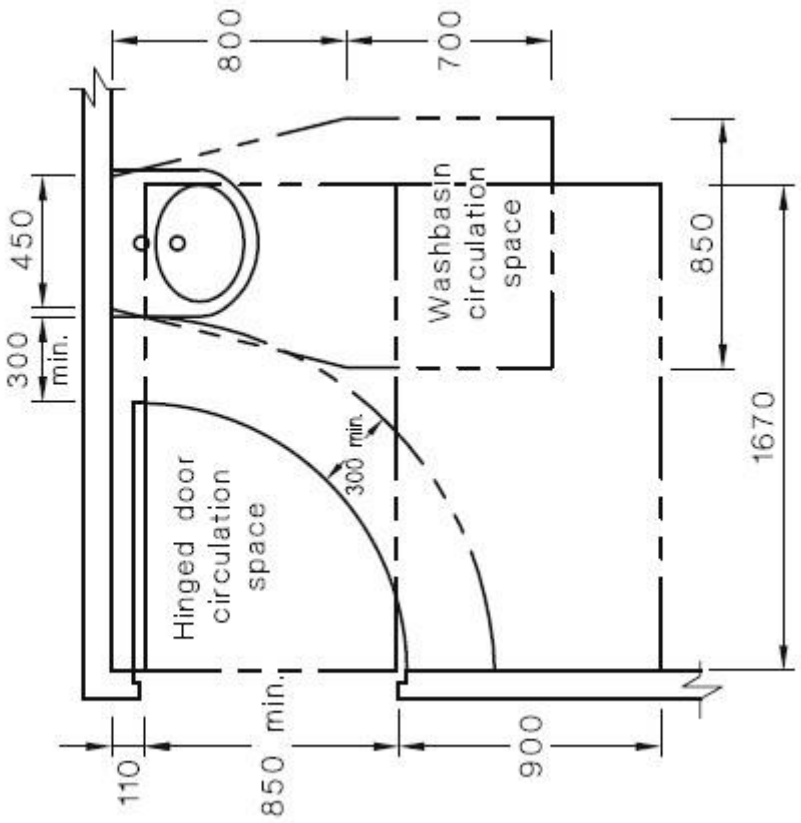
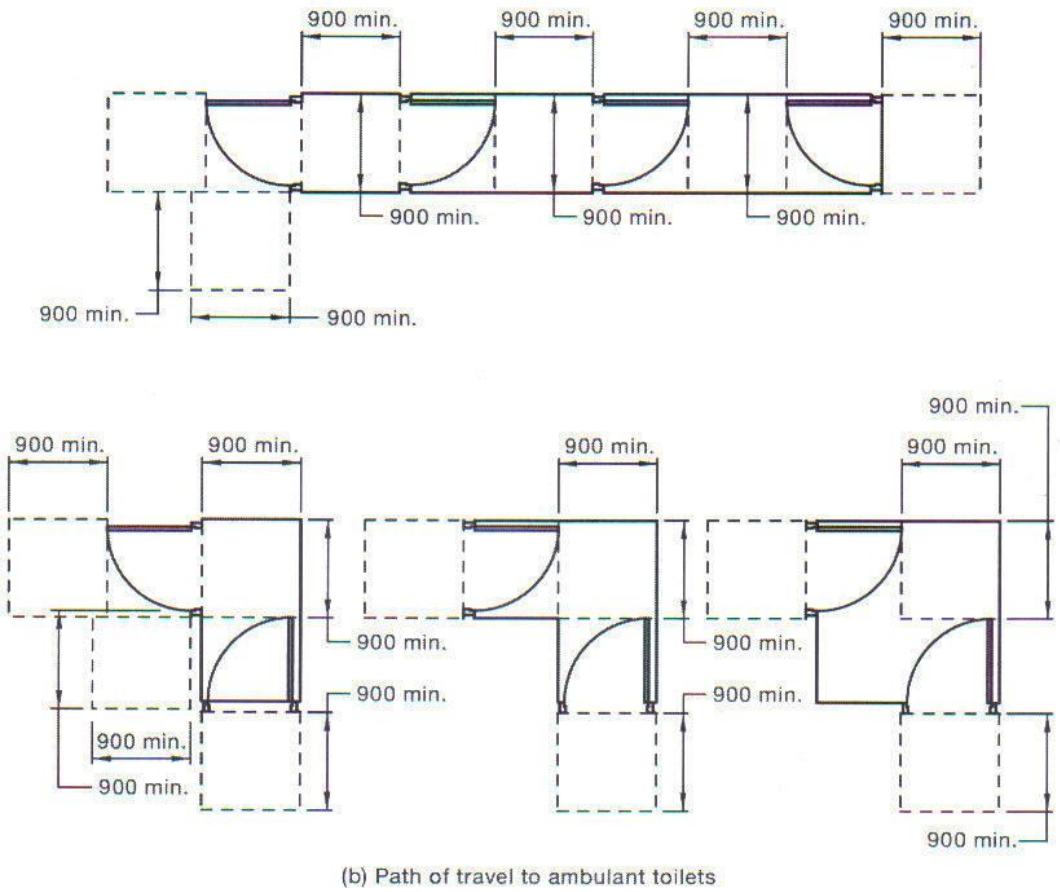
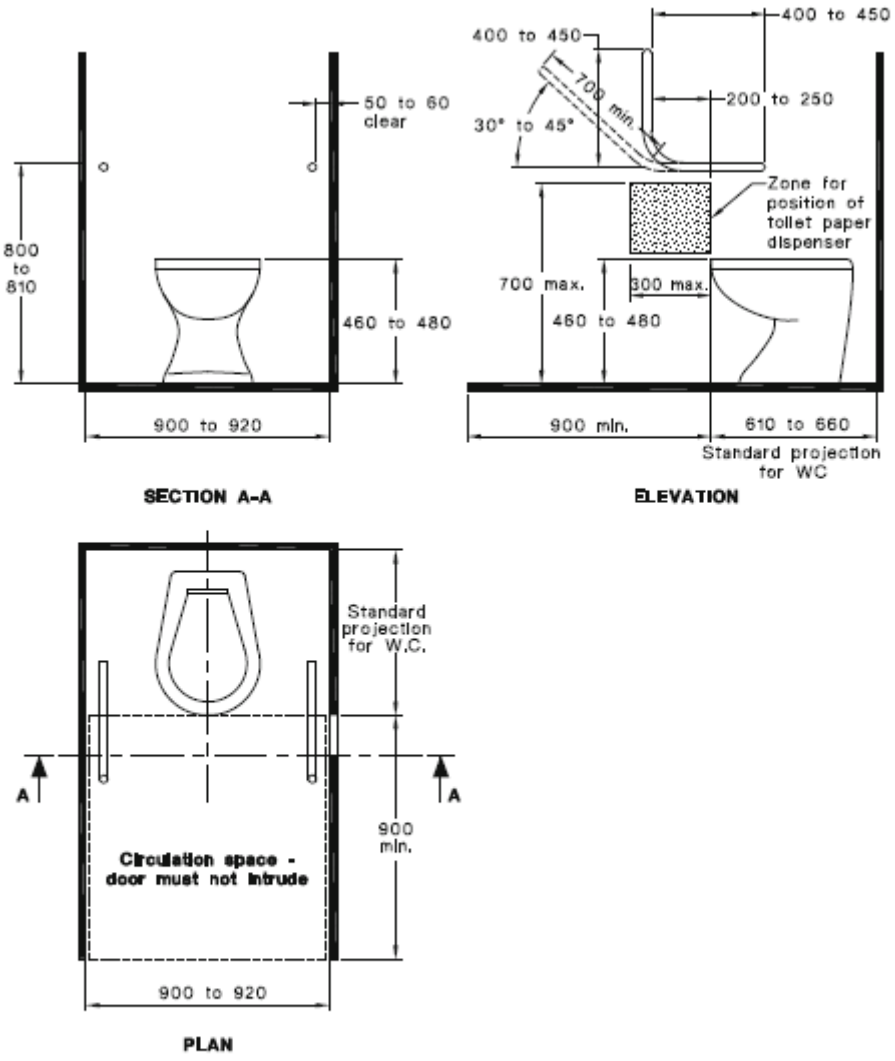

800
700
450
300
min.
Washbasin
circulation
space
850
1670
300 min.
Hinged door
circulation
space
110
850 min.
900

Fig 27



AS1428.1:2009 FIGURE 34 (in part) Distance between successive doorways in vestibules and air locks on a path of travel to ambulant toilets

Fig 28



DIMENSIONS IN MILLIMETRES

FIGURE 53(A) SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES—PLAN AND ELEVATION

Fig 29

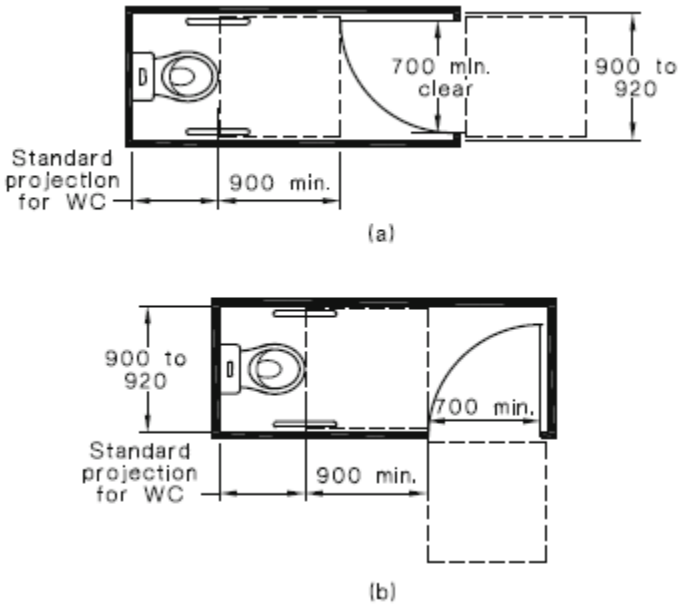

700 min.
clear
900 to
920
Standard
projection
for WC
900 min.
(a)
900 to
920
700 min.
Standard
projection
for WC
900 min.
(b)

Fig 30

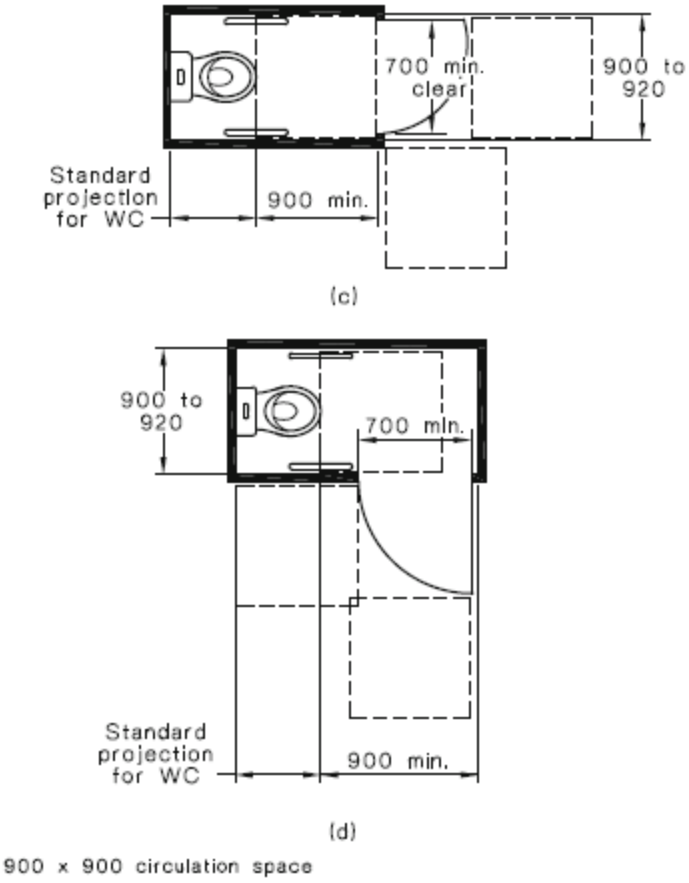

700 min.
clear
900 to
920
Standard
projection
for WC
900 min.
(c)
900 to
920
700 min.
Standard
projection
for WC
900 min.
(d)
900 x 900 circulation space

Fig 31

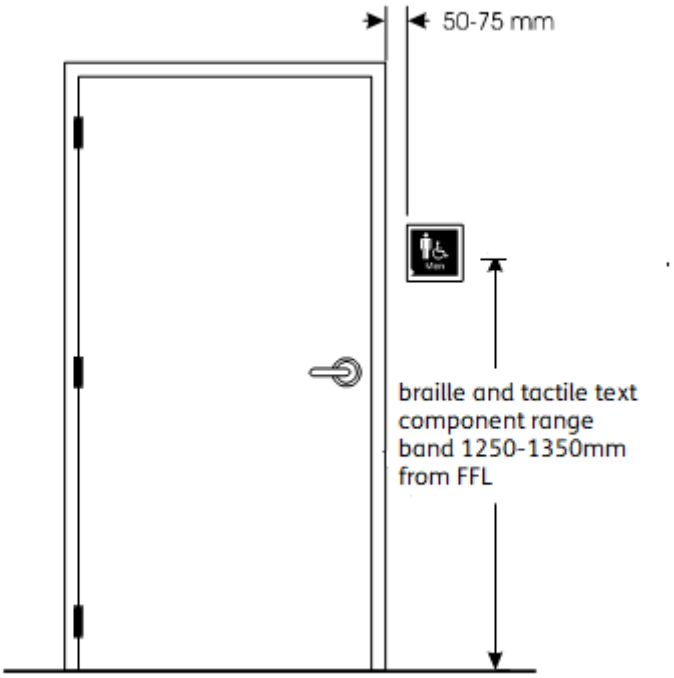

50-75 mm
braille and tactile text component range band 1250-1350mm from FFL

Fig 32

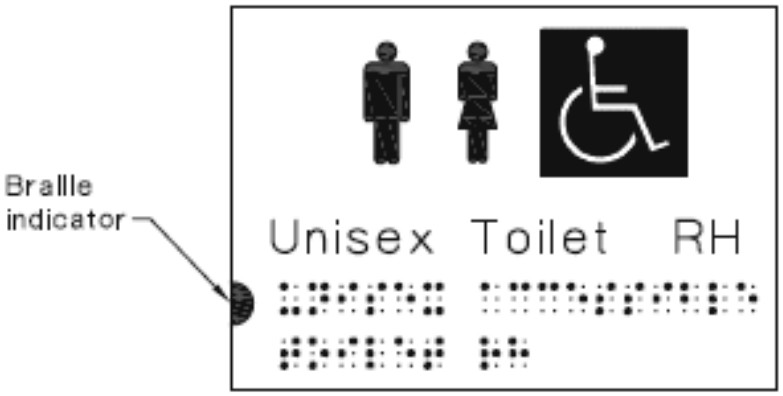

Braille indicator
Unisex Toilet RH

Fig 33

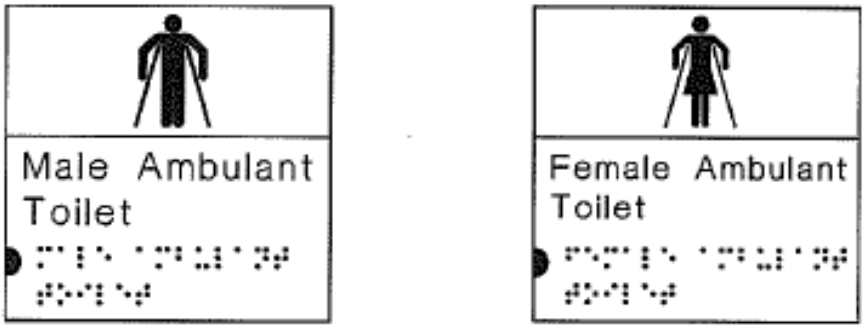

Male Ambulant Toilet
Female Ambulant Toilet

Fig 34

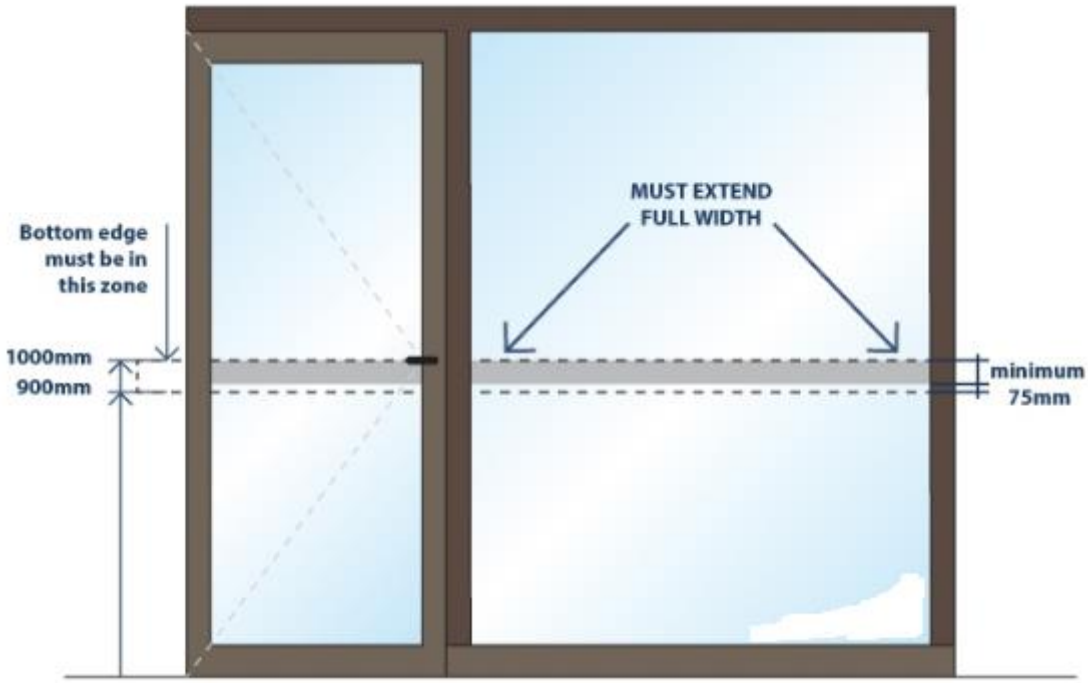
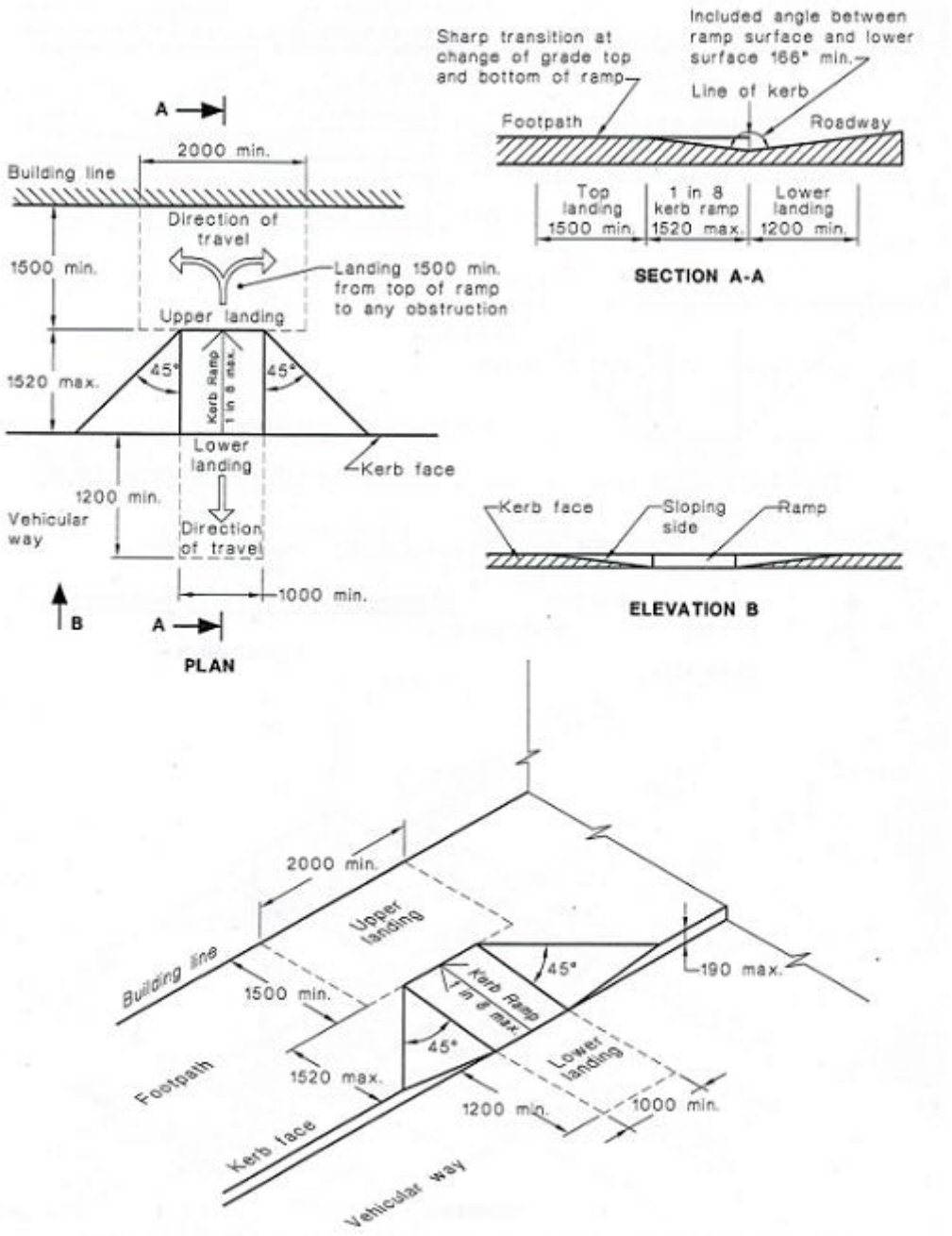

MUST EXTEND FULL WIDTH
Bottom edge must be in this zone
1000mm
900mm
minimum 75mm

Fig 35



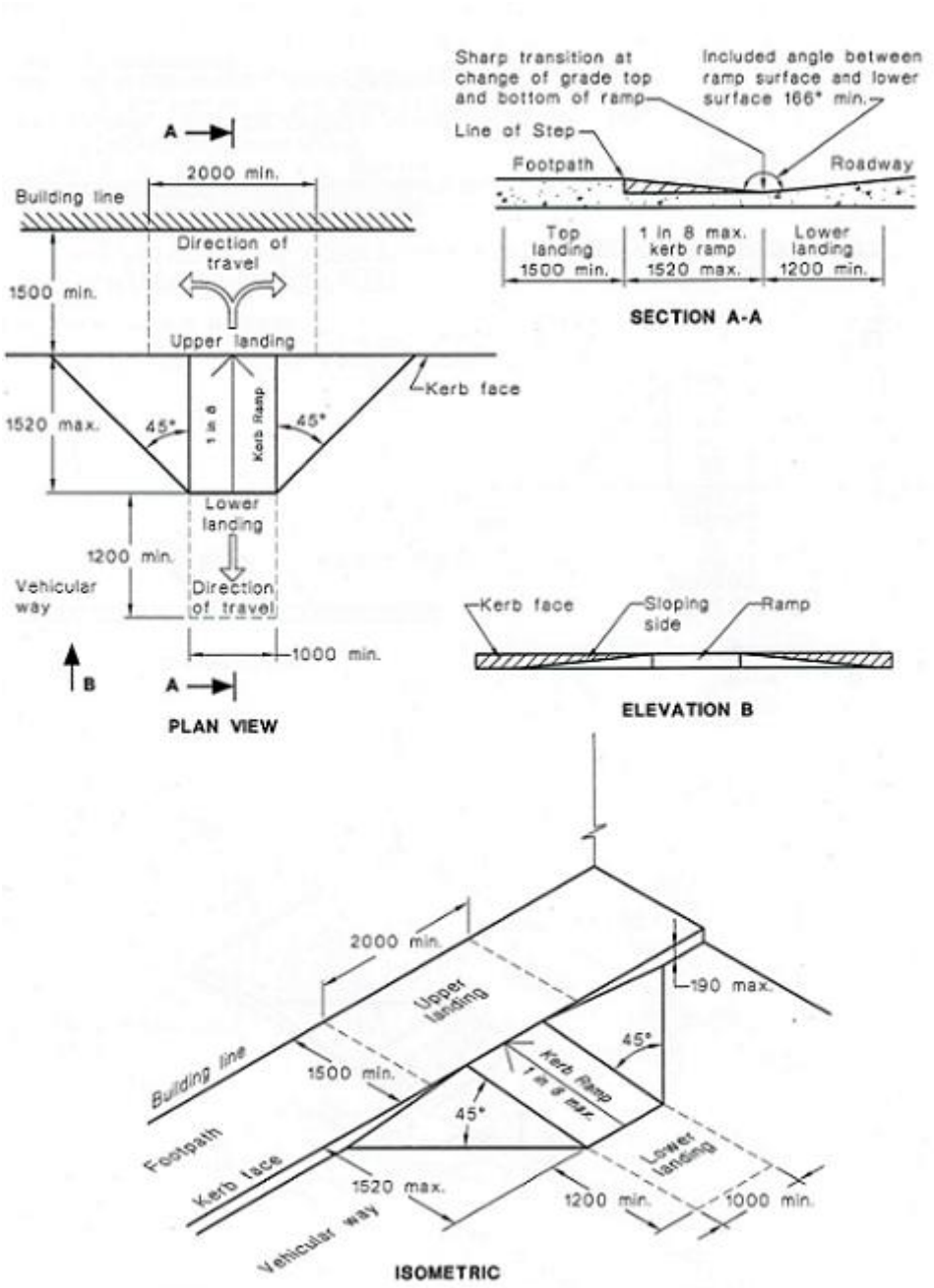
ISOMETRIC VIEW

NOTE: Where there is no turn involved, top landing may be reduced to 1200 mm min. in length.

DIMENSIONS IN MILLIMETRES

FIGURE 24(A) INSERTED KERB RAMP

Fig 36

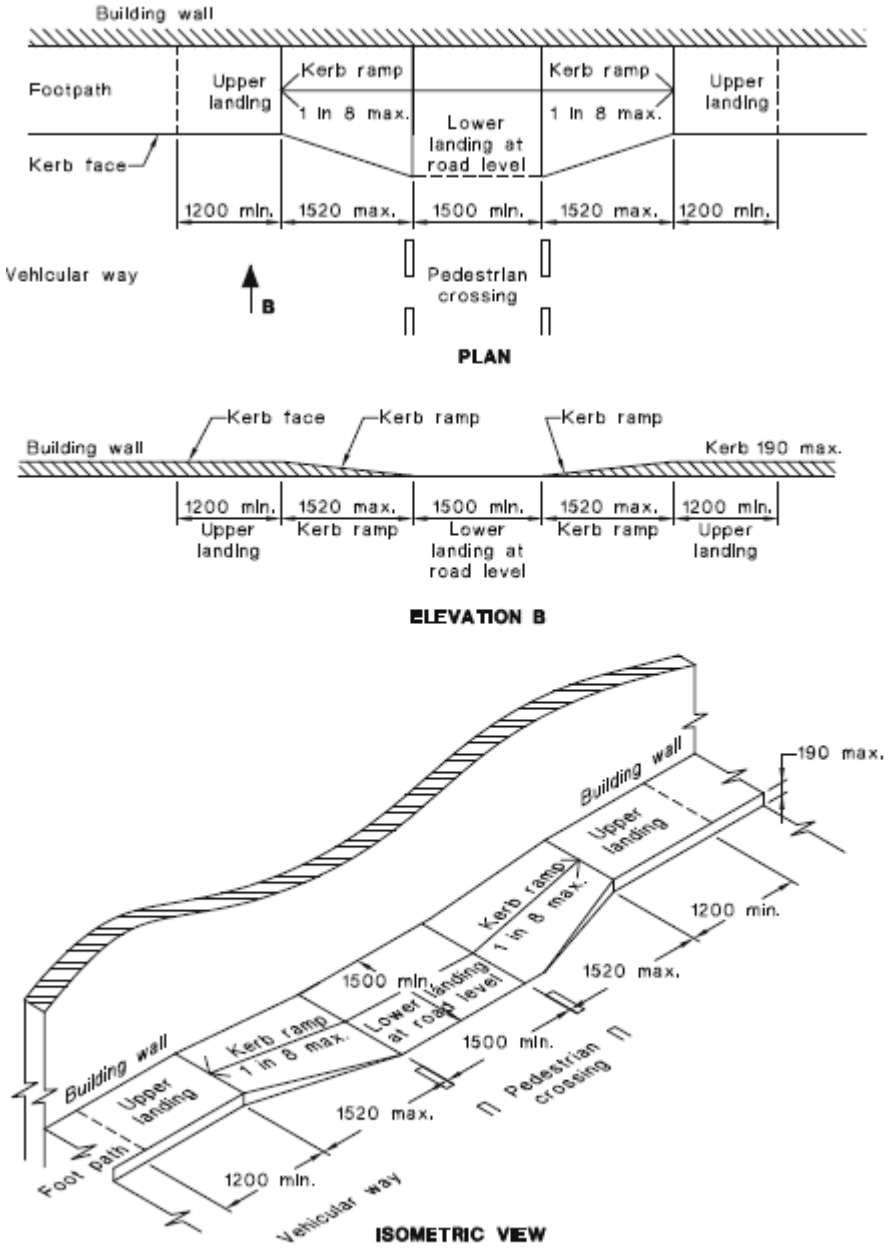


NOTE: Where there is no turn involved, top landing may be reduced to 1200 mm min. in length.

DIMENSIONS IN MILLIMETRES

FIGURE 24(B) ATTACHED KERB RAMP

Fig 37

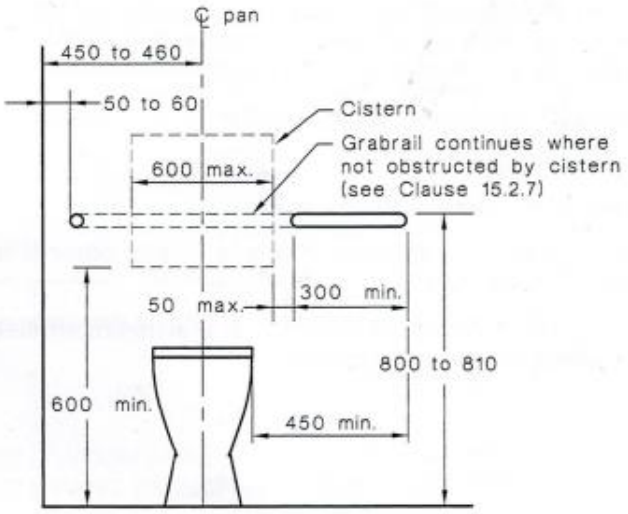


DIMENSIONS IN MILLIMETRES

FIGURE 24(C) IN LINE KERB RAMPS—NARROW FOOTPATHS

AS1428.1:2009-Figure 24(C).

Fig 38

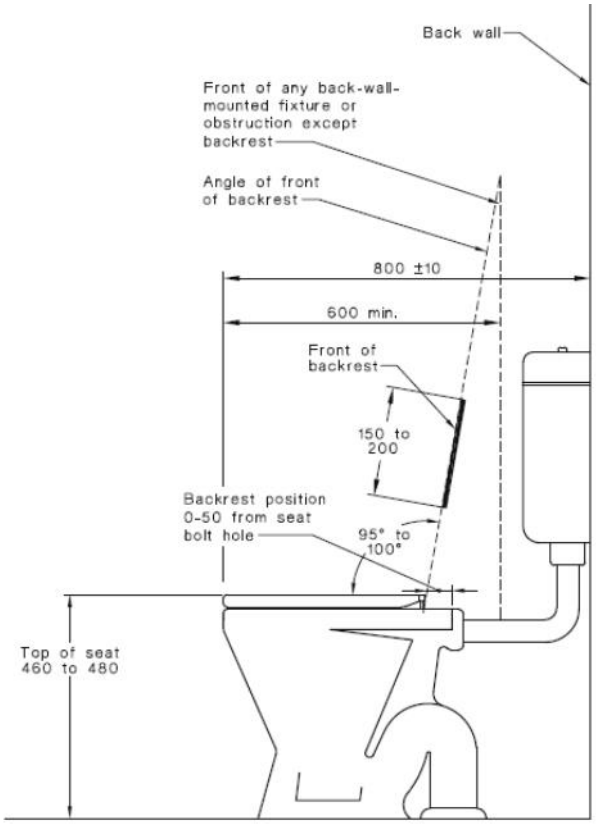


(b) Grabrail at back of pan and sectional view of grabrail at side of pan

DIMENSIONS IN MILLIMETRES

FIGURE 42 POSITIONS OF GRABRAILS IN WATER CLOSETS

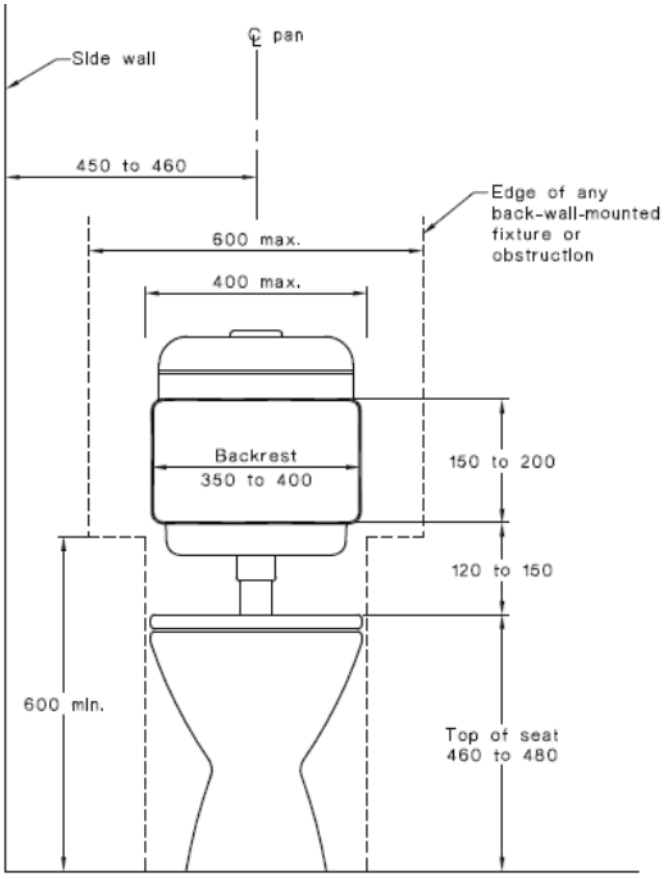
Fig 39



(b) Side view

DIMENSIONS IN MILLIMETRES

Fig 40



(a) Front view

DIMENSIONS IN MILLIMETRES

Fig 41

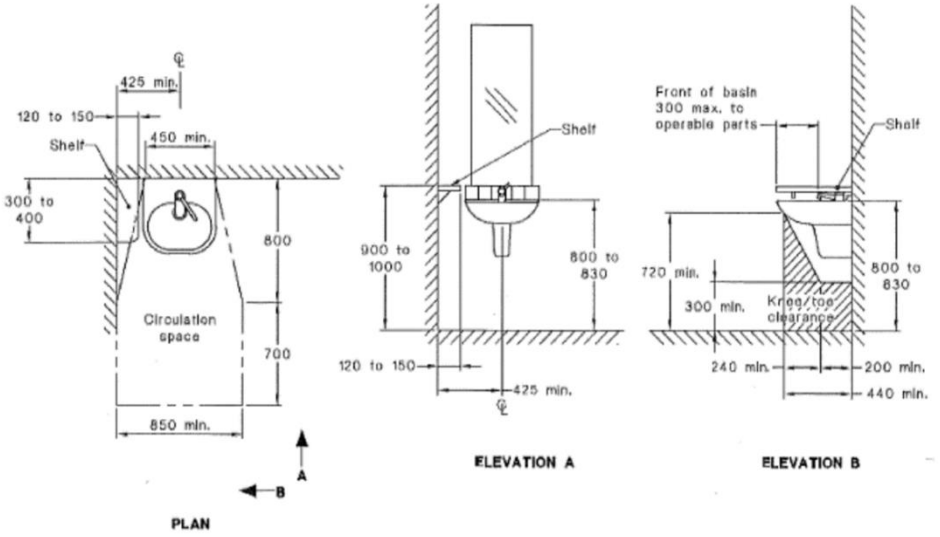


Fig 42

AS 1428.1—2009

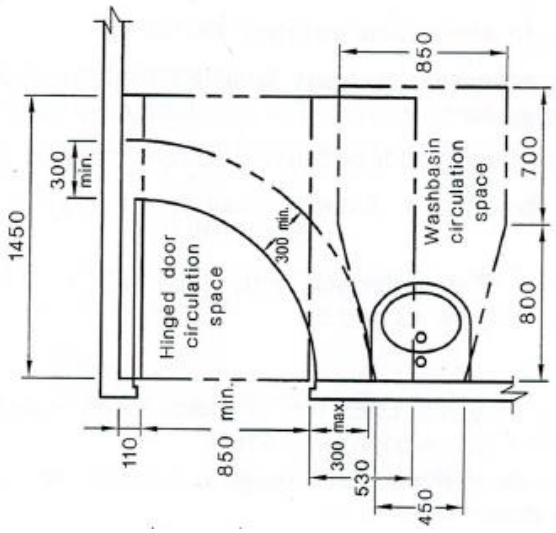


Fig 43

APPENDIX 10 – NCC 2022 Section J Report

Refer separate attachment for NCC 2022 Section J Report.

APPENDIX 11 – Building Codes of Australia Report

BCA – Building Code of Australia Report

Warehouse Development,
86 Bryant Street,
Padstow,
NSW 2211.

Issue - A 05/09/2024

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PTY LTD

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Office. (02) 9635 9890 - Mob. 0432 144 744
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Website: www.silverend.com.au

Contents

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This BCA report is based on information about the site provided to Silver End Pty Ltd as outlined in the details of this report. While this report is based on the information available at the time, we cannot guarantee the outcome of such report unless the full assessment is undertaken by the appointed Principal Certifier to ensure compliance with the BCA as required by legislations. The Certifier must not rely solely on the advice given within this report, and must take all reasonable steps to carry their own assessment to satisfy themselves that all relevant performance requirements of the BCA have been met and complied with prior to issue of Complying Development Certificate CDC or Construction Certificate CC.

The Report is solely for the use of the applicant / owner, architect, and the appointed certifier whom this report was prepared for and for the purpose that was engaged for, which is to gain BCA opinion based on the available information at hand. Information contained in the Report is current as of the date of the Report and may not reflect any event or circumstances which occur after the date of the Report. BCA and Planning controls are subject to change at a short notice. Silver End Pty Ltd will not be liable in respect of any business losses, including without limitation loss of or damage to profits, income, revenue, use, production, anticipated savings, business, contracts, commercial opportunities, or goodwill. The report given by Silver End Pty Ltd is based on their qualifications and experience whether to the best of their knowledge the design or proposal complies with the specified development standards. The report makes recommendations to the client and architect where necessary.

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If this report is for a BCA assessment of (Class 2 project as defined in the BCA, for the purpose of CC or CDC) It includes providing recommendation / Mark ups on plans for 1 revision only. The designer/ architect is expected to take on the advice given and amend the plans accordingly prior to submission to the Principal Certifier. Additional advice and feedback can be provided to the designer or the architect. However, not in a form of a formal revised BCA report. Revised BCA reports on further revisions including final revision will not be provided for (Class 2 Buildings). BCA compliance declaration to be provided by the building designer or the architect for the project in accordance with Division 2 of the Design and Building Practitioners Regulation 2021. Silver end Pty Ltd does not issue compliance certificates with any reports. BCA reports are based on personal professional opinions and is subject to different interpretations by different professionals. The Principal Certifier is obliged under Section 137 (1) of Environmental Planning and Assessment Regulation 2021 to ensure the design is complying with the BCA prior to issue of the CDC or CC Consent.

The technical and intellectual content prepared and contained within this document is intended specifically for the subject building and client of *Silver End Pty Ltd* under the contract for which it is prepared. This document may not be used for any other purpose and shall not be accessed by any third party without written permission by *Silver End Pty Ltd*. This report has been prepared as an Advisory report for the sole use of the owners/developers to inform themselves of the feasibility of the proposed development and if it would comply with the Building Code of Australia.

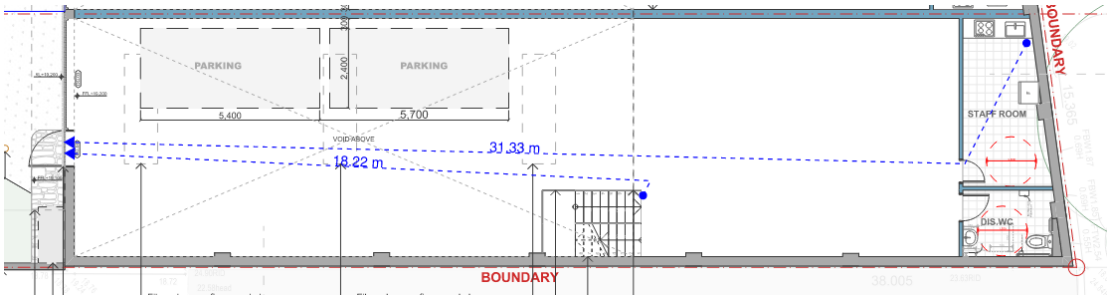
Executive Summary

This Building Code of Australia (BCA) compliance assessment report has been prepared to support the Development Application (DA) for the proposed alterations and additions to the existing building, currently operating as a vehicle repair workshop (Class 8), to be converted into two attached warehouses (Class 7b) with subdivision.

The DA will be submitted to Canterbury-Bankstown Council under the Environmental Planning and Assessment Acts and Regulations.

The assessment identified some deviations from the Deemed-to-Satisfy (DTS) provisions of the BCA. Specifically, the exit travel distances (D2D5) do not comply with the prescribed limits.

Ground Floor:
The measured travel distances from the furthest point within the ground floor exceed the 20m limit to the exit doors leading to a road or open space.



Despite these non-compliances, the building is capable of meeting the required Performance Requirements via a Performance Solution, as outlined in Part A2 of the National Construction Code (NCC), to be implemented at the Construction Certificate (CC) stage.

Addressing these issues is vital to ensure the building meets safety and regulatory standards. Detailed compliance strategies will be integrated during the construction phase, as outlined in the full BCA report.

Introduction

The subject site is located at **86 Bryant St, Padstow NSW 2211**

This Building Code of Australia (BCA) compliance assessment report is prepared to accompany the Development Application (DA) for the proposed alterations and additions to the existing building currently used as vehicle repair workshop Class 8 to proposed 2 attached warehouses Class 7b with Subdivision. The DA application to be submitted to Canterbury-Bankstown Council under the Environmental Planning and Assessment Acts and Regulations.

This report is prepared to assess the level of compliance with the Building Code of Australia for the purpose of " Warehouse ". The configuration of the proposed development contains the following BCA classes of buildings, as defined in the NCC/Building Code of Australia:

- Class 7b - Warehouse

Class 7 buildings include two sub classifications: Class 7a and Class 7b.

- Class 7b buildings are typically warehouses, storage buildings or buildings for the display of goods (or produce) that is for wholesale.

Source: ABCB, Building classifications publication.

The proposal is seeking a development consent under Environmental Planning and Assessment Acts and Regulation. The report at the stage for the submission of DA application and not for a construction certificate CC.

The current NCC 2022 is used as a guiding document in the assessment. The plans shall be further detailed prior to submission where required to the satisfaction of Council.

The Performance Requirements would be achieved either with the Deemed to Satisfy provisions or a Performance Solution.

All building work must be carried out in accordance with the provisions of the *Building Code of Australia*. In this clause, a reference to the *Building Code of Australia* is a reference to that Code as in force on the date the application for the relevant construction certificate is made, which is NCC 2022.

Basis of Report

This report is prepared to address compliance with the Performance Requirement of the *Building Code of Australia* 2022 with regards to new development.

The content of this report reflects the following:

- The principles and provisions of BCA 2022 Volume 1; and
- The Guide to the Building Code of Australia; and
- Architectural Plans, prepared by BJ Architects international. Project No. 24017, Rev. A, dated 21 August 2024.
- No site Inspection was conducted.

Limitations of the Report

This report does not assess the following:

- Compliance with structural provisions of the proposed building design;
- Reporting on hazardous materials, WHS matters or site contamination;
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire-resistant levels of the building;

- Consideration of any fire services operations (including hydraulic, electrical or other systems);
- Assessment of plumbing and drainage installations, including stormwater;
- Assessment of mechanical plant operations, electrical systems or security systems
- Heritage significance;
- Compliance with Disability Discrimination Act (DDA) other than minimum; requirements under the Disability (Access to Premises — Buildings) Standards 2010;
- Compliance with the conditions of the approved Development Consent;
- Compliance with the energy provisions of Section J and Basix;
- Compliance with Council DCP for adaptable housing and provisions of AS4299-1995;
- Compliance with Bush Fire Risk and any associated requirements;
- Compliance with planning legislation and requirements;
- Consideration of energy or water authority requirements;
- Consideration of Council's local planning policies;
- Environmental or planning issues;
- Requirements of statutory authorities;
- Pest inspection or assessment building damage caused by pests (general/visual pest invasion or damage will be reported; however invasive or intrusive inspections have not been carried out);
- Unless, otherwise stated within this report, Section D Part D4 Access for people with a disability, and Sections G, I & J of the BCA are not considered.
- Provision of any construction approvals or certification under Division 4.5 and 6.3 of the Environmental Planning & Assessment Act 1979.
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out.

Assessment data regarding the current Building Code of Australia.

Table 1

Part of project	Construction determination
Classifications: - **Class 7b** ABCB website www.abcb.gov.au Source: NCC- Vol. 1 Schedule 3 Definitions	Class 7b - Warehouse
Rise in storeys	Base building is 2 storeys (2) above NGL.
Type of construction	Base building is Type C Construction.
Effective height (m)	Base building is < 25m effective height.

BCA Assessment

Where items are nominated as "Capable of Complying" it is considered that the existing plans are capable of achieving compliance subject to further design development during the BIC Certificate documentation phase of the development.

Section A- Governing Requirements

	Yes	No	N/A	Comments
	Interpreting the NCC Governing Requirements			
A1G1 Scope of NCC Volume 1	☒	☐	☐	Governing requirement and scope of Vol. one
A1G2 Scope of NCC Volume 2	☐	☐	☒	Not applicable
A1G3 Scope of NCC Volume 3	☐	☐	☒	Not applicable
A1G4 Interpretation	☒	☐	☐	Noted
	Compliance with the NCC Governing Requirements			
A2G1 Compliance	☒	☐	☐	Compliance with the NCC is achieved by complying with the governing requirements and the Performance Requirements.
A2G2 Performance Solution	☒	☐	☐	Capable of Complying – Details at CC stage. Some DTS departures documented in this report can be satisfied by Performance Solution via any or a combination of the following, in accordance with this clause. 1. Evidence of suitability 2. Verification Method 3. Expert Judgement 4. Comparison with the DTS
A2G3 Deemed-to-Satisfy Solution	☒	☐	☐	Works to comply with deemed-to satisfy-solution provisions.
A2G4 A combination of solutions	☒	☐	☐	Compliance through one or more of the following assessment methods, Evidence of suitability or Expert judgement
	Application of the NCC in States and Territories			

	Governing Requirements			
A3G1 State and Territory compliance	☒	☐	☐	NSW Variation and Legislation applies
	Referenced documents **Governing Requirements**			
A4G1 Referenced Documents	☒	☐	☐	Noted
A4G2 Differences between referenced documents and the NCC	☐	☐	☒	NCC overrules and difference between the NCC and a primary reference document
A4G3 Adoption of referenced documents	☒	☐	☐	Applies to documents refence within volume one
	Documentation of design and construction **Governing Requirements**			
A5G1 Suitability	☒	☐	☐	Suitable materials and construction methods, supported by evidence per A5G2 must be aligned with either A5G3 or A5G4. Proper construction/installation is essential for compliance with the National Construction Code (NCC).
A5G2 Evidence of suitability V1, V2 & V3	☒	☐	☐	Copies of any installation certificates to be submitted to Council. The form of evidence used must be appropriate to the use of the material, product, form of construction or design to which it relates.
A5G3 Evidence of suitability V1 & V2	☒	☐	☐	Any compliance certificate from an appropriately qualified person is a crucial submission to Council/Certifier, validating that the material, product, form of construction, or design aligns with specific BCA requirements. This evidence can take various forms, such as a CodeMark Australia certificate, Certificate of Accreditation, certification body certificate, or an Accredited Testing Laboratory report. Additionally, professional engineer certificates and alternative documentary evidence, like Product Technical Statements, are accepted. For calculation methods, certification from a qualified person or alternative documentation describing compliance with the ABCB protocol is necessary.

				All submissions must detail the basis for certification and the reliance on relevant standards and publications.
A5G4 Evidence of suitability V3	☐	☐	☒	Not applicable. Volume one is applicable.
A5G5 Fire resistance of building elements	☒	☐	☐	Existing base building element having FRL is determined in accordance with Schedule 5
A5G6 Fire hazard properties	☒	☐	☐	Capable of Complying details at CC stage. Compliance with fire hazard properties for building components or assemblies, as per A5G6, necessitates adherence to specific criteria. Follow Specification 1 for average specific extinction area, critical radiant flux, and Flammability Index. For Smoke-Developed Index and Spread-of-Flame Index, refer to Specification 3, while material's group number or smoke growth rate index (SMOGRARC) should comply with S7C4(2). This ensures the proper determination of fire hazard properties in line with Deemed-to-Satisfy Provisions.
A5G7 Resistance to the incipient spread of fire	☐	☐	☒	Existing base building is of concrete construction.
A5G8 Labelling of Aluminium Composite Panels	☐	☐	☒	No ACP. Not applicable to the scope of works.
A5G9 NatHERS	☐	☐	☒	Not applicable
	Building classification **Governing Requirements**			
A6G1 Determining a building classification	☒	☐	☐	The proposal is classified as a Warehouse building (Class 7b) under the NCC.
A6G2 Class 1 buildings	☐	☐	☒	Not applicable
A6G3 Class 2 buildings	☐	☐	☒	Not applicable
A6G4 Class 3 buildings	☐	☐	☒	Not applicable
A6G5 Class 4 parts of buildings	☐	☐	☒	Not applicable
A6G6 Class 5 buildings	☐	☐	☒	Not applicable
NSW A6G7 Class 6 buildings	☐	☐	☒	Not applicable
A6G8 Class 7 buildings	☒	☐	☐	Warehouse

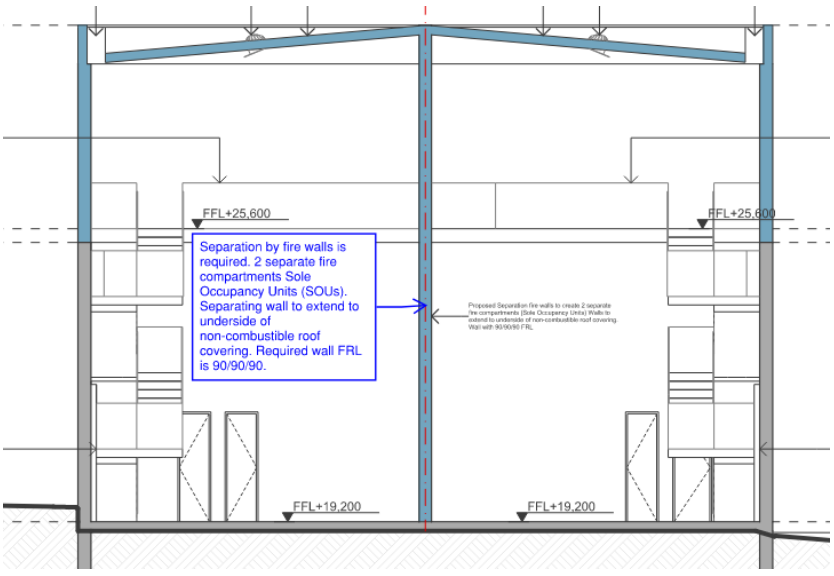
A6G9 Class 8 buildings	☐	☐	☒	Not applicable
A6G10 Class 9 buildings	☐	☐	☒	Not applicable
A6G11 Class 10 buildings and structures	☐	☐	☒	Not applicable
A6G12 Multiple classifications	☐	☐	☒	Not applicable
	United buildings			
	Governing Requirements			
A7G1 United buildings	☐	☐	☒	Not applicable
A7G2 Alterations in a united building	☐	☐	☒	Not applicable
Specification 1 Fire-resistance of building elements	☐	☐	☒	Not applicable
Specification 2 Descriptions of elements referred to in Specification 1	☐	☐	☒	Not applicable
Specification 3 Fire hazard properties	☒	☐	☐	Capable of Complying details at CC stage. Specifications of materials used and certificates of compliance to be submitted with the CC application to the appointed *Principal Certifier*, to confirm compliance of internal finishes.

Section B- Structure

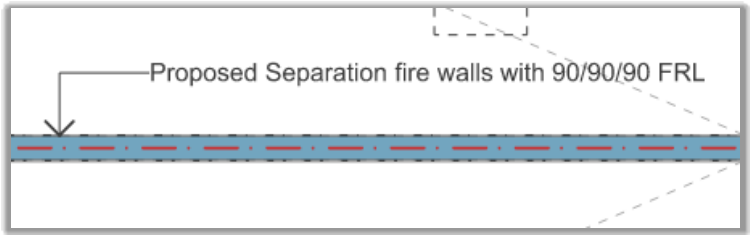
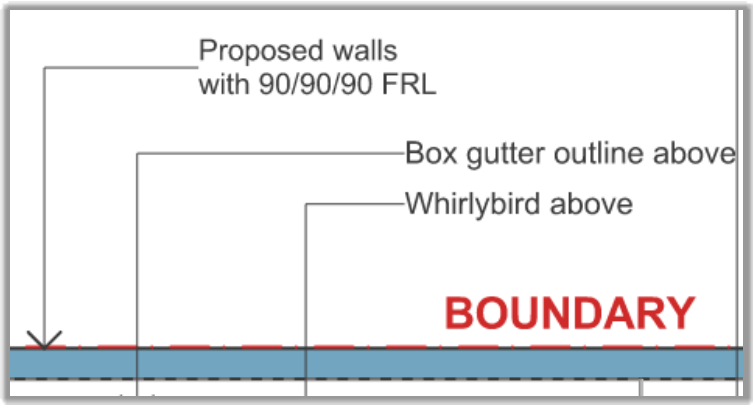
	Yes	No	N/A	Comments
B1D1- Deemed-to-Satisfy Provisions	☒	☐	☐	Engineer to certify at CC stage.
B1D2 Resistance to actions	☒	☐	☐	Engineer to certify at CC stage.
B1D3 Determination of individual actions	☒	☐	☐	Engineer to certify at CC stage.
B1D4 Determination of structural resistance of materials and forms of construction	☒	☐	☐	Engineer to certify at CC stage.
B1D5 Structural software	☒	☐	☐	Engineer to certify at CC stage.
B1D6 Construction of buildings in flood hazard areas	☐	☐	☒	Not flood prone area

Section C- Fire Resistance

	Part C2 **Fire resistance and stability**			
	Yes	**No**	**N/A**	**Comments**
C2D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted.
C2D2 Type of Construction Required	☒	☐	☐	Class 7b, Type C Construction. Type C construction has been adopted for the entire building.
C2D3 Calculation of rise in storeys	☒	☐	☐	Noted. Building is two storeys (2) above NGL. Mezzanine floor is > 1/3rd of the storey below. Approx. 45%. Regarded as a storey.
C2D4 Buildings of multiple classification	☐	☐	☒	One class of building. Warehouse Class 7b.
C2D5 Mixed types of construction	☐	☐	☒	One Type of Construction. Type C Construction for the entire building will be used throughout. No separation between different types of construction required.
C2D6 Two storey Class 2, 3 or 9c buildings	☐	☐	☒	Not Applicable.
C2D7 Class 4 parts of buildings	☐	☐	☒	Not Applicable. Class 7b.
C2D8 Open spectator stands and indoor sports stadiums	☐	☐	☒	Not applicable. As noted above.
C2D9 Lightweight construction	☐	☐	☒	Not required.
C2D10 Non-combustible building elements	☐	☐	☒	Not applicable for Type C construction.
NSW C2D11 Fire hazard properties	☒	☐	☐	Capable of Complying – more details are required for internal materials used, such as flooring, and paint, etc. Specifications of materials used and certificates of compliance to be submitted with the CC application to Certifier.
C2D12 Performance of external walls in fire	☐	☐	☒	Not applicable. Not tilt up panel.
C2D13 Fire-protected timber: Concession	☐	☐	☒	No fire protected timber used.

C2D14 Ancillary elements	☐	☐	☒	No external wall that are required to be non-combustible.
C2D15 Fixing of laminated cladding panels	☐	☐	☒	Not applicable.
	Part C3 **Compartmentation and separation**			
C3D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted
C3D2 Application of Part	☒	☐	☐	Noted
C3D3 General floor area and volume limitations	☒	☐	☐	Type C construction – Max floor area – 2,000m^2 & Max volume—21,000 m^3 Maximum parameters have not been exceeded.
C3D4 Large isolated buildings	☐	☐	☒	Not a large-isolated building. Building size does not exceed that specified in Table C3D3.
C3D5 Requirements for open spaces and vehicular access	☐	☐	☒	Not Applicable.
NSW C3D6 Class 9 buildings	☐	☐	☒	Not applicable for Class 7b building.
C3D7 Vertical separation of openings in external walls	☐	☐	☒	Not required for type C construction.
C3D8 Separation by fire walls	☒	☐	☐	Capable of complying. Details at CC stage. Separation by fire walls is required. 2 separate fire compartments Sole Occupancy Units (SOUs). Separating wall to extend to underside of non-combustible roof covering. Required wall FRL is 90/90/90.
				

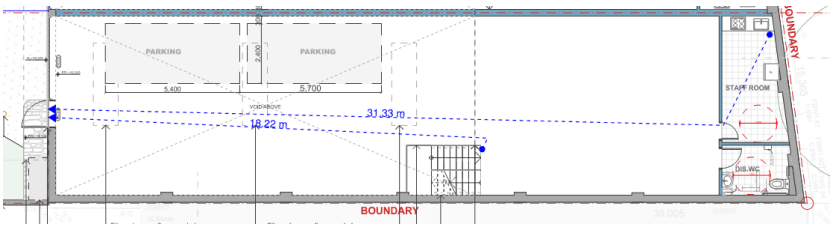
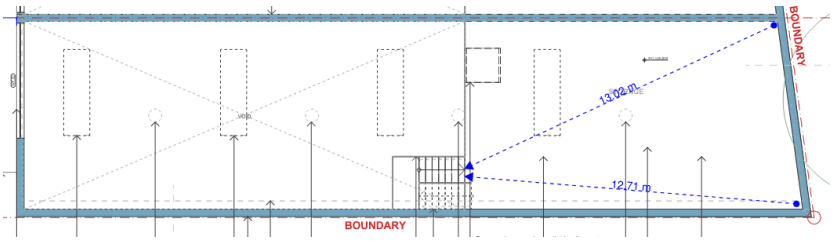
C3D9 Separation of classifications in the same storey	☐	☐	☒	No separation required. One fire compartment.
C3D10 Separation of classifications in different storeys	☐	☐	☒	No separation required. One fire compartment.
C3D11 Separation of lift shafts	☐	☐	☒	No separation required. One fire compartment.
C3D12 Stairways and lifts in one shaft	☐	☐	☒	Not Applicable. Not in the same shaft.
C3D13 Separation of equipment	☐	☐	☒	No equipment as per clause 2 & 3 to be separated.
C3D14 Electricity supply system	☐	☐	☒	Not Applicable. No Electrical Substation.
C3D15 Public corridors in Class 2 and 3 buildings	☐	☐	☒	Not class 2.
	Part C4 **Protection of openings**			
C4D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted. No Protection of openings required.
C4D2 Application of Part	☐	☐	☒	Not Applicable.
C4D3 Protection of openings in external walls	☐	☐	☒	No Protection of openings required.
C4D4 Separation of external walls and associated openings in different fire compartments	☐	☐	☒	No Protection of openings required.
C4D5 Acceptable methods of protection	☐	☐	☒	Not triggered by C4D3.
C4D6 Doorways in fire walls	☐	☐	☒	Not Applicable. No fire walls.
C4D7 Sliding fire doors	☐	☐	☒	Noted. No Sliding fire doors.
C4D8 Protection of doorways in horizontal exits	☐	☐	☒	No horizontal exits.
C4D9 Openings in fire-isolated exits	☐	☐	☒	No fire-isolated exits.
C4D10 Service penetrations in fire-isolated exits	☐	☐	☒	No fire-isolated exits.
C4D11 Openings in fire-isolated lift shafts	☐	☐	☒	No fire-isolated lift shafts.
C4D12 Bounding construction-Class 2 and 3 buildings and Class 4 parts	☐	☐	☒	Not Applicable. Class 7b.
C4D13 Openings in floors and ceilings for services	☐	☐	☒	No protection required. One fire compartment.

C4D14 Openings in shafts	☐	☐	☒	Not required for Type C Construction.
C4D15 Openings for service installations	☐	☐	☒	No protection required. One fire compartment.
C4D16 Construction joints	☒	☐	☐	Capable of Complying details at CC stage. Construction joints, spaces, and similar elements within building components required to be fire-resisting must be protected to achieve the required Fire Resistance Level (FRL).
C4D17 Columns protected with lightweight construction to achieve an FRL	☐	☐	☒	Not applicable. No Column protected with lightweight construction proposed.
Specification 5 Fire Resisting Construction	☒	☐	☐	Capable of complying. To be further detailed at CC stage. Separation by fire walls is required. 2 separate fire compartments Sole Occupancy Units (SOUs).
				Table S5C24a: Type C construction: FRL of parts of external walls Distance from a *fire-source feature* / FRL (in minutes): *Structural adequacy / Integrity / Insulation* Class 2, 3 or 4 part / Class 5, 7a or 9 / Class 6 / Class 7b or 8 Less than 1.5 m: 90/90/90 / 90/90/90 / 90/90/90 / 90/90/90 1.5 to less than 3 m: –/–/– / 60/60/60 / 60/60/60 / 60/60/60 3 m or more: –/–/– / –/–/– / –/–/– / –/–/–
				
				
Specification 6 Structural tests for lightweight construction	☐	☐	☒	Lightweight construction is NOT used. Where used, it must comply.

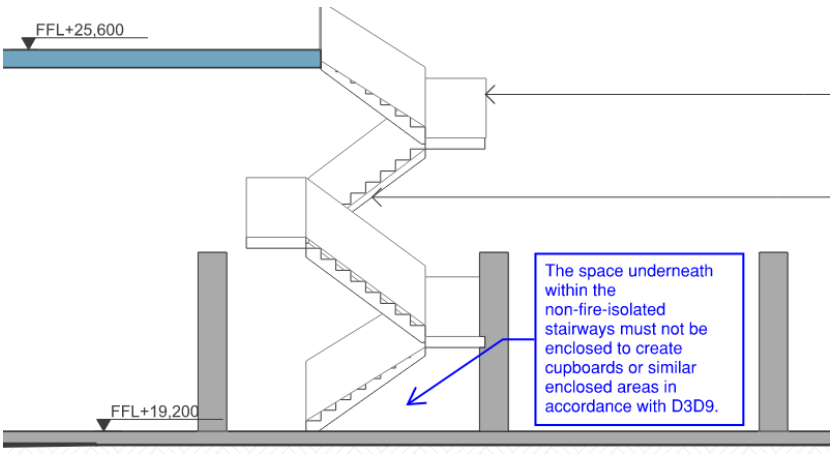
Specification 7 Fire hazard properties	☒	☐	☐	Capable of Complying CC stage. Specifications of materials and finishes used such as Floor linings and floor coverings, Wall and ceiling linings**,** paints, and any other materials used are to be submitted to Certifier.
Specification 8 Performance of external walls in fire	☐	☐	☒	No External concrete tilt -up panel walls above ground level.
Specification 9 Cavity barriers for fire-protected timber	☐	☐	☒	No Fire protected timber construction.
Specification 10 Fire-protected timber	☐	☐	☒	No Fire-protected timber.
Specification 11 Smoke-proof walls in health-care and residential care buildings	☐	☐	☒	Not applicable. Not a 'health-care and residential care building'
Specification 12 Fire doors, smoke doors, fire windows and shutters	☐	☐	☒	Not applicable.
Specification 13 Penetration of walls, floors and ceilings by services	☒	☐	☐	Not applicable.

Section D- Access and Egress

	Part D2 **Provision for escape**			
	Yes	**No**	**N/A**	**Comments**
D2D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted
D2D2 Application of Part	☒	☐	☐	Noted. Applies.
NSW D2D3 Number of exits required	☒	☐	☐	Complies. 1 exit stairs is provided to mezzanine level for each SOU.
D2D4 When fire- isolated stairways and ramps are required	☐	☐	☒	No fire- isolated stairways required.
D2D5 Exit travel distances	☐	☒	☐	Do not comply. However, Capable of Complying with required *Performance Requirements* via *Performance Solution* in accordance with Part A2 Governing Requirements of the NCC at CC stage.

				Ground Floor: Calculated travel distances when measured from the furthest point within the ground floor are generally more than 20m to the exit doors leading to a road or an open space. **First Floor:** Points on the floor within level 1 (Mezzanine floor) are not more than 20 m to an exit stair.
				Ground Floor:  **First Floor:** 
D2D6 Distance between alternative exits	☐	☐	☒	No alternative exits are provided.
D2D7 Height of exits, paths of travel to exits and doorways	☒	☐	☐	Capable of complying. To be further detailed at CC stage. Exits door complies and unobstructed height to be not less than 2.0m
NSW D2D8 Width of exits and paths of travel to exits	☒	☐	☐	Capable of complying. To be further detailed at CC stage. Width of exits and path of travel to exits are to be not less than 1.0m.
NSW D2D9 Width of doorways in exits or paths of travel to exits	☒	☐	☐	Capable of complying. To be further detailed at CC stage.
D2D10 Exit width not to diminish in direction of travel	☒	☐	☐	Capable of complying. To be further detailed at CC stage.
D2D11 Determination of measurement of exits and paths of travel to exits	☒	☐	☐	Complies. To be checked at final inspection by Certifier.
D2D12 Travel via fire-isolated exits	☐	☐	☒	No fire-isolated exits.
D2D13 External stairways or ramps in lieu of fire -isolated exits	☐	☐	☒	Not applicable.

D2D14 Travel by non-fire isolated stairways or ramps	☒	☐	☐	Complies. A non-fire-isolated stairway from mezzanine level serving as a required exit provides a continuous means of travel by its own flights and landings from that storey served to ground level at which egress to a road or open space is provided. The total distance from any point on the mezzanine floor to a point of egress to a road or open space by way of the required non-fire-isolated stairways does not exceed 80 m.
NSW D2D15 Discharge from exits	☒	☐	☐	Complies. Bollards provided to prevent vehicles from blocking the exits.
D2D16 Horizontal exits	☐	☐	☒	No Horizontal exits. One fire compartment.
D2D17 Non-required stairways, ramps or escalators	☐	☐	☒	Not applicable.
NSW D2D18 Number of persons accommodated	☒	☐	☐	The applicant stated maximum of 4 employees for each SOU. 50 % male to female ratio. Refer to F4D3 for calculation of number of occupants and facilities required.
D2D19 Measurement of distances	☒	☐	☐	Noted.
D2D20 Method of measurement	☒	☐	☐	Noted. Class 7b building.
D2D21 Plant rooms, lift machine rooms and electricity network substations: Concession	☐	☐	☒	No plant rooms attached to building.
D2D22 Access to lift pits	☐	☐	☒	No lifts.
D2D23 Egress from primary schools	☐	☐	☒	Not applicable.
	Part D3 **Construction of exits**			
D3D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted. Applies.
NSW D3D2 Application of Part	☐	☐	☒	N/A. Not Class 2, 3, or 9b.
D3D3 Fire-isolated stairways and ramps	☐	☐	☒	No Fire-isolated stairways.
D3D4 Non-fire isolated stairways and ramps	☐	☐	☒	N/A. Rise in storeys is not more than 2.

D3D5 Separation of rising and descending stair flights	☐	☐	☒	Not applicable. No basement.
D3D6 Open access ramps and balconies	☐	☐	☒	No balconies provided to meet the smoke hazard management requirement.
D3D7 Smoke lobbies	☐	☐	☒	No smoke lobbies within the building.
D3D8 Installations in exits and paths of travel	☒	☐	☐	Capable of Complying – further details required at CC stage. Where required, any electricity distribution boards that are located on the path of travel to exit, are to be suitably sealed against smoke spreading from the enclosure and be non-combustible construction such as metal enclosure; or a fire-protective covering. Licensed electrician to certify all internal electrical works and wiring conduits compliance certification to be submitted to the Certifier at CC stage.
D3D9 Enclosure of space under stairs and ramps	☒	☐	☐	Complies. The space beneath a required non-fire-isolated stairway (including external stairways) or non-fire-isolated ramp must not be enclosed to form a cupboard or any other enclosed space unless fire protection measures are implemented. These measures include: 1. **Fire Resistance Level (FRL):** The enclosing walls and ceiling must achieve a minimum FRL of 60/60/60. 2. **Access Doorway:** Any access doorway to the enclosed space must be fitted with a self-closing fire door that achieves a –/60/30 FRL rating.
				

D3D10 Width of required stairways and ramps	☐	☐	☒	Not applicable. Does not exceed 2m in width.
D3D11 Pedestrian ramps	☐	☐	☒	Not applicable.
D3D12 Fire-isolated passageways	☐	☐	☒	Not applicable.
D3D13 Roof as open space	☐	☐	☒	No roof used as open space.
NSW D3D14 Goings and risers	☒	☐	☐	Capable of Complying - details at CC stage. Stairways must meet specific requirements for risers, goings, and quantities as per Table D3D14. Stairways must maintain consistent dimensions within each flight and have slip-resistant treads. Winders are not allowed in required stairways.
D3D15 Landings	☒	☐	☐	Capable of Complying – Details at CC stage. Landings with a maximum gradient of 1:50 are permissible in any building to limit the number of risers in each flight. Each landing must be at least 750 mm long, and if there is a change in direction, the length is measured 500 mm from the inside edge of the landing. The landing surface must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586. Alternatively, if the edge of the landing leads to a flight below, a strip at the edge must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.
NSW D3D16 Thresholds	☒	☐	☐	Capable of Complying - details at CC stage. To be checked at final OC stage. Doorway thresholds must not have steps or ramps closer to the doorway than the width of the door leaf, except in specific the following cases: • In buildings requiring accessibility by Part D4, doorways opening to roads or open spaces must have threshold ramps according to AS 1428.1. • In other cases, doorways opening to roads, external stair landings, or balconies can

				have door sills up to 190 mm above the finished surface.
D3D17 Barriers to prevent falls	☒	☐	☐	Capable of Complying - details at CC stage. • A continuous barrier is required along roofs with general access, stairways, ramps, floors, corridors, balconies, decks, etc., if the trafficable surface is 1 m or more above the surface beneath. • Exceptions include certain areas like stages, loading docks, retaining walls (unless part of a delineated path of access), and barriers for openable windows covered by D3D29. • Barriers must meet construction standards outlined in D3D18, D3D19, D3D20, and D3D21 if a wire barrier is used.
NSW D3D18 Height of barriers	☒	☐	☐	Capable of Complying - details at CC stage. • Barriers along stairways or ramps with a gradient of 1:20 or steeper and landings with barriers along the inside edge not exceeding 500 mm in length must be at least 865 mm in height. • For all other locations, barriers must be at least 1 m in height. • The height is measured above the nosing line of stair treads, and a transition zone may be incorporated where the barrier height changes from 865 mm on stair flights or ramps to 1 m at a landing or floor.
D3D19 Openings in barriers	☒	☐	☐	Capable of Complying - details at CC stage. • Openings in required barriers must not allow a 125 mm sphere to pass through, except as permitted. • In fire-isolated stairways or ramps and areas primarily for emergencies, openings must not allow a 300 mm sphere, and specific requirements apply for railings. • The maximum 125 mm barrier opening for stairways is measured above the nosing line of stair treads. • When barriers are fixed to vertical faces, the opening between the barrier and the face

				must not exceed 40 mm, measured horizontally.
D3D20 Barrier climbability	☒	☐	☐	Capable of Complying - details at CC stage. • Barriers on floors more than 4 m above the ground, required by D3D17, must not include horizontal or near-horizontal elements between 150 mm and 760 mm above the floor that could aid climbing. • Exceptions to this rule include fire-isolated stairways, ramps, and emergency areas, except for external stairways, external ramps, Class 7 (other than carparks).
D3D21 Wire barriers	☐	☐	☒	No Wire barrier
D3D22 Handrails	☒	☐	☐	Capable of Complying - details at CC stage. • Handrails must be located along at least one side of a ramp or flight. • Heights are measured above the nosings of stair treads or the floor surface of the ramp, landing, etc. • Handrails to assist people with disabilities must comply with D4D4. • Exceptions apply for certain types of handrails and specific building features.
D3D23 Fixed platforms, walkways, stairways and ladders	☐	☐	☒	No Fixed walkway or ladder to non-habitable rooms.
NSW D3D24 Doorways and doors	☒	☐	☐	Complies. The doorway serving as a required exit is not to be fitted with a roller shutter or tilt-up door, or security doors.
D3D25 Swinging doors	☒	☐	☐	Complies. Exit swing door on front façade leading to road and open space located on main entry on ground floor, swings in the direction of egress.
NSW D3D26 Operation of latch	☒	☐	☐	Capable of Complying details at CC stage. All exit doors and doors in the paths of travel to exits are to be readily openable without a key from the side facing a person seeking egress, using a single hand pushing action on a device (Lever style) located between 900 mm and 1.2 m from the floor.

D3D27 Re-entry from fire isolated exits	☐	☐	☒	Not applicable. Not Class 7b.
D3D28 Signs on doors	☐	☐	☒	Not required for Class 7b. Non-fire isolated exit, with no fire doors and smoke doors.
D3D29 Protection of openable windows	☐	☐	☒	Not required. No Protection of openable windows required.
D3D30 Timber stairways: Concession	☐	☐	☒	Not applicable. No Timber stairways.
NSW D3D31 Doors in paths of travel to an entertainment venue	☐	☐	☒	Not applicable.
	Part D4 **Access for people with a disability** (Not part of the scope of work) Refer to Access Consultant.			
D4D1 Deemed to Satisfy Provisions	☐	☐	☒	(Not part of the scope of work) Refer to Access Consultant if required.
D4D2 General building access requirements	☐	☐	☒	Refer to Access Consultant if required. However, appears to comply.
D4D3 Access to buildings	☐	☐	☒	
D4D4 Parts of buildings to be accessible	☐	☐	☒	
D4D5 Exemptions	☐	☐	☒	
D4D6 Accessible carparking	☐	☐	☒	
D4D7 Signage	☐	☐	☒	
D4D8 Hearing augmentation	☐	☐	☒	
D4D9 Tactile indicators	☐	☐	☒	
D4D10 Wheelchair seating spaces in Class 9b assembly buildings	☐	☐	☒	
D4D11 Swimming Pools	☐	☐	☒	
D4D12 Ramps	☐	☐	☒	
D4D13 Glazing on an accessway	☐	☐	☒	
Specification 14 Non-required stairways, ramps and escalators	☐	☐	☒	
Specification 15 Braille and tactile signs	☐	☐	☒	

Specification 16 Accessible water entry/exit from swimming pools	☐	☐	☒	

Section E- Services and Equipment

	Part E1 **Firefighting equipment**			
	Yes	**No**	**N/A**	**Comments**
E1D1 Deemed to Satisfy Provisions	☒	☐	☐	Applicable. Noted.
E1D2 Fire hydrants	☒	☐	☐	Capable of Complying details at CC stage. Total floor area of the entire development is > 500 m2. Fire hydrant coverage diagram and statement of the available flow and pressure from Sydney water are to be provided at CC stage. May rely on street hydrant. To be confirmed by hydraulic engineer at CC stage
E1D3 Fire hose reels	☒	☐	☐	Capable of Complying details at CC stage. Total floor area of development is > 500 m2. Fire hose reel coverage diagram to be provided and confirmed by hydraulic engineer at CC stage.
E1D4 Sprinklers	☐	☐	☒	Not applicable. The building has an effective height of not more than 25 m.
E1D5 Where sprinklers are required: all classifications	☐	☐	☒	Not applicable.
E1D6 Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	☐	☐	☒	Not applicable.
E1D7 Where sprinklers are required: Class 3 building used as a residential care building	☐	☐	☒	Not applicable.
E1D8 Where sprinklers are required: Class 6 building	☐	☐	☒	Not applicable.
E1D9 Where sprinklers are required: Class 7a building, other than an open deck carpark	☐	☐	☒	Not applicable.
E1D10 Where sprinklers are required: Class 9a health-care	☐	☐	☒	Not applicable.

building used as a residential care building, Class 9c buildings				
E1D11 Where sprinklers are required: Class 9b buildings	☐	☐	☒	Not applicable. Not an early childhood centre.
E1D12 Where sprinklers are required: additional requirements	☐	☐	☒	Not applicable.
E1D13 Where sprinklers are required: occupancies of excessive hazard	☐	☐	☒	Not applicable.
E1D14 Portable fire extinguishers	☒	☐	☐	Capable of Complying – CC stage Portable fire extinguisher is to be installed, certified, and maintained in accordance with AS2444. Portable fire extinguisher is to be hanged on walls and have the appropriate signage. Fire services diagram to be prepared at CC stage.
E1D15 Fire control centres	☐	☐	☒	Not applicable. The building has an effective height of not more than 25 m, and total floor area is not more than 18 000 m2.
E1D16 Fire precautions during construction	☒	☐	☐	Capable of complying During construction, Portable fire extinguishers must ensure fire safety by providing at least one fire extinguisher for Class A, B, C, and electrical fires.
E1D17 Provision for special hazards	☐	☐	☒	Noted. Not applicable.
	Part E2 Smoke hazard management			
E2D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted.
E2D2 Application of Requirements	☒	☐	☐	Noted. Applies.
E2D3 General requirements	☐	☐	☒	Not applicable to Class 7b building. NB. Compliance with E2D20 is not required as it does not apply in NSW.
E2D4 Fire-isolated exits	☐	☐	☒	Not applicable. Building is < 25m in effective height, and not > 2 storeys below ground.
E2D5 Buildings more than 25 metres in effective height: Class 2 and 3 buildings and Class 4 parts	☐	☐	☒	Not applicable. Building is < 25 m high.

E2D6 Buildings more than 25 metres in effective height: Class 5, 6, 7b, 8 or 9b buildings	☐	☐	☒	Not applicable. Building is < 25 m high.
E2D7 Buildings more than 25 metres in effective height: Class 9a buildings	☐	☐	☒	Not applicable. Building is < 25 m high. However, do not include Class 9a.
E2D8 Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	☐	☐	☒	Not applicable. Building is < 25 m high. However, do not include Class 2, 3, or 4.
E2D9 Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings	☐	☐	☒	The building does not have a rise in storeys of more than 2.
NSW E2D10 Buildings not more than 25m in effective height: large-isolated buildings	☐	☐	☒	Not a large-isolated building.
E2D11 Buildings not more than 25m in effective height: Class 9a and 9c buildings	☐	☐	☒	Not applicable. Not Class 9 building.
E2D12 Class 7a buildings	☐	☐	☒	Not applicable. Not Class 7a building.
E2D13 Basements (other than 7a buildings)	☐	☐	☒	Not applicable. No Basements.
E2D14 Class 6 buildings- in fire compartments more than 2000 sq m: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole occupancy unit)	☐	☐	☒	Not applicable. No Class 6 portion.
E2D15 Class 6 buildings- in fire compartments more than 2000 sq m: Class 6 building (containing an enclosed common walkway or mall)	☐	☐	☒	Not applicable. No Class 6 portion.
NSW E2D16 Class 9b- assembly buildings: nightclubs, discotheques and the like	☐	☐	☒	Not applicable. No Class 9.
NSW E2D17 Class 9b- assembly buildings: exhibition halls **NSW** E2D18 Class 9b- assembly buildings: theatres and public halls **NSW** E2D19 Class 9b- assembly buildings: theatres and public halls (not listed in E2D18 (including lecture theatres and cinema/auditorium complexes	☐	☐	☒	Not applicable. No Class 9.

NSW E2D20 Class 9b- assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)	☐	☐	☒	Not applicable. No Class 9.
E2D21 Provision for special hazards	☐	☐	☒	Not applicable. Not a special hazard.
	Part E3 Lift installations			
E3D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted.
E3D2 Lift Installations	☐	☐	☒	Not applicable. No lifts.
E3D3 Stretcher facility in lifts	☐	☐	☒	Not required.
E3D4 Warning against use of lifts in fire	☐	☐	☒	Not applicable. No lifts.
E3D5 Emergency lifts	☐	☐	☒	Not applicable. No lifts.
E3D6 Landings	☐	☐	☒	Not applicable. No lifts.
E3D7 Passenger lift types and their limitations	☐	☐	☒	Not applicable. No lifts.
E3D8 Accessible features required for passenger lifts	☐	☐	☒	Not applicable. No lifts.
E3D9 Fire Service Controls	☐	☐	☒	Not applicable. No lifts.
E3D10 Residential care buildings	☐	☐	☒	Not a Residential care building.
E3D11 Fire service recall control switch	☐	☐	☒	Not applicable. Not triggered by E3D9.
E3D12 Lift car fire service drive control switch	☐	☐	☒	Not applicable. Not triggered by E3D9.
	Part E4 Visibility in an emergency, exit signs and warning systems			
E4D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted
E4D2 Emergency lighting requirements	☒	☐	☐	Capable of Complying – CC stage Emergency Lighting is required to be installed for Class 7b as per subclause (b). The floor area is > 300 m2. Fire services diagram to be prepared at CC stage.
E4D3 Measurement of distance	☒	☐	☐	Noted
E4D4 Design and operation of emergency lighting	☒	☐	☐	Capable of Complying – CC stage Emergency lighting must be regularly maintained and endorsed by Accredited

				Practitioner – Fire Safety (APFS) in the future Annual Fire Safety Statement (AFSS).
E4D5 Exit signs	☒	☐	☐	Capable of complying – CC stage Illuminated exit signs must be installed throughout the building above the entry doors or doors leading to exit and in the through rooms forming part of travel to exit. Fire services diagram to be prepared at CC stage.
NSW E4D6 Direction signs	☒	☐	☐	Capable of Complying – CC stage Where an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions indicating the direction to a required exit. Illuminated directional must be installed on throughout the building and through the paths of travel leading to open space, forming part of travel to exit. Fire services diagram to be prepared at CC stage
E4D7 Class 2 and 3 buildings and Class 4 parts: exemptions	☐	☐	☒	N/A. Class 7b.
E4D8 Design and operation of exit signs	☒	☐	☐	Capable of Complying – CC stage Every required exit sign must comply with AS/NZS 2293.1 and be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building. Newly installed exit signs must be regularly maintained and endorsed by APFS in the future AFSS.
E4D9 Emergency warning and intercom systems	☐	☐	☒	Building < 25 m in effective height.
NSW S20C8 System Monitoring	☐	☐	☒	Not applicable. Not a large-isolated building.
Specification 17 Fire sprinkler systems	☐	☐	☒	No Sprinklers are applicable.
Specification 18 Class 2 and 3 buildings not more than 25 m in effective height	☐	☐	☒	N/A. Class 7 building.
Specification 19 Fire control centres	☐	☐	☒	Not applicable. Subject to AFSS routine maintenance.
Specification 20	☐	☐	☒	Not applicable. Not required by E2D3.

Smoke detection and alarm systems				
Specification 21 Smoke exhaust systems	☐	☐	☒	Not applicable. No Smoke exhaust systems.
Specification 22 Smoke-and-heat vents	☐	☐	☒	Not applicable. No Smoke-and-heat vents.
Specification 23 Residential fire safety systems	☐	☐	☒	Not applicable. Not residential.
Specification 24 Lift installations	☐	☐	☒	Not applicable. No lifts.
Specification 25 Photoluminescent exit signs	☒	☐	☐	Capable of Complying Every required exit sign must comply with AS/NZS 2293.1.

Section F- Health and amenity

	Part F1 **Surface water management, rising damp and external waterproofing**			
	Yes	**No**	**N/A**	**Comments**
F1D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted.
F1D2 Application of Part	☒	☐	☐	Capable of Complying – Details at CC stage. F1D4- F1D5 are not applicable to building if metal sheet roofing complies with AS 1562.1.
F1D3 Stormwater drainage	☒	☐	☐	Capable of Complying – Details at CC stage. Stormwater drainage to comply with AS/NZS 3500.3.
F1D4 Exposed joints	☒	☐	☐	Capable of Complying – Details at CC stage. Exposed joints in the drainage surface on roofs, balconies, podiums, or similar horizontal building surfaces should adhere to Section 2.9 of AS 4654.2 for protection. Additionally, these joints must not be situated beneath or run through planter boxes, water features, or similar elements of the building.
F1D5 External waterproofing membranes	☒	☐	☐	Capable of Complying – Details at CC stage. Exposed joints in the drainage surface on a roof, balcony, podium, or similar horizontal surface of

				a building must adhere to the protection guidelines outlined in Section 2.9 of AS 4654.2. Additionally, these joints must not be situated beneath or run through a planter box, water feature, or any similar component of the building.
F1D6 Damp-proofing	☒	☐	☐	Capable of Complying – Details at CC stage. Moisture from the ground must be prevented from reaching the floor. Where a damp-proof course is provided, it must consist of a material that complies with AS/NZS 2904; or impervious sheet material in accordance with AS 3660.1.
F1D7 Damp-proofing of floors on the ground	☒	☐	☐	Capable of Complying – Details at CC stage. Moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. Details and specifications to be submitted to the appointed Principal Certifier.
F1D8 Subfloor ventilation	☐	☐	☒	No subfloor. Slab on ground. N/A
	Part F2 **Wet areas and overflow protection**			
F2D1 Deemed to Satisfy Provisions	☒	☐	☐	Applicable
F2D2 Wet area construction	☒	☐	☐	Capable of Complying – Details at CC stage. Building elements (In a Class 7b building) in a bathroom or sink compartment, or sanitary compartment must be water resistant or waterproof in accordance with Specification 26; and comply with AS 3740, as if they were in a Class 4 part of a building. To be noted on CC plans.
F2D3 Rooms containing urinals	☐	☐	☒	Not applicable. No urinals required nor proposed.
F2D4 Floor wastes	☒	☐	☐	Capable of Complying details at CC stage. Where a floor waste is installed—the minimum continuous fall of a floor plane to the waste must be 1:80; and the maximum continuous fall of a floor plane to the waste must be 1:50.
	Part F3			

	Roof and wall cladding			
F3D1 Deemed-to-Satisfy Provisions	☐	☐	☒	Not Applicable.
F3D2 Roof coverings	☒	☐	☐	Capable of Complying – Details at CC stage. Roofs must be covered with materials such as roof tiles complying with AS 2049 and fixed according to AS 2050, metal sheet roofing as per AS 1562.1, plastic sheet roofing designed in accordance with AS 1562.3, or terracotta, fiber-cement, and timber slates and shingles following AS 4597, excluding cyclonic areas. Alternatively, an external waterproofing membrane complying with F1D5 can be used.
F3D3 Sarking	☐	☐	☒	Not applicable. No sarking.
F3D4 Glazed assemblies	☒	☐	☐	Where glazed assembly (Sliding door and all windows) is used in the external walls, it must comply with AS 2047 requirements for resistance to water penetration, in accordance with the requirements of F3D4.
F3D5 Wall cladding	☒	☐	☐	Capable of Complying – Details at CC stage. External wall cladding must adhere to compliance standards, with one or combining the following options: • Masonry, including masonry veneer (unreinforced and reinforced masonry) in accordance with AS 3700; • Autoclaved aerated concrete meeting AS 5146.3; and • Metal wall cladding conforming to AS 1562.1.
	Part F4 **Sanitary and other facilities**			
F4D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted
F4D2 Facilities in residential buildings	☐	☐	☒	Not applicable. Not residential.
F4D3 Calculation of number of occupants and facilities	☒	☐	☐	The applicant stated maximum of 4 employees per SOU. 50 % male to female ratio. Refer to NSWD2D18.

NSW F4D4 Facilities in Class 3 to 9 buildings	☒	☐	☐	Adequate sanitary facility has been allocated. See below: F4D4(3) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.

Table F4D4b: Sanitary facilities in Class 7 and 8 buildings

User group	Facility type	Design occupancy	Number
Male employees	Closet pans	1 - 20	1
		>20	Add 1 per 20
	Urinals	1 - 10	0
		11 - 25	1
		26 - 50	2
		>50	Add 1 per 50
	Washbasins	1 - 20	1
		>20	Add 1 per 20
Female employees	Closet pans	1 - 15	1
		>15	Add 1 per 15
	Washbasins	1 - 20	1
		>20	Add 1 per 20

Table Notes

Sanitary facilities need not be provided for a Class 8 *electricity network substation*.

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F4D4(3) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.

F4D5 Accessible sanitary facilities	☒	☐	☐	Adequate sanitary facility has been allocated.
F4D6 Accessible unisex sanitary compartments	☒	☐	☐	Adequate sanitary facility has been allocated. 1x Unisex Accessible sanitary compartment on ground floor storey containing sanitary compartments.
F4D7 Accessible unisex showers	☐	☐	☒	No accessible showers are required by F4D5(b) and F4D4.
F4D8 Construction of sanitary compartments	☒	☐	☐	Capable of Complying details at CC stage. Internal bathroom fixtures are to be further detailed on CC plans where required at CC stage.
F4D9 Interpretation: urinals and washbasins	☐	☐	☒	Not required.
F4D10 Microbial (legionella) control	☐	☐	☒	This clause has deliberately been left blank. F4D10 does not apply in NSW as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation 2012, under the Public Health Act 2010.
F4D11 Waste management	☐	☐	☒	Not required for Class 6 & 7.

F4D12 Accessible adult change facilities	☐	☐	☒	No unisex accessible adult change facilities.
	Part F5 **Room heights**			
F5D1 Deemed to Satisfy Provisions	☒	☐	☐	Noted.
F5D2 Height of rooms and other spaces	☒	☐	☐	Ceiling heights are not < the required 2.4 m.
	Part F6 **Light and ventilation**			
F6D1 Deemed to Satisfy Provisions	☒	☐	☐	Applies. Noted.
F6D2 Provision of natural light	☒	☐	☐	Natural light has been provided through windows and skylights.
F6D3 Methods and extent of natural light	☒	☐	☐	Method and extent of natural light has been provided by glazed windows and doors in accordance with this clause.
F6D4 Natural light borrowed from adjoining room	☐	☐	☒	N/A. No natural borrowed lights.
F6D5 Artificial lighting	☒	☐	☐	Capable of Complying details at CC stage. Artificial lighting has been provided, in accordance with AS 1680.0-2009. Electrical services diagrams to be provided to Certifier at CC stage.
NSW F6D6 Ventilation of rooms	☒	☐	☐	Naturally ventilated, in accordance with F6D7.
F6D7 Natural ventilation	☒	☐	☐	Capable of Complying details at CC stage. Provided with natural ventilation and with mechanical ventilation or air-conditioning system complying with AS 1668.2. Mechanical services diagrams to be provided to Certifier at CC stage.
F6D8 Ventilation borrowed from adjoining room	☒	☐	☐	Capable of Complying details at CC stage. Natural ventilation to a room can be provided through a window, opening, door, or other device from an adjoining room, given certain conditions. In Class 7 buildings, the ventilating area must be at least 10% of the floor area of the room to be

				ventilated, measured within 3.6 m above the floor, and for the adjoining room. These requirements may be adjusted if direct natural ventilation is provided from another source.
F6D9 Restriction on location of sanitary compartments	☐	☐	☒	Not applicable for Class 7.
F6D10 Airlocks	☐	☐	☒	No airlocks required.
F6D11 Carparks	☐	☐	☒	N/A. Open deck carpark.
F6D12 Kitchen local exhaust ventilation	☐	☐	☒	No commercial kitchens.
	Part F7 **Sound transmission and insulation**			
F7D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted
F7D2 Application of Part	☐	☐	☒	Not applicable for Class 7 building.
F7D3 Determination of airborne sound insulation ratings	☐	☐	☒	Not applicable for Class 7 building.
F7D4 Determination of impact sound insulation ratings	☐	☐	☒	Not applicable for Class 7 building.
F7D5 Sound insulation rating of floors	☐	☐	☒	Not applicable for Class 7 building.
F7D6 Sound insulation rating of walls	☐	☐	☒	Not applicable for Class 7 building.
F7D7 Sound insulation rating of internal services	☐	☐	☒	Not applicable for Class 7 building.
F7D8 Sound insulation of pumps	☐	☐	☒	Not applicable for Class 7 building.
	Part F8 **Condensation management** **Note:** From 1 May 2023 to 30 September 2023 Part F6 of NCC 2019 Volume One Amendment 1 may apply instead of Part F8 of NCC 2022 Volume One. From 1 October 2023 Part F8 of NCC 2022 Volume One applies.			
F8D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted.
F8D2 Application of Part	☐	☐	☒	Not applicable for Class 7 building.
F8D3 External wall construction	☐	☐	☒	Not applicable for Class 7 building.
F8D4 Exhaust systems	☐	☐	☒	Not applicable for Class 7 building.

F8D5 Ventilation of roof space	☐	☐	☒	Not applicable for Class 7 building.
Specification 26 Waterproofing and water-resistance requirements for building elements in wet areas	☐	☐	☒	Not applicable for Class 7 building.
Specification 27 Accessible adult change facilities	☐	☐	☒	Not applicable for Class 7 building.
Specification 28 Sound insulation for building elements	☐	☐	☒	Not applicable for Class 7 building.
Specification 29 Impact sound – test of equivalence	☐	☐	☒	Not applicable for Class 7 building.

Section G Ancillary Provisions

	Part G1 **Minor structures and components**			
	Yes	**No**	**N/A**	**Comments**
G1D1 Deemed to Satisfy Provisions	☐	☐	☒	
NSW G1D2 Swimming Pools	☐	☐	☒	
G1D3 Refrigerated chambers, strong-rooms and vaults	☐	☐	☒	
G1D4 Outdoor play spaces	☐	☐	☒	
NSW G1D5 Provision for cleaning windows	☐	☐	☒	
	Part G2 **Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues**			
G2D1 Application of Part	☐	☐	☒	
G2D2 Installation of appliances	☐	☐	☒	
G2D3 Open fireplaces	☐	☐	☒	
G2D4 Incinerator rooms	☐	☐	☒	
	Part G3 **Atrium construction**			
G3D1 Application of Part	☐	☐	☒	

G3D2 Dimensions of atrium well	☐	☐	☒	
G3D3 Separation of atrium by bounding walls	☐	☐	☒	
G3D4 Construction of bounding walls	☐	☐	☒	
G3D5 Construction of balconies	☐	☐	☒	
G3D6 Separation at roof	☐	☐	☒	
G3D7 Means of egress	☐	☐	☒	
G3D8 Fire and smoke control systems	☐	☐	☒	
	Part G4 **Construction in alpine areas**			
G4D1 Deemed to Satisfy Provisions	☐	☐	☒	
G4D2 Application of Part	☐	☐	☒	
G4D3 External doors	☐	☐	☒	
G4D4 Emergency lighting	☐	☐	☒	
G4D5 External trafficable structures	☐	☐	☒	
G4D6 Clear space around buildings	☐	☐	☒	
G4D7 Fire-fighting services and equipment	☐	☐	☒	
G4D8 Fire orders	☐	☐	☒	
	Part G5 **Construction in bushfire prone areas**			
G5D1 Deemed to Satisfy Provisions	☐	☐	☒	
NSW G5D2 Application of Part	☐	☐	☒	
NSW G5D3 Protection	☐	☐	☒	
NSW G5D4 Protection- Class 9 building used as a special protection purpose	☐	☐	☒	
	Part G6 **Occupiable outdoor areas**			
G6D1 Application of Part	☐	☐	☒	

G6D2 Fire hazard properties	☐	☐	☒	
G6D3 Fire separation	☐	☐	☒	
G6D4 Provision for escape	☐	☐	☒	
G6D5 Construction of exits	☐	☐	☒	
G6D6 Fire-fighting equipment	☐	☐	☒	
G6D7 Lift installations	☐	☐	☒	
G6D8 Visibility in an emergency, exit signs and warning systems	☐	☐	☒	
G6D9 Light and ventilation	☐	☐	☒	
G6D10 Fire orders	☐	☐	☒	
	Part G7 **Livable housing design**			
NSW G7D1 Deemed to Satisfy Provisions	☐	☐	☒	Not applicable in NSW
NSW G7D2 Livable housing design	☐	☐	☒	Not applicable in NSW
Specification 30 Installation of boilers and pressure vessels	☐	☐	☒	
Specification 31 Fire and smoke control systems in buildings containing atriums	☐	☐	☒	
NSW S43C2 Separation from classified vegetation	☐	☐	☒	
NSW S43C11 Supply of water for fire-fighting purposes	☐	☐	☒	

Section I- Special Use Buildings

	Part I1 **Class 9b buildings**			
	Yes	**No**	**N/A**	**Comments**
NSW I1D1 Application	☐	☐	☒	
I1D2 Separation	☐	☐	☒	
I1D3 Proscenium wall construction	☐	☐	☒	

I1D4 Seating area	☐	☐	☒	
I1D5 Exits from stages	☐	☐	☒	
I1D6 Access to platforms and lofts	☐	☐	☒	
I1D7 Aisle lights	☐	☐	☒	
	Part I2 **Public transport buildings**			
I2D1 Application of Part	☐	☐	☒	
I2D2 Accessways	☐	☐	☒	
I2D3 Ramps	☐	☐	☒	
I2D4 Handrails and grabrails	☐	☐	☒	
I2D5 Doorways and doors	☐	☐	☒	
I2D6 Lifts	☐	☐	☒	
I2D7 Stairways	☐	☐	☒	
I2D8 Unisex accessible toilet	☐	☐	☒	
I2D9 Location of accessible toilets	☐	☐	☒	
I2D10 Symbols and signs	☐	☐	☒	
I2D11 Tactile ground surface indicators	☐	☐	☒	
I2D12 Lighting	☐	☐	☒	
I2D13 Hearing augmentation	☐	☐	☒	
I2D14 Emergency warning systems	☐	☐	☒	
I2D15 Controls	☐	☐	☒	
	Part I3 **Farm buildings and farm sheds**			
I3D1 Application of Part	☐	☐	☒	
I3D2 Fire resistance and separation	☐	☐	☒	
I3D3 Provision for escape	☐	☐	☒	
I3D4 Construction of exits	☐	☐	☒	
I3D5 Fixed platforms, walkways, stairways and ladders	☐	☐	☒	
I3D6 Thresholds	☐	☐	☒	

I3D7 Swinging doors	☐	☐	☒	
I3D8 Fire-fighting equipment	☐	☐	☒	
I3D9 Fire hydrants and water supplies	☐	☐	☒	
I3D10 Fire hose reels	☐	☐	☒	
I3D11 Portable fire extinguishers	☐	☐	☒	
I3D12 Emergency lighting requirements	☐	☐	☒	
I3D13 Exit signs	☐	☐	☒	
I3D14 Direction signs	☐	☐	☒	
I3D15 Design and operation of exit signs	☐	☐	☒	
I3D16 Sanitary facilities	☐	☐	☒	
I3D17 Height of rooms and other spaces	☐	☐	☒	
I3D18 Artificial lighting	☐	☐	☒	
Specification 32 **Construction of proscenium walls**	☐	☐	☒	

Section J- Energy Efficiency

Notes: New South Wales Section J Energy Efficiency

1. For a Class 2 building or a Class 4 part of a building, where a relevant development consent or an application for a complying development certificate requires compliance with a BASIX Single Dwelling or Multi Dwelling Certificate issued under Version 3.0 or earlier, NSW Section J of NCC 2019 Amendment 1 applies.
2. For a Class 2 building or a Class 4 part of a building, where a relevant development consent or an application for a complying development certificate requires compliance with a BASIX Single Dwelling or Multi Dwelling Certificate issued under Version 4.0 or later, Section J of NCC 2022 applies.
3. For a Class 2 building or a Class 4 part of a building, where a relevant development consent or an application for a complying development certificate requires compliance with a BASIX Alterations and Additions Certificate, NSW Section J of NCC 2019 Amendment 1 applies.
4. For a Class 3 building or Class 5 to 9 building:
   (a) From 1 May 2023 to 30 September 2023 NSW Section J of NCC 2019 Volume One Amendment 1 may apply instead of Section J of NCC 2022 Volume One.

From 1 October 2023 Section J of NCC 2022 Volume One applies.

Part J1 **Energy efficiency performance requirements**	☐	☐	☒	Does not form part of the scope of the works of this report.
	Part J2			

	Energy efficiency			
NSW J2D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted.
NSW J2D2 Application of Section J	☐	☐	☒	Section J Consultant to verify if this section is applicable, where required and requested by Certifier or Council.
	Part J3 **Elemental provisions for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building**			
NSW D3D1 Deemed to Satisfy Provisions	☐	☐	☒	Noted.
NSW J3D2 Application of Part	☐	☐	☒	Noted.
NSW J3D3 Reducing heating and cooling loads of a sole occupancy unit of a Class 2 building or a Class 4 part of a building using house energy rating software	☐	☐	☒	
NSW J3D4 Ceiling fans in a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
J3D5 Roof thermal breaks of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
J3D6 Thermal breaks of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D7 Roofs and ceilings of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D8 External walls of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D9 Wall glazing construction of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D10 Floors of a sole occupancy unit of a Class 2	☐	☐	☒	

building or a Class 4 part of a building				
NSW J3D11 External winter glazing of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D12 External summer glazing of a sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D13 Shading of a sole occupancy unit of Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D13 Net equivalent energy usage of sole occupancy unit of a Class 2 building or a Class 4 part of a building	☐	☐	☒	
NSW J3D15 Net equivalent energy usage for a sole occupancy unit of a Class 2 building or a Class 4 part of a building- home energy rating software	☐	☐	☒	
	Part J4 Building fabric			
NSW J4D1 Deemed to Satisfy Provisions	☐	☐	☒	
NSW J4D2 Application of Part	☐	☐	☒	
NSW J4D3 Thermal construction- general	☐	☐	☒	
J4D4 Roof and ceiling construction	☐	☐	☒	
J4D5 Roof lights	☐	☐	☒	
J4D6 Walls and glazing	☐	☐	☒	
J4D7 Floors	☐	☐	☒	
NSW J5D1 Deemed to Satisfy Provisions	☐	☐	☒	
NSW J5D2 Application of Part	☐	☐	☒	
	Part J5 Building sealing			
J5D3 Chimneys and flues	☐	☐	☒	

J5D4 Roof lights	☐	☐	☒	
NSW J5D5 Windows and doors	☐	☐	☒	
	Part J6 **Air-conditioning and ventilation**			
J5D6 Exhaust fans	☐	☐	☒	
J5D7 Construction of ceilings, wall's and floors	☐	☐	☒	
J5D8 Evaporative coolers	☐	☐	☒	
NSW J6D1 Deemed to Satisfy Provisions	☐	☐	☒	
NSW J6D2 Application of Part	☐	☐	☒	
J6D3 Air-conditioning system control	☐	☐	☒	
J6D4 Mechanical ventilation system control	☐	☐	☒	
J6D5 Fans and duct systems	☐	☐	☒	
J6D6 Ductwork insulation	☐	☐	☒	
	Part J7 **Artificial lighting and power**			
J6D7 Ductwork sealing	☐	☐	☒	
	Part J8 **Heated water supply and swimming pool and spa pool plant**			
J6D8 Pump systems	☐	☐	☒	
	Part J9 **Energy monitoring and on-site distributed energy resources**			
J6D9 Pipework insulation	☐	☐	☒	
NSW J6D10 Space heating	☐	☐	☒	
J6D11 Refrigerant chillers	☐	☐	☒	
J6D12 Unitary air-conditioning equipment	☐	☐	☒	
J6D13 Heat rejection equipment	☐	☐	☒	
NSW J7D1 Deemed to Satisfy Provisions	☐	☐	☒	
NSW J7D2 Application of Part	☐	☐	☒	
NSW J7D3 Artificial lighting	☐	☐	☒	

NSW J7D4 Interior artificial lighting and power control	☐	☐	☒	
NSW J7D5 Interior decorative and display lighting	☐	☐	☒	
J7D6 Exterior artificial lighting	☐	☐	☒	
J7D7 Boiling water and chilled water storage units	☐	☐	☒	
J7D8 Lifts	☐	☐	☒	
J7D9 Escalators and moving walkways	☐	☐	☒	
NSW J8D1 Deemed to Satisfy Provisions	☐	☐	☒	
J8D2 Heated water supply	☐	☐	☒	
NSW J8D3 Swimming pool heating and pumping	☐	☐	☒	
NSW J8D4 Spa pool heating and pumping	☐	☐	☒	
NSW J9D1 Deemed to Satisfy Provisions	☐	☐	☒	
J9D2 Application of Part	☐	☐	☒	
J9D3 Facilities for energy monitoring	☐	☐	☒	
J9D4 Facilities for electric vehicle charging equipment	☐	☐	☒	
J9D5 Facilities for solar photovoltaic and battery systems	☐	☐	☒	
NSW Schedule 2- Referenced Documents	☐	☐	☒	Note: Some varied standards to National Table 1
Specification 33 Additional requirements	☐	☐	☒	
Specification 34 Modelling parameters for J1V3	☐	☐	☒	
Specification 35 Modelling profiles for J1V3	☐	☐	☒	
Specification 36 Material properties	☐	☐	☒	
Specification 37 Calculation of U-Value and solar admittance	☐	☐	☒	

Specification 38 Spandrel panel thermal performance	☐	☐	☒	
Specification 39 Sub-floor and soil thermal performance	☐	☐	☒	
Specification 40 Lighting and power control devices	☐	☐	☒	
Specification 44 Calculation of heating load limit, cooling load limit and thermal energy load limit	☐	☐	☒	
Specification 45 Modelling profiles for J1V5	☐	☐	☒	

Conclusion

Based on the building code assessment presented in this report, it is our professional opinion that the proposed works would comply with DTS / Performance Requirements of the BCA. Subject to the implementation of the recommended works and final inspection.

The proposed development is considered to be in conformity with the *Performance Requirements* of the Building Code of Australia (BCA).

It is concluded that the proposed building works as specified is capable of complying with the DTS or *Performance Requirements* of the BCA, via the development of *Performance Solution*. Subject to Council approval.

Prepared by
Firas Naji – Senior Building Surveyor – Fire Safety
Unrestricted All classes of building (BDC 3315)
Town Planning Consultant

www.silverend.com.au

Academic Qualifications

- Diploma of Architectural Technology - TAFE
- Bachelor of Design in Architecture - UTS
- Master of Urban Management and Planning - UWS
- Advanced Diploma of Building Surveying – TAFE
- Graduate Diploma of Building Surveying – UNISA

End or Report

APPENDIX 12 – Demolition and Construction Waste Management Plan

WASTE MANAGEMENT PLAN

ADDITION CONSTRUCTION OF TWO-STORY WAREHOUSES

Address: 86 Bryant St, Padstow NSW 2211

LOT/DP: Lots 21 in DP 732054

PREPARED FOR

XIANG LIN HE

ISSUE DATE

11/09/2024

PROPOSAL DETAIL

Site address: 86 Bryant St, Padstow NSW 2211

Building and other structures currently on the site:

The site currently contains a single-story warehouse structure. The warehouse has access to Bryant St, with parking provided within the front setback area.

Brief description of the proposal:
The proposal involves expanding the existing single-story warehouse into a two-story warehouse structure. The expansion will provide additional warehouse and storage.

APPLICANT'S DETAIL

Name: Rachel Wong

Address: Suite 902, Level 9/12 Help St, Chatswood NSW 2067

Mobile: 0405693988

Email: rachel@bjarchitects.com.au

The details provided on this form are the intentions of managing waste relating to this project.

Signature of Applicant:

Date: 10/09/2024

FORM 1 – DEMOLITION PHASE

MATERIALS ON SITE		DESTINATION		
Type of material	Estimated volume	Reuse & recycling		Disposal
		On-site *Specify proposed reuses or on-site recycling methods*	Off-site *Specify contractor and recycling outlet*	*Specify contractor and landfill site*
Excavation material	5m^3	Keep and reuse for landscaping.	To Art Excavations and Demolitions.	Nil
Green waste	3m^3	Keep and reuse for landscaping topsoil.	To Australian Native Landscapes P/L	Nil
Bricks	12m^3	Clean and reuse for new construction.	To Brandown Recycling Facilities	Nil
Tiles	0m^3	Nil	To Brandown Recycling Facilities	Nil
Concrete	3m^3	Crush and reuse for new driveway.	To Brandown Recycling Facilities	Nil
Timber	2m^3	Reuse for studwork, framework and landscaping.	To stockpile at To Brandown Transfer Station, By approved Waste Contractor	Nil
Plasterboard	2m^3	Nil	To Brandown Recycling Facilities	Nil
Metal	3m^3	Nil	To Selland Parker Metal Recyclers	Nil
Asbestos	0 m^3	Nil	Nil	Nil
Other waste *e.g., Ceramic tiles, paints, plastics, etc.*	3 m^3	Nil	To Brandown Recycling Facilities	Nil

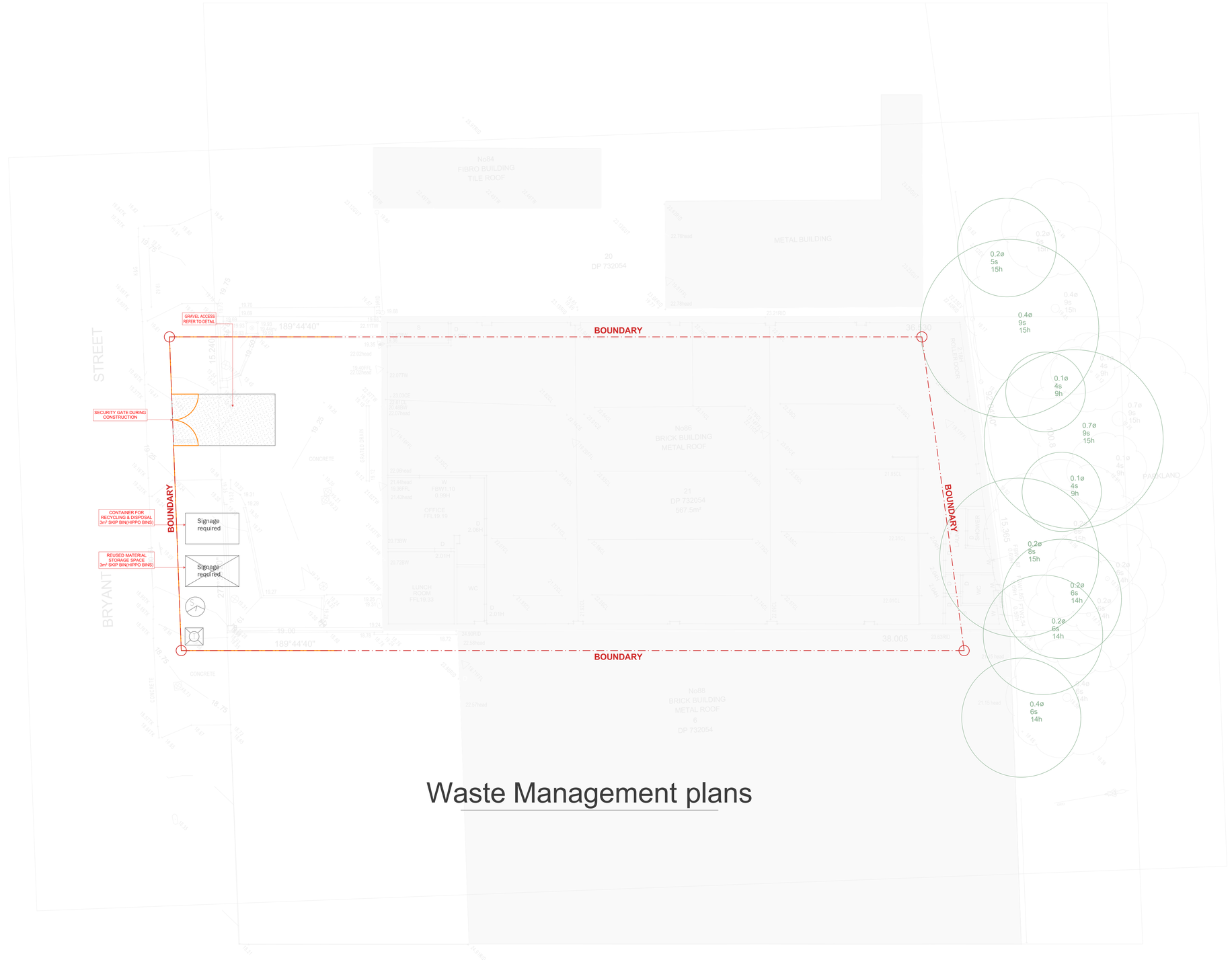
FORM 2 – CONSTRUCTION PHASE

MATERIALS ON SITE		DESTINATION		
Type of material	Estimated volume	Reuse & recycling		Disposal
		On-site *Specify proposed reuses or on-site recycling methods*	Off-site *Specify contractor and recycling outlet*	*Specify contractor and landfill site*
Excavation material	Refer to the demolition phase			
Green waste	Refer to the demolition phase			
Bricks	$2m^3$	Clean and reuse for landscape features.	To Brandown Recycling Facilities	Nil
Tiles	$0m^3$	Nil	To Brandown Recycling Facilities	Nil
Concrete	$1m^3$	Crush and reuse for new driveway.	To Brandown Recycling Facilities	Nil
Timber	$0.5m^3$	Reuse for studwork, framework and landscaping.	To stockpile at To Brandown Transfer Station, By approved Waste Contractor	Nil
Plasterboard	$1m^3$	Nil	To Brandown Recycling Facilities	Nil
Metal	$0.5m^3$	Nil	To Selland Parker Metal Recyclers	Nil
Asbestos	$0\ m^3$	Nil	Nil	Nil
Other waste *e.g., Ceramic tiles, paints, plastics, etc.*	$3\ m^3$	Nil	To Brandown Recycling Facilities	Nil

FORM 3 - ON-GOING MANAGEMENT

Describe how you intend to ensure on-going management of waste on-site (e.g., lease conditions, caretaker/manager on-site).

METHODS	DESCRIPTION



Waste Management plans

BJ ARCHITECTS INTERNATIONAL
ABN 94 634 347 201 | ACN 634 347 201

A: Suite 902, Level 9/12 Help St,
Chatswood, NSW 2067
T: 02 9066 3919
E: info@bjarchitects.com.au
W: www.bjarchitects.com.au
NSW ARB # 10984

LEGEND
1. Architectural drawings shall be read in conjunction with other consultant drawings and specifications. Any discrepancies shall be referred to BJ Architects International before proceeding with the work.
2. All dimensions and levels are in millimeters unless noted otherwise. No dimension shall be obtained by scaling the drawings.
3. All dimensions to be checked on site with any discrepancies referred to BJ Architects International before proceeding with work.
4. All work to be carried out in accordance with the requirements of the Principal Certifying Authority, current NCC & Australian Standard.

PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	RACHEL.W	2024.08.29

DRAWING
Additional Info - Waste Management Plans

SCALE
1:100@A1

DRAWING NO
A504

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2024.08.29

APPENDIX 13 – Detailed Site Investigations for Contamination

Refer separate attachment for Detailed Site Investigations for Contamination.

APPENDIX 14 – Remedial Action Plan

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Remedial Action Plan

Prepared for:	BJ Architects Pty Ltd
Site Address	86 Bryant Street, Padstow, NSW
Prepared by	Jeffrey Yu • Principal Environmental Consultant • Certified Environmental Practitioner (#1516) • Licensed Asbestos Assessor (#001366) • PhD (EnvEng), PhD (MediChem)
Reference. No.	DRYU551J_RAP_V3_86 Bryant Street, Padstow, NSW_16042025.

16 April 2025

DR UPSILON ENVIRONMENTS PTY LTD
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Document History and Status

Rev	Status	Description	Author	Reviewer	Release Date
1	Final	For submission	Jeffrey YU		26/11/2024
2	Final	Updated architectural plan	Jeffrey YU		27/11/2024
3	Final	Updated architectural plan	Jeffrey YU		16/04/2025

Distribution of Copies

Rev	Format	Issued To
3	Electronic (Email)	BJ Architects Pty Ltd DRYU Electronic Storage System

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Abbreviations

ACM	Asbestos Containing Material
AEC	Area of Environmental Concern
AHD	Australian Height Datum
AMP	Asbestos Management Plan
ASC NEPM	National Environment Protection (Assessment of Site Contamination) Measure
ASS	Acid Sulfate Soils
ASI	Additional Site Investigation
BGL	Below ground level
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
COPC	Contaminant of Potential Concern
Council	Canterbury Bankstown Council
CSM	Conceptual Site Model
DA	Development Application
DQI	Data Quality Indicator
DQO	Data Quality Objective
DSI	Detailed Site Investigation
EIL	Ecological Investigation Level
ESL	Ecological Screening Level
EP&A	Environmental Planning and Assessment
DRYU	Dr Upsilon Environments Pty Ltd
HIL	Health Investigation Level
HSL	Health Screening Level
IL	Investigation Level
LOR	Limit of Reporting
NATA	National Association of Testing Authorities, Australia
NEPC	National Environment Protection Council
NSW EPA	Environment Protection Authority of New South Wales
NSW OEH	Office of Environment and Heritage of New South Wales
OCP	Organochlorine Pesticide
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PPE	Personal Protective Equipment
QA	Quality Assurance

QC	Quality Control
RAP	Remediation Action Plan
RPD	Relative Percent Difference
SEPP	State Environmental Planning Policy
SWMS	Safe Work Method Statement
TRH	Total Recoverable Hydrocarbon
PFAS	Per- and Polyfluoroalkyl Substances
VENM	Virgin Excavated Natural Material

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Executive Summary

Dr Upsilon Environments Pty Ltd ("DRYU") was commissioned by BJ Architects Pty Ltd ("**The Client**") on 26 November 2024 to perform a Remedial Action Plan report ("**RAP**") in order to assist in the proposed light industrial development (DA-1010/2024), "Demolition of the existing building and the construction of the approved warehouse", at 86 Bryant Street, Padstow, NSW to Canterbury Bankstown Council ("**The Council**").

According to the architectural plans, the soil disturbance could be mainly conducted around the two lift footings and the middle partition wall, rather than the whole warehouse slab.

The objectives of the RAP were to:

- Summarise the characteristics of the Site;
- Define the extent of contamination and define the scope of remediation required;
- Identify potential remediation options and justify the selection of the preferred remediation option;
- Outline the methodology required to implement the preferred remediation option;
- Outline regulatory environments applicable to the remediation works;
- Outline requirements for the protection of human health and the environment during the remediation works; and
- Establish validation criteria in order to validate and to render the site suitable for the industrial land use.

In order for the asbestos impacted soils for **RAP Impacted Area** to be disposed of at a waste disposal facility, a waste classification report will need to be prepared. This report should be prepared by a suitably qualified environmental consultant in accordance with the NSW EPA (2014) *Waste Classification Guidelines*.

The results of DRYU soil characterisation assessment reports can be used to prepare the waste classification report for RAP Areas. Should the environmental consultant consider that additional sampling is required to confirm the waste classification, this should be discussed with the Client prior to preparation of the waste classification report.

The procedure that should be followed for the remediation and off-site disposal of contaminated soils is outlined below, as shown in Appendix 1 – DRYU DSI Sampling and RAP Site Layout and Table 3.

- The RAP Asbestos Impacted area (**~150 m^2**) should be marked out with spray paint or similar prior to excavation.
- The approximate lateral extent (as shown in Appendix 1 – DRYU DSI Sampling and RAP Site Layout) of digging/excavation to be undertaken is as follows:
  - The approximate remediation area excludes the extent of the soils to any underground/ground services facilities
- Excavation in **RAP Impacted Area** is to be extended to either the underlying virgin natural materials, after the removal of fill (up to approximately **0.45 m below initial ground surface**) or to encounter natural clay before inspection, validation and landscaping.

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- The contaminated soils are to be temporarily stockpiled on-site away from tree droplines or loaded directly with double-bagged asbestos bag or heavy-duty plastic into waste disposal trucks with waste classification.
- The spoil is to be disposed off-site at a facility licensed to accept the classification of waste that is applied to the material and in accordance with the waste classification report. Based on DRYU visual inspection and previous soil characterisation assessment reports, the following waste classification may apply:
  - Remediation Areas: **RAP Impacted Area** – General Solid Waste (non-putrescible)-Special Waste (Asbestos), subject to the chemical testing of the stockpile;
  - If the entire volume of contaminated soil is mixed – Special Waste-Asbestos, General Solid Waste (non-putrescible) with the requirement of waste classification for the stockpile.
- If soils are to be stockpiled separately, the materials should be put on top of 2 mm plastic and covered with a layer of high visibility geofabric materials (or equivalent) to prevent airborne dispersion of asbestos fibres. Excavation and movement of all bonded ACM soils are required to be supervised by a Class A Licensed Asbestos Removalist supervisor and suitably qualified Environmental Consultant/Occupational Hygienist (i.e., DRYU). A relevant Asbestos Removal Control Plan ("**ARCP**") should be developed and reviewed for friable asbestos impacted soil report by a Class A asbestos removalist company. The **ARCP** will address the risks associated with ACM and controls to be implemented during works to mitigate the possibility of airborne asbestos exposure to contractors, clients and visitors on Site.
- Waste disposal trucks transporting contaminated soil from the Site are to be covered during transport. Waste disposal documentation should be retained by the Client, or its subcontractors, for each load of contaminated soil leaving the Site in order to verify that the contaminated soils have been appropriately disposed.
- The environmental consultant shall be engaged for onsite supervision works and will be required to keep a photographic record as part of the validation process (refer to Validation Plan of this RAP).

The underlying natural soil and rock at this site shall be validated to meet the Resource Recovery Exemption – Excavated Natural Material (ENM) Exemption (2014), thereby fulfilling legislative obligations of the Protection of the Environment Operations (Waste) Regulation 2014.

The proposed construction will generate a small volume of excess soil and rock requiring offsite disposal. It is important to keep non-impacted materials separated from contaminated soils. Non-impacted fill materials (confirmed through validation sampling) can be either reused onsite or potentially disposed offsite at as General Solid Waste.

Contingency and Onsite Supervision
There is uncertainty of the extent of the contamination for the fill layer(s) across the whole lot, remediation areas may have been assumed and may change based on onsite environmental supervision during real earthworks and validation results.

Both Unexpected finds protocol and waste classification for the fill materials across the lot shall be prepared and implemented for the uncertainty during demolition / earthwork stage.

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During excavation works across the whole lot, a competent and qualified environmental consult shall be commissioned for the on-site supervision.

Conclusion and Recommendation

DRYU concludes that the site can be made **suitable** for the proposed light industrial warehouse development, provided that the proper implementation of this RAP by a competent contractor with onsite supervision by a competent and qualified environmental consultant during demolition and earthwork stage.

This report shall be read in full and in conjunction with the referred DRYU reports.

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1 Introduction

1.1 General

Dr Upsilon Environments Pty Ltd ("DRYU") was commissioned by BJ Architects Pty Ltd ("**The Client**") on 26 November 2024 to perform a Remedial Action Plan report ("**RAP**"**)** in order to assist in the proposed light industrial development (DA-1010/2024), "Demolition of the existing building and the construction of the approved warehouse", at 86 Bryant Street, Padstow, NSW to Canterbury Bankstown Council ("**The Council**").

On the basis of the previous reports and site information, DRYU proposes that the Site can be made suitable for the proposed light industrial development, subject to preparation of a Remedial Action Plan and the completion of remediation works in order to comply with pre-lodgement DA conditions from the Council and relevant regulations.

This RAP has been prepared in accordance with the relevant sections of the following documents:

- National Environment Protection (Assessment of Site Contamination) Measure 1999 – 2013 Amendment (NEPC, 2013, hereafter referred to as the "ASC NEPM")
- Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (NSW EPA, 2015; hereafter referred to as the 'Duty to Report Guidelines')
- Consultants Reporting on Contaminated Land: Contaminated Land Guidelines (NSW EPA, 2020, referred to as the "Consultant reporting Guidelines")
- Sampling Design Part 1 – Application: Contaminated Land Guidelines (NSW EPA, 2022, referred to as the "Sampling Design Guidelines")
- NSW EPA (2022) Sampling Design Part 2 – Interpretation: Contaminated Land Guidelines (NSW EPA, 2022, referred to as the "Sampling Design Guidelines");
- Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (The WA Department of Health, 2021, referred to as the "WA Asbestos Guideline")

The previous investigation reports were also referred to in this report:

- Detailed Site Investigation and Assessment Report (Ref. No.: DRYU539J_DSI_V3_86 Bryant Street, Padstow, NSW_16042025, DRYU, dated 16 April 2025)
- Stage One Preliminary Site Investigation Report (Ref. No.: ADG1739.24, ADG Consulting, dated 4 November 2024)

1.2 Objectives

The objectives of the RAP were to:

- Summarise the characteristics of the Site;
- Define the extent and nature of contamination;
- Identify potential remediation options and justify the selection of the preferred remediation option;
- Outline the methodology required to implement the preferred remediation option;
- Outline regulatory environments applicable to the remediation works;
- Outline requirements for the protection of human health and the environment during the remediation works; and

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- Establish validation criteria in order to validate the Site to a level suitable for the commercial land use.

1.3 Scope of Work

In order to assist the Client in the compliance with development conditions (from environmental contamination perspective), DRYU provided the Client with the following environmental consulting services (the "**Services**"):

- Review of planning and regulatory requirements;
- Review of previous environmental investigation reports;
- Supplementary site investigation to delineate areas of environmental concern identified from the previous site investigations and site inspection;
- Assessment of suitable remediation options;
- Review of historical site records and aerial photographs (where available);
- Review of the proposed subdivision and development plan;
- Documentation a Remedial Action Plan for endorsement by the Client and the regulator.

2 Site Description

2.1 Site Location and Identification

General Site details are included below in Table 1, Figure 1 and Appendix 1 – DRYU DSI Sampling and RAP Site Layout.

Table 1 Site Detail

Item	Description
Site Address:	The Site is located at 86 Bryant Street, Padstow, NSW
Approximate Site Area:	567 m^2
Site Identification Details:	Lot 21 DP 732054
Current Land Use:	The Site is used as industrial warehouse
Future Land Use:	The Site is going to be used as a industrial warehouse
LGA	Canterbury Bankstown Council
Zoning	IN2 Light Industrial
Surrounding Land Uses:	• Industrial properties in the south, west and east • M5 motorway along the northern boundary
Site Co-ordinates:	The centre at 318385.236(E), 6242639.909(N)(CRS GDA94, MGA Zone 56)

2.2 Site Features

From the Site layout shown in Figure 1, site features identified during the Site walkover are summarised below:

Figure 1 The site at 86 Bryant Street, Padstow, NSW

Site features identified during the site walkover are summarised below:

- The site slightly slopes towards northerly and easterly directions
- The site was observed with a metal roof
- Some mechanical workshops around the boundaries
- Various industrial properties are located in the close proximity

The observations in surrounding areas are summarised as follows:

- None of petrol stations was observed within 500 m in the upgradient direction
- No evidence of underground storage tank(s) was observed onsite
- Above ground storage tank(s) was not observed onsite

2.3 Site Topography

Landscape 9130xx indicates that the Site is Terrain disturbed by human activity. Local relief is usually <2 m, but occasionally up to 10 m. Most areas of disturbed ground have been levelled to slopes of <3%. In terraced cut and fill areas short rises may be steeper than 30%. Microtopography may be hummocky due to truck dumping of fill material. Disturbed areas are often landscaped and artificially drained. Landform elements include berms, cut faces, embankments, mounds, pits and trenches.

The site geology is artificial fill. Dredged estuarine sand and mud, demolition rubble, industrial and household waste. Also includes rocks and local soil materials.

It is expected that Site surface waters would become surface runoff and flow towards the onsite drainage.

2.4 Regional Geology and Soils

The Geological Map Sydney 1:100000 Geological Series Sheet and NSW surface geology maps indicate that the site is located at Ashfield Shale, Black to light grey shale and laminite.

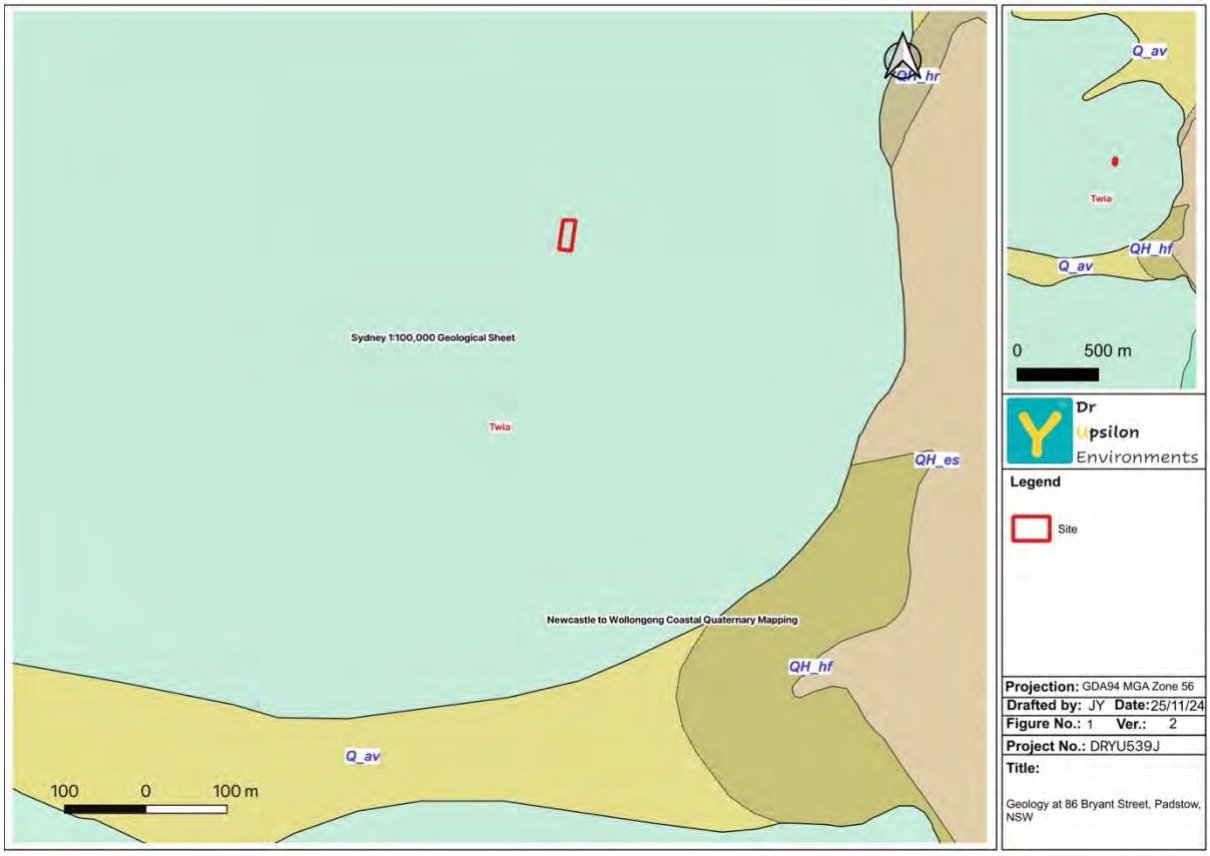

Figure 2 Regional Geology

2.5 Regional Hydrogeology and Local Groundwater Usage

Groundwater beneath the Site is anticipated to be present in a confined aquifer. Groundwater could flow northerly direction.

Five of groundwater bores was registered within the distance of 500 m of the site (https://realtimedata.waternsw.com.au/water.stm). The groundwater contamination is unknown as no information could be obtained regarding off-site migration from close proximity.

3 Summary of Previous Site Contamination Investigations and Assessments

3.1 Summary of Detailed Site Investigation Report

The Detailed Site Investigation Report (Ref. No.: DRYU539J_V3, Dr Upsilon Environments, dated 16 April 2025) indicates the following:

- Metal parts were encountered under the slab around BH03
- Fill materials with stained clay or sandy clay/silt were observed in BH03 (0.45 mBGL, prior to refusal) and BH04 up to 0.4 mBGL

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- Bonded asbestos was detected in one location, BH04_0.1-0.4. The concentration of bonded asbestos (0.02%/w/w) did not exceed the HSL-D (0.05%w/w, bonded).
- Asbestos fine was detected in one soil sample, BH03_0.1-0.45 (0.00003%w/w)
- Analysis of discrete soil samples for fill and/or soil under slab for Heavy Metals, TPHs, BTEXN, PAHs, OCPs, OPPs, PCBs and asbestos indicates that all COPC concentrations are below the Tier One Site Assessment Criteria

3.2 Data Gaps

Based on the previous site investigations and DRYU site inspections, DRYU proposed that, potential contaminants (other than asbestos) were not identified at significant concentration exceeding the site contamination criteria in soil. However, there could be uncertainties and gaps due to site access constraint, which should be addressed in the subsequent remediation, validation and environmental management procedures.

Several data gaps may exist and to be addressed during construction stage:

- Soil beneath the dwelling structures such as the footings, the slab, drainages, etc

Data gap closure works are required to be completed in accordance with sampling requirement outlined in the NSW EPA Sampling Design Guidelines (2022).

4 Conceptual Site Model

Based on the Site history review and Site walkover, a preliminary CSM has been prepared to outline the frame work for identifying how the site may have become contaminated and how potential receptors may be exposed to contamination either in the present or the future through an assessment of the potential source – pathway – receptor linkage (complete pathway).

The key elements of the preliminary CSM as outlined in NEMP 2013 include:

- Known and potential sources of contamination
- Potential contaminants of concern
- Mechanism of contamination
- Potentially affected media
- Human and ecological receptors
- Potential for migration
- Exposure pathways

4.1 Areas of Environmental Concern and Contaminants of Potential Concern

Based on the desktop review and site walkover of the site (potential contamination – landfill, offsite migration), the following potential sources of contamination and associated contaminants of potential concern (COPC) have been identified.

- Uncontrolled Filling: A potential source of contamination is imported contaminated fill or residual demolition waste. It is possible that hazardous building materials such as asbestos and lead paint being a potential issue in surface soils and fill. Various COPC can be associated with filling, such as heavy metals, asbestos, polycyclic aromatic hydrocarbons (PAH), petroleum hydrocarbons, organochlorine pesticides (OCP), polychlorinated biphenyls (PCB), and asbestos.

- Potential contaminants associated with hazardous building materials include Heavy Metals, asbestos and PCBs;
- Heavy metals: As, Cu and Cr from Copper Chrome Arsenate timber treatments;
- Heavy metals: Zn from Zinc Alum sheeting;
- Agricultural use: Organophosphorus Pesticides (OPPs), Organochlorine Pesticides (OCPs).

The main potential receptors of contamination at the site (current and future) are considered to be:

- Site users (residents, visitors);
- Construction works (for the construction of any future development);
- Maintenance workers;
- Adjacent site users;
- Surface water;
- Groundwater;
- Terrestrial and aquatic ecology.

The potential contamination pathways through which the identified receptors could come into contact with contamination are considered to be:

- Ingestion and dermal contact;
- Inhalation of dust;
- Inhalation of landfill and/or volatile vapours;
- Surface water run off;
- Leaching and vertical migration into groundwater;
- Lateral migration of groundwater;
- Contact with terrestrial and aquatic ecology.

4.2 Potential Sources, Pathways and Receptors of Contamination

The potential sources, pathways and receptors of contamination are provided below in Table 2.

Table 2 Potential Sources, Pathways and Receptors of Contamination

Potential Sources	Pathway	Receptor	Comment/Risk Management/Action Recommended
Importation of potentially contaminated fill onsite throughout	Ingestion and dermal contact	Current and future Site users	There is low potential for Site users to come into contact with contaminated soil, therefore a complete pathway potentially does not exist.
	Inhalation of dust and vapours	Current and future Site users and surrounding Site users	There is potential for Site users and surrounding land users to be exposed to dust from the Site, therefore a complete pathway potentially likely exists.
	Leaching of contaminants into ground surface	Soils across the Site	There is low potential for surface and shallow soils to be contaminated as a result of historical Site activities, therefore a complete pathway could less likely exist. Therefore, a complete pathway is not considered to exert a significant impact on the site.

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Potential Sources	Pathway	Receptor	Comment/Risk Management/Action Recommended
	Leaching of contaminants into groundwater	Groundwater beneath the Site	Given the historical and current Site use, surrounding land uses, groundwater is anticipated to be at depths of >1 m BGL, and groundwater beneath the Site is potentially anticipated to be not contaminated as a result of Site activities. Therefore, a potentially complete pathway is unlikely to exist.
	Surface water runoff	Terrestrial and aquatic ecology	There is low potential for stormwater runoff from the Site to be impacted from soil contamination, which can then impact off-site surface water receptors through stormwater system flow, therefore a complete pathway could not exist.
Potentially hazardous building materials on ground surface and buried below ground surface – around the footprint and in the structures	Ingestion and dermal contact	Current and future Site users	There is low potential for Site users to come into contact with contaminated soil, therefore a complete pathway does not exist.
	Inhalation of dust and vapours	Current and future Site users and surrounding Site users	There is potential for Site users and surrounding land users to be exposed to dust and vapours from the Site, therefore a complete pathway likely exists.
Potentially contaminants offsite migration from day to day industrial operation (mechanic repair)	Ingestion and dermal contact	Current and future Site users	There is less likely for Site users to come into contact with contaminated soil, therefore a complete pathway does not exist.
	Inhalation of dust and vapours	Current and future Site users and surrounding Site users	There is low potential for Site users to be exposed to dust and vapours from the Site, therefore a complete pathway is not considered to potentially exist.
	Leaching of contaminants into ground surface	Soils across the Site	There is less likely that leachate/plume from the upgradient to impact the site subsurface soils as groundwater water could flow towards northern creek, therefore a complete pathway is not considered to impact the site.
	Leaching of contaminants into groundwater	Groundwater beneath the Site	The groundwater level is anticipated to be at the depths of over ~1.0 m BGL. Therefore, a complete pathway is not considered to exert a significant impact on the site.

5 Discussion of Potential Remediation Options and Selection of Preferred Remediation Strategy

5.1 Remediation Objectives

With respect to remediation of the Site, the objectives are to:

- Remove or manage the asbestos contaminated soils from the Site, as shown in Appendix 1 – DRYU DSI Sampling and RAP Site Layout and Table 3.

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- Validate the remediation process, including imported fill (if any) and surfaces; and
- Document the validation process.

This section of the RAP outlines the potential remediation options and preferred remediation strategy for the asbestos contaminated fill at the Site only. Management of ACM, should it be uncovered during future earthworks, is covered in the following sections.

5.2 Extent of Remediation

Based on the results of DRYU visual inspections, previous soil characterisation and assessment reports for asbestos in/on soil and other contaminants of environmental concern, the extent of soil contamination is as follows:

- The lateral extent of soils impacted by asbestos is approximately 150 m^2 at the northern section, as shown in Appendix 1 – DRYU DSI Sampling and RAP Site Layout;
- The vertical extent of contaminated soils was considered to be defined as the various depth of from 0.1 m (the hardstand thickness) to up to ~0.45 m below ground level, as shown in Table 3 Approximate RAP Areas, Delineation and Remediation Strategy and Appendix 1 – DRYU DSI Sampling and RAP Site Layout.

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Table 3 Approximate RAP Areas, Delineation and Remediation Strategy

AEC No.	Positive Sample Locations	Stratum of concern and depth /mBGL	Area /m^2	Approximate Volume /m^3	Notes
Asbestos Impacted Area for the proposed disturbance area (two lift footings and partition wall)					
Northern Section Impacted Area	BH03 and BH04	in fill up to 0.45 mBGL (refusal)	~150 m^2	~45 m^3 For the proposed two lift pits and partition wall footings	• Medium risk and shall be managed according to the WHS regulation • Class A asbestos removal; • Excavation for offsite disposal if slab disturbance for lift construction; • Waste classification of spoil

Note:

- Assuming most of the warehouse slab will be retained, only two lift footings and the middle partitional wall could disturb the fill under slab.
- Red sample locations denote where bonded asbestos/asbestos fine were observed or detected.
- Highlighted sample locations (in red) denote where the soils were impacted by bonded asbestos/Asbestos fine, but below the adopted SAC.
- Asbestos did not exceed the HSL-D shall be managed according to the WHS legislation.
- These estimated areas, volumes, tonnage numbers are estimated with approximately ±25% deviation with high uncertainty due to shallow bedrock encountered.

5.3 Potential Remediation Options

ASC NEPM (2013) outlines the following order of preference (hierarchy of options) for soil remediation and management:

- On-site treatment of the contamination so that it is either destroyed or reduced to an acceptable level;
- Off-site treatment of the contamination so that it is either destroyed or reduced to an acceptable level, after which the soil is returned to the Site;
- Consolidation and isolation of the soil on-site by containment with a properly designed barrier; and
- Removal of the contaminated material to an approved facility, followed by replacement with validated fill as required.

In addition, ASC NEPM notes that, where assessment indicated remediation would have no net environmental benefit or would have a net adverse environmental effect, an appropriate management strategy can be implemented.

With respect to the remediation of asbestos contaminated soils at the Site and in accordance with the ASC NEPM (2013) hierarchy of remediation options, the potential remediation options therefore are:

- On-site immobilisation of the contaminated soils – this process involves injecting chemicals into the contaminated matrix in order to "lock in" or reduce the potential for the contaminants to be released.
- On-site capping and containing of the contaminated soils – this process involves the importation of validated material which is then used to construct a cap over the contaminated soil, so that the potential for future disturbance of the contaminated soil is reduced.
- Excavation and off-site disposal of the contaminated soils – this process involves the physical hand digging and removal of the contaminated soils from the Site, followed by validation sampling. The contaminated soil is disposed of at a lawfully approved facility. If the entire volume of contaminated material is to be hand dug, excavated and removed as one volume, the entire volume would classify as **General Solid Waste (non-putrescible)-Special Waste (Asbestos)**, following a waste classification process for in-situ soil. If the soil with the asbestos contaminated topsoil/fill is to be loaded directly into container with double-sealed asbestos bags for off-site disposal.
- Waste classification reports for spoil (fill and residual soils/rock) will also be required and be prepared by an environmental consultant.

5.4 Rationale for Selection of the Off-site Disposal Strategy

Based on previous contamination investigation and risk assessment, this report addresses the most feasibly remediation option by selecting the offsite disposal option for the proposed small lift footing/partitional wall excavation, in order to achieve net environmental benefit:

- minimisation of public risk;
- minimisation of contaminated soil disturbance;
- minimisation of contaminated material/soil moved to landfill.

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Although cost, time, convenience and future owner perception were important considerations, this RAP primarily stated in terms of public and worker protection, especially for the client, future residents and surrounding receptors.

Therefore, DRYU proposes the following an integrated management strategy Section 5.5 ~ Section 5.7:

5.5 Scraping, Excavation and Off-site Disposal of Identified Contaminated Soils From RAP Impacted Area

After segregation of concrete, the selected remediation option for the **RAP Impacted Area (~20 m^2)** with the asbestos-fine impacted soil is to excavate the impacted fill for offsite disposal, in order to manage the risk effectively, to minimise contaminated soil disturbance and to reduce contaminated material/soil moved to landfill. Regardless, this option is considered to be the preferred option for footing excavation.

Emu picking of asbestos is not permitted for impacted soil reuse, where asbestos has been identified as asbestos fines or fibrous asbestos. Removal of asbestos fragments is not a remedial approach to 'clean' asbestos contaminated soils or stockpiles for reuse.

5.6 Scraping, Classification and Off-site Disposal of Fill at Other Areas Rather Than the RAP Impacted Area at the Site

The proposed excavation earthworks for the footings shall scrape the concrete, gravel, recycled aggregate and underlain fill materials.

The spoil from the structure footprints shall be segregated, classified and disposed offsite to an appropriate landfill licensed by NSW EPA to receive the contaminated material. Prior to offsite disposal, excavated materials require waste classification where the results of samples collected from the material are compared to the NSW EPA (2014) Waste Classification Guidelines.

5.7 Excavation, Classification and Off-site Disposal of Natural Soil / Rock From the Footings Excavation

For the footing excavation, the underlying natural soil and rock may satisfy the definition of Virgin Excavated Natural Material (VENM) to be re-used offsite for engineered fill or used in earthworks. This can be assessed by an experienced environmental consultant following remediation and removal of fill soils and prior to continuation of footings excavation.

The underlying natural soil and rock from **deep excavation** shall be validated and classified to meet the definition of Virgin Excavated Natural Material (VENM) to be re-used offsite for engineered fill or used in earthworks. This can be assessed by an experienced environmental consultant following remediation and removal of fill soils and prior to continuation of footings excavation.

6 Remedial Action Plan

6.1 Overview

The general procedures for remediating asbestos impacted soils at the Site to be implemented by the Client, and its subcontractors, include:

- Preparation of a waste classification report;
- Site establishment;

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- Excavation and off-site disposal of asbestos contaminated soils from one localised RAP Area;
- Excavation, classification and off-site disposal of spoil from structure footprints, where contamination was not detected or not assessed due to site access constraint;
- Validation sampling and reporting.

These steps are discussed in detail in the sections below. A suitably qualified environmental consultant will be required to oversee each aspect of the remediation works.

6.2 Remedial Works

6.2.1 Contaminated Soils from RAP Asbestos Impacted Area

In order for the contaminated soils for **RAP Impacted Area** to be disposed of at a waste disposal facility, a waste classification report will need to be prepared. This report should be prepared by a suitably qualified environmental consultant in accordance with the NSW EPA (2014) *Waste Classification Guidelines*.

The results of DRYU soil characterisation assessment reports can be used to prepare the waste classification report for RAP Areas. Should the environmental consultant consider that additional sampling is required to confirm the waste classification, this should be discussed with the Client prior to preparation of the waste classification report.

The procedure that should be followed for the remediation and off-site disposal of contaminated soils is outlined below, as shown in Table 3 and Appendix 1 – DRYU DSI Sampling and RAP Site Layout and Table 3.

- The remedial areas should be marked out with spray paint or similar prior to hand-digging and/or raking and emu-picking.
- The approximate lateral extent (as shown in Appendix 1 – DRYU DSI Sampling and RAP Site Layout) of digging/excavation to be undertaken is as follows:
  - The approximate remediation area excludes the extent of the soils to any underground/ground services facilities
- Excavation in **RAP Impacted Area** is to be extended to either the underlying virgin natural materials, after the removal of fill (up to approximately 0.45 m below initial ground surface, from 0.1 mBGL to 0.45 mBGL) or to encounter natural clay before validation and landscaping.
- The contaminated soils are to be temporarily stockpiled on-site away from tree droplines or loaded directly with double-bagged asbestos bag or heavy-duty plastic into waste disposal trucks with waste classification.
- The spoil is to be disposed off-site at a facility licensed to accept the classification of waste that is applied to the material and in accordance with the waste classification report. Based on DRYU visual inspection and previous soil characterisation assessment reports, the following waste classification may apply:
  - Remediation Areas: **RAP Impacted Area** – General Solid Waste (non-putrescible)-Special Waste (Asbestos);
  - If the entire volume of contaminated soil is mixed – Special Waste-Asbestos, General Solid Waste (non-putrescible) with the requirement of waste classification for the stockpile.

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- If soils are to be stockpiled separately, the materials should be put on top of 2 mm plastic and covered with a layer of high visibility geofabric materials (or equivalent) to prevent airborne dispersion of asbestos fibres. Excavation and movement of all bonded ACM soils are required to be supervised by a Class A Licensed Asbestos Removalist supervisor and suitably qualified Environmental Consultant/Occupational Hygienist (i.e., DRYU). A relevant Asbestos Removal Control Plan ("**ARCP**") should be developed and reviewed for friable asbestos impacted soil report by a Class A asbestos removalist company. The **ARCP** will address the risks associated with ACM and controls to be implemented during works to mitigate the possibility of airborne asbestos exposure to contractors, clients and visitors on Site.
- Waste disposal trucks transporting contaminated soil from the Site are to be covered during transport. Waste disposal documentation should be retained by the Client, or its subcontractors, for each load of contaminated soil leaving the Site in order to verify that the contaminated soils have been appropriately disposed.
- The environmental consultant shall be engaged for onsite supervision works and will be required to keep a photographic record as part of the validation process (refer to Validation Plan of this RAP).

6.2.2 Fill Scraped from All Other Areas Cross the Site (Rather Than RAP Area)

The proposed excavation earthworks for the one-level footings shall scrape the topsoil, gravel and underlain fill materials.

The spoil collected from the structure footprints rather than from the asbestos impacted areas of environmental concern shall be classified and disposed offsite to an appropriate landfill licensed by NSW EPA to receive the material. Prior to offsite disposal, excavated soil requires waste classification where the results of samples collected from the material are compared to the NSW EPA (2014) Waste Classification Guidelines.

6.2.3 Potential Segregation and Resources Recovery of Hardstand Materials From Remediation Area (RAP Area)

For concrete slabs

The selected remediation option for **concrete slabs** after visual inspection once they are overturned from the northern section shall be segregated for offsite recycling, if neither asbestos or unusual stain are not observed, in order to manage the risk effectively, to reduce solid waste to landfill. Regardless, this option is considered to be the preferred option.

6.2.4 Potential Segregation and Resources Recovery

The proposed construction with two-level footings will generate large volumes of excess soil and rock requiring offsite disposal. It is important to keep non-impacted materials separated from contaminated soils. Non-impacted fill soils (confirmed through validation sampling) can be either reused onsite or potentially disposed offsite at as General Solid Waste.

The underlying natural soil and rock at this site shall be validated to meet the Resource Recovery Exemption – Excavated Natural Material (ENM) Exemption (2014), thereby fulfilling legislative obligations of the Protection of the Environment Operations (Waste) Regulation 2014.

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The underlying natural soil and rock at this site may satisfy the definition of Virgin Excavated Natural Material (VENM) to be re-used offsite for engineered fill or used in earthworks. This can be assessed by an experienced environmental consultant following remediation and removal of fill soils and prior to continuation of footings excavation. Once natural soil and rock is assessed as VENM, it must be kept separate from other material that may be stockpiled onsite.

6.3 Site Establishment

The Client (or its subcontractors) will be required to establish the Site prior to excavation works commencing. The following should be undertaken prior to the excavation works commencing:

- The Site should have delineated areas affected by asbestos and should establish an effective exclusion zone with minimum 10 metre setback, where practical;
- Restrict access to the site from adjacent streets and access ways;
- The Site should be made secure with safety tape bunting, barricades, perimeter fencing, and unauthorised access restricted;
- Appropriate warning signs should be placed at the affected areas. Signs shall be attached at each point of entry, exit and at suitable intervals.
- Site signage, including contact numbers for Site Supervisors should be placed in prominent locations around the Site;
- The Site should have a decontamination area at point or entry and exit with PPE supplies and waste receptacles;
- Temporary stockpile areas (if needed) should be designated away from tree droplines and protected with sediment controls, water spray for dust suppression and or plastic covers;
- Proposed truck and plant movements should be communicated to workers on-site;
- Erosion and sedimentation controls (e.g. silt fences or hay bales) should be installed as needed around the proposed excavation areas, proposed temporary stockpile areas (if needed), around the road drainage inlet screens if exist, and/or around the boundaries of the Site as a minimum;
- Locate services – prior to commencing remedial activities, all services such as power, water, gas sewerage and telecommunications cables shall be identified and where possible disconnected by the contractor.
- Water will be required for dust control and/or cleaning purposes. The waste water should be collected, treated on site or disposed properly.
- During excavation, demolition and construction phases, toilet facilities are to be provided on the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site

6.4 Validation of Imported Fill

If material is to be imported for backfilling of excavations (or other reasons), the material must be classified as either VENM, or under a Resource Recovery Exemption, as defined by the NSW EPA. Documentation stating the classification of the material should be provided to the environmental consultant prior to the material being imported, in order for the suitability of the documentation to be verified.

If material to be imported to the Site does not have documentation of its classification, or the documentation provided is considered to be inadequate, the environmental consultant should carry out their own assessment of the material at the source site.

For all material being imported to site, including virgin excavated natural material (VENM) or material subject to a Resource Recovery Order / Exemption (RRO/E), the environmental consultant should conduct its own sampling of material upon its arrival on site in accordance with the recommendations for stockpile sampling provided in the Sampling Design Guidelines (i.e. 1 sample per 25 m^3) to verify the contamination status of the imported material.

6.5 Demobilisation

On completion of the remediation works, the plant and equipment used during the works should be cleaned, validated and inspected with clearance certificates, removed from the Site and signage removed from the fencing around the Site as necessary.

The Site fencing, erosion and sedimentation controls should remain in place until the construction works are completed. This may require temporary maintenance to be carried out on the fencing and sediment controls.

7 Health, Safety and Environmental Management Plan

7.1 Safe Work Method Statements

Prior to commencing work on Site, workers must prepare Safe Work Method Statements ("**SWMS**") for the tasks they will carry out. **SWMS** must be site specific and be reviewed by the relevant workers each time they arrive on Site.

The **SWMS** must describe how the work is to be carried out, the risks applicable to each step, appropriate controls, and the personnel responsible for implementing the controls.

7.2 Personal Protective Equipment

Personal Protective Equipment ("**PPE**") requirements would typically be established by the Client or its Principal Contractor. It is anticipated minimum PPE requirements will include:

- Long sleeve shirts and long pants;
- Hard hat;
- Safety glasses;
- Steel capped boots;
- Cut resistant gloves (overworn with disposable nitrile gloves if handling contaminated soil); and
- High visibility vest or jacket.

Other PPE may be required depending on the activity being undertaken.

PPE must be in date and in suitable condition, and workers must be trained in the effective use of PPE.

7.3 Site Inductions

The Client (or its Principal Contractor) should carry out site inductions for each worker undertaking works on the Site, to setup exclusion zone and decontamination procedure. A Site Induction Register should be maintained on Site.

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Each worker should provide evidence of qualifications and training relevant to their duties during the Site induction.

7.4 Hours of Operation

The hours of operation for remediation works will be dependent on requirements from Council as well as those from the Client, current residents and children's day care services, though it is anticipated will be in the order of:

- Monday to Friday – 7:00am to 5:00pm;
- Saturday – 8:00am to 12:00noon; and
- Sunday and Public Holidays – no work permitted.
- Emergency work may be permitted outside these hours.
- Excavation or removal of any materials using machinery of any kind, including compressors and jack hammers, must be limited to between 7.30am and 5.00pm Monday to Friday.

7.5 Site Access

Site access is to be restricted to those personnel inducted and carrying works out on the Site. No public access should be provided throughout the course of the remediation works.

Vehicular access to the Site should be restricted to those vehicles required to undertake works on Site. Other vehicles (including personal vehicles) should be parked in suitable locations off-site.

A tyre grid or washdown bay should be installed at the entry gates to the Site. Plant and vehicles entering and exiting the Site should enter through the tyre grid or washdown bay in order to reduce the potential for soils to be tracked off-site. Driveways and nearby stormwater drains should be regularly inspected and excess soil removed. **Soil or other materials are not to be washed into stormwater drains or towards the creek**.

7.6 Stockpile Management

Based on the remediation works outlined in this RAP, DRYU considers there is likely to be little requirement for the stockpiling of soils. Stockpiling is likely to be limited to temporarily stockpiling of excavated soils prior to disposal or temporary stockpiling of imported fill prior to being used to backfill excavations (if required).

If temporary stockpiling is required, the stockpiles should be placed in a designated area, surrounded by sediment controls (silt fences or hay bales), out of tree drop line areas. Stockpiles should not exceed the height of the fencing on the Site boundary. If stockpiles are to be left overnight, they should be covered prior to the end of the working day with plastic sheeting to reduce the potential for dust generation overnight.

If stockpiles of contaminated material are required during remediation works, the footprint of the stockpile area must be validated following removal of the stockpiles to demonstrate contamination from the stockpiles has not occurred.

7.7 Noise and Vibration

It is anticipated that noise and vibration levels during remediation works will not exceed that of a typical construction site. Noise and vibration levels can be managed through:

- Only undertaking works within the specified work hours;

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- Ensuing plant and equipment undertaking work is in good order; and
- Placement of acoustic barriers around the perimeter of the Site.

If excessive noise or vibration levels are generated, consideration may be given to implementing a noise or vibration monitoring program.

7.8 Dust Management

There is a likelihood of dust being generated during the works, mainly through handling of soil and plant and vehicles tracking over the Site.

Personnel will be required to monitor dust levels throughout the remediation works, and wet down the work areas with mist sprays as necessary. Care should be taken to avoid saturation of soils in order to reduce runoff potential.

7.9 Odour Management

Given the nature of the soil contamination previously identified, odours are not considered to be a potential issue. However, if odours are encountered, potential management options include application of odour suppressants and covering of soils.

7.10 Flora and Fauna

The proposed remediation area covers only open space, where trees should neither be removed or damaged.

A Construction Environmental Management Plan by a subcontractor is to include procedures for the clearance of vegetation (if required). This should include:

- Strategies for minimising vegetation clearance within the worksite and protection of vegetated areas adjoining the work area.
- Stockpiles and other materials are not to be stored below the dripline of any tree.

7.11 Material Transport and Tracking

Excavated material being transported from the Site for off-site disposal should be transported in designated trucks with loads covered.

Each load of excavated material removed from the Site should be accompanied by a waste disposal docket, verifying that the load was disposed of at a suitable waste disposal facility licensed to accept the classification waste applicable to the material. The Client (or its Principal contractor) should retain these dockets as part of the Site validation process. These dockets must be made available to the environmental consultant upon request.

Material imported to the Site (e.g. validated fill) should also be transported in designated trucks with loads covered. Imported material should be unloaded in a designated area. Traffic control may be arranged to co-ordinate truck movements into and out of the Site.

Each load of imported material should be accompanied by a delivery docket. The Client (or its Principal contractor) should retain these dockets as part of the Site validation process. These dockets must be made available to the environmental consultant upon request.

Appropriate road rules and NSW legislation apply to vehicles transporting material to and from the Site. In addition, in accordance with the *NSW Protection of the Environment Operations (Waste) Regulation, 2014*, Part 6, Clause 71, states:

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"A person must not, in the course of business, transport by motor vehicle any waste that is generated in New South Wales (other than restricted solid waste) to any place, in or outside of New South Wales, unless the place can lawfully be used for the disposal of that waste and one of the following applies:

- the place is 150 kilometres or less from the premises of origin of that waste; and
- the place is more than 150 kilometres from the premises of origin and is the closest or second closest to those premises of the places, in or outside New South Wales, that can lawfully be used for the disposal of that waste.

However, the person can also transport the waste to another State or a Territory if a border crossing to that State or Territory:

- is 150 kilometres or less from the premises of origin; and
- or is more than 150 kilometres from the premises of origin and is closer to those premises than the closest or second closest to those premises of the places in New South Wales that can lawfully be used for the disposal of that waste."

8 Validation Plan

8.1 Data Quality Objectives

The validation plan for the remediation works is based on the seven-step Data Quality Objective ("**DQO**") process outlined in ASC NEPM (2013). These steps are discussed in the sections below.

Step 1 – State the Problem

The Client is proposing to remediate the asbestos impacted soil on the Site for footings construction. Asbestos was identified at one localised area at the Site, at RAP Area with asbestos fine below the ASC NEPM (2013) HSL-D for the industrial land use.

Remediation and validation of the Site is therefore required for the Site to be suitable for the future warehouse land use.

The ACM contamination with data gap identified is addressed through the Remedial Works provided in of this RAP.

Step 2 – Identify the Decisions

The following decisions are required to be made during the validation works:

- Have the localised remediation areas been remediated to a level that all contaminated materials have been excavated and disposed off-site in a legal manner and to render the site suitable for the future setting – Industrial D landuse?
- Have the other areas of the site been classified and validated with sufficient validation sampling and staging requirement to accommodate the excavation of fill materials across the whole site?
- Has the material to be excavated and removed from the Site been suitably waste classified to enable off-site disposal?
- Has imported fill (if required) been suitably validated prior to being imported to Site?
- Are there ongoing environmental monitoring and maintenance requirements for the Site following remediation?

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Step 3 – Identify Inputs to the Decisions
The inputs to the decisions are:

- Physical observations made during the remediation activities;
- Waste classification reports for the contaminated material to be removed from the Site;
- Waste disposal documentation for contaminated soils removed from the targeted remediation areas;
- Waste classification reports for the fill material to be removed from the other areas across the Site;
- Material tracking documentation for imported fill and off-site disposal;
- Material classification reports for imported fill and off-site disposal;
- Soil analytical data from validation samples collected from excavations across the site including the targeted Remediation Area.
- For areas where excavation works are not planned, such as the landscape areas in the southwestern section of the site and south-western shrub area, an asbestos clearance certificate should be obtained from an LAA to validate these portions of the site.

Step 4 – Define the Site Boundaries
The lateral and vertical extent of impacted soils at RAP Area is shown as Asbestos Impacted **RAP Area**, in Appendix 1 – DRYU DSI Sampling and RAP Site Layout and in Table 3.

The vertical extent of contamination based on DRYU visual inspection and soil characterisation assessment report is considered to be the depth of the fill layer (approximately up to ~0.45 m BGL in RAP Area).

The impacted area shall be validated to demonstrate that the targeted remediation areas are sufficiently remediated.

Step 5 – Develop a Decision Rule

8.1.1.1 Remediation Validation Criteria

Remediation validation sampling will be carried out across each remediation/excavation area to confirm that the asbestos contaminated materials have been removed from the Site and the remaining excavated areas are free of contaminated soils and fill.

The results of the validation sample analysis should be compared to the following criteria:

- NEPC (2013) National Environment Protection (Assessment of Site Contamination Measure) Measure 1999 (2013 amendment).

ASC NEPM (2013) define an 'Investigation Level' ("**IL**") as *"the concentration of a contaminant above which further appropriate investigation and evaluation will be required. The investigation and evaluation are to ascertain:*

- the typical and extreme concentrations of the contaminant(s) on the Site;
- the horizontal and vertical distribution of the contaminant(s) on the Site;
- the physio-chemical form(s) of the contaminant(s); and
- the bioavailability of the contaminant(s)."

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Soil ILs are to be adopted for validation purposes to confirm that the contaminated soils have been removed from the Site, and the resulting excavations have been remediated.

As the contaminants of concern associated in soils and surfaces with this project is Asbestos, application of other Health Investigation levels ("**HILs**") or Ecological Screening Levels ("**ESLs**") are not considered relevant to this project for targeted remediation areas.

Therefore, the adopted criteria for validation of remediation areas at this Site is: Asbestos, as listed in Table 4.

Table 4 Health Screening Levels for Asbestos Contamination in Soil (NEPM 2013)

Form of asbestos	Health Screening Level (w/w)
	Industrial D
Bonded ACM	0.05%
FA and AF (friable asbestos)	0.001%
All forms of asbestos	No visible asbestos for surface soil

8.1.1.2 Imported Fill Validation Criteria

Validation sampling of material to be imported to Site should be required. the environmental consultant should inspect the material upon its arrival to site to verify it matches the description and conditions of the associated classification report. For material imported to site subject to an RRO/E, the environmental consultant should conduct its own sampling of material upon its arrival on site in accordance with the recommendations for stockpile sampling provided in the Sampling Design Guidelines (i.e. 1 in 25 m^3) to verify the contamination status of the imported material. If sampling of fill is required, the results of the sample analysis should be compared to the following criteria:

- VENM – no published criteria exist. The environmental consultant will need to use their judgement to assess if the results of the sampling indicate likely background conditions or otherwise.
- Other Recovered Resource – as per the criteria of the relevant Resource Recovery Order published by the NSW EPA.

8.1.1.3 Quality Assurance / Quality Control

A Quality Assurance / Quality Control ("**QA/QC**") program (if chemicals of environmental concern is considered to be necessarily conducted during validation investigation) should be established in order to assess the quality of the data obtained.

Validation of the remediation works for asbestos impacted soil will be conducted through visual observations made by the environmental consultant, supported by sample analytical results and other documentation as relevant.

Step 6 – Specify Limits on Decision Errors

Specific limits for this project are in accordance with the:

- Appropriate guidance from the NSW EPA and ASC NEPM (2013); and
- Appropriate DQIs, and standard procedures for field sampling and handling.

This step examines the certainty of conclusive statements based on the available Site data collected. This should include the following points to quantify tolerable limits on decision errors:

- Based on a probability that 95% of the data will satisfy the given site acceptance criteria. This follows the guidance given in the NSW EPA Guidelines for the NSW Site Auditor Scheme (3rd Edition), 2017 and the ASC NEPM (2013). Therefore, a limit on the decision error will be 5% that a conclusive statement may be incorrect;
- No individual sample result should have a concentration that exceeds 250% of the Site acceptance criteria;
- A normal distribution will only be used if the coefficient of variance is not greater than 1.2; and
- The standard deviation of a sample population should not exceed 50% of the Site acceptance criteria.

Step 7 – Optimise the Design for Obtaining Data

8.1.1.4 General

Validation of the remediation works will be achieved through on-site visual observations and validation sampling.

The environmental consultant will be required to be on-site throughout the duration of the excavation works, to ensure the remediation works undertaken are compliant with this RAP. A photographic record should be maintained by the environmental consultant throughout the remediation works. Site photographs should also be collected before and after the remediation works are undertaken.

The environmental consultant should also maintain written records throughout the remediation program, including the date and time of remediation works, the activities being undertaken on the Site (including sampling undertaken), and any items to be actioned.

8.1.1.5 Validation of Excavations From the Remediation Area

Validation of excavations after fill materials removal for offsite disposal from the remediation areas should be undertaken in accordance with the following steps:

- Validation samples should be collected from each excavation at a rate of:
    - One sample per 25 m^2 across the base of each excavation; and
    - One sample per 10 lineal metres per wall of each excavation.
- Validation samples should be collected by machinery or with suitable hand tools. Should the excavations be unsafe to enter (e.g. due to depth or stability), samples should be collected by the excavator (samples should be retrieved from the excavator bucket with care taken to avoid cross-contamination of samples).
- Each sample should be placed into appropriate laboratory-supplied glass jars.
- A clean pair of disposable nitrile gloves should be worn when collecting each sample.
- If hand tools are to be used to collect the samples (e.g. shovels or hand trowels), the equipment should be decontaminated between samples by rinsing with phosphate-free detergent and potable water.
- Samples should be placed into secure containers for transport to the laboratory.
- The samples should be dispatched under Chain of Custody conditions to a National Association of Testing Authorities, Australia ("**NATA**") accredited laboratory for analysis.
- Each validation sample should be analysed for asbestos.

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- Given that asbestos is the primary contaminant of concern driving remediation, following the excavation and removal of asbestos contaminated material, a clearance certificate from a Licensed Asbestos Assessor (LAA) must be obtained as evidence of validation of the excavated area.

8.1.1.6 Validation of Imported Fill

If sampling of fill to be imported to Site is required, the following steps should be followed:

- Sampling of the material should be carried out at the source site, before the material is imported to Site.
- If the material is to be classified as VENM, sampling should be undertaken at a rate of one sample per 25 m^3 per source site of material to be imported, with a minimum of three samples collected from each source site.
- If the material is to be classified under a Resource Recovery Order published by the NSW EPA, sampling must be carried out in accordance with that Resource Recovery Order.
- Each sample should be collected by hand or by using stainless steel hand trowels or shovels. Each sample should be placed into appropriate sample containers applicable for the laboratory analysis to be undertaken.
- A clean pair of disposable nitrile gloves should be worn when collecting each sample.
- If equipment is used to collect the samples (e.g. shovels or hand trowels), the equipment should be decontaminated between samples by rinsing with phosphate-free detergent and potable water.
- Samples should be placed into ice-chilled containers for transport to the laboratory.
- The samples should be dispatched under Chain of Custody conditions to a NATA-accredited laboratory for analysis.
- If the material is to be classified as VENM, each sample should be analysed for:
  - Heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
  - Total Recoverable Hydrocarbons ("**TRH**");
  - Benzene, Toluene, Ethylbenzene and Xylenes ("**BTEX**");
  - Polycyclic Aromatic Hydrocarbons ("**PAH**");
  - Organochlorine Pesticides ("**OCP**");
  - Polychlorinated Biphenyls ("**PCB**"); and
  - Asbestos.
- If the material is to be classified under a Resource Recovery Order published by the NSW EPA, the samples will need to be analysed for the contaminants listed in the respective Resource Recovery Order.

8.2 Validation Reporting

At the completion of the remediation works, a Validation Report will need to be prepared by the environmental consultant. The report should be prepared in accordance with the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Sites, ASC NEPM (2013), and other references as relevant.

The Validation Report should include:

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- A description of the Site and regional setting;
- Summaries of previous assessments undertaken;
- Details of the remediation works undertaken (including photographs);
- Demonstration that the objectives of this RAP have been achieved;
- The results of excavation validation sampling undertaken;
- The results of surface validation sampling undertaken;
- The results of any validation sampling undertaken of material proposed to be imported;
- Documentation, including material tracking information and imported fill certification (if required);
- A statement that the Site is suitable for the proposed land use, including any ongoing monitoring and maintenance requirements if relevant;
- Given that asbestos is the primary contaminant of concern driving remediation, following the excavation and removal of asbestos contaminated material, a clearance certificate from a Licensed Asbestos Assessor ("LAA") must be obtained as evidence of validation of the excavated area. For areas where excavation works are not planned, such as the landscape area in the southwestern section of the site, a clearance certificate should be obtained from an LAA to validate this portion of the site. Clearance certificates should be included as part of the validation data set included in the validation report;
- For areas where excavation works are not planned, such as the landscape area in the south-eastern section of the site, a clearance certificate should be obtained from an LAA to validate this portion of the site;
- Clearance certificates for all of the **Remediation Area** should be included as part of the validation data set included in the validation report;

9 Contingency Plan for Unexpected Finds Protocol

While the investigation, remediation and validation for the Remediation Areas of the site shall render the areas suitable for the proposed commercial land use, there are uncertainty of contaminants of potential concern for fill layer(s) across the whole site. The Unexpected Finds Protocol deals specifically with the construction and related earthworks for the whole lot. A protocol for managing unexpected finds should be developed for the project in conjunction with a Site Environmental Management Plan.

Should a work activity identify any condition other than what can be expected for the groundwater, based on previously identified contaminants in the DSI report, all works shall stop in that area. Unexpected finds are to be immediately reported to the Site Manager.

If any suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheets/pieces/pipes, ash material, excessive groundwater seepage, settling, running sands, etc.) or any potentially contaminated area(s) and filled area(s), all works will be stopped in the area and further analysis may need be undertaken by a suitably qualified and competent person (i.e., DRYU). Works will not commence until the relevant investigation has been conducted and approval has been received. Unexpected Finds shall be addressed in compliance with the client's Unexpected Finds Protocol.

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Considering asbestos in the form of both bonded and asbestos fine from the three remediation areas, there is uncertainty of potential asbestos contamination in fill material across or at some areas of the lot. An unexpected finds protocol shall be prepared and implemented during the fill materials excavation for off-site disposal.

The general unexpected finds protocol shall be implemented as follows:

- Immediately cease work and contact site foreman
- Site Manager to evacuate immediate area and construct temporary barricading to prevent worker access to the unexpected substance(s) and install appropriate stormwater/sediment controls
- Project Manager to notify the Principal's Authorised Person of the discovery and comply with all the directions of the Principal's Authorised Person or its nominee; and
- Photograph the find and mark the identified location using GPS
- If substance assessed as presenting an unacceptable risk to human health evacuate site
- If substance assessed as not presenting an unacceptable risk to human health, Site foreman to retain safety barricades and environmental controls and continue work outside of vicinity
- Project Manager to notify the client's management and engage specialist consultants as required
- Toolbox to all site staff
- Environmental consultant to supervise remediation and undertake validation/clearance as per the remediation/validation/clearance plan
- Work is not to recommence until and investigation has been completed by a suitably qualified person in accordance with the EPA guidelines and directed to do so by the Project Manager.
- Site Foreman to remove barricades and environmental controls and continue work once approval has been given to do so.
- Environmental consultant to submit assessment/validation/clearance reports to Project Manager for distribution to the Client and appropriate regulatory authorities.

Table 5 outlines the management plan for unexpected finds throughout the remediation works:

Table 5 Contingency Plan for Unexpected Finds

Unexpected Find	**Management Plan**
Other potential contamination (e.g. asbestos) is identified in surface soils	Stop work in the area of the unexpected find and report to Site Supervisor. Environmental consultant to inspect area provide advice, including potentially collecting samples of the impacted area for analysis. If suspected ACM is identified, the AMP should be reviewed.
potential contamination (e.g. asbestos) is identified in surface soils from other areas across the	Stop work in the area of the unexpected find and report to Site Supervisor.

site rather than form the identified Remediation Areas 01 ~ 03	Environmental consultant to inspect area provide advice, including potentially collecting samples of the impacted area for analysis. If suspected ACM is identified, the AMP should be reviewed.
Contamination is identified in imported fill	Stockpile the contaminated fill on Site and report to Site Supervisor. Environmental consultant may undertake sampling of the suspected contamination, or the Site Supervisor may contact the supplier to arrange for the material to be removed from the Site.
Imported fill not consistent with material classification report	Stockpile fill on Site and contact supplier to confirm the source of the material. Environmental consultant may collect additional samples to confirm the classification of the material.
Other unexpected finds	Stop work in the area of the unexpected find, isolate and contact Site Supervisor. Site Supervisor to identify appropriate management, in consultation (as required) with other personnel.

10 Regulatory Approvals

Chapter 4 of the State Environmental Planning Policy (Resilience and Hazards) 2021 states that:

4.8 Category 1 remediation work: work needing consent
For the purposes of this Chapter, a category 1 remediation work is a remediation work (not being a work to which section 4.11(b) applies) that is—
(a) designated development, or
(b) carried out or to be carried out on land declared to be a critical habitat, or
(c) likely to have a significant effect on a critical habitat or a threatened species, population or ecological community, or
(d) development for which another State environmental planning policy or a regional environmental plan requires development consent, or
(e) carried out or to be carried out in an area or zone to which any classifications to the following effect apply under an environmental planning instrument—
(i) coastal protection,
(ii) conservation or heritage conservation,
(iii) habitat area, habitat protection area, habitat or wildlife corridor,
(iv) environment protection,
(v) escarpment, escarpment protection or escarpment preservation,
(vi) floodway,
(vii) littoral rainforest,
(viii) nature reserve,
(ix) scenic area or scenic protection,
(x) wetland, or

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(f) carried out or to be carried out on any land in a manner that does not comply with a policy made under the contaminated land planning guidelines by the council for any local government area in which the land is situated (or if the land is within the unincorporated area, the Minister).
Note—
See section 5A of the *Environmental Planning and Assessment Act 1979* for the factors to be taken into account in assessing whether there is likely to be a significant effect as referred to in paragraph (c) above. The terms used in that paragraph are defined in that Act by reference to both the *Threatened Species Conservation Act 1995* and the *Fisheries Management Act 1994*.

4.9 Consent authority in relation to remediation works

(1) The consent authority in relation to a development application for consent to carry out a remediation work is—

(a) the person or authority that, in accordance with a provision made by an environmental planning instrument that applies to the land, is the consent authority for the development, or

(b) in default of any such provision—

(i) the council for the local government area in which the land is situated, or

(ii) the Minister, if the land is within the unincorporated area.

4.11 Category 2 remediation work: work not needing consent

For the purposes of this Chapter, a category 2 remediation work is—

(a) a remediation work that is not a work of a kind described in section 4.8(a)–(f), or

(b) a remediation work (whether or not it is a work of a kind described in section 4.8(a)–(f)) that -

(i) by the terms of a remediation order, is required to be commenced before the expiry of the usual period under the *Contaminated Land Management Act 1997* for lodgment of an appeal against the order, or

Note -

The usual period for lodgement of an appeal is 21 days or a period prescribed instead by regulations made under the *Contaminated Land Management Act 1997*.

(ii) may be carried out without consent under another State environmental planning policy or a regional environmental plan (as referred to in section 4.16(4)), or

(iii) is carried out or to be carried out by or on behalf of the Director-General of the Department of Agriculture on land contaminated by the use of a cattle dip under a program implemented in accordance with the recommendations or advice of the Board of Tick Control under Part 2 of the *Stock Diseases Act 1923*, or

(iv) is carried out or to be carried out under the Public Land Remediation Program administered by the Broken Hill Environmental Lead Centre.

4.12 Remediation work that is ancillary to other development

(1) A remediation work that would of itself be a category 2 remediation work but which is ancillary to designated development that requires development consent may, as an applicant chooses -

(a) be made part of the subject of the development application for the designated development instead of being made the subject of a separate development application, or

(b) be treated as a category 2 remediation work.

(2) However, a category 1 remediation work must be treated as such even if it is ancillary to development that may be carried out without consent.

(3) A remediation work that would of itself be a category 1 remediation work and constitute designated development does not, just because it is ancillary to other development—

(a) render the latter development designated development, or

(b) cause that development to become a development for which development consent is required.

4.13 Prior notice of category 2 remediation work

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(1) A person who proposes to carry out a category 2 remediation work on any land must give notice of the proposed work to the council for the local government area in which the land is situated (or, if the land is within the unincorporated area, to the Minister).
(2) The notice must be given -
(a) at least 30 days before the commencement of the work, except in the case of a work referred to in section 4.11(b), and
(b) in the case of a work referred to in section 4.11(b)—no later than the day before the commencement of the work.
(3) The notice must -
(a) be in writing, and
(b) provide the name, address and telephone number of the person who has the duty of ensuring that the notice is given, and
(c) briefly describe the remediation work, and
(d) show why the person considers that the work is category 2 remediation work by reference to sections 4.8, 4.11 and (if it applies) 4.12(1), and
(e) specify, by reference to its property description and street address (if any), the land on which the work is to be carried out, and
(f) provide a map of the location of the land, and
(g) provide estimates of the dates for the commencement and completion of the work.

4.14 Guidelines and notices: all remediation work

(1) All remediation work must, in addition to complying with any requirement under the Act or any other law, be carried out in accordance with—
(a) the contaminated land planning guidelines, and
(b) the guidelines (if any) in force under the *Contaminated Land Management Act 1997*, and
(c) in the case of a category 1 remediation work—a plan of remediation, as approved by the consent authority, prepared in accordance with the contaminated land planning guidelines.
(2) A notice of completion of remediation work on any land must be given to the council for the local government area in which the land is situated (or, if the land is within the unincorporated area, to the Minister).
(3) The notice is to be given within 30 days after the completion of the work.
(4) A copy of the notice must also be given within the same period to the consent authority, if consent was required for the remediation work and the consent authority is not one of the authorities referred to in subsection (2).

4.15 Notice of completion of remediation work

The notice required by section 4.14(2) must—
(a) be in writing prepared and signed by the person who carried out the work, and
(b) provide the person's name, address and business telephone number, and
(c) provide details of the person's qualifications to carry out the work, and
(d) specify, by reference to its property description and street address (if any), the land on which the work was carried out, and
(e) provide a map of the location of the land, and
(f) state when the work was completed, and
(g) specify the uses of the land, and the substances, that contaminated it in such a way as to present a risk of harm to human health or some other aspect of the environment, and
(h) specify the uses of the land immediately before the work started, and
(i) briefly describe the method of remediation used in the work, and
(j) specify the guidelines that were complied with in the work, and
(k) specify the standard of remediation achieved (in the light of the use proposed for the land), and
(l) show in what manner the work (if a category 1 remediation work) complied with the conditions of the relevant development consent, and

(m) state what action must be maintained in relation to the land after the completion of the remediation work if the standard of remediation achieved is to be maintained.
Note—
A site audit statement (within the meaning of Part 4 of the *Contaminated Land Management Act 1997*) may be given in partial compliance with this requirement.

Therefore, the proposed remediation works for the RAP Area do not require Category 1 consent. Instead, the proposed remediation works are considered to be Category 2 Remediation Works. This requires:

- At least 30 days' notice to be provided to Council prior to the commencement of remediation works; and
- Notice of the completion of remediation works to be provided to Council within 30 days of the completion of works.

The licensed asbestos removalist must give written *Notification* of *asbestos removal* work to *SafeWork NSW* to notify of asbestos removal under the WHS Regulation. The licensed asbestos removalist must give written notice to SafeWork NSW at least five calendar days before removal work is commenced.

*Interstate asbestos removalists operating in NSW must notify SafeWork NSW. Where asbestos must be removed immediately, the licensed asbestos removalist must telephone SafeWork NSW on 13 10 50 and complete and submit this form within 24 hours of the telephone notification.

Immediate removal of asbestos may be commenced if:

- There is a sudden and unexpected event, including a failure of equipment that may cause persons to be exposed to respirable asbestos fibres
- An unexpected breakdown that requires immediate rectification to enable the service to continue.

11 Reporting Requirements

11.1 Clearance Certificates

Progressive Clearance Certificates shall be required at key milestones throughout the works for:

- Clearance certificate prior to entry to any portion of a removal site without asbestos PPE or any non-asbestos removal works;
- Clearance certificates required for plant & equipment prior to leaving the site or commencing non-asbestos works;
- Clearance certificate required for the RAP Area, all landscaping areas without excavation, all other areas across the site with fill throughout.

It is important to note that the Asbestos Assessor has the right to stop the project if work is not being carried out in accordance with the site specific agreed procedures identified in this RAP and/or ARCP.

11.2 Validation Report

A final validation report is required to be prepared in accordance with The Guidelines for Consultants reporting on contaminated Land: Contaminated land guidelines (NSW EPA) and

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submitted to the regulator for endorsement. The validation report shall document the remediation methods and results to ensure that the objectives stated in the RAP have been achieved. The report must confirm statistically that the remediated site complies with the clean-up criteria set for the site. Where targets have not been achieved, reasons must be stated and additional site work proposed to achieve the remediation goals outlined in this RAP, or a management plan recommended for ongoing monitoring. The validation report should also include information confirming that all other regulatory authorities' licence conditions and approvals have been met. In particular, documentary evidence is needed to confirm that any disposal of soil off-site has been undertaken in accordance with this RAP.

11.3 Consultation and Communication

Prior to the commencement of remediation works, the Client (or its Principal Contractor) should provide written advice of the works to adjoining site occupants and others who may be affected by the works. This can be in the form of a letterbox drop or public announcement.

Any complaints or issues raised from adjoining site users (or other members of the public) during the works should be immediately reported to the Site Supervisor, who should then investigate the complaint or issue and remedy as is applicable.

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12 Limitations

Overview
Contaminated site investigations are generally designed based on a number of factors:

- Objective and scope of works;
- State and national guidelines;
- Accessibility/ site restrictions;
- Visual and Olfactory observations;
- Historical land use; and
- Proposed land use.

Investigation designs can also be influenced by the following factors:

- Stage of a development process;
- Purpose of the investigation (due diligence, environmental compliance etc.);
- Available budget;
- Client's risk management strategy; and
- Available timescale.

Although the investigation is designed to identify and/or delineate potential contamination there are a number of uncertainties that can result in additional investigative work, increased remedial work and costs, re-development delays and changes in land values. These uncertainties are an inherent part of dealing with land contamination. This section is designed to outline some of the uncertainties and limitations that are generally encountered.

Document Preparation
DRYU has prepared this report for the purpose set out in **Section 1** and as agreed to by the Client. DRYU cannot be held responsible to the Client and/or others for any matters outside the agreed scope of services. Any advice, opinions or recommendations are considered current to the date of this document.

No warranties or guarantees are expressed or should be inferred by any third parties. This document may not be relied upon by other parties without written consent from DRYU. Where consent is provided, other parties should review the scope of service, objectives and limitation to determine if the document is appropriate for their requirements. They should make their own enquiries and obtain independent advice to determine the accuracy and appropriateness of this report for their use and interpretation.

It should be understood that where this document has been developed for a specific purpose, for example a due diligence document for a property vendor, it may not be suitable for other purposes such as satisfying the needs of a purchaser or assessing contamination risks for classifying the site.

Scope of Services
For each scope of services, a specific approach to the assessment is developed. The scope is usually driven by key objectives set by the client's needs and refined based on the project/site specific requirements.

Any data, evaluations, discussions, conclusions and/or options presented have been designed, obtained and presented based on the Scope of services. Should the instructions provided be

inaccurate, insufficient or incomplete the document outcomes could change. The scope of services may also be limited by factors such as time, budget, access, site constraints and/or reliance third party data and information made available to DRYU.

Reliance on Data

This document has been prepared by DRYU with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with the Client. Information documented herein is based on the interpretation of data collected (data, surveys, analyses, designs, plans and other information), which has been accepted in good faith as being accurate and valid at the time of writing the document.

It should be noted that many investigations are based upon an assessment of potentially contaminating processes which may have occurred historically on the site. This assessment is based upon historical records associated with the site. Such records may be inaccurate, absent or contradictory. In addition, documents may exist which are not readily available for public viewing.

Except where it has been stated in this document, DRYU has not verified the accuracy or completeness of the data relied upon. Statements, opinions, facts, information, conclusions and/or recommendations made in this document ("conclusions") are based in whole or part on the data obtained, those conclusions are contingent upon the accuracy and completeness of the data. DRYU cannot be held liable should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to DRYU leading to incorrect conclusions.

Report Separation

This report has been prepared using all the data provided (within the report and within its appendices/attachments. Any reliance upon this report should assess and review the report in its entirety. The executive summary, individual sections and/or appendices/attachments should not be cut out and/or removed from the report and used independently.

Report logs, figures, laboratory data, drawings, etc. are generated for this report by DRYU consultants (unless otherwise stated) based on their individual interpretation of the site conditions at the time the site visit was undertaken. Although DRYU consultants undergo training to achieve a standard of field reporting, individual interpretation still varies slightly. Information should not under any circumstances be redrawn for inclusion in other documents or separated from this report in any way.

Environmental Conclusions

In accordance with the scope of services, DRYU may have conducted environmental field monitoring and/or testing in the preparation of this report. The nature and extent of monitoring and/or testing conducted is described in the report.

DRYU has utilised state and national guidelines, Australian Standards, professional judgement and a degree of skill and care to develop standard operating procedures (SOP), which are considered to be in line with industry best practice. Any monitoring, testing, sampling and report preparation has been undertaken in accordance with DRYU's SOP and performed in a professional manner.

All sites have varying degrees of heterogeneity in the vertical and lateral soil and groundwater horizons. No monitoring, common testing or sampling techniques can eliminate the possibility

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that monitoring or testing results/samples are not totally representative of soil and/or groundwater conditions encountered.

The sampling results obtained are therefore representative of the conditions at the point at which the sample was taken. Additional data derived from indirect field measurements and sometimes other reports may also be used in the interpretation of environmental conditions. However, the environmental field monitoring and/or testing are merely indicative of the environmental conditions of the site at the time samples were taken. Any evaluations, discussions and conclusions are based on the data results presented. No liability can be accepted for changes in ground conditions in between exploratory locations (bore holes/test pits etc.). It should also be recognised that site conditions, including the extent and concentration of contaminants, can change with time.

Other Limitations
DRYU's interpretations are based upon its professional judgement, experience, and training. These opinions are also based upon data derived from testing and analysis described in this document. DRYU believes that its opinions, options, conclusions and/or recommendations are reasonably supported by the testing and analysis that have been done, and that those opinions have been developed according to the professional standard of care for the environment consulting profession in this area at this time. That standard of care may change and new methods and practices of exploration, testing, analysis and remediation may develop in the future, which might produce different results. DRYU's professional opinions contained in this document may be subject to modification if additional information is obtained, through further investigation, observations, or validation testing and analysis during remedial activities.

Should events or emergent circumstances or facts become apparent after the submissions date of the report, DRYU cannot be held liable to update or reverse the report to take this into account.

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13 References

- Protection of the Environment Operations Act 1997 (Cth.).
- Protection of the Environment Operations (Waste) Regulation 2014 (Cth.)
- NSW State Environmental Planning Policy (Resilience and Hazards) 2021
- National Environment Protection (Assessment of Site Contamination) Measure 1999 – 2013 Amendment (NEPC, 2013, referred to as the "ASC NEPM")
- Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (NSW EPA, 2015; referred to as the 'Duty to Report Guidelines')
- Consultants Reporting on Contaminated Land: Contaminated Land Guidelines (NSW EPA, 2020, referred to as the "Consultant reporting Guidelines")
- Sampling Design Part 1 – Application: Contaminated Land Guidelines (NSW EPA, 2022, referred to as the "Sampling Design Guidelines")
- NSW EPA (2022) Sampling Design Part 2 – Interpretation: Contaminated Land Guidelines (NSW EPA, 2022, referred to as the "Sampling Design Guidelines");
- Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (The WA Department of Health, 2021, referred to as the "WA Asbestos Guideline")
- New South Wales Environment Protection Authority. (2014). Waste Classification Guidelines - Part 1: Classifying Waste. Sydney, Australia (NSW EPA, 2014, referred to as the "Waste Classification Guideline").

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14 Appendices

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Appendix 1 – DRYU DSI Sampling and RAP Site Layout

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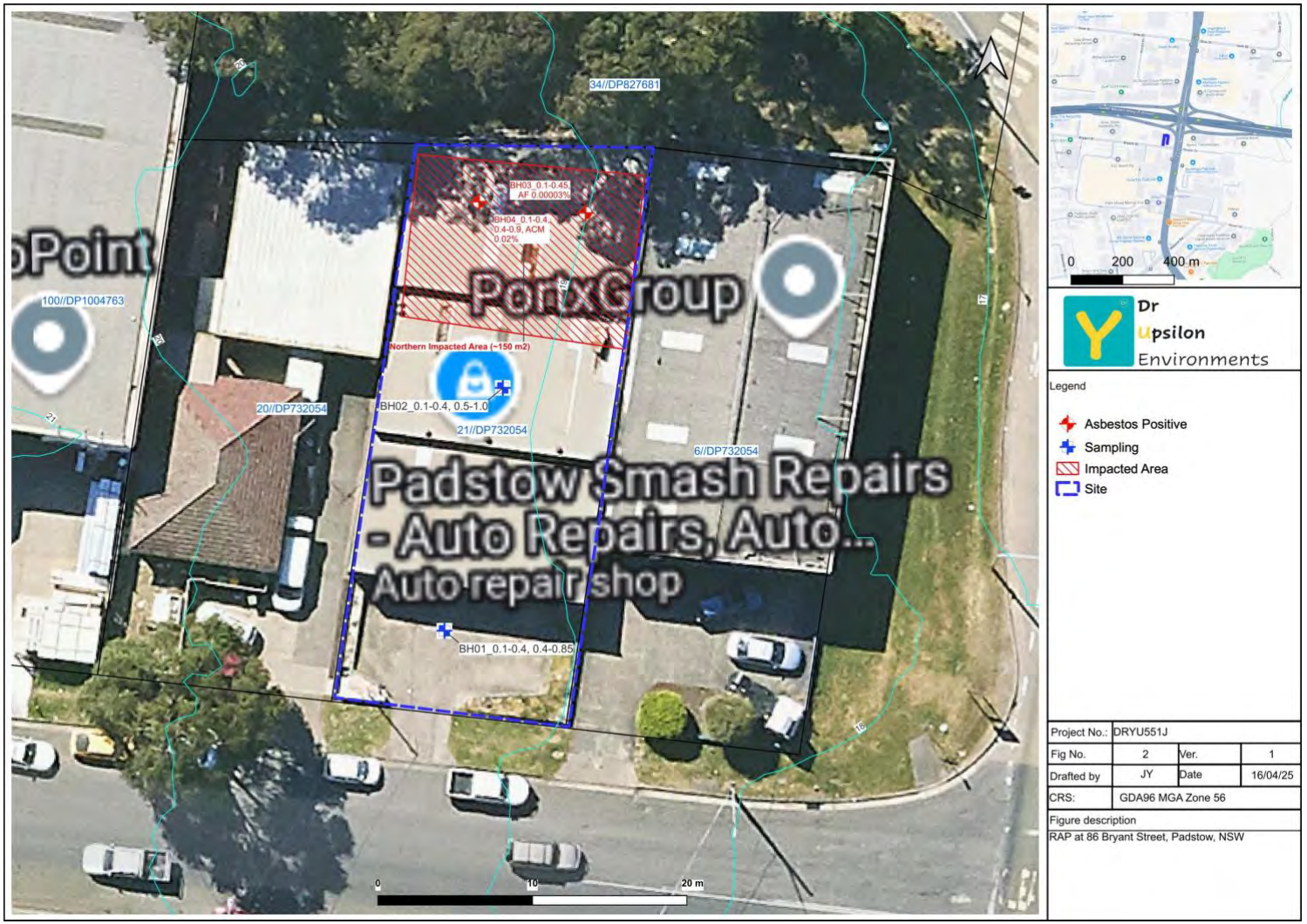

Figure 3 Site Layout and DSI Sampling

Appendix 2 – Architectural Plan and Survey Plan

DEVELOPMENT APPLICATION

DEMOLITION OF EXISTING STRUCTURE AND CONSTRUCTION OF A TWO STORY WAREHOUSE

86 Bryant St, Padstow NSW 2211

SITE MAP

DRAWING LIST

	LAYOUT	REVISION
A001	Titlepage	A
A002	General Notes	A
A101	Existing Site Plan	A
A102	Existing Floor Plan	A
A103	Demolition Plan	A
A104	Subdivision Plan	A
A105	Site Analysis	A
A106	Proposed Roof Plan	A
A107	Proposed Ground Floor Plan	A
A108	Proposed Mezzanine Floor Plan	A
A201	Proposed - N&S Elevations	A
A202	Proposed - E&W Elevations	A
A301	Proposed - Sections	A
A401	Existing GFA Diagram	A
A402	Proposed GFA Diagram	A
A403	Existing Landscape Diagram	A
A404	Proposed Landscape Diagram	A
A405	Proposed Shadow Diagram	A
A501	Schedule Of Window & Door	A
A502	Schedule Of External Finish & Materials	A
A503	Streetview Elevations	A

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Titlepage - Titlepage

DRAWING NO **A001**

ISSUE **A**

FOR DEVELOPMENT APPLICATION
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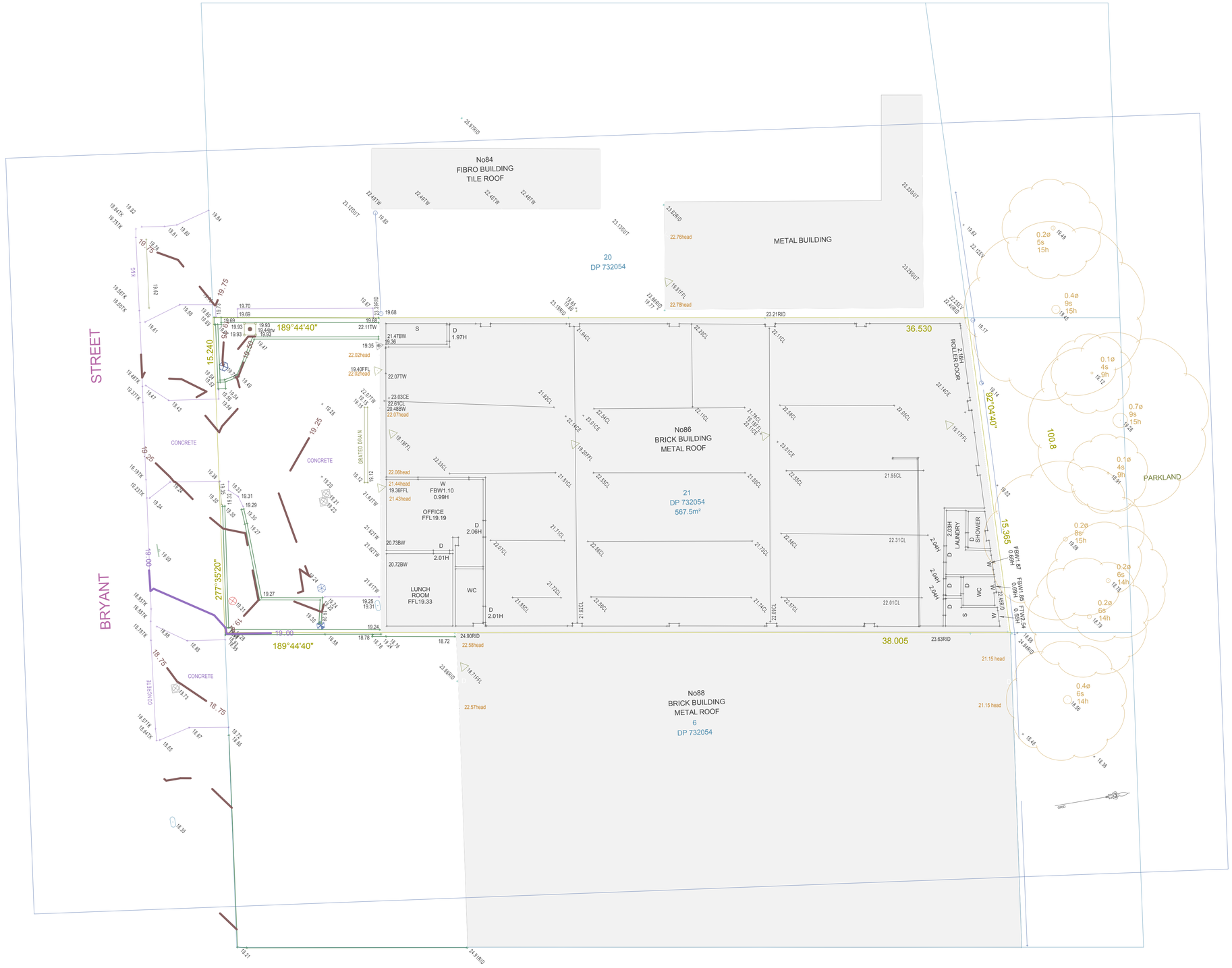
ISSUE DATE: 2025.04.03



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DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
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PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

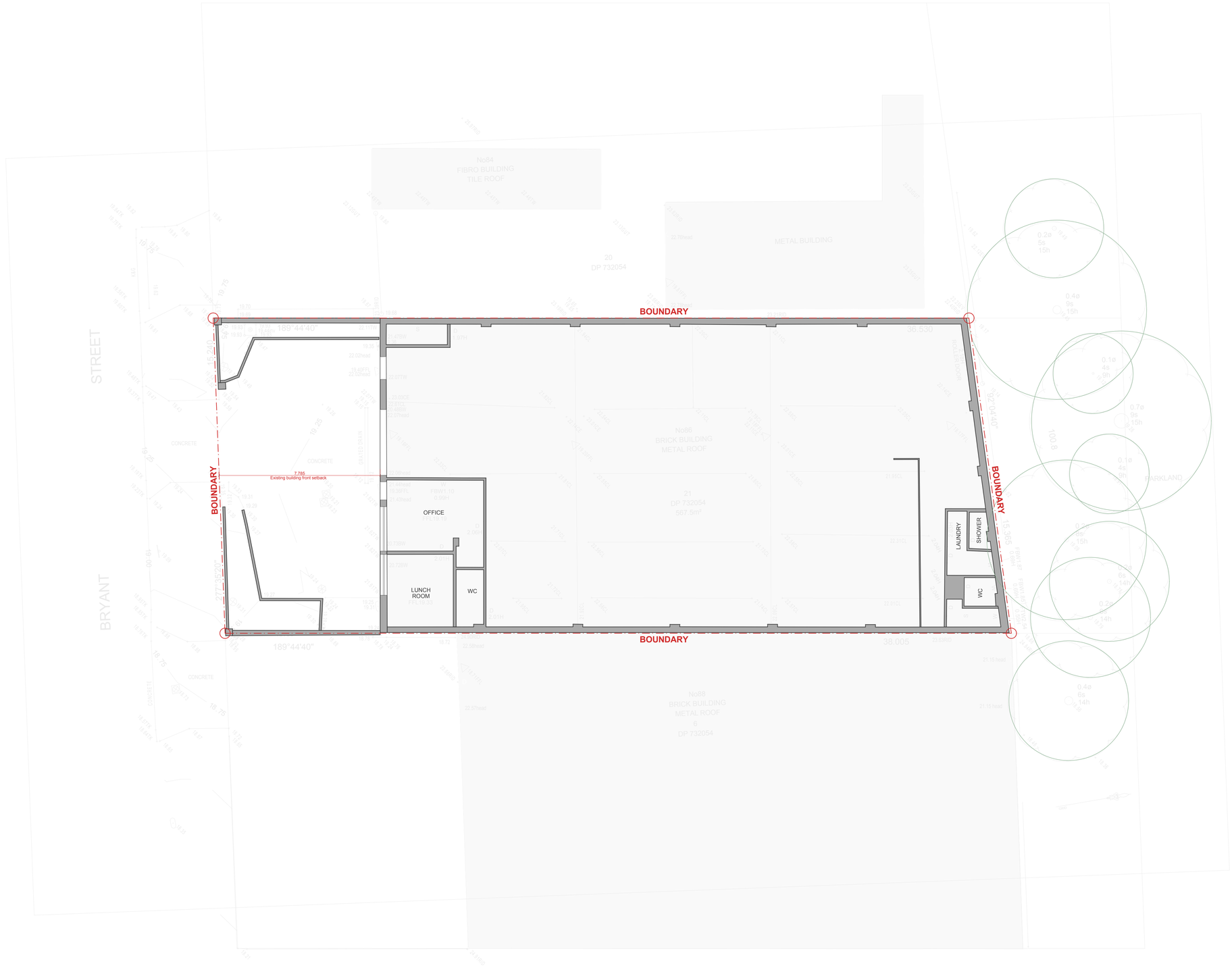
DRAWING
Plans - Existing Site Plan

SCALE
1:100@A1

DRAWING NO
A101

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



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DEVELOPMENT APPLYCATION

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PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
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DRAWING
Plans - Existing Floor Plan

SCALE
1:100@A1

DRAWING NO
A102

ISSUE
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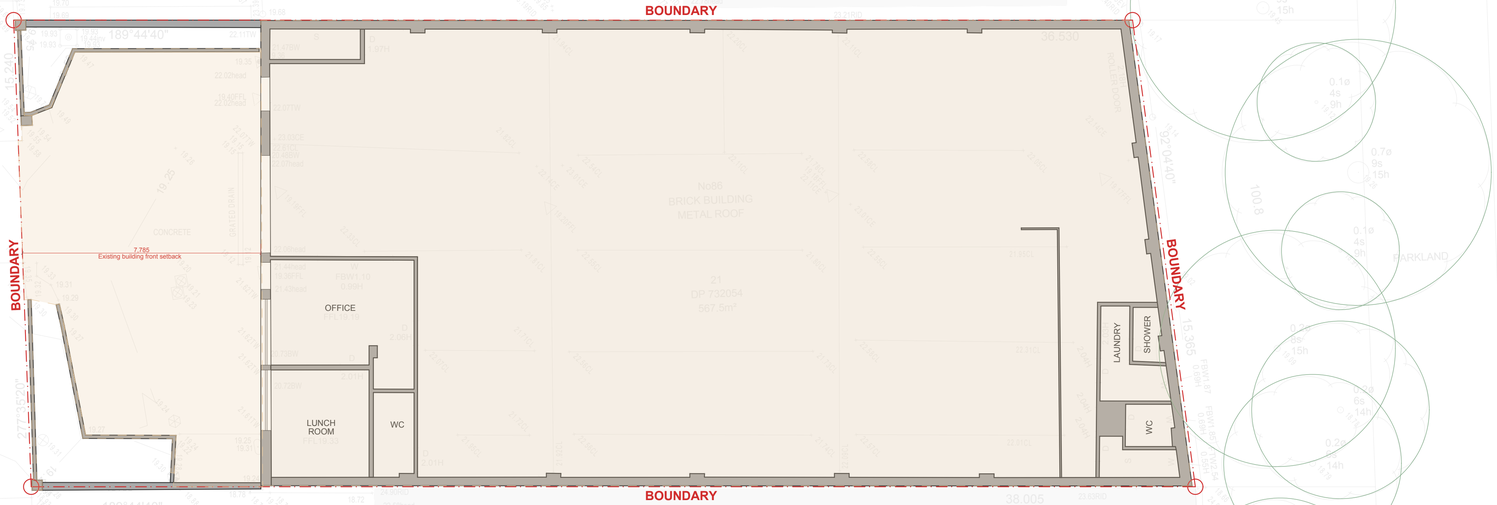
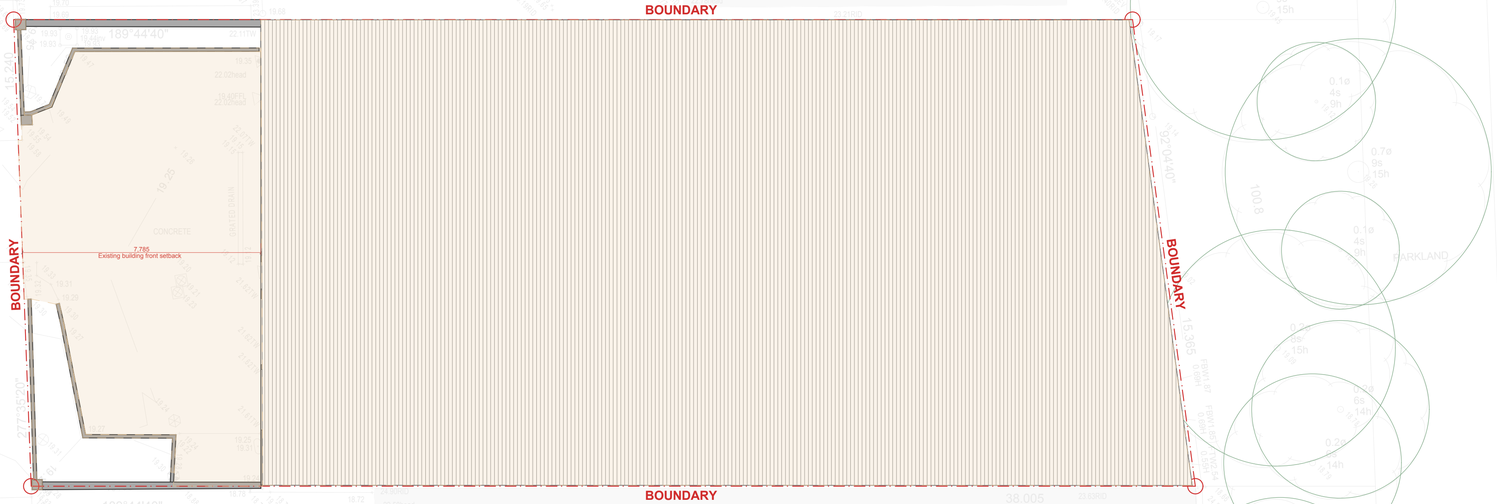
FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03





EXISTING STRUCTURE
TO BE DEMOLISHED

EXISTING BUILDING
TO BE DEMOLISHED

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PROJECT NO
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PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
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DRAWING
Plans - Demolition Plan

SCALE
1:100@A1

DRAWING NO
A103

ISSUE
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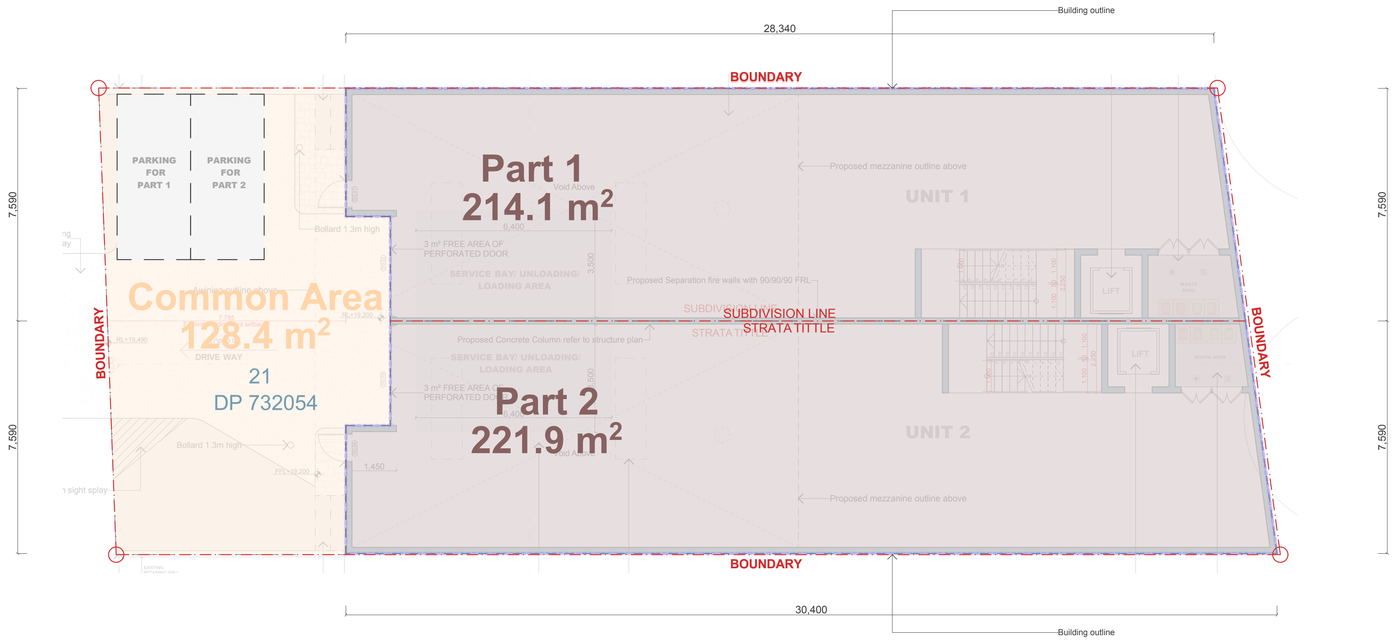
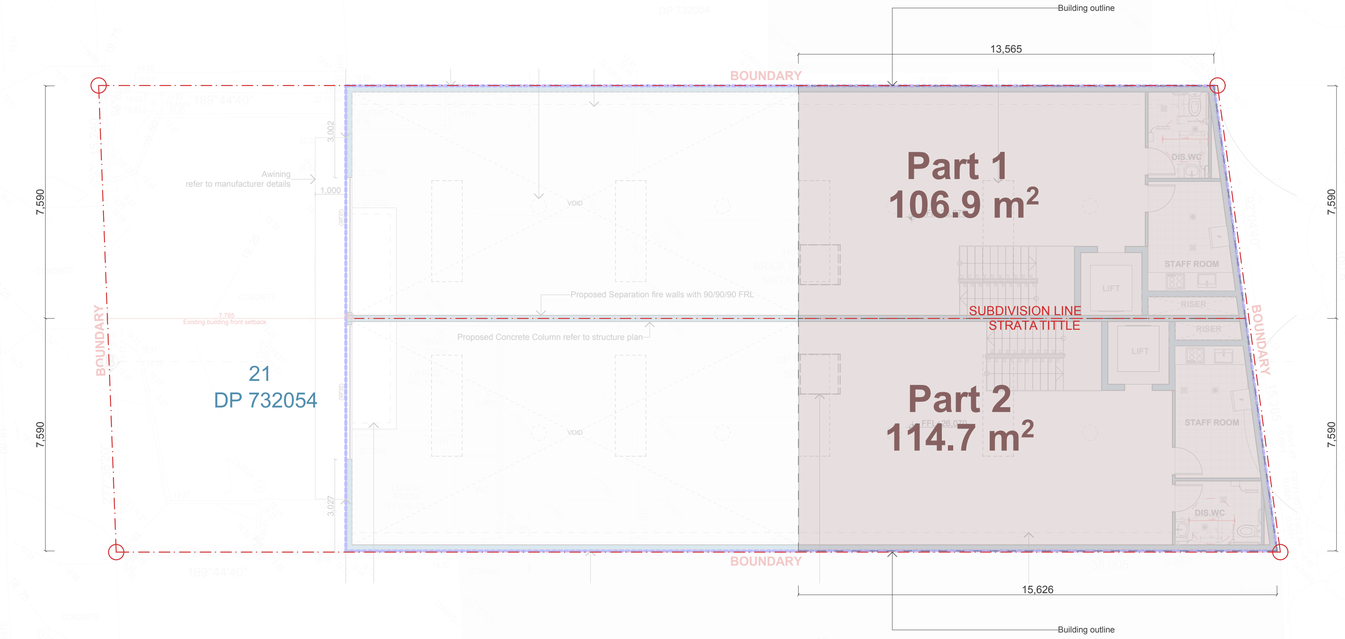


Ground Floor



Mezzanine

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NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Subdivision Plan

SCALE
1:100@A1

DRAWING NO
A104

ISSUE
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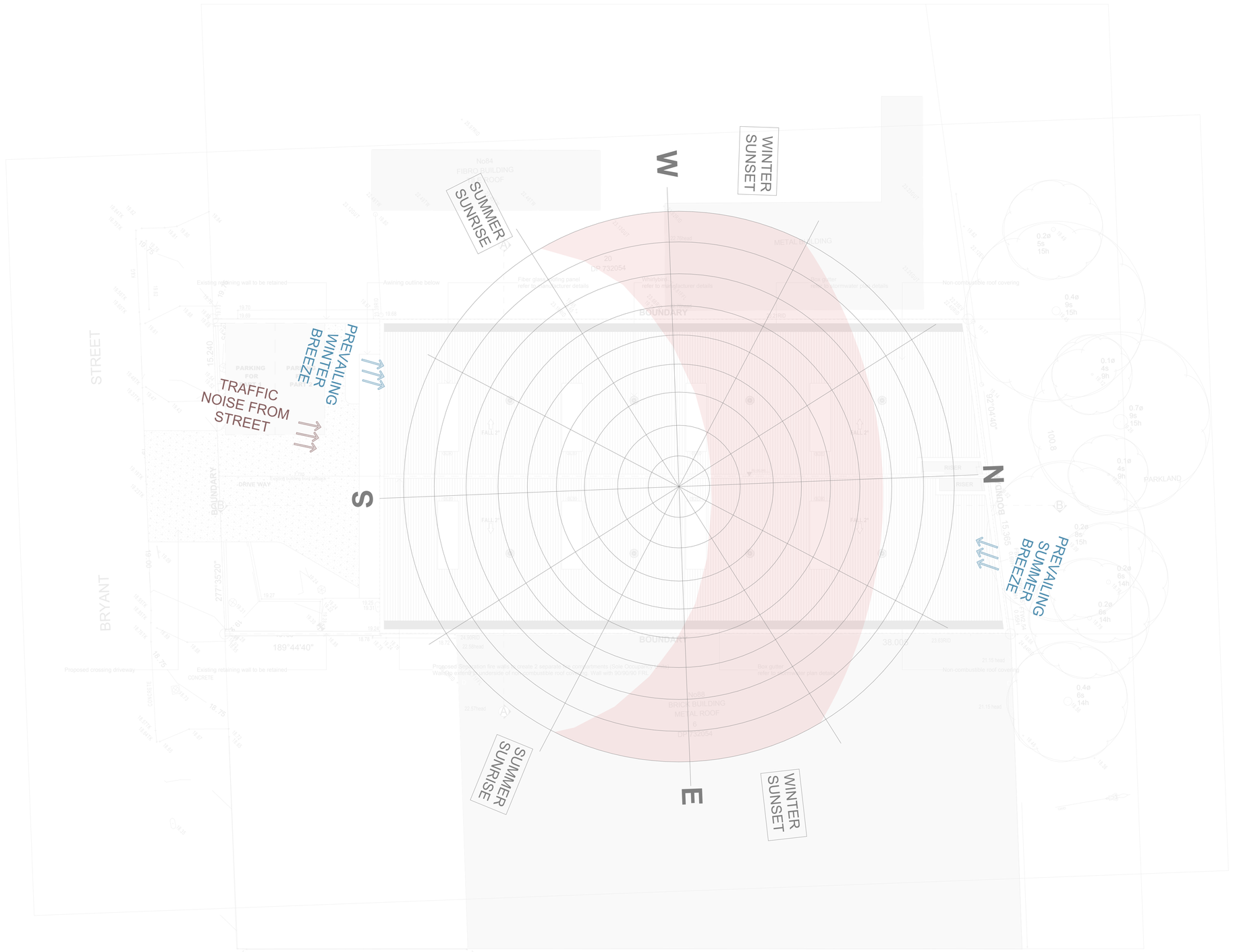

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PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Site Analysis

SCALE
1:100@A1

DRAWING NO
A105

ISSUE
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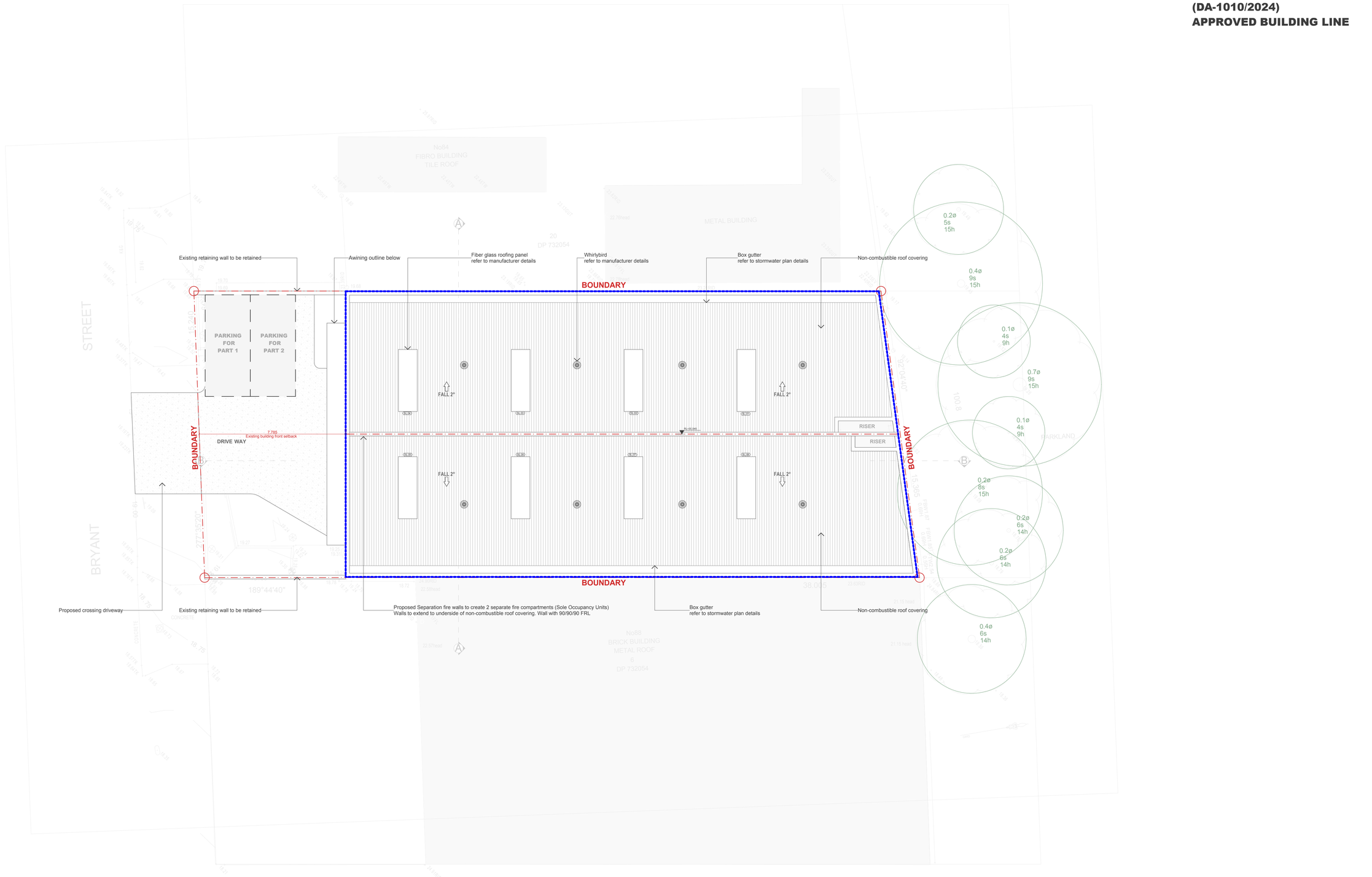
DEVELOPMENT APPLICATION (DA-1010/2024) APPROVED BUILDING LINE



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PROJECT
DEVELOPMENT APPLYCATION

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PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Proposed Roof Plan

SCALE
1:100@A1

DRAWING NO
A106

ISSUE
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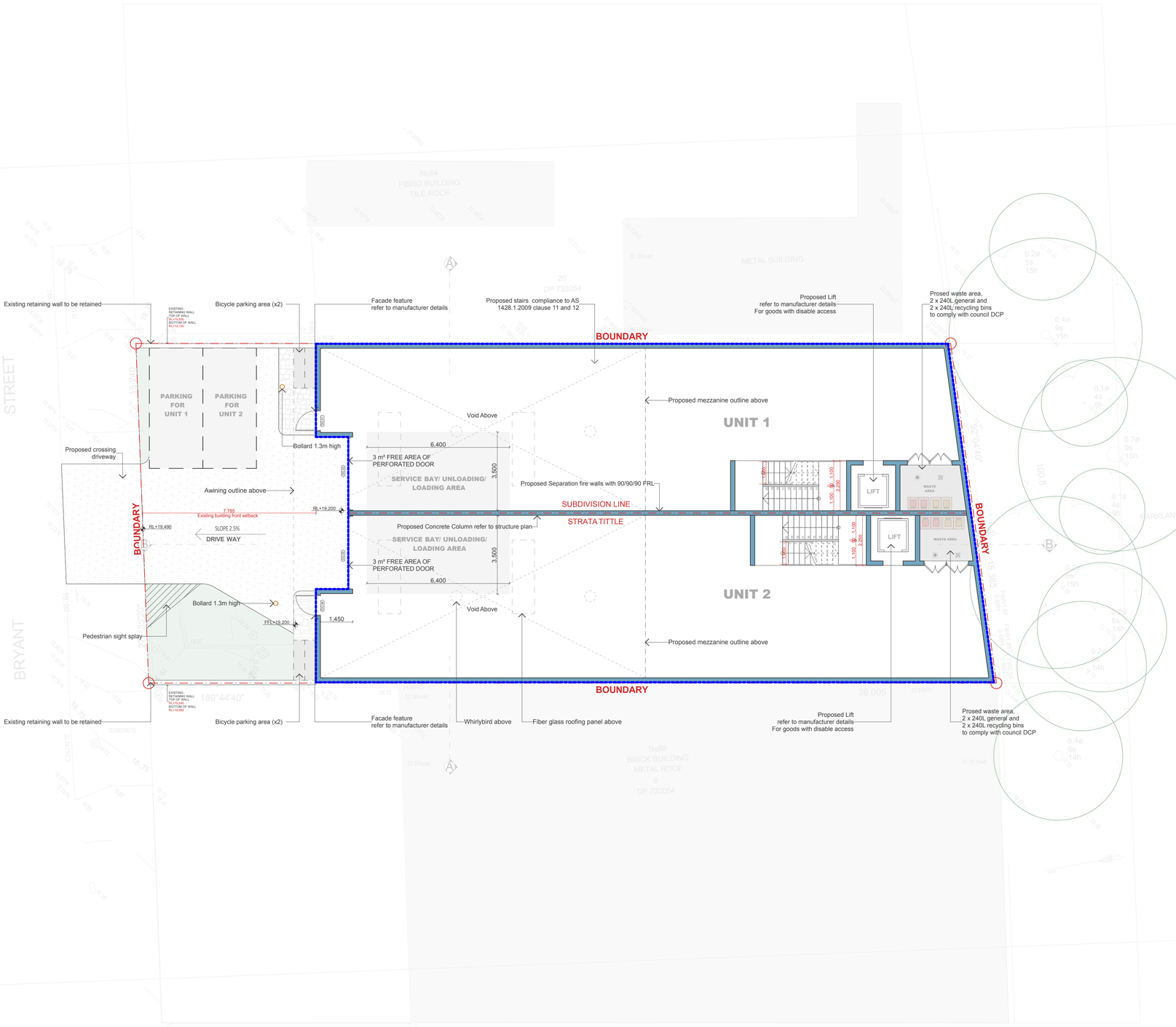
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

DEVELOPMENT APPLICATION
(DA-1010/2024)
APPROVED BUILDING LINE



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DEVELOPMENT APPLYCATION

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PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Proposed Ground Floor Plan

SCALE
1:100@A1

DRAWING NO
A107

ISSUE
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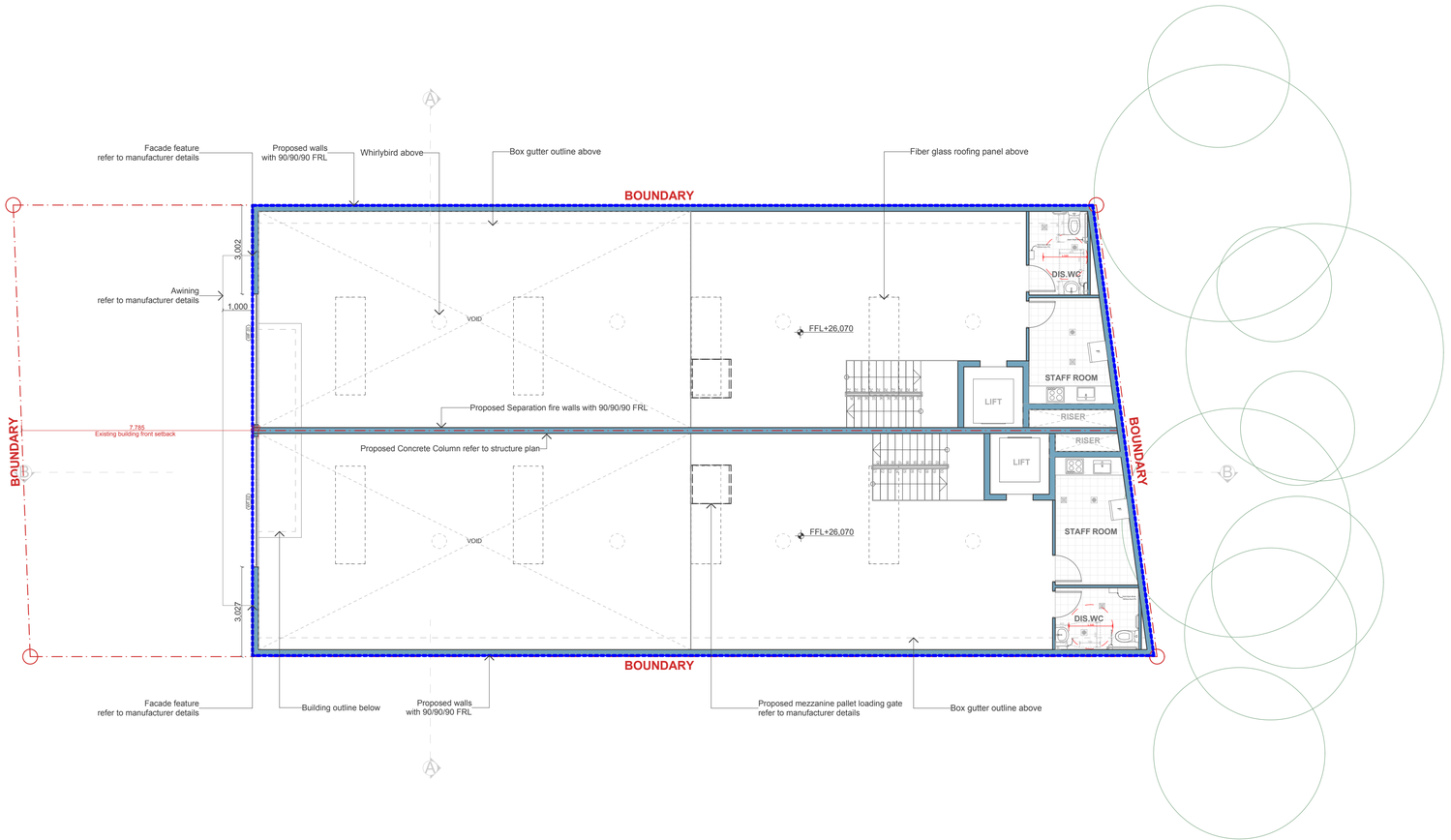
ISSUE DATE: 2025.04.03

DEVELOPMENT APPLICATION (DA-1010/2024) APPROVED BUILDING LINE



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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Plans - Proposed Mezzanine Floor Plan

SCALE
1:100@A1

DRAWING NO
A108

ISSUE
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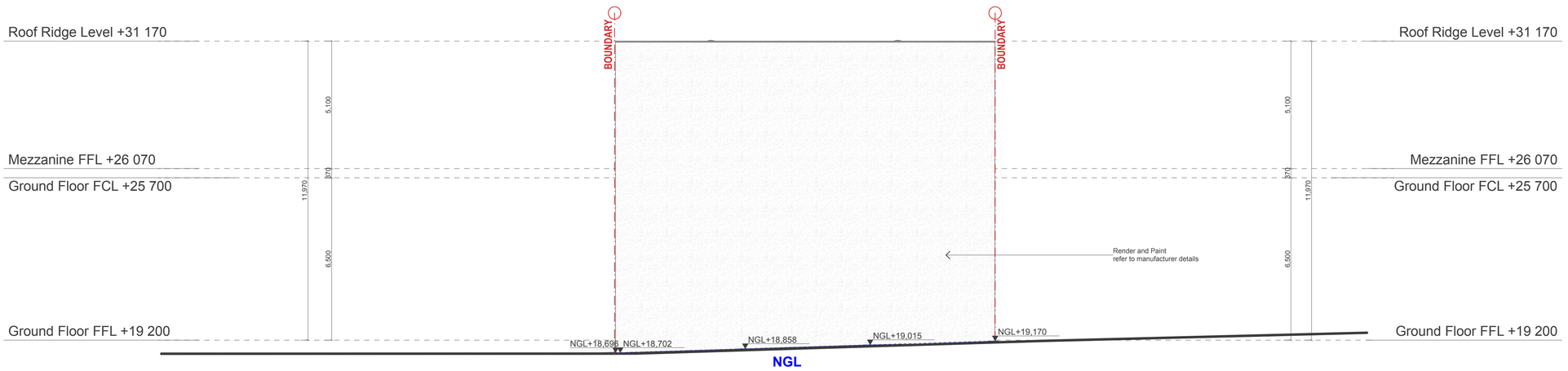
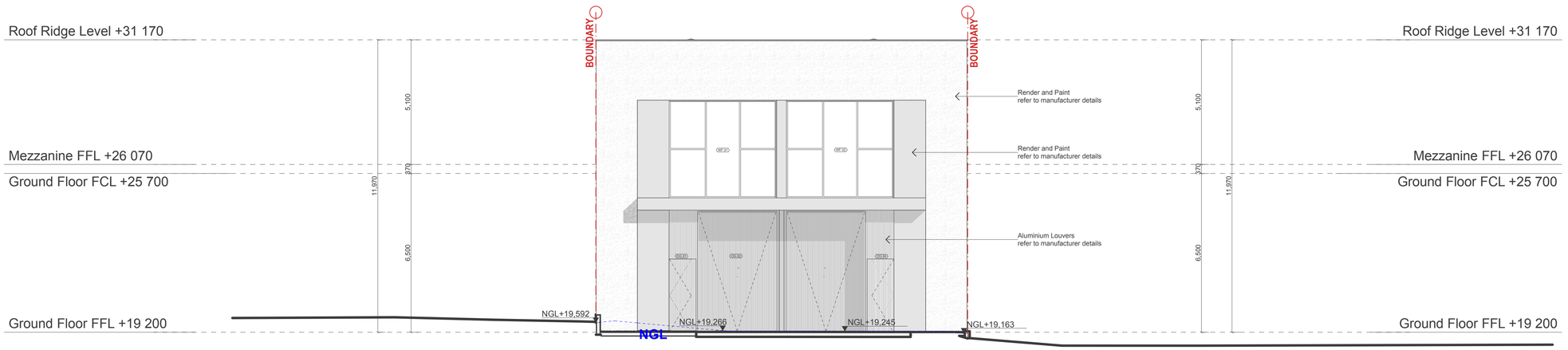
ISSUE DATE: 2025.04.03



NORTH



SOUTH

WALL TYPE SCHEDULE

note: - drawings may not contain all items listed below
- refer to BASIX certificate for insulation requirements

WE - Existing wall

WD - To-be-demolished wall

WP - Proposed wall

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DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

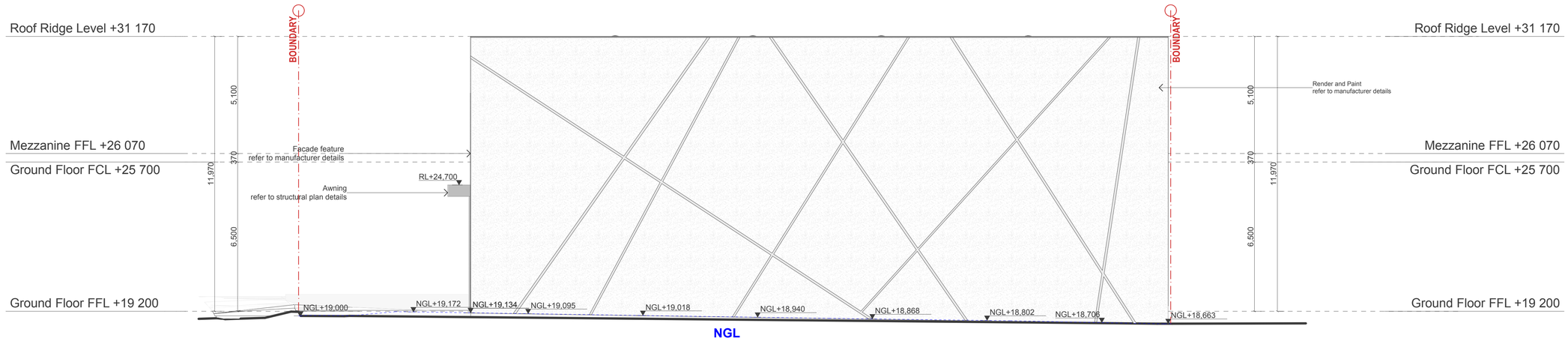
DRAWING
Elevations - Proposed - N&S Elevations

SCALE
1:100@A1

DRAWING NO
A201

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



EAST

WEST

WALL TYPE SCHEDULE

note: - drawings may not contain all items listed below
- refer to BASIX certificate for insulation requirements

WE - Existing wall

WD - To-be-demolished wall

WP - Proposed wall

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

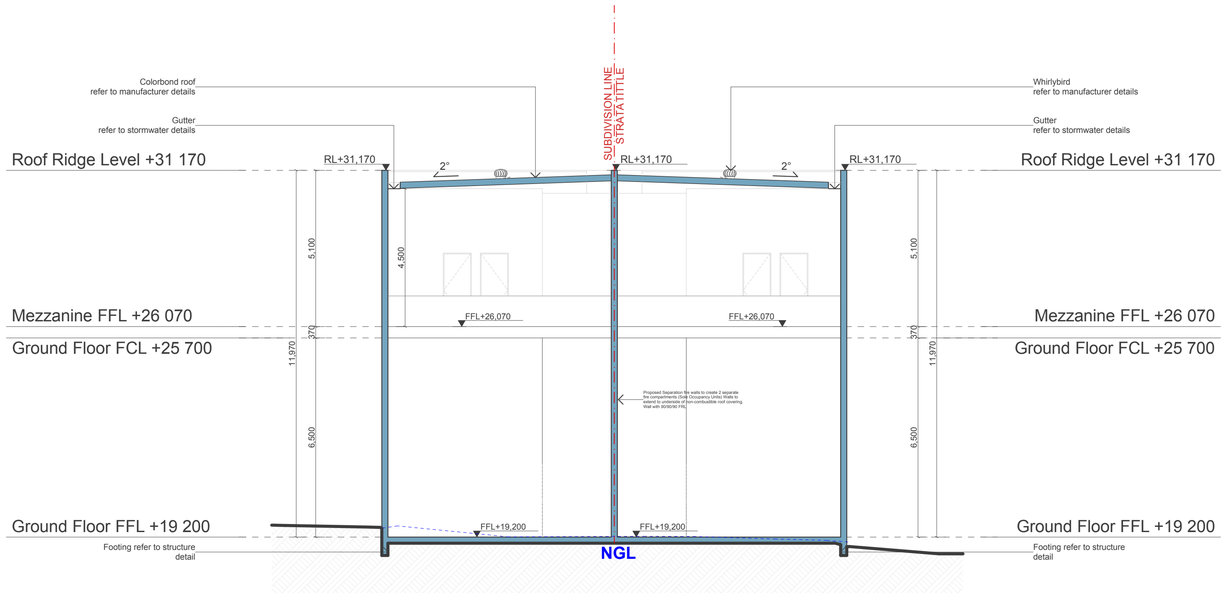
DRAWING
Elevations - Proposed - E&W Elevations

SCALE
1:100@A1

DRAWING NO
A202

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



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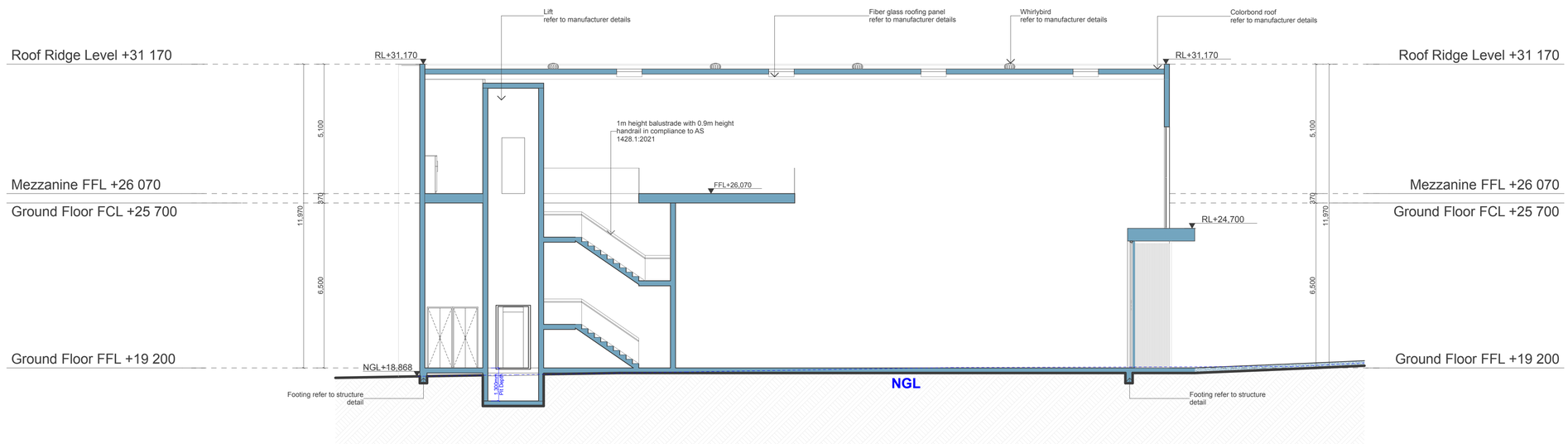

B

WALL TYPE SCHEDULE

note: - drawings may not contain all items listed below
- refer to BASIX certificate for insulation requirements

WE - Existing wall

WD - To-be-demolished wall

WP - Proposed wall

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86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Sections - Proposed - Sections

SCALE
1:100@A1

DRAWING NO
A301

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

PROPOSED AREA INFO

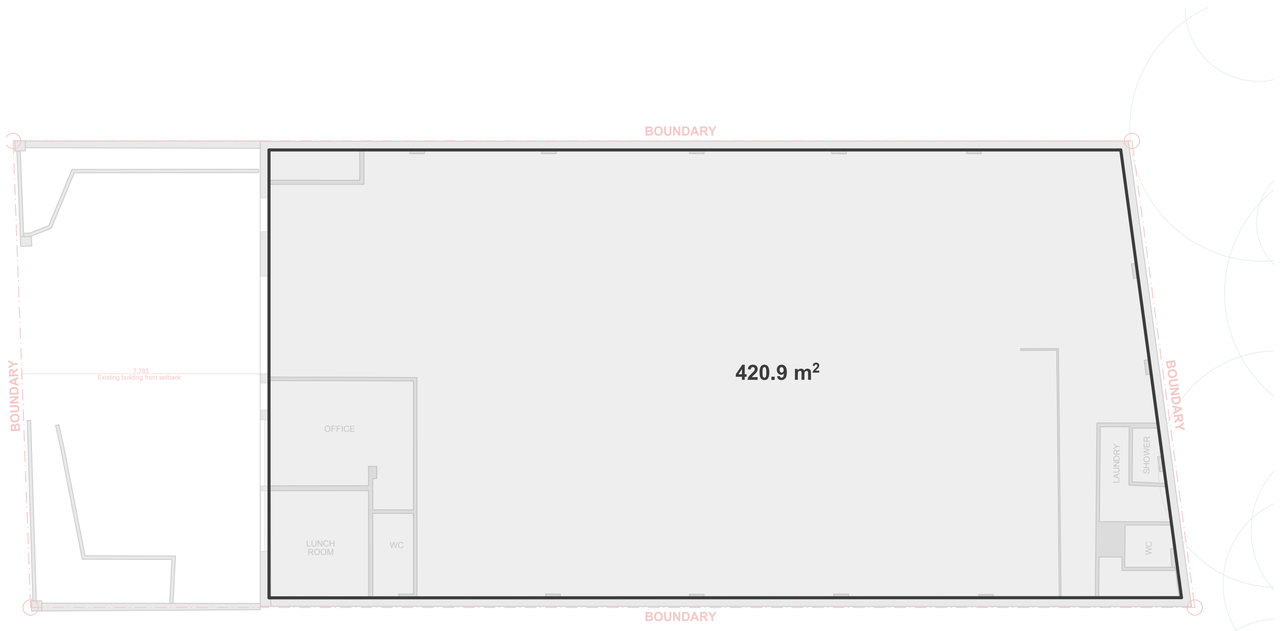
SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2



Existing Floor Plan

BJ ARCHITECTS INTERNATIONAL
ABN 94 634 347 201 | ACN 634 347 201

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T: 02 9066 3919
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W: www.bjarchitects.com.au
NSW ARB # 10984

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

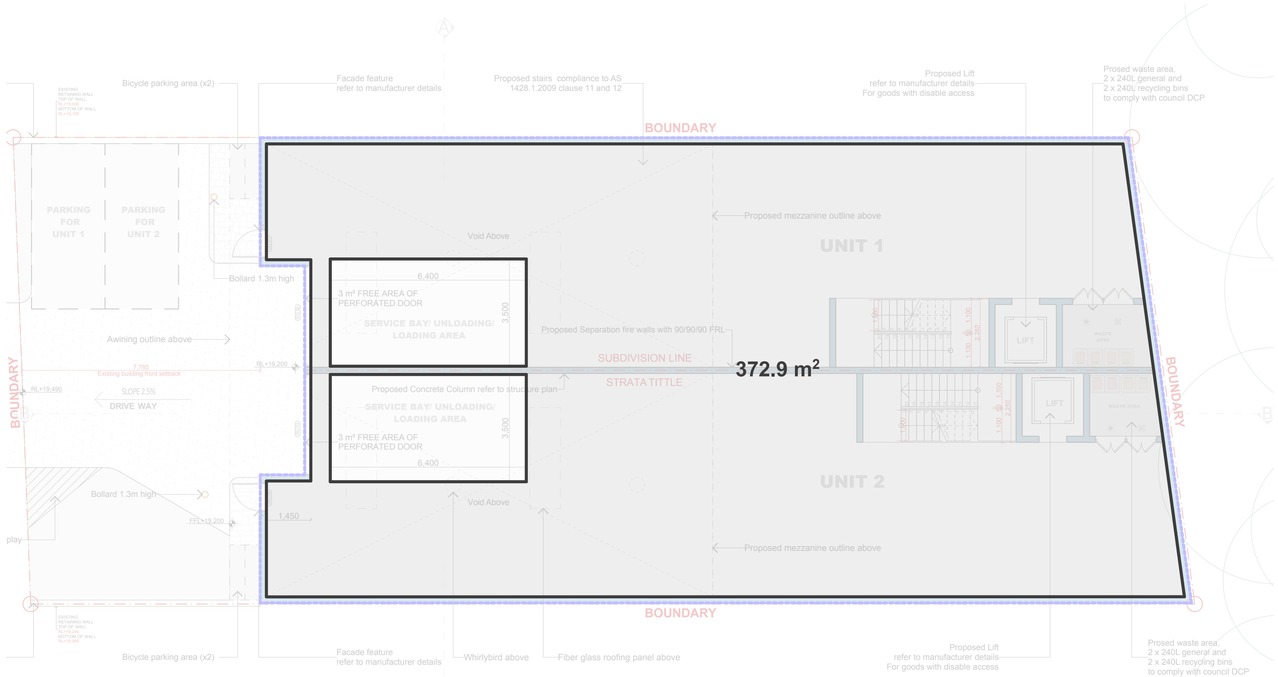
DRAWING
Diagram - Existing GFA Diagram

SCALE
1:100@A1

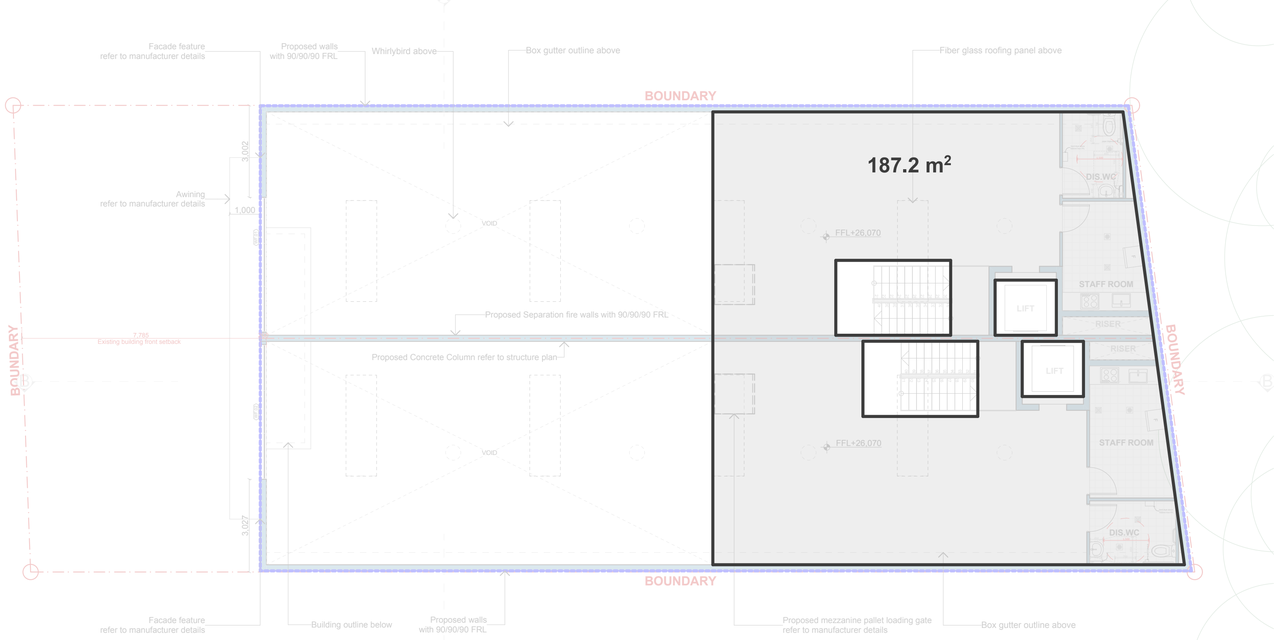
DRAWING NO
A401

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Ground Floor



Mezzanine

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m²)	**567.5**
GROUND FLOOR (m²)	372.9
FIRST FLOOR (m²)	187.2
TOTAL GFA (m²)	**560.1**
TOTAL LANDSCAPE AREA (m²)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m²)	**567.5**
TOTAL GFA (m²)	**420.9**
TOTAL LANDSCAPE AREA (m²)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

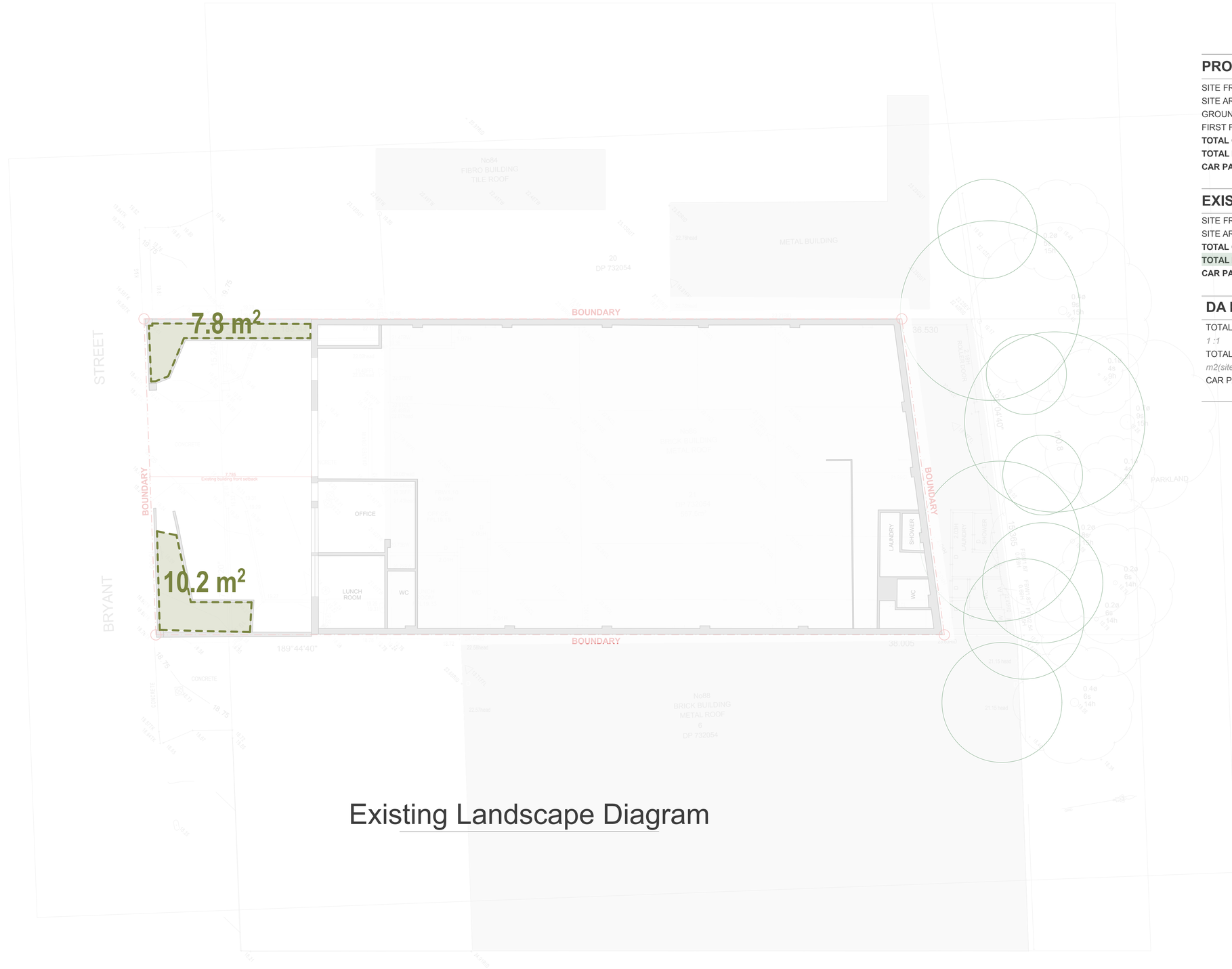
DRAWING
Diagram - Proposed GFA Diagram

SCALE
1:100@A1

DRAWING NO
A402

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Existing Landscape Diagram

PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

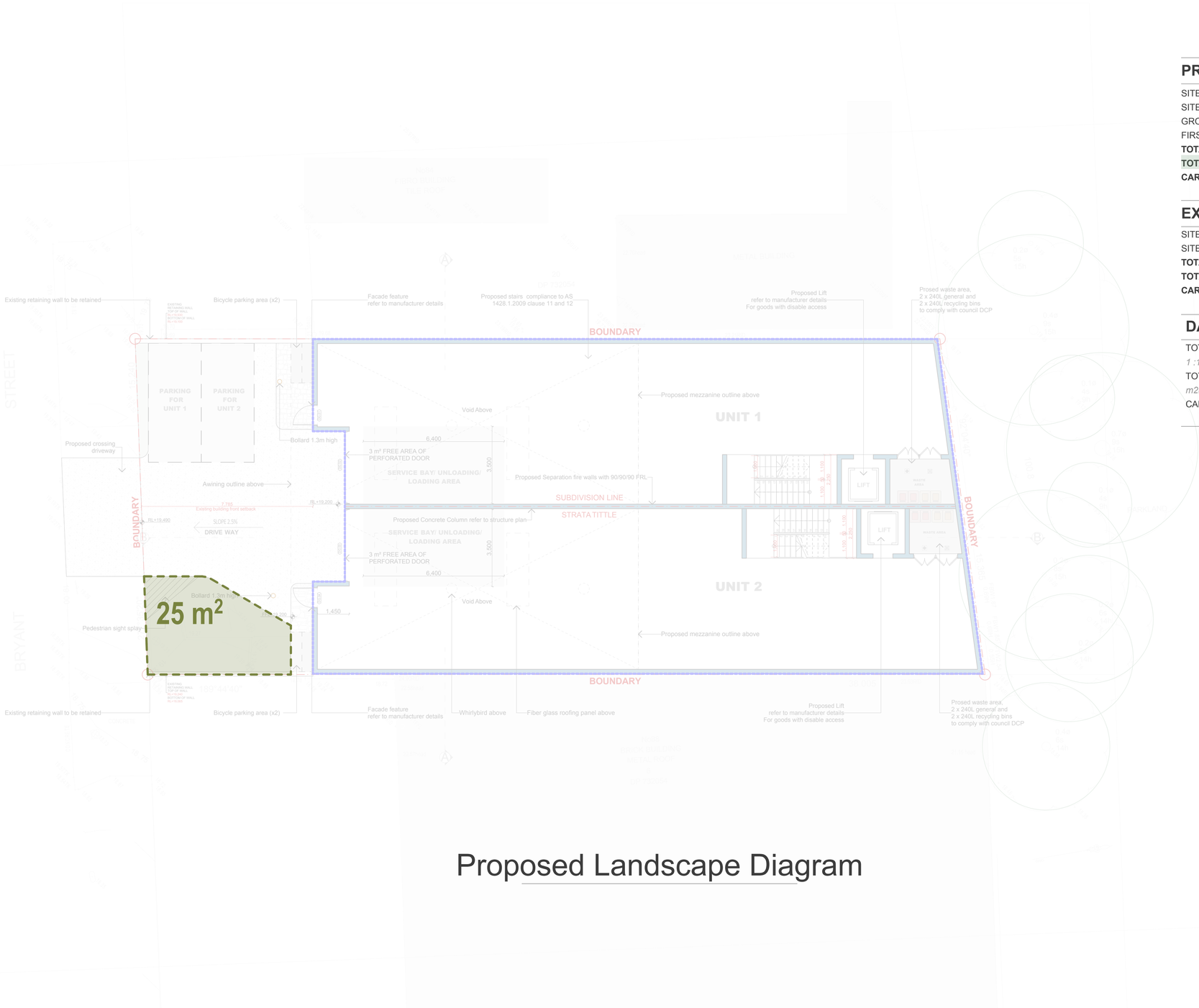
DRAWING
Diagram - Existing Landscape Diagram

SCALE
1:100@A1

DRAWING NO
A403

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



PROPOSED AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
GROUND FLOOR (m^2)	372.9
FIRST FLOOR (m^2)	187.2
TOTAL GFA (m^2)	**560.1**
TOTAL LANDSCAPE AREA (m^2)	**25**
CAR PARKING RATES	**2**

EXISTING AREA INFO

SITE FRONTAGE (m)	**15.24**
SITE AREA (m^2)	**567.5**
TOTAL GFA (m^2)	**420.9**
TOTAL LANDSCAPE AREA (m^2)	**18**
CAR PARKING RATES	**1**

DA REQUIREMENT

TOTAL GFA	567.5
1 :1	
TOTAL LANDSCAPE AREA (m2)	25
m2(site area) x = (m2)	
CAR PARKING RATES	2

Proposed Landscape Diagram

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

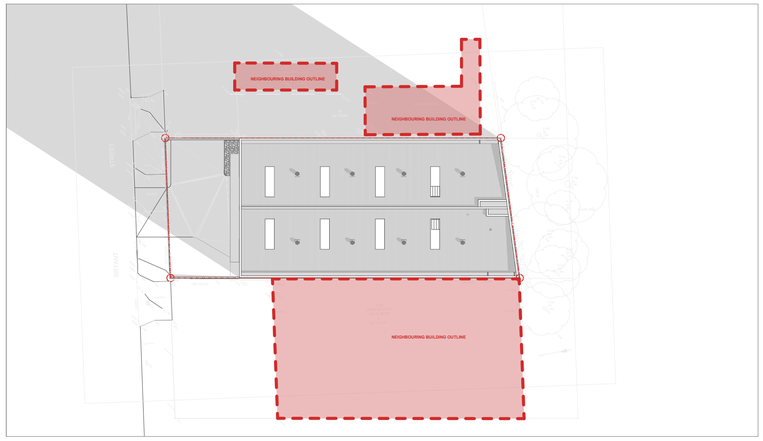
DRAWING
Diagram - Proposed Landscape Diagram

SCALE
1:100@A1

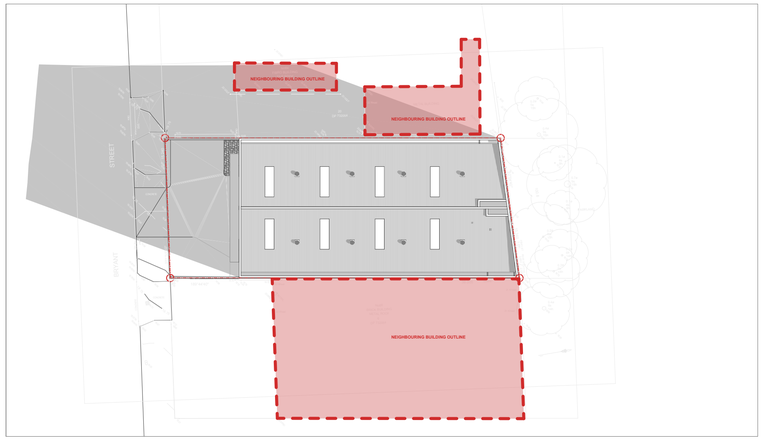
DRAWING NO
A404

ISSUE
A

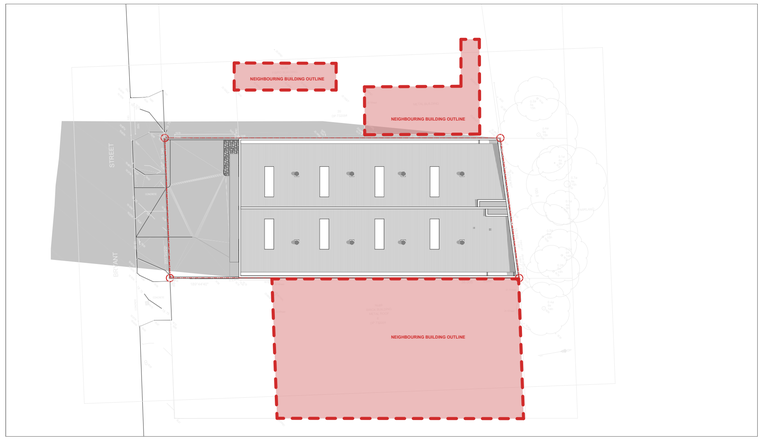
FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



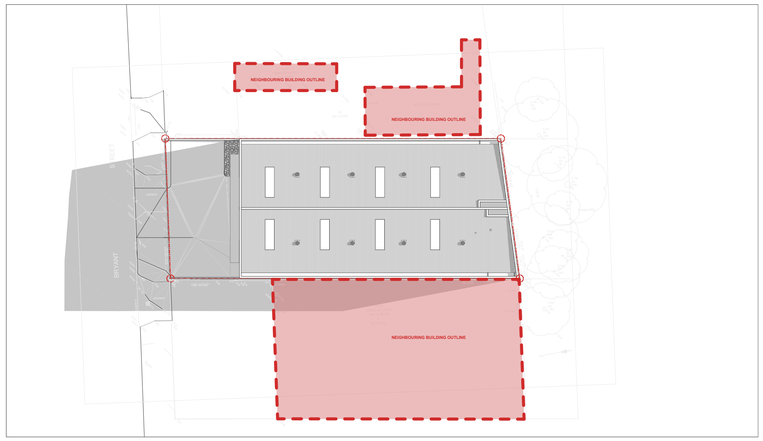
Shadow Diagram 09am 06.21



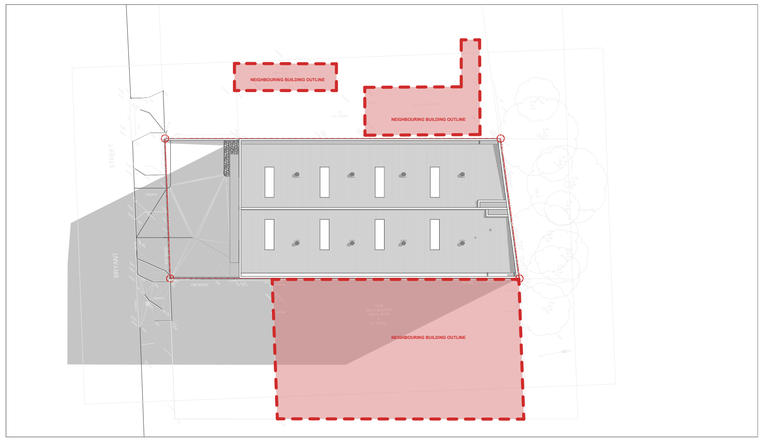
Shadow Diagram 10am 06.21



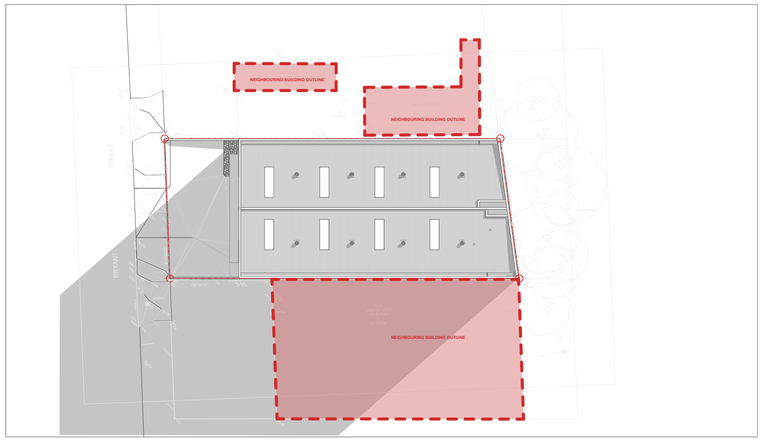
Shadow Diagram 11am 06.21



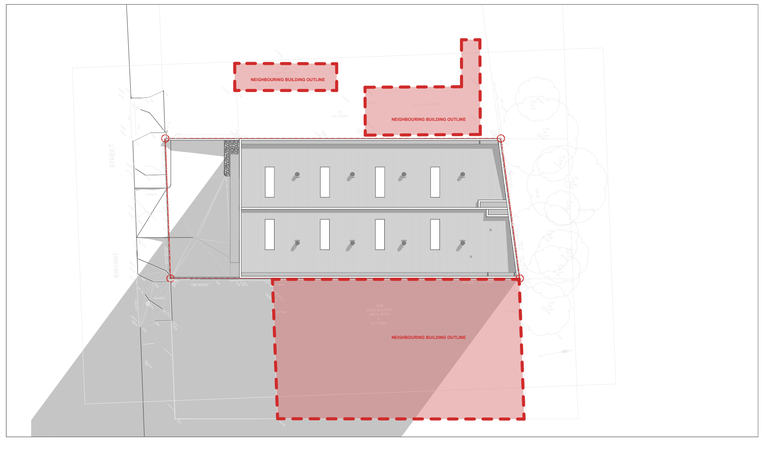
Shadow Diagram 12pm 06.21



Shadow Diagram 1pm 06.21



Shadow Diagram 2pm 06.21



Shadow Diagram 3pm 06.21

NEIGHBOUR PROPERTY

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

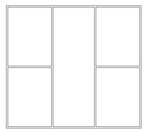
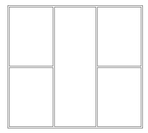
NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Diagram - Proposed Shadow Diagram

DRAWING NO **A405**

ISSUE **A**

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

WINDOW SCHEDULE		
WINDOW NUMBER	WF.01	WF.02
UNIT DIMENSIONS	4,400×4,000	4,400×4,000
W/D NONIMAL SILL HEIGHTS	0	0
VIEW FROM OPENING SIDE		

DOOR SCHEDULE				
DOOR NUMBER	DG.01	DG.02	DG.03	DG.04
UNIT DIMENSIONS	920×3,000	3,275×5,000	3,275×5,000	920×3,000
VIEW FROM OPENING SIDE				

SKYLIGHT SCHEDULE								
SKYLIGHT NUMBER	SL.01	SL.02	SL.03	SL.04	SL.05	SL.06	SL.07	SL.08
UNIT DIMENSIONS	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300	1,000×3,300
3D Front View								

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PROJECT
DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

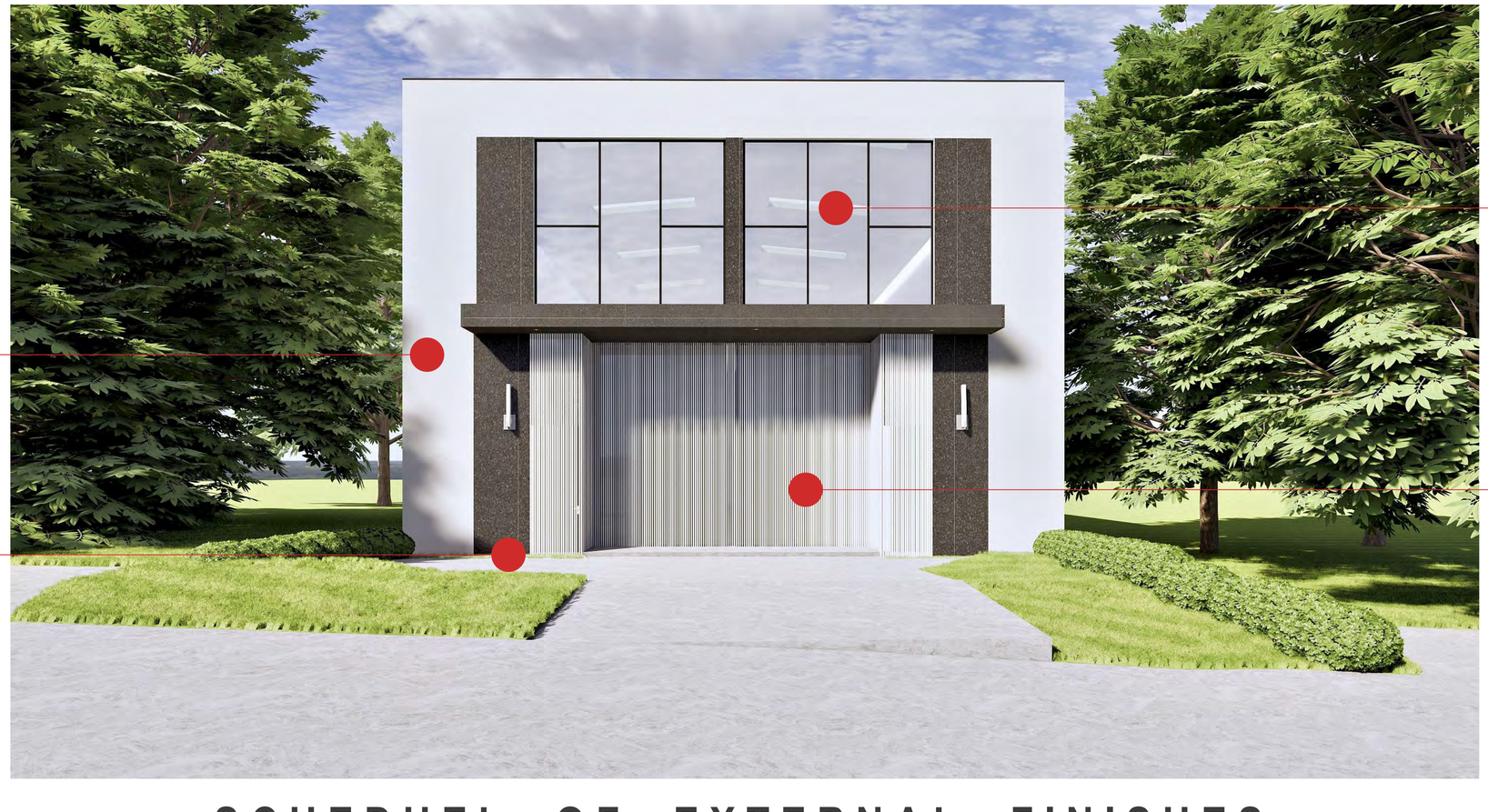
DRAWING
Additional Info - Schedule Of Window & Door

SCALE
1:100@A1

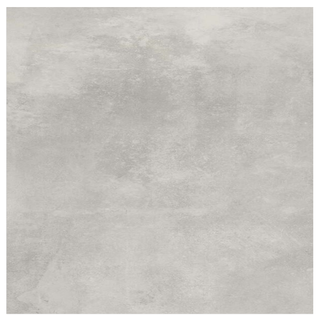
DRAWING NO
A501

ISSUE
A

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



SCHEDUEL OF EXTERNAL FINISHES



1

RENDER AND PAINT
Refer to manufacturer details

2

RENDER AND PAINT
Refer to manufacturer details

3

CUSTOM WINDOW
Refer to manufacturer details

4

ALUMINIUM LOUVERS
Refer to manufacturer details

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DEVELOPMENT APPLYCATION

86 Bryant St, Padstow NSW 2211

PROJECT NO
24017

PROJECT NORTH

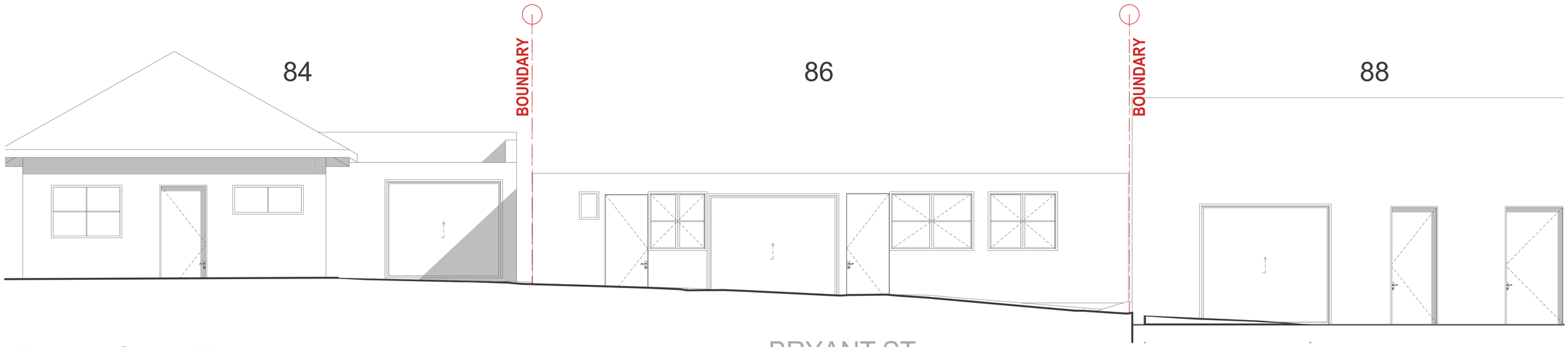
AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Additional Info - Schedule Of External Finish & Materials

DRAWING NO **A502** ISSUE **A**

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03



Existing Street Elevation

Proposed Street Elevation

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PROJECT NORTH

AMENDMENTS

NO.	REVISION	BY	DATE
A	DA APPLICATION	QY	2025.04.03

DRAWING
Additional Info - Streetview Elevations

DRAWING NO **A503** ISSUE **A**

FOR DEVELOPMENT APPLICATION
NOT FOR CONSTRUCTION
ISSUE DATE: 2025.04.03

How to Contact Us

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PO Box 289, 12 Gardeners Road, Kingsford, NSW
Phone: 0406 201 136
Email: Jeffrey.yu@DrUpsilonGroup.com
Web: www.DrUpsilonGroup.com.au

APPENDIX 15 – HAZMAT Inspection and Register Report

Refer separate attachment for HAZMAT Inspection and Register Report.

Allera Planning Pty Ltd
Suite 20, 22 Darley Road, Manly, NSW 2095