



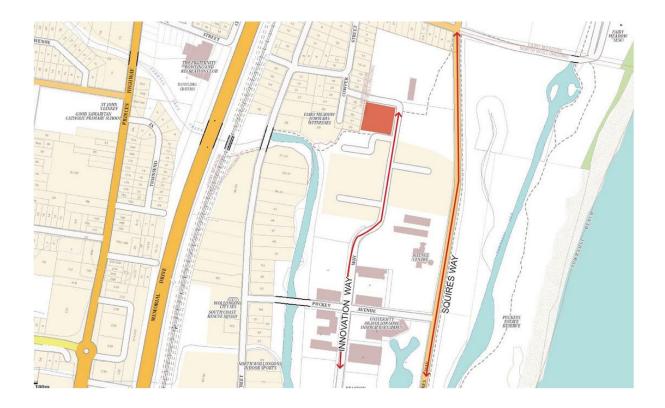
# **Fairy Meadow Ambulance Station**

Issue date: 17/08/22

Rev: A

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# **Design Development Report**



T + 612 9319 2955
E studio@djrd.com.au
djrd pty Itd
63 Myrtle Street
Chippendale NSW 2008
Sydney, Australia
djrd.com.au
Nominated Architects
Daniel Beekwilder 6192
Andrew Hipwell 6562



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## 1 Executive Summary

DJRD Architects were engaged by Health Infrastructure to undertake the design of a new ambulance station located in Fairy Meadow.

NSW Ambulance is a mobile health service with four key clinical areas of operation: emergency care, urgent/unscheduled care, community support and health support.

The NSW government is committed to enhancing the capacity of NSW Ambulance. In particular, rural health is a priority for the NSW government. The NSW Rural Health plan towards 2031 highlights the need to strengthen the capacity of rural health services to provide a more connected and seamless care. As part of addressing the rural health service, NSW Ambulance has identified a need to how it will deliver their services and identify the infrastructure required to support this service.

Consistent with the rest of the health system, there is a need to maintain and upgrade capital infrastructure for NSW Ambulance. Ambulance has already developed a Sydney Infrastructure Reform Strategy resulting in the SAMIS (Sydney Ambulance Metropolitan Infrastructure Strategy) program, and a similar approach for regional and rural NSW is to be adopted. This project has been named the Rural Ambulance Infrastructure Reconfiguration (RAIR) program.

24 upgraded, rebuilt or new regional and rural ambulance stations were delivered under the RAIR Stage 1 program – this represents the largest delivery of NSW Ambulance regional and rural infrastructure in the organisation's history. Construction is complete on 23 Stage 1 projects with one remaining in construction.

Following on from the success of Stage 1 of the program, the NSW Government has announced an additional \$100 million to deliver upgraded, rebuilt or entirely new NSW Ambulance stations in rural and regional NSW as part of Stage 2 of the program, and Fairy Meadow is part of Stage 2.

# 2 Fairy Meadow Ambulance Station

Fairy Meadow Ambulance Station has been designed in accordance with template guidelines titled "Rural Ambulance Station Facilities Design Guidelines Part A, B & C". In 2019 the Design Guidelines were updated to incorporate lessons learnt from previous stations and they comprise template designs for small, medium and large stations as well as modules for Education, Fleet and Zone/Sector.

#### 2.1 Project Scope

The project scope of the Fairy Meadow ambulance station includes the construction of a new medium Ambulance Station comprising of six (6) internal ambulance parking spaces; One (1) Internal vehicle wash bay; One (1) external covered parking bays; and One (1) Relief external covered parking bays; Eight (8) external staff parking spaces, including one accessible space; Ambulance administration and storage areas; Ambulance amenity facilities including lockers, toilets, kitchen and common room; Tier 2 Education learning spaces, Tier 1 Zone & Sector Management Module, Tier 1 Fleet Maintenance, Relief Quarters Module and Gym Space Module.



## 3 Project Team

The consultant team are as follows;

Health Infrastructure	Client
NSW Ambulance	Client
Mace	Project Manager
DJRD	Architect
МВМ	Cost management
Meinhardt-Bonacci	Structural and Civil
JHA	Mechanical, Electrical, ICT, Comms, ESD (Section J), Hydraulic and Acoustic
RoadNet	Traffic
Geolink	Town Planner
Site Image	Landscape Architect
Monteath & Powys	Survey
BCA Logic	BCA

#### 3.1 Service Planning

Through a consultation process with NSW Ambulance, DJRD prepared a series of return briefs and schedules of accommodation for Fairy Meadow Ambulance Station. The final version of the return brief was issued in June 2021.

The station requirements are based off the medium station templates, as well as the principles of the RAIR program addressing service planning towards 2031.

#### 3.2 Site Assessment and Due Diligence

A site was chosen and Due Diligence was carried out before Concept Design began. The Due Diligence can include desktop studies on services, contamination, and traffic and involve test fits on how the building can be located on the site. The test fits are based upon the Guidelines and "template" station designs.

#### 3.3 Safety in Design

A Safety in Design risk matrix has been prepared for the project, and will be reviewed with the design team. In compiling this report, the specific and unusual workplace hazards which have been identified by DJRD have been assessed, and control measures have been recommended to manage those risks. It has been assumed that the usual workplace hazards (i.e., those that are common to all buildings & construction sites) are already sufficiently managed through the engagement of competent and qualified contractors and subcontractors who work to industry standard practice throughout the duration of their engagement.



#### 3.3.1 Risk Assessment Matrix

Determining the level of risk.

This matrix has been used to identify the level of risk and help to prioritise any control measures.

The **consequences** and **likelihood** for each of the identified hazards have been considered and the table has been used to obtain the risk level.

			Consequences				
			1 Insignificant Dealt with by in- house first aid, etc	2 Minor Medical help needed. Treatment by medical professional/ho- spital outpatient, etc	3 Moderate Significant non- permanent injury. Overnight hospitalisation (inpatient)	4 Major Extensive permanent injury (e.g. loss of finger/s) Extended hospitalisation	5 Catastrophic Death. Permanent disabling injury (e.g. blindness, loss of hand/s, quadriplegia)
	5	Almost certain to occur in most circumstances	High (H)	High (H)	Extreme (X)	Extreme (X)	Extreme (X)
	4	Likely to occur normally	Moderate (M)	High (H)	High (H)	Extreme (X)	Extreme (X)
Likelihood	3	Possible and likely to occur sometime	Moderate (M)	Moderate(M)	High (H)	High (H))	Extreme (X)
	2	Unlikely to occur but could happen	Low (L)	Moderate(M)	Moderate(M)	High (H)	High (H))
	1	May occur but only in rare and exceptional circumstances	Low (L)	Low (L)	Moderate (M)	Moderate(M)	High (H)

Figure 1 – risk assessment matrix

Risks relating to the building's construction phase include but are not limited to:

- Possible cutting of below ground services.
- Fire due to hot work on site causing injury and/or damage.
- Various potential contaminants in fill soils
- · Release of contaminants onto site, health issue and delays

Risks relating the building when operational include but are not limited to:

- Collision between vehicles and building resulting in damage to and possible collapse of structure
- Disruption of traffic and collisions with pedestrians and disruption to services.
- Collision between ambulances and people/other vehicles causing permanent injury/death.
- Staff rushing to ambulances/Staff restocking of vehicles, movement of stretchers resulting in injury

# 4 Project User Groups

Project User Group (PUG) 1 for the Fairy Meadow Ambulance Station was held on Wednesday the 16<sup>th</sup> of June 2021. PUG 1 focused on presenting the brief, overall layout and functional relationships of the design guidelines template, while sections and elevations were also presented.



# 5 Design Team Meetings

Weekly RAIR Design Team Meetings have been held online over the course of the project.

# 6 Design Statement

#### **6.1 Site**

Fairy Meadow is a suburb in the north of Wollongong, in the Illawarra region of NSW. Fairy Meadow has an approximate population of 7,405, reported in 2016. Fairy Meadow is located on Dharawal Country.

The Proposed Fairy Meadow Ambulance station is located on Innovation Way, Fairy Meadow. The site borders the University of Wollongong student accommodation to the south and residential houses to the west, with a childcare centre located to the sites north-east.

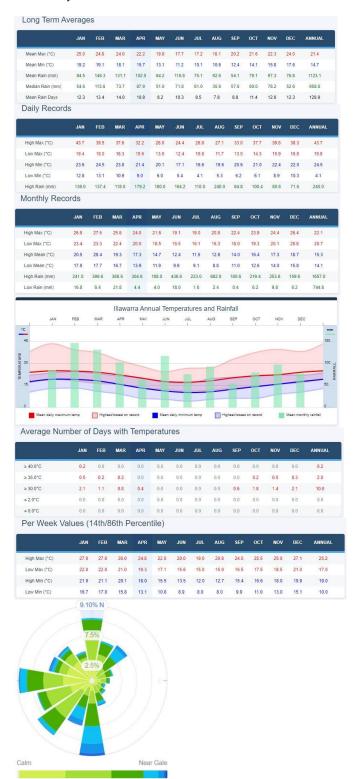


Figure 2: Aerial view of site showing neighbouring buildings



#### 6.2 Architectural Design

The proposed ambulance facility has been designed to meet the functional requirements of NSW Ambulance and to have a positive aesthetic impact on its context. Site analysis was carried out to determine the climatic, geographical, historical, legal, and infrastructural context of the site. These factors were taken into account during the design phase so that the proposed building could respond effectively to them.











DECEMBER 21ST - 12PM SUN PATH



#### 6.2.1 Return Brief

Fairy Meadow Ambulance Station was designed to achieve the requirements of the Return Brief dated 17/08/22. The return brief is included in appendix 7.1

This return brief has been prepared to suit the targeted staffing capacity & outlined for year 2031 based on the following Reference Documents;

- a. Email correspondence from NSW Ambulance
- b. RAIR Staff Ratio Appendix FTE vs Station Requirements

#### **Outline of Requirements**

#### **Ambulance Station**

To be typically based on the Rural Ambulance Station Facilities Design Guidelines / Revision J / Medium Station Template M-01 / 02.1AR1101 - modified to suit required FTE staff levels in accordance with RAIR Staff Ratio Appendices Spreadsheet V5 & based on correspondence from NSWA.

#### Staffing

•	Full Time Equivalent Staff DOM	24 1	As per NSWA Correspondence
Provision for Staff			As per RAIR Staff Ratio Appendix
	Locker Room – provision for	30	Lockers (24 x 1.23 FTE)
	Common Area Lounge – provision for	8	Staff
	Common Area Dining – provision for	10	Staff
	Admin Space (Peak by half) – provision for	3	staff
Equipment			As per RAIR Staff Ratio Appendix
	Computers – provision for	3	pcs in admin area
	Basic Printer – provision for	1	Basic printer in admin area
Amenities Male			As per RAIR Staff Ratio Appendix
	WC	1	
	Shower	1	
	Change Cubicle	1	
Amenities Female			As per RAIR Staff Ratio Appendix
	WC	1	
	Shower	1	
	Change Cubicle	1	
Accessible Amenities	<b>3</b>		As per RAIR Staff Ratio Appendix
	Combined Accessible WC + Shower	1	in accordance with AS1428



Additional Modules	As per RAIR Design Guidelines	
Zone & Sector Management Module	1	Tier 1 – 1 x shared DOM office – 12m2 and 1 x 9m2 S/O office
Fleet Maintenance		Tier 1 as noted in Plant Room below
Rest Pods	2	Rest Pods
Education Module	1	Tier 2 –30m <sup>2</sup>
Gym Space Module	1	Approx. 12m2 – may be internal or external protected from the elements

#### **Plant Room**

To be typically based on the Rural Ambulance Station Facilities Design Guidelines / Revision J / Medium Station Template M-01 / 02.1AR1101 – modified to suit site as follows;

- 1. to suit required # of parking bays as outlined on the RAIR Endorsement sheet
- 2. to suit endorsed schedule of accommodation in approved Return Brief
- 3. to suit site size & geometry

Internal Vehicles			As per NSWA Correspondence
	Ambulance	5	Internal bays
	Fleet Maintenance Bay	Included	Tier 1
	Wash Bay	1	Internal bay
	Total Internal Vehicles	(6) 5 ambulance bays + 1 Wash Bay	
External Vehicles (Covered)			As per RAIR Design Guidelines
	DOM Bay	1	Operation Frontline Vehicle (Car) – 2.7x5.4m Large Car Park
	Relief	1	
	Total External (Covered) Vehicles	(2) 1 DOM bay + 1 Relief bay	
Other Parking (Not Covered)			Standard Car Parking Bay size: 5.4x2.4m
Access	sible Parking Bay + Circulation Area	1	statutory requirement in accordance with AS2890.6
	Parking bays	6	As per RAIR Staff Ratio Appendix
	Total	(7) 1 acc. + 6 parking bays	



Indicative Sched	dule of Areas	i		
Ambulance Stat	ion			
1	Х	3 staff	Admin	To suit required number of staff
1	Х	30 m <sup>2</sup>	Combined Medical Equipment Store	As per RAIR Staff Ratio Appendix
1	х	> 7m <sup>2</sup>	Comms Cupboard	To suit NSWA ITC Reqs
1	x	4m <sup>2</sup>	Cleaner's Sink / Store	
1	x	9m²	Office	
1	x	12m <sup>2</sup>	DOM Office	Shared Office
		-	Circulation	
4		0 -1-#	Amenities	To acid as acidenal according a fact of
1	Х	8 staff	Common Room	To suit required number of staff
1	Х	10 staff	Meals	To suit required number of staff
1	Х	7 m <sup>2</sup>	Accessible WC with shower	
1	X	14 m <sup>2</sup>	Male WC	
1	X	incl	Male Shower	
1	Х	incl	Male Change	
1	х	14 m <sup>2</sup>	Female WC	
1	x	incl	Female Shower	
1	x	incl	Female Change	
1	х	30 lockers	Locker Room	To suit required number of lockers
1	х	11 m <sup>2</sup>	Charge	
1	х	12m2	Gym	
Bolt On Module:				
Relief Quarters	Х	30m <sup>2</sup>	Multi-purpose Classroom	
2	v	13m²	Rest Pods	
Associated Exte	× ernal Spaces		Rest Fous	
1	X	28m²	Outdoor Area	Adjacent to common room
1		7m <sup>2</sup>	Services	Confirm if Bolton Modules require
•	Х			this to be larger
1	х	6m²	Waste	Confirm if Bolton Modules require
Vehicle Plant Ro	oom			this to be larger
1	Х	Variable	Plant Room	Drive through configuration to suit 5
1		8m <sup>2</sup>	Delivery	SEV
1	Х	4m <sup>2</sup>	Main Switchboard	
1	Х	4111 <sup>2</sup> 2m <sup>2</sup>	Oil Separator	
1	Х		·	Internal Wash Pay
Darking Allacat	x on Covered	50m2	Wash Bay	Internal Wash Bay
Parking Allocati	on Covered x		Relief Bay	2.7x5.4m Large Car Park
1	X		DOM Bay	2.7x5.4m Large Car Park TBC
Parking Allocati		red		
1	X	. •	Accessible Parking Bay + Circulation	Standard Car Parking Bay size
^	^		Desking Davis Architector Otal	5.4x2.4m
6	х		Parking Bays – Ambulance Station	Standard Car Parking Bay size. 5.4x2.4m



#### 2. Outline of Requirements

This return brief has been prepared to suit the targeted staffing capacity & outlined for year 2031 based on the following Reference Documents;

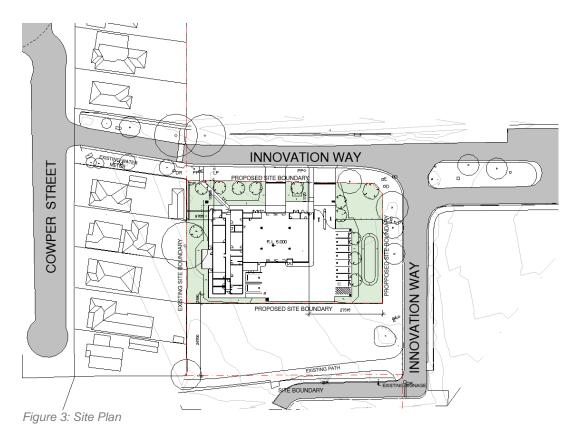
- c. Email correspondence from NSW Ambulance
- d. RAIR Staff Ratio Appendix FTE vs Station Requirements

RAIR Fairy Meadow Ambulance Station has a site area of approximately 3271.4m<sup>2</sup> and includes;

1. The construction of a new Medium Ambulance Station comprising of six (6) internal ambulance parking spaces; One (1) external Relief parking bay, One (1) external DOM parking bay, One (1) internal Wash Bay; Eight (8) external staff parking spaces, including one accessible space; Ambulance administration and storage areas; Ambulance amenity facilities including lockers, toilets, kitchen and common room; Zone and Sector Management Module, Relief Quarters Module and Gym Space Module.

#### Site Planning & Context:

The site has a rectangular footprint with approximately 69m northern street frontage, and 41m eastern frontage. Vehicles enter and exit from Innovation Way to the north of the site. The building is oriented with the plant room exit facing north, and the administration and relief areas of the station located along the western portion of the site. The overall width of the drive through plant room has been calculated to allow sufficient clearance behind ambulance parking spaces and to provide sufficient space for the loading/unloading of stretchers and other equipment.





#### 6.2.2 Architecture

The building will be used by ambulance service paramedics and administration staff. The building is not intended for public access and it is not anticipated that there will be a high number of visitors to the building. The building has been developed in conjunction with other new RAIR projects. Its overall form, material selection and aesthetics will be similar to the other RAIR stations, providing a recognisable and consistent approach for new RAIR buildings. This is considered important to reflect the cohesive nature of the ambulance service and provide staff with workplaces that do not differ significantly from one RAIR station to another. Selection of the colour of materials will be used appropriately with consideration given to the site context.

The building height and form has been simplified to maintain an efficient building shape. The roof is a skillion roof and kept to a low pitch of approximately 3.5 degrees to further refine the building form. In maintaining as small and simple a form as possible, overshadowing or overpowering adjacent buildings has been minimised. Taking into account the interior minimum height requirements and the internal clear spans of the office and plant areas an efficient steel portal frame has been incorporated as the primary structure for the building envelope. Internal walls are non-load bearing to allow for future flexibility and internal rearrangement of spaces. The ambulance station administration, amenities and relief areas have been located to the west of the plant room. Office, meeting, relief, as well as the common room have been provided windows that offer natural light and outlook.



Figure 4: Exterior Perspective





Figure 5: Axonometric

### 6.3 ESD

A Section J - Energy Efficiency Report is being prepared by JHA for the proposed construction of Fairy Meadow Ambulance Station and it outlines thermal insulation construction requirements the building.

## **Building Classification:**

• Class 3 (relief), class 5 (office) and class 7a (carpark) in Climate zone 5

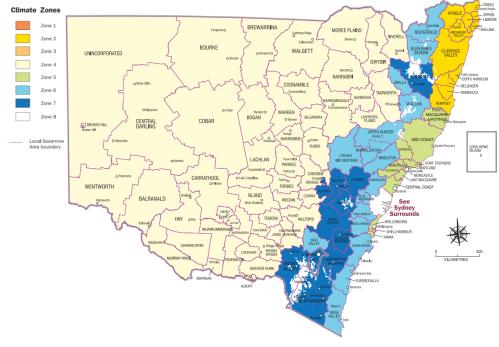


Figure 6: BCA extract: NSW Climate Zone Map

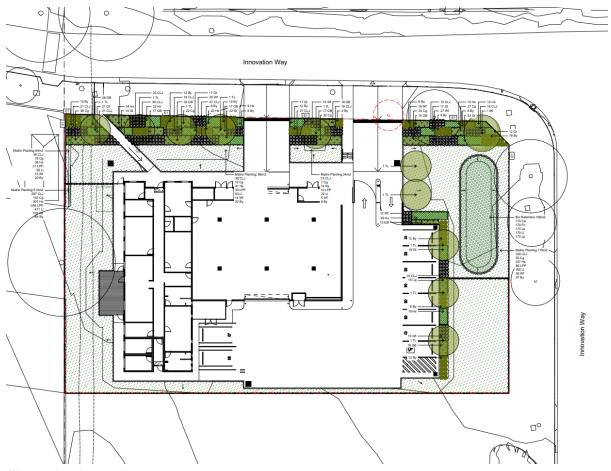


## 6.4 Landscape Architecture

Refer to appendix 7.5 for the landscape design.

A preliminary landscape design for the RAIR Fairy Meadow site has been developed by Site Image Landscape Architects. The planting design for RAIR Fairy Meadow embodies a low maintenance and sustainable approach in terms of species choices. Planting has been proposed along the street elevations to supplement the existing trees and soften the elevations.

The planting strategy incorporates trees and low planting at the property entry, while maintaining as many existing trees as possible around other boundaries.







#### 6.5 BCA

Refer to appendix 7.5 for BCA report.

DJRD have engaged BCA Logic to carry out a project specific Building Code of Australia 2019 review of the design drawings for the proposed Fairy Meadow Ambulance Station located at and to prepare a Building Code of Australia report commenting upon the compliance of the design.

The drawings provided to date have been assessed in respect to the deemed to satisfy provisions of the Building Code of Australia 2019 Parts C, D, E and F. The design is at a point where it can be completed.

#### General

#### **Building Classification:**

Class	Level	Description
3	Ground	Sleeping pod rooms (Sole occupancy units)
5	Ground	Offices, amenities, meeting and communal ancillary areas
7a	Ground	Plant room used for the parking of the ambulances

#### Rise in Storeys & Effective Height:

The building is single storey and therefore the effective height is not applicable.

#### Type of Construction:

The building is required to be of Type C Construction.

#### **Exposure to fire source features:**

If the external walls of the building are proposed to be located 3m or more from the side and rear boundaries they are not required to be provided with a fire resistance level.

#### Relief:

The BCA considers a relief to be a sole occupancy unit if the occupier will have exclusive use of the room while they occupy it, see the definition below:

Sole-occupancy unit means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—

- (a) a dwelling; or
- (b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or
- (c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or
- (d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

The relief is considered to be a sole occupancy unit and the walls bounding the relief is required to have an FRL of not less than 60/60/60 and must extend:

- to the underside of the next floor above if that floor has an FRL of at least 30/30/30 or a fire-protective covering on the underside of the floor; or
- to the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or
- to the underside of the roof covering if it is non-combustible, and except for roof battens with dimensions of 75mm x 50mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or
- 450 mm above the roof covering if it is combustible



#### **Disabled Access**

The BCA does not require the Class 3 relief quarters to be accessible however the building is required to be accessible and to comply with the requirements of Part D3 of Building Code of Australia 2019 and the relevant parts of AS1428.1 2009, these include:

- Disabled access is required to be provided from the main points of a pedestrian entry at the allotment boundary to the main entry door.
- Disabled access is required to be provided from the accessible carspace to the main entry doors.
- All accessible doors should be a minimum of 850mm clear width.
- At least one leaf of all double doors must have a clear width of 850mm.
- All doors should have adequate circulation spaces as per the requirements of figure 31 of AS1428.1 2009.
- Both sides of all doorways that are required to be accessible are required to have a luminous contrast of at least 30% to the adjacent surface as per clause 13.1 of AS1428.1 2009 and as stated on the finishes schedule.
- All switches, card readers etc should be placed at a height of between 900-1100mm from floor level and not less than 500mm from any internal corner.
- All floors are required to have a slip resistant surface.
- The accessible carspace is required to be constructed and line marked in accordance with the requirements of AS/NZS 2890.6 2009.
- Braille and tactile signage is required to be provided to the accessible, male and female toilets and to the exit doors as per the requirements of BCA Clause D3.6.

#### **Services**

#### **Fire Hydrants**

The proposed floor area is more than 500m<sub>2</sub>, therefore the building is required to be protected by hydrant coverage in accordance with the Building Code of Australia 2019 and AS2419.1 2005. The proposed fire hydrant booster is required to be located within sight of the main entrance of the building and designed and constructed in accordance with Clause E1.3. Details are required to be provided for review.

#### **Fire Hose Reels**

The proposed floor area is more than 500m<sub>2</sub>, therefore the building is required to be protected by fire hose reel coverage in accordance with the Building Code of Australia 2019 and AS2441 2005. Please note that BCA 2019 does not required fire hose reel protection to be provided to Class 5 parts of buildings.

#### Section J

#### **Building Fabric:**

The envelope of the conditioned space must comply with the building fabric requirements of Part J1 of the Building Code of Australia 2019.

The envelope will include the internal wall as the plant room (vehicle parking bay) is not expected to be conditioned and this internal wall is required to comply with Part J1.

#### Glazing:

The glazing in the envelope of the conditioned space must comply with the glazing requirements of Part J2 of the Building Code of Australia 2019.

#### **Building Sealing:**

Any openings in the envelope of the conditioned space must have seals specified to the external doors and operable windows and must have self-closing devices specified to the swing doors all as per the requirements of Part J3 of the Building Code of Australia 2019.

The envelope will include the internal wall as the plant room (vehicle parking bay) is not expected to be conditioned and the doors in this internal wall are required to comply with Part J3 ie provided with self-closing devices and seals.



#### Ventilation Systems, Artificial Lighting, Hot Water Supply

The design stage services consultants design certificates have confirmed that the services comply with the requirements of BCA Section J.

#### Conclusion

The drawings provided to date have been assessed in respect to the deemed to satisfy provisions of the National Construction Code 2019 Parts C, D, E and F. The design is at a point where it can be completed.



# 7 APPENDIX



## 7.1 Return Brief



# Fairy Meadow RAIR Ambulance Station ~ Return Brief

#### 1. Reference Documents

This return brief has been prepared to suit the targeted staffing capacity & outlined for year 2031 based on the following Reference Documents;

- a. Email correspondence from NSW Ambulance
- b. RAIR Staff Ratio Appendix FTE vs Station Requirements

#### 2. Outline of Requirements

#### **Ambulance Station**

To be typically based on the Rural Ambulance Station Facilities Design Guidelines / Revision J / Medium Station Template M-01 / 02.1AR1101 - modified to suit required FTE staff levels in accordance with RAIR Staff Ratio Appendices Spreadsheet V2

#### Staffing

	Full Time Equivalent Staff	24	As per NSWA Correspondence
	DOM	1	
Provision for Staff			As per RAIR Staff Ratio Appendix
	Locker Room – provision for	30	Lockers (24x 1.23 FTE)
	Common Area Lounge – provision for	8	Staff
	Common Area Dining – provision for	10	Staff
	Admin Space (Peak by half) – provision for	3	staff
Equipment			As per RAIR Staff Ratio Appendix
	Computers – provision for	3	pcs in admin area
	Basic Printer – provision for	1	Basic printer in admin area
Amenities Male			As per RAIR Staff Ratio Appendix
	WC	1	
	Shower	1	
	Change Cubicle	1	
Amenities Female			As per RAIR Staff Ratio Appendix
	WC	1	
	Shower	1	
	Change Cubicle	1	
Accessible Amenities			As per RAIR Staff Ratio Appendix
	Combined Accessible WC + Shower	1	in accordance with AS1428



Additional Modules		As per RAIR Design Guidelines
Zone & Sector Management Module	1	Tier 1 – 1 x shared DOM office – 12m2 and 1 x 9m2 S/O office
Fleet Maintenance		Tier 1 as noted in Plant Room below
Rest Pods	2	Rest Pods
Education Module	1	Tier 2 –30m <sup>2</sup>
Gym Space Module	1	Approx. 12m2 – may be internal or external protected from the elements

#### **Plant Room**

To be typically based on the Rural Ambulance Station Facilities Design Guidelines / Revision J / Medium Station Template M-01 / 02.1AR1101 – modified to suit site as follows;

- 1. to suit required # of parking bays as outlined on the RAIR Endorsement sheet
- 2. to suit endorsed schedule of accommodation in approved Return Brief
- 3. to suit site size & geometry

Internal Vehicles			As per NSWA Correspondence
	Ambulance	5	Internal bays
	Fleet Maintenance Bay	Included	Tier 1
	Wash Bay	1	Internal bay
	Total Internal Vehicles	(6) 5 ambulance bays + 1 Wash Bay	
External Vehicles (Covered)			As per RAIR Design Guidelines
	DOM Bay	1	Operation Frontline Vehicle (Car) – 2.7x5.4m Large Car Park
	Relief	1	
	Total External (Covered) Vehicles	(2) 1 DOM bay + 1 Relief bay	
Other Parking (Not Covered)			Standard Car Parking Bay size: 5.4x2.4m
Acces	sible Parking Bay + Circulation Area	1	statutory requirement in accordance with AS2890.6
	Parking bays	6	As per RAIR Staff Ratio Appendix
	Total	(7) 1 acc. + 6 parking bays	

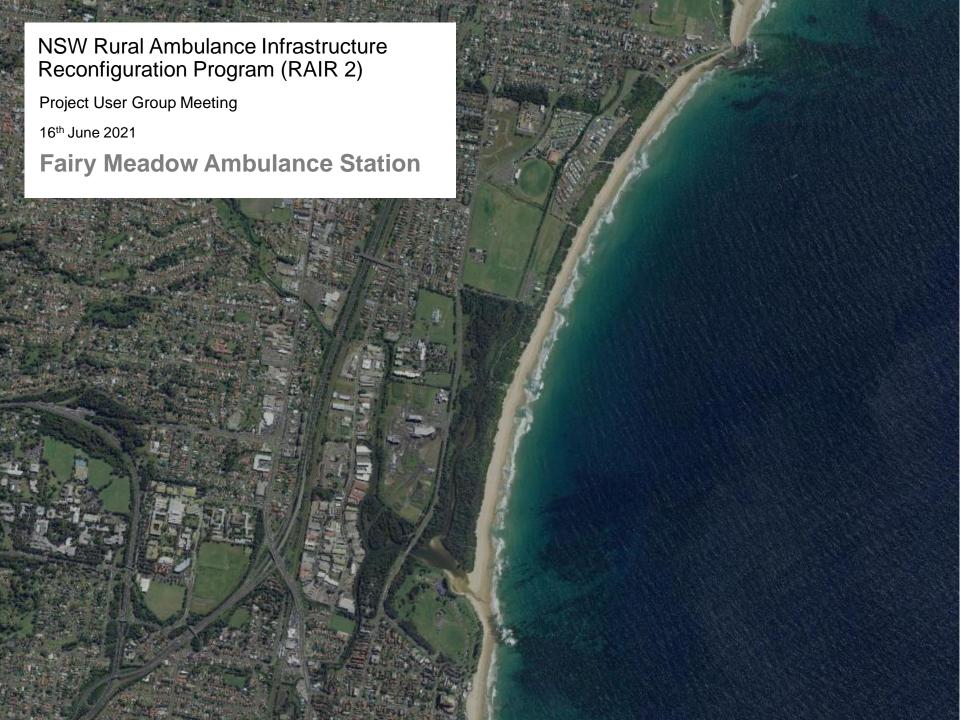


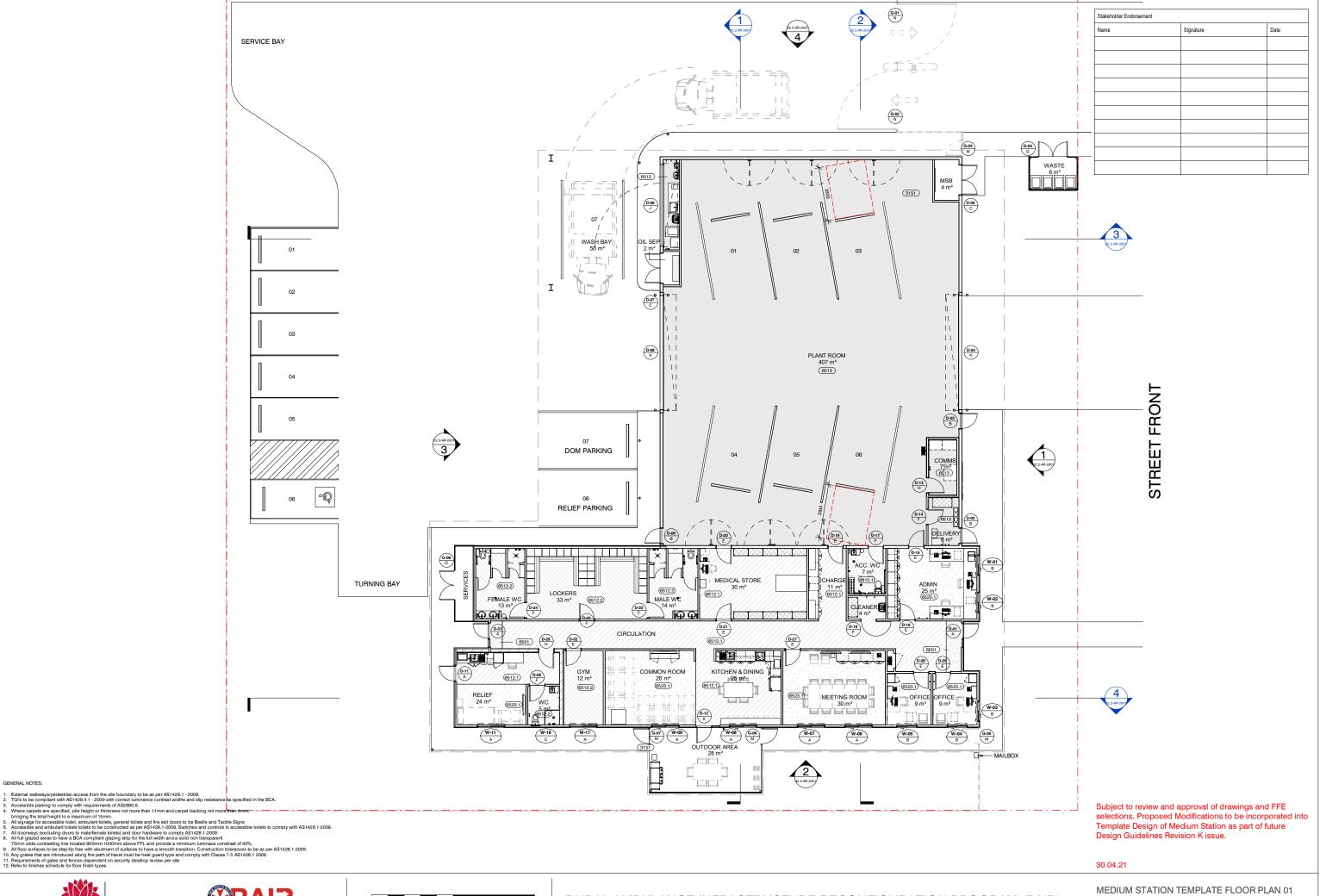
Ambulance Stati	on			
1	X	3 staff	Admin	To suit required number of staff
1	x	30 m <sup>2</sup>	Combined Medical Equipment Store	As per RAIR Staff Ratio Appendix
1	x	> 7m <sup>2</sup>	Comms Cupboard	To suit NSWA ITC Reqs
1	x	4m <sup>2</sup>	Cleaner's Sink / Store	
1	x	9m²	Office	
1	x	12m <sup>2</sup>	DOM Office	Shared Office
		-	Circulation	
			Amenities	
1	х	8 staff	Common Room	To suit required number of staff
1	x	10 staff	Meals	To suit required number of staff
1	x	7 m <sup>2</sup>	Accessible WC with shower	
1	x	14 m <sup>2</sup>	Male WC	
1	x	incl	Male Shower	
1	x	incl	Male Change	
1	x	14 m <sup>2</sup>	Female WC	
1	x	incl	Female Shower	
1	x	incl	Female Change	
1	x	30 lockers	Locker Room	To suit required number of lockers
1	x	11 m <sup>2</sup>	Charge	
1	x	12m2	Gym	
Bolt On Module:				
1 Relief Quarters	Х	30m <sup>2</sup>	Multi-purpose Classroom	
2	X	13m <sup>2</sup>	Rest Pods	
Associated Exte		131112	Nest Fous	
1	x	28m²	Outdoor Area	Adjacent to common room
1		7m <sup>2</sup>	Services	Confirm if Bolton Modules require
	X			this to be larger
1	x	6m <sup>2</sup>	Waste	Confirm if Bolton Modules require this to be larger
/ehicle Plant Ro	om			this to be larger
1	х	Variable	Plant Room	Drive through configuration to suit
1		8m²	Delivery	SEV
1	X	4m <sup>2</sup>	Main Switchboard	
1	X	2m <sup>2</sup>	Oil Separator	
1	X	50m2	Wash Bay	Internal Wash Bay
arking Allocation	x on Covered	OOTIL	Wash Bay	internal Wash Bay
1	X		Relief Bay	2.7x5.4m Large Car Park
1	x		DOM Bay	2.7x5.4m Large Car Park TBC
Parking Allocation		red		
1	х		Accessible Parking Bay + Circulation	Standard Car Parking Bay size: 5.4x2.4m
6	x		Parking Bays – Ambulance Station	Standard Car Parking Bay size:



# 7.2 Architectural PUG Drawings



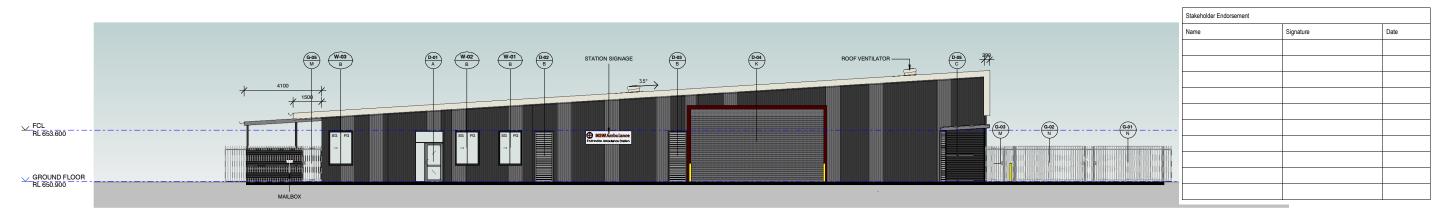




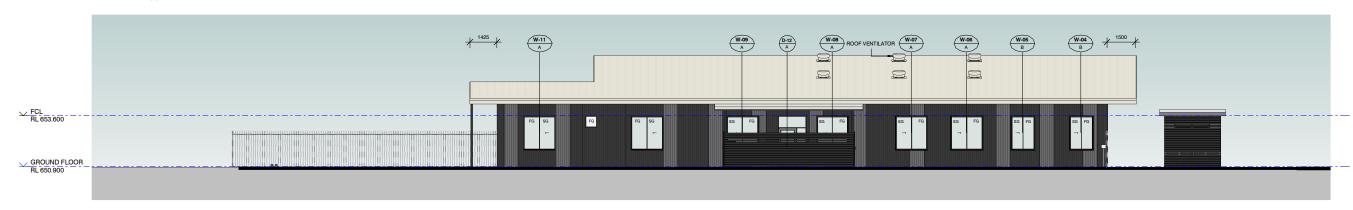








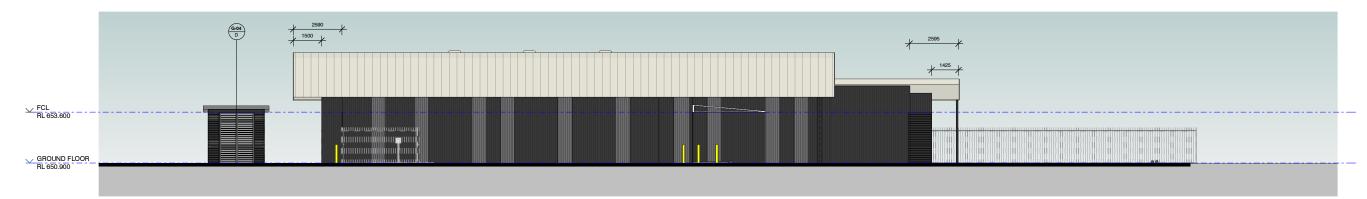
① ELEVATION 01



② ELEVATION 02 1:100



3 ELEVATION 03



4 ELEVATION 04

OFNEDAL NOTES

Requirements of gates and fences dependent on security desktop review per site

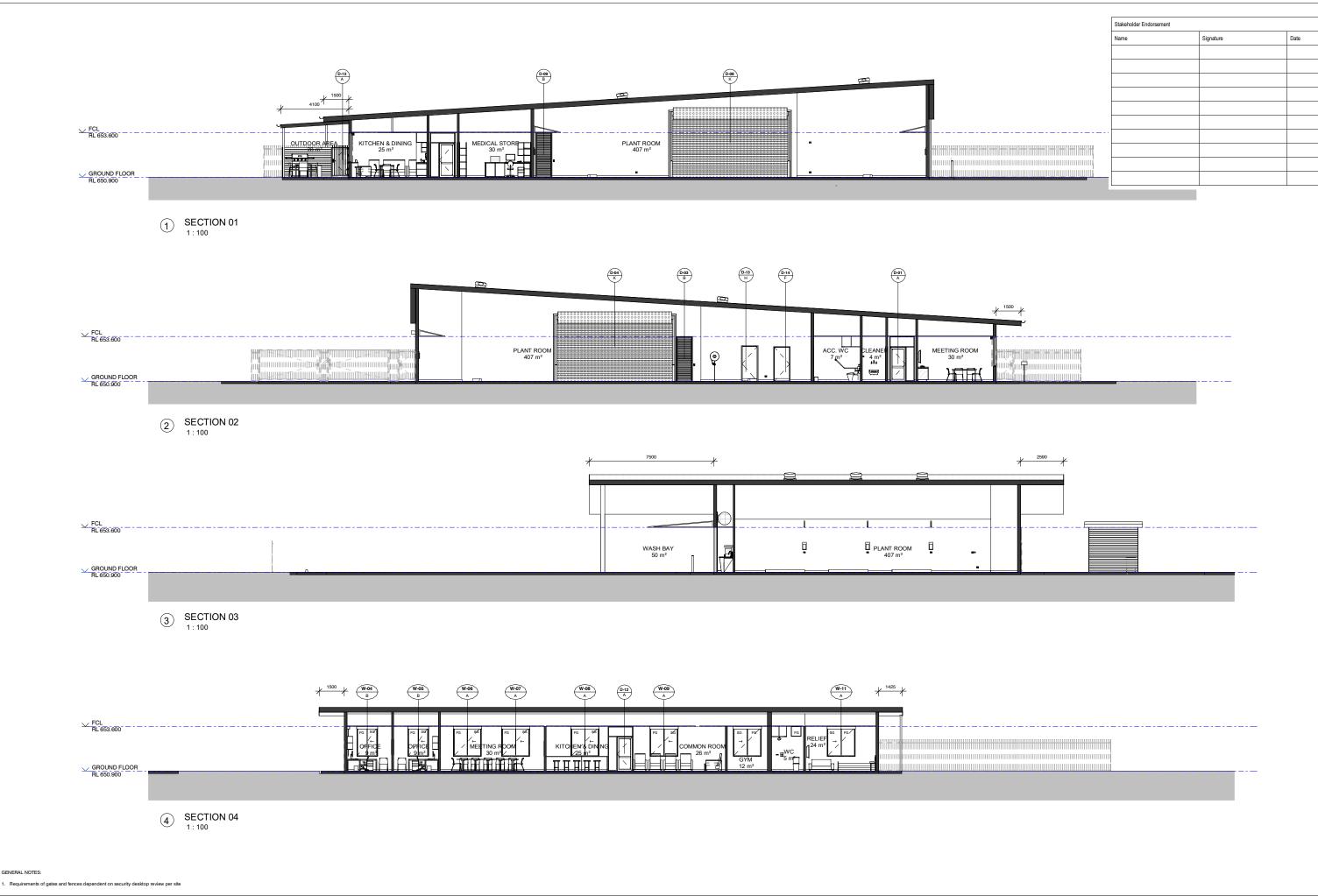






MEDIUM STATION TEMPLATE ELEVATIONS

PROJECT No SCALE DRAWING No 19 408-02.1 AT A1: 1:100 02.2-AR-2001



NSW GOVERNMENT Infrastructure





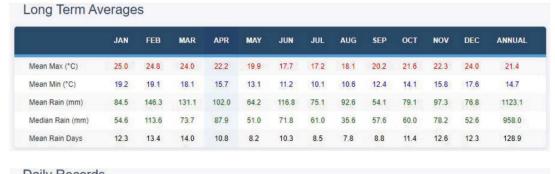
# 7.3 Architectural Drawings



# RAIR - RURAL AMBULANCE INFRUSTRUCTURE RECONFIGURATION PROGRAM



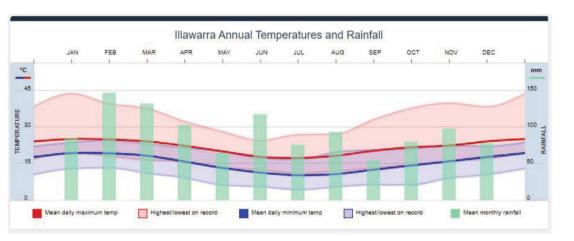
# FAIRY MEADOW CLIMATE



Daily Record	us												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	ANNUAL
High Max (°C)	43.7	39.5	37.6	32.2	28.0	24.4	26.8	27.1	33.0	37.7	39.8	38.3	43.7
Low Max (°C)	19.4	18.0	16.3	15.6	13.0	12.4	10.8	11.7	13.0	14.3	15.9	16.8	10.8
High Min (°C)	23.6	24.5	23.0	21.4	20.1	17.1	16.6	19.6	20.6	21.0	22.4	22.0	24.5
Low Min (°C)	12.8	13.1	10.9	9.0	6.0	5.4	4.1	5.3	6.2	6.1	8.9	10.3	4.1

Monthly Records

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	ANNUAL
High Max (°C)	26.9	27.5	25.8	24.0	21.6	19.1	19.0	20.8	22.4	23.9	24.4	26.4	22.1
Low Max (°C)	23.4	23.3	22.4	20.0	18.5	16.5	16.1	16.3	18.0	19.3	20.1	20.8	20.7
High Mean (°C)	20.5	20.4	19.3	17.3	14.7	12.4	11.5	12.8	14.0	16.4	17.3	18.7	15.3
Low Mean (°C)	17.0	17.7	16.7	13.9	11.9	9.9	9.1	8.8	11.0	12.6	14.0	15.8	14.1
High Rain (mm)	241.0	399.6	368.6	304.6	188.0	436.6	223.0	682.0	180.6	219.4	253.6	159.6	1657.0
Low Rain (mm)	16.8	6.4	21.8	4.4	4.0	18.0	1.6	2.4	0.4	6.2	9.8	6.2	744.8

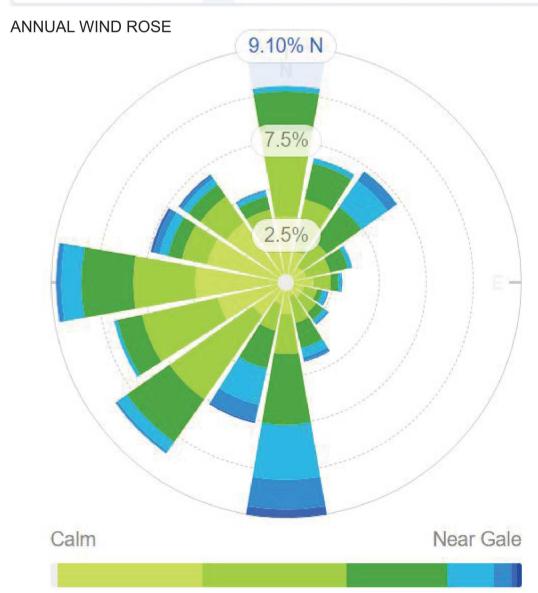


Average Number of Days with Temperatures

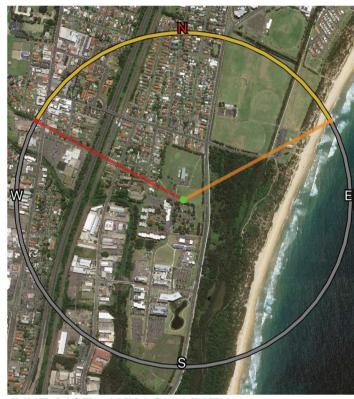
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	ANNUAL
≥ 40.0°C	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
≥ 35.0°C	0.5	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.3	2.0
≥ 30.0°C	2.1	1.1	8.0	0.4	0.0	0.0	0.0	0.0	0.6	1.8	1.4	2.1	10.0
≤ 2.0°C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
≤ 0.0°C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Per Week Values (14th/86th Percentile)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	ANNUAL
High Max (°C)	27.0	27.0	26.0	24.8	22.0	20.0	19.0	20.8	24.0	25.5	25.0	27.1	25.2
Low Max (°C)	22.0	22.0	21.0	19.3	17.1	15.6	15.0	15.0	16.5	17.5	18.5	21.0	17.0
High Min (°C)	21.0	21.1	20.1	18.0	15.5	13.5	12.0	12.7	15.4	16.6	18.0	19.9	19.0
Low Min (°C)	16.7	17.0	15.8	13.1	10.8	8.9	8.0	8.0	9.9	11.0	13.0	15.1	10.0







JUNE 21ST - 12PM SUN PATH

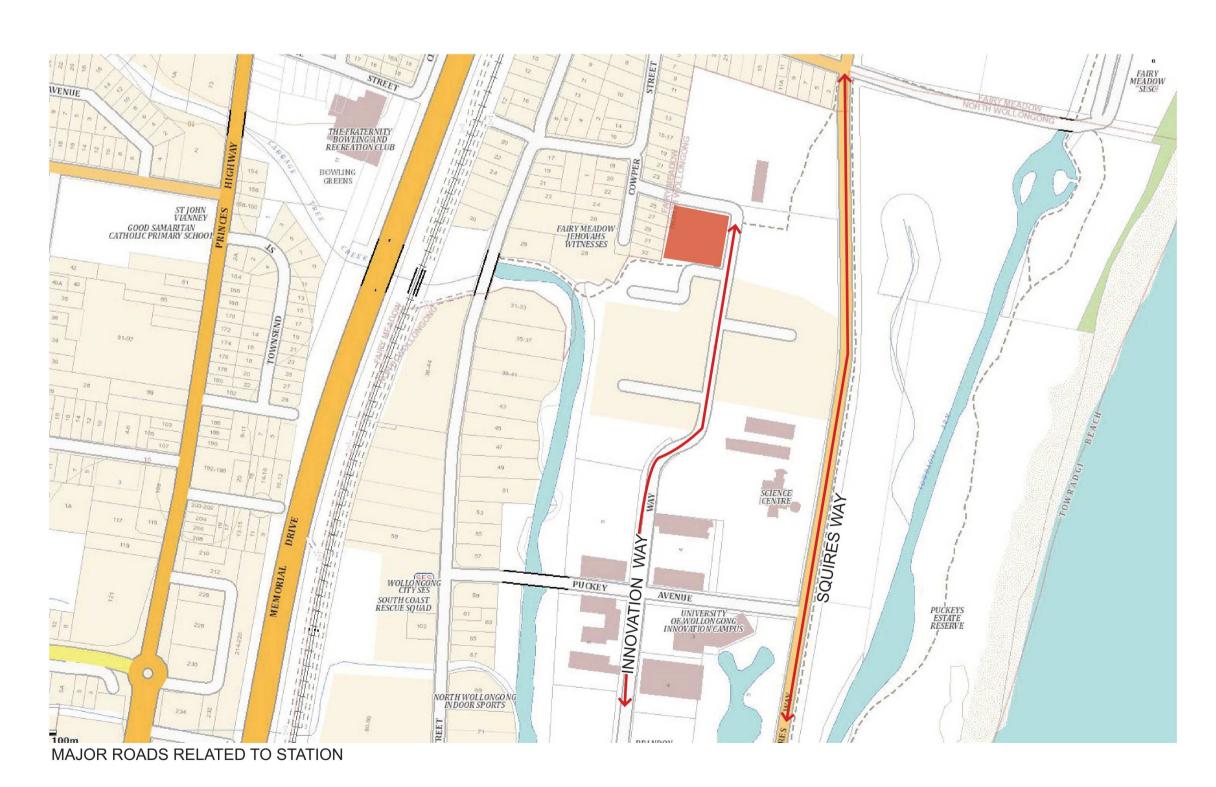


SEPTEMBER 23RD - 12PM SUN PATH



DECEMBER 21ST - 12PM SUN PATH







VIEW 1 - INNOVATION WAY



VIEW 2 - INNOVATION WAY



VIEW 3 - COWPER ST



VIEW 4 - INNOVATION WAY

DATE PRINTED: 05/08/2022 17:08:31

SCALE AT A1 T +612 9319 2955 ABN: 48 942 921 969 Nominated Architects: Andrew Hipwell 6562 Daniel Beekwilder 6192

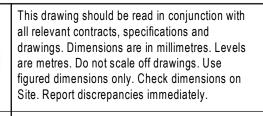
63 Myrtle Street Chippendale NSW 2008 Sydney Australia

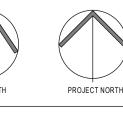
DRAWING No REVISION R23- AR-0100

ISSUE	DATE	SUBJECT	AUTHORISED	SECUTATOR
Α	17.06.22	BASE ARCHITECTURE SET	MR	
В	01.07.22	REF ISSUE	MR	AMBUT STORY
С	29.07.22	FOR COORDINATION	MR	Rural Ambulanc
D	05.08.22	TENDER	MR	Building the I
				SERVICES
				23/101 MILLER ST

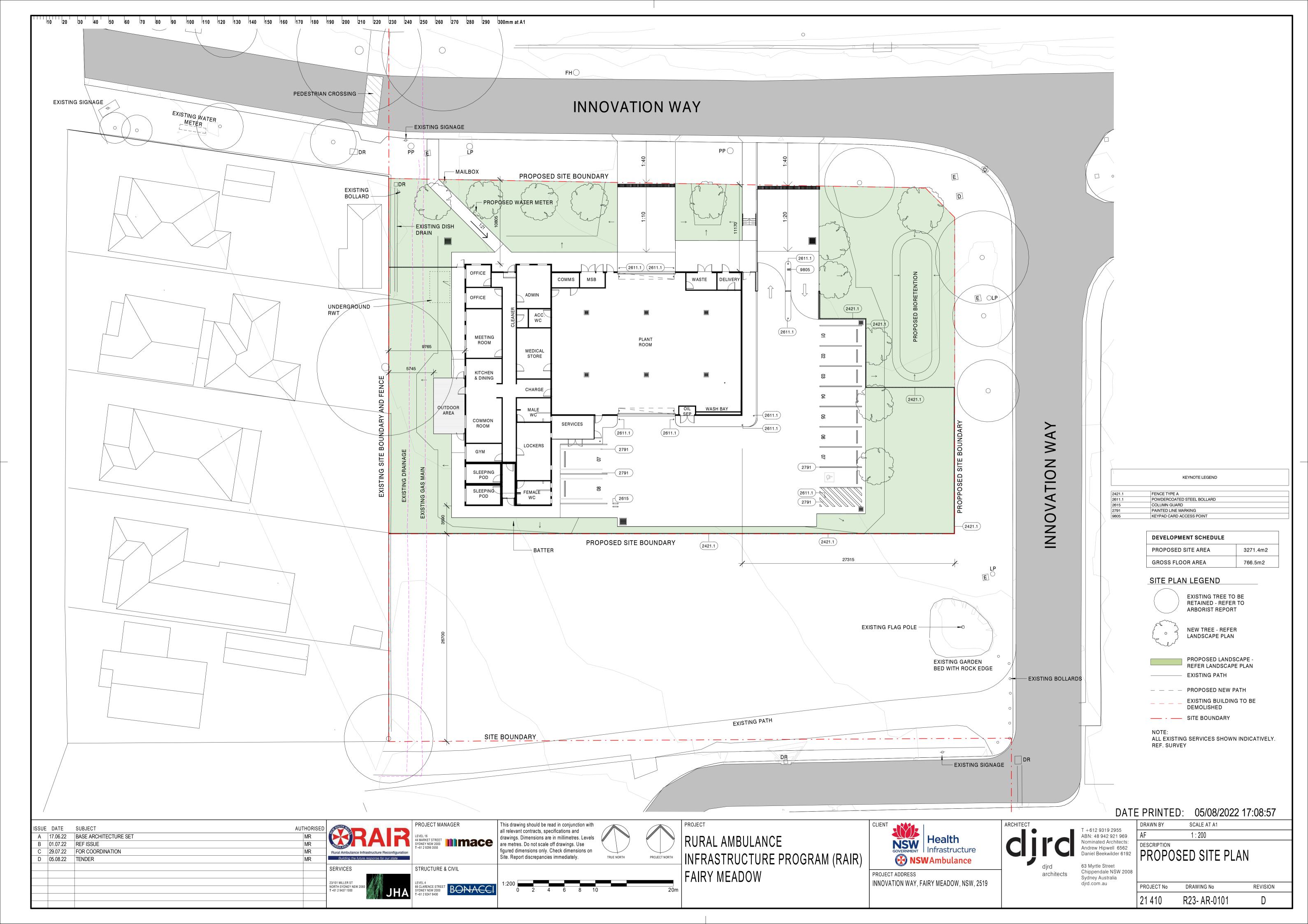


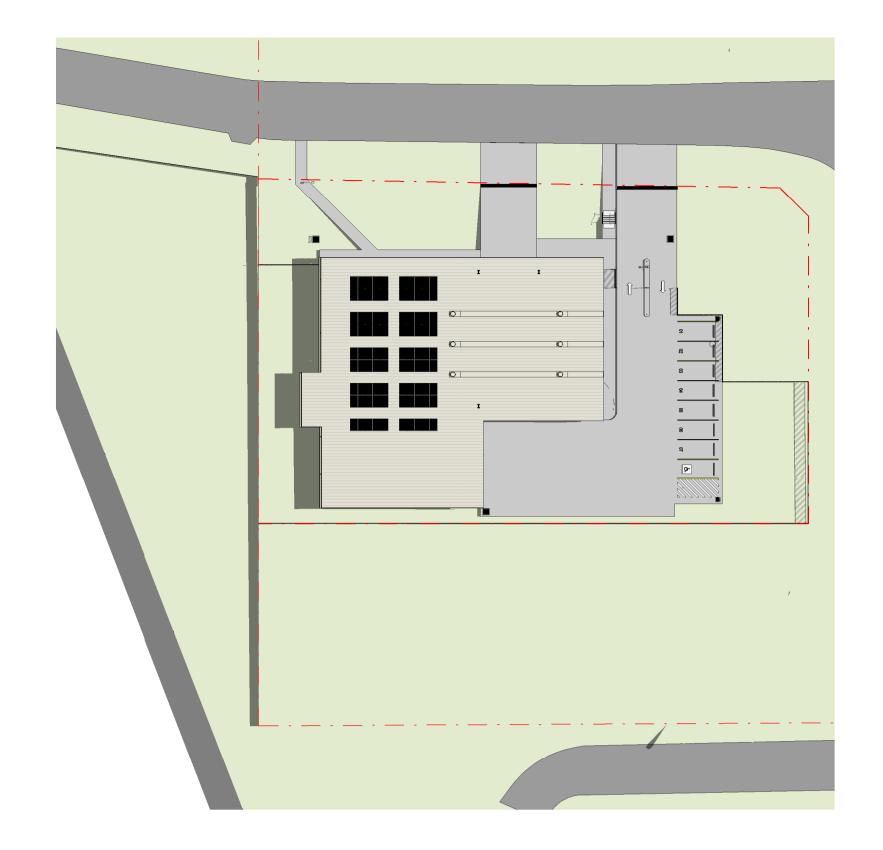
STRUCTURE & CIVIL

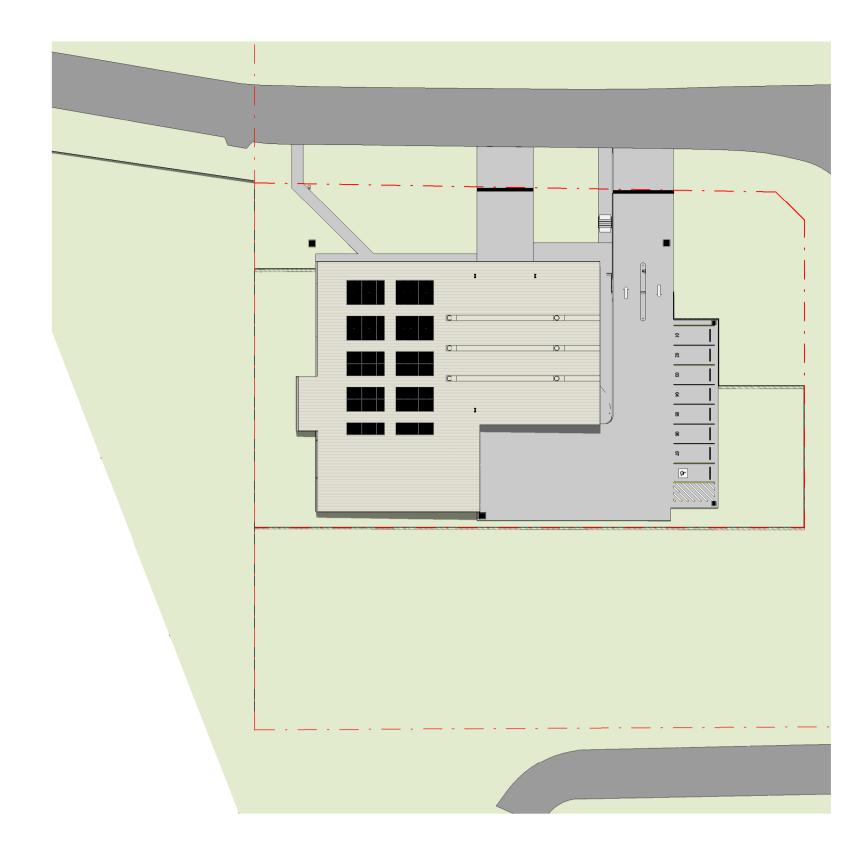


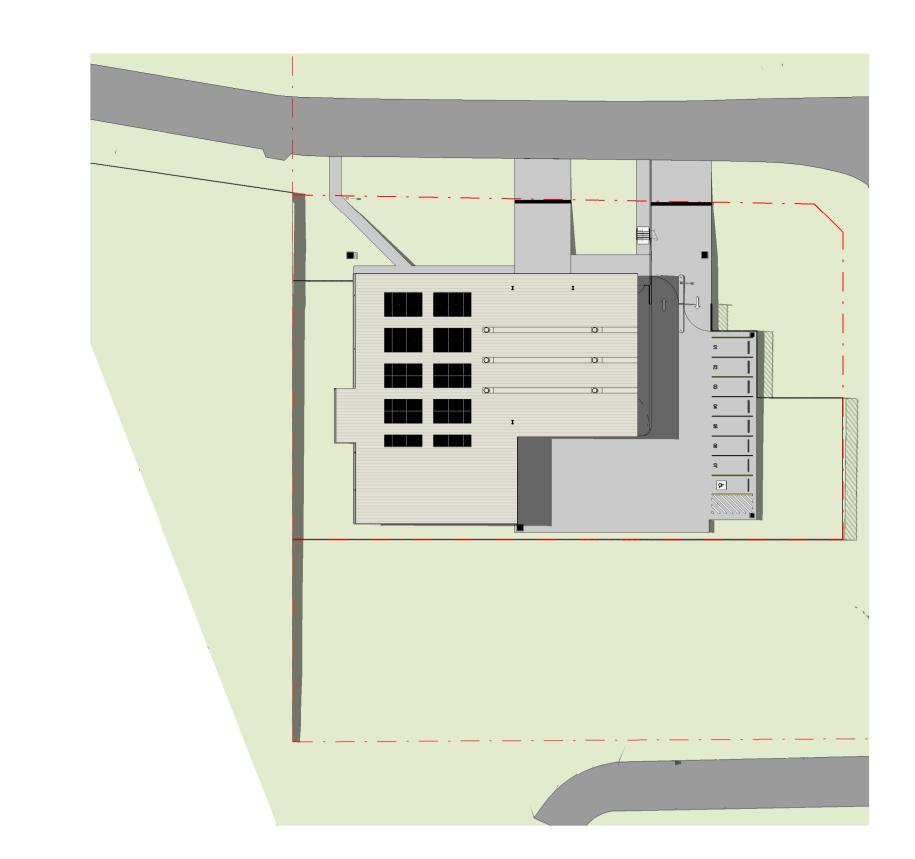


RURAL AMBULANCE INFRASTRUCTURE PROGRAM (RAIR) FAIRY MEADOW



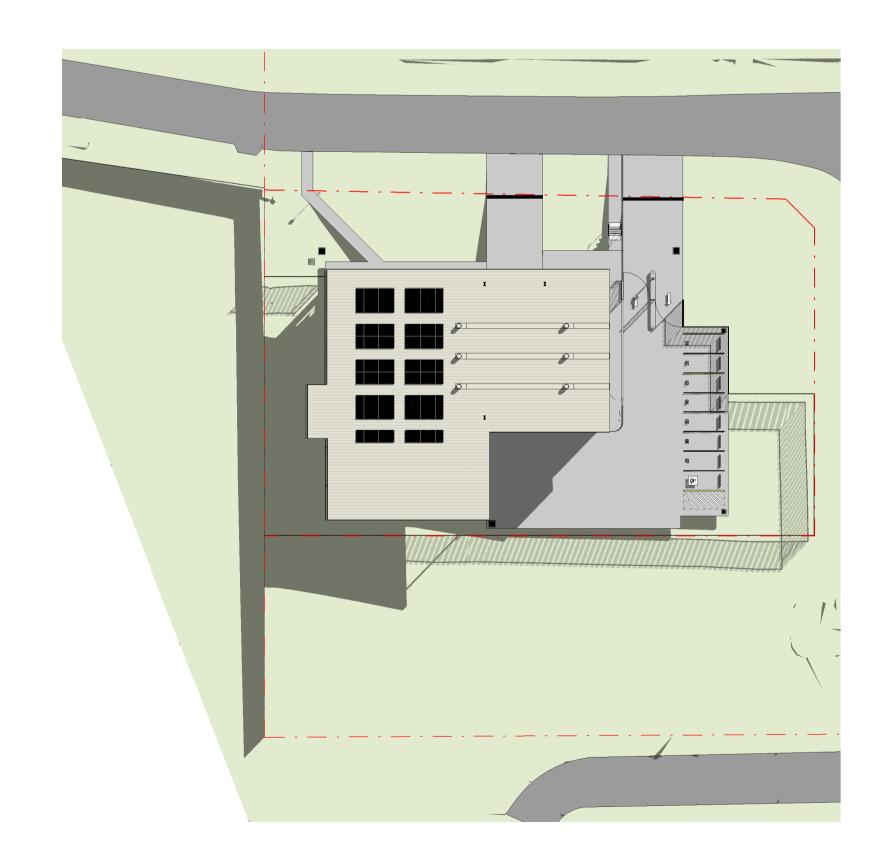


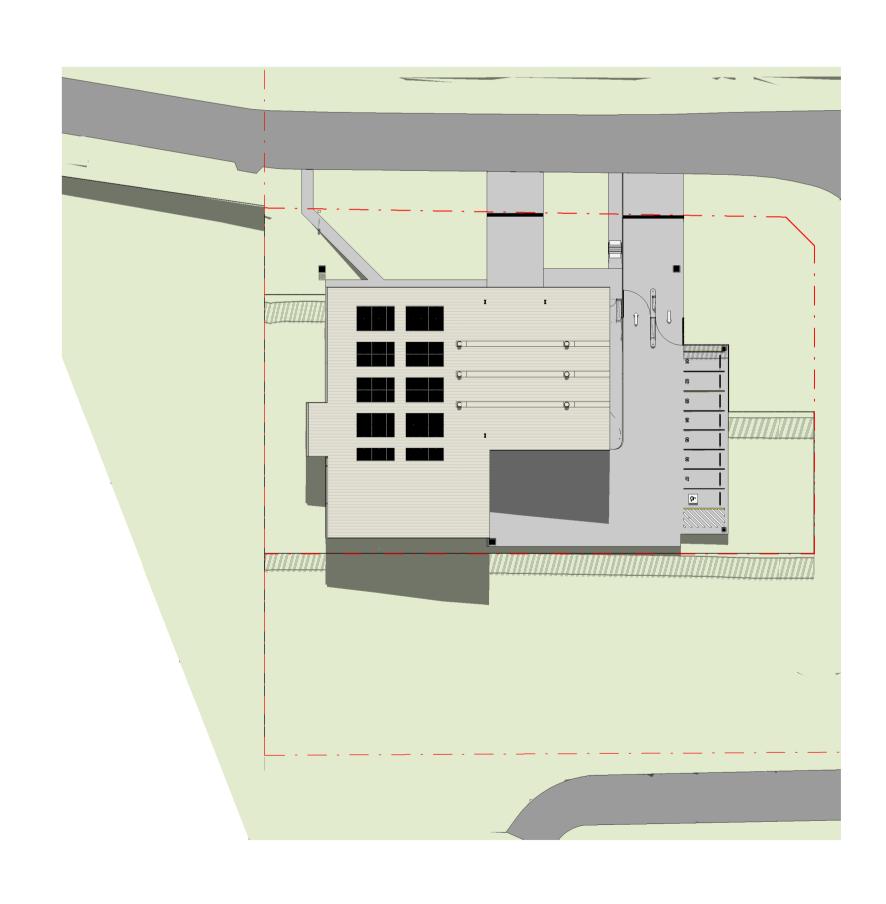


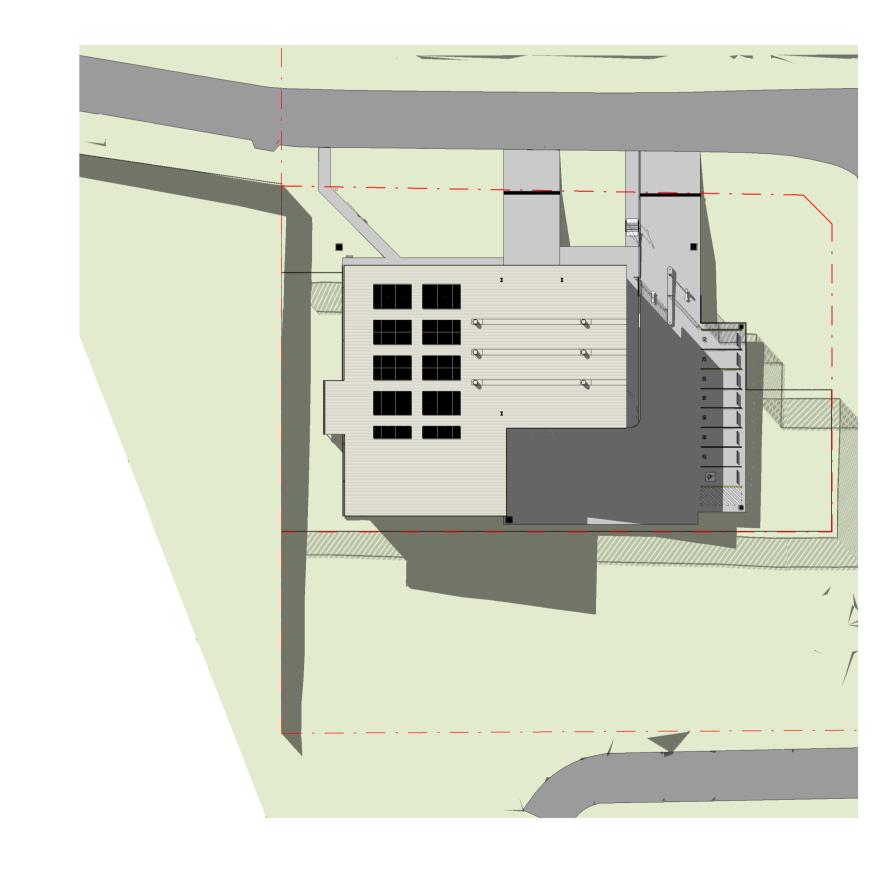












5 12PM WINTER SOLSTICE

6 3PM WINTER SOLSTICE
1:500

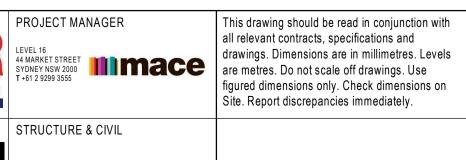
ISSUE	DATE	SUBJECT	AUTHORISED	SECONTH DAY
Α	17.06.22	BASE ARCHITECTURE SET	MR	
В	01.07.22	REF ISSUE	MR	AMBUT SCE
С	29.07.22	FOR COORDINATION	MR	Rural Ambulance
D	05.08.22	TENDER	MR	Building the fu
				SERVICES
				23/101 MILLER ST
				NORTH SYDNEY NSW : T +61 2 9437 1000

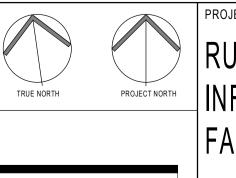
9AM SUMMER SOLSTICE
1:500

9AM WINTER SOLSTICE
1:500

RISED		_
}		
	AND AND STATE OF THE PARTY OF T	
}	Rural Ambulance Infrastructure Reconfiguration	
!	Building the future response for our state	
	SERVICES	
	2/4/11/1	
	02/404 MILLED OT	







RURAL AMBULANCE INFRASTRUCTURE PROGRAM (RAIR) FAIRY MEADOW

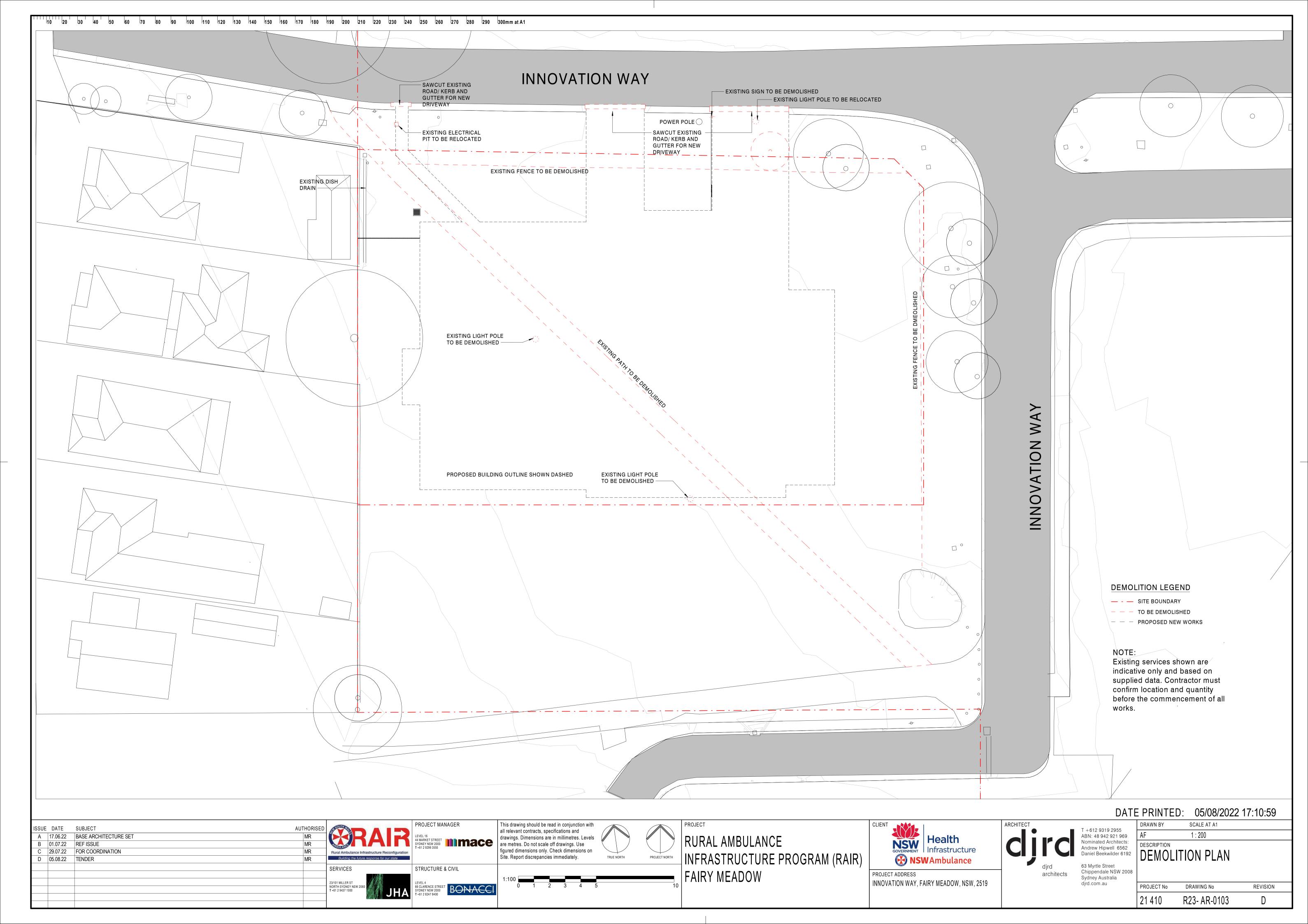


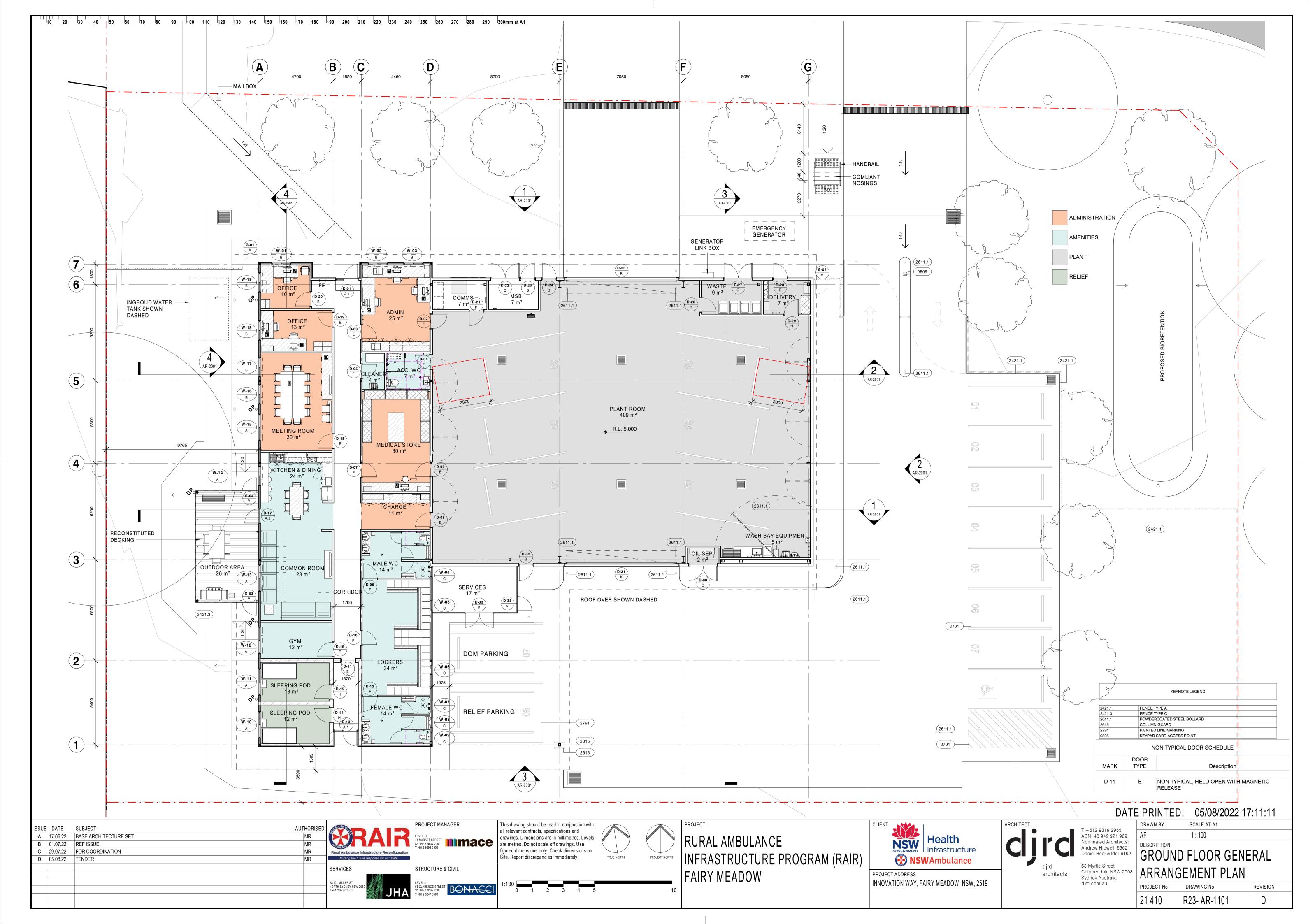


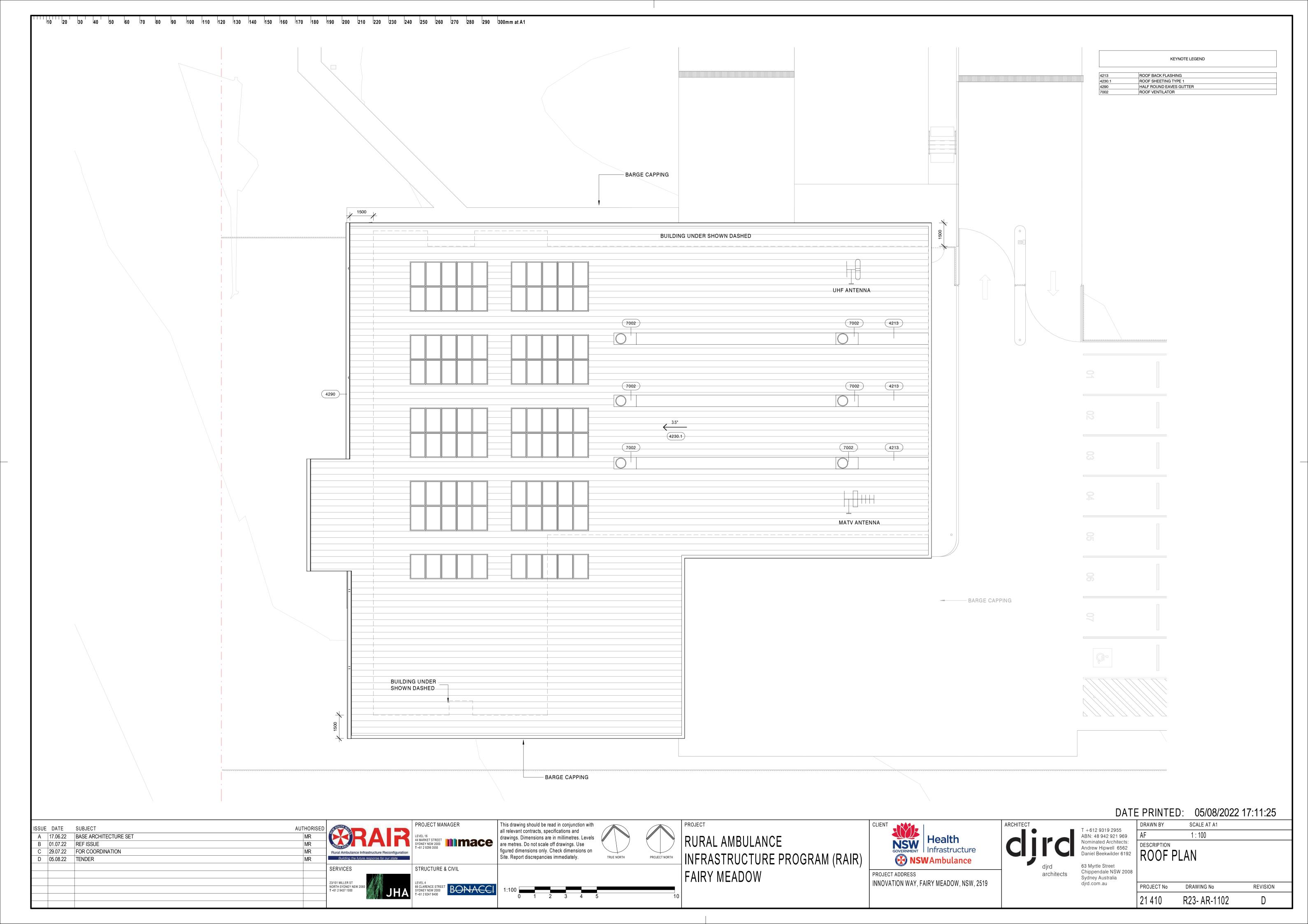
DATE PRINTED: 05/08/2022 17:10:38 DRAWN BY SCALE AT A1 T +612 9319 2955 ABN: 48 942 921 969 Nominated Architects: Andrew Hipwell 6562 Daniel Beekwilder 6192

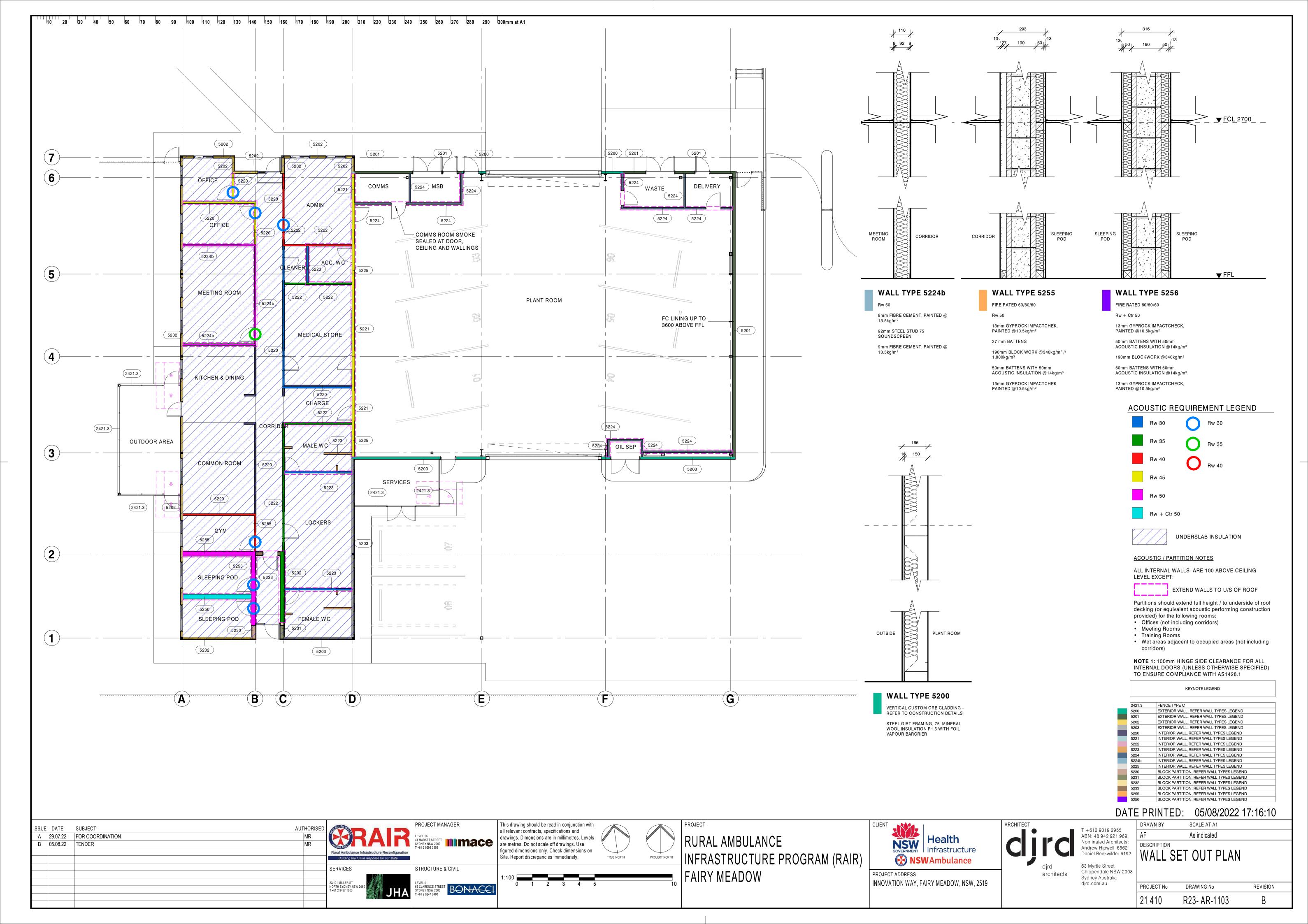
63 Myrtle Street Chippendale NSW 2008 Sydney Australia djrd.com.au

	AF	1 : 500	
2	SHADO	W DIAGRAMS	
8			
	PROJECT No	DRAWING No	REVISION
	21 410	R23- AR-0102	D

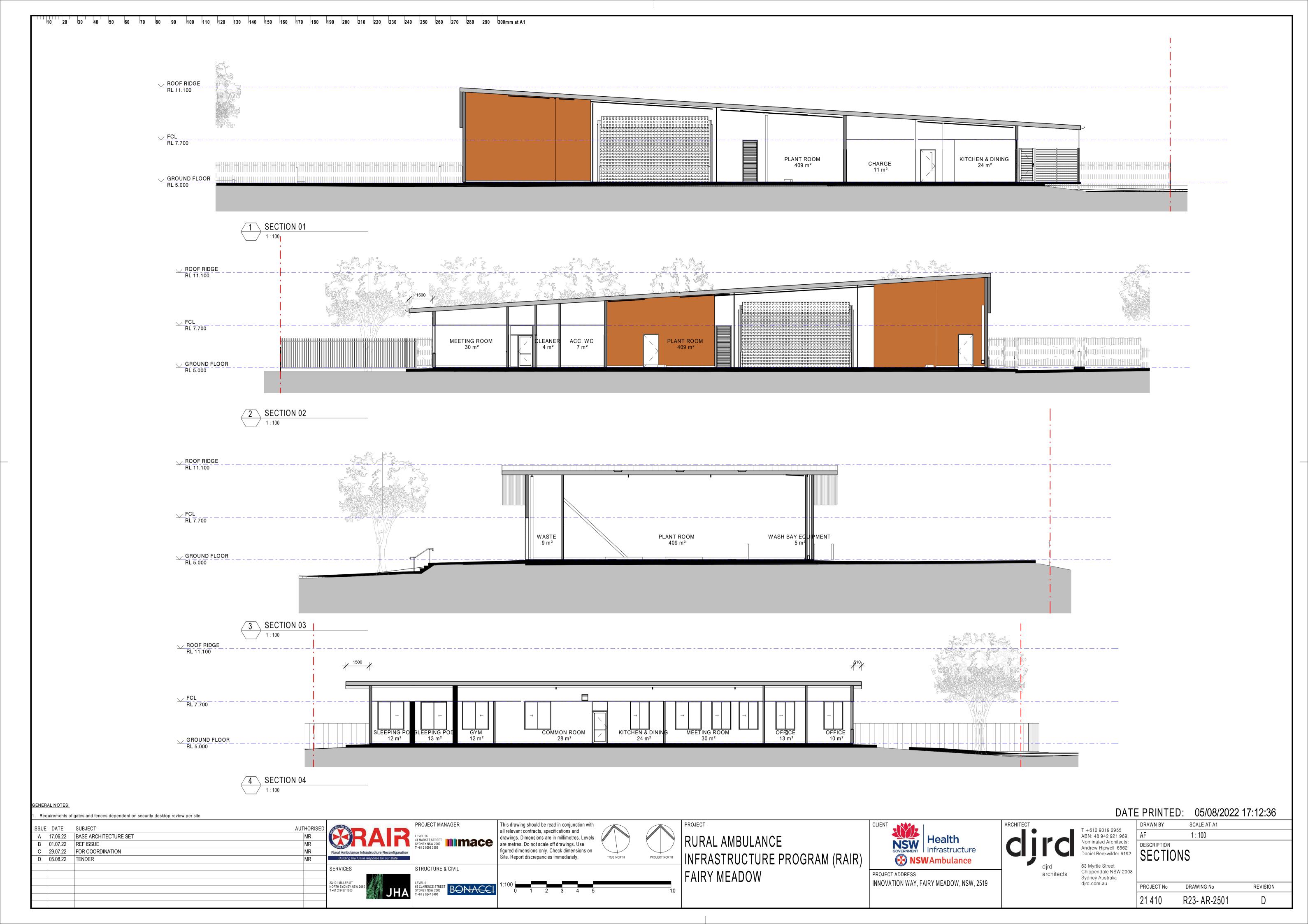




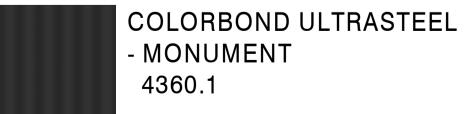














COLORBOND ULTRASTEEL - WOODLAND GREY 4360.2



LYSAGHT ROOF SHEETING - SURFMIST 4230.1



FEATURE TRIM DULUX PAINT FINISH TO MATCH COLORBOND - MANOR RED 6701.5

ISSUE DATE SUBJECT A 01.07.22 REF ISSUE B 29.07.22 FOR COORDINATION C 05.08.22 TENDER

SERVICES

STRUCTURE & CIVIL

This drawing should be read in conjunction with all relevant contracts, specifications and drawings. Dimensions are in millimetres. Levels are metres. Do not scale off drawings. Use figured dimensions only. Check dimensions on Site. Report discrepancies immediately.

PROJECT

RURAL AMBULANCE INFRASTRUCTURE PROGRAM (RAIR) FAIRY MEADOW



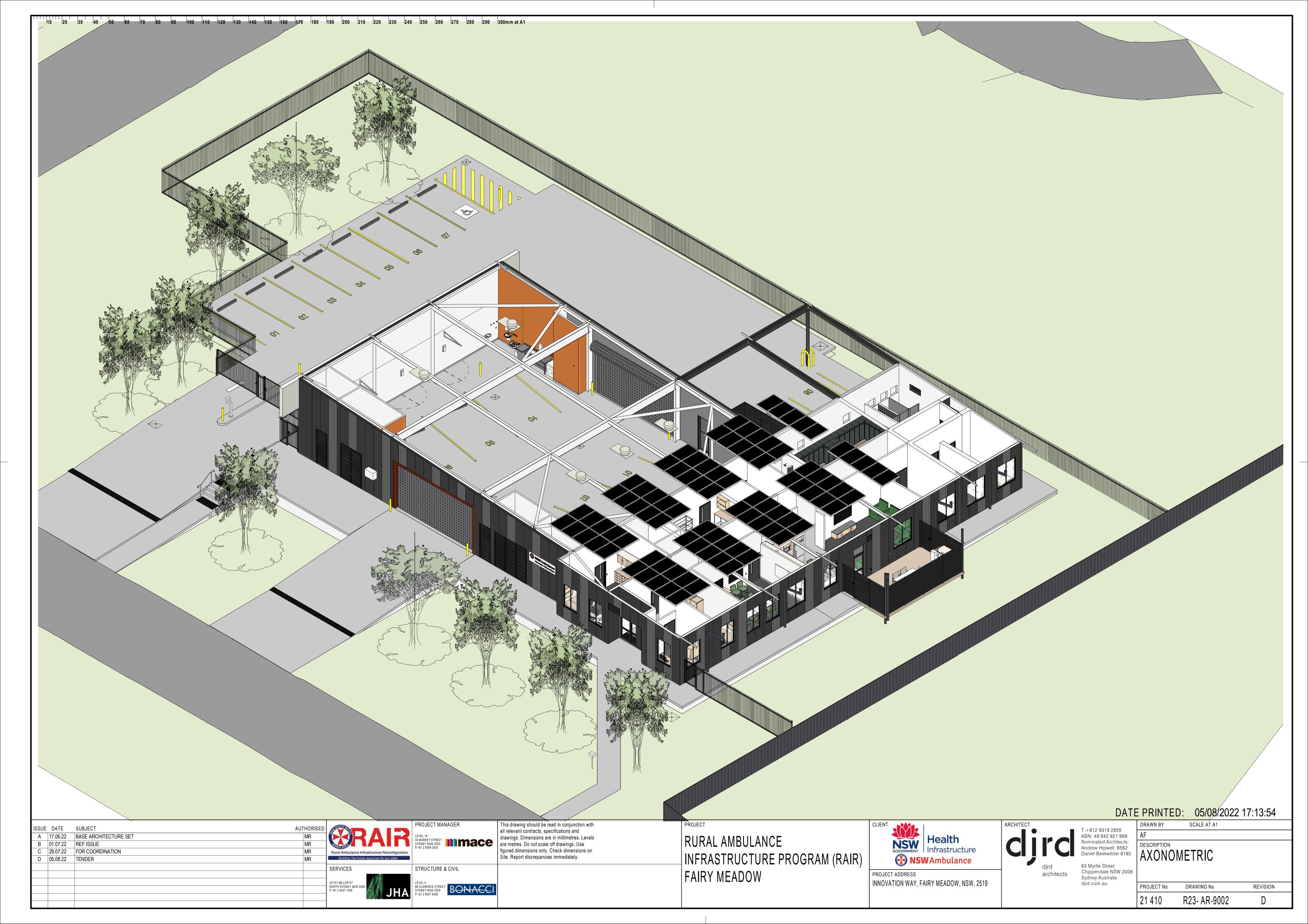
PROJECT ADDRESS INNOVATION WAY, FAIRY MEADOW, NSW, 2519



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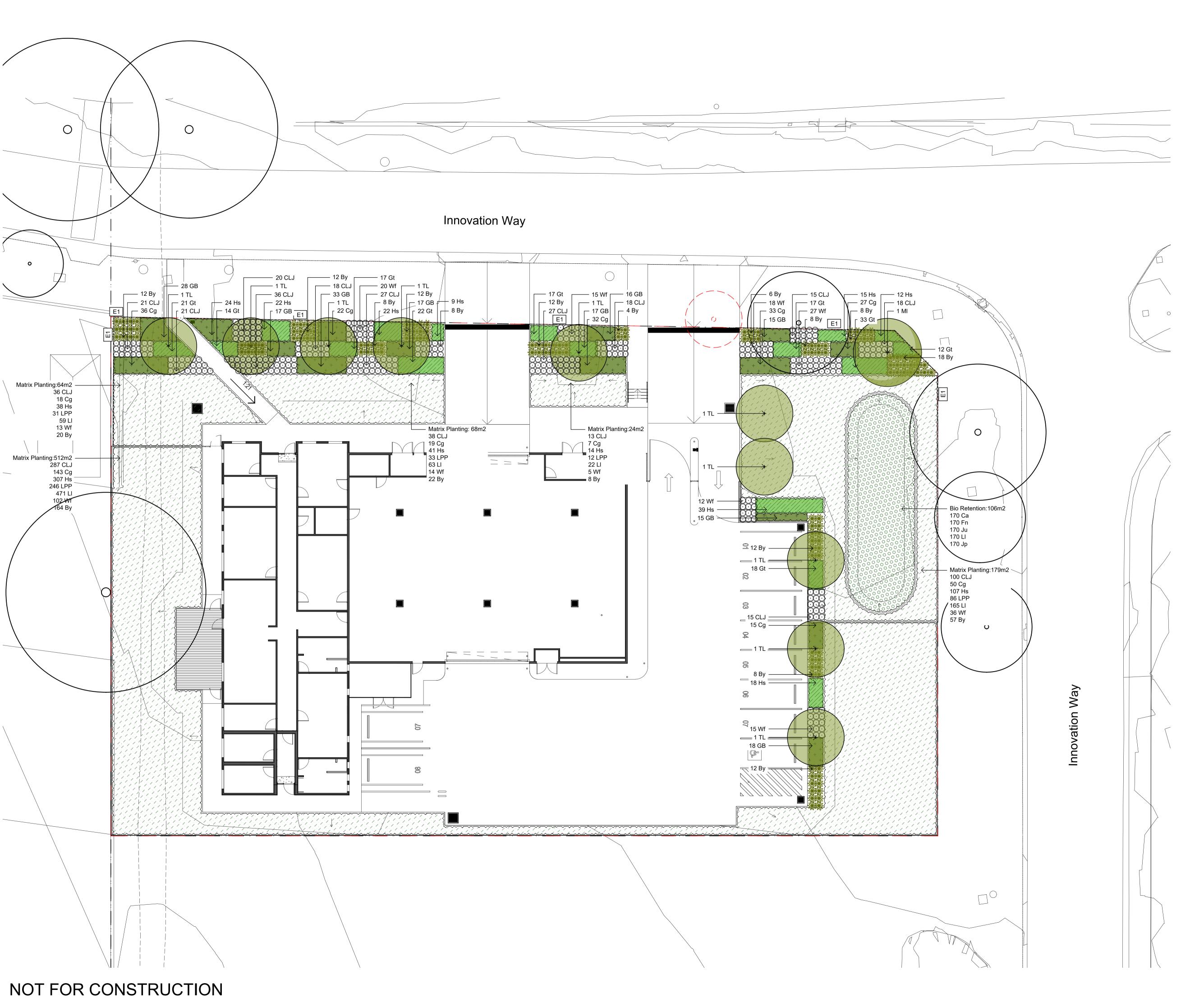
63 Myrtle Street Chippendale NS Sydney Australia djrd.com.au

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2955 921 969	AF		
rchitects: ell 6562 ilder 6192	DESCRIPTION RENDER	3	
et NSW 2008 alia			
	PROJECT No	DRAWING No	REVISION
	21 410	R23- AR-9001	С



# 7.4 Landscape Architecture Drawings





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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Architectural Coordination Architectural Coordination

B Architectural Coordination A Preliminary Issue Revision Description

LW NM 01.08.2022 RG NM 29.06.2022 LW NM 10.05.2022 LW NM 04.05.2022 Drawn Check Date

LW NM 05.08.2022

Legend

Boundary

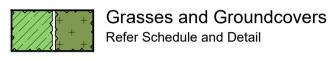
Tree to be Retained



Tree to Removed



☐ Proposed Tree Refer Schedule and Detail



Refer Schedule and Detail



Refer Schedule and Detail

Shrubs and Accents



Planting Matrix (Refer Schedule and Detail)

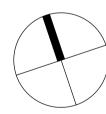


Bio-retention Basin (Refer Schedule and Detail)



Garden Edging (Steel edge refer Schedule and

Key Plan





RAIR Fairy Meadow R23 Innovation Way, Fairy Meadow, NSW 2519

Level 1, 3-5 Baptist Street Redfern NSW 2016

Tel: (61 2) 8332 5600 Fax: (61 2) 9698 2877 www.siteimage.com.au

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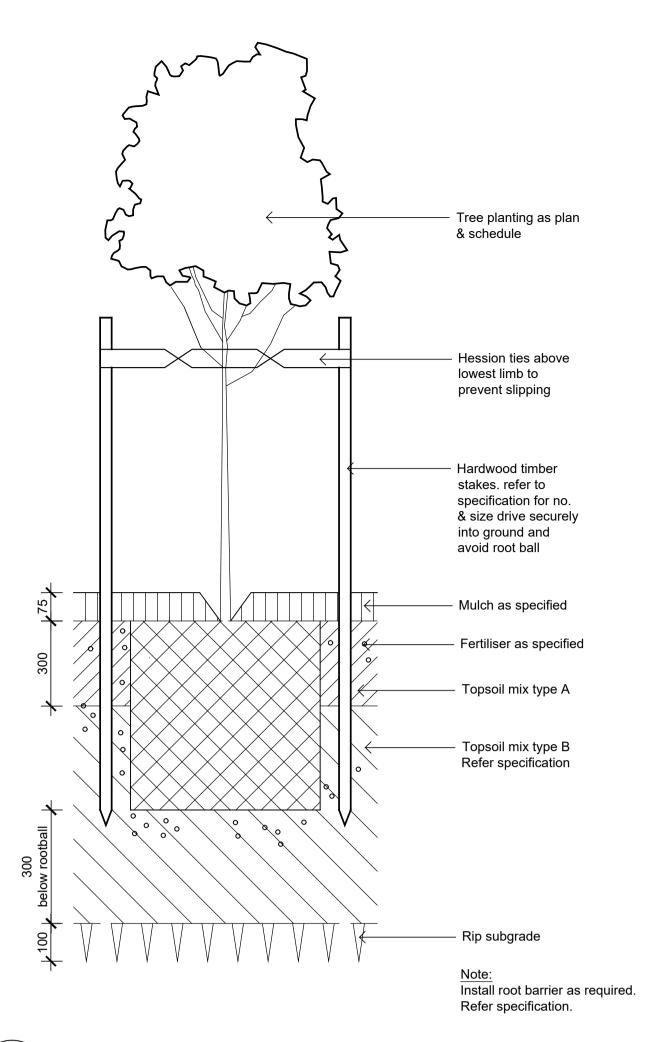
101 E

SITE IMAGE

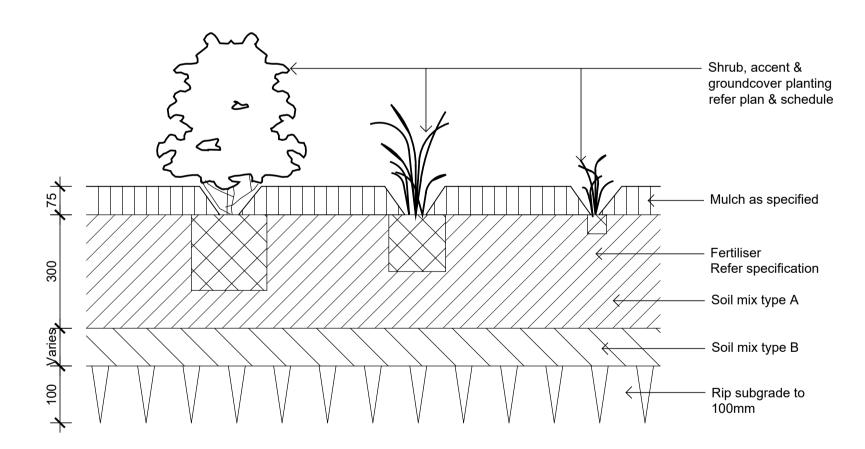
Tender

Landscape Plan

SS22-4937

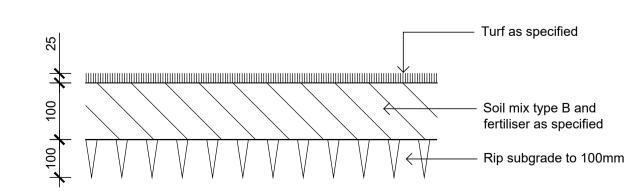


01 Detail 75-200L Tree Planting on Grade
501 1:10

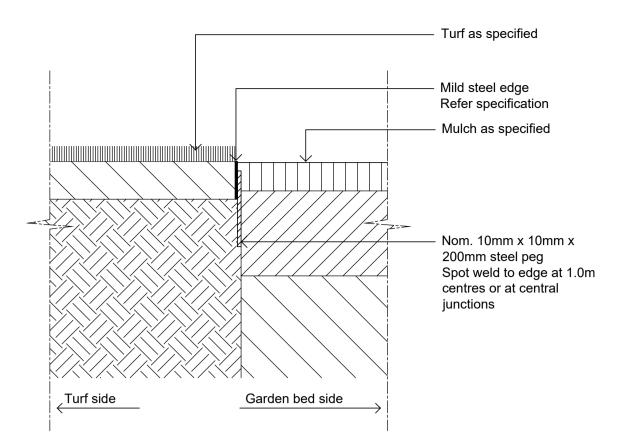


Detail Shrub Accent & Groundcover Planting on Grade

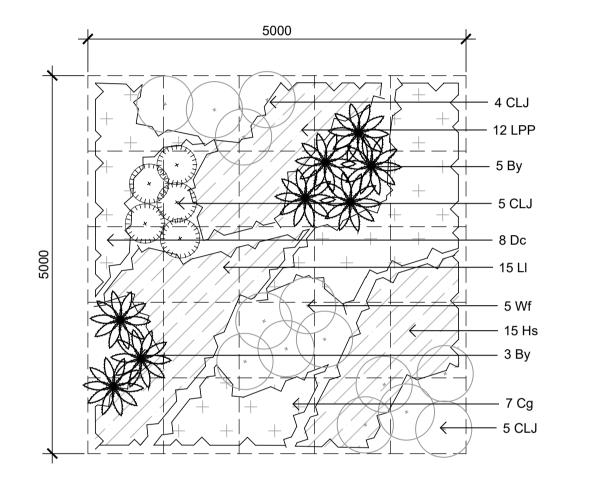
501 1:10



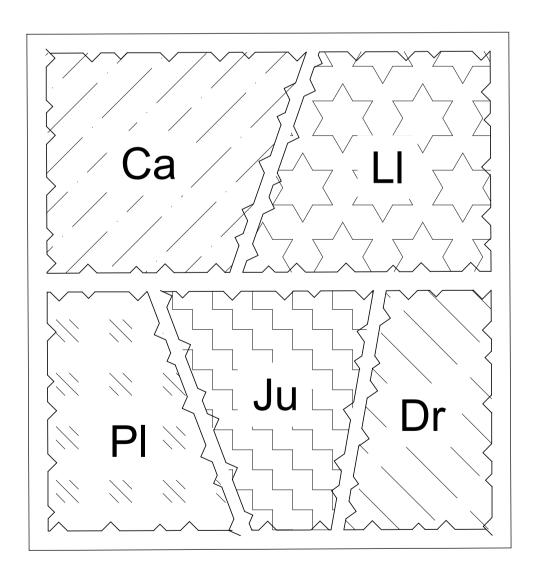
Detail Turf on Even Grade
501 1:10



04 Mild Steel Edge (E1) 501 / 1:10



05 Planting Matrix
501 1:50



Bio-Retention Basin Mix Planting 06 Bio 501 1:30

# PLANT SCHEDULE

Symbol	Botanical Name	Common Name	Mature Height (m.)	Mature Spread (m.)	Spacings	Pot Size	Quantity
	Trees						
MI	Melaleuca linariifolia	Flax-leaved Paperbark	10	8	As Shown	200L	1
TL	Tristaniopsois Laurina 'Luscious'	Water Gum	8	4	As Shown	200L	10
	Shrubs And Accents						
CLJ	Callistemon 'Little John'	Little John Callistemon	1.5	1	As Shown	300mm	238
Wf	Westringia fruticosa	Coastal Rosemary	2	2	As Shown	300mm	107
Ву	Beschorneria yuccoides	Mexican Lily	1	1	As Shown	300mm	140
	Groundcovers / Grasses						
Cg	Carpobrotus glaucescens	Pig Face	0.15	1	5/m2	150mm	165
GB	Grevillea 'Bronze Rambler'	Grevillea	0.14	0.2	5/m2	150mm	159
Gt	Gazania tomentosa	Silver leaf Gazania	0.15	1	5/m2	150mm	157
Hs	Hibbertia scandens	Trailing Guidea Flower	0.2	1	5/m2	150mm	161
	Matrix Planting	Total Area	847				
					/25sqm		
CLJ	Callistemon 'Little John'	Little John Callistemon	1.5	1	14	150mm	474
Cg	Carpobrotus glaucescens	Pig Face	0.15	1	7	150mm	237
Hs	Hibbertia scandens	Trailing Guidea Flower	0.2	1	15	150mm	508
LPP	Loropetalum 'Purple Pixie'	Chinese fringe	0.3	1.2	12	150mm	407
LI	Lomandra longifolia	Matt Rush	0.5	0.5	23	150mm	779
Wf	Westringia fruticosa	Coastal Rosemary	2	2	5	150mm	169
Ву	Beschorneria yuccoides	Mexican Lily	1	1	8	300mm	271
	Bioretention Basin Mix Planting	Total Area			106		
Са	Carex appressa	Tall Sedge	1	1	8/m2	150mm	170
Fn	Ficinia nodosa	Club Rush	1	1	8/m2	150mm	170
Ju	Juncus usitatus	Common Rush	1.2	1.5	8/m2	150mm	170
LI	Lomandra longifolia	Mat-rush	1	0.8	8/m2	150mm	170
Jp	Juncus prismatocarpus	Branching Rush	0.6	0.3	8/m2	150mm	170

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

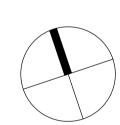
LW NM 05.08.2022 D Architectural Coordination LW NM 01.08.2022 B Architectural Coordination RG NM 29.06.2022 A Preliminary LW NM 04.05.2022

Drawn Check Date

Legend

Issue Revision Description

Key Plan



**NSW** Ambulance

RAIR Fairy Meadow R23 Innovation Way, Fairy Meadow, NSW 2519

Level 1, 3-5 Baptist Street Redfern NSW 2016

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Tender

**Drawing Name** 

Landscape Details

Scale As Shown

Job Number

501 D

NOT FOR CONSTRUCTION

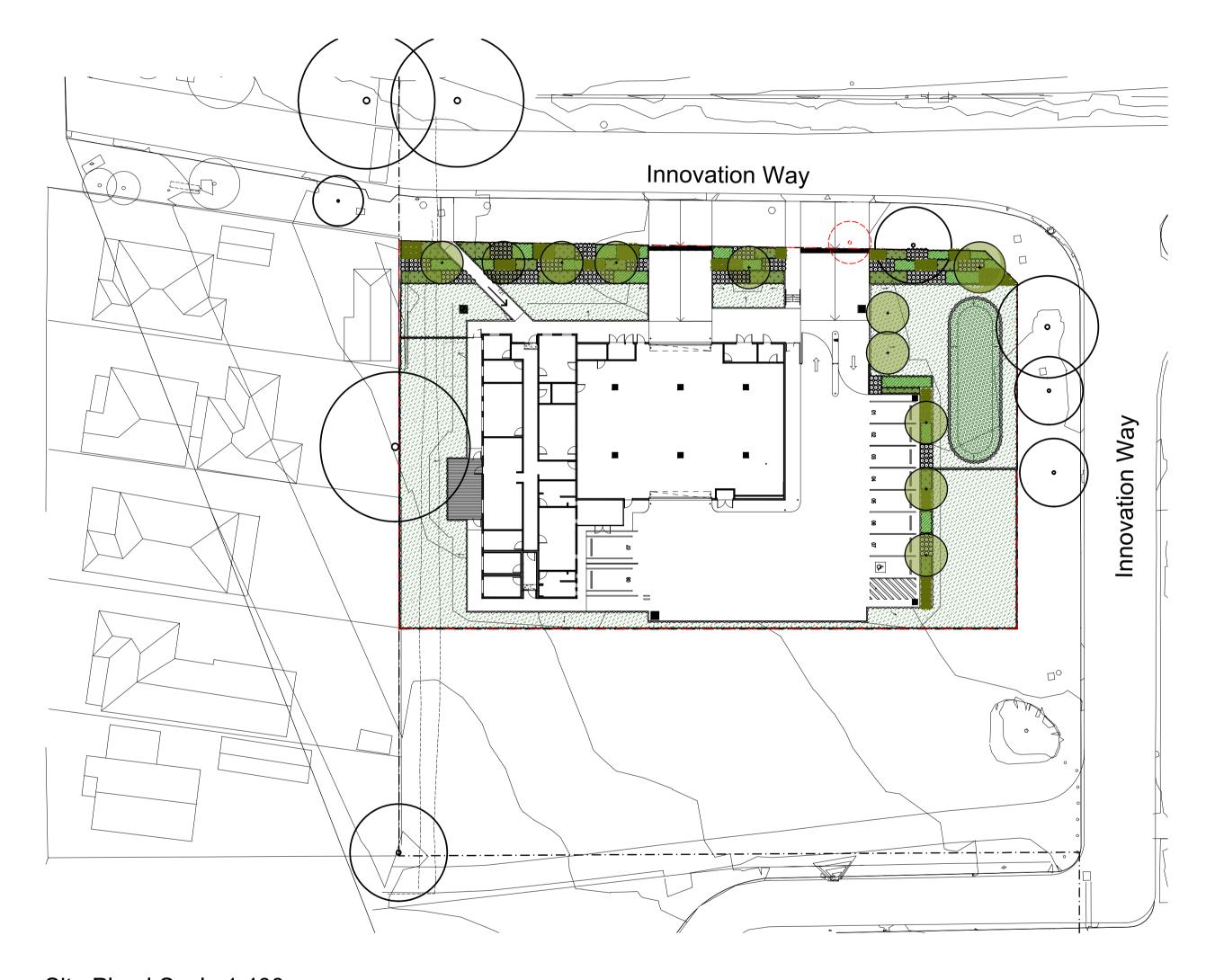
SS22-4937

# RAIR Fairy Meadow R23

Innovation Way, Fairy Meadow, NSW, 2519 Tender

# Drawing Schedule

Drawing Number	Drawing Title	Scale
000	Landscape Coversheet	As Shown
101	Landscape Plan	1:150
501	Landscape Details	As Shown



Site Plan | Scale 1:400

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

 E
 Architectural Coordination
 LW
 NM
 05.08.2022

 D
 Tender
 LW
 NM
 01.08.2022

 C
 Architectural Coordination
 RG
 NM
 29.06.2022

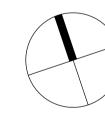
 B
 Architectural Coordination
 LW
 NM
 10.05.2022

 A
 Preliminary
 LW
 NM
 04.05.2022

 Issue
 Revision Description
 Drawn
 Check
 Date

Legend

Key Plan





NS INS

RAIR Fairy Meadow R23 Innovation Way, Fairy Meadow, NSW 2519

Level 1, 3-5 Baptist Street Redfern NSW 2016 Australia

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Tender

Drawing Name

Landscape Coversheet

Scale As Shown

Drawing Number

per Issue

SS22-4937

Job Number

NOT FOR CONSTRUCTION

## 7.5 BCA Report







# **BCA Assessment Report**

Innovation Way, Fairy Meadow



Project: Innovation Way, Fairy Meadow

**Reference No:** 113737:10a-BCA-r2

**Date:** 1 July 2022

Client: DJRD Architects

Email: DBeekwilder@djrd.com.au

BCA Logic Contact: Jarryd Beckman

**Direct:** (02) 8484 4094

Email: jbeckman@bcalogic.com.au

#### **Document Control**

Revision	Date	Description	
113737:10a-BCA-r1	11 May 2022	REF Stage BCA Assessment Report	
113737:10a-BCA-r2	1 July 2022	Updated to Reflect Innovation	on Way Site Address
		Prepared by	Verified by
		Jarryd Beckman	Matthew Kemp
		Accredited Certifier	Accredited Certifier
		Grade A1, No. BDC 3126	Grade A1, No. BDC 0208
		Building Regulations Consultant	Senior Building Regulations Consultant
			M. May



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#### 1 BASIS OF ASSESSMENT

#### 1.1. Location and Description

The building development, the subject of this report, is located at Innovation Way, Fairy Meadow. The proposed development comprises the construction of a new single storey Ambulance station which will include an enclosed plant room used for ambulance parking, external public parking, amenities, general office / communal areas and two sleeping pods.

The main pedestrian and vehicular access into the building is from the northern boundary which adjoins the new proposed road.

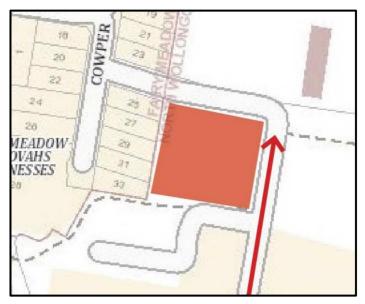


Photo sourced from DJRD Architectural Plans

#### 1.2. Purpose

The purpose of this report is to assess the current design proposal against the Deemed-to-Satisfy Provisions of BCA 2019 Volume One Amendment 1, and to clearly outline those areas (if any) where compliance is not achieved, where areas may warrant redesign to achieve strict BCA compliance or where areas may be able to be assessed against the relevant performance criteria of BCA 2019.

#### 1.3. Building Code of Australia

This report is based on the Deemed-to-Satisfy Provisions of the National Construction Code Series Volume One – Building Code of Australia, 2019 Edition (BCA) Amendment 1 incorporating the State variations where applicable. Please note that the version of the BCA applicable to new building works is the version applicable at the time of the lodgement of the Construction Certificate (CC) application to the Accredited Certifying Authority. The BCA is updated generally on a three-yearly cycle, starting from the 1st of May 2016.



#### 1.4. Limitations

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

- (a) the structural adequacy or design of the building;
- (b) the inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and
- (c) the design basis and/or operating capabilities of any proposed electrical, mechanical or hydraulic fire protection services.

This report does not include, or imply compliance with:

- 1. the National Construction Code Plumbing Code of Australia Volume 3;
- 2. the Disability Discrimination Act 1992;
- The deemed-to-satisfy provisions of Part D3 and Clause F2.4 of the BCA (Refer to separate Access Report)
- 4. Demolition Standards not referred to by the BCA;
- 5. Work Health and Safety Act 2011;
- 6. Requirements of Australian Standards unless specifically referred to;
- 7. Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like; and

#### 1.5. Design Documentation

This report has been based on the Design plans and Specifications listed in Annexure A of this Report.



#### 2 BUILDING DESCRIPTION

For the purposes of the Building Code of Australia (BCA) the development may be described as follows.

#### 2.1. Rise in Storeys (Clause C1.2)

The building has a rise in storeys of one (1).

#### 2.2. Classification (Clause A6.0)

The building has been classified as follows.

Table 1. Building Classification

Class	Level	Description
3	Ground	Sleeping pods (Sole occupancy unit)
5	Ground	Offices, amenities, meeting and communal ancillary areas
7a	Ground	Plant room used for the parking of the ambulances

Note: The Sleeping pods have been classified as a Class 3 part, on the basis that the rooms will be a common place of transient living for a number of unrelated occupants i.e. ambulance operational staff.

#### 2.3. Effective Height (Clause A1.0)

The building is single storey and therefore the effective height is not applicable.

#### 2.4. Type of Construction Required (Table C1.1)

The building is required to be of Type C Construction.

#### 2.5. Floor Area and Volume Limitations (Table C2.2)

The building does not exceed the maximum floor area and volume limits of:-

Class 5	Maximum Floor Area	3 000m <sup>2</sup>
	Maximum Volume	18 000m <sup>3</sup>
Class 7a	Maximum Floor Area	2 000m <sup>2</sup>
	Maximum Volume	12 000m <sup>3</sup>

Note: There are no maximum floor area or volume limitations for Class 3 parts as these classifications are required to have fire rated bounding construction under Specification C1.1.

#### 2.6. Fire Compartments

The building is a single fire compartment.



#### **2.7.** Exits

The following points in the building have been considered as the exits:

- (a) The entrance door which is located adjacent to the admin.
- (b) The rear door located adjacent to the Female WC.
- (c) The two egress doors from the Plant room.

#### 2.8. Location of Fire-source features

The fire source features for the subject development are:

North: The far side of Innovation Way.

South: The common site boundary.

East: The far side of Innovation Way.

West: The common site boundary.



#### 3 BCA ASSESSMENT

#### 3.1. General

An assessment of the Architectural design documentation against the Deemed-to Satisfy Provisions of the Building Code of Australia, 2019 (BCA) has been undertaken. It is important to note that only those items which are considered to be critical to the compliance of the proposed works have been discussed below. Any parts of the BCA2019 which have not been discussed are considered to be satisfied to an appropriate level and would readily be able to achieve compliance at Construction Certificate (CC) stage or are not applicable to the proposed development.

#### 3.2. Dimensions and Tolerances

The BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. BCA Logic's assessment of the plans and specifications has been undertaken to ensure the minimum dimensions have been met.

The designer and builder should ensure that the minimum dimensions are met onsite and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses and the like which can adversely impact on critical maters such as access for people with disabilities, stair and corridor widths and balustrade heights.

#### 3.3. Section C – Fire Resistance

#### Clause C1.8 - Lightweight construction

Where lightweight construction is used for the fire rated bounding walls around the class 3 sleeping pods, then the lightweight construction must comply with Clause C1.8 and Specification C1.8.

#### Clause C1.10 - Fire Hazard Properties

The fire hazard properties for the proposed internal linings throughout the building shall be further assessed at CC stage to determine compliance with Specification C1.10.

#### Clause C2.2 – Fire compartment limitations

The floor area and volume of the proposed building does not exceed the maximum limitations as specified for a Type C building with Class 3, 5 and 7a parts.

Note: It has been advised that compliant pressure and flows will be achieved from the street hydrant, therefore no fire wall is required between the plant and admin areas of the building.

#### Clause C2.8 – Separation of classifications in the same storey

The building is Type C Construction, therefore the FRL's for Class 3, 5 and 7a parts are generally the same, albeit the Class 3 sleeping pods will require FRL 60/60/60 bounding walls. Compliance is readily achievable, subject to fire compartment plans being provided at CC stage.

#### Clause C2.13 – Electrical supply systems

The building contains a main switch board, however it is assumed that the emergency equipment will have battery back-up and therefore no fire separation is required.

#### Clause C2.14 – Public corridors in Class 2 and 3 buildings

The sleeping pods discharge into a corridor which will be required to be fire separated. The corridor does not exceed a length of 40 metres.

#### <u>Clause C3.11 – Bounding construction: Class 3 buildings</u>

The building is Type C Construction, therefore the doorway from the Class 3 sleeping pods which opens onto the corridor must be protected with a self-closing, tight fitting, solid core door, not less than 35 mm thick.



#### Clause C3.15 – Openings for service installations:

Where services pass through fire rated elements, they must be protected in accordance with Specification C3.15.

#### Specification C1.1 – Fire Resisting Construction:

To satisfy the fire rating provisions of Type C Construction, the only elements required to achieve an FRL are the bounding walls of the sleeping pods and the adjacent corridor, due to all the external walls of the building being located greater than 3 metres from a fire source feature. With regards to the bounding walls and adjacent corridor, the walls must achieve an FRL of 60/60/60 and extend-

- (i) to the underside of a ceiling having a resistance to incipient spread of fire to the space above of not less than 60 minutes; or
- (ii) to the underside of the roof covering if it is non-combustible, and except for roof battens with dimensions of 75 mm x 50 mm or less or sarking material, must not be crossed by timber or other combustible building elements.

#### 3.4. Section D1 & D2 – Provision for Escape & Construction of Exits

#### Clause D1.4 - Exit travel distances:

With reference to the designated exits outlined in section 2.7 of this report and the point of open space past the exit doors, all points throughout the Class 5 and 7a parts are located within 20 metres (class 7a parts) or 30 metres (class 5 parts) of an exit, or within 20 metres of a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits does not exceed 40 metres. With regards to the travel distances from the Class 3 sleeping pods, the entry doors are located no greater than 20 metres from the rear doorway adjacent to the female WC, therefore compliance with Clause D1.4 throughout the entire building is achieved.

#### <u>Clause D1.5 – Distance between alternative exits:</u>

Where alternative exits are relied upon throughout the Class 5 and 7a parts, the distance between the alternate exits does not exceed 60 metres, nor are they located within 9 metres of each other.

#### <u>Clause D1.6 – Dimensions of exits and paths of travel to exits:</u>

The unobstructed height throughout all exits and paths of travel to exits must be no less than 2 metres, except for a doorway where a height of 1980mm is permitted. Furthermore, all egress widths must maintain a clear distance of 1 metre, except doorways are permitted to have a reduced width of 750 mm (when the doorway is deemed non-accessible).

#### Clause D1.10 – Discharge from exits:

The northern exits discharge onto a minimum 1-metre-wide pathway that provides egress to the road or open space. The egress route to the road is capable of achieving a gradient no steeper than 1:20 to avoid handrails and tactiles.

The southern exits discharge onto a minimum 1-metre-wide pathway that provides egress to a road or open space. The egress route to the road will involve the use of the carpark footpath which is capable of achieving a gradient no steeper than 1:20.

#### Clause D2.7 – Installations in exits and paths of travel:

Where there are electricity meters, distribution boards, central telecommunications distribution boards or equipment located in a required exit or along a path of travel to a required exit or corridor, then the services and/or equipment must be enclosed by non-combustible construction or a fire-protective covering with the doorways and other openings suitably smoke sealed in accordance with Clause D2.7.



#### Clause D2.15 - Thresholds:

The threshold of all doorways must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless the door opens to open space and the threshold is provided with a threshold ramp or step ramp in accordance with AS 1428.1-2009.

#### Clause D2.20 – Swinging doors:

All doorways that serve as required exits swing in the direction of egress and would comply with the provisions of this clause.

#### Clause D2.21 – Operation of latch:

All doorways that serve as a required exit or are located along a path of travel to a required exit, must be readily opened without a key from the side that faces a person seeking egress and be -

- a single hand downward action lever on a single device which is located between 900 mm and 1.1 metres from the floor and have a clearance between the handle and the back plate or door face of not less than 35 mm and not more than 45mm; or
- (ii) a single hand pushing action on a single device which is located between 900 mm and 1.2 metres from the floor surface.

#### 3.5. Section E – Services and equipment

#### Clause E1.3 – Fire Hydrants:

The building has a combined floor area great than 500m<sup>2</sup>, therefore a fire hydrant system will be required to serve the building in accordance with AS 2419.1-2005. Further details will be required at CC stage to confirm the location of the onsite fire hydrant system, keeping in mind that the hydrant must be located within sight of the main entrance and provide coverage so all parts of the building. Coverage is provided by all parts being located within 90 metres of the hydrant (20 m of hose from the hydrant to the truck (ensuring the truck remains at least 10 m away from the building), 60 m of hose from the truck with a 10 m spray issued from the end of the nozzle).

#### Clause E1.4 - Fire hose reels:

The building has a combined floor area greater than 500m², therefore fire hose reels will be required in the Class 7a plantroom only. At least one fire hose reel must be located within 4 m of a required exit and coverage must be provided throughout all parts of the building. Coverage is achieved by all parts being located within 40 m of a fire hose reel (36 m of hose with a 4 m spray). Further details to be provided at CC stage.

#### <u>Clause E1.6 – Portable fire extinguishers:</u>

The building will be required to be protected with portable fire extinguishers in accordance with Clause E1.6 and AS 2444-2001. Further details to be provided at CC stage.

#### Clause E2.2 – General requirements (smoke detection):

The building contains a Class 3 part, therefore the building requires a smoke detection system in accordance with Clause E2.2a. To satisfy the provisions of Clause E2.2a and Specification E2.2a, the building will require either of the following detection systems:

- (i) A clause 3 smoke alarm system throughout which is hardwired and powered from consumers main source and is in accordance with AS 3786 2014 and Clause 3 of Specification E2.2a; or
- (ii) A clause 4 smoke detection system throughout which has a Fire Indictor Panel (FIP) installed which alerts a building occupant warning system in accordance with Clause 7 of Specification E2.2a. The smoke detection system must be installed in accordance with Clause 4 of Specification E2.2a and AS 1670.1-2015. Note: Where a Clause 4 smoke detection is installed, then the fire rating of the main switch board will be required if the switch board sustains power to the FIP.



#### Clause E4.2 – Emergency lighting and exit sign requirements:

The building will require emergency lighting and illuminate exits and/or directional signs in accordance with BCA Clauses E4.2, E4.4, E4.5, E4.6 and E4.8 and AS 2293.1-2005.

#### 3.6. Section F – Health and Amenity

#### Clause F1.0 Deemed-to-satisfy provisions (weatherproofing)

Performance Requirement FP1.4, for the prevention of the penetration of water through external walls, must be complied with. There are no Deemed-to-Satisfy Provisions for this Performance Requirement in respect of external walls, therefore a performance solution will be required at CC stage.

#### <u>Clause F1.1 – Stormwater drainage:</u>

Stormwater drainage to comply with AS/NZS 3500.3:2018.

#### Clause F1.4 – External above ground membranes:

Waterproofing membranes for external above ground use to comply with AS 4654 Parts 1 and 2:2012.

#### Clause F1.5 - Roof coverings:

The plans show metal sheeting roofing. The metal sheet roofing must comply with AS 1562.1.

#### Clause F1.6 - Sarking:

Sarking-type materials used for weatherproofing must comply with AS/NZS 4200 Part 1 and 2:2017.

#### Clause F1.7 – Waterproofing of wet areas in buildings:

Wet areas must be constructed in accordance with AS 3740:2010 and Clause F1.7 of the BCA.

#### Clause F1.9 – Damp-proofing:

Moisture is to be prevented from reaching the walls above a damp-proof course, and the underside of the suspended floors. Where a damp-proof course is provided, it must consist of –

- (i) a material that complies with AS/NZS 2904; or
- (ii) impervious sheet material in accordance with AS 3660.1

#### Clause F1.10 – Damp-proofing of floors on the ground:

If a floor of a room is laid on the ground or on fill, 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 2870:2011.

#### Clause F1.13 - Glazed assemblies:

The following glazed assemblies in the external walls, must comply with AS 2047-2014 requirements for resistance to water penetration:

- (i) Windows
- (ii) Swinging glazed doors
- (iii) Adjustable louvres
- (iv) Window walls with one piece framing

#### Clause F1.1 Facilities in residential buildings:

The Class 3 sleeping pod will have access to the communal Male and female bathrooms which provide at least a WC, shower and wash basin.



#### Clause F2.3 – Facilities in Class 3 to 9 buildings:

The Class 5 and 7a parts have a proposed accessible sanitary compartment, as well as separate male and female bathrooms, each of which have a single ambulant WC and two wash basins. These sanitary facilities will accommodate a total of 20 females and 20 males.

#### Clause F3.1 – Height of rooms and other spaces:

The sections drawings show ceiling heights of 2.7 metres throughout which will achieve compliance with the provisions of this clause.

#### Clause F4.1 and F4.2 – Natural light:

Natural light is required to the Class 3 bedroom. The window located in the western elevation have an aggregate area greater than 10% of the floor area of the bedroom, therefore sufficient natural light is provided in accordance with Clause F4.2.

#### Clause F4.4 – Artificial lighting:

Artificial Lighting must be provided to all areas / rooms and be installed in accordance with AS/NZS 1680.0:2009.

#### Clause F4.5 – Ventilation of rooms:

All rooms must be provided with Clause F4.6 compliant natural ventilation **OR** a mechanical ventilation or air-conditioning system complying with AS 1668.2:2012. The plant room is considered to be an enclosed carpark, therefore this part of the building must be provided with mechanical ventilation complying with AS 1668.2; or a system of natural ventilation complying with Section 4 of AS 1668.4.

#### Part F5 - Sound Transmission and Insulation

The bounding walls in the Class 3 sleeping pods will require an Rw (airborne) not less than 50 between the corridor and an RW + Ctr (airborne) not less than 50 between the sleeping pods. The doorway into the sleeping pods which opens into the corridor must achieve an Rw rating no less than 30.

#### 3.7. Section J – Energy Efficiency

The separating wall between the plantroom and the conditioned spaces must comply with the building fabric provisions of J1 of the BCA2019. Where openings are constructed within the envelope of the conditioned part of the building, suitable seals shall be installed around the operable windows and external doors in accordance with the provisions of J3 of the BCA2019.



#### 4 STATEMENT OF COMPLIANCE

The architectural design documentation as referred to in this report have been assessed against the applicable provisions of the Building Code of Australia, (BCA) and it is considered that such documentation either complies or is capable of complying with the relevant provisions of the BCA, for the purposes of a REF.





## Annexure A – Design Documentation

This report has been based on the following design documentation.

Table 2. Architectural Plans

Architectural Plans Prepared by djrd architects			
Drawing Number	Revision	Date	Title
AR-0000	Α	17.06.2022	Cover Sheet
AR-0100	Α	17.06.2022	Site Analysis
AR-0101	Α	17.06.2022	Proposed Site Plan
AR-0102	Α	17.06.2022	Shadow Diagrams
AR-0103	А	17.06.2022	Demolition Plan
AR-1101	Α	17.06.2022	Ground Floor General Arrangement Plan
AR-1102	А	17.06.2022	Roof Plan
AR-2001	Α	17.06.2022	Elevations
AR-2501	А	17.06.2022	Sections
AR-9003	А	17.06.2022	Axonometric





#### **Annexure B - Essential Services**

The following fire safety measures are required to be installed in the building. The following table may be required to be updated as the design develops and options for compliance are confirmed.

Item	Essential Fire and Other Safety Measures	Standard of Performance
Fire F	Resistance (Floors – Walls – Doors – Shafts)	
1.	Fire seals protecting openings in fire resisting components of the building	BCA2019 C3.15 (Openings for service installations)  BCA2019 C3.16 (Construction joints)  BCA2019 Spec C3.15  AS1530.4:2014 & AS4072.1-2005
2.	FRL 60/60/60 fire rated bounding walls around the sleeping pods and adjacent corrdior extended to the underside of;     The ceiling system incorporating a ceiling which has a resistance to the incipient spread of a fire to the space above itself of no less than 60 minutes; or     Non-combustible roof covering	BCA2019 C1.1, Spec. C1.1 BCA2019 C1.8, Spec C1.8 BCA2019 C3.11 (Bounding Construction) BCA2019 C2.12 (Separation of Equipment) AS1530.4:2014
3.	Solid core doors  > Type 'C' Construction	BCA2019 Spec. C3.4 C3.11 (Bounding Construction)
Gene	ral	
4.	Portable fire extinguishers	BCA2019 E1.6 AS 2444–2001
Gene	ral Egress	
5.	Warning & operational signs	BCA2019 D3.6 (Braille Exit Signs) (Note: E4.5 (Exit Signs))
Elect	rical Services	
6.	Automatic fire detection & alarm:  > Clause 3 - AS 3786:2014 Smoke Alarm systems powered from consumer mains in accordance with AS 3786-2014; or  > Clause 4 - AS 1670.1:2018 system throughout the building/part connected to a Clause 7 building occupant warning system.	BCA2019 E2.2, NSW Table E2.2a, Spec E2.2a Spec E2.2a - Clause 3 (Smoke alarm system) Spec E2.2a - Clause 4 (Smoke detection system) Spec E2.2a - Clause 7 (BOWS)
7.	Emergency lighting	BCA2019 E4.2, E4.4 AS/NZS 2293.1:2018



Item	Essential Fire and Other Safety Measures	Standard of Performance		
	Exit signs	BCA2019 E4.5 (Exit Signs)		
		BCA2019 E4.6 (Direction Signs)		
8.		BCA2019 E4.8 (Design and Operation - Exits)		
		AS/NZS 2293.1:2018		
Hydra	aulic Services			
	Fire hydrant systems	BCA2019 E1.3		
	> NSW Storz Couplings	AS 2419.1:2005		
9.		FRNSW Technical Sheet D15/45534.V9 issued 10.01.19, 'Compatible Hose Connections'		
40	Hose reel systems	BCA2019 E1.4		
10.	(Class 7a Part)	AS 2441:2005		
Mech	Mechanical Services			
11.	1. Mechanical ventilation to carpark (if natural	BCA2019 E2.2, Table E2.2a		
11.	ventilation cannot be achieved)	Spec E2.2a		







# **Access Assessment Report**

Innovation Way, Fairy Meadow



Project: Innovation Way, Fairy Meadow

Reference No: 113737:10b-Access-r2

**Date:** 1 July 2022

Client: DJRD Architects

Client Contact: DBeekwilder@djrd.com.au

Email: Jarryd Beckman

BCA Logic Project: Jarryd Beckman

**Direct:** 8484 4094

Email: jbeckman@bcalogic.com.au

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113737:10b- Access-r1	11 May 2022	REF Stage Access Assessment Report		
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		Prepared by	Verified by	
		Jarryd Beckman	Matthew Kemp	
		Registered Certifier Grade A1, No. BDC 3126	Registered Certifier Grade A1, No. BDC 0208 Senior Building Regulations Consultant	
		Senior Building Regulations Consultant	Access Institute Qualified Access Consultant	
			M. May	



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#### 1 BASIS OF ASSESSMENT

#### 1.1. Location

The building development, the subject of this report, is located at Innovation Way, Fairy Meadow. The proposed development comprises the construction of a new single storey Ambulance station which will include an enclosed plant room used for ambulance parking, external public parking, amenities, general office / communal areas and two sleeping pods.

The main pedestrian and vehicular access into the building is from the northern boundary which adjoins the new proposed road.

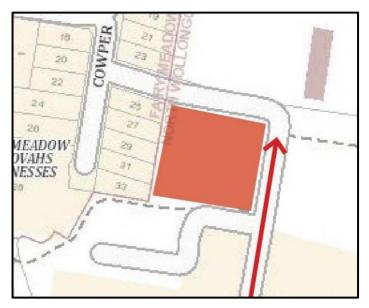


Photo sourced from djrd architectural drawings

#### 1.2. Purpose

The purpose of this report is to assess the proposed building against the documents and their relevant Deemed to Satisfy requirements. The report is intended to clearly outline those areas where compliance is not achieved and provide recommendations to achieve compliance:

- Disability Discrimination Act 1992 (DDA);
- > Disability Access to Premises Standards 2010 (Premises Standards);
- > Building Code of Australia 2019 (BCA2019) Volume 1 Amendment 1 Part D3 and F2.4; and
- > Applicable Australian Standards AS1428.1:2009, AS1428.4.1:2009 and AS2890.6:2009.

#### 1.3. Limitations

This report is limited to an assessment of the access and amenity provisions for people with a disability against the documents as outlined in 1.2 above. It is not an assessment of the proposal against all provisions of the BCA2019 and if this is required, a separate report will be necessary.

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

- > The structural adequacy or design of the building;
- > The inherent derived fire-resistance ratings of any existing or proposed structural elements of the building (unless specifically referred to); and
- > The design basis and/or operating capabilities of any existing or proposed electrical, mechanical or hydraulic fire protection services.



This report does not include, or imply compliance with:

- > The Disability Discrimination Act (it cannot be guaranteed that that a complaint under the DDA will not be made, however should the building comply with BCA2019 and the Premises Standard then those responsible for the building cannot be subject to a successful complaint);
- BCA2019 Sections B, C, E, F, G, H, I, J, Parts D1 and D2;
- > Demolition Standards not referred to by the BCA2019;
- > Work Health and Safety Act;
- > Construction Safety Act;
- Requirements of other Regulatory Authorities including, but not limited to, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like; and
- > This report does not assess the safety of the particular aspects of the building but merely the minimum standards called up by the documents outlined in Part 1.2 of this report.

#### 1.4. Federal Disability Discrimination Act (DDA)

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.

All organisations have a responsibility, under the 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 included within the subject development.

The DDA applies nationally and is complaint based. While the Disability (Access to Premises – Buildings) Standards 2010 and the BC2019 are recognised as a design standard to satisfy certain aspects of the DDA, compliance with the BCA2019 and the referenced standards does not guarantee that a complaint will not be lodged.

#### 1.5. Disability Access to Premises Standards (Premises Standards)

The Premises Standards intend to provide certainty for the building industry in relation to meeting the requirements for access in new and upgraded buildings. They only apply to elements addressed within the Standards. All other elements related to premises will still be subject to the existing provisions of the DDA.

The Premises Standards generally align with the BCA2019 and reference a range of Australian Standards relating to access and other associated matters.

They do not apply to existing buildings that are not undergoing upgrade, however they introduce the concept of the "Affected Part". This means that new works need to be connected to the building's Principal Pedestrian Entrance by an accessible path of travel. This can mean that upgrade to the building may be necessary even where none is proposed.

#### 1.6. Design Documentation

This report has been based on the Design plans and Specifications listed in Annexure A of this Report.



#### 1.7. Definitions

#### Accessible

Having features to enable use by people with a disability.

#### <u>Accessway</u>

A continuous accessible path of travel (as defined in AS 1428.1) to, into or within a building.

#### Continuous Accessible Path of Travel

An uninterrupted path of travel to, into or within a building providing access to all access facilities.

#### Luminance Contrast

The light reflected from one surface or component, compared to the light reflected from another surface or component.

#### Ramp

An inclined surface on a continuous accessible path of travel between two landings with a gradient steeper than 1 in 20 but not steeper than 1 in 14.

#### Tactile Indicators

Tactile Ground Surface Indicators (TGSIs)

Truncated cones and/or bars installed on the ground or floor surface, designed to provide pedestrians who are blind or vision-impaired with warning or directional orientation information



#### 2 KEY COMPLIANCE CONSIDERATION

#### 2.1. General

The following is a summary of all the individual elements that relate directly to the ability of a person with a disability to access all the portions of the building required to be accessible.

Accessibility has been assessed against the documents outlined in Part 1.2 of this Report. The Annexures to this report provides a detailed assessments of the proposal against ALL relevant Deemed-to-Satisfy Provisions and prescriptive requirements

Note: It is important that the Annexures are read in conjunction with the items below, as some matters may not have had sufficient information provided to allow a detailed assessment to be undertaken.

The abbreviations outlined below have been used in the following tables.

#### 2.2. Classification

Under the provisions of Parts A6 of BCA2019 and Part A4 of the Access Code, the building has been classified as follows:

Table 1. Building Classification

Class	Level	Description
3	Ground	Sleeping pods
5	Ground	Offices, amenities, meeting and communal ancillary areas
7a	Ground	Plant room used for the parking of the ambulances

Note: The sleeping pods have been classified as a Class 3 part, on the basis that the rooms will be a common place of transient living for a number of unrelated occupants i.e. operational ambulance staff.

#### 2.3. Dimensions and Tolerances

The Premises Standards and BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. BCA Logic's assessment of the plans and specifications has been undertaken to ensure the minimum dimensions have been met.

The designer and builder should ensure that the minimum dimensions are met onsite and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses and the like which can adversely impact on critical maters such as access for people with disabilities, stair and corridor widths and balustrade heights.



#### 2.4. Areas Required to be Accessible

The following areas of the building are required to be accessible:

Table 2. Areas Required to be Accessible

Area / Room	Description
Class 3 sleeping pods	An exemption under Clause D3.4 has been assumed, on the basis that the occupants of the sleeping pods will be operational ambulance employees. It is readily assumed that the operational ambulance workers will be able-bodied persons who will not require the room to have accessible features.
Class 5 Offices, amenities, meeting and communal ancillary areas	To and within all areas normally used by the occupants
Class 7a Plant room used for the parking of the ambulances	There are no accessible carparking spaces in the plantroom, therefore access is not required, however there is an accessible carparking space located in the lower ground carpark, therefore access from this space to the building must be provided.

Note: The limitations and exemptions of Clauses D3.2, D3.3 and D3.4 of the BCA2019 and Access Code been considered where applicable in the process of developing the above table.



#### 3 STATEMENT OF COMPLIANCE

The design documentation as referred to in this report has been assessed against the applicable provisions for Accessibility as outlined in Part 1.2 of this report. It is considered that such documentation complies or is capable of complying (as outlined in Part 2 of this Report) with those documents, for the purposes of a REF.



## **Annexure A – Design Documentation**

This report has been based on the following design documentation.

Table 3. Architectural Plans

Architectural Plans Prepared by djrd architects			
Drawing Number	Revision	Date	Title
AR-0000	Α	17.06.2022	Cover Sheet
AR-0100	Α	17.06.2022	Site Analysis
AR-0101	Α	17.06.2022	Proposed Site Plan
AR-0102	Α	17.06.2022	Shadow Diagrams
AR-0103	Α	17.06.2022	Demolition Plan
AR-1101	Α	17.06.2022	Ground Floor General Arrangement Plan
AR-1102	Α	17.06.2022	Roof Plan
AR-2001	Α	17.06.2022	Elevations
AR-2501	Α	17.06.2022	Sections
AR-9003	А	17.06.2022	Axonometric



CRA - Refer

Annexure C

#### **Annexure B - Premises Standards & BCA Assessment**

N/A Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed

design.

Complies

The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the

proposed design.

'COMPLIANCE READILY ACHIEVABLE'. It is considered that there is not enough

information included in the documentation to accurately determine strict compliance with the individual clause requirements. However, with further design development, compliance can readily be achievable. This item is to be read in conjunction with the

BCA Specification included within Annexure C of this report.

Further Information is necessary to determine the compliance potential of the building

design.

Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to

satisfy the relevant Performance Requirements.

**DNC** Does Not Comply.

Noted BCA Clause simply provides a statement not requiring specific design comment or

confirmation.



## Building Code of Australia 2019 Assessment Summary (BCA2019) / Premises Standards (Access Code)

Table 4. BCA 2019 Summary

	Clause	Clause Requirements	Comment	Status
Section	D: Access and Egress			
Part D3	- Access for People with	a Disability		
D3.0:	Deemed-to-Satisfy Provisions	Informational		Noted
	General Building Access Requirements	The building or parts are required to be accessible. Accessible meaning having the features necessary to permit its use by persons with a disability.  Class 3 —  From a pedestrian entrance to at least 1 floor containing SOU's, to the entrance doorway of each SOU located on that level, and any other level served by a passenger lift	Class 3 parts –  An exemption under Clause D3.4 has been assumed, on the basis that the occupants of the sleeping pods will be operational ambulance employees. It is readily assumed that the operational ambulance workers will be ablebodied persons who will not require the room to have accessible features.  Class 5 parts –	Noted
D3.1:		or an accessible ramp.  To and within not less than 1 of each type of room or space for use in common by the residents  To and within at least 1 SOU's	Disabled access is capable of being achieved to and within the Class 5 parts of the building. Dimensioned details shall be provided at CC stage to confirm the constructability of the 1:20 walkways and the circulation zones at the doorways.  Class 7a –	CRA – Refer Annexure C
		Class 5 –  To and within all areas normally used by the occupants.  Class 7 –	Access from accessible carparking space to and within the building will be via the rear doorway that is adjacent to the female WC. Compliance is readily achievable.	
		To and within any level containing accessible carparking spaces.	Note: Access will also be required through the plant room as there is an accessible sanitary compartment that is located in the plant room. Access is provided via change and medical storeroom doorways.	CRA – Refer Annexure C



Section D: Access and Egress			
	(a) An accessway must be provided to a building required to accessible –		
	(i) from the main points of a pedestrian entry at the allotment boundary; and		
	(ii) from any required accessible carparking space on the allotment.		
	(b) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and –		
	(i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and	The proposed accessway is via the front pathway. The	
	(ii) in a building with a total floor area more than 500 m2, a pedestrian entrance which is not accessible must not be located more than 50	accessway is capable of achieving compliance, subject to dimensioned details being provided showing gradients and landings (if required).	CRA – Refer Annexure C
	m from an accessible pedestrian entrance,	The accessway from the external accessible carparking	
D3.2: Access to Buildings	except for pedestrian entrances serving only areas exempted by D3.4.	space to the buildings entrance will readily achieve compliance, subject to the space provided between the	CRA – Refer
	(c) For the purposes of (c)—	building and the DOM and Relief parking being increased to 1 metre.	Annexure C
	<ul> <li>(i) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where—</li> </ul>	The entrance doors will readily achieve the required unobstructed clearance of 850mm and wheelchair circulation clearances to AS 1428.1.	CRA – Refer Annexure C
	(A) all doorways serve the same part or parts of the building; and		
	(B) the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D3.2); and		
	<ul><li>(ii) a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D3.2).</li></ul>		
	(d) Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width		



Section	n D: Access and Egress			
		of not less than 850 mm in accordance with AS 1428.1.		
D3.3:	Parts of Buildings to be Accessible	<ul> <li>Walkways and ramps must comply with clause 10 of AS 1428.1-2009.</li> <li>Non-fire-isolated stairways must comply with Clause 11 of AS 1428.1-2009.</li> <li>Fire-isolated stairways must comply with clause 11 (f) &amp; (g) of AS 1428.1-2009.</li> <li>The accessways must be provided with:</li> <li>Passing spaces (1800x2000mm) complying with AS1428.1 at 20m max. intervals where direct line of sight is not available.</li> <li>Turning spaces (1540x2070mm) complying with AS1428.1 within 2m of the end of accessways (including corridors or the like); and at 20m max. intervals along an accessway.</li> <li>An intersection of accessways satisfies the spatial requirements for a passing and turning space.</li> </ul>	Walkways and ramps  No details of the external walkways/pathways have been provided, however where the grades are steeper than 1:20, then double handrails and tactiles will be required in accordance with AS 1428.1-2009. Details to be provided at CC stage.  Non-fire-isolated stairs  N/A  Fire-isolated stairways  The building does not have any fire-isolated stairs.  Turning spaces  The internal corridors throughout the building allow sufficient space for a wheelchair to make a 180- degree turn by achieving a minimum space of 1540mm x 2070mm.	CRA – Refer Annexure C N/A N/A
D3.4:	Exemptions	Certain areas can be exempted under this clause if pose a health and safety risk for people with disability and /or access would be inappropriate because the particular purpose for which this area is used (e.g. plant rooms, service areas, heavy / toxic item storage, etc.)	The following areas within this development have been identified as potential excepted areas, subject to certifier's approval:  > The Class 3 sleeping pods, on the basis that the occupants of the sleeping pods will be operational ambulance employees. It is readily assumed that the operational ambulance workers will be ablebodied persons who will not require the room to have accessible features.	Noted
D3.4:	Accessible Car Parking	Accessible carparking spaces to be in compliance with this Clause and AS2890.6 in the proportion required by BCA2019.	There is an accessible carparking space provided in the external carpark. The space has an adjacent shared zone and is capable of achieving compliance with Clause D3.5 and AS 2890.6.	CRA – Refer Annexure C



Section	n D: Access and Egress			
D3.6:	Signage	<ul> <li>Braille and tactile signage complying with Specification D3.6 and incorporating the international symbol of access, or deafness as appropriate, must identify each:         <ul> <li>sanitary facility; and</li> <li>identify each door required by E4.5 to be provided with an exit sign and state "Exit" and "Level" and either:</li></ul></li></ul>	Signage details are to be provided at CC stage for the accessible sanitary compartment and the ambulant compartments in the male and female bathrooms. Compliance is readily achievable.	CRA – Refer Annexure C
D3.7:	Hearing Augmentation	N/A	N/A	N/A
D3.8:	Tactile Indicators	N/A	N/A	N/A
D3.9:	Wheelchair seating spaces in Class 9b Assembly Buildings	N/A	N/A	N/A



Section D: Access and Egress			
D3.10: Swimming Pools	N/A	N/A	N/A
D3.11: Ramps	On an accessway a series of connected ramps must not have a combined vertical rise of 3.6m and a landing for a step ramp must no overlap a landing for another step ramp or ramp.	The ramps located along the accessway do not have a combined rise more than 3.6m.	Complies
D3.12: Glazing on an Accessway	On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	Compliance is readily achievable, subject to a detailed window/door schedule being provided at CC stage to confirm the colour and location of the glazing strips on the fully glazed doorways and sidelights located along an accessway. The glazing strips shall achieve a minimum 30% luminance contrast to the floor surface on the adjoining side of the doorway.	CRA – Refer Annexure C

Section	Section F: Healthy and Amenity				
Part F2	- Sanitary and Other Faci	lities			
F2.0:	Deemed-to-Satisfy Provisions	Informational	Informational	Noted	
F2.4:	Accessible Sanitary Facilities (including Table F2.4)	(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and     (b) accessible unisex showers must be provided in accordance with Table F2.4(b); and     (c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1	There is an accessible sanitary compartment proposed in the plant room. Based off scaled measurements, the compartment can readily achieve the required dimensions for an accessible sanitary compartment in accordance with AS 1428.1-2009.  Further dimension details and elevations will be required at CC stage to confirm compliance.  Each of the male and female bathrooms have an ambulant sanitary compartment proposed. The compartments are both capable of achieving compliance with AS 1428.1-2009.	CRA – Refer Annexure C CRA – Refer Annexure C	



Section F: Healthy and Amenity			
	must be provided for use by males and females; and		
	<ul> <li>(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and</li> </ul>		
	(e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1; and		
	(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and		
	(g) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations.		
F2.9: Accessible adult change facilities	N/A	N/A	N/A



#### **Annexure C - Compliance Specification**

#### **Design Certification**

Further due to the level of detail provided at this stage the following items are to form part of a design statement or specification:

#### General

- 1. On an accessway where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights or glazing capable of being mistaken for a doorway or opening will be clearly marked and comply with Clause 6.6 of AS1428.1-2009. A solid non-transparent contrasting line not less than 75mm wide is to extend across the full width of the glazing panel. The lower edge of the contrasting line is to be located between 900-1000mm above the plane of the finished floor level. The contrasting line is to provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 metres of the glazing on the opposite side.
- 2. All doorways will have a minimum luminance contrast of 30% in accordance with Clause 13.1 of AS1428.1-2009.
- 3. Fixtures and fittings in accessible sanitary facilities will be provided and installed in accordance Clause 15 of AS1428.1-2009.
- 4. Fixtures and fittings in ambulant facilities will be provided and installed in accordance Clause 16 of AS1428.1-2009.
- 5. Walkways will comply with Clause 10 of AS1428.1-2009.
- 6. For the walkways, the floor or ground surface abutting the sides of the walkway will be firm and level of a different material to that of the walkway at the same level and follow the grade of the walkway and extend horizontally for a minimum of 600mm, or be provided with a kerb or kerb rail in accordance with Clause 10.2 of AS1428.1-2009.
- 7. Grabrails will comply with Clause 17 of AS1428.1-2009.
- 8. Accessible car spaces will achieve compliant headroom clearances in accordance with Clause 2.4 of AS2890.6-2009.
- 9. Demarcation will be provided in the accessible car space and adjacent shared zone in accordance with Clause 3.1 and 3.2 of AS2890.6. Refer to Annexure B1 for a diagrammatic explanation.
- 10. Bollards will be provided in the shared disabled car space area in accordance with Clause 2.2.1(e) of AS2890.6-2009. Refer to Annexure B1 for a diagrammatic explanation.
- 11. Switches and power points will comply with Clause 14 of AS1428.1-2009.
- 12. Floor and ground floor surfaces on accessible paths and circulation spaces including the external areas will comply with Clause 7 of AS1428.1-2009. Any level difference over 3mm must be ramped according AS1428.1 Clause 10.5.
- 13. Braille and tactile signage will comply with BCA2019 Clause D3.6.
- 14. Signage will have to comply with Clause 8 of AS1428.1-2009.
- 15. Door handles and the like, will be in accordance with Clause 13.5 of AS1428.1-2009.

