



# Development Application

Proposed Transient Workforce Accommodation  
Project Jinbi – Portion Unallocated Crown Land (PIN 3115653)

30 June 2025

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## Document Control

### Proposed Transient Workforce Accommodation: Project Jinbi

Client: Yindjibarndi Energy Corporation

Client Contact: Chris Haddon

### Version Control

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## Table of Contents

Document Control .....	<b>2</b>
1 Introduction.....	<b>5</b>
1.2 Project Team.....	6
1.3 Background.....	6
2 Description of Site .....	<b>7</b>
2.1 Location.....	7
2.2 Tenure Details .....	11
3 Description of Proposal .....	<b>13</b>
3.2 Operational Detail .....	14
4 Planning Framework.....	<b>15</b>
4.1 Statutory Planning .....	15
4.2 Strategic Planning.....	18
4.3 State Planning Policies .....	19
4.4 Local Planning Policies .....	19
5 Technical Supporting Information.....	<b>20</b>
5.1 Environmental Considerations.....	20
5.2 Heritage.....	20
5.3 Bushfire Management.....	21
5.4 Traffic and Access .....	22
5.5 Social Impact .....	22
5.6 Engineering Servicing.....	23
5.7 Noise Impact .....	24
6 Summary .....	<b>25</b>



## Appendices

Appendix A:	Planning Approval (DAP/24/O2764) .....	26
Appendix B:	Feature Survey .....	27
Appendix C:	Development Plans .....	28
Appendix D:	Local Planning Policy 13 Assessment .....	29
Appendix E:	Bushfire Management Plan .....	37
Appendix F:	Social Impact Assessment .....	38
Appendix G:	Servicing Report .....	39
Appendix H:	Acoustic Report .....	40

## Figures

Figure 1: Regional Location.....	8
Figure 2: Local Location.....	9
Figure 3: Site Plan.....	10
Figure 4: Land Tenure Plan. ....	12
Figure 5: Local Planning Scheme No. 7 Map.....	16
Figure 6: Draft Local Planning Scheme No. 8 Map.....	17



## 1 Introduction

RFF Australia acts on behalf of Yindjibarndi Energy Corporation ('YEC') with respect to this proposed development application seeking temporary approval for a Transient Workforce Accommodation facility on a portion of Unallocated Crown Land PIN 3115653 ('the subject land'). The proposal is sought in association with the Project Jinbi Solar Facility, located north of the application area, which was approved by the Regional Development Assessment Panel on 4 December 2024.

### Refer Appendix A: Planning Approval (DAP/24/O2764).

This proposal seeks to develop and use the subject land to accommodate the construction workforce required for Project Jinbi, which is anticipated to be located south of the project area. Project Jinbi, and the proposed associated workforce camp, represents the first stage of the Yindjibarndi Energy Corporation's broader aspiration to develop a notional 3GW of renewable energy on Yindjibarndi Ngurra ('country'), to contribute to the Stage Government's forecast demand of 41GW of renewable energy required to power the Pilbara region by 2051.

In summary, the Development Application seeks approval of the following:

- Siting and use of 16 trailer-mounted accommodation facilities, each containing provision for accommodation of 47 people, providing a short-term accommodation solution. This short-term accommodation is for the purpose of constructing the Workforce Accommodation Facility.
- Development and use of a Workforce Accommodation Facility comprising:
  - 68 transportable buildings, providing accommodation for up to 272 people.
  - A kitchen and associated mess (dining) hall.
  - A wet mess (tavern) and associated beer garden.
  - Four laundry facilities.
  - A gym facility.
  - A recreation room.
  - Associated office, storage and ice rooms.

This report is prepared in support of the Development Application to include a description of the following matters:

- Description of the subject site;
- Description of the existing land use;
- Detailed explanation of the proposed use and development of the land;
- Overview of the relevant planning issues;
- Justification for the proposed development; and
- Supporting technical appendices.

The proposed development is demonstrated to have a well-considered design and will support the broader Yindjibarndi Energy Corporation aspiration to generate renewable power on Ngurra.

Accordingly, it is respectfully requested that the Regional Development Assessment Panel favourably consider the application on its merits and approve the development.



1.2 Project Team

The following multidisciplinary team has been engaged by the Proponent:

Table 1: Project Team.

Discipline	Consultant
Town Planning & Project Management	RFF Australia
Drafting & Building Design	Rapid Camps Australia
Survey	Hawkeye
Bushfire Management	Western Environmental Pty Ltd
Site & Soil Evaluation	Galt Geotechnics
Noise Assessment	Lloyd George Acoustics
Heritage	Yindjibarndi Aboriginal Corporation and Echoes Cultural Heritage Management

RFF is the primary contact for all issues relating to the proposal.

1.3 Background

YEC is progressing a number of renewable energy initiatives on Yindjibarndi Ngurra, within the Yindjibarndi Native Title Determination Area, with an ultimate aspiration to develop up to 3GW of electricity on Country.

The Jinbi solar farm is the first project forming part of YEC's broader strategy. On 4 December 2024, the Regional Development Assessment Panel ('DAP') granted Development Approval for the project, which seeks to generate approximately 150 MW of solar electricity directly into an existing Rio Tinto sub-station. This approval marks a significant milestone in the project, which is expected to play a crucial role in reducing the region's reliance on fossil fuels and contribute to the state's renewable energy targets.

This approval followed the execution of a Memorandum of Understanding ('MoU') between YEC and Rio Tinto for the provision of transmission and grid connection services. This partnership with Rio Tinto underscores the strategic alignment between the renewable energy goals of YEC and the operational needs of Rio Tinto and provides a basis for supporting the success of future YEC projects.

YEC are actively completing studies and development planning for additional projects and is working with Energy Policy WA to investigate an appropriate common user transmission corridor to connect potential future projects, to the Northwest Interconnected System ('NWIS'). This corridor, known as the Chichester Range Corridor, is expected to provide a transmission route linking the project site to the Maitland Strategic Industrial Area.

The proposed workforce accommodation facility will support the construction phase of Project Jinbi, providing temporary accommodation for the construction workers involved.



## 2 Description of Site

### 2.1 Location

The subject land is located within the Shire of Ashburton, within the locality of Chichester. The development is proposed to be sited on a portion of Unallocated Crown Land ('UCL') located within the north-west portion of the Yindjibarndi Native Title Determination Area.

It is located approximately 60 kilometres south of the Karratha City Centre and 180 kilometres north-west of Tom Price.

#### **Refer Figure 1: Regional Location.**

The subject land is located immediately west of the Millstream Chichester National Park. Access to the site is via the Karratha to Tom Price Road, and then via Rio Tinto private access roads adjacent the Robe River Railway.

#### **Refer Figure 2: Local Location.**

The location of development within the Unallocated Crown Land (PIN 3115653) is directly west of the Pannawonica (Robe River) Railway, and immediately east of the Rio Tinto's Cape Lambert transmission line, contained within a general lease area.

The development area comprises an area of approximately 3.19 hectares, located within the southern portion of the approved Clearing Permit polygon associated with the Project Jinbi solar farm.

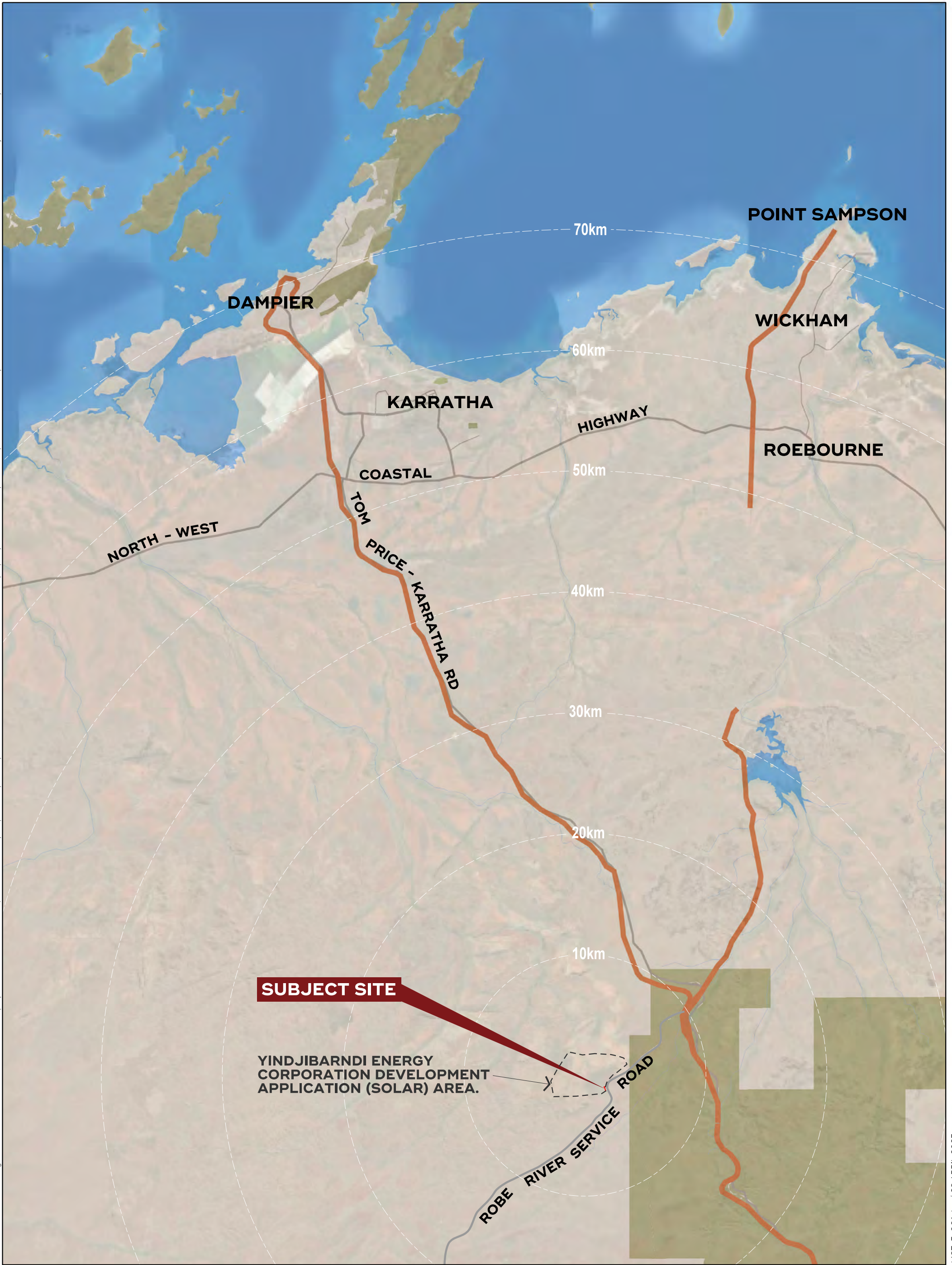
The broader development parcel (associated with the Clearing Permit and Project Jinbi) includes a permanent freshwater spring ("Jinbi" in Yindjibarndi language), generally to the centre of the broader solar farm area. The Jinbi is associated with groundwater dependent vegetation and is considered a potential breeding ground and shelter habitat for the Northern Quoll and Pilbara Olive Python. The Jinbi is identified as culturally significant to the Yindjibarndi People and will not be impacted or disturbed by either this development, or the broader solar farm.

#### **Refer Figure 3: Site Plan.**

#### **Refer Appendix B: Feature Survey.**



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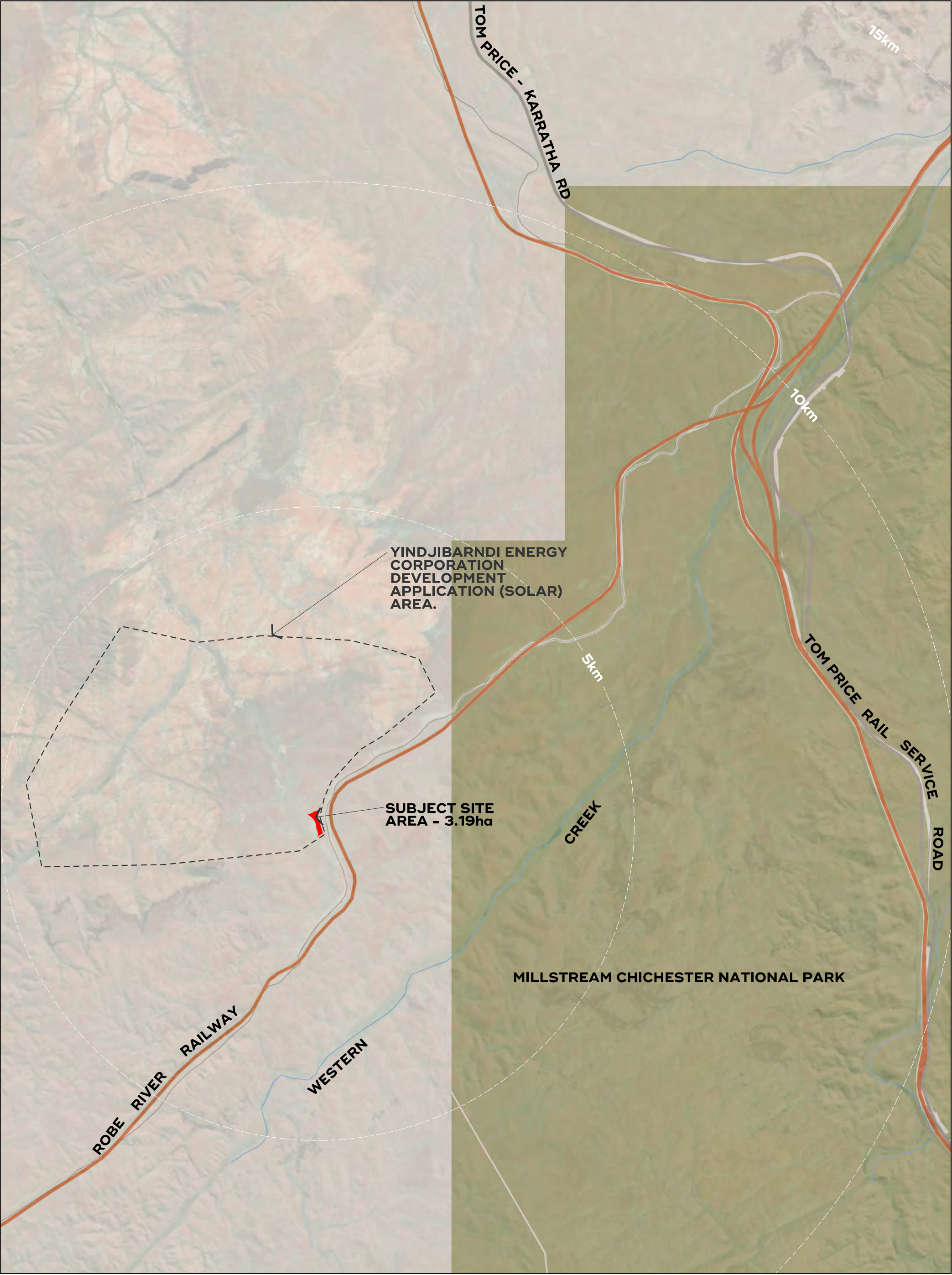


**REGIONAL LOCATION**  
DEVELOPMENT APPLICATION  
JINBI CAMP

**FIGURE 1**



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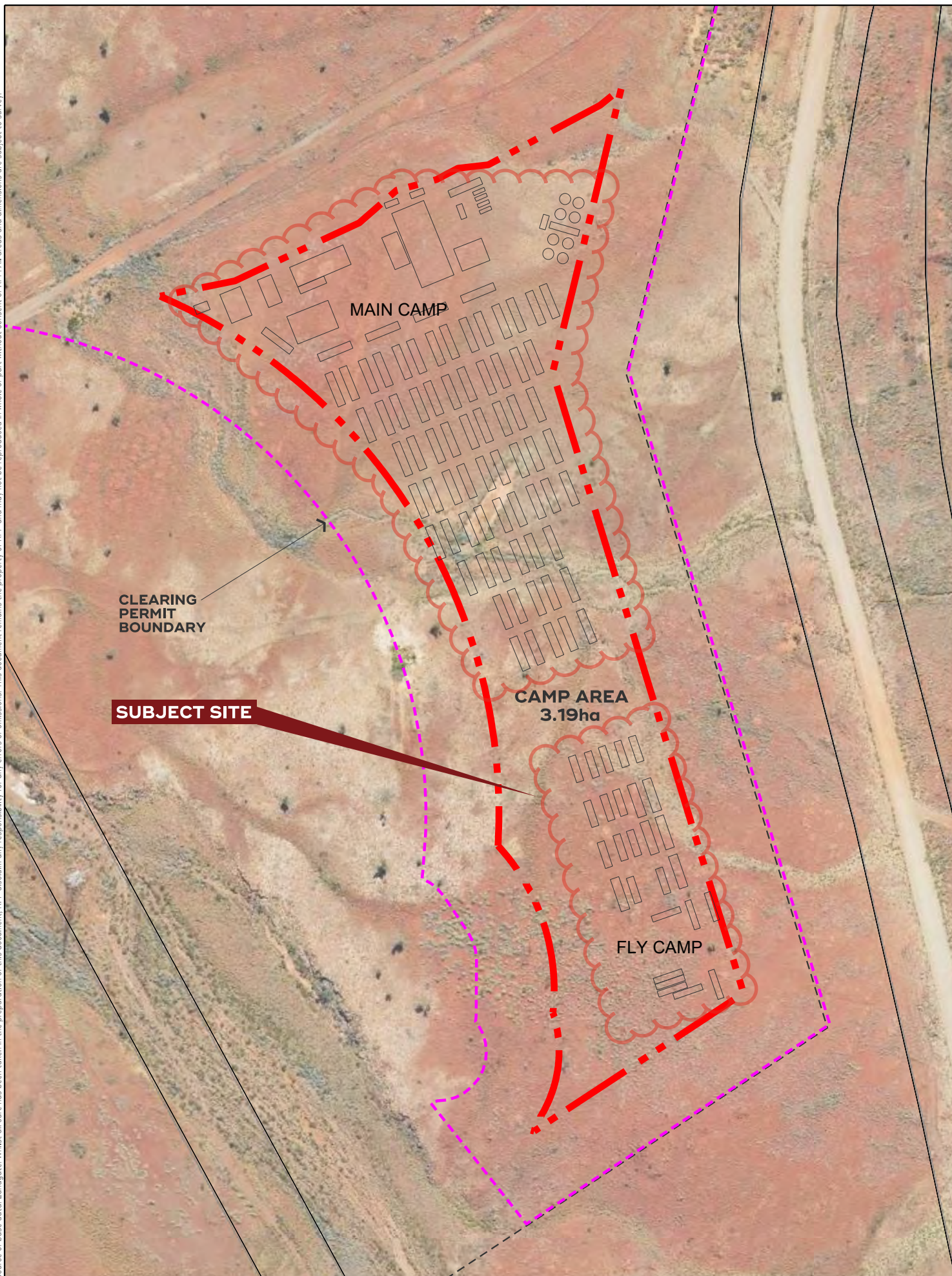
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**LOCAL LOCATION**  
DEVELOPMENT APPLICATION  
JINBI CAMP

**FIGURE 2**









## 2.2 Tenure Details

The portion of Unallocated Crown Land (UCL) on which the development area is situated lies within the north-western section of the Yindjibarndi area of the Yindjibarndi–Ngarluma Native Title Determination Area and is subject to exclusive native title rights.

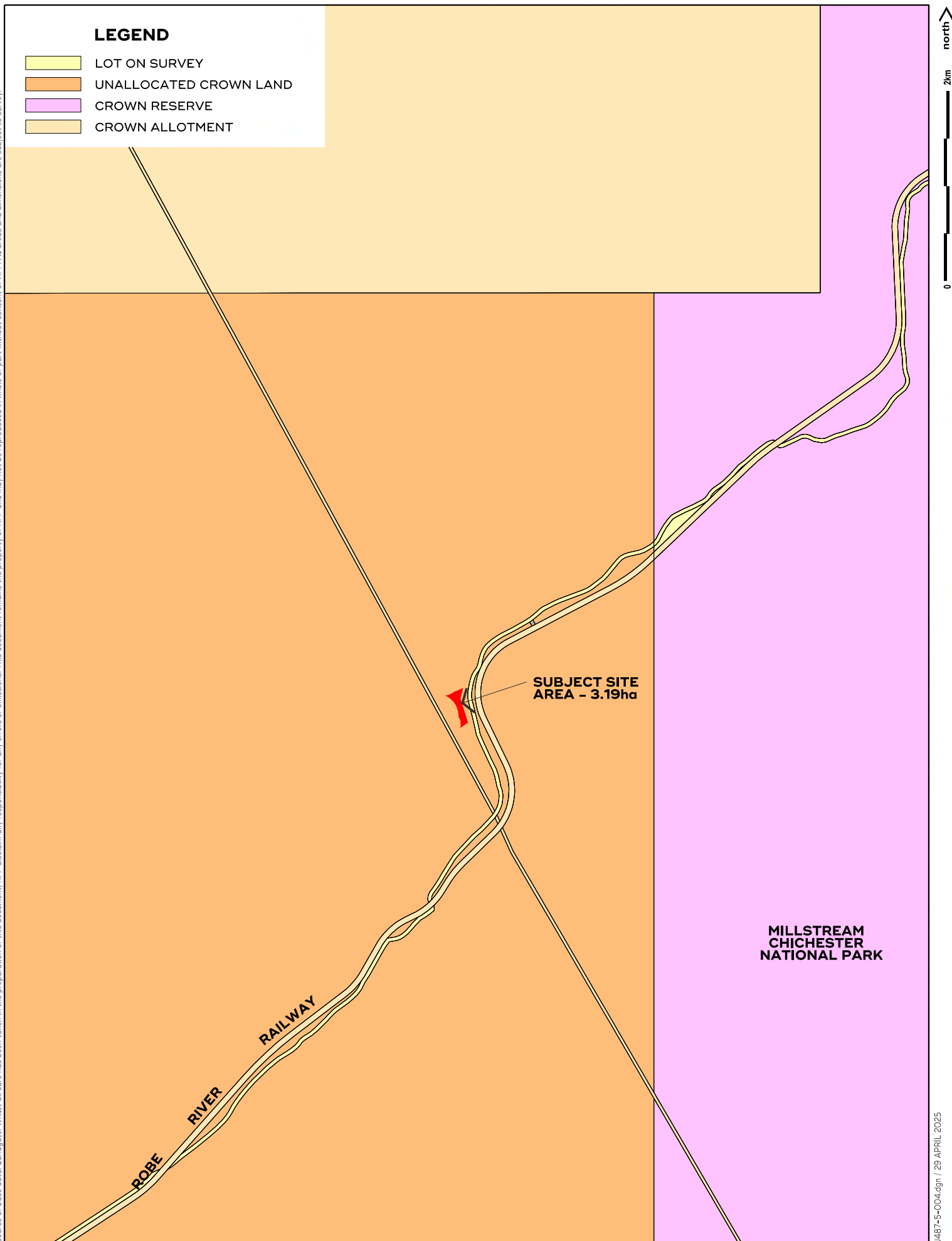
The subject site is included within the boundaries of an existing license held by Yiyangu Pty Ltd, which has been granted pursuant to Section 91 of the *Land Administration Act 1997* ('LAA').

Yiyangu (a shareholder of YEC) has also executed an Indigenous Land Use Agreement with Yindjibarndi Aboriginal Corporation ('YAC') and Yindjibarndi Ngurra Aboriginal Corporation ('YNAC'), which grants the use of the land for renewable energy projects under the *Native Title Act 1993*.

A Lease over the Project Jinbi area is expected to be granted under Section 79 of the LAA, which corresponds to approximately 720 hectares and includes the proposed camp development site.

**Refer Figure 4: Land Tenure Plan.**

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### 3 Description of Proposal

This Application seeks the approval of the Regional Development Assessment Panel ('DAP') to develop and operate a temporary Workforce Accommodation facility to accommodate 272 people, comprising the following:

- Siting and use of 16 trailer-mounted accommodation facilities (Fly-Camp), providing for accommodation of 47 people, as a short-term accommodation solution to enable the construction of a Workforce Accommodation Facility.
- Development and use of a Workforce Accommodation Facility comprising:
  - 68 transportable buildings, providing accommodation for up to 272 people.
  - A kitchen and associated mess (dining) hall.
  - A wet mess (tavern) and associated beer garden.
  - Four laundry facilities.
  - A gym facility.
  - A recreation room.
  - Associated office, storage and ice rooms.

The proposal seeks approval for the proposed development for a period of 10-years, initially, to:

- Provide a short-term (approximately 4 months) accommodation solution (Fly-Camp) for the workforce (47 persons) required to construct the longer-term facility. The Fly-Camp will be demobilised following the construction of the Workforce Accommodation Facility.
- Provide a longer-term, though still temporary, accommodation solution for the renewable energy (and related infrastructure) construction workforce (257 persons), and the associated workforce facility operator (15 persons).
- As previously noted, the construction workforce facility is intended to accommodate the workforce required for the approved Jinbi Solar Facility. The initial stage of the solar facility (first 75MW) is likely to be constructed over 2-3 years. This proposal allows for the workforce accommodation to remain in place for the next stage of solar development (second 75MW), however will be assessed following completion of the initial stage.

#### Refer Appendix C: Development Plans.

The proposed development will be integrated into the broader development of the Jinbi Solar Farm. The proximity to existing roads, power transmission lines, and water sources has been a key consideration in the site selection, ensuring efficient access to essential services.

The workforce accommodation facility is designed with a structured layout to optimise functionality and ease of access. The accommodation units are systematically arranged into clusters to provide efficient access to shared amenities while maintaining privacy for residents. Key elements of the site layout include:

- The accommodation units are organised into multiple blocks, each comprising four-bedroom units with associated ablution facilities. Each unit provides an 8m<sup>2</sup> living space per occupant, ensuring comfort and privacy.
- The camp features a centrally located amenities hub, including the dining hall, wet mess, gymnasium, and recreation room, facilitating social interaction and convenience for residents.



- Essential infrastructure, such as wastewater treatment facilities, potable water storage, and power generation units, is located on the periphery of the site to ensure operational efficiency and minimise disruption to living areas.
- A structured internal road network provides clear access to all areas of the camp, including designated parking areas for vehicles and emergency access routes.
- Open space is allocated for passive and active recreation, including shaded seating areas and a designated beer garden adjacent to the wet mess.
- The facility incorporates controlled entry points to manage site security and restrict unauthorised access, ensuring a safe and well-regulated environment for workers.

### 3.2 Operational Detail

The proposed development will be managed by a full-time facility and hospitality operator engaged by YEC. The operator will be responsible for the following:

- Overall facility management, including the implementation of operational procedures and day-to-day oversight of the village.
- Appointment of a qualified site manager.
- Health and safety management, including compliance with relevant legislation and standards.
- Quality assurance, including regular audits and reporting in accordance with legislative requirements.
- Accommodation services, including booking management, key distribution, resident communications, and general administration.
- Catering services, encompassing meal preparation and service, menu planning, and management of the liquor licence.
- Waste management and disposal.
- Emergency preparedness and response planning.
- Hygiene and cleaning services, along with ongoing village maintenance.
- Security services to ensure resident and site safety.
- Provision of recreational and entertainment facilities for residents.

It is anticipated that a condition of planning approval will require the submission of an Operational Management Plan to the Shire of Ashburton, detailing the above functions.

## 4 Planning Framework

### 4.1 Statutory Planning

#### 4.1.1 Shire of Ashburton Local Planning Scheme No. 7

The subject land is reserved for 'Other Purposes – Infrastructure' under the provisions of the Shire of Ashburton Local Planning Scheme No. 7 ('LPS 7'). Land surrounding the site to the north, south and west of the subject land is reserved for 'Public Purposes – Water and Drainage'. The land lies within the infrastructure corridor that comprises the Rio Tinto Robe River railway and associated rail access roads. Land north of the subject land is zoned 'Rural' under the provisions of the City of Karratha Local Planning Scheme No. 7, and the land east of the site, the Millstream Chichester National Park, is reserved for 'Conservation, Recreation and Natural Landscape'.

**Refer Figure 5: Local Planning Scheme No. 7 Map.**

Clause 3.2 of LPS 7 relates to the Use and Development of Reserves, with Clause 3.2.2 setting out requirements for development approval:

*Cl. 3.2.2 Where an application for planning approval is made with respect to land within a reserve, the Local Government shall have regard to the ultimate purpose intended for the reserve and Local Government shall confer with the organisations it considers relevant to that purpose and the proposed use or development.*

The proposed workforce accommodation camp, intended to support the construction of the approved Jinbi Solar Facility, is consistent with the purpose of the 'Other Purposes – Infrastructure' reserve under the Shire of Ashburton Local Planning Scheme.

This reserve is intended to accommodate essential infrastructure that supports strategic and regionally significant developments. Given the scale and importance of the renewable energy projects, the associated workforce accommodation is a critical enabling infrastructure component, facilitating their delivery and operation in a remote location.

As such, the proposal aligns with the reserve's intent to support infrastructure that underpins broader economic and community outcomes.

#### 4.1.2 Draft Shire of Ashburton Local Planning Scheme No. 8

At its meeting of 10 October 2023, the Shire of Ashburton resolved to adopt the draft Local Planning Scheme No. 8 ('draft LPS 8') for public advertising. At the time of writing, the Shire was awaiting formal consent to advertise to be issued by the Department of Planning, Lands and Heritage.




The subject land is proposed to retain its 'Other Purposes – Infrastructure' reservation under draft LPS 8.

**Refer Figure 6: Draft Local Planning Scheme No. 8 Map.**

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**LEGEND**

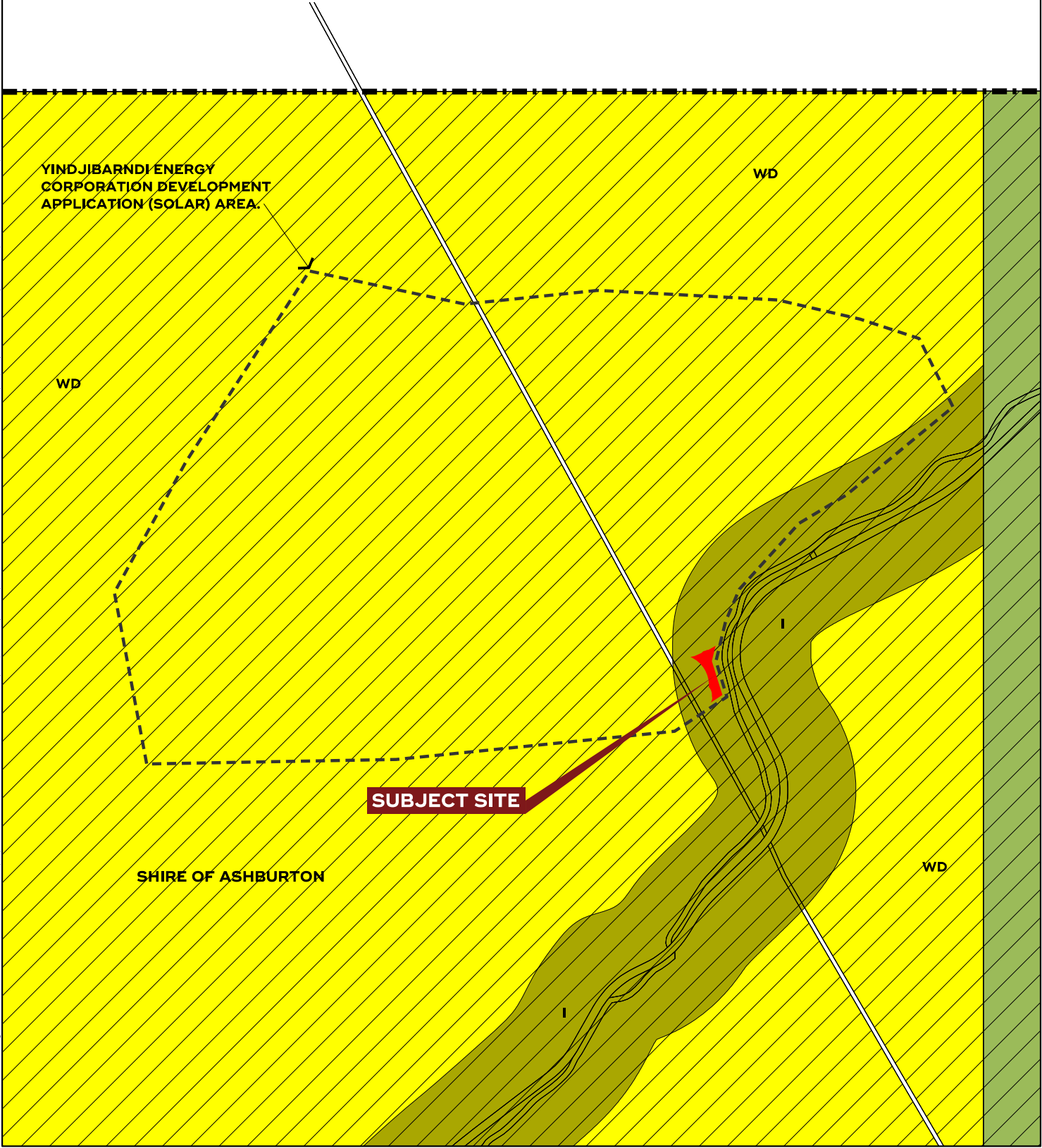
**LOCAL SCHEME RESERVES**

-  CONSERVATION, RECREATION AND NATURE LANDSCAPE
-  OTHER PURPOSES: INFRASTRUCTURE
-  PUBLIC PURPOSES: WATER AND DRAINAGE

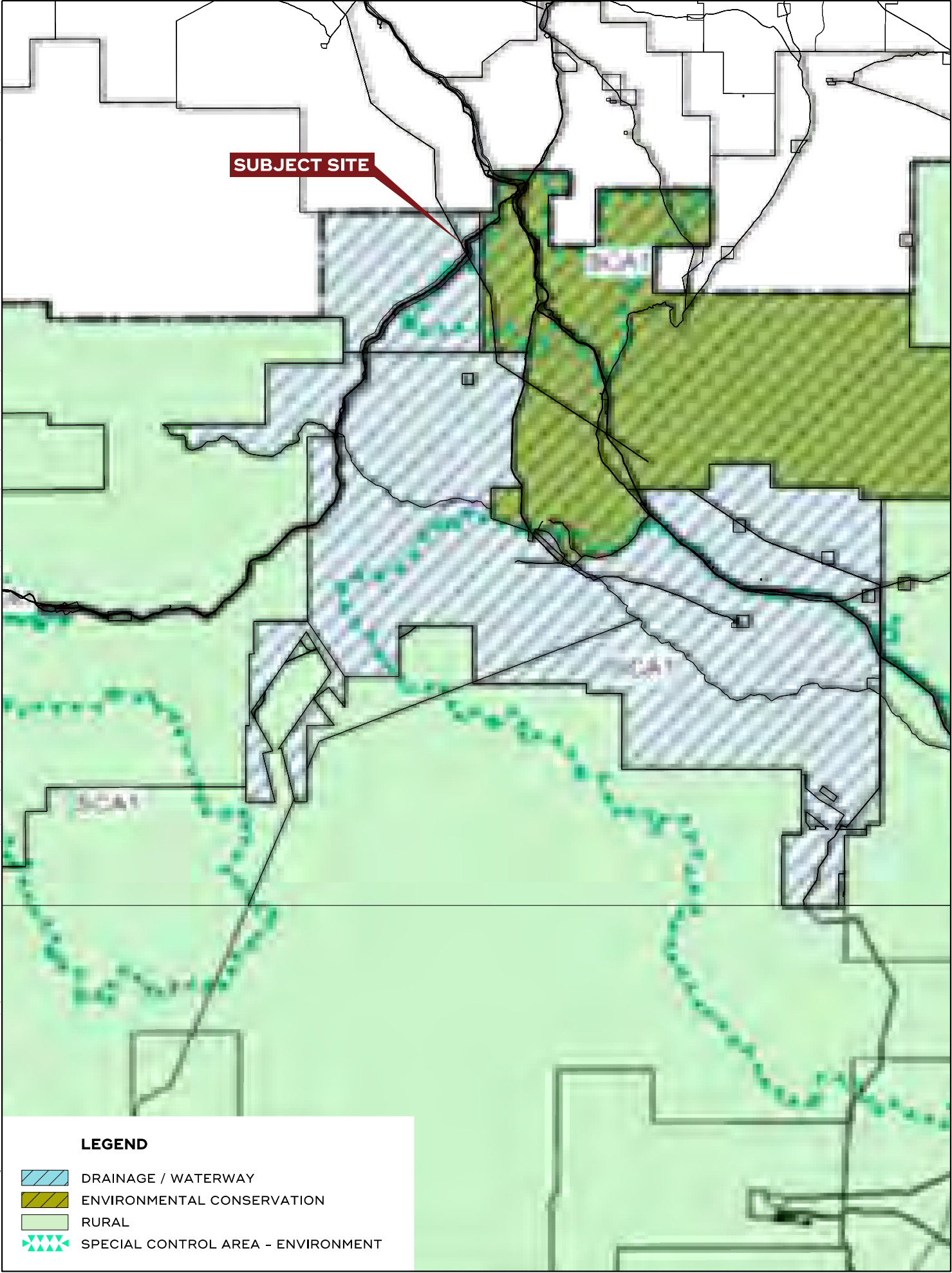
**OTHER CATEGORIES**

-  SCHEME AREA BOUNDARY





CITY OF KARRATHA



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**LEGEND**

-  DRAINAGE / WATERWAY
-  ENVIRONMENTAL CONSERVATION
-  RURAL
-  SPECIAL CONTROL AREA - ENVIRONMENT





## 4.2 Strategic Planning

### 4.2.1 Shire of Ashburton Local Planning Strategy

The Shire of Ashburton Local Planning Strategy was endorsed by the WAPC on 21 June 2021. The Strategy is prepared to articulate the Shire's strategic vision, policies and proposals for the municipality over the following 15 years.

The Local Planning Strategy identifies the subject land for 'Community / Public Purpose (Water and Drainage)' though is not contained within any Public Drinking Water Source Area.

Section 5.4 of the Strategy outlines the strategies and actions for Utilities, with Action 3 being:

*"Support investment and development of projects for renewable energy and microgrid technology, to provide sustainable alternative sources of electricity generation".*

The proposed development is being sought to support YEC's broader renewable energy facility and is therefore consistent with the Strategy.

With respect to workforce accommodation, the Strategy sets out the following strategies and actions.

Strategies	Actions
<ul style="list-style-type: none"> <li>Acknowledge the important role of Workforce Accommodation for contributing towards project viability, workforce convenience being in proximity to project sites, and the economic stimulus benefits to the local government district as a result.</li> <li>Consult with proponents to ensure a balanced approach is fostered for the appropriate and reasonable accommodation of workers.</li> <li>Encourage construction workforce in proximity to project sites, and operational workforce within the existing townsites of Onslow, Tom Price, Paraburdoo and Pannawonica.</li> </ul>	<ul style="list-style-type: none"> <li>Actively pursue the provision of construction workforce accommodation associated with major projects within established townsites wherever possible.</li> <li>Retain the long-term development option of Chevron Australia's 'Operational Village' on Lot 4001 within the Onslow townsite, as a well-integrated workforce accommodation development within town.</li> <li>Where Development Approval for workforce accommodation is necessary under the local planning scheme, require proponents to demonstrate how they will mitigate the potential social impacts and health issues associated with remote accommodation camps, impacts on existing communities, and how they will provide quality accommodation, support services and facilities.</li> <li>Include the Workforce Accommodation land use definition and permissibility in the Zoning Table for the appropriate zones in the local planning scheme.</li> </ul>

It is noted that the proposed workforce accommodation facility is intended to house construction personnel and is not readily accessible from any established townsite within the Shire or the adjoining City of Karratha. The facility is essential to ensure appropriate





living conditions and to support improved work health and safety outcomes for the anticipated workforce.

### 4.3 State Planning Policies

#### 4.3.1 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

State Planning Policy 3.7 – Planning in Bushfire Prone Areas ('SPP 3.7') outlines the measures for strategic planning, subdivision and development applications to reduce the impact of bushfire on property and infrastructure.

The subject land is identified as a Bushfire Prone Area on the Department of Fire and Emergency Services ('DFES') mapping. Accordingly, a Bushfire Management Plan (BMP) is required to support any future planning and development of the subject land, prepared in accordance with the requirements of SPP 3.7. A BMP has therefore been prepared by Western Environmental in support of this Development Application.

#### Refer Appendix E – Bushfire Management Plan.

The outcomes of the BMP demonstrate that the proposed development is capable of achieving compliance with each of the four bushfire protection criteria outlined in the Appendices to the Guidelines for Planning in Bushfire Prone Areas. This is discussed further at Section 5.1 of this report.

### 4.4 Local Planning Policies

#### 4.4.1 Local Planning Policy 13 – Transient Workforce Accommodation

The Shire of Ashburton created its Local Planning Policy 13 – Transient Workforce Accommodation ('LPP 13') to guide the development of transient workforce facilities, where require, to address issues of amenity for both camp residents and the surrounding community.

The proposed development is considered a 'Type B' facility, which is defined as:

*"more remote from existing urban or resident populations, typically on land zoned rural or pastoral uses. These camps include exploration and fly camps, remote construction camps and remote operational villages. By their nature and location, these camps operate largely independently of existing permanent urban settlements".*

The proposed development is consistent with the criteria of LPP 13, and a detailed assessment against each of the policy provisions included at Appendix D:

## 5 Technical Supporting Information

### 5.1 Environmental Considerations

Cotterra Environment, on behalf of YEC, has obtained a Native Vegetation Clearing Permit from DWER under Part V of the *Environmental Protection Act 1986*, allowing for the clearing of 527.21 hectares for the Project Jinbi Solar Facility (CPS 10494/1). Environmental assessments, including flora, fauna, and SRE desktop studies, identified key ecological values, notably the Priority Ecological Community ('PEC') within Creekline 2 (C2) and the culturally significant Jinbi permanent pools. To mitigate impacts, a 30-metre buffer will protect the Jinbi, the only recorded Priority flora will be retained with a 10-metre buffer, and clearing will occur in a phased manner to reduce soil exposure and dust emissions. The proposed camp is located to the south of the Jinbi and is not in the vicinity of any protected area.

A fauna assessment confirmed 26 species on-site, with the Northern Quoll and Pilbara Olive Python identified as key conservation species. The Jinbi area and broader drainage lines provide critical habitat, which will be preserved, and perimeter fencing will be designed to allow fauna movement. Pasture retention between solar panels, modelled on similar projects, will support foraging and dispersal. Consultation with the Yindjibarndi Nation has ensured agreement on buffers and access to the Jinbi.

The project site falls within the Pilbara Proclaimed Groundwater and Surface Water Areas, requiring water licensing from DWER. It is outside the Millstream Water Reserve but adjacent to the Harding Dam Public Drinking Water Catchment Area. Environmental conditions attached to the Clearing Permit will ensure ongoing protection of key ecological and cultural values.

### 5.2 Heritage

A desktop heritage assessment and on-ground survey have been undertaken to address Aboriginal and non-Aboriginal heritage considerations relevant to the proposed development.

The development site is located within Unallocated Crown Land ('UCL') in the Yindjibarndi section of the Ngarluma/Yindjibarndi Native Title Determination Area (WCD2005/001), where exclusive native title rights are held. A search of the Aboriginal Heritage Inquiry System ('AHIS'), maintained by the DPLH identified a lodged Aboriginal heritage place-Powerline Survey 078 (ACH-00010937)—in the vicinity of the site, but outside the proposed camp development area. No State Registered Heritage Places or locally listed heritage places (as per the Local Planning Scheme and Municipal Heritage Inventory) are located within or adjacent to the site.

An Aboriginal heritage survey was undertaken over the broader Project Jinbi area in June, July and September 2024 by Yindjibarndi Aboriginal Corporation ('YAC') and Echoes Cultural Heritage Management, with the participation of Yindjibarndi Traditional Owners. The survey included both archaeological and ethnographic assessments. Within the defined camp footprint, no registered Aboriginal sites or culturally sensitive areas were identified.

A Cultural Heritage Management Plan ('CHMP') is currently being prepared by Echoes, which will address the findings and recommendations of desktop heritage assessment and on-ground survey. The CHMP will form part of the broader management framework for Project Jinbi Solar Farm, covering both the solar farm and camp components.

The following management measures, informed by the heritage survey and stakeholder engagement, are specific to the Jinbi camp site:

- Engagement of Yindjibarndi monitors during all ground-disturbing works;



- Salvage of isolated artefacts in accordance with agreed protocol;
- Fencing and clear demarcation of the nearby DPLH-lodged heritage place (ACH-00010937), as requested by Yindjibarndi Ngurra Aboriginal Corporation ('YNAC');
- Ongoing alignment with the due diligence requirements of the *Aboriginal Cultural Heritage Act 2021* (WA).

These measures form one component of the broader CHMP, which will outline additional protections and management protocols across the full Project Jinbi footprint.

### 5.3 Bushfire Management

This application is supported by a Bushfire Management Plan ('BMP') prepared by Western Environmental. The BMP is prepared to address the requirements of State Planning Policy 3.7 and its associated Guidelines for Planning in Bushfire Prone Areas.

#### Appendix E: Bushfire Management Plan.

The BMP confirms bushfire risk is capable of being appropriately mitigated to achieve compliance with the Guidelines. The main considerations relating to bushfire management of the proposed development are set out in **Table 2**.

**Table 2: Bushfire Protection Criteria Compliance Table.**

Bushfire Protection Criteria	Proposed Bushfire Management Strategies
Element 1: Location	Does not apply to Development Applications.
Element 2: Siting & Design	<p>All proposed buildings will be subject to a BAL rating of BAL-12.5 or less. The habitable buildings will be separated from post-development bushfire risk by an asset management zone ('APZ') that will be cleared and maintained in perpetuity.</p> <p>The proposed development is wholly located inside the boundary of the existing, approved Native Vegetation Clearing Permit associated with the Solar Facility.</p>
Element 3: Vehicular Access	All internal roads within the development will comply with the private driveway requirements in the Guidelines.
Element 4: Water	The development will not be connected to reticulated water. Accordingly, the proposal will be serviced by interconnected firefighting water tanks to provide dedicated water supply for emergency situations.



## 5.4 Traffic and Access

The broader solar farm development was originally supported by a Traffic Impact Assessment, which anticipated daily bus movements transporting the construction and operational workforce to and from Karratha. However, following more detailed workforce planning, this application proposes on-site accommodation as a means to improve work health and safety outcomes for employees.

As a result, the workforce camp is now proposed directly adjacent to the solar farm, allowing workers to be accommodated within walking distance of the site. Personnel will be transported from their town of origin to the site by bus on a weekly basis, rather than daily.

This revised arrangement significantly reduces the total number of traffic movements associated with the development, compared to the original scenario.

## 5.5 Social Impact

A Social Impact Statement ('SIS') has been prepared to support this Development Application in accordance with the Shire of Ashburton's Local Planning Policy LPP20 – Social Impact Assessment. The SIS identifies key social risks and opportunities associated with the proposed Jinbi Workforce Accommodation Camp and outlines mitigation measures to manage potential impacts.

### 5.5.1 Key Areas of Social Influence

The development is located within the Yindjibarndi Native Title Determination Area. The primary areas of social influence include the Ngurrawaana community, Karratha, and Roebourne, with considerations including proximity, local workforce engagement, cultural heritage protection, and infrastructure impacts.

### 5.5.2 Consultation

YEC has adopted a best-practice, culturally appropriate community engagement approach guided by Clean Energy Council and First Nations Clean Energy principles. Consultation has already commenced with key stakeholders including the Ngurrawaana community, local government, Traditional Owners, and potential suppliers, and will continue throughout the life of the Project.

### 5.5.3 Preliminary Social Impacts and Mitigation Measures

Theme	Potential Impact or Opportunity	Mitigation / Enhancement Measure
Economic	Creation of employment and procurement opportunities for Indigenous and local businesses	Prioritisation of Yindjibarndi businesses, community profit-sharing, support for training programs
Social	Increased demand on local services; potential strain on housing	On-site accommodation provision; private service use; cultural awareness programs; local presence
Transport	Increased traffic and associated safety risks	On-site camp to reduce transport needs; route planning; use of buses for shift transport
Ecological	Impacts on flora, fauna, and water systems	Environmental assessments; adherence to permit conditions;



Theme	Potential Impact or Opportunity	Mitigation / Enhancement Measure
		participation of Traditional Owners in surveys
Cultural	Protection of cultural heritage and access to Country	Cultural awareness induction; heritage agreements; restricted areas fenced off
Other	Visual impacts, remote location risks	Visualisation tools, emergency management plans, site layout approval from Yindjibarndi

#### 5.5.4 Ongoing Commitment

YEC is committed to transparent engagement and continual review of social impacts. A Social Investment Program and Operational Management Plan will be implemented to support community wellbeing and maximise local benefits during the camp's operation.

### Appendix F: Social Impact Assessment

## 5.6 Engineering Servicing

The proposed development will be a temporary accommodation facility established to support construction activities associated with the Yindjibarndi Energy Solar Farm. The facility will provide up to 272 beds and will be comprehensively serviced via self-contained infrastructure systems, suitable for remote regional deployment and operation. The following outlines the key servicing provisions.

### Appendix G: Servicing Report

#### 5.6.1 Potable Water

Potable water will be supplied to the camp via an onsite Potable Water Treatment Plant ('PWTP'). This system is designed to treat raw water sourced either via approved groundwater extraction or water carting, depending on local availability and site conditions. Treated water will be stored in dedicated potable water holding tanks with appropriate UV and chlorination facilities in place to ensure ongoing compliance with health regulations. Reticulation throughout the facility will be achieved via a pressurised ring main system, distributing water to each accommodation module and communal facility as required.

#### 5.6.2 Effluent Disposal

All wastewater generated on site will be treated via a dedicated Wastewater Treatment Plant ('WWTP'). The treatment system has been designed in accordance with Department of Health and Department of Water and Environmental Regulation guidelines and is capable of servicing the maximum anticipated occupancy. Wastewater will be conveyed from camp facilities to the WWTP via a gravity-fed and pumped reticulation network, including balance tanks to manage peak flows. Treated effluent will be disposed of via an engineered spray field located within the camp lease area, designed to accommodate hydraulic and nutrient loads. A grease trap will be installed to manage kitchen wastewater prior to entry to the system.



### 5.6.3 Stormwater Management

Stormwater will be managed via surface flow directed to swales and infiltration areas, minimising discharge off-site and avoiding erosion. The layout ensures that drainage paths are aligned with natural topography and that habitable infrastructure is elevated where required. All earthworks will be designed to ensure stormwater does not impact surrounding vegetation or cultural heritage exclusion areas.

### 5.6.4 Power Supply

Power to the facility will be generated onsite using diesel generators. The primary power source will comprise modular generator units with sufficient capacity to supply peak and redundancy loads. Electrical distribution will be managed through centralised switchboards and sub-boards to all accommodation and utility buildings. All installations will comply with relevant Australian Standards, and the layout will be designed to allow for efficient energy management, including future integration with renewable sources if required.

### 5.6.5 Communications

The camp will include a dedicated communications room and be equipped with internal Wi-Fi capabilities and cable reticulation to service all modules. Satellite or mobile data infrastructure will be installed to ensure reliable external connectivity. A TV entertainment system will be available in communal areas, improving resident amenity.

## 5.7 Noise Impact

The proposed development site is located in proximity to a freight rail line, with several accommodation modules situated within 200 metres of the railway corridor. As a result, an acoustic assessment was undertaken in accordance with the requirements of State Planning Policy 5.4 – Road and Rail Noise ('SPP 5.4') to ensure noise-sensitive development is adequately protected from transport-generated noise.

A Noise Assessment was prepared by Lloyd George in support of this application, to ensure that the noise within the development is at acceptable levels.

### Appendix H: Acoustic Report.

Modelling indicated that a number of rooms along the eastern edge of the camp would be exposed to noise levels exceeding SPP 5.4 thresholds. To achieve compliance with indoor noise criteria, specific construction measures have been recommended, including:

- All windows in exposed rooms to have a minimum  $R_w + C_{tr} \geq 26$ , typically achieved using 6mm thick glazing in fixed or awning frames with acoustic seals.
- External doors for impacted rooms to be minimum 35mm solid timber core with full perimeter acoustic seals and, where glazed, incorporate a minimum 5mm glass insert.
- Sound-rated plasterboard linings to be applied internally to sandwich panel walls in select modules (either single or double layers depending on orientation and exposure).
- All rooms to be provided with 90mm R2 insulation and a 13mm sound-rated plasterboard ceiling.

Noise contour mapping confirms that with the above measures, all internal habitable rooms within the camp can achieve compliance with SPP 5.4 requirements. External areas, while not fully shielded, will provide a reasonable level of acoustic amenity for passive use, consistent with expectations for temporary workforce accommodation in proximity to transport infrastructure.



## 6 Summary

This Application seeks the approval of the Shire of Ashburton for the use and development of a Transient Workforce Accommodation Facility on a portion of Unallocated Crown Land ID 3115653. The primary purpose of the facility is to accommodate the construction workforce associated with the Yindjibarndi Energy Corporation's Project Jinbi Solar Farm.

In summary, the proposed development includes:

- Siting and use of 16 trailer-mounted accommodation facilities, each containing provision for accommodation of 47 people, providing a short-term accommodation solution to construct the Workforce Accommodation Facility.
- Development and use of a Workforce Accommodation Facility comprising:
  - 68 transportable buildings, providing accommodation for up to 272 people.
  - A kitchen and associated mess (dining) hall.
  - A wet mess (tavern) and associated beer garden.
  - Four laundry facilities.
  - A gym facility.
  - A recreation room.
  - Associated office, storage and ice rooms.

The proposed development is consistent with the applicable local planning framework and will directly support YEC with its broader renewable energy generation targets. On the basis of the above, it is respectfully requested that the Shire of Ashburton recommend that the Regional Development Assessment Panel grant approval for this application.



## Appendix A: Planning Approval (DAP/24/O2764)





LG Ref: DA 24-41  
DAP Ref: DAP/24/02764  
Enquiries: (08) 6551 9919

Madison Mackenzie  
RFF Pty Ltd  
2 Church Street,  
PERTH WA 6000

Dear Madison,

**REGIONAL DAP - SHIRE OF ASHBURTON - DAP APPLICATION - DA 24-41 - DETERMINATION**

Property Location:	Land ID 3115647 & Land ID 3115653
Application Details:	Renewable Energy Facility (Solar)

Thank you for your Form 1 Development Assessment Panel (DAP) application and plans submitted to the Shire of Ashburton on 10 September 2024 for the above-mentioned development.

This application was considered by the Regional DAP at its meeting held on 4 December 2024, where in accordance with the provisions of the Shire of Ashburton Local Planning Scheme No.7, it was resolved to **approve** the application as per the attached notice of determination.

Should the applicant not be satisfied by this decision, an application may be made to amend or cancel this planning approval in accordance with regulation 17 and 17A of the *Planning and Development (Development Assessment Panels) Regulations 2011*.

Please also be advised that there is a right of review by the State Administrative Tribunal in accordance with Part 14 of the *Planning and Development Act 2005*. Such an application must be made within 28 days of the determination, in accordance with the *State Administrative Tribunal Act 2004*.

Should you have any queries with respect to the conditions of approval, please contact Jack Hunter on behalf of the Shire of Ashburton on 08 9188 4444.

Yours sincerely,

**DAP executive director**

10 December 2024

Encl. DAP Determination Notice  
Approved Plans

Cc: Jack Hunter  
Shire of Ashburton

***Planning and Development Act 2005***

**Shire of Ashburton Local Planning Scheme No.7**

**Regional Development Assessment Panel**

**Determination on Development Assessment Panel  
Application for Planning Approval**

**Property Location:** Land ID 3115647 & Land ID 3115653

**Application Details:** Renewable Energy Facility (Solar)

In accordance with regulation 8 of the *Planning and Development (Development Assessment Panels) Regulations 2011*, the above application for planning approval was **granted** on 4 December 2024, subject to the following:

In accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the Shire of Ashburton Local Planning Scheme No. 7, **Approves** DAP Application DAP24/02764 for a Renewable Energy Facility (Solar) on Unallocated Crown Land ID 3115647 and 3115653, incorporating the following plans date received 6 November 2024:

- Overall Site Plan - Civil
- Internal Access Road, Tracks, Fence and Access Gates Layout Sheet 1 of 3
- Internal Access Road, Tracks, Fence and Access Gates Layout Sheet 2 of 3
- Internal Access Road, Tracks, Fence and Access Gates Layout Sheet 3 of 3
- Internal Access Road, Tracks, Fence and Access Gates Sections (Typical)
- Internal Access Road, Tracks, Fence and Access Gates Sections Low Level Rock Crossing
- Internal Access Road, Tracks, Fence and Access Gates Sections Road Regrading
- Operation and Maintenance Building Plan
- Operation and Maintenance Building GA and Elevations
- Switchroom Layout
- Firewater Tank Plan and Turning Path
- Site Access Roads Intersection Details

subject to the conditions and advice notes set out below:

**Conditions**

1. The approved development shall be in accordance with the approved development plans and documentation which form part of this development approval, subject to modifications required as a consequence of any condition(s) of this approval.

2. Prior to commencing construction, the applicant shall submit and have approved by the Local Government, and thereafter implement to the satisfaction of the Local Government, a Construction and Environmental Management Plan addressing the following matters:
  - a) How materials and equipment will be delivered to and removed from the site;
  - b) How materials and equipment will be stored on the site;
  - c) Arrangements for complying with clearing permit conditions;
  - d) Parking arrangements and facilities for construction workers;
  - e) How construction waste will be collected, stored, recycled and/or disposed of; and
  - f) How risks of wind and/or water erosion, sedimentation and dust generation will be minimised during and after the works.
3. Prior to lodging a building permit, the applicant shall submit a Parking and Access Plan addressing the requirements of Clause 6.17 of the Scheme to the satisfaction of the Local Government. The approved plan shall be implemented prior to commencing operations and thereafter maintained to the satisfaction of the Local Government.
4. Prior to commencing construction, and subject to approval from the Local Government, the applicant shall install the onsite sewerage treatment system associated with the operations and maintenance building and systems associated with temporary facilities for construction workers.
5. Prior to commencing operations, the applicant shall submit to the Local Government, certification from a suitably qualified Bushfire Planning and Design (BPAD) Practitioner that the recommendations of the Linfire Bushfire Risk Management Plan (BRMP) dated 9 September 2024 have been implemented to the satisfaction of the practitioner and that sufficient procedures and processes are in place to reasonably secure ongoing compliance with the operational requirements of the BRMP.
6. Prior to commencing construction of the renewable energy facility, an Outline Decommissioning and Rehabilitation Plan (ODRP) shall be submitted to the Local Government for approval. The ODRP shall address the following to the satisfaction of the Local Government:
  - a) Provide an initial strategy for decommissioning the facility and rehabilitating the site at the end of its operational life;
  - b) The anticipated lifespan of the facility;
  - c) Methods and measures to remove infrastructure and restore the site to its current standard;
  - d) Arrangements for managing waste generated from decommissioning operations and redundant/removed infrastructure;
  - e) An indicative estimate of decommissioning and rehabilitation costs; and
  - f) Arrangements to secure decommissioning and rehabilitation obligations, which may include a bank guarantee, bond, trust fund, or other acceptable financial instrument.

7. No later than one (1) year prior to the cessation of operations (anticipated or otherwise), the operator shall submit to the Local Government for approval, a Detailed Decommissioning and Rehabilitation Plan (DDRP). The DDRP shall address the following to the satisfaction of the Local Government:
  - a) Establishment of a suitable financial mechanism such as a bank guarantee or bond to secure the operator's decommissioning and rehabilitation obligations, as outlined in the DDRP;
  - b) A comprehensive schedule and methodology for the removal of all above-ground and below-ground infrastructure associated with the facility;
  - c) Detailed measures for the recycling, reuse, or disposal of materials in accordance with relevant legislation and guidelines;
  - d) Specific proposals for site rehabilitation and land restoration, including soil stabilisation and revegetation strategies;
  - e) An updated and detailed estimate of decommissioning and rehabilitation costs, prepared by a qualified independent professional; and
  - f) Finalised details of the financial security mechanism to ensure that sufficient funds are available to carry out the decommissioning and rehabilitation works.
8. If the renewable energy facility ceases to generate electricity for a period of twelve (12) consecutive months, the operator shall, within six (6) months of the end of that period, submit a DDRP to the Local Government for approval and proceed to decommission the facility in accordance with the approved DDRP to the satisfaction of the Local Government.

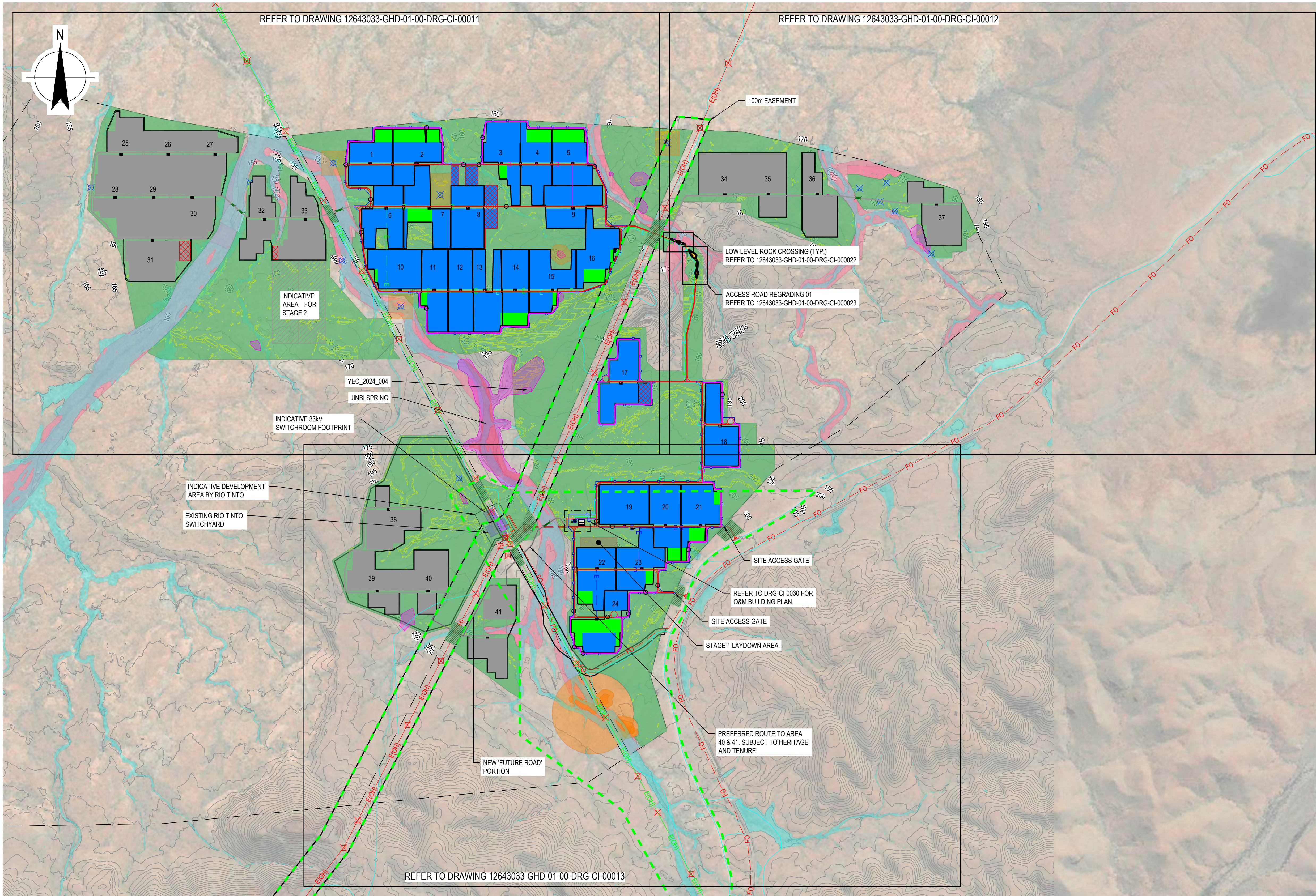
#### **Advice Notes**

1. The proponent is advised that granting of development approval does not constitute a building permit and that an application for relevant building permits must be submitted to the local government and be approved before any work requiring a building permit can commence on site.
2. The proponent is advised that this development approval does not negate the requirement for any additional approvals, and adherence to due diligence, which may be required under separate legislation. This includes, but is not limited to, the obtaining of any required approvals from the Department of Health, the Department of Energy, Mines, Industry Regulation and Safety, the Department of Water & Environment Regulation and Main Roads WA and consulting of Before You Dig Australia. It is the applicant's responsibility to obtain any additional approvals, and undertaking of due diligence, required before the development/use lawfully commences.
3. In relation to the operations and maintenance building, given the building meets the definition of a habitable building, if it is located in a BAL-40 or BAL-FZ area then the provisions of SPP 3.7 are triggered and the development must demonstrate compliance with applicable bushfire planning guidelines.

4. Onsite sewerage treatment systems require approval from the Local Government's Environmental Health Services. The system must comply with the Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974 and any other applicable legislation, regulations, or standards. It is recommended that the applicant engages with the Local Government early in the planning process to ensure that all design, installation, and operational requirements are met prior to commencing works
5. The proponent is advised to liaise directly with the Civil Aviation Safety Authority (CASA) and/or Airservices Australia regarding any requirements for a specific type of hazard/warning obstacle light/s that may need to be installed in order to ensure other users of the airspace are aware of the structures.
6. The applicant is advised that the Hydrologia Jinbi Flood Extents Study dated 23 May 2024 does not address recent changes to the Australian Rainfall and Runoff Guidelines (ARR) in Book 1 Chapter 6 – Climate Change Considerations as the modelling does not account for the impact of climate change on the magnitude or frequencies of occurrence for flood events. It is recommended that the flood extents study be updated to address these changes, noting the new chapter was published on 27 August 2024, well after the date of the study.
7. In relation to the BRMP recommendations include, but are not limited to:
  - a) Establishment of an Asset Protection Zone (APZ) around the perimeter of the development;
  - b) Provision of sufficient and appropriately positioned bushfire water supply;
  - c) Electrical infrastructure designed to comply with all relevant design, construction and installation standards;
  - d) Provision of appropriate vehicular access to all parts of the development, including multiple points of ingress and egress, passing bays every 600m and all-weather construction;
  - e) Establishment and adherence to an Emergency Management Plan; and
  - f) Establishment of procedures and processes to establish ongoing compliance with the operational requirements for the BRMP.

Where an approval has so lapsed, no development shall be carried out without further approval having first been sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) or local government approval under regulation 17A of the *Planning and Development (Development Assessment Panels) Regulations 2011*.





#### LEGEND:

- SITE BOUNDARY
- TOPOGRAPHICAL CONSTRAINTS ( >15% SLOPES )
- ENVIRONMENTAL AVOIDANCE AREA
- PROPOSED DEVELOPMENT AREA
- PROPOSED ACCESS CORRIDORS
- HERITAGE AVOIDANCE
- HERITAGE SITES
- HYDROLOGY CONSTRAINTS ( DEPTH > 0.5m, 1 IN 500 - YEAR AEP )
- 1.8m HIGH SITE FENCING - STAGE 1
- SITE GATE
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- ACCESS PATH ( 4m WIDTH ) - STAGE 1
- ACCESS ROAD ( 4m WIDTH ) - FUTURE
- ACCESS PATH ( 4m WIDTH ) - FUTURE
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- SOLAR TRACKER ( 2 STRINGS, 54 PANELS )
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- FIREWATER TANK AND HARDSTAND
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- 33kV SOLAR FEEDER 2
- 33kV SOLAR FEEDER 3
- 33kV SOLAR FEEDER 4
- CULVERT CROSSING
- PCU SKID
- YEC\_2024-03 JINBI FIELD SITES
- LOW LEVEL ROCK CROSSING

#### EXISTING:

- CONTOUR
- 132kV POWERLINE
- 220kV POWERLINE
- FIBRE OPTIC CABLE
- TRACKS
- ON-GOING LAND TENURE DISCUSSIONS
- TRANSMISSION TOWERS

#### NOTES:

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- PV ARRAYS SUBJECT TO MINOR MODIFICATIONS PENDING CIVIL ACCESS REQUIREMENTS.
- ROAD/FENCE PROXIMITY TO 1% AEP FLOOD IN AREAS AND SUBJECT TO FURTHER DESIGN DEVELOPMENT.

DEVELOPMENT  
ASSESSMENT PANEL

APPROVED  
04-Dec-2024

SITE PLAN  
SCALE 1:10,000m

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P02	CLIENT COMMENTS	BE	RR	30.09.24
P01	DRAFT WORK IN PROGRESS	JS	RR	13.09.24
Rev	Description	Checked	Approved	Date
Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	

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SCALE 1:10,000 AT ORIGINAL SIZE

Yindjibarndi Energy  
A partnership with ACEN

GHD  
Level 15, 133 Castlereagh Street,  
Sydney NSW 2000 Australia  
T 61 2 9239 7100 F 61 2 9239 7199  
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Project No.  
12643033

Client YINDJIBARNDI ENERGY  
CORPORATION Pty Ltd  
Project YINDJIBARNDI RENEWABLE ENERGY  
HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

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JINBI SOLAR FARM  
OVERALL SITE PLAN  
CIVIL

12643033-GHD-01-00-DRG-CI-00001

Size  
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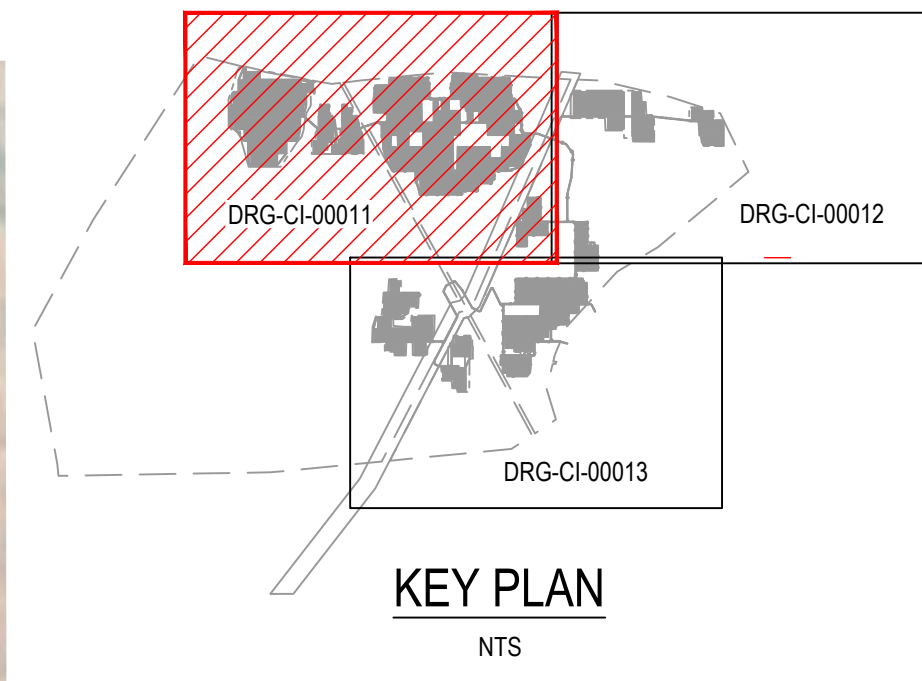
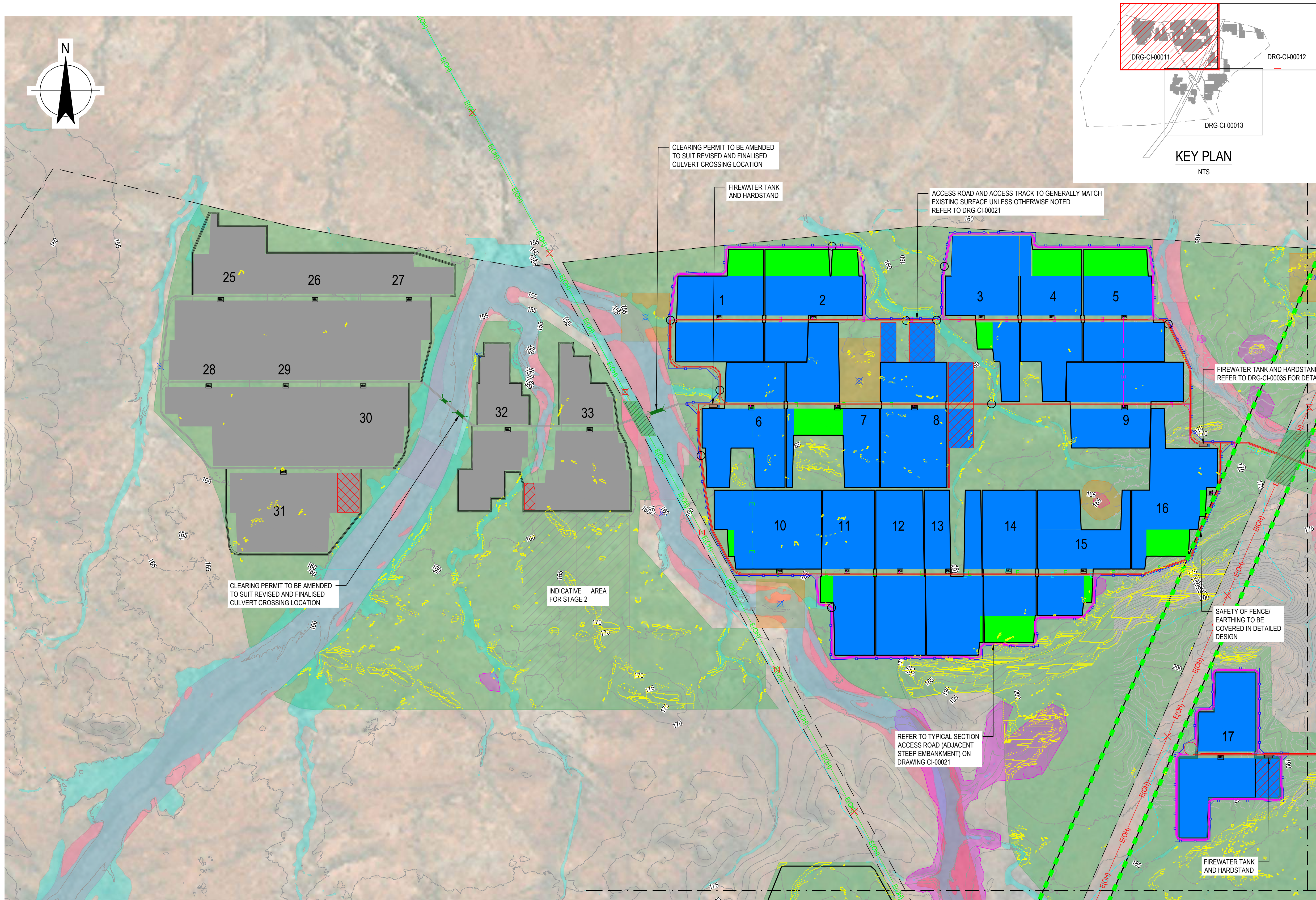
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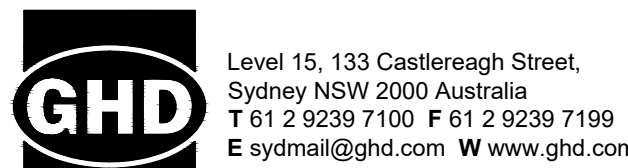
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Rev	Description	Checked	Approved	Date
Author	C. MENCHAVEZ	Design Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	

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SCALE 1:5000 AT ORIGINAL SIZE



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Project No.  
12643033

Client  
YINDJIBARNDI ENERGY CORPORATION Pty Ltd  
Project  
YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE  
Status  
PRELIMINARY

Drawing Title  
JINBI SOLAR FARM  
INTERNAL ACCESS ROAD, TRACKS,  
FENCE AND ACCESS GATES LAYOUT  
SHEET 1 OF 3

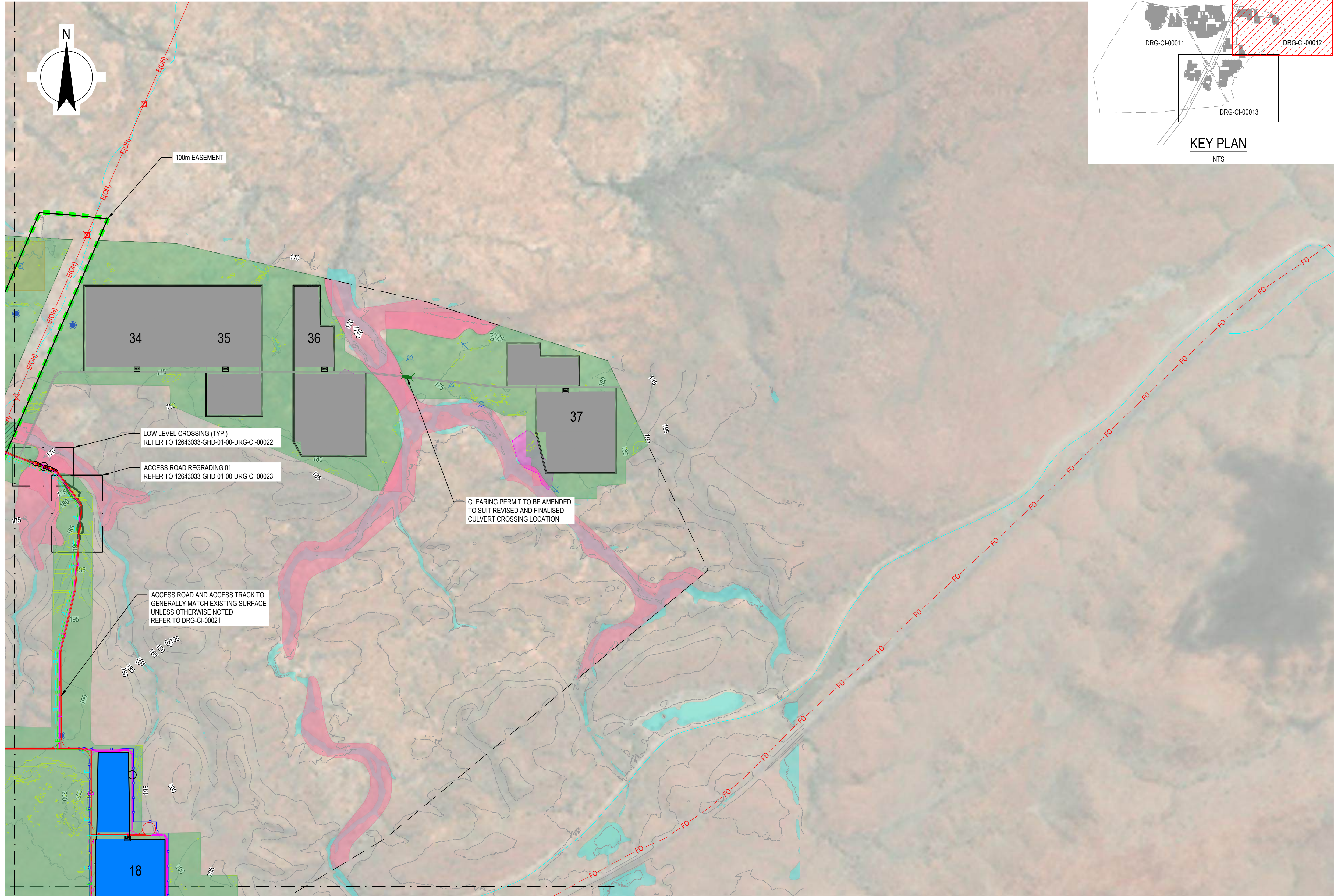
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Size  
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Rev  
P03



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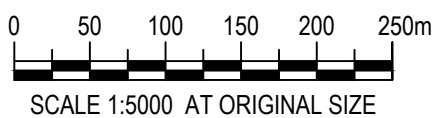
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**SITE PLAN**  
SCALE 1:5000m

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Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	



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Project No.  
12643033

Client **YINDJIBARNDI ENERGY CORPORATION Pty Ltd**  
Project **YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE**  
Status **PRELIMINARY**

Drawing Title **JINBI SOLAR FARM  
INTERNAL ACCESS ROAD, TRACKS,  
FENCE AND ACCESS GATES LAYOUT  
SHEET 2 OF 3**

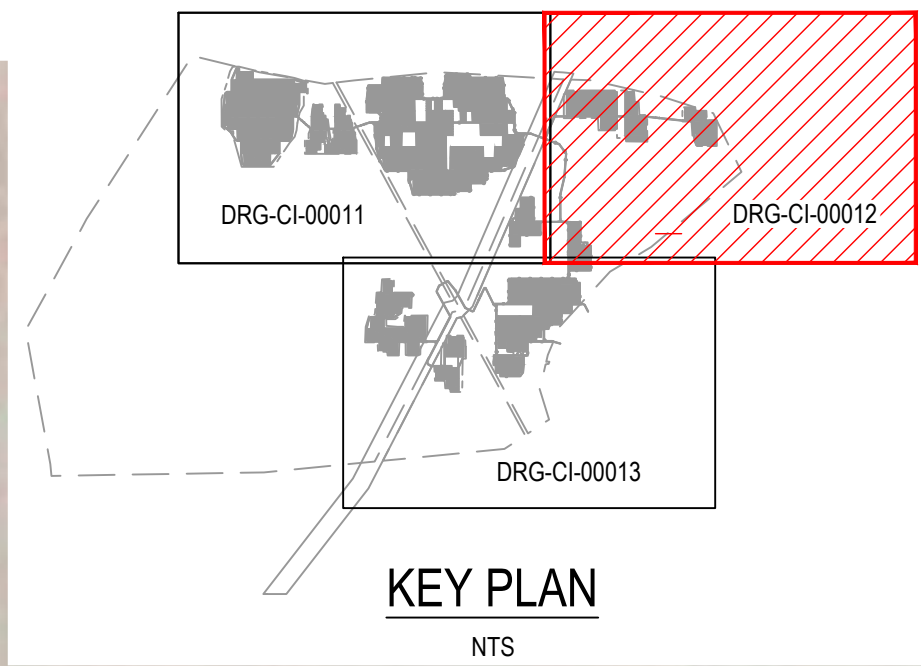
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ASSESSMENT PANEL**

**APPROVED**  
**04-Dec-2024**

Drawing No.  
12643033-GHD-01-00-DRG-CI-00012

Size  
**A1**

Rev  
**P03**



**LEGEND:**

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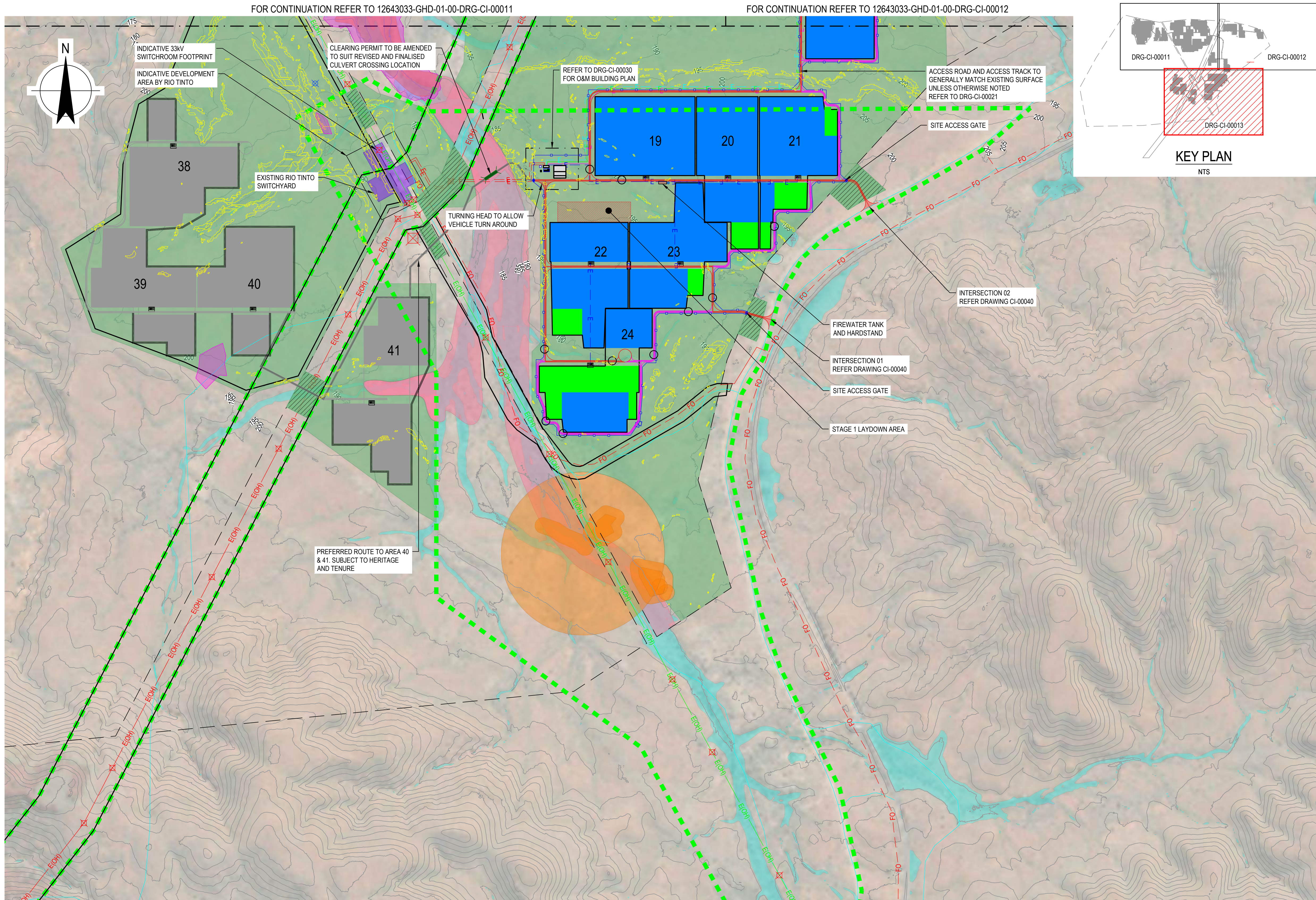
- CONTOUR
- E(OH) 132kV POWERLINE
- E(OH) 220kV POWERLINE
- FO FIBRE OPTIC CABLE
- TRACKS
- ON-GOING LAND TENURE DISCUSSIONS
- TRANSMISSION TOWERS

**NOTES:**

- SOLAR PANEL ARRANGEMENT AND LAYOUT IS PRELIMINARY ONLY AND NOT INTENDED FOR CONSTRUCTION. EQUIPMENT LAYOUT TO BE REFINED SUBJECT TO FURTHER DESIGN AND DISCUSSION.
- SOLAR PANEL ARRANGEMENT AND LAYOUT IS BASED ON LIMITED GEOTECHNICAL INFORMATION PROVIDED AT THE TIME OF DESIGN DEVELOPMENT. ARRANGEMENT TO BE REFINED BASED ON GEOTECHNICAL REPORT COMMISSIONED AND UNDERWAY AT THE TIME OF THIS DESIGN DEVELOPMENT.
- FINAL DESIGN STAGE TO OUTLINE FOOTPRINT FOR PREFABRICATED CONTROL ROOM AND OPERATIONAL FACILITIES. BUILDINGS TO HAVE ASSET PROTECTION ZONE TO MINIMISE BUSHFIRE IMPACT.
- FIRE WATER TANKS FINAL LOCATIONS TO BE >10 METRES AWAY FROM SOLAR PANELS AND PCU SKID.
- ALL STAGE 2 WORKS ARE SUBJECT TO CHANGE PENDING STAGE 2 REQUIREMENTS AND FURTHER ENGINEERING ASSESSMENT.
- PV ARRAYS SUBJECT TO MINOR MODIFICATIONS PENDING CIVIL ACCESS REQUIREMENTS.
- ROAD/FENCE PROXIMITY TO 1% AEP FLOOD IN AREAS AND SUBJECT TO FURTHER DESIGN DEVELOPMENT.

Plot Date: 5 November 2024 - 4:34 PM Plotted by: JC Menchavez





LEGEND:

- SITE BOUNDARY
- TOPOGRAPHICAL CONSTRAINTS (>15% SLOPES)
- ENVIRONMENTAL AVOIDANCE AREA
- PROPOSED DEVELOPMENT AREA
- PROPOSED ACCESS CORRIDORS
- HERITAGE AVOIDANCE
- HERITAGE SITES
- HYDROLOGY CONSTRAINTS (DEPTH > 0.5m, 1 IN 500 - YEAR AEP)
- 1.8m HIGH SITE FENCING - STAGE 1
- SITE GATE
- ACCESS ROAD (4m WIDTH) - STAGE 1
- ACCESS PATH (4m WIDTH) - STAGE 1
- ACCESS ROAD (4m WIDTH) - FUTURE
- ACCESS PATH (4m WIDTH) - FUTURE
- INVERTER BLOCKS (INDICATIVE ONLY)
- SOLAR TRACKER (3 STRINGS, 81 PANELS)
- SOLAR TRACKER (2 STRINGS, 54 PANELS)
- SOLAR TRACKER (FUTURE STAGE 2 WORKS)
- EXTRA TRACKERS FOR CONSTRUCTION FLEXIBILITY
- FIREWATER TANK AND HARDSTAND
- 33kV RIO CONNECTION
- 33kV SOLAR FEEDER 1
- 33kV SOLAR FEEDER 2
- 33kV SOLAR FEEDER 3
- 33kV SOLAR FEEDER 4
- CULVERT CROSSING
- PCU SKID
- YEC\_2024-03 JINBI FIELD SITES
- LOW LEVEL ROCK CROSSING

EXISTING:

- CONTOUR
- 132kV POWERLINE
- 220kV POWERLINE
- FIBRE OPTIC CABLE
- TRACKS
- ON-GOING LAND TENURE DISCUSSIONS
- TRANSMISSION TOWERS

NOTES:

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- FINAL DESIGN STAGE TO OUTLINE FOOTPRINT FOR PREFABRICATED CONTROL ROOM AND OPERATIONAL FACILITIES. BUILDINGS TO HAVE ASSET PROTECTION ZONE TO MINIMISE BUSHFIRE IMPACT.
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- PV ARRAYS SUBJECT TO MINOR MODIFICATIONS PENDING CIVIL ACCESS REQUIREMENTS.
- ROADFENCE PROXIMITY TO 1% AEP FLOOD IN AREAS AND SUBJECT TO FURTHER DESIGN DEVELOPMENT.

DEVELOPMENT  
ASSESSMENT PANEL

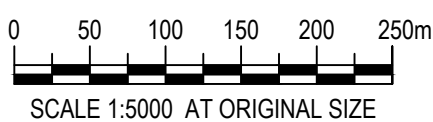
APPROVED  
04-Dec-2024

SITE PLAN

SCALE 1:5000m

PRELIMINARY  
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SCALE 1:5000 AT ORIGINAL SIZE



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Project No.  
12643033

Client YINDJIBARNDI ENERGY  
CORPORATION Pty Ltd  
Project YINDJIBARNDI RENEWABLE ENERGY  
HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

Drawing Title  
JINBI SOLAR FARM  
INTERNAL ACCESS ROAD, TRACKS,  
FENCE AND ACCESS GATES LAYOUT  
SHEET 3 OF 3

12643033-GHD-01-00-DRG-CI-00013

Size  
A1

Rev  
P03

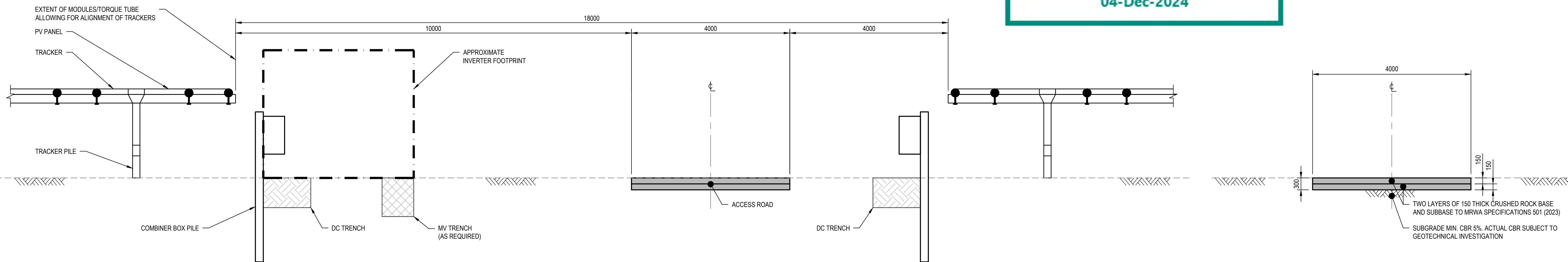


DEVELOPMENT  
ASSESSMENT PANEL

APPROVED

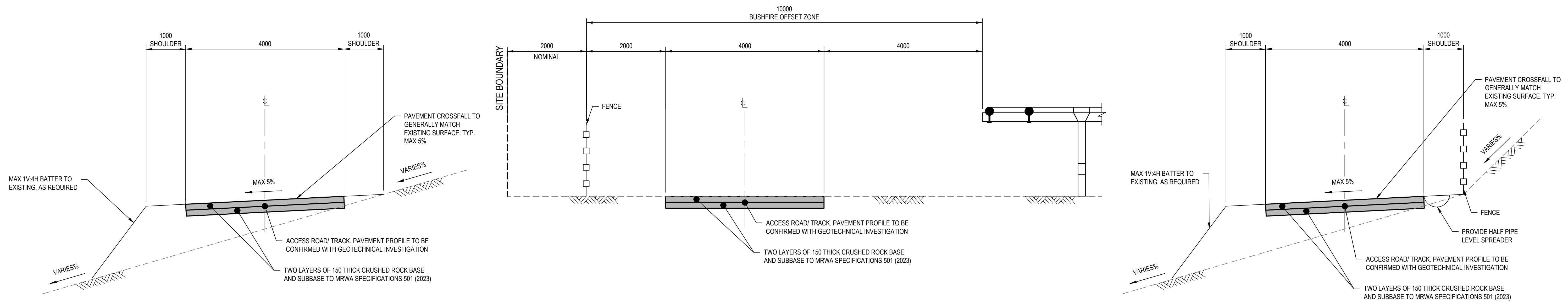
04-Dec-2024

Date Received 6  
November 2024



TYPICAL CROSS SECTION  
ACCESS ROAD (BETWEEN PV PANELS)  
SCALE 1:50

PAVEMENT PROFILE  
ACCESS ROAD/TRACK  
SCALE 1:50

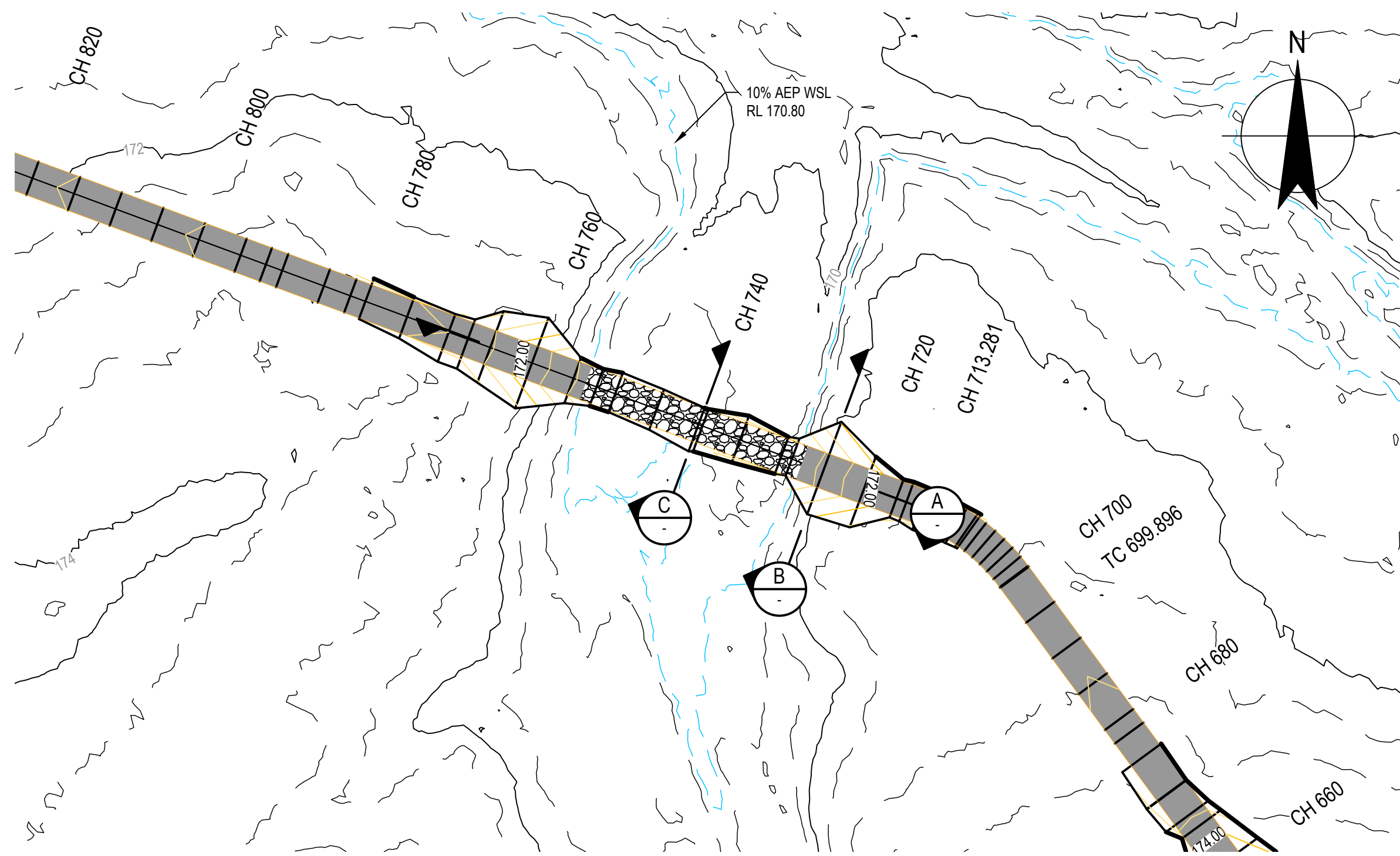


TYPICAL CROSS SECTION  
ACCESS ROAD/TRACK (OUTSIDE PV AREAS)  
SCALE 1:50

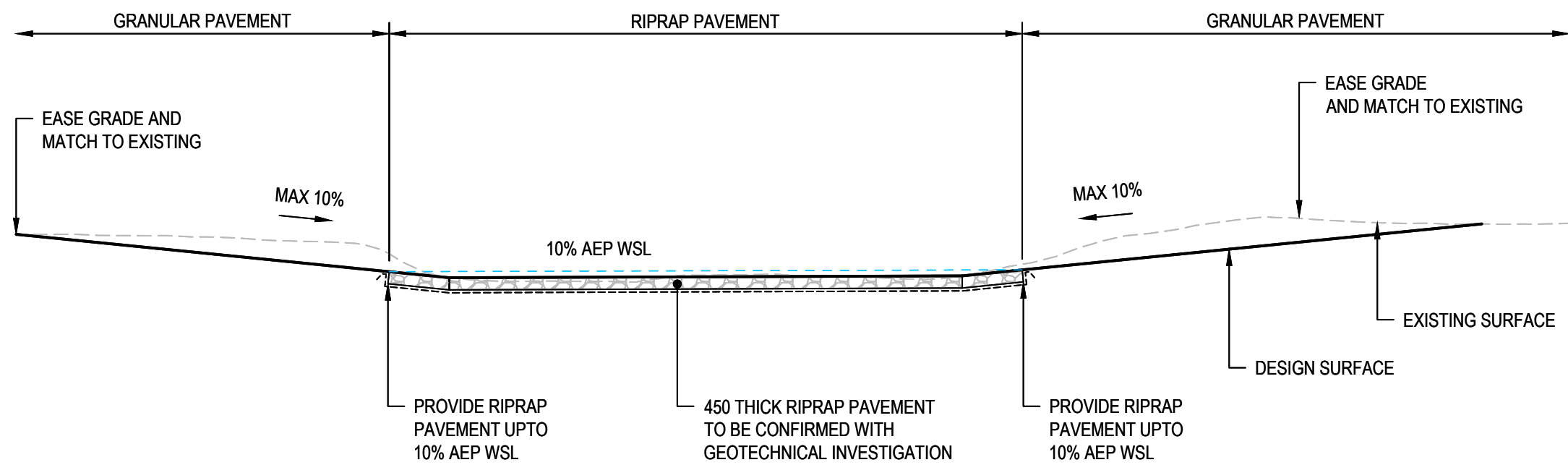
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ACCESS ROAD/TRACK (ADJACENT PV PANELS)  
SCALE 1:50

TYPICAL CROSS SECTION  
ACCESS ROAD/TRACK (ADJACENT STEEP EMBANKMENT)  
SCALE 1:50

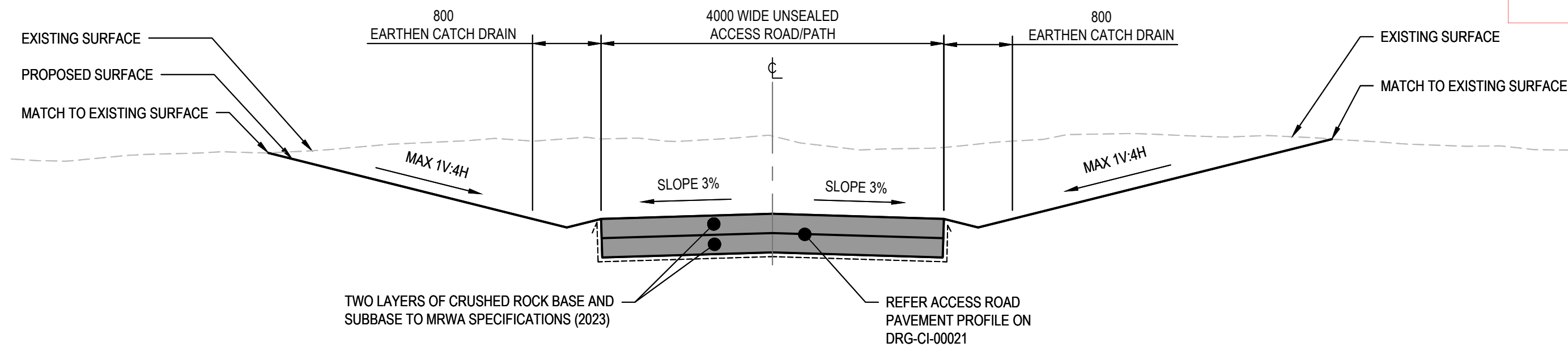




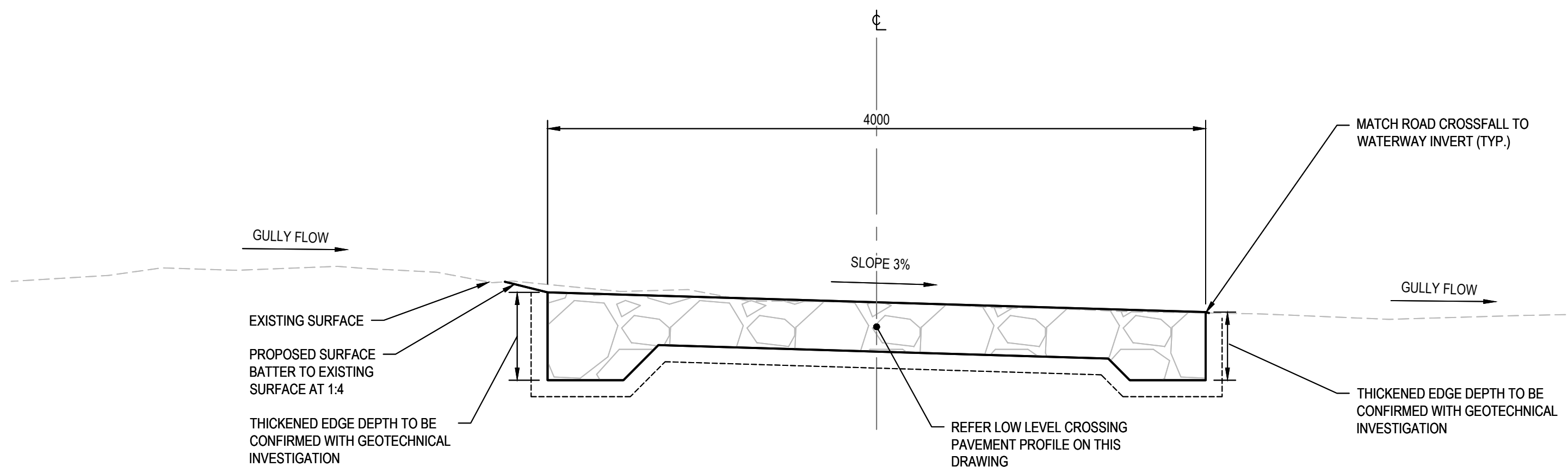
PLAN  
ACCESS ROAD/TRACK - LOW LEVEL CROSSING  
SCALE 1:500



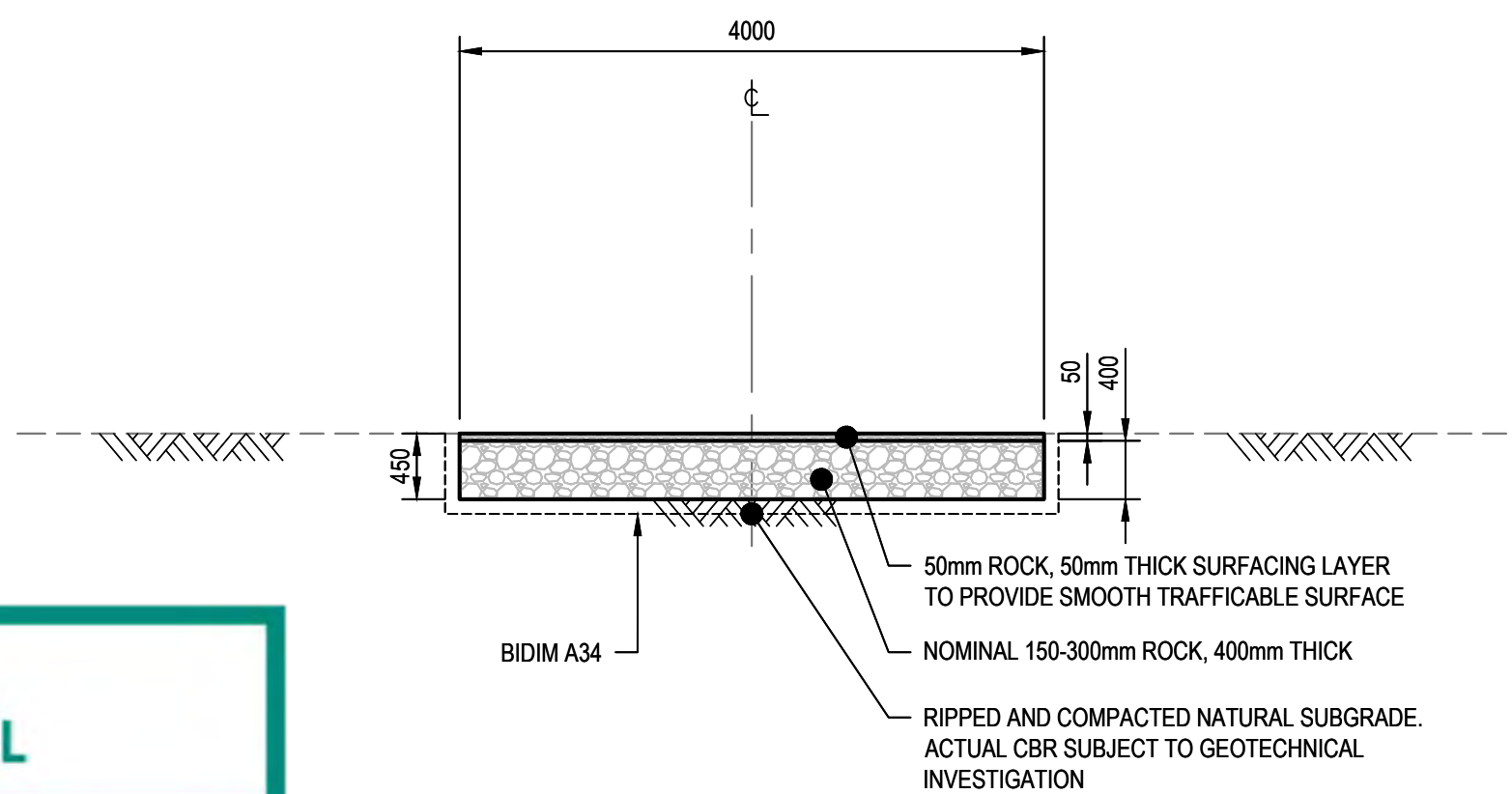
A  
TYPICAL LONG SECTION  
ACCESS ROAD/TRACK - LOW LEVEL CROSSING  
SCALE 1:500



B  
TYPICAL CROSS SECTION  
ACCESS ROAD/TRACK - LOW LEVEL CROSSING  
SCALE 1:50



C  
TYPICAL CROSS SECTION  
ACCESS ROAD/TRACK - LOW LEVEL CROSSING  
SCALE 1:25



PAVEMENT PROFILE  
LOW LEVEL ROCK CROSSING  
SCALE 1:50

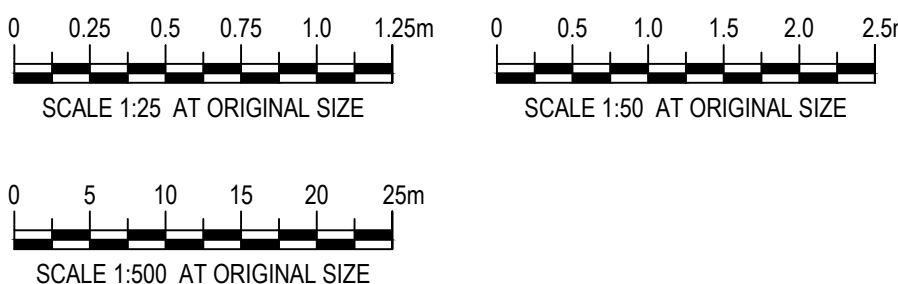
DEVELOPMENT  
ASSESSMENT PANEL

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04-Dec-2024

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Rev	Description	Checked	Approved	Date
P01	ISSUED FOR CLIENT COMMENTS	BE	RR	31.10.24
Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	



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A partnership with ACEN

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Project No.  
12643033

Client YINDJIBARNDI ENERGY CORPORATION Pty Ltd  
Project YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

Drawing Title JINBI SOLAR FARM  
INTERNAL ACCESS ROAD, TRACKS,  
FENCE AND ACCESS GATES SECTIONS  
LOW LEVEL ROCK CROSSING

Drawing No. 12643033-GHD-01-00-DRG-CI-00022  
Rev P01

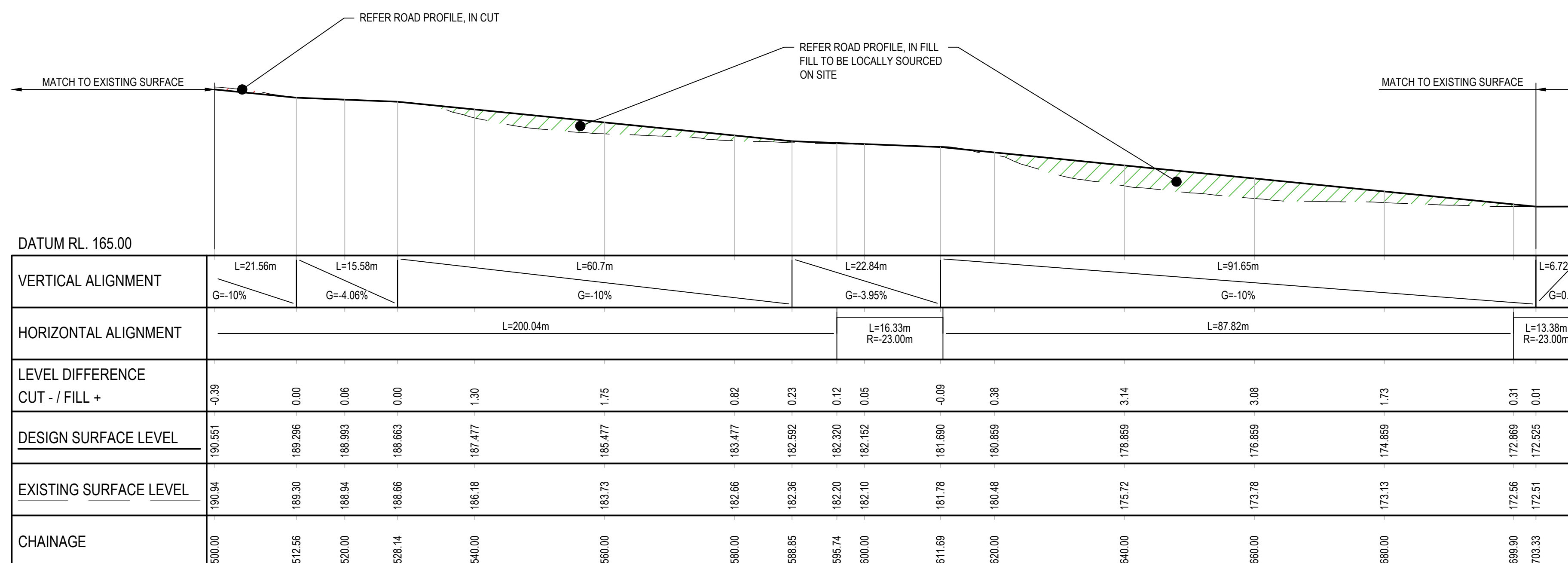
Size  
A1



Diagram illustrating the proposed road profile and cross-section details:

- Profile Labels:** PROFILE IF IN CUT, PROFILE IF IN FILL.
- Dimensions:** 1000 SHOULDER, 4000 UNSEALED ACCESS ROAD.
- Slopes:** MAX 1V:4H, SLOPE 3%.
- Notes:**
  - IF IN FILL, FILL TO BE LOCALLY SOURCED ON SITE
  - IF IN CUT, PROVIDE CATCH DRAIN (TYP.)
  - REFER ACCESS ROAD PAVEMENT PROFILE ON DRG-CI-00021

**B** CROSS SECTION - ACCESS ROAD REGRADING 01  
- SCALE 1 : 100

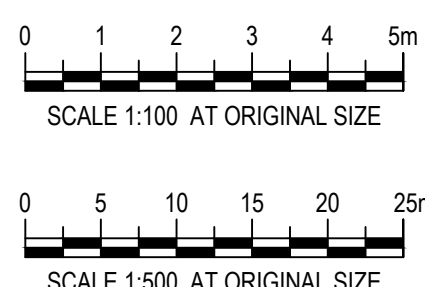


**A LONG SECTION - ACCESS ROAD REGRADING 01**  
- SCALE H 1 : 500, V 1 : 500

**APPROVED**  
04-Dec-2024

**PRELIMINARY**  
**NOT FOR CONSTRUCTION**

P01	ISSUED FOR CLIENT COMMENTS			BE	RR	31.10.24
Rev	Description			Checked	Approved	Date
Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN			
Designer	S. ANGELICA	Design Check	J. KEEM			



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Project No.  
12643033

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Project	YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE
Status	PRELIMINARY

Drawing Title	JINBI SOLAR FARM INTERNAL ACCESS ROAD, TRACKS, FENCE AND ACCESS GATES SECTIONS ROAD REGRADING
------------------	--

Drawing No.  
12643033-GHD-01-00-DRG-CI-00023

Size  
A1

Rev  
P01

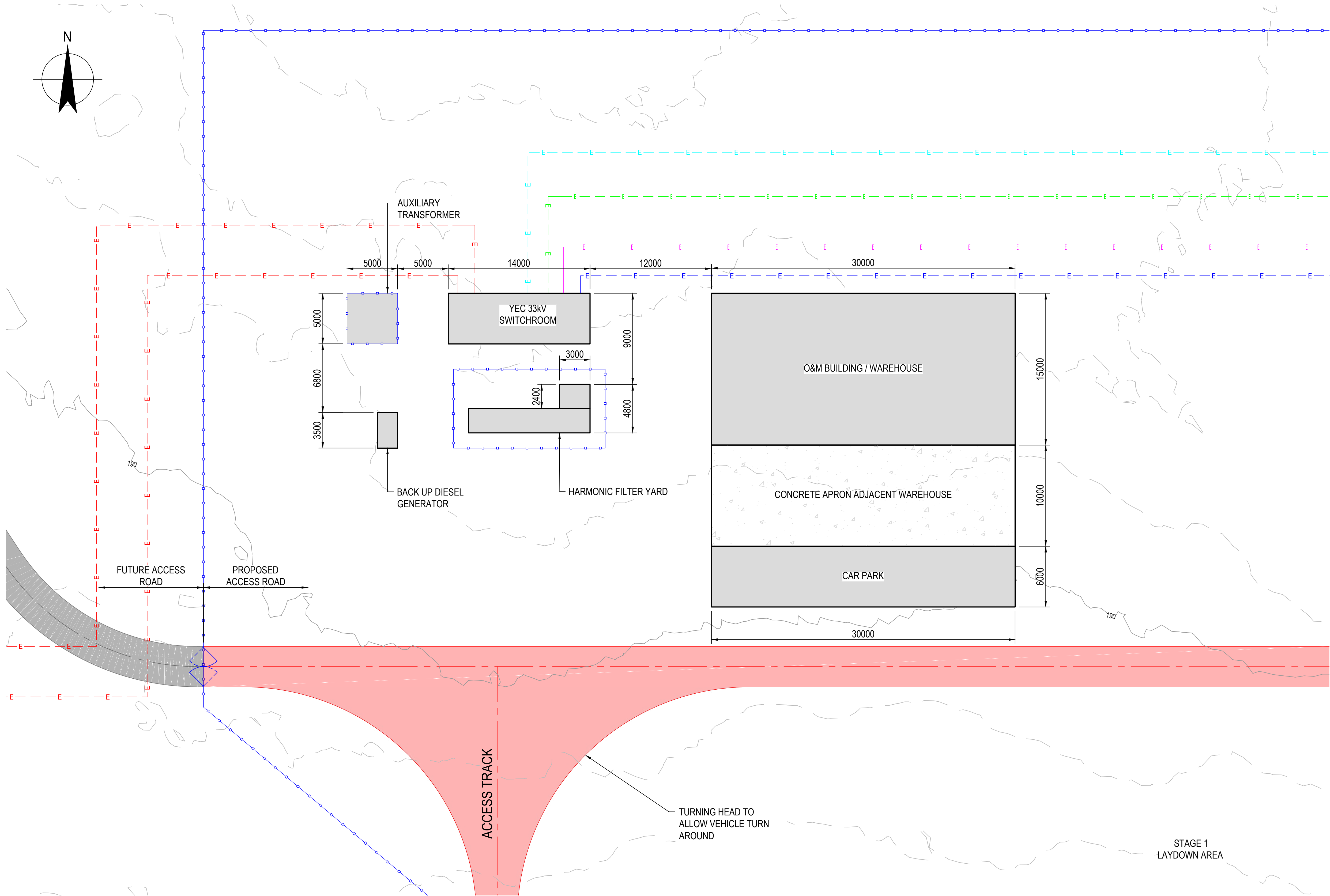


LEGEND:

- 1.8m HIGH SITE FENCING - STAGE 1
- SITE GATE
- ACCESS ROAD ( 4m WIDTH ) - STAGE 1
- ACCESS ROAD ( 4m WIDTH ) - FUTURE
- FIREWATER TANK AND HARDSTAND
- 33kV RIO CONNECTION
- 33kV SOLAR FEEDER 1
- 33kV SOLAR FEEDER 2
- 33kV SOLAR FEEDER 3
- 33kV SOLAR FEEDER 4

NOTE:

- OPERATION AND MAINTENANCE BUILDING LAYOUT IS INDICATIVE ONLY AND SUBJECT TO FINAL DESIGN DEVELOPMENT.



DEVELOPMENT  
ASSESSMENT PANEL

APPROVED  
04-Dec-2024

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P03	ISSUED FOR TENDER	BE	RR	31.10.24
P02	CLIENT COMMENTS	BE	RR	30.09.24
P01	DRAFT WORK IN PROGRESS	JS	RR	13.09.24
Rev	Description	Checked	Approved	Date
Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	

0 2 4 6 8 10m  
SCALE 1:200 AT ORIGINAL SIZE

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Project No.  
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Client YINDJIBARNDI ENERGY  
CORPORATION Pty Ltd  
Project YINDJIBARNDI RENEWABLE ENERGY  
HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

Drawing Title  
JINBI SOLAR FARM  
OPERATION AND MAINTENANCE  
BUILDING PLAN

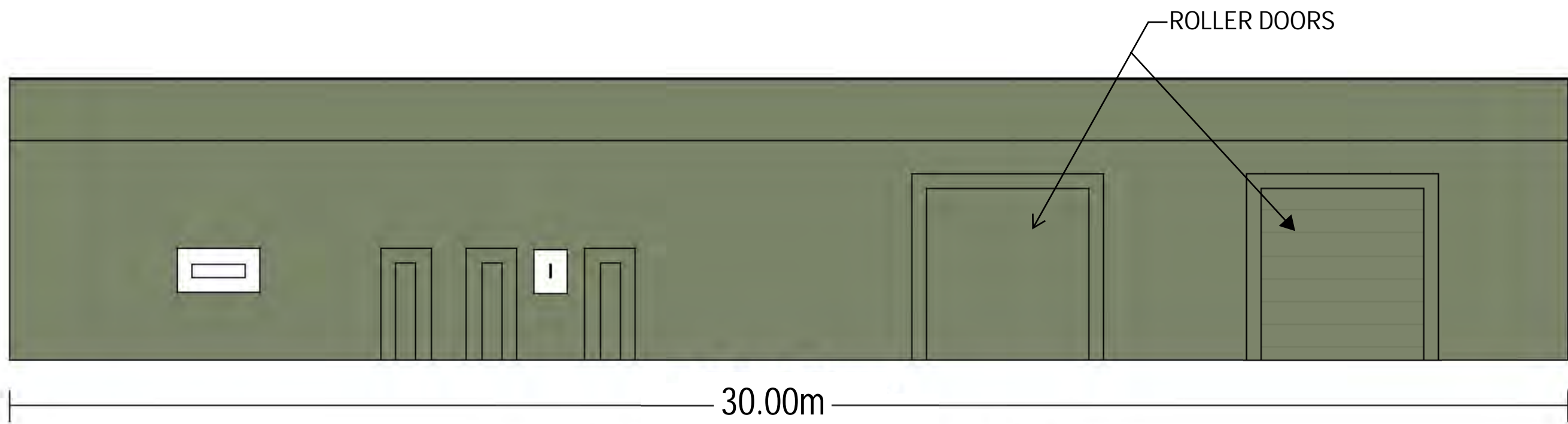
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Size  
A1

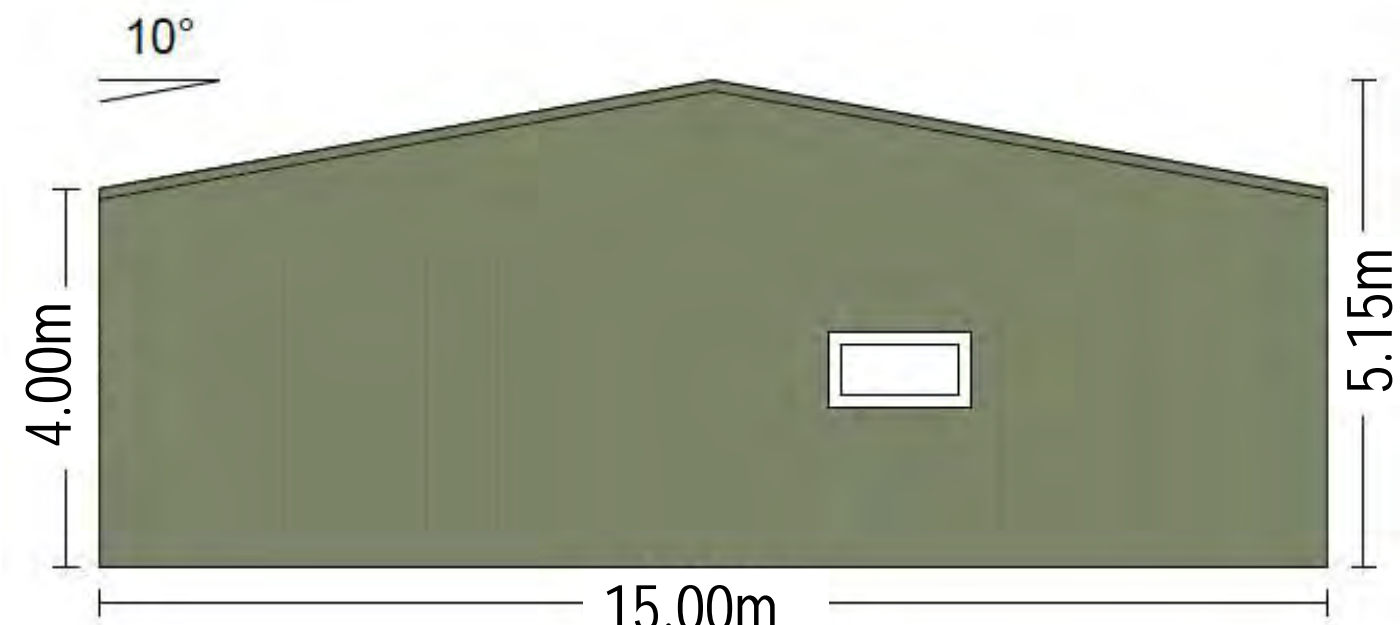
Rev  
P03

DEVELOPMENT  
ASSESSMENT PANEL

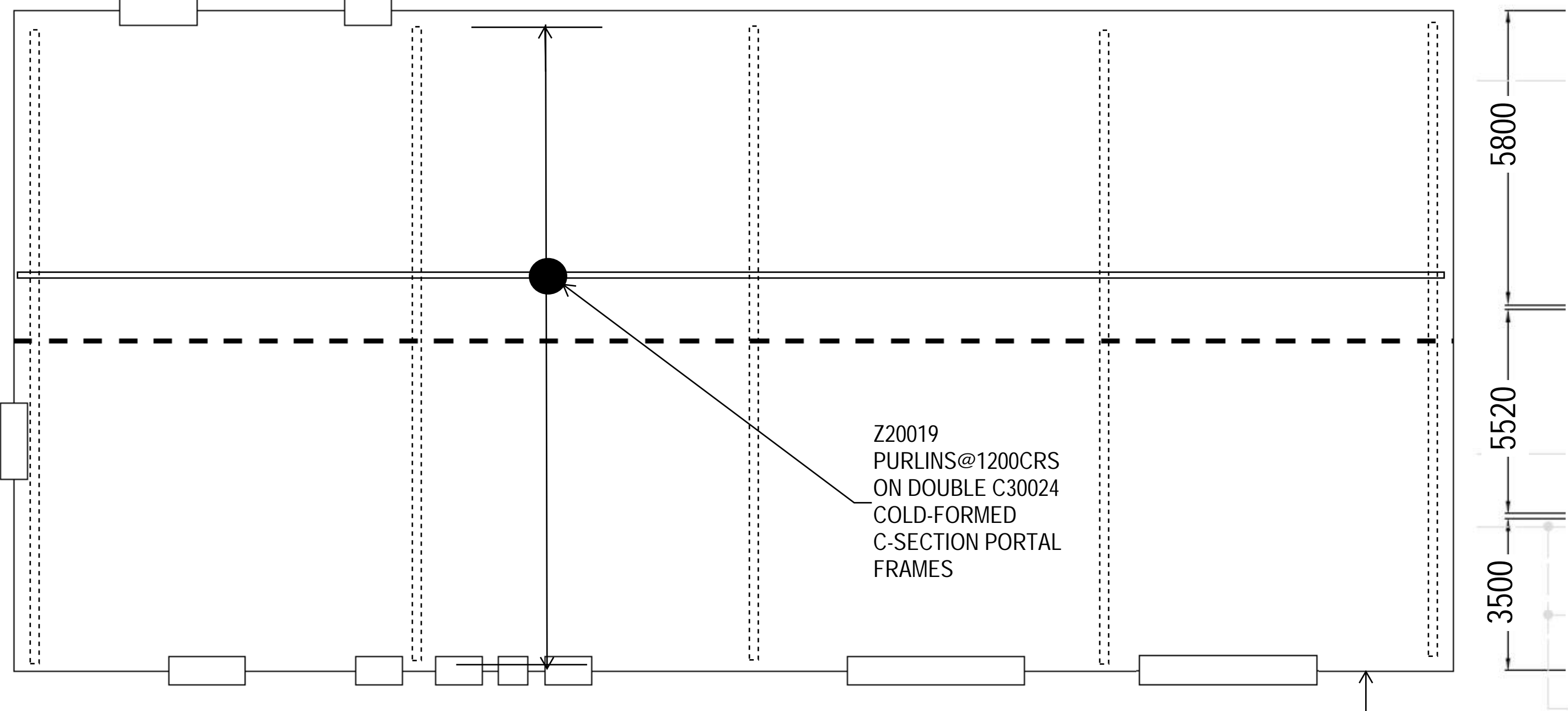
APPROVED  
04-Dec-2024



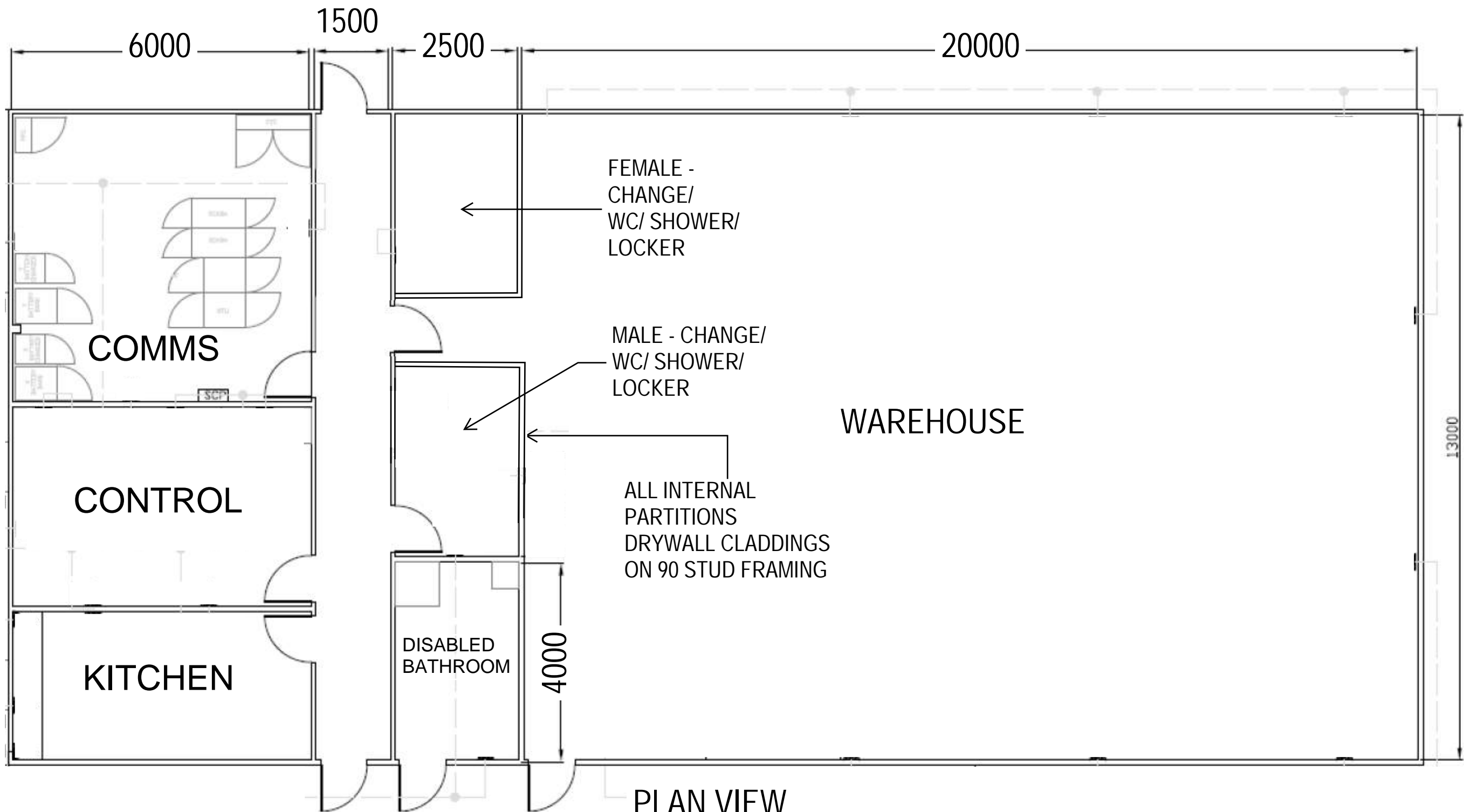
FRONT ELEVATION  
NTS



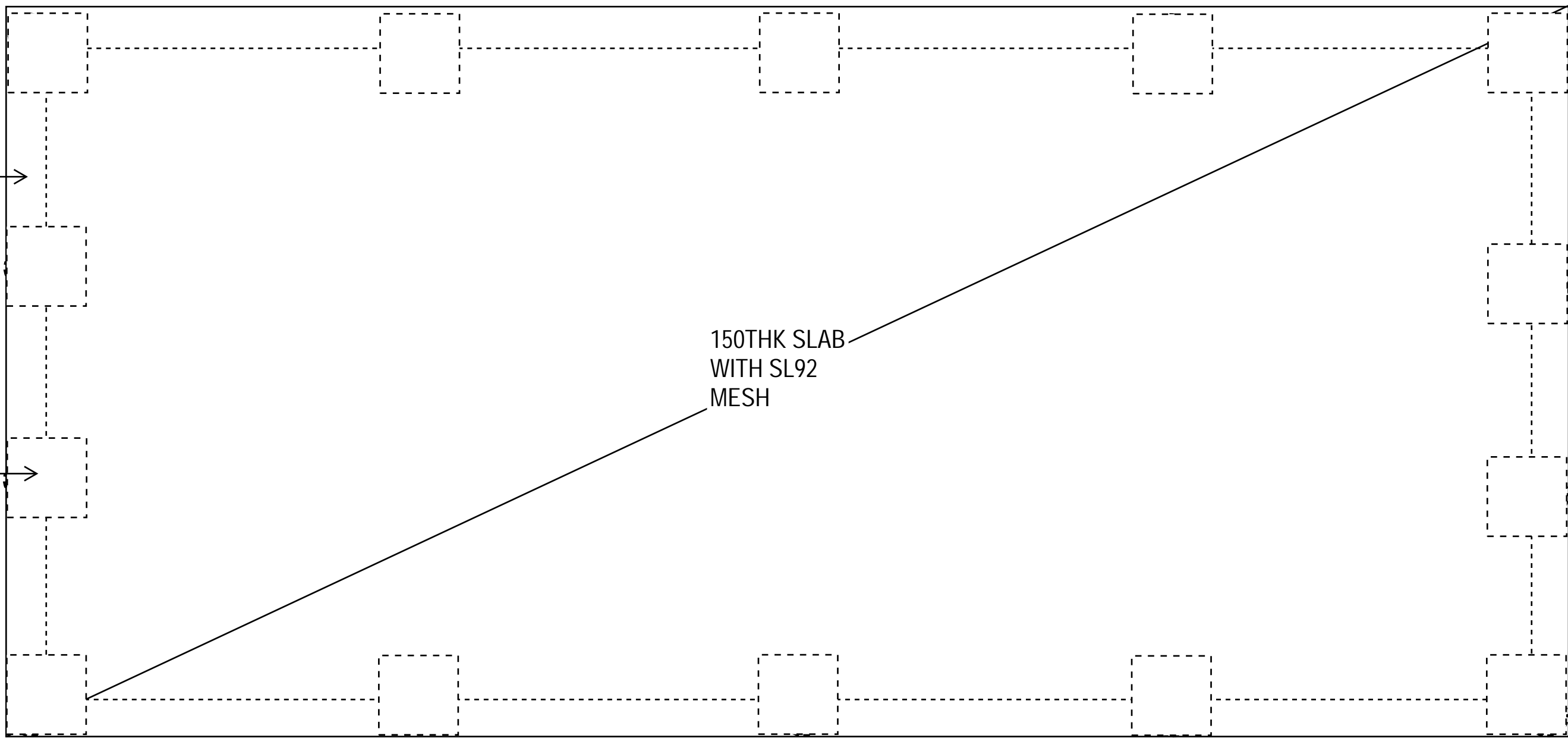
SIDE ELEVATION  
NTS



PLAN VIEW  
NTS



PLAN VIEW  
NTS



FOUNDATION  
NTS

NOTES:

- BUILDING IS TYPICAL PROPRIETARY LIGHTWEIGHT STEEL SHED COMPRISED OF MONOCLAD ROOF AND WALL CLADDINGS.
- STRUCTURAL SIZES ARE PRELIMINARY ONLY. ALLOW FOR CONTINGENCES, RISKS, ETC. AS REQUIRED.
- FOUNDATIONS AND SLAB DESIGNED FOR MINIMUM GROUND SAFE BEARING CAPACITY OF 100kPa.

PRELIMINARY  
NOT FOR CONSTRUCTION

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P01 ISSUED FOR CLIENT COMMENT				JS	RR	05.11.24
Rev	Description	Checked	Approved	Date		
Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN			
Designer	A. BRINGAS	Design Check	S. DRUMMOND			

Plot Date: 5 November 2024 - 3:05 PM Plotted by: JC Menchavez

File Name: C:\12d\SWdata\IP-00-12D-00121-12643033 - YEC Renewable Energy Hub - Jinbi FEED\_3247\CADD\Drawings\12643033-GHD-01-00-DRG-ST-00001.dwg



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Client YINDJIBARNDI ENERGY CORPORATION Pty Ltd  
Project YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

Drawing Title JINBI SOLAR FARM OPERATIONS AND MAINTENANCE BUILDING - GA AND ELEVATIONS

12643033-GHD-01-00-DRG-ST-00001

Size  
A1

Rev  
P01



SWITCHROOM EQUIPMENT TABLE		
PANEL ID	DESCRIPTION	QTY
A1	33 kV SWITCHBOARD PANEL	11
A2	DC DISTRIBUTION BOARD	1
A3	415V DISTRIBUTION BOARD	1
A4	FIRE INDICATION PANEL	1
A5	DATA/SCADA CABINET	1
A6	OPERATOR WORKSTATION	1
A7	POWER QUALITY METER CABINET	2
A8	BATTERY CABINET	1
A9	PROTECTION PANEL	1

- NOTES:
- Date Received 6 November 2024

1.

PRELIMINARY ONLY AND NOT FOR CONSTRUCTION.

2.

BUILDING INTERNAL CEILING HEIGHT TO BE A MINIMUM OF 2440mm FROM FLOOR.

3.

SWITCHROOM TO BE ELEVATED. ELEVATION TO BE DETERMINED IN DETAILED DESIGN..

4.

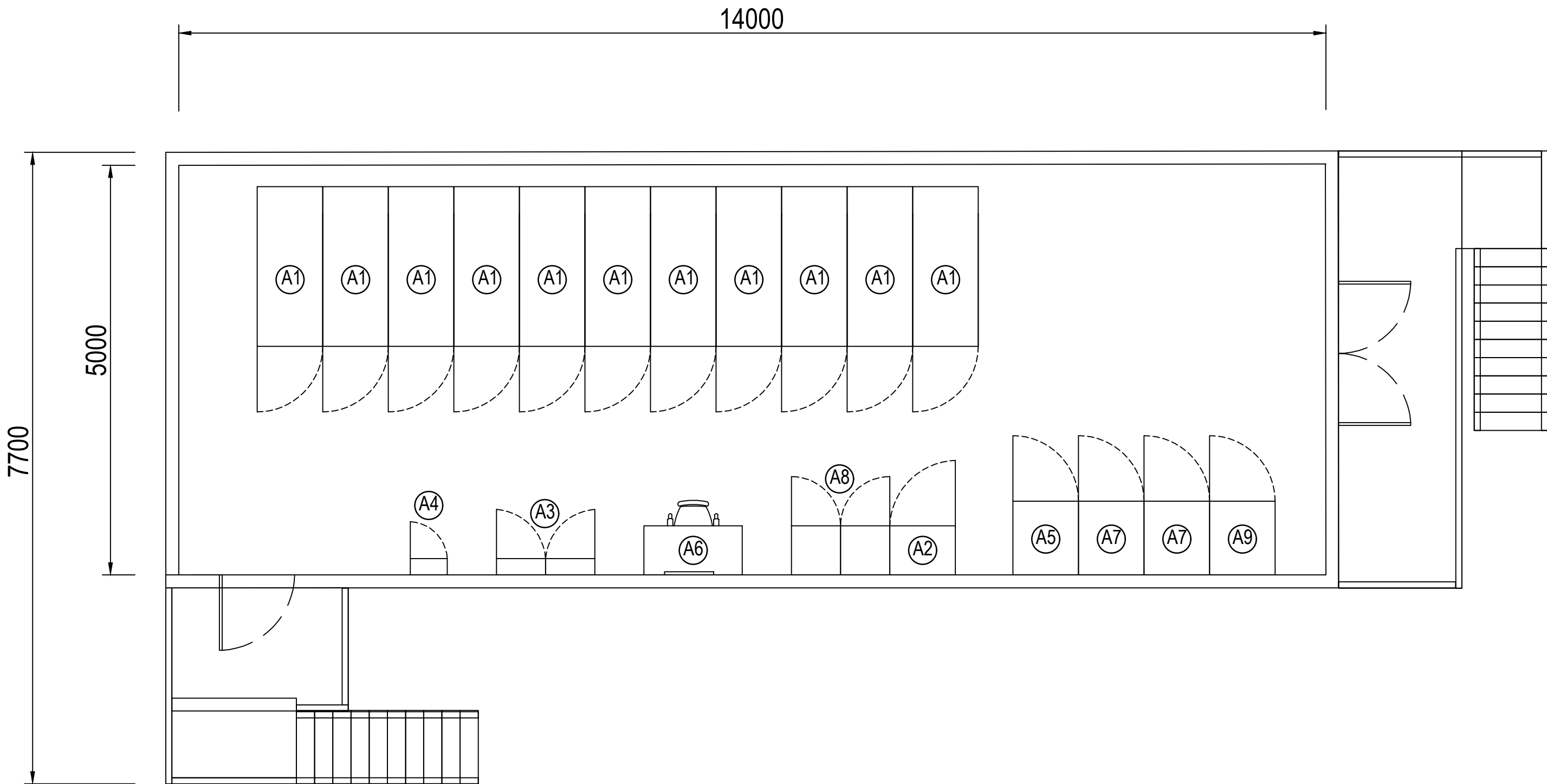
STAIRS TO EXTEND TO A CONCRETE LANDING AS PER AS 1657.

5.

BUILDING IDENTIFICATION AND MARKING TO BE PROVIDED AS PER AS 2067.

6.

BATTERY CABINET CONTAINS TWO SEPARATE BATTERY SUPPLIES.



SWITCHROOM LAYOUT  
SCALE 1:50

DEVELOPMENT  
ASSESSMENT PANEL

APPROVED  
04-Dec-2024

PRELIMINARY  
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P01 DRAFT WORK IN PROGRESS			
Rev	Description	Checked	Approved Date
Author	A. NASSAR	Drafting Check	J. HERNANDEZ
Designer	A. NASSAR	Design Check	L. AUDINO



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Project	YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE
Status	PRELIMINARY

Drawing Title  
JINBI SOLAR FARM  
SWITCHROOM LAYOUT

12643033-GHD-01-00-DRG-EL-00010

Size  
A1

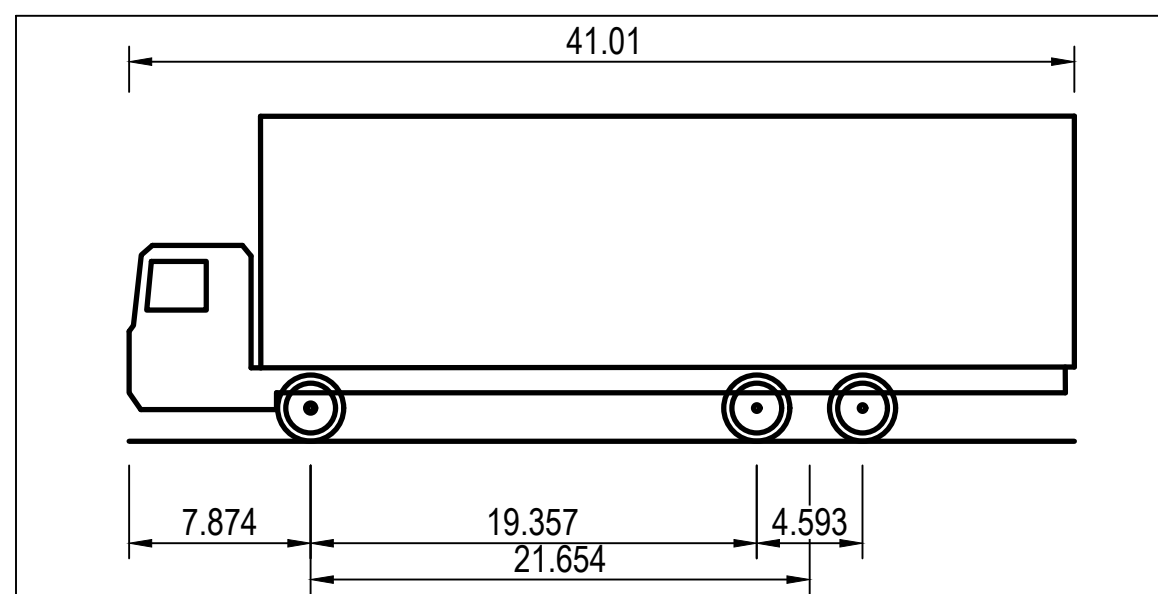
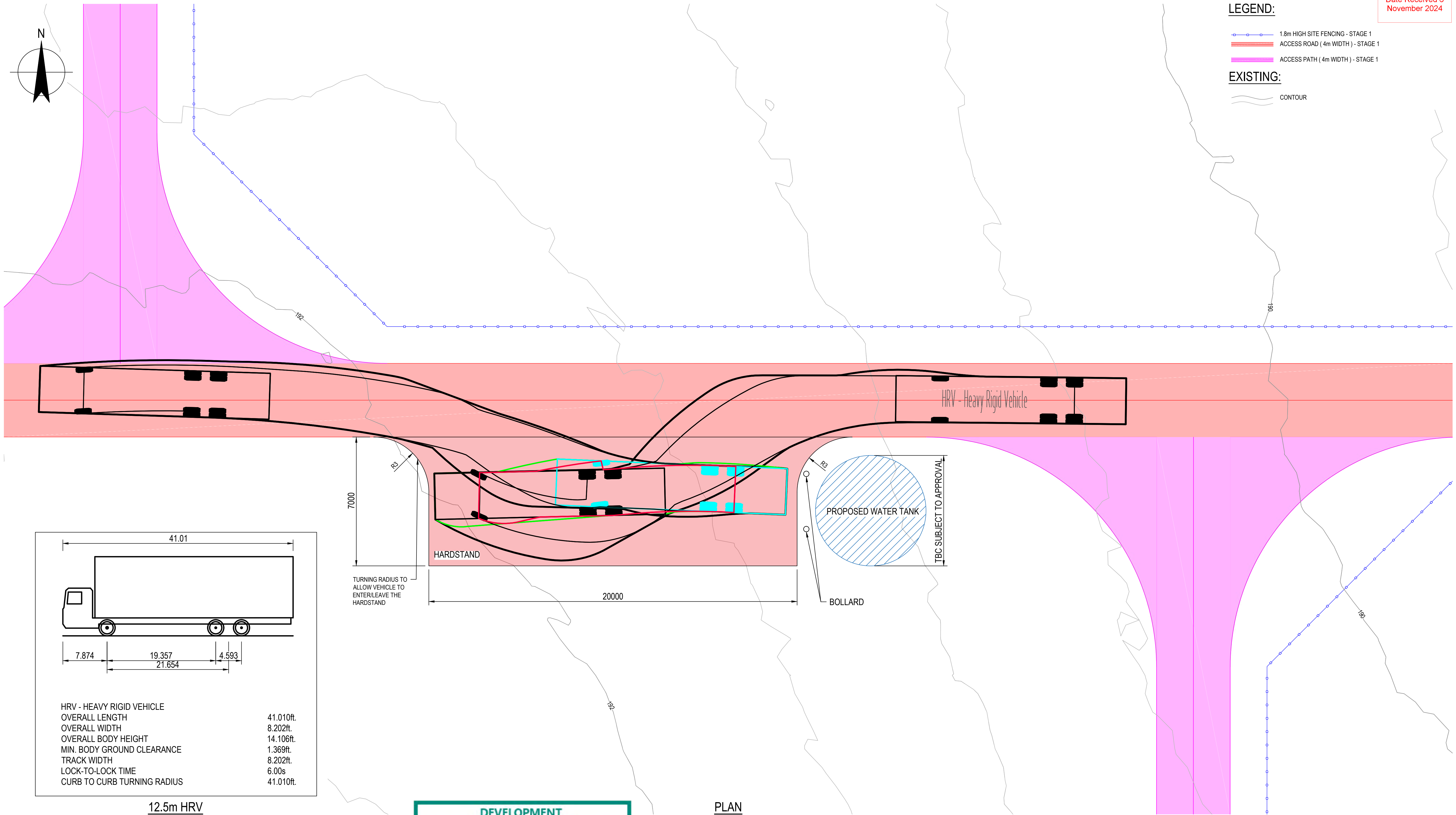
Rev  
P01

LEGEND:

- 1.8m HIGH SITE FENCING - STAGE 1  
ACCESS ROAD ( 4m WIDTH ) - STAGE 1  
ACCESS PATH ( 4m WIDTH ) - STAGE 1

EXISTING:

- CONTOUR



HRV - HEAVY RIGID VEHICLE  
OVERALL LENGTH 41.010ft.  
OVERALL WIDTH 8.202ft.  
OVERALL BODY HEIGHT 14.106ft.  
MIN. BODY GROUND CLEARANCE 1.369ft.  
TRACK WIDTH 8.202ft.  
LOCK-TO-LOCK TIME 6.00s  
CURB TO CURB TURNING RADIUS 41.010ft.

12.5m HRV  
NTS

DEVELOPMENT  
ASSESSMENT PANEL

APPROVED  
04-Dec-2024

PLAN  
SCALE 1:100



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Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	



File Name: C:\12d\SWdata\IP-00-12D-00\121-12643033 - YEC Renewable Energy Hub - Jinbi FEED\_3247\CADD\Drawings\12643033-GHD-01-00-DRG-CI-00035.dwg



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Project YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

Drawing Title JINBI SOLAR FARM FIREWATER TANK PLAN AND TURNING PATH

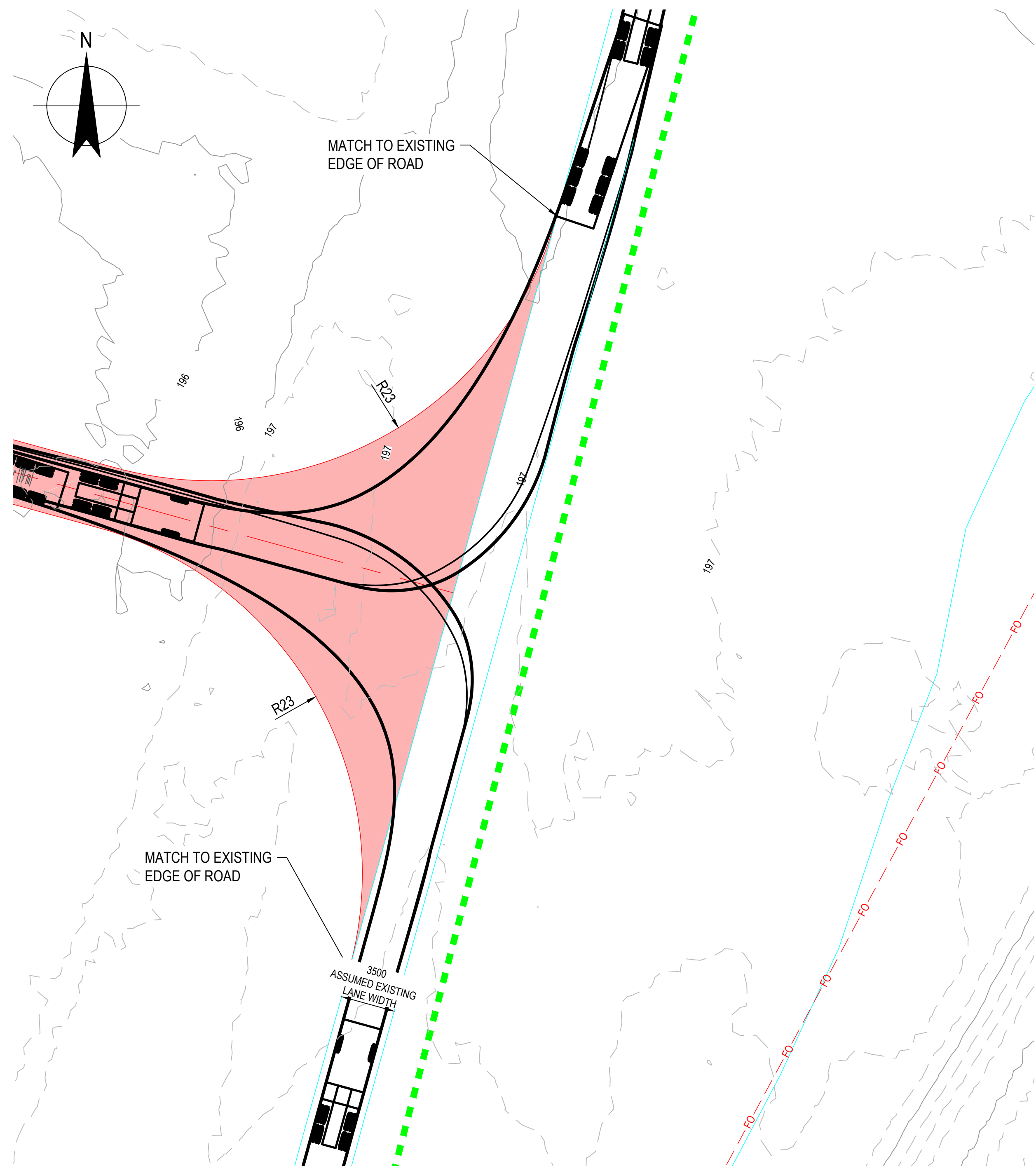
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A1

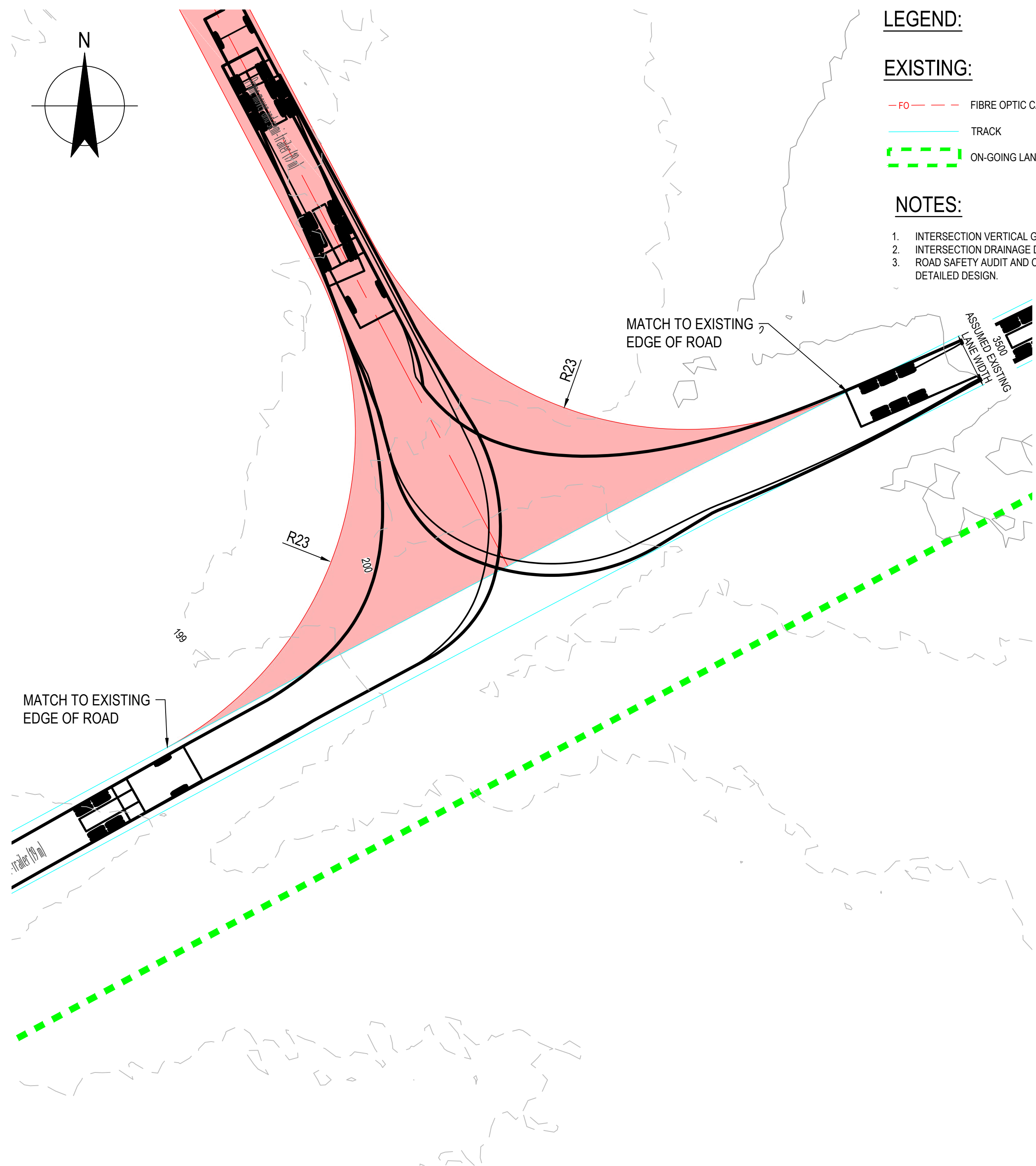
Rev  
P01

PRELIMINARY  
NOT FOR CONSTRUCTION





INTERSECTION 01 PLAN  
SCALE 1:200



INTERSECTION 02 PLAN  
SCALE 1:200

LEGEND:

EXISTING:

- FO FIBRE OPTIC CABLE
- TRACK
- ON-GOING LAND TENURE DISCUSSIONS

NOTES:

- INTERSECTION VERTICAL GEOMETRY DESIGN TO BE UNDERTAKEN IN DETAILED DESIGN.
- INTERSECTION DRAINAGE DESIGN TO BE UNDERTAKEN IN DETAILED DESIGN.
- ROAD SAFETY AUDIT AND CONSULTATION WITH MAIN ROADS WA TO BE UNDERTAKEN IN DETAILED DESIGN.

DEVELOPMENT  
ASSESSMENT PANEL

APPROVED  
04-Dec-2024

PRELIMINARY  
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Author	C. MENCHAVEZ	Drafting Check	M. WOOTTEN	
Designer	S. ANGELICA	Design Check	J. KEEM	

0 2 4 6 8 10m  
SCALE 1:200 AT ORIGINAL SIZE



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12643033

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Project YINDJIBARNDI RENEWABLE ENERGY HUB - JINBI PROJECT FEED PACKAGE  
Status PRELIMINARY

Drawing Title  
JINBI SOLAR FARM  
SITE ACCESS ROADS  
INTERSECTION DETAILS

12643033-GHD-01-00-DRG-CI-00040

Size  
A1

Rev  
P01



## Appendix B: Feature Survey





#### LEGEND

- Proposed Lease Extent (716.06 ha)
- SA Lease I123390
- SA Lease I123393
- SA Lease I123646
- Indicative Rio Tinto Misc Licence (1.36 ha)



0 0.3 0.6 km

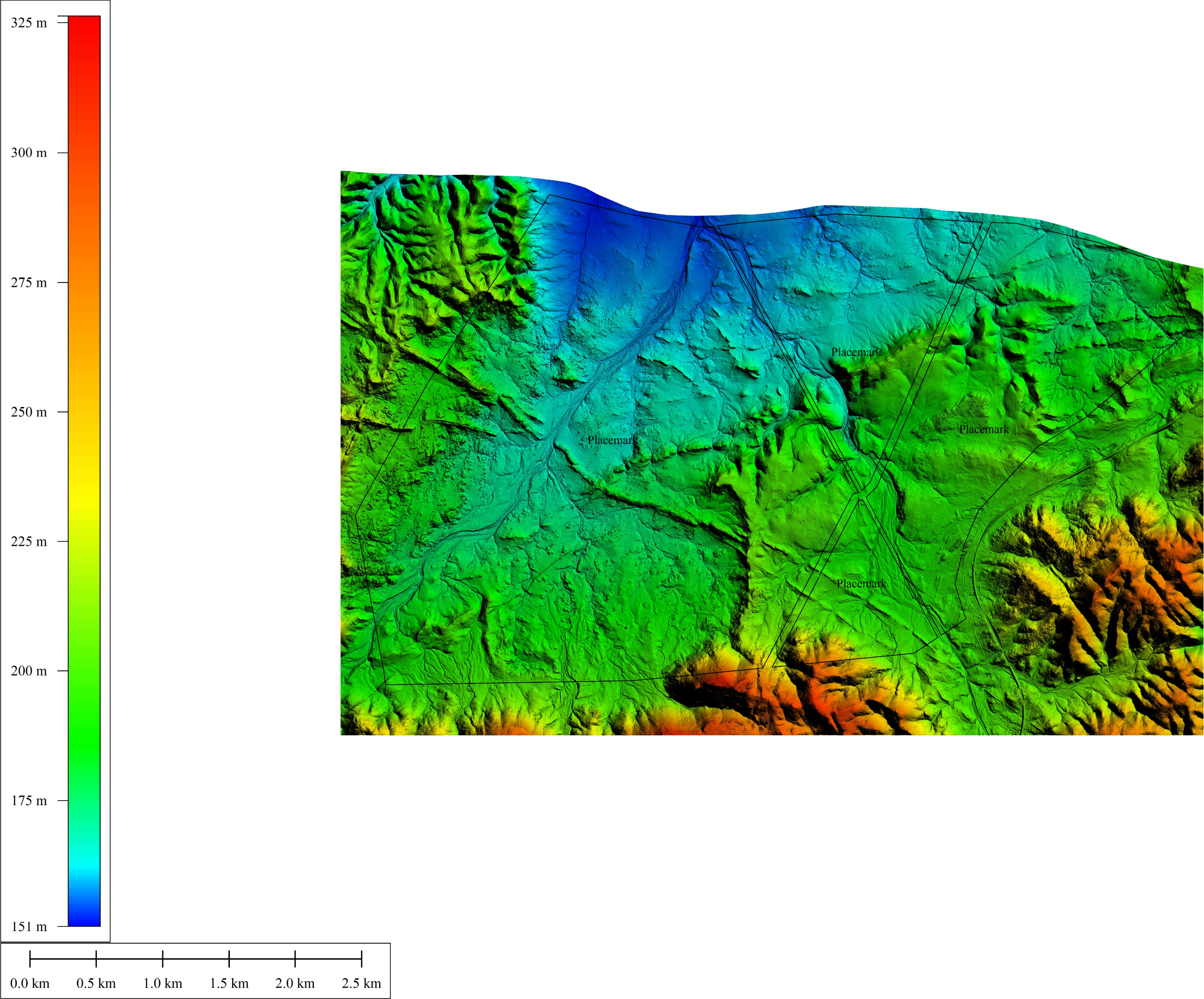
### PROPOSED LEASE EXTENT YEC Jinbi Project

Scale: 1:16,000  
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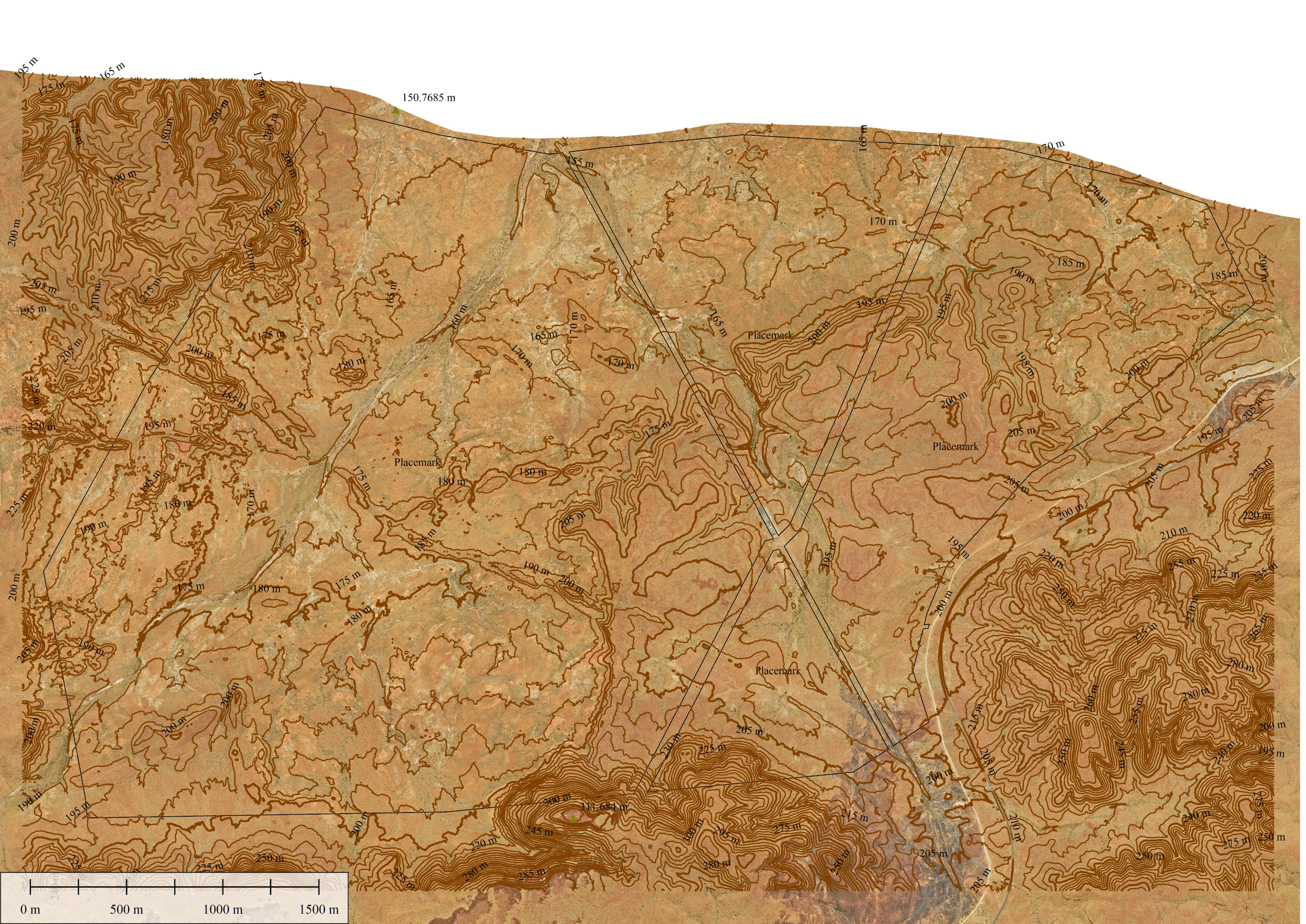
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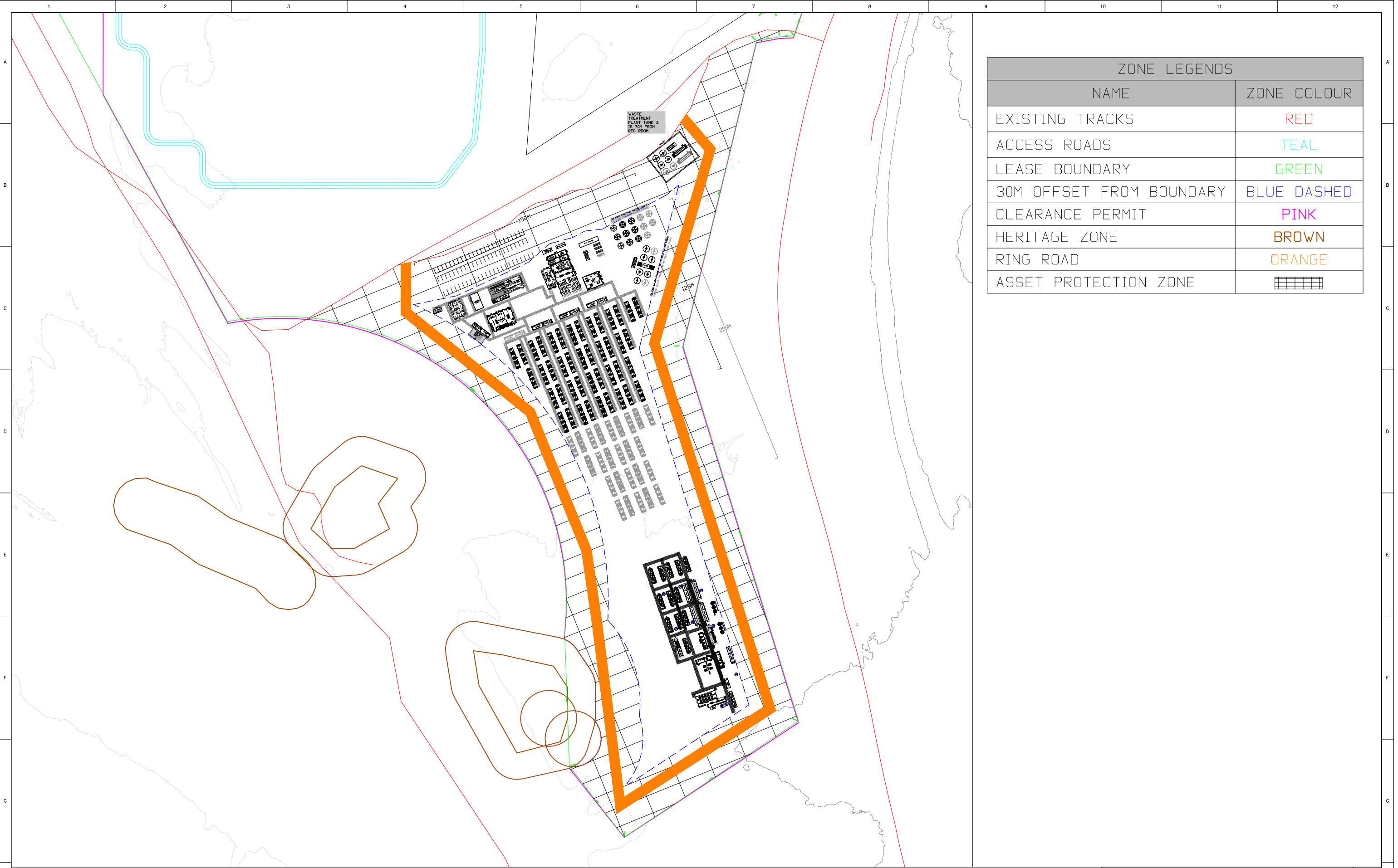






## Appendix C: Development Plans

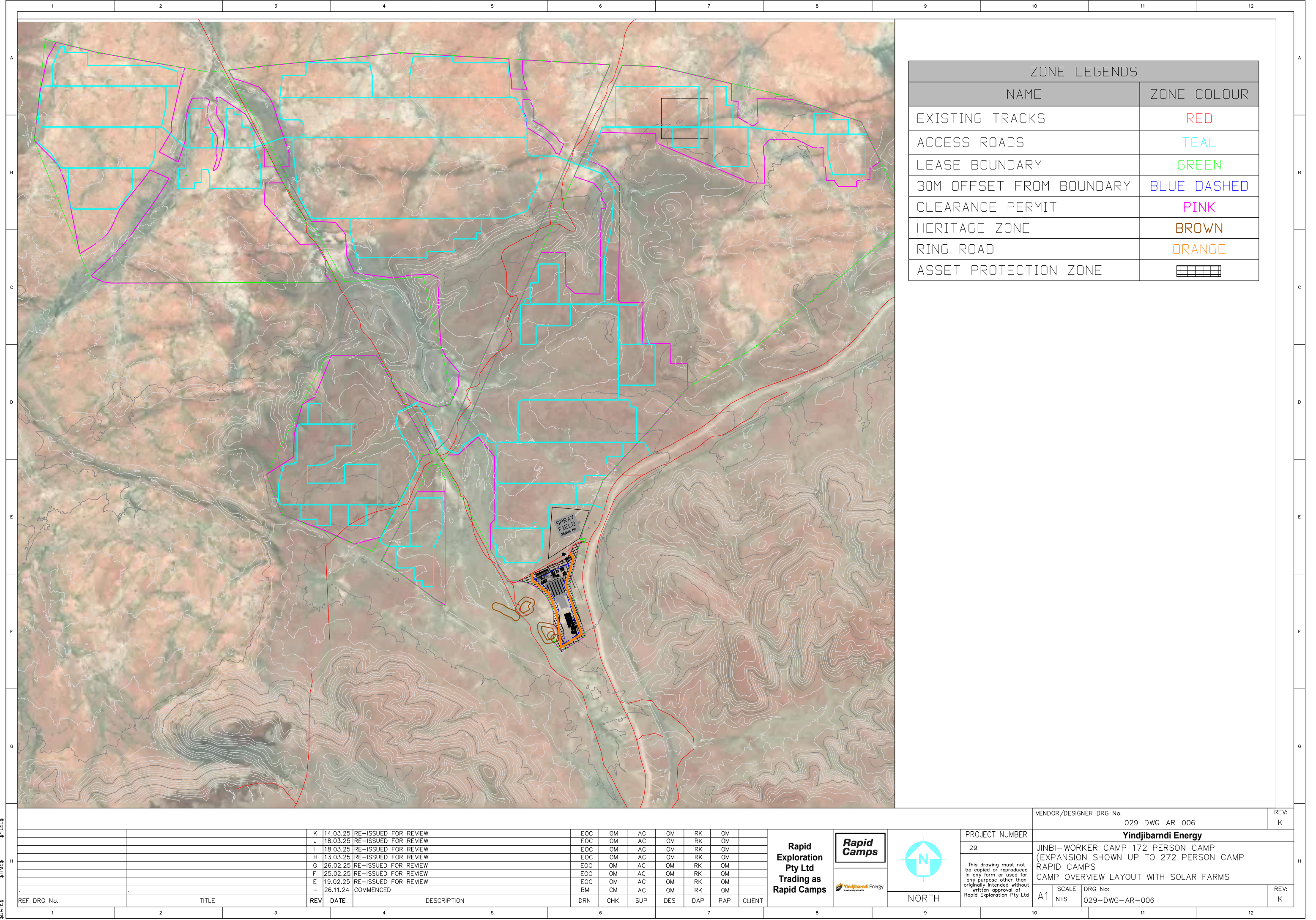




ZONE LEGENDS	
NAME	ZONE COLOUR
EXISTING TRACKS	RED
ACCESS ROADS	TEAL
LEASE BOUNDARY	GREEN
30M OFFSET FROM BOUNDARY	BLUE DASHED
CLEARANCE PERMIT	PINK
HERITAGE ZONE	BROWN
RING ROAD	ORANGE
ASSET PROTECTION ZONE	

														VENDOR/DESIGNER DRG No.		029—DWG—AR—001		REV: K									
														<div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div> <div><div>Rapid Camps</div><div>Yindibarndi Energy <small>A partnership with BHP</small></div></div> <div><div><div></div><div>N</div></div><div>NORTH</div></div>		PROJECT NUMBER		Yindibarndi Energy JINBI—WORKER CAMP 172 PERSON CAMP (EXPANSION SHOWN UP TO 272 PERSON CAMP RAPID CAMPS CAMP OVERVIEW LAYOUT						REV: K			
29																											
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A1		SCALE NTS		DRG No: 029—DWG—AR—001																							
REF DRG No.		TITLE			REV	DATE	DESCRIPTION				DRN	CHK	SUP			DES	DAP	PAP	CLIENT								
1		2			3		4		5			6		7			8		9		10		11			12	
					K 14.03.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					J 18.03.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					I 18.03.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					H 13.03.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					G 26.02.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					F 25.02.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					E 19.02.25		RE—ISSUED FOR REVIEW				EOC	OM	AC	OM	RK	OM											
					— 26.11.24		COMMENCED				BM	CM	AC	OM	RK	OM											





ZONE LEGENDS	
NAME	ZONE COLOUR
EXISTING TRACKS	RED
ACCESS ROADS	TEAL
LEASE BOUNDARY	GREEN
30M OFFSET FROM BOUNDARY	BLUE DASHED
CLEARANCE PERMIT	PINK
HERITAGE ZONE	BROWN
RING ROAD	ORANGE
ASSET PROTECTION ZONE	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>

														VENDOR/DESIGNER DRG No. 029-DWG-AR-006										REV: K																										
														PROJECT NUMBER										Yindijbarndi Energy																										
														29										JINBI-WORKER CAMP 172 PERSON CAMP (EXPANSION SHOWN UP TO 272 PERSON CAMP RAPID CAMPS CAMP OVERVIEW LAYOUT WITH SOLAR FARMS																										
														This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd																																				
														NORTH										A1 SCALE NTS										DRG No: 029-DWG-AR-006										REV: K						
REF DRG No.														TITLE														REV	DATE	DESCRIPTION														DRN	CHK	SUP	DES	DAP	PAP	CLIENT
														K 14.03.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														J 18.03.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														I 18.03.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														H 13.03.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														G 26.02.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														F 25.02.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														E 19.02.25 RE-ISSUED FOR REVIEW														EOC	OM	AC	OM	RK	OM																	
														- 26.11.24 COMMENCED														BM	CM	AC	OM	RK	OM																	

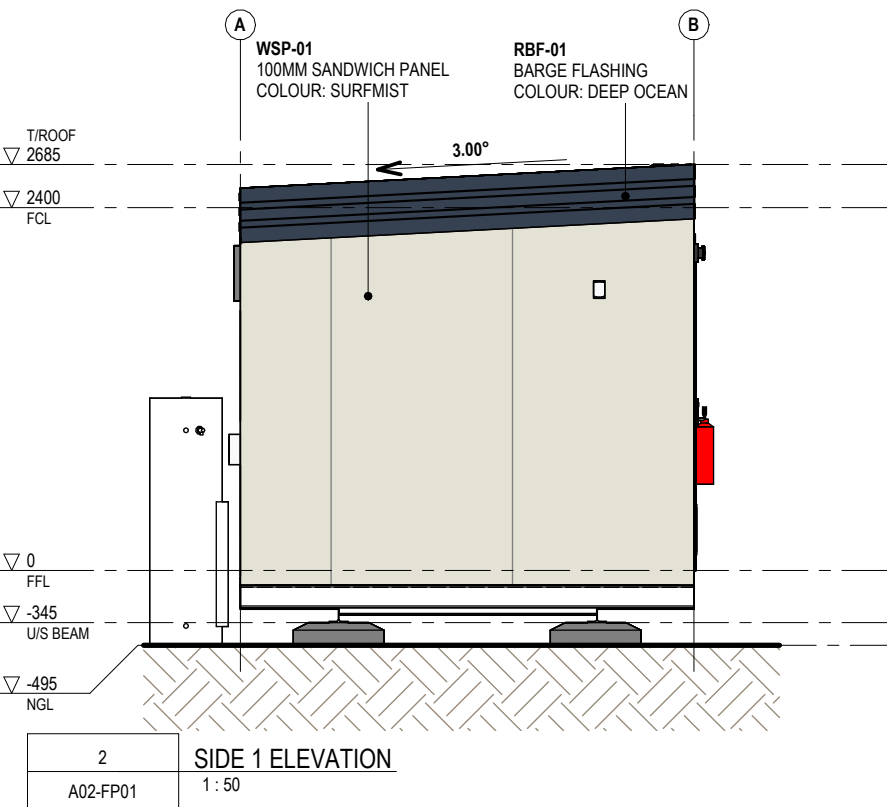
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I	18.03.25	RE-ISSUED FOR REVIEW	EOC	OM	AC	OM	RK	OM	
H	13.03.25	RE-ISSUED FOR REVIEW	EOC	OM	AC	OM	RK	OM	
G	26.02.25	RE-ISSUED FOR REVIEW	EOC	OM	AC	OM	RK	OM	
F	25.02.25	RE-ISSUED FOR REVIEW	EOC	OM	AC	OM	RK	OM	
E	19.02.25	RE-ISSUED FOR REVIEW	EOC	OM	AC	OM	RK	OM	
-	26.11.24	COMMENCED	BM	CM	AC	OM	RK	OM	

Rapid  
Exploration  
Pty Ltd  
Trading as  
Rapid Camps



NORTH





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<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

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DRAWN <b>SC</b>	CHECKED <b>KP</b>	SCALE <b>1 : 50</b>	SIZE <b>A3</b>
DRAWING NO. <b>A03-EL01</b>		REVISION <b>A</b>	
DC SIGN OFF:			



The floor plan for the A03-EL01 module is a rectangular structure with a total width of 12000 and a total depth of 3000. The plan is divided into several functional areas:

- Male Restroom (MALE FVL-01, 18 m²):** Located on the left side, containing five toilet stalls and a mirror.
- Female Restroom (FEMALE FVL-01, 8 m²):** Located on the right side, containing three toilet stalls and a mirror.
- Urinal Area (UAT FVL-01, 7 m²):** Located in the center, containing a urinal and a mirror.
- Shower Area (BHS-01):** Located in the center, containing a shower stall.
- Storage Area (W1 08, W1 07, W1 06):** Located along the bottom wall, containing three storage units.
- Entrance/Exit:** Located at the bottom left, with a door labeled D1 01 and a window labeled W1 08.


The plan includes various dimensions and labels for doors, windows, and fixtures. The overall layout is designed for efficient use of space and easy access to facilities.

A	ISSUED FOR REVIEW	31/01/24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

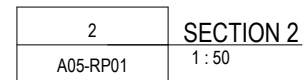
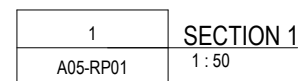
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NORTH



Autodesk Docs://J005076 - FWD CAPEX - 100P Camp Stock Build/J005076\_B02\_Plant Ablution\_R22.rvt



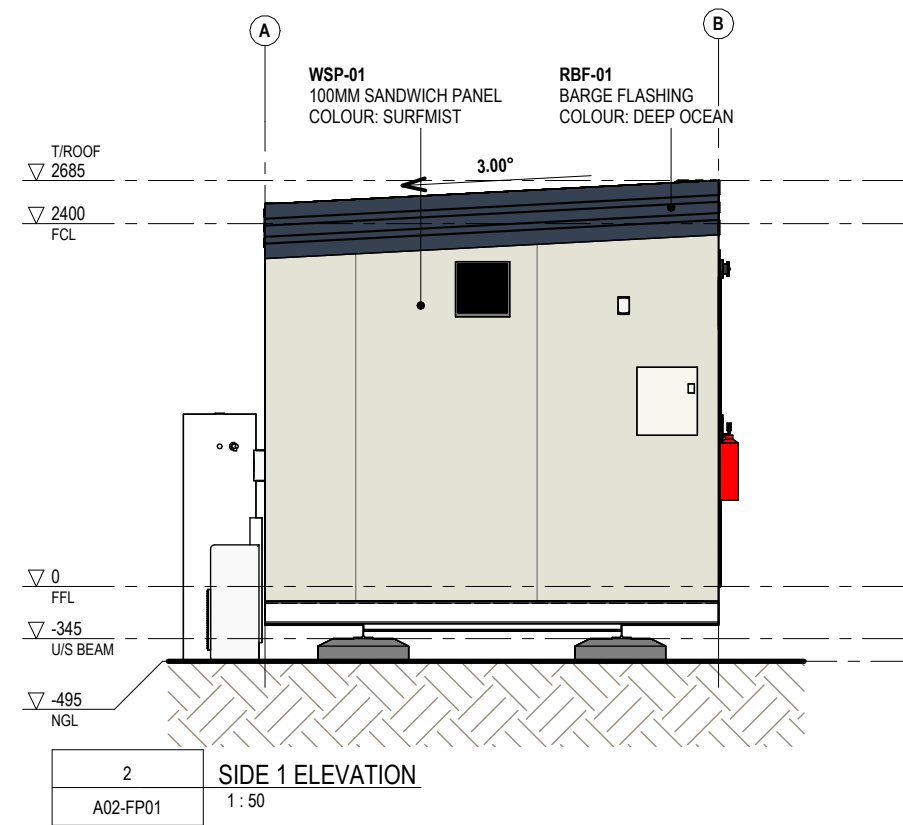
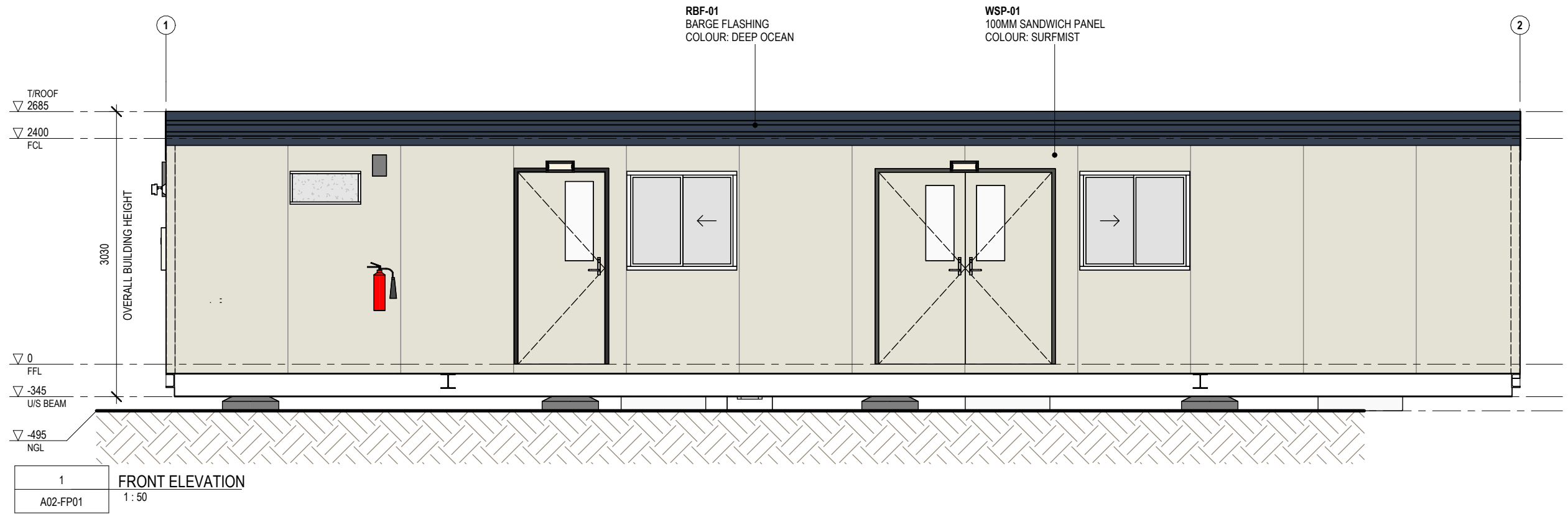
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PROJECT NO.:  
**J005076-B08**

PROJECT STATUS  
**FOR SALES**

PROJECT CLIENT  
**FLEETWOOD CAPEX**

PROJECT:  
**FIRST AID HUT**

PROJECT ADDRESS  
**XX**

SHEET  
**ELEVATIONS**

DRAWN  
**SC**

CHECKED  
**KP**

SCALE  
**1:50**

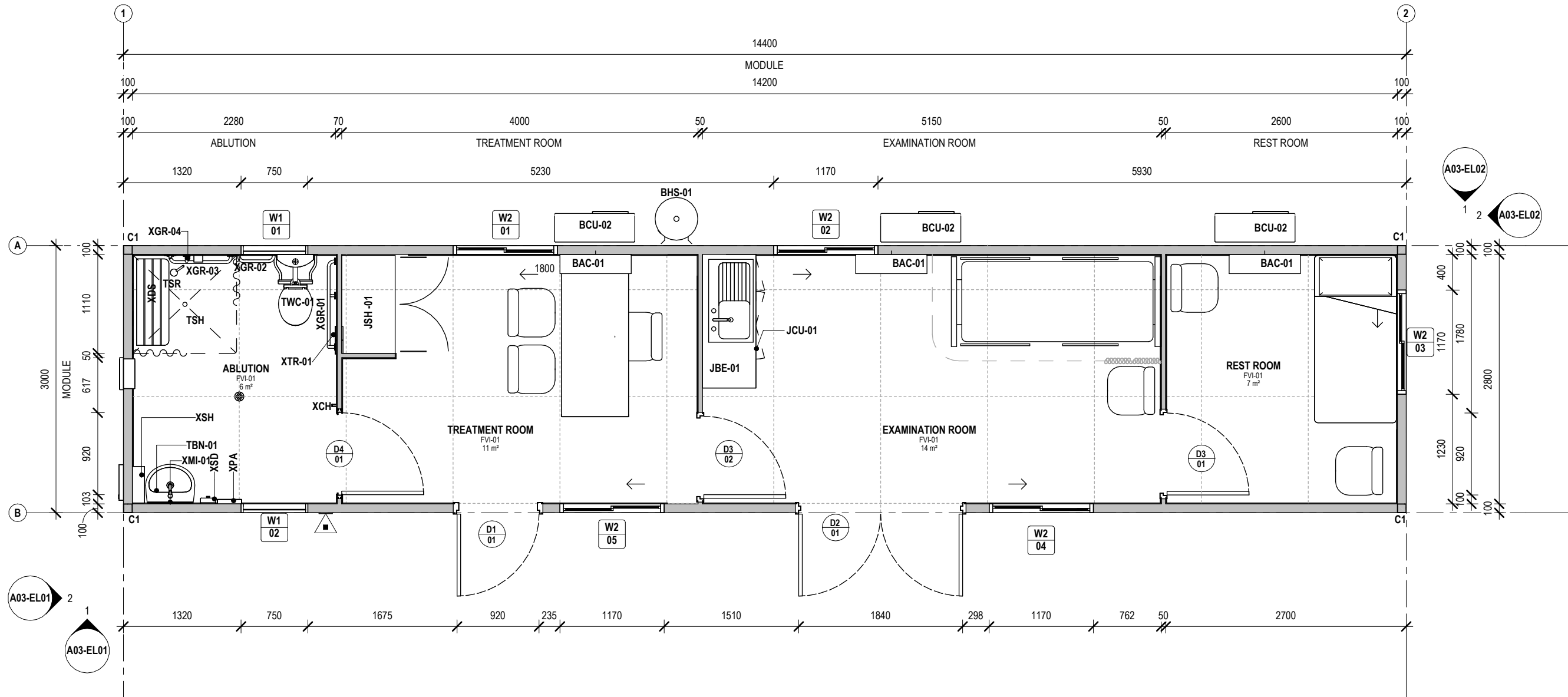
SIZE  
**A3**

DRAWING NO.  
**A03-EL01**

REVISION  
**A**

DC SIGN OFF:

ROOM NAME	AREA
ABLUTION	6 m <sup>2</sup>
EXAMINATION ROOM	14 m <sup>2</sup>
REST ROOM	7 m <sup>2</sup>
TREATMENT ROOM	11 m <sup>2</sup>
TOTAL	39 m <sup>2</sup>



1 FLOOR PLAN  
1 : 50

NO.	DESCRIPTION	DATE	BY	CHK'D
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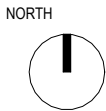
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J005076-B08

PROJECT STATUS  
FOR SALES

PROJECT CLIENT  
FLEETWOOD CAPEX

PROJECT:  
FIRST AID HUT

PROJECT ADDRESS  
XX



SHEET  
FLOOR PLAN

DRAWN  
SC

CHECKED  
KP

DRAWING NO.  
A02-FP01

DC SIGN OFF:

SCALE  
1 : 50

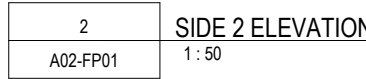
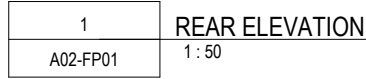
SIZE  
A3

REVISION  
A









A	ISSUED FOR REVIEW	02/02/24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

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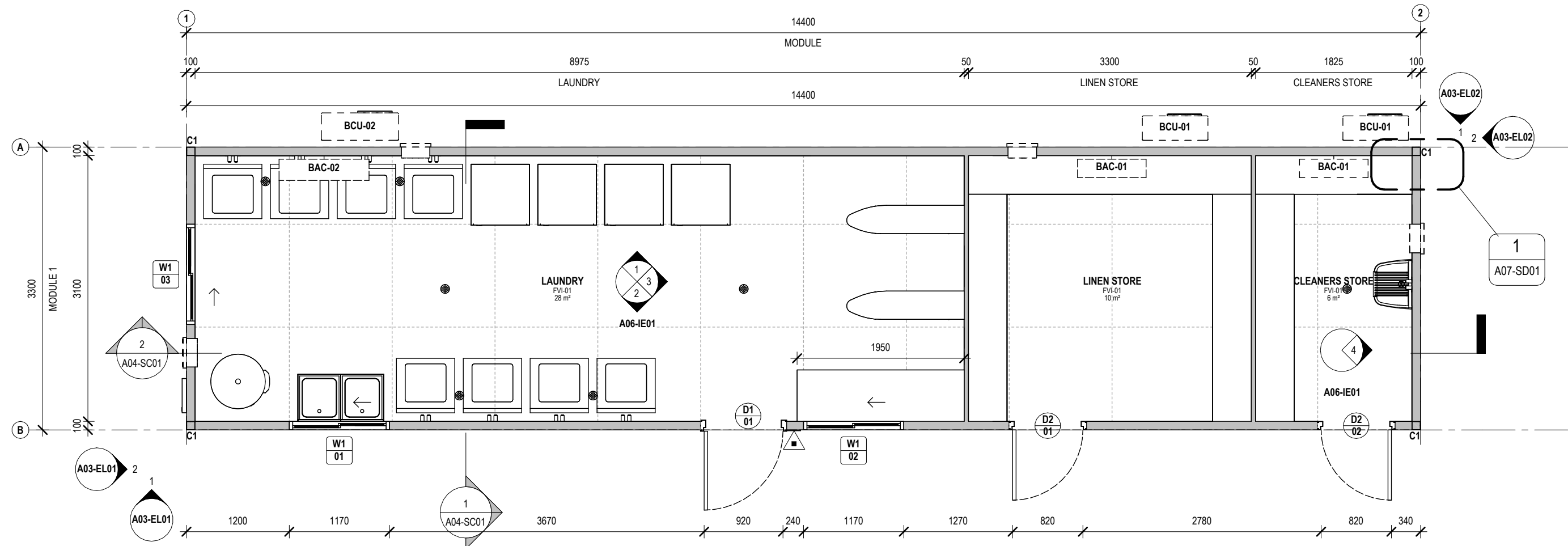
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A

ROOM NAME	AREA
CLEANERS STORE	6 m²
LAUNDRY	28 m²
LINEN STORE	10 m²
TOTAL	44 m²



1	<b>FLOOR PLAN</b>
	1 : 50

A	ISSUED FOR REVIEW	02/02/24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

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PROJECT NO.:

**J005076-B07**

## PROJECT STATUS

ISSUED FOR REVIEW

PROJECT CLIENT

**FLEETWOOD CAPEX**

PROJECT:

## LAUNDRY LINEN CLEANER

PROJECT ADDRESS

XX

SHEET

## FLOOR PLAN

DRAWN

SC

DRAWING NO.

A02-FP01

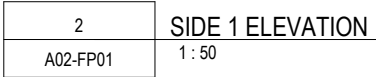
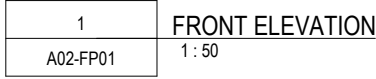
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SCALE SIZE

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REVISION

A



A	ISSUED FOR REVIEW	06.02.24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

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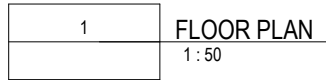
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DRAWING NO. <b>A03-EL01</b>		REVISION <b>A</b>	
DC SIGN OFF:			

50% OF BUILDS TO HAVE BSB LOCATED ON LHS  
50% OF BUILDS TO HAVE BSB LOCATED ON RHS

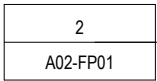


A	ISSUED FOR REVIEW	06.02.24	SC KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b> <b>CHK'D</b>

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1 : 50



1 : 50

A	ISSUED FOR REVIEW	06/02/24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

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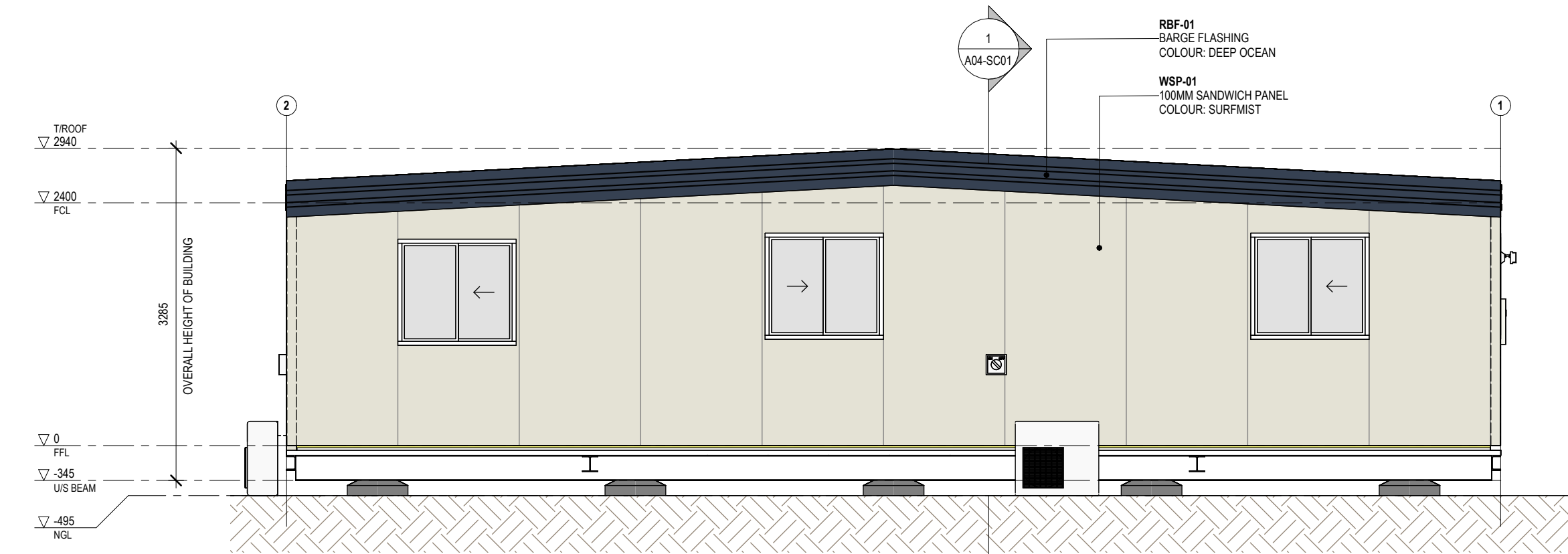
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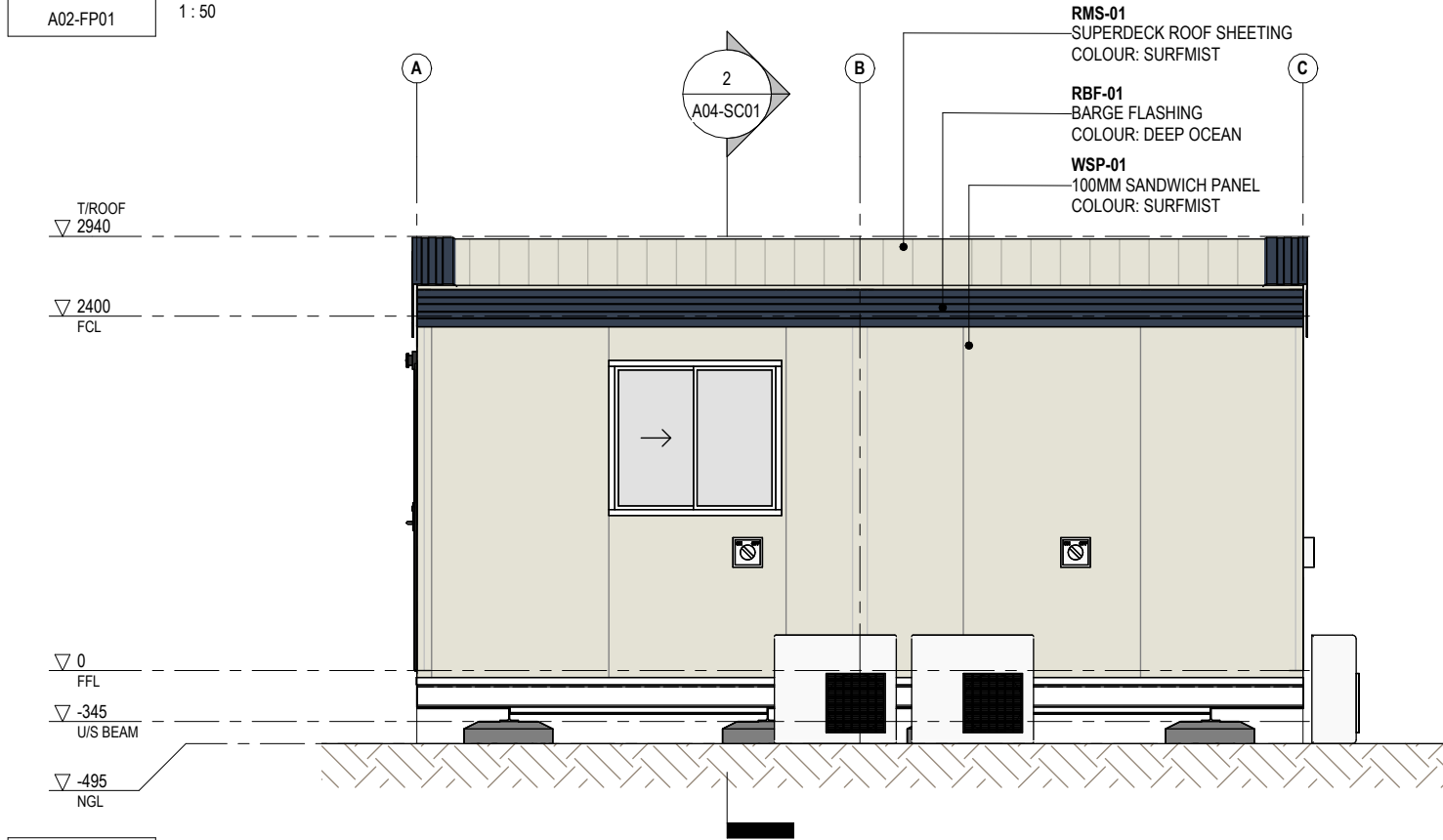
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A





2  
A02-FP01  
REAR ELEVATION  
1 : 50



1  
A02-FP01  
SIDE 2 ELEVATION  
1 : 50

NO.	DESCRIPTION	DATE	BY	CHK'D
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PROJECT NO.:

J005076-B05

PROJECT STATUS

ISSUED FOR REVIEW

PROJECT CLIENT

FLEETWOOD CAPEX

PROJECT:

OFFICE

PROJECT ADDRESS

XX

SHEET

ELEVATIONS

DRAWN

SC

CHECKED

KP

SCALE

1 : 50

SIZE

A3

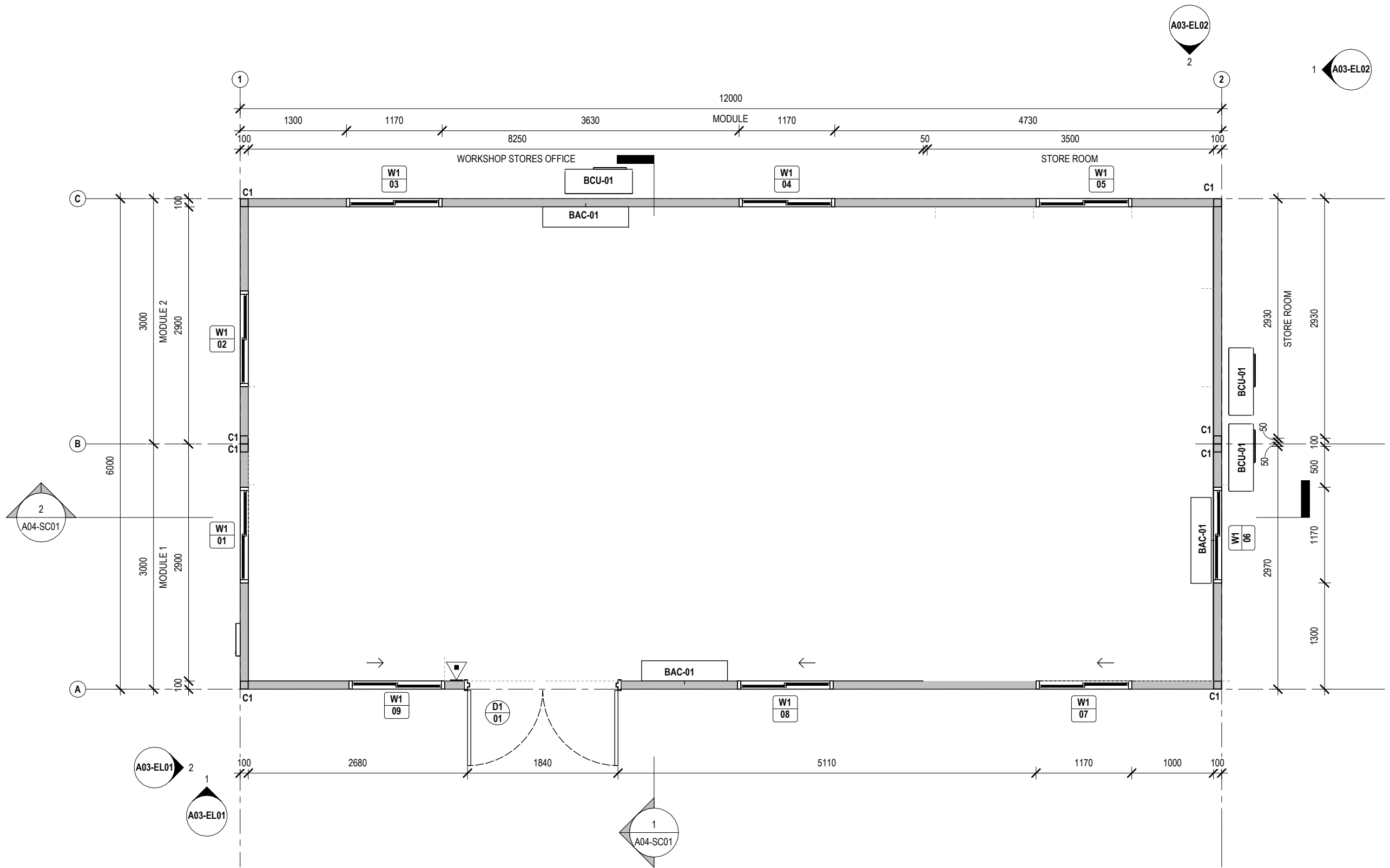
DRAWING NO.

A03-EL02

REVISION

A

DC SIGN OFF:



1 FLOOR PLAN  
1 : 50

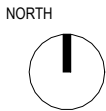
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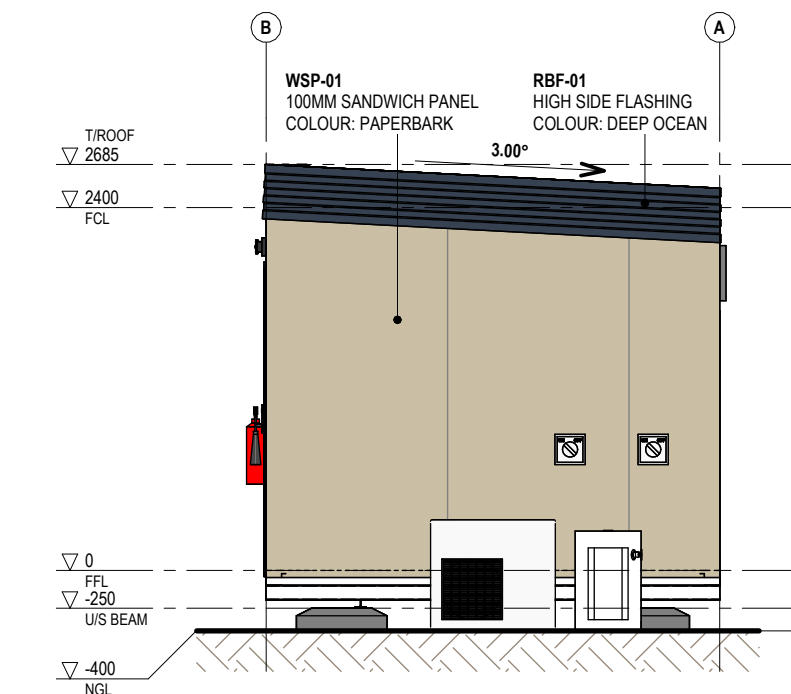
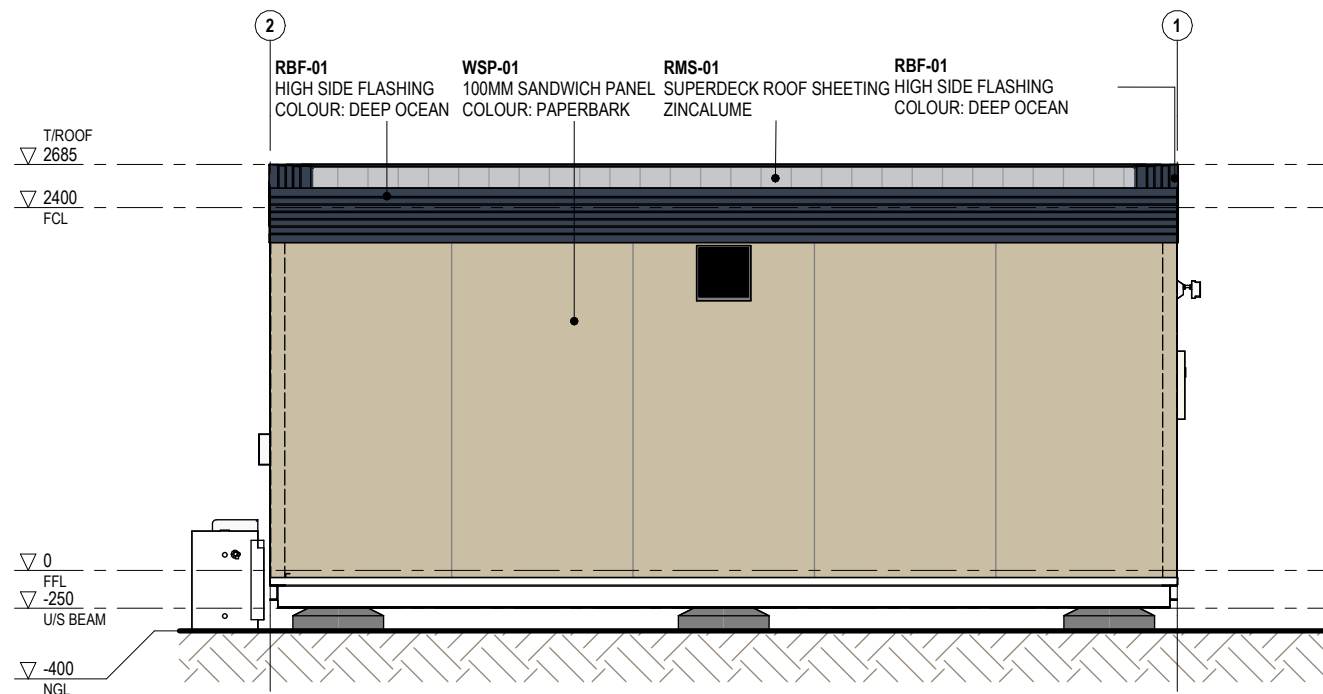
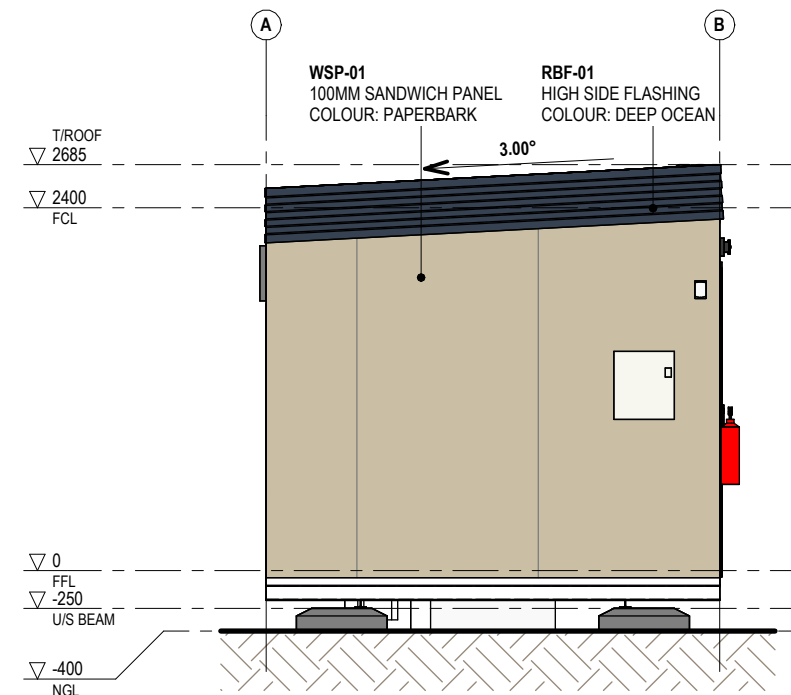
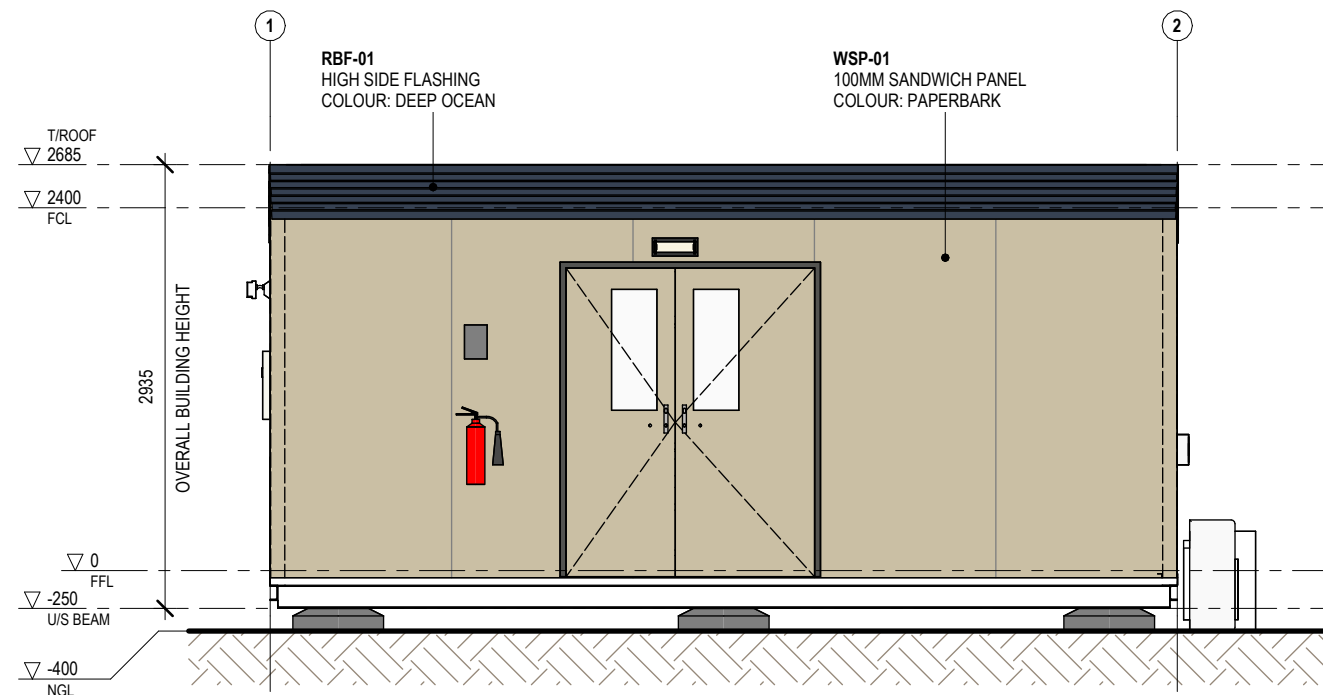
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J005076-B05  
PROJECT STATUS  
ISSUED FOR REVIEW  
PROJECT CLIENT  
FLEETWOOD CAPEX

PROJECT:  
LOCKER ROOM  
PROJECT ADDRESS  
XX



SHEET  
FLOOR PLAN

DRAWN  
SC  
CHECKED  
KP  
DRAWING NO.  
A02-FP01  
DC SIGN OFF:  
SCALE  
1 : 50  
SIZE  
A3  
REVISION  
A



A	ISSUED FOR REVIEW	30.01.24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

**FLEETWOOD**  
**AUSTRALIA**

1202 Abernethy Rd, Perth Airport WA 6105 | (08) 9281 7500

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2. READ IN CONJUNCTION WITH OTHER DRAWINGS, SPECIFICATIONS & CONSULTANTS DOCUMENTATION.

3. REFER ANY DISCREPANCIES IMMEDIATELY TO THE DESIGNER & AWAIT WRITTEN INSTRUCTION.

PROJECT NO.:  
**J005076-B04**

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PROJECT STATUS  
**ISSUED FOR REVIEW**

---

PROJECT CLIENT  
**FLEETWOOD CAPEX**

PROJECT:  
**ICE ROOM**

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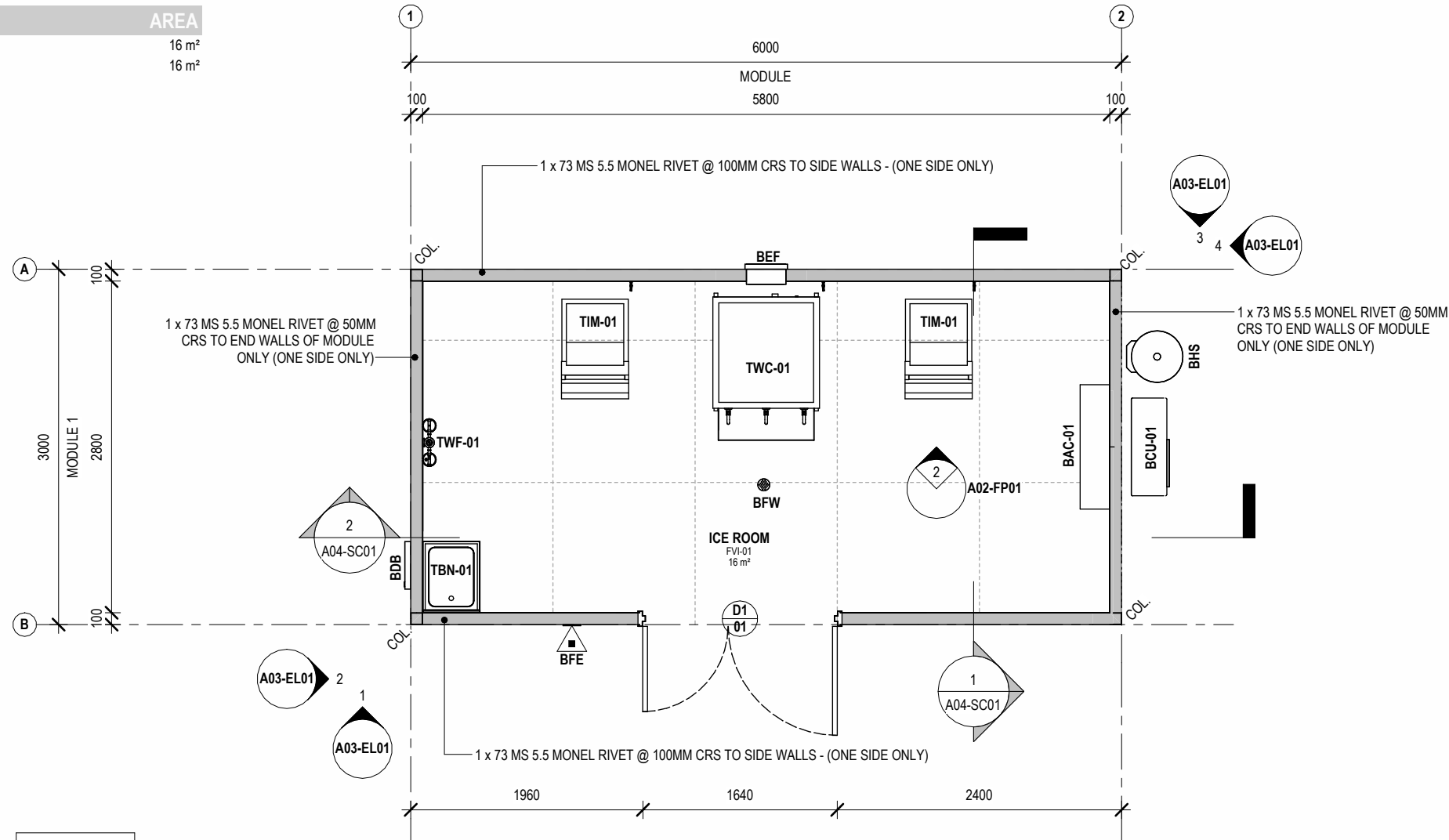
PROJECT ADDRESS  
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SHEET

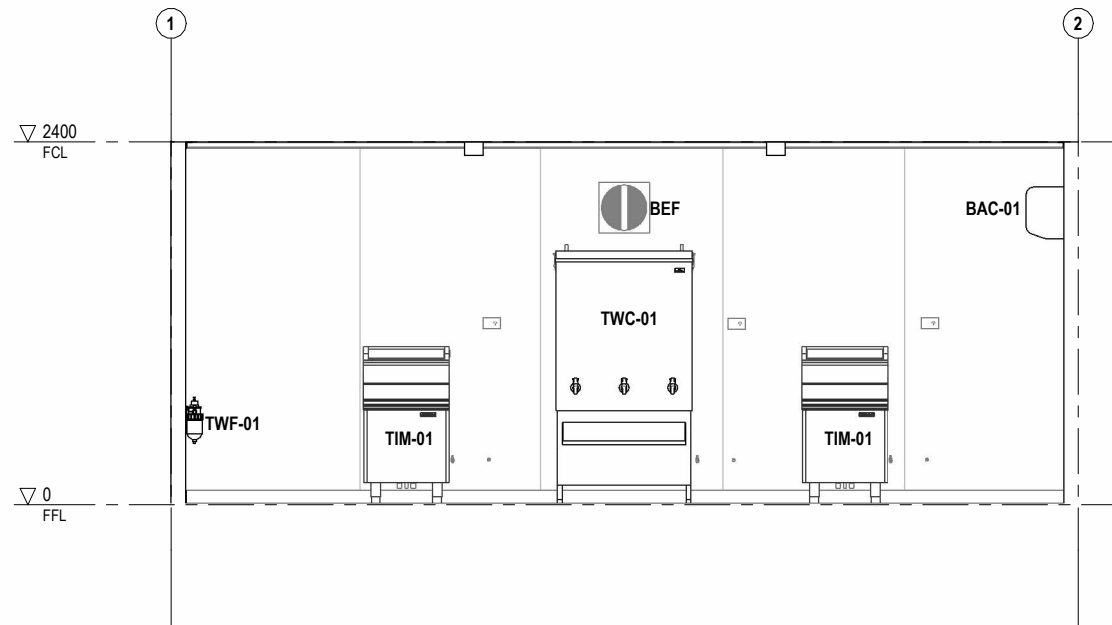
**ELEVATIONS**

DRAWN <b>SC</b>	CHECKED <b>KP</b>	SCALE <b>1:50</b>	SIZE <b>A3</b>
DRAWING NO. <b>A03-EL01</b>		REVISION <b>A</b>	
DC SIGN OFF:			

ROOM NAME	AREA
ICE ROOM	16 m²
TOTAL	16 m²



1	FLOOR PLAN
	1 : 50



2	INTERNAL ELEVATION
	1 : 50

NO.	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR REVIEW	30.01.24	SC	KP

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4. REFER ANY DISCREPANCIES IMMEDIATELY TO THE DESIGNER & AWAIT WRITTEN INSTRUCTION.

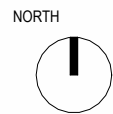
PROJECT NO.:  
**J005076-B04**

PROJECT STATUS  
**ISSUED FOR REVIEW**

PROJECT CLIENT  
**FLEETWOOD CAPEX**

PROJECT:  
**ICE ROOM**

PROJECT ADDRESS  
**XX**



SHEET  
**FLOOR PLAN**

DRAWN  
**SC**

CHECKED  
**KP**

SCALE  
**1 : 50**

SIZE  
**A3**

DRAWING NO.  
**A02-FP01**

REVISION  
**A**

DC SIGN OFF:

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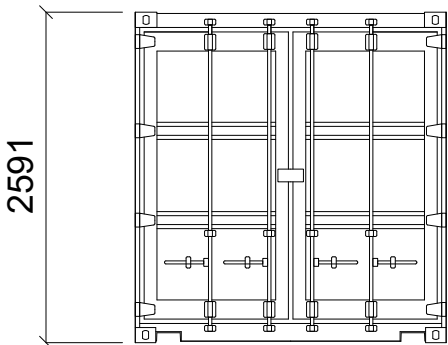
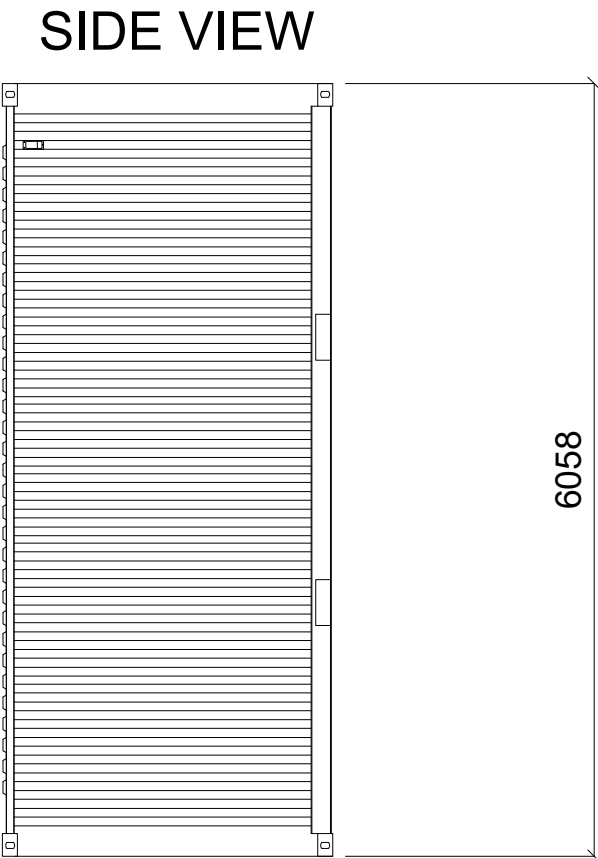
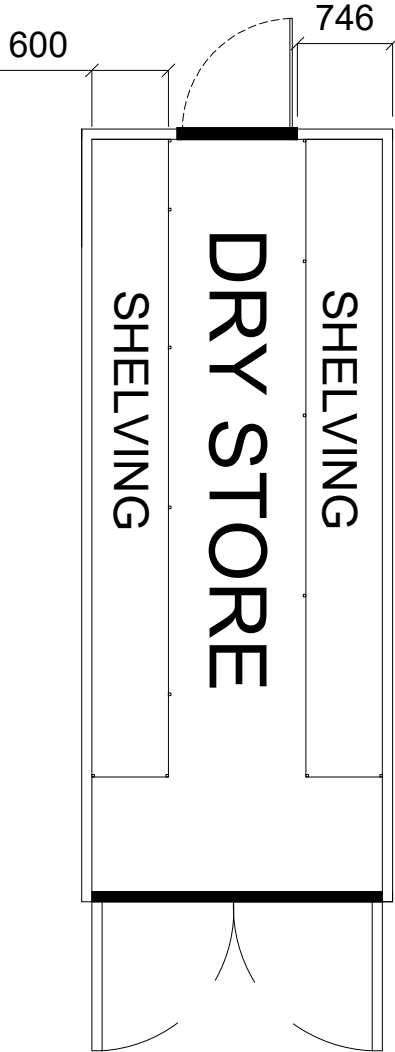
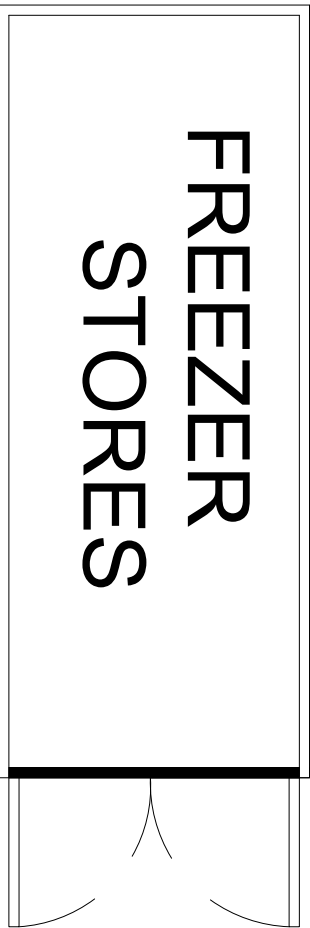
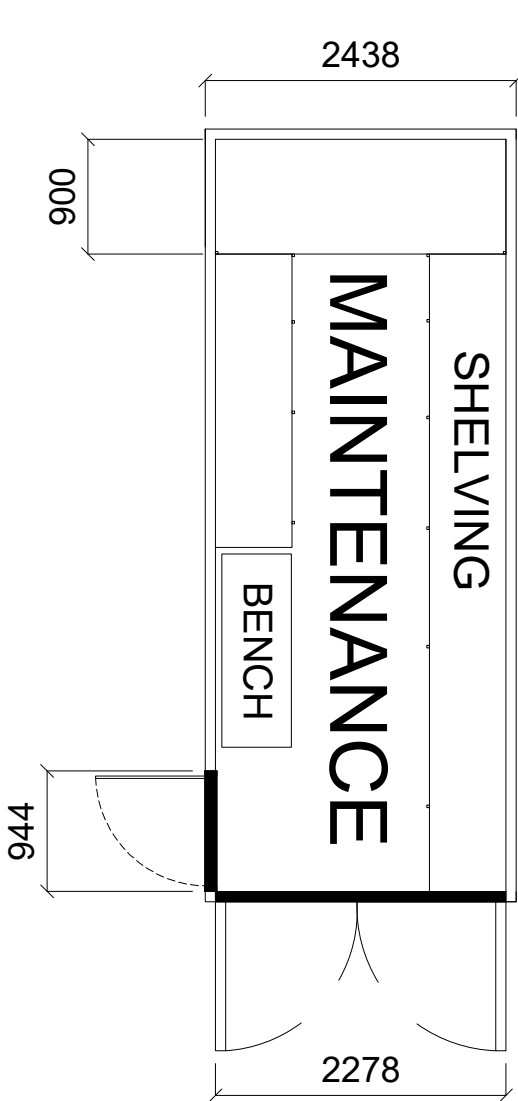


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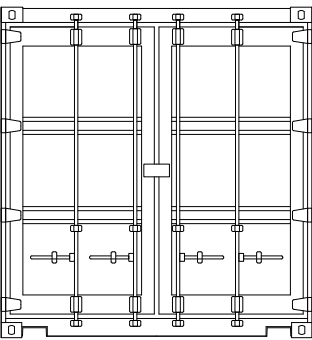
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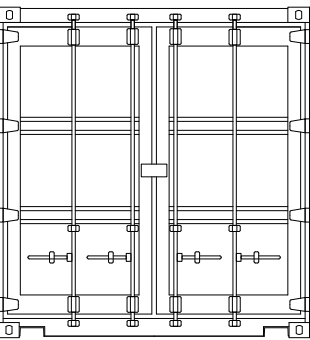
STANDARD 20ft CONTAINERS



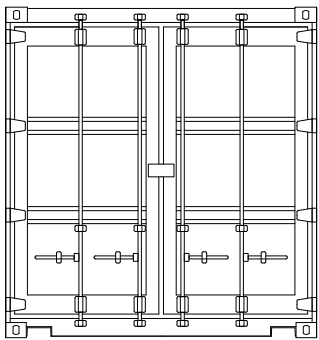
SIDE VIEW



SIDE VIEW

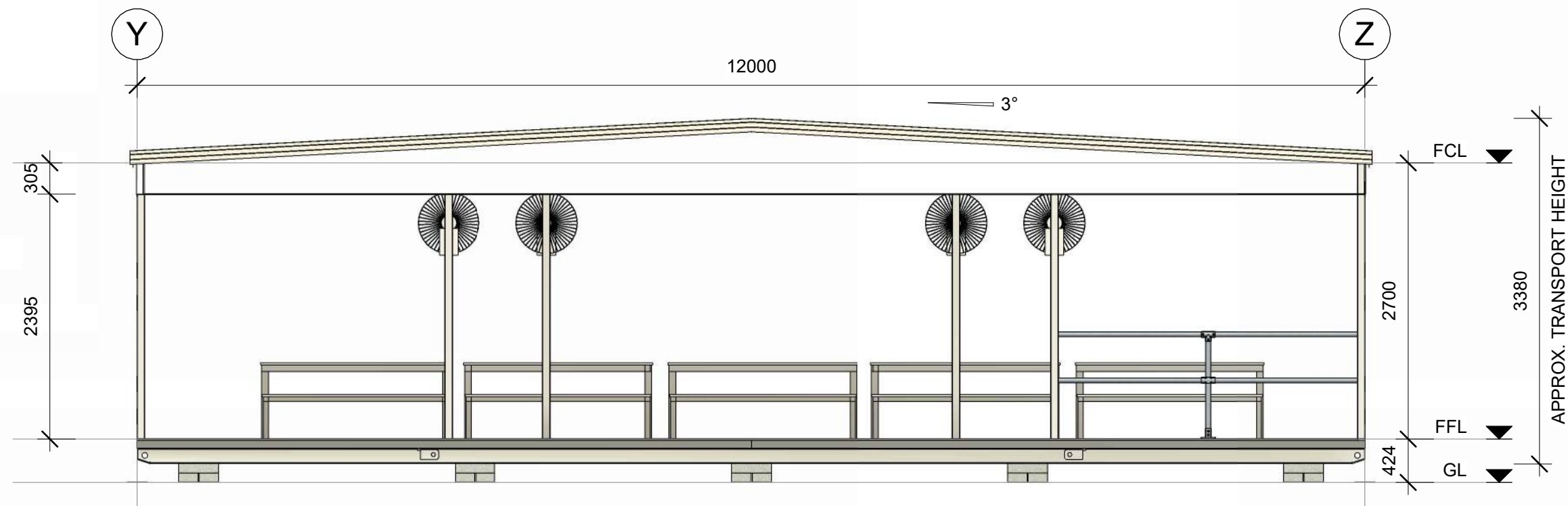


SIDE VIEW

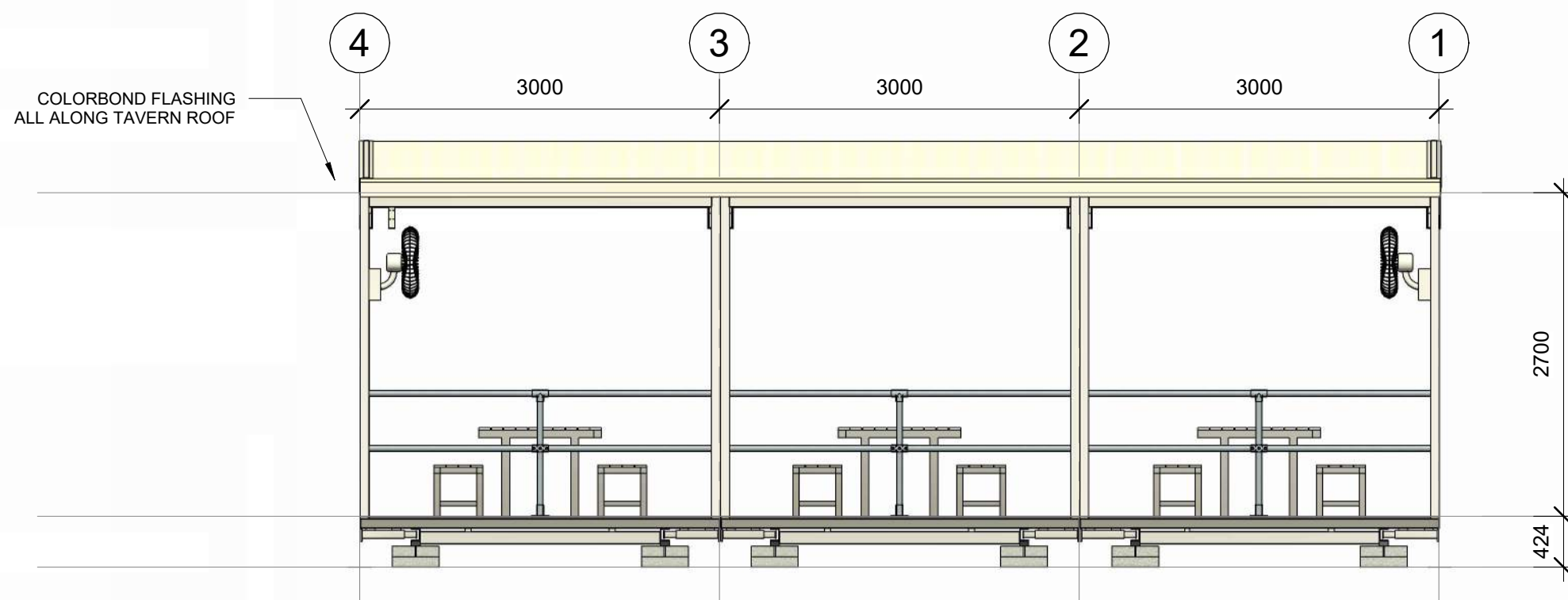


SIDE VIEW

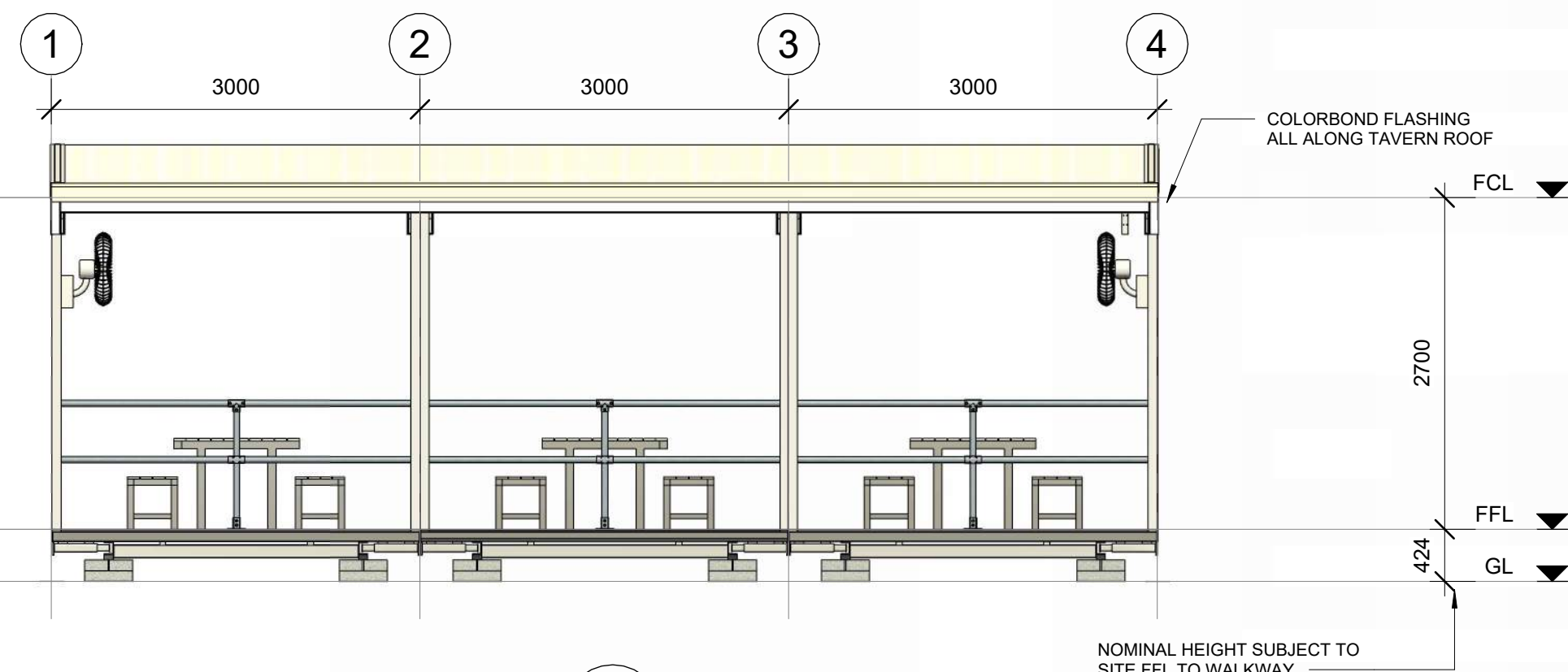
\$FILE\$															RC-MRL-C-DWG-AR-004		A											
															<div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div> <div><div>Rapid Camps</div><div>MINERAL RESOURCES</div></div>	<div><div><div></div><div>N</div></div><div>NORTH</div></div>	PROJECT NUMBER		Mineral Resources Ltd									
																	XXXX		CARDIO EXPLORATION 60 PERSON CAMP									
																	This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Fortescue MetalsGroup Ltd		DRY, COLD FREEZER STORES AND MAINTENANCE GA									
\$TIME\$															OM		RK		RK		OM		RK		RK			
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\$DATE\$															OM													
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REF DRG No.		TITLE				REV	DATE	DESCRIPTION						DRN	CHK	SUP	DES	DAP	PAP	MRL								
1		2		3		4		5			6			7			8		9		10		11		12			



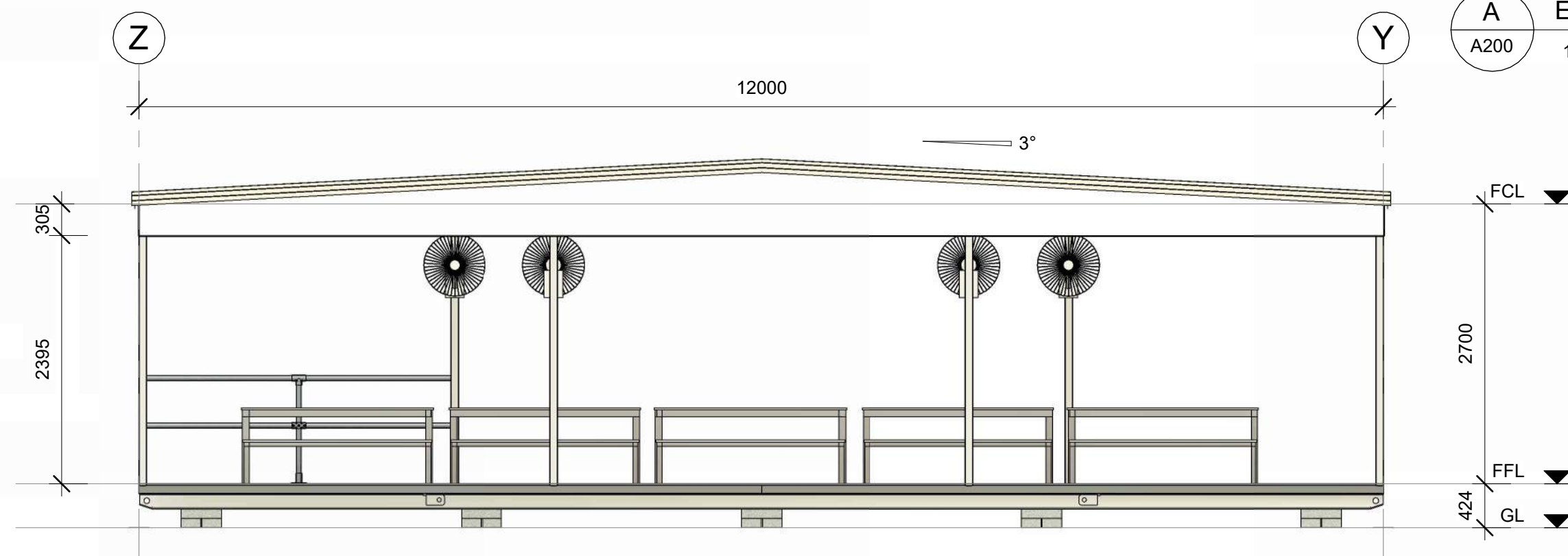
**B**  
A200  
ELEVATION  
1 : 50



**C**  
A200  
ELEVATION  
1 : 50




**A**  
A200  
ELEVATION  
1 : 50



**D**  
A200  
ELEVATION  
1 : 50

CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION  
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A	ISSUED FOR APPROVAL	20.09.23	JO	IK



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STRUCTURES & LOGISTICS PTY. LTD.  
28 ARMSTRONG ROAD,  
HOPE VALLEY, WA 6165  
PO BOX 40, WATTLEUP, WA 6166

PHONE: (08) 9236 1500  
ABN: 71 083 902 309  
EMAIL: [ASLAu.Sales@atco.com](mailto:ASLAu.Sales@atco.com)

TITLE ELEVATIONS		
DESCRIPTION 12.0 x 9.0m BEER GARDEN		SCALE AT A2 1 : 50
DRAWING NUMBER 230925B -A300		REVISION A

WIND REGION:		D
TERRAIN CATEGORY:		2
IMPORTANCE LEVEL:		2
SHIELDING FACTOR:		NS
BUILDING CLASS:		10a
FLOOR LOADS	DISTRIBUTED (kPa):	3.0
	CONCENTRATED (kN):	2.7
CLIMATE ZONE:		3
FLOOR LOADS CALCULATED FROM AS1170.1 - 2002. WIND SPEED CALCULATED FROM AS1170.2 - 2011. BUILDING CLASS, IMPORTANCE LEVEL, PROBABILITY OF EXCEEDANCE, WIND REGION, TERRAIN CATEGORY, TOPOGRAPHIC CLASIFICATION, SHIELDING FACTOR, CLIMATE ZONE & NORTH POINT ARE ASSUMED UNLESS OTHERWISE ADVISED BY CLIENT.		

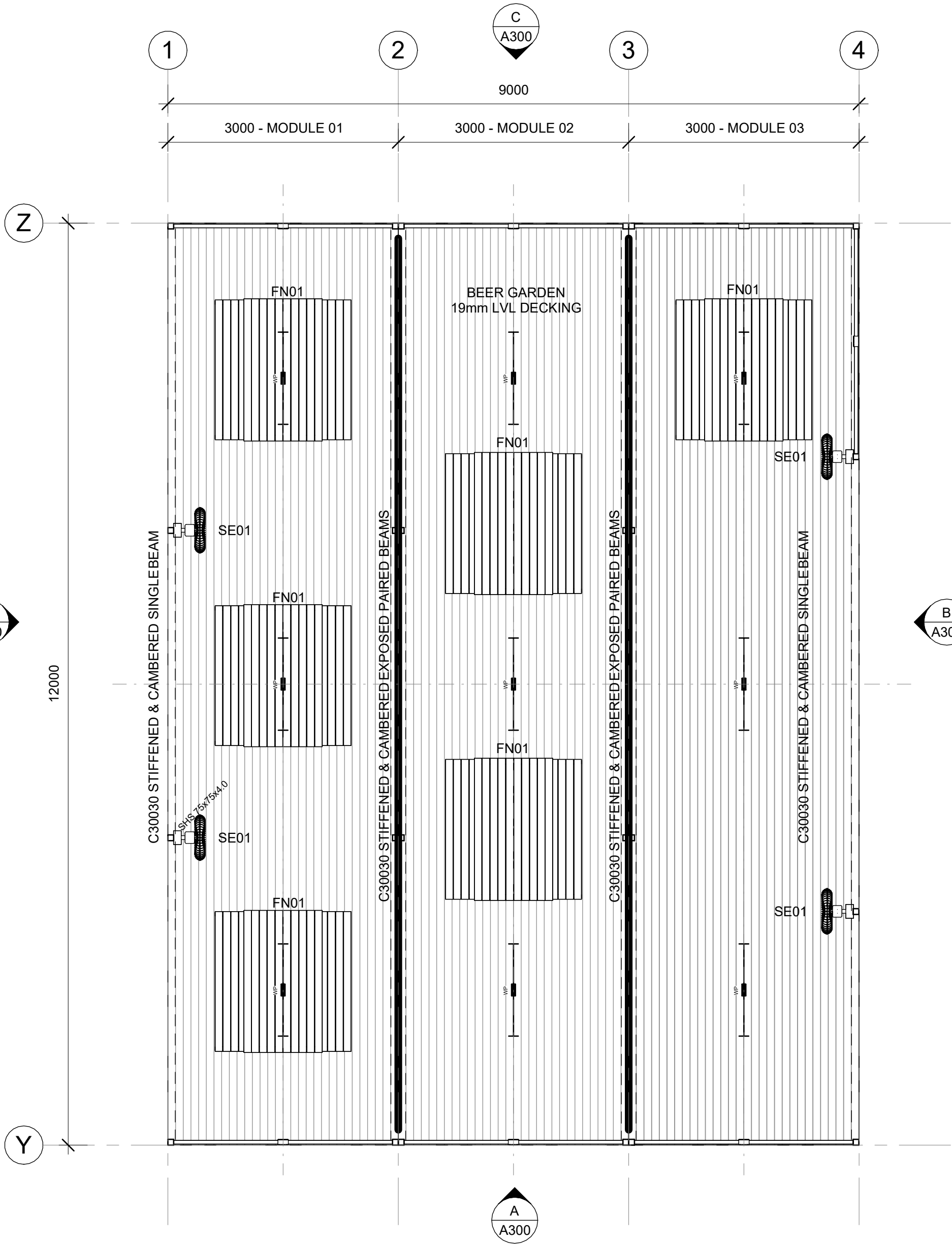


FINISHES SCHEDULE	
CLADDING - EXTERNAL	COLORBOND MAXIRIB - HORIZONTAL
CEILING LINING	6mm FIBRE CEMENT, PAINTED
ROOF SHEETING	0.48mm BMT SUPERDEK ROOFING

ITEM LIST		
ITEM	QTY	DESCRIPTION
Furniture		
FN01	6	PICNIC TABLE, ALUMINUM - 1800L x 1770W
Specialty Equipment		
SE01	4	FAN, WALL MOUNTED


SYMBOL LEGEND

—■— LIGHT - 1200mm LED BATTEN & DIFFUSER



1 PLAN  
1 : 50

CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION					
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REV	DESCRIPTION	DATE	BY	CHKD	
A	ISSUED FOR APPROVAL	20.09.23	JO	IK	

		TITLE PLAN	
DESCRIPTION 12.0 x 9.0m BEER GARDEN		PROJECT No.	SCALE AT A2 1 : 50
DRAWING NUMBER 230925B -A200		REVISION A	





230925B

View indicative only

DRAWING LIST		
SHEET NUMBER	SHEET NAME	CURRENT REVISION
A000	TITLE PAGE	A
A200	PLAN	A
A300	ELEVATIONS	A
A500	SALES SCHEDULES	A

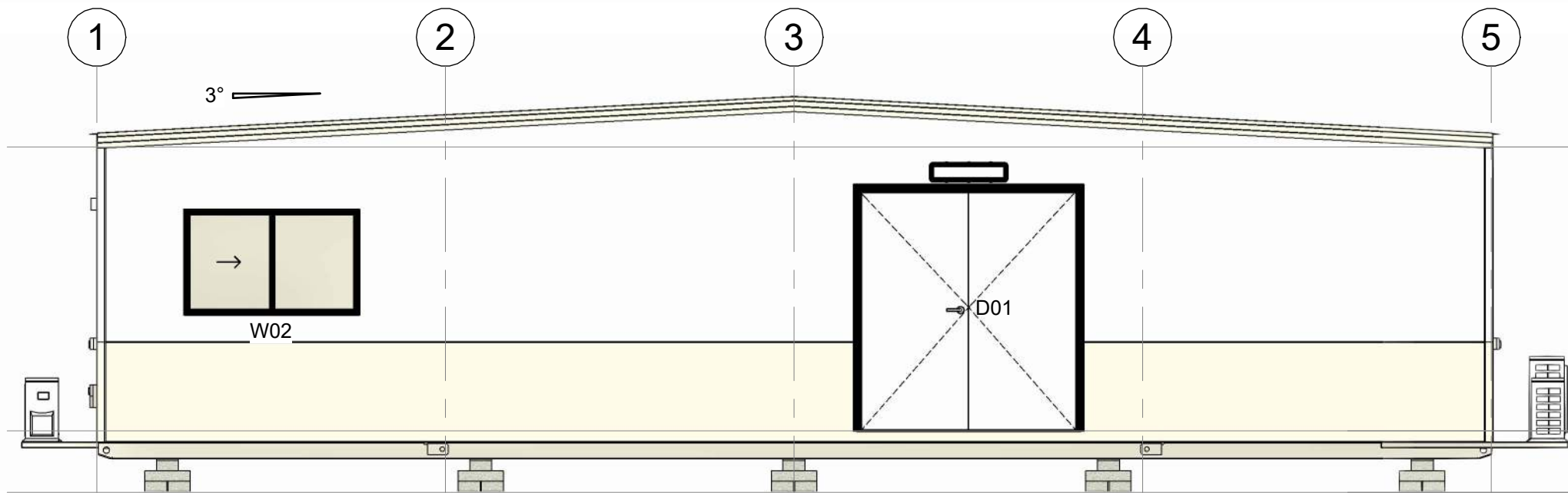
12.0 x 9.0m BEER GARDEN



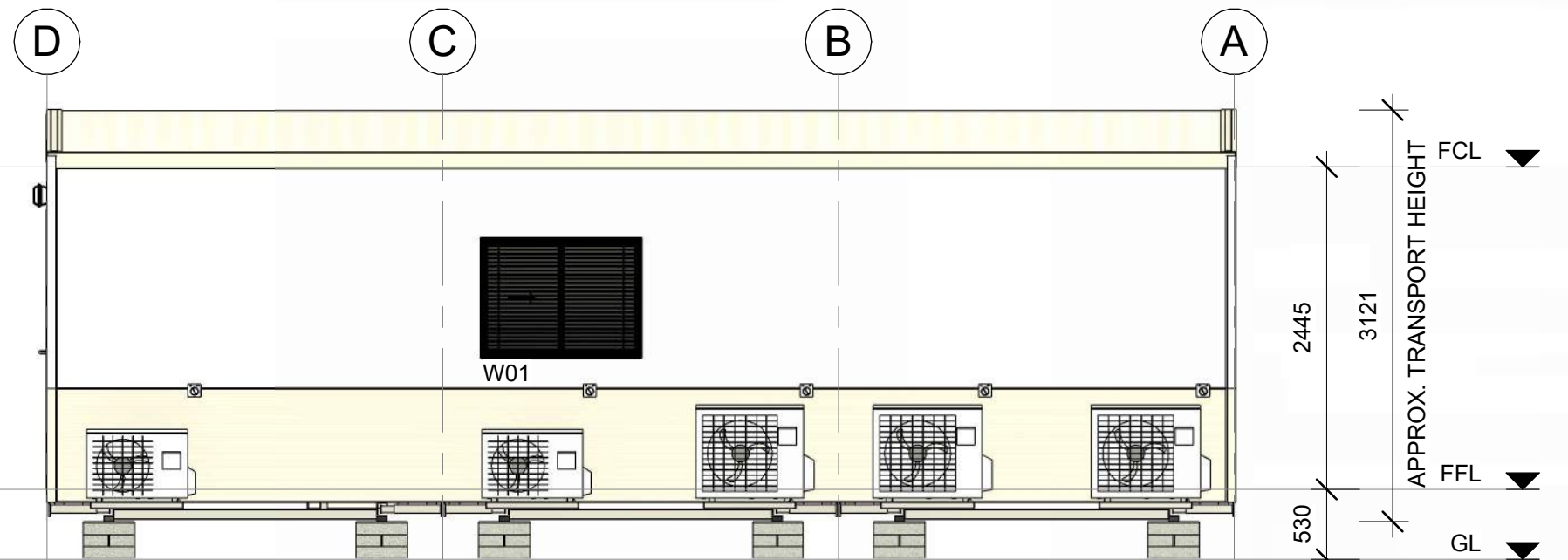
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PHONE: (08) 9236 1500  
ABN: 71 083 902 309  
EMAIL: ASLAu.Sales@atco.com

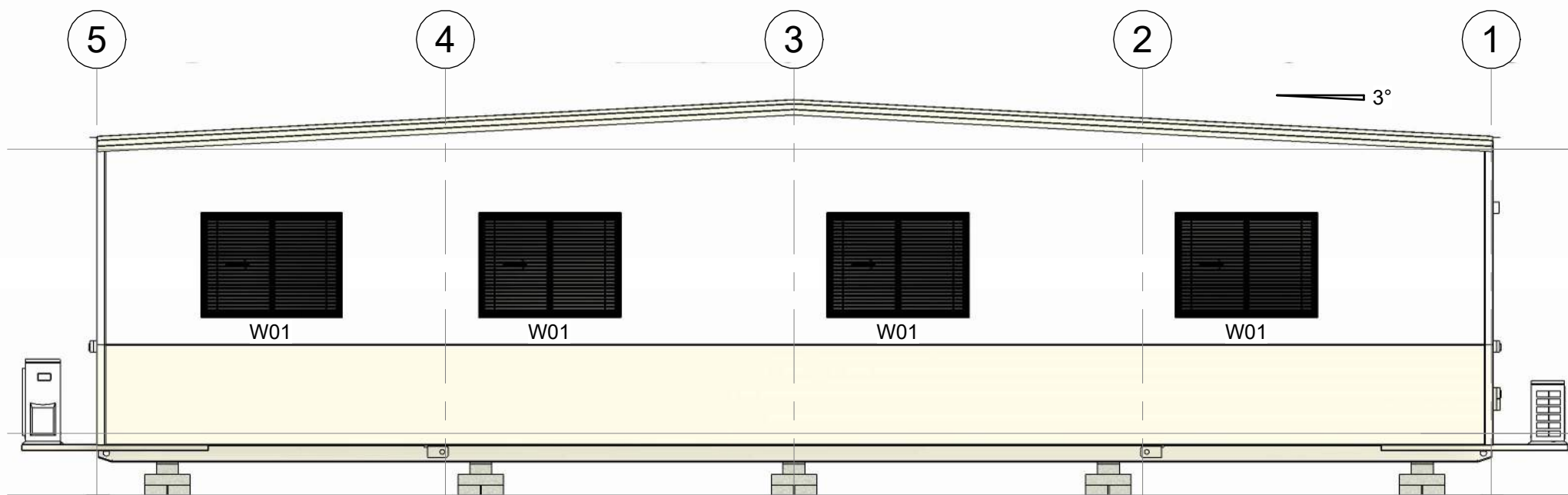




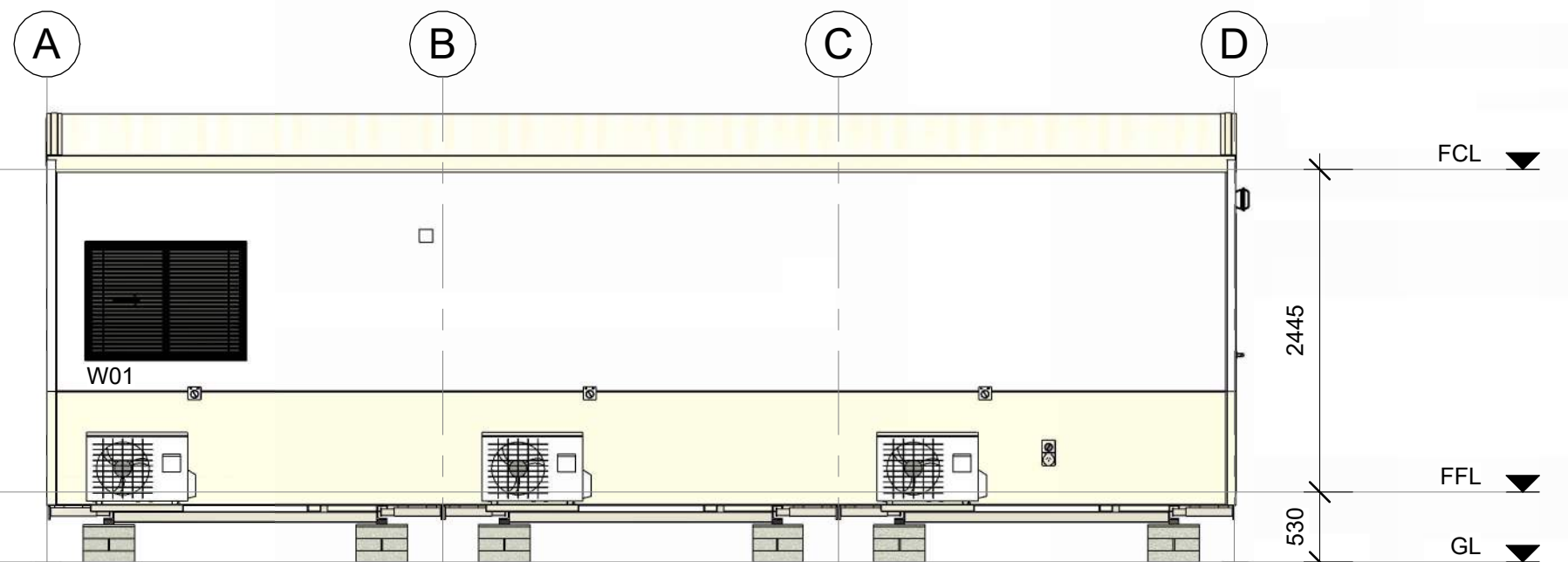
**A** ELEVATION  
A200 1 : 50



**B** ELEVATION  
A200 1 : 50



**C** ELEVATION  
A200 1 : 50



**D** ELEVATION  
A200 1 : 50

CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION  
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REV	DESCRIPTION	DATE	BY	CHKD
A	ISSUED FOR APPROVAL	06.10.23	JO	IK
B	ISSUED FOR CERTIFICATION	26.10.23	JO	NG



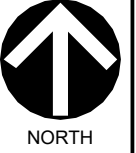
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ABN: 71 083 902 309  
EMAIL: [ASLAu.Sales@atco.com](mailto:ASLAu.Sales@atco.com)

DESCRIPTION	
12.0 x 9.0m CAMP OFFICE / SHOP OFFICE	

TITLE	
ELEVATIONS	
DRAWING NUMBER	230925E -A300
SCALE AT A2	1 : 50
REVISION	B

WIND REGION:		D
TERRAIN CATEGORY:		2
IMPORTANCE LEVEL:		2
SHIELDING FACTOR:		NS
BUILDING CLASS:		5
FLOOR LOADS	DISTRIBUTED (kPa):	3.0
	CONCENTRATED (kN):	2.7
CLIMATE ZONE:		3
FLOOR LOADS CALCULATED FROM AS1170.1 - 2002. WIND SPEED CALCULATED FROM AS1170.2 - 2011. BUILDING CLASS, IMPORTANCE LEVEL, PROBABILITY OF EXCEEDANCE, WIND REGION, TERRAIN CATEGORY, TOPOGRAPHIC CLASSIFICATION, SHIELDING FACTOR, CLIMATE ZONE & NORTH POINT ARE ASSUMED UNLESS OTHERWISE ADVISED BY CLIENT.		



FINISHES SCHEDULE	
FLOOR COVERING	2mm VINYL
CLADDING - EXTERNAL	COLORBOND MAXIRIB - HORIZONTAL
CLADDING - EXTERNAL	COLORBOND MAXIRIB - HORIZONTAL
WALL LINING - INTERNAL	3.6mm POLYESTER COATED PLYWOOD
CEILING LINING	3.6mm COATED PLYWOOD
ROOF SHEETING	0.48mm BMT SUPERDEK ROOFING

ITEM LIST		
ITEM	QTY	DESCRIPTION
Casework		
CW01	1	CUPBOARD, MELAMINE w/ EXTENDED TOP - 1200mm SINK
Electrical Equipment		
EE01	1	BAR REFRIGERATOR - 130Ltr
EE02	1	ICE CREAM FREEZER - ICS 150 Litre
EE03	2	SKOPE GLASS DOUBLE DOOR BME1200-A
Fire Alarm Devices		
FE01	1	FIRE EXTINGUISHER - 9.0Kg ABE c/w SIGNAGE
Furniture		
FN01	1	CABINET, STORAGE - 900 x 450 x 1800H
FN02	3	CABINET, STORAGE - 1200 x 580 x 2100H
FN03	6	CHAIR, CLERICAL w/ ARMS
FN04	4	DESK - 1800 x 750 x 727H
FN05	4	DISPLAY SHELVING (BY OTHERS)
FN06	1	WORKSTATION - 1800 x 1800 x 750
FN07	1	DESK, RECEPTION - 1800 x 750 x 727H
FN08	1	KEY STORAGE BOARD (BY OTHERS)
Plumbing Fixtures		
PL01	1	AUTOBOILER - 5.0Ltr w/ IN-BUILT TIMER
PL02	1	SINK, STAINLESS STEEL - 1200x450 (COLD ONLY)
PL04	1	WATER INLET c/w LINE STRAINER

SYMBOL LEGEND

	ELECTRICAL SWITCHBOARD
	ELECTRICAL POINT OF ENTRY
	LIGHT SWITCH, SINGLE
	ISOLATION SWITCH
	GPO, SINGLE POLE - 1x10A
	GPO, SINGLE POLE - 2x10A
	GPO, SINGLE POLE - 1x15A
	DATA - SINGLE w/ RJ45 FACEPLATE - CAT 6 OUTLET
	LIGHT - 1200mm LED BATTEN & DIFFUSER
	LIGHT, WEATHERPROOF - 600mm
	PHOTO ELECTRIC CELL
	PLUMBING WATER INLET POINT
	PLUMBING WASTE MANIFOLD OUTLET POINT

1 PLAN  
1 : 50

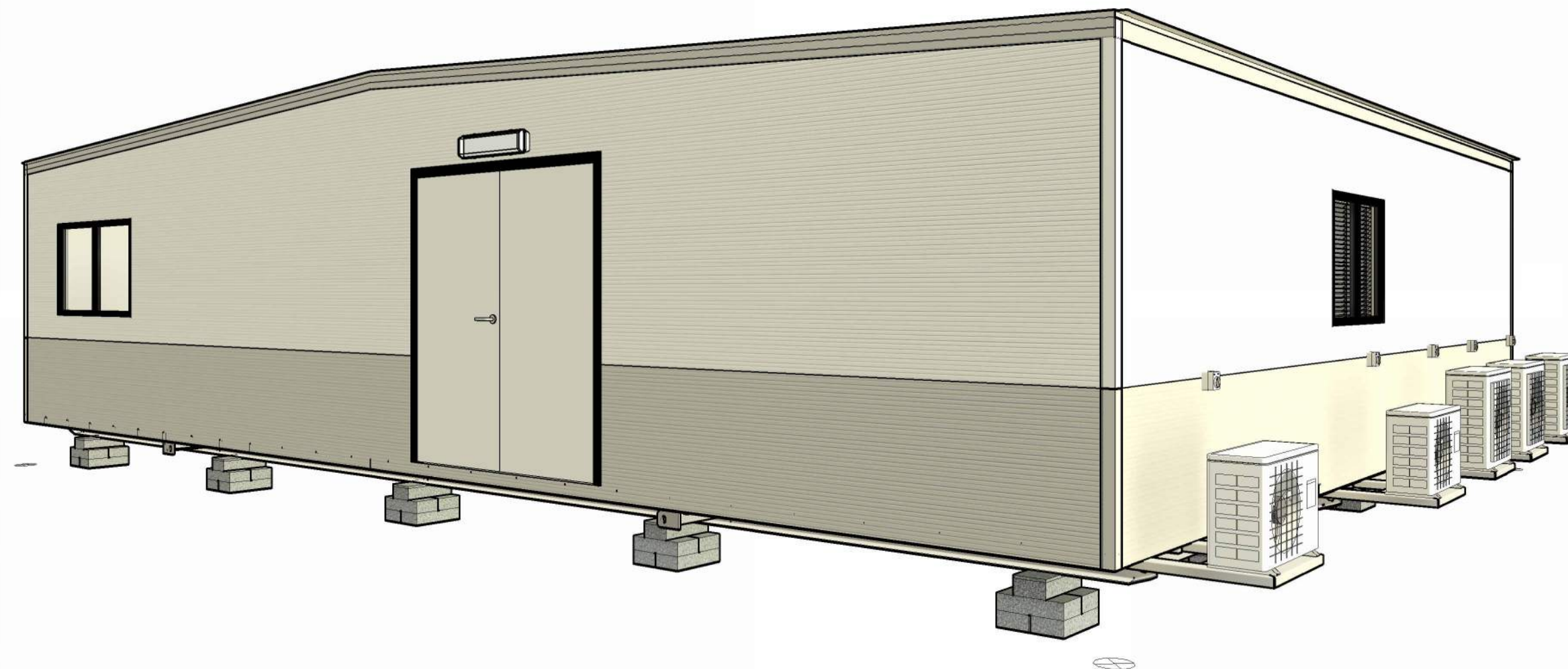
REV	DESCRIPTION	DATE	BY	CHKD
A	ISSUED FOR APPROVAL	06.10.23	JO	IK
B	ISSUED FOR CERTIFICATION	26.10.23	JO	NG

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PO BOX 40, WATTLEUP, WA 6166

PHONE: (08) 9236 1500  
ABN: 71 083 902 309  
EMAIL: ASLAu.Sales@atco.com

TITLE PLAN	
DESCRIPTION 12.0 x 9.0m CAMP OFFICE / SHOP OFFICE	
DRAWING NUMBER 230925E -A200	SCALE AT A2 1 : 50 REVISION B





View indicative only

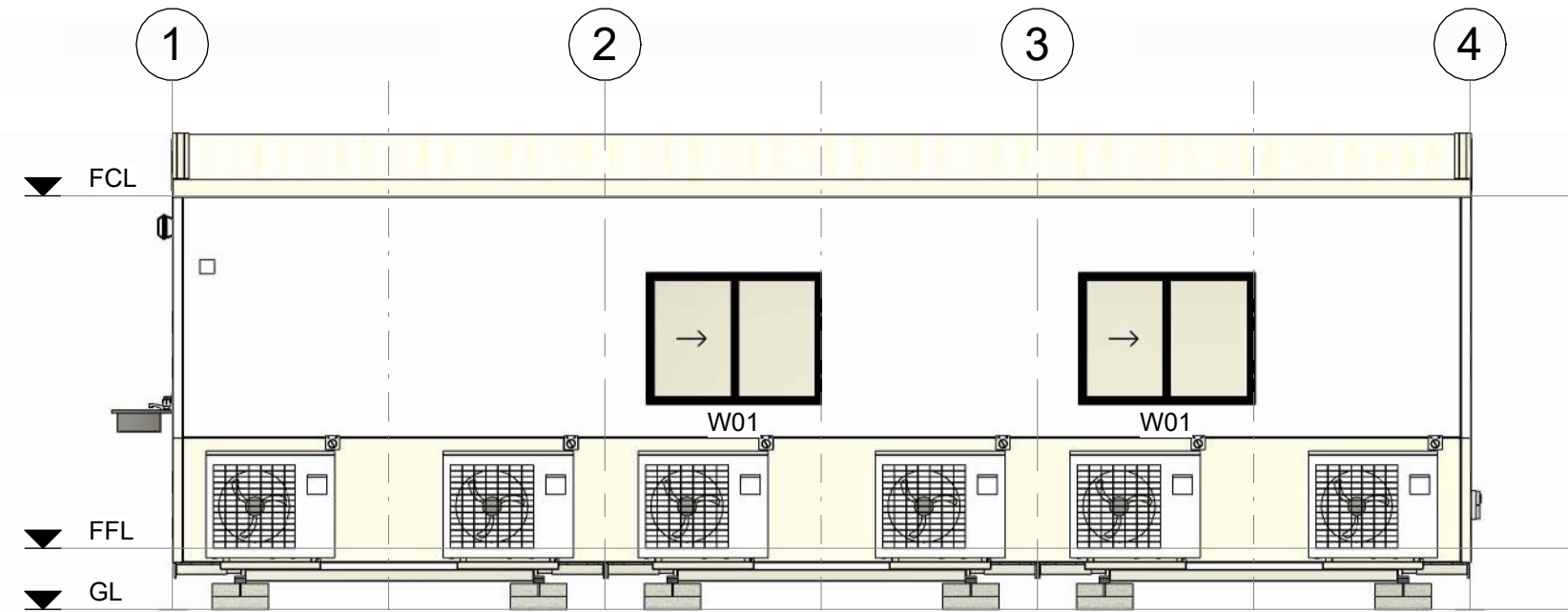
230925E

DRAWING LIST		
SHEET NUMBER	SHEET NAME	CURRENT REVISION
A000	TITLE PAGE	B
A200	PLAN	B
A300	ELEVATIONS	B
A350	SECTIONS	A
A351	CONNECTION DETAILS	A
A400	FOUNDATION PLAN	A
A550	MANUFACTURING SCHEDULES	A
A555	PACKING LIST	A
S200	SHOP DRAWINGS - BASEFRAME GUIDE	A
S201	SHOP DRAWINGS - BASE 01	A

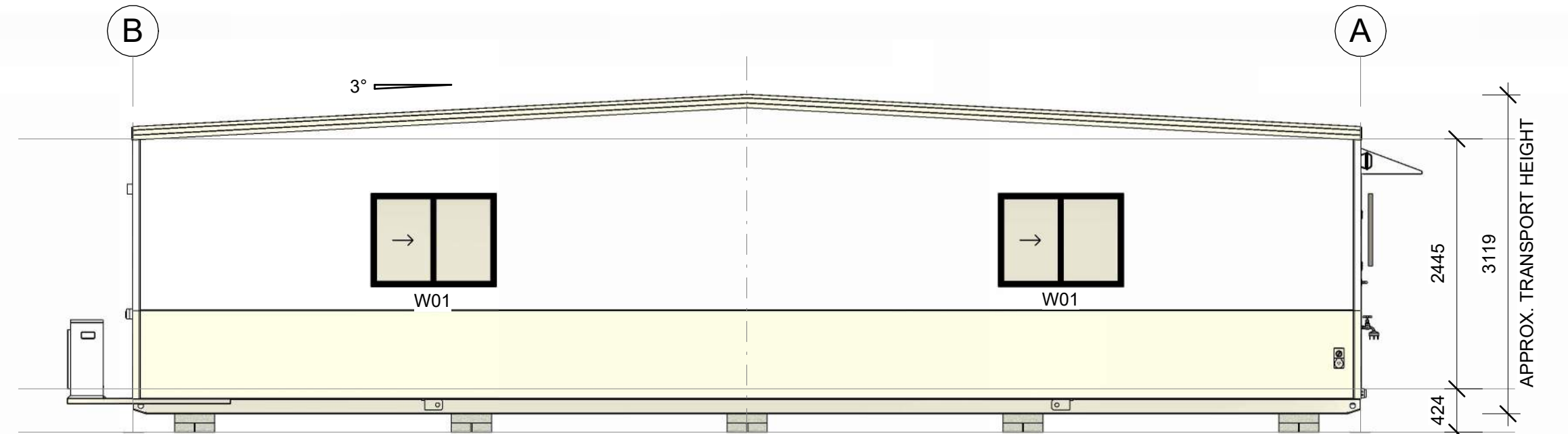
12.0 x 9.0m CAMP OFFICE / SHOP OFFICE



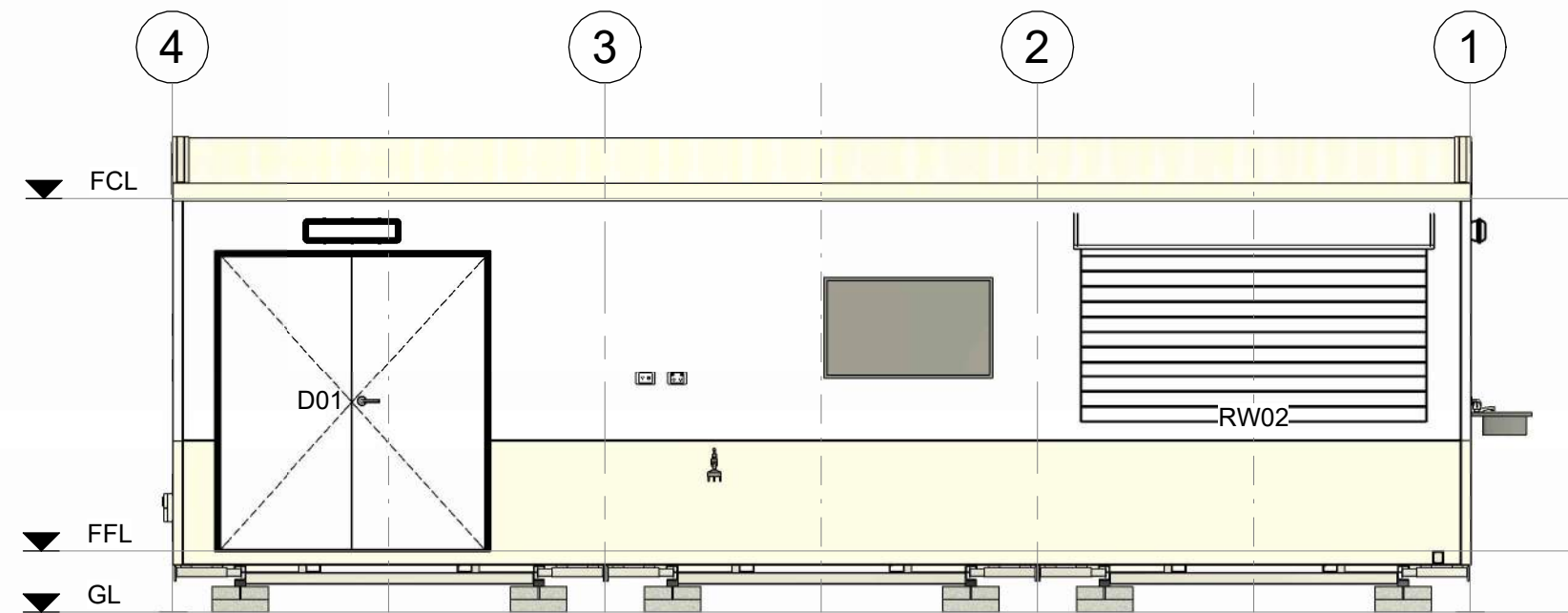
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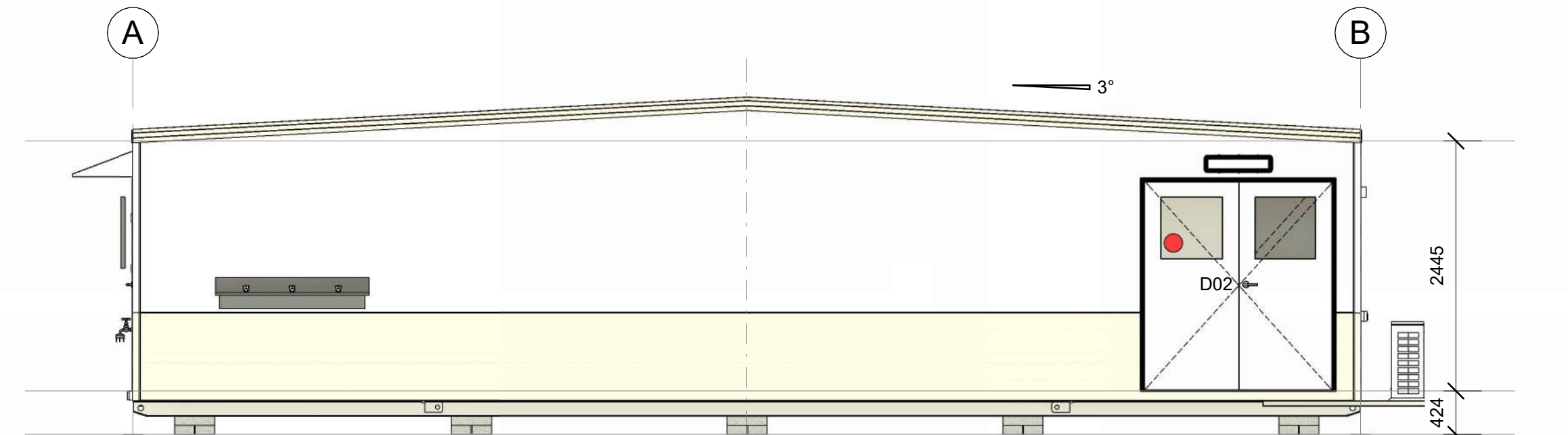
**A** ELEVATION  
A200 1 : 50




**B** ELEVATION  
A200 1 : 50



**C** ELEVATION  
A200 1 : 50



**D** ELEVATION  
A200 1 : 50

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	A	ISSUED FOR APPROVAL	20.09.23	JO	IK			SCALE AT A2 1 : 50	DRAWING NUMBER 230925A -A300	REVISION C
	B	ISSUED FOR CERTIFICATION	26.10.23	JO	NG					
	C	COORDINATES ADDED	02.11.23	JO						



ISSUED FOR CERTIFICATION

WIND REGION:		D
TERRAIN CATEGORY:		2
IMPORTANCE LEVEL:		2
SHIELDING FACTOR:		NS
BUILDING CLASS:		6
FLOOR LOADS	DISTRIBUTED (kPa):	3.0
	CONCENTRATED (kN):	2.7
CLIMATE ZONE:		3
FLOOR LOADS CALCULATED FROM AS1170.1 - 2002. WIND SPEED CALCULATED FROM AS1170.2 - 2011. BUILDING CLASS, IMPORTANCE LEVEL, PROBABILITY OF EXCEEDANCE, WIND REGION, TERRAIN CATEGORY, TOPOGRAPHIC CLASSIFICATION, SHIELDING FACTOR, CLIMATE ZONE & NORTH POINT ARE ASSUMED UNLESS OTHERWISE ADVISED BY CLIENT.		



FINISHES SCHEDULE	
FLOOR COVERING	2mm VINYL - SLIP RESISTANT- 150mm HIGH COVING
CLADDING - EXTERNAL	COLORBOND MAXIRIB - HORIZONTAL
CLADDING - EXTERNAL	COLORBOND MAXIRIB - HORIZONTAL
WALL LINING - INTERNAL	3.6mm POLYESTER COATED PLYWOOD
CEILING LINING	3.6mm COATED PLYWOOD
ROOF SHEETING	0.48mm BMT SUPERDEK ROOFING

ITEM LIST		
ITEM	QTY	DESCRIPTION
Casework		
CW01	1	BENCHTOP (32mm) c/w SPLASHBACK (150H), LAMINATED / CARCASS (16mm) END PANELS, CUPBOARDS & DRAWS UNDER, MELAMINE - 600D - 2300L - 900H
Electrical Equipment		
EE01	4	SKOPE GLASS DOUBLE DOOR BME1200-A
EE02	2	TELEVISION - FLAT SCREEN - 50" (127cm)
EE03	1	ICE MAKER w/BIN UNDER
Fire Alarm Devices		
FE01	2	FIRE EXTINGUISHER - 9.0Kg ABE c/w SIGNAGE
Furniture		
FN01	16	STACK CHAIR - BISTRO
FN02	4	ROUND TABLE - 5 STAR BASE 900mm DIAMETER
FN03	1	SERVERY HOOD - 2500 x 600
FN04	2	DART BOARD w/ DARTS (MAL ATWELL)
FN05	1	POOL TABLE - 7' x 3'6" (MAL ATWELL)
Generic Models		
GM01	1	BENCH, STAINLESS STEEL, w/ MID SHELF - 4000 LONG & PASS THROUGH
GM02	1	BENCH, STAINLESS STEEL, w/ MID SHELF - 2836 LONG & PASS THROUGH
Plumbing Fixtures		
PL01	1	SINK, STAINLESS STEEL - 1200x450 (HOT & COLD FLICKMIXER)
PL02	1	HOT WATER SYSTEM, MOUNTED INTERNALLY ON SAFE TRAY - 50Ltr, 1x3.6kW
PL03	1	WASH TROUGH, 3 TAP STAINLESS STEEL (PUSH BUTTON) - 1500mm LONG (SITE INSTALLED)
PL04	1	CHILLED FILTERED DRINKING FOUNTAIN
PL05	1	WATER INLET c/w LINE STRAINER
PL07	2	600L - INSULATED ICE WELL
PL08	1	FLOOR WASTE
PL09	2	1000L - INSULATED ICE WELL
PL10	2	HOSE COCK w/ SHROUD

SYMBOL LEGEND

	ELECTRICAL SWITCHBOARD		LIGHT - 1200mm LED BATTEN & DIFFUSER
	ELECTRICAL POINT OF ENTRY		LIGHT, EXIT. C0 = E2.0, C90 = E2.0, 24m VIEW DISTANCE
	LIGHT SWITCH, SINGLE		LIGHT, LED SPOTLIGHT
	ISOLATION SWITCH		LIGHT, WEATHERPROOF - 600mm
	GPO, SINGLE POLE - 1x10A		LIGHT, POOL TABLE
	GPO, SINGLE POLE - 2x10A		PHOTO ELECTRIC CELL
	GPO, SINGLE POLE - 1x15A		PLUMBING WATER INLET POINT
	DATA - SINGLE w/ RJ45 FACEPLATE - CAT 6 OUTLET		PLUMBING WASTE MANIFOLD OUTLET POINT
	TV ANTENNA SOCKET		

NOTE:  
NOT DEEMED PART OF FOOD SERVICE OPERATION, DOES NOT COMPLY WITH AS4674

1 PLAN  
1 : 50

REV	DESCRIPTION	DATE	BY	CHKD
A	ISSUED FOR APPROVAL	20.09.23	JO	IK
B	ISSUED FOR CERTIFICATION	26.10.23	JO	NG
C	COORDINATES ADDED	02.11.23	JO	

ATCO STRUCTURES & LOGISTICS PTY. LTD.  
28 ARMSTRONG ROAD,  
HOPE VALLEY, WA 6165  
PO BOX 40, WATTLEUP, WA 6166

PHONE: (08) 9236 1500  
ABN: 71 083 902 309  
EMAIL: ASLAu.Sales@atco.com

TITLE PLAN	
DESCRIPTION 12.0 x 9.0m WETMESS	
DRAWING NUMBER 230925A -A200	SCALE AT A2 1 : 50 REVISION C





230925A

View indicative only

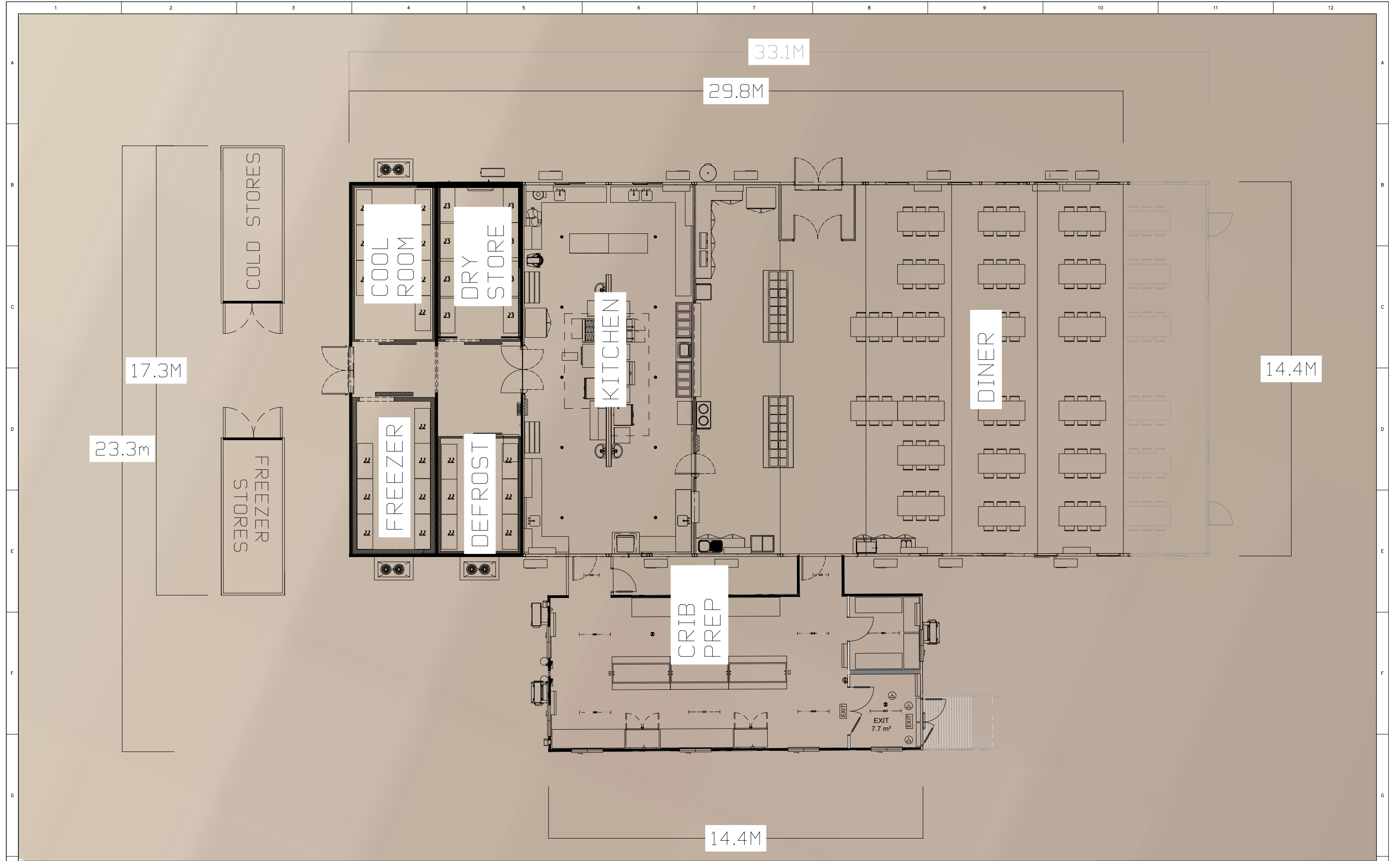
DRAWING LIST		
SHEET NUMBER	SHEET NAME	CURRENT REVISION
A000	TITLE PAGE	C
A200	PLAN	C
A300	ELEVATIONS	C
A350	SECTIONS	B
A351	CONNECTION DETAILS	B
A400	FOUNDATION PLAN	B
A550	MANUFACTURING SCHEDULES	B
A555	PACKING LIST	B
S201	SHOP DRAWINGS - BASE 01	B


12.0 x 9.0m WETMESS



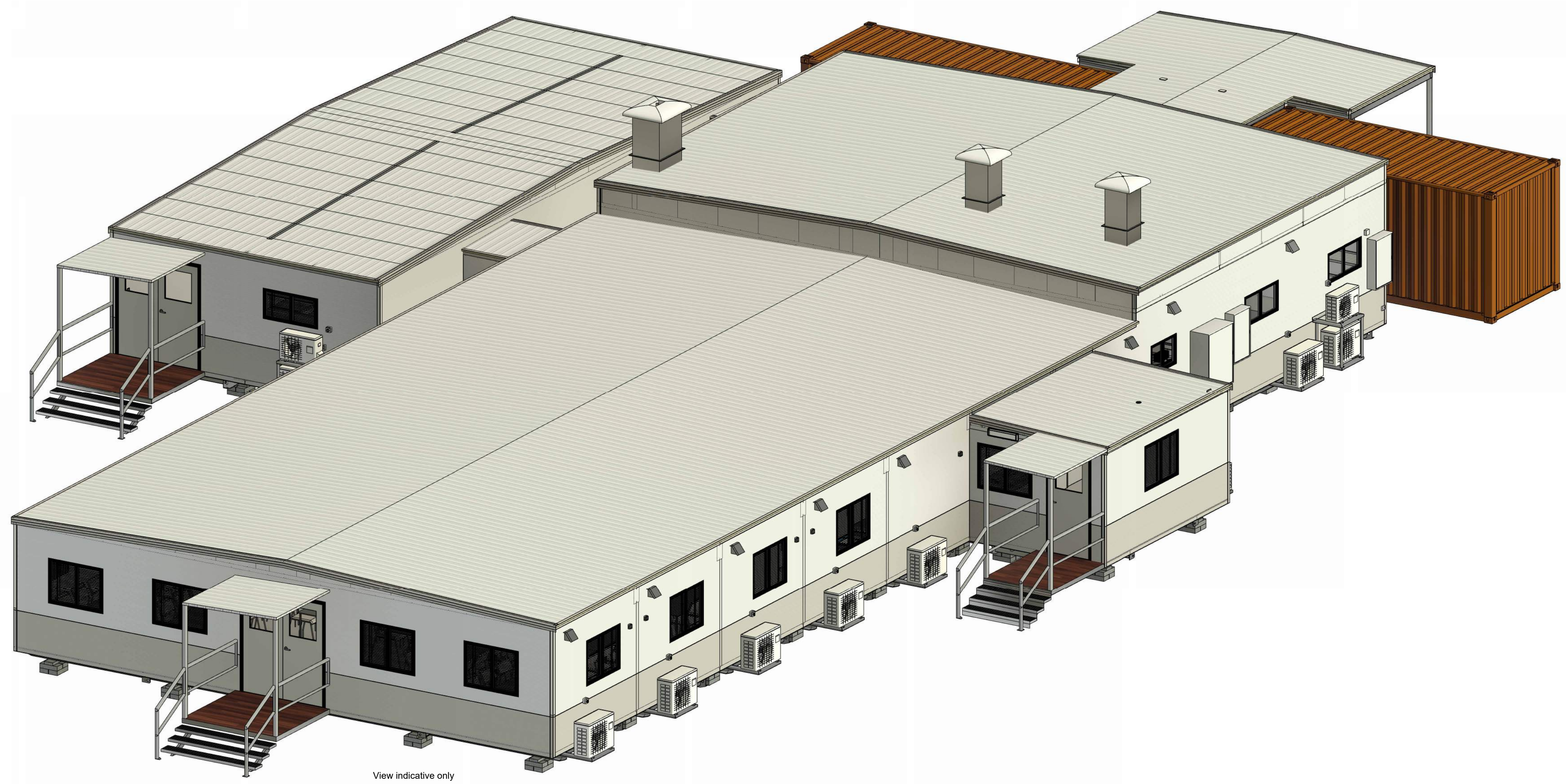
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PO BOX 40, WATTLEUP, WA 6166  
PHONE: (08) 9236 1500  
ABN: 71 083 902 309  
EMAIL: ASLAu.Sales@atco.com





															VENDOR/DESIGNER DRG No. 029—DWG—AR—004		REV: B																
															<div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div>	<div>Rapid Camps</div>	<div></div>	PROJECT NUMBER	Yindjibarndi Energy JINBI—WORKER CAMP 172 PERSON CAMP (EXPANSION SHOWN UP TO 228 PERSON CAMP) RAPID CAMPS KITCHEN LAYOUT				REV: B										
																		XXXX															
																		This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd															
REF	DRG No.	TITLE				REV	DATE	DESCRIPTION				DRN	CHK	SUP	DES	DAP	PAP	CLIENT	A1		SCALE NTS	DRG No: 029—DWG—AR—004	REV: B										
1		2						4				5				6				7				8		9		10		11		12	





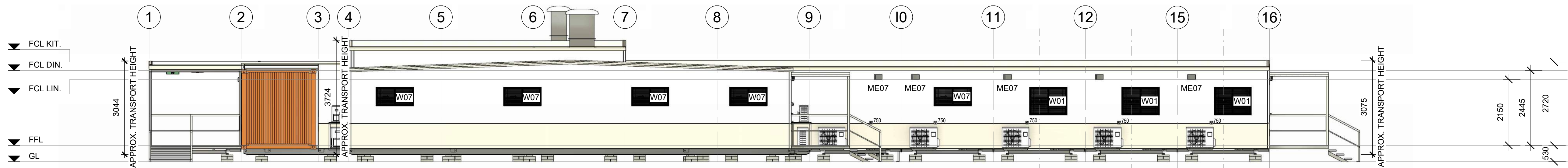
230624A

36.5 x 22.5m KITCHEN DINER & CRIB - 300P

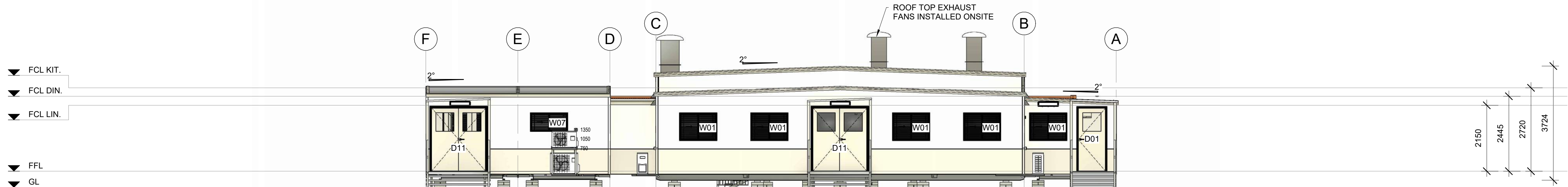


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 55 TONKA STREET  
 LUSCOMBE, QLD 4207  
 P.O. BOX 393, BEENLEIGH, QLD 4207  
 PHONE: (07) 3412 8800  
 FAX: 71 983 902 309  
 EMAIL: ASIA@atco.com

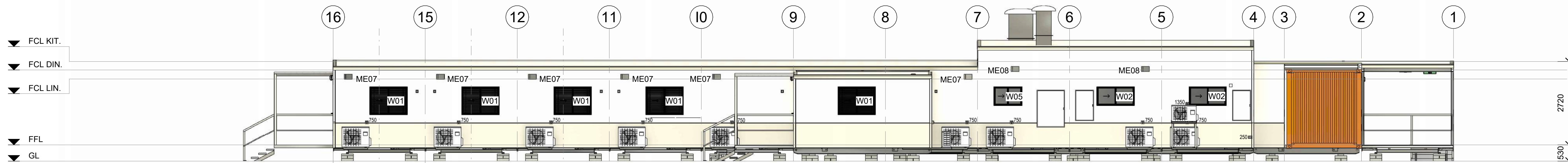




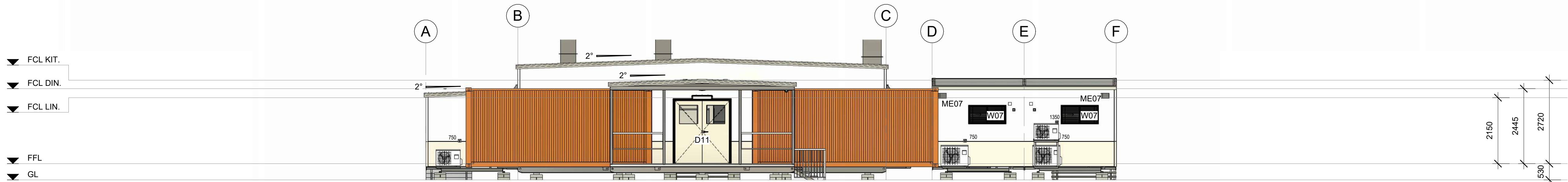
A ELEVATION  
A200 1 : 75



B ELEVATION  
A200 1 : 75




C ELEVATION  
A200 1 : 75



D ELEVATION  
A200 1 : 75

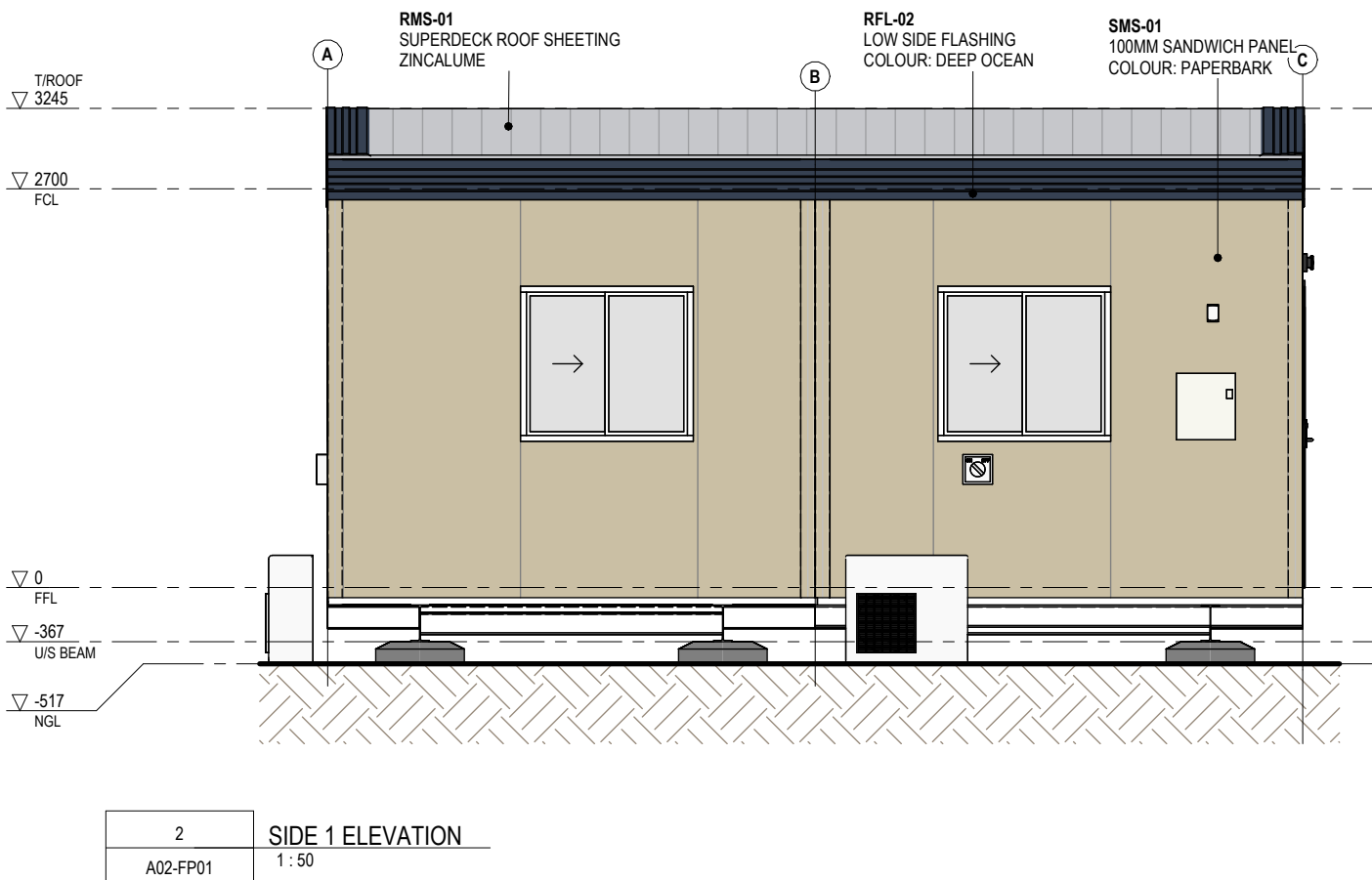
CONFIRM DETAILS OF SET OUTS, LEVELS AND CRITICAL DIMENSIONS ON SITE PRIOR TO SHOP DRAWINGS AND FABRICATION.				
REV	DESCRIPTION	DATE	BY	CHK'D
0	APPROVED FOR CONSTRUCTION	30.08.23	DR	SL



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20 ARMSTRONG ROAD,  
HOPE VALLEY, WA 6165  
PO BOX 40, WATTLEUP, WA 6166

PHONE: 080 9036 1500  
FAX: 71 083 902 309  
EMAIL: [ASLAu.Sales@atco.com](mailto:ASLAu.Sales@atco.com)

DESCRIPTION		TITLE	
36.5 x 22.5m KITCHEN DINER & CRIB - 300P		ELEVATIONS	
DRAWING NUMBER		SCALE AT A1	
230624A -A300		1 : 75	
REVISION		REVISION	
0		0	



A	ISSUED FOR REVIEW	02.02.24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

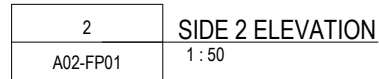
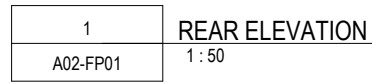
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**AUSTRALIA**

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4. REFER ANY DISCREPANCIES IMMEDIATELY TO THE DESIGNER & AWAIT WRITTEN INSTRUCTION.

# A





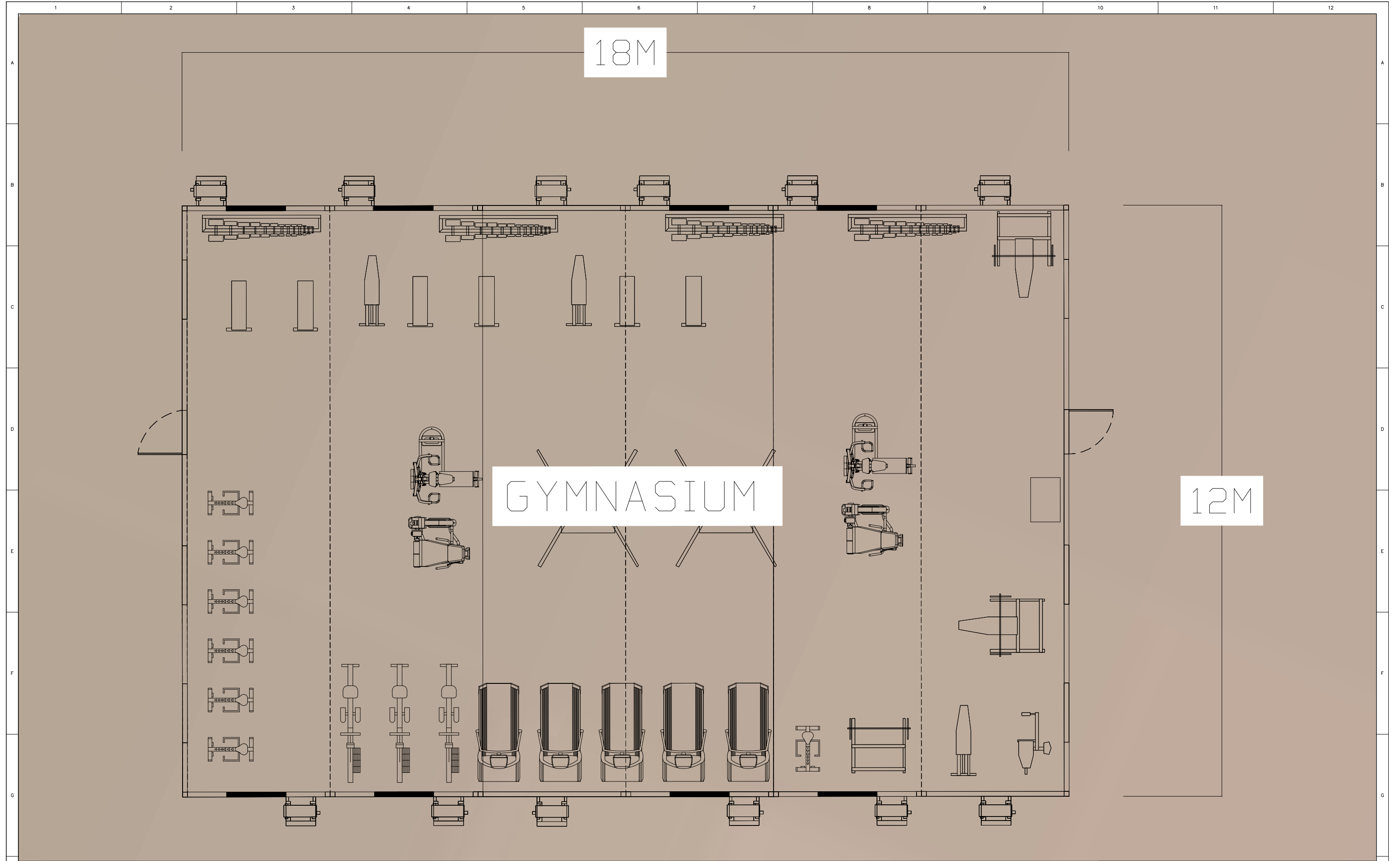
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GENERAL NOTES

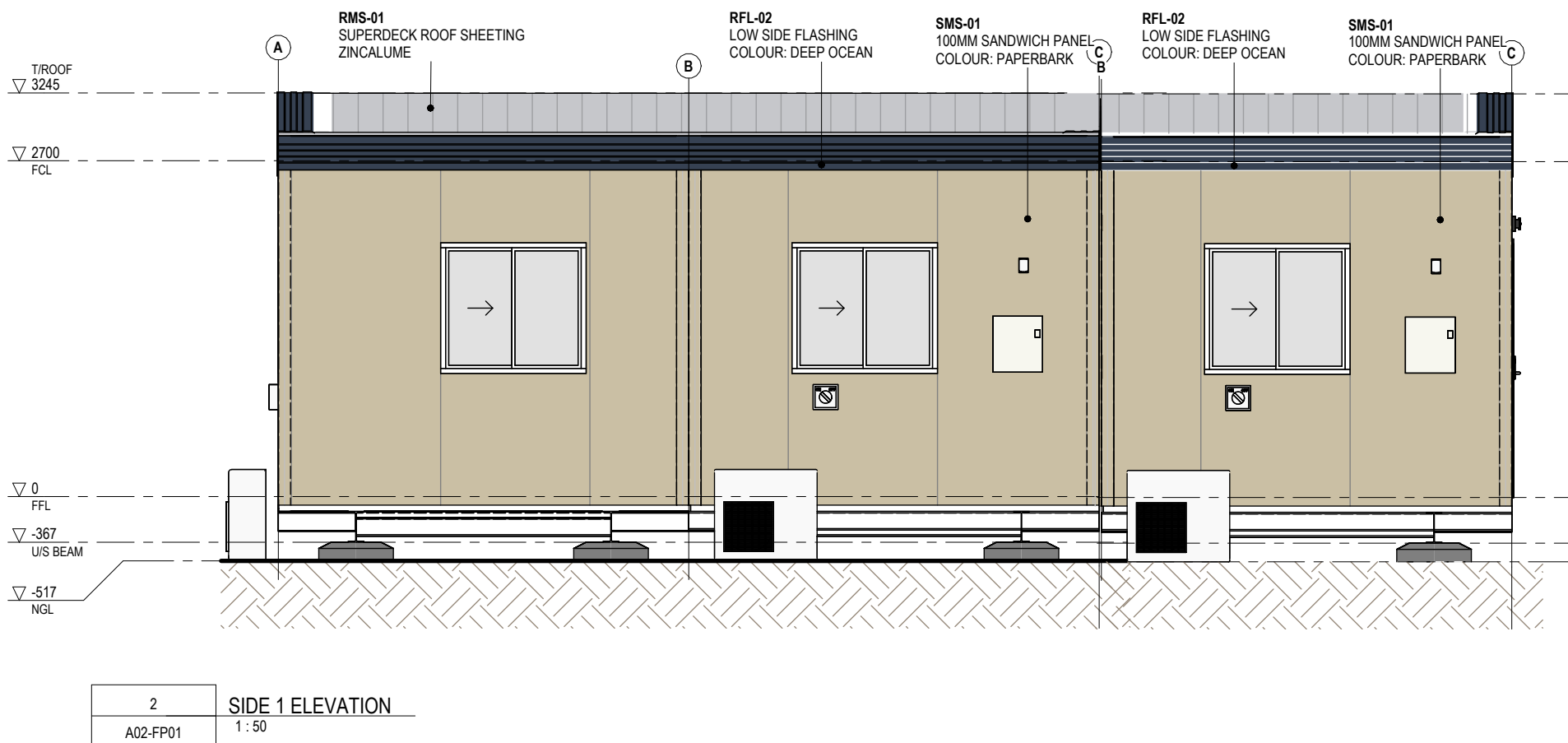
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# A



														VENDOR/DESIGNER DRG No. 029-DWG-AR-005				REV: A													
														<div><div><div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div><div><div><div>Rapid Camps</div><div><div>Yindjibarndi Energy</div></div></div></div></div></div>				<div><div><div><div></div></div></div><div><div>NORTH</div></div></div>		PROJECT NUMBER		Yindjibarndi Energy JINBI-WORKER CAMP 172 PERSON CAMP (EXPANSION SHOWN UP TO 228 PERSON CAMP) RAPID CAMPS GYM LAYOUT				REV: A					
XXXX																															
														This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd																	
REF DRG No.		TITLE				REV	DATE	DESCRIPTION				DRN	CHK	SUP	DES	DAP	PAP	CLIENT	A1		SCALE NTS	DRG No: 029-DWG-AR-005		REV: A							
1		2				3		4				5				6		7				8		9		10		11		12	





A	ISSUED FOR REVIEW	02.02.24	SC	KP
<b>NO.</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>BY</b>	<b>CHK'D</b>

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4. REFER ANY DISCREPANCIES IMMEDIATELY TO THE DESIGNER & AWAIT WRITTEN INSTRUCTION.

**J005076-B09**

ISSUED FOR REVIEW

FLEETWOOD CAPEX

REC ROOM

XX

## ELEVATIONS

SC

**A03-EL01**

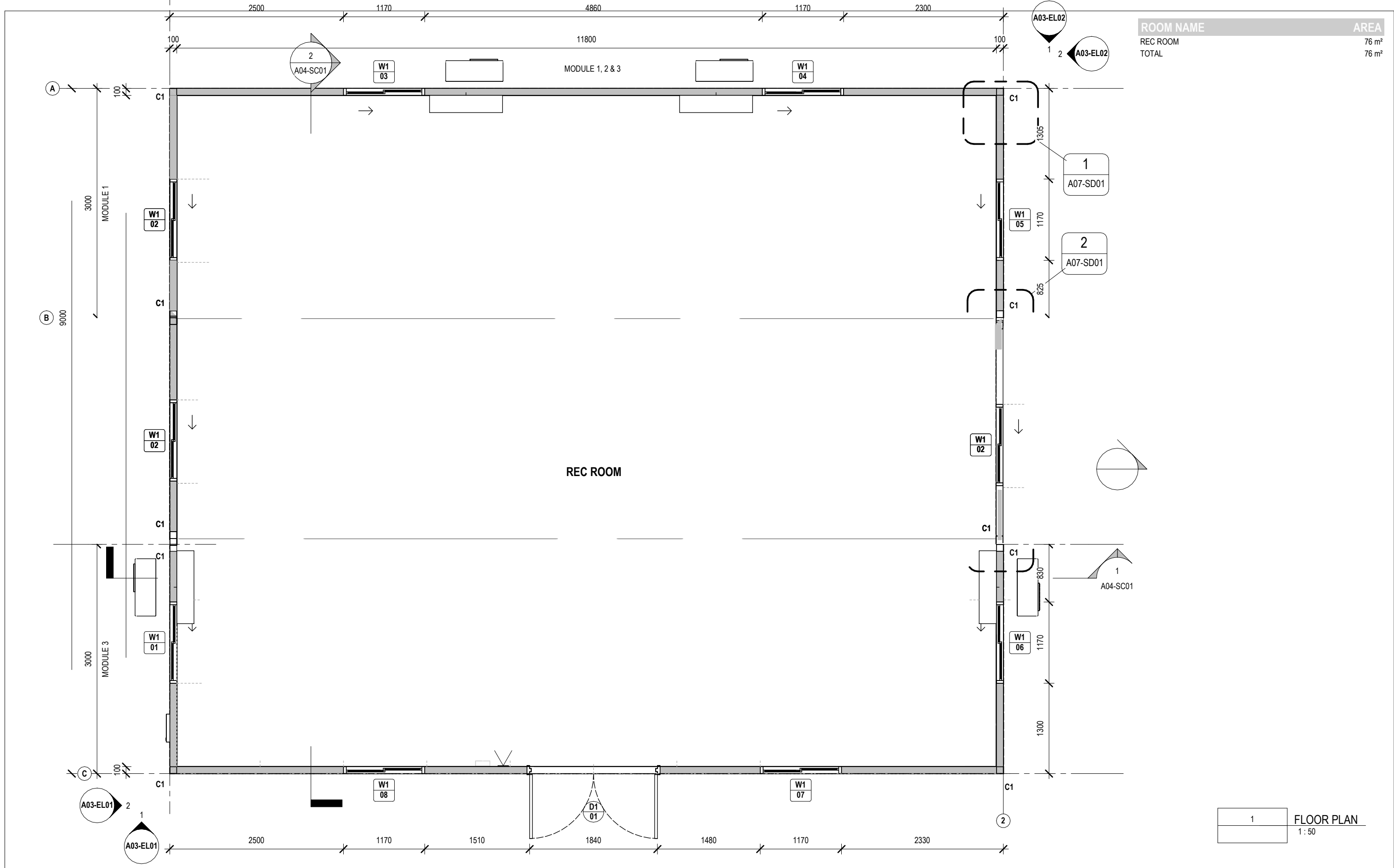
DC SIGN OFF:

SCALE  
1:50

SIZE  
A3

## REVISION

A



ROOM NAME		AREA
REC ROOM		76 m²
TOTAL		76 m²

1	FLOOR PLAN
	1:50

NO.	DESCRIPTION	DATE	BY	CHK'D
A	ISSUED FOR REVIEW	02.02.24	SC	KP

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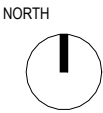
PROJECT NO.:  
**J005076-B09**

PROJECT STATUS  
**ISSUED FOR REVIEW**

PROJECT CLIENT  
**FLEETWOOD CAPEX**

PROJECT:  
**REC ROOM**

PROJECT ADDRESS  
**XX**



**SHEET**  
**FLOOR PLAN**

**DRAWN**  
**SC**

**CHECKED**  
**KP**

**DRAWING NO.**  
**A02-FP01**

**SCALE**  
**1:50**

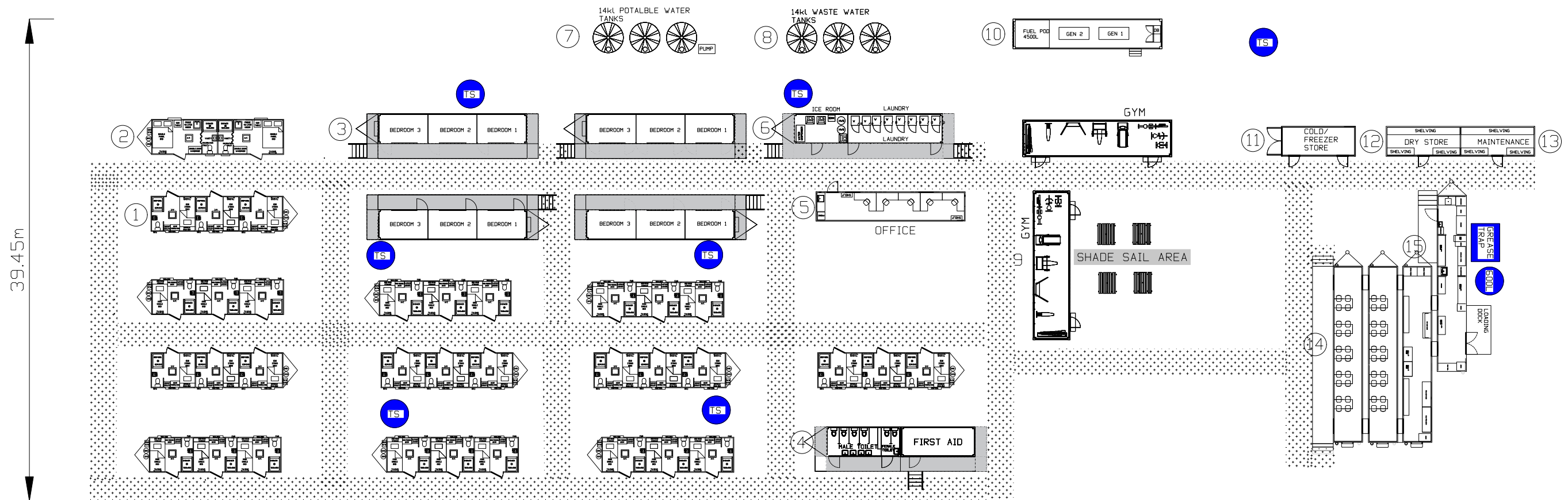
**SIZE**  
**A3**


**REVISION**  
**A**

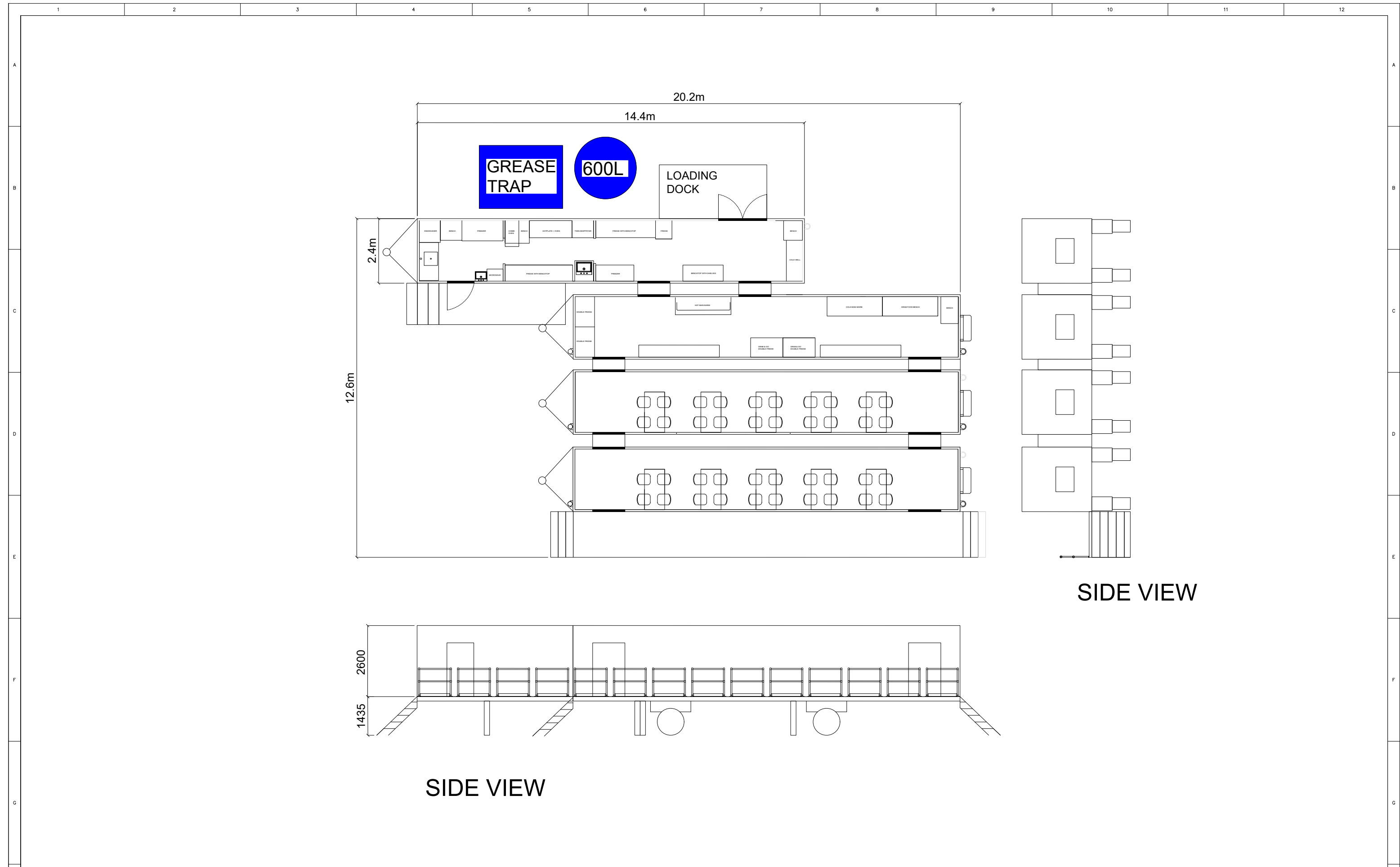
**DC SIGN OFF:**






Building Legend		
Building No.	Description	Quantity
1	3 PERSON STAFF QUARTER 10x2.9m	11
2	2 PERSON STAFF QUARTER 10x2.9m	1
3	3 PERSON TRAILER MOUNTED SPQ 12.2x2.4m	4
4	FIRST AID TRAILER 12.2x2.4m	1
5	CONTAINER OFFICE 12.2x3m	1
6	TRAILER MOUNTED LAUNDRY/ICE ROOM 12.2x2.4m	1
7	14KL POTABLE WATER TANK	3
8	14KL WASTE WATER TANK	3
9	CONTAINER GYMNASIUM 12.2x3m	2
10	GENERATOR SKID 12.2x2.4m	1
11	COLD/FREEZER ROOM 6x2.4m	1
12	DRY STORE 6x2.4m	1
13	MAINTENANCE STORE 6x2.4m	1
14	TRAILER MOUNTED DINER 14.4x2.4m	2
15	TRAILER MOUNTED KITCHEN 14.4x2.4m	2

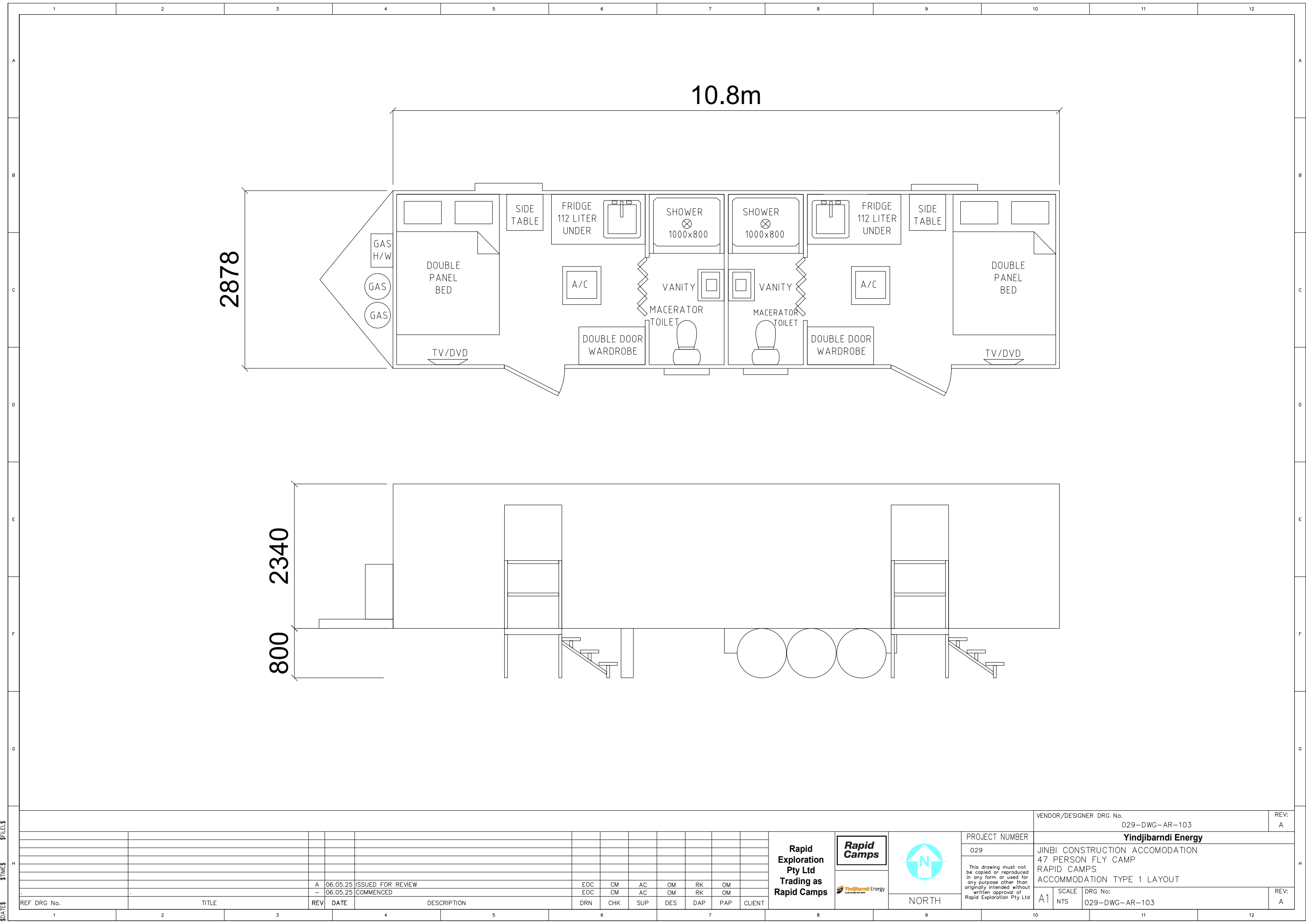


												VENDOR/DESIGNER DRG No.		XXXX		REV: E							
												<div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div>	<div>Rapid Camps</div>	<div></div>	PROJECT NUMBER		Yindjibarndi Energy						
															XXXX	JINBI CONSTRUCTION ACCOMODATION 47 PERSON FLY CAMP RAPID CAMPS FLY CAMP GENERAL LAYOUT							
															<div>This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd</div>								
REF DRG No.		TITLE			REV	DATE	DESCRIPTION					DRN	CHK	SUP	DES	DAP	PAP	CLIENT	A1	SCALE NTS	DRG No: XXXX	REV: E	





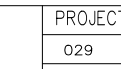
<div>\$FILED\$</div> <div>\$</div> <div>\$DATE\$</div>											VENDOR/DESIGNER DRG No. 029—DWG—AR—102		REV: C							
											Yindjibarndi Energy									
											JINBI CONSTRUCTION ACCOMODATION 47 PERSON FLY CAMP RAPID CAMPS KITCHEN LAYOUT									
											PROJECT NUMBER 029									
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											Rapid Exploration Pty Ltd Trading as Rapid Camps									
												NORTH								
											A1	SCALE NTS	DRG No: 029—DWG—AR—102	REV: C						



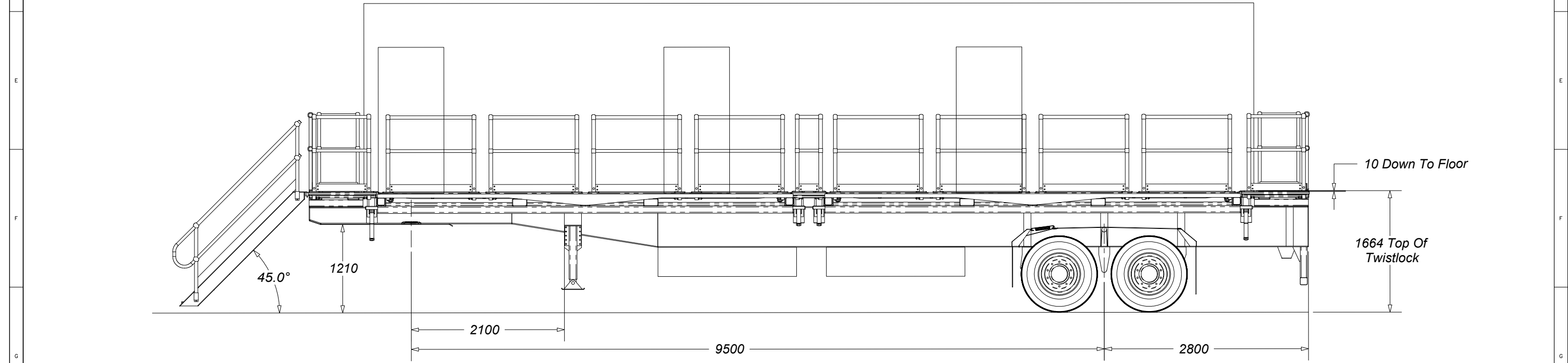
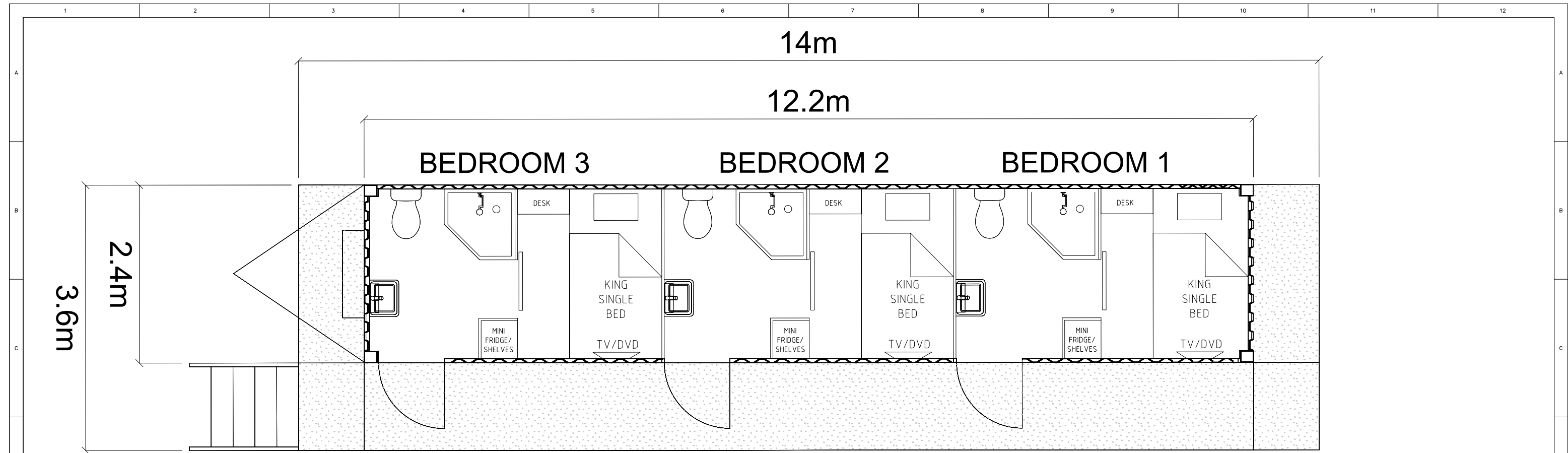


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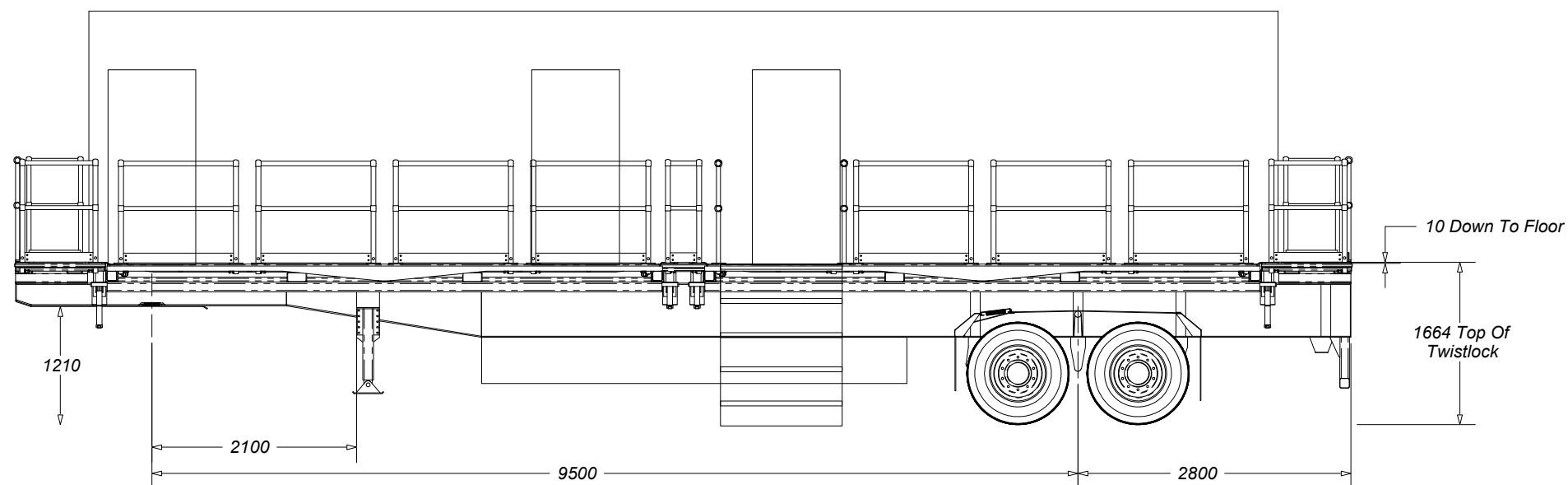
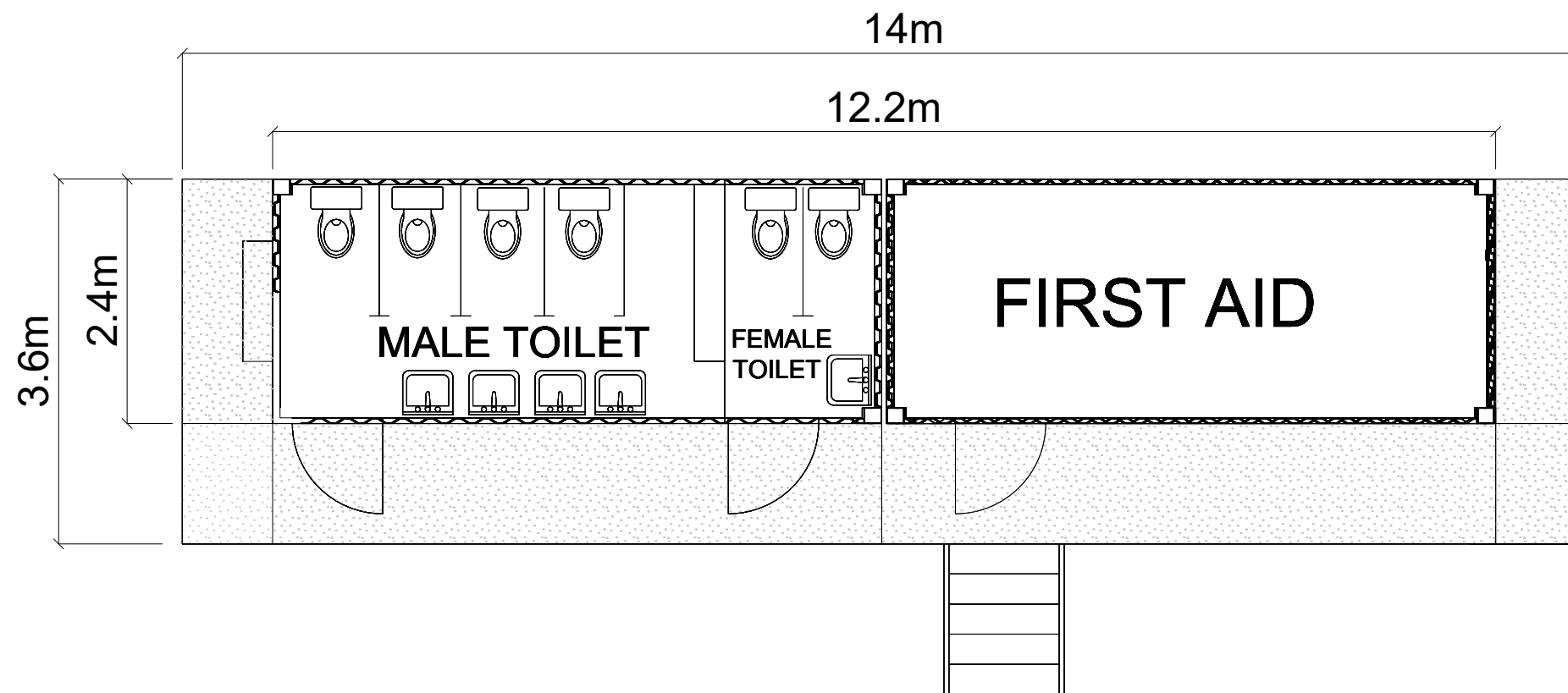






# SIDE VIEW

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										JINBI CONSTRUCTION ACCOMODATION							
										47 PERSON FLY CAMP							
										RAPID CAMPS							
										ACCOMMODATION TYPE 3 LAYOUT							
										A1		SCALE NTS		DRG No: 029-DWG-AR-103		REV: A	

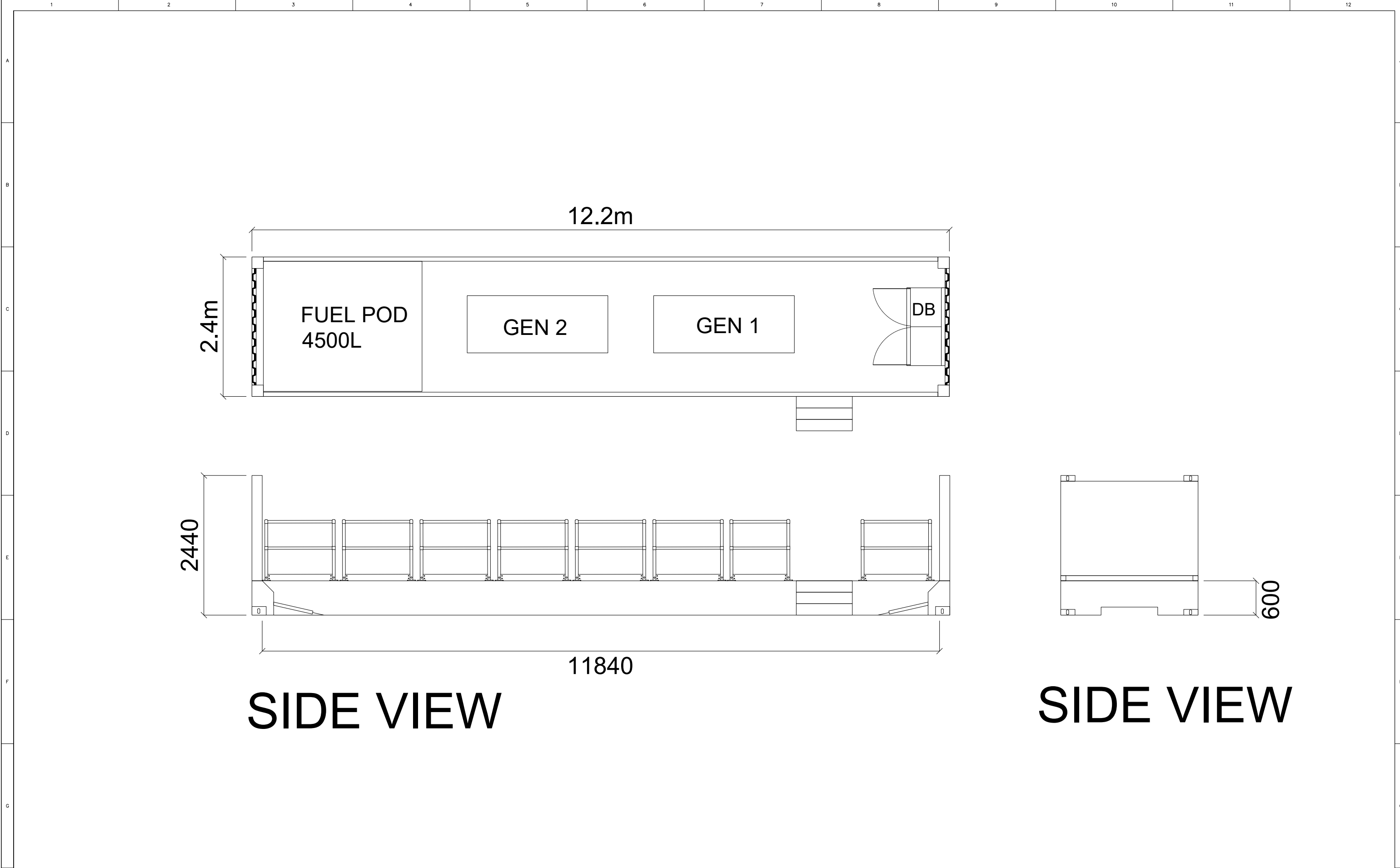
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A		06.05.25		ISSUED FOR REVIEW		EOC		CM		AC		OM		RK		OM		PAP		CLIENT		Rapid Exploration Pty Ltd		Yindjibarndi Energy		NORTH		PROJECT NUMBER 029		This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd							
-		06.05.25		COMMENCED		EOC		CM		AC		OM		RK		OM		PAP		CLIENT		Rapid Exploration Pty Ltd		Yindjibarndi Energy		NORTH		PROJECT NUMBER 029		This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd							



## SIDE VIEW

													VENDOR/DESIGNER DRG No. 029—DWG—AR—105			REV: A					
													<div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div>	<div><div>Rapid Camps</div><div> Yindjibarndi Energy <small>A Yindjibarndi Business</small></div></div>	<div> NORTH</div>	PROJECT NUMBER		Yindjibarndi Energy			
																029	JINBI CONSTRUCTION ACCOMODATION 47 PERSON FLY CAMP RAPID CAMPS FIRST AID LAYOUT				
																This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd					
																A1	SCALE NTS	DRG No: 029—DWG—AR—105		REV: A	
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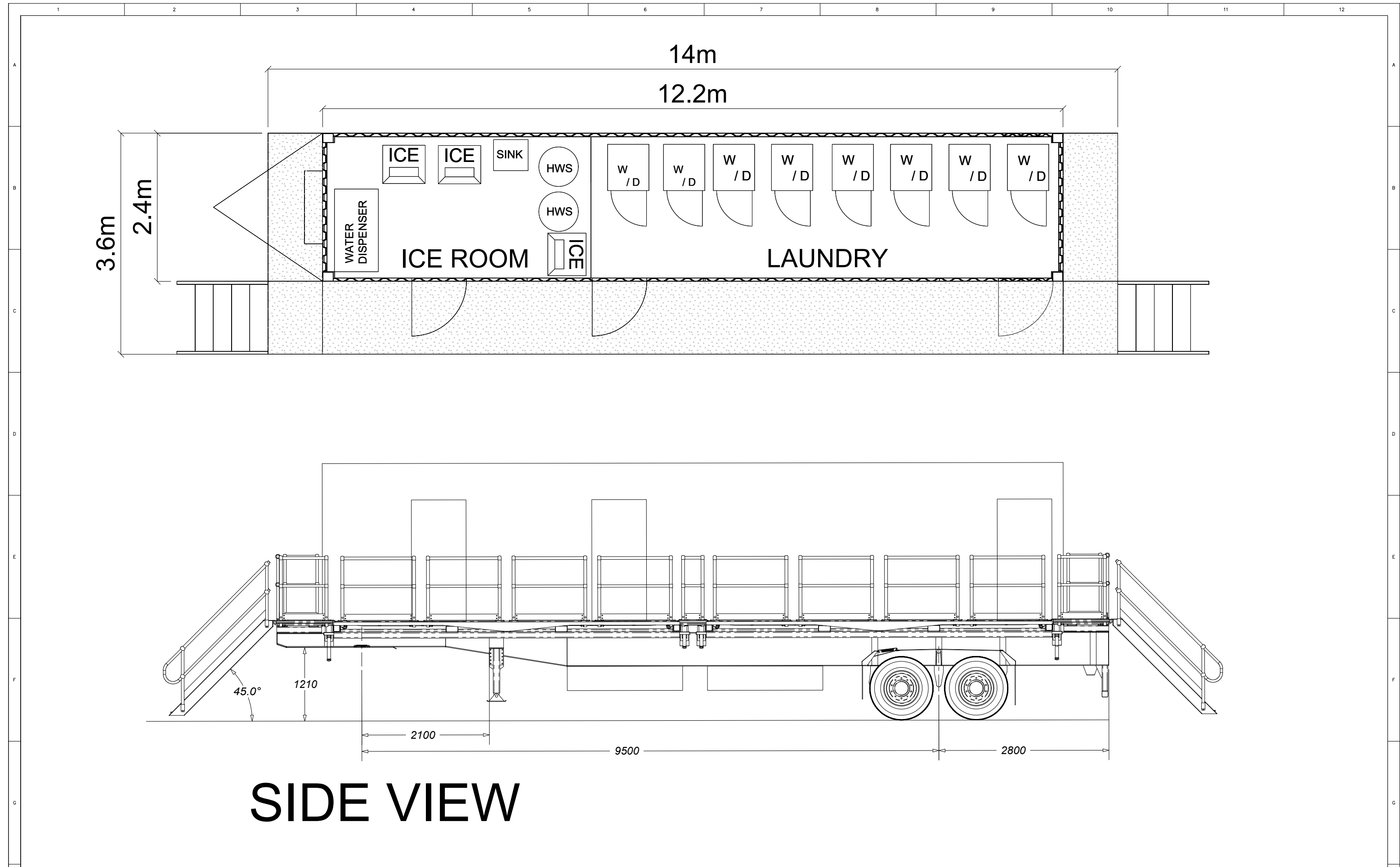




SIDE VIEW

SIDE VIEW

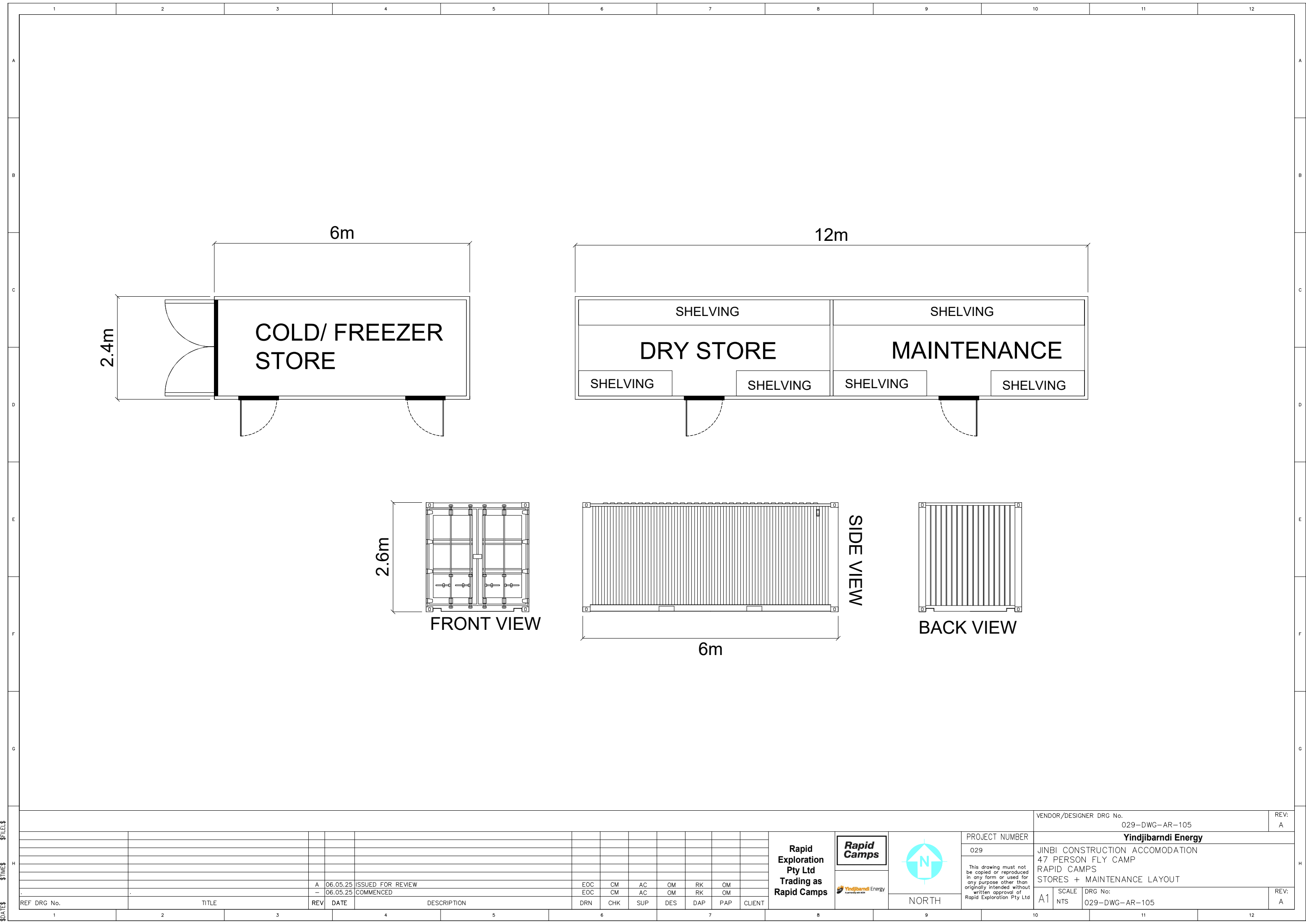
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												This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd														
REF DRG No.		TITLE				REV	DATE	DESCRIPTION				DRN	CHK	SUP	DES	DAP	PAP	CLIENT	NORTH		A1		SCALE NTS	DRG No: 029-DWG-AR-105		REV: A
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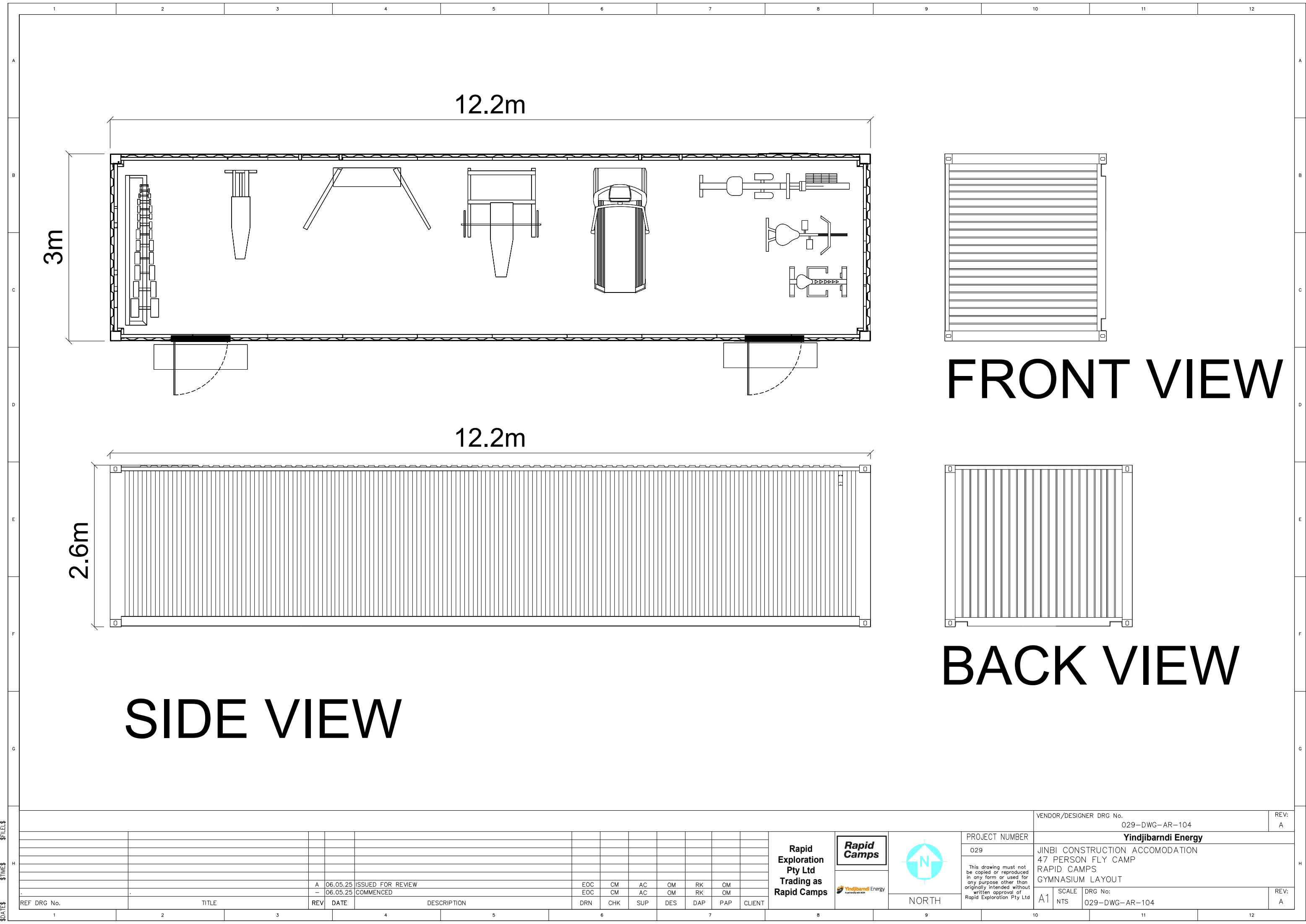


SIDE VIEW

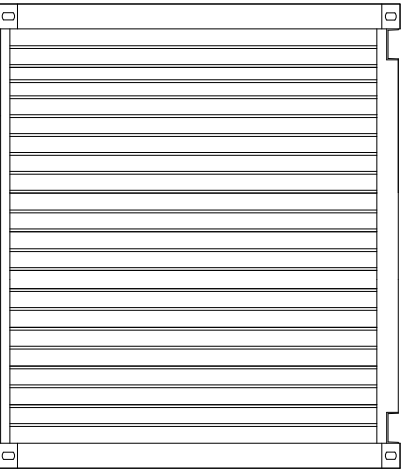
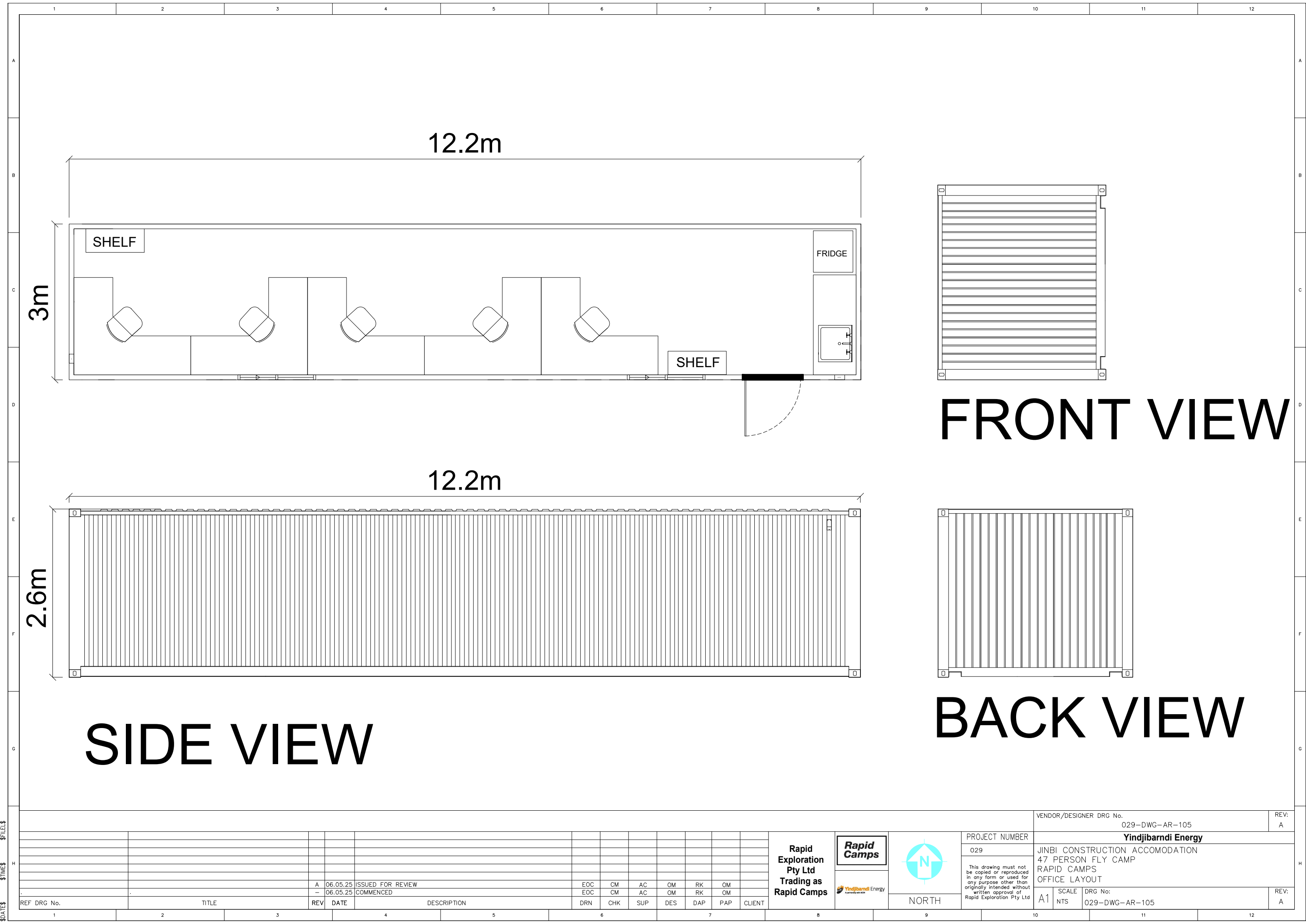
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										<div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div> <div><div><div>Rapid Camps</div></div><div><div>Yindjibarndi Energy</div></div></div>	<div><div><div><div></div><div>N</div></div></div><div>NORTH</div></div>	<div>PROJECT NUMBER</div> <div>029</div> <div>This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd</div>	<div>VENDOR/DESIGNER DRG No.</div> <div>029—DWG—AR—105</div> <div>REV: A</div>
										<div><div><div><div></div><div>N</div></div></div><div>NORTH</div></div>	<div>PROJECT NUMBER</div> <div>029</div> <div>This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd</div>	<div>VENDOR/DESIGNER DRG No.</div> <div>029—DWG—AR—105</div> <div>REV: A</div>	
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										<div><div><div><div></div><div>N</div></div></div><div>NORTH</div></div>	<div>PROJECT NUMBER</div> <div>029</div> <div>This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd</div>	<div>VENDOR/DESIGNER DRG No.</div> <div>029—DWG—AR—105</div> <div>REV: A</div>	
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										<div><div><div><div></div><div>N</div></div></div><div>NORTH</div></div>			



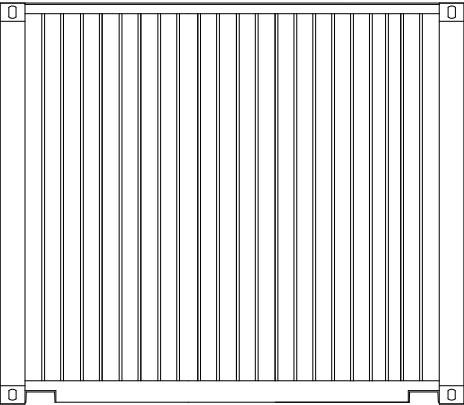








FRONT VIEW



BACK VIEW

										VENDOR/DESIGNER DRG No. 029—DWG—AR—105		REV: A
										Yindjibarndi Energy		
										JINBI CONSTRUCTION ACCOMODATION 47 PERSON FLY CAMP RAPID CAMPS OFFICE LAYOUT		
										A1	SCALE NTS	REV: A
										029—DWG—AR—105		

										PROJECT NUMBER 029		<div><div></div><div>N</div></div> <div>NORTH</div>	
										This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd			



## Appendix D: Local Planning Policy 13 Assessment





Requirement	Proposed Development
<b>3.4 – Impact on Community</b>	
Workforce Accommodation proposals to be accompanied by:	
A detailed explanation about the need for the facility	Travel distance between site and nearest established town is too great.
Details of the extent to which the proposal places demand on physical and community infrastructure.	Refer Section 5.5
The extent to which the local community will benefit from the proposal.	Refer Section 5.5
<b>3.5 – Advertising of Applications</b>	
Application to be advertised in accordance with Clause 5.7 of LPS 7.	Noted
<b>3.6 – Location of Camps</b>	
The particular location of any proposed camp is at the discretion of the Shire and will depend on the capability, suitability and appropriateness of the site proposal.	Noted.
<b>3.7 – Density of Development</b>	
3.7.1 – Type A should not exceed 200 rooms	N/A – not Type A
3.7.2 – Type B camps shall provide the necessary number of rooms associated with the relevant operations.	Proposed development seeks approval for 272 persons, being the peak anticipated construction workforce for Jinbi and associated project / infrastructure.
3.7.3 – The overall density of the camp should not exceed 100 persons per hectare.	Complies.
3.7.4 – The shire may consider variations to this clause provided there is adequate justification provided.	Noted.
<b>3.8 – Design Requirements &amp; Building Materials of Structures</b>	
3.8.1 – All materials used and construction of accommodation and ancillary buildings shall be in accordance with the BCA & Health Act (Construction Camp Regulations).	Noted
3.8.2 – The use of reflective cladding materials on the buildings shall not be permitted.	Noted. Not proposed.



Requirement	Proposed Development
3.8.3 – For Type A Camps, the building materials shall be earth brown, vegetation green or local landscape colours range to blend with surroundings.	N/A – Not Type A
3.8.4 – The use of second-hand materials is not supported in Type A camps.	N/A – Not Type A.
3.8.5 – The Shire may consider approval to use second hand materials and/or buildings in Type A camps subject to additional material providing justification.	N/A – Not Type A.
3.8.6 – Each accommodation unit must be designed such that each accommodation room meets the following criteria:	
the ventilation and air space is to be in accordance with the requirements of the Health Act 1911 Construction Camp Regulations.	Complies.
Adequate provisions are to be made for heating and cooling systems for each accommodation room.	Complies.
An en-suite is to be provided for each Type A room.	All rooms have ensuite.
Each ensuite shall have a door that opens outwards or can be readily removed from the outside. In the case of a shared ensuite, the door/s must be capable of being locked.	All ensuites fitted with sliding doors.
Each accommodation room should be provided with a bed, clothes storage, table / desk and any other necessary furniture.	All ensuites fitted with bed, tv, desk and clothing storage.
Each accommodation room is to have at least 2 double power points.	To be included at detailed design stage.
Each accommodation room is to be provided with both natural and artificial light.	Each room has at least one window.
3.8.7 – Adequate provisions are made for verandas for each accommodation unit, or alternatively, the supply of common covered areas.	All buildings to be serviced by veranda.
<b>3.9 – Landscaping and Aesthetics</b>	
3.9.1 – All accommodation units, ancillary buildings and car parking areas will be set back in accordance with the Town Planning Scheme.	N/A – no setbacks included in scheme for this land.





Requirement	Proposed Development
3.9.2 – All boundary setback areas with frontage to roads will be landscaped with appropriate fast-growing trees and shrubs.	N/A
3.9.3 – The internal camp area is to be landscaped for screening and shade purposes, in accordance with an approved landscape plan.	Camp area to be cleared for bushfire asset protection. Camp is temporary and no internal landscaping is proposed, given the remoteness of the location.
3.9.4 – Landscaping works to be commenced within 30 days of completion of the camp and to be maintained by the developer of the camp for the duration of the camp.	Refer above.
3.9.5 – The developer is to provide footpaths, which are a minimum of 1.2m wide, between all accommodation units, outdoor areas, ancillary buildings, car parks and bus bays.	Footpaths provided
<b>3.11 – Servicing</b>	
3.11.1 – Arrangements being made with the relevant service provider so that connection to a water supply will be available to the proposed camp.	There is no reticulated water available to service the camp.
3.11.2 – In the event that no reticulated water supply can be provided to the land, arrangements are to be made to provide an adequate potable water supply.	Proposed camp will be serviced by ground water that has been treated with a potable water treatment system.
3.11.3 – All tanks and vessels used for storage of drinking water shall be so constructed and covered as to prevent water stored therein from becoming polluted or contaminated.	Holding tanks appropriately located and sized to protect water from pollution and contamination.
3.11.4 – The potable water supply shall be of a capacity to provide a minimum of 80 litres per person per day.	Complies with requirements under Work Health and Safety Act 2020
<b>3.12 – Stormwater Drainage</b>	
3.12.1 – All stormwater from roofed and paved areas shall be collected and disposed on site.	Stormwater to be retained within development,



Requirement	Proposed Development
	following natural contours and flow directions.
<b>3.13 – Effluent Disposal &amp; Toilet Facilities</b>	
3.13.1 – All ablution facilities shall be connected to an appropriate approved effluent disposal system.	Camp to be serviced by proposed effluent disposal system.
3.13.2 – in addition to the ablution facilities for each room, suitable provisions are to be made for ablution facilities in common areas.	Compliant.
<b>3.14 – Laundry Facilities</b>	
3.14.1 – Minimum laundry facilities shall be provided to the following scale: Up to 100 persons 1 unit to 10 persons Between 100 – 200 persons, 1 unit to 12 persons Between 200 – 300 persons, 1 unit to 15 persons	Complies with requirements under Work Health and Safety Act 2020
3.14.2 – Such laundry facilities will include: At least 1 washing machine connected to hot and cold running water A trough with a drain plug and hot and cold running water At least 0.3m of bench space for ironing clothes, with access to a power point. An electric clothes dryer or 60m of washing line Supplied with artificial light.	Complies with requirements under Work Health and Safety Act 2020
<b>3.15 – Rubbish Disposal</b>	
3.15.1 – The developer/manager of the facility shall establish rubbish disposal services, to the satisfaction of the Shire.	Commercial rubbish collection to be arranged as part of the operation of the camp.
3.15.2 – The developer/manager is to provide at least 1 common area for rubbish collection, which may be easily accessed. This area is to contain bin wash down areas and appropriately setback and screened from adjoining buildings.	Compliant.
3.15.3 – Bins to be provided in all common areas.	Compliant
<b>3.16 – Lighting</b>	
3.16.1 – Appropriate night time security lighting is to be provided within the camp site to the satisfaction of the Shire.	Anticipate lighting plan required as condition of approval.





Requirement	Proposed Development
3.16.2 - All lighting shall be required to adopt shading measures and be directed to minimise any unnecessary light spill and impacts on the surrounding locality.	Refer above.
<b>3.17 - Emergency Services, Fire, First Aid</b>	
3.17.1 - Type A camps will be required to provide emergency fire services in accordance with relevant legislation.	N/A
3.17.2 - Type B camps will be required to make adequate provisions for emergency fire services.	Proposal supported by BMP and includes provisions for emergency fire services.
3.17.3 - The Shire will require that the proponent prepare emergency fire and cyclone procedures plan.	Noted. BMP provided, cyclone plan to form part of operational management plan.
3.17.4 - The proponent will be required to make suitable provisions for first aid facilities in accordance with Health Department regulations.	First aid / medic facilities included.
3.17.5 - All emergency services shall be adequately marked and located to ensure emergency vehicle access.	Noted.
<b>3.18 - Parking Provisions</b>	
3.18.1 - Car parking shall be determined upon application.	Noted. Parking bays included.
3.18.2 - Provisions shall be made for bus parking and pick up / set down areas within the site, or as required.	Noted. Adequate area within camp development for pick up. Employees to work to site.
3.18.3 - All car parking shall be located, designed and constructed to the satisfaction of the Shire.	Noted.
<b>3.19 - Internal Road Standards</b>	
3.19.1 - All internal roads shall be a minimum of 4m in width and designed and constructed to the satisfaction of the Shire.	Camp serviced by 4m wide ring road.
3.19.2 - A one way system of vehicle movement throughout the site and a maximum speed of 8km/hr is preferred.	Noted. Camp serviced by ring road.



Requirement	Proposed Development
<b>3.20 - Road Frontage Standards</b>	
3.20.1 - The Shire will consider the existing road network adjacent to the development site, and may consider the developer construct, upgrade the existing road(s) and/or contribute towards the additional maintenance of the existing road(s).	Noted.
<b>3.21 - Signage</b>	
3.21.1 - Signage shall be in accordance with the Town Planning Scheme and relevant Policy requirements.	Noted.
3.21.2 - An 1800mm x 1800mm information sign shall be provided at the entrance to the development site to indicate such information as: Owner of the site Manager of the site Specific rules for the camp area Map of the camp area Emergency contact phone number(s)	Noted.
<b>3.22 - Public Transportation Provisions</b>	
3.22.1 - It is preferred that workers are transported to and from the work site by a coach or bus service.	N/A- camp too remote.
<b>3.23 - Recreation &amp; Community Facilities</b>	
2.23.1 - It is preferred that the workers utilise the recreation and community services available within the existing towns and settlements throughout the region when the camp is located within reasonable proximity to these facilities.	N/A - camp too remote.
<b>3.24 - Liquor Licensing</b>	
3.24.1 - On site facilities will be subject to the standards set under the relevant legislation.	Proposal to comply with requirements under Work Health and Safety Act 2020 and liquor licensing act.
<b>3.25 - Catering and Meal Areas</b>	
3.25.1 - All kitchen and meal areas shall comply with the relevant standards as prescribed by the Health Act and other legislation.	Will comply with requirements under Work Health and Safety Act 2020





Requirement	Proposed Development
<b>3.26 - Telephones</b>	
3.26.1 - It is preferred that an adequate number of public phones throughout the camp.	Will comply with requirements under Work Health and Safety Act 2020
<b>3.27 - Review of Development</b>	
3.27.1 - Shire shall take regular inspections of the camp and surrounding area to provide written notification to the camp manager of any breaches or problems identified during the inspection.	Noted.
3.27.2 - The camp manager shall rectify those breaches or problems immediately, unless the Shire grants an extension in accordance with a written request from the camp manager which details the reasons for the extension being requested.	Noted.
<b>3.28 - Removal of Structures and Rehabilitation of Site</b>	
3.28.1 - The Shire shall require all temporary structures, waste disposal facilities, roads, parking areas and drainage facilities are permanently removed from the site at the cessation of the Planning Consent granted by the Shire for the camp.	Noted. Anticipate condition to this effect.
3.28.2 - The Shire shall require that the site be let in a neat and tidy condition following the removal of the structure.	Noted.
3.28.3 - The Shire will require a written agreement to be provided by the Developer / Manager to this effect.	Noted.
<b>3.29 - Keeping of Pets</b>	
3.29.1 - No pets are to be kept within the camp area and the Shire will require that a written agreement by the developer / manager to this effect.	Noted.



## Appendix E: Bushfire Management Plan





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## **Bushfire Management Plan**

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Development Application: Jinbi Solar Camp

**Western Environmental Pty Ltd**

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# Bushfire Management Plan

Development Application: Jinbi Solar Camp

**Report No:**

A24.305-RPT-BMP\_0\_FINAL

**Issue Date:**

3-May-2025

**Status**

FINAL

**Prepared for:**

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Unit 2, Level 13, 1 Spring Street  
PERTH WA 6000

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8-Apr-2025	9-Apr-2025	7-May-2025

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The bushfire management measures and risk treatments proposed in this document do not guarantee that buildings or infrastructure will not be damaged in a bushfire, nor that there will be no injuries or fatalities either on the site or offsite while evacuating. Primarily, this is due to the unpredictable nature and behaviour of fire and fire weather conditions. In addition, implementation of the required bushfire management measures (including construction standards, maintenance etc.) and any other required or recommended measures, will depend upon, among other things, the ongoing actions of landowners and/or operators over which WEPL has no control.

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# Table of Contents

1.	Introduction .....	1
1.1	Proposal Details.....	1
1.1.1	Site context.....	2
1.2	Purpose and Application of the BMP .....	2
2.	Environmental Considerations .....	3
3.	Bushfire Assessment Results .....	7
3.1	Bushfire Assessment Inputs .....	7
3.1.1	Fire Danger Index .....	7
3.1.2	Vegetation Classification and Slope under Vegetation .....	7
3.1.3	Post Development Assumptions .....	7
3.2	Bushfire Assessment Outputs .....	9
3.2.1	BAL Assessment.....	9
3.2.2	Method 1 BAL Assessment .....	9
3.3	Identification of Issues Arising from the BAL Assessment .....	10
4.	Assessment Against the Bushfire Protection Criteria.....	12
4.1	Compliance .....	12
4.2	Water Tank Requirements .....	13
4.3	Additional Bushfire Management Strategies .....	13
4.3.1	Evacuation .....	15
4.3.2	Shelter-in-place .....	15
5.	Responsibilities for Implementation and Management of Bushfire Management Measures .....	17
6.	Conclusion.....	18

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## 7. References ..... 19

### Tables

Table 1: Classified Vegetation as per AS 3959: 2018.....	7
Table 2: Method 1 BAL Calculation (BAL Contours) .....	9
Table 4: Assessment Against the Bushfire Protection Criteria.....	12
Table 5: Bushfire Awareness and Management Procedures .....	14
Table 6: Proposed Works Program.....	17

### Figures

Figure 1: Site Overview .....	4
Figure 2: Site Plan .....	5
Figure 3: Bushfire Prone Areas .....	6
Figure 4: Vegetation Classification .....	8
Figure 5: Bushfire Attack Level (BAL) Contours .....	11
Figure 6: Bushfire Management Measures .....	16

### Appendices

Appendix A: Classified Vegetation Photos
Appendix B: Vehicular Access Technical Requirements
Appendix C: Bushfire Preparedness

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# 1. Introduction

## 1.1 Proposal Details

RFF, on behalf of Yindjibarndi Energy Corporation (YEC), is seeking to progress a development application (DA) for temporary workforce accommodation within a portion of Unallocated Crown Land (UCL; PIN 3115653), directly west of the Pannawonica (Robe River) Railway, and immediately east of Rio Tinto's Cape Lambert transmission line, which is contained within a general lease area (the subject site; Figure 1).

This Application seeks the approval of the Regional Development Assessment Panel ('DAP') to develop and operate a temporary Workforce Accommodation facility to accommodate 272 people, and comprising the following (Figure 2):

- Siting and use of 16 trailer-mounted accommodation facilities, each containing provision for accommodation of 47 people, providing a short-term accommodation solution.
- Development and use of a Workforce Accommodation Facility comprising:
  - 68 transportable buildings, providing accommodation for up to 272 people.
  - A kitchen and associated mess (dining) hall.
  - A wet mess (tavern) and associated beer garden.
  - Four laundry facilities.
  - A gym facility.
  - A recreation room.
  - Associated office, storage and ice rooms.

The proposal seeks approval for the proposed development to:

- Provide a short-term (approximately 4 months) accommodation solution for the workforce required to construct the longer-term facility (47 persons).
- Provide a longer-term, though still temporary, accommodation solution for the renewable energy (and related infrastructure) construction workforce (257 persons), and the associated facility operator (15 persons).

As aforementioned, the construction workforce facility is intended to accommodate the work force required to construct the approved Jinbi Solar Facility.

The subject site is within a designated bushfire prone area (Area 2) as per the *Western Australia State Map of Bush Fire Prone Areas* (DFES, 2024; Figure 3), which triggers bushfire planning requirements under *State Planning Policy 3.7 Bushfire* (SPP 3.7; WAPC, 2024a) and the associated *Planning for Bushfire Guidelines* (the Guidelines; WAPC, 2024b).



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Western Environmental Approvals Pty Ltd (WEPL) was commissioned to prepare a Bushfire Management Plan (BMP) to support the DA. This BMP has been prepared by Senior Principal Bushfire Consultant Daniel Panickar (FPAA BPAD Level 3 Certified Practitioner No. BPAD37802) and Bushfire Consultant Bridie Farrar.

### **1.1.1 Site context**

The subject site is located within a portion of UCL located within the north-west portion of the Yindjibarndi portion of the Yindjibarndi-Ngarluma Native Title Determination Area and is subject to exclusive native title rights. The subject site is also included within the boundaries of an existing license held by Yiyangu Pty Ltd, which has been granted pursuant to Section 91 of the *Land Administration Act 1997* (LAA).

Yiyangu (a shareholder of YEC) has also executed an Indigenous Land Use Agreement with Yindjibarndi Aboriginal Corporation and Yindjibarndi Ngurra Aboriginal Corporation, which grants the use of the land for renewable energy projects under the *Native Title Act 1993*.

A Lease over the Project Jinbi area has been granted under Section 79 of the LAA, which corresponds to approximately 720 hectares and includes the proposed camp development site.

The subject site is reserved for Other Purposes - Infrastructure under the provisions of the Shire of Ashburton Local Planning Scheme No. 7. Land surrounding the site to the north, south and west of the subject land is reserved for Public Purposes – Water and Drainage. The land lies within the infrastructure corridor that comprises the Rio Tinto Robe River railway and associated rail access roads. Land north of the subject site is zoned Rural under the provisions of the City of Karratha Local Planning Scheme No. 7, and the land east of the site, the Millstream Chichester National Park, is reserved for Conservation, Recreation and Natural Landscape.

## **1.2 Purpose and Application of the BMP**

This BMP has been prepared in accordance with SPP 3.7 and the Guidelines to support the assessment of the DA submitted to the Shire of Ashburton.

In addition, this BMP provides strategies and guidance to reduce the level of bushfire risk exposure for the subject sites through implementation of a range of bushfire management measures in accordance with the Guidelines.

---

## 2. Environmental Considerations

SPP 3.7 policy objective 5.4 recognises the need to consider bushfire risk management measures alongside environmental, biodiversity and conservation values.

The subject site wholly lies within the approved Native Vegetation Clearing Permit (CPS 10494/1) area associated with the Jinbi Solar Farm Facility. The Permit, issued pursuant to Part V of the *Environmental Protection Act 1986*, was granted subject to conditions by the Department of Water and Environmental Regulation on 3 May 2024 over an area of 527.21 hectares over UCL (PINs 1017635 and 1017648), for the purpose of “constructing a solar facility and associated infrastructure”.

No revegetation is proposed within the subject site and landscaping will be maintained in a low-threat state.



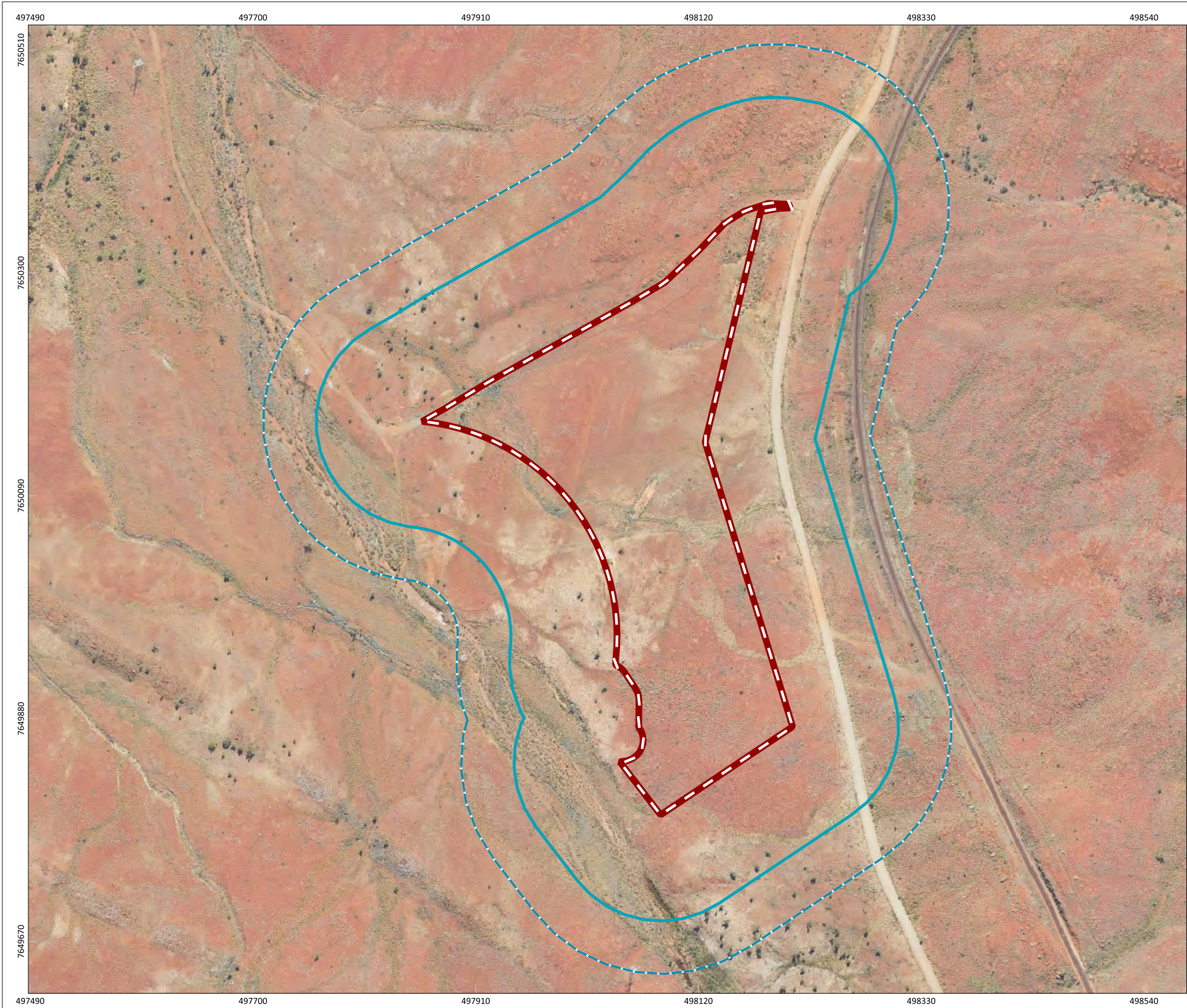


Figure 1: Site Overview

<div><div><div></div><div></div></div><div>060120180240 m</div></div>		PROJECT/REPORT NAME Bushfire Management Plan Yindjibarndi Energy Corporation Jinbi Solar Farm Workforce Accommodation	
SCALE 1:4,200	SHEET SIZE A3 COLOUR	CLIENT Yindjibarndi Energy Corporation	
COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50		PROJECT NUMBER A24.305	VERSION 0
DATA SOURCE LANDGATE AERIAL IMAGERY		DRAWN BY / REVIEWED BY JP/DP	DATE 7/5/2025

Legend

Subject Site

Buffer 100m

Buffer 150m

No	Description	Drawn	Approved	Date
A	Original issue	JP	DP	7/5/2025



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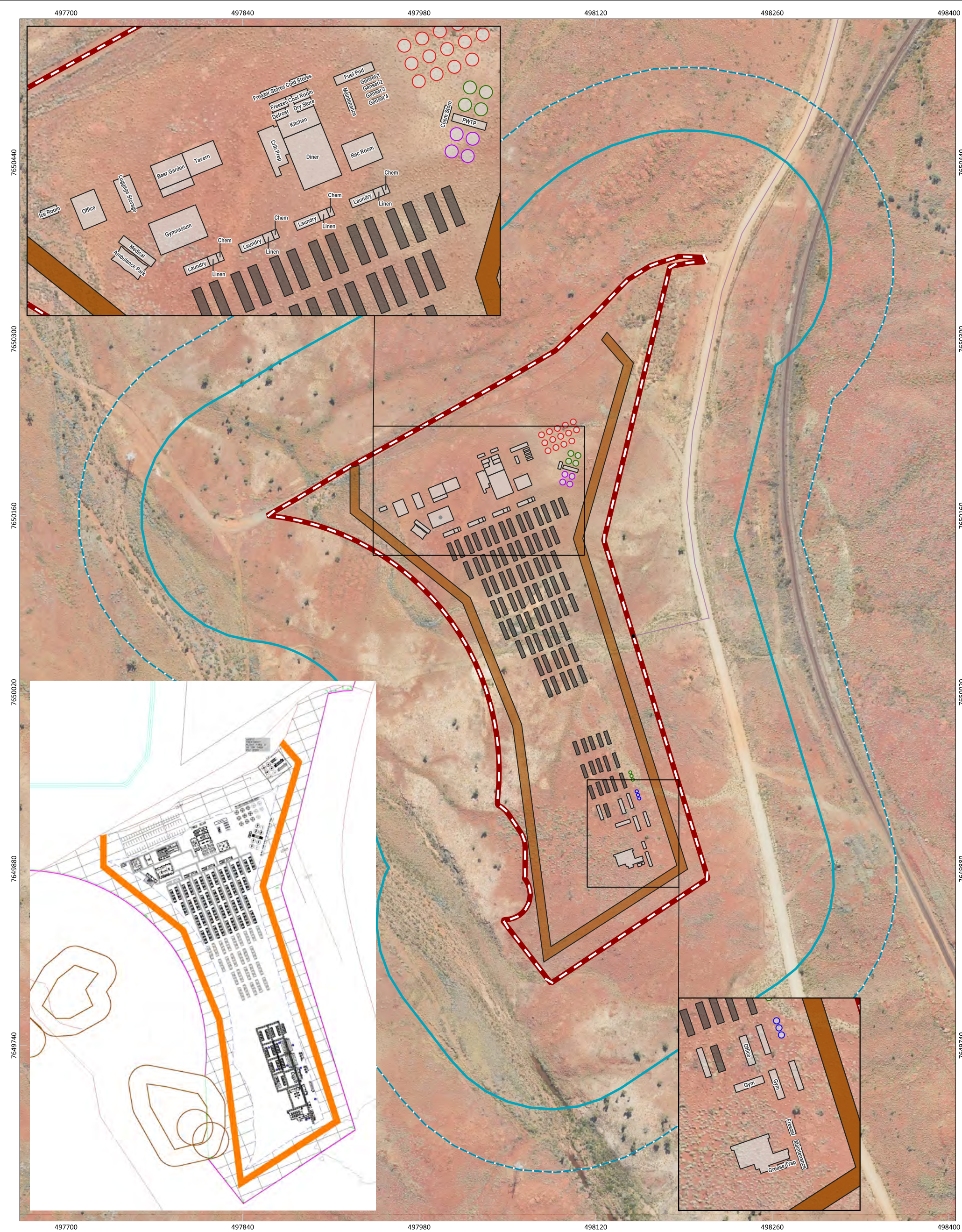


Figure 2: Site Plan

<div><div><div></div><div>020406080 m</div><div>N</div></div></div>		PROJECT/REPORT NAME Bushfire Management Plan Yindjibarndi Energy Corporation Jinbi Solar Farm Workforce Accommodation		<div>Legend</div> <div><div><div></div>Subject Site</div><div><div></div>Buffer 100m</div><div><div></div>Buffer 150m</div><div><div></div>Accommodation building</div><div><div></div>Non-accommodation building</div><div><div></div>Ring road</div></div> <div><div>Water tanks</div><div><div></div>Raw</div><div><div></div>Potable</div><div><div></div>Waste water</div><div><div></div>Fire fighting</div></div>		<table><tr><th>No</th><th>Description</th><th>Drawn</th><th>Approved</th><th>Date</th></tr><tr><td>A</td><td>Original issue</td><td>JP</td><td>DP</td><td>7/5/2025</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="5">NOTES: Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.</td></tr></table>	No	Description	Drawn	Approved	Date	A	Original issue	JP	DP	7/5/2025																															NOTES: Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.				
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SCALE 1:2,800		SHEET SIZE A3 COLOUR		CLIENT Yindjibarndi Energy Corporation																																															
COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50		PROJECT NUMBER A24.305		VERSION 0																																															
DATA SOURCE LANDGATE AERIAL IMAGERY		DRAWN BY / REVIEWED BY JP/DP		DATE 7/5/2025																																															
<div><div><div></div><div>WESTERN ENVIRONMENTAL</div><div>Western Environmental Pty Ltd 08 6244 2310   enquiries@westernv.com.au Level 3/25 Prowse St, West Perth WA 6005 westernv.com.au</div></div></div>																																																			







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## 3. Bushfire Assessment Results

### 3.1 Bushfire Assessment Inputs

A bushfire assessment has been undertaken for the DA in accordance with the Guidelines. Inputs to this assessment are detailed below.

#### 3.1.1 Fire Danger Index

A blanket Fire Danger Index (FDI) 80 is adopted for Western Australia, as outlined in *Australian Standard AS 3959: 2018 Construction of Buildings in Bushfire Prone Areas* (AS 3959: 2018; SA, 2018).

#### 3.1.2 Vegetation Classification and Slope under Vegetation

Vegetation and effective slope (i.e. slope under vegetation) within the subject site and surrounding 150 m (the assessment area) were assessed on 3/05/2024 in accordance with the Guidelines and AS 3959: 2018.

Identified vegetation plots and associated effective slope within the assessment areas are identified below in Table 1 and Figure 4.

**Table 1: Classified Vegetation as per AS 3959: 2018**

Plot	Vegetation classification	Effective slope
1	Class C Shrubland	All upslopes and flat land (0 degrees)
2	Excluded - clause 2.2.3.2 (e)	-

Photographs relating to each area and vegetation type are included in Appendix A.

#### 3.1.3 Post Development Assumptions

The inset in Figure 5 illustrates the post-development vegetation plots following the subject site being cleared and landscaping being planted to a low threat state. The assessment outputs in this BMP have been based on the post development scenario.



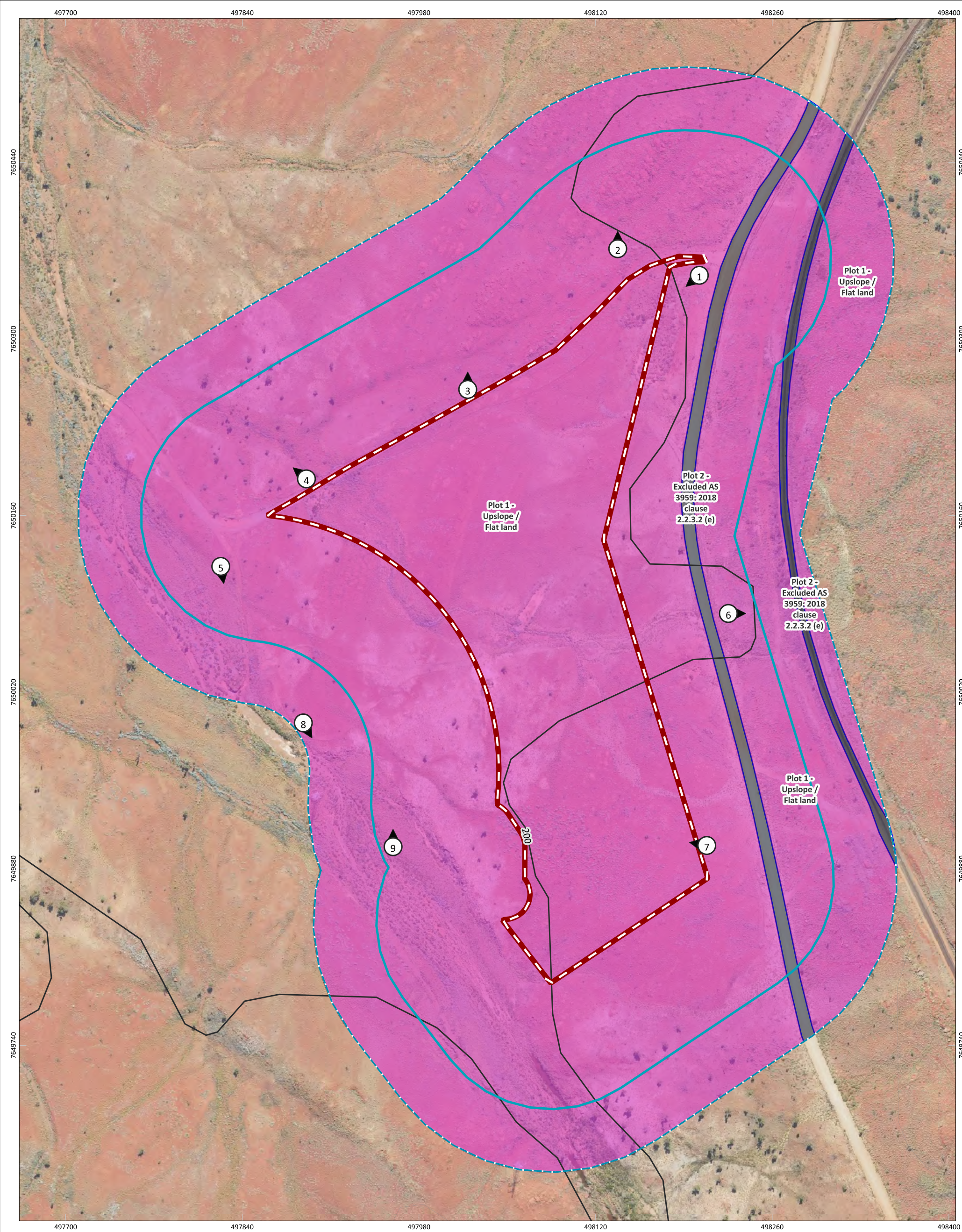


Figure 4: Vegetation Classification Pre-Development

0

20

40

60

80 m

N

SCALE

1:2,800

SHEET SIZE

A3 COLOUR

COORDINATE REFERENCE SYSTEM

GDA2020 / MGA zone 50

DATA SOURCE

LANDGATE AERIAL IMAGERY

PROJECT/REPORT NAME

Bushfire Management Plan  
Yindjibarndi Energy Corporation Jinbi  
Solar Farm Workforce Accommodation

CLIENT

Yindjibarndi Energy Corporation

PROJECT NUMBER

A24.305

VERSION

0

DRAWN BY / REVIEWED BY

JP/DP

DATE

7/5/2025

Legend

Subject Site

Buffer 100m

Buffer 150m

Contour Line (LGATE-015)

Each 50m

Each 10m

Photos

Vegetation Classification

Class C - Shrubland

Excluded AS 3959: 2018 2.2.3.2 (e)

No	Description	Drawn	Approved	Date
A	Original Issue	JP	DP	7/5/2025

NOTES:

Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.

WESTERN ENVIRONMENTAL

Western Environmental Pty Ltd

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Level 3/25 Prowse St, West Perth WA 6005

western.com.au

Designed and Automated by AC

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## 3.2 Bushfire Assessment Outputs

A Bushfire Attack Level (BAL) assessment has been undertaken in accordance with SPP 3.7, the Guidelines, AS 3959: 2018 and the bushfire assessment inputs in Section 3.1.

### 3.2.1 BAL Assessment

All land located within 100 m of the classified vegetation depicted in Figure 4 is considered bushfire prone and is subject to a BAL assessment in accordance with AS 3959: 2018.

A Method 1 BAL assessment (as outlined in AS 3959: 2018) has been completed for the proposed subdivision and incorporates the following factors:

- Fire Danger Index (FDI) rating.
- Vegetation class.
- Slope under classified vegetation.
- Distance between proposed lots and the classified vegetation.

Based on the identified BAL, construction requirements for relevant buildings/structures can then be assigned. The BAL rating gives an indication of the expected level of bushfire attack (i.e. radiant heat flux, flame contact and ember penetration) that may be received by proposed buildings and subsequently informs the standard of construction required to increase building survivability.

### 3.2.2 Method 1 BAL Assessment

Table 2 and Figure 5 display the Method 1 BAL assessment (in the form of BAL contours) that has been completed for the proposed DA in accordance with AS 3959: 2018 methodology.

**Table 2: Method 1 BAL Calculation (BAL Contours)**

Plot	Vegetation classification	Effective slope	Separation distances required (m)				
			BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5
1	Class C Shrubland	All upslopes and flat land (0 degrees)	<7	7-<9	9-<13	13-<19	19-<100
2	Excluded - clause 2.2.3.2 (e)	-	No separation distances required - BAL-LOW				

Post-development, all proposed buildings within the subject site will be exposed to a radiant heat flux of 12.5 kW/m<sup>2</sup> (BAL-12.5) as depicted in Figure 5.



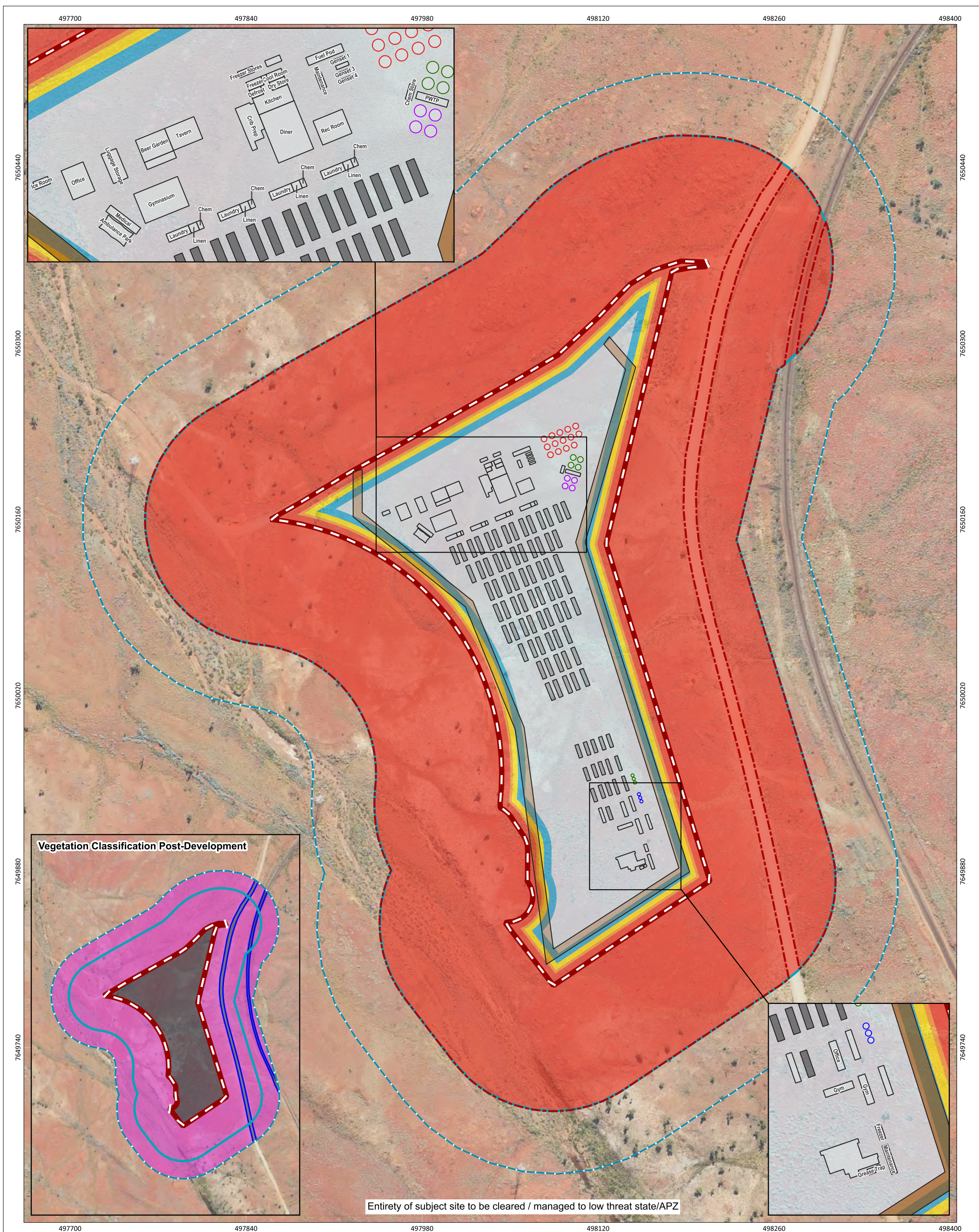
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### **3.3 Identification of Issues Arising from the BAL Assessment**

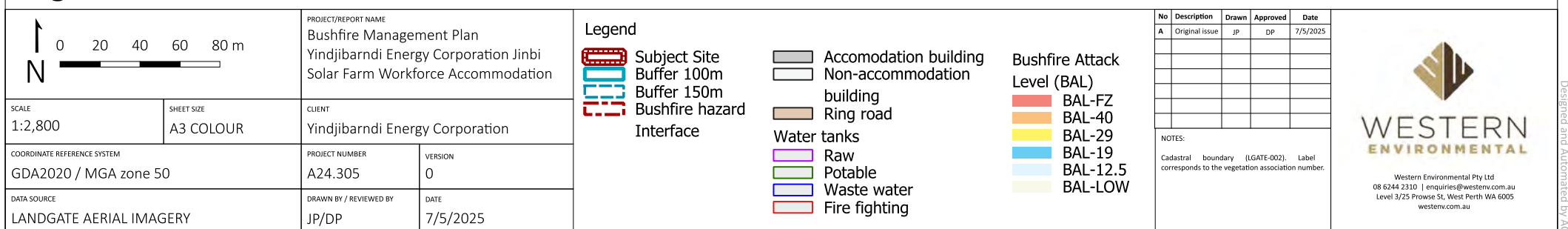
Post-development, all proposed buildings within the subject site will be exposed to a radiant heat flux not exceeding 12.5 kW/m<sup>2</sup> (BAL-12.5).

A reassessment of BAL ratings, through either a BMP addendum or revised BMP will be undertaken if changes to development design or classified vegetation within the assessment area which require a modified bushfire management response occur.





**Figure 5: Bushfire Attack Level (BAL) Contours**





## 4. Assessment Against the Bushfire Protection Criteria

### 4.1 Compliance

The proposed DA is required to comply with Policy Measure 7.1 of SPP 3.7 and Bushfire Protection Criteria 6 of the Guidelines.

Table 3 outlines the Acceptable Solutions (AS) that are relevant to the proposed subdivision and summarises how the intent of each Bushfire Protection Criteria has been achieved through the application of bushfire risk management measures. No Outcomes-Based Approaches (OA) have been proposed for this subdivision. These management measures are depicted in Figure 6 where relevant.

Implementation of this BMP is expected to meet Policy Outcomes 6.1 to 6.4 of SPP 3.7.

**Table 3: Assessment Against the Bushfire Protection Criteria**

Bushfire Protection Criteria 5: Structure Plans and Subdivision Applications	AS	OA	N/A
<b>Element 1: Location</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Not applicable - This Element does not apply to development applications.			
<b>Element 2: Siting and design of development</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>A2.1 Siting and design</b>			
All proposed buildings will be subject to BAL-12.5, as depicted in Figure 5 and Figure 6. The development is considered to be compliant with A2.1.			
<b>A2.2 Asset Protection Zone (APZ)</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The entirety of the subject site will be cleared for development. Post-development, there will be no classifiable vegetation on-site and all adjacent bushfire hazards will be separated from the proposed buildings such that the BAL ratings for the buildings will be BAL-12.5. Separation is in the form of roads, hardstand etc. which will be managed to APZ standards (Appendix B) (Figure 6). The development is considered to be compliant with A2.2.			
<b>A2.3 Clearing of native vegetation</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Native vegetation will be cleared for development, which has been approved through a Native Vegetation Clearing Permit (CPS 10494/1). The development is considered to be compliant with A2.3.			
<b>Element 3: Vehicular Access</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>A3.1 Private Driveways</b>			
Internal roads within the subject site will comply with private driveway requirements in the Guidelines, specifically: <ul style="list-style-type: none"> <li>All roads will be a minimum of 6 m wide;</li> <li>All roads will comply with the technical specifications for private driveways in Appendix C; and</li> <li>Turnaround areas will be provided as required.</li> </ul> The proposed development is considered to be compliant with A3.1.			

Bushfire Protection Criteria 5: Structure Plans and Subdivision Applications	AS	OA	N/A
<b>Element 4: Water Supply</b>	✓	<input type="checkbox"/>	<input type="checkbox"/>
<b>A4.1 Water supply for residential habitable buildings</b>			

The subject site is not located within an area with reticulated water.

Twelve, 50 kL interconnected firefighting water tanks (600 kL total capacity) are proposed within the subject site to provide water to protect assets within the site in the event of a bushfire. This water capacity has been calculated using a ratio of 10 kL per transportable 4 single person quarter building (SPQ). There are 43 SPQs proposed, requiring a minimum of 430 kL of water. The ultimate capacity will be 60 SPQs, requiring the 600 kL proposed.

The water tanks will be installed when the site is developed and future assets are constructed, in accordance with the specifications in section 4.2 (Figure 6).

Two additional 50 kL water tanks, supplying drinking water are also included on the plan. These are not connected to the firefighting water tanks.

The proposed development is considered to be compliant with A4.1.

Note: AS - Acceptable solution, OA - Outcomes-Based Approach, N/A - Not applicable.

## 4.2 Water Tank Requirements

Each tank and associated stand will be above-ground, constructed of non-combustible material and comply with *AS/NZS 3500.1:2018 Plumbing and drainage Water Services*.

All exposed water supply pipes and fittings will be metal. Fittings should be located away from the source of bushfire attack.

All nine tanks will be interconnected, and a 50 mm male camlock coupling with full flow valve will be fitted to one of the tanks to provide a dedicated point to draw water from.

As the tanks will be interconnected, only one active pump will be provided, with an additional pump available as a standby to provide redundancy. The camp is independent of the electricity grid and powered by generators with 100% redundancy. Therefore, both pumps will be electric with a minimum power of 3.7 kW each.

## 4.3 Additional Bushfire Management Strategies

Given the remoteness of the subject site, additional bushfire awareness and management measures have been recommended. These measures relate to monitoring and awareness of Fire Danger Ratings as well as subsequent actions.

In addition, Sections 4.3.1 and 4.3.2 identify potential evacuation and shelter-in-place locations, should such actions be required.



**Table 4: Bushfire Awareness and Management Procedures**

FIRE WEATHER FORECAST AREA: ASHBURTON INLAND				
Actions	Frequency	Responsible Person		
Days forecast with No Rating				
No actions required				
Days forecast as Moderate FDR				
Monitor Emergency WA / or DFES website or ABC Radio for fire incidents	Once daily (1pm)	Camp Manager / Emergency Response Coordinator		
Days forecast as High FDR				
Monitor Emergency WA / or DFES website or ABC Radio for fire incidents	Twice daily (1pm and 3pm)	Camp Manager / Emergency Response Coordinator		
Complete building preparedness checks (refer to Appendix D)	Once daily (prior to 10am)	Camp Manager / Emergency Response Coordinator		
Days forecast as Extreme FDR				
Monitor Emergency WA / or DFES website or ABC Radio for fire incidents	Four times daily (9am, 11am, 1pm and 3pm) or more frequently if fire event in locality	Camp Manager /	Emergency Response Coordinator	
Complete building preparedness checks (refer to Appendix D)	Once daily (prior to 8am)	Camp Manager /	Emergency Response Coordinator	
Ensure all vehicles are filled with fuel in case evacuation is advised by emergency services	Once daily (after completion of works each day)	Camp Manager /	Emergency Response Coordinator	
Days forecast as Catastrophic FDR				
Monitor Emergency WA / or DFES website or ABC Radio for fire incidents	Four times daily (9am, 11am, 1pm and 3pm) or more frequently if fire event in locality	Camp Manager /	Emergency Response Coordinator	
Complete building preparedness checks (refer to Appendix D)	Once daily (prior to 8am)	Camp Manager /	Emergency Response Coordinator	
Remove flammable items from around accommodation buildings and the gymnasium in the event that shelter in place is required.	Once daily (prior to 8am)	Camp Manager /	Emergency Response Coordinator	
Ensure adequate drinking water is available in the gymnasium.				
Visually inspect the area around the camp for signs of fire or smoke	Four times daily (9am, 11am, 1pm and 3pm) or more frequently if fire event in locality	Camp Manager /	Emergency Response Coordinator	
Ensure all vehicles are filled with fuel and at least 3L of potable water per person, in case evacuation is advised by emergency services	Once daily (after completion of works each day)	Camp Manager /	Emergency Response Coordinator	

## FIRE WEATHER FORECAST AREA: ASHBURTON INLAND

### Additional Controls - Total Fire Ban in area where Camp is located

<b>Monitor Emergency WA / or DFES website or ABC Radio for fire incidents</b>	Four times daily (9am, 11am, 1pm and 3pm) or more frequently if fire event in locality	Survey Camp Manager / Emergency Response Coordinator
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In the event of a bushfire in the landscape, the Department of Fire and Emergency Services (DFES) may issue a Bushfire Warning that may require the Camp Manager to contemplate evacuation or shelter-in-place. Indicative evacuation and shelter-in-place locations have been identified below. Given the possibility for multiple bushfire scenarios to affect the proposed camp, the emergency management team should review these locations, refine if needed, and develop triggers for enacting each procedure.

### 4.3.1 Evacuation

#### OFF-SITE EVACUATION ROUTES and DESTINATIONS

##### On-site assembly area (prior to off site evacuation)

<b>Name/Description</b>	Inside the Gymnasium (Figure 6)
-------------------------	---------------------------------

##### Off-site evacuation Destination

<b>Destination</b>	Karratha Leisureplex Opposite Broadhurst Road, Dampier Hwy, Pegs Creek Nearest Intersection: Dampier Highway and Broadhurst Road
--------------------	--

<b>Evacuation route</b>	Travel northeast along the Rio Tinto Rail Access Road toward Manuwarra Red Dog Highway for approximately 13 km, turn left onto Manuwarra Red Dog Highway, travel along Manuwarra Red Dog Highway for approximately 56 km, turn right onto North West Coastal Highway, and then left after 300 m onto Madigan Road, follow Madigan Road for 6 km, turn right onto Dampier Highway, travel along Dampier Highway for 4 km, turn right at the roundabout at Broadhurst Road and then turn left into the Karratha Leisureplex.
-------------------------	--

<b>Vehicles</b>	All personnel will use vehicles available on site.
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### 4.3.2 Shelter-in-place

#### SHELTER-IN-PLACE DETAILS

<b>Building / Area</b>	<b>Location</b>
Gymnasium (Figure 6)	Northwest of camp







## 5. Responsibilities for Implementation and Management of Bushfire Management Measures

Responsibility for implementation of the bushfire risk management measures outlined in Section 4 of this BMP applies to the developer, future owners/builders within the subject site and the local government. Table 5 provides a works program detailing these measures, timing of implementation and responsibility.

**Table 5: Proposed Works Program**

No.	Bushfire management measure
<b>Developer responsibilities - Prior to occupancy</b>	
1	Ensure the entirety of the subject site is either non-vegetated, or contains low-threat, maintained vegetation, managed to APZ standards.
2	Provide firefighting water tanks in accordance with Section 4.2 and Figure 6.
3	Construct proposed accommodation buildings to BAL-12.5 construction standards in AS 3959: 2018.
<b>Camp operator responsibilities - Ongoing</b>	
4	Maintain the entirety of the subject site as either non-vegetated areas, or low-threat, maintained vegetation, managed to APZ standards.
5	Review and update the Additional Bushfire Management Strategies in Section 4.3 on an annual basis, through consultation with the Camp Emergency Management Team.



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## 6. Conclusion

In the professional opinion of the author, the proposed development satisfies the intent, aim and objectives of SPP 3.7 and the Guidelines and is recommended for approval.

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## 7. References

Department of Fire and Emergency Services (DFES). (2024). *Map of Bush Fire Prone Areas*. Retrieved on 30/09/2024 from:

<http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/Pages/default.aspx>.

Standards Australia (SA). (2018). *Construction of buildings in bushfire-prone areas* (AS 3959: 2018).




Western Australian Planning Commission (WAPC). (2024a). *State Planning Policy 3.7 Bushfire*. Government of Western Australia.

Western Australian Planning Commission (WAPC). (2024b). *Planning for Bushfire Guidelines*. Government of Western Australia.









# **Appendix A:**

# **Classified Vegetation Photos**

Plot 1	Class C Shrubland
<p><b>Photo 1</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p>	
Plot 1	Class C Shrubland
<p><b>Photo 2</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p>	
Plot 1	Class C Shrubland
<p><b>Photo 3</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p>	



Plot 1	Class C Shrubland
<p><b>Photo 4</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p>	
Plot 1	Excluded - clause 2.2.3.2 (e)
<p><b>Photo 5</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p>	
Plot 1	Excluded - clause 2.2.3.2 (f)
<p><b>Photo 6</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p> <p>Note: The Rio Tinto Iron Ore rail line is in the background.</p>	

Plot 1	Class C Shrubland
<p><b>Photo 7</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p> <p>Note: This is vegetation within the subject site which will be cleared for development.</p>	
Plot 1	Class C Shrubland
<p><b>Photo 8</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p> <p>Note: The open water has not been excluded, as it appears to be part of an ephemeral creekline that may not contain water during the fire season.</p>	
Plot 1	Class C Shrubland
<p><b>Photo 9</b></p> <p>Vegetation comprises spinifex grassland with scattered shrubs. A Class G Grassland classification would be appropriate, however shrubs may regenerate following rains and/or fire so a conservative classification was adopted.</p> <p>The slope under this vegetation was assessed to be upslope/flat land.</p>	



# **Appendix B:**

# **Standards for Asset Protection Zones**

# **(WAPC, 2024b)**

The following standards have been extracted from the Planning for Bushfire Guidelines (WAPC, 2024b).

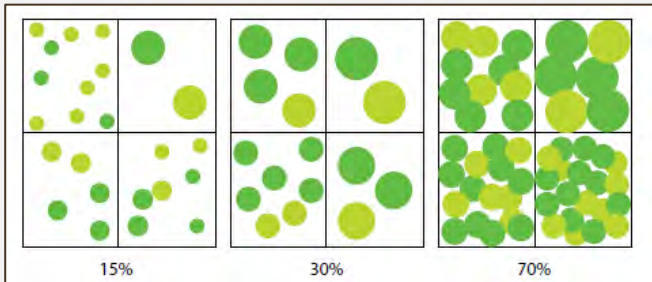
Every habitable building is to be surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:

- a. Width: the APZ is measured from the development site, and of sufficient size to ensure the radiant heat impact of a bushfire does not exceed 29kW/m<sup>2</sup> (BAL-29) in all circumstances.
- b. Location: the APZ should be contained solely within the boundaries of the lot, except in instances where:
  - the vegetation on the adjoining lot(s) is, and will continue to be, low threat as per Clause 2.2.3.2 of AS 3959 or the APZ technical requirements, or an alternative standard on a local planning scheme, on an ongoing basis in perpetuity; or
  - the adjoining land is and will remain in perpetuity, non-vegetated.
- c. Management: the APZ is managed in accordance with the APZ technical requirements (below), or an alternative standard in a gazetted local planning scheme.

### APZ Technical Requirements

Object	Requirement
<b>Fences within the APZ</b>	Should be constructed from non-combustible materials (for example, iron, brick, limestone, metal post and wire, or bushfire-resisting timber referenced in Appendix F of AS 3959).
<b>Fine fuel load (Combustible, dead vegetation matter less than 6 mm in thickness)</b>	<ul style="list-style-type: none"> <li>• Should be managed and removed on a regular basis to be maintained as a low threat vegetation.</li> <li>• Should be maintained at less than two tonnes per hectare (on average).</li> <li>• Mulches should be non-combustible such as stone, gravel, shells, rock or crushed mineral earth or wood mulch more than five millimetres in thickness.</li> </ul>
<b>Trees* (more than 6 m in height)</b>	<ul style="list-style-type: none"> <li>• Trunks at maturity should be a minimum distance of six metres from all elevations of the building.</li> <li>• Branches at maturity should not touch or overhang a building or powerline.</li> <li>• Lower branches and loose bark should be removed to a height of two metres above the ground and/or surface vegetation.</li> <li>• Canopy cover within the APZ should be less than 15 per cent of the total APZ area.</li> <li>• Tree canopies at maturity should be at least 5 m apart to avoid forming a continuous canopy. Stands of existing mature trees with interlocking canopies may be treated as an individual canopy provided the total canopy cover within the APZ does not exceed 15 per cent and is not connected to the tree canopy outside the APZ.</li> </ul>



Object	Requirement
	 <ul style="list-style-type: none"> <li>• Tree canopy cover – ranging from 15 to 70 per cent at maturity</li> </ul>
<b>Shrub* and scrub* (0.5 m to 6 m in height). Shrub and scrub more than 6 m in height are to be treated as trees.</b>	<ul style="list-style-type: none"> <li>• Should not be located under trees or within three metres of buildings.</li> <li>• Should not be planted in clumps more than five square metres in area.</li> <li>• Clumps should be separated from each other and any exposed window or door by at least 10 metres.</li> </ul>
<b>Ground cover*(less than 0.5 m in height. Ground cover more than 0.5 m in height is to be treated as shrub)</b>	<ul style="list-style-type: none"> <li>• Can be planted under trees but must be maintained to remove dead plant material, as prescribed in 'Fine fuel load' above</li> <li>• Can be located within two metres of a structure but three metres from windows or doors if more than 100 mm in height.</li> </ul>
<b>Grass</b>	<ul style="list-style-type: none"> <li>• Grass should be maintained at a height of 100 mm or less, at all times</li> <li>• Wherever possible, perennial grasses should be used and well-hydrated with regular application of wetting agents and efficient irrigation.</li> </ul>
<b>Defendable space</b>	<ul style="list-style-type: none"> <li>• Within three metres of each wall or supporting post of a habitable building; the area is kept free from vegetation but can include ground cover, grass and non-combustible mulches as prescribed above.</li> </ul>
<b>Liquid petroleum gas cylinders</b>	<ul style="list-style-type: none"> <li>• Should be located on the side of a building farthest from the likely direction of a bushfire or on the side of a building where surrounding classified vegetation is upslope, at least one metre from vulnerable parts of a building.</li> <li>• The pressure relief valve should point away from the house.</li> <li>• No flammable material within six metres from the front of the valve.</li> <li>• Must sit on a firm, level and non-combustible base and be secured to a solid structure.</li> </ul>
<ul style="list-style-type: none"> <li>• * Plant flammability, landscaping design and maintenance should be considered - refer to explanatory notes in the Guidelines.</li> </ul>	

## ADDITIONAL NOTES

An Asset Protection Zone (APZ) is a low fuel area, maintained around a building to increase the likelihood a building will survive a bushfire, by reducing the potential for direct flame contact, radiant heat exposure and ember attack. The APZ allows emergency services access and provides an area for firefighters and homeowners to defend their property.

An APZ should be contained within the boundaries of the lot on which the building is situated, except in instances where it is demonstrated the vegetation on the adjoining land is, and will continue to be, low threat as per cl. 2.2.3.2 of AS 3959, or the vegetation on the adjoining lot is, and will remain in perpetuity, non-vegetated. However, it should be noted there is no requirement for a neighbouring landowner or land

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manager (public or private) to be party to a legal agreement to undertake ongoing management of vegetation as low threat, in perpetuity.



# **Appendix C:**

## **Vehicular Access Technical Requirements (WAPC, 2024b)**

Technical requirements	Perimeter Roads		Public Roads		Emergency Access Way3		Fire Service Access Route3		Battle-Axe and Private Driveways1	
Map of Bush Fire Prone Areas Designation	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1	Area 2	Area 1
Minimum horizontal clearance (m)	12	8	See note 5		10	6	10	6	6	
Minimum vertical clearance (m)	4.5									
Minimum weight capacity (t)	15									
Maximum grade unsealed road2	See note 5		See note 5		1:10 (10% or 6 degrees)					
1:7 (14.3% or 8 degrees)										
1:10 (10% or 6 degrees)										
8.5										

## NOTES

1. Driveways and battle-axe legs to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision where not required to comply with the widths in this Appendix or the Guidelines.
2. Dips must have no more than a 1 in 8 (12.5% - 7.1 degrees) entry and exit angle.
3. To have crossfalls between 3 per cent and 6 per cent.
4. For sealed roads only the maximum grade of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50 metres is permissible, except for short constrictions to 3.5 metres for no more than 30 metres in length where an obstruction cannot be reasonably avoided or removed.

As outlined in the Institute of Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards Main Roads standard, supplement, policy or guideline and/or any applicable or relevant local government standard or policy.



# **Appendix D:**

# **Bushfire Preparedness**

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The following actions are to be undertaken by the Camp Operators at the specified times.

### ***Ongoing Actions (Year-round)***

Ensure the landscaped grounds are maintained to the requirements of Standards for Asset Protection Zones (WAPC, 2024) with the following items checked prior to 1 January each year:

- Objects: within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.
- Fine Fuel load: combustible dead vegetation matter less than 6 millimetres (mm) in thickness reduced to and maintained at an average of two tonnes per hectare.
- Trees (> 5 metres in height): trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy.
- Shrubs (0.5 metres to 5 metres in height): should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m<sup>2</sup> in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.
- Ground covers (<0.5 metres in height): can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.
- Grass: should be managed to maintain a height of 100 millimetres or less.

Detailed information and checklists are available on the DFES website including 'Preparing Your Property'<sup>1</sup> and the 'My Bushfire Plan Toolkit'<sup>2</sup> published by DFES.

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<sup>1</sup> <https://publications.dfes.wa.gov.au/publications/preparing-your-property>

<sup>2</sup> <https://mybushfireplan.wa.gov.au/>



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### ***Actions Immediately Prior to the Bushfire Season***

- Ensure the emergency management team is briefed on bushfire risk and the actions required in this BMP.
- Ensure contact phone numbers for the emergency management team are correct and up to date.
- Ensure adequate levels of drinking water are available in the facility in case of emergency.
- Ensure any firefighting equipment (hoses etc.) are serviceable and available.
- Ensure no hazards are present around buildings (for example, rubbish piles) that could contribute to increased fire intensity.
- Ensure property access is kept clear and easily trafficable.
- Ensure first aid kits, fire extinguishers, emergency lighting and other emergency resources are current, serviceable and accessible.
- Ensure roof and gutters are free from leaf litter and debris.
- Ensure an emergency evacuation kit has been prepared and is easily accessible by staff. Refer to <https://www.dfes.wa.gov.au/hazard-information/emergency-kits> for examples of potentially relevant items to include in the kit.
- Brief all staff on the bushfire evacuation procedures with updated advice provided when fire warnings are issued by Emergency Services (currently DFES) for the locality.

### ***Ongoing Actions During the Bushfire Season***

- Maintain the landscaped grounds and APZs in accordance with Standards for Asset Protection Zones.
- Maintain compliance with the local government's annual firebreak and fuel load notice issued under s33 of the *Bush Fires Act 1954*.
- Ensure defensible spaces around buildings and assembly points are maintained.
- Update contact details of the emergency management team and employees.
- Ensure that attendance and visitor registers are updated and accurate at least twice daily.







## Appendix F: Social Impact Assessment

# Project Jinbi Workers Camp Social Impact Statement

April 2025





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## Table of Contents

<b>Table of Contents</b>	<b>3</b>
<b>1 INTRODUCTION</b>	<b>4</b>
1.1 Objectives and Scope	4
<b>2 PROJECT OVERVIEW</b>	<b>5</b>
2.1 Jinbi Workforce Accommodation Project	5
2.1.1 Project Jinbi Workforce Overview	5
2.1.2 WHS considerations	5
2.1.3 Capacity	5
2.1.4 Construction	5
2.1.5 Location	6
2.1.6 Operation	6
<b>3 AREA OF SOCIAL INFLUENCE</b>	<b>9</b>
<b>4 CONSULTATION</b>	<b>10</b>
<b>5 PRELIMINARY SOCIAL IMPACTS AND OPPORTUNITIES</b>	<b>11</b>
<b>6 NEXT STEPS</b>	<b>15</b>



# 1 INTRODUCTION

Yindjibarndi Energy Corporation (**YEC**) proposes to develop, own, and operate large scale renewable energy projects on Yindjibarndi Country in the Pilbara Region of Western Australia.

YEC currently has three green field site projects under development within the Local Government Area (**LGA**) of Shire of Ashburton:

- Project Jinbi: 75MWac solar array, with the ability to expand to 150MWac and an option to include Battery Energy Storage System (**BESS**)
- Project Baru: up to 450MW wind, plus solar and BESS; and
- Project Marnda: up to 600MW wind, plus solar and BESS.

This Social Impact Statement (**SIS**) has been prepared in accordance with the Shire of Ashburton's Local Planning Policy LPP20 Social Impact Assessment and is intended to support YEC's application to the Shire of Ashburton for development approval for the workforce accommodation required to support Project Jinbi.

## 1.1 Objectives and Scope

The solar component of Project Jinbi received development approval from the Department Planning Lands and Heritage (**DPLH**) through the City of Karratha's Joint Development Assessment Panel (**JDAP**) in December 2024.

The workforce accommodation required to support Project Jinbi was not included in the initial application for development approval and it was noted that separate development approval would be required for construction of temporary workforce accommodation on the Jinbi site.

Therefore, the specific objectives of this SIS are to:

1. Identify key stakeholders and communities that are likely to have an interest or be affected by the development of the Jinbi Workforce Accommodation Project (**the Project**) including any marginalised or more vulnerable community groups.
2. Provide a preliminary analysis of potential social impacts associated with the Project - both negative and positive.
3. Identify measures to reduce negative social impacts and enhance positive impacts where practically possible.
4. Inform further Social Impact Assessment (SIA) scopes of work to be undertaken as the Project progresses.

## 2 PROJECT OVERVIEW

### 2.1 Jinbi Workforce Accommodation Project

The Jinbi Workforce Accommodation Project consists of a purpose-built, temporary accommodation facility to house workers engaged in the construction of Project Jinbi and related infrastructure works, including the development of access roads.

Project Jinbi consists of a solar array and potential BESS on a greenfield site, with direct connection to existing transmission infrastructure. It is located within an area of Exclusive Native Title, being Unallocated Crown Land within Yindjibarndi Native Title Determination Areas. It is located approximately 56km south of Karratha and 180km north-west of Tom Price.

#### 2.1.1 Project Jinbi Workforce Overview

Project Jinbi will require a construction workforce of approximately 100, followed by an ongoing operational workforce of 10 people. Construction of Project Jinbi is expected to take about two years, intended to commence in 2026. Operations and generation of clean, renewable electricity is expected from 2028.

#### 2.1.2 WHS considerations

While it is expected that most of the construction workforce will be sourced locally from the Karratha area, the substantial distance from Karratha to the Project Jinbi site (approximately 1.5 hours) poses a significant risk of employee fatigue. The decision to establish an onsite workers camp was driven by several factors:

- Fatigue management: onsite accommodation eliminates long commutes, giving workers more time to rest.
- Enhanced safety: reducing fatigue lowers the risk of accidents and errors, contributing to a safer work environment.
- Increased productivity: well-rested workers are more alert and efficient, leading to higher productivity levels.
- Health and well-being: supports overall health by preventing chronic fatigue and related issues, promoting better mental and physical health.
- Extreme Heat Management: onsite accommodation helps manage extreme heat conditions by providing immediate access to cool, sheltered environments, reducing heat stress and related health risks. It also enables workers to take advantage of the cooler conditions in the early morning, further mitigating the impact of extreme temperatures.

#### 2.1.3 Capacity

The camp has a maximum planned capacity of 272 people which includes construction workers to build the project, YEC staff and staff from the camp supplier to operate and maintain the facility.

#### 2.1.4 Construction

The camp will be constructed in two stages:

Stage 1:



- Construction of a smaller “fly camp” with caravan-style accommodation to support an initial workforce of approximately 54 people. This camp will facilitate early civil works, such as roads and piling, and assist in the construction of the main workers’ camp.
- Construction will take 3 months, from February to April 2026.

Stage 2:

- Construction of the main workers’ camp. Once the main camp is complete, the initial “fly camp” will be removed.
- Construction will take 5 months, from April to August 2026.

### **2.1.5 Location**

The camp will be located in the southern portion of the Jinbi lease – refer to Figure 1, Figure 2 and Figure 3. Locating the camp on the southern portion of the lease area represents the lowest risk from a timing and future developments point of view, being close to existing access roads, within an area that is not flagged for solar panel installation and is a more central location in relation to other proposed YEC Development areas (Marnda, Baru, Transmission corridor).

Further to the above a key opportunity for the camp is the potential for it to support future aspirations of YEC such as providing accommodation for the Marnda, Baru and Transmission corridor developments. Whilst this is dependant of the timing of the other developments it has been considered in the proposed location

### **2.1.6 Operation**

The camp is expected to be operational for 2 years.

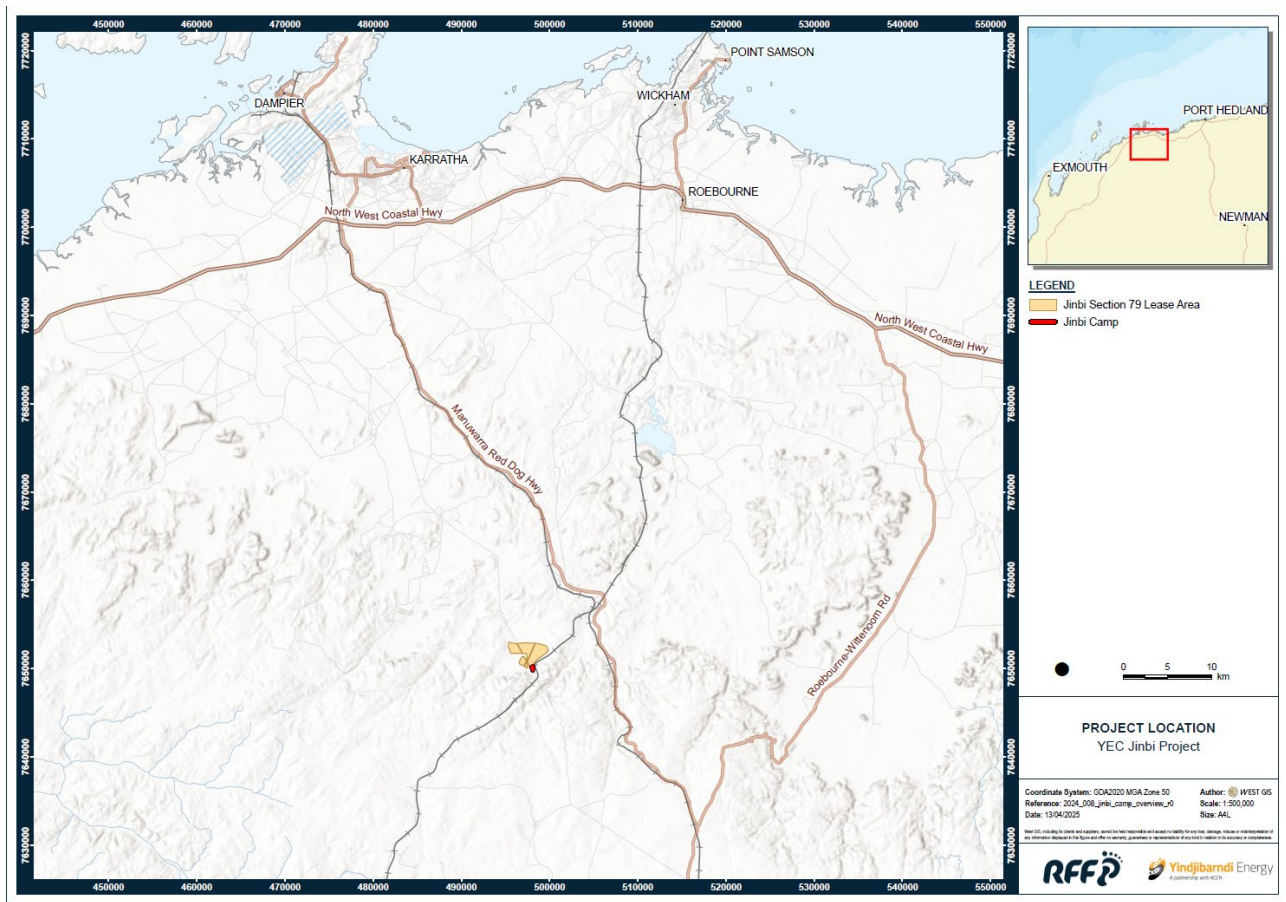


Figure 1 Workforce Accommodation Location



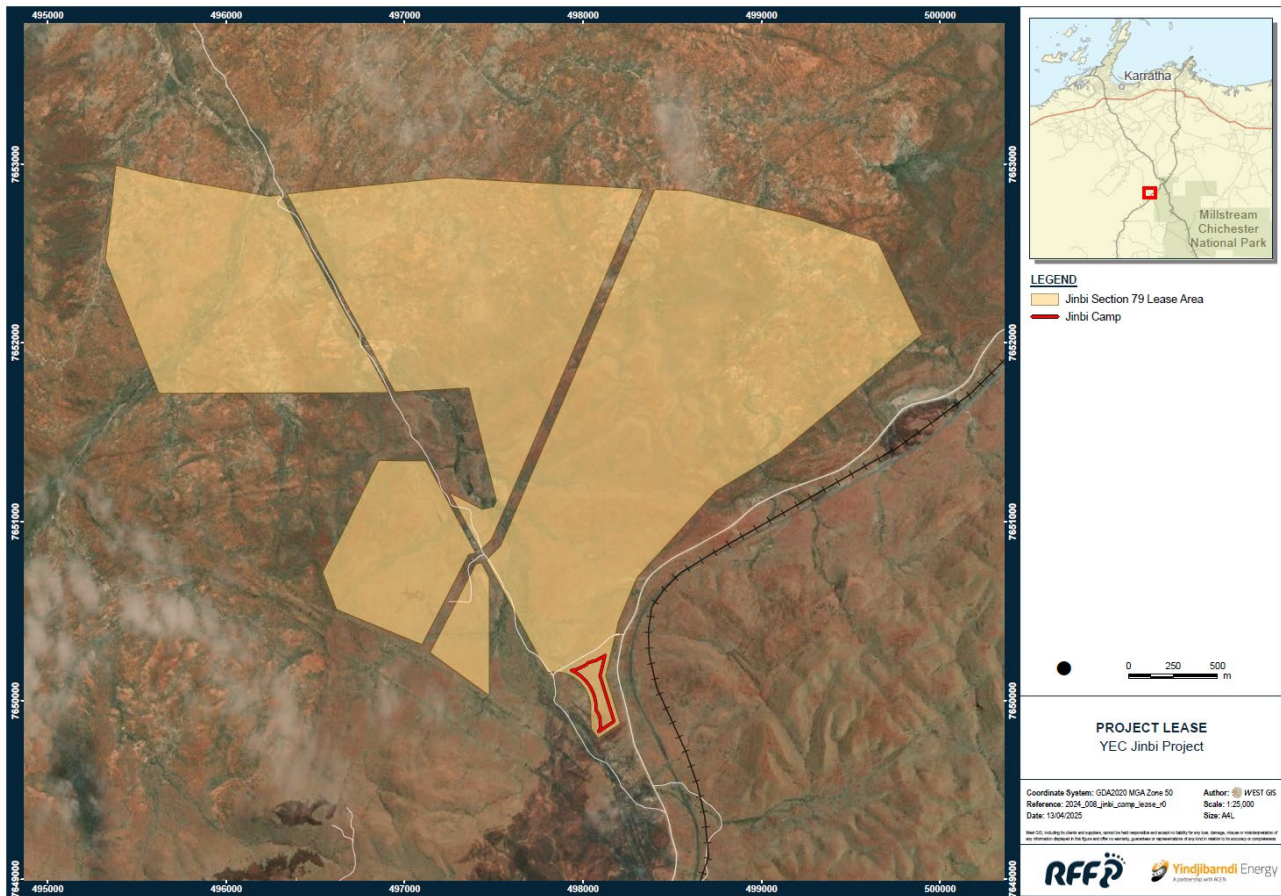


Figure 2 Location within Project Jinbi Lease Area

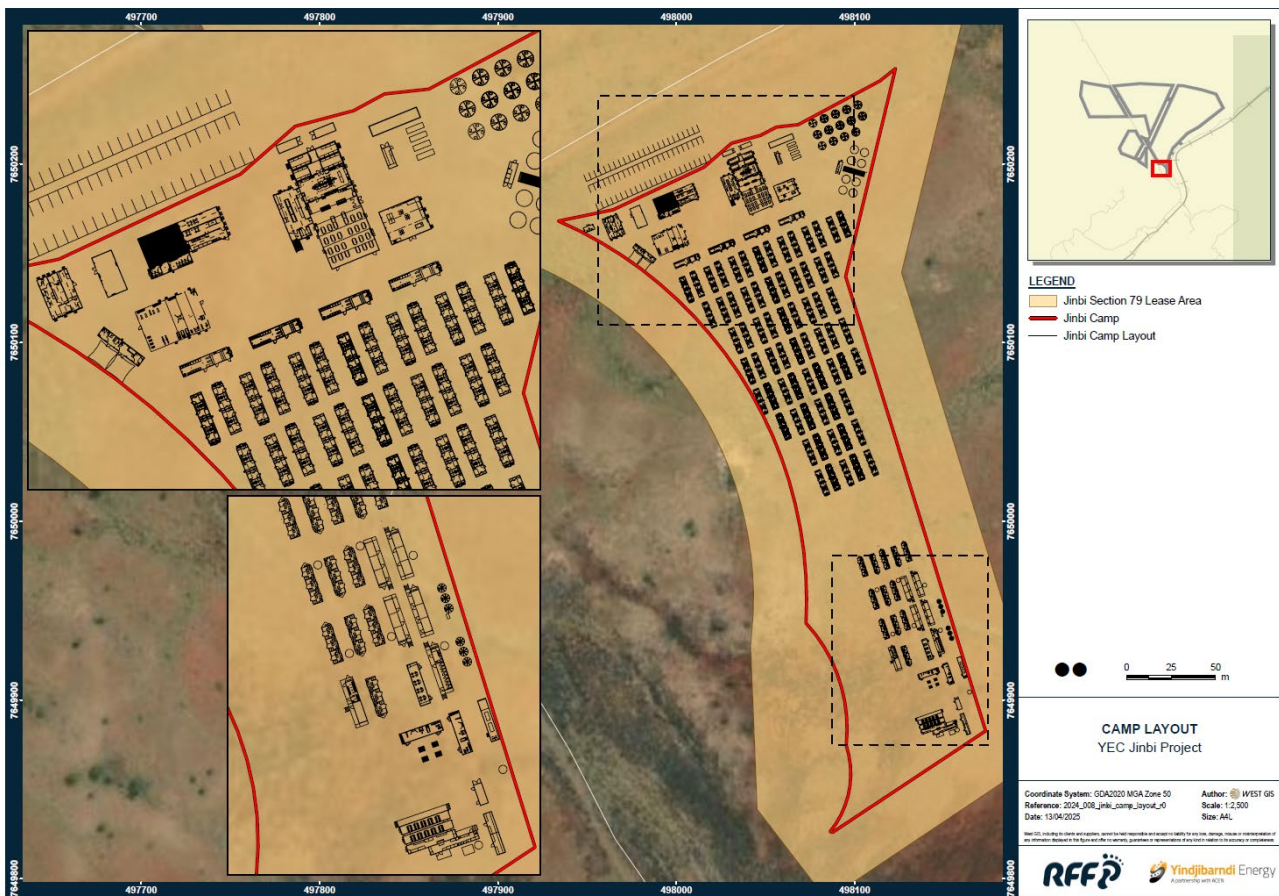


Figure 3 Proposed Camp Layout

### 3 AREA OF SOCIAL INFLUENCE

The Jinbi Workforce Accommodation Project is located within the Shire of Ashburton within an area of Exclusive Native Title, being Unallocated Crown Land within Yindjibarndi Native Title Determination Areas.

Areas of social influence	Features of the project's social context to be considered
<ul style="list-style-type: none"> <li>Ngurrawaana</li> <li>Roebourne</li> <li>Karratha</li> </ul>	<ol style="list-style-type: none"> <li>Proximity of communities to the project</li> <li>The size of the project's construction and operations workforce</li> <li>The movement of goods, materials and equipment</li> <li>The movement and accommodation of workers</li> <li>Access to local and Indigenous workforce and supply chain</li> <li>Protection and enhancement of cultural heritage and values</li> </ol>



## 4 CONSULTATION

YEC understands that community engagement is fundamental to SIA as it ensures that the voices and concerns of all stakeholders are heard and addressed, leading to more inclusive and sustainable project outcomes. By actively involving the community, projects can better understand and mitigate potential social impacts, fostering trust and collaboration.

YEC is guided by the following industry guidelines in relation to community engagement:

- Clean Energy Council - Community Engagement Guidelines for the Australian Wind Industry.
- First Nations Clean Energy - Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects

Consistent with the above guidelines, community engagement undertaken by YEC as part of the proposed Project will be respectful, inclusive, and meaningful. Engagement is used to identify community values and aspirations in relation to the Project, and to identify key issues of concern for key stakeholders and local communities, including opportunities to further refine project design to address and/or enhance project impacts.

YEC is committed to developing and maintaining genuine partnerships to enable all stakeholders to provide feedback on the proposed Project and to raise any concerns that should be considered through the development process. YEC is committed to communicating openly, honestly and in a transparent manner with all stakeholders.

Stakeholder and community consultation will continue as the Jinbi Workforce Accommodation Project progresses and is a key component in understanding potential social impacts.

Consultation with the below groups has either already commenced or is planned to be undertaken:

- Yindjibarndi people and specifically the Ngurrawaana community
- Local government departments, agencies and elected representatives
- State government departments, agencies and elected representatives
- Commonwealth Government departments, agencies and elected representatives
- Potential suppliers
- Potential customers
- Ngarluma people
- Special interest groups

## 5 PRELIMINARY SOCIAL IMPACTS AND OPPORTUNITIES

- Minimise impact
- Maximise opportunity




THEME	POTENTIAL IMPACTS / OPPORTUNITIES	APPROACH	HOW IT MAY BE ADDRESSED
Economic	<ul style="list-style-type: none"> <li>Local jobs and income generation for Indigenous communities to improve individual and familial household income, strengthening economic independence and sustainable contribution to local economy</li> <li>The construction and operation of the camp may create job opportunities for local residents</li> </ul>	●	<ul style="list-style-type: none"> <li>Proportion of YEC profits filtered back to the community</li> <li>Prioritise the engagement of Yindjibarndi businesses</li> <li>Support for training programs to build pool of capable candidates</li> </ul>
	Impact on Pilbara businesses via supply and procurement:	●	<ul style="list-style-type: none"> <li>Prioritise use of local businesses where practical</li> <li>Establish online registration for local businesses to register interest</li> <li>Host local supply forums</li> </ul>
Social	<ul style="list-style-type: none"> <li>Local workforce likely to invest in community services and businesses contributing to local economy</li> <li>Local businesses may experience increased demand for goods and services, boosting the local economy</li> </ul>	●	<ul style="list-style-type: none"> <li>Use local and existing workforce where practical</li> <li>Prioritise use of local businesses where practical</li> </ul>
	Workforce accommodation will reduce strain on local housing demand and affordability	●	<ul style="list-style-type: none"> <li>Host workforce in proposed Jinbi workforce accommodation</li> </ul>



THEME	POTENTIAL IMPACTS / OPPORTUNITIES	APPROACH	HOW IT MAY BE ADDRESSED
	Workforce puts strain on community and social services and facilities	●	<ul style="list-style-type: none"> <li>• Use local and existing workforce where practical</li> <li>• Leverage existing established private industry services and facilities</li> <li>• The camp will have some facilities to reduce strain on local services and facilities</li> </ul>
	Yindjibarndi community awareness and understanding of YEC aspirations, activities and benefits	●	<ul style="list-style-type: none"> <li>• Culturally appropriate information materials</li> <li>• Long term Social Investment Program focussed on improving quality of life and benefits to local communities</li> <li>• YEC local presence</li> </ul>
	Negative impact on community cohesiveness	●	<ul style="list-style-type: none"> <li>• Ensure WHS planning includes guidance for workforce on acceptable behaviour in the local community</li> <li>• Provision of on-site recreational facilities</li> <li>• Distance to nearby communities renders negative impact on the nearby community unlikely due to time constraints (i.e. long shift work)</li> </ul>
Transport	Increased traffic congestion with the transport of construction components	●	<ul style="list-style-type: none"> <li>• Detailed transport and logistics route planning by suitably qualified specialists</li> <li>• Traffic will be reduced due to construction of workforce accommodation which is based on site.</li> </ul>
	Public safety related to increased traffic on road networks	●	<ul style="list-style-type: none"> <li>• Detailed transport and logistics route planning by suitably qualified specialists</li> <li>• Traffic will be reduced due to construction of workforce accommodation which is based on site.</li> <li>• Bus transport for workforce at start and end of shift.</li> </ul>

THEME	POTENTIAL IMPACTS / OPPORTUNITIES	APPROACH	HOW IT MAY BE ADDRESSED
Ecological	Impact on environmentally significant species	●	<ul style="list-style-type: none"> <li>Detailed environmental assessments by suitably qualified specialists</li> <li>Adherence to Clearing Permit conditions</li> <li>Yindjibarndi participation in pre-clearing fauna and flora surveys</li> </ul>
	Impact on waterways and hydrological features	●	<ul style="list-style-type: none"> <li>Detailed hydrological assessments by suitably qualified specialists</li> <li>Design development with a focus to avoid existing hydrological pathways</li> <li>Adherence to Clearing Permit conditions</li> <li>Adherence to Beds and Banks Permit conditions</li> <li>A Part V works approval will be obtained for site for the appropriate management of waste water discharge</li> </ul>
	Long term reduction in greenhouse gas emissions	●	<ul style="list-style-type: none"> <li>YEC energy is used to decarbonise existing Pilbara industries</li> </ul>
Cultural	Workforce respect for Aboriginal cultural heritage and values	●	<ul style="list-style-type: none"> <li>Induction and cultural awareness training for workforce</li> </ul>
	Impact on waterways and hydrological features	●	<ul style="list-style-type: none"> <li>Detailed hydrological assessments by suitably qualified specialists</li> <li>Adherence to Heritage Protection Agreement</li> <li>Adherence to Clearing Permit conditions</li> </ul>
	Access to culturally significant sites	●	<ul style="list-style-type: none"> <li>Upgrade access tracks for Yindjibarndi community</li> <li>Adherence to Heritage Protection Agreement</li> <li>Culturally sensitive areas will be restricted and fenced off</li> </ul>



THEME	POTENTIAL IMPACTS / OPPORTUNITIES	APPROACH	HOW IT MAY BE ADDRESSED
Other	Installation of infrastructure, telecommunications and services in remote areas		<ul style="list-style-type: none"> <li>Understand and where practical, align installation with Ngurrawaana Community Layout Plan</li> </ul>
	Changed visual landscape following construction of the Jinbi Workforce Accommodation Project		<ul style="list-style-type: none"> <li>Yindjibarndi approval of site layout</li> <li>Adherence to Heritage Protection Agreement</li> <li>Use of visualisation tools to support engagement</li> </ul>
	Remoteness of project location		<ul style="list-style-type: none"> <li>Suitable emergency management planning</li> <li>Serviced construction compound with satellite communications</li> <li>Detailed Construction and Environmental Management Plan</li> <li>Optimise site amenity and safety provisions for workforce health and well-being</li> </ul>

## 6 NEXT STEPS

Stakeholder and community consultation will continue as the Jinbi Workforce Accommodation Project progresses and is a key component in understanding social values, impacts and opportunities.

YEC has in place a number of project controls to manage feedback and social risks. The preliminary social impacts and opportunities listed in this SIS will be integrated into project design and reviewed regularly.





## Appendix G: Servicing Report

## **Yindjibarndi Energy**

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### **Jinbi Workers Camp DA Deliverables Brief**

029-DC-FRM-001 Rev B

03/04/2025



## Jinbi Workers Camp DA Deliverables

Document Number	029-DC-FRM-001	
Revision Number	B	
Revision Date	19/03/2025	
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Prepared By	Bianca Matthews	19/03/2025
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Next Review Date		

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Prepared By	Reviewed By	Approved by	Rev	Status	Issued Date
Bianca Matthews	Oliver Meegan	Rupert Kerr	A	IFR	20/30/25
Bianca Matthews	Oliver Meegan	Rupert Kerr	B	IFCR	3/4/2025

### Hold Status

Section	Details of Hold	Status

# TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>5</b>
1.1	OVERVIEW .....	5
<b>2</b>	<b>ENGINEERING, DESIGN AND TIE DOWNS .....</b>	<b>6</b>
2.1	ENGINEERING AND DESIGN .....	6
2.2	TIE DOWNS .....	6
2.3	FOOTINGS .....	8
2.3.1	<i>Donuts</i> .....	8
2.3.2	<i>Screw Piles</i> .....	8
<b>3</b>	<b>POWER AND ELECTRICAL SERVICES .....</b>	<b>9</b>
3.1	GENERATORS .....	9
3.2	POWER RETICULATION .....	9
3.3	POWER DISTRIBUTION BOARDS .....	11
3.4	LIGHTING .....	12
<b>4</b>	<b>POTABLE WATER SYSTEM .....</b>	<b>13</b>
4.1	POTABLE WATER TREATMENT PLANT .....	13
4.2	POTABLE WATER HOLDING TANKS .....	14
4.3	POTABLE WATER RETICULATION SYSTEM .....	14
<b>5</b>	<b>WASTE WATER SYSTEM .....</b>	<b>15</b>
5.1	WASTE WATER TREATMENT PLANT .....	15
5.2	WASTE WATER HOLDING / BALANCE TANKS .....	16
5.3	WASTEWATER RETICULATION SYSTEM .....	17
5.4	EFFLUENT DISPOSAL / SPRAY FIELD .....	18
5.5	GREASE TRAP .....	18
<b>6</b>	<b>COMMUNICATIONS .....</b>	<b>19</b>
6.1	GENERAL .....	19
6.1.1	<i>Communications Room</i> .....	19
6.1.2	<i>TV Entertainment System</i> .....	19
6.1.3	<i>WIFI</i> .....	19
6.1.4	<i>Cable Reticulation</i> .....	20
<b>7</b>	<b>STORM WATER MANAGEMENT .....</b>	<b>20</b>
<b>8</b>	<b>FIREWATER SYSTEM AND FIRE SAFETY .....</b>	<b>21</b>
8.1	FIRE SAFETY .....	21
8.2	FIREWATER SYSTEM .....	21
<b>9</b>	<b>FENCING AND DELINEATION .....</b>	<b>22</b>
<b>10</b>	<b>HEALTH AND SAFETY MEASURES .....</b>	<b>23</b>
10.1	MEASURES .....	23
10.1.1	<i>Compliance</i> .....	23
10.1.2	<i>Training</i> .....	23
10.1.3	<i>Monitoring</i> .....	23
<b>11</b>	<b>ENVIRONMENTAL CONSIDERATIONS .....</b>	<b>23</b>



11.1	IMPACT ASSESSMENT .....	23
11.2	SUSTIANABILITY PRACTICES.....	23
<b>APPENDIX A – JINBI WORKERS CAMP LAYOUTS .....</b>		<b>24</b>
<b>APPENDIX B – EXAMPLE SPRAY FIELD .....</b>		<b>25</b>

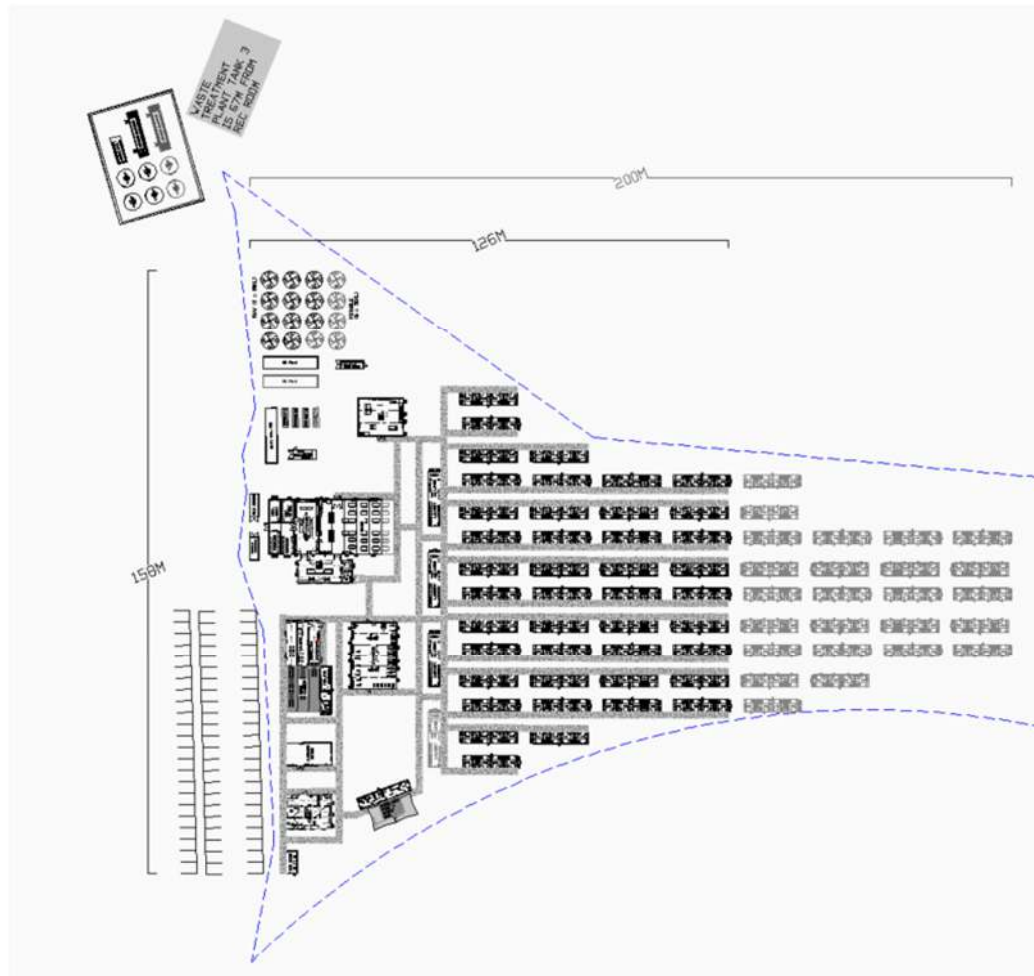
# 1 INTRODUCTION

This brief outlines the deliverables required to support the Development Application for the Temporary Jinbi Workers Camp. This camp will be utilised for the construction of the Yindjibarndi Energy Solar Farm.

There is a 30m offset from the clearance permit boundary for all habitable assets within the camp. Please refer to Appendix A for the layout showing the camp up to 272pax size.

## 1.1 OVERVIEW

Below gives an aerial overview of the camp.



**Figure 1. Camp Layout**



## 2 ENGINEERING, DESIGN AND TIE DOWNS



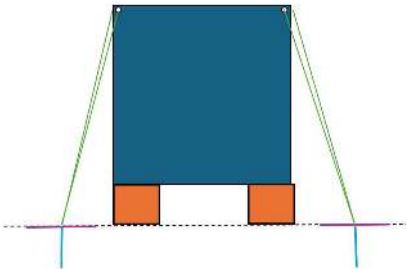
### 2.1 ENGINEERING AND DESIGN


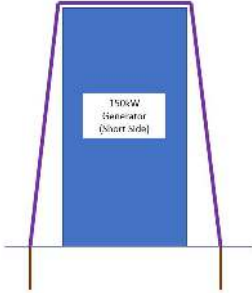


A structural engineering report will be completed for the camp by a design house. This will certify the camp to the relevant importance level, cyclone wind regions and to all relevant Australian Standards.

The output from the report will be the definition of the Tie Downs and Footings.

### 2.2 TIE DOWNS

See below typical examples of tie downs utilized within the camp. The tie downs will be design specific to the building / asset item connection detail, ground conditions and appropriate min design load rating.

TIEDOWN	PHOTO/FIGURE	DESCRIPTION
Tiedown Specification #1 – Tanks		<p>Minimum rating = 250kg WLL that consists of:</p> <ul style="list-style-type: none"> <li>- Earth anchor with steel wire rope</li> <li>- Rated steel chain with shackles</li> </ul>
Tiedown Specification #2 - Portable Units (Secondary)		<p>Minimum rating = 2-ton WLL that consists of:</p> <ul style="list-style-type: none"> <li>- Earth anchor with 16mm continuous threaded bar</li> <li>- Container hold down bracket</li> <li>- Hold down plate &amp; nut</li> </ul>
Tiedown Specification #3 - Portable Units (Primary)		<p>Minimum rating = 2-ton WLL that consists of:</p> <ul style="list-style-type: none"> <li>- 2T WLL Lashing Capacity Cargo Strap tied to top of unit</li> <li>- 2T WLL Wire Rope Earth Anchor (Duckbill Type)</li> </ul>

<p>Tiedown Specification #4 - Caravans</p>		<p>Minimum rating = 2.5-ton WLL that consists of:</p> <ul style="list-style-type: none"> <li>- 2.5T WLL Wire Rope Earth Anchor</li> <li>- Chain/Wire Rope tied to Caravan Chassis</li> <li>- Turnbuckle to connect Chain/Wire Rope to Earth Anchor</li> </ul>
<p>Tiedown Specification #5 - Generators (Option 1)</p>		<p>Tie Down Arrangement:</p> <ul style="list-style-type: none"> <li>- 1x 1000kg WLL Ratchet Strap tie over Generator Each Side, 2x Total</li> <li>- 2x 500kg Wire Rope Earth Anchors Each Side, 4x Total</li> </ul>
<p>Tiedown Specification #5 - Generators (Option 2)</p>		<p>Tie Down Arrangement</p> <ul style="list-style-type: none"> <li>- 4x 500kg WLL Earth anchor with 16mm continuous threaded bar</li> <li>- 4x 500kg WLL Rated steel chain</li> </ul>
<p>Tiedown Specification #5 - Generators (Option 3)</p>		<p>Tie Down Arrangement:</p> <ul style="list-style-type: none"> <li>- 4x 500kg WLL Wire Rope Earth Anchor (Duckbill Type)</li> </ul>

## 2.3 FOOTINGS

Footings will be utilised within the camp. There are 2 main typical types of foots that will be utilised / considered during the structural design.

### 2.3.1 Donuts

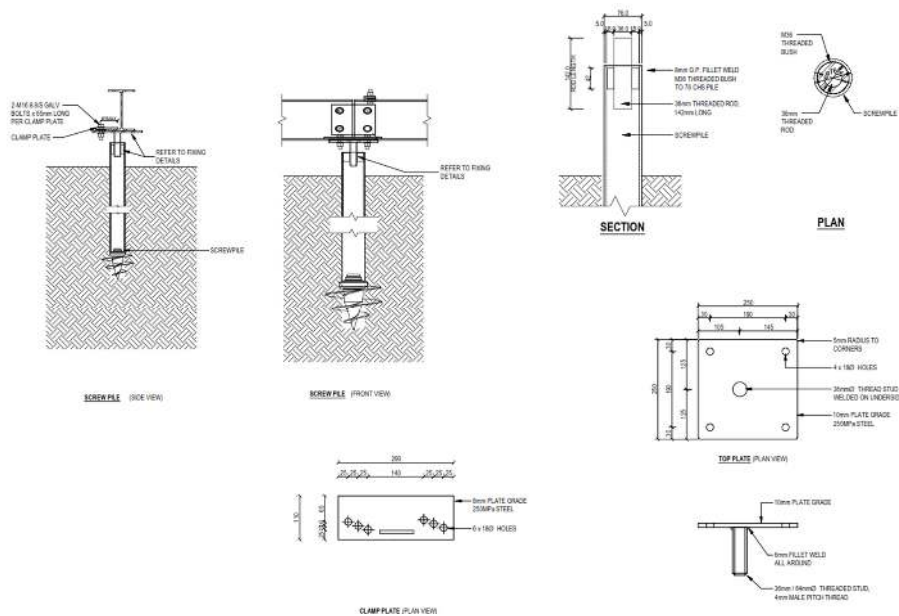
Typical concrete donuts are 600mm diameter and 200mm in height, refer to image below for example



*Figure 2. Concrete Footings (Donuts 600mm)*

### 2.3.2 Screw Piles

Screw piles are utilised where economical or superior from design considerations. They act as both footings and tie down points.



*Figure 3. Screw Piles*



## 3 POWER AND ELECTRICAL SERVICES

### 3.1 GENERATORS

A load bank of generators will be installed to supply power for the camp which are sized with the loading from the camp to ensure there is 100% redundancy. The diesel generators will be fuelled via a fuel pod appropriately sized with agreed contingency for running time.

The generators will be synchronised and timed with automatic changeover. They will have remote monitoring connected to give visibility back to Perth and scheduled preventative maintenance with a qualified technician as well as daily checks completed onsite by the camp operations team.



*Figure 2. Generators and Fuel Pod Configuration*

### 3.2 POWER RETICULATION

All power reticulation will either be in a cable tray for services above ground or in conduit for inground services. Each cable will be sized appropriately for the amount of current passing through. As the cables get further away from the generators, the cable size will reduce to ensure correct voltage and amplitude is maintained.



*Figure 4 Underground Power*



*Figure 5. Cable Tray*

### 3.3 POWER DISTRIBUTION BOARDS

The power is distributed by SMDB and submains throughout the camp. Firstly the power from the generators gets distributed through a Site Main Distribution Board, SMDB, which are the main point of distribution for the site. These have to have the capacity for large volumes of energy. These then distribute energy to submain distribution boards, which are a different areas distribution board. From these distribution boards, the energy is then sent to individual distribution boards that are attached to different buildings, such as the kitchen, accommodation units or the gym.



*Figure 6. Site Main Distribution Boards*



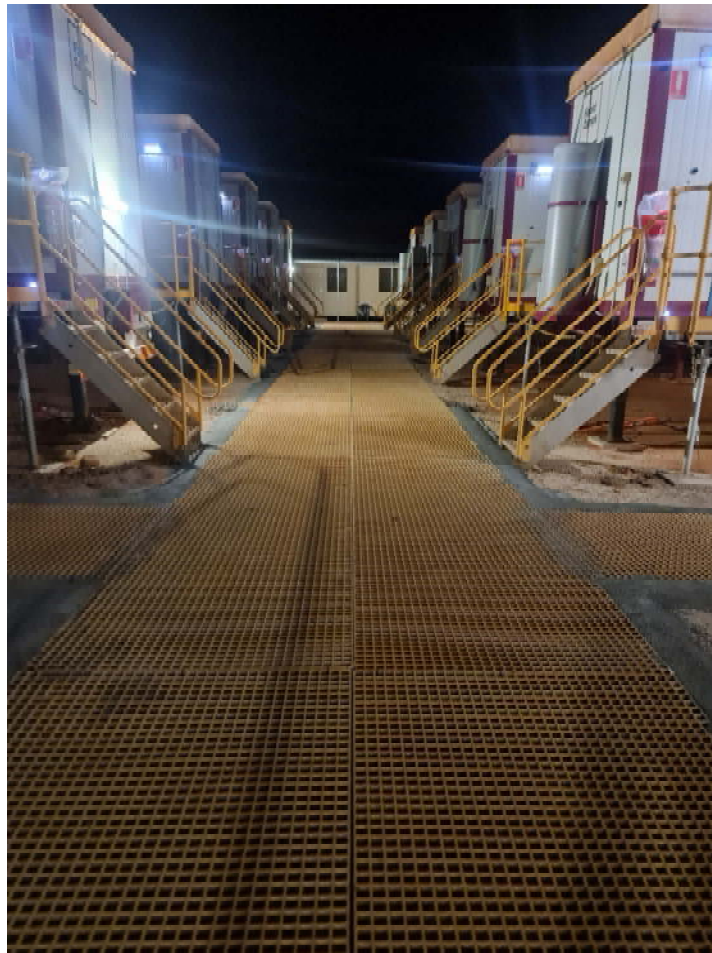
*Figure 7 Submains*



### 3.4 LIGHTING

Lighting will be installed through the camp to safely luminate all walkways, access paths, and other critical locations requiring night operations as per below

- i. Footpaths / Walkways;
- ii. Generators & Fuel Pod;
- iii. Kitchen and tavern loading/unloading facility;
- iv. PTWP;
- v. WWTP



*Figure 8. Camp Lighting*

## 4 POTABLE WATER SYSTEM

The camp will be installed with a potable water system to service the camp. Refer to sections below for high level details.

### 4.1 POTABLE WATER TREATMENT PLANT

If approved and deemed appropriate for the camp, a potable water treatment plant (PWTP) will be installed to treat Raw Water and convert to Potable water. The PWTP will be appropriately sized for the camp with an agreed redundancy for producing capabilities vs camp consumption.

The plant will typically include Duty filter feed / backwash pump, Automatic Media filter, Reverse osmosis (RO) feed pump, 5 micron and 1 micron prefilters, CIP pump, CIP tank, RO pressure vessels with Hydranautics membranes, calcite filter, flowmeter, pH and conductivity sensors, PLC and HMI, Sodium hypo dosing, portable safety shower Chlorine dosing, chlorine analyser and dual booster pumpset

The PWTP will feed the potable water into the potable water holding tanks where it will be chlorinated and circulated before being distributed to camp.

The brine water from the PWPT will be sent to Reject Water Tanks for specific disposal or be blended in with the WWTP effluent to be disposed of to the spray field.



*Figure 9. Internal of RO Plant*

## 4.2 POTABLE WATER HOLDING TANKS

The potable water will be stored in appropriately sized holding tanks with an agreed number of days of contingency based on the camp usage. The water will be chlorinated and circulated in the holding tanks before being distributed to the camp



*Figure 10. Potable Water Holding Tanks*

## 4.3 POTABLE WATER RETICULATION SYSTEM

The potable water will be reticulated throughout the camp typically with blue line poly pipe in either an above ground capacity and or below. Should the pipes run above ground all reasonable effort will be made to run pipes in the shade and under buildings to mitigate the water heating up in the pipes and cooking off the chlorine. Above ground potable pipes will also be lagged to insulate against the sun. Where the potable water piping is buried underground it will be surrounded by bedding sand and comply with the relevant AS.

The potable water reticulation system works include the following;

- i. Design of the reticulation system;
- ii. Supply and installation of all piping, valves and associated fittings;
- iii. All connections to the building and facilities;
- iv. Connection onto existing raw water tie-in point and connect to the raw water tanks PWTP and the supply and installation of water lines as required;
- v. Supply and installation of all materials, valves, pits, tags, survey and associated items required to complete the works; all flushing, pressure testing, commissioning, disinfecting and completion documentation in accordance with AS;
- vi. Ensuring that works comply with the Principal's Standards or at min the relevant AS;
- vii. All taps/tie ins into the potable water supply with a suitable backflow prevention/ reduced pressure zone device, to comply with relevant Legislation; and
- viii. Operating and maintenance instructions and execution of all maintenance as required.
- ix. All lines to be above ground and suitably clipped/secured. Exposed line to be covered with heat wrap.





**Figure 11 In and above ground potable water and power**

## **5 WASTE WATER SYSTEM**

The camp will be installed with a waste water system to service the camp. Refer to sections below for high level details.

### **5.1 WASTE WATER TREATMENT PLANT**

If approved and deemed appropriate for the camp, a waste water treatment plant (WWTP) will be installed to treat raw sewerage and convert to an approved standard of effluent that can be disposed of via a spray field. The WWTP will be appropriately sized for the camp with an agreed redundancy for producing effluent vs camp generation of waste.

The WWPT typically utilises the Fixed Film Process. The plant consists of the following main components:

- Skid mounted fixed film sewage treatment reactor
- Treated effluent tank
- Containerised, insulated and airconditioned plant room with;
  - Duty standby influent feed pumps
  - Duty standby effluent pumps
  - Duty standby air blowers
  - Precipitant dosing pump
  - Influent and effluent flowmeters
  - AS3000 compliant control panel



*Figure 12. Waste Water Treatment Plant*

## **5.2 WASTE WATER HOLDING / BALANCE TANKS**

The camp wastewater will be initially stored in appropriately sized holding / balance tanks with an agreed number of days of contingency based on the camp waste generation.

The WWTP will then draw wastewater from the balance tanks and begin the treatment within the plant system.



*Figure 13. Waste Water Holding Tanks*



### 5.3 WASTEWATER RETICULATION SYSTEM

The wastewater will be reticulated throughout the camp typically with purple poly pipe in either an above ground capacity and or below. Where the wastewater piping is buried underground it will be surrounded by bedding sand and comply with the relevant AS.

The waste water will be transferred around the camp to the balance tanks via gravity system and transfer tanks of varying design to suit the specific areas of camp.

The reticulation system will comply with AS3000. The installation works include the following:

- i. Sewerage mains pipelines, sewer reticulation pipelines, headwork , pumping stations and tie-ins as required;
- ii. Supply and installation of above ground sewer along the underside of the accommodation facilities;
- iii. Supply and installation of access chambers, maintenance chambers and inspection opening as required;
- iv. Complete connection to all waste point to buildings;
- v. Complete connection to irrigation pumps and supply and install irrigation pipeline to the spray field;
- vi. Flushing, testing, commissioning and completion of MDR documentation



**Figure 14 Wastewater Reticulation**



## 5.4 EFFLUENT DISPOSAL / SPRAY FIELD

Effluent, the treated waste water produced by the camp, will be disposed of over a spray field. This is distributed by an irrigation system, where it can be absorbed into the soil and provide nutrients to the vegetation. The spray field will be appropriately sized for the camp effluent disposal and an appropriate distance from the camp. It will be fenced and comply with all relevant regulatory requirements.

See APPENDIX B – EXAMPLE Spray Field for the location of the spray field respective to the camp.

## 5.5 GREASE TRAP

The wastewater from the kitchen will drain through an appropriately sized grease trap before being pumped to the balance tanks via a transfer station.



*Figure 15 Grease Trap*

## 6 COMMUNICATIONS

### 6.1 GENERAL

The camp communications will be as follows:

- Communications room,
- Television entertainment system with Free to Air;
- Wi-Fi internet system
- Cabling reticulation system for both entertainment and data systems

#### 6.1.1 *Communications Room*

The camp will have communications room inclusive of;

- i. Lockable room
- ii. Communication racks
- iii. Adequate air conditioners to support the equipment heat
- iv. Suitable cable ladder/ management solution
- v. Electrical testing of all installed equipment

#### 6.1.2 *TV Entertainment System*

The TV entertainment system and equipment will enable Western Australian Free-to-Air (WAST) television channels.

The head end system will be installed in the communications room. All equipment is to be rack mountable or installed on a rack mounted shelving.

The entertainment system will be made available to all accommodation units and the following central facilities;

- i. Tavern and Beer garden
- ii. Kitchen and Dining facilities
- iii. Gym
- iv. Recreation Rooms.

#### 6.1.3 *WIFI*

Either a client or contractor supplied service will be used on site to ensure reliable WIFI coverage to be provided to the following site locations at minimum;

- i. Kitchen and Dining facilities
- ii. Gym
- iii. Tavern and Beer Garden
- iv. Recreation Room
- v. Village Management office
- vi. Accommodation rooms
- vii. PWTP
- viii. WWTP
- ix. Generators

#### 6.1.4 Cable Reticulation

The cable reticulation system will support the TV and WIFI entertainment systems.

All cabling works will be compliant with AS/CA S009:2020. All test results and TCA forms will be recorded in electronic format.

## 7 STORM WATER MANAGEMENT

The site will have a grade of at least 1% to allow for sufficient drainage and will look to follow the natural contours of the land where possible. Erosion, pooling and puddles will be mitigated within the camp using the following methods

- Rock pitching
- Swale or v Drains
- Under footpath mini culverts / drainage pipes



*Figure 16 Rock Drainage*



## 8 FIREWATER SYSTEM AND FIRE SAFETY

### 8.1 FIRE SAFETY

The camp will have all the required fire safety equipment installed, commissioned, test and tagged as necessary to comply with all NCC and AS.

- i. The following protection devices must be installed throughout Jinbi Camp;
  - a. Smoke detectors;
  - b. Fire blankets;
  - c. Extinguishers;
  - d. Fire reels; - shay gap on a trailer mounted unit
  - e. Any other protective or firefighter equipment not listed here by required for NCC compliance.
- ii. Operating and maintenance instructions and the execution of all maintenance as required.



*Figure 17 Fire Extinguisher*

### 8.2 FIREWATER SYSTEM

There will be 10kL of firefighting water allowed for each habitable building for the camp. The tanks and fittings will all be made non combustible materials. All firewater tanks will be interconnected with non-combustible piping therefore they effectively operate as one tank. i.e. Drawing water from one tank will draw from them all (same theory if any tank is filled)

Two x firewater pumps will be installed i.e. a standby and duty to have 100% redundancy

## 9 FENCING AND DELINEATION

The camp is constructed within approved clearing & lease boundaries. There are nearby culturally sensitive heritage areas.

All boundaries will be appropriately fenced to ensure the required level of protection and delineation is applied.

## **10 HEALTH AND SAFETY MEASURES**

### **10.1 MEASURES**

#### **10.1.1 Compliance**

All services will adhere to local health and safety regulations. A testing matrix will be constructed to ensure all regular testing will be observed.

#### **10.1.2 Training**

Personnel will receive training on safety protocols and emergency procedures as outlined in **Error! Reference source not found..**

#### **10.1.3 Monitoring**

Continuous monitoring systems will be established for power, water, waste management, and communications.

## **11 ENVIRONMENTAL CONSIDERATIONS**

### **11.1 IMPACT ASSESSMENT**

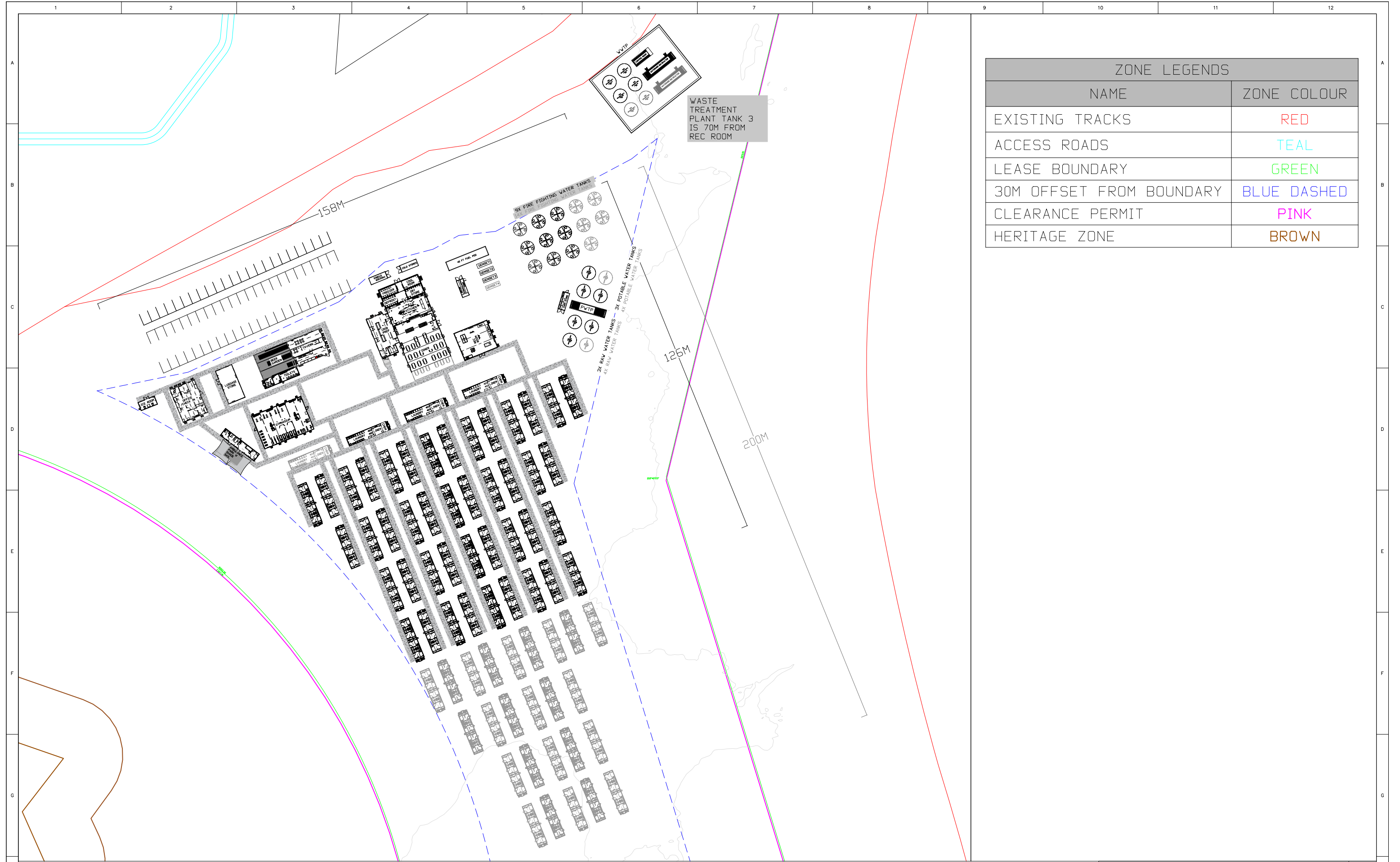
An environmental impact assessment will be conducted to identify and mitigate potential issues related to the camp's operation.

### **11.2 SUSTIANABILITY PRACTICES**

Efforts will be made to minimise waste generation and energy consumption by the camp.



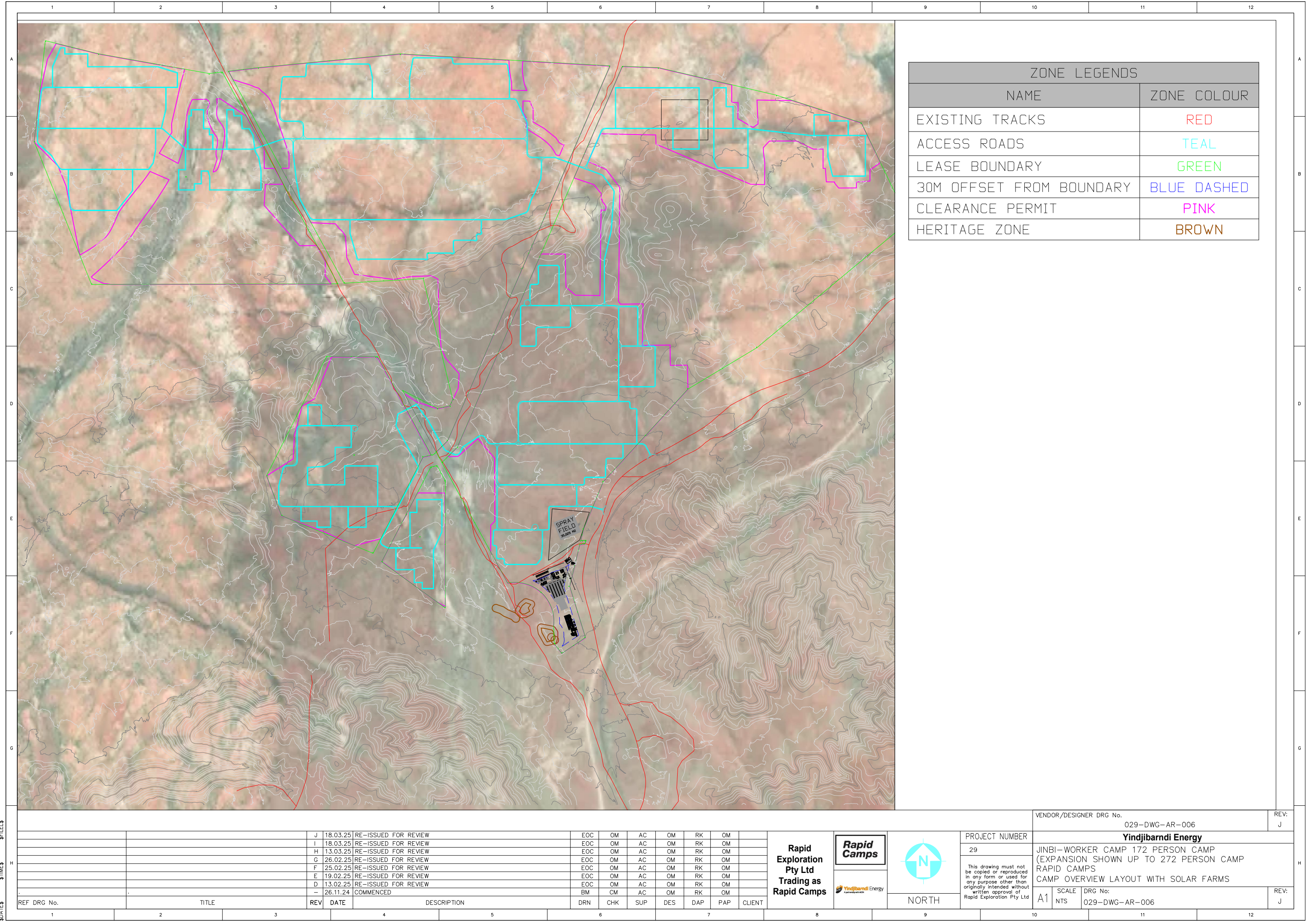
## **APPENDIX A – JINBI WORKERS CAMP LAYOUTS**





ZONE LEGENDS	
NAME	ZONE COLOUR
EXISTING TRACKS	RED
ACCESS ROADS	TEAL
LEASE BOUNDARY	GREEN
30M OFFSET FROM BOUNDARY	BLUE DASHED
CLEARANCE PERMIT	PINK
HERITAGE ZONE	BROWN

															VENDOR/DESIGNER DRG No.		029-DWG-AR-001		REV: J									
															<div><div><div>Rapid Exploration Pty Ltd Trading as Rapid Camps</div><div><div><div>Rapid Camps</div></div><div><div><div>Yindibarndi Energy</div><div>Exploration Pty Ltd</div></div></div></div></div></div>		<div><div><div><div></div><div>N</div><div></div></div></div></div>		PROJECT NUMBER		Yindibarndi Energy JINBI-WORKER CAMP 172 PERSON CAMP (EXPANSION SHOWN UP TO 272 PERSON CAMP RAPID CAMPS CAMP OVERVIEW LAYOUT						REV: J	
29																												
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REF DRG No.		TITLE			REV	DATE	DESCRIPTION				DRN	CHK	SUP	DES	DAP	PAP	CLIENT	NORTH		A1		SCALE NTS	DRG No: 029-DWG-AR-001		REV: J			
1		2			3		4		5			6		7			8		9		10		11			12		





ZONE LEGENDS	
NAME	ZONE COLOUR
EXISTING TRACKS	RED
ACCESS ROADS	TEAL
LEASE BOUNDARY	GREEN
30M OFFSET FROM BOUNDARY	BLUE DASHED
CLEARANCE PERMIT	PINK
HERITAGE ZONE	BROWN

H												Rapid Exploration Pty Ltd Trading as Rapid Camps			VENDOR/DESIGNER DRG No. 029-DWG-AR-006		REV: J	
															Yindjibarndi Energy			
															JINBI-WORKER CAMP 172 PERSON CAMP (EXPANSION SHOWN UP TO 272 PERSON CAMP RAPID CAMPS CAMP OVERVIEW LAYOUT WITH SOLAR FARMS			
															This drawing must not be copied or reproduced in any form or used for any purpose other than originally intended without written approval of Rapid Exploration Pty Ltd			
															A1 SCALE DRG No: NTS 029-DWG-AR-006			REV: J



## **APPENDIX B – EXAMPLE SPRAY FIELD**





## Appendix H: Acoustic Report



# Freight Train Noise Assessment

**Jinbi Worker Camp – Yindjibarndi Energy**

**Reference: 250410151-01**

Prepared for:  
RFF Australia

## Reference: 250410151-01

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This report has been prepared in accordance with the scope of services described in the contract or agreement between Lloyd George Acoustics Pty Ltd and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client, and Lloyd George Acoustics Pty Ltd accepts no responsibility for its use by other parties.

Date	Rev	Description	Author	Verified
29-Apr-25	0	Issued to Client	Terry George	Matt Nolan

## CONTENTS

1. INTRODUCTION.....	1
2. CRITERIA.....	2
3. METHODOLOGY .....	3
3.1. Noise Level Data .....	3
3.2. Noise Modelling.....	4
3.2.1. Ground Topography.....	4
3.2.2. Ground Absorption .....	4
4. RESULTS .....	4
5. ASSESSMENT .....	6

## List of Tables

Table 2-1: Noise Targets for Noise Sensitive Land-Use .....	2
Table 5-1: Minimum Construction Requirements .....	6



## List of Figures

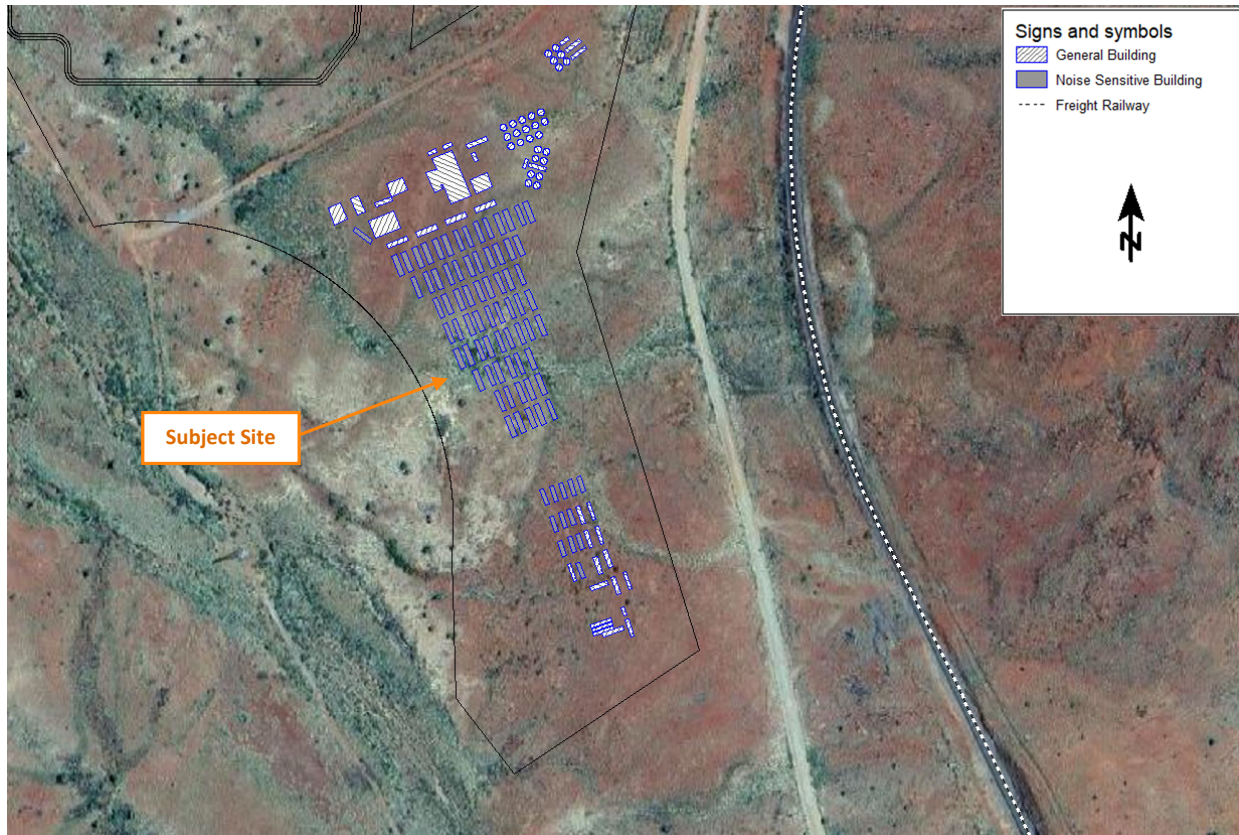
Figure 1-1: Subdivision Location (Source: DPLH PlanWA) .....	1
Figure 3-1: Noise Level Data from SPP 5.4 Guidelines .....	3
Figure 4-1: $L_{Aeq(Night)}$ Noise Contour Plot – Ground Floor Level .....	5
Figure 5-1: Module Numbering North.....	7
Figure 5-2: Module Numbering South.....	8

## Appendices

Appendix A – Terminology .....	9
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## 1. INTRODUCTION

It is proposed to subdivide land for Jinbi Worker Camp – Yindjibarndi Energy with the proposed locality shown in *Figure 1-1*. Some of the accommodation modules are within 200 metres of a freight railway, such that a noise assessment is required in accordance with *State Planning Policy No. 5.4 Road and Rail Noise*, being the subject of this report.



**Figure 1-1: Subdivision Location (Source: DPLH PlanWA)**

*Appendix A* contains a description of some of the terminology used throughout this report.

## 2. CRITERIA

The criteria relevant to this project is provided in *State Planning Policy No. 5.4 Road and Rail Noise* (hereafter referred to as SPP 5.4) produced by the Western Australian Planning Commission (WAPC). SPP 5.4 is supported by the *Road and Rail Noise Guidelines* (the Guidelines) and the Department of Planning, Lands and Heritage mapping. The objectives of SPP 5.4 are to:

- Protect the community from unreasonable levels of transport noise;
- Protect strategic and other significant freight transport corridors from incompatible urban encroachment;
- Ensure transport infrastructure and land-use can mutually exist within urban corridors;
- Ensure that noise impacts are addressed as early as possible in the planning process; and
- Encourage best practice noise mitigation design and construction standards.

Table 2-1 sets out noise targets that are to be achieved by proposals under which SPP 5.4 applies. Where the targets are exceeded, an assessment is required to determine the likely level of transport noise and management/mitigation required.

**Table 2-1: Noise Targets for Noise Sensitive Land-Use**

Scenario	Outdoor Noise Target		Indoor Noise Target	
	55 dB L <sub>Aeq</sub> (Day)	50 dB L <sub>Aeq</sub> (Night)	40 dB L <sub>Aeq</sub> (Day) (Living and Work Areas)	35 dB L <sub>Aeq</sub> (Night) (Bedrooms)
Noise-sensitive land-use and/or development				

Notes:

- Day period is from 6am to 10pm and night period from 10pm to 6am.
- The outdoor noise target is to be measured at 1-metre from the most exposed, habitable<sup>1</sup> facade of a noise sensitive building.
- For all noise-sensitive land-use and/or development, indoor noise targets for other room usages may be reasonably drawn from Table 1 of Australian Standard/New Zealand Standard AS/NZS 2107:2016 *Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors* (as amended) for each relevant time period.
- Outdoor targets are to be met at all outdoor areas as far as is reasonable and practicable to do so using the various noise mitigation measures outlined in the Guidelines.

The application of SPP 5.4 is to consider anticipated traffic volumes for the next 20 years from when the noise assessment has been undertaken.

<sup>1</sup> A habitable room is defined in *State Planning Policy 3.1* as a room used for normal domestic activities that includes a bedroom, living room, lounge room, music room, sitting room, television room, kitchen, dining room, sewing room, study, playroom, sunroom, gymnasium, fully enclosed swimming pool or patio.



### 3. METHODOLOGY

Noise modelling have been undertaken in accordance with the requirements of SPP 5.4 and associated Guidelines, as described in *Section 3.1* and *Section 3.2*.

#### 3.1. Noise Level Data

Given the remoteness of the site, rather than undertake noise measurements, a desktop study has been undertaken by using the noise data presented in the SPP 5.4 Guidelines as shown in *Figure 3-1*.

Railway Transport Corridor Classification		Forecast period average noise level and exposure category based on distance from nearest rail centreline (m)																
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	175	200
Passenger railways	Fremantle, Midland and Thornlie main lines only	68	64	62	60	59	58	56	56	55	54	53	52	52	51	51	49	48
	All other metro passenger rail lines, and where multiple metro rail services share the same transport corridor	70	66	64	62	61	60	58	57	56	56	55	54	54	53	52	51	50
Freight railways, up to 1 movement per hour		72	68	65	63*	62*	60*	59*	58*	57*	57*	56	55	55	54	53	52	51

**Figure 3-1: Noise Level Data from SPP 5.4 Guidelines**

The above noise levels form the basis of the assessment, whereby the model is calibrated for these values. The model is then modified to include the proposed buildings so that the attenuation provided by buildings can be taken into account.

The basis of the noise model was:

- Train Speed – 80 km/hr
- Train Length – 2000 metres
- Locomotive Source Height – 4.0 metres above rail;
- Wagon Source Height – 0.8 metres above rail;
- Number of Trains – 1 per hour. This aligns with the minimum required to be assumed in SPP 5.4.

## 3.2. Noise Modelling

The computer program *SoundPLAN 9.1* was utilised incorporating the Nordic Rail Prediction Method (Kilde Rep. 130) algorithms, calibrated against the *Figure 3-1* sound levels.

Predictions are made at heights of 1.4 metres above ground floor level. The noise is predicted at 1-metre from a building façade, resulting in a + 2.5 dB correction due to reflected noise.

Various input data are included in the modelling and these are discussed in *Section 3.2.1* to *Section 3.2.2*.

### 3.2.1. Ground Topography

Topographical data was imported from *Google* as spot heights and assumed to be unchanged in the future.

The plan of the development was provided and incorporated into the noise model with buildings assumed to be 3.0 metres above ground. These buildings can provide barrier attenuation when located between a source and a receiver, in much the same way as a hill or wall.

### 3.2.2. Ground Absorption

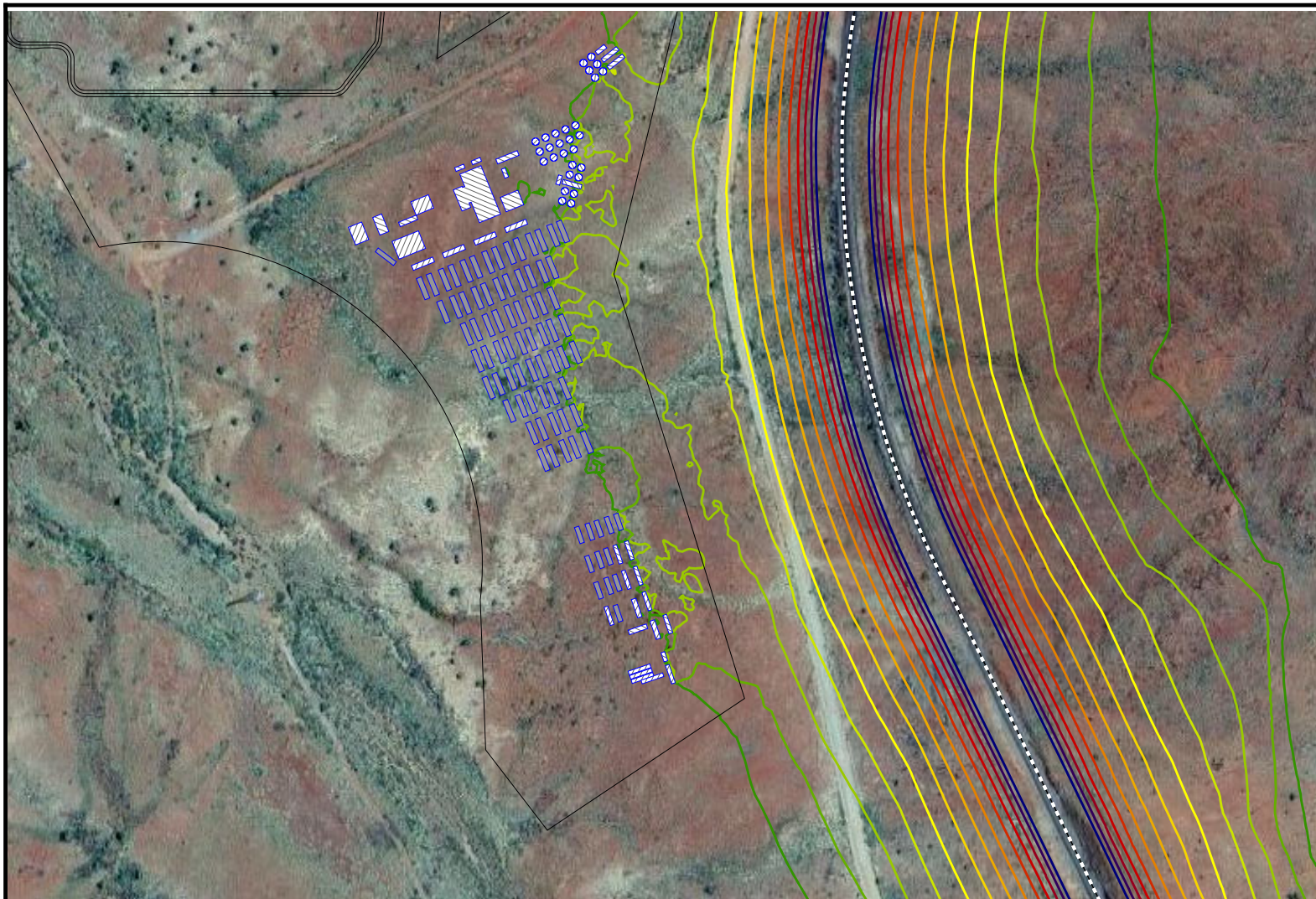
The ground absorption has been assumed to be 0.6 (60%) across the study area, noting that 0.0 represents hard reflective surfaces such as water and 1.0 represents absorptive surfaces such as grass.

## 4. RESULTS

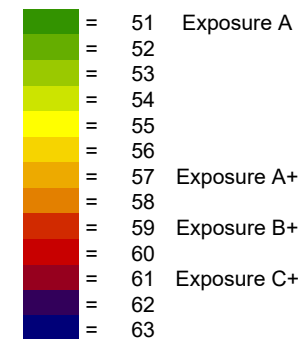
A noise model was initially set-up for flat open ground, to enable calibration against the SPP 5.4 Guidelines. Once the input data was determined to generally match the Guidelines, these same inputs were used for the existing railway. The results are presented as a noise contour plot in *Figure 4-1*.

Note that as it is assumed the number of train movements are even throughout the day, the  $L_{Aeq(Day)}$  and  $L_{Aeq(Night)}$  will be the same and as such, the  $L_{Aeq(Night)}$  will be the critical parameter.

# Figure 4-1



Noise levels  
L<sub>Aeq</sub>(Night) dB



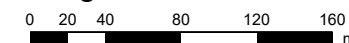
SPP 5.4 (Sep 2019)

## Signs and symbols

- General Building
- Noise Sensitive Building
- Freight Railway



Length Scale 1:4000



## Freight Train Noise Assessment Jinbi Worker Camp - Yindjibarni Energy

L<sub>Aeq</sub>(Night) Noise Level Contours Based on SPP 5.4 Screening Tables  
Ground Floor Level

SoundPLAN v9.1  
Kilde Algorithms  
Job No. 250410151

27 April 2025



**Lloyd George Acoustics**  
PO Box 717  
HILLARYS WA 6923  
(08) 9401 7770



## 5. ASSESSMENT

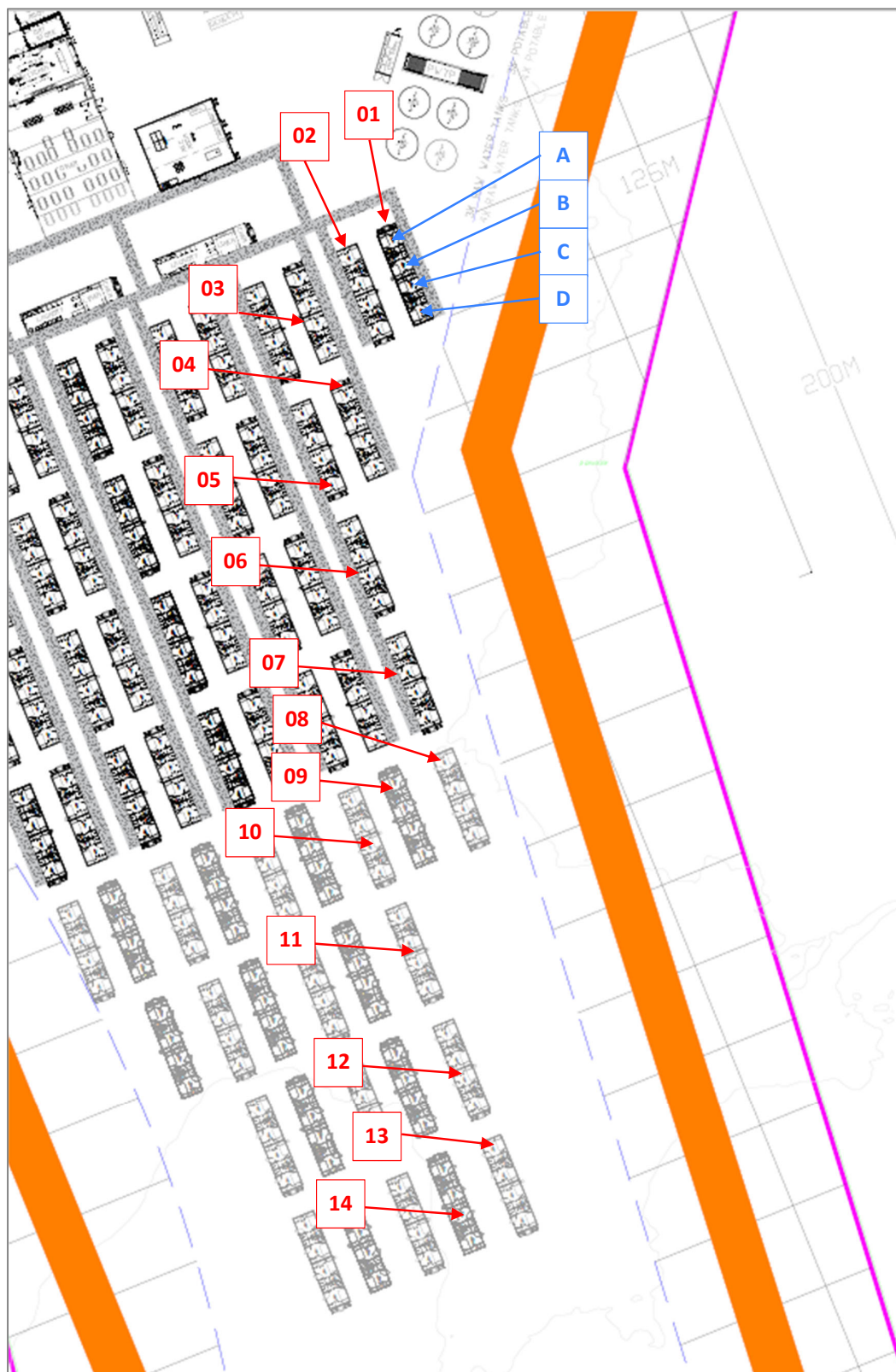
The objectives of SPP 5.4 are to achieve:

- Indoor noise levels specified in *Table 2-1* in noise-sensitive areas (e.g. bedrooms and living rooms of houses); and
- A reasonable degree of acoustic amenity for outdoor living areas.

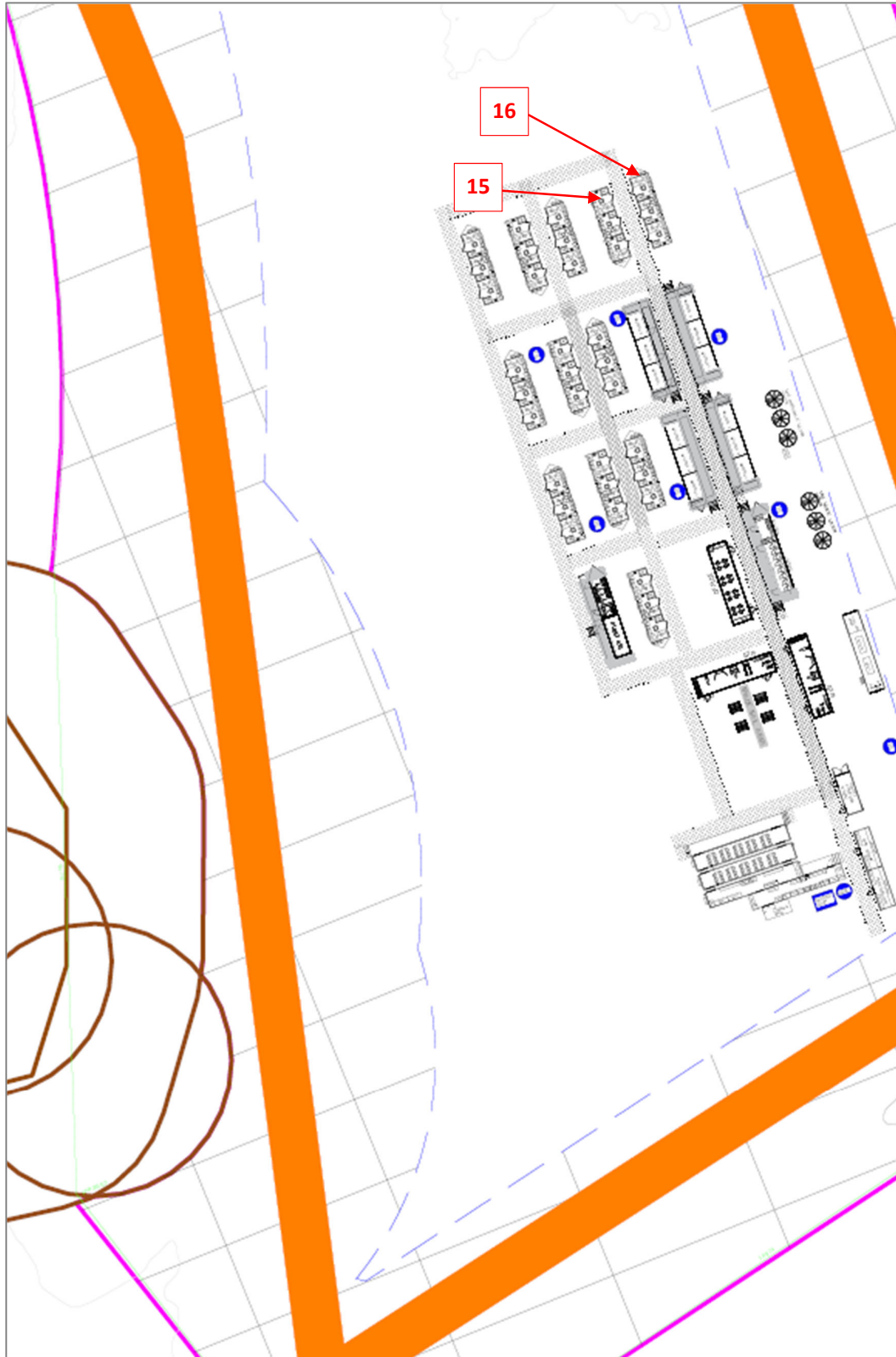
Where the outdoor noise targets of *Table 2-1* are achieved, no further noise controls are necessary. With reference to *Section 4*, it is evident the outdoor noise target will be exceeded at some of the eastern most accommodation modules. As such, *Table 5-1* provides the minimum required construction with *Figure 5-1* and *Figure 5-2* providing the module numbering with rooms within each module labelled A to D, irrespective of which way it is facing.

**Table 5-1: Minimum Construction Requirements**

Element	Module-Room	Minimum Construction
External Glazing	1A, 1B, 1C, 1D, 3D, 4A, 4B, 4C, 4D, 9D, 15D	Window approximately 27% of floor area and assessed as side on to corridor, thereby requiring $R_w + C_{tr} \geq 26$ , likely achievable using 6mm thick glass in fixed/awning style frame with acoustic seals.
	All Other Habitable Rooms	Note - As good practice for close proximity living, it is recommended all glazing be minimum $R_w + C_{tr} \geq 26$ , likely achievable using 6mm thick glass in fixed/awning style frame with acoustic seals.
External Doors	1A, 1B, 1C, 1D, 3D, 4A, 4B, 4C, 4D, 9D, 15D	Door to be minimum 35mm thick solid, timber core door with full perimeter acoustic seals. Any small glass inserts to be minimum 5mm thick. Alternative door to be $R_w + C_{tr} \geq 25$ .
	All Other Entry Doors	Note - As good practice for close proximity living, it is recommended all entry doors be as specified above.
External Walls	1D, 4D, 8D	Install 2x 13mm thick sound-rated plasterboard direct to inside of south and east 100mm thick sandwich panels.
	1A, 1B, 1C, 2D, 3D, 4A, 4B, 4C, 5D, 6A, 6B, 6C, 6D, 7A, 7B, 7C, 7D, 8A, 8B, 8C, 9D, 10D, 11A, 11B, 11C, 11D, 12A, 12B, 12C, 12D, 13A, 13B, 13C, 13D, 15D, 16A, 16B, 16C	Install 1x 13mm thick sound-rated plasterboard direct to inside of north, south and east (where applicable) external 100mm thick sandwich panels.
Roof / Ceiling	1A, 1B, 1C, 1D, 2D, 3D, 4A, 4B, 4C, 4D, 5D, 6A, 6B, 6C, 6D, 7A, 7B, 7C, 7D, 8A, 8B, 8C, 8D, 9D, 10D, 11A, 11B, 11C, 11D, 12A, 12B, 12C, 12D, 13A, 13B, 13C, 13D, 15D, 16A, 16B, 16C	Metal roof with minimum 90mm thick, 11 kg/m <sup>3</sup> R2 fibrous insulation and ceiling to be 13mm thick sound-rated plasterboard.



**Figure 5-1: Module Numbering North**



**Figure 5-2: Module Numbering South**



## Appendix A – Terminology

The following is an explanation of the terminology used throughout this report:

- **Decibel (dB)**

The decibel is the unit that describes the sound pressure levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

- **A-Weighting**

An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as  $L_A$ , dB.

- **$L_{eq}$**

The  $L_{eq}$  level represents the average noise energy during a measurement period.

- **$L_{Aeq(Day)}$**

The  $L_{Aeq(Day)}$  level is the logarithmic average of the  $L_{Aeq}$  levels from 6.00am to 10.00pm.

- **$L_{Aeq(Night)}$**

The  $L_{Aeq(Night)}$  level is the logarithmic average of the  $L_{Aeq}$  levels from 10.00pm to 6.00am.

- **Noise-sensitive land use and/or development**

Land-uses or development occupied or designed for occupation or use for residential purposes (including dwellings, residential buildings or short-stay accommodation), caravan park, camping ground, educational establishment, child care premises, hospital, nursing home, corrective institution or place of worship.

- **$R_w$**

This is the weighted sound reduction index. It is a single number rating determined by moving a grading curve in integral steps against the laboratory measured transmission loss until the sum of the deficiencies at each one-third-octave band, between 100 Hz and 3.15 kHz, does not exceed 32 dB. The higher the  $R_w$  value, the better the acoustic performance.

- **$C_{tr}$**

This is a spectrum adaptation term for airborne noise and provides a correction to the  $R_w$  value to suit source sounds with significant low frequency content such as road traffic or home theatre systems. A wall that provides a relatively high level of low frequency attenuation (i.e. masonry) may have a value in the order of – 4 dB, whilst a wall with relatively poor attenuation at low frequencies (i.e. stud wall) may have a value in the order of -12 dB.

- **About the Term 'Reasonable'**

An assessment of reasonableness should demonstrate that efforts have been made to resolve conflicts without comprising on the need to protect noise-sensitive land-use activities. For example, have reasonable efforts been made to design, relocate or vegetate a proposed noise barrier to address community concerns about the noise barrier height? Whether a noise mitigation measure is reasonable might include consideration of:

- The noise reduction benefit provided;
- The number of people protected;
- The relative cost vs benefit of mitigation;
- Road conditions (speed and road surface) significantly differ from noise forecast table assumptions;
- Existing and future noise levels, including changes in noise levels;
- Aesthetic amenity and visual impacts;
- Compatibility with other planning policies;
- Differences between metropolitan and regional situations and whether noise modelling requirements reflect the true nature of transport movements;
- Ability and cost for mobilisation and retrieval of noise monitoring equipment in regional areas;
- Differences between Greenfield and infill development;
- Differences between freight routes and public transport routes and urban corridors;
- The impact on the operational capacity of freight routes;
- The benefits arising from the proposed development;
- Existing or planned strategies to mitigate the noise at source.

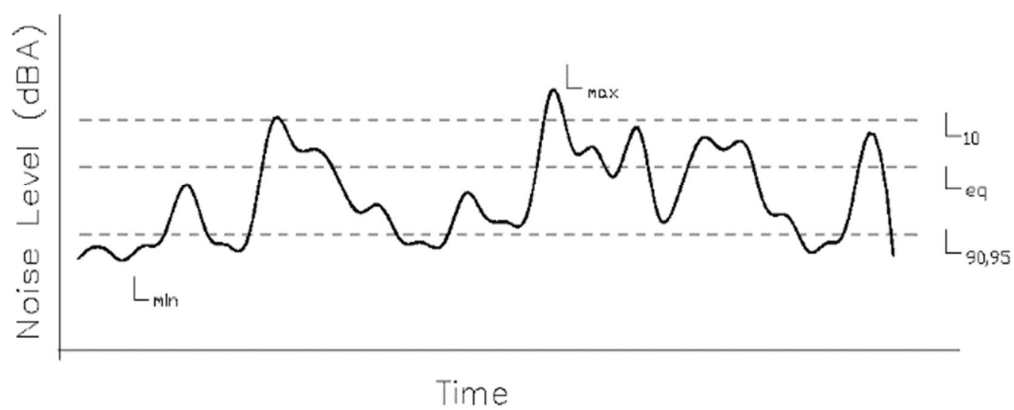
- **About the Term 'Practicable'**

'Practicable' considerations for the purposes of the policy normally relate to the engineering aspects of the noise mitigation measures under evaluation. It is defined as "reasonably practicable having regard to, among other things, local conditions and circumstances (including costs) and to the current state of technical knowledge" (*Environmental Protection Act 1986*). These may include:

- Limitations of the different mitigation measures to reduce transport noise;
- Competing planning policies and strategies;
- Safety issues (such as impact on crash zones or restrictions on road vision);
- Topography and site constraints (such as space limitations);
- Engineering and drainage requirements;
- Access requirements (for driveways, pedestrian access and the like);
- Maintenance requirements;
- Bushfire resistance or BAL ratings;
- Suitability of the building for acoustic treatments.



- **Chart of Noise Level Descriptors**



- **Typical Noise Levels**

