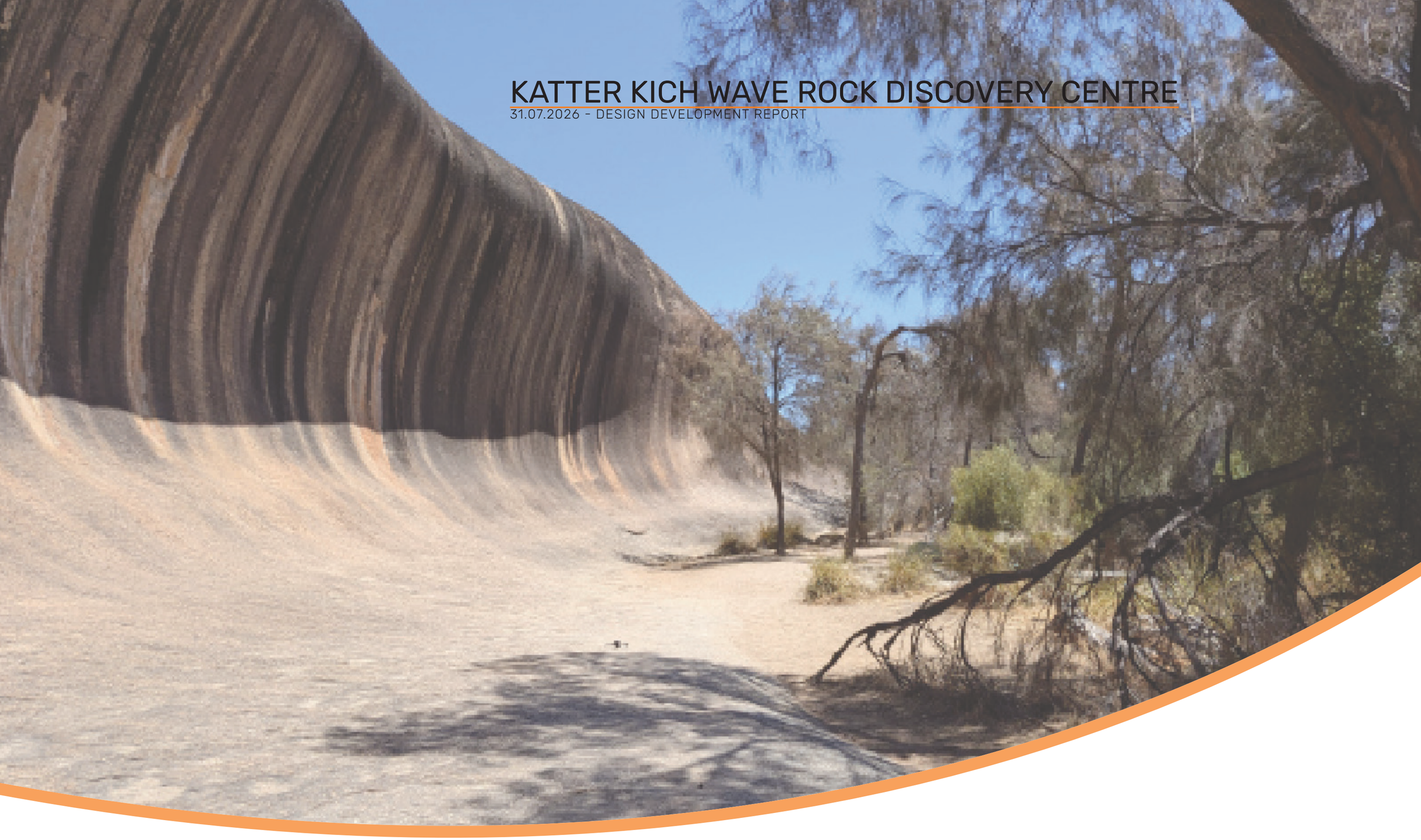
KATTER KICH WAVE ROCK DISCOVERY CENTRE

31.07.2026 - DESIGN DEVELOPMENT REPORT



HYDEN PROGRESS ASSOCIATION

AMASS site



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Revision Status

Rev.	Description of Revision	Date	Issued
A	PRELIMINARY ISSUE	31.07.26	MTH
B	MINOR UPDATES	07.08.26	MTH

1.0 INTRODUCTION



1.1 EXECUTIVE SUMMARY

This report has been prepared by SITE Architecture Studio (SITE) at the conclusion of the Design Development Phase (DD) and summarises the outcomes of this phase.

This document outlines the current status of the site & masterplanning investigations, structural, services and landscape design and building concept design at the completion of the Design Development phase, which has been informed through ongoing discussions with Hyden Progress Association (HPA) and the relevant consultants in their relevant fields.

The project has now progressed to the lodgement of a Development Application (DA), which is currently under assessment by the Shire of Kondinin. Additionally, the Shire of Kondinin has been closely involved in the development of the design and has been generally supportive of the outcome. The project is now completed with a level of detail that can be Issued for a D & C Tender once approved.

OBJECTIVE

This report aims to provide a summary of the key outcomes of the design development and investigation ;

- Scope Definition to meet the needs of the project
- Architectural and Structural design development
- Site Planning including Landscape and Civil design
- Services
- Geotechnical
- Cost estimate
- Program

KEY OUTCOMES

Th the following key outcomes have been developed through the completion of the Design Development Phase:

- Development of a facility that provides for both the local community, businesses & visitors.
- Incorporation of a new Discovery Centre for the local tourist attractions including Wave Rock, Hyden Community Resource Centre, Katter Kich Gallery and shared multipurpose spaces.
- Creation of a high quality architectural outcome that provides a facility for the local community to be proud of while also attracting visitors to the area.
- A design that is both durable and low maintenance.
- Improve pedestrian links to the surrounding community areas.
- Landscaping to support the activities of the facility.
- A design response that reflects and complements the built character, natural landscape and cultural significance of Hyden its surrounds.
- Advancement of the design to support the Development Application process and provide a foundation for future grant funding applications and a Design and Construct (D&C) tender.

2.0 THE BRIEF

2.1 BACKGROUND

The Wave Rock (Katter Kich) Discovery Centre was initially conceived as a project in 2021 by the Hyden Progress Association with support from the Shire of Kondinin.

The initial concept and scheme for the project was developed for the Shire of Kondinin by a separate design team, however due to various factors, the project did not proceed with the original scheme.

SITE Architecture Studio was appointed by the Hyden Progress Association as Lead Consultant in January 2026 to develop Design & Construct level documentation of a new design scheme with adjusted scope and briefing requirements to meet the communities needs and requirements.

The initially briefed key outcome for the project was defined as:

The Wave Rock (Katter Kich) Discovery Centre is to be a civic and cultural hub that will transform Hyden's town centre. With 100,000+ visitors annually, this project is designed to strengthen inclusion, expand Aboriginal cultural enterprise, and resolve critical social infrastructure gaps.

This statement has been developed through consultation undertaken during the concept and design development phases and forms the basis of the design outcomes presented within this report.

BRIEFING INFORMATION

The following information & documents have been supplied by the client to provide a basis for the development of the project.

- Wave Rock (Katter Kich) Discovery Centre Lotterywest Briefing
- Geotechnical Report prepared by Perth Geotechnics dated December 2025
- Contour & Feature Survey prepared by Monaghan Mapping & Surveying dated 08th May 2021
- Functional Areas Schedule

2.2 CONSULTATION

The development of this report has been supported by a rigorous engagement with the key stakeholders and by investigations by the wider design team.

STAKEHOLDERS

This primary Stakeholder for the project is the Hyden Progress Association (HPA) as the client for the delivery of the services. Other key Stakeholders include the Shire of Kondinin and the Hyden Community Resource Centre as key users & contributors to the new building.

Refer below list of key Stakeholders for the project to date:

- Hyden Progress Association (HPA)
- Shire of Kondinin (SoK)
- Hyden Community Resource Centre
- Katter Kich Gallery & Tours (Michael Ward)

DESIGN TEAM

Refer below the design team that has been appointed to date to provide input into this report.

Architect (Lead)	SITE Architecture Studio
Architect (Support)	Amass
Structural	ADG
Civil	ADG
Electrical	Focus WA
Mechanical	SMW&C
Hydraulic	CHD
Quantity Surveyor	HWA
Building Certifier	ComplyWest
Landscape	Moro Studio
Sustainability	Emergen
Exhibition	Creative Spaces
ECI Contractor	Devlyn Construction

Additional consultants may be required for future stages of the project. (TBC)

PROCESS

The primary consultation for the project to date has occurred through discussions between HPA as the client and key stakeholder, and SITE as the lead consultant.

In addition, stakeholder design workshops were undertaken during the Concept Design phase to inform the development of the project vision, priorities and design direction. The minutes and key outcomes of these workshops are included within the Appendices of this report.

Consultation with the broader community has been facilitated by HPA and key project stakeholders, with feedback, priorities and community perspectives regularly communicated to SITE and incorporated into the design review process where appropriate.

The consultation process has been ongoing throughout both the Concept Design and Design Development phases, with regular engagement between HPA, stakeholders, consultants and the project team to review design outcomes, respond to project requirements and refine the proposal. This collaborative approach has ensured that stakeholder and community feedback continues to inform the evolution of the project and will remain an important part of future project phases.

2.3 BRIEF & CONSULTATION OUTCOMES

As part of the initial Concept Design and then further developed in the Design Development phase, the design team has undertaken a thorough review of the project requirements and developed the initial brief based on consultation with key stakeholder groups, community feedback provided by HPA, consultant input and SITE's own investigations and understanding.

The broad outcomes of the briefing and consultation undertaken to date are represented in this report and associated documents. The following provides a summary of the key outcomes which have informed the brief and the design development to date:

Project Vision

The proposed Wave Rock (Katter Kich) Discovery Centre offers a major opportunity to strengthen community wellbeing by creating a culturally grounded, inclusive place that honours Noongar stories, supports local identity, and deepens social connection. The Centre will serve as a welcoming gathering place for residents, visitors, and Aboriginal community members.

Functionality

The new facility will include 3 primary functions with combined amenities.

- **Discovery Centre** inclusive of interpretative exhibition spaces and a proposed indigenous art gallery & workshop space (to replace the existing facility on site that is proposed to be removed for the new development).
- **Community Facilities** inclusive of use for the CRC and shire office/ administration.
- **Shared Facilities** inclusive of a 50 person theatre, multipurpose function room & kitchenette & a leas-able cafeteria space.

The above functions will be served by a central foyer/ reception area allowing for shared passive surveillance and administration of all 3 functions. Additionally there will be shared toilet, storage and plant facilities to service the above.

Landscape & Site Planning

The landscape design utilises native planting that celebrates the local flora, with retention of existing mature trees where practical. Key external spaces include:

- External interpretative landscape area
- Potential community amphitheater
- Central courtyard space with native planting and trees
- Forecourt planting and landscape that celebrates the local flora.

Parking

Due to site area limitations, the facility will include parking bays for staff (nominally three), universal access parking, and loading/service bays only. Visitor parking will be accommodated within surrounding public parking areas, including the existing parking located on the opposite side of Marshall Road. Tourist buses will also be able to utilise the existing slip road off Marshall Road.

Environmental Factors

The proposed site is susceptible to prevailing winds from the west and south, as well as significant exposure to summer heat.
The facility has been designed and orientated to provide protection and refuge from these environmental conditions, while maximising occupant comfort and the usability of external spaces.



2.4 SCHEDULE OF ACCOMMODATION

This document outlines the current status of the agreed Schedule of Accommodation (SoA) as a development of the initial brief. This includes discussions with the key stakeholders to develop the key requirements of the facility as a development of the initial brief to suit budget and site restrictions.

This SoA has been developed from the original brief with the following overarching changes to suit as follows

- Reduction in Multi-purpose room capacity to allow for 2 x school groups (50 people)
- Incorporation of shared and overlapping facilities to suit the 3 primary functions (including foyer)
- Reduction in Retail space allowances aligned to a cafe/ restaurant.
- Incorporation of flexible Shire use space within the Community Resource Centre (CRC)
- Consolidation of more functions into Multi Purpose Room including, teaching kitchen, community leasable function space, expansion to theater for larger events.

Additionally, assumptions relating to the SoA are listed below:

- General allowance for external covered verandah has been made which will need to be verified pending the development of the schematic design.
- A general allowance has been made for grossing factors including:
  - Circulation noting the crossover with incidental learning space on the mutli storey teaching block.
  - Services (including electrical cupboards, risers and mechanical plant). These areas will need to be verified in detailed design.
  - Structure in terms of wall thickness, columns and structural walls
- Kitchen:
  - A heat and serve style kitchen has been allowed for to service the Multi Purpose Function Room
  - A small commercial kitchen suitable for sit down cafe meals has been allowed for to service the retail space.
  - We have allowed for a separately leas-able area inclusive of separate metering.
- Bathroom Allowances:
  - 1 x Universal Access bathroom and;
  - 3 x toilet pans for females and;
  - 2 x toilet pans and 1 x urinal for males to service staff and visitor requirements aligned to minimum NCC requirements.

FACILITY	ROOM AREAS		CAPACITY	FUNCTIONS	SERVICE REQUIREMENTS	FFE	NOTES
	ORIGINAL	CURRENT					
Multipurpose Areas							
Multi Purpose Room 1	50m²	58m²	30 people seated	Training, Boardroom, Functions	AV/ AC	Chairs & Tables	
Multi Purpose Room 2	50m²	50m²	30 people seated	Training, Boardroom, Functions	AV/ AC	Chairs & Tables	
Chair/ Table Store	12m²	12m²					
Function Heat & Service Kitchen	0m²	20m²			AC		
Sub Total	**112m²**	**140m²**					
Exhibition, Interpretation & Visitor Experience							
Discovery Centre/ Museum	200m²	178m²	TBC		AC		Double Height Volume
Gift Shop	36m²	53m²			AC		
Gift Shop Store	9m²	0m²					
Retail Space (Café)	120m²	49m²	30 customers assumed internal		AC		Potential overlap with foyer area for internal seating
Retail Store	30m²	0m²					
Commerical Kitchen	0m²	16m²		Café/ Restaurant Kitchen	AC/ Exhaust		Classification TBC
Cool Room	0m²	0m²					
Sub Total	**395m²**	**296m²**					
Shire Administration & CRC							
Hot Desk Office Area	12m²	12m²	6 desks		AC		Shared space withing the CRC area
Video Conference Room	6m²	11m²	2 people		AC/ AV	Small Meeting Room	
Flexible Working Area	36m²	11m²			AC	3d Printer, General Printing	Includes the print area
Staff Kitchenette & Lockers	8m²	8m²			AC, Exhaust	Microwave, Coffee Machine, Small Fridge	
Centrelink Booth	4m²	4m²	1 seat		AC		Private - Publically Accessible
Library	42m²	111m²			AC/ AV		Modern Communal Area with hot desk and flexible working areas
CRC Manager Office	12m²	14m²	3 seats				CRC Manager, Finance Officer, Stay in Place Manager
Sub Total	**144m²**	**171m²**					
Arts Studio							
Studio/ Gallery	75m²	68m²			AC		Important for Grant Funding
Gallery Store	0m²	34m²					
Demonstration(Training Kitchen)	24m²	0m²					Incorporate into Flexible Multipurpose Room Kitchen
Sub Total	**75m²**	**102m²**					
Combined Amenities							
Entry Foyer	60m²	80m²			AC		Includes Reception
Reception	0m²	0m²			AC	Ticket Counter, Shire Reception, CRC	Combined Reception for whole of facility. Included in Reception Allowance
Secure Store	9m²	0m²					Space allocated within the manager's office
Wet Store	6m²	4m²			Exhaust		Cleaners Store etc
General Store	3m²	0m²					Proposed Store Cabinetry
Server Room	9m²	10m²			AC		
Universal Toilet	0m²	6m²			Exhaust		Required for NCC
Unisex staff toilet	0m²	2m²			Exhaust		
Male Toilets	20m²	10m²	2 x pans, 1 x urinal		Exhaust		Required for NCC
Female Toilets	20m²	12m²	3 x pans		Exhaust		Required for NCC
Sub Total	**127m²**	**124m²**					
Other							
Mechanical Plant	TBC	21m²					Located on Roof
AV Comms	TBC	10m²					
Electrical Services	TBC	9m²					Comms rack located in the Electrical Services Room
Sub Total		**40m²**					
Totals							
Useable Floor Area (UFA)	853m²	873m²					
Grossing Factors (Wall Thicknesses)	85m²	55m²					
Total Area (FECA)	**938m²**	**928m²**					

3.0 THE SITE & CONTEXT

3.1 SITE FEATURES

The proposed site for the new facility is located on the corner of Marshall St & McPherson St in the town of Hyden within Shire of Kondinin (SoK) in Western Australia.

The key features of the site include:

Location

The proposed site is central to the town of Hyden with a prominent frontage to the south west to Marshall St which is the major road access to Hyden connecting to Perth and Esperance.

The key spaces within the vicinity of the site include

- Hyden Sports Precinct immediately to the south west across McPherson St.
- Main Roads easement which is currently been used as a landscape park/ exhibition space for the local Lions Club to the south west corner.
- Local Shopping Centre to the lot immediately to the north east.
- Local bakery & retail centre to the north of the site.
- Public parkland to the north east of the site.
- Gravel parking & train line to the south across Marshall St.

Additional to the above, the site is 5km from the key tourist attractions of Wave Rock and Hippos Yawn.

Topography

The topography of the site is mostly flat with an average level of 297.45 AHD across the site. The level is slightly lower than the pedestrian path level on Marshall St & McPherson St.

Existing Use & Function

The site currently is used as an overflow gravel carpark for general community use. Additionally there is an existing building that is currently used for the Katter Kich Gallery & Tours. This building is of limited significance and is proposed to be demolished for the new project.

Planting & Vegetation

The site is currently gravelised generally with a series of mature trees through the centre of the site and to the south west.

3.2 SITE ACCESSIBILITY

The proposed site has strong links on all frontages, to adjacent community facilities with the primary access identified off Marshall St. (Brookton Hwy)

PARKING

Existing parking in the vicinity includes:

- Parking Associated with the shopping centre to the north (approx 20 bays).
- Street Parking on Marshall St slip Rd. (approx 20 bays).
- An extensive area of informal gravel parking across Marshal St to the south.
- Parking associated with the sporting precinct and shopping precinct accessed off McPherson St.

UNIVERSAL ACCESS

Universal access is central to the planning of the new facility and is achievable with the predominantly flat site. Both internal and external access will be provided to be in accordance with AS1428.1. A new pedestrian spine is also proposed from the central courtyard of the facility to provide shelter from weather and improve safety of pedestrian paths alongside roads and vehicles.



FIGURE 3.1.1 - AERIAL VIEW OF THE PROJECT SITE



FIGURE 3.1.2 - EXISTING SITE CONTEXT

3.3 ENVIRONMENTAL

BIODIVERSITY

The landscape consultant has created a landscape design that will plant multiple native trees and other native flora throughout the site.

GEOTECHNICAL

A geotechnical engineer was engaged in the design development phase and completed their onsite investigation and prepared a report on the existing soil conditions for the site.

BUSHFIRE

The proposed building site is not located within a Bushfire Prone Area, though numerous mature tree and landscaping exists to the east, west and north of the proposed buildings. The existing vegetation is not considered a fire risk, though should be considered from a maintenance perspective.

ESD INITIATIVES

Throughout Concept Design and Design Development phases, several ESD initiatives have been raised to provide sustainable environmental and design outcomes where possible within the project budget. These initiatives will be further developed and refined through subsequent project stages and include:

- Photovoltaic System and provision for future battery storage.
- Water collection from building and discharge into landscaping and stormwater swale.
- Automated louvres and preset air-conditioning.
- Minimum 4 star WELS rated hydraulic fixtures throughout.
- LED lighting and all-electric appliances.
- Passive solar design including natural light and effective ventilation & shading.

3.4 SITE SERVICES

Site services have been located based on a visual inspection and a site feature survey of the site.

ELECTRICAL

The electrical consultant has determined that there will be a Western Power Capacity Upgrade required to the existing unipillar to supply power to the proposed development. This will also require a new Site Main Switchboard.

Additionally, there is also proposed to be provision in the design for connection to a standby generator.

The site currently is no provided with any telecommunications connection and so a new Telstra/ NBN lead in service will be required.

WATER

An existing Water Corporation reticulated water main is currently located within the lane at the rear of the property. A new domestic water connection and meter sized to adequately provide water to the development shall be provided from this main.

GAS

There is no gas connection required to this building.

SEWER

An existing Water Corporation main reticulated gravity sewer is currently located within the lane at the rear of the property. There are 2No x existing 100 diameter sewer junction connections available for this development to connect to.

STORMWATER

The civil engineer has investigated stormwater servicing options for the site and identified that the only viable connection point within the existing Council drainage network is located in McPherson Street, subject to further design development and Council requirements.

Due to limitations in the existing drainage infrastructure and site constraints, portions of the site stormwater may continue to discharge via controlled sheet flow to the surrounding road network, consistent with existing site conditions.

To assist in the management of stormwater runoff, the design also incorporates rainwater collection and opportunities for on-site landscape-based stormwater management measures where practical. Further consultation with the Shire of Kondinin and relevant authorities will be required as the project progresses.



FIGURE 3.1.3- SITE CONTEXT DIAGRAM

4.0 AUTHORITY REQUIREMENTS

4.1 ZONING & APPROVALS

SITE OWNERSHIP

The project site is located at 36 Marshall Street, Hyden WA 6359, being Lot 800 on Deposited Plan 421688. The land is currently owned by the Hyden Progress Association Inc., as identified on the Certificate of Title. The site was created through a previous subdivision and amalgamation process and is intended to accommodate the proposed Wave Rock (Katter Kich) Discovery Centre development.

HERITAGE

There are no heritage requirements for this site.

PLANNING APPROVAL

A Development Application (DA) for the proposed development was submitted to the Shire of Kondinin on 24 June 2026 and is currently under assessment. The Shire of Kondinin has been closely involved as a key stakeholder in the development of the design and has been generally supportive of the proposal to date.

BUILDING PERMIT

The changes to the Building Act in 2011, require that this project be certified by a registered Building Certifier, and a Building License is granted.

Likewise, the project will require certification at completion before a Certificate of Occupancy can be granted. The project team includes a licensed Building Certifier who will undertake a certified review of the Building License documentation.

The application cannot be certified by the Building Surveyor until the contractor who will undertake the works has been appointed. This means that a Building License cannot be submitted to the building approvals authority until the tenders have closed and the successful tenderer appointed.

The project is expected to be certified under NCC2022.

BUILDING CLASSIFICATION & AMENITIES

Under the Building Code of Australia (BCA) the new building will be classified as Class 9, being a building of a public nature, specifically an assembly building or the like. The type of Construction is expected to be Type C Construction.

4.2 SERVICE AUTHORITIES

WESTERN POWER

An application to increase power capacity will need to be made to Western Power for this project.

WATER CORPORATION

There will be an application to the Water Corporation made via the contractor relating to water supply for the proposed works. There are not any foreseen issues relating to Water Corp for this project.

DEPARTMENT OF FIRE & EMERGENCY SERVICES (DFES)

The project design will need to be submitted to DFES for review and approval prior to application for Building Permit. At this stage each fire compartment is less than 500m2 to avoid requiring fire hydrant coverage.

The design will continue to progress in accordance with DFES requirements.



5.0 DESIGN

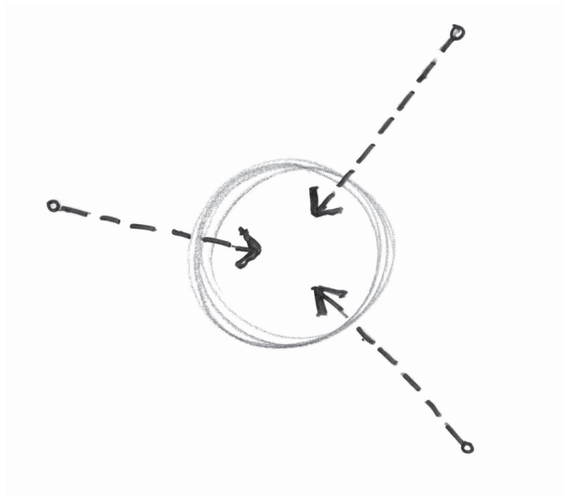
5.1 DESIGN APPROACH

The design team has completed a rigorous approach and undertaken detailed site analysis and engagement with the key stakeholders to develop a set of design principles forming the design approach for the project.

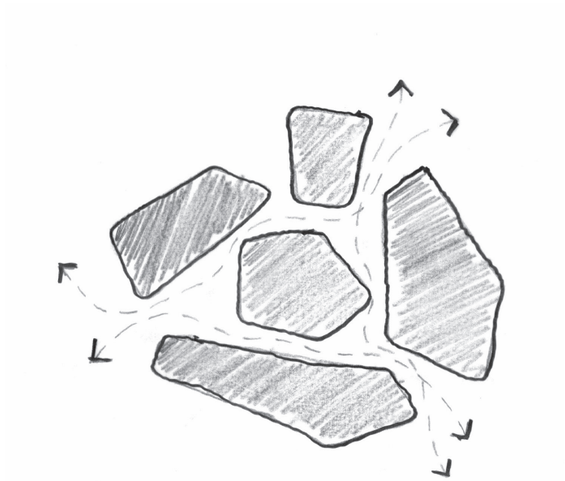
The key principles in the approach include:

- Recognition of the **Natural and Built** form in Hyden and the surrounding areas
- The **intersection** of ideas, culture and natural/ built form. Building on the idea as the development as a meeting point.
- **Sheltered** landscape and built form to provide protection from the heat, wind and noise of the surrounding roads
- Creating an **experience** for visitors through the idea of welcome, intrigue, compression and then expansion.
- Connection and retention of l**andscape.** Porosity of the site to welcome visitors and users to travel through and experience all the functions of the buildings
- Overlapping functionality for the community and visitors

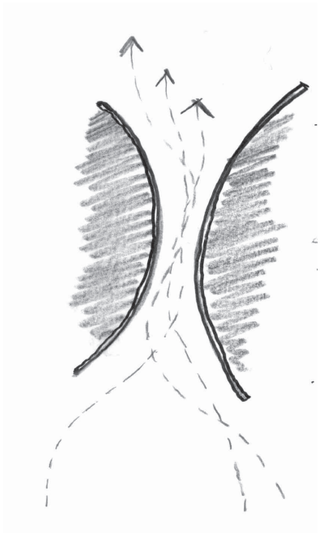
Refer the following pages for detail on the development of the site planning, building planning and architectural design that are developed based on the above principles.



INTERSECTION | MEETING POINT



POROSITY | GEOMETRY



LANDSCAPE | WELCOME | COMPRESSION | PROTECTION

FIGURE 5.1.1 - CONCEPT DIAGRAMS

5.2 SITE PLANNING

The proposed scheme proposes a building in 3 masses. Each of the masses provides for different functionality including:

- Discovery Centre & Gallery
- Community
- Overlapping Functionality

These 3 masses are arranged a central landscaped courtyard which proposes to retain the existing central trees to the site.

The 3 mass's intentionally provide a border to the boundary of the site to provide shelter to the internal central courtyard.

ACCESS & CIRCULATION

The site is proposed to have 3 key entry points as below:

- Main Entry for visitors to the south east corner accessed off Marshal St
- Community access through the north west corner from McPherson St.
- Connection to the adjacent play area and parkland to the North East.

It is proposed to use existing parking along Marshall St to provide the majority of visitors to the facility including RVs, tourist buses and general vehicles. A small number of bays is proposed for staff access only with a universal bay and loading accessed of a one way right of way to the north of the site.

LANDSCAPE

A landscape design by Moro Studio has been developed for the precinct, which ties back to the design principles for the project.

Key is the development of a landscape that promotes the local natural character including:

- Connection to Country
- Discovery learning landscape linked to the built Discovery Centre
- Retention of existing trees.
- Creation of Landscape Shelter
- Celebrating the Great Western Woodlands.
- Playful/ Interactive landscape elements



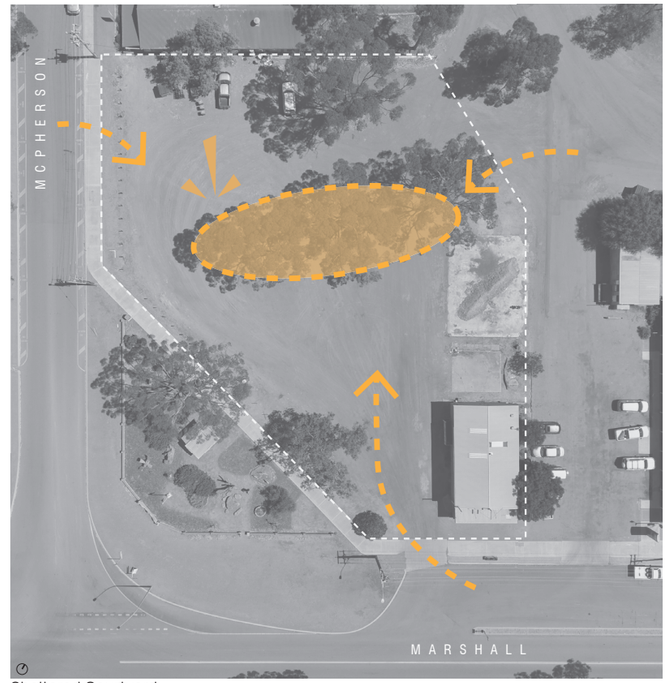
Creation of Shelter to Boundary



Entry Points



Green Corridor



Sheltered Courtyard

FIGURE 5.2.1 - SITE PLANNING DIAGRAMS

5.3 BUILDING PLANNING

The development has been proposed in 3 zones to suit the primary functionality of the development as briefed. This is as outlined in the Site Planning Section and referenced below.

- Discovery Centre
- Community Resource Centre
- Multipurpose Centre

The planning of the facility has focused on

- Overlapping Functionality
- Connection to sheltered landscape
- Access off Central Courtyard
- Open areas with minimal hard partitioning to allow for adaptability and expansion

Refer below brief summary of the planning approach to each space.

FOYER

A central entry foyer is proposed between the Discovery Centre and Community functions. The foyer is proposed as an open glazed "void" between these spaces that allows some of the functionality including cafe, reception, gift store to bleed into the space serving as a central entry point to both.

This will allow for effective supervision and overlap of staffing.

DISCOVERY CENTRE

The Discovery Centre wing will be accessed off the main foyer. This wing will included a central gift shop, Black Box Discovery Centre and Art Gallery & Workshop Space. Both the Galley and Discovery Centre have access to their own private landscape spaces to support the internal activities.

Note - the brief for the discovery centre space is being developed in parallel with the overall project design, and the exhibition designer has provided key input into the current space allocation.

CIVIC/ COMMUNITY RESOURCE CENTRE

The Community Resource Centre (CRC) will be accessed off the main foyer and is proposed as a large open space with a services spine at the side, that houses staff amenities, such as the managers office, kitchenette, staff toilet, and shared commenuty spaces including a printing area and video conference room. This services spine allows for the main CRC space to remain open and uncluttered for flexibility and adaptability of this area over time to suit various functions.

The primary functional purpose within the CRC include:

- Open Plan hot desk office area for 6 people
- Acoustic Booth for Centrelink Meetings
- Community Library
- Flexible working area for 3d printing & general printing
- CRC/ Shire Office for 3 people
- Video Conference Rooms

MULTIPURPOSE FACILITIES

To support the Discovery Centre and the CRC, there will be multipurpose facilities that can serve both the community and the Discovery/ Visitor aspect of the project.

These facilities are proposed together easily accessible to both primary users off the central courtyard and include:

- Two multi-purpose spaces divided by an operable wall with fixed seating for 50 people
- Demonstration/ Function kitchen
- Function Space.

There will be an operable wall between these areas with individual access off the central courtyard to allow for maximum flexibility in how the spaces can be used.

RETAIL/ CAFE SPACE

To support the financial viability and to add additional functionality of the facility, there is proposed a leasable retail space for use as a cafeteria/ restaurant. This space includes a commercial kitchen suitable for a cafeteria, serving area, and internal/ external seating.

AMENITY

To minimise duplication of amenities, the design allows for combined amenities to serve the whole facility in a central bathroom facility accessed off the central courtyard with screened private access.

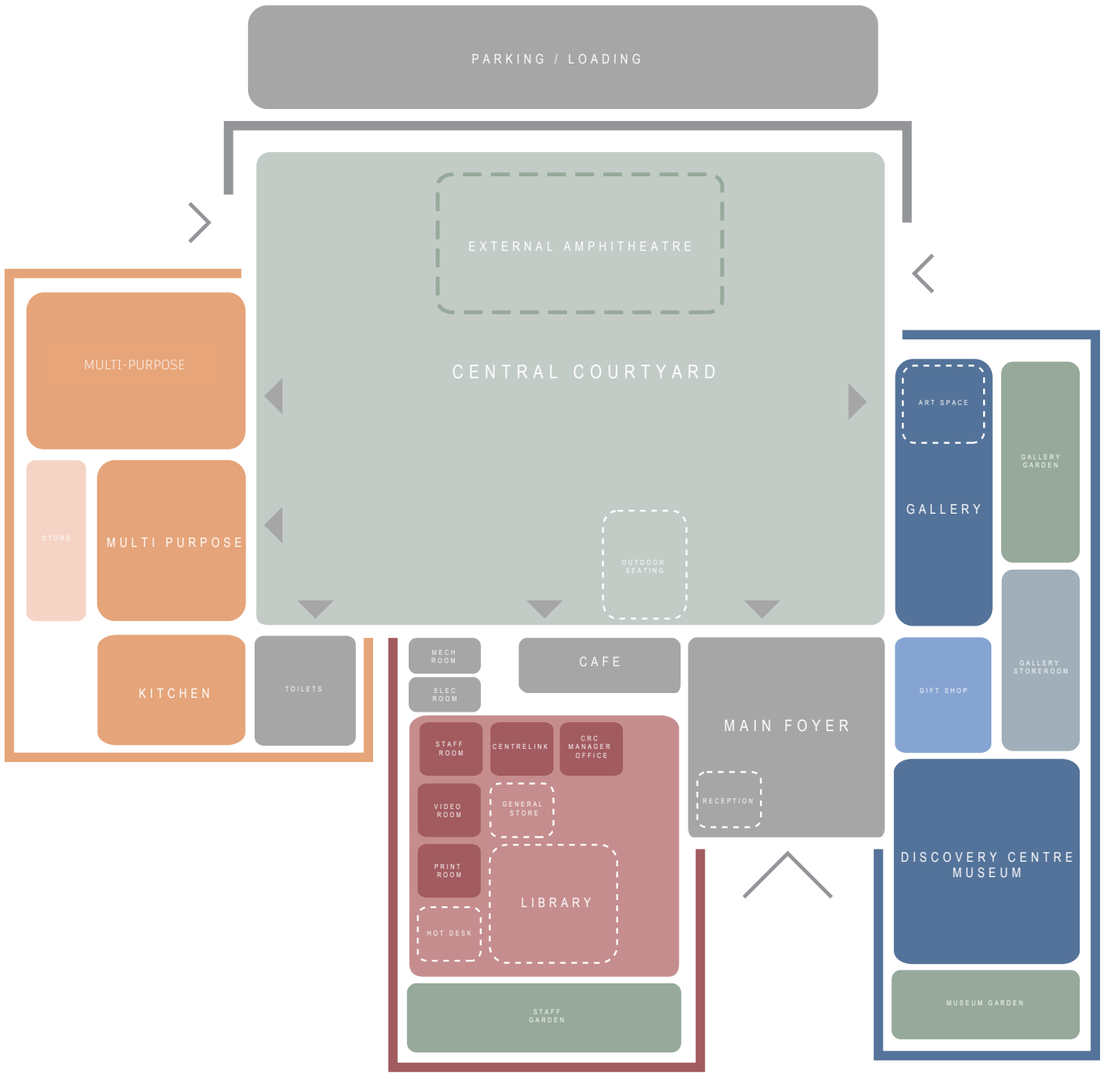


FIGURE 5.3.1 - FUNCTIONAL RELATIONSHIP DIAGRAM

5.4 BUILDING ARCHITECTURE & STRUCTURE

BUILDING FORM

The proposed building form takes cues from the natural surrounds of Hyden including Wave Rock, Mulka's Cave & Hippos Yawn.

The result is a series of curved irregular masses with voids between. These masses are then connected via a veranda structure that provides a sheltered link between.

Sectionally, the roof form itself lifts and falls as needed to suit the internal program within providing a simple and effective built form approach

Despite the striking nature of the curved layout, the building is actually fairly simple in its sectional form with a single pitch classroom and verandah for circulation between The simple verandah structure wraps around the building to unifies the three building areas, provides cover, and ties back to the surrounding regional built form context of Hyden.

The roof has been designed to avoid the use of box gutters, using eaves gutters instead, which are much easier from a maintenance perspective.

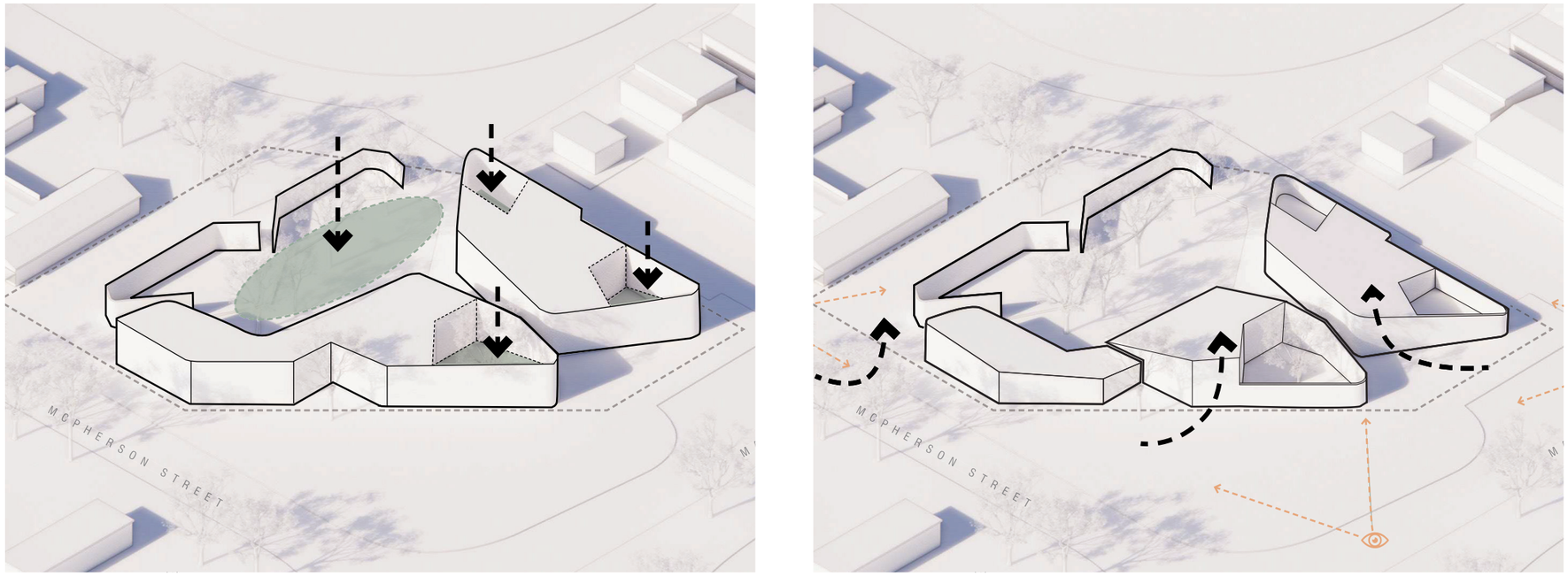


FIGURE 5.4.1 - FORM DEVELOPMENT DIAGRAMS

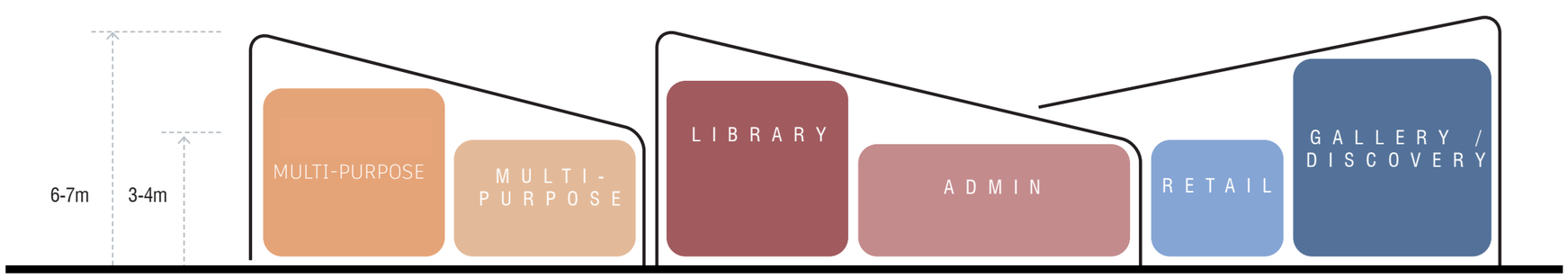


FIGURE 5.4.2 - CONCEPT SECTIONAL DIAGRAM

5.5 BUILDING MATERIALS

EXTERIOR MATERIAL PALETTE

The external material palette for the building has been chosen carefully to reflect the existing natural and built fabric of the site and local context, while still ensuring a contemporary architectural solution that is durable and low maintenance.

The external walls will be made of exposed rammed earth and the roof will be metal roof sheeting in a zincalume finish, both a durable material that reflects the shed architecture of the area. The simple and restrained nature of the materials reinforce the elegant curved building form, and this approach has also extended into the interior design.

The Rammed Earth in particular provides a strong link to the key caves and rocky features of Hyden and provides a pivotal link to country and will use locally sourced aggregate/soil, for an even greater link to its natural context.

The Verandah Structure is polycarbonate in a semi-transparent finish on a simple steel frame, which provides a link to the regional built context of Hyden referencing the town itself. The polycarbonate also allows light to enter into the deep areas of the verandah.

There are batten screen elements in the walled courtyards and along the verandah edge, in a bronze anodised finish at irregular size and spacing to reference the woodlands of the area.

Together with the native landscape elements, the overall precinct built on the interconnection of the built and natural forms of Hyden's local context.

CONSTRUCTION MATERIALS & STRUCTURE

The proposed building form has been designed to ensure that it is a simple and economical structural solution with a single steel framed pitched roof form and canopy structure and an in situ concrete slab on ground for the floor.

Additionally the rammed earth forms provide structural support where possible for the external walls and roof.



FIGURE 5.5.1 - PROPOSED CONCEPT MATERIAL PALETTE



FIGURE 5.5.2 - PRECEDENT STUDY

5.6 INTERIOR DESIGN AND PRECEDENCE

INTERIOR DESIGN

The interior design of the project reflects the natural forms and the simple materiality of the building exterior. The design team has selected materials with warm colours and natural textures that evoke the connection to the natural landscapes around the Hyden region. The interior colour palette reflects the three main material colours of the building exterior: the rammed earth, the bronze anodised metal and the zincalume steel.

The interior palette is simple and restrained to leave the rammed earth walls at the main feature & to evoke the feeling of being in the rock wall forms of Wave Rock and a sense of shelter from the outside elements.

The interior palette of the main CRC space is light and open, ideal for flexible working and reading. There is a calming sense of being in a large rammed earth cave with the high rammed earth walls with skylight above and curated views out to the landscaped courtyard.

The natural curves of the external rammed earth walls have been brought inside through the stud partition walls of the CRC, reinforced by the curving carpet patterns and loose furniture to carve a path for visitors into the central gathering area of the library, which reflects a 'yarning circle'.

In the foyer and gift shop area, the polished concrete floor finish, metal sheet reception desk and the perforated curved metal soffit, are all minimalist in style to allow the rammed earth forms to remain the feature. In all the building volumes, where the internal stud walls and floor finishes, will generally have a warm tone and natural texture to compliment the rammed earth.

The multipurpose rooms, gallery, gift shop and exhibition rooms will have simple finishes to allow the feature displays in these areas to remain a feature, and allow for future flexibility for different layouts and uses by the community.

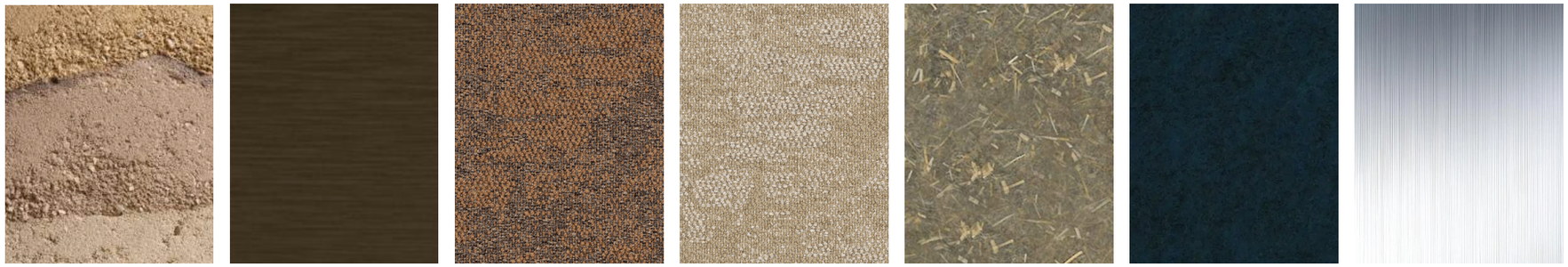


FIGURE 5.6.1 - PROPOSED INTERIOR MATERIAL PALETTE



FIGURE 5.6.2 - INTERIOR PRECEDENT STUDY

6.0 PROGRAM

SITE Architecture Studio has established a preliminary program to guide the delivery of the project through the Design Development, funding, procurement and construction phases. This program has been developed in consultation with the Hyden Progress Association (HPA) to support grant funding applications and the future delivery of the project.

This program identifies key design phases, hold points and delivery milestones, including time-frame for Tender and Award, and Construction.

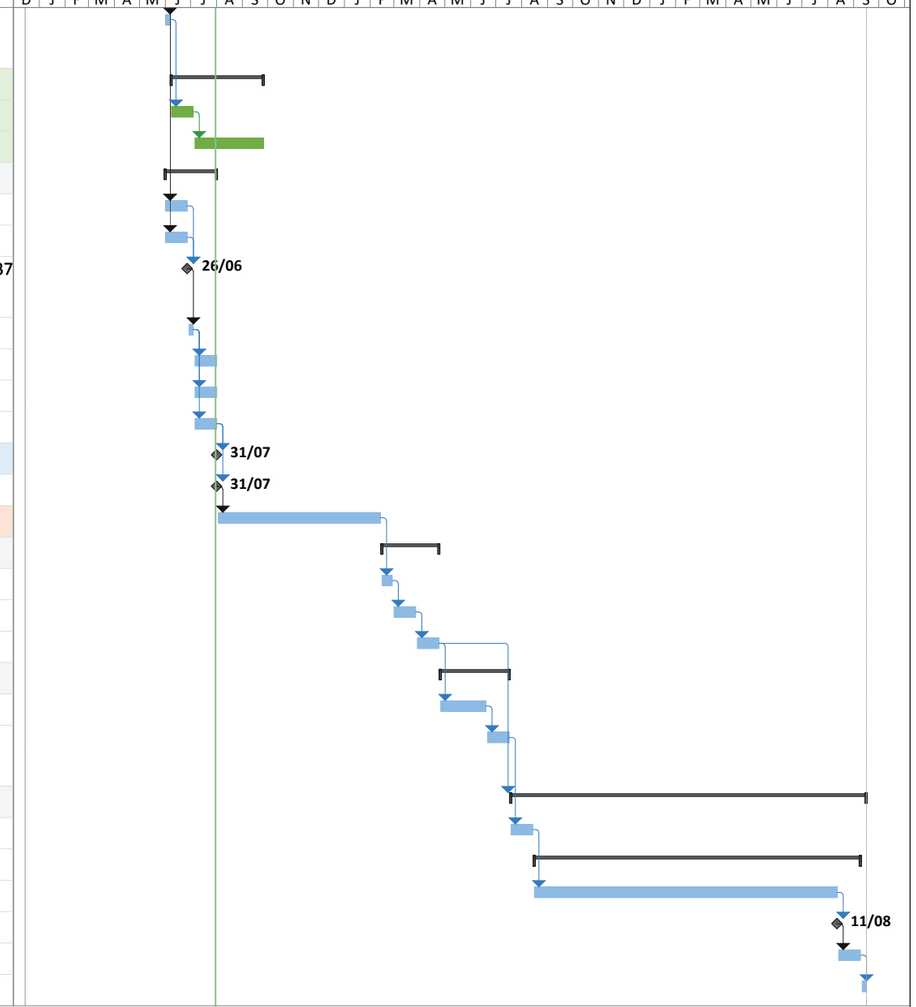
The key milestones are currently anticipated as follows:

- Schematic Design - Completed May 2026
- Development Application - Submitted June 2026
- Design Development Report - Completed July 2026
- Funding Applications and Approvals - Ongoing
- D&C Tender Documents - Subject to funding approval
- Construction Period - Expected to be 12-15 months
- Practical Completion - Targeting 2028*
- Building Occupancy - Following Practical Completion

* Program dates beyond the Design Development phase are indicative only and remain subject to planning approvals, funding availability, procurement outcomes and project delivery requirements.

KATTER KICH WAVE ROCK DISCOVERY CENTRE - DESIGN PROGRAM

Task Mode	Task Name	Duration	Start	Finish	Predec
	HPA Review Schematic Design Report & Approval to submit for DA	1 wk	Mon 1/06/26	Fri 5/06/26	29
	Development Application	**80 days**	**Mon 8/06/26**	**Fri 25/09/26**	
	Development Application compilation & Submission	4 wks	Mon 8/06/26	Fri 3/07/26	31
	Development Application Approval Allowance	12 wks	Mon 6/07/26	Fri 25/09/26	33
	Design Development	**45 days**	**Mon 1/06/26**	**Fri 31/07/26**	
	Prepare Initial Design Development Package	4 wks	Mon 1/06/26	Fri 26/06/26	30
	Sub Consultant Preliminary DD Drawings	4 wks	Mon 1/06/26	Fri 26/06/26	30
	Meeting 10 - Preliminary Detailed Design Workshop (Architecture)	**0 days**	**Fri 26/06/26**	**Fri 26/06/26**	**36,37**
	Stakeholder Review and Feedback	1 wk	Mon 29/06/26	Fri 3/07/26	38
	Update Detailed Design to suit feedback	4 wks	Mon 6/07/26	Fri 31/07/26	39
	Prepare Design Development D&C Pricing Package	4 wks	Mon 6/07/26	Fri 31/07/26	39
	Prepare Design Development Report & D&C Tender	4 wks	Mon 6/07/26	Fri 31/07/26	39
	Submission - Design Development Report	**0 days**	**Fri 31/07/26**	**Fri 31/07/26**	**42**
	Meeting 8 - Design Development Report Presentati	**0 days**	**Fri 31/07/26**	**Fri 31/07/26**	**42**
	HOLD POINT - FUNDING APPLICATION	**7 mons**	**Mon 3/08/26**	**Fri 12/02/27**	**44**
	Tender and Award	**50 days**	**Mon 15/02/27**	**Fri 23/04/27**	
	Finalise Tender Package	2 wks	Mon 15/02/27	Fri 26/02/27	45
	D&C Tender	4 wks	Mon 1/03/27	Fri 26/03/27	47
	Tender review and Award	4 wks	Mon 29/03/27	Fri 23/04/27	48
	Contract Documentation	**60 days**	**Mon 26/04/27**	**Fri 16/07/27**	
	Prepare Construction Documenation for Contractor	8 wks	Mon 26/04/27	Fri 18/06/27	49
	HPA Review IFC Package Documents & Approval to proceed to Construction	4 wks	Mon 21/06/27	Fri 16/07/27	51
	Construction	**305 day**	**Mon 19/07/27**	**Fri 15/09/28**	**49**
	Mobilisation & Building Permit	4 wks	Mon 19/07/27	Fri 13/08/27	52
	Construction	**280 day**	**Mon 16/08/27**	**Fri 8/09/28**	
	Construction Works (Indicative)	52 wks	Mon 16/08/27	Fri 11/08/28	54
	Practical Completion	0 days	Fri 11/08/28	Fri 11/08/28	56
	Contingency & Occupancy Permit	4 wks	Mon 14/08/28	Fri 8/09/28	57
	Project Handover	**1 wk**	**Mon 11/09/28**	**Fri 15/09/28**	**58**



ct: msproj11
: Fri 31/07/26

Task	Project Summary	Inactive Milestone	Manual Summary Rollup	Deadline
Split	External Tasks	Inactive Summary	Manual Summary	Progress
Milestone	External Milestone	Manual Task	Start-only	Manual Progress
Summary	Inactive Task	Duration-only	Finish-only	

1/07/26 Page 2 22580 KKWRDC Design Program

FIGURE 6.1 - PROJECT PROGRAM

7.0 BUDGET

The initially briefed budget for the project targeted a construction budget within $11M (inclusive of fees, contingencies and regional loadings based on an estimated 1000m² building.

Throughout the Concept Design and Design Development phases, the design team has worked closely with the client and key stakeholders to refine the scope of works and align the project with available funding objectives.

This process has focused on developing an efficient, high-performing facility through the sharing of spaces and amenities, minimising area inefficiencies and maximising functionality for the community and visitors.

The project Quantity Surveyor has provided a DD cost estimate included in Appendix 2 that aligns to the project scope, design and functionality identified within this report.

The current estimate identifies a Design & Construct Contract Value of approximately $9,984,000.00 (ex GST).

The project has progressed to a high level of detail providing certainty around the expectations ready for a D&C Tender. Additionally the cost estimate includes a reasonable allowance for contingency, escalation and regional allowances.

HW & Associates
ABN 62 650 513 410
Unit 5
43 Kirwan Street
FLOREAT WA 6014
Ph: (08) 9321 0102

QUANTITY SURVEYORS

25125212.004

31 July 2026

Site Architecture Studio
PO Box 7351,
Perth, Cloisters Square WA 6850

Attention: Stephen Hart

Dear Stephen,

WAVE ROCK (KATTER KICH) DISCOVERY CENTRE
DESIGN DEVELOPMENT ESTIMATE

We have reviewed the scope for the proposed Discovery Centre at Wave Rock. We attach a copy of our detailed estimate as summarised below:

Discovery Centre	
Building Works	$6,533,000
Siteworks & Services	3,087,000
	9,620,000
Locality Allowance Included Within Rates	-
	9,650,000
D & C Design Costs (Locality Allowance Not Applicable)	364,000
	$9,984,000
Design Contingency 5%	500,000
Construction Contingency 7.5%	749,000
Headworks – Excluded	-
Permits, Fees & Levys	25,000
Public Art – Excluded, As Advised	-
Loose Furniture & Equipment - Excluded	-
AV Services & Displays – Excluded, As Advised	-
Interactive/Interpretive Elements – Excluded, As Advised	-
First Nations Engagement – Excluded, As Advised	-
Commissioning, Relocation Costs & Disbursements – Excluded	-
Client Costs – Management & Administration – Excluded	-
Professional Fees & Disbursements, As Advised	355,000
Management Fees – Excluded	-
Escalation to February 2027, 3.4%	395,000
Total, excluding GST	**$12,008,000**

Cost advice has been received from the electrical, mechanical, and hydraulic consultants and as such has been included within our estimate.

Liam Tomlin M: 0434 611 782 E: LiamTomlin@HWAssociates.com.au

FIGURE 7.1 - QS COST ESTIMATE SUMMARY

8.0 ASSUMPTIONS & CONSIDERATIONS

8.1 ASSUMPTIONS

The following constraints and assumptions have been noted:

1. Scope of works identified is based on consultation with the key stakeholders and captured in the schedule of accommodation is fit for purpose to suit the project needs
2. Escalation to Tender for Construction in 2027
3. Project to be procured through a Design and Construct Model.
4. Strong preference for Buy Local Policy outcomes;
5. High functional design that is safe and efficient, reflects constraint and characteristics of the site and school operational need with capacity for change over time.
6. Approvals process - ongoing engagement by key decision makers for approvals.

8.2 RISKS

The current key issues raised for the project are:

1. Stormwater connection and design - ongoing mitigation and resolution through discussions with civil, landscape and Shire.
2. Budget: we have been managing this risk through regular cost estimates provided by a qualified Quantity Surveyor
3. Program: the program risk has been managed through regular consultation with the key stakeholders for key dates and with regular updates to the project program
4. Landscape Extent - The proposed budget has reduced the landscape design down to a minimum recommended scope
5. Kitchen Scope - Assumptions have been made around the extent and scope of the function and cafeteria spaces. There is allowance for a simple kitchen to serve the function room capabilities which has been developed in consultation with the key stakeholders. At this stage cafe kitchen is assumed to be by leasee. No allowance has been made for fit-out, only provision of services.
6. Exhibition Scope - The extent of the exhibition allowance and design for the discovery centre is being developed in parallel with the design for the overall project. Ongoing consultation with the exhibition designer is being undertaken to ensure the building allowances for this space are closely aligned to the requirements.



APPENDIX A

ARCHITECTURAL DRAWINGS

A0.00 - COVER SHEET
A0.10 - FEATURE SURVEY
A0.20 - EXISTING CONDITIONS/DEMOLITION PLAN
A1.00 - SITE PLAN
A1.20 - MECHANICAL COMPOUND DETAILS
A2.00 - FLOOR PLAN
A2.10 - ROOF PLAN
A3.00 - REFLECTED CEILING PLAN
A4.00 - ELEVATIONS (STREET)
A4.01 - ELEVATIONS (BUILDING)
A4.02 - ELEVATIONS (BUILDING)
A4.03 - ELEVATIONS (BUILDING)
A5.00 - SECTIONS
A5.01 - SECTIONS
A5.02 - SECTIONS
A5.03 - SECTIONS
A5.10 - FACADE SECTIONS
A8.00 - DOOR SCHEDULE
A8.10 - GATE & ROLLER DOORS SCHEDULE
A8.20 - WINDOW & LOUVRE SCHEDULE
A9.00 - ROOM LAYOUTS 0 - MULTIPURPOSE 1, 2 & STORE
A9.01 - ROOM LAYOUTS 1 - KITCHEN & AMENITIES
A9.02 - ROOM LAYOUTS 2 - CRC
A9.03 - ROOM LAYOUTS 3 - MANAGER'S OFF., VC, CENTRELINK, K/NETTE & ELECT. SVC
A9.04 - ROOM LAYOUTS 4 - CAFE & KITCHEN
A9.05 - ROOM LAYOUTS 5 - FOYER & GIFT SHOP
A9.06 - ROOM LAYOUTS 6 - EXHIBITION SPACE
A9.07 - ROOM LAYOUTS 7 - GALLERY & EXHIBITION STORE
A9.10 - EXTERNAL & INTERIOR FINISHES

KATTER KICH WAVE ROCK DISCOVERY CENTRE

DRAWING LIST - ARCHITECTURAL

SHEET NUMBER	SHEET NAME	Current Revision
A0.00	COVER SHEET	B
A0.10	FEATURE SURVEY	B
A0.20	EXISTING CONDITIONS/DEMOLITION PLAN	A
A1.00	SITE PLAN	F
A1.20	MECH COMPOUND DETAILS	B
A2.00	FLOOR PLAN	K
A2.10	ROOF PLAN	I
A3.00	REFLECTED CEILING PLAN	F
A4.00	ELEVATIONS (STREET)	E
A4.01	ELEVATIONS (BUILDING)	E
A4.02	ELEVATIONS (BUILDING)	E
A4.03	ELEVATIONS (BUILDING)	E
A5.00	SECTIONS	G
A5.01	SECTIONS	G
A5.02	SECTIONS	G
A5.03	SECTIONS	G
A5.10	FACADE SECTIONS	
A8.00	DOOR SCHEDULE	A
A8.10	GATE & ROLLER DOORS SCHEDULE	A
A8.20	WINDOW & LOUVRE SCHEDULE	B
A9.00	ROOM LAYOUTS 0 - MULTIPURPOSE 1, 2 & STORE	A
A9.01	ROOM LAYOUTS 1 - KITCHEN & AMENITIES	B
A9.02	ROOM LAYOUTS 2 - CRC	A
A9.03	ROOM LAYOUTS 3 - MANAGER'S OFFICE, VC, CENTRELINK, KITCHENETTE & ELECT. SERVICES	A
A9.04	ROOM LAYOUTS 4 - CAFE & KITCHEN	A
A9.05	ROOM LAYOUTS 5 - FOYER & GIFT SHOP	A
A9.06	ROOM LAYOUTS 6 - EXHIBITION SPACE	A
A9.07	ROOM LAYOUTS 7 - GALLERY & EXHIBITION STORE	A
A9.10	EXTERNAL & INTERIOR FINISHES	A



1 LOCATION PLAN
1 : 500

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
10.07.26	B	Issue for DD Cost Estimate	RB
30.04.26	A	Issue to Exhibition Consultant	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

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T 08 9226 5661
mail@sitearchitecture.com.au I
www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
COVER SHEET

DATE I 01/05/07
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1 FEATURE SURVEY
1 : 500

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
10.07.26	B	Issue for DD Cost Estimate	RB
29.05.26	A	Issue to Structural	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

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www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
FEATURE SURVEY

DATE I 08/23/11
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EXISTING CONDITIONS/ DEMOLITION PLAN LEGEND

NOTES

1. BUILDER TO MAKE GOOD TO ANY DAMAGED MADE TO EXISTING BUILDINGS AND STRUCTURES DURING DEMOLITION WORKS.

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SITE & FLOOR PLAN TO ASSIST NEW WORKS CO-ORDINATION.

3. EXISTING CONDITIONS & DEMOLITION PLAN TO BE READ IN CONJUNCTION WITH ALL CONSULTANT DRAWINGS.

4. ALL DEMOLITIONS WORKS TO BE REMOVED OFF SITE AND DISPOSED AS PER LOCAL COUNCIL REGULATIONS BY BUILDER.

5. COMPLETE ACCURACY OF EXISTING SERVICES CANNOT GUARANTEED. ALL INFORMATION SHOULD BE FURTHER CLARIFIED ON SITE PROIR TO COMMENCEMENT OF EXCAVATION AND CONSTRUCTION.

6. VERIFY ALL LEVELS & DIMENSIONS SHOWN. CONTRACTOR TO REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT PRIOR TO PROCEEDING WITH WORKS IN EFFECT OF DISCREPANCY.

7. ANY WORKS OUTSIDE OF THE ALLOCATED BUILDING AREA TO BE PROGRAMMED AND CONFIRMED BY SUPERINTENDENT PRIOR TO COMMENCEMENT TO THESE WORKS.

LEGEND

D. COL EXISTING STRUCTURAL COLUMN TO BE DEMOLISHED.
D. DP EXISTING DOWNPIPE TO BE REMOVED.
ED EXISTING DOOR.
EW EXISTING WINDOW.
EX. COL EXISTING STRUCTURAL COLUMN TO REMAIN.
EX. DP EXISTING DOWNPIPE TO REMAIN.

HATCH DENOTES EXTENT OF EXISTING STRUCTURAL INTEGRITY (INDICATIVE ONLY).

DASHED LINE INDICATES EXTENT OF EXISTING STRUCTURE TO BE REMOVED.

HATCH DENOTES EXTENT OF DEMOLITON WORKS AS DESCRIBED.

EXISTING TREES TO BE RETAINED

EXISTING TREES TO BE REMOVED

LOT 25
1012m2

LOT 2122
2023m2

R. O. W.

EXISTING R.O.W

MCPHERSON STREET

MARSHALL STREET

EXISTING FOOTPATH

EXISTING BUILDING

BOUNDARY 50.29 m

BOUNDARY 29.39 m

BOUNDARY 56.91 m

BOUNDARY 35.7 m

BOUNDARY 25.23 m

50.29m

20.12m

20.08

89°58'

90°02'

121°10'

14.7m

107°23'35"

14.68m

43.64m

40.24m

90°

148°50'

50.29m

REMOVE EXISTING CONCRETE SLAB

REMOVE EXISTING CONCRETE SLAB

REMOVE EXISTING WOODEN RETAINING WALL

REMOVE EXISTING METAL SHED IN ITS ENTIRETY INCLUDING SLAB FLOOR, VERANDAH, STAIRS AND ASSOCIATED SERVICES

REMOVE LINE OF EXISTING TIMBER BOLLARDS

REMOVE LINE OF EXISTING TIMBER BOLLARDS

REMOVE EXISTING RETIC ENCLOSURE. REFER ELECTRICAL

REMOVE EXISTING SITE MAIN SWITCHBOARD AND PREPARE FOR NEW. REFER ELECTRICAL DETAILS

REMOVE EXISTING DISTRIBUTION BOARD. REFER ELECTRICAL DETAILS

EXISTING WESTERN POWER POLE TO REMAIN. REFER ELECTRICAL

EXISTING WESTERN POWER DOME TO REMAIN. REFER ELECTRICAL DETAILS

EXISTING WESTERN POWER POLE TO REMAIN. REFER ELECTRICAL

EXISTING CROSSOVER TO BE REMOVED

HYDEN LION'S PARK
(EXISTING PARK - NOT IN SCOPE)

EXISTING MAIN ROADS
ROAD RESERVE

135°01'

93°31'58"

28.46m

28.44m

25.23m

40.23m

40.24m

verandah awning

1 A1.20 EXISTING / DEMOLITION PLAN
1 : 200

NORTH

DESIGN DEVELOPMENT

10.07.26	A	Issue for DD Cost Estimate	RB
DATE	No.	REVISION	CHKD

CLIENT
HYDEN PROGRESS ASSOCIATION

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TITLE
EXISTING CONDITIONS/DEMOLITION PLAN

DATE	I 12/05/17	DWG	REV
SCALE @A1	I As indicated	A0.20	A
JOB No	I 22580		
DRAWN BY	I Author		
CHECKED	I Checker		

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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DRAWING TO BE READ IN COLOUR

SITE PLAN LEGEND

NOTES

1. READ IN CONJUNCTION WITH THE SPECIFICATION.

2. FIGURE DIMENSIONS TAKE PRECEDENCE TO SCALED DWGS

3. VERIFY ALL LEVELS & DIMENSIONS SHOWN. BUILDER TO REPORT ANY DISCREPANCIES TO ARCHITECT FOR DECISION BEFORE PROCEEDING WITH WORKS.

4. REFER STRUCTURAL DWGS FOR STRUCTURAL INFORMATION & DETAILS INCLUDING CONSTRUCTION & MOVEMENT JOINTS, RETAINING WALLS AND FOOTINGS

5. ALL DEMOLITION WORKS TO BE REMOVED OFF SITE AND DISPOSED AS PER LOCAL COUNCIL REGULATIONS BY BUILDER.

6. COMPLETE ACCURACY OF EXISTING SERVICES CANNOT BE GUARANTEED. ALL INFORMATION TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

7. ALL PROPOSED PAVING, CONCRETE AND BITUMEN LEVELS ARE TO BE CHECKED AND CONFIRMED ON SITE WITH THE ARCHITECT PRIOR TO CONSTRUCTING THE WORKS.
ALL PAVEMENTS ARE TO FALL AWAY FROM THE BUILDING

8. CO-ORDINATE FOOTING AND RETAINING WALL LEVELS w/ ARCHITECTURAL AND STRUCT DWGS AND DETAILS.

9. REFER LANDSCAPE ARCHITECT AND CIVIL DWGS FOR TREE PROTECTION (TPZ) & STRUCTURAL ROOT ZONE (SRZ) DETAILS.

10. REFER TO SEPARABLE PORTION DRAWINGS FOR DEMO & PROPOSED WORKS WITHIN EACH PORTION.

KEY:

- EXISTING BUILDINGS
- DEMOLITION
- NEW BUILDING WORKS IN THIS STAGE
- LOCAL GRAVEL MULCH - GARDEN BEDS
- EXPOSED AGGREGATE CONCRETE
- COMPACTED RED GRAVEL
- RED ASPHALT
- NEW TREES. REFER LANDSCAPE
- EXISTING TREES
- EXISTING TREES TO BE REMOVED
- TREE PROTECTION ZONES OF EXISTING TREES. ALL WORKS ARE TO BE OUT OF THE TPZ.
- BUILDER'S COMPOUND
- SEWER PIPE. REFER HYDRAULIC DWG
- EXTENT OF NEW WORKS

ABBREVIATIONS:

B	BOLLARDS
BR	BIKE RACK
DP	DOWNPIPE
EX	EXISTING
FFL	FINISHED FLOOR LEVEL
HC	HOSE COCK. REFER HYD DWGS
SM	SUMP BOX IN FLOOR. REFER CIVIL DWGS
TGSI	TACTILE GROUND SURFACE INDICATOR
TOW	TOP OF WALL

NORTH

DESIGN DEVELOPMENT

14.07.26	F	Issue to Mechanical	RB
10.07.26	E	Issue for DD Cost Estimate	RB
01.07.26	D	DD Services Consultant Coordination	RB
19.06.26	C	Issue to Energy Consultant	RB
11.06.26	B	Issue to Structural	RB
29.05.26	A	Issue to Structural	RB
DATE	No.	REVISION	CHKD

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KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

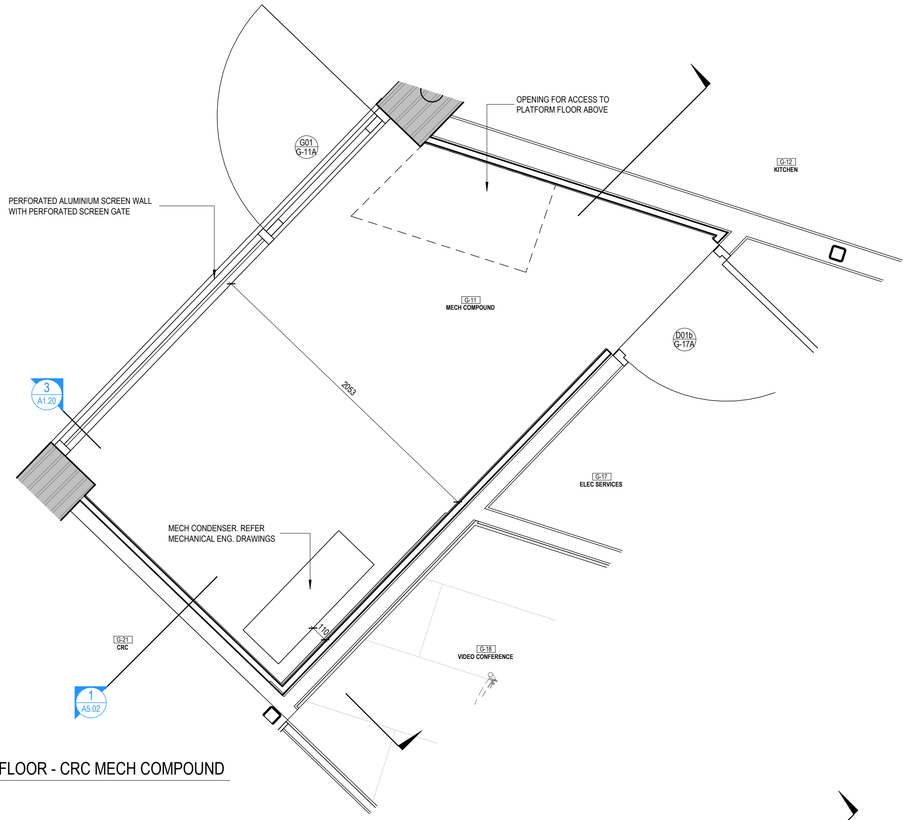
TITLE
SITE PLAN

DATE	08/23/11	DWG	REV
SCALE @A1	As indicated	A1.00	F
JOB No	22580		
DRAWN BY	Author		
CHECKED	Checker		

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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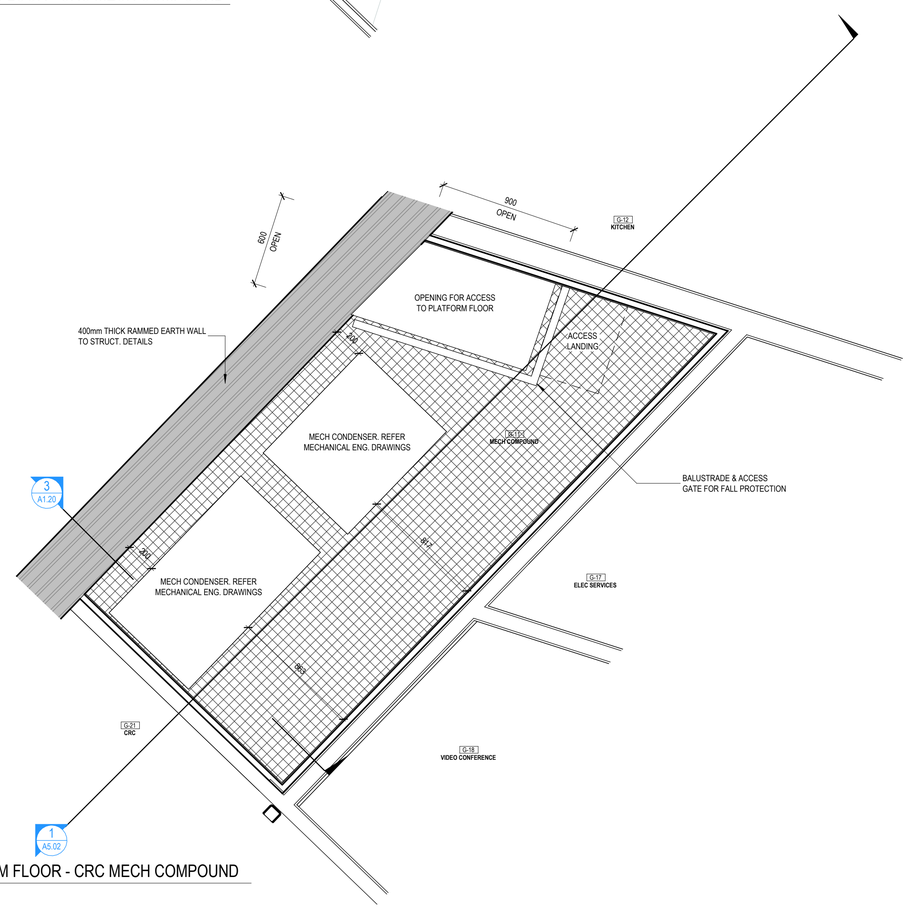
1 SITE PLAN
1 : 200



1
A1.20

GROUND FLOOR - CRC MECH COMPOUND

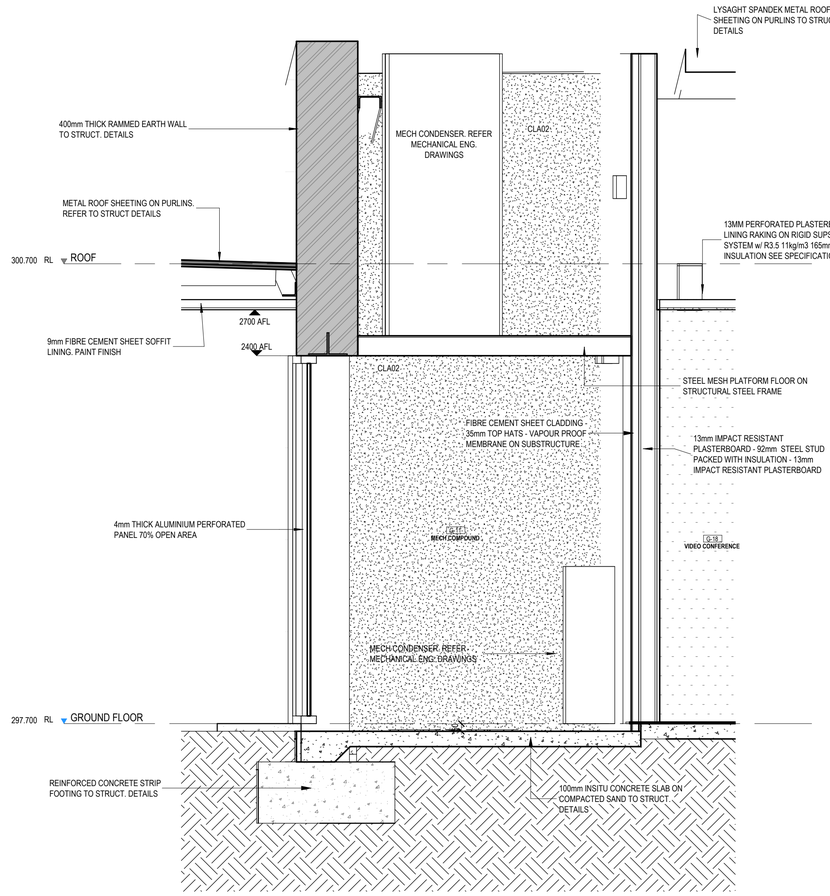
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2
A1.20

PLATFORM FLOOR - CRC MECH COMPOUND

1 : 20



3
A1.20

SECTION DETAIL - CRC MECH COMPOUND

1 : 20

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
23.07.26	B	Issue for Consultant Coordination	RB
22.07.26	A	Issue to Mechanical	RB

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HYDEN PROGRESS ASSOCIATION

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
MECH COMPOUND DETAILS

DATE I 07/22/26
SCALE @A1I 1 : 20
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A1.20B
REV

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31/07/2026 1:59:59 PM

SCHEDULE - WALLS

TYPE	Description	Insulation Type	Acoustic Rating	Fire Rating
		<varies>	<varies>	
CLA01	STANDING SEAM METAL WALL CLADDING - 35mm TOP HATS - VAPOUR PROOF MEMBRANE ON SUBSTRUCTURE	VPM		
CLA02	FIBRE CEMENT SHEET CLADDING - 35mm TOP HATS - VAPOUR PROOF MEMBRANE ON SUBSTRUCTURE	VPM	-	
PAR01	13mm IMPACT RESISTANT PLASTERBOARD - 92mm STEEL STUD PACKED WITH INSULATION	90mm BULK INSUALTION	Rw 42	
PAR02	13mm IMPACT RESISTANT PLASTERBOARD - 92mm STEEL STUD PACKED WITH INSULATION - 13mm IMPACT RESISTANT PLASTERBOARD	90mm BULK INSUALTION	Rw 42	
PAR03	13mm IMPACT RESISTANT PLASTERBOARD - 150mm STEEL STUD PACKED WITH INSULATION - 13mm IMPACT RESISTANT PLASTERBOARD	90mm BULK INSUALTION	Rw 42	
PAR04	92mm STEEL STUD PACKED WITH INSULATION	90mm BULK INSUALTION	Rw 42	
PAR05	13mm IMPACT RESISTANT PLASTERBOARD - 150mm STEEL STUD PACKED WITH INSULATION - 13mm IMPACT RESISTANT PLASTERBOARD	90mm BULK INSUALTION	Rw 42	
PAR06a	13mm FIRE CHEK PLASTERBOARD - 150mm STEEL STUD PACKED WITH INSULATION - 2 HOUR FIRE RATED WALL	90mm BULK INSUALTION	Rw 42	
RE01	400mm THICK RAMMED EARTH WALL TO STRUCT. DETAILS			
RE02	450mm THICK RAMMED EARTH WALL TO STRUCT. DETAILS			
SCR01	PERFORATED ALUMINIUM PANEL SCREEN ON STEEL FRAME. MINIMUM 65% OPEN AIR			

FLOOR PLAN LEGEND

NOTES

1. REFER TO ROOM LAYOUTS AND ELEVATIONS IN THE A5 SERIES FOR JOINERY DESIGN AND DETAILS

2. LOOSE FURNITURE SHOWN DASHED BY OWNER

3. COLUMN TYPES INDICATIVE ONLY - REFER TO STRUCT DWGS

4. SERVICES TO BE READ IN CONJUNCTION w/ CONSULTANT DWGS

5. REFER TO ELEVATIONS FOR EXTERNAL FINISHES

6. TO BE READ IN CONJUNCTION WITH INTERNAL & EXTERNAL FINISHES SCHEDULE ON A0.01

7. ALL INTERNAL WALLS TO FINISH TO UNDERSIDE OF SLAB/ROOF UNLESS SHOWN OTHERWISE. TO BE READ IN CONJUNCTION w/ REFLECTED CEILING PLANS

8. CONTRACTOR TO ALLOW FOR SLAB SETDOWNS, SCREEDS AND REQUIRED FALLS TO ALL FLOOR WASTES SHOWN IN THIS DRAWING AND FOR ALL ADDITIONAL FLOOR WASTES SHOWN IN ALL CONSULTANTS DRAWINGS

LEGEND

A	ACTIVE DOOR LEAF
AFL	ABOVE FLOOR LEVEL
BG	BAG RACK. REFER JOINERY DETAIL
BT	BENCH TOP
COL	COLUMN
COMM	LOCATION OF COMMUNICATIONS RACK
DP	DOWNPIPE - REFER ROOF PLAN
DF	DRINK FOUNTAIN
EXIT	EXIT SIGN
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
FR	FRIDGE
FW	FLOOR WASTE - REFER HYDUALIC DWGS
HC	HOSE COCK
HWU	HOT WATER UNIT
SB	ELECTRICAL SWITCHBOARD TO ELEC DWGS
SM	SUMP BOX IN FLOOR. REFER CIVIL DWGS
SMSB	SITE MAIN SWITCHBOARD TO ELEC DWGS
SDP	SURFACE DRAIN POINT. REFER HYDRAULIC DWGS
SS	STAINLESS STEEL
TGSI	TACTILE GROUND SURFACE INDICATOR
TOW	TOP OF WALL
TR	HAND WASH TROUGH
TWT	TRADE WASTE TRAP - REFER HYDUALIC DWGS

SYMBOLS

D-01 / 01	DOOR TYPE AND OPENING NUMBER. REFER DOOR SCHEDULE FOR DETAILS
WA-01 / 02	WINDOW TYPE AND OPENING NUMBER. REFER WINDOW SCHEDULE FOR DETAILS
1 / A6.1	PLAN DETAIL NUMBER AND SHEET. REFER TO A6 SERIES
RL 290.20	PROPOSED LEVEL
TOW RL 290.20	PROPOSED TOP OF WALL LEVEL

NORTH

DESIGN DEVELOPMENT

23.07.26	K	Issue for Consultant Coordination	RB
17.07.26	J	Issue for Structural Coordination	RB
14.07.26	I	Issue to Mechanical	RB
10.07.26	H	Issue for DD Cost Estimate	RB
03.07.26	G	Updated DD Consultant Coordination	RB
01.07.26	F	DD Services Consultant Coordination	RB
19.06.26	E	Issue to Energy Consultant	RB
18.06.26	D	Issue to Exhibition Consultant	RB
11.06.26	C	Issue to Structural	RB
03.06.26	B	Issue to Mechanical	RB
29.05.26	A	Issue to Structural	RB
DATE	No.	REVISION	CHKD

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
FLOOR PLAN

DATE	I 08/11/11	DWG	REV
SCALE @A1	I 1 : 100		
JOB No	I 22580	A2.00K	
DRAWN BY	I Author		
CHECKED	I Checker		

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31/07/2026 2:00:02 PM

1 / A1.20 Floor Plan
1 : 100



1 ROOF PLAN
A1.20
1 : 100

ROOF PLAN LEGEND

NOTES

1. FALL ALL GUTTERS TOWARDS DOWN PIPES @ 1 IN 200 (MIN) IN DIRECTION SHOWN UNLESS NOTED.

2. BUILDER TO LAP & SEAL FLASHING JOINTS TO ENSURE WATER TIGHT

3. BUILDER TO LAP & SEAL ALL ROOF PENETRATIONS AND ROOF ACCESS SAFETY SYSTEMS TO ENSURE WATER TIGHT

4. LOCATION OF PROPOSED ROOF PENETRATIONS FOR ALL SERVICES TO BE CONFIRMED BY ARCHITECT PRIOR TO INSTALLATION. ANY PENETRATIONS MADE WITHOUT APPROVAL MAY BE INSTRUCTED TO BE RELOCATED AT THE CONTRACTOR'S COST

5. ROOF ACCESS SYSTEMS AS PER SPECIFICATION

6. ALL COLORBOND FLASHINGS TO MATCH ROOF PROFILE COLOUR UNLESS OTHERWISE NOTED. REFER FLASHING SCHEDULE

7. ALLOW FOR TRIMMER PURLINS BETWEEN ALL ROOF PENETRATIONS

LEGEND

AP ROOF ACCESS PANEL

DP1 150mm DOWN PIPE AS SELECTED. WHERE DOWNPIPE IS BEHIND A RAMMED EARTH PARAPET WALL, THE DOWNPIPE WILL BE CONCEALED IN CENTRE OF THE RAMMED EARTH WALL TO A SUMP BOX IN THE FLOOR.

DP2 80mm STEEL HDP DOWN PIPE AS SELECTED. PAINT FINISH

S 500mm MINIMUM WIDE ROOF SUMP

BOX GUTTER: TYPICALLY 500mmW x 150mmD
BOX GUTTER SUMP: MIN. 500mm WIDE

J GUTTER JOINT. LAP & SEAL

SA SAFETY ACCESS POINT

MRS: SPANDEK METALDECK ROOF SHEETING AS SPECIFIED IN ZINCALUME FINISH

POL01 DANPAL FREESPAN POLYCARBONATE ROOF SYSTEM AS SPECIFIED.

ROOF INSULATION LEGEND

R1.8 FOIL FACED INSULATION BLANKET TO ROOF, AS SPECIFIED

R3.6 FOIL FACED INSULATION BLANKET TO ROOF, FIXED ON SPACERS, AS SPECIFIED

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	I	Issue for Structural Coordination	RB
14.07.26	H	Issue to Mechanical	RB
10.07.26	G	Issue for DD Cost Estimate	RB
01.07.26	F	DD Services Consultant Coordination	RB
26.06.26	E	Issue to Hydraulic	RB
19.06.26	D	Issue to Energy Consultant	RB
11.06.26	C	Issue to Structural	RB
03.06.26	B	Issue to Mechanical	RB
29.05.26	A	Issue to Structural	RB

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
ROOF PLAN

DATE	I 26/06/26	DWG	REV
SCALE @A1I	1 : 100	A2.10I	
JOB No	I 22580		
DRAWN BY	I RB		
CHECKED	I MTH		

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1 GROUND FLOOR CEILING PLAN
A1.20
1 : 100

CEILING PLAN LEGEND

NOTES:

1. ALL ACCESS HATCH PANELS REQUIRED BY HYDRAULIC, MECHANICAL AND ELECTRICAL SERVICES NOT SHOWN ARE TO BE ALLOWED FOR BY THE CONTRACTOR. FINAL LOCATION OF REQUIRED ACCESS HATCH PANELS TO BE CONFIRMED BY ARCHITECT.

2. ALL INTERNAL WALLS TO FINISH TO UNDERSIDE OF SLAB/ROOF OVER UNLESS SHOWN OTHERWISE. TO BE READ IN CONJUNCTION WITH FLOOR PLANS

3. ENSURE SET-OUT OF SOFFIT LINING ALIGNS TO ARCHITECTURAL SET-OUT AND INTENT. CONFIRM WITH ARCHITECT PRIOR TO COMMENCING.

LEGEND:

FC	FIBRE CEMENT
PB	FLUSH PLASTERBOARD
PPB	PERFORATED PLASTERBOARD
MRPB	MOISTURE RESISTANT PLASTERBOARD
ACT	ACOUSTIC CEILING TILES
A/C	AIR-CONDITIONING TO MECH DWGS
A/P	ACCESS PANEL AS SPECIFIED

KEY:

- FPB / MRPB — FLUSH PLASTERBOARD CEILING
- PPB — PERFORATED PLASTERBOARD
- FC — FIBRE CEMENT SOFFIT. PAINT FINISH.
- UST — UNISTRUT SUSPENDED CEILING GRID

ELECTRICAL FIXTURES LEGEND

- EMERGENCY LIGHT
- MOTION SENSOR
- SMOKE DETECTOR
- SPEAKER
- THERMAL DETECTOR
- RECESSED DOWNLIGHT
- SOFFIT RECESSED DOWNLIGHT
- SURFACE MOUNT DOWNLIGHT
- WALL MOUNTED LIGHT
- EMERGENCY EXIT SIGNAGE
- CF — CEILING FAN
- SURFACE MOUNT LUMINAIRE
- RECESSED FLUORESCENT LUMINAIRE
- STRIP LIGHT
- TRACK LIGHT
- A/C — WALL MOUNTED SPLIT AC UNIT

NOTE: REFER TO ELECTRICAL DWGS FOR FITTING TYPES AND SIZES

MECHANICAL FIXTURES LEGEND

- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER
- A/C CASSETTE UNIT TO MECHANICAL DWGS
- A/P — 600x600mm ACCESS PANEL w/ FPB OR PPB TO MATCH ADJACENT CEILING

NOTE: REFER MECHANICAL DWGS FOR EQUIPMENT TYPES AND SIZE

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	F	Issue for Structural Coordination	RB
14.07.26	E	Issue to Mechanical	RB
10.07.26	D	Issue for DD Cost Estimate	RB
01.07.26	C	DD Services Consultant Coordination	RB
19.06.26	B	Issue to Energy Consultant	RB
03.06.26	A	Issue to Mechanical	RB

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

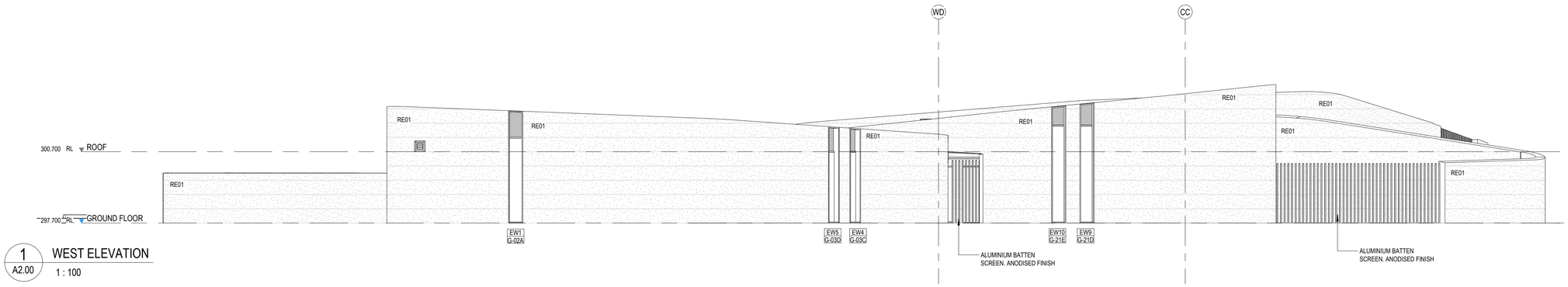
TITLE
REFLECTED CEILING PLAN

DATE I 08/11/11
SCALE @A1 I 1 : 100
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A3.00F
REV F

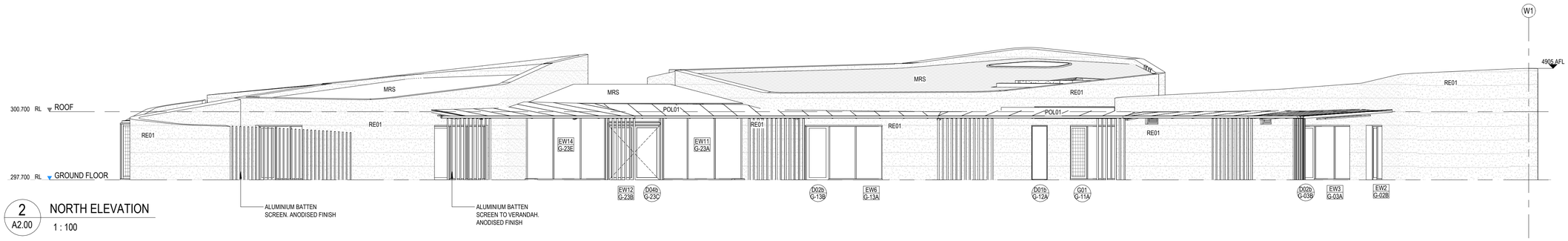
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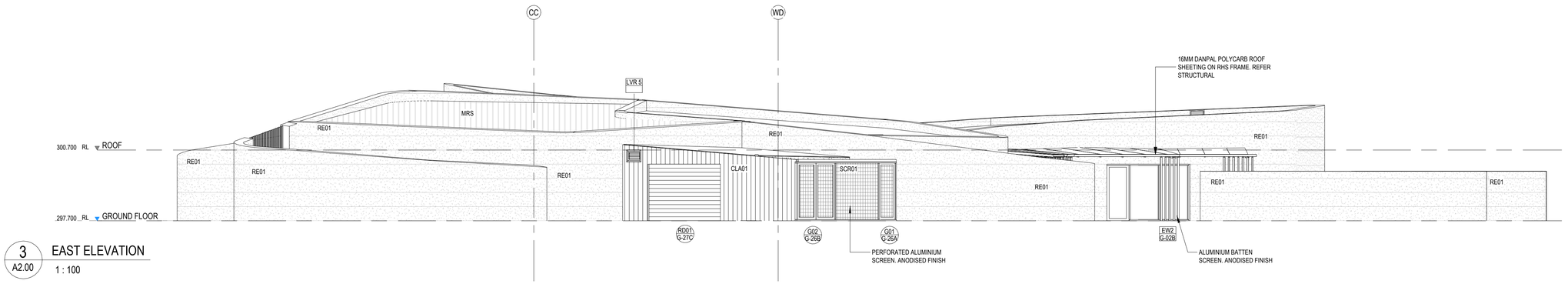
1 A2.00 WEST ELEVATION

1 : 100



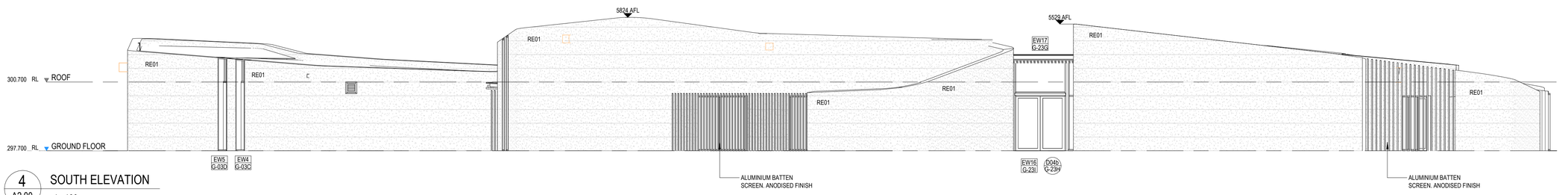
2 A2.00 NORTH ELEVATION

1 : 100



3 A2.00 EAST ELEVATION

1 : 100



4 A2.00 SOUTH ELEVATION

1 : 100

ELEVATIONS / SECTIONS LEGEND

NOTES

1. BUILDER TO LOCALLY GRADE FINISHED LANDSCAPING TO ENTIRE PERIMETER OF BUILDING TO ENSURE ADEQUATE WATER RUN OFF IS ACHIEVED

2. PROVIDE MINIMUM FALL AWAY FROM BUILDING OF 1:100 FOR STORM WATER RUN OFF TO ALL EXTERNAL PAVING

3. REFER TO FINISHES SCHEDULE FOR EXTERNAL FINISHES & MATERIAL CODES

2. WHERE ONLY ONE MATERIAL/ COLOUR IS NOMINATED ON A SURFACE, ASSUME THAT MATERIAL/ COLOUR IS APPLICABLE TO THE WHOLE SURFACE.

LEGEND

AFL	ABOVE FLOOR LEVEL
COL	COLUMN
DP	DOWNPIPE
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL

SYMBOLS

D-01 / 01	DOOR TYPE AND OPENING NUMBER. REFER DOOR SCHEDULE FOR DETAILS
WA-01 / 02	WINDOW TYPE AND OPENING NUMBER. REFER WINDOW SCHEDULE FOR DETAILS
RL 290.20	PROPOSED LEVEL

EXTERNAL FINISHES LEGEND

MRS: SPANDEK METALDECK ROOF SHEETING AS SPECIFIED IN ZINCALUME FINISH

POL01 DANPAL FREESPAN POLYCARBONATE ROOF SYSTEM AS SPECIFIED.

CLA01 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.

CLA02 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	E	Issue for Structural Coordination	RB
14.07.26	D	Issue to Mechanical	RB
10.07.26	C	Issue for DD Cost Estimate	RB
01.07.26	B	DD Services Consultant Coordination	RB
19.06.26	A	Issue to Energy Consultant	RB

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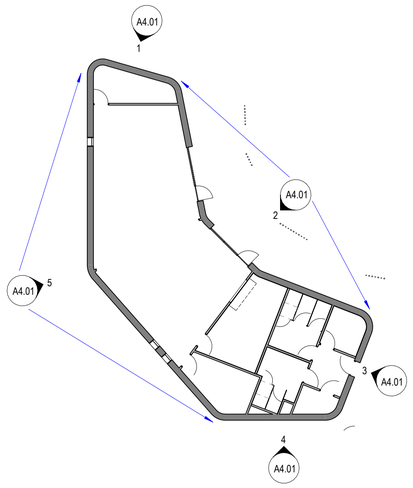
PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
ELEVATIONS (STREET)

		DWG	REV
DATE	I 08/11/11	A4.00	E
SCALE @A1	I 1 : 100		
JOB No	I 22580		
DRAWN BY	I Author		
CHECKED	I Checker		

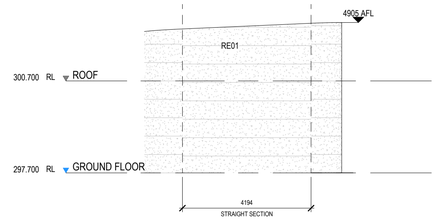
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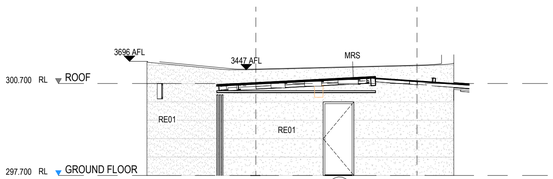
0 / A1.20 KEY PLAN - ELEVATIONS MULTIPURPOSE

1 : 200



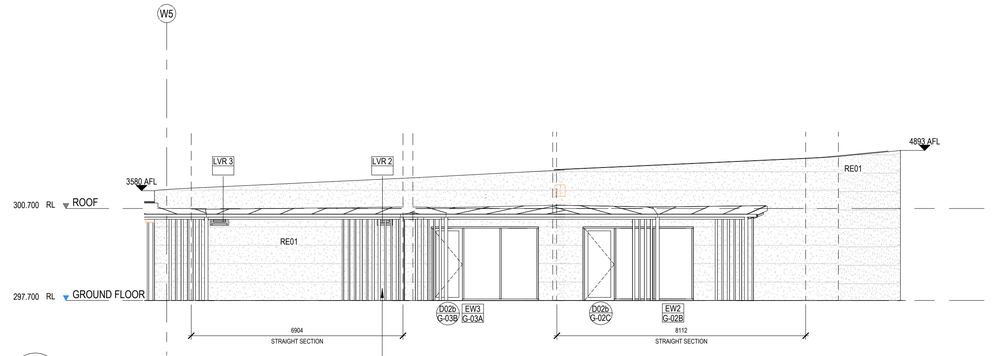
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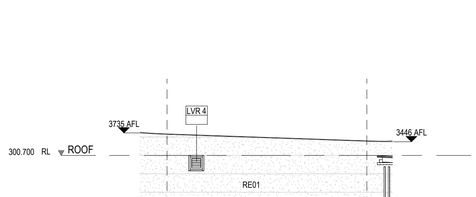
3 / A4.01 ELEVATION 3 - MULTIPURPOSE BUILDING

1 : 100



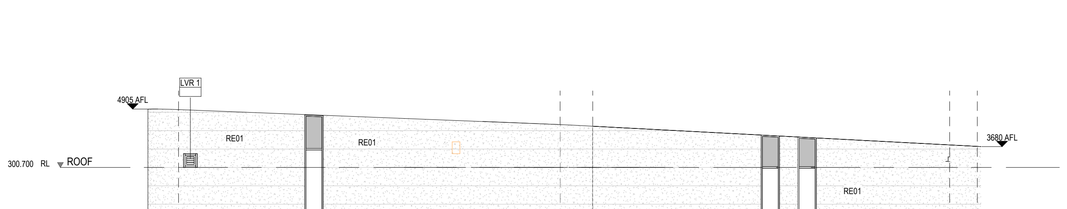
2 / A4.01 ELEVATION 2 - MULTIPURPOSE BUILDING

1 : 100



4 / A4.01 ELEVATION 4 -MULTIPURPOSE BUILDING

1 : 100



5 / A4.01 ELEVATION 5 - MULTIPURPOSE BUILDING

1 : 100

ELEVATIONS / SECTIONS LEGEND

NOTES

1. BUILDER TO LOCALLY GRADE FINISHED LANDSCAPING TO ENTIRE PERIMETER OF BUILDING TO ENSURE ADEQUATE WATER RUN OFF IS ACHIEVED

2. PROVIDE MINIMUM FALL AWAY FROM BUILDING OF 1:100 FOR STORM WATER RUN OFF TO ALL EXTERNAL PAVING

3. REFER TO FINISHES SCHEDULE FOR EXTERNAL FINISHES & MATERIAL CODES

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LEGEND

AFL	ABOVE FLOOR LEVEL
COL	COLUMN
DP	DOWNPIPE
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL

SYMBOLS

D-01 / 01	DOOR TYPE AND OPENING NUMBER. REFER DOOR SCHEDULE FOR DETAILS
WA-01 / 02	WINDOW TYPE AND OPENING NUMBER. REFER WINDOW SCHEDULE FOR DETAILS
RL 290.20	PROPOSED LEVEL

EXTERNAL FINISHES LEGEND

MRS: SPANDEK METALDECK ROOF SHEETING AS SPECIFIED IN ZINCALUME FINISH

POL01 DANPAL FREESPAN POLYCARBONATE ROOF SYSTEM AS SPECIFIED.

CLA01 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.

CLA02 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	E	Issue for Structural Coordination	RB
14.07.26	D	Issue to Mechanical	RB
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01.07.26	B	DD Services Consultant Coordination	RB
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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
ELEVATIONS (BUILDING)

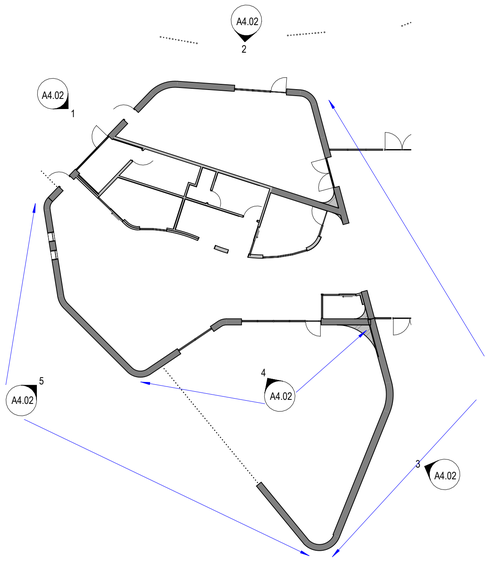
DATE I 08/11/11
SCALE @A1I As indicated
JOB No I 22580
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CHECKED I Checker

DWG A4.01E

REV

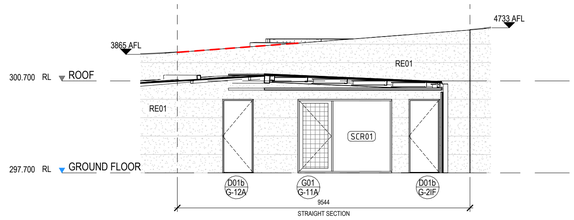
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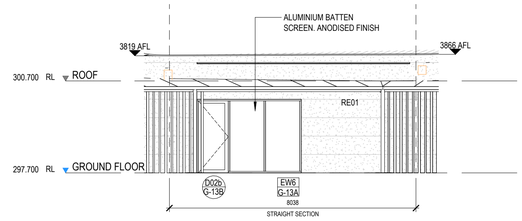
0 A1.20 KEY PLAN - ELEVATIONS CRC

1 : 200



1 A4.02 ELEVATION 1 - CENTRAL VOLUME

1 : 100



2 A4.02 ELEVATION 2 - CENTRAL VOLUME

1 : 100

ELEVATIONS / SECTIONS LEGEND

NOTES

1. BUILDER TO LOCALLY GRADE FINISHED LANDSCAPING TO ENTIRE PERIMETER OF BUILDING TO ENSURE ADEQUATE WATER RUN OFF IS ACHIEVED

2. PROVIDE MINIMUM FALL AWAY FROM BUILDING OF 1:100 FOR STORM WATER RUN OFF TO ALL EXTERNAL PAVING

3. REFER TO FINISHES SCHEDULE FOR EXTERNAL FINISHES & MATERIAL CODES

2. WHERE ONLY ONE MATERIAL/ COLOUR IS NOMINATED ON A SURFACE, ASSUME THAT MATERIAL/ COLOUR IS APPLICABLE TO THE WHOLE SURFACE.

LEGEND

AFL	ABOVE FLOOR LEVEL
COL	COLUMN
DP	DOWNPIPE
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL

SYMBOLS

D-01 / 01	DOOR TYPE AND OPENING NUMBER. REFER DOOR SCHEDULE FOR DETAILS
WA-01 / 02	WINDOW TYPE AND OPENING NUMBER. REFER WINDOW SCHEDULE FOR DETAILS
RL 290.20	PROPOSED LEVEL

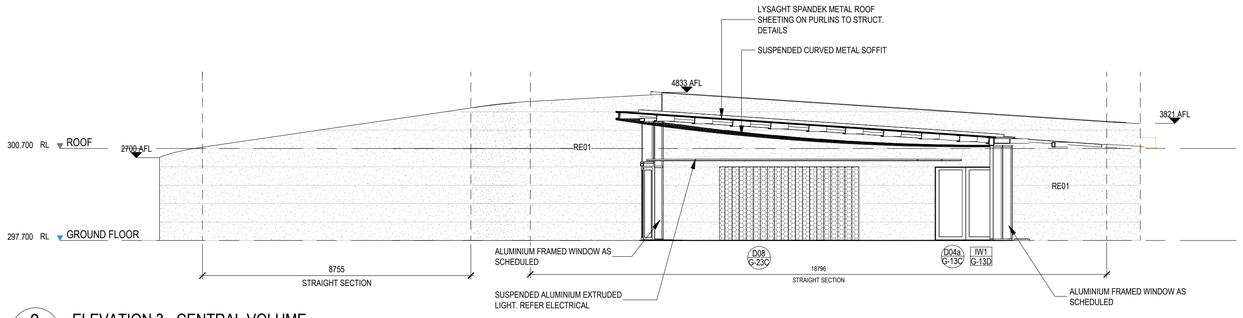
EXTERNAL FINISHES LEGEND

MRS: SPANDEK METALDECK ROOF SHEETING AS SPECIFIED IN ZINCALUME FINISH

POL01 DANPAL FREESPAN POLYCARBONATE ROOF SYSTEM AS SPECIFIED.

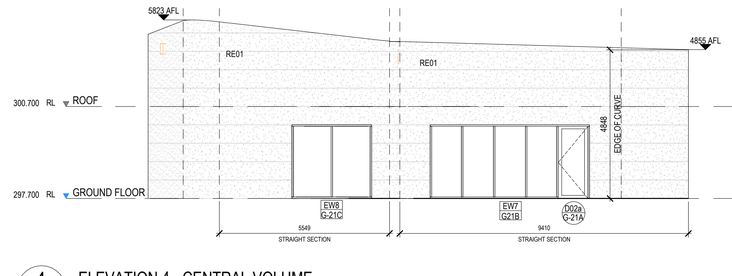
CLA01 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.

CLA02 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.



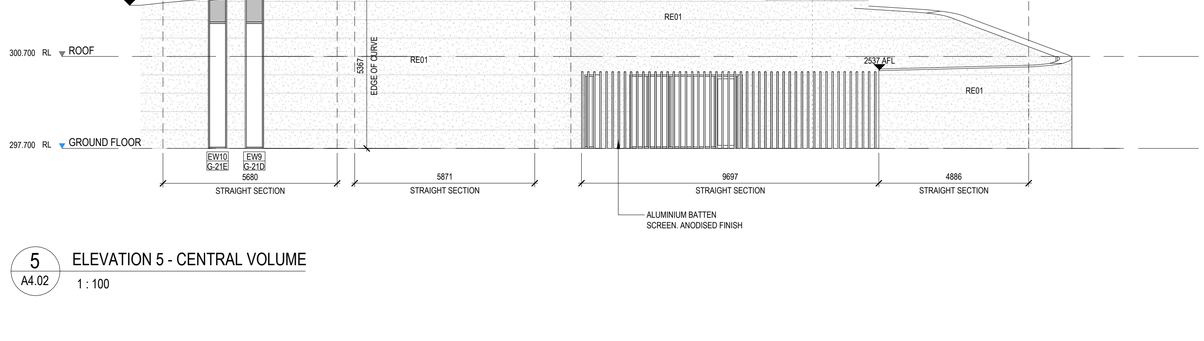
3 A4.02 ELEVATION 3 - CENTRAL VOLUME

1 : 100



4 A4.02 ELEVATION 4 - CENTRAL VOLUME

1 : 100



5 A4.02 ELEVATION 5 - CENTRAL VOLUME

1 : 100

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	E	Issue for Structural Coordination	RB
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10.07.26	C	Issue for DD Cost Estimate	RB
01.07.26	B	DD Services Consultant Coordination	RB
19.06.26	A	Issue to Energy Consultant	RB

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mail@sitearchitecture.com.au I www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

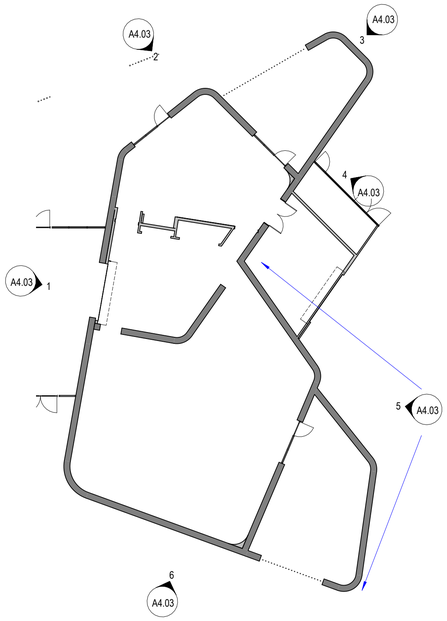
TITLE
ELEVATIONS (BUILDING)

DATE I 08/11/11
SCALE @A1I As indicated
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A4.02E | REV

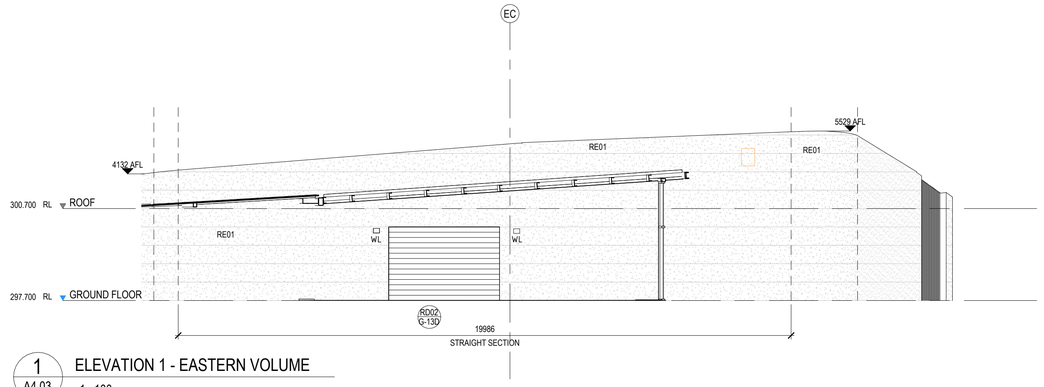
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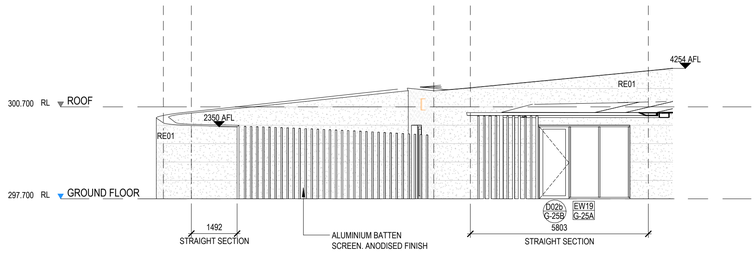
0 A1.20 KEY PLAN - ELEVATIONS EXHIBITION

1 : 200



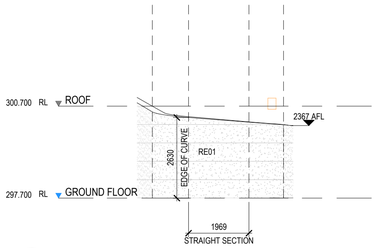
1 A4.03 ELEVATION 1 - EASTERN VOLUME

1 : 100



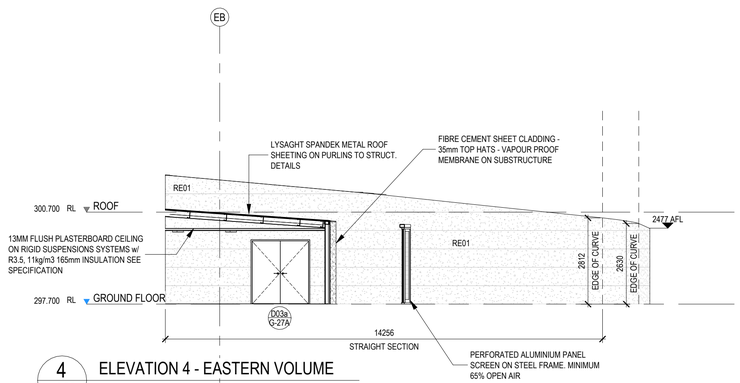
2 A4.03 ELEVATION 2 - EASTERN VOLUME

1 : 100



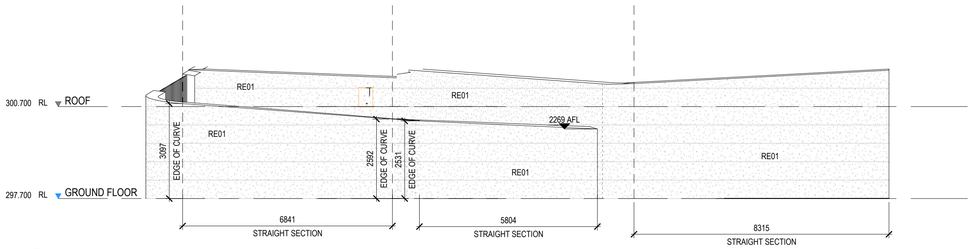
3 A4.03 ELEVATION 3 - EASTERN VOLUME

1 : 100



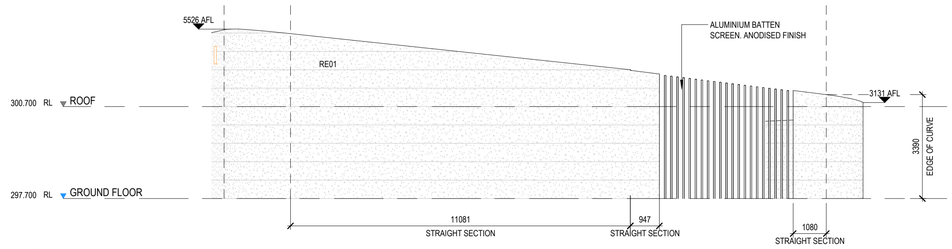
4 A4.03 ELEVATION 4 - EASTERN VOLUME

1 : 100



5 A4.03 ELEVATION 5 - EASTERN VOLUME

1 : 100



6 A4.03 ELEVATION 6 - EASTERN VOLUME

1 : 100

ELEVATIONS / SECTIONS LEGEND

NOTES

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COL	COLUMN
DP	DOWNPIPE
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL

SYMBOLS

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WA-01 / 02	WINDOW TYPE AND OPENING NUMBER. REFER WINDOW SCHEDULE FOR DETAILS
RL 290.20	PROPOSED LEVEL

EXTERNAL FINISHES LEGEND

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CLA02 LYSAGHT DOMINION 285 METAL WALL CLADDING AS SPECIFIED IN COLORBOND FINISH.

DESIGN DEVELOPMENT

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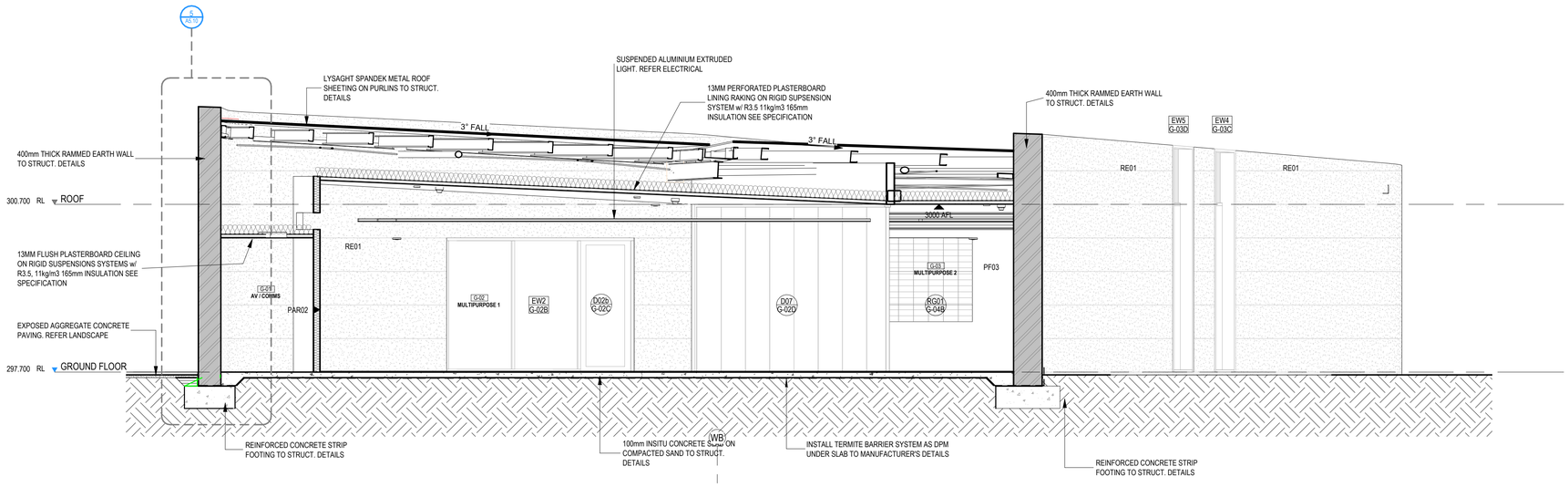
TITLE
ELEVATIONS (BUILDING)

DATE I 08/11/11
SCALE @A1I As indicated
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A4.03E | REV

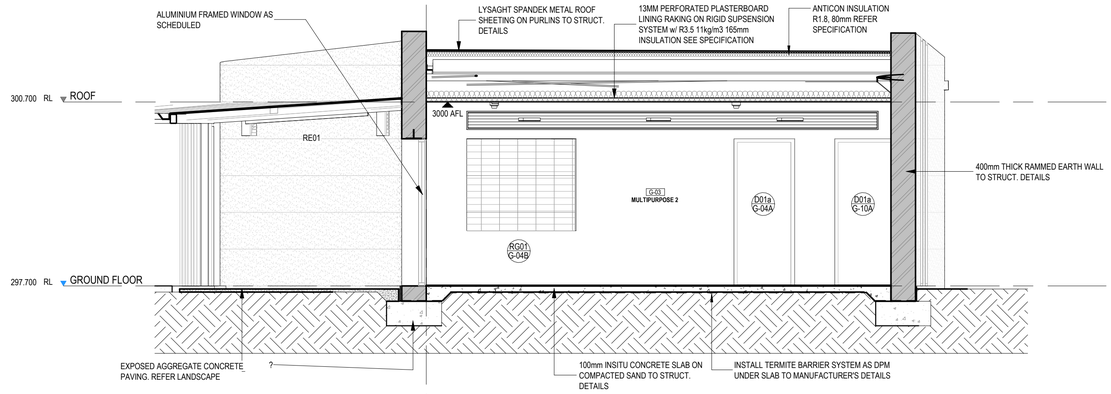
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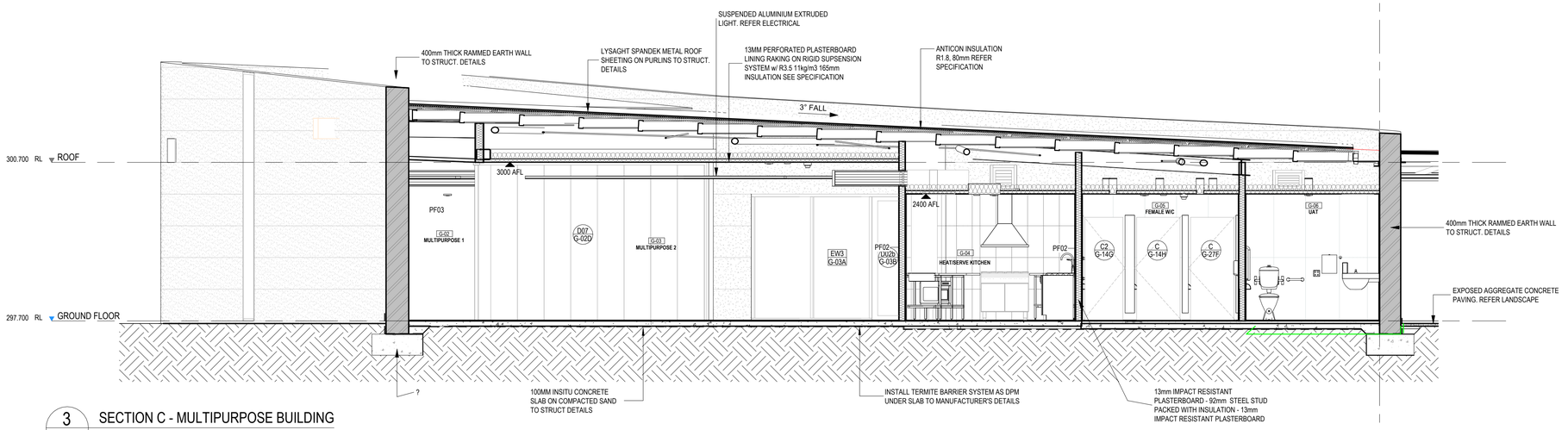
1 A2.00 SECTION A - MULTIPURPOSE BUILDING

1 : 50



2 A2.00 SECTION B - MULTIPURPOSE BUILDING

1 : 50



3 A2.00 SECTION C - MULTIPURPOSE BUILDING

1 : 50

ELEVATIONS / SECTIONS LEGEND

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FFL	FINISHED FLOOR LEVEL
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FHR	FIRE HOSE REEL

SYMBOLS

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WA-01 02	WINDOW TYPE AND OPENING NUMBER. REFER WINDOW SCHEDULE FOR DETAILS
RL 290.20	PROPOSED LEVEL

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DESIGN DEVELOPMENT

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19.06.26	C	Issue to Energy Consultant	RB
03.06.26	B	Issue to Mechanical	RB
29.05.26	A	Issue to Structural	RB
DATE	No.	REVISION	CHKD

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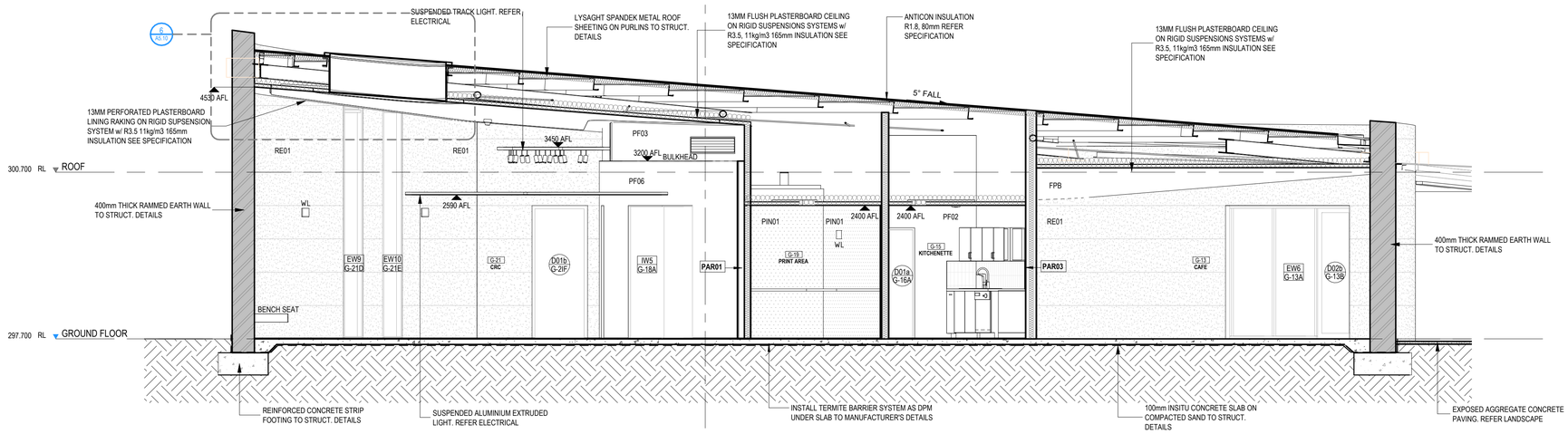
PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
SECTIONS

DATE	I 08/11/11	DWG	REV
SCALE @A1	I As indicated	A5.00	G
JOB No	I 22580		
DRAWN BY	I Author		
CHECKED	I Checker		

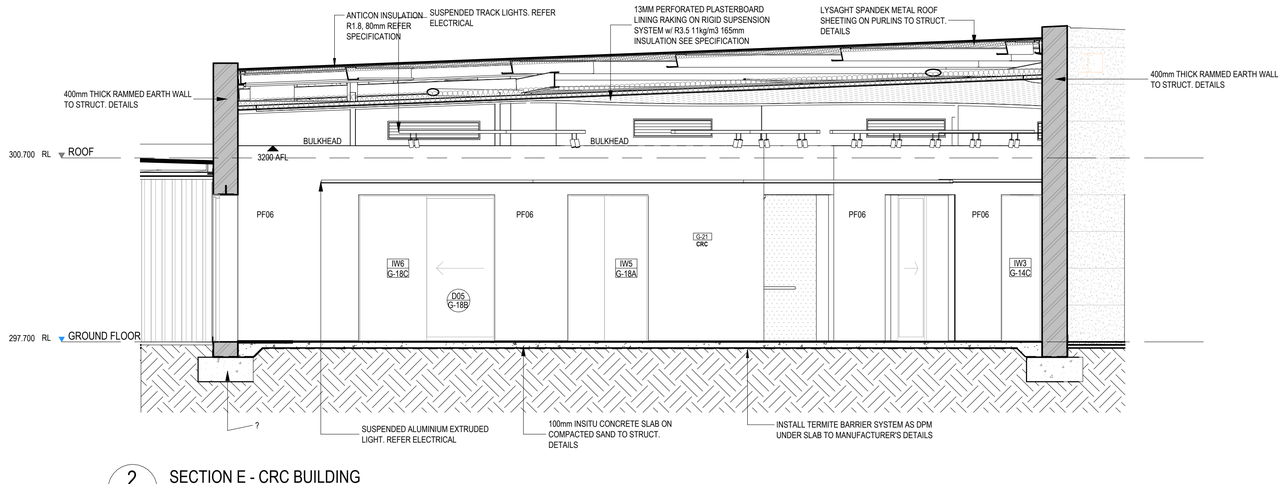
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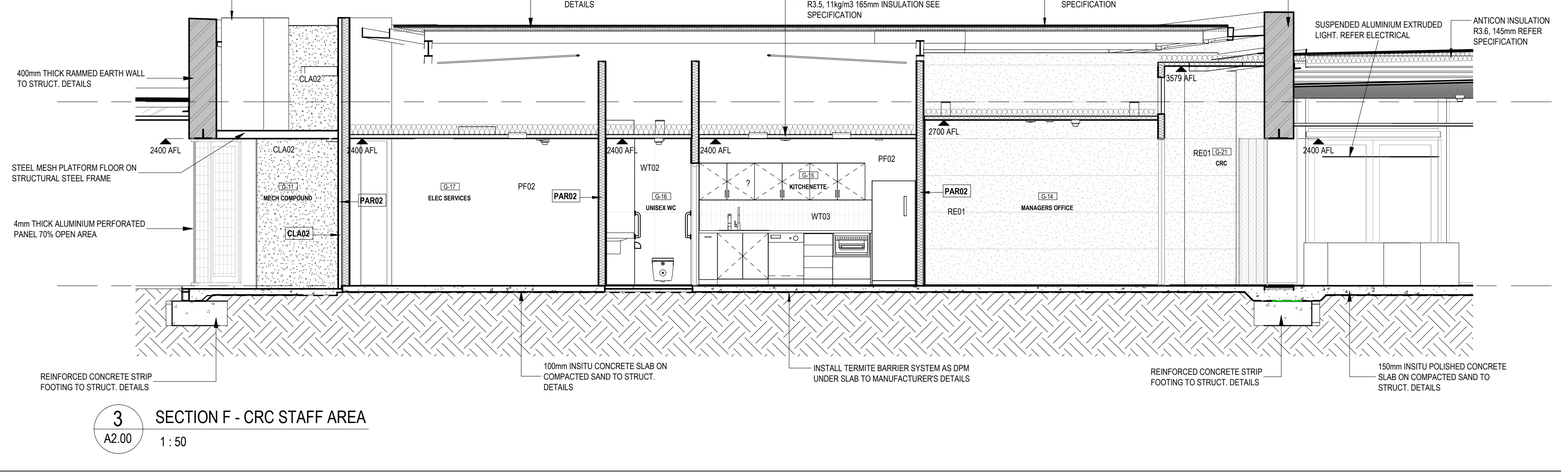
1 A2.00 SECTION D - CRC BUILDING

1 : 50



2 A2.00 SECTION E - CRC BUILDING

1 : 50



3 A2.00 SECTION F - CRC STAFF AREA

1 : 50

ELEVATIONS / SECTIONS LEGEND

NOTES

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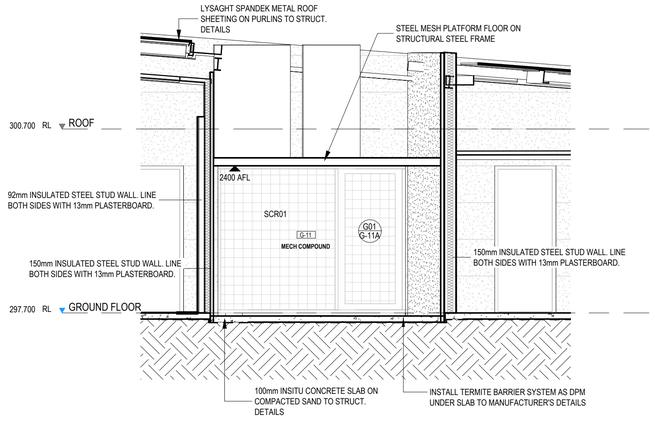
PROJECT
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36 MARSHALL STREET, HYDEN WA 6359

TITLE
SECTIONS

		DWG	REV
DATE	08/11/11	A5.01	G
SCALE @A1	As indicated		
JOB No	22580		
DRAWN BY	Author		
CHECKED	Checker		

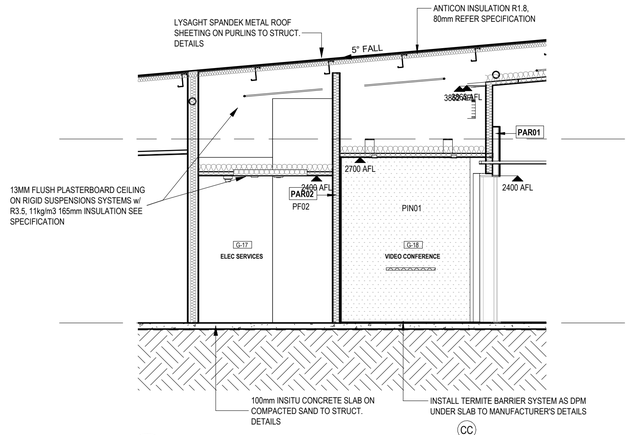
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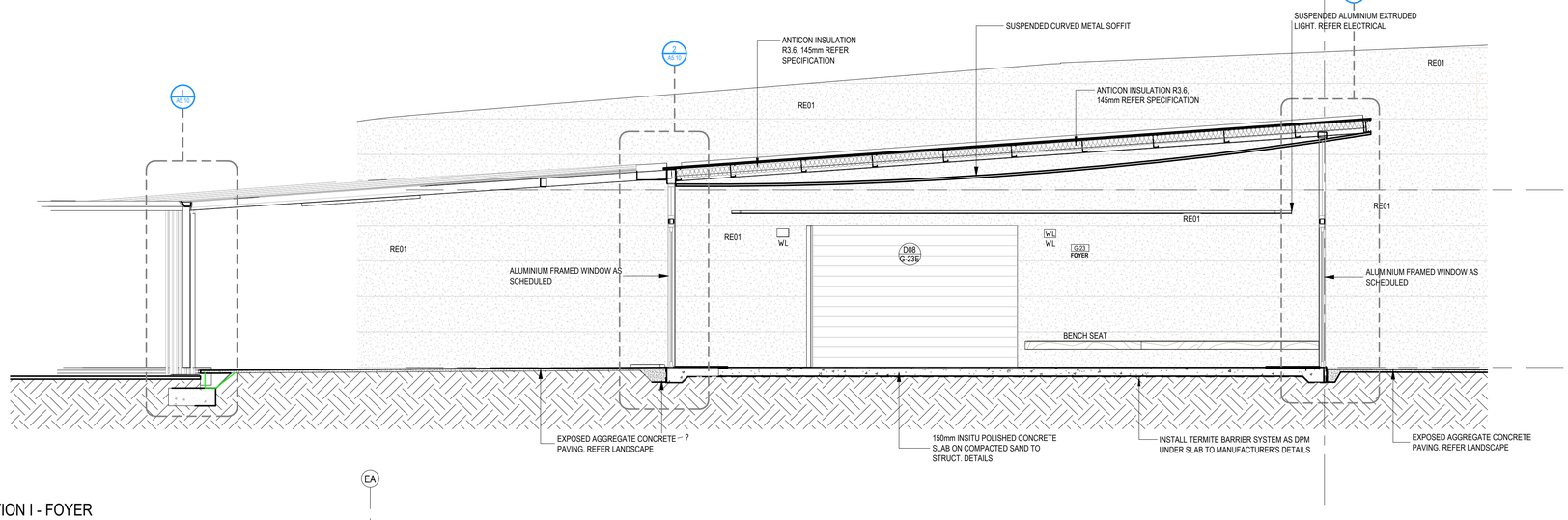
1 A1.20 SECTION G - MECHANICAL COMPOUND

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2 A2.00 SECTION H - ELEC. SERVICES & VC ROOM

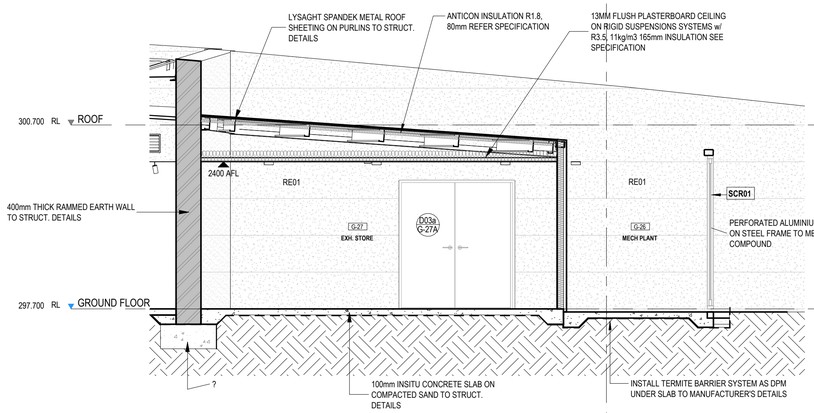
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3 A2.00 SECTION I - FOYER

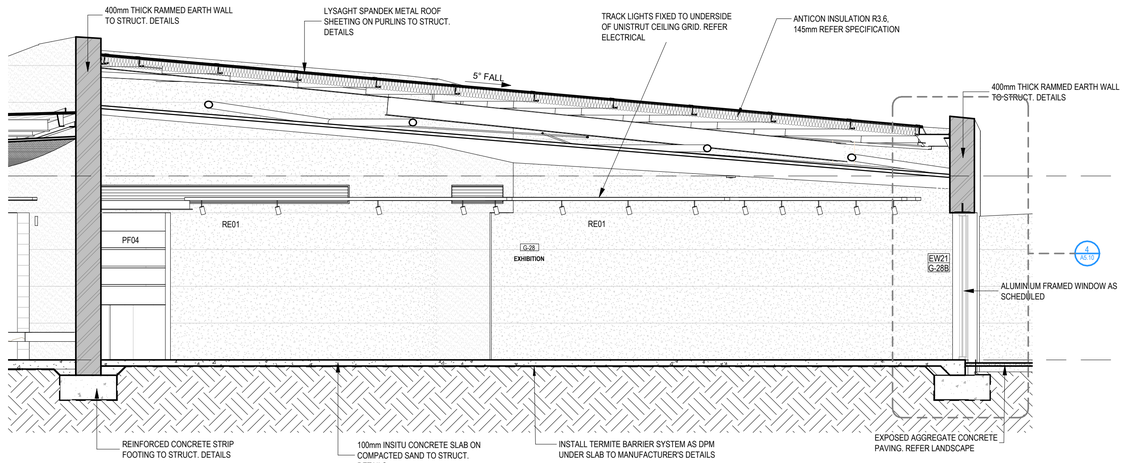
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EA



4 A2.00 SECTION J - EXHIBITION STORE

1 : 50



5 A2.00 SECTION K - EXHIBITION

1 : 50

ELEVATIONS / SECTIONS LEGEND

NOTES

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RL 290.20	PROPOSED LEVEL

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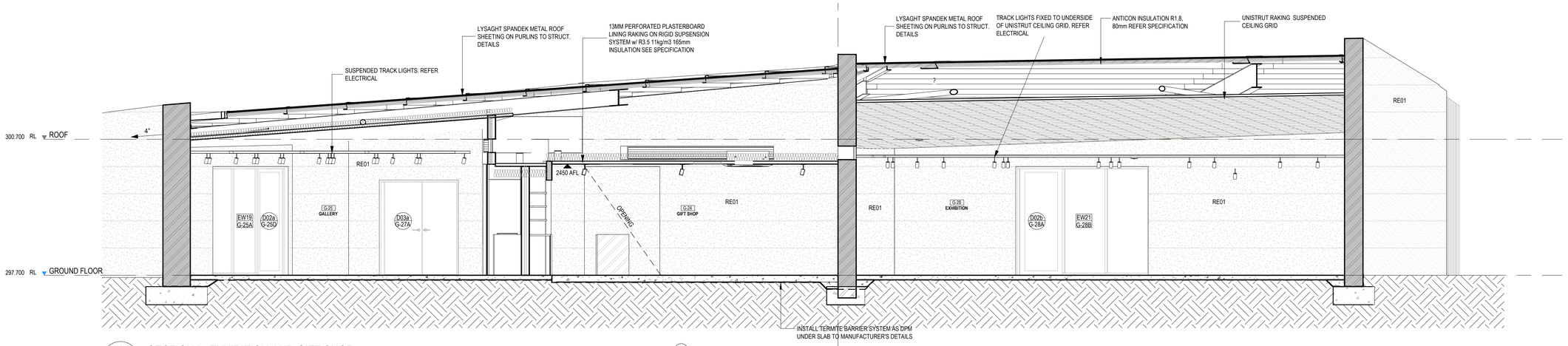
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JOB No	22580		
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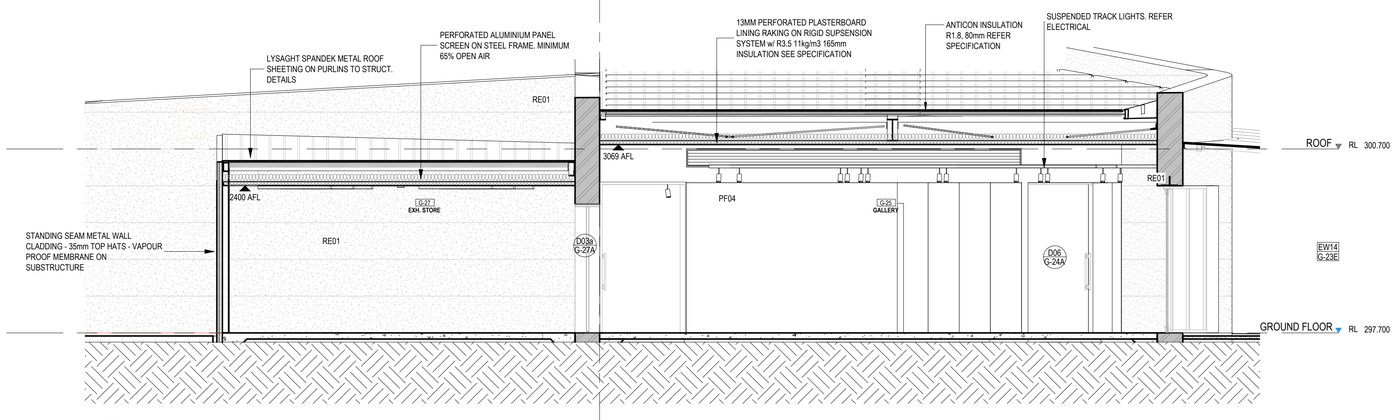
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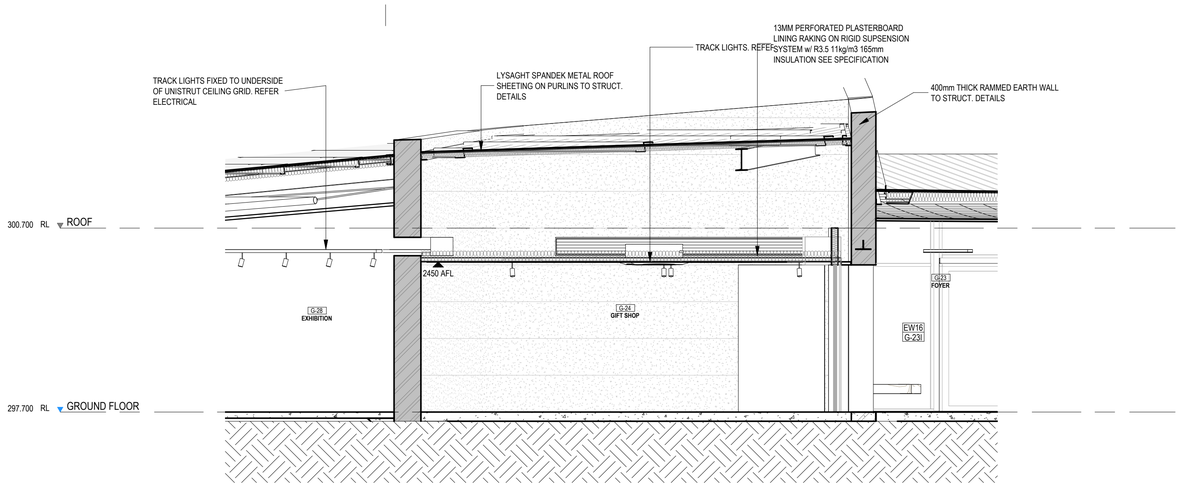
1 A2.00 SECTION I - EXHIBITION AND GIFT SHOP

1 : 50



2 A2.00 SECTION J - GALLERY

1 : 50



3 A2.00 SECTION K - FOYER & EXHIBITION

1 : 50

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14.07.26	F	Issue to Mechanical	RB
10.07.26	E	Issue for DD Cost Estimate	RB
01.07.26	D	DD Services Consultant Coordination	RB
19.06.26	C	Issue to Energy Consultant	RB
03.06.26	B	Issue to Mechanical	RB
29.05.26	A	Issue to Structural	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
SECTIONS

		DWG	REV
DATE	I 08/11/11		
SCALE @A1	I As indicated		
JOB No	I 22580	A5.03G	
DRAWN BY	I Author		
CHECKED	I Checker		

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

31/07/2026 2:00:31 PM

SCHEDULE - DOORS

DOOR CONFIGURATION	OPENING/ROOM NUMBER	ROOM NAME	OPENING HEIGHT (C.O.S.)	OPENING WIDTH (C.O.S.)	LEAF HEIGHT	LEAF 1 WIDTH	LEAF 2 WIDTH	LEAF THICKNESS	FRAME TYPE AND FINISH	DOOR TYPE AND FINISH	FIRE RATING	ACOUSTIC RATING	DOOR CLOSER	SEALS	REMARKS
GROUND FLOOR															
D01a	**G-05A**	FEMALE W/C	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		Yes		
D01a	**G-08A**	SERVICES STORE	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		No		
D01a	**G-06A**	UAT	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		Yes		
D01a	**G-10A**	STORE	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		No		
D01a	**G-04A**	HEAT/SERVE KITCHEN	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		No		
D01a	**G-09A**	MALE W/C	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		Yes		
D01a	**G-15A**	KITCHENETTE	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		Yes		
D01a	**G-01A**	AV / COMMS	2400	1000	2340	920		40	TYPE A	TYPE A	-- / -- / --		No		
D01a	**G-16A**	UNISEX WC	2000	900	1940	820		40	TYPE A	TYPE A	-- / -- / --		Yes		
D01b	**G-17A**	ELEC SERVICES	2400	1000	2340	920		40	TYPE B	TYPE B	-- / -- / --		No	SS, WS	
D01b	**G-07A**	AIRLOCK	2400	1000	2340	920		40	TYPE B	TYPE B	-- / -- / --		Yes	WS	
D01b	**G-2IF**	CRC	2400	1000	2340	920		40	TYPE B	TYPE B	-- / -- / --		Yes	WS	
D01b	**G-12A**	KITCHEN	2400	1000	2340	920		40	TYPE B	TYPE B	-- / -- / --		Yes	WS	
D02a	**G-25D**	GALLERY	2350	970	2350	970		0	TYPE C	TYPE D	-- / -- / --		Yes	WS	
D02a	**G-21A**	CRC	2350	970	2350	970		0	TYPE C	TYPE D	-- / -- / --		Yes	WS	
D02b	**G-28A**	EXHIBITION	2350	970	2350	970		0	TYPE C	TYPE C	-- / -- / --		Yes	WS	
D02b	**G-03B**	MULTIPURPOSE 2	2350	970	2350	970		0	TYPE C	TYPE C	-- / -- / --		Yes	WS	
D02b	**G-13B**	CAFE	2350	970	2350	970		0	TYPE C	TYPE C	-- / -- / --		Yes	WS	
D02b	**G-25B**	GALLERY	2350	965	2350	965		0	TYPE C	TYPE C	-- / -- / --		Yes	WS	
D02b	**G-02C**	MULTIPURPOSE 1	2350	970	2350	970		0	TYPE C	TYPE C	-- / -- / --		Yes	WS	
D02b	**G-14A**	MANAGERS OFFICE	2380	970	2380	970		0	TYPE C	TYPE C	-- / -- / --	Rw30	Yes	WS	
D03a	**G-27A**	EXH. STORE	2100	1920	2040	920	920	40	TYPE A	TYPE A	-- / -- / --		No		
D04a	**G-13C**	CAFE	2360	1960	2360	980	980	50	TYPE C	TYPE C	-- / -- / --		No		
D04b	**G-23H**	FOYER	2375	2152	2375	1076	1076	50		TYPE C	-- / -- / --		No		
D04b	**G-23C**		2375	2223	2375	1111	1111	50		TYPE C	-- / -- / --		No		
D05	**G-14E**	CORRIDOOR	2360	900					TYPE D	TYPE E	-- / -- / --	Rw30	No	AS	
D05	**G-18B**	CRC	2360	1090					TYPE D	TYPE E	-- / -- / --	Rw30	No		
D05	**G-22B**	CENTRELINK	2360	1058					TYPE D	TYPE E	-- / -- / --	Rw30	No		
D06	**G-24A**	GIFT SHOP	2460	1580	2400	1500		40	TYPE E	TYPE F	-- / -- / --		No		
D06	**G-24B**	GALLERY	2460	1580	2400	1500		40	TYPE E	TYPE E	-- / -- / --		No		
D07	**G-02D**	MULTIPURPOSE 1	3000	7500										AS	AS PER MANUFACTURER'S DETAILS
D08	**G-23E**	GIFT SHOP	2400	4150											AS PER MANUFACTURER'S DETAILS
D08	**G-23C**	FOYER	2400	4600											AS PER MANUFACTURER'S DETAILS

Grand total: 33

DOOR TYPES

DOOR FRAME TYPES

TYPE-A
STEEL FRAME AS DETAILED. PAINT FINISH TO COLOUR SCHEDULE

TYPE-B
EXTERIOR STEEL FRAME AS DETAILED. PAINT FINISH TO COLOUR SCHEDULE

TYPE-C
WITHIN SURROUNDING ALUMINIUM WINDOW SUITE

TYPE-D
ALUMINIUM SLIDING DOOR FRAME WITHIN SURROUNDING ALUMINIUM WINDOW SUITE.

TYPE-E
POCKET SLIDING DOOR FRAME.

TYPE-F
CABINETRY BIFOLD SLIDING DOOR FRAME & TRACK

TYPE-G
CONCEALED DOOR FRAME. NOMINALLY EZYJAMB SINGLE REBATE SRC

DOOR PANEL TYPES

TYPE-A
SOLID CORE DOOR - PAINT FINISH

TYPE - B
EXTERIOR GRADE SOLID CORE DOOR w/ METAL FACING AND STEEL CHANNEL TO ALL EDGES - PAINT FINISH. TO COLOUR SCHEDULE.

TYPE-C
AWS SERIES 50 COMMERICAL ALUMINIUM FRAMED GLAZED DOOR PANEL w/ WIDE STILES. **ANODISED PAINT** FINISH TO COLOUR SCHEDULE

TYPE-D
SAPPHIRE SHOOSHLINE HINGED ALUMINIUM FRAMED GLAZED DOOR PANEL w/ LARGE STILES (115x45) ALL ROUND. **ANODISED PAINT** FINISH TO COLOUR SCHEDULE

TYPE-E
SAPPHIRE SHOOSHLINE SLIDING ALUMINIUM FRAMED GLAZED DOOR PANEL w/ LARGE STILES (115x45) ALL ROUND. **ANODISED PAINT** FINISH TO COLOUR SCHEDULE

TYPE-F
SOLID SLIDING DOOR PANEL .PAINT FINISH TO COLOUR SCHEDULE.

DOOR SEAL TYPES

(REFER DOOR HARDWARE SCHEDULE FOR SPECIFICATION)

AS - ACOUSTIC SEAL
WS - WEATHER SEAL
SS - SMOKE SEAL

DOOR/ WINDOW SCHEDULE LEGEND

NOTES

1. ALL DIMENSIONS AND OPENING SIZES ARE ONLY INDICATIVE AND NEED TO BE CHECKED AND CONFIRMED ON SITE AND BY SHOP DRAWINGS PRIOR TO MANUFACTURE OF WINDOW AND DOOR FRAMES.

2. ALL FRAME SIZES, FRAME LAYOUT AND GLASS THICKNESS STATE THE DESIGN INTENT ONLY AND NEED TO BE CHECKED AND CONFIRMED IN SHOP DRAWINGS BY THE BUILDER TO BE IN ACCORDANCE WITH ALL RELEVANT AUSTRALIAN STANDARDS AND STRUCTURAL REQUIREMENTS.

3. ALL GLAZING TO AS 1288 - 2006 A3

4. ALL DOORS TO REQUIRED EXITS MUST BE READILY OPENABLE WITHOUT A KEY FROM THE SIDE THAT FACES A PERSON SEEKING EGRESS, BY A SINGLE HAND DOWNWARD ACTION OR PUSHING ACTION ON A SINGLE DEVICE.

5. PROVIDE DOOR SIGNAGE TO EACH SANITARY FACILITY IN ACCORDANCE WITH AS 1428.1

6. ALL GLAZED ASSEMBLIES IN EXTERNAL WALLS TO COMPLY WITH AS 2047

7. ALL DOOR HARDWARE TO BE INSTALLED AT 1000 ABOVE FLOOR LEVEL UNLESS NOTED OTHERWISE.

8. REFER TO COLOUR SCHEDULE FOR COLOUR SELECTIONS

10. GRAPHICS FILM WHERE SHOWN TO BE PART OF SIGNAGE PROVISIONAL SUM

11. ALL WINDOW ASSEMBLIES AS VIEWED EXTERNALLY

12. REFER TO PLANS FOR HANDING AND ACTIVE LEAF (A). IF NO ACTIVE LEAF NOMINATED - CONFIRM WITH ARCHITECT.

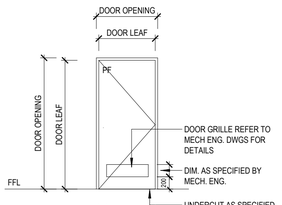
13. ACTIVE LEAF TO HAVE MINIMUM CLEAR OPENING OF 900mm. IF ACTIVE LEAF IS SHOWN LESS THAN 900mm, DOOR SIZING TO BE AMENDED TO ACHIEVE 900mm CLEAR (MIN 950mm). DIRECTION TO BE CONFIRMED WITH ARCHITECT.

13. ALL GLAZED SUITES MUST BE SUBFRAMED AROUND THE ENTIRE PERIMETER UNLESS NOTED OTHERWISE

14. ENSURE MINIMUM THICKNESS OF GLASS IS ACHIEVED IN ACCORDANCE WITH GLAZING STANDARDS

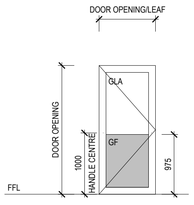
LEGEND

AW	AWNING WINDOW
COL.	STRUCTURAL COLUMN. REFER TO STRUC. ENG. DWGS FOR DETAILS
C.O.S	CHECK ON SITE
F	FIXED GLAZING
GLA##	GLAZING TYPE AS SCHEDULED
GF	GLAZING FILM TO FUTURE ARTWORK TO SIGNAGE PROVISIONAL SUM
LVR	LOUVRED PANEL
PF	PAINT FINISH TO COLOUR SCHEDULE
SC	SECURITY SCREEN AS SPECD
SJ	SILICON JOIN
SL	SLIDING DOOR/ WINDOW PANEL
VSL	VERTICAL SLIDING PANEL



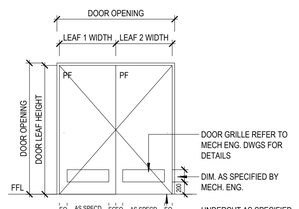
D01# - DOOR CONFIGURATION 01

SINGLE SWING HINGED DOOR - SOLID
a - INTERNAL
b - EXTERNAL



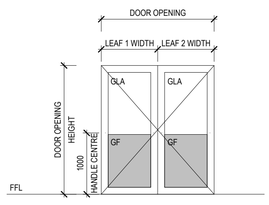
DOOR CONFIGURATION 02

SINGLE SWING HINGED DOOR - ALUMINIUM FRAMED GLAZED
a - INTERNAL
b - EXTERNAL



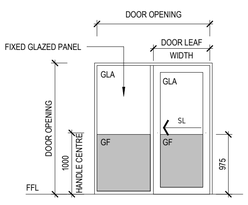
DOOR CONFIGURATION 03

DOUBLE SWING HINGED DOOR - SOLID
a - INTERNAL
b- EXTERNAL



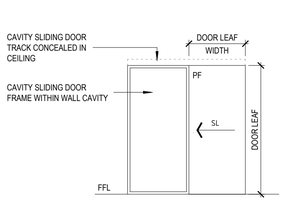
DOOR CONFIGURATION 04

DOUBLE SWING HIINGED DOOR - ALUMINIUM FRAMED GLAZED
a - INTERNAL
b- EXTERNAL



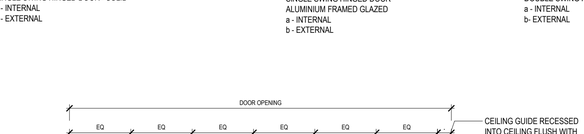
DOOR CONFIGURATION 05

SINGLE SLIDING DOOR - GLAZED
WITHIN ALUMINIUM FRAME



DOOR CONFIGURATION 06

POCKET CAVITY SLIDING DOOR - SOLID



DOOR CONFIGURATION 07

BIFOLD ROOM DIVIDER
= NUMBER OF PANELS



DOOR CONFIGURATION 08

STEEL CONCERTINA SECURITY SHUTTER

DESIGN DEVELOPMENT

10.07.26	A	Issue for DD Cost Estimate	RB
DATE	No.	REVISION	CHKD

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HYDEN PROGRESS ASSOCIATION

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
DOOR SCHEDULE

DATE I 08/11/11
SCALE @A1I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A8.00A
REV

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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SCHEDULE - ROLLER DOORS

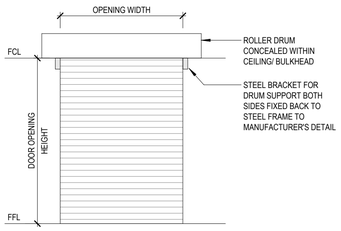
CONFIGURATION	OPENING/ROOM NUMBER	ROOM NAME	OPENING HEIGHT (C.O.S.)	OPENING WIDTH (C.O.S.)	LEAF THICKNESS	TYPE AND FINISH	FIRE RATING	ACOUSTIC RATING	OPERATION	LOCKABLE	REMARKS
GROUND FLOOR											
RD01	**G-27C**	EXH. STORE	2400	3755	25					Yes	
RD02	**G-13D**	FOYER	2400	3755	25		-/120/-				
RG01	**G-04B**	HEAT/SERVE KITCHEN	1500	1800	25					Yes	
Grand total: 3											

ROLLED DOOR/ SHUTTER TYPES

RD-01 *(DOOR)*
STEEL ROLLER DOOR WITHIN STEEL CHANNEL. POWDERCOAT PAINT FINISH.

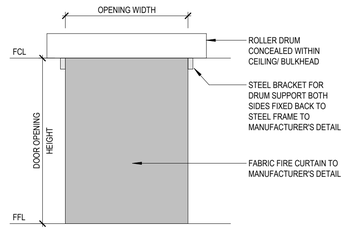
RD-02 *(FIRE CURTAIN)*
FABRIC FIRE CURTAIN WITHIN STEEL CHANNEL.

RG-01
ALUMINIUM ROLLER GRILLE WITHIN ALUMINIUM FRAME. POWDERCOAT PAINT FINISH.



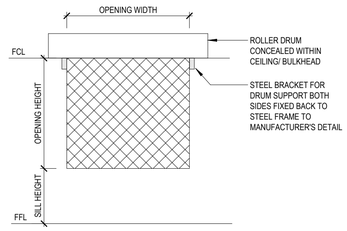
RD01 - ROLLER DOOR 01

STEEL FRAMED ROLLER DOOR WITH ALUMINIUM SLATS



RD02 - ROLLER DOOR 02 FIRE CURTAIN

STEEL FRAMED FIRE CURTAIN



RG01 - ROLLER GRILLE 01

ALUMINIUM FRAMED ROLLER GRILLE WITH TUBULAR ALUMINIUM PANEL

SCHEDULE - GATES

DOOR CONFIGURATION	OPENING/ROOM NUMBER	ROOM NAME	OPENING HEIGHT (C.O.S.)	OPENING WIDTH (C.O.S.)	LEAF HEIGHT	LEAF 1 WIDTH	LEAF 2 WIDTH	FRAME TYPE AND FINISH	PANEL TYPE AND FINISH	LOCKABLE	REMARKS
GROUND FLOOR											
G01	**G-11A**	MECH COMPOUND	2300	1045	2300	1045		TYPE A	TYPE A		
G01	**G-26A**	MECH PLANT	2400	965	2400	965		TYPE A	TYPE A		
G02	**G-26B**	MECH PLANT	2400	2265	2400	1133	1133	TYPE A	TYPE A		
Grand total: 3											

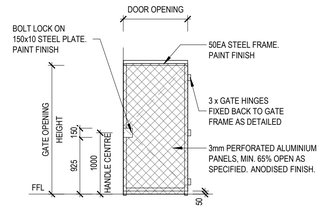
GATE TYPES

GATE FRAME TYPES

TYPE-A
50 STEEL SHS PERIMETER FRAME AS DETAILED. PAINT FINISH TO COLOUR SCHEDULE

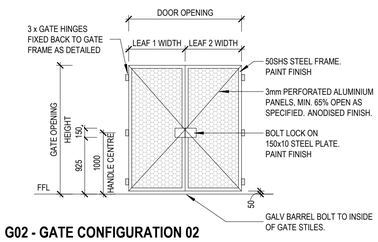
GATE PANEL TYPES

TYPE-A
4mm PERFORATED ALUMINIUM PANEL TO SELECTED PATTERN WITHIN STEEL FRAME AS DETAILED. **ANODISED PAINT** FINISH TO COLOUR SCHEDULE. FINAL PERFORATED SCREEN PATTERN AND COLOUR SELECTION TO BE CONFIRMED W/ PUBLIC ARTIST



G01 - GATE CONFIGURATION 01

SINGLE SWING HINGED GATE - PANEL



G02 - GATE CONFIGURATION 02

DOUBLE SWING HINGED GATE - PANEL

DOOR/ WINDOW SCHEDULE LEGEND

NOTES

1. ALL DIMENSIONS AND OPENING SIZES ARE ONLY INDICATIVE AND NEED TO BE CHECKED AND CONFIRMED ON SITE AND BY SHOP DRAWINGS PRIOR TO MANUFACTURE OF WINDOW AND DOOR FRAMES.

2. ALL FRAME SIZES, FRAME LAYOUT AND GLASS THICKNESS STATE THE DESIGN INTENT ONLY AND NEED TO BE CHECKED AND CONFIRMED IN SHOP DRAWINGS BY THE BUILDER TO BE IN ACCORDANCE WITH ALL RELEVANT AUSTRALIAN STANDARDS AND STRUCTURAL REQUIREMENTS.

3. ALL GLAZING TO AS 1288 - 2006 A3

4. ALL DOORS TO REQUIRED EXITS MUST BE READILY OPENABLE WITHOUT A KEY FROM THE SIDE THAT FACES A PERSON SEEKING EGRESS, BY A SINGLE HAND DOWNWARD ACTION OR PUSHING ACTION ON A SINGLE DEVICE.

5. PROVIDE DOOR SIGNAGE TO EACH SANITARY FACILITY IN ACCORDANCE WITH AS 1428.1

6. ALL GLAZED ASSEMBLIES IN EXTERNAL WALLS TO COMPLY WITH AS 2047

7. ALL DOOR HARDWARE TO BE INSTALLED AT 1000 ABOVE FLOOR LEVEL UNLESS NOTED OTHERWISE.

8. REFER TO COLOUR SCHEDULE FOR COLOUR SELECTIONS

10. GRAPHICS FILM WHERE SHOWN TO BE PART OF SIGNAGE PROVISIONAL SUM

11. ALL WINDOW ASSEMBLIES AS VIEWED EXTERNALLY

12. REFER TO PLANS FOR HANDING AND ACTIVE LEAF (A). IF NO ACTIVE LEAF NOMINATED - CONFIRM WITH ARCHITECT.

13. ACTIVE LEAF TO HAVE MINIMUM CLEAR OPENING OF 900mm. IF ACTIVE LEAF IS SHOWN LESS THAN 900mm, DOOR SIZING TO BE AMENDED TO ACHIEVE 900mm CLEAR (MIN 950mm). DIRECTION TO BE CONFIRMED WITH ARCHITECT,

13. ALL GLAZED SUITES MUST BE SUBFRAMED AROUND THE ENTIRE PERIMETER UNLESS NOTED OTHERWISE

14. ENSURE MINIMUM THICKNESS OF GLASS IS ACHIEVED IN ACCORDANCE WITH GLAZING STANDARDS

LEGEND

AW	AWNING WINDOW
COL.	STRUCTURAL COLUMN. REFER TO STRUC. ENG. DWGS FOR DETAILS
C.O.S	CHECK ON SITE
F	FIXED GLAZING
GLA##	GLAZING TYPE AS SCHEDULED
GF	GLAZING FILM TO FUTURE ARTWORK TO SIGNAGE PROVISIONAL SUM
LVR	LOUVRED PANEL
PF	PAINT FINISH TO COLOUR SCHEDULE
SC	SECURITY SCREEN AS SPECD
SJ	SILICON JOIN
SL	SLIDING DOOR/ WINDOW PANEL
VSL	VERTICAL SLIDING PANEL

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
10.07.26	A	Issue for DD Cost Estimate	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
GATE & ROLLER DOORS SCHEDULE

DATE I 07/08/26
SCALE @A1I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A8.10A
REV

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

31/07/2026 2:00:34 PM

SCHEDULE - WINDOW ASSEMBLIES

WINDO TYPE	OPENING/ROOM NUMBER	LENGTH	HEIGHT	FRAME TYPE AND FINISH	GLAZING TYPE	ACOUSTIC RATING	FIRE RATING	FLYSCREEN	LOCKABLE	REMARKS
EW1	G-02A	600	4702	TYPE A	TYPE A					
EW2	G-02B	3600	2400	TYPE A	TYPE A					
EW3	G-03A	3500	2400	TYPE A	TYPE A					
EW4	G-03C	600	3978	TYPE A	TYPE A					
EW5	G-03D	600	4041	TYPE A	TYPE A					
EW6	G-13A	3400	2400	TYPE A	TYPE A					
EW7	G21B	5256	2373	TYPE A	TYPE A					
EW8	G-21C	2600	2400	TYPE A	TYPE A					
EW9	G-21D	600	5017	TYPE A	TYPE A					
EW10	G-21E	600	4901	TYPE A	TYPE A					
EW11	G-23A	9492	1142	TYPE A	TYPE A					
EW12	G-23B	9492	593	TYPE A	TYPE A					
EW13	G-23D	9492	144	TYPE A	TYPE A					
EW14	G-23E	9902	1094	TYPE A	TYPE A					
EW15	G-23F	4814	877	TYPE A	TYPE A					
EW16	G-23I	5017	1088	TYPE A	TYPE A					
EW17	G-23G	4814	639	TYPE A	TYPE A					
EW18	G-23J	4814	881	TYPE A	TYPE A					
EW19	G-25A	3000	2400	TYPE A	TYPE A					
EW20	G-25C	2900	2400	TYPE A	TYPE A					
EW21	G-28B	3000	2400	TYPE A	TYPE A					
IW1	G-13D	2000	2400	TYPE B	TYPE C	Rw30				
IW2	G-14B	1745	2400	TYPE B	TYPE C	Rw30				
IW3	G-14C	2908	2400	TYPE B	TYPE C	Rw30				
IW4	G-14D	1920	2333	TYPE B	TYPE C	Rw30				
IW5	G-18A	1767	2404	TYPE B	TYPE C	Rw30				
IW6	G-18C	2220	2400	TYPE B	TYPE C	Rw30				
IW7	G-22A	2206	2400	TYPE B	TYPE C	Rw30				
IW8	G-22C	1523	2400	TYPE B	TYPE C	Rw30				

WINDOW TYPES

WINDOW FRAME TYPES

TYPE A
AWS SERIES 400 102x50 CENTRE GLAZED ALUMINIUM FRAMED SINGLE GLAZING SUITE. **ANODISED** FINISH TO COLOUR SCHEDULE

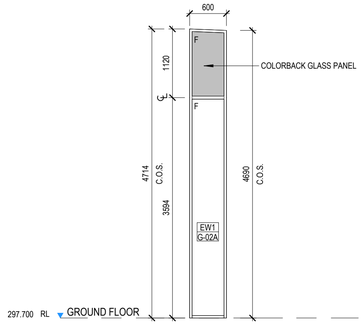
TYPE B
SAPPHIRE MICROLINE 80 (80x50mm) SUITE PARTITION GLAZING SUITE. **ANODISED** FINISH TO COLOUR SCHEDULE

GLAZING TYPES

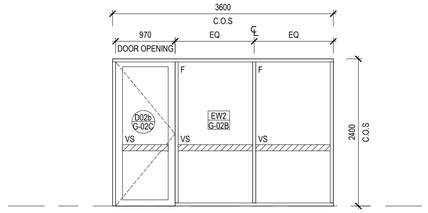
TYPE A GLASS TYPE A (SINGLE GLAZING)
- **U-VALUE: 3.98, SHGC: .52**
- **GLASS FINISH: COOL-E NEUTRAL 6.38mm**
- **LAMINATED GLASS**
- **MAX POCKET SIZE: ##**

TYPE B GLASS TYPE B (SKYLIGHT GLAZING)
- **MAX SYSTEM U-VALUE: 3.5, MAX SHGC: .35**
- **GLASS FINISH TOUGHENED OUTER PANE: ULTRA COOL-E 6.00mm**
- **GLASS FINISH LAMINATED SAFETY INNER PANE: GRADE A 6.38mm**
- **MAX POCKET SIZE: ##**

TYPE C GLASS TYPE C (PARTITION GLAZING)
- **Rw:###**
- **GLASS FINISH: CLEAR 10.38mm**
- **MAX POCKET SIZE: ##**



EW1
1 : 50



EW2
1 : 50

DOOR/ WINDOW SCHEDULE LEGEND

NOTES

1. ALL DIMENSIONS AND OPENING SIZES ARE ONLY INDICATIVE AND NEED TO BE CHECKED AND CONFIRMED ON SITE AND BY SHOP DRAWINGS PRIOR TO MANUFACTURE OF WINDOW AND DOOR FRAMES.

2. ALL FRAME SIZES, FRAME LAYOUT AND GLASS THICKNESS STATE THE DESIGN INTENT ONLY AND NEED TO BE CHECKED AND CONFIRMED IN SHOP DRAWINGS BY THE BUILDER TO BE IN ACCORDANCE WITH ALL RELEVANT AUSTRALIAN STANDARDS AND STRUCTURAL REQUIREMENTS.

3. ALL GLAZING TO AS 1288 - 2006 A3

4. ALL DOORS TO REQUIRED EXITS MUST BE READILY OPENABLE WITHOUT A KEY FROM THE SIDE THAT FACES A PERSON SEEKING EGRESS, BY A SINGLE HAND DOWNWARD ACTION OR PUSHING ACTION ON A SINGLE DEVICE.

5. PROVIDE DOOR SIGNAGE TO EACH SANITARY FACILITY IN ACCORDANCE WITH AS 1428.1

6. ALL GLAZED ASSEMBLIES IN EXTERNAL WALLS TO COMPLY WITH AS 2047

7. ALL DOOR HARDWARE TO BE INSTALLED AT 1000 ABOVE FLOOR LEVEL UNLESS NOTED OTHERWISE.

8. REFER TO COLOUR SCHEDULE FOR COLOUR SELECTIONS

10. GRAPHICS FILM WHERE SHOWN TO BE PART OF SIGNAGE PROVISIONAL SUM

11. ALL WINDOW ASSEMBLIES AS VIEWED EXTERNALLY

12. REFER TO PLANS FOR HANDING AND ACTIVE LEAF (A). IF NO ACTIVE LEAF NOMINATED - CONFIRM WITH ARCHITECT.

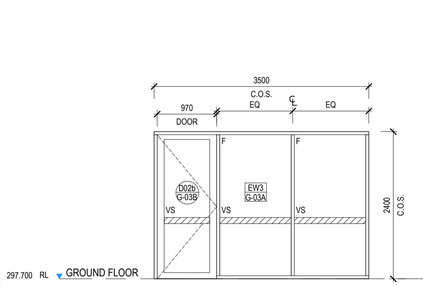
13. ACTIVE LEAF TO HAVE MINIMUM CLEAR OPENING OF 900mm. IF ACTIVE LEAF IS SHOWN LESS THAN 900mm, DOOR SIZING TO BE AMENDED TO ACHIEVE 900mm CLEAR (MIN 950mm). DIRECTION TO BE CONFIRMED WITH ARCHITECT,

13. ALL GLAZED SUITES MUST BE SUBFRAMED AROUND THE ENTIRE PERIMETER UNLESS NOTED OTHERWISE

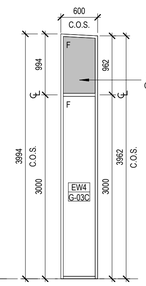
14. ENSURE MINIMUM THICKNESS OF GLASS IS ACHIEVED IN ACCORDANCE WITH GLAZING STANDARDS

LEGEND

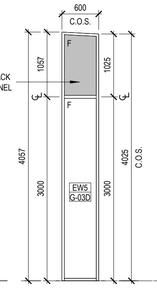
AW	AWNING WINDOW
COL.	STRUCTURAL COLUMN. REFER TO STRUC. ENG. DWGS FOR DETAILS
C.O.S	CHECK ON SITE
F	FIXED GLAZING
GLA##	GLAZING TYPE AS SCHEDULED
GF	GLAZING FILM TO FUTURE ARTWORK TO SIGNAGE PROVISIONAL SUM
LVR	LOUVRED PANEL
PF	PAINT FINISH TO COLOUR SCHEDULE
SC	SECURITY SCREEN AS SPECD
SJ	SILICON JOIN
SL	SLIDING DOOR/ WINDOW PANEL
VSL	VERTICAL SLIDING PANEL



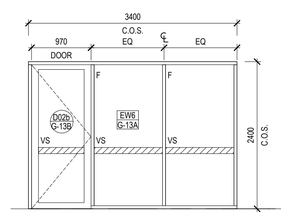
EW3
1 : 50



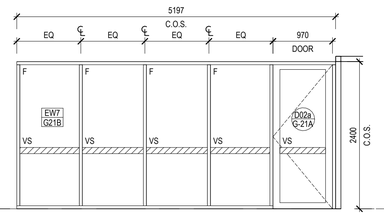
EW4
1 : 50



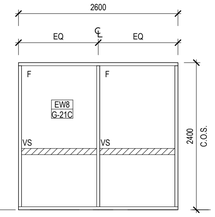
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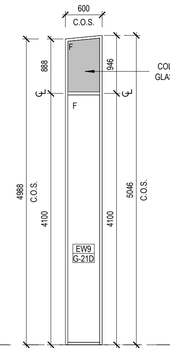
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1 : 50



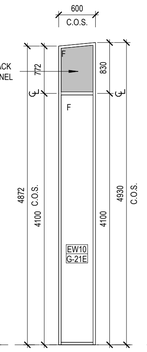
EW7
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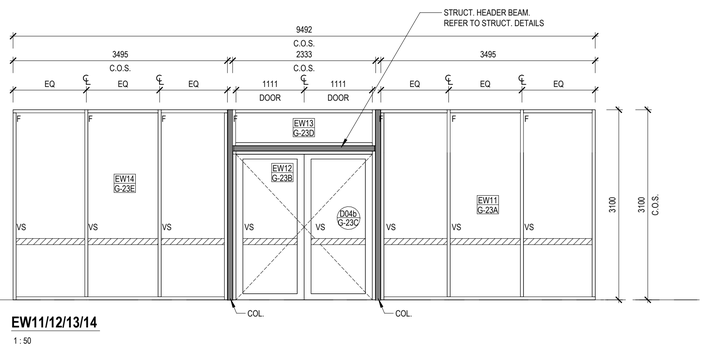
EW8
1 : 50



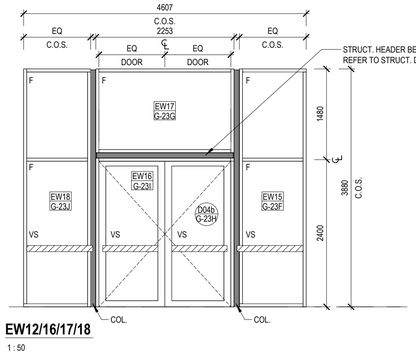
EW9
1 : 50



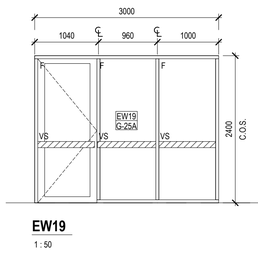
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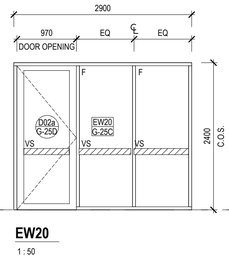
EW11/12/13/14
1 : 50



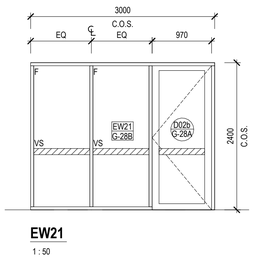
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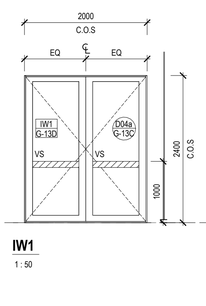
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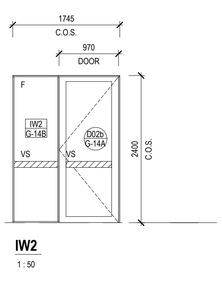
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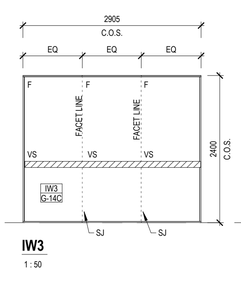
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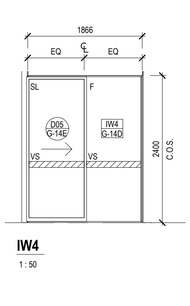
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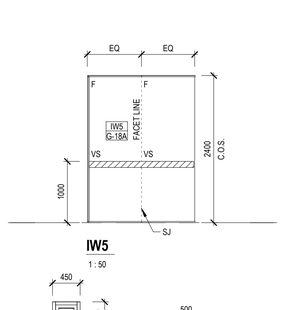
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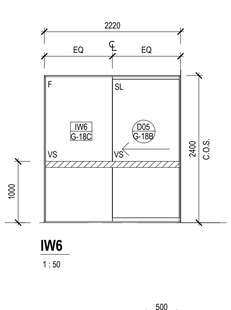
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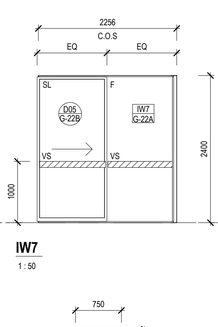
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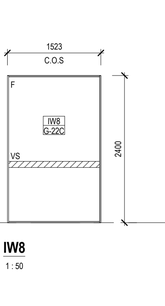
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1 : 50



IW6
1 : 50



IW7
1 : 50



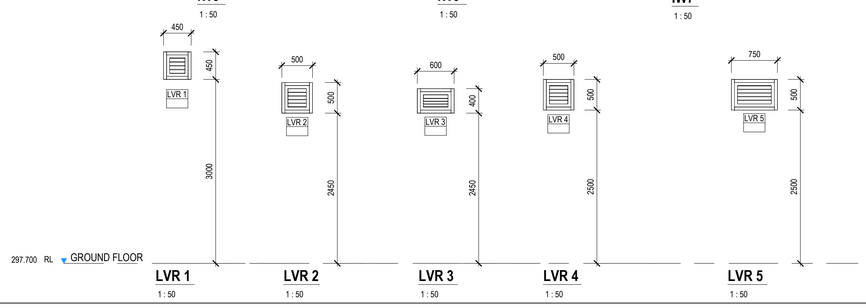
IW8
1 : 50

SCHEDULE - LOUVRES

LOUVRE TYPE	OPENING/ROOM NUMBER	LENGTH	HEIGHT	LOUVRE TYPE AND FINISH	ACOUSTIC RATING	FIRE RATING	FLYSCREEN	REMARKS
LVR 5		750	500	TYPE A				
LVR 4		500	500	TYPE A				
LVR 3		600	400	TYPE A				
LVR 2		500	500	TYPE A				
LVR 1		450	450	TYPE A				

LOUVRE TYPES

TYPE - A
100mm FIXED WEATHERPROOF LOUVRE WITHIN ALUMINIUM LOUVRE FRAME. **POWDERCOAT PAINT** FINISH TO COLOUR SCHEDULE.



LVR 1
1 : 50

LVR 2
1 : 50

LVR 3
1 : 50

LVR 4
1 : 50

LVR 5
1 : 50

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
10.07.26	B	Issue for DD Cost Estimate	RB
19.06.26	A	Issue to Energy Consultant	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

Site Architecture Studio
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T 08 9226 5661
mail@sitearchitecture.com.au I www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

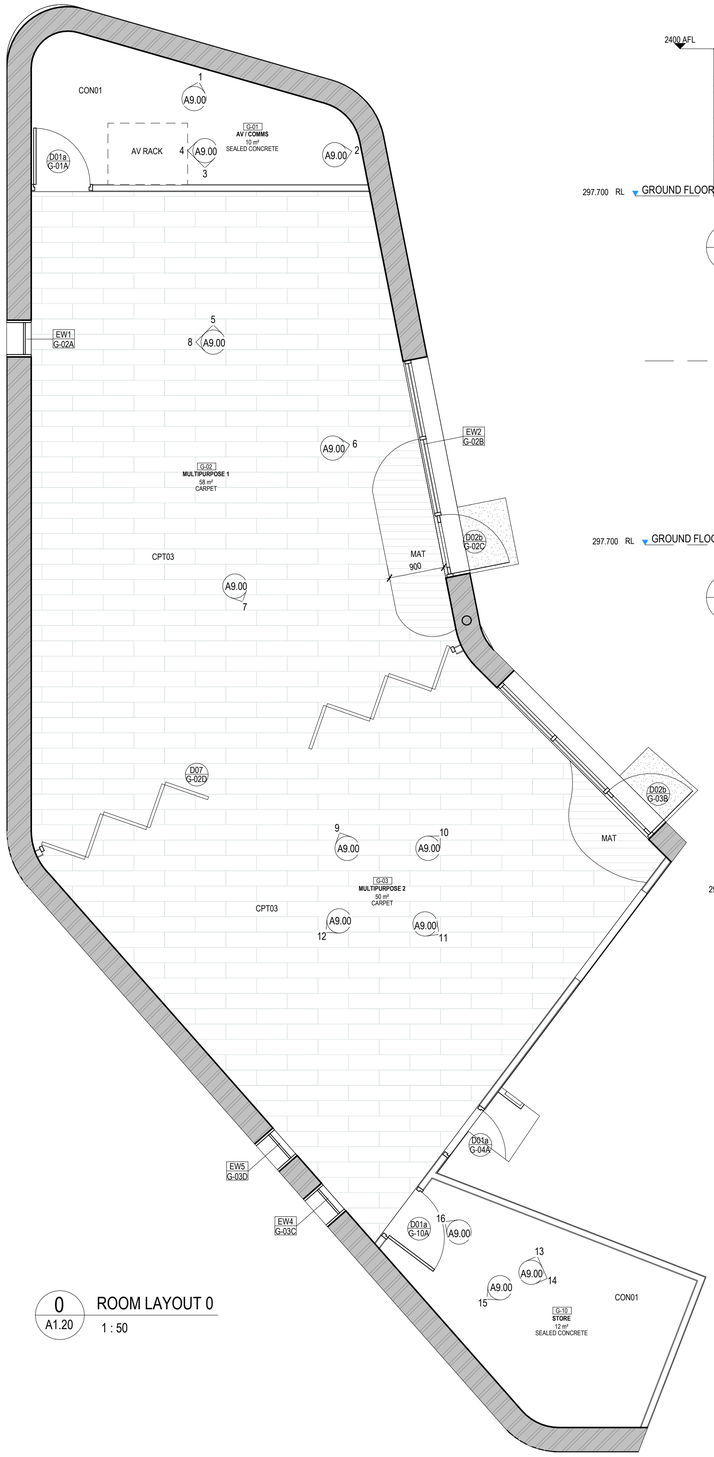
TITLE
WINDOW & LOUVRE SCHEDULE

DATE I 08/12/11
SCALE @A1I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

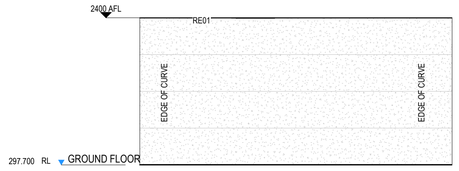
DWG A8.20B
REV

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

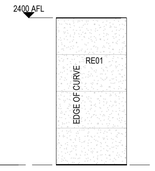
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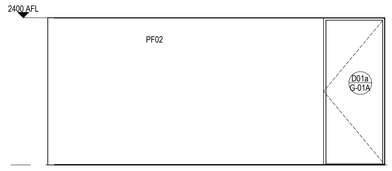
0 A1.20 ROOM LAYOUT 0
1 : 50



1 A9.00 AV / COMMS - A
1 : 50

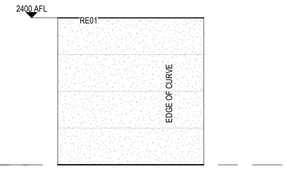


2 A9.00 AV / COMMS - B
1 : 50

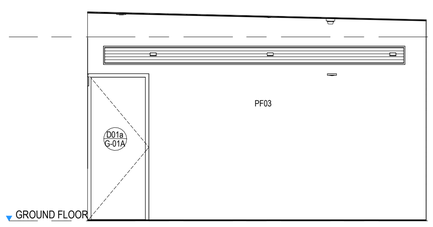


400mm THICK RAMMED EARTH WALL TO STRUCT. E

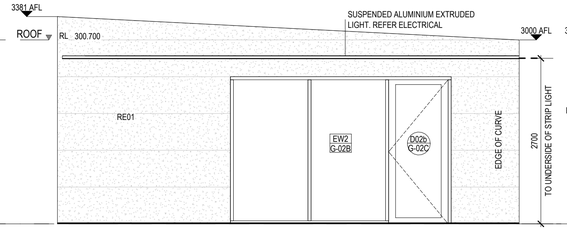
3 A9.00 AV / COMMS - C
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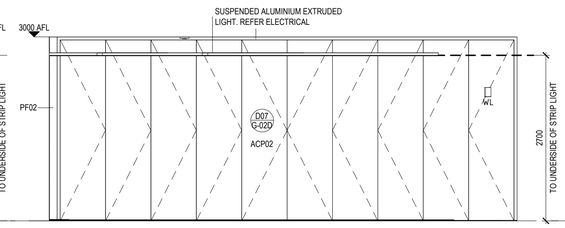
4 A9.00 AV / COMMS - D
1 : 50



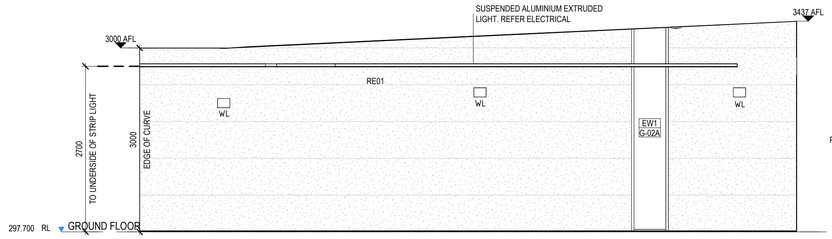
5 A9.00 MULTIPURPOSE 1 - A
1 : 50



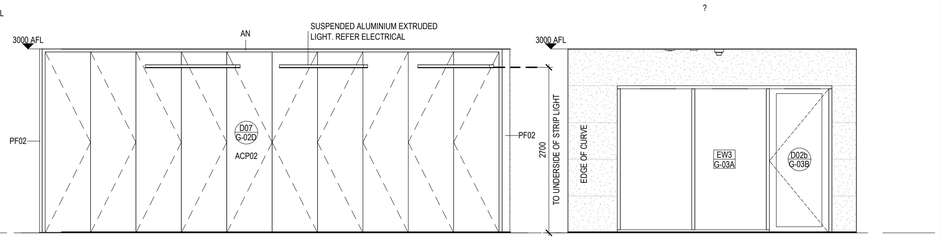
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7 A9.00 MULTIPURPOSE 1 - C
1 : 50

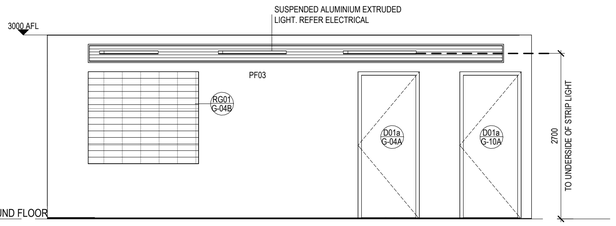


8 A9.00 MULTIPURPOSE 1 - D
1 : 50

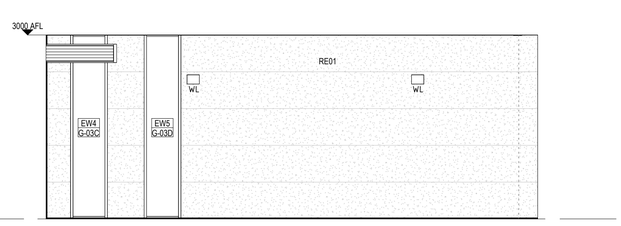


9 A9.00 MULTIPURPOSE 2 - A
1 : 50

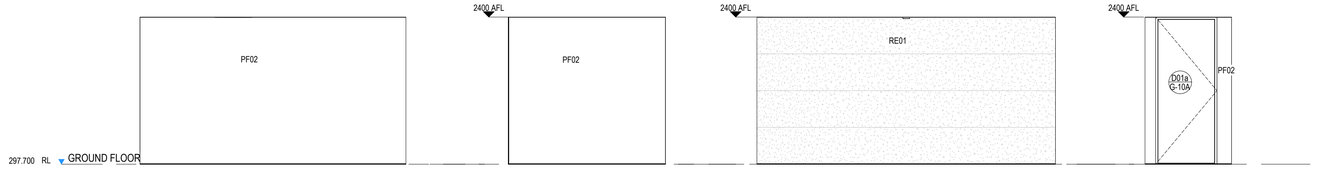
10 A9.00 MULTIPURPOSE 2 - B
1 : 50



11 A9.00 MULTIPURPOSE 2 - C
1 : 50



12 A9.00 MULTIPURPOSE 2 - D
1 : 50



13 A9.00 STORE - A
1 : 50

14 A9.00 STORE - B
1 : 50

15 A9.00 STORE - C
1 : 50

16 A9.00 STORE - D
1 : 50

DETAILED PLAN & ELEVATION LEGEND:

NOTES:

1. CHECK ALL DIMENSIONS ON SITE
2. REFER TO MULTI-TRADE SCHEDULE FOR FINISHES
3. ALL FURNITURE SHOWN IN LIGHT GREY/DASH IS N.I.C.
4. BUILDER TO ALLOW FOR SUFFICIENT STRUCTURE IN WALLS AND CEILINGS TO SUPPORT ALL ITEMS SHOWN INCLUDING ITEMS N.I.C.
5. COLUMN TYPES ONLY INDICATIVE - REFER TO STRUCTURAL DRAWINGS
6. ALL JOINTS BETWEEN IRP & PB TO FLUSHED TOGETHER SO NO VISIBLE JOINT IS SHOWN

LEGEND:

A/C	WALL MOUNTED SPILT AC UNIT
ADJ.	ADJUSTABLE SHELF
A.PAN	AMBULANT PAN
BT	BENCHTOP
BN	BURNER
CJ	CONTROL JOINT
CO	COMMUNICATIONS OUTLET
COMM	COMMUNICATION RACK
C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
FPB	FIXED PANEL BEHIND
FR	FRIDGE
FW	FLOOR WASTE (ALL FLOORS TO FALL TO FW)
GPO	ELECTRICAL OUTLET
GR	GRAB RAIL
GW	GLASS WASHER
HC	HOSE COCK. REFER TO HYD. ENG. DWGS
HB	HAND BASIN
HD	HAND DRIER
HWU	HOT WATER UNIT
IRP	IMPACT RESISTANCE PLASTERBOARD
MW	MICROWAVE
PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
SB	SWITCHBOARD
SD	SOAP DISPENSER
SHF.	SHELF (FIXED)
SHR	SHOWER
SR	SHOWER ROSE
SM	SHOWER MIXER
S.S	STAINLESS STEEL
TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

?

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	A	Interiors Issues for DD Cost Estimate	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
ROOM LAYOUTS 0 - MULTIPURPOSE 1, 2 & STORE

		DWG	REV
DATE	I 08/25/11		
SCALE @A1	I 1 : 50		
JOB No	I 22580		
DRAWN BY	I Author	A9.00A	
CHECKED	I Checker		

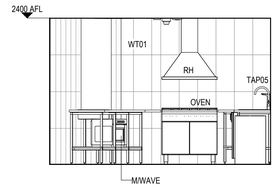
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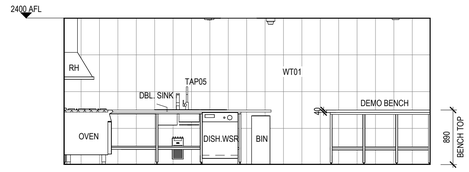
0 A1.20 ROOM LAYOUT 1

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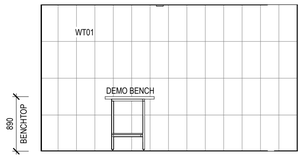
1 A9.01 HEAT/SERVE KITCHEN - A

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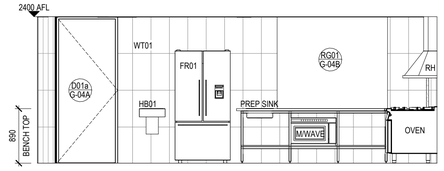
2 A9.01 HEAT/SERVE KITCHEN - B

1 : 50



3 A9.01 HEAT/SERVE KITCHEN - C

1 : 50



4 A9.01 HEAT/SERVE KITCHEN D

1 : 50

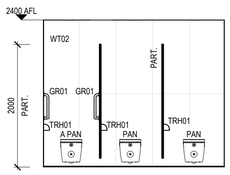
DETAILED PLAN & ELEVATION LEGEND:

NOTES:

1. CHECK ALL DIMENSIONS ON SITE
2. REFER TO MULTI-TRADE SCHEDULE FOR FINISHES
3. ALL FURNITURE SHOWN IN LIGHT GREY/DASH IS N.I.C.
4. BUILDER TO ALLOW FOR SUFFICIENT STRUCTURE IN WALLS AND CEILINGS TO SUPPORT ALL ITEMS SHOWN INCLUDING ITEMS N.I.C.
5. COLUMN TYPES ONLY INDICATIVE - REFER TO STRUCTURAL DRAWINGS
6. ALL JOINTS BETWEEN IRP & PB TO FLUSHED TOGETHER SO NO VISIBLE JOINT IS SHOWN

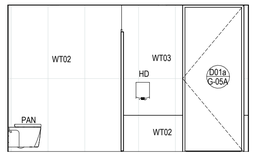
LEGEND:

A/C	WALL MOUNTED SPILT AC UNIT
ADJ.	ADJUSTABLE SHELF
A.PAN	AMBULANT PAN
BT	BENCHTOP
BN	BURNER
CJ	CONTROL JOINT
CO	COMMUNICATIONS OUTLET
COMM	COMMUNICATION RACK
C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
FPB	FIXED PANEL BEHIND
FR	FRIDGE
FW	FLOOR WASTE (ALL FLOORS TO FALL TO FW)
GPO	ELECTRICAL OUTLET
GR	GRAB RAIL
GW	GLASS WASHER
HC	HOSE COCK. REFER TO HYD. ENG. DWGS
HB	HAND BASIN
HD	HAND DRIER
HWU	HOT WATER UNIT
IRP	IMPACT RESISTANCE PLASTERBOARD
MW	MICROWAVE
PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
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TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT



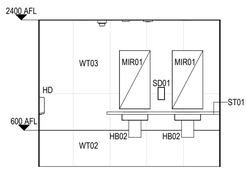
5 A9.01 FEMALE W/C - A

1 : 50



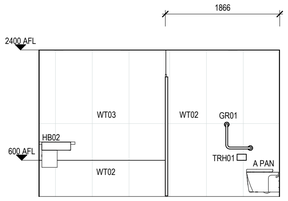
6 A9.01 FEMALE W/C - B

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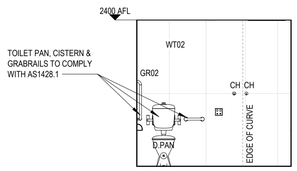
7 A9.01 FEMALE W/C - C

1 : 50



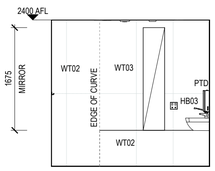
8 A9.01 FEMALE W/C - D

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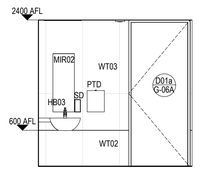
9 A9.01 UAT - A

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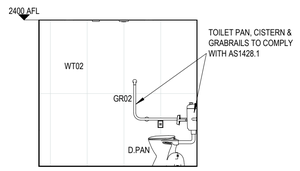
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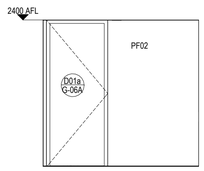
11 A9.01 UAT - C

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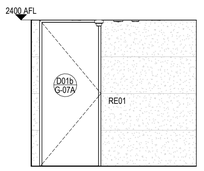
12 A9.01 UAT - D

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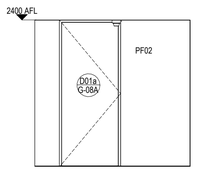
13 A9.01 AIRLOCK - A

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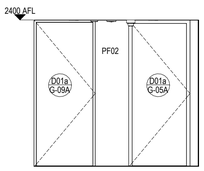
14 A9.01 AIRLOCK - B

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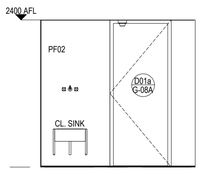
15 A9.01 AIRLOCK - C

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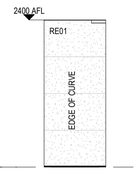
16 A9.01 AIRLOCK - D

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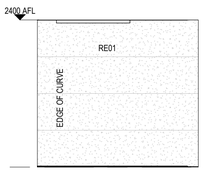
17 A9.01 SERVICES STORE 1 - A

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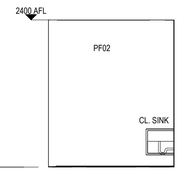
18 A9.01 SERVICES STORE 1 - B

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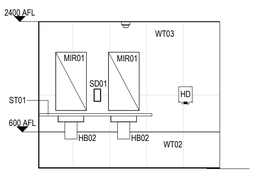
19 A9.01 SERVICES STORE 1 - C

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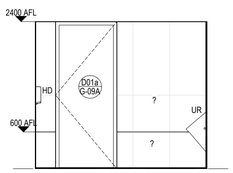
20 A9.01 SERVICES STORE 1 - D

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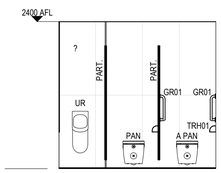
21 A9.01 MALE W/C - A

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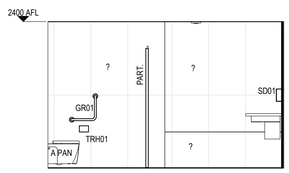
22 A9.01 MALE W/C - B

1 : 50



23 A9.01 MALE W/C - C

1 : 50



24 A9.01 MALE W/C - D

1 : 50

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	B	Interiors Issues for DD Cost Estimate	RB
03.07.26	A	Updated DD Consultant Coordination	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

Site Architecture Studio
Level 3, 56 William Street, Perth 6000 WA
T 08 9226 5661
mail@sitearchitecture.com.au I www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

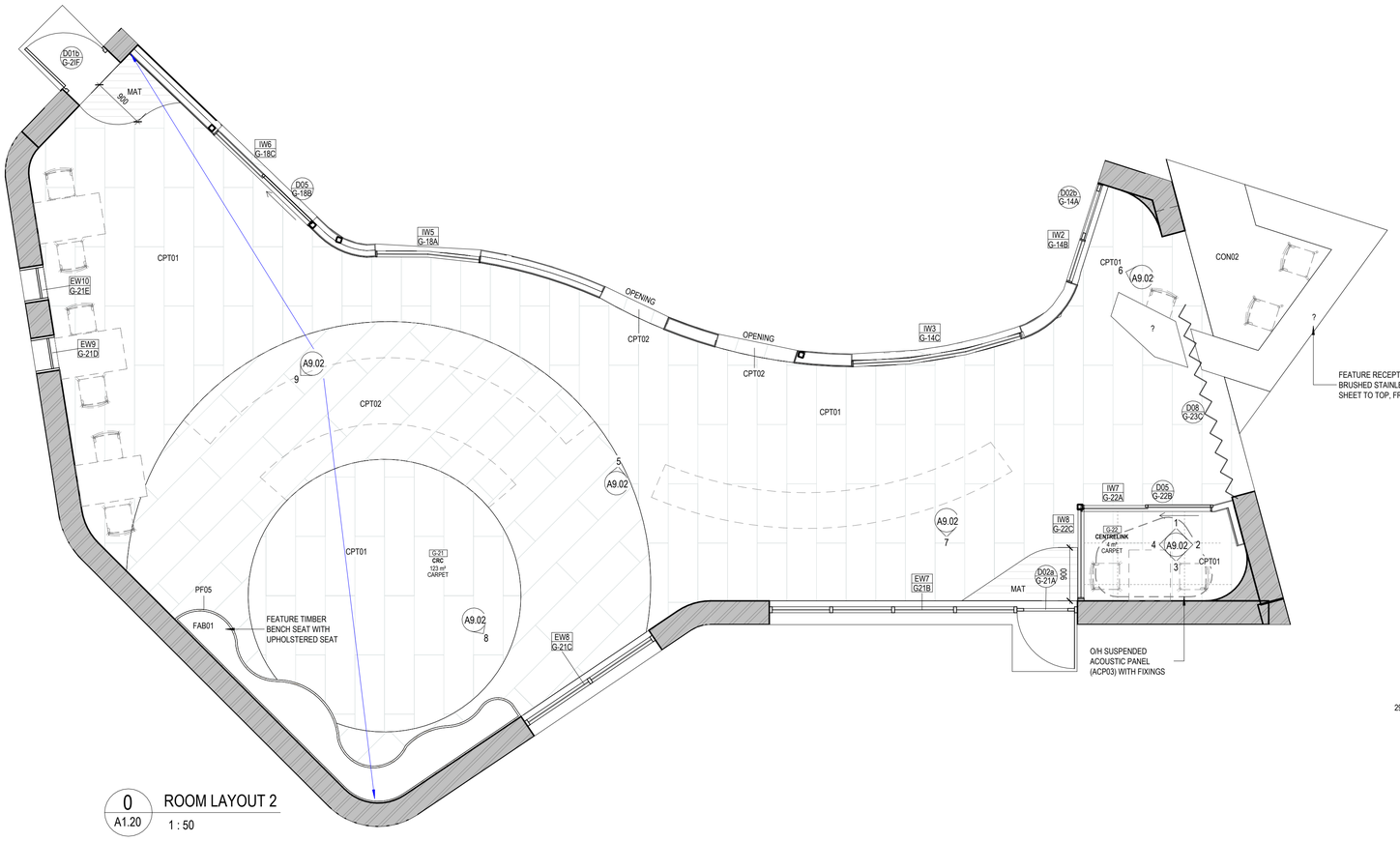
TITLE
ROOM LAYOUTS 1 - KITCHEN & AMENITIES

DATE I 08/25/11
SCALE @A1 I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

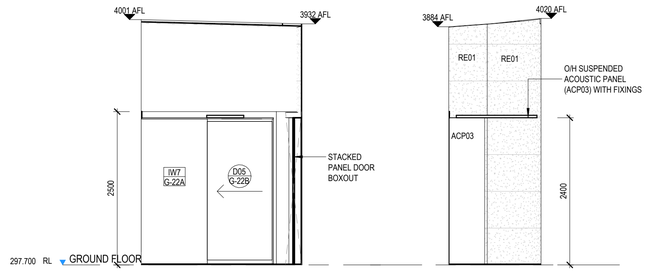
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REV B

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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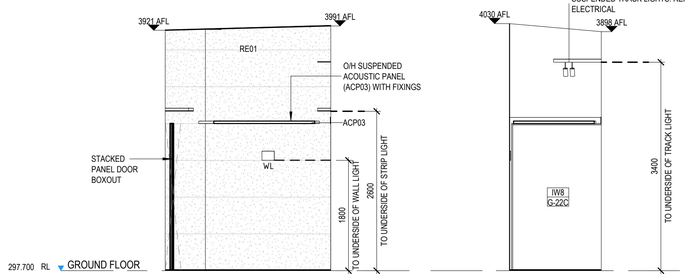


0 A1.20 ROOM LAYOUT 2
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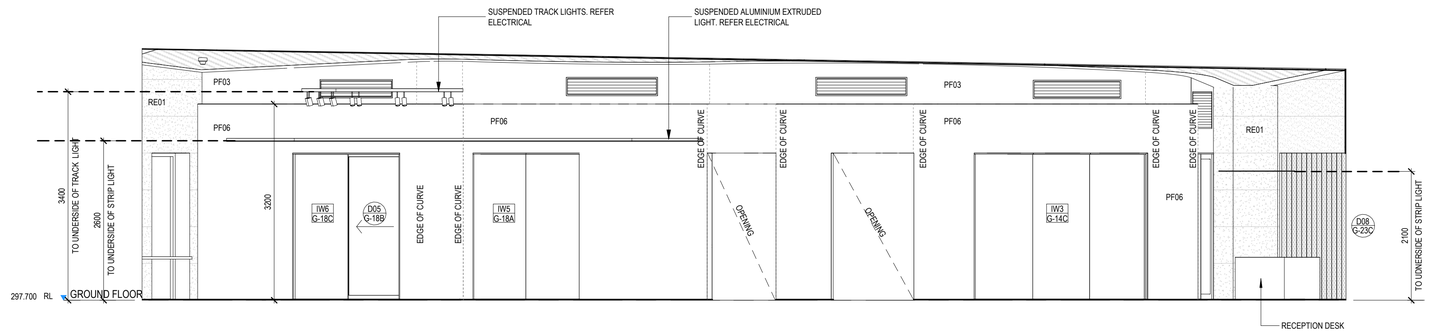
1 A9.02 CENTRELINK - A
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2 A9.02 CENTRELINK - B
1 : 50

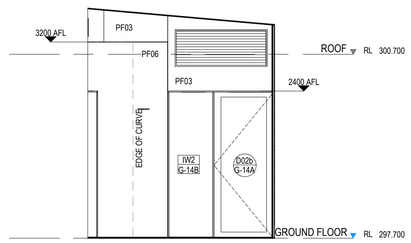


3 A9.02 CENTRELINK - C
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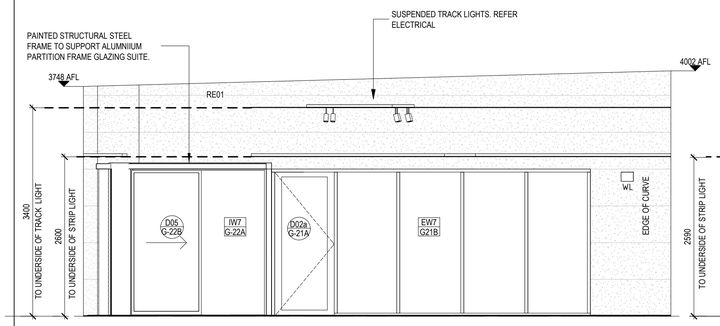
4 A9.02 CENTRELINK - D
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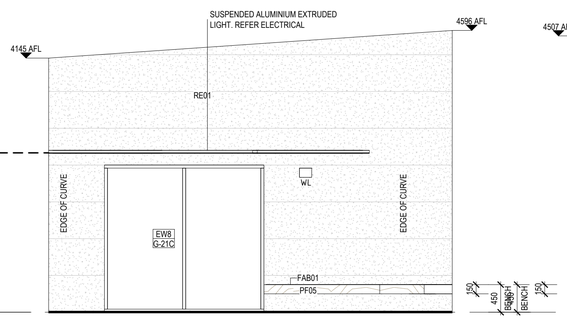
5 A9.02 CRC - A
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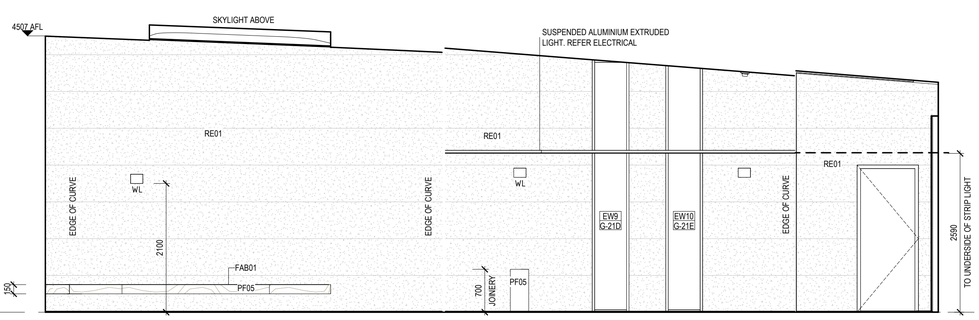
6 A9.02 CRC - B
1 : 50



7 A9.02 CRC - C
1 : 50



8 A9.02 CRC - D
1 : 50



9 A9.02 CRC - E
1 : 50

DETAILED PLAN & ELEVATION LEGEND:

NOTES:

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LEGEND:

A/C	WALL MOUNTED SPILT AC UNIT
ADJ.	ADJUSTABLE SHELF
A.PAN	AMBULANT PAN
BT	BENCHTOP
BN	BURNER
CJ	CONTROL JOINT
CO	COMMUNICATIONS OUTLET
COMM	COMMUNICATION RACK
C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
FPB	FIXED PANEL BEHIND
FR	FRIDGE
FW	FLOOR WASTE (ALL FLOORS TO FALL TO FW)
GPO	ELECTRICAL OUTLET
GR	GRAB RAIL
GW	GLASS WASHER
HC	HOSE COCK. REFER TO HYD. ENG. DWGS
HB	HAND BASIN
HD	HAND DRIER
HWU	HOT WATER UNIT
IRP	IMPACT RESISTANCE PLASTERBOARD
MW	MICROWAVE
PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
SB	SWITCHBOARD
SD	SOAP DISPENSER
SH.	SHELF (FIXED)
SHR	SHOWER
SR	SHOWER ROSE
SM	SHOWER MIXER
S.S	STAINLESS STEEL
TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	A	Interiors Issues for DD Cost Estimate	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

Site Architecture Studio
Level 3, 56 William Street, Perth 6000 WA
T 08 9226 5661
mail@sitearchitecture.com.au I
www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

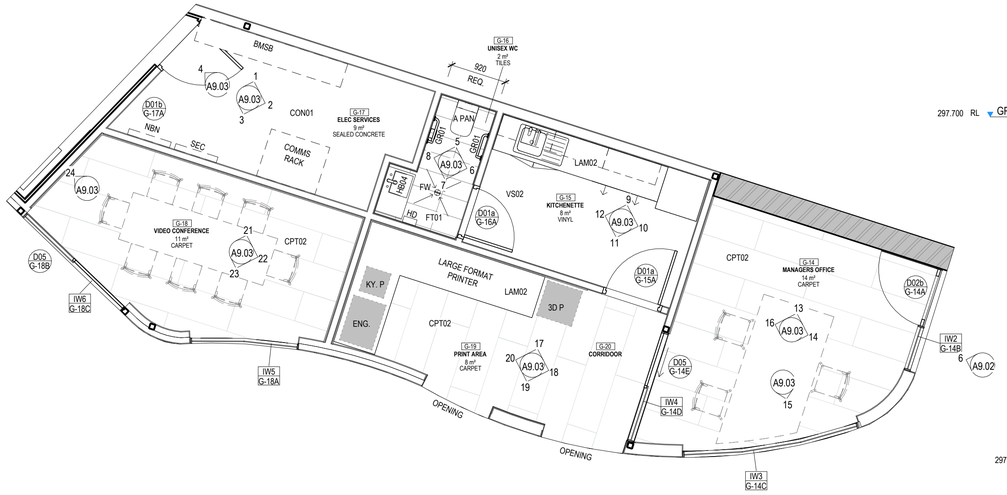
TITLE
ROOM LAYOUTS 2 - CRC

DATE I 08/25/11
SCALE @A1I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A9.02A
REV

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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0 A1.20 ROOM LAYOUT 3
1 : 50

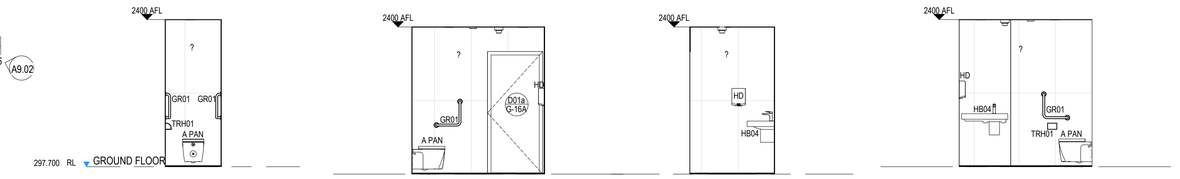


1 A9.03 ELEC SERVICES - A
1 : 50

2 A9.03 ELEC SERVICES - B
1 : 50

3 A9.03 ELEC SERVICES - C
1 : 50

4 A9.03 ELEC SERVICES - D
1 : 50



5 A9.03 UNISEX - A
1 : 50

6 A9.03 UNISEX - B
1 : 50

7 A9.03 UNISEX - C
1 : 50

8 A9.03 UNISEX - D
1 : 50

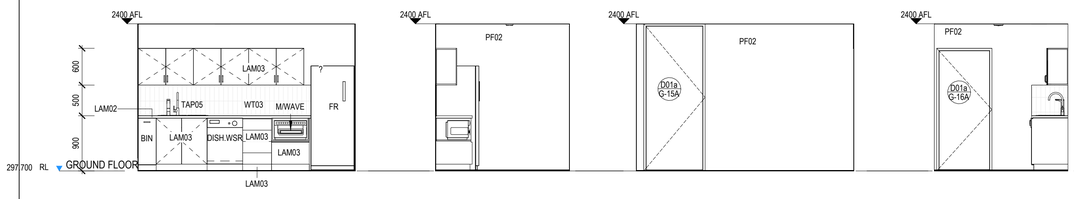
DETAILED PLAN & ELEVATION LEGEND:

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BN	BURNER
CJ	CONTROL JOINT
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C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
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FW	FLOOR WASTE (ALL FLOORS TO FALL TO FW)
GPO	ELECTRICAL OUTLET
GR	GRAB RAIL
GW	GLASS WASHER
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HWU	HOT WATER UNIT
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PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
SB	SWITCHBOARD
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SH.	SHELF (FIXED)
SHR	SHOWER
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SM	SHOWER MIXER
S.S	STAINLESS STEEL
TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

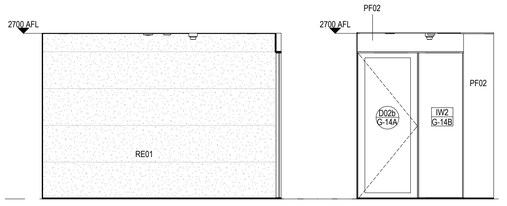


9 A9.03 KITCHENETTE - A
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10 A9.03 KITCHENETTE - B
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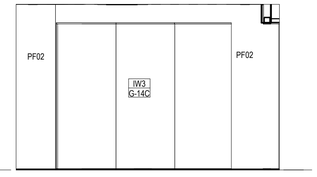
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12 A9.03 KITCHENETTE - D
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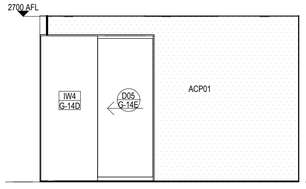


13 A9.03 MANAGER'S OFFICE - A
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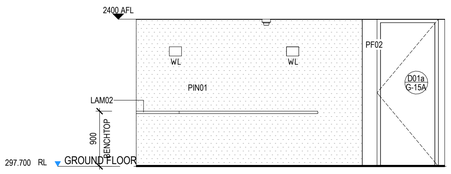
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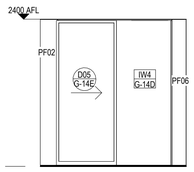
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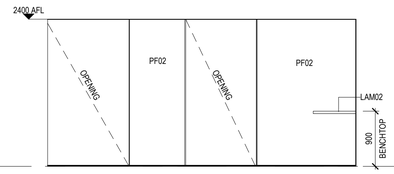
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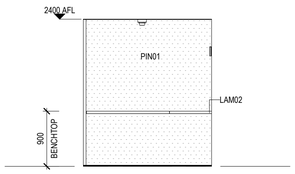
17 A9.03 PRINT AREA - A
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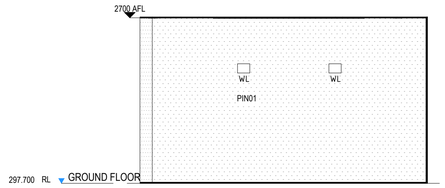
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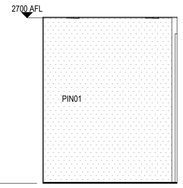
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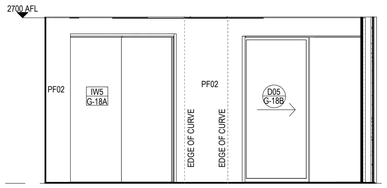
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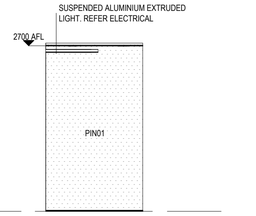
21 A9.03 VIDEO CONFERENCE - A
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22 A9.03 VIDEO CONFERENCE - B
1 : 50



23 A9.03 VIDEO CONFERENCE - C
1 : 50



24 A9.03 VIDEO CONFERENCE - D
1 : 50

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	A	Interiors Issues for DD Cost Estimate	RB

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

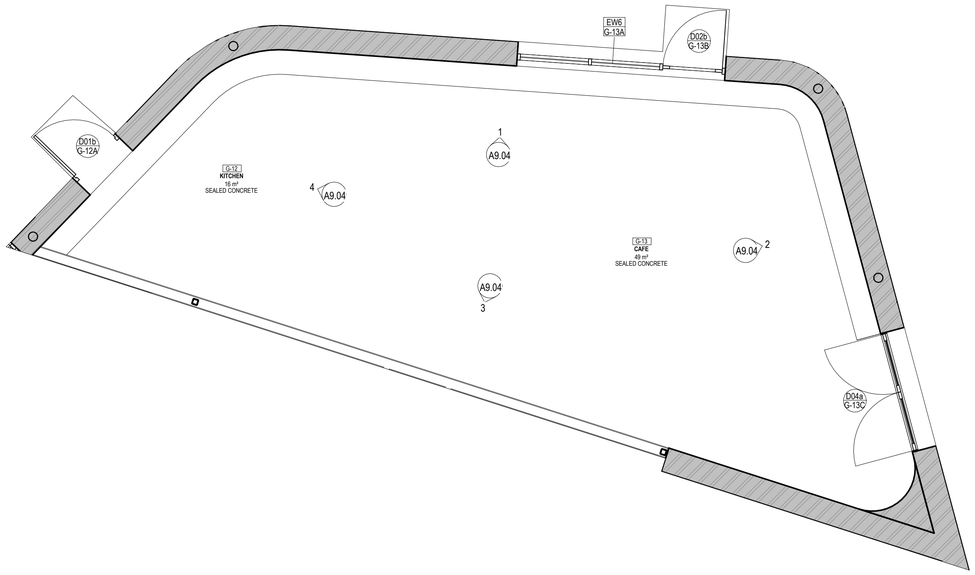
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ROOM LAYOUTS 3 - MANAGER'S OFFICE, VC, CENTRELINK, KITCHENETTE & ELECT. SERVICES

DATE I 08/25/11
SCALE @A1I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

DWG A9.03A
REV

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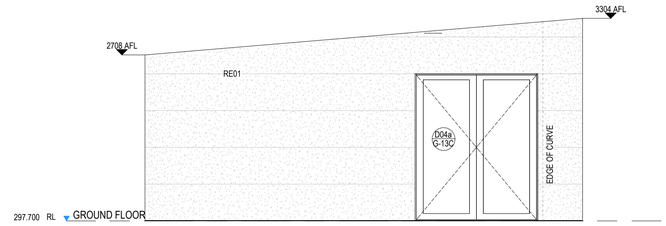
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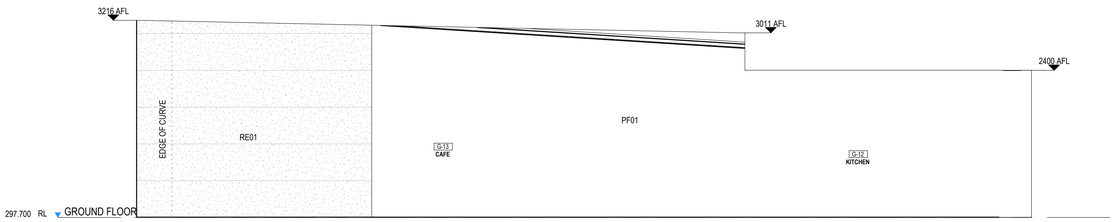
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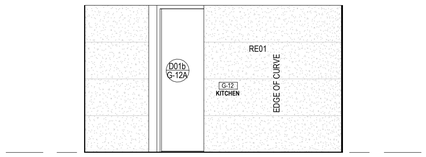
2 / A9.04 KITCHEN / CAFE - B

1 : 50



3 / A9.04 KITCHEN / CAFE - C

1 : 50



4 / A9.04 KITCHEN / CAFE - D

1 : 50

DETAILED PLAN & ELEVATION LEGEND:

NOTES:

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LEGEND:

A/C	WALL MOUNTED SPILT AC UNIT
ADJ.	ADJUSTABLE SHELF
A.PAN	AMBULANT PAN
BT	BENCHTOP
BN	BURNER
CJ	CONTROL JOINT
CO	COMMUNICATIONS OUTLET
COMM	COMMUNICATION RACK
C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
FPB	FIXED PANEL BEHIND
FR	FRIDGE
FW	FLOOR WASTE (ALL FLOORS TO FALL TO FW)
GPO	ELECTRICAL OUTLET
GR	GRAB RAIL
GW	GLASS WASHER
HC	HOSE COCK. REFER TO HYD. ENG. DWGS
HB	HAND BASIN
HD	HAND DRIER
HWU	HOT WATER UNIT
IRP	IMPACT RESISTANCE PLASTERBOARD
MW	MICROWAVE
PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
SB	SWITCHBOARD
SD	SOAP DISPENSER
SH.	SHELF (FIXED)
SHR	SHOWER
SR	SHOWER ROSE
SM	SHOWER MIXER
S.S	STAINLESS STEEL
TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

NORTH

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36 MARSHALL STREET, HYDEN WA 6359

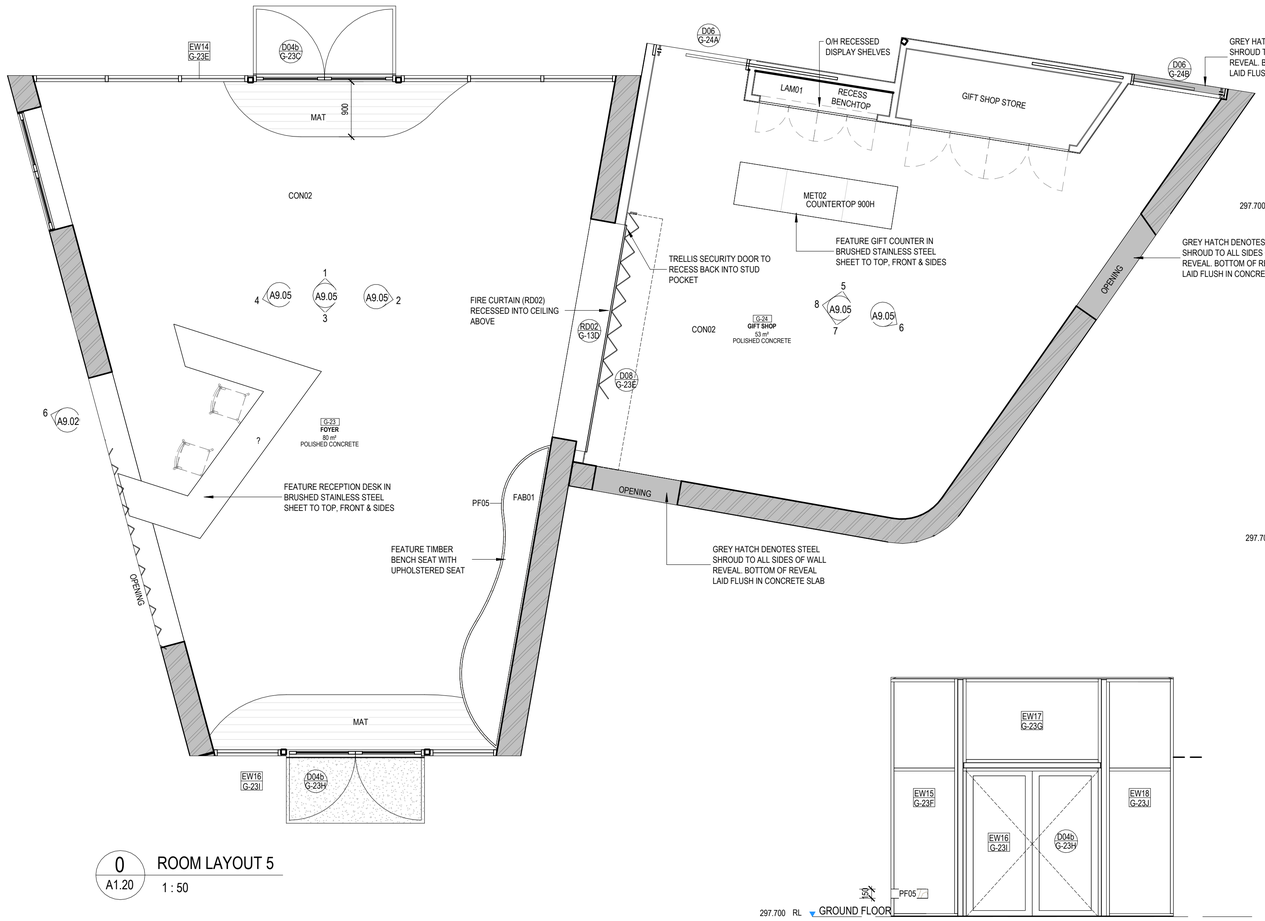
TITLE
ROOM LAYOUTS 4 - CAFE & KITCHEN

DATE I 08/25/11
SCALE @A1I 1 : 50
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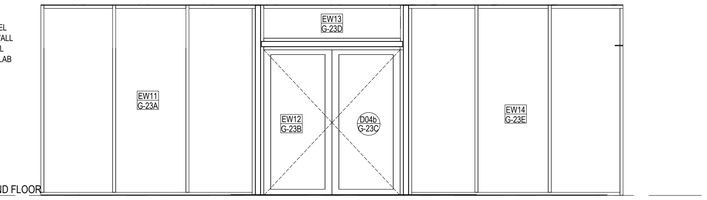
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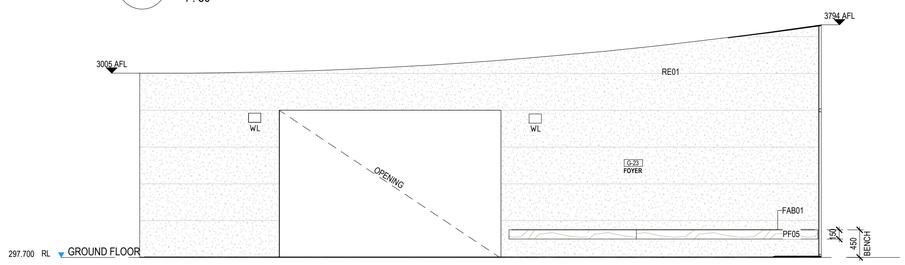
0 A1.20 ROOM LAYOUT 5

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1 A9.05 FOYER - A

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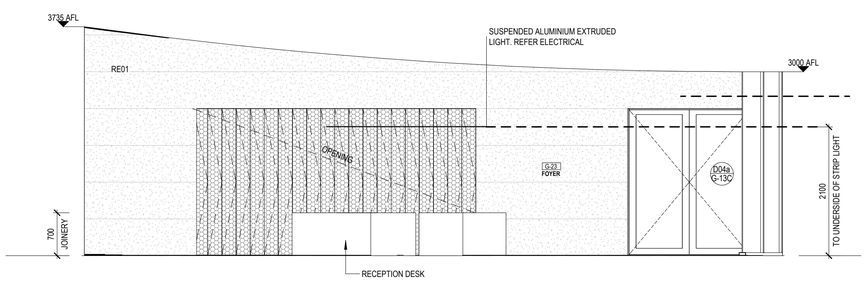


2 A9.05 FOYER - B

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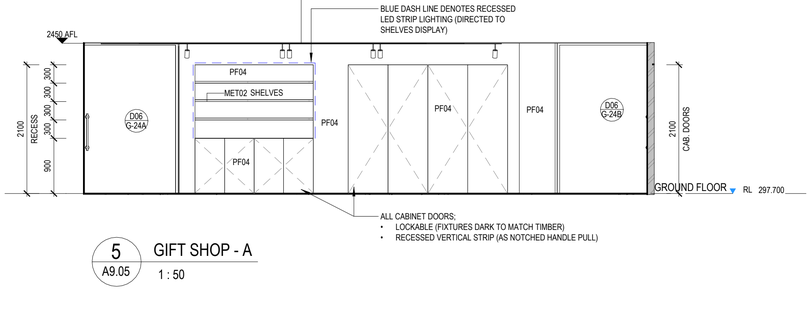
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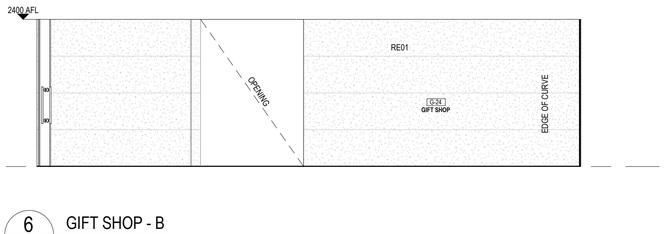
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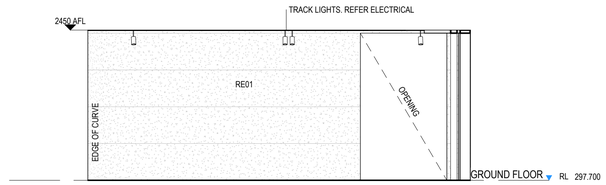
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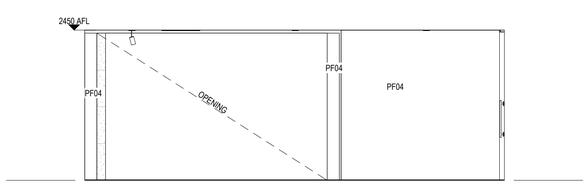
6 A9.05 GIFT SHOP - B

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7 A9.05 GIFT SHOP - C

1 : 50



8 A9.05 GIFT SHOP - D

1 : 50

DETAILED PLAN & ELEVATION LEGEND:

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ADJ.	ADJUSTABLE SHELF
A.PAN	AMBULANT PAN
BT	BENCHTOP
BN	BURNER
CJ	CONTROL JOINT
CO	COMMUNICATIONS OUTLET
COMM	COMMUNICATION RACK
C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
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GW	GLASS WASHER
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HB	HAND BASIN
HD	HAND DRIER
HWU	HOT WATER UNIT
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MW	MICROWAVE
PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
SB	SWITCHBOARD
SD	SOAP DISPENSER
SH.	SHELF (FIXED)
SHR	SHOWER
SR	SHOWER ROSE
SM	SHOWER MIXER
S.S	STAINLESS STEEL
TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

NORTH

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17.07.26	A	Interiors Issues for DD Cost Estimate	RB

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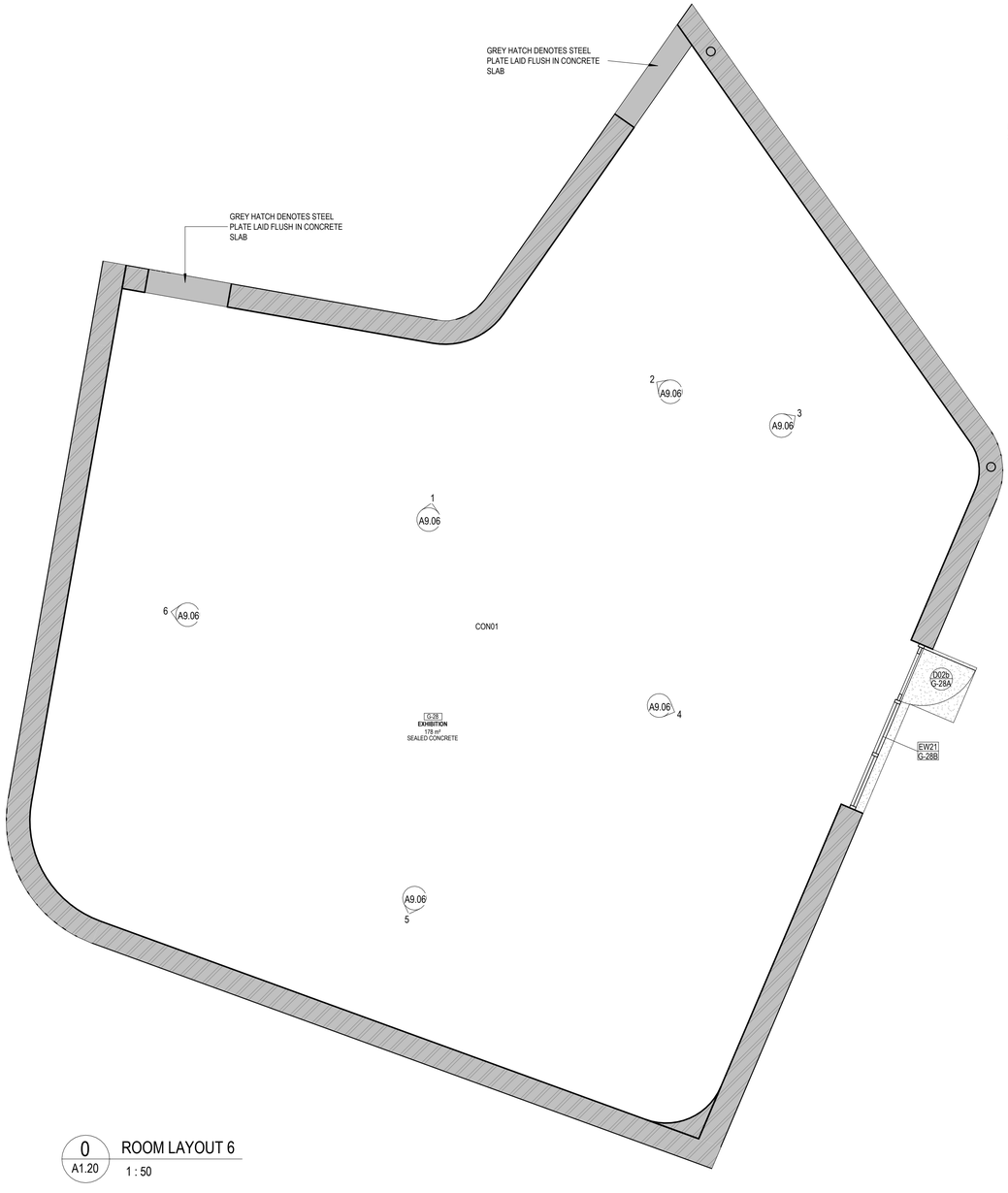
PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
ROOM LAYOUTS 5 - FOYER & GIFT SHOP

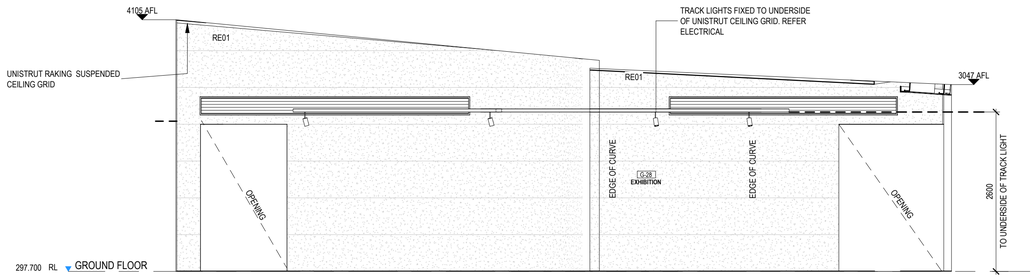
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DRAWN BY	I Author		
CHECKED	I Checker		

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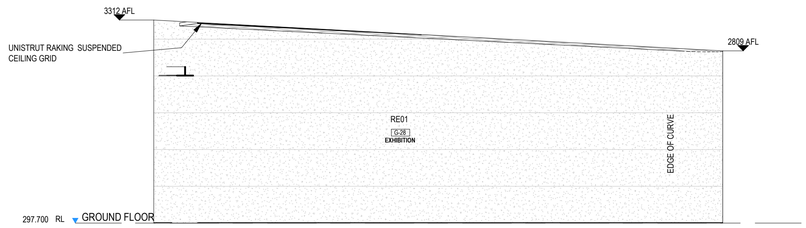


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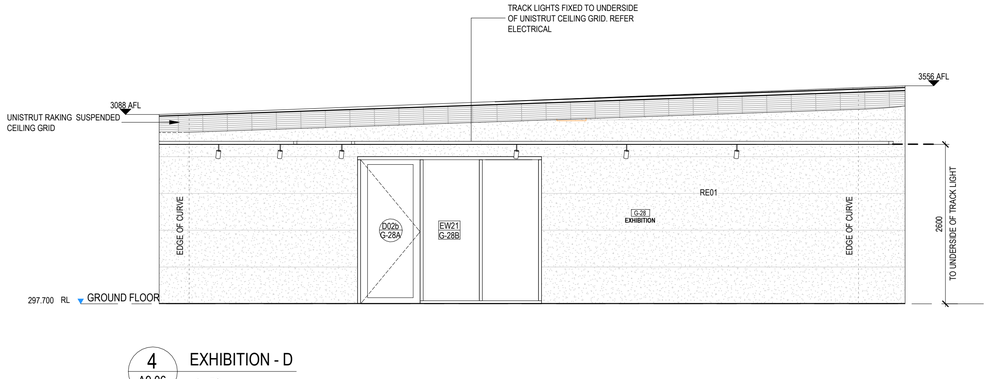


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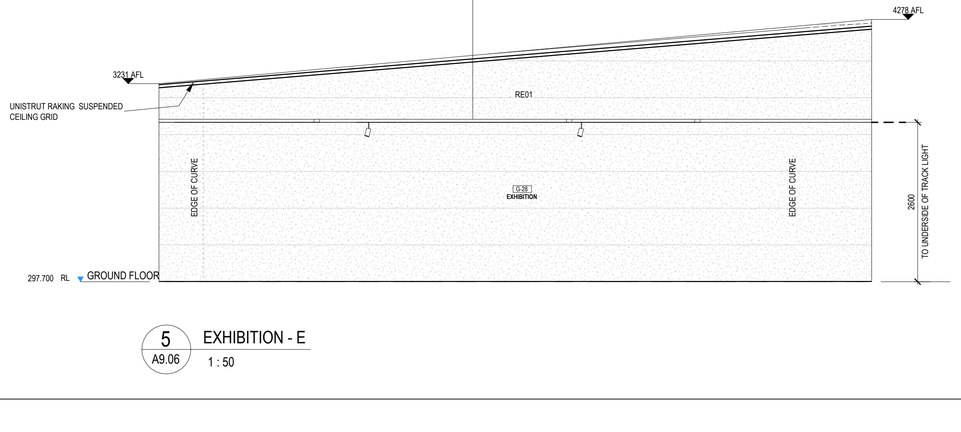
2 A9.06 EXHIBITION - B
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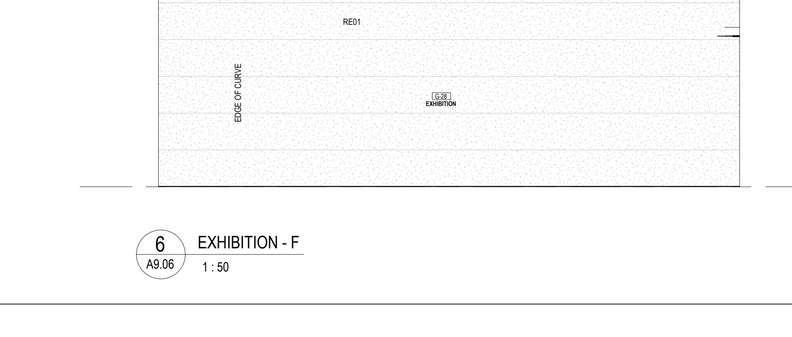
3 A9.06 EXHIBITION - C
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4 A9.06 EXHIBITION - D
1 : 50



5 A9.06 EXHIBITION - E
1 : 50



6 A9.06 EXHIBITION - F
1 : 50

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DW	DISHWASHER
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TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

NORTH

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PROJECT
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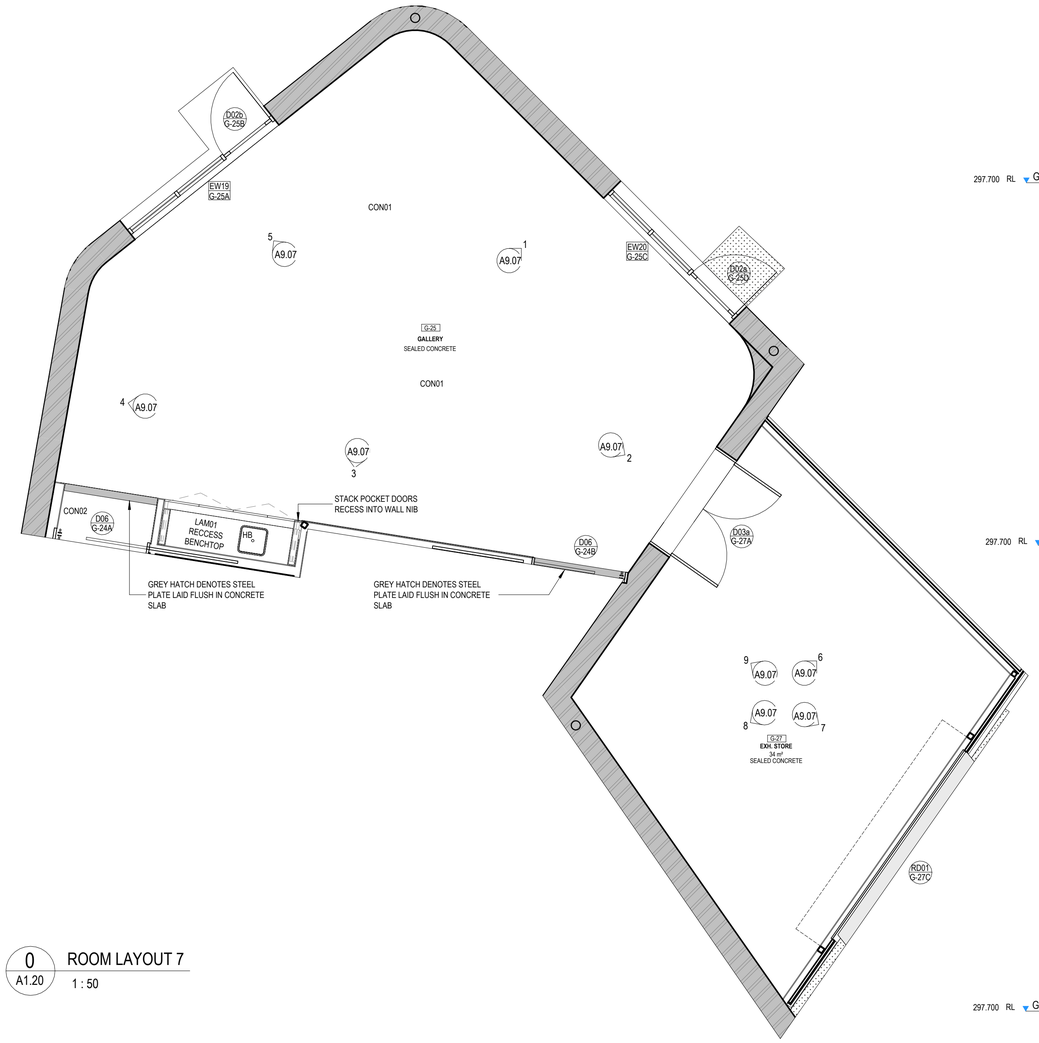
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DRAWN BY I Author
CHECKED I Checker

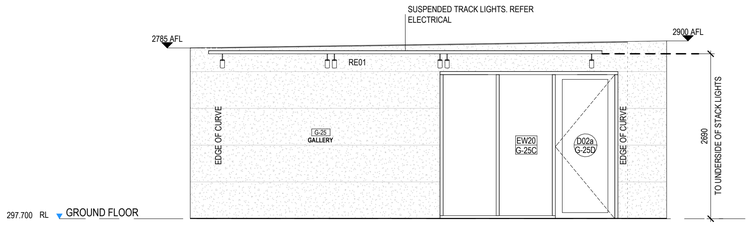
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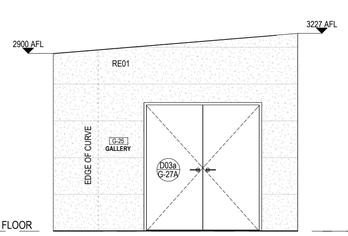
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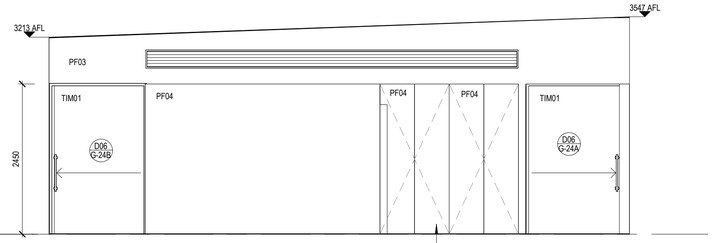
0 A1.20 ROOM LAYOUT 7
1 : 50



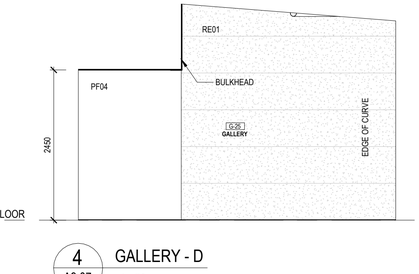
1 A9.07 GALLERY - A
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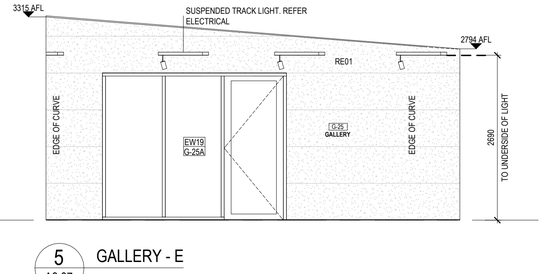
2 A9.07 GALLERY - B
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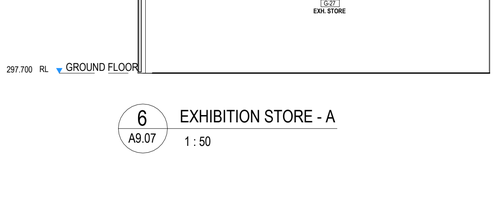
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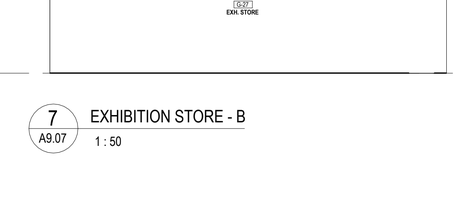
4 A9.07 GALLERY - D
1 : 50



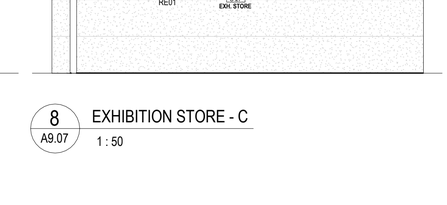
5 A9.07 GALLERY - E
1 : 50



6 A9.07 EXHIBITION STORE - A
1 : 50



7 A9.07 EXHIBITION STORE - B
1 : 50



8 A9.07 EXHIBITION STORE - C
1 : 50



9 A9.07 EXHIBITION STORE - D
1 : 50

DETAILED PLAN & ELEVATION LEGEND:

NOTES:

1. CHECK ALL DIMENSIONS ON SITE
2. REFER TO MULTI-TRADE SCHEDULE FOR FINISHES
3. ALL FURNITURE SHOWN IN LIGHT GREY/DASH IS N.I.C.
4. BUILDER TO ALLOW FOR SUFFICIENT STRUCTURE IN WALLS AND CEILINGS TO SUPPORT ALL ITEMS SHOWN INCLUDING ITEMS N.I.C.
5. COLUMN TYPES ONLY INDICATIVE - REFER TO STRUCTURAL DRAWINGS
6. ALL JOINTS BETWEEN IRP & PB TO FLUSHED TOGETHER SO NO VISIBLE JOINT IS SHOWN

LEGEND:

A/C	WALL MOUNTED SPILT AC UNIT
ADJ.	ADJUSTABLE SHELF
A.PAN	AMBULANT PAN
BT	BENCHTOP
BN	BURNER
CJ	CONTROL JOINT
CO	COMMUNICATIONS OUTLET
COMM	COMMUNICATION RACK
C.P	COMPOSITE PANEL
DP	PVC DOWNPIPE
DW	DISHWASHER
F	FIXED
FPB	FIXED PANEL BEHIND
FR	FRIDGE
FW	FLOOR WASTE (ALL FLOORS TO FALL TO FW)
GPO	ELECTRICAL OUTLET
GR	GRAB RAIL
GW	GLASS WASHER
HC	HOSE COCK. REFER TO HYD. ENG. DWGS
HB	HAND BASIN
HD	HAND DRIER
HWU	HOT WATER UNIT
IRP	IMPACT RESISTANCE PLASTERBOARD
MW	MICROWAVE
PART.	TOILER PARTITION
PB	PLASTERBOARD
PF	PRE-FINISHED
PTD	PAPER TOWEL DISPENSER
RH	RANGE HOOD
R.S	ROLLER SHUTTER
SB	SWITCHBOARD
SD	SOAP DISPENSER
SH.	SHELF (FIXED)
SHR	SHOWER
SR	SHOWER ROSE
SM	SHOWER MIXER
S.S	STAINLESS STEEL
TG	TRENCH GRATE. REFER TO HYD. ENG. DWGS
TRH	TOILET ROLL HOLDER
TV	TELEVISION BY SHIRE
UR	URINAL
W.	WINDOW
WL	WALL LIGHT

NORTH

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	A	Interiors Issues for DD Cost Estimate	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

Site Architecture Studio
Level 3, 56 William Street, Perth 6000 WA
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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
ROOM LAYOUTS 7 - GALLERY & EXHIBITION STORE

DATE I 08/25/11
SCALE @A1I 1 : 50
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

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USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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INTERIOR FINISHES SCHEDULE

CODE	DESCRIPTION	SUPPLIER / MANUFACTURER	COLOUR / FINISH	LOCATION / COMMENTS
Ceilings				
ACP03	ACOUSTIC PANEL	SQUARE BEAR	Range: Chord Colour: Mocha	Refer to Drawings: Centrelink Room Ceiling & Wall
FPB	Flush Plasterboard Ceiling		Finish: Paint Finish PF04	Interior
MET	PERFORATED ALUMINIUM CEILING	Decor Systems	Finish: Powdercoat Finish. Colour T.B.C	
PF04	PAINT FINISH	DULUX	Colour : Casper White Half / SW1F5	General Ceiling Colour (UNO)
PPB	Perforated Plasterboard	Armstrong	Finish: Paint Finish PF04	Interior
Floor Finishes				
CPT01	CARPET TILE	INTERFACE	Collection: Upon Common Ground Range: Escarpment Colour: Freshwater Neutral 2525012 Size: 500 x 500	Pattern: ashlar Refer to drawings: CRC
CPT02	CARPET TILE	INTERFACE	Collection: Upon Common Ground Range: Escarpment Colour: Saltwater Cliff 252005 Size: 500 x 500	Pattern: ashlar Refer to Drawings: CRC & Central Rooms
CPT03	CARPET TILE	INTERFACE	Collection: Upon Common Ground Range: Dry Bark Colour: Freshwater Groge 2529008	
FT01	FLOOR TILE	MYAREE CERAMICS	Product: Robusta Mid Grey Finish: Matt Size: 300 x 600 (10mm Thickness)	Slip Rating: P3 Grout: 311 Ardex Slate Grey Pattern: stack
MAT	ENTRANCE MATT	BIRIUS	Collection: Coco Mat Matt Colour: Natural Extrusion Finish: Bronze Anodised	Refer Drawings
SK	SKIRTING		Product: MDF Skirting Board Finish: Paint finish to match walls	Refer to Drawings: to PB (UNO)
VS01	VINYL SHEET	ARMSTRONG	Product: Safeguard R12 Colour: Desert Sheet Size: 2M x 20M (2mm thick)	Slip Rating: P5 / R12 Refer to Drawings: Kitchen
VS02	VINYL SHEET	ARMSTRONG	Product: Safeguard R10 Colour: Beige Sheet Size: 2M x 20M (2mm thick)	Slip Rating: P3 / R10 Refer to Drawings: Kitchennette
Joinery				
ABS	TO MATCH LAMINATE			
FAB01	UPHOLSTERY	MAHARAM	Product: Lariat 440401 Colour: 011 Chocolate	Refer to Drawings
LAM01	LAMINATE	LAMINEX	Colour: Natural Teak 8849 Finish: Natural	Refer to Drawings: Gift Shop Cabinetry & Aqualoo Cubicles Matching ABS edging
LAM02	LAMINATE	LAMINEX	Colour: Bluestone 2600 Finish: Natural	Refer to Drawings: Print Room Benchtop Matching ABS
LAM03	LAMINATE	LAMINEX	Colour: Dain tree 2603 Finish: Natural	Refer to Drawings: Giftshop Joinery Matching ABS edging
MET02	BRUSHED METAL	tbc	Details: BLACK STAINLESS STEEL Finish: BRUSHED	
ST01	ENG. STONE BENCHTOP	CORIAN	Colour: Clamshell (E) Sheet Size: 3658 x 760 (12mm Thick)	Refer to Drawings : Wet Area Benchtops (UNO)
Wall Finishes				
	Aluminium in a Natural Anodised finish	AAA	Grey	Natural Anodised
ACP01	ACOUSTIC PANEL	SQUARE BEAR	Range: Chord Colour: Mariana SIze: 2800 x 1225 (12mm Thick)	Refer to Drawings: Multipurpose
ACP02	ACOUSTIC PANEL	ECOUSTIC	Range: Bio Tile Colour: Bio Hemp dark Size: 800mm x 400mm (40mm Thick)	Refer to Drawings: CRC Rooms
PF01	PAINT FINISH	DULUX	Colour : Natural White / 15W SW1F4	Refer to Drawings : Walls as noted
PF02	PAINT FINISH	DULUX	Colour : Gallant Knight / S05B9	Refer to Drawings : Walls as noted
PF03	PAINT FINISH	DULUX	T.B.C	Refer to Drawings: CRC Bulkhead
PF04	PAINT FINISH	DULUX	T.B.C	Refer to Drawings
PF05	PAINT FINISH	DULUX	T.B.C	Refer to Drawings
PF06	FEATURE WALL PAINT	DULUX	T.B.C	Refer to Drawings : Internal Walls
PF06	FEATURE WALL PAINT	DULUX	T.B.C	Refer to Drawings : Internal Walls
WT01	Ceramic Wall Tile	MYAREE CERAMICS	White Gloss Rect. Finish: Gloss Size: 300 x 600 Thickness: 9mm	Pattern: Stack Vertically Grout: 390 U/White Refer to drawings : Kitchenette Walls
WT02	Porcelain Wall Tile	MYAREE	Product: Mapierre Ancienne Beige Size: 1200 x 600 (9.5mm Thick)	Pattern: Vertical Stack Grout: 377 Ardex Travertine Refer to drawings : Bathroom Walls
WT03	Porcelain Wall Tile	MYAREE	Product: Mapierre Ligne Beige Size: 1200 x 600 (9.5mm Thick)	Pattern: Vertical Stack Grout: 377 Ardex Travertine Refer to drawings : Bathroom Walls

EXTERNAL FINISHES SCHEDULE

CODE	DESCRIPTION	SUPPLIER / MANUFACTURER	COLOUR / FINISH	LOCATION / COMMENTS
Ceilings				
FC	9mm Compressed Fibre Cement, Stretcher Bond 2410x1210	James Hardie	Paint finish	External Soffit
Doors + Windows				
AN	Anodized Aluminium Glazing Frames	Anodizers WA	Massimo	External & Internal Glazing Suites Throughout
GLA##	Glazing as Specified	Refer Architectural Specifications	As nominated by supplier to achieve thermal requirements	Glazing throughout unless otherwise noted
Flooring				
CON01	Sealed Concrete	Refer Eng' Drawings for Details		
CON02	Polished Concrete	Refer Eng' Drawings for Details		
Roofing				
FLSH	Flashings and cappings throughout	Prefinished Steel	Zincalume	To Building Roof. Verandah flashings to be in colorbond to match polycarbonate frame.
FLSH	Gutters	Manufacturer & Profile	Zincalume	To Building Roof. Verandah gutter to be paint finis.
MRS	Metal Sheet Roofing	Lysaght - Spandek	Zincalume	Typical Metal Sheet Roofing
POL01	Polycarbonate Roof system	Danpal - Freespan	Colour: Ice with Softlite finish	
Site				
	Chain Link Mesh Fence			
GALV	Steel, Hot Dipped Galvanized		Natural Finish	
PAV1	Concrete Paving	Refer Landscape details		Refer Landscape Drawings
PAV2	Exposed Aggregate Paving	Refer Landscape details		Refer Landscape Drawings
SCR01	Perforated Aluminium screen	Metrix Group	Pattern: refer specifictaion. Minimum 65% open air.Colour: Anodised in Massimo	
Wall				
RE01	Rammed Earth	Local aggregate/soil	T.B.C	
Wall Cladding				
CLA01	Standing Seam Metal Cladding	Lysaght - Dominion 285	Jasper	External cladding
CLA02	9mm Fibre Cement, Stretcher Bond 2410x1210	James Hardie Matrix	Paint finish	External Cladding

DESIGN DEVELOPMENT

DATE	No.	REVISION	CHKD
17.07.26	A	Interiors Issues for DD Cost Estimate	RB

CLIENT
HYDEN PROGRESS ASSOCIATION

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T 08 9226 5661
mail@sitearchitecture.com.au I www.sitearchitecture.com.au

PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

TITLE
EXTERNAL & INTERIOR FINISHES

DATE I 08/25/11
SCALE @A1I
JOB No I 22580
DRAWN BY I Author
CHECKED I Checker

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REV A

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

31/07/2026 2:00:56 PM

APPENDIX B

CONCEPT 3D RENDERS & VISUALISATION



ROAD VIEW

DA06 PERSPECTIVE RENDER

DEVELOPMENT APPLICATION

24.06.26

REV B

HYDEN PROGRESS ASSOCIATION KATTER KICH WAVE ROCK DISCOVERY CENTRE

SITE ARCHITECTURE STUDIO
Level 3, 56 William Street, Perth 6000 WA
mail@sitearchitecture.com.au I www.sitearchitecture.com.au
T 08 9226 5661



MAIN ENTRANCE

DA07 PERSPECTIVE RENDER

DEVELOPMENT APPLICATION

24.06.26

REV B

HYDEN PROGRESS ASSOCIATION KATTER KICH WAVE ROCK DISCOVERY CENTRE

SITE ARCHITECTURE STUDIO
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mail@sitearchitecture.com.au I www.sitearchitecture.com.au
T 08 9226 5661



PARK ENTRANCE

DA08 PERSPECTIVE RENDER

DEVELOPMENT APPLICATION

24.06.26

REV B

HYDEN PROGRESS ASSOCIATION KATTER KICH WAVE ROCK DISCOVERY CENTRE

SITE ARCHITECTURE STUDIO
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T 08 9226 5661



LOCAL ENTRANCE

DA09 PERSPECTIVE RENDER

DEVELOPMENT APPLICATION

24.06.26

REV B

HYDEN PROGRESS ASSOCIATION KATTER KICH WAVE ROCK DISCOVERY CENTRE

SITE ARCHITECTURE STUDIO
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T 08 9226 5661



MAIN ENTRANCE CLOSE-UP



COURTYARD

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T 08 9226 5661

APPENDIX C

COST PLAN

QUANTITY SURVEYORS

HW & Associates
ABN 62 650 513 410
Unit 5
43 Kirwan Street
FLOREAT WA 6014
Ph: (08) 9321 0102

25125212.004

31 July 2026

Site Architecture Studio
PO Box 7351,
Perth, Cloisters Square WA 6850

Attention: Stephen Hart

Dear Stephen,

WAVE ROCK (KATTER KICH) DISCOVERY CENTRE
DESIGN DEVELOPMENT ESTIMATE

We have reviewed the scope for the proposed Discovery Centre at Wave Rock. We attach a copy of our detailed estimate as summarised below:

Discovery Centre

Building Works	$6,533,000
Siteworks & Services	3,087,000
	9,620,000
Locality Allowance Included Within Rates	-
	9,650,000
D & C Design Costs (Locality Allowance Not Applicable)	364,000
	$9,984,000
Design Contingency 5%	500,000
Construction Contingency 7.5%	749,000
Headworks – Excluded	-
Permits, Fees & Levys	25,000
Public Art – Excluded, As Advised	-
Loose Furniture & Equipment - Excluded	-
AV Services & Displays – Excluded, As Advised	-
Interactive/Interpretive Elements – Excluded, As Advised	-
First Nations Engagement – Excluded, As Advised	-
Commissioning, Relocation Costs & Disbursements – Excluded	-
Client Costs – Management & Administration – Excluded	-
Professional Fees & Disbursements, As Advised	355,000
Management Fees – Excluded	-
Escalation to February 2027, 3.4%	395,000
Total, excluding GST	**$12,008,000**

Cost advice has been received from the electrical, mechanical, and hydraulic consultants and as such has been included within our estimate.

Liam Tomlin M: 0434 611 782 E: LiamTomlin@HWAssociates.com.au
Brad Bell M: 0408 896 666 E: BradBell@HWAssociates.com.au

Cost Options
The following cost options have been included, as requested. Each cost option includes their proportion of preliminaries, locality allowance, contingencies & escalation.

Delete Demolition Work (Completed By Client)	**-$82,000**
Delete Excavation Works Below Building Pad (Completed By Client)	**-$104,000**
Delete Supply & Deliver of Clean Imported Fill (Completed By Client)	**-$41,000**
Delete Digging In Rock (Completed By Client)	**-$104,000**

We note the following qualifications:

Building Works
- The framed stage has been excluded, as advised.
- A roof top mechanical platform and screening has been excluded, as advised.
- Insulation to the external rammed earth walls has been excluded, as advised.
- Plywood lining under the standing seam roofing has been excluded, as advised.
- Window shrouds have been excluded, as advised.
- Blinds & security screens to windows have been excluded.
- Access control to internal doors have been excluded.
- Steel shrouds to reveals have been excluded, as advised.
- Polished plaster finish to curved walls have been excluded, as advised.
- Feature timber wall linings have been excluded, as advised.
- Curved timber seating to the CRC have been excluded, as advised.
- Laminate overhead cupboard to the kitchenette have been excluded, as advised.
- Pinboards have been excluded, as advised.
- A provisional allowance of $25,000 has been included for the CRC/Café/Kitchen stainless steel reception counter, as advised.
- A provisional allowance of $7,500 has been included for the stainless steel counte to the Gift shop, as advised.
- A provisional allowance of $6,000 has been included for kitchen appliances
- Joinery & fitments have been included within the estimate as per the drawings.
- Joinery to the Kitchen area has been assumed as a basic fitout only, as advised. A commercial kitchen fitout has been excluded.
- Wet fire services including sprinklers, hose reels, etc. have been excluded.
- Specialist AV systems and CCTV have been excluded.

Siteworks & Services
- Asbestos removal and disposal have been excluded, as advised.
- A provisional allowance of $60,000 has been included for clean imported fill.
- A provisional allowance of $75,000 has been included for digging in rock.
- Fencing and gates have been excluded, as advised.
- External sheds, binstores and covered links have been excluded.
- Consultant cost advice has been received from the landscape consultant and as such included in our estimate. Additional allowances have been made for planting. Cost saving advice has also been received from the consultant and included.
- Loose furniture elements including seating, tables, umbrellas, etc. have been excluded.
- Landscaping works have been adjusted to reflect the estimate markup provided by Site, this is subject to final design and requirements.
- Play equipment has been excluded, as advised.

- A sewer pump station has been excluded.
- Rainwater tanks have been excluded.
- Gas services have been excluded.
- EV charging points, carpark lighting, a backup generator and CCTV have all been excluded.

D & C Design Costs

- D & C design costs have been included at $364,000, based upon the head contractor engaging the current design team beyond the D&C tender.
- Professional fees for this stage included at $340,000, as advised plus $7,500 disbursements and head contractor margin included at 5%, as advised.

Project Costs

- A locality allowance of 35% has been included for Hyden.
- Design contingency has been included at 5%
- Construction contingency has been included at 7.5%.
- Headworks costs have been included in the builder's works.
- Public art has been excluded, as advised.
- Loose furniture and equipment, AV services and equipment and interactive/interpretive elements have been excluded, as advised.
- First Nations engagement has been excluded, as advised.
- Professional fees have been included at $355,000, as advised and include all costs associated for the funding stage and up to D&C novation.
- Client management and administration have been excluded.
- External management fees have been excluded, as advised.
- Escalation has been included to February 2027 at 3.4%, based upon current AIQS forecast indices. The AIQS indices were published prior to the war related fuel crisis and on costs felt in the construction industry. Given the rapidly increasing escalation in costs, we suggest an additional 10% escalation may be considered, if the current situation remains.
- GST has been excluded.

While our estimate aims to account for the anticipated increase in construction costs arising from the ongoing conflict in the Middle East and the associated fuel crisis. However, current market pricing hasn't yet taken into account the full cost impact of the war. As a result, there remains a degree of uncertainty in accurately forecasting the overall impact on supplier and subcontractor pricing. Preliminary advice received from suppliers and subcontractors indicates the potential for significant cost escalations.

All reasonable efforts have been made to prepare an estimate that reflects fair and current market pricing, the industry is currently highly volatile. Ongoing shortages of skilled tradespeople and essential materials are contributing to substantial fluctuations in pricing. These conditions may continue to impact subcontractor pricing and overall project costs.

We trust this meets with your current needs.

Yours faithfully,



Liam Tomlin

Trade Summary

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Elem. Code	Elemental Description	% B.C.	Cost/m2	Elem. Qty	Elem. Unit	Elem. Rate	Sub Total	Mark Up %	Elemental Total
SB	Substructure	4.92	391.37				429,720		429,720
CL	Columns	0.16	12.42				13,640		13,640
UF	Upper Floors								
SC	Staircases								
RF	Roof	9.64	766.70				841,842		841,842
EW	External Walls	17.10	1,360.48				1,493,810		1,493,810
WW	Windows	2.31	184.14				202,190		202,190
ED	External Doors	0.68	54.14				59,450		59,450
NW	Internal Walls	2.17	172.65				189,570		189,570
NS	Internal Screens	2.15	171.12				187,890		187,890
ND	Internal Doors	0.75	59.95				65,825		65,825
WF	Wall Finishes	1.01	80.01				87,850		87,850
FF	Floor Finishes	1.64	130.49				143,280		143,280
CF	Ceiling Finishes	4.06	322.94				354,590		354,590
FT	Fitments	1.84	146.53				160,890		160,890
SE	Special Equipment	0.30	23.68				26,000		26,000
SF	Sanitary Fixtures	0.93	74.08				81,345		81,345
VE	Ventilation								
AC	Air Conditioning	8.13	647.09				710,500		710,500
FP	Fire Protection	0.09	6.83				7,500		7,500
LP	Electric Light and Power	7.15	568.84				624,590		624,590
PR	Preliminaries	9.76	776.43				852,518		852,518
	Subtotal								6,533,000
XP	Site Preparation	4.03	320.49				351,895		351,895
XR	Roads, Footpaths, Paved Areas	1.30	103.83				114,000		114,000
XN	Boundary Walls, Fencing, Gates	8.34	663.47				728,490		728,490
XB	Outbuildings and Covered Ways								
XL	Landscaping and Improvements	8.22	654.28				718,400		718,400
XK	External Stormwater Drainage	2.17	172.59				189,500		189,500
XD	External Sewer Drainage	1.15	91.48				100,450		100,450
XW	External Water Supply		38.96				42,775		42,775
XG	External Gas								
XF	External Fire Protection								
XE	External Electrics		399.08				438,190		438,190

Trade Summary

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Elem. Code	Elemental Description	% B.C.	Cost/m2	Elem. Qty	Elem. Unit	Elem. Rate	Sub Total	Mark Up %	Elemental Total
PR	Preliminaries		367.30				403,300		403,300
	Subtotal								3,087,000
	Subtotal - Perth Based								9,620,000
	Locality Allowance								
	Subtotal - Building Works								9,620,000
	D & C Design Cost (Locality allowance not applicable)		331.51				364,000		364,000
	TOTAL - D & C Contract								9,984,000
	Design Contingency		455.37				500,000		500,000
	Construction Contingency		682.15				749,000		749,000
	Headworks								
	Authority Costs		22.77				25,000		25,000
	Public Art								
	Loose Furniture & Equipment								
	AV Services & Displays								
	Interactive/Interpretive Elements								
	First Nations Engagement								
	Client Costs - Management & Administration								
	Professional Fees & Disbursements		323.32				355,000		355,000
	Management Fees								
	Escalation		359.74				395,000		395,000
	GST								
	Subtotal								2,388,000
	TOTAL								12,008,000
	COST OPTIONS								
	COST OPTION: Demolition Works (By Client, no cost to project)		-74.68				-82,000		-82,000
	COST OPTION: Excavation works below building pad for clean fill (By Client, no cost to project)		-94.72				-104,000		-104,000
	COST OPTION: Supply & Deliver Clean Imported Fill (By Client, no cost to project)		-37.34				-41,000		-41,000
	COST OPTION: Digging In Rock (By Client, no cost to project)		-94.72				-104,000		-104,000
	TOTAL - Cost Options								-331,000
	GFA: 1,098 m2.	**100.00**	**10,634.79**				**11,677,000**		**11,677,000**

Trade Summary

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Elem. Code	Elemental Description	% B.C.	Cost/m2	Elem. Qty	Elem. Unit	Elem. Rate	Sub Total	Mark Up %	Elemental Total

Final Total : $ **11,677,000**

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1 *Substructure***						
	Ground Slabs						
	Multipurpose/Kitchen						
1	Detailed excavation to thickenings		8.00	m3	300.00		2,400.00
2	100 thick concrete to ground slab and thickenings :[200 m2]		28.00	m3	550.00		15,400.00
3	Formwork to slab edge		71.00	m	100.00		7,100.00
4	SL82 mesh reinforcement		200.00	m2	50.00		10,000.00
5	3L11 trench mesh - Assume to edge		71.00	m	30.00		2,130.00
6	N12 bar reinforcement		0.07	t	6,000.00		420.00
7	Saw cut joint - SJ.1		50.00	m	40.00		2,000.00
8	Slab cradle dowell movement joint - DJ.1		16.00	m	150.00		2,400.00
9	Joint at rammed earth		71.00	m	40.00		2,840.00
10	Termite treatment, DPM, pad, finish, etc.		200.00	m2	70.00		14,000.00
11	Subtotal						*58,690.00*
	CRC/Library						
12	Detailed excavation to thickenings :[9 m2]		9.00	m3	300.00		2,700.00
13	100 thick concrete to ground slab and thickenings :[266 m2]		35.00	m3	550.00		19,250.00
14	Formwork to slab edge		84.00	m	100.00		8,400.00
15	SL82 mesh reinforcement		266.00	m2	50.00		13,300.00
16	3L11 trench mesh - Assume to edge		84.00	m	30.00		2,520.00
17	N12 bar reinforcement		0.08	t	6,000.00		480.00
18	Saw cut joint - SJ.1		90.00	m	40.00		3,600.00
19	Slab cradle dowell movement joint - DJ.1		11.00	m	150.00		1,650.00
20	Joint at rammed earth		84.00	m	40.00		3,360.00
21	Termite treatment, DPM, pad, finish, etc.		266.00	m2	70.00		18,620.00
22	Subtotal						*73,880.00*
	Foyer						
23	Detailed excavation to thickenings		7.00	m3	300.00		2,100.00
24	150 thick Holcim Geostone concrete to ground slab and thickenings :[86 m2]		15.00	m3	1,000.00		15,000.00
25	Formwork to slab edge		37.00	m	100.00		3,700.00
26	SL102 mesh reinforcement		86.00	m2	55.00		4,730.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1 *Substructure***						*(Continued)*
27	3L11 trench mesh - Assume to edge		37.00	m	30.00		1,110.00
28	N12 bar reinforcement		0.04	t	6,000.00		240.00
29	Slab cradle dowell movement joint - DJ.1		51.00	m	150.00		7,650.00
30	Termite treatment, DPM, pad, finish, etc.		86.00	m2	75.00		6,450.00
31	Subtotal						*40,980.00*
	Exhibition, Gift Shop & Gallery						
32	Detailed excavation to thickenings :[9 m2]		9.00	m3	300.00		2,700.00
33	100 thick concrete to ground slab and thickenings :[312 m2]		39.00	m3	550.00		21,450.00
34	Formwork to slab edge		70.00	m	100.00		7,000.00
35	SL82 mesh reinforcement		312.00	m2	50.00		15,600.00
36	3L11 trench mesh - Assume to edge		99.00	m	30.00		2,970.00
37	N12 bar reinforcement		0.10	t	6,000.00		600.00
38	Saw cut joint - SJ.1		73.00	m	40.00		2,920.00
39	Slab cradle dowell movement joint - DJ.1		6.00	m	150.00		900.00
40	Joint at rammed earth		99.00	m	40.00		3,960.00
41	Termite treatment, DPM, pad, finish, etc.		312.00	m2	70.00		21,840.00
42	Subtotal						*79,940.00*
	Store						
43	Detailed excavation to thickenings		3.00	m3	300.00		900.00
44	100 thick concrete to ground slab and thickenings :[56 m2]		8.00	m3	550.00		4,400.00
45	Formwork to slab edge		30.00	m	100.00		3,000.00
46	SL82 mesh reinforcement		56.00	m2	50.00		2,800.00
47	3L11 trench mesh - Assume to edge		30.00	m	30.00		900.00
48	N12 bar reinforcement		0.03	t	6,000.00		180.00
49	Saw cut joint - SJ.1		7.00	m	40.00		280.00
50	Joint at rammed earth		15.00	m	40.00		600.00
51	Termite treatment, DPM, pad, finish, etc.		56.00	m2	70.00		3,920.00
52	TOTAL - Slabs						*253,490.00*
53							
	Strip Footings						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**1 *Substructure***						*(Continued)*
54	Strip footings to garden and courtyard walls - See External Works			Note			
55	900 x 400 reinforced concrete strip footings - SF.1		233.00	m	650.00		151,450.00
56	Subtotal						*151,450.00*
	Pad Footings						
57	800 x 800 x 350 reinforced concrete pad footing - PF.1		13.00	No	600.00		7,800.00
58	Subtotal						*7,800.00*
59							
60	External paving - See Roads, Footpaths, Paved Areas			Note			
					Substructure	**Total :**	**429,720.00**
Trade :	**2 *Columns***						
	Steel Columns - Internal						
1	75 x 75 x 4.0 SHS - SC.S75d :[1 No]		0.03	t	20,000.00		600.00
2	89 x 89 x 5.0 SHS - SC.S89b :[5 No]		0.26	t	20,000.00		5,200.00
3	Baseplates and bolts		6.00	No	200.00		1,200.00
4	Attached connections and sundry			Item			700.00
5	Subtotal						*7,700.00*
	Steel Columns - External						
6	76.1 x 4.5 CHS - SC.C76j :[8 No]		0.19	t	20,000.00		3,800.00
7	Baseplates and bolts		8.00	No	200.00		1,600.00
8	Attached connections and sundry			Item			540.00
9	Subtotal						*5,940.00*
					Columns	**Total :**	**13,640.00**
Trade :	**3 *Upper Floors***						
	Stage						
1	Framed stage including structure, linings, facing, stair access, etc. - Excluded, as advised			Note			
2	Subtotal						*0.00*
					Upper Floors	**Total :**	

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**4 *Staircases***						
1	Staircases - Excluded			Note			
					Staircases **Total :**		
Trade :	**5 *Roof***						
	Roof Structure						
	Multipurpose & Amenities						
1	310UB32 - B.UB31a		0.54	t	20,000.00		10,800.00
2	90 x 8 EA raking angle - RA.EA90b		0.42	t	20,000.00		8,400.00
3	230PFC - RA.PF23		0.52	t	20,000.00		10,400.00
4	114 x 3.2 CHS - S.C114a		0.37	t	20,000.00		7,400.00
5	20dia rod bracing - HB.RD20		83.00	m	40.00		3,320.00
6	C20015 - P.PC20a		208.00	m	85.00		17,680.00
7	Attached connections and sundry			Item			5,800.00
8	Subtotal						*63,800.00*
	CRC & Cafe						
9	200UB18.2 - B.UB20a		0.14	t	20,000.00		2,800.00
10	250UB25.7 - B.UB25a		0.86	t	20,000.00		17,200.00
11	90 x 8 EA raking angle - RA.EA90b		0.41	t	20,000.00		8,200.00
12	150PFC - WB.PF15, B.PF15		0.31	t	20,000.00		6,200.00
13	230PFC - RA.PF23		0.34	t	20,000.00		6,800.00
14	114 x 3.2 CHS - S.C114a		0.29	t	20,000.00		5,800.00
15	20dia rod bracing - HB.RD20		57.00	m	40.00		2,280.00
16	C20015 - P.PC20a		247.00	m	85.00		20,995.00
17	C20024 - P.PC20c		5.00	m	95.00		475.00
18	Attached connections and sundry			Item			7,075.00
19	Subtotal						*77,825.00*
	Foyer						
20	90 x 8 EA raking angle - RA.EA90b		0.26	t	20,000.00		5,200.00
21	250 x 150 x 6.0 RHS - P.R251b		0.34	t	20,000.00		6,800.00
22	C20015 - P.PC20a		33.00	m	85.00		2,805.00
23	C20019 - P.PC20b		43.00	m	90.00		3,870.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**5** ***Roof***						*(Continued)*
24	Attached connections and sundry			Item			1,868.00
25	Subtotal						*20,543.00*
	Gallery & Exhibition						
26	310UB32 - B.UB31a		0.82	t	20,000.00		16,400.00
27	530UB82 - BUB53a		1.14	t	20,000.00		22,800.00
28	90 x 8 EA raking angle - RA.EA90b		0.91	t	20,000.00		18,200.00
29	114 x 3.2 CHS - S.C114a		0.45	t	20,000.00		9,000.00
30	20dia rod bracing - HB.RD20		46.00	m	40.00		1,840.00
31	C15015 - P.PC15c		73.00	m	85.00		6,205.00
32	Z15015 - P.PZ15c		167.00	m	85.00		14,195.00
33	Z15024 - P.PZ15e		99.00	m	85.00		8,415.00
34	Attached connections and sundry			Item			9,706.00
35	Subtotal						*106,761.00*
	Store						
36	150PFC - R.PF15		0.12	t	20,000.00		2,400.00
37	90 x 8 EA raking angle - RA.EA90b		0.13	t	20,000.00		2,600.00
38	C20015 - P.PC20a		41.00	m	105.00		4,305.00
39	Attached connections and sundry			Item			931.00
40	Subtotal						*10,236.00*
41	Verandah						
42	150 x 100 x 5.0 RHS - B.R151b		1.42	t	20,000.00		28,400.00
43	90 x 8 EA raking angle - RA.EA90b		0.62	t	20,000.00		12,400.00
44	250 x 150 x 6.0 RHS - P.R251b		0.15	t	20,000.00		3,000.00
45	C15015 - P.PC15c		13.00	m	85.00		1,105.00
46	C15024 - P.PC15e		3.00	m	105.00		315.00
47	Additional structure to large spans where noted - Provisional			Item			7,500.00
48	Attached connections and sundry			Item			5,272.00
49	Subtotal						*57,992.00*
50	TOTAL - Roof Structure						*337,157.00*
51							
	Roofing						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**5 *Roof***						*(Continued)*
	Multipurpose & Amenities						
52	Spandeck roof sheeting, including insulation and mesh		196.00	m2	205.00		40,180.00
53	Parapet capping		69.00	m	85.00		5,865.00
54	E/o for curves		7.00	No	150.00		1,050.00
55	Apron flashing		68.00	m	90.00		6,120.00
56	E/o for curves		7.00	No	150.00		1,050.00
57	Box gutter including supports, joints, etc.		21.00	m	380.00		7,980.00
58	E/o for curves		2.00	No	250.00		500.00
59	Gutter sump and downpipe		3.00	No	710.00		2,130.00
60	Subtotal						*64,875.00*
	Covered Link						
61	Spandeck roof sheeting, including insulation and mesh		15.00	m2	205.00		3,075.00
62	Ridge capping		5.00	m	85.00		425.00
63	Apron flashing		13.00	m	90.00		1,170.00
64	E/o for curves		1.00	No	150.00		150.00
65	Eaves gutter and fascia		3.00	m	205.00		615.00
66	Rainwater downpipe - Steel		1.00	No	975.00		975.00
67	Subtotal						*6,410.00*
	CRC & Cafe						
68	Spandeck roof sheeting, including insulation and mesh		260.00	m2	205.00		53,300.00
69	Parapet capping		68.00	m	85.00		5,780.00
70	E/o for curves		6.00	No	150.00		900.00
71	Apron flashing		69.00	m	90.00		6,210.00
72	E/o for curves		6.00	No	150.00		900.00
73	Box gutter including supports, joints, etc.		38.00	m	380.00		14,440.00
74	E/o for curves		2.00	No	250.00		500.00
75	Gutter sump and downpipe		4.00	No	710.00		2,840.00
76	Subtotal						*84,870.00*
	Foyer						
77	Spandeck roof sheeting, including insulation and mesh		87.00	m2	205.00		17,835.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**5 *Roof***						*(Continued)*
78	Apex capping		5.00	m	85.00		425.00
79	Apron flashing		25.00	m	90.00		2,250.00
80	Box gutter including supports, joints, etc.		10.00	m	380.00		3,800.00
81	Gutter sump and downpipe		1.00	No	710.00		710.00
82	Subtotal						*25,020.00*
	Gallery & Exhibition						
83	Spandeck roof sheeting, including insulation and mesh		303.00	m2	205.00		62,115.00
84	Parapet capping		91.00	m	85.00		7,735.00
85	E/o for curves		6.00	No	150.00		900.00
86	Apron flashing		104.00	m	90.00		9,360.00
87	E/o for curves		7.00	No	150.00		1,050.00
88	Box gutter including supports, joints, etc.		37.00	m	380.00		14,060.00
89	E/o for curves		3.00	No	250.00		750.00
90	Gutter sump and downpipe		4.00	No	710.00		2,840.00
91	Subtotal						*98,810.00*
	Store						
92	Spandeck roof sheeting, including insulation and mesh		37.00	m2	205.00		7,585.00
93	Barge capping		7.00	m	85.00		595.00
94	Apron flashing		12.00	m	90.00		1,080.00
95	Eaves gutter and fascia		5.90	m	205.00		1,209.50
96	Rainwater downpipe - Steel		1.00	No	975.00		975.00
97	Subtotal						*11,444.50*
	Verandah						
98	Danpal Solarspan polycarbonate roof sheeting, including fixings, joiners, etc.		215.00	m2	675.00		145,125.00
99	Apron flashing		48.00	m	90.00		4,320.00
100	E/o for curves		6.00	No	150.00		900.00
101	Barge capping		8.00	m	85.00		680.00
102	Eaves gutter		46.00	m	205.00		9,430.00
103	Rainwater downpipe - Steel		8.00	No	975.00		7,800.00
104	Subtotal						*168,255.00*

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**5** ***Roof***						*(Continued)*
	Sundries						
105	Glazed skylight - CRC		1.00	Item	20,000.00		20,000.00
106	Allow for roof safety system			Item			25,000.00
107	Skylights other than those indicated - Excluded			Note			
108	Mechanical plant platform - Excluded, as advised, to be ground level			Note			
109	Mechanical plant screening - Excluded, as advised, to be ground level			Note			
110	Subtotal						*45,000.00*
111	TOTAL - Roofing						*504,684.50*
					Roof	**Total :**	**841,841.50**
Trade :	**6** ***External Walls***						
	Wall Structure						
1	Steel lintel type L1		0.93	t	20,000.00		18,600.00
2	Steel lintel type L2		2.82	t	20,000.00		56,400.00
3	Attached connections and sundry			Item			7,000.00
4	Subtotal						*82,000.00*
	Rammed Earth Walls						
5	All walls includind internal rammed earth measured below			Note			
6	Isolated courtyard screen walls - See Boundary Walls, Fencing & Gates			Note			
7	400 thick rammed earth wall including reinforcing and seals :[232 m]		1,070.00	m2	1,265.00		1,353,550.00
8	Insulation centrally to external walls - Excluded, as advised			Note			
9	E/ for bulk curved rammed earth junction		1.00	Item	5,000.00		5,000.00
10	Subtotal						*1,353,550.00*
	Framed Walls						
11	Framed infill wall over EW11		10.00	m	500.00		5,000.00
12	92 steel stud lined externally with Standing seam sheet metal, on battens and vapor barrier, internally with platerboard, including insulation - PAR01, CLAD01 - Plywood excluded, as advised		34.00	m2	810.00		27,540.00
13	E/o for flashings and cappings		1.00	Item	3,000.00		3,000.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**6 *External Walls***						*(Continued)*
14	Double 92 stud lined one side with plasterboard, fibre cement cladding on battens and vapor barrier to the other, including insulation - PAR01, CLAD02		7.00	m2	635.00		4,445.00
15	92 stud lined one side with plasterboard, fibre cement cladding on battens and vapor barrier to the other, including insulation - PAR02, CLAD02		17.00	m2	515.00		8,755.00
16	150 stud lined one side with plasterboard, fibre cement cladding on battens and vapor barrier to the other, including insulation - PAR03, CLAD02		8.00	m2	565.00		4,520.00
17	Subtotal						*32,540.00*
18							
19	Timber/aluminium screening - See Boundary Walls, Fencing & Gates			Note			
20	Mehanical secreening & gates - See External Doors			Note			
					External Walls	**Total :**	**1,493,810.00**
Trade :	**7 *Windows***						
	Aluminium Windows & Doors (Incl hardware and glazing film where applicable)						
	100 x 50 anodised aluminium window with 6.38 Cool-E Neutral single glazing						
1	600 x 4714 window with colorback glazing over - EW1		1.00	No	4,850.00		4,850.00
2	600 x 3994 window with colorbcak glazing over - EW4		1.00	No	4,125.00		4,125.00
3	11649 x 4130 window - EW5 - Excluded, TBC			Note			
4	600 x 4057 window with colorback glazing over - EW5		1.00	No	4,200.00		4,200.00
5	600 x 5046 window with colorback glazing over - EW9		1.00	No	5,305.00		5,305.00
6	600 x 4930 window with colorback glazing over - EW10		1.00	No	5,165.00		5,165.00
7	Subtotal						*23,645.00*
	40 x 50 anodised Sapphire Microline window with 6.38 Cool-E Neutral single glazing						
8	3600 x 2400 door/window combination - EW2		1.00	No	14,365.00		14,365.00
9	3500 x 2400 door/window combination - EW3		1.00	No	14,040.00		14,040.00
10	3400 x 2400 door/window combination - EW6		1.00	No	13,720.00		13,720.00
11	5256 x 2373 door/window combination - EW7		1.00	No	20,190.00		20,190.00
12	2600 x 2400 window - EW8		1.00	No	8,425.00		8,425.00
13	9492 x 3100 door/window combination - EW11		1.00	No	42,425.00		42,425.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**7 *Windows***						*(Continued)*
14	4607 x 3930 door/window combination - EW12		1.00	No	27,145.00		27,145.00
15	3000 x 2400 door/window combination - EW13		1.00	No	13,070.00		13,070.00
16	2900 x 2400 door/window combination - EW14		1.00	No	12,745.00		12,745.00
17	3000 x 2400 door/window combination - EW15		1.00	No	12,420.00		12,420.00
18	Subtotal						*178,545.00*
	Sundries						
19	Window shrouds - Excluded, as advised			Note			
20	Allow for blinds - Excluded, as advised			Note			
21	Crimsafe security screens - Excluded			Note			
22	Subtotal						*0.00*
					Windows	**Total :**	**202,190.00**
Trade :	**8 *External Doors***						
	Timber Doors						
1	1000 x 2400 solid core door including metal facing and steel channel edges, hardware, steel frame and paint - D01b		4.00	No	6,050.00		24,200.00
2	Subtotal						*24,200.00*
	Aluminium Doors						
3	Alumnium door/window combinations - See Windows			Note			
4	Subtotal						*0.00*
	Roller Doors						
5	3755 x 2400 automated roller doors - RD01		1.00	No	5,500.00		5,500.00
6	Subtotal						*5,500.00*
	Fencing & Gates						
7	3100 wide x 2300 high fperforated aluminium screening and gates, including 50SHS framing, etc. - G01/G11A		1.00	No	9,750.00		9,750.00
8	5900 wide x 2500 high perforated aluminium screening and gates, including 50SHS framing, etc. - G01/G26A, G02/G26b		1.00	No	20,000.00		20,000.00
9	Subtotal						*29,750.00*
					External Doors	**Total :**	**59,450.00**

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**9 *Internal Walls***						
	Rammed Earth Walls						
1	For all rammed earth walls - See External Walls			Note			
2	Subtotal						*0.00*
	Framed Walls						
3	92 stud lined one side with plasterboard, including insulation - PAR01		64.00	m2	250.00		16,000.00
4	92 stud lined one side with plasterboard, including insulation - PAR01, curved		116.00	m2	375.00		43,500.00
5	92 stud lined both sides with plasterboard, including insulation - PAR02		234.00	m2	335.00		78,390.00
6	150 stud lined both sides with plasterboard, including insulation - PAR03		37.00	m2	380.00		14,060.00
7	92 stud packed with insulation - PAR04 (See External Walls CLA02)			Note			
8	150 stud lined both sides with plasterboard, including insulation - PAR05		26.00	m2	380.00		9,880.00
9	150 stud lined one side with plasterboard, including insulation - PAR06		29.00	m2	380.00		11,020.00
10	150 stud lined one side with plasterboard, including insulation - PAR06a (Two hour fire rated)		11.00	m2	500.00		5,500.00
11	Subtotal						*178,350.00*
	Sundries						
12	Form reveals to rammed earth wall openings		33.00	m	340.00		11,220.00
13	Steel shrouds to all sides of reveals - Excluded, as advised			Note			
14	Subtotal						*11,220.00*
					Internal Walls	**Total :**	**189,570.00**
Trade :	**10 *Internal Screens***						
	Aluminium Windows & Doors (Incl hardware and glazing film where applicable)						
	40 x 50 anodised Sapphire Microline window with 10.38 clear glazing						
1	2000 x 2400 door - IW1		1.00	No	10,480.00		10,480.00
2	1702 x 2400 door and sidelight - IW2		1.00	No	7,910.00		7,910.00
3	1702 x 2400 window - IW3		1.00	No	11,295.00		11,295.00
4	1702 x 2400 sliding door and sidelight - IW4		1.00	No	10,300.00		10,300.00
5	1767 x 2400 window - IW5		1.00	No	6,875.00		6,875.00
6	2220 x 2400 sliding door and sidelight - IW6		1.00	No	11,245.00		11,245.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**10** ***Internal Screens***						*(Continued)*
7	2256 x 2400 sliding door and sidelight - IW7		1.00	No	11,360.00		11,360.00
8	1523 x 2400 window - IW8		1.00	No	5,925.00		5,925.00
9	Subtotal						*75,390.00*
	Laminate Partitions						
10	Laminate toilet partitions		22.00	m2	500.00		11,000.00
11	E/o for door and hardware		5.00	No	500.00		2,500.00
12	Subtotal						*13,500.00*
	Operable Walls						
13	7500 x 3000 operable wall		1.00	No	46,000.00		46,000.00
14	E/o for raking baffle over		6.00	m2	500.00		3,000.00
15	Subtotal						*49,000.00*
	Trellis Doors - Per Quote						
16	3625 x 2400 heavy duty trellis security door - D09		1.00	No	8,500.00		8,500.00
17	4600 x 2400 heavy duty trellis security door - D09		1.00	No	11,500.00		11,500.00
18	Subtotal						*20,000.00*
	Fire Curtain						
19	Fire curtain to 3625 x 2400 opening		1.00	No	30,000.00		30,000.00
20	Subtotal						*30,000.00*
					Internal Screens	**Total :**	**187,890.00**
Trade :	**11** ***Internal Doors***						
	Aluminium Doors						
1	Alumnium door/window combinations - See Windows			Note			
2	Subtotal						*0.00*
	Timber Doors						
3	1000 x 2400 timber door including hardware, frame and paint - D1a		8.00	No	4,725.00		37,800.00
4	900 x 2000 timber door including hardware, frame and paint - D1a		1.00	No	4,400.00		4,400.00
5	1920 x 2100 timber double doors, including hardware, frame and paint - D03a		1.00	No	6,075.00		6,075.00
6	1580 x 2460 pocket sliding door, inclduing hardware, frame and paint - D06		1.00	No	6,750.00		6,750.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**11 *Internal Doors***						*(Continued)*
7	1480 x 2460 pocket sliding door, inclduing hardware, frame and paint - D06		1.00	No	6,750.00		6,750.00
8	Subtotal						*61,775.00*
	Roller Shutters						
9	1800 x 1500 automated roller shutter - RG01		1.00	No	4,050.00		4,050.00
10	Subtotal						*4,050.00*
11							
12	Access control hardware - Excluded			Note			
					Internal Doors	**Total :**	**65,825.00**
Trade :	**12 *Wall Finishes***						
	Internally						
1	Finish to rammed earth - Excluded			Note			
2	Paint to plasterboard walls		790.00	m2	35.00		27,650.00
3	Polished plaster to curved walls - Excluded, as advised, painted finish			Note			
4	Wall tiling - WT01		42.00	m2	400.00		16,800.00
5	Wall tiling - WT02/WT03		97.00	m2	400.00		38,800.00
6	Splashback tiling - WT03		3.00	m2	1,000.00		3,000.00
7	Timber wall lining - TIM01- Excluded, as advised, painted finish			Note			
8	Subtotal						*86,250.00*
	Externally						
9	Paint to CFC walls		32.00	m2	50.00		1,600.00
10	Nil - Exposed rammed earth			Note			
11	Framed wall - Finishes included in wall rate			Note			
12	Subtotal						*1,600.00*
					Wall Finishes	**Total :**	**87,850.00**
Trade :	**13 *Floor Finishes***						
	Internally						
1	Floor tiling including waterproofing and screed		40.00	m2	550.00		22,000.00
2	Vinyl flooring on moisture barrier		30.00	m2	220.00		6,600.00
3	Carpet tiles		282.00	m2	125.00		35,250.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**13 *Floor Finishes***						*(Continued)*
4	E/o for feature patterns and trims			Item			5,000.00
5	Feature timber inlay in curved pattern - (TIM02) Excluded currently, measured as joinery items TBC			Note			
6	Polished concrete		142.00	m2	220.00		31,240.00
7	Sealed concrete - Clear seal only, epoxy excluded		389.00	m2	45.00		17,505.00
8	Entry mats		1.00	Item	17,000.00		17,000.00
9	Painted MDF skirting		171.00	m	45.00		7,695.00
10	Subtotal						*142,290.00*
	Externally						
11	Sealed concrete - Clear seal only, epoxy excluded (Mechanical)		22.00	m2	45.00		990.00
12	Finish to verandahs, etc. - See Roads, Footpaths, Paved Areas			Note			
13	Subtotal						*990.00*
					Floor Finishes	**Total :**	**143,280.00**
Trade :	**14 *Ceiling Finishes***						
	Internally						
1	Flush plasterboard ceiling, including insulation and paint - FPB		176.00	m2	220.00		38,720.00
2	Flush plasterboard ceiling, including insulation and paint - FPB, 300 margin curved		70.00	m	350.00		24,500.00
3	Raking plasterboard ceiling, including insulation and paint - FPB		48.00	m2	230.00		11,040.00
4	Perforated plasterboard ceiling, including insulation and paint - PPB		79.00	m2	375.00		29,625.00
5	Perforated plasterboard ceiling, including insulation and paint - PPB (Gift shop in lieu of PPB, as advised)		68.00	m2	375.00		25,500.00
6	Raking perforated plasterboard ceiling, including insulation and paint - PPB		243.00	m2	405.00		98,415.00
7	Suspended acoustic ceiling panel - ACP03 (Centrelink)		4.00	m2	900.00		3,600.00
8	Curved Decor Olympia mesh panels - Foyer		82.00	m2	750.00		61,500.00
9	Unistrut suspended ceiling with exposed roof structure over, paint services as required		177.00	m2	170.00		30,090.00
10	Framed plasterbboard bulkhead including insulation and paint		20.00	m2	550.00		11,000.00
11	Skylight - See Roofing			Note			
12	Sundries including access panels		1.00	Item	15,000.00		15,000.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**14** ***Ceiling Finishes***						*(Continued)*
13	Subtotal						*333,990.00*
	Externally						
14	9 thick express jointed CFC soffit lining - FC		16.00	m2	350.00		5,600.00
15	Generally excluded - Translucent polycarbonate			Note			
16	Subtotal						*5,600.00*
					Ceiling Finishes	**Total :**	**354,590.00**
Trade :	**15** ***Fitments***						
	Joinery & Fitments to the following areas:						
	AV/Comms						
1	Nil			Note			
	Multipurpose 1						
2	Nil - Acoustic panels assumed to be included in Operable wall scope			Note			
	Multipurpose 2						
3	Nil - Acoustic panels assumed to be included in Operable wall scope			Note			
	Heat/Serve Kitchen						
4	For SS benches & equipment - See Special Equipment			Note			
	Female						
5	Stone vanity unit		1.00	Item	5,620.00		5,620.00
6	Mirror		2.00	No	600.00		1,200.00
7	Soap dispenser		1.00	No	250.00		250.00
8	Hand dryer		1.00	No	1,800.00		1,800.00
9	Ambulant grabrail		2.00	No	350.00		700.00
10	Toilet roll holder		3.00	No	200.00		600.00
	Male						
11	Stone vanity unit		1.00	Item	5,620.00		5,620.00
12	Mirror		2.00	No	600.00		1,200.00
13	Soap dispenser		1.00	No	250.00		250.00
14	Hand dryer		1.00	No	1,800.00		1,800.00
15	Ambulant grabrail		2.00	No	350.00		700.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**15** ***Fitments***						*(Continued)*
16	Toilet roll holder		2.00	No	200.00		400.00
	Airlock						
17	Nil			Note			
	UAT						
18	Mirror - 1675 x 350		1.00	No	650.00		650.00
19	Mirror - 950 x 350		1.00	No	400.00		400.00
20	Soap dispenser		1.00	No	250.00		250.00
21	Paper towel dispenser		1.00	No	450.00		450.00
22	Grabrails		1.00	Item	1,000.00		1,000.00
23	Toilet roll holder		2.00	No	200.00		400.00
24	Padded backrest - Integrated with WC, see hydraulics			Note			
25	Coathooks		2.00	No	150.00		300.00
	Services Store						
26	Nil			Note			
	CRC						
27	Tables & chairs - Excluded			Note			
28	Reception counter - See Foyer			Note			
29	Feature timber wall seat with upholstered finish - TIM02 Provisional		1.00	Item	25,000.00		25,000.00
30	600 wide curved timber bench seating - TIM02 - Excluded, as advised			Note			
	Centrelink						
31	Table & chairs - Excluded			Note			
32	Acoustic wall panel - ACP03		4.00	m2	475.00		1,900.00
	Electrical Services						
33	Nil			Note			
	Unisex						
34	Mirror - TBC		1.00	No	600.00		600.00
35	Soap dispenser		1.00	No	250.00		250.00
36	Hand dryer		1.00	No	1,800.00		1,800.00
37	Ambulant grabrail		2.00	No	350.00		700.00
38	Toilet roll holder		1.00	No	200.00		200.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**15 *Fitments***						*(Continued)*
	Kitchenette						
39	Laminate wall bench with cupboards below		1.00	Item	6,000.00		6,000.00
40	E/o for bin		1.00	No	1,500.00		1,500.00
41	Laminate overhead cupboards - Excluded, as advised			Note			
	Managers Office						
42	Table and chairs - Excluded			Note			
43	Acoustic wall panel - ACP01		6.00	m2	475.00		2,850.00
	Print Area						
44	Laminate wall bench		1.00	Item	7,000.00		7,000.00
45	Pinboards - PIN01 - Excluded, as advised			Note			
46	Printing equipment - Excluded			Note			
	Video Conference						
47	Tables & chairs - Excluded			Note			
48	Pinboards - PIN01- Exlcuded, as advised			Note			
	Kitchen/Cafe						
49	Nil - By tenant			Note			
50	Brushed SS sheet reception counter (Including CRC portion) - MET01, Provisional allowance, as advised		1.00	Item	25,000.00		25,000.00
51	Feature timber wall seat with upholstered finish - TIM02 Provisional		1.00	Item	17,000.00		17,000.00
	Gift Shop						
52	Timber panelling - See Wall Finishes			Note			
53	1950 wide bench, shelving and cupboard unit		1.00	Item	6,500.00		6,500.00
54	2400 with pair of double cupboard doors - Fitout to store excluded		1.00	Item	8,500.00		8,500.00
55	Brushed SS sheet counter - MET01, Provisional allowance, as advised		1.00	Item	7,500.00		7,500.00
	Exhibition						
56	Nil			Note			
57	Gallery						
58	2250 wide pair of double pocket doors including llaminate bench behind		1.00	Item	20,000.00		20,000.00
	Sundries						
59	Signage & sundry			Item			5,000.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**15 *Fitments***						*(Continued)*
60	Subtotal						*160,890.00*
					Fitments	**Total :**	**160,890.00**
Trade :	**16 *Special Equipment***						
	Heat/Serve Kitchen Fitout						
1	SS benches - Provisional		1.00	Item	17,500.00		17,500.00
2	Kitchen appliances and bin - Provisional allowance, as advised		1.00	Item	6,000.00		6,000.00
3	Rangehood - See Mechanical Services			Note			
4	Subtotal						*23,500.00*
	Kitchenette Fitout						
5	Kitchen appliances - Provisional allowance, as advised		1.00	Item	2,500.00		2,500.00
6	Subtotal						*2,500.00*
7							
8	Kitchen & Cafe fitout - Excluded			Note			
					Special Equipment	**Total :**	**26,000.00**
Trade :	**17 *Sanitary Fixtures***						
	Hydraulic Services as consultants estimate						
1	Fixtures & tapware			Item			50,600.00
2	Mechanical services drainage			Item			5,500.00
3	Locality allowance, builders work and margin			Item			25,245.00
4	Subtotal						*81,345.00*
					Sanitary Fixtures	**Total :**	**81,345.00**
Trade :	**18 *Ventilation***						
1	For all mechanical services - See Airconditioning			Note			
					Ventilation	**Total :**	
Trade :	**19 *Air Conditioning***						
	Mechanical Services as consultants estimate						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**19** ***Air Conditioning***						*(Continued)*
1	Threatre, Multipurpose, Heat/Serve Kitchen & Toilets			Item			130,000.00
2	CRC, Comms, Video Conference & Managers Office			Item			120,000.00
3	Foyer, Exhibitition & Gift Shop			Item			240,000.00
4	Locality allowance, builders work and margin			Item			220,500.00
5	Subtotal						*710,500.00*
					Air Conditioning	**Total :**	**710,500.00**
Trade :	**20** ***Fire Protection***						
	Extinguishers						
1	Fire extinguishers and blankets			Item			7,500.00
2	Subtotal						*7,500.00*
3							
4	Wet fire services including sprinklers, hose reels, etc. - Excluded			Note			
					Fire Protection	**Total :**	**7,500.00**
Trade :	**21** ***Electric Light and Power***						
	Electrical Services as consultants estimate						
1	Power & lighting services			Item			360,800.00
2	Communication services			Item			26,200.00
3	Assistance call servivces			Item			3,750.00
4	MATV services			Item			4,500.00
5	Security services			Item			35,500.00
6	Locality allowance, builders work and margin			Item			193,840.00
7	Subtotal						*624,590.00*
8							
9	Specialist AV systems - Excluded			Note			
10	CCTV - Excluded, as advised			Note			
					Electric Light and Power	**Total :**	**624,590.00**
Trade :	**22** ***Preliminaries***						
	Preliminaries						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**22 *Preliminaries***						*(Continued)*
1	Preliminaries 15%			Item			852,518.00
2	Design & Engineering (D&C) - See Professional Fees			Note			
3	Subtotal						*852,518.00*
					Preliminaries	**Total :**	**852,518.00**
Trade :	**23 *Subtotal***						
					Subtotal	**Total :**	
Trade :	**24 *Site Preparation***						
	Demolition						
1	Remove trees and grub up roots - Excluded, to remain			Note			
2	Demolish existing sheds entirely		150.00	m2	135.00		20,250.00
3	E/o for verandah		25.00	m2	90.00		2,250.00
4	Remove existing concrete slab		250.00	m2	60.00		15,000.00
5	Remove existing crossover		31.00	m2	75.00		2,325.00
6	Remove existing stairs and landing			Item			2,000.00
7	Remove existing timber retaining		42.00	m	135.00		5,670.00
8	Remove existing bollard fencing		48.00	m	50.00		2,400.00
9	Sundry demolition, including in ground pits, etc.			Item			10,000.00
10	Allow for asbestos - Excluded, as advised			Note			
11	Subtotal						*59,895.00*
	Site Preparation						
12	Strip and clear site, trim and form levels - Within site boundary		3,950.00	m2	20.00		79,000.00
13	Strip and clear site, trim and form levels - To Crossovers		120.00	m2	25.00		3,000.00
14	Excavate below building pad for clean fill, dispose off site		1.00	Item	75,000.00		75,000.00
15	Clean imported fill for pads - Provisional		1.00	Item	60,000.00		60,000.00
16	Digging in rock - Provisional			Item			75,000.00
17	Subtotal						*292,000.00*
18							

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**24 *Site Preparation***						*(Continued)*
19	Siteworks for landscaping outside site boundary - See Cost Options			Note			
					Site Preparation	**Total :**	**351,895.00**
Trade :	**25 *Roads, Footpaths, Paved Areas***						
	Pedestrian Paving						
1	Reinforced concrete paving including thickenings, joints, DPM, etc. - Per Stuctural, Exposed Aggregate		380.00	m2	300.00		114,000.00
2	Subtotal						*114,000.00*
	Parking and Roadways						
3	Bitumen including base, sub base, kerbs, linemarking, wheelstops, etc. - See Landscaping & Improvements			Note			
4	Subtotal						*0.00*
					Roads, Footpaths, Paved Areas	**Total :**	**114,000.00**
Trade :	**26 *Boundary Walls, Fencing, Gates***						
	Rammed Earth Walls - Gardens						
1	900 x 400 reinforced concrete strip footings - SF.1		15.00	m	650.00		9,750.00
2	1200 x 400 reinforced concrete strip footings - SF.2		41.00	m	765.00		31,365.00
3	400 thick rammed earth wall including reinforcing and seals		112.00	m2	1,265.00		141,680.00
4	450 thick rammed earth wall including reinforcing and seals		70.00	m2	1,305.00		91,350.00
5	E/ for bulk curved rammed earth junction		1.00	Item	2,500.00		2,500.00
6	Subtotal						*276,645.00*
	Rammed Earth Walls - Courtyard						
7	1200 x 400 reinforced concrete strip footings - SF.2		58.00	m	765.00		44,370.00
8	450 thick rammed earth wall including reinforcing and seals		121.00	m2	1,305.00		157,905.00
9	Subtotal						*202,275.00*
	Aluminium Batten Screening - Garden Areas						
10	Reinforced concrete strip footings - Assumed for fixing points		23.00	m	450.00		10,350.00
11	Anodised aluminium circular batten screen and sub framing		61.00	m2	1,620.00		98,820.00
12	E/o for gate and hardware		3.00	No	4,500.00		13,500.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**26** ***Boundary Walls, Fencing, Gates***						*(Continued)*
13	Subtotal						*109,170.00*
	Aluminium Batten Screening - Verandah						
14	Reinforced concrete strip footings - Assumed for fixing points		12.00	m	450.00		5,400.00
15	Anodised aluminium circular batten screen and sub framing		32.00	m2	1,620.00		51,840.00
16	Subtotal						*57,240.00*
	Aluminium Batten Screening - Amphitheatre						
17	Reinforced concrete strip footings - Assumed for fixing points		18.00	m	450.00		8,100.00
18	Anodised aluminium circular batten screen and sub framing		38.00	m2	1,620.00		61,560.00
19	Subtotal						*69,660.00*
	Mechanical Screening						
20	Allow for mechanical screening and gates - Excluded, within building footprint, as advised			Note			
21	Subtotal						*0.00*
22							
23	Fencing & gates - Excluded, as advised			Note			
				Boundary Walls, Fencing, Gates		**Total :**	**728,490.00**
Trade :	**27** ***Outbuildings and Covered Ways***						
1	External sheds and binstores - Excluded			Note			
2	Covered links - Excluded			Note			
				Outbuildings and Covered Ways		**Total :**	
Trade :	**28** ***Landscaping and Improvements***						
	Landscaping - Based upon consultant scope and quantities						
1	1) Exposed aggregate paving		700.00	m2	300.00		210,000.00
2	2) Recycled hardwood timber decking including framing and finish - Excluded, as advised, not to be replaced with paving		210.00	m2			
3	3) Summerstones gravel fines		140.00	m2	105.00		14,700.00
4	4) Compacted local gravel fines		550.00	m2	105.00		57,750.00
5	5) Spray seal bitumen roadway and parking, including base and subbase - As advised		450.00	m2	200.00		90,000.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**28** ***Landscaping and Improvements***						*(Continued)*
6	E/o for concrete kerb - Excluded, as advised		210.00	m			
7	E/o for linemarking, bollards, signage, wheelstops, etc. - Excluded, as advised			Note			
8	E/o for crossover - 1 crossover only, as advised			Item			20,000.00
9	6) Recycled timber railway sleeper seating, with concrete plinth - Excluded, as advised		15.00	m			
10	7) Local granite seating rocks and bedding (400mm to 800mm) - Excluded, as advised		40.00	No			
11	8) Feature local rocks (1000mm to 1800mm) - Excluded, as advised		20.00	No			
12	9) 50mm thick local gravel mulch (5mm to 25mm)		2,010.00	m2	45.00		90,450.00
13	Subtotal						*482,900.00*
	Planting - Based upon consultant scope and quantities (Including supply, install, conditioner, etc.)						
14	90L trees		20.00	No	1,000.00		20,000.00
15	45L trees		15.00	No	900.00		13,500.00
16	140mm pot		2,000.00	No	30.00		60,000.00
17	Tubestock		4,000.00	No	7.00		28,000.00
18	Subtotal						*121,500.00*
	Sundry Landscaped Elements						
19	Landscaping maintenance and defects - Provisional			Item			25,000.00
20	Sundry local rocks to irrigation ponds - Excluded, as advised			Item			
21	Informal irrigation drainage ponds - Excluded, as advised		250.00	m2			
22	Corten/garden edging - Excluded, as advised			Note			
23	Irrigation to garden beds and trees - Provisional (Based upon gravel mulch to garden areas)		1,800.00	m2	30.00		54,000.00
24	Irrigation infrastructure and connections - Provisional (Bore excluded)			Item			25,000.00
25	Sundry street furniture (Bins, bike racks, etc.) - Excluded, as advised			Item			
26	Wayfinding signage - Provisional			Item			10,000.00
27	Interactive play elements (Per imagery, log steppers, etc.) - Excluded, as advised			Item			
28	Arbors & shading (Per imagery) - Excluded, as advised			Item			
29	Subtotal						*114,000.00*
	Qualifications						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**28** ***Landscaping and Improvements***						*(Continued)*
30	Loose furniture elements, incldluing seating, tables, umbrealls, etc. - Excluded, by client			Note			
31	Play equipment - Excluded			Note			
32	Subtotal						*0.00*
33							
34	Remove landscaping from area outside of bounday - Excluded			Note			
				Landscaping and Improvements		**Total :**	**718,400.00**
Trade :	**29** ***External Stormwater Drainage***						
	Hydraulic Services						
1	Stormwater drainage to built elements, including collection and disposal		1.00	Item	70,000.00		70,000.00
2	Locality allowance, builders work and margin			Item			31,500.00
3	Subtotal						*101,500.00*
4							
	Civil Stormwater						
5	Civil stormwater drainage including collection and disposal to paved elements		1.00	Item	80,000.00		80,000.00
6	Builders work and margin			Item			8,000.00
7	Subtotal						*88,000.00*
				External Stormwater Drainage		**Total :**	**189,500.00**
Trade :	**30** ***External Sewer Drainage***						
	Hydraulic Services as consultants estimate						
1	Property sewer & trade waste			Item			35,400.00
2	Water Corporation headworks			Item			33,873.00
3	Locality allowance, builders work and margin			Item			31,177.00
4	Subtotal						*100,450.00*
5							
6	Sewer pump station - Excluded			Note			
				External Sewer Drainage		**Total :**	**100,450.00**
Trade :	**31** ***External Water Supply***						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**31** ***External Water Supply***						
	Hydraulic Services as consultants estimate						
1	Cold water service			Item			18,600.00
2	Hot water service			Item			10,900.00
3	Locality allowance, builders work and margin			Item			13,275.00
4	Subtotal						*42,775.00*
5							
6	Headworks - See External Sewer Drainage			Note			
7	Rainwater tanks - Excluded			Note			
					External Water Supply	**Total :**	**42,775.00**
Trade :	**32** ***External Gas***						
1	Gas service - Excluded, kitchen to be electric, as advised			Note			
					External Gas	**Total :**	
Trade :	**33** ***External Fire Protection***						
	Hydraulic Services as consultants estimate						
1	Fire services - Excluded, to be compartmentalised, as advised			Note			
2	Subtotal						*0.00*
					External Fire Protection	**Total :**	
Trade :	**34** ***External Electrics***						
	Electrical Services as consultants estimate						
1	As cons & manuals			Item			2,000.00
2	Site establishment			Item			5,000.00
3	Removal of redundant			Item			3,000.00
4	Site main switchboard			Item			30,000.00
5	Building main switchboard			Item			40,000.00
6	New consumer mains to SMSB			Item			7,560.00
7	New submain SMSB to BMSB			Item			15,120.00
8	Trenching			Item			28,800.00
9	Underground conduit			Item			17,820.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**34** ***External Electrics***						*(Continued)*
10	Cable pits			Item			9,900.00
11	Testing & inspection			Item			3,000.00
12	Western Power headworks			Item			110,000.00
13	Telstra/NBN headworks			Item			30,000.00
14	30kW PV system - Excluded			Note			
15	Landscape lighting - Excluded			Note			
16	Locality allowance, builders work and margin			Item			135,990.00
17	Subtotal						*438,190.00*
18							
19	EV charging points - Excluded			Note			
20	Carpark lighting - Excluded			Note			
21	Backup diesel generator - Excluded			Note			
22	CCTV system - Excluded, as advised			Note			
					External Electrics	**Total :**	**438,190.00**
Trade :	**35** ***Preliminaries***						
	Preliminaries						
1	Preliminaries 15%			Item			403,300.00
2	Design & Engineering (D&C) - See Professional Fees			Note			
3	Subtotal						*403,300.00*
					Preliminaries	**Total :**	**403,300.00**
Trade :	**36** ***Subtotal***						
					Subtotal	**Total :**	
Trade :	**37** ***Subtotal - Perth Based***						
1							
					Subtotal - Perth Based	**Total :**	
Trade :	**38** ***Locality Allowance***						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**38** ***Locality Allowance***						
1	Locality Allowance for Hyden 35% - Included within rates			Note			
				Locality Allowance		**Total :**	
Trade :	**39** ***Subtotal - Building Works***						
				Subtotal - Building Works		**Total :**	
Trade :	**40** ***D & C Design Cost (Locality allowance not applicable)***						
	Professional Fees & Disbursements, as advised						
1	Professional fees - Post novation ($668,570 total, less $350,00 design to tender)			Item			340,000.00
2	Disbursements - $15,000, split 50/50 with tender			Item			7,500.00
3	Subtotal						*347,500.00*
4	Builders coordination and margin 5% - As advised			Item			16,500.00
				D & C Design Cost (Locality allowance not applicable)		**Total :**	**364,000.00**
Trade :	**41** ***TOTAL - D & C Contract***						
				TOTAL - D & C Contract		**Total :**	
Trade :	**42** ***Design Contingency***						
1	Design contingency 5%			Item			500,000.00
				Design Contingency		**Total :**	**500,000.00**
Trade :	**43** ***Construction Contingency***						
1	Construction Contingency 7.5%			Item			749,000.00
				Construction Contingency		**Total :**	**749,000.00**
Trade :	**44** ***Headworks***						
1	Hydraulic headworks - See Builders Work			Note			
2	Electrical headworks - See Builders Work			Note			

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
					Headworks	**Total :**	
Trade :	**45** ***Authority Costs***						
1	Authoity costs			Item			25,000.00
					Authority Costs	**Total :**	**25,000.00**
Trade :	**46** ***Public Art***						
1	Public Art 1% - Excluded, as advised			Note			
					Public Art	**Total :**	
Trade :	**47** ***Loose Furniture & Equipment***						
1	Loose furniture & equipment - Excluded, as advised			Note			
					Loose Furniture & Equipment	**Total :**	
Trade :	**48** ***AV Services & Displays***						
1	AV services and displays - Excluded, as advised			Note			
					AV Services & Displays	**Total :**	
Trade :	**49** ***Interactive/Interpretive Elements***						
1	Interactive/interpretive elements - Excluded, as advised			Note			
					Interactive/Interpretive Elements	**Total :**	
Trade :	**50** ***First Nations Engagement***						
1	First Nations engagement - Excluded, as advised			Note			
					First Nations Engagement	**Total :**	
Trade :	**51** ***Client Costs - Management & Administration***						
1	Client costs, management, administration and disbursements - Excluded			Note			
					Client Costs - Management & Administration	**Total :**	
Trade :	**52** ***Professional Fees & Disbursements***						
	Professional Fees & Disbursements, as advised						
1	Professional fees - For funding stage			Item			329,380.00

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**52** ***Professional Fees & Disbursements***						*(Continued)*
2	Professional fees - Post novation (See Builders Scope)			Note			
3	Disbursements - $15,000 split 50/50 with post novation			Item			7,500.00
4	Subtotal						*336,880.00*
5	Sundry contingency 5%, as advised			Item			18,120.00
					Professional Fees & Disbursements	**Total :**	**355,000.00**
Trade :	**53** ***Management Fees***						
1	External project management fees - Excluded, as advised			Note			
					Management Fees	**Total :**	
Trade :	**54** ***Escalation***						
1	Escalation to February 2027, 3.4% based upon AIQS forecast indices			Item			395,000.00
					Escalation	**Total :**	**395,000.00**
Trade :	**55** ***GST***						
1	GST - Excluded			Note			
					GST	**Total :**	
Trade :	**56** ***Subtotal***						
					Subtotal	**Total :**	
Trade :	**57** ***TOTAL***						
1							
					TOTAL	**Total :**	
Trade :	**58**						
1							
						Total :	

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**59 *COST OPTIONS***						
1							
					COST OPTIONS	**Total :**	
Trade :	**60 *COST OPTION: Demolition Works (By Client, no cost to project)***						
	Delete						
	Demolition						
1	Remove trees and grub up roots - Excluded, to remain			Note			
2	Demolish existing sheds entirely		-150.00	m2	135.00		-20,250.00
3	E/o for verandah		-25.00	m2	90.00		-2,250.00
4	Remove existing concrete slab		-250.00	m2	60.00		-15,000.00
5	Remove existing crossover		-31.00	m2	75.00		-2,325.00
6	Remove existing stairs and landing			Item			-2,000.00
7	Remove existing timber retaining		-42.00	m	135.00		-5,670.00
8	Remove existing bollard fencing		-48.00	m	50.00		-2,400.00
9	Sundry demolition, including in ground pits, etc.			Item			-10,000.00
10	Allow for asbestos - Excluded, as advised			Note			
11	Subtotal						*-59,895.00*
	Preliminaries						
12	Preliminaries 15%			Item			-8,105.00
13	Subtotal						*-68,000.00*
	Locality Allowance						
14	Locality allowance for Hyden - Included above			Note			
15	TOTAL - Building Works						*-68,000.00*
	Project Costs						
16	Contingencies, escalation, etc. 22%		-1.00	Item	14,000.00		-14,000.00
17	TOTAL						*-82,000.00*
					COST OPTION: Demolition Works (By Client, no cost to project)	**Total :**	**-82,000.00**
Trade :	**61 *COST OPTION: Excavation works below building pad for clean fill (By Client, no cost to proje***						
	Delete						
	Site Preparation						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**61** ***COST OPTION: Excavation works below building pad for clean fill (By Client, no cost to proje***						*(Continued)*
1	Excavate below building pad for clean fill, dispose off site		-1.00	Item	75,000.00		-75,000.00
2	Subtotal						*-75,000.00*
	Preliminaries						
3	Preliminaries 15%			Item			
4	Subtotal						*-75,000.00*
	Locality Allowance						
5	Locality allowance for Hyden - Included above			Note			-11,000.00
6	TOTAL - Building Works						*-86,000.00*
	Project Costs						
7	Contingencies, escalation, etc. 22%			Item			-18,000.00
8	TOTAL						*-104,000.00*
	COST OPTION: Excavation works below building pad for clean fill (By Client, no cost to project)					**Total :**	**-104,000.00**
Trade :	**62** ***COST OPTION: Supply & Deliver Clean Imported Fill (By Client, no cost to project)***						
	Delete						
1	Supply cost of clean imported fill		-1.00	Item	30,000.00		-30,000.00
2	Subtotal						*-30,000.00*
	Preliminaries						
3	Preliminaries 15%			Item			-4,000.00
4	Subtotal						*-34,000.00*
	Locality Allowance						
5	Locality allowance for Hyden - Included above			Note			
6	TOTAL - Building Works						*-34,000.00*
	Project Costs						
7	Contingencies, escalation, etc. 22%			Item			-7,000.00
8	TOTAL						*-41,000.00*
	COST OPTION: Supply & Deliver Clean Imported Fill (By Client, no cost to project)					**Total :**	**-41,000.00**
Trade :	**63** ***COST OPTION: Digging In Rock (By Client, no cost to project)***						
	Delete						
	Site Preparation						

TRADE BREAKUP

Job Name : DETAILED DESIGN1 **Job Description**

Client's Name: Site Architects Katter Kich Discovery Centre

Item No.	Item Description	+/- %	Quantity	Unit	Rate	Mark Up %	Amount
Trade :	**63** ***COST OPTION: Digging In Rock (By Client, no cost to project)***						*(Continued)*
1	Digging in rock - Provisional			Item			-75,000.00
2	Subtotal						*-75,000.00*
	Preliminaries						
3	Preliminaries 15%			Item			
4	Subtotal						*-75,000.00*
	Locality Allowance						
5	Locality allowance for Hyden - Included above			Note			-11,000.00
6	TOTAL - Building Works						*-86,000.00*
	Project Costs						
7	Contingencies, escalation, etc. 22%			Item			-18,000.00
8	TOTAL						*-104,000.00*
				COST OPTION: Digging In Rock (By Client, no cost to project)		**Total :**	**-104,000.00**
Trade :	**64** ***TOTAL - Cost Options***						
				TOTAL - Cost Options		**Total :**	

APPENDIX D

SUB CONSULTANT REPORTS

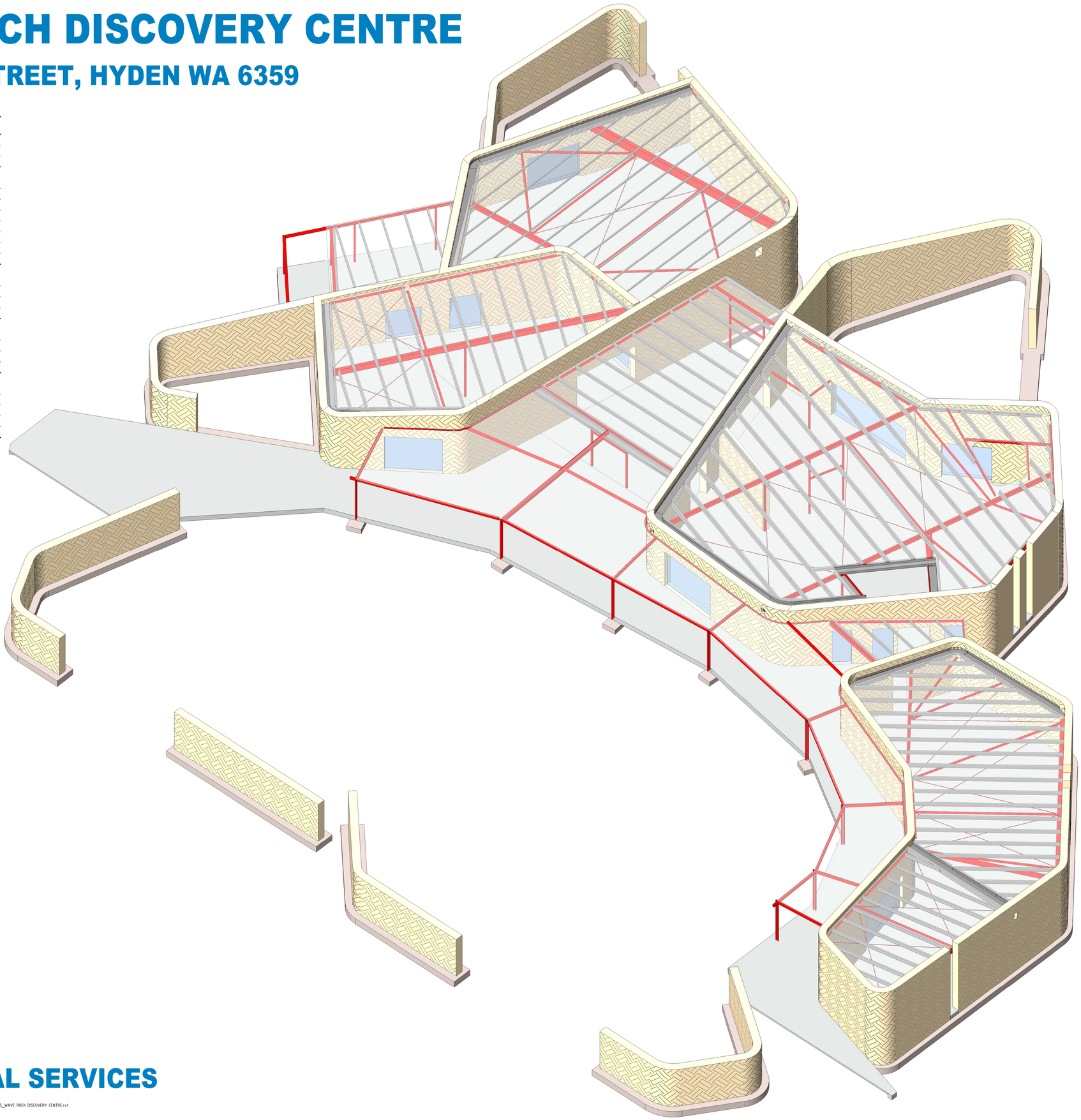
B.1 STRUCTURAL
B.2 ELECTRICAL
B.3 HYDRAULIC
B.4 MECHANICAL
B.5 LANDSCAPE
B.6 CIVIL
B.7 COMPLIANCE
B.8 ENERGY
B.9 SURVEY
B.10 GEOTECHNICAL

KATTER KICH DISCOVERY CENTRE

36 MARSHALL STREET, HYDEN WA 6359

DRAWING REGISTER

SHEET No.	SHEET NAME	REV.
S00 - MODEL REGISTER		
S00-01	MODEL REGISTER - STRUCTURAL	B
S01 - COVER SHEET		
S01-01	COVER SHEET DRAWING LIST	B
S01-101	GENERAL NOTES SHEET 01	B
S01-102	GENERAL NOTES SHEET 02	B
S01-103	GENERAL NOTES SHEET 03	B
S01-111	DENOTATION SHEET 01	B
S01-121	SAFETY IN DESIGN REGISTER SHEET 01	B
S01-122	SAFETY IN DESIGN REGISTER SHEET 02	B
S05 - RAMMED EARTH WALLS		
S05-01	RAMMED EARTH WALL ELEVATIONS SHEET 01	B
S05-02	RAMMED EARTH WALL ELEVATIONS SHEET 02	B
S05-03	RAMMED EARTH WALL ELEVATIONS SHEET 03	B
S09 - FOUNDATIONS, BASEMENT TO GROUND GA PLANS & SECTIONS		
S09-05.0	GROUND ISOMETRIC VIEW	B
S09-05.1	GROUND GENERAL ARRANGEMENT PLAN SHEET 01	B
S09-05.2	GROUND GENERAL ARRANGEMENT PLAN SHEET 02	B
S11 - FRAMING		
S11-25.0	ROOF FRAMING ISOMETRIC VIEW	B
S11-25.1	LOWER ROOF FRAMING LAYOUT	B
S11-25.2	UPPER ROOF FRAMING LAYOUT	B
S11-25.6	STEEL FRAMING WALL ELEVATIONS SHEET 01	B



HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title: COVER SHEET
DRAWING LIST

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By: D.G	Checked By: C.B	Approved By: C.B
Project No.: 29385.001	Drawn By: J.B	Scale: (at A1)
Drawing No.: S01-01		Revision: B

ADG STRUCTURAL SERVICES

PLOT DATE: 30/07/2026 9:22:57 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/v24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

KATTER KICH DISCOVERY CENTRE

36 MARSHALL STREET, HYDEN WA 6359

GENERAL

1. "ENGINEER" REFERS TO THE DESIGN ENGINEER RESPONSIBLE FOR THE DESIGN OF THE RELEVANT ELEMENT. DESIGNS SHALL NOT BE MODIFIED IN ANY WAY WITHOUT THE WRITTEN APPROVAL FROM THE DESIGN ENGINEER. FOR ELEMENTS NOT DESIGNED BY ADG, ALL ADVICE PROVIDED BY THE DESIGN ENGINEER RELATING TO ANY MODIFICATIONS OR ADDITIONAL DETAILS NOT INCLUDED IN THE CURRENT DOCUMENTATION SHALL BE ISSUED TO ADG.
2. UNO REFERS ONLY TO ADVICE OR DOCUMENTS PROVIDED BY ADG UNLESS SPECIFICALLY STATED OTHERWISE. FOR ALL CASES WHERE THE GENERAL NOTES CONFLICT WITH THE DETAILED DRAWINGS, THE DETAILED DRAWINGS REQUIREMENTS GOVERN UNLESS SPECIFICALLY STATED OTHERWISE.
3. ANY INDEPENDENT COMPLIANCE DESIGN OR INSPECTION CERTIFICATION OF BUILDING ELEMENTS PROVIDED BY MANUFACTURERS OR SUBCONTRACTORS SHALL BE CARRIED OUT BY SUITABLY QUALIFIED COMPETENT PERSONS OR PROFESSIONAL ENGINEERS AS REQUIRED BY AND IN ACCORDANCE WITH LEGISLATIVE REQUIREMENTS OF THAT PROJECT JURISDICTION.
4. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER.
5. SETTING-OUT DIMENSIONS AND SIZES OF STRUCTURAL MEMBERS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS. ANY SETTING-OUT DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS SHALL BE CHECKED BY THE CONTRACTOR BEFORE CONSTRUCTION COMMENCES.
6. UNO ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
7. MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION, CURRENT NCC BUILDING REGULATIONS AND AUSTRALIAN STANDARDS CODES AND THE REQUIREMENTS OF ANY OTHER RELEVANT STATUTORY AUTHORITIES.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE DURING CONSTRUCTION THAT THE STRUCTURE IS MAINTAINED IN A STABLE CONDITION AND NO PART IS OVERSTRESSED.
9. UNLESS SPECIFICALLY STATED OTHERWISE, DOCUMENTATION RELATES TO THE STRUCTURE IN ITS PERMANENT CONDITION ONLY. ADDITIONAL REQUIREMENTS FOR CONSTRUCTION SEQUENCING, TEMPORARY WORKS, PROPPING, BRACING, CONSTRUCTION LOADING, ETC SHALL BE DOCUMENTED BY SPECIALISTS ENGAGED BY THE CONTRACTOR.
10. ANY MATERIAL STACKING LOADS REQUIRED PRIOR TO THE TEMPORARY FLOOR SUPPORT BEING REMOVED ARE TO BE ALLOWED FOR BY THE CONTRACTOR'S ENGINEERS. MATERIAL STACKING LOAD ALLOWANCE AFTER TEMPORARY FLOOR SUPPORTS ARE REMOVED IS LIMITED TO THE FLOOR LIVE LOAD LIMIT UNO.
11. CONTRACTOR TO COORDINATE ALL SERVICES TO AVOID CLASHES WITH STRUCTURAL ELEMENTS. ALL EXISTING SERVICES TO BE LOCATED PRIOR TO THE COMMENCEMENT OF WORKS. ANY EXISTING SERVICES SHOWN ARE INDICATIVE ONLY AND ARE PROVIDED FOR INFORMATION ONLY.
12. CONTRACTOR SHALL PROVIDE MINIMUM 48 HOURS NOTICE FOR ALL ENGINEERS INSPECTIONS. CONTRACTOR TO ENSURE WORKS COMPLETE PRIOR TO ENGINEERS INSPECTION. CONTRACTOR SHALL ENSURE ALL ELEMENTS REQUIRING INSPECTION HAVE SAFE ACCESS AND ARE WELL LIT.
13. CONTRACTOR IS TO ENSURE A RESPONSIBLE SITE SUPERVISOR IS AVAILABLE TO RECEIVE ENGINEERS INSPECTION REPORT. THE CONTRACTOR IS TO ENSURE ALL ITEMS NOTED IN ENGINEERS INSPECTION REPORT ARE COMPLETED. INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES TO ENSURE COMPLETE AND CORRECT WORKS.
14. CONTRACTOR TO OBTAIN WRITTEN INSTRUCTION FROM THE ENGINEER FOR VARIATIONS, ALTERNATIVE DETAILS OR WHERE DETAILS HAVE NOT BEEN INCLUDED WITHIN THE CURRENT DOCUMENTATION PRIOR TO PROCEEDING WITH WORKS.
15. NO PENETRATIONS, CORING OR CHASING OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PERMITTED WITHIN STRUCTURAL ELEMENTS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
16. ITEMS NOT DOCUMENTED ON ADG DRAWINGS ARE TO BE APPROPRIATELY INSPECTED AND CERTIFIED BY THE RELEVANT PARTY.
17. UNO ELEMENTS DESIGNED BY OTHERS, INCLUDING TEMPORARY WORKS CONNECTIONS, SHALL BE COORDINATED WITH ADG ENGINEERS' DESIGN AT ALL INTERFACES.
18. ANY REDUCED LEVELS SHOWN ON THE STRUCTURAL DRAWINGS ARE NOMINAL ONLY AND TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
19. THE WEATHERPROOFING AND WATERPROOFING OF THE STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR OR ARCHITECT. THIS INCLUDES THE SPECIFICATION AND DETAILING OF SEALANTS, WATERPROOF MEMBRANES, SETDOWNS, REBATES, STEPS, CLADDING FIXING, FLASHINGS AND WATERSTOPS.
20. UNO BY THE ENGINEER ALL FACADES, SERVICES, ARCHITECTURAL FINISHES AND PARTITIONS TO ALLOW FOR FLOOR MOVEMENTS OF SPAN/250 (20mm MIN) AND CANTILEVER/125 (20mm MIN).

STRUCTURAL MONITORING

1. PRIOR TO THE COMMENCEMENT OF EXCAVATION, THE CONTRACTOR TO UNDERTAKE A COMPREHENSIVE DILAPIDATION SURVEY OF THE EXISTING BUILDINGS, PAVEMENTS AND SERVICES. THE CONTRACTOR SHALL CONSULT WITH RELEVANT ASSET OWNERS FOR DILAPIDATION REQUIREMENTS. REFER ALSO FOUNDATION NOTES.
2. ESTABLISH SURVEY MARKS AND MONITORING EQUIPMENT AT CRITICAL LOCATIONS OR IN THE LOCATIONS NOMINATED ON PLANS.
3. SURVEY MARKS ARE TO BE ACCURATELY SURVEYED BY A LICENSED SURVEYOR.
4. RECORDS SHALL BE REGULARLY MAINTAINED OF ALL MONITORING RESULTS AND SUBMITTED TO THE PROJECT TEAM FOR REVIEW. SHOULD THERE BE MORE THAN 5mm MOVEMENT OR MORE THAN THE NOMINATED TRIGGER LEVELS, THE CONTRACTOR IS TO NOTIFY ADG ENGINEERS IMMEDIATELY.
5. REFER TO THE GEOTECHNICAL CONSULTANT FOR ANY GEOTECHNICAL AND GROUND WATER MONITORING REQUIREMENTS.
6. THE CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY WORKS TO PROTECT EXISTING SERVICES OR STRUCTURES. ANY DAMAGE TO THE EXISTING BUILDINGS, PAVEMENTS AND SERVICES ARE TO BE RECTIFIED BY THE CONTRACTOR. ALL AREAS OUTSIDE THE SITE BOUNDARY DISTURBED BY THE WORKS ARE TO BE MADE GOOD TO THE SATISFACTION OF THE ASSET OWNER OR RELEVANT AUTHORITY.

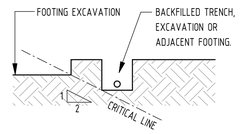
DESIGN CRITERIA

1. THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH LOADS BASED ON AS/NZS1170 AND RELEVANT REGULATIONS.
2. FOR SURVEY INFORMATION RELATED TO THIS PROJECT, REFER TO:
   a. DRAWING HYD 001 UNO.
   b. BY: MONAGHAN MAPPING & SURVEY
3. REFER TO ADG STRUCTURAL PERFORMANCE BRIEF FOR FURTHER INFORMATION:
   a. REPORT NO: 29385.001 S [00]
4. FOR GEOTECHNICAL INFORMATION RELATED TO THE PROJECT, REFER TO GEOTECHNICAL INVESTIGATION:
   a. BY: PERTH GEOTECHNICS
   b. REPORT NO: GI862725PG_REV0
   c. DATED: 31 DECEMBER 2025

   DESIGN PARAMETERS - FOUNDATIONS
   a. PAD FOOTINGS: MIN 100 kPa ALLOWABLE BEARING CAPACITY
   b. STRIP FOOTINGS: MIN 100 kPa ALLOWABLE BEARING CAPACITY
   c. GROUND SLABS AND BEAMS: MIN 100 kPa ALLOWABLE BEARING CAPACITY
   d. AS 2870 SITE CLASSIFICATION: S - CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR GROUND IMPROVEMENT TO ACHIEVE CLASS S.
5. BEARING PRESSURE UNDER FOOTINGS TO BE CONFIRMED ON SITE BY GEOTECHNICAL ENGINEER.
6. FLOOR LOADS
   a. DEAD LOADS - 1.5kPa.
      LIVE LOADS - 4.0kPa
   b. UNO THE CONSTRUCTION LIVE LOAD ALLOWANCE IS NOT CONCURRENT WITH ANY SUPERIMPOSED DEAD LOADS OR LANDSCAPING LOADS AND, ONCE SUPERIMPOSED DEAD LOADS OR LANDSCAPING LOADS ARE APPLIED, THE CONSTRUCTION LIVE LOAD IS THEREAFTER LIMITED TO THE FLOOR LIVE LOAD NOTED.
7. WIND LOADING AS1170.2-2021
   a. IMPORTANCE LEVEL: 2
   b. ANNUAL PROBABILITY OF EXCEEDANCE: 1/500
   c. REGION: A
   d. TERRAIN CATEGORY: VARIES
   e. Mt - VARIES
   f. ULTIMATE REGIONAL WIND SPEED VR: 45 m/s
   g. SERVICEABILITY REGIONAL WIND SPEED VR: 37 m/s
8. EARTHQUAKE LOADING AS1170.4-2007 (R2018)
   a. IMPORTANCE LEVEL: 2
   b. ANNUAL PROBABILITY OF EXCEEDANCE: 1/500
   c. PROBABILITY FACTOR Kp: 1
   d. HAZARD DESIGN FACTOR Z: 0.08
   e. SITE SUB-SOIL CLASS: Ce
   f. EARTHQUAKE DESIGN CATEGORY: I
   g. STRUCTURAL DUCTILITY μ: 1.0
   h. STRUCT PERFORMANCE FACTOR Sp: 0.77
   i. UNO NON-STRUCTURAL ELEMENTS, INCLUDING CEILINGS, SERVICES AND LIGHTWEIGHT PARTITIONS, THEIR FASTENERS AND ANY BRACING REQUIRED, ARE TO BE DESIGNED BY ENGINEER, ENGAGED BY THE CONTRACTOR, TO SECTION 8 OF AS1170.4.
9. CONCRETE DURABILITY
   a. DESIGN LIFE: 40-60 YRS TO AS3600 UNO.
   b. AS3600 EXPOSURE CLASSIFICATION:
   c. INTERNAL: A2
   d. EXTERNAL A2
   e. IN CONTACT WITH GROUND: A2
10. STRUCTURAL STEEL DURABILITY
    a. CORROSIVITY CATEGORY TO AS4312:
    b. EXPOSED INTERNAL: C1
    c. EXPOSED EXTERNAL: C2
    d. NON-EXPOSED AND SEALED: C1
11. MASONRY AND COMPONENTS DURABILITY
    a. REFER MASONRY NOTES FOR MASONRY UNIT SALT RESISTANCE CLASS, MORTAR CLASS AND BUILT-IN COMPONENTS CLASS.

FOUNDATION

1. THIS FOOTING DESIGN HAS BEEN PREPARED BASED ON INFORMATION PROVIDED IN THE GEOTECHNICAL REPORT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE REFERENCE TO THIS REPORT AND ITS RECOMMENDATIONS.
2. THE CONTRACTOR MUST BE AWARE THAT FOUNDATIONS MAY VARY BETWEEN TEST LOCATIONS REFERRED TO IN THE GEOTECHNICAL REPORT. IF FOUNDATION CONDITIONS DIFFER FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT IN PERFORMING EARTHWORKS OR FOOTING EXCAVATION, THEN ADG ENGINEERS MUST BE NOTIFIED IN WRITING IMMEDIATELY AS AN AMENDMENT TO THE SITE CLASSIFICATION AND/OR DESIGN MAY BE REQUIRED.
3. THE STRUCTURAL DESIGN HAS BEEN BASED ON THE FOLLOWING ASSUMPTIONS:
   a. FOUNDATION MATERIAL SATISFIES THE NOMINATED MINIMUM BEARING CAPACITY AND ASSOCIATED STIFFNESS.
   b. THERE ARE NO SLOPE STABILITY OR OTHER GEOTECHNICAL ISSUES.
4. THE DESIGN OF FOOTINGS AND SUPERSTRUCTURE OVER IS SUBJECT TO CHANGE IF GEOTECHNICAL CONDITIONS CHANGE.
5. UNO FOOTINGS SHALL BE LOCATED CENTRALLY UNDER WALLS AND COLUMNS.
6. ALL LOOSE MATERIALS AND WATER TO BE CLEANED OUT OF THE FOUNDATION. FORMWORK TO BE USED WHERE THE SIDES OF THE FOUNDATION ARE NOT STABLE.
7. A 50mm BLINDING LAYER (N20 MINIMUM CONCRETE UNO) TO BE APPLIED TO THE BASE OF ALL FOUNDATIONS IMMEDIATELY AFTER VERIFICATION OF THE BEARING CAPACITY BY THE GEOTECHNICAL ENGINEER. WHERE THE FOUNDING MATERIAL IS DEEPER THAN REQUIRED FOR THE FOOTING, THE EXCAVATION TO BE BACKFILLED WITH N20 MIN CONCRETE (UNO) TO THE UNDERSIDE OF THE FOOTING.
8. UNLESS OTHERWISE APPROVED BY ADG ENGINEERS, THE LIMITATIONS OF EXCAVATIONS NEAR FOOTINGS SHALL BE AS FOLLOWS:



9. EXCAVATION NEAR EXISTING FOOTINGS SHALL NOT EXTEND BELOW FOUNDATION LEVEL WITHOUT THE APPROVAL OF ADG ENGINEERS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ANY EXCAVATION IN A STABLE CONDITION WITHOUT ADVERSELY AFFECTING SURROUNDING PROPERTY, INCLUDING SERVICES. THIS INCLUDES OBTAINING ALL NECESSARY APPROVALS FOR SHORING AND ANCHORING SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND LOCATING ALL EXISTING UNDERGROUND SERVICES PRIOR TO ANY EXCAVATION COMMENCING.
11. DEPTHS SPECIFIED FOR FOOTINGS ARE MINIMUM DIMENSIONS ONLY. GREATER DEPTH MAY BE NECESSARY TO ACHIEVE SPECIFIED FOUNDING BASE.
12. IF THE MATERIAL UNDERLYING THE SITE IS EXPANSIVE CLAY, THE FOLLOWING PRECAUTIONS ARE TO BE UNDERTAKEN BY THE CONTRACTOR TO AVOID MOISTURE VARIATIONS:
    a. GROUND GRADED OR DRAINED SO THAT WATER CANNOT POND AGAINST OR NEAR FOOTINGS, INCLUDING WITHIN UNDERFLOOR SPACES.
    b. SITE GRADED OR DRAINED SO THAT WATER CANNOT POND AGAINST OR NEAR GROUND SLABS AROUND THE BUILDING PERIMETER
    c. AVOID LANDSCAPE PLANTING CLOSE TO FOOTINGS AND GROUND SLABS
    d. PROTECT UNDERGROUND SERVICES ADJACENT TREE ROOTS
    e. REPAIR LEAKING SERVICES PROMPTLY.
13. ONGOING MAINTENANCE IS REQUIRED TO CONTROL MOVEMENTS OF REACTIVE CLAYS OVER THE LIFE OF THE STRUCTURE AS PER AS2870 APPENDIX B.
14. PIPES SHALL NOT BE CAST INTO FOOTINGS OR GROUND BEAMS WITHOUT APPROVAL FROM THE ENGINEER. ALL PIPES ARE TO BE ISOLATED FROM THE STRUCTURE TO THE ENGINEER'S DETAIL.

SUBGRADE PREPARATION

1. THE CONTRACTOR SHALL ALLOW TO PAY ALL ASSOCIATED COSTS TO ENGAGE AN APPROVED GEOTECHNICAL TESTING AUTHORITY TO CARRY OUT ALL INSPECTIONS, TESTING AND CERTIFICATIONS AS NECESSARY OF THE EARTHWORKS SHOWN IN THE DOCUMENTATION.
2. THE GEOTECHNICAL TESTING AUTHORITY IS TO INCLUDE INSPECTION, TESTING AND CERTIFICATION OF SUBGRADE REPLACEMENT, REINSTATEMENT WORKS AND TRENCHING WORKS CARRIED OUT ON SITE.
3. THE EXTENT OF GEOTECHNICAL SUPERVISION OF EARTHWORKS AND TESTING IS TO BE DETERMINED BY THE GEOTECHNICAL TESTING AUTHORITY IN ACCORDANCE WITH AS3798. THE CONTRACTOR SHALL PROVIDE DETAILS OF ALL TESTING TO THE ENGINEER PROGRESSIVELY THROUGHOUT THE WORKS AND NOTIFY THE ENGINEER OF ANY NON-CONFORMANCES. ALL NON-CONFORMING WORK IS TO BE RECTIFIED AT THE CONTRACTOR'S EXPENSE.
4. ALL PIPE AND TRENCH EXCAVATIONS SHALL BE CARRIED OUT CAREFULLY AND SHALL BE KEPT TO A MINIMUM SIZE. EXCAVATIONS SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL AND SHALL BE PLACED IN LAYERS NOT EXCEEDING 200mm LOOSE DEPTH AND COMPACTED BY VIBRATING PLATE TO ACHIEVE A 100% STANDARD DRY DENSITY UNO BY THE ENGINEER OR GEOTECHNICAL ENGINEER.
5. EXCAVATION FOR BEAMS AND FOOTINGS TO DIMENSIONS SHOWN ON THE DRAWINGS, ENSURING THAT THE BASE AND SIDES OF THE EXCAVATIONS REMAIN FULLY COMPACTED. REFER ALSO TO FOUNDATION NOTES.
6. TRIM PLATFORM TO THE REQUIRED LEVEL.

CONCRETE

1. ALL WORKMANSHIP, MATERIALS SHALL BE IN ACCORDANCE WITH AS1379, AS3600 AND ALL AMENDMENTS, AND THE CONCRETE SPECIFICATION.
2. THE CONTRACTOR SHALL ENSURE THE CONCRETE MIX DESIGN, FORMWORK, COMPACTION AND FINISHING METHODOLOGIES ARE SUITABLE TO ENSURE DENSE QUALITY CONCRETE THROUGHOUT FOR ALL ELEMENTS WITH DUE CONSIDERATION IS GIVEN TO:
   a. THE CONFIGURATION AND DENSITY OF THE REINFORCEMENT, TENDONS, ANCHORS, JOINTS AND EMBEDDED ELEMENTS.
   b. ENVIRONMENTAL CONDITIONS DURING AND AFTER THE POUR
   c. THE SIZE OF ELEMENTS AND THE POUR SIZES OVERALL
   d. ANY PROJECT SUSTAINABILITY TARGETS
3. ALL CONCRETE CLASS DESIGNATION TO AS1379 UNO. FOR CONCRETE WITH f'c <=50MPa, CONCRETE SHALL BE NORMAL-CLASS ('N' GRADE) UNO.
4. THE MIX DESIGN FOR ALL CONCRETE SPECIFIED AS SPECIAL-CLASS ('S' GRADE) SHALL BE SUBMITTED TO ADG FOR REVIEW PURPOSES ONLY (MIX DESIGN RESPONSIBILITY REMAINS WITH THE CONTRACTOR FOR ALL MIXES).
5. CONCRETE STRENGTH SHALL NOT BE INCREASED FOR HIGH EARLY STRENGTH OR OTHER PURPOSES WITHOUT APPROVAL FROM ADG ENGINEERS.
6. UNO CONCRETE SIZES ARE MINIMUM STRUCTURAL SIZES DO NOT INCLUDE
   a. FINISHES
   b. FALLS UNLESS SPECIFICALLY NOTED
   c. EXTRA CONCRETE DUE TO OVER-EXCAVATED GROUND
   d. EXTRA CONCRETE DUE TO OUT OF POSITION FORMWORK OR SHORING.
7. FOR MECHANICAL FIXINGS, COUPLERS AND THREADED INSERTS, REFER TO REINFORCEMENT NOTES.
8. NO HOLES, CHASES OR EMBEDMENTS OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT ENGINEER'S APPROVAL.
9. FOR CHAMFERS, DRIP GROOVES, FILLETS ETC., REFER TO ARCHITECT'S DETAILS. MAINTAIN MINIMUM COVER TO REINFORCEMENT AT THESE LOCATIONS. ALL FORMED CORNERS TO HAVE A MAXIMUM 25mm BEVELED FACE WIDTH (17x17mm NOM) UNO.
10. DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS. SLABS AND BEAMS SHALL BE CAST TOGETHER UNLESS OTHERWISE NOTED.
11. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED AND DETAILED TO THE APPROVAL OF ADG ENGINEERS.
12. A BOND BREAKER MATERIAL SHALL BE PLACED BETWEEN CONTRACTING SURFACES AT CONTRACTING JOINTS, INCLUDING TEMPORARY AND PERMANENT MOVEMENT JOINTS. REINFORCEMENT SHALL NOT BE CONTINUOUS THROUGH CONTRACTION JOINTS.
13. THE CONTRACTOR SHALL ENSURE EVAPORATION RATES ARE CONTROLLED PRIOR TO CONCRETE CURING. EVAPORATION RETARDERS SHALL BE APPLIED FOR SLABS WHEN POURING IN HIGH EVAPORATION CONDITIONS (HIGH HEAT, OR HIGH WIND, OR LOW HUMIDITY). EVAPORATION CONTROLS DO NOT REPLACE CURING REQUIREMENTS.
14. CURE CONCRETE BY KEEPING SURFACES CONTINUOUSLY WET FOR THE FOLLOWING PERIODS:
    a. EXPOSURE CLASSIFICATION A1, A2 - 3 DAYS MINIMUM
    b. ALTERNATIVELY, A CURING COMPOUND COMPLYING FULLY TO AS1379-2007 (R2017) MAY BE ADOPTED. THE CONTRACTOR SHALL ENSURE ANY CURING COMPOUNDS ARE FULLY COMPATIBLE WITH ALL FLOOR FINISHES.
15. CONSTRUCTION SUPPORT PROPPING SHALL BE LEFT IN PLACE WHERE REQUIRED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING. REFER ALSO TO GENERAL NOTE 9.
16. CONDUITS AND PIPES WHEN CAST IN SLABS OR WALLS ARE TO BE PLACED BETWEEN THE TWO REINFORCEMENT LAYERS IN THE MIDDLE THIRD OF THE SLAB. WHERE THERE IS ONLY ONE LAYER OF REINFORCEMENT, PROVIDE 50mm COVER TO CONDUIT. PROVIDE MINIMUM 100mm CLEARANCE BETWEEN CONDUITS.
17. THE MATERIALS, DESIGN, FABRICATION AND STRIPPING OF FORMWORK SHALL COMPLY WITH THE RELEVANT REQUIREMENTS OF AS3600 AND AS3610.1.
18. FALSEWORK, FORMWORK AND SHORING SHALL BE DESIGNED AND ERECTED TO BE SUFFICIENT TO PRODUCE HARDENED CONCRETE TO THE LINES, LEVELS AND PROFILES SHOWN IN THE DRAWINGS. IT SHALL HAVE ADEQUATE STRENGTH TO CARRY ALL APPLIED LOADS, INCLUDING THE PRESSURE OF FRESH CONCRETE, VIBRATION LOADS, WEIGHT OF WORKERS AND EQUIPMENT, WITHOUT LOSS OF SHAPE.
19. THE PERMANENT STRUCTURE HAS BEEN DESIGNED TO CARRY THE LOADS INDICATED IN THE STRUCTURAL DRAWINGS/PERFORMANCE BRIEF/NOTES ON THE DRAWINGS. THE STRUCTURE HAS NOT BEEN DESIGNED SPECIFICALLY FOR ANY SHORING OR RESHORING PROCESS.
20. THE FORMWORK SHALL BE DESIGNED TO ACCOUNT FOR THE CONSTRUCTION CYCLE PROVIDED BY THE BUILDING CONTRACTOR. ANY SHORING SYSTEM MAY NEED TO CONSIDER LOADINGS IMPOSED ON THE LOWER FLOORS.
21. THE CONCRETE COVER IS THE CLEAR DISTANCE BETWEEN ANY REINFORCEMENT (INCLUDING FITMENTS AND COUPLERS) AND THE FACE OF THE STRUCTURAL ELEMENT. NO FERROUS MATERIALS, INCLUDING FORM COIL TIES OR ADDITIONAL BARS USED FOR REINFORCEMENT FIXING PURPOSES ARE TO BE LOCATED IN THE CONCRETE COVER.
22. THE COVERS SHALL BE MAINTAINED USING APPROVED BAR CHAIRS COMPLYING TO AS/NZS2425 WITH MAXIMUM CENTRES AS PER THE REINFORCEMENT NOTES. BAR CHAIRS SHALL BE PROVIDED ALONG THE EDGES OF ALL CONSTRUCTION JOINTS. STOP ENDS SHALL NOT BE USED TO MAINTAIN THE COVERS.

CONCRETE

23. UNO ALL CONCRETE SHALL HAVE A MAXIMUM NOMINAL AGGREGATE SIZE OF 20mm.
24. THE BELOW TABLE IS TO BE USED ONLY WHEN CONCRETE COVERS ARE NOT SHOWN ON THE RELEVANT PLANS, ELEVATIONS OR SECTIONS.

FOOTINGS CONCRETE COVER TO REINFORCEMENT

EXP CLASS	CONC GRADE f'c (MPa)	CAST AGAINST GROUND		FORMED NO FRL
		NO MEMBRANE	WPM OR VPM MEMBRANE	
A1/A2	≥25	50	40	40

SLABS, BANDS & BEAMS CONCRETE COVER TO...

EXP CLASS	CONC GRADE f'c (MPa)	CAST AGAINST GROUND		TOP COVER
		NO MEMBRANE	WPM OR VPM MEMBRANE	
EXTERNAL				
A2	≥25	50	40	30
INTERNAL				
A1	≥25	50	40	20
A2	25	50	40	30
A2	32	50	40	25
A2	≥40	50	40	20

SLAB ON GROUND

1. WHERE SLAB OR PAVEMENT SUB BASE IS REQUIRED:
   a. IT SHALL BE APPROVED GRANULAR MATERIAL COMPACTED TO 100% STANDARD DRY DENSITY TO AS1289.5.1.1 UNO BY THE ENGINEER OR THE GEOTECHNICAL ENGINEER,
   b. THE CONTRACTOR SHALL ALLOW FOR FIELD DENSITY TESTS TO AS1289.5.3.2 FOR 1 TEST PER 2500m2 (3 NO. MIN) UNO BY THE ENGINEER OR THE GEOTECHNICAL ENGINEER.
2. PLACE 50mm NOMINAL (30mm MINIMUM) COMPACTED SAND BEDDING.
3. LAY 0.2mm THICK POLYTHENE VAPOUR PROOF MEMBRANE (VPM) TO THE ENTIRE UNDERSIDE OF THE SLAB AND INTEGRAL GROUND BEAMS. THE VPM TO BE LAPPED 30mm MINIMUM AT JOINTS AT TAPED CONTINUOUSLY WITH MOISTURE PROOF PRESSURE SENSITIVE TAPE. WRAP AND TAPE ALL PIPE PENETRATIONS. ANY HOLES TO BE PATCHED AND TAPED.
4. ALL SLAB ON GROUND UNLESS NOTED OTHERWISE ON PLAN TO BE PROVIDED 1.N12 TRIMMER TIED TO UNDERSIDE OF FABRIC TO ALL EDGES AND SIDES OF SLABS INCLUDING EACH SIDE OF ALL JOINTS. TRIMMERS LAPPED 450mm MINIMUM AND COGGED 300mm AT CORNERS AND ENDS.
5. INTERNAL SLAB EDGES TO BE TURNED DOWN ON TO FOOTINGS ALL AS PER DETAILED ON SECTIONS. LOCAL TO PAD BASES AND FOOTINGS GREATER THAN 600mm WIDE. PROVIDE NOMINAL 300mm WIDE DOWN TURN ONLY. ALL OTHER LOCATIONS, EDGE THICKENING AS NOTED ON PLAN AND SECTIONS. DETAILS TYPICAL AT SLAB ON GROUND LOCATIONS.
6. TO MITIGATE CRACKING, THE CONTRACTOR SHALL CONTROL EVAPORATION AS REQUIRED AND ENSURE SAWN JOINTS ARE CUT ON THE SAME DAY AS THE POUR.
7. WHERE SAW CUT CANNOT BE CUT ON THE DAY OF THE POUR, THE CONTRACTOR SHALL ENSURE ONE OF THE FOLLOWING ALTERNATIVE CONTROL JOINT TYPES IS ADOPTED:
   a. SOFF CUT SAWN JOINTS OR TOOLED JOINT, WITH THE SAME DEPTH AS DETAILED SAWN JOINT.
   b. APPROVED PROPRIETARY CONTROL JOINT.

RAMMED EARTH

1. RAMMED EARTH WALLS AS SHOWN ARE TO BE DESIGNED, CERTIFIED AND CONSTRUCTED BY SPECIALIST CONTRACTOR TO SUIT GEOMETRY CONFIGURATION SHOWN.
2. THICKNESS SHOWN HAVE BEEN DETERMINED BASED ON SLENDERNESS LIMITS OUTLINED IN **HB195 - THE AUSTRALIAN EARTH BUILDING HANDBOOK (2002)**. THICKNESS TO BE VERIFIED DURING THE DETAILED DESIGN AND DOCUMENTATION PHASE.
3. SOILS, CLAYS AND CEMENT BINDERS USED TO BE SPECIFIED BY SPECIALIST CONTRACTORAND SUBMITTED FOR REVIEW TO SUIT ARCHITECTURAL INTENT. TESTING TO BE UNDERTAKEN ON ALL MATERIALS AS PER REQUIREMENTS OF HB195.
4. WATER USED FOR CONSTRUCTION OF RAMMED EARTH WALLS IS TO BE FREE OF ORGANIC MATTER AND TESTED FOR SUITABILITY WITH PROPOSED CEMENT BINDER.
5. DAMP-PROOF MEMBRANE AND FLASHINGS TO BE INSTALLED TO BASE OF ALL RAMMED EARHT WALLS BELOW GROUND LEVEL TO ARCHITECTS REQUIREMENTS.
6. FULL HEIGHT CONTROL/ARTICULATION JOINTS ARE TO BE INSTALLED TO RAMMED EARTH WALLS TO A MAXIMUM OF 4.5m SPACINGS.
7. ALL RAMMED EARTH WALL ARE TO BE SEALED SEALED WITH A SUITABLE ACYRLIC POLYMER SEALER.
8. RAMMED EARTH DESIGNER TO ALLOW FOR AND CONSIDER INCOMING STRUCTURAL STEEL ELEMENTS AS NOTED.

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title: GENERAL NOTES
SHEET 01

Discipline	Status
STRUCTURAL	HIGH LEVEL

Designed By	Checked By	Approved By
D.G	C.B	C.B

Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)

Drawing No. S01-101 Revision B

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

ADG STRUCTURAL SERVICES

PLOT DATE: 30/07/2026 9:23:09 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/V24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

KATTER KICH DISCOVERY CENTRE

36 MARSHALL STREET, HYDEN WA 6359

REINFORCEMENT

1. ALL WORKMANSHIP, MATERIALS SHALL BE IN ACCORDANCE WITH AS4671, AS3600 AND THE REINFORCED CONCRETE SPECIFICATION.
2. ALL MATERIAL SUPPLIERS TO HAVE A CURRENT AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEEL (ACRS) PRODUCER CERTIFICATE.
3. THE ENGINEER SHALL BE GIVEN A MINIMUM OF 48 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETING SHALL NOT COMMENCE UNTIL ALL CORRECTIONS AND OMISSIONS IDENTIFIED IN THE INSPECTION REPORTED HAVE BEEN COMPLETED.
4. SLAB REINFORCEMENT SHALL EXTEND 65mm ONTO MASONRY SUPPORT WALLS AND 50% OF BOTTOM REINFORCEMENT SHALL BE COGGED TO ACHIEVE ANCHORAGE AT SIMPLY SUPPORTED ENDS.
5. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND IS NOT NECESSARILY IN TRUE PROJECTION. SPLICES TO REINFORCEMENT SHALL BE MADE ONLY AT THE LOCATIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.
6. UNO AT PENETRATIONS DETAILED REINFORCEMENT SHALL NOT BE CUT BUT SHALL BE GATHERED EQUALLY TO EACH SIDE OF PENETRATION AND EXTRA REINFORCEMENT PROVIDED BETWEEN THE PENETRATIONS AS DIRECTED BY THE ENGINEER.
7. WHERE DISTRIBUTION BARS TO THE MAIN REINFORCEMENT ARE NOT SHOWN ON DRAWINGS, PROVIDE MINIMUM N12 AT 300 CENTRES FOR RC SLABS AND N12 AT 400 CENTRES FOR PT SLABS. DISTRIBUTION BARS WHETHER SHOWN ON PLAN OR NOT TO BE COGGED AT ELEMENT ENDS AND JOINTS AND LAPPED AS PER MAIN BARS (REFER TABLES THIS DRAWING).
8. THE FIGURE FOLLOWING THE MESH SYMBOL SL or RL IS THE REFERENCE NUMBER FOR MESH TO AS4671.
9. LAP MESH 2 TRANSVERSE BARS PLUS 50mm OR 250mm, WHICHEVER IS THE GREATER.
10. ALL PULL-OUT /STARTER BARS SHALL BE "TEMPCORE" GRADE 500 PLUS REINFORCEMENT OR QUENCHED AND TEMPERED PRODUCT. ALL BENDING AND REBENDING OF REINFORCEMENT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF AS3600.
11. UNO WHERE BARS ARE NOTED ON THE DRAWINGS TO BE POST-INSTALLED (E.G. "DRILL AND EPOXY SET") USE HILTI HIT RE 500 V4 INJECTION EPOXY MORTAR OR APPROVED EQUIVALENT, INSTALLED BY COMPETENT INSTALLER STRICTLY TO THE MANUFACTURER'S RECOMMENDATIONS.
    UNO ADOPT THE FOLLOWING REQUIREMENTS:
    a. MASONRY DRILL OR FULLY ROUGHENED COREHOLE ONLY.
    b. HOLES FULLY CLEAR OF DUST AND WATER
    c. PROOF TESTING AS PER POST FIXED ANCHORS NOTES
    d. HOLE DIAMETER, MINIMUM CONCRETE EDGE DISTANCE AND EMBEDMENT DEPTH FOR MAXIMUM TENSION CAPACITY.

POST INSTALLED REINF'T BAR EMBED SCHEDULE

BAR SIZE	N12	N16	N20	N24
MIN HOLE DIAMETER (mm)	16	20	25	35
MIN BAR EMBEDMENT DEPTH (mm)	350	480	625	840
MIN EDGE DISTANCE (mm)	55	60	75	80

THE ABOVE EMBEDMENT MAY NOT PROVIDE FULL SHEAR AND TENSILE STRENGTH AND INCREASING EMBEDMENT DEPTH BEYOND DEPTH SHOWN WILL NOT NECESSARILY INCREASE STRENGTH.

12. IF REINFORCEMENT AND POST TENSIONING RATES ARE NOTED IN THE DOCUMENTATION, THESE ARE AN ESTIMATE OF THE QUANTITIES REQUIRED FOR STRUCTURAL ELEMENTS IN THE FINAL CASE ONLY. THE CONTRACTOR SHALL MAKE APPROPRIATE ALLOWANCES FOR NON-STRUCTURAL ELEMENTS (E.G. TRIMMING OF SERVICES PENETRATIONS, KERBS, PLINTHS, SCREEDS ETC.), ROLLING MARGINS, WASTE AND ADDITIONAL QUANTITIES REQUIRED FOR CONSTRUCTION ACTIVITIES.
13. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON BAR CHAIRS OR SPACER BARS AT THE FOLLOWING MAXIMUM CENTRES UNO:
    a. SL72 OR LIGHTER FABRIC – 600 x 600 CRS
    b. SL82 OR HEAVIER FABRIC – 800 x 800 CRS
    c. N12, N16 BARS – 1000 MAX CRS
    d. N20 BARS – 1200 CRS
    e. N24 OR LARGER BARS – 1500 CRS
    f. BAR CHAIR TO BE PLACED ON PLATES ("TIN LIDS") AND SPACING HALVED WHEN REINFORCEMENT FIXED OVER VOID FORMER. REFER CONCRETE NOTES FOR BAR CHAIR REQUIREMENTS.
14. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER, FOLLOWING AFTER WRITTEN REQUEST.
    UNO WELDED SPLICES TO COMPLY WITH THE FOLLOWING REQUIREMENTS:
    a. STRICTLY TO AS/NZS1554.3, CATEGORY SP
    b. MAXIMUM 200°C INTERPASS TEMPERATURE.
    c. 3 BAR DIAMETERS CLEAR OF BENDS IN BARS AND ANY PART OF THE BAR THAT HAS BEEN BENT AND RESTRAIGHTENED
    d. MINIMUM 10 BAR DIAMETERS LONG FOR SINGLE LAP SPLICE (ONE SIDED WELD)
    e. MINIMUM 5 BAR DIAMETERS LONG FOR DOUBLE LAP SPLICE (WELDED EACH SIDE)
    f. THROAT THICKNESS FOR LAP SPLICE WELDS EQUAL TO VISIBLE WELD WIDTH OF 0.25 TIMES THE BAR DIAMETER
    g. BENDING OF WELDED BAR IS NOT PERMITTED.
15. WELDS THAT ARE NOT SHOWN ON THE DRAWINGS BUT ARE REQUIRED TO MAINTAIN REINFORCING STEEL IN THE CORRECT POSITION FOR LIFTING, TEMPORARY STABILITY AND TRANSPORTATION PURPOSES ONLY SHALL COMPLY WITH THE NON-LOAD BEARING WELDED JOINTS REQUIREMENTS OF AS1554.3.

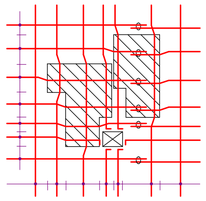
REINFORCEMENT

16. THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF PRE-ASSEMBLED REINFORCING CAGES. ALL WELDS FOR LIFTING AND TRANSPORT PURPOSES SHALL BE DESIGNED BY A SUITABLY QUALIFIED PERSON, STRICTLY IN ACCORDANCE WITH AS1554.3.
17. HEATING OF BARS IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER. WHERE WRITTEN APPROVAL IS PROVIDED BARS HEAT CRAYONS ARE TO BE USED TO LIMIT BAR TEMPERATURE TO 200°C MAXIMUM.
18. JOGGLES TO BARS SHALL BE 1x BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS UNO.
19. ALL BARS IN TRIMMER BAR GROUPS SHALL BE THE SAME LENGTH. SYMBOLOGY IS SHOWN ON PLAN. SPACE BARS AT APPROXIMATELY 100mm CENTRES.
20. DISTRIBUTION BARS AT 30 MAXIMUM SETDOWN TO BE FULLY LAPPED WITHOUT BENDING. DISTRIBUTION BARS AT SETDOWNS GREATER THAN 30mm AND AT STEPS AND FOLDS AS FOLLOWS:

    TOP BAR
    BOTTOM BAR

    LAP AND COG ALL DISTRIBUTION BARS AS REQUIRED TO SUIT TOP + SOFFIT STEPS IN SLAB PROFILE.

21. UNO ALL ADDITIONAL BARS LOCAL TO THE COLUMNS TO BE LOCATED ON CENTRELINE OF THE COLUMN IN BOTH DIRECTIONS OR MIDSPAN BETWEEN COLUMNS AS INDICATED. WHERE EXTRA BOTTOM BARS ARE SHOWN OVER THE COLUMNS, THEY SHALL BE LOCATED WITHIN THE REGION BOUNDED BY THE COLUMN BARS.
22. BENDING OF BARS ON SITE IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER. WHERE WRITTEN APPROVAL IS PROVIDED, BARS MUST BE BENT AROUND A PIN EQUAL TO 5 TIMES THE BAR DIAMETER FOR MAIN BARS AND PER TABLE THIS DRAWING FOR FITMENTS.
23. TYPICAL TOP REINFORCEMENT DRAPE / CRANK DETAILS AT WET AREA SET DOWNS FOR N12 BARS. DETAILS APPLICABLE AT MAXIMUM 30mm SET DOWNS GREATER THAN 30mm SET DOWNS PROVIDE CRANK IN OR LAP + COG BARS.



24. CRANKS WHERE SHOWN IN N12 BARS ABOVE ARE INDICATIVE ONLY. THESE BARS TO BE SCHEDULED AS STRAIGHT AND DRAPED ON SITE IN DIRECTIONS INDICATED ON THIS PLAN AT TIME OF PLACING BAR. THESE BARS WILL BE SHOWN STRAIGHT ON TOP REINFORCEMENT PLAN BARS. N16 DIAMETER AND ABOVE – PROVIDE WITH PRE-FORMED CRANKS AS INDICATED ON REINFORCEMENT PLANS.
25. ALL THREADED INSERTS FOR CONNECTING STEEL AND LIGHTWEIGHT ELEMENTS SHALL:
    a. BE FULLY COMPLIANT TO AS3600 & AS5216
    b. HAVE ULTIMATE CAPACITY OF THE INSERT AND CONCRETE ANCHORAGE GREATER THAN THE YIELD STRENGTH OF THE BOLT
    c. BE FULLY COMPLIANT TO AS3850.1 FOR LIFTING AND BRACING PURPOSES
    d. FOR PRODUCTS WITH A HOLE, THE INSERT SHALL BE SECURED IN PLACE WITH A CROSSBAR STRICTLY TO THE INSERT MANUFACTURER'S RECOMMENDATIONS
    e. BE CONNECTED WITH 4.6 GRADE BOLTS UNLESS THE CONNECTION DETAIL SPECIFICALLY NOTES OTHERWISE
    f. NOT BE LOADED UNTIL THE 28 DAY STRENGTH HAS BEEN ACHIEVED UNO
    THE USE OF BOLTS WITH STRENGTH GRADE HIGHER THAN SPECIFIED IS NOT PERMITTED.
26. WHERE THREADED INSERTS ARE SHOWN FOR CONNECTING INSITU CONCRETE WITH REINFORCING BARS, THE THREADED INSERTS SHALL:
    a. BE HEADED (WITH A "FOOT")
    b. BE FULLY COMPLIANT TO AS3600 & AS5216
    c. HAVE ULTIMATE CAPACITY OF THE INSERT AND CONCRETE ANCHORAGE GREATER THAN THE YIELD STRENGTH OF THE BAR
    d. NOT BE LOADED UNTIL THE 28 DAY STRENGTH HAS BEEN ACHIEVED UNLESS SPECIFICALLY NOTED OTHERWISE.
    ACCEPTABLE PRODUCTS INCLUDE ANCON KSN ANCHORS WITH BT THREADED STARTERS AND REIDBAR THREADED INSERTS WITH REIDBAR STARTERS.
    THE USE OF ROUND FERRULES AND ROUND INSERTS IS NOT PERMITTED.
    THE USE OF THREADED BARS NOT ENDORSED BY INSERT MANUFACTURER IS NOT PERMITTED.

REINFORCEMENT DEVELOPMENT LENGTHS

1. THE BELOW TABLE OF 90° COG AND 180° HOOK LENGTHS IN mm FOR REINFORCEMENT BARS IS TO BE USED WHERE DETAILS ARE NOT SHOWN ON DRAWINGS.

90° COG AND 180° HOOK LENGTHS FOR REINFORCEMENT BARS

DESCRIPTION	DIM	BAR SIZE / LENGTHS (mm)								DIAGRAM
		N10	N12	N16	N20	N24	N28	N32	N36	N40	
STANDARD COG O/A LENGTH	A	155	170	205	245	295	345	390	440	490	STANDARD COG: 5 BAR DIA PIN, A
STANDARD HOOK O/A WIDTH (MINIMUM U-BAR WIDTH SIMILAR)	B	70	85	115	140	170	200	225	255	280	STANDARD HOOK: 5 BAR DIA PIN, 4B, C
STANDARD HOOK LENGTH	C	105	115	130	150	180	210	240	270	300	
FULL DEVELOPMENT COG LENGTH	D	REFER "REINFORCEMENT DEVELOPMENT LENGTHS" NOTES.									FULL DEVELOPMENT COG: 10 BAR DIA PIN, D

a. UNO ROTATE BARS AS REQUIRED AT HOOKS, U-BARS AND COGS AS REQUIRED TO ENSURE COVER IN THIN ELEMENTS.
b. ALL HOOKS AND COGS TO ENCLOSE A TRANSVERSE BAR WITH A DIAMETER EQUAL OR LARGER THAN HOOKED/COGGED BAR WHETHER SHOWN ON DRAWINGS OR NOT. TRANSVERSE BARS TO BE DEVELOPED BEYOND END BENDS.

2. THE BELOW TABLE OF 90° COG AND 180° HOOK LENGTHS IN mm FOR FITMENTS IS TO BE USED WHERE DETAILS ARE NOT SHOWN ON DRAWINGS.

90° COG AND 135°, 180° HOOK LENGTHS FOR FITMENT BARS

DESCRIPTION	DIM	BAR SIZE / LENGTHS (mm)								DIAGRAM
		R6	R10	N10	N12	N16	N20	N24		
BEND MINIMUM PIN DIAMATER		18	30	40	48	64	80	96		FITMENT COG: MIN PIN DIA, X
STANDARD COG O/A LENGTH	X	105	130	140	154	184	220	265		FITMENT 135° HOOK: MIN PIN DIA, 4, X
STANDARD 135° HOOK LENGTH	Y	95	115	120	130	150	180	215		FITMENT 180° HOOK: MIN PIN DIA, 2
STANDARD 180° HOOK LENGTH	Z	85	95	100	110	120	140	170		

a. ALL FITMENT BENDS, HOOKS AND COGS TO BE ENCLOSED BY A REINFORCEMENT BAR WITH A DIAMETER EQUAL OR LARGER THAN FITMENT BARS WHETHER SHOWN ON THE DRAWINGS OR NOT.

3. THE BELOW TABLE OF COMPRESSION AND TENSION DEVELOPMENT LENGTHS FOR FULL DEVELOPMENT WITH STANDARD COGS WHERE LENGTHS ARE NOT SHOWN ON DRAWINGS

COMPRESSION & TENSION DEVELOPMENT LENGTHS FOR FULL DEVELOPMENT WITH STANDARD COGS

DESCRIPTION	DIM	BAR SIZE / LENGTHS (mm)								DIAGRAM
		N12	N16	N20	N24	N28	N32	N36	N40	
COGGED WALL & COLUMN STARTER BARS	P	265	355	450	520	620	705	795	880	P, LACER AS PER NOTE 6b, STANDARD COG

THE ABOVE DEVELOPMENT IS ADEQUATE FOR FULL TENSION AND COMPRESSION FOR THE FOLLOWING CASES
a. N12 TO N20 – 25MPa MIN, 20mm MIN COVER, 75 MIN SPACING
b. N24 TO N32 – 32MPa MIN, MIN COVER EQUAL TO BAR DIAMETER, 75 MIN SPACING
c. N36 TO N40 – 40MPa MIN, MIN COVER EQUAL TO BAR DIAMETER, 75 MIN SPACING

STRUCTURAL INSPECTIONS AND CERTIFICATION

1. THE FOLLOWING INSPECTIONS MUST BE COMPLETED BY ADG ENGINEERS TO ENABLE STRUCTURAL COMPLETION CERTIFICATION TO BE ISSUED. THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 48 HOURS NOTICE TO ADG FOR THE REQUIRED INSPECTIONS.
    a) PAD, STRIP AND RAFT FOUNDATIONS – EXCAVATED, REINFORCEMENT IN PLACE; NOTE THAT PROJECT GEOTECHNICAL ENGINEER IS TO VERIFY ALLOWABLE BEARING CAPACITY OF FOUNDING MATERIAL PRIOR TO INSTALLATION OF REINFORCEMENT.
    b) BORED PIERS (EXCLUDING DESIGN & CONSTRUCT BY SPECIALIST CONTRACTOR) – PIER EXCAVATED, FOUNDING MATERIAL SIGNED OFF BY PROJECT GEOTECHNICAL ENGINEER, REINFORCEMENT IN PLACE.
    c) SLAB ON GRADE – REINFORCEMENT AND JOINT COMPONENTS IN PLACE; NOTE THAT PROJECT GEOTECHNICAL ENGINEER IS TO VERIFY SUITABILITY OF GROUND PREPARATION AND FOUNDING MATERIAL PRIOR TO INSTALLATION OF VAPOUR PROOF MEMBRANE OR REINFORCEMENT.
    d) WALL – REINFORCEMENT COMPLETED PRIOR TO INSTALLATION OF SHUTTERS TO BOTH FACES.
    e) STAIRS – FORMWORK IN PLACE, REINFORCEMENT INSTALLED.
    f) STRUCTURAL STEELWORK – ALL ITEMS INSTALLED INCLUSIVE OF ALL BOLTS AND BRACING PRIOR TO INSTALLATION OF ANY CLADDING WHICH MAY LIMIT VISUAL OR PHYSICAL ACCESS TO STRUCTURAL MEMBERS OR CONNECTIONS.gh) MASONRY BLOCKWORK – CORES CLEANED, REINFORCEMENT IN PLACE WITH CLEAN OUT BLOCK OPEN.
2. INSPECTION BY ADG ENGINEERS DOES NOT LIMIT THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE WORKS IN ACCORDANCE WITH THE PROJECT DOCUMENTATION AS WELL AS RELEVANT AUSTRALIAN STANDARDS AND CODES OF PRACTICE.
3. THE CONTRACTOR IS TO UNDERTAKE THEIR OWN QUALITY INSPECTIONS AND PROVIDE DOCUMENTED REPORTS TO ADG ENGINEERS INDEPENDENT OF ADG ENGINEERS STRUCTURAL INSPECTION.
4. INSPECTION BY PHOTOGRAPHIC EVIDENCE OR OTHER DIGITAL MEANS SHALL ONLY BE UNDERTAKEN WITH THE SPECIFIC PRIOR APPROVAL BY ADG ENGINEERS.
5. ITEMS THAT HAVE NOT BEEN INSPECTED WILL BE SPECIFICALLY EXCLUDED FROM ADG ENGINEERS PROJECT STRUCTURAL CERTIFICATION.
6. ADG ENGINEERS IS NOT RESPONSIBLE FOR THE DESIGN AND CERTIFICATION OF NON-STRUCTURAL PARTS, COMPONENTS AND THEIR FASTENINGS INCLUDING BUT NOT LIMITED TO THE REQUIREMENTS SET OUT IN SECTION 8 OF AS1170.4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL NON-STRUCTURAL ELEMENTS HAVE THE APPROPRIATE CERTIFICATION FROM THE MANUFACTURER STATING THAT THEY HAVE BEEN DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION 8 OF AS1170.4.

TEMPORARY WORKS

1. THE CONTRACTOR SHALL ALLOW FOR IN THEIR PRICE ALL COSTS ASSOCIATED WITH THE DESIGN, SUPPLY, INSTALLATION AND REMOVAL OF ALL TEMPORARY BACK PROPPING, SAFETY SCREENS, SCAFFOLDING AND OTHER REQUIREMENTS OF THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL ENGAGE A SUITABLY QUALIFIED ENGINEER REFERRED TO AS "CONTRACTOR'S ENGINEER". TO DESIGN, INSPECT AND CERTIFY ALL TEMPORARY WORKS, AND DEMOLITION WORKS.
2. THE CONTRACTOR IS TO PROVIDE ALL TEMPORARY WORKS CONTRACTOR ENGINEERING DRAWINGS TO ADG ENGINEERS FOR INFORMATION.
3. WHERE THERE ARE ANY SAFETY ASPECTS TO THE TEMPORARY WORKS DESIGN THAT THE CONTRACTOR OR OTHER PARTIES WOULD NOT REASONABLY BE EXPECTED TO KNOW, THE CONTRACTOR'S ENGINEER SHALL PRODUCE A DESIGN SAFETY REPORT AND DISTRIBUTE TO THE CONTRACTOR AND ADG ENGINEERS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE OVERALL STABILITY OF THE STRUCTURE AND THAT NO PART IS OVERSTRESSED DUE TO CONSTRUCTION & INSTALLATION METHODOLOGIES AND/OR EQUIPMENT DURING CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN WRITTEN ADVICE FROM THE CONTRACTOR'S ENGINEER WHERE REQUIRED. ANY NON-STANDARD CONSTRUCTION SEQUENCING DOCUMENTATION SHALL BE SUBMITTED TO ADG ENGINEERS FOR REVIEW.
5. THE CONTRACTOR IS TO HAVE CONSTRUCTION METHODOLOGY STATEMENTS PREPARED AND SUBMITTED FOR GENERAL REVIEW TO ENSURE IT IS IN ACCORDANCE WITH THE DESIGN INTENT.
6. ALL VERTICAL DISPLACEMENTS AND MOVEMENTS ARE TO BE LIMITED TO ENSURE THE STRUCTURE IS NOT SUBJECTED TO LOADS OR MOVEMENTS CAUSING STRUCTURAL DISTRESS TO ANY ELEMENT WHILE THE STRUCTURE IS BEING TEMPORARILY SUPPORTED.
7. THE STRUCTURE IS TO BE ADEQUATELY BRACED TO PREVENT ANY HORIZONTAL MOVEMENT OR DEFLECTIONS.
8. WHERE COMPLEX STRUCTURES ARE PROGRESSIVELY CONSTRUCTED AND SUPPORTED TEMPORARILY IN LOCATIONS THAT DIFFER FROM THE PERMANENT LOAD PATHS, A STAGED ERECTION STRESS AND TEMPORARY STRESS AND STABILITY ANALYSIS MAY BE REQUIRED. IF REQUIRED, THE CONTRACTOR SHALL ENGAGE A COMPETENT ENGINEER EXPERIENCED IN STAGED STRESS ANALYSIS.

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

True North: N

Title: GENERAL NOTES
SHEET 02

Discipline: STRUCTURAL	Status: HIGH LEVEL
Designed By: D.G	Checked By: C.B / Approved By: C.B
Project No.: 29385.001	Drawn By: J.B / Scale: 1 : 100 (at A1)
Drawing No.: S01-102	Revision: B

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

ADG STRUCTURAL SERVICES

PLOT DATE: 30/07/2026 9:23:15 AM FILENAME: Autodesk Docs://29385 – WAVE ROCK DISCOVERY CENTRE/V24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

KATTER KICH DISCOVERY CENTRE

36 MARSHALL STREET, HYDEN WA 6359

STRUCTURAL STEELWORK

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE STRUCTURAL STEEL SPECIFICATION AND AS4100 FOR STEEL STRUCTURES AND AS/NZS4600 FOR COLD FORMED STEEL STRUCTURES. FABRICATION, ERECTION AND DOCUMENTATION TO BE SUPPLIED WITH MATERIALS AND COMPONENTS SHALL COMPLY WITH AS/NZS5131.
2. THE CONTRACTOR TO PROVIDE ALL TEMPORARY BRACING TO ENSURE THE BUILDING IS STABLE DURING ALL STAGES OF CONSTRUCTION.
3. THE FABRICATOR SHALL BE RESPONSIBLE FOR SHOP DRAWINGS WHICH SHALL COMPLY WITH THESE DRAWINGS. SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS BEFORE FABRICATION COMMENCES.
4. UNO MINIMUM CONNECTION DETAILS SHALL BE IN ACCORDANCE WITH THE FOLLOWING MINIMUM REQUIREMENTS:
   a. WELDS TO BE 6mm CONTINUOUS FILLETS
   b. ALL FILLET AND BUTT WELDS TO BE CATEGORY SP
   c. ALL PLATES TO BE 10mm THICK MIN
   d. ALL PURLIN CLEATS TO BE 8mm THICK MIN
   e. BOLTS TO BE M20 8.8/S IN 22mm DIAMETER HOLES; PROVIDE A MINIMUM OF TWO BOLTS PER CONNECTION
   f. HOLDING DOWN BOLTS TO BE GRADE 4.6/S
   g. FABRICATOR SHALL PROVIDE ALL FIXINGS FOR ARCHITECTURAL AND OTHER ELEMENTS ETC
   h. WELDING CONSUMABLES SHALL BE:

WELDING CONSUMABLES SCHEDULE

NOMINAL YIELD STRENGTH OF STEEL TO BE WELDED	NOMINAL TENSILE STRENGTH OF WELD METAL, Fuw
ALL GRADE ≤ 300 MPa	430 MPa
300 < GRADE ≤ 450 Mpa	490 MPa
QUENCH & TEMPERED STEEL TO GRADE 690 MPa	760 mpa

5. PROVIDE M12 SAG RODS AT 1/3 SPAN POINTS FOR ALL WINDOW HEADS.
6. THE STEELWORK COMPONENTS SHALL BE FABRICATED STRICTLY TO THE ENGINEER'S DOCUMENTATION AND CONTRACTOR SHALL RECEIVE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO SUBSTITUTING SECTIONS, OR ADDING SPLICES OR CUTOUTS NOT SHOWN ON THE DRAWINGS.
7. ALL STEELWORK BELOW GROUND SHALL BE ENCASED BY 75mm OF N32 MIN STRENGTH CONCRETE UNO.
8. ABOVE GROUND CONCRETE ENCASED STRUCTURAL STEEL TO BE WRAPPED WITH FGW41 PLACED 25mm CLEAR OF STEEL. PROVIDE THE FOLLOWING MINIMUM REQUIREMENTS UNO:
   a. INTERNAL A1/A2 EXPOSURE – N25 CONCRETE WITH 20mm COVER, MINIMUM 55mm ENCASEMENT THICKNESS.
   b. EXTERNAL B1 EXPOSURE – N40 CONCRETE WITH 30mm COVER, MINIMUM 65mm ENCASEMENT THICKNESS.
   c. EXTERNAL B2 EXPOSURE – N40 CONCRETE WITH 45mm COVER, MINIMUM 80mm ENCASEMENT THICKNESS.
9. THE BOLTING PROCEDURE IS DESIGNATED AS FOLLOWS:
   a. 4.6/S – REFERS TO COMMERCIAL BOLTS OF STRENGTH GRADE 4.6 TO AS/NZS 1111.1 TIGHTENED USING A STANDARD WRENCH TO A SNUG-TIGHT CONDITION.
   b. 8.8/S – REFERS TO HIGH STRENGTH BOLTS OF STRENGTH GRADE 8.8 TO AS/NZS 1252.1 TIGHTENED TO A SNUG-TIGHT CONDITION.
   c. 8.8/TF – REFERS TO HIGH STRENGTH BOLTS OF STRENGTH GRADE 8.8 TO AS/NZS 1252.1 FULLY TENSIONED TO AS/NZS 5131, DESIGNED AS A FRICTION TYPE JOINT.
   d. 8.8/TB – REFERS TO HIGH STRENGTH BOLTS OF STRENGTH GRADE 8.8 TO AS/NZS 1252.1 FULLY TENSIONED TO AS/NZS 5131, DESIGNED AS A BEARING TYPE JOINT.
   e. 10.9/TF – REFERS TO HIGH STRENGTH BOLTS OF STRENGTH GRADE 10.9 TO AS/NZS 1252.1 FULLY TENSIONED TO AS/NZS 5131, DESIGNED AS A FRICTION TYPE JOINT.
   f. 10.9/TB – REFERS TO HIGH STRENGTH BOLTS OF STRENGTH GRADE 10.9 TO AS/NZS 1252.1 FULLY TENSIONED TO AS/NZS 5131, DESIGNED AS A BEARING TYPE JOINT.
10. HIGH STRENGTH STRUCTURAL BOLTS SHALL BE VERIFIED TO AS/NZS1252.2. THE DOCUMENTATION REQUIRED BY THE STANDARD, INCLUDING THE 'SUPPLIER DECLARATION OF CONFORMITY' (SDOC) SHALL BE PROVIDED.
11. TB AND TF BOLT CATEGORIES SHALL BE INSTALLED USING EITHER THE PART TURN METHOD OR THE DIRECT TENSION INDICATOR METHOD TO AS/NZS5131.
12. FOR CONNECTIONS WHERE TF BOLTS ARE SPECIFIED, A FRICTION COEFFICIENT OF 0.35 HAS BEEN ASSUMED FOR THE DESIGN. THE CONTACT SURFACES SHALL BE PREPARED ACCORDING TO AS/NZS5131 AND BE FREE FROM PAINT, LACQUER OR OTHER APPLIED FINISHES.
13. ALL BOLTS SHALL BE OF SUCH LENGTH THAT AT LEAST ONE FULL THREAD IS EXPOSED BEYOND THE NUT AFTER THE NUT HAS BEEN TIGHTENED, INCLUDING FOR THE PRESENCE OF ANY WASHERS OR LOCKING DEVICES.
14. MINIMUM ONE WASHER SHALL BE USED UNDER THE NUT IN ALL SITUATIONS. IF TIGHTENING IS CARRIED OUT AT THE HEAD, AN ADDITIONAL WASHER SHALL BE USED UNDER THE HEAD. FOR SLOTTED HOLES, USE HARDENED WASHER UNDER THE NUT AND BOLT HEAD.

STRUCTURAL STEELWORK

15. WHERE THE BASE PLATE BOLT HOLES ARE MORE THAN 3mm LARGER THAN BOLT DIAMETER (TO A MAXIMUM 6 mm OVERSIZED) A GALVANIZED STRUCTURAL WASHER PLATE TO AS3678 SHALL BE INSTALLED AS FOLLOWS UNO:

STEELWORK WASHER PLATE SCHEDULE

BOLT DIAMETER	MIN SIZE (SQ OR DIA)	MIN THICKNESS	HOLE DIAMETER
M12	36	5	14
M16	44	5	18
M20	52	6	22
M24	60	8	26
M30	72	10	32
M36	84	10	38

16. UNO, ALL MATERIAL SUPPLIERS TO HAVE A CURRENT AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEEL (ACRS) PRODUCER CERTIFICATE AND TO BE:
   a. HOT ROLLED PLATES GRADE 250 TO AS/NZS3678.
   b. HOT ROLLED SECTIONS, GRADE 300 TO AS/NZS3679.1.
   c. WELDED I SECTIONS, GRADE 300 TO AS/NZS3679.2.
   d. SHS AND RHS GRADE 350 TO AS1163.
   e. CHS GRADE 250 TO AS/NZS1163.
   f. COLD FORMED LIGHT GAUGE SECTIONS GRADE 450 TO AS/NZS4600.
17. INSPECTION AND TEST PLANS (ITP) SHALL BE PREPARED AS FOLLOWS WITH ALL INSPECTION, TESTING AND CORRECTION CONFORMING TO AS/NZS5131:

INSPECTION, TESTING & CORRECTION SCHEDULE

ITEM	ITP
MATERIALS AND COMPONENTS	REQUIRED
PREPARATION AND ASSEMBLY	REQUIRED
WELDING	REQUIRED
MECHANICAL FASTENING	REQUIRED
SURFACE TREATMENT	REQUIRED
PAINT COATINGS	REQUIRED
GALVANIZED COATINGS	REQUIRED
ERECTION	REQUIRED

18. CONSTRUCTION CATEGORY, IN ACCORDANCE WITH THE REQUIREMENTS OF AS/NZS5131. THE CONSTRUCTION CATEGORIES FOR THIS PROJECT ARE DEFINED IN THE FOLLOWING TABLE UNO.

STEELWORK CONSTRUCTION CATEGORY SCHEDULE

ELEMENTS IN IMPORTANCE LEVEL 2 & 3 DEVELOPMENTS	SERVICE	FABRICATION	CONSTRUCTION
SHOP FABRICATED ELEMENTS IN CONCRETE BUILDINGS INCLUDING: a.HANDRAILS, BALUSTRADES, GATE FRAMES b.WALKWAYS LADDER, AND STAIRS c.INTERNAL FITOUT COMPONENTS d.PERGOLAS, LOUVRE SUPPORTS AND PLANT ENCLOSURES e.FAÇADE SUPPORTS f.NON-VIBRATING PLANT SUPPORTS g.BMU SUPPORT COMPONENTS	SC1	FC1	CC2
VIBRATING PLANT SUPPORTS	SC2	FC1	CC3
SITE WELDED COMPONENTS IN IL2 CONCRETE BUILDINGS	SC1	FC2	CC2

STRUCTURAL STEELWORK

19. UNO FABRICATION TOLERANCES SHALL BE CLASS 1 TO AS/NZS5131 AND ERECTION TOLERANCES SHALL CONFORM TO AS/NZS5131. ALL MEMBERS HAVING A NATURAL CAMBER WITHIN THE STRAIGHTNESS TOLERANCE SHALL BE ERECTED WITH THE NATURAL CAMBER UP.
20. MINIMUM SURFACE TREATMENT FOR STEELWORK TO BE PAINTED IN ACCORDANCE WITH AS/NZS5131 AS PER THE FOLLOWING TABLE UNO BY ADG ENGINEERS OR THE ARCHITECT:

STEELWORK SURFACE TREATMENT SCHEDULE

ELEMENT	TREATMENT GRADE	ACHITECTURALLY EXPOSED STEELWORK CATEGORY
INTERNAL HIDDEN	P1	-
INTERNAL EXPOSED	-	AESS 2
EXTERNAL HIDDEN/ENCASED	P2	-
EXTERNAL EXPOSED	-	AESS 2

21. COATING QUALITY LEVEL IN ACCORDANCE WITH AS/NZS5131 AS PER THE FOLLOWING TABLE UNO BY ADG ENGINEERS OR THE ARCHITECT:

STEELWORK COATING QUALITY SCHEDULE

ELEMENT	COATING QUALITY
INTERNAL C1 EXPOSURE	PC1
INTERNAL C2 EXPOSURE	PC2
EXTERNAL HIDDEN/ENCASED	PC2
EXTERNAL EXPOSED	PC2
EXISTING STEEL MODIFIED INSITU	PC1

22. UNO THE "YEARS TO FIRST MAINTENANCE" IS AS FOLLOWS:

STEELWORK DURABILITY SCHEDULE

LOCATION & PROTECTION	DURABILITY LIFE (YEARS TO FIRST MAINTENANCE)	YEARS UNTIL FIRST MAINTENANCE OF PAINT
INTERNAL C1/C2 PAINTED	-	25+
INTERNAL C1/C2 GALVANIZED ONLY	50+	-
EXTERNAL C2 GALVANIZED ONLY	50+	-

23. THE ABOVE SCHEDULE DOES NOT RELIEVE BUILDER OWNERS FROM THEIR OBLIGATION TO UNDERTAKE REGULAR VISUAL INSPECTION AND PERFORM ROUTINE SURFACE CLEANING AND MAINTENANCE DURING THIS TIME PERIOD.
24. QUALITY OF WELDS AND INSPECTION OF WELDS SHALL BE TO AS/NZS1554.1. QUALIFICATIONS OF WELD INSPECTORS AND WELD INSPECTION AND TEST PLANS SHALL BE TO AS/NZS5131. UNO THE EXTENT OF WELD NON-DESTRUCTIVE EXAMINATION (NDE) SHALL BE AS SCHEDULE BELOW AND AS FOLLOWS:
   a. GENERAL BUILDINGS INCLUDE MULTI-LEVEL BUILDINGS AND PORTAL FRAMES THAT PREDOMINATELY RESIST GRAVITY AND QUASI-STATIC WIND LOADS
   b. STRUCTURES WITH COMPLEX LOADING INCLUDES CRANES, BRIDGES, EDCIII LOAD RESISTING STRUCTURES, WIND SENSITIVE STRUCTURES, CYCLIC LOADING
   c. BEAMS FABRICATED FROM PLATE IN STRUCTURES WITH COMPLEX LOADING SHALL BE TESTED AS PER AS/NZS3679.2
   d. SUPPLEMENTARY ULTRASONIC TESTING TO AS2207 AND AS/NZS1554.1 IS REQUIRED FOR PLATE ≥40MM FOR AUSTRALIAN PRODUCT AND FOR PLATE ≥25mm FOR ALL IMPORTED PRODUCT
   e. PLATES IN JOINTS NOTED AS 'LT SUSCEPTIBLE' TO BE ULTRASONICALLY TESTED – SEE NOTE 32.

STEELWORK WELD NON-DESTRUCTIVE EXAMINATION (NDE) SCHEDULE

ITEM	SERVICE CATEGORY	WELD CATEGORY	VISUAL SCANNING	VISUAL EXAMINATION	MAGNETIC PRACTICE EXAMINATION OF FILLET WELDS	ULTRASONIC OR RADIOGRAPHIC EXAMINATION OF BUTT WELDS
GENERAL BUILDING STEELWORK	SC1	SP	100%	25% SHOP WELDS 50% FIELD FILLET WELDS (100% IF DEFECTS FOUND) 100% FIELD BUTT WELDS	10% SHOP WELDS 25% FIELD WELDS (100% IF DEFECTS FOUND)	10% SHOP WELDS 100% FIELD WELDS

STRUCTURAL STEELWORK

25. STRUCTURAL STEEL SHALL HAVE THE FOLLOWING MINIMUM SURFACE TREATMENTS UNO BY ADG ENGINEERS OR THE ARCHITECT:

STEELWORK MINIMUM SURFACE TREATMENT SCHEDULE

ITEM	CLEANING	PRIMER, GALV. OR OTHER	2nd COAT	FINAL COAT
INTERNAL HIDDEN	ABRASIVE BLAST TO AS1627.4 CLASS 2.5	75µm ZINC PHOSPHATE	-	-
INTERNAL EXPOSED C1/C2	ABRASIVE BLAST TO AS1627.4 CLASS 2.5	75µm ZINC PHOSPHATE	125µm HIGH BUILD EPOXY	40µm ACRYLIC LATEX OR 50µm 2-PACK ACRYLIC OR 50mm POLYURETHANE. REFER ARCH SPECIFICATION
EXTERNAL HIDDEN OR EXT/INT EXPOSED C2 AND GALV ONLY	ABRASIVE BLAST TO AS1627.4 CLASS 2	HDG600 (85µm)	-	-
EXTERNAL HIDDEN OR EXT/INT EXPOSED C3 AND GALV ONLY	ABRASIVE BLAST TO AS1627.4 CLASS 2	HDG900 (125µm)	-	-
EXTERNAL EXPOSED CORROSIVITY CATEGORY C2/C3	ABRASIVE BLAST TO AS1627.4 CLASS 2	HDG600 (85µm). SWEEP BLAST CLEAN AFTER GALV	250µm 2-PACK HIGH BUILD EPOXY	100µm POLYURETHANE OR ACRYLIC GLOSS (2-PACK) REFER ARCH SPECIFICATION

   a. REFER THE STEELWORK SPECIFICATION AND THE ARCHITECT'S DOCUMENTATION FOR ADDITIONAL REQUIREMENTS
   b. ALL STEELWORK TO BE CLEANED AND PICKLED AS REQUIRED TO AS1627.1 AND AS1627.5
   c. ALL PAINTING SHALL COMPLY WITH REQUIREMENTS AND RECOMMENDATION IN AS2312.1
   d. ALL PAINTING OVER GALVANIZED STEEL (DUPLEX) SHALL COMPLY WITH REQUIREMENTS AND RECOMMENDATION IN AS2312.1.
26. UNO ALL BOLTS, NUTS AND WASHERS, INCLUDING HOLD DOWN BOLTS, CAST-IN FERRULES AND MASONRY ANCHORS ARE TO BE HOT-DIP GALVANIZED. ALL GALVANIZED COMPONENTS TO BE CAST INTO CONCRETE SHALL BE PASSIVATED.
27. UNO FASTENERS AND BOLT ASSEMBLIES IN CORROSIVITY CATEGORY C4/C5/C5X SHALL BE STAINLESS STEEL GRADE 316 / 3161 WITH INSULATION WASHERS.
28. GALVANIZING SHALL BE IN ACCORDANCE WITH THE FOLLOWING UNO:

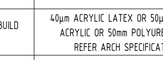
STEELWORK GALVANIZED SCHEDULE

STANDARD	COATING QUALITY
AS 4680	SINGLE PIECES OF STEEL OR FABRICATIONS WITH DIFFERENT TYPES OF STEEL PRODUCTS
AS 1214	FASTENERS
AS 4791	INLINE PROCESS ON OPEN SECTIONS, EG COLD FORMED LINTELS
AS 7492	PRE-GALVANIZED CHS, SHS AND RHS
AS 1397	SHEET & COIL, ROOF & WALL SHEET, PURLINS AND GIRTS, & WELDED TUBES

29. ALL FULLY SEALED HOLLOW SECTIONS TO BE VENTED WHEN THE MEMBER IS TO BE HOT DIP GALVANIZED.
30. FOOTING BOLTS, GROUTING UNDER BASE PLATES AND SHIMS AND PACKERS SHALL COMPLY WITH THE REQUIREMENTS OF AS/NZS5131. SHIMS AND PACKERS LEFT IN PLACE SHALL HAVE THE SAME PROTECTION AS THE STEELWORK AND SHALL HAVE MINIMUM 25mm GROUT COVER UNO.
31. UNO GROUT UNDER BASE PLATES AND STEELWORK BEARING AREAS SHALL BE A PROPRIETARY FLOWABLE NON-SHRINKAGE GROUT WITH MINIMUM 40MPa COMPRESSIVE CUBE STRENGTH AT LOADING, 30mm MINIMUM THICK AND INSTALLED STRICTLY TO THE MANUFACTURER'S RECOMMENDATIONS.
32. JOINT DETAILS WHICH ARE SUSCEPTIBLE TO LAMELLAR TEARING (LT) ARE INDICATED ON THE DRAWINGS AS 'LT SUSCEPTIBLE', WITH THE SPECIFIC PLATE WITH HIGH THROUGH-THICKNESS STRESS NOTED. THE SPECIFIC PLATE IN JOINTS THAT ARE INDICATED AS 'LT SUSCEPTIBLE' SHALL BE SUPPLIED ULTRASONICALLY TESTED TO AS1710 CLASS 1.
33. JOINTS THAT ARE DESIGNATED 'LT SUSCEPTIBLE' AND FURTHER REQUIRE PLATE TO A NOMINATED Z-VALUE ARE INDICATED ON THE PROJECT DRAWINGS WITH A DESIGNATED Z-VALUE. THE PLATE USED FOR THESE JOINTS SHALL BE ORDERED TO THE DESIGNATED Z-VALUE.
34. CONTRACTOR TO ENSURE THE STEELWORK FIRE RATING REQUIREMENTS ARE TO MEET THOSE SPECIFIED BY THE BUILDING CERTIFIER.

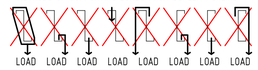
STRUCTURAL STEELWORK

35. THE STRUCTURE HAS BEEN DESIGNED FOR THE FINAL CONDITION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT DURING CONSTRUCTION THE STRUCTURE IS MAINTAINED IN A STABLE CONDITION AND NO PART OF THE STRUCTURE IS OVERSTRESSED. ERECTION SHALL COMPLY STRICTLY TO AS/NZS5131 REQUIREMENTS.
36. UNLESS RISK ASSESSMENT UNDERTAKEN BY THE CONTRACTOR INDICATES THE ERECTION IS SIMPLE AND LOW RISK, THE CONTRACTOR SHALL ARRANGE FOR ERECTION SEQUENCE METHODOLOGY (ESM) AS PER AS/NZS131. THE ESM SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PURPOSES ONLY (ERECTION REMAINS THE CONTRACTORS RESPONSIBILITY).
37. THE CONTRACTOR SHALL ENSURE ALL SECONDARY STEELWORK NOT DETAILED ON THE ADG DRAWINGS IS ALLOWED FOR. UNO SECONDARY STEELWORK EXCLUDED FROM ADG SCOPE INCLUDES THE FOLLOWING:
   a. CEILING AND LIGHTWEIGHT PARTITION FRAMING
   b. FACADE FRAMING
   c. DOOR AND WINDOW FRAMING
   d. SIGNAGE SUPPORT
   e. LIGHTING SYSTEMS
   f. FALL ARRESTOR SYSTEMS
   g. PLANT AND EQUIPMENT SUPPORTS
   h. ACCESS WALKWAYS
   i. HANDRAILS AND BARRIERS
   j. INTERNAL FITOUT
   k. PROPRIETARY PRODUCTS.
38. ALL PURLINS, GIRTS AND BRIDGING SHALL BE PROVIDED BY THE NOMINATED SUPPLIER INCLUDING ALL ACCESSORIES AND COMPONENTS. WHERE ALTERNATE SUPPLIER OR DETAILS ARE PROPOSED, THE DESIGN OF THE ALTERNATIVE IS TO BE SUBMITTED INCLUDING INDEPENDENT CERTIFICATION OF THE DESIGN, PRIOR TO PROCEEDING.
39. THE CONTRACTOR IS TO PROVIDE TRIMMER PURLINS AND GIRTS AS REQUIRED TO SUPPORT TRIMMED EDGES OF ROOF SHEETING THAT ARE REQUIRED TO BE CUT TO SUIT CHANGES IN DIRECTION OF THE ROOF, UNSUPPORTED PENETRATIONS, CAPPING, FLASHING AND OTHER LOCATIONS AS REQUIRED BY ARCHITECTURAL DETAILING. TRIMMER PURLINS SHALL BE OF SAME TYPE AND SIZE AS THE ADJACENT ROOF PURLINS AND FIXED WITH 6 PLATE OR PROPRIETARY BRACKETS WITH 2.M12 4.6/S EACH LEG TYPICAL.
40. CEILING, SERVICES, ETC WHICH ARE SUSPENDED FROM SHALL BE FIXED TO THE PURLIN WEBS ONLY. NO LOADS SHALL BE SUSPENDED FROM, OR HOLES DRILLED THROUGH, PURLIN FLANGES.



APPROVED METHODS OF SUSPENDING FROM PURLINS

WHERE NECESSARY TO HANG CEILING, SERVICES PIPES, DUCTWORK, etc FROM STANDARD PURLINS, THE BUILDER SHALL ONLY USE THE ABOVE APPROVED METHODS. REFER TO MANUFACTURER FOR APPROVED METHODS OF SUPPORTING LOADS FROM DUPLEX PURLINS



NON-APPROVED METHODS OF SUSPENDING FROM PURLINS

THE BUILDER SHALL NOT USE ANY OF THE ABOVE METHODS OF SUSPENSION.

IF IN DOUBT OBTAIN APPROVAL FROM PROJECT ENGINEER FOR PROPOSED FIXING METHOD PRIOR TO COMMENCING ANY INSTALLATION. NOTE PARTICULARLY: LOAD SUSPENSION FROM PURLIN BRIDGING IS NOT PERMITTED. PURLINS ARE NOT TO BE USED TO PROVIDE LATERAL RESTRAINT TO CEILINGS OR SERVICES.

MATERIALS COMPLIANCE AND IMPORTED STEEL

1. THE DESIGN IS BASED ON STEEL MATERIALS COMPLYING FULLY WITH THE FOLLOWING PRODUCT STANDARDS WHERE THOSE PRODUCTS ARE DETAILED ON ADG ENGINEERS DRAWINGS:
   a. AS/NZS1163 – COLD FORMED HOLLOW SECTIONS
   b. AS/NZS1594 – ROLLED STEEL FLAT PRODUCTS
   c. AS/NZS3678 – HOT ROLLED PLATES, FLOORPLATE & SLABS
   d. AS/NZS3679.1 – HOT ROLLED BARS AND SECTIONS
   e. AS/NZS3679.2 – WELDED I SECTIONS
   f. AS3597 – QUENCHED AND TEMPERED PLATE.
2. FOR IMPORTED MATERIALS, OR WHERE THE MATERIALS HAVE NOT BEEN VERIFIED TO FULLY COMPLY WITH THESE STANDARDS, A PERFORMANCE BASED SOLUTION TO THE NCC IS REQUIRED.
3. UNO PERFORMANCE SOLUTIONS, INCLUDING DEVELOPING A COMPLIANCE MANAGEMENT PLAN, REVIEWING TEST AND INSPECTION CERTIFICATES AND ANY REDESIGN REQUIRED FOR UNIDENTIFIED OR ALTERNATIVE MATERIALS IS BEYOND ADG'S SCOPE AND THE CONTRACTOR SHALL NOTE THERE IS ADDITIONAL TIME AND COSTS ASSOCIATED WITH CERTIFICATION WHERE VERIFICATION OF STEEL PRODUCT AND FABRICATED STEELWORK IS REQUIRED.
4. UNO THE CONTRACTOR SHALL ENGAGE AN ILAC/ILAC(MRA) ACCREDITED BODY TO UNDERTAKE THE FOLLOWING:
   a. STEEL MANUFACTURER VERIFICATION (REQUIRED)
   b. SUPPLY CHAIN VERIFICATION (OPTIONAL/RECOMMENDED)
   c. TRACEABILITY VERIFICATION (REQUIRED)
   d. PRODUCT PERFORMANCE VERIFICATION (REQUIRED)

FABRICATION COMPLIANCE AND IMPORTED FABRICATED STEELWORK

1. THE DESIGN IS BASED ON THE FABRICATION REQUIREMENTS OF AS4100 WHICH REQUIRES COMPLIANCE WITH THE FOLLOWING STANDARDS:
   a. AUSTRALIAN STEEL PRODUCT STANDARDS LISTED IN AS4100 (SEE NOTE 1 IN MATERIALS COMPLIANCE AND IMPORTED STEEL).
   b. AS/NZS 5153 – FABRICATION AND ERECTION
   c. AS1554 SERIES – STRUCTURAL STEEL WELDING
2. FOR IMPORTED FABRICATION THAT DO NOT COMPLY WITH ALL THE ABOVE, OR ANY STEEL HAS ≥0.0008% BORON CONTENT, A PERFORMANCE BASED SOLUTION TO NCC IS REQUIRED.
3. UNO WHERE A PERFORMANCE BASED SOLUTION IS REQUIRED, THE CONTRACTOR SHALL ENSURE THE FOLLOWING AND PROVIDE DOCUMENTATION TO ADG ENGINEERS:
   a. VERIFICATION OF PREHEAT REQUIREMENTS
   b. BRITTLE FRACTURE AND CHARPY IMPACT PROPERTIES OF THE STEEL ARE COMPLIANT WITH APPENDIX B OF AS/NZS1554.1
   c. THE STEELS ARE MATCHED WITH THE APPROPRIATE WELDING CONSUMABLES (CLAUSE 4.6 OF AS/NZS1554.1)
   d. THE STEEL IS ASSESSED TO CONFIRM THE PERFORMANCE WITH AS/NZS1554.1 PREQUALIFIED WELD PROCEDURES, WHERE PREQUALIFIED WELD PROCEDURES ARE TO BE ADOPTED BY THE FABRICATOR
   e. TEST CERTIFICTES ARE TO BE PROVIDED FOR ALL STEEL MATERIALS; LOT TRACEABILTY IS REQUIRED AS FOLLOWS:
      a. FOR CC2 LOT TRACEABILITY FOR THE MAIN STRUCTURAL MEMBERS AND THEIR CONNECTION COMPONENTS
      b. FOR CC3 AND CC4 LOT TRACEABILITY FOR ALL ITEMS.
4. REDESIGN WILL BE REQUIRED AT THE CONTRACTOR'S COST FOR FABRICATION CORRECTIONS, ALTERNATIVE MATERIALS OR FOR UNTRACEABLE STEEL THAT IS REQUIRED TO BE LIMITED TO 170 MPa YIELD STRENGTH FOR UNIDENTIFIED STEEL TO AS4100.
5. ALL BOLTS OF IMPORTED FABRICATIONS ARE TO COMPLY WITH AUSTRALIAN STANDARDS AS1111.1 AND AS1252.1.
6. ALL PURLINS AND GIRTS ATTACHED TO IMPORTED FABRICATED STEELWORK SHALL COMPLY WITH AS4600.

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title: GENERAL NOTES
SHEET 03

Discipline	Status
STRUCTURAL	HIGH LEVEL

Designed By	Checked By	Approved By
D.G	C.B	C.B

Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)

Drawing No.: S01-103 Revision: B

ADG STRUCTURAL SERVICES

PLOT DATE: 30/07/2026 9:23:22 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/v24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

KATTER KICH DISCOVERY CENTRE

36 MARSHALL STREET, HYDEN WA 6359

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

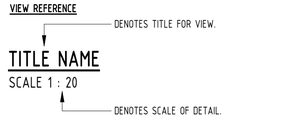
GENERAL

1. **ABBREVIATIONS**

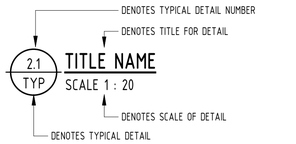
NTS	- NOT TO SCALE
TBC	- TO BE CONFIRMED
SIM	- SIMILAR
TYP	- TYPICAL
REQ'D	- REQUIRED
UNO	- UNLESS NOTED OTHERWISE
GA	- GENERAL ARRANGEMENT
NSOP	- NOT SHOWN ON PLAN
NSOE	- NOT SHOWN ON ELEVATION
DWG	- DRAWING
MIN	- MINIMUM
MAX	- MAXIMUM
EQ	- EQUAL
VRS	- VARIES
ALT	- ALTERNATE
PL	- PLATE
OPP	- OPPOSITE
HORIZ.	- HORIZONTAL
VERT.	- VERTICAL
CRS	- CENTRES
CL	- CENTRELINE
NOM	- NOMINAL
O/A	- OVERALL
EW	- EACH WAY
EF	- EACH FACE
NF	- NEAR FACE
FF	- FAR FACE
SF	- SIDE FACE
T	- TOP
B / BTM	- BOTTOM/BEHIND
T&B	- TOP AND BOTTOM
L	- LONG / LENGTH
W	- WIDE / WIDTH
H	- HIGH / HEIGHT
D	- DEEP / DEPTH
LV	- LENGTH VARIES
REQ	- REINFORCEMENT
REINF.	- REINFORCEMENT
GALV	- GALVANISED
S/S	- STAINLESS STEEL
TOS	- TOP OF STEEL
U/S	- UNDERSIDE

VIEW/ DETAIL/ SECTION REFERENCING

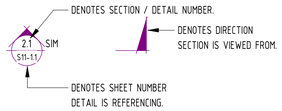
VIEW REFERENCE



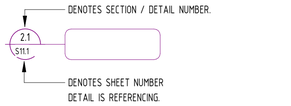
TYPICAL DETAIL REFERENCE



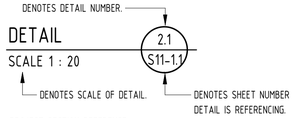
PROJECT SECTION REFERENCE



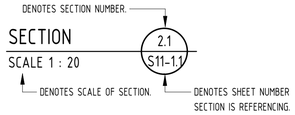
PROJECT SECTION REFERENCE



PROJECT DETAIL REFERENCE



PROJECT SECTION REFERENCE

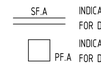


FOUNDATIONS

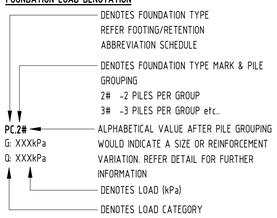
1. **FOOTING/RETENTION ABBREVIATIONS**

PF	- PAD FOOTING
SF	- STRIP FOOTING

2. **LEGEND**



3. **FOUNDATION LOAD DENOTATION**



SLABS

1. **SLABS/BEAMS ABBREVIATIONS**

SOG	- SLAB ON GROUND
ET	- EDGE THICKENING
ST	- SLAB THICKENING

2. **LEGEND**



3. **SLAB STEP DENOTATION**



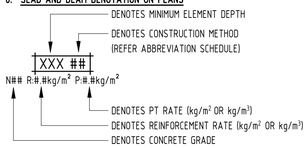
4. **PENETRATION DETAILS**

5. **JOINT DENOTATION**

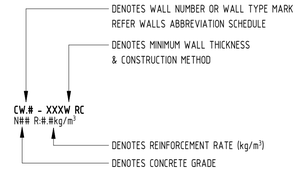
BJ.	DENOTES BUTT JOINT
CJ.	DENOTES CONSTRUCTION JOINT
DJ.	DENOTES DOWELLED CONSTRUCTION JOINT
DMJ.	DENOTES DOWELLED MOVEMENT JOINT
KJ.	DENOTES KEY JOINT
MJ.	DENOTES MOVEMENT JOINT
SJ.	DENOTES SAW CUT JOINT
TMJ.	DENOTES TEMPORARY MOVEMENT JOINT

PROVIDE NOMINAL 10mm WIDE FLEXIBLE ISOLATION JOINT TYPICAL, LOCAL TO ALL SLAB ABUTMENTS WITH CONCRETE COLUMNS, CAVITY AND BLOCK WALLS. JOINT TO BE FULL DEPTH FILLED WITH APPROVED COMPRESSIBLE FILLER ALL SEALED TO ARCHITECT'S SPECIFICATION. U.N.O.

6. **SLAB AND BEAM DENOTATION ON PLANS**



8. **WALL DENOTATION ON PLANS**



REINFORCEMENT

1. **LEGEND**



SIDE FACE REINFORCEMENT IS LAID PERPENDICULAR TO MAIN BAR AT COG/VERTICAL STEP. NOT SHOWN ON PLAN



DENOTES LOCATION OF CHANGE IN SHAPE OR LENGTH OF BARS WITHIN BAR GROUP.

DENOTES LOCATIONS OF LAPS IN TOP AND BOTTOM BARS IN BEAMS OR SLAB.



DENOTES TYPICAL LENGTH OF SINGLE BAR

DENOTES L BAR

DENOTES CRANKED BAR

DENOTES STRAIGHT BAR

DENOTES STEP BAR

DENOTES U BAR


DENOTES REINFORCEMENT LINK

DENOTES REINFORCEMENT COUPLER

DENOTES INTEGRITY REINFORCEMENT SHOWN BLUE

DENOTES MESH/ FABRIC REINFORCEMENT

2. **REINFORCEMENT NOTATION**

7.N12.400.2*

7	- NUMBER OF BARS IN GROUP
N12	- BAR GRADE/TYPE AND DIAMETER
400	- BAR SPACING IN mm
2	- BAR LAYING SEQUENCE. (REFER BELOW) ABBREVIATIONS
ABP	- DENOTES ALTERNATE BAR PLACED.
ABS	- DENOTES ALTERNATE BAR STAGGERED.
ABR	- DENOTES ALTERNATE BAR REVERSED.
LV	- DENOTES LENGTH VARIES.
E	- DENOTES EXTRA BAR PLACED.
*	- DENOTES INTEGRITY REINFORCEMENT.
SFR	- DENOTES SIDE FACE REINFORCEMENT.
EF	- DENOTES EACH FACE.
(#L)	- DENOTES REINFORCEMENT TO BE PROVIDED IN LAYERS

3. **REINFORCEMENT LAYING SEQUENCE NOTATION**

IN SLABS

4	- TOP BARS LAID 4th
3	- TOP BARS LAID 3rd
2	- BOTTOM BARS LAID 2nd
1	- BOTTOM BARS LAID 1st

IN BEAMS OR SLAB BANDS

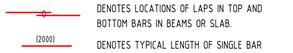
T	- BARS LAID TOP WITHIN LIGATURE
M	- BARS LAID MID-HEIGHT WITHIN LIGATURE
B	- BARS LAID BOTTOM WITHIN LIGATURE

4. **LIGATURE NOTATION**

5.L2.N12.300

5	- NUMBER OF LIGATURE SETS IN GROUP
L2	- LIGATURE SET TYPE. (REFER TYPICAL DETAILS BELOW)
N12	- LIGATURE GRADE/TYPE AND DIAMETER
300	- LIGATURE SET SPACING IN mm

FOR TYPICAL BEAM LIGATURES NOT SHOWN ON PLAN, REFER TO RELEVANT SECTIONS.



L2 DENOTES 2 OPEN LIGS

L2a DENOTES 2 OPEN LIGS + SINGLE TIE etc...



CL2 DENOTES 2 CLOSED LIGS

CL2a DENOTES 2 CLOSED LIGS + SINGLE TIE etc...

ADDITIONAL NOTATION

1. **COMMUNICATION**



AREAS CLOUDED GREEN OR GREEN TEXT ACTS AS A PROMPT OR INDICATOR FOR AN ITEM TO BE ACTIONED. THIS COULD BE INTERNAL OR EXTERNAL COMMUNICATION. A DESCRIPTIVE COMMENT WILL BE PROVIDED ON THE DRAWING.



AREAS CLOUDED RED OR RED TEXT INDICATES ITEMS IS TO BE CONFIRMED (TBC) OR ON HOLD UNTIL FURTHER ADVICE IS RECEIVED.


AREAS CLOUDED MAGENTA INDICATES A REVISION CLOUD. COMPLEMENTED WITH REVISION NUMBER AND DESCRIPTION.

TIMBER FRAMING

1. **ABBREVIATIONS**

GLC	- HYNE LAMINATED BEAM (CAMBERED)
GLS	- HYNE LAMINATED BEAM (STRAIGHT)
HWD	- UNSEASONED HARDWOOD
KDH	- KILN DRIED HARDWOOD
LGL	- HYNE EDGE LAMINATED BEAM
LVL	- LAMINATED VENEER LUMBER
MGP	- MACHINE GRADE PINE
RGL	- HYNE REINFORCED LAMINATED BEAM
SJ	- SMARTJOIST I-BEAM

2. **MEMBER SIZE**

REFER SCHEDULES ON FRAMING PLANS

STEEL FRAMING

1. **FRAMING NOTATION**

B.R75b(U)

B.	- FRAMING USAGE (BEAM, STRUT, COLUMN etc.)
R	- MEMBER PROFILE
75	- PRIMARY MEMBER SIZE
b	- SECONDARY MEMBER SIZE
(U)	- MEMBER LOCATION

2. **PURLIN/GIRT NOTATION**

P.EZ20e.1500(U)

(2B)

P.	- FRAMING USAGE (PURLIN, GIRT)
EZ	- MEMBER PROFILE
20	- PRIMARY MEMBER SIZE
e	- SECONDARY MEMBER SIZE
(U)	- MEMBER LOCATION
1500	- NOMINATED MAX SPACINGS
(2B)	- NUMBER OF ROWS OF BRIDGING

3. **STEEL FRAMING USAGE**

B.	- DENOTES BEAM
FB.	- DENOTES FASCIA BEAM
FBr.	- DENOTES FLY BRACING
H.	- DENOTES HEADER
HB.	- DENOTES HORIZONTAL BRACING
L.	- DENOTES LINTEL
M.	- DENOTES MULLION
OR.	- DENOTES OUTRIGGER
PP.	- DENOTES POLE PLATE
R.	- DENOTES RAFTER
RA.	- DENOTES RAKING ANGLE
RC.	- DENOTES RAKING CHANNEL
S.	- DENOTES STRUT
SA.	- DENOTES SHELF ANGLE
SC.	- DENOTES STEEL COLUMN
SdC.	- DENOTES DROPPER COLUMN
StC.	- DENOTES STUB COLUMN
SW.	- DENOTES SHORING WALER
TO.	- DENOTES TOP PLATE
TR.	- DENOTES TRUSS
VB.	- DENOTES VERTICAL BRACING
WB.	- DENOTES WIND BEAM
WF.	- DENOTES WELDED FRAME
WH.	- DENOTES WINDOW HEAD

4. **COLD FORMED FRAMING USAGE**

FP.	- DENOTES FASCIA PURLIN
G.	- DENOTES GIRT
J.	- DENOTES JOIST
P.	- DENOTES PURLIN
TP.	- DENOTES TRIMMER PURLIN

5. **STEEL MEMBER PROFILE NOTATION**

BT	- DENOTES UNIVERSAL BEAM TEE
C	- DENOTES CIRCULAR HOLLOW SECTION
CL	- DENOTES CIRCULAR HOLLOW SECTION (GRADE L0)
CT	- DENOTES UNIVERSAL COLUMN TEE
EA	- DENOTES EQUAL ANGLE
F	- DENOTES FLAT BAR
PF	- DENOTES PARALLEL FLANGE CHANNEL
R	- DENOTES RECTANGULAR HOLLOW SECTION
RL	- DENOTES RECTANGULAR HOLLOW SECTION (GRADE L0)
RD	- DENOTES ROUND BAR
S	- DENOTES SQUARE HOLLOW SECTION
SL	- DENOTES SQUARE HOLLOW SECTION (GRADE L0)
SB	- DENOTES SQUARE BAR
TF	- DENOTES TAPERED FLANGE BEAM
UA	- DENOTES UNEQUAL ANGLE
UB	- DENOTES UNIVERSAL BEAM
UC	- DENOTES UNIVERSAL COLUMN
WB	- DENOTES WELDED BEAM
WC	- DENOTES WELDED COLUMN

6. **COLD FORMED MEMBER PROFILE NOTATION**

PC	- DENOTES C SECTION
PZ	- DENOTES Z SECTION
EC	- DENOTES STRAMIT EXACTA C SECTION
EZ	- DENOTES STRAMIT EXACTA Z SECTION

7. **MEMBER SIZE**

REFER SCHEDULES ON FRAMING PLANS

8. **STEEL MEMBER LOCATION**

(O)	- DENOTES OVER
(U)	- DENOTES UNDER
(B)	- DENOTES BEHIND
(NF)	- DENOTES NEAR FACE
(FF)	- DENOTES FAR FACE
(EF)	- DENOTES EACH FACE

9. **WELD ABBREVIATIONS**

CFW	- CONTINUOUS FILLET WELD
FPBW	- FULL PENETRATION BUTT WELD
FSBW	- FULL STRENGTH BUTT WELD
PPBW	- PARTIAL PENETRATION BUTT WELD

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title: DENOTATION
SHEET 01

Discipline: STRUCTURAL		Status: HIGH LEVEL
Designed By: D.G	Checked By: C.B	Approved By: C.B
Project No.: 29385.001	Drawn By: J.B	Scale: 1 : 100 (at A1)
Drawing No.: S01-111		Revision: B

SAFETY IN DESIGN REGISTER

ITEM	HAZARD IDENTIFICATION (POTENTIAL HAZARD OR HAZARDOUS EVENT)	PRE-DESIGN RISK RATING			RISK MITIGATION ACTION PLAN	RESIDUAL RISK RATING			COMMENTS	RESPONSIBILITY / HAZARD TRANSFER DESTINATION
		LIKELIHOOD	CONSEQUENCE	RISK RATING		LIKELIHOOD	CONSEQUENCE	RISK RATING		
1.0 PRE CONSTRUCTION										
1.1	SITE ACCESS, SAFE ACCESS TO SITE TO BE MANAGED. INCLUDES CLEARANCE, EXISTING SERVICES INCLUDING UNDERGROUND SERVICES, POWER LINES ABOVE GROUND, PEDESTRIAN AND STAFF MOVEMENT, TOPOGRAPHICAL FEATURES.	C	4	HIGH	ENSURE EXCLUSION ZONES ARE APPROPRIATELY ESTABLISHED AND MAINTAINED. IDENTIFY ALL SERVICES.	D	2	LOW		CONTRACTOR/ BUILDER
1.2	ACCESS / OPERATIONAL TRAFFIC TO THE STRUCTURE IMPACTS ON EXISTING CONDITIONS AND NEIGHBOURS.	C	3	HIGH	ALL WORK TO BE CONDUCTED WITHIN REQUIRED NOISE, DUST AND VIBRATION RECOMMENDATIONS OF THE LOCAL AUTHORITY AND THE APPROVED MANAGEMENT PLAN.	D	2	LOW		CONTRACTOR/ BUILDER
1.3	MAINTENANCE OF PROPERTY ACCESS.	C	3	HIGH	ENSURE ACCESS IS MAINTAINED AT ALL TIMES FOR ADJACENT PROPERTIES DURING CONSTRUCTION AND POST CONSTRUCTION. INCORPORATE SAFE APPROPRIATE PROPERTY ACCESS IN DESIGN.	D	2	LOW		CONTRACTOR/ BUILDER
1.4	EXISTING BUILDING OR INFRASTRUCTURE DEMOLITION, REMOVAL OR RELOCATION. INCLUDE BUILDING DEMOLITION, SERVICES REMOVAL OR RELOCATION, EXISTING SERVICES LOCATION.	C	4	HIGH	ENSURE EXCLUSION ZONES ARE APPROPRIATELY ESTABLISHED AND MAINTAINED. IDENTIFY ALL SERVICES.	D	2	LOW		CONTRACTOR/ BUILDER
1.5	PREMATURE COLLAPSE OF THE STRUCTURE DURING DEMOLITION.	C	4	HIGH	PROVIDE APPROPRIATE DEMOLITION SEQUENCE.	D	3	MODERATE	ENSURE DEMOLITION SEQUENCE IS ADHERED TO.	CONTRACTOR/ BUILDER
1.6	DEMOLISH SECTION OF STRUCTURE TO BE RETAINED.	D	4	MODERATE	IDENTIFY CRITICAL ELEMENTS PRIOR TO DEMOLITION.	D	2	LOW	DEMOLISH IN ACCORDANCE WITH CONTRACT DOCUMENTS.	CONTRACTOR/ BUILDER
1.7	SITE CONTAMINANTS OR HAZARDS IDENTIFICATION.	C	3	HIGH	ENSURE SITE CONTAIMINANTS OR HAZARDS ARE IDENTIFIED AND MANAGED AS PER STANDARDS.	C	1	LOW		CONTRACTOR/ BUILDER
1.8	ASBESTOS IDENTIFICATION - MANDATORY TO LEAVE THIS ITEM IN THE REGISTER - STATE IF PRESENT ON SITE, IF ITS CHECKED, REPORT PROVIDED, IF PRE 2000, 'POSSIBILITY OF HAZARDOUS SUBSTANCES ON SITE'.	C	3	HIGH	ENSURE SITE CONTAIMINANTS OR HAZARDS ARE IDENTIFIED AND MANAGED AS PER STANDARDS.	C	1	LOW		CONTRACTOR/ BUILDER
1.9	UNAUTHORISED ENTRY.	C	3	HIGH	PROVIDING FENCING AND CO ORDINATION WITH LOCAL COUNCIL AND HEAD CONTRACTOR REQUIREMENTS.	C	1	LOW		CONTRACTOR/ BUILDER
2.0 SITE LAYOUT										
2.1	OVERHEAD OR UNDERGROUND SERVICES IMPACT ON STRUCTURE.	C	3	HIGH	SURVEY OF EXISITING SERVICES, DESIGN AROUND THEM TO AVOID CLASHES.	C	1	LOW		CONTRACTOR / ADG
2.2	ARE THERE NEIGHBOURING CONDITIONS AFFECTING THE SITE, EG STOCKPILES, SUBSTATIONS?	C	3	HIGH	COORDINATE WITH LOCAL COUNCIL AND HEAD CONTRACTOR REQUIREMENTS.	C	1	LOW		CONTRACTOR / ADG
2.3	DOES THE PROPOSED STRUCTURE IMPACT ON ADJACENT NEIGHBOURS, EG EXCAVATION DEPTHS NEAR BOUNDARIES.	C	3	HIGH	APPROPRIATE DESIGN SOLUTIONS TO ADJACENT STRUCTURES OR PROPERTIES.	C	1	LOW		ADG
2.4	DOES ACCESS / OPERATIONAL TRAFFIC TO THE STRUCTURE IMPACT ON EXISTING CONDITIONS OR NEIGHBOURS?	C	3	HIGH	DESIGN OPERATIONS OUTSIDE OF PEAK PERIODS.	C	1	LOW		CONTRACTOR/ BUILDER
2.5	DOES THE DESIGN SUIT THE FOUNDING MATERIAL? RISK OF EXCESS SETTLEMENT, STRUCTURAL FAILURE.	B	4	HIGH	DESIGN OF STRUCTURE TO SUIT GEOTECHNICAL INVESTIGATION CARRIED OUT.	D	3	MODERATE		ADG
3.0 EXCAVATION										
3.1	SHORING / EXCAVATION COLLAPSE.	B	4	HIGH	IDENTIFY REQUIREMENT FOR SHORING / RETENTION.	D	3	MODERATE	PROVIDE APPROPRIATE SHORING / RETENTION.	CONTRACTOR/ BUILDER
3.2	ARE THERE OVERHEAD OR UNDERGROUND SERVICES EFFECTING THE EXCAVATION?	A	4	EXTREME	AVOID EXISTING SERVICES WHERE POSSIBLE.	C	3	HIGH	CONTRACTOR TO IDENTIFY ALL EXISTING SERVICES.	CONTRACTOR/ BUILDER
3.3	DOES THE PROPOSED STRUCTURE IMPACT ON ADJACENT NEIGHBOURS, EG EXCAVATION DEPTHS NEAR BOUNDARIES.	C	3	HIGH	APPROPRIATE DESIGN SOLUTIONS TO ADJACENT STRUCTURES OR PROPERTIES.	D	3	MODERATE		ADG
3.4	UNDERMINE ADJACENT STRUCTURE.	C	4	HIGH	INCLUDE RETENTION STRUCTURE WHERE REQUIRED.	D	3	MODERATE	INSTALL TEMPORARY / PERMANENT RETENTION AS REQUIRED.	CONTRACTOR/ BUILDER
3.5	FALLING INTO OPEN EXCAVATION.	C	4	HIGH	CONTRACTOR TO PROVIDE ADEQUATE ACCESS / EDGE PROTECTION.	E	4	MODERATE		CONTRACTOR/ BUILDER
3.6	NOISE, VIBRATION, DUST AND FALLING DEBRIS.	C	3	HIGH	NECESSARY MEASURES AND PROCEDURES ARE CARRIED OUT BY CONTRACTOR DURING CONSTRUCTION TO MINIMISE ENVIRONMENTAL IMPACT.	D	2	LOW	CONTRACTOR TO PROVIDE ADEQUATE MONITORING EQUIPMENT.	CONTRACTOR/ BUILDER

FOR CONTINUATION REFER TO SHEET 02

CONSEQUENCE LEGEND

MAJOR	5	LONG TERM DELAY TO DELIVERY OF THE PROJECT, CATASTROPHIC DAMAGE TO ASSETS, LARGE SCALE ENVIRONMENTAL DAMAGE, OR MULTIPLE DEATH / SERIOUS INJURY
SIGNIFICANT	4	DELAY TO DELIVERY OF THE PROJECT, SIGNIFICANT DAMAGE TO ASSETS, SUBSTANTIAL ENVIRONMENTAL DAMAGE, OR SERIOUS INJURY / POSSIBLE DEATH
MODERATE	3	DISRUPTION TO DELIVERY OF PROJECT, MINOR DAMAGE TO ASSETS, MINOR ENVIRONMENTAL DAMAGE, OR INJURY
MINOR	2	THE CONSEQUENCES WOULD THREATEN THE EFFICIENCY OR EFFECTIVENESS OF SOME ASPECTS OF THE OPERATION, BUT WOULD BE DEALT WITH INTERNALLY
INSIGNIFICANT	1	THE CONSEQUENCES ARE DEALT WITH BY ROUTINE OPERATIONS

LIKELIHOOD LEGEND

ALMOST CERTAIN	A	EXPECTED TO OCCUR
LIKELY	B	IS LIKELY TO OCCUR
POSSIBLE	C	MAY OCCUR
UNLIKELY	D	IS UNLIKELY TO OCCUR
RARE	E	IS NOT EXPECTED TO OCCUR

RISK RATING MATRIX

CONSEQUENCE / LIKELIHOOD		INSIGNIFICANT 1	MINOR 2	MODERATE 3	SIGNIFICANT 4	MAJOR 5
ALMOST CERTAIN	A	MODERATE	HIGH	HIGH	EXTREME	EXTREME
LIKELY	B	MODERATE	MODERATE	HIGH	HIGH	EXTREME
POSSIBLE	C	LOW	MODERATE	HIGH	HIGH	HIGH
UNLIKELY	D	LOW	LOW	MODERATE	MODERATE	HIGH
RARE	E	LOW	LOW	MODERATE	MODERATE	MODERATE

SAFETY IN DESIGN NOTES

PURPOSE

THIS DOCUMENT HAS BEEN PREPARED TO PROVIDE A TEMPLATE TO ASSIST ADG ENGINEERS (AUSTRALIA) PTY LTD TO MEET OUR OBLIGATIONS UNDER THE WORK HEALTH AND SAFETY (WHS) ACT 2011. IT ADDRESSES OUR OBLIGATION UNDER 'SAFE WORK AUSTRALIA, MODEL WORK HEALTH AND SAFETY REGULATIONS 2021' TO PROVIDE A SAFETY REPORT TO OUR CLIENTS.
THE WHS ACT PROVIDES A FRAMEWORK TO PROTECT THE HEALTH, SAFETY AND WELFARE OF ALL WORKERS AT WORK AND OF ALL OTHER PEOPLE WHO MIGHT BE AFFECTED BY THE WORK. THE ACT AIMS TO PROTECT THE HEALTH AND SAFETY OF WORKERS AND OTHER PEOPLE BY ELIMINATING OR REDUCING WORKPLACE RISKS. THIS WHS ACT PROVIDES A CONSISTENT NATIONAL FRAMEWORK FOR WORKPLACE SAFETY.

GUIDELINES

OBLIGATIONS & RESPONSIBILITIES
OUR OBLIGATIONS RELATE TO CONSTRUCTION, OPERATION AND MAINTENANCE, AND USE OF THE STRUCTURE AND COVER RISKS TO WORKERS AS WELL AS THE GENERAL PUBLIC. THE TERM REASONABLY PRACTICABLE MEANS WHAT COULD REASONABLY BE DONE AT A PARTICULAR TIME TO ENSURE HEALTH AND SAFETY MEASURES WERE IN PLACE. ORDINARILY, COST WILL NOT BE THE KEY FACTOR IN DETERMINING WHAT IT IS REASONABLE FOR A DUTY HOLDER TO DO UNLESS IT CAN BE SHOWN TO BE 'GROSSLY DISPROPORTIONATE' TO THE RISK.

SAFETY IN DESIGN REPORT

THE WHS REGULATION (CLAUSE 295) STATES THAT "THE DESIGNER OF A STRUCTURE OR ANY PART OF A STRUCTURE THAT IS TO BE CONSTRUCTED MUST GIVE THE PERSON CONDUCTING A BUSINESS OR UNDERTAKING WHO COMMISSIONED THE DESIGN A WRITTEN REPORT THAT SPECIFIES THE HAZARDS RELATING TO THE DESIGN OF THE STRUCTURE THAT, SO FAR AS THE DESIGNER IS REASONABLY AWARE:
(A) CREATE A RISK TO THE HEALTH OR SAFETY OF PERSONS WHO ARE TO CARRY OUT ANY CONSTRUCTION WORK ON THE STRUCTURE OR PART; AND
(B) ARE ASSOCIATED ONLY WITH THE PARTICULAR DESIGN AND NOT WITH OTHER DESIGNS OF THE SAME TYPE OF STRUCTURE."

HIGH RISK & CONSTRUCTION WORK

THE WHS REGULATION (CLAUSE 299) STATES THAT "A PERSON CONDUCTING A BUSINESS OR UNDERTAKING THAT INCLUDES THE CARRYING OUT OF HIGH RISK CONSTRUCTION WORK MUST, BEFORE HIGH RISK CONSTRUCTION WORK COMMENCES, ENSURE THAT A SAFE WORK METHOD STATEMENT FOR THE PROPOSED WORK:
(A) IS PREPARED; OR
(B) HAS ALREADY BEEN PREPARED BY ANOTHER PERSON."
HIGH RISK CONSTRUCTION WORK IS DEFINED IN THE REGULATION

RISK MANAGEMENT

IN MANAGING RISKS, ADG HAS APPLIED THE FOLLOWING HIERARCHY OF CONTROLS:
- ELIMINATION (DESIGNING THE HAZARD OUT);
- SUBSTITUTION (USING LESS HAZARDOUS MATERIALS, FIXTURES, FITTINGS, PLANT OR CONSTRUCTION METHODS);
- ISOLATION (REMOVING PEOPLE FROM THE SOURCE OF THE HAZARD);
- ENGINEERING (CHANGING THE PHYSICAL CHARACTERISTICS OF THE STRUCTURE OR WORKPLACE TO REMOVE OR REDUCE THE RISK);
- ADMINISTRATION (SUCH AS TRAINING, SYSTEMS OF WORK AND SIGNAGE); AND
- PERSONAL PROTECTIVE EQUIPMENT (EQUIPMENT OR CLOTHING TO PROTECT THE WORKER).

GENERAL

1. THIS SAFETY IN DESIGN HAS BEEN CARRIED OUT IN RELATION TO STRUCTURAL ASPECTS OF THIS PROJECT ONLY.
2. IT ASSUMES THAT THE PRINCIPAL CONTRACTOR WILL UNDERTAKE WORK IN ACCORDANCE WITH CURRENT LEGISLATION, INDUSTRY STANDARDS.
3. THE PRINCIPAL CONTRACTOR SHALL UNDERTAKE THEIR OWN SAFETY IN DESIGN ASSESSMENTS PRIOR TO COMMENCING WORKS.
4. THE PRINCIPAL CONTRACTOR IS DEEMED TO HAVE ULTIMATE MANAGEMENT/ CONTROL OF THE CONSTRUCTION SITE (WORKPLACE)
5. THE PRINCIPAL CONTRACTOR MUST PREPARE A WRITTEN WHS MANAGEMENT PLAN FOR THE CONSTRUCTION SITE (WORKPLACE) BEFORE WORK ON THE PROJECT COMMENCES.

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title: SAFETY IN DESIGN REGISTER
SHEET 01

Discipline: STRUCTURAL		Status: HIGH LEVEL
Designed By: D.G	Checked By: C.B	Approved By: C.B
Project No.: 29385.001	Drawn By: J.B	Scale: 1 : 100 (at A1)
Drawing No.: S01-121		Revision: B

PLOT DATE: 30/07/2026 9:23:33 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/v24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

FOR CONTINUATION TO SHEET 01

SAFETY IN DESIGN REGISTER

ITEM	HAZARD IDENTIFICATION (POTENTIAL HAZARD OR HAZARDOUS EVENT)	PRE-DESIGN RISK RATING			RISK MITIGATION ACTION PLAN	RESIDUAL RISK RATING			COMMENTS	RESPONSIBILITY / HAZARD TRANSFER DESTINATION
		LIKELIHOOD	CONSEQUENCE	RISK RATING		LIKELIHOOD	CONSEQUENCE	RISK RATING		
4.0 DEMOLITION (WHERE APPLICABLE)										
4.1	RISK OF ABESTOS.	C	4	HIGH	ASBESTOS CONTRACTOR BY BUILDER. ASBESTOS REGISTER TO BE PROVIDED.	D	3	MODERATE		CONTRACTOR/ BUILDER
4.2	PREMATURE COLLAPSE OF THE STRUCTURE DURING DEMOLITION.	C	4	HIGH	PROVIDE APPROPRIATE DEMOLITION SEQUENCE.	D	3	MODERATE	ENSURE DEMOLITION SEQUENCE IS ADHERED TO.	
4.3	DEMOLISH SECTION OF STRUCTURE TO BE RETAINED.	D	4	MODERATE	IDENTIFY CRITICAL ELEMENTS PRIOR TO DEMOLITION.	D	2	LOW	DEMOLISH IN ACCORDANCE WITH CONTRACT DOCUMENTS.	CONTRACTOR/ BUILDER
4.4	OVERLOADING EXISTING STRUCTURE.	C	4	HIGH	PROVIDE FLOOR LOADING DIAGRAMS.	D	3	MODERATE	ADHERE TO LOAD LIMITS.	CONTRACTOR/ BUILDER
5.0 CONSTRUCTION - EXCAVATION (WHERE APPLICABLE)										
5.1	EXCAVATION - SHORING EXCAVATION - UNDERPINNING ADJACENT STRUCTURES AND SERVICES. COLLAPSE OF EXCAVATION.	B	4	HIGH	IDENTIFY REQUIREMENT FOR SHORING / RETENTION.	C	1	LOW	PROVIDE APPROPRIATE SHORING / RETENTION.	CONTRACTOR/ BUILDER
5.2	DEWATERING.	B	3	HIGH	IDENTIFY REQUIREMENT FOR DEWATERING.	C	1	LOW	PROVIDE APPROPRIATE DEWATERING.	CONTRACTOR/ BUILDER
5.3	IDENTIFICATION OF EXISTING SERVICES INTERNAL AND EXTERNAL TO THE SITE.	C	3	HIGH	APPROPRIATE SERVICES TO BE IDENTIFIED AND MARKED ON SITE TO AVOID DAMAGE.	C	1	LOW		CONTRACTOR/ BUILDER
5.4	RISK OF COLLAPSE DURING EXCAVATION.	B	3	HIGH	IDENTIFY AND ADOPT EXAVATION PROTECTION MEASURES TO MINIMISE RISK OF COLLAPSE.	D	3	MODERATE		CONTRACTOR/ BUILDER
5.5	EARTHWORKS - ENVIRONMENTAL FACTORS INCLUDING NOISE, DUST, WATER POLLUTANTS, VIBRATION.	C	3	HIGH	NECESSARY MEASURES AND PROCEDURES ARE CARRIED OUT BY CONTRACTOR DURING CONSTRUCTION TO MINIMISE ENVIRONMENTAL IMPACT.	D	2	LOW		CONTRACTOR/ BUILDER
5.6	CONFIRMATION OF FOUNDATION ADEQUACY - CLEARLY NOTED ON DRAWINGS - CONFIRM BY QUALIFIED GEOTECHNICAL TESTING.	C	3	HIGH	GEOTECHNICAL ENGINEER TO CONFIRM FOUNDATIONS.	D	2	LOW		CONTRACTOR/ BUILDER
5.7	BUILDING FOUNDATIONS NOT BEING FOUNDED IN MATERIAL THAT REFLECTS DESIGN INTENT.	C	3	HIGH	GEOTECHNICAL ENGINEER TO CONFIRM MINIMUM SOIL PARAMETERS TO ACHIEVE FOOTING EXCAVATIONS.	D	2	LOW		CONTRACTOR/ BUILDER
6.0 CONSTRUCTION - REINFORCED CONCRETE WORKS.										
6.1	INADEQUATE BACKPROPPING.	C	4	HIGH	ADVISE REQUIREMENT FOR TEMPORARY WORKS.	D	3	MODERATE	CONTRACTOR TO ENGAGE SUITABLY QUALIFIED TEMPORARY WORKS ENGINEER.	CONTRACTOR/ BUILDER
6.2	EARLY STRIPPING OF FORMWORK.	C	4	HIGH	REQUIREMENTS OUTLINED IN CONCRETE SPECIFICATION.	D	3	MODERATE	CONTRACTOR TO ADHERE TO SPECIFICATION.	CONTRACTOR/ BUILDER
6.3	TEMPORARY CONSTRUCTION PENETRATIONS.	C	4	HIGH	DESIGN TO ACCOUNT FOR TEMPORARY PENETRATIONS.	D	3	MODERATE	CONTRACTOR TO ADVISE STRUCTURAL ENGINEER OF REQUIRED PENETRATIONS.	CONTRACTOR / ADG
6.4	LIFTING HEAVY REINFORCEMENT BARS.	A	4	EXTREME	DETAIL REINFORCEMENT TO MINIMISE WEIGHTS, CRANE REINFORCEMENT AS CLOSE AS POSSIBLE TO WORK ZONE.	C	3	HIGH	ENSURE ALL OPERATIVES AWARE OF HEAVY LIFTING PROCEDURES.	CONTRACTOR/ BUILDER
6.5	FAILURE OF MECHANICAL / CHEMICAL ANCHORS.	C	4	HIGH	NOTE REQUIREMENTS FOR CORRECT INSTALLATION.	D	3	MODERATE	CONTRACTOR TO INSTALL AS PER MANUFACTURER'S REQUIREMENTS.	CONTRACTOR/ BUILDER
6.6	TEMPORARY STABILITY DURING CONSTRUCTION.	B	4	HIGH	TEMPORARY WORKS DESIGN TO CONSIDER STABILITY DURING CONSTRUCTION.	C	3	HIGH	CONTRACTOR TO ENGAGE SUITABLY QUALIFIED TEMPORARY WORKS ENGINEER.	CONTRACTOR/ BUILDER
6.7	OVERLOADING OF STRUCTURE DURING CONSTRUCTION.	C	4	HIGH	INCLUDE DESIGN LOADS ON CONTRACT DOCUMENTS.	D	3	MODERATE	CONTRACTOR TO ADHERE TO LOAD LIMITS.	CONTRACTOR/ BUILDER
6.8	PERSONNEL CAN BE TRAPPED OR CRUSHED DUE TO COLLAPSE OF FORMWORK.	C	5	HIGH	USE OF FORMWORK TO FOLLOW CRITERIA SETOUT BY THE TEMPORARY WORKS ENGINEER.	D	3	MODERATE	CONTRACTOR TO ENGAGE SUITABLY QUALIFIED TEMPORARY WORKS ENGINEER.	CONTRACTOR/ BUILDER

FOR CONTINUATION REFER RIGHT

FOR CONTINUATION REFER LEFT

SAFETY IN DESIGN REGISTER

ITEM	HAZARD IDENTIFICATION (POTENTIAL HAZARD OR HAZARDOUS EVENT)	PRE-DESIGN RISK RATING			RISK MITIGATION ACTION PLAN	RESIDUAL RISK RATING			COMMENTS	RESPONSIBILITY / HAZARD TRANSFER DESTINATION
		LIKELIHOOD	CONSEQUENCE	RISK RATING		LIKELIHOOD	CONSEQUENCE	RISK RATING		
7.0 CONSTRUCTION - PREFABRICATED CONCRETE ELEMENTS										
7.1	LIFTING AND INSTALLATION OF PRECAST CONCRETE ELEMENTS.	A	4	EXTREME	DESIGN TO MINIMISE WEIGHTS OF PRECAST ELEMENTS. REFER TO CODE OF PRACTICE.	C	3	HIGH	CONTRACTOR TO ADHERE TO CODE OF PRACTICE AND ENGAGE COMPETENT ERECTION DESIGNER AS PER AS 3850.	CONTRACTOR/ BUILDER
7.2	TILT PANELS NEAR BOUNDARIES. PANEL STABILITY DURING CONSTRUCTION.	C	3	HIGH	DESIGN TO CONSIDER LOCATION OF PANELS AND ASSOCIATED TEMPORARY WORK.	E	3	MODERATE	CONTRACTOR TO ENGAGE A QUALIFIED TEMPORARY WORKS ENGINEER.	CONTRACTOR/ BUILDER
7.3	INADEQUATE PROPPING / BRACING TO PRECAST ELEMENTS.	B	4	HIGH	REFER TO CODE OF PRACTICE/SPECIFICATION/AS 3850.	D	3	MODERATE	CONTRACTOR TO ADHERE TO CODE OF PRACTICE AND ENGAGE COMPETENT ERECTION DESIGNER AS PER AS 3850.	CONTRACTOR/ BUILDER
7.4	EARLY REMOVAL OF PROPPING / BRACING TO PRECAST ELEMENTS.	B	4	HIGH	FINAL INSPECTION REQUIRED PRIOR TO REMOVAL.	D	3	MODERATE	CONTRACTOR NOT TO REMOVE PROPPING / BRACING UNTIL APPROVED BY STRUCTURAL ENGINEER.	CONTRACTOR/ BUILDER
8.0 CONSTRUCTION - STRUCTURAL STEEL										
8.1	COLLAPSE OF STEELWORK DURING ERECTION.	C	4	HIGH	CONTRACTOR TO ENGAGE TEMPORARY WORKS ENGINEER TO ASSESS TEMPORARY STABILITY.	D	3	MODERATE	CONTRACTOR TO ADHERE TO CODE OF PRACTICE.	CONTRACTOR/ BUILDER
8.2	FALL FROM HEIGHT DURING ERECTION.	C	4	HIGH	ENSURE GUARD RAILS AND FALL PREVENTION DEVICES ARE ADEQUATELY INSTALLED AS PER CODE OF PRACTICE. ENSURE PHYSICAL BARRIER OR FALL RESTRAINT IS SYSTEM DOCUMENTED TO AREAS WHERE A PERSON MAY WORK.	D	3	MODERATE	CONTRACTOR TO PROVIDE FALL PREVENTION SYSTEMS AS REQUIRED.	CONTRACTOR/ BUILDER
8.3	USE OF CHEMICAL ANCHORS IN TENSION	C	5	HIGH	EPOXY CREEP OF CHEMICAL ANCHORS MAY REDUCE THE CAPACITY OF THE SPECIFIED ANCHOR	D	3	MODERATE	MANUFACTURER OF CHEMICAL ANCHORS TO BE SPECIFIED ON THE DRAWINGS AND DOCUMENTATION. ENSURE HOLES ARE MECHANICALLY ROUGHENED TO INCREASE BOND STRENGTH. TEST ANCHORS TO VERIFY INSTALLATION TECHNIQUE.	CONTRACTOR/ BUILDER
8.4	WORKING WITH HAND TOOLS	D	3	MODERATE	SITE STAFF WORKING WITH HAND TOOLS, PNEUMATIC TOOLS AND ELECTRIC POWER TOOLS RESULTING IN INJURY TO SITE PERSONNEL.	D	2	LOW	CONTRACTOR IS TO ENSURE SITE PERSONNEL HAVE UNDERTAKEN THE RELEVANT TRAINING AND ARE COMPETENT OPERATORS OF THE EQUIPMENT TO BE USED.	CONTRACTOR/ BUILDER
8.5	DRILLING OR JACK HAMMERING CONCRETE	C	5	HIGH	EXPOSURE TO SILICA DUST CAUSING LONG TERM HEALTH ISSUES.	D	2	LOW	CONTRACTOR IS TO PROVIDE NECESSARY PEE TO WORKERS TO COMPLETE TASKS IN ACCORDANCE WITH BEST INDUSTRY PRACTICE. DUST SUPRESSION, MANAGEMENT OR CAPTURE SHALL BE COMPLETED.	CONTRACTOR/ BUILDER
8.6	DRILLING, CHASING	B	2	MODERATE	NOISE	C	1	LOW	APPROPRIATE WORKPLACE POLICIES, EDUCATION AND PPE. HAZARDS VIDEO WITH REAL CASES OF PEOPLE WITH LOSS OF HEARING DUE TO NOISE.	CONTRACTOR/ BUILDER
8.7	WELDING / HOT WORKS.	A	4	EXTREME	DESIGN TO MINIMISE SITE WELDING.	C	3	HIGH	CONTRACTOR TO ADHERE TO CODE OF PRACTICE.	CONTRACTOR/ BUILDER
9.0 CONSTRUCTION - BLOCK WORK CONSTRUCTION										
9.1	COLLAPSE OF BLOCKWORK DURING CONSTRUCTION.	B	3	HIGH	PROVIDE ADEQUATE TEMPORAY SUPPORTS UNTIL FINAL STRUCTURE IS IN PLACE.	D	3	MODERATE	CONTRACTOR TO ADHERE TO CODE OF PRACTICE.	CONTRACTOR/ BUILDER
10.0 END USER OPERATION AND MAINTENANCE										
10.1	RETAINING WALLS - COLLAPSE DUE TO BLOCKED DRAINAGE.	C	3	HIGH	ONGOING MAINTENANCE PLAN TO ENSURE DRAINS BEHIND WALLS REMAIN SERVICEABLE.	D	2	LOW		CLIENT
10.2	DRAINAGE.	C	3	HIGH	ONGOING MAINTENANCE PLAN TO ENSURE DRAINAGE IS CHECKED FOR BLOCKAGES AND DEBRIS.	D	2	LOW		CLIENT
10.3	MONITORING SETTLEMENTS AND / OR DEFLECTION.	C	3	HIGH	ONGOING MAINTENANCE PLAN TO ENSURE SETTLEMENT OR DEFLECTION DETECTED.	D	2	LOW		CLIENT
10.4	OVERLOADING OF STRUCTURE.	C	3	HIGH	DESIGN TO INCLUDE APPROPRIATE SAFETY FACTORS SET BY AS, BCA.	D	2	LOW	BUILDING OPERATIONS MANAGER TO ENSURE CORRECT USAGE.	CLIENT
10.5	PENETRATION AFTER STRUCTURE IS COMPLETE.	B	3	HIGH	CO-ORDINATE PENETRATIONS PRIOR TO CONSTRUCTION.	D	3	MODERATE	CONTRACTOR TO RECEIVE APPROVAL FROM DESIGN ENGINEER PRIOR TO INSTALLING NEW PENETRATIONS.	CONTRACTOR/ BUILDER
10.6	ELIMINATE OR MINIMISE RISK OF FALL AT DESIGN STAGE, INCLUDING DESIGN CONSIDERATIONS TO ASSIST WITH MAINTENANCE, REPAIR OR CLEANING THE STRUCTURE.	B	4	HIGH	HEIGHT SAFETY PLAN TO BE ESTABLISHED AND FOLLOWED.	D	3	MODERATE		CONTRACTOR/ BUILDER
10.7	IS THERE MECHANICAL PLANT ON THE ROOF REQUIRING MAINTENANCE ACCESS?	C	5	HIGH	HEIGHT SAFETY PLAN TO BE ESTABLISHED AND FOLLOWED.	D	3	MODERATE		CONTRACTOR/ BUILDER
11.00 SUSTAINABILITY										
11.1	CONTRIBUTION OF CARBON INTENSIVE CONTRUCTION MATERIALS TO ENVIRONMENTAL DEGREDATION.	B	3	HIGH	DESIGN USING ENVIRONMENTALLY SUSTAINABLE MATERIALS.	D	2	LOW		ADG
12.0 DEMOLITION										
12.1	MAINTENANCE OF PROPERTY ACCESS.	C	3	HIGH	ENSURE ACCESS IS MAINTAINED AT ALL TIMES FOR ADJACENT PROPERTIES DURING CONSTRUCTION AND POST CONSTRUCTION. INCORPORATE SAFE APPROPRIATE PROPERTY ACCESS IN DESIGN.	D	2	LOW		CLIENT
12.2	RETAINING WALLS.	C	4	HIGH	REMOVE ALL SURCHARGE LOADS PRIOR TO DEMOLITION. PROVIDE ADEQUATE EDGE PROTECTION. DO NOT UNDERMINE NEARBY STRUCTURES.	D	3	MODERATE	CONTRACTOR TO ENGAGE A QUALIFIED ENGINEER TO ASSESS PROPOSED WORKS.	CLIENT
12.3	PRPEARE A DEMOLITION STRUCTURES PLAN WITH A SUITABLE DEMOLITION CONTRACTOR.	B	4	HIGH	ENSURE DEMOLITION PLAN PREPARED PRIOR TO DEMOLITION WORKS COMMENCING.	C	2	MODERATE	DEMOLITION PLAN TO BE STRICTLY FOLLOWED.	CLIENT

FOR NOTES & LEGEND REFER TO SHEET 01 UNLESS NOTED OTHERWISE

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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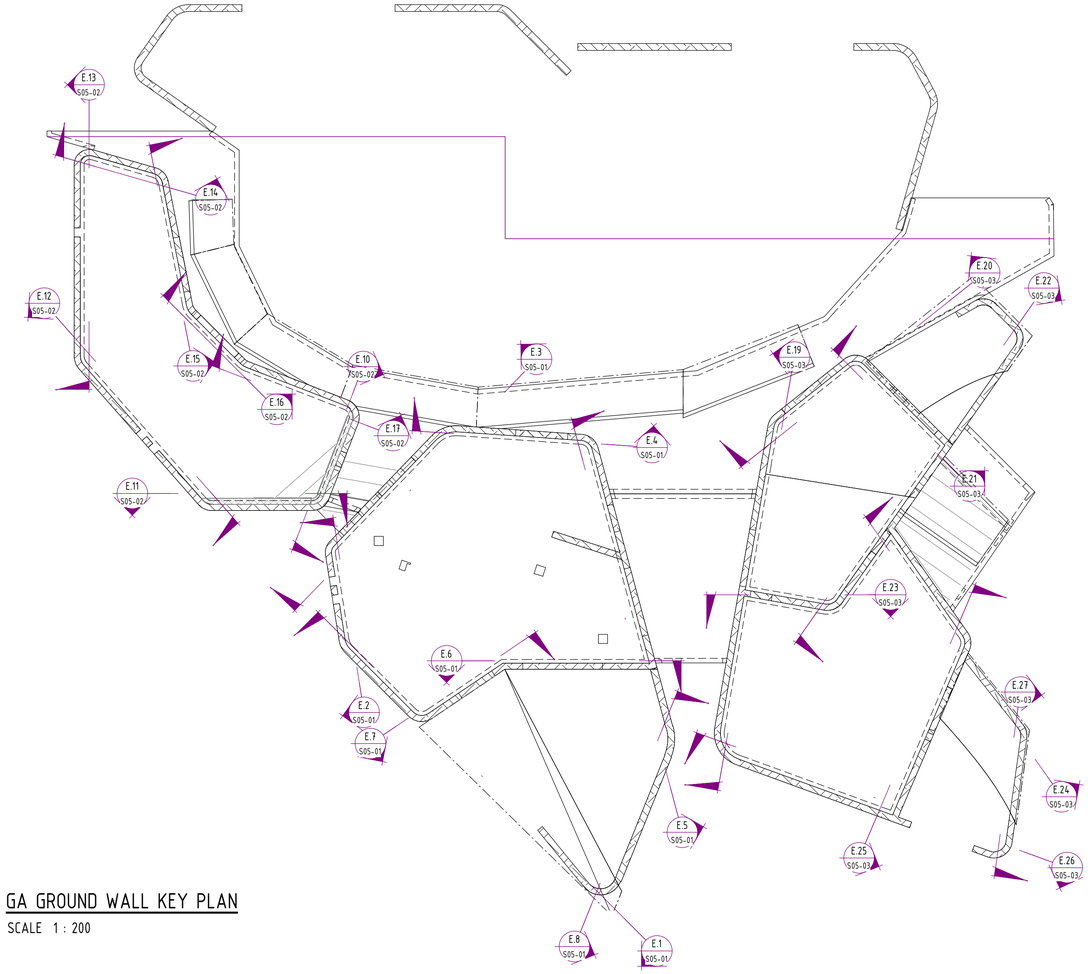
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Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

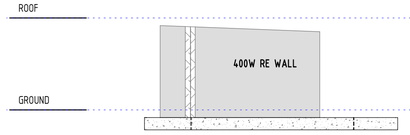
Title: SAFETY IN DESIGN REGISTER
SHEET 02

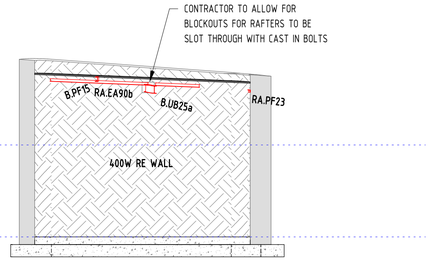
Discipline: STRUCTURAL	Status: HIGH LEVEL
Designed By: D.G	Checked By: C.B / Approved By: C.B
Project No.: 29385.001	Drawn By: J.B / Scale: 1 : 100 (at A1)
Drawing No.: S01-122	Revision: B



GA GROUND WALL KEY PLAN

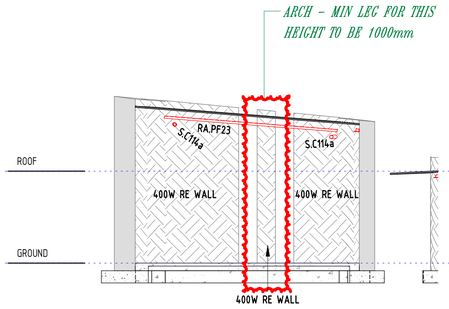
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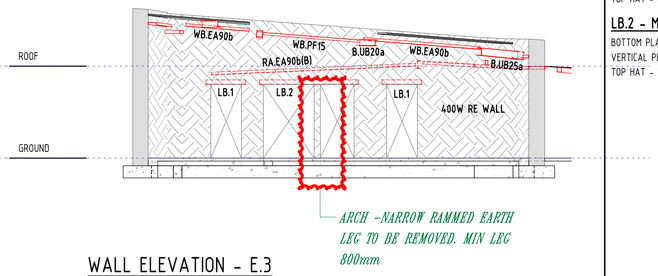
WALL ELEVATION - E.1

SCALE 1 : 100



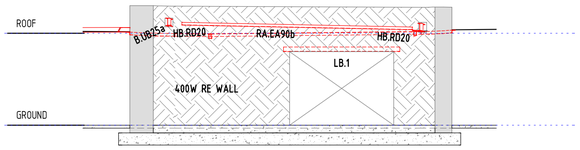
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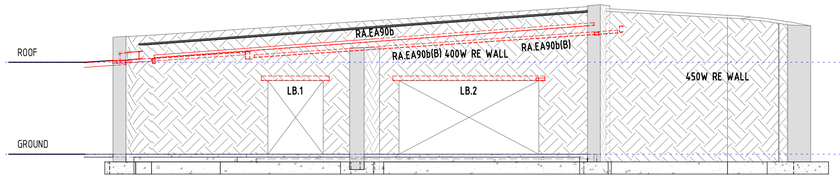
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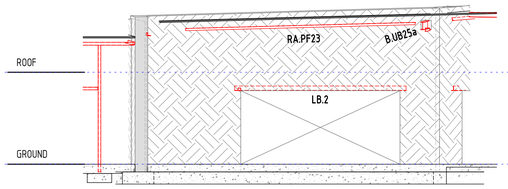
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SCALE 1 : 100



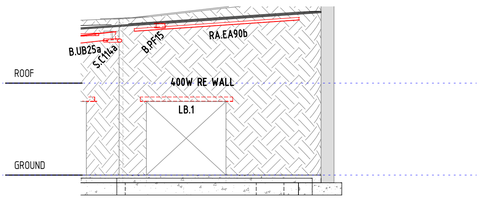
WALL ELEVATION - E.5

SCALE 1 : 100



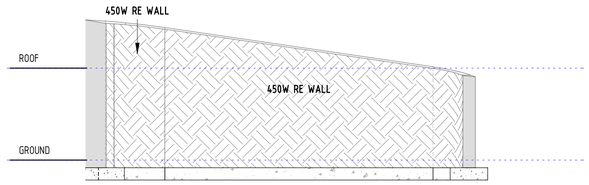
WALL ELEVATION - E.6

SCALE 1 : 100



WALL ELEVATION - E.7

SCALE 1 : 100



WALL ELEVATION - E.8

SCALE 1 : 100

HIGH LEVEL TENDER SUBMISSION

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RAMMED EARTH WALL NOTES

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   - ABBREVIATIONS
   - NOTATIONS
   - SYMBOLOGY
2. FOR DETAILS OF R.L.s, DIMENSIONS AND SET OUT ETC. REFER TO LATEST ARCHITECT'S DETAILS. ENGINEER TO BE NOTIFIED OF ANY VARIATION TO THAT SHOWN ON ENGINEER'S DRAWINGS PRIOR TO THE COMMENCEMENT OF ANY WORKS.
3. FOR WALL MARKINGS REFER TO RELEVANT FLOOR GENERAL ARRANGEMENT PLAN UNO.
4. MINIMUM STRUCTURAL THICKNESS TO BE AS NOTED ON EACH RELEVANT ELEVATION OR DETAILS.
5. **NOTE:**
   RAMMED EARTH WALLS HAVE BEEN SPECIFIED BASED ON HEIGHT-TO-DEPTH RATIOS BASED ON HB195 - THE AUSTRALIAN EARTH BUILDING HANDBOOK (2002).
   THICKNESSES TO BE VERIFIED DURING THE DETAILED DESIGN AND DOCUMENTATION PHASE INCLUDING TESTING TO CONFIRM FLEXURAL CAPACITY.

'T' BAR LINTEL SCHEDULE

ALL LINTELS TO MINIMUM 300 GRADE PLATE AND BEAR MINIMUM OF 250mm ON WALLS EACH SIDE OF OPENINGS.

LB.1 - MAX 2.7m OPENING

BOTTOM PLATE - 300x16
VERTICAL PLATE - 200x12
TOP HAT - NONE

LB.2 - MAX 5.2m OPENING

BOTTOM PLATE - 350x16
VERTICAL PLATE - 200x12
TOP HAT - 50x16

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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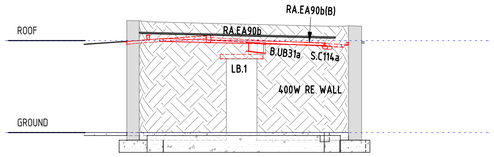
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Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

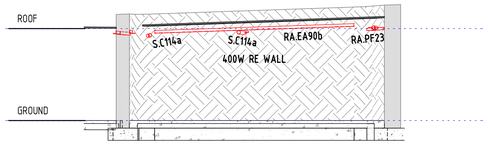
Title: RAMMED EARTH WALL ELEVATIONS
SHEET 01

Discipline: STRUCTURAL			Status: HIGH LEVEL
Designed By: D.G	Checked By: C.B		Approved By: C.B
Project No.: 29385.001	Drawn By: J.B		Scale: As indicated (at A1)
Drawing No.: S05-01			Revision: B



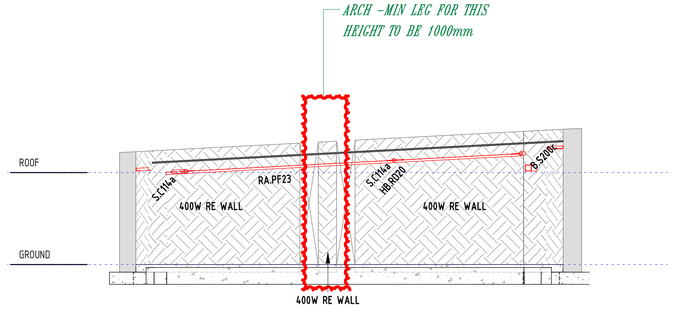
WALL ELEVATION - E.10

SCALE 1 : 100



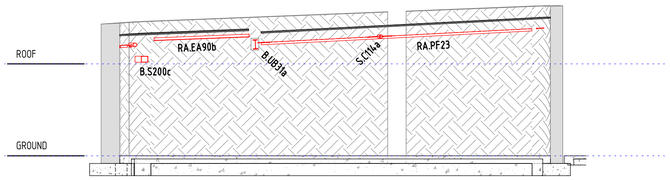
WALL ELEVATION - E.11

SCALE 1 : 100



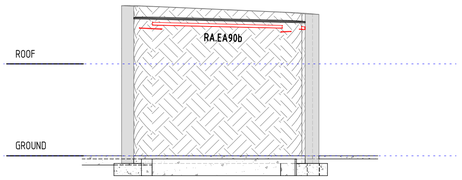
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SCALE 1 : 100



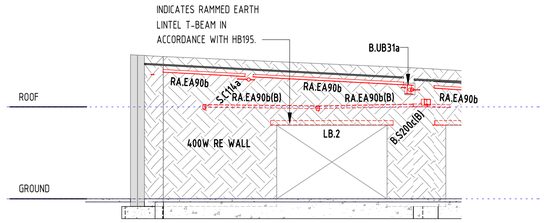
WALL ELEVATION - E.13

SCALE 1 : 100



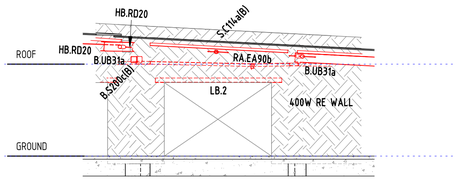
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SCALE 1 : 100



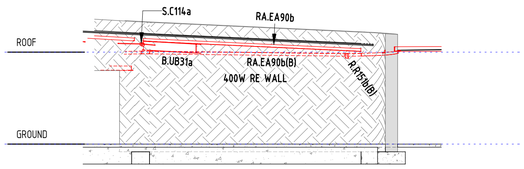
WALL ELEVATION - E.15

SCALE 1 : 100



WALL ELEVATION - E.16

SCALE 1 : 100



WALL ELEVATION - E.17

SCALE 1 : 100

HIGH LEVEL TENDER SUBMISSION

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RAMMED EARTH WALL NOTES

1. REFER TO DRAWING SERIES S01 FOR THE FOLLOWING:
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   - NOTATIONS
   - SYMBOLOGY
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3. FOR WALL MARKINGS REFER TO RELEVANT FLOOR GENERAL ARRANGEMENT PLAN UNO.
4. MINIMUM STRUCTURAL THICKNESS TO BE AS NOTED ON EACH RELEVANT ELEVATION OR DETAILS.
5. **NOTE:**
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   THICKNESSES TO BE VERIFIED DURING THE DETAILED DESIGN AND DOCUMENTATION PHASE INCLUDING TESTING TO CONFIRM FLEXURAL CAPACITY.

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

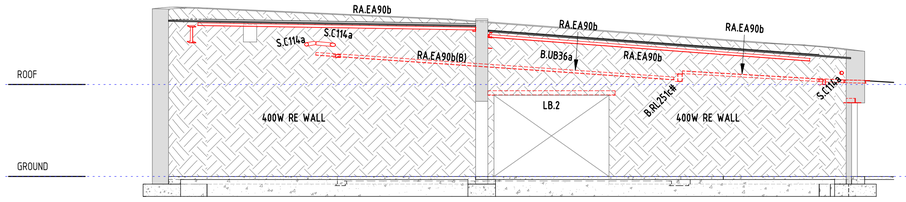
Title: RAMMED EARTH WALL ELEVATIONS
SHEET 02

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By: D.G	Checked By: C.B	Approved By: C.B
Project No.: 29385.001	Drawn By: J.B	Scale: 1 : 100 (at A1)

Drawing No.: S05-02
Revision: B

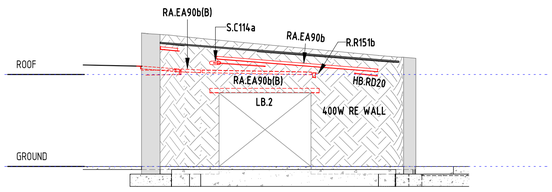
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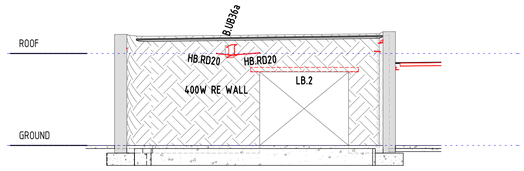
WALL ELEVATION - E.19

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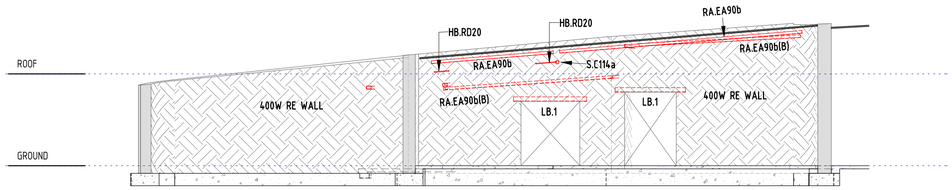
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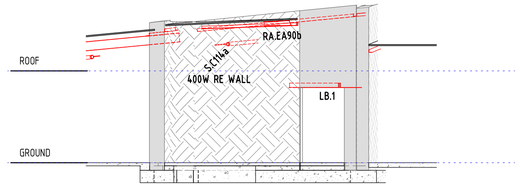
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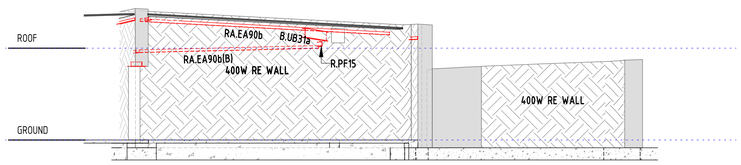
WALL ELEVATION - E.22

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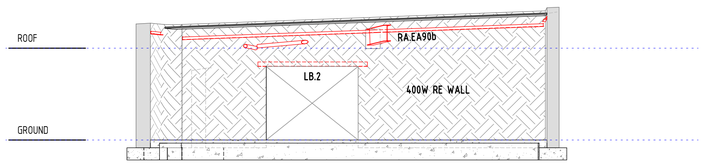
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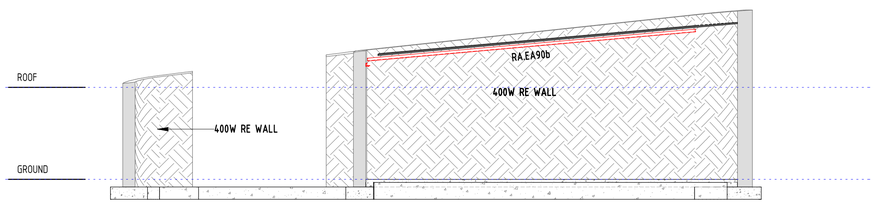
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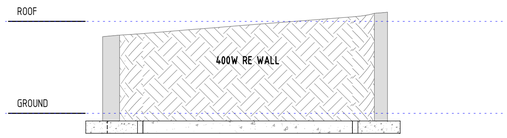
WALL ELEVATION - E.25

SCALE 1 : 100



WALL ELEVATION - E.26

SCALE 1 : 100



WALL ELEVATION - E.27

SCALE 1 : 100

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RAMMED EARTH WALL NOTES

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Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Client
HYDEN PROGRESS ASSOCIATION

Project Name
KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

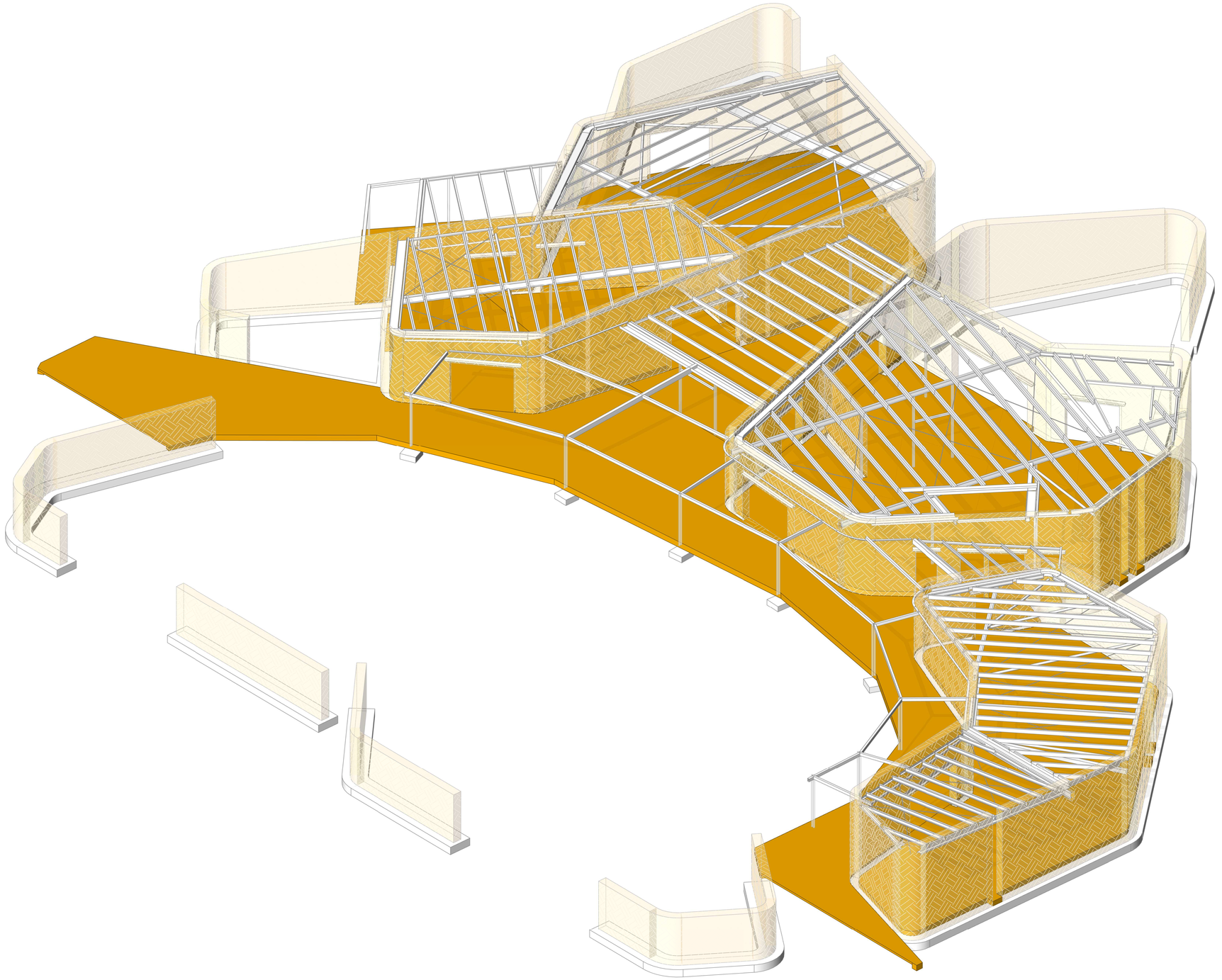
Title
RAMMED EARTH WALL ELEVATIONS
SHEET 03

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By	Checked By	Approved By
D.G	C.B	C.B
Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)

Drawing No. S05-03
Revision B

PLOT DATE: 30/07/2026 9:23:53 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/V24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm



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GENERAL ISOMETRIC VIEW NOTES

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   - NOTATIONS
   - SYMBOLOGY
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3. THE ISOMETRIC VIEW IS A COMPLEMENTARY VIEW TO BE READ IN-CONJUCTION WITH THE CORRESPONDING LEVEL SERIES OF DRAWINGS AND NOT TO BE SOLELY USED TO CONSTRUCT OFF.

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Client
HYDEN PROGRESS ASSOCIATION

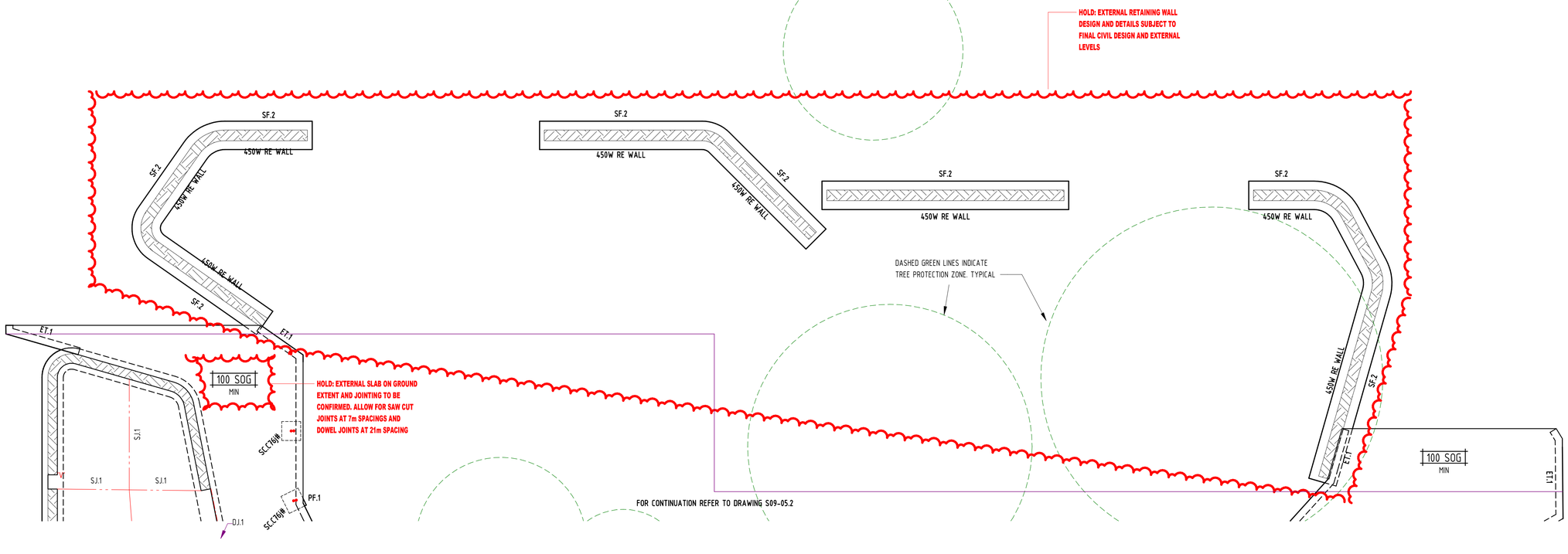
Project Name
KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title
GROUND
ISOMETRIC VIEW

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By	Checked By	Approved By
D.G	C.B	C.B
Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)

Drawing No.	Revision
S09-05.0	B

STRIP FOOTING SCHED. (SF)		
MARK	SIZE	GRADE
SF.1	900x400 DP	N32
SF.2	1200x400 DP	N32



HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

SLAB ON GROUND NOTES

1. REFER TO DRAWING SERIES S01 FOR THE FOLLOWING:
   - GENERAL AND CONSTRUCTION NOTES
   - ABBREVIATIONS
   - NOTATIONS
   - SYMBOLOGY
2. FOR DETAILS OF R.L.s, DIMENSIONS AND SET OUT ETC. REFER TO LATEST ARCHITECT'S DETAILS. ENGINEER TO BE NOTIFIED OF ANY VARIATION TO THAT SHOWN ON ENGINEER'S DRAWINGS PRIOR TO THE COMMENCEMENT OF ANY WORKS.
3. TYPICAL SLAB ON GROUND
   ALL SLAB ON GROUND UNLESS NOTED OTHERWISE ON PLAN TO BE XXXmm THICK MINIMUM TYPICAL THROUGHOUT

SLAB ON GROUND SCHEDULE (SOG)

SIZE	GRADE	TOP REO.	BOTTOM REO.
100 SOG	N32	SL82	N/A
100 SOG (PC)	N32	SL102	N/A
150 SOG (PC)	N32	SL102	N/A

REFER SUBGRADE PREPARATION ON DRAWING GENERAL NOTES.

SOG DETAILS SCHEDULE

SJ.1 - SLAB SAW CUT JOINT

DJ.1 - SLAB CRADLE DOWEL MOVEMENT JOINT.

4. CONCRETE PROPERTIES

CONCRETE PROPERTIES

ELEMENT	CONCRETE GRADE	CONCRETE COVER TOP	CONCRETE COVER BTM	CONCRETE COVER SIDE	SPECIAL REQUIREMENT
INTERNAL	N32	50mm	50mm	50mm	-
EXTERNAL	N32	50mm	50mm	50mm	-

5. SLAB SETDOWN DETAILS

   INDICATES EXTENT OF 50m MAXIMUM SETDOWN IN SLAB TO WET AREAS.

6. TRIMMER SCHEDULE

   'V', 'W', 'X', 'Y', 'Z' — DENOTES TRIMMERS REINFORCEMENT LOCATIONS. REFER TYPICAL DETAILS.

7. SLAB TYPE
   a. EXTENT OF POLISHED CONCRETE
   b. HONING/STONE CONCRETE TO BE USED. REFER TO ARCHITECTURAL DRAWINGS FOR FINISHES AND SPECIFICATIONS
   c. SLAB TO BE GRADED TO FALL TO DRAIN WITH MAXIMUM TOP COVER TO ALLOW FOR GRINDING AND POLISHING
   d. SLAB TO BE POURED ON 2 LAYERS OF LUBRICATED DAMP PROOF MEMBRANE.
   e. POLISHED AREAS TO BE POURED 28 DAYS AFTER STRUCTURAL SLAB.

FOOTING NOTES

1. CONCRETE PROPERTIES

CONCRETE PROPERTIES

ELEMENT	CONCRETE GRADE	CONCRETE COVER TOP	CONCRETE COVER BTM	CONCRETE COVER SIDE	SPECIAL REQUIREMENT
ALL FOOTING UNO	N32	50mm	50mm	50mm	-
STRIP FOOTING	N32	50mm	50mm	50mm	-

2. REINFORCEMENT LAP LENGTHS

REINFORCEMENT LAP LENGTHS

TYPICAL.

ELEMENT	BAR SIZE / LAP LENGTHS (mm) N12	N16	N20	N24	N28	N32	N36	N40
STD LAP	450	700	900	1100	1350	1600	1900	2150
STD* LAP	600	900	1150	1450	1750	2100	2450	2800

ALL REINFORCEMENT SHALL BE 'STD LAP' UNO.

'STD* LAP' WILL BE NOTED ON RELEVANT SECTIONS & DETAILS.

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

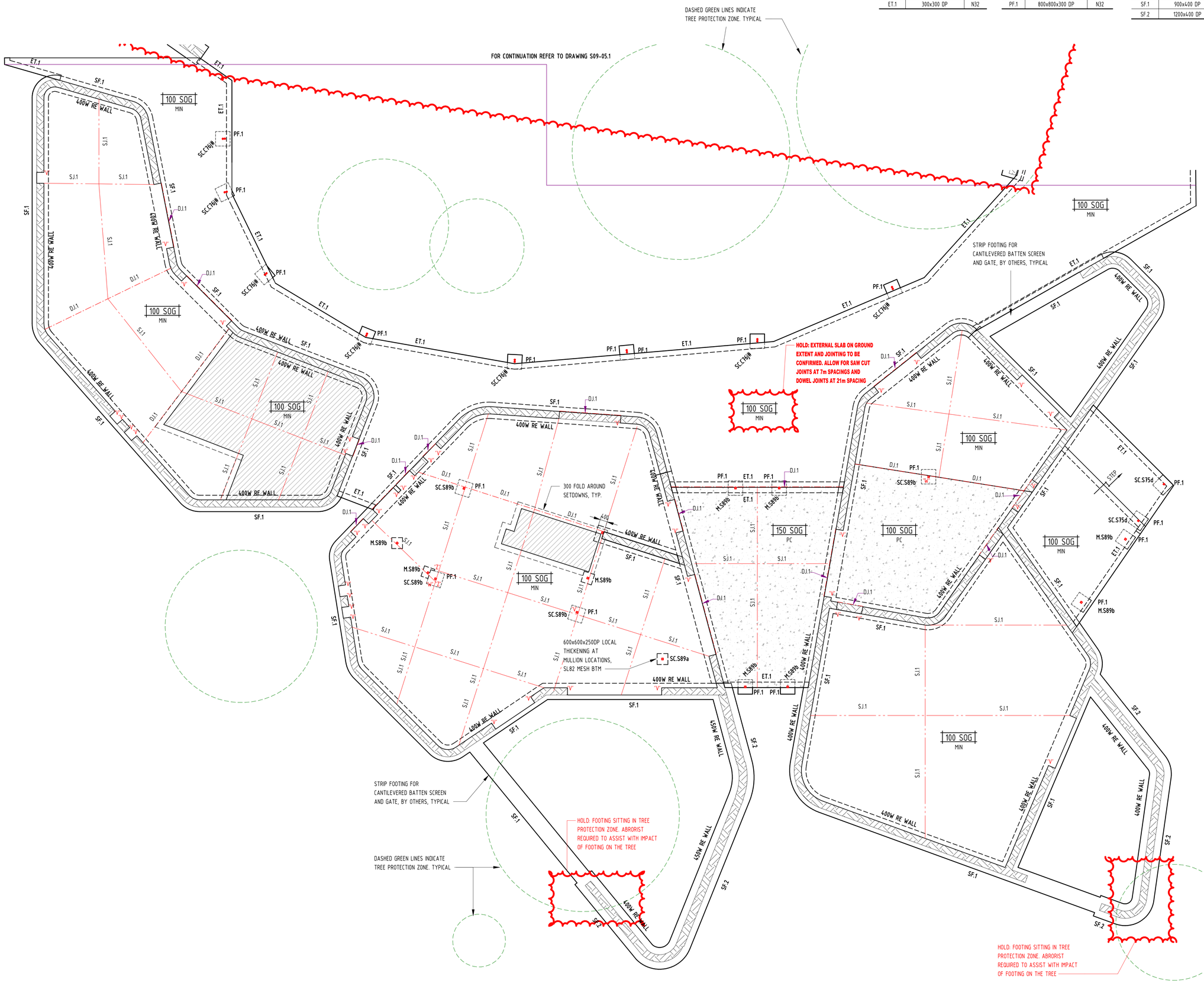
Title: GROUND GENERAL ARRANGEMENT PLAN SHEET 01

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By	Checked By	Approved By
D.G	C.B	C.B
Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)
Drawing No.		Revision
S09-05.1		B

SLAB / EDGE THK SCHED.		
MARK	SIZE	GRADE
ET.1	300x300 DP	N32

PAD FOOTING SCHED. (PF)		
MARK	SIZE	GRADE
PF.1	800x800x300 DP	N32

STRIP FOOTING SCHED. (SF)		
MARK	SIZE	GRADE
SF.1	900x400 DP	N32
SF.2	1200x400 DP	N32



HIGH LEVEL TENDER SUBMISSION

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SLAB ON GROUND NOTES

1. REFER TO DRAWING SERIES S01 FOR THE FOLLOWING:
   - GENERAL AND CONSTRUCTION NOTES
   - ABBREVIATIONS
   - NOTATIONS
   - SYMBOLOGY
2. FOR DETAILS OF R.L's, DIMENSIONS AND SET OUT ETC. REFER TO LATEST ARCHITECT'S DETAILS. ENGINEER TO BE NOTIFIED OF ANY VARIATION TO THAT SHOWN ON ENGINEER'S DRAWINGS PRIOR TO THE COMMENCEMENT OF ANY WORKS.
3. TYPICAL SLAB ON GROUND
   ALL SLAB ON GROUND UNLESS NOTED OTHERWISE ON PLAN TO BE XXXmm THICK MINIMUM TYPICAL THROUGHOUT

SLAB ON GROUND SCHEDULE (SOG)

SIZE	GRADE	TOP REO.	BOTTOM REO.
100 SOG	N32	SL82	N/A
100 SOG (PC)	N32	SL102	N/A
150 SOG (PC)	N32	SL102	N/A

REFER SUBGRADE PREPARATION ON DRAWING GENERAL NOTES.

SOG DETAILS SCHEDULE
SJ.1 - SLAB SAW CUT JOINT
DJ.1 - SLAB CRADLE DOWEL MOVEMENT JOINT.

4. CONCRETE PROPERTIES

CONCRETE PROPERTIES

ELEMENT	CONCRETE GRADE	CONCRETE COVER TOP	BTM	SIDE	SPECIAL REQUIREMENT
INTERNAL	N32	50mm	50mm	50mm	-
EXTERNAL	N32	50mm	50mm	50mm	-

5. SLAB SETDOWN DETAILS
   INDICATES EXTENT OF 50m MAXIMUM SETDOWN IN SLAB TO WET AREAS.
6. TRIMMER SCHEDULE
   'V', 'W', 'X', 'Y', 'Z' DENOTES TRIMMERS REINFORCEMENT LOCATIONS. REFER TYPICAL DETAILS.
7. SLAB TYPE
   INDIACTES EXTENT OF POLISHED CONCRETE
   a. HOLCIM GEOSTONE CONCRETE TO BE USED. REFER TO ARCHITECTURAL DRAWINGS FOR FINISHES AND SPECIFICATIONS.
   b. SL102 MESH TO BE LOAD THROUGH WITH SUFFICIENT TOP COVER TO ALLOW FOR GRINDING AND POLISHING.
   c. SLAB TO BE POURED ON 2 LAYERS OF LUBRICATED DAMP PROOF MEMBRANE.
   d. POLISHED AREAS TO BE POURED 28 DAYS AFTER CASTING OF SURROUNDING SLABS TYPICAL.

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

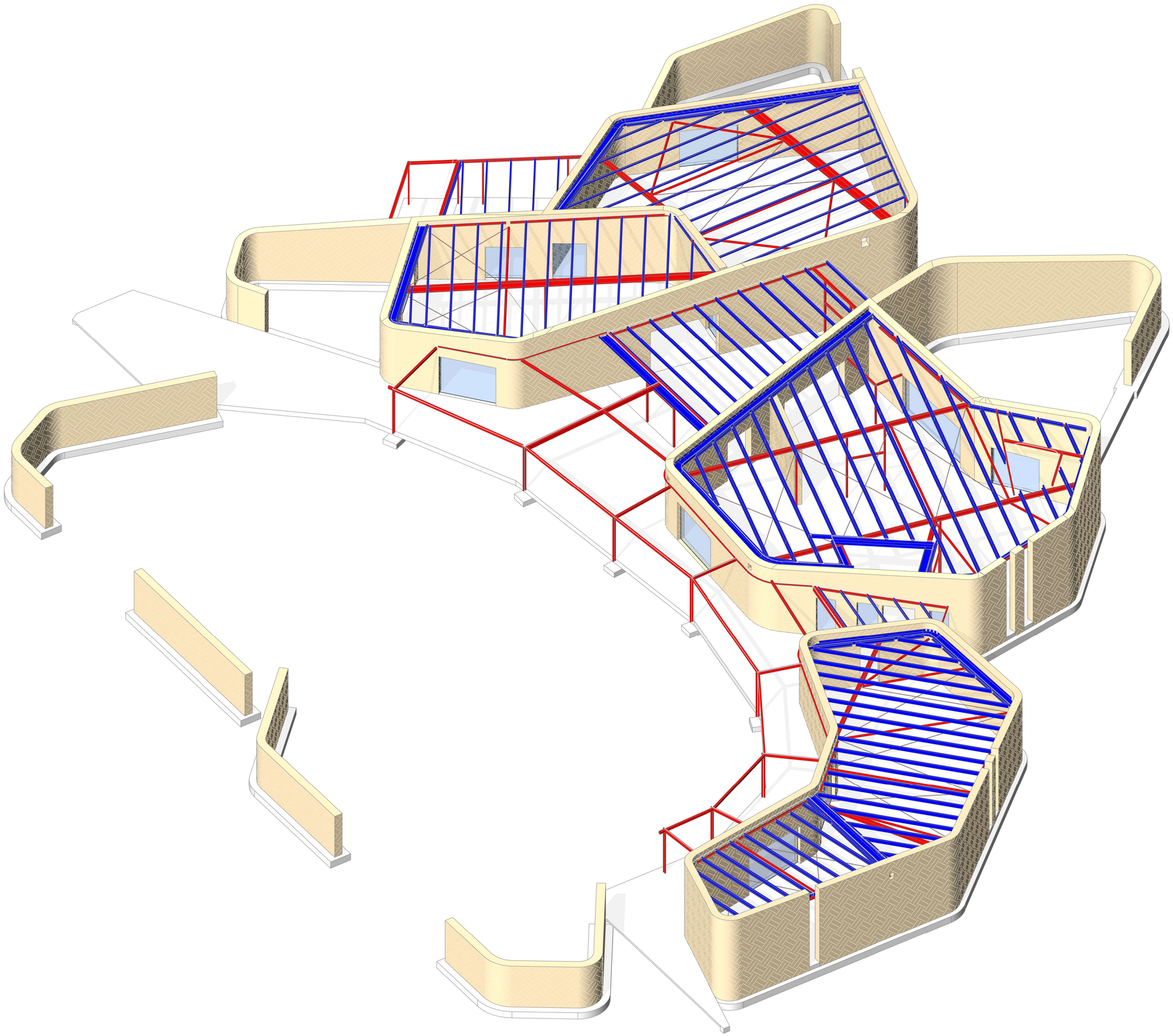
Title: GROUND
GENERAL ARRANGEMENT PLAN
SHEET 02

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By	Checked By	Approved By
D.G	C.B	C.B
Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)

Drawing No. S09-05.2 Revision B

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

PLOT DATE: 30/07/2026 9:24:15 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/V24.105_29385_WAVE ROCK DISCOVERY CENTRE.rvt



HIGH LEVEL TENDER SUBMISSION

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STEELWORK ISOMETRIC VIEW NOTES

1. REFER TO DRAWING SERIES S01 FOR THE FOLLOWING:
   - GENERAL AND CONSTRUCTION NOTES
   - ABBREVIATIONS
   - NOTATIONS
   - SYMBOLOGY
2. FOR DETAILS OF R.L.s, DIMENSIONS AND SET OUT ETC. REFER TO LATEST ARCHITECT'S DETAILS. ENGINEER TO BE NOTIFIED OF ANY VARIATION TO THAT SHOWN ON ENGINEER'S DRAWINGS PRIOR TO THE COMMENCEMENT OF ANY WORKS.
3. THE ISOMETRIC VIEW IS A COMPLEMENTARY VIEW TO BE READ IN-CONJUCTION WITH THE CORRESPONDING LEVEL SERIES OF DRAWINGS AND NOT TO BE SOLELY USED TO CONSTRUCT OFF.
4. LEGEND

DENOTES HOT ROLLED STEELWORK ELEMENT

DENOTES COLD FORM STEELWORK ELEMENT

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Environmental Management ISO 14001:2015

Client
HYDEN PROGRESS ASSOCIATION

Project Name
KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title
ROOF FRAMING
ISOMETRIC VIEW

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By	Checked By	Approved By
D.G	C.B	C.B
Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)
Drawing No.		Revision
S11-25.0		B

FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

PLOT DATE: 30/07/2026 9:24:25 AM FILENAME: Autodesk Docs://29385 - WAVE ROCK DISCOVERY CENTRE/V24.10.5_29385_WAVE ROCK DISCOVERY CENTRE.rvt

'T' BAR LINTEL SCHEDULE

ALL LINTELS TO MINIMUM 300 GRADE PLATE AND BEAR MINIMUM OF 250mm ON WALLS EACH SIDE OF OPENINGS.

LB.1 - MAX 2.7m OPENING

BOTTOM PLATE - 300x16
VERTICAL PLATE - 200x12
TOP HAT - NONE

LB.2 - MAX 5.2m OPENING

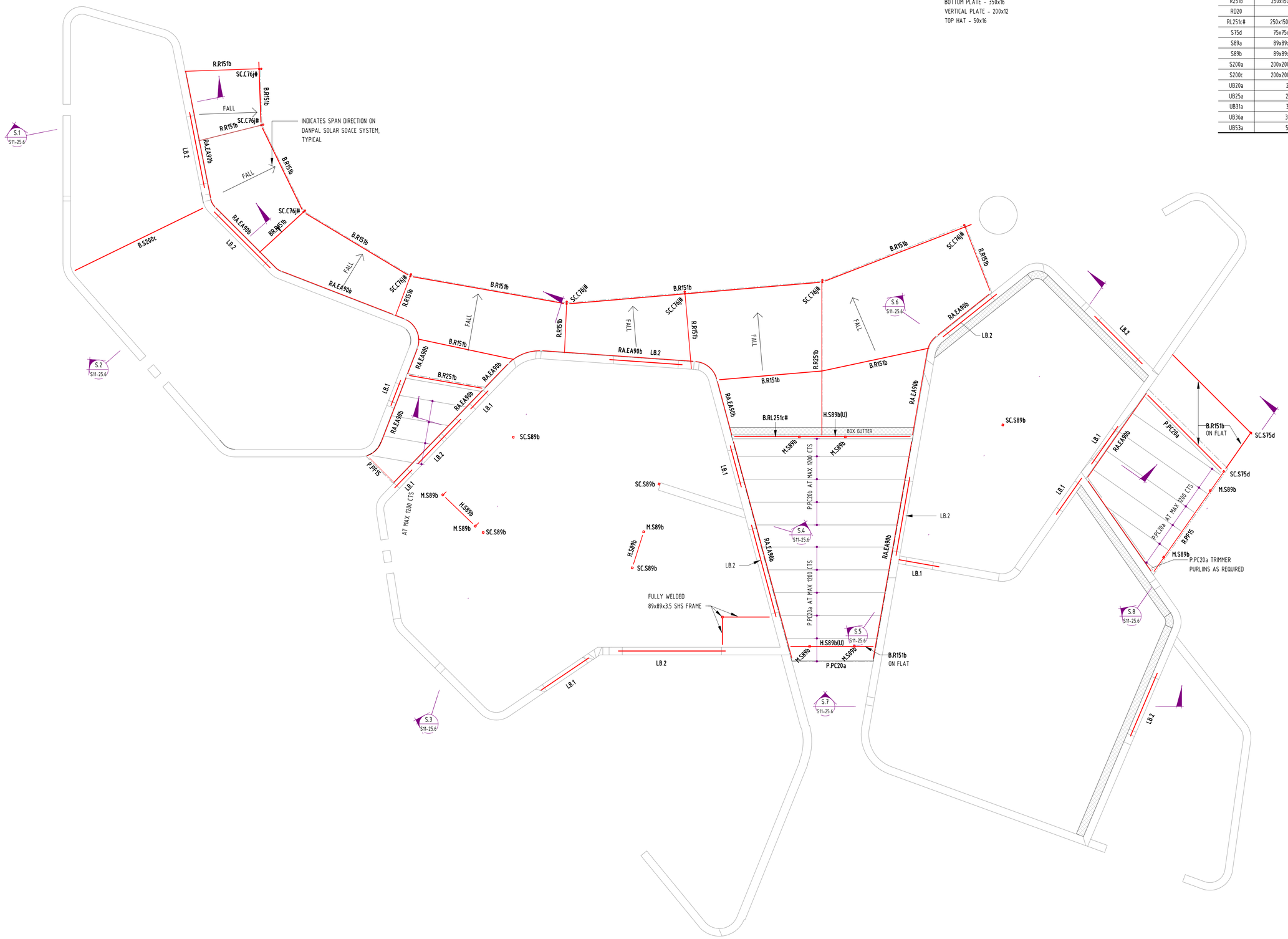
BOTTOM PLATE - 350x16
VERTICAL PLATE - 200x12
TOP HAT - 50x16

FRAMING SCHEDULE (COLD FORMED)

MARK	SIZE
PC15c	C150-15
PC20a	C200-15
PC20b	C200-19
PC20c	C200-24
PZ15c	Z150-15
PZ15e	Z150-24
PZ20a	Z200-15

FRAMING SCHEDULE (HOT ROLLED)

MARK	SIZE
C76h#	76.1x3.6 CHS (250)
C76j#	76.1x4.5 CHS (250)
C114a	114.3x3.2 CHS (350)
EA90b	90x90x8EA
PF15	150PFC
PF23	230PFC
R151b	150x100x5.0 RHS (350)
R251b	250x150x6.0 RHS (350)
RD20	20ROD
RL251c#	250x150x8 RHS (450L0)
S75d	75x75x4.0 SHS (350)
S89a	89x89x3.5 SHS (350)
S89b	89x89x5.0 SHS (350)
S200a	200x200x5.0 SHS (350)
S200c	200x200x9.0 SHS (350)
UB20a	200UB18.2
UB25a	250UB25.7
UB31a	310UB32.0
UB36a	360UB44.7
UB53a	530UB82.0



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FRAMING NOTES

1. REFER TO DRAWING SERIES S01 FOR THE FOLLOWING:
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   - NOTATIONS
   - SYMBOLOGY
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3. FOR FRAMING ELEVATIONS REFER TO S11-25.6
4. **POST FIXED CONNECTIONS**
   ADG-CDS OR EQUIVALENT CONTRACTOR TO PROVIDE HIT PREVENTION (GPR SCANNING) SERVICES FOR ALL CUT AND/OR CORE LOCATIONS. ADG-CDS REPORT TO BE REFFERED TO ADG ENGINEERS FOR REVIEW AND APPROVAL.
   ADG-CDS OR EQUIVALENT CONTRACTOR TO PROOF TEST ALL NOMINATED ANCHORS. ADG-CDS REPORT TO BE REFFERED TO ADG ENGINEERS FOR REVIEW AND APPROVAL.
5. **FRAMING NOTATION**
   B.R75b(U)
   B. - FRAMING USAGE (BEAM, STRUT, COLUMN etc.)
   R - MEMBER PROFILE
   75 - PRIMARY MEMBER SIZE
   b - SECONDARY MEMBER SIZE
   (U) - MEMBER LOCATION

PURLIN, GIRTS & JOISTS NOTES

1. ENSURE ALL ROOF PURLIN AND GIRT LAPS ARE MIN. OF 15% OF ADJACENT SPAN WHERE SHOWN ON PLAN.
2. PROVIDE M10 HOOK BOLTS FROM PURLINS TO SUPPORT X BRACING AT 1/4 POINTS APPROX.
3. PROVIDE BRIDGING AS STATED ON PLANS.
4. STEEL FABRICATOR TO ALLOW FOR AND PROVIDE ALL PURLIN TRIMMERS AND BATTENS BETWEEN PURLINS AS REQUIRED TO SUPPORT AND/OR CONNECT ROOF SHEETING, CAPPINGS, FLASHINGS AND BOX GUTTERS ETC.
5. PURLIN CENTRES NOTED ARE MAXIMUM & FABRICATOR TO CONFIRM ROOF SHEETING PROFILE FOR POSSIBLE ADJUSTMENT TO END PURLIN SPACING TO SUIT ROOF SHEETING MANUFACTURER'S SPECIFICATION.

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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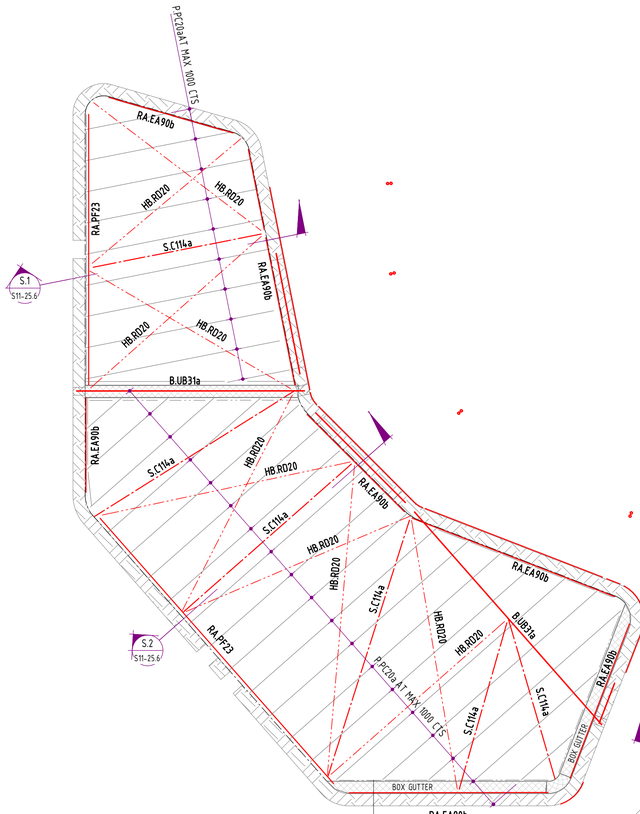
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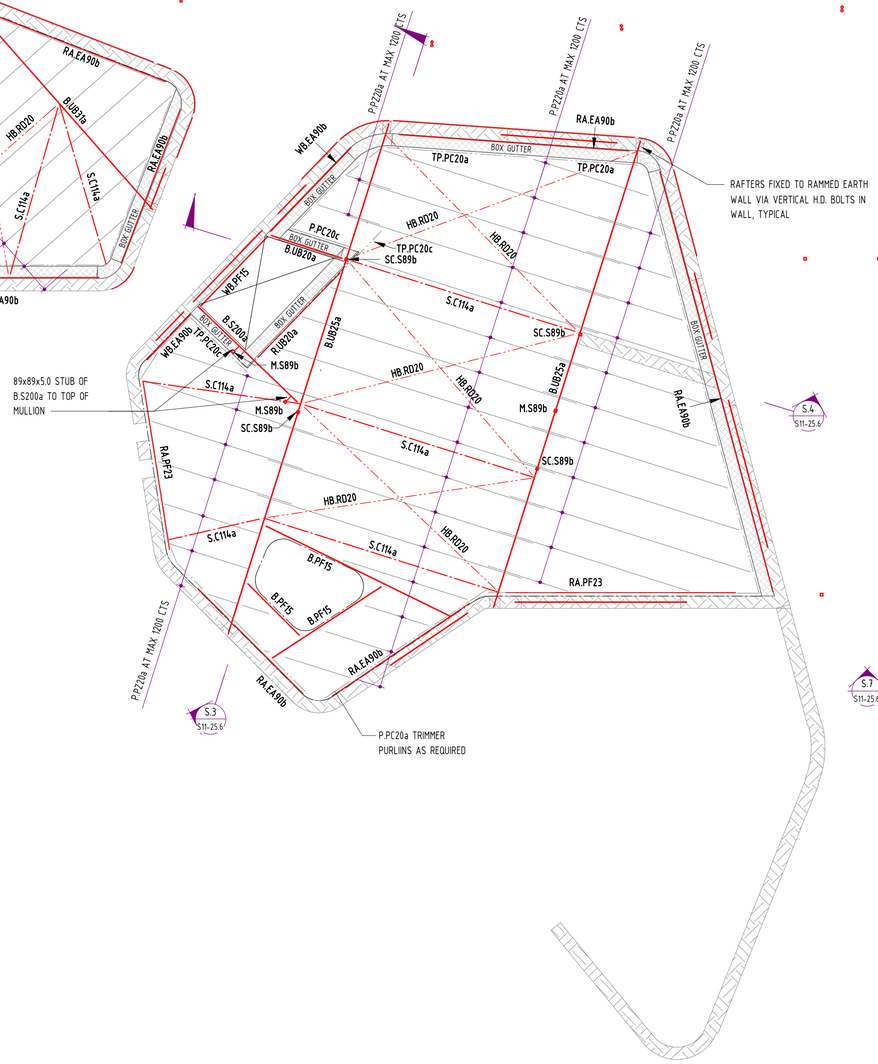
Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

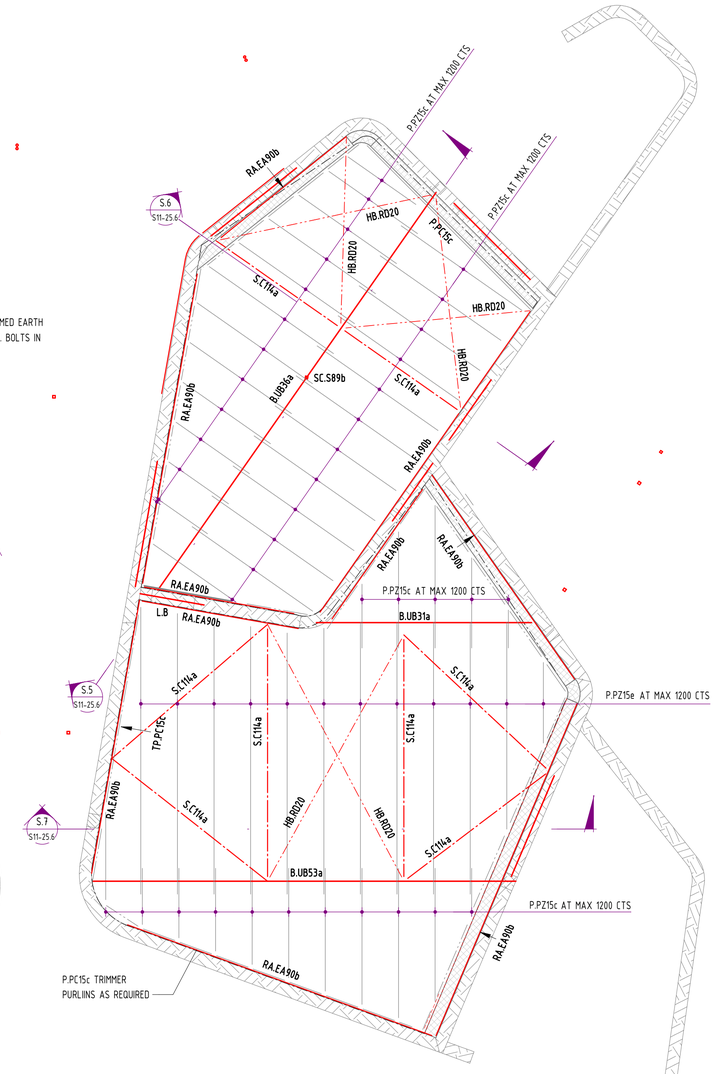
Title: LOWER ROOF FRAMING LAYOUT

Discipline: STRUCTURAL	Status: HIGH LEVEL
Designed By: D.G	Checked By: C.B / Approved By: C.B
Project No.: 29385.001	Drawn By: J.B / Scale: 1 : 100 (at A1)
Drawing No.: S11-25.1	Revision: B





RAFTERS FIXED TO RAMMED EARTH WALL VIA VERTICAL H.D. BOLTS IN WALL, TYPICAL



'T' BAR LINTEL SCHEDULE

ALL LINTELS TO MINIMUM 300 GRADE PLATE AND BEAR MINIMUM OF 250mm ON WALLS EACH SIDE OF OPENINGS.

LB.1 - MAX 2.7m OPENING

BOTTOM PLATE - 300x16
VERTICAL PLATE - 200x12
TOP HAT - NONE

LB.2 - MAX 5.2m OPENING

BOTTOM PLATE - 350x16
VERTICAL PLATE - 200x12
TOP HAT - 50x16

FRAMING SCHEDULE (COLD FORMED)

MARK	SIZE
PC15c	C150-15
PC20a	C200-15
PC20b	C200-19
PC20c	C200-24
PZ15c	Z150-15
PZ15e	Z150-24
PZ20a	Z200-15

FRAMING SCHEDULE (HOT ROLLED)

MARK	SIZE
C76h#	76.1x3.6 CHS (250)
C76j#	76.1x4.5 CHS (250)
C114a	114.3x3.2 CHS (350)
EA90b	90x90x8EA
PF15	150PFC
PF23	230PFC
R151b	150x100x5.0 RHS (350)
R251b	250x150x6.0 RHS (350)
RD20	20ROD
RL251c#	250x150x8 RHS (450L0)
S75d	75x75x4.0 SHS (350)
S89a	89x89x3.5 SHS (350)
S89b	89x89x5.0 SHS (350)
S200a	200x200x5.0 SHS (350)
S200c	200x200x9.0 SHS (350)
UB20a	200UB18.2
UB25a	250UB25.7
UB31a	310UB32.0
UB36a	360UB44.7
UB53a	530UB82.0

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FRAMING NOTES

1. REFER TO DRAWING SERIES S01 FOR THE FOLLOWING:
   - GENERAL AND CONSTRUCTION NOTES
   - ABBREVIATIONS
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3. FOR FRAMING ELEVATIONS REFER TO S11-25.6
4. **POST FIXED CONNECTIONS**
   ADG-CDS OR EQUIVALENT CONTRACTOR TO PROVIDE HIT PREVENTION (GPR SCANNING) SERVICES FOR ALL CUT AND/OR CORE LOCATIONS. ADG-CDS REPORT TO BE REFFERED TO ADG ENGINEERS FOR REVIEW AND APPROVAL.
   ADG-CDS OR EQUIVALENT CONTRACTOR TO PROOF TEST ALL NOMINATED ANCHORS. ADG-CDS REPORT TO BE REFFERED TO ADG ENGINEERS FOR REVIEW AND APPROVAL.
5. **FRAMING NOTATION**
   B.R75b(U)
   B. - FRAMING USAGE (BEAM, STRUT, COLUMN etc.)
   R - MEMBER PROFILE
   75 - PRIMARY MEMBER SIZE
   b - SECONDARY MEMBER SIZE
   (U) - MEMBER LOCATION

PURLIN, GIRTS & JOISTS NOTES

1. ENSURE ALL ROOF PURLIN AND GIRT LAPS ARE MIN. OF 15% OF ADJACENT SPAN WHERE SHOWN ON PLAN.
2. PROVIDE M10 HOOK BOLTS FROM PURLINS TO SUPPORT X BRACING AT 1/4 POINTS APPROX.
3. PROVIDE BRIDGING AS STATED ON PLANS.
4. STEEL FABRICATOR TO ALLOW FOR AND PROVIDE ALL PURLIN TRIMMERS AND BATTENS BETWEEN PURLINS AS REQUIRED TO SUPPORT AND/OR CONNECT ROOF SHEETING, CAPPINGS, FLASHINGS AND BOX GUTTERS ETC.
5. PURLIN CENTRES NOTED ARE MAXIMUM & FABRICATOR TO CONFIRM ROOF SHEETING PROFILE FOR POSSIBLE ADJUSTMENT TO END PURLIN SPACING TO SUIT ROOF SHEETING MANUFACTURER'S SPECIFICATION.

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Environmental Management ISO 14001:2015

Client: HYDEN PROGRESS ASSOCIATION

Project Name: KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

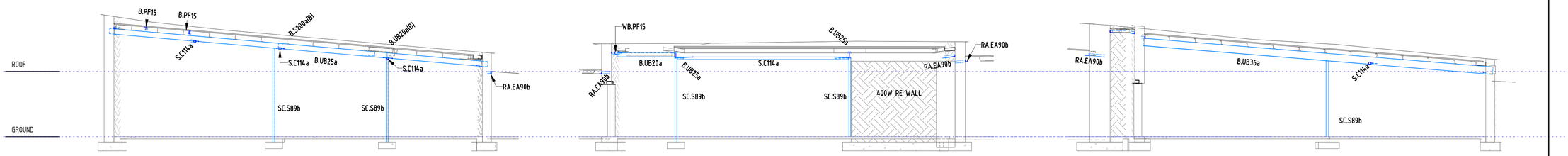
Title: UPPER ROOF FRAMING LAYOUT

Discipline	Status
STRUCTURAL	HIGH LEVEL
Designed By: D.G	Checked By: C.B	Approved By: C.B
Project No.: 29385.001	Drawn By: J.B	Scale: 1 : 100 (at A1)
Drawing No.: S11-25.2	Revision: B



SECTION S.1
SCALE 1 : 100 S11-25.1

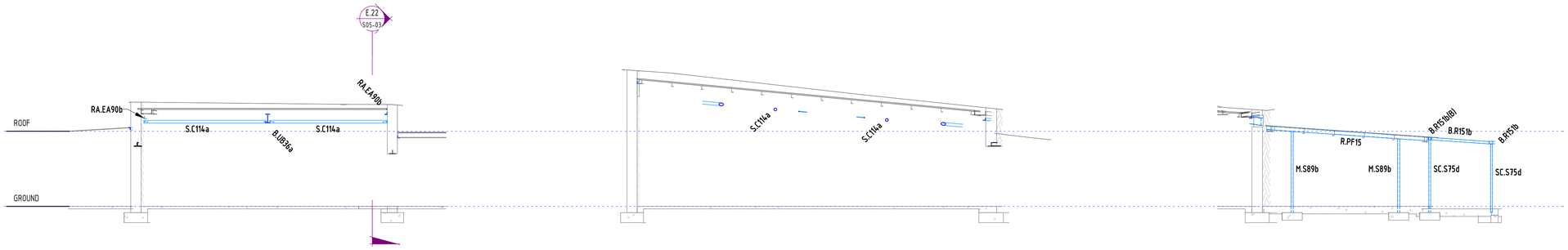
SECTION S.2
SCALE 1 : 100 S11-25.1



SECTION S.3
SCALE 1 : 100 S11-25.1

SECTION S.4
SCALE 1 : 100 S11-25.1

SECTION S.5
SCALE 1 : 100 S11-25.1



SECTION S.6
SCALE 1 : 100 S11-25.1

SECTION S.7
SCALE 1 : 100 S11-25.1

SECTION S.8
SCALE 1 : 100 S11-25.1

HIGH LEVEL TENDER SUBMISSION

PRINT IN COLOUR

Rev	Date	Description	By	Chk
B	30.07.26	HIGH LEVEL TENDER SUBMISSION	JB	CB
A	01.07.26	ISSUE FOR COORDINATION	JB	CB

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client
HYDEN PROGRESS ASSOCIATION

Project Name
KATTER KICH DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

Title
STEEL FRAMING WALL ELEVATIONS
SHEET 01

Discipline		Status
STRUCTURAL		HIGH LEVEL
Designed By	Checked By	Approved By
D.G	C.B	C.B
Project No.	Drawn By	Scale
29385.001	J.B	1 : 100 (at A1)

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Revision B

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FULL SIZE ON ORIGINAL 0 10 20 30 40 50 60 70 80 90 100mm

FOCUSWA CONSULTING

CONCEPT DESIGN REPORT

ELECTRICAL SERVICES

KATTER KICH DISCOVERY CENTRE

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REVISION REGISTER

Rev	Date	Revision Details	Signatures		
			Originator	Reviewed	Approved
A	02.04.2026	For Information	FWA	PRJ	PRJ

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1 INTRODUCTION

1.1 General

This concept design report identifies the basis of the electrical, communications and general extra-low voltage design for the proposed Katter Kich Discovery Centre at Hyden, WA.

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1.2 Scope of Report

This report provides a description overview of:

- Existing Utility Connections
- Main site infrastructure related to the project
- Back up Generator provision.
- Power infrastructure reticulation
- General power services
- Internal lighting
- Emergency lighting
- External lighting
- Communications
- MATV services
- Electronic security services
- Photo Voltaic System

This report is not intended to identify specific components or elements of the services, it provides only the extent and level of service to be included, as such this report should not be used for tendering or construction.

1.3 Information Source

The information in this return brief is based on the following information:

- Site Inspection.
- Architectural design drawings
- Nearmaps, Google maps and Google street view images
- Dial Before You Dig information

1.4 Terminology

The following abbreviations are used throughout this document:

- SMSB: Site Main Switchboard
- BMSB: Building Main Switchboard
- RCD: Residual Current Device
- PoS: Point of Supply
- PoA: Point of Attachment
- MD: Maximum demand

2 PROJECT SITE

2.1 Location

The existing site is located at lots 23 & 24 Cnr of McPherson & Marshall Street, Hyden WA.
The site is currently now accommodates one single building, which is the art studio / gallery.

Focus Consulting WA understands that the two lots will be amalgamated into one single lot.



Figure 1: Existing Site Location

3 ELECTRICAL SERVICES INFRASTRUCTURE

3.1 Existing Western Power Supply

There is an existing Western Power Uni-pillar located in the southwest corner of lot 23 which serves the site main switchboard located inside the art gallery.



Figure 2: Existing Western Power Uni-pillar & Overhead WPC services along Marshall St.

The estimated Western Power capacity to the site is 32Amps three phase which is a standard WPC connection.

There is existing overhead high voltage and low voltage Western Power services installed along Marshall Street and McPherson Street as indicated on the survey drawing. The proposed building will need to be setback from the overhead services to comply with Western Power standards.



Figure 3: Existing Western Power Overhead WPC services along McPherson St.

3.2 Proposed Western Power Supply

We understand the proposed building to be in the region of 900m^2 in floor area, based on 150VA/m^2 for commercial buildings with café facilities, the estimated project electrical demand will be in the region of 190Amps three phase.

A Western Power capacity upgrade will be required to cater for the increased power demand and should be provided through a pillar connection, negating the need for a transformer connection.

The pillar will need to be located in a dedicated 1m x 1m exclusion zone on the project lot, tight to the street boundary.

3.3 Site Main Switchboard

A new external site main switchboard will be required to be provided within 30m of the proposed Western Power pillar connection. The new SMSB will contain the Western Power site master meter and the Service Protective Device (SPD), in addition to circuit breakers protecting outgoing cabling to the following:

- A building main switchboard located adjacent to the main foyer.
- A distribution board for the proposed Multipurpose, theatre & kitchen building section.
- EV car charging stations
- Connection for a temporary diesel generator.

The Service Protective Device located within the switchboard must be accessible to Western Power at all times.
The site main switchboard will also accommodate provisions for the connection of a standby generator, should the client require the site to operate off the generator supply only as a temporary measure. The site main switchboard will be configured such that all outgoing circuitry can operate off the generator, i.e no 'essential' or 'non-essential' arrangement.

3.4 Cable Distribution

Power will be distributed to the Building Main Switchboard (BMSB) and distribution boards, originating from the SMSB by means of an underground conduit and pit system. The submain will be sized for initial power loads with 25% spare current carrying capacity.

3.5 Conduits

Spare conduits will be documented to facilitate moderate future requirements. All spare conduits will be provided with PVC insulated copper draw wiring.

The submain and conduit routes throughout the site will be installed into a common service trench where practicable, to reduce trenching costs and to limit the risk of damage during excavations for future work.

Conduits will be sealed to prevent water and insect ingress, and when entering buildings, they shall be sealed with 150mm of expansion foam.

Spare capacity within the underground conduit system will be provided for future oval sports lighting, however will need to be extended in the future as required.

3.6 Cable Pits

Cable pits shall be designed with a minimum load rating equivalent to Class C.

Cable pits will be provided with a minimum of 4 x 50mm holes to facilitate drainage.

Unless requested otherwise, cable pits will not be buried.

3.7 Proposed Building Main Switchboard

A Building Main Switchboard (BMSB) will be located within the proposed buildings and will supply local general power and lighting services.

The switchboard will be a painted metal, front access type generally located in a service cupboard central within the building for ease of access.
Equipment will be logically arranged with physical space and electrical capacity for 25% increase of outgoing circuits. All equipment will be clearly labelled.

Circuit breakers will be used for circuit protection, circuit protection devices will be selected for discrimination to prevent a fault from opening any protective device other than the device immediately upstream of the fault. The protective device selectivity will isolate any fault to one circuit and to ensure the remaining services within that area remain operational until the fault is cleared. Residual current devices (RCD's) will be installed on all switchboards to protect all socket outlets and lighting circuits. All direct connected appliances will be RCD protected in accordance with AS3000:2018.

Separate distribution chassis will be provided for:-

- Lighting
- General power
- Mechanical services

Transient surge protection will be provided to each building switchboard in the form of a shunt diversion device.
A power analyser will be provided within the building main switchboard to enable checking of instantaneous voltage and current values of each phase. The power analyser will also be capable of logging peak current demand of each phase.

Power will be distributed to the Building Main Switchboard (BMSB) by means of an underground conduit and pit system or cable trays with ceiling and roof voids. The submain will be sized for initial power loads with 25% spare current carrying capacity. Spare conduits will be documented to any electrical service trench to facilitate moderate future requirements.

3.8 Standby Generator

Space needs to be provided for a external free standing standby generator whether temporary or permanent and to include truck access for delivery, pick up and re-fueling.

4 GENERAL LIGHTING

4.1 General

LED lighting will be provided throughout all areas of the project.
Luminaires will be provided to all internal areas utilising surface and recessed luminaires to provide lighting levels in accordance with AS1680 for general interior spaces.

Luminaire installation types, i.e. surface mounted, recessed or suspended will be selected to suit the projects reflected ceiling plans and acoustic requirements.

The lighting will be designed to achieve maintained illuminance values as recommended by AS 1680.2.31 Interior and workplace lighting, the key areas summarised as follows;

Area	Illumination Value (Lux)
General use (Multi-Purpose rooms etc)	240
Food prep & cooking	240
Offices / Reception / Library	320 – Dimmable.
Toilets/Changerooms	80
Corridors and other circulation spaces	40 (minimum)
Gift Shop	240Lux – Dimmable.
Exhibition / Gallery / Theatre	240Lux – Dimmable with scene selection

4.2 Exit and Emergency Lighting

In accordance with NCC Part E4, single point standalone exit signs and emergency lights are required throughout the new buildings. The function of the emergency lighting is to provide illumination to the requirements of the Building Code of Australia, to all designated egress routes.

Manually initiated automated test facilities will be provided within each respective switchboard to control all emergency lighting circuits, in accordance with AS 2293.

4.3 Car Park lighting

The car park lighting will be designed to meet the criteria's outlined below and as defined in AS 1158 (Lighting For Roads and Public Spaces) and utilise pole mounted LED luminaires designed to minimise light spillage.

The lighting will be designed in accordance with AS 1158.1 2020;

- PC3 for carparks
- PCD for disabled carpark bays

Pole mounted luminaires will be designed to provide general and security lighting to the carpark, designed to minimise spill lighting to adjacent properties.

4.4 External Lighting

Artificial lighting will be provided externally to illuminate access ways, open areas providing both functional and security lighting during non-daylight hours.

The external lighting will be designed and effectively used to create atmosphere and the desired welcoming accessible ambience and contribute to a successful development.

Luminaire selection will consider vandal resistance and appearance to compliment the architectural design and shall have a light source efficacy exceeding 50lm/W.

The external lights will be controlled via new timeclock control system, located within the proposed building main switchboard.

4.5 Plant and Service Areas

Impact and robust lighting will be provided to all plant and service areas.

4.6 Lighting Control System

An intelligent lighting control system such as DALI is recommended to control the interior and exterior lighting for the project. The intelligent lighting control system will include motion sensors for energy control, scene control for events and time schedules to suit the clients requirements. Touch screens and manual switches will be provided to suit the desired space.

5 GENERAL POWER SERVICES

5.1 General Power Outlets

Power outlets located at 500mm above finished floor.

All outlets will be protected by residual current devices (earth leakage circuit breakers/safety switches) located within the main switchboard of the respective building.

All outlets will be marked with circuit numbers for maintenance purposes.

Outlets will be provided as required to the kitchen and specialist areas to suit the needs of the facility.

External service outlets will be provided around the building perimeter for connection of general cleaning equipment. External socket outlets will be lockable.

5.2 Power to Third Party Services

Power supplies will be provided mechanical and hydraulic services as required.

6 COMMUNICATIONS

6.1 Carrier Services

The lot is currently not provided with any telecommunications services connection from Telstra/NBN.

A new Telstra / NBN lead-in service will be required for the development.

6.2 General

The building infrastructure will provide a flexible high-speed platform for the data communication network with a facility to integrate IP telephony, audio visual and other media services.

The cabling network will be a totally flexible solution utilising fully patchable Cat 6 unshielded, copper twisted pair mediums.

A fully patchable system simplifies moves and changes within the network. PC's, workstations and telephones can be reassigned by re-patching local patch panels or outlets added by cabling to the local patch panel, thus eliminating disruptions and expensive cable reconfigurations.

The data cabling network infrastructure excludes electronic equipment and software necessary to effect connection between users and host/services (i.e. Hubs, routers, file servers, software/configuration, user licenses and the like).

6.3 Voice and Data Cabling System within Buildings

From the communication enclosure 4 pair Cat 6 unshielded twisted pair cable will be provided to each communications outlet. The Cat 6 cable will terminate at the communications enclosure on a patch panel. The patch panel will consist of multiple Cat 6, RJ45 sockets, one socket for each field outlet, mounted on a 19" free standing rack.

The voice and data cable system will be designed such that any outlet in the field can either be a voice or data outlet determined by the patching configuration at the patch panel.

The voice and data cabling system will support 1000 base T with all cable runs to outlets less than 85 metres.

6.4 Wireless Access Points

Data outlets will be positioned throughout the proposed development to facilitate future connection of wireless access routers.

7 MASTER ANTENNA TV

A Master Antennae Television (MATV) system will be provided throughout the proposed development. The system will deliver local Free to Air digital TV signals.

8 DIGITAL AUDIO-VISUAL SERVICES

Cabling will be provided to support video projection equipment or LED TV screens.

Focus Consulting WA will liaise with the nominated AV specialist installer to determine a solution for the Theatre, Gallery & Exhibition spaces.

9 SECURITY SYSTEMS

The new development will be provided with a new intruder detection system. The new system and shall comprise of the following:

- Security control panel.
- Access Control system.
- Data gathering panels located within the buildings.
- Infra-red motion detection devices throughout, connected to the security alarm panel.
- Magnetic reed switches located on all external doors which do not have motion detectors within rooms, e.g. stores, toilets, cleaners rooms, etc and are connected to the security alarm panel.
- Remote arming station near main building entry.
- Smoke detectors connected to individual 24 hour monitored zones on the security panel.
- Electronic access control to external doors as required.
- Video surveillance systems.

The preferred intruder detection and access control systems would be based on the Gallagher system or similar. When the system is switched ON, movement within the area covered by the motion detectors, unauthorized opening of any security device, or detection of smoke will cause an alarm. The alarm condition will report the alarm condition to the Central Monitoring Station via the telephone network.

Video surveillance will be provided to the external perimeter of the building an to all internal public spaces.

10 PHOTOVOLTAIC SYSTEM

Focus Consulting WA understand that a new photovoltaic system is required to site. The required capacity of the photovoltaic system at this stage is estimated to be 30kW.

11 FIRE DETECTION SYSTEM & OCCUPANT WARNING

An AS1670.1fire detection system is not deemed required based on the building being Class 9b and less than 3-storeys.

12 ELECTRICAL VEHICLE CHARGING

EV charging is deemed not to be required as the carpark is external. The building certifier will need to confirm if EV charging provision is required. Costs are excluded at this stage.

13 PROBABLE ORDER OF COST

The preliminary probable order of costs for the electrical services installation is provided below:

Project Katter Kich Discovery Centre
Project Reference 2526-155
Revision A
Issue Date 2/04/2026

Electrical Order of Probable Cost

Description	Unit	Quantity	Rate		Cost		Total
			Labour	Material	Labour	Material	
Authorities & Preliminary Costs							
Western Power Headworks (Estimate only)	Qty	1	$ 55,000.00	$ 55,000.00	$ 25,000.00	$ 25,000.00	$ 50,000.00
Telstra / NBN Headworks (Estimate only)	Qty	1	$ 20,000.00	$ 20,000.00	$ 10,000.00	$ 10,000.00	$ 20,000.00
As Constructed & Manuals	Qty	1	$ 1,500.00	$ 1,000.00	$ 1,500.00	$ 1,000.00	$ 2,500.00
Site Establishment costs	Qty	1	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 4,000.00
						Authorities & Preliminary Costs Subtotal	**$ 76,500.00**
Site Infrastructure							
Buildgng Main Switchboard	Qty	1	$ 10,000.00	$ 40,000.00	$ 10,000.00	$ 40,000.00	$ 50,000.00
New submain from SMSB to BMSB (Based on 50m)	CCC	10000	$ 6,000.00	$ 6,000.00	$ 6,000.00	$ 6,000.00	$ 12,000.00
Buildgng Distribution Board	Qty	1	$ 10,000.00	$ 20,000.00	$ 10,000.00	$ 20,000.00	$ 30,000.00
New submain from SMSB to DB (Based on 80m)	CCC	16000	$ 9,600.00	$ 9,600.00	$ 9,600.00	$ 9,600.00	$ 19,200.00
New underground conduits (LV)	Qty	400	$ 7.50	$ 7.50	$ 3,000.00	$ 3,000.00	$ 6,000.00
New underground conduits (ELV)	Qty	400	$ 7.50	$ 7.50	$ 3,000.00	$ 3,000.00	$ 6,000.00
New cable pits	Qty	6	$ 600.00	$ 800.00	$ 3,600.00	$ 4,800.00	$ 8,400.00
Trenching for new underground conduits (LV) (Based on 100m)	Qty	100	$ 35.00	$ 35.00	$ 3,500.00	$ 3,500.00	$ 7,000.00
Trenching for new underground conduits (ELV) (Based on 100m)	Qty	100	$ 35.00	$ 35.00	$ 3,500.00	$ 3,500.00	$ 7,000.00
New 30kW PV System	CCC	1	$ 20,000.00	$ 20,000.00	$ 20,000.00	$ 20,000.00	$ 40,000.00
Landscape Lighting	Qty	1	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 30,000.00
						Site Infrastructure Subtotal	**$ 215,600.00**
Proposed Building; Based on $/m2 Rates Only							
Proposed Development ($350/m2)	900 m2				$350/m2		$ 315,000.00
						Proposed Buildings Subtotal	**$ 315,000.00**
						TOTAL (Excluding GST)	**$ 607,100.00**

Exclusions:

- GST
- Builders work Items
- Contingency Allowance
- EV Charging Provision
- Carpark Lighitng.
- Regional Allowance - Prices Based on Perth Metro Rates
- Back up Diesel Generator
- Specalist Audio Visual Systems

End of Report.

KATTER KICH WAVE ROCK DISCOVERY CENTRE

ELECTRICAL SERVICES

POWER LEGEND

- SITE MAIN SWITCHBOARD
- DB = DISTRIBUTION BOARD
  BMSB = BUILDING MAIN SWITCHBOARD
- SWITCHBOARD OR CONTROL PANEL BY OTHER TRADES
- SUPPLY AUTHORITY POINT OF SUPPLY
- SINGLE SWITCHED SOCKET OUTLET
- DOUBLE SWITCHED SOCKET OUTLET
- 15A SWITCHED SOCKET OUTLET
- CL CLEANERS OUTLET. ENGRAVED "CLEANERS USE ONLY"
- PENDANT SWITCHED SOCKET OUTLET MOUNTED AT 1700AFF UOS.
- TWO CHANNEL CABLE DUCT WITH OUTLETS MOUNTED TO THE DUCT
- SINGLE GENERAL PURPOSE OUTLET (SURGE PROTECTED)
- SINGLE PHASE IP65 ISOLATOR MOUNTED ADJACENT TO THE EQUIPMENT
- THREE PHASE IP65 ISOLATOR MOUNTED ADJACENT TO THE EQUIPMENT
- SINGLE PHASE HARDWIRED CONNECTION TO THE EQUIPMENT
- THREE PHASE HARDWIRED CONNECTION TO THE EQUIPMENT
- IK INSECT KILLER
- P UNDERGROUND POWER CONDUIT
- T UNDERGROUND TELSTRA CONDUIT
- C UNDERGROUND COMMUNICATIONS CONDUIT
- OH EXISTING OVERHEAD SERVICES CONDUCTORS
- EP EXISTING UNDERGROUND POWER CONDUIT
- ET EXISTING UNDERGROUND TELSTRA CONDUIT

#Px	INDICATES QUANTITY & DIAMETER OF POWER CONDUIT '#' DENOTES QUANTITY OF CONDUITS 'x' DENOTES CONDUIT DIAMETER (mm)
#Cx	INDICATES QUANTITY & DIAMETER OF COMMUNICATIONS CONDUIT '#' DENOTES QUANTITY OF CONDUITS 'x' DENOTES CONDUIT DIAMETER (mm)
#SPx	INDICATES QUANTITY & DIAMETER OF SPARE CONDUIT '#' DENOTES QUANTITY OF CONDUITS 'x' DENOTES CONDUIT DIAMETER (mm)
#Tx	INDICATES QUANTITY & DIAMETER OF TELSTRA CONDUIT '#' DENOTES QUANTITY OF CONDUITS 'x' DENOTES CONDUIT DIAMETER (mm)

- P1 NEW ELECTRICAL CABLE PIT. ACO CABLE MATE TYPE 99H COMPLETE WITH A GALVANISED STEEL POWERLOK LID BURIED 300mm BELOW FINISHED GROUND LEVEL.
- P2 NEW ELECTRICAL CABLE PIT. ACO CABLE MATE TYPE 66H COMPLETE WITH A GALVANISED STEEL POWERLOK LID FLUSHED WITH GROUND LEVEL.
- C2 NEW COMMUNICATIONS CABLE PIT. ACO CABLE MATE TYPE 66H COMPLETE WITH A GALVANISED STEEL POWERLOK LID FLUSHED WITH GROUND LEVEL.
- EXISTING TELSTRA CABLE PIT
- E EARTH PIT

COMMUNICATIONS LEGEND

- COM COMMUNICATIONS RACK
- SINGLE CAT6 RJ45, TELECOMMUNICATIONS OUTLET
- W CEILING MOUNTED CAT6 RJ45 DATA OUTLET FOR WIRELESS ACCESS POINT
- n CAT6 RJ45, TELECOMMUNICATIONS OUTLET MOUNTED AT 400AFF UOS.
  'n' DENOTES NUMBER OF OUTLETS TO EACH WALL PLATE

NBN LEGEND

- NTD NETWORK TERMINATION DEVICE
- PCD PREMISES CONNECTION DEVICE

LIGHTING LEGEND

(REFER TO THE SPECIFICATION FOR REQUIREMENTS)

- SURFACE MOUNTED LUMINAIRE - 1200mm
- M SURFACE MOUNTED LUMINAIRE WITH INTEGRAL MOTION SENSOR
- M EM SURFACE MOUNTED LUMINAIRE WITH INTEGRAL MOTION SENSOR & EMERGENCY BATTERY PACK
- RECESSED LUMINAIRE - 1200x300mm
- RECESSED LUMINAIRE - 600x600mm
- CONTINUOUS LIGHTING SYSTEM
- TRACK SYSTEM SPOTLIGHT LUMINAIRE
- TRACK SYSTEM LINEAR LUMINAIRE
- RECESSED CIRCULAR DOWNLIGHT
- WALL MOUNTED LUMINAIRE
- SINGLE POLE MOUNTED LUMINAIRE
- RECESSED EMERGENCY LUMINAIRE
- SURFACE MOUNTED EMERGENCY LUMINAIRE
- EXIT SIGN
  (DS DENOTES DOUBLE SIDED)
- DIRECTIONAL EXIT SIGN
  (DS DENOTES DOUBLE SIDED)
- WALL MOUNTING BRACKET

SWITCHING LEGEND

- SINGLE SWITCH & SWITCH WIRE
  'n' DENOTES NUMBER OF SWITCH GANGS PER SWITCH PLATE
- T ELECTRONIC TIME DELAY SWITCH - CLIPSAL 2031VETR3
- n SINGLE PUSH-BUTTON SWITCH 'n' DENOTES NUMBER OF PUSH BUTTONS PER PLATE - DIGITAL INPUT TO LCS
- SWITCH WITH LED INDICATOR MOUNTED 1000AFF
- DIMMED SWITCH WIRE CIRCUIT
- M1 MOTION SENSOR - REFER SPECIFICATION
- MR SLAVE MOTION SENSOR TYPE M1 - REFER SPECIFICATION
- M2 MOTION SENSOR - TWO CHANNEL - REFER SPECIFICATION
- PE CELL LOCATION
- LSP LIGHT SWITCH PANEL
- DENOTES SWITCHING CONNECTION
- DENOTES SWITCHING CROSSOVER
- LSP TO SEPARATE SWITCH ON LIGHT SWITCH PANEL
- SWn TO SEPARATE SWITCH ON LOCAL SWITCH PLATE
  'n' SWITCH NUMBER
- S1 DENOTES LCS LIGHTING CONTROL STRATEGY No.1

SECURITY LEGEND

- SEC SECURITY CONTROL PANEL
- DGP DATA GATHERING PANEL
- RAS SECURITY KEYPAD. REMOTE ARMING STATION
- S MOVEMENT DETECTOR (PIR)
- 360° S 360° PIR MOVEMENT DETECTOR
- DOOR CONTACT/REED SWITCH (MIN. 1 PER DOOR LEAF)
  HD - HEAVY DUTY FOR ROLLER DOOR
- INTERNAL SECURITY SCREAMER
- S SECURITY STROBE & SIREN
- SA SMOKE DETECTOR WIRED TO SECURITY SYSTEM
- HA HEAT DETECTOR WIRED TO SECURITY SYSTEM

AUDIO VISUAL LEGEND

- A HDMI OUTLET COMPLETE WITH HDMI CABLE INTERCONNECTION

SMATV LEGEND

- SMATV MATV 'HEAD END' EQUIPMENT
- ROOF MOUNTED ANTENNA
- n TELEVISION OUTLET n = TYPE
  TV - FREE TO AIR
- M MATV SPLITTER & AMPLIFIER LOCATION

MISCELLANEOUS LEGEND

- FB FLOOR BOX
- INV PHOTOVOLTAIC SYSTEM INVERTER
- PV PHOTOVOLTAIC SOLAR PANEL

LIGHTING AND CEILING FAN VARIANTS

CLn	CONTINUOUS LINEAR LUMINAIRE
En	EMERGENCY LUMINAIRE
Dn	DOWNLIGHT
Gn	LANDSCAPE LUMINAIRE
Ln	LINEAR LUMINAIRE
PMn	POLE MOUNTED LUMINAIRE
Tn	TRACK LUMINAIRE
Vn	WALL LUMINAIRE

VARIANTS

AB	OUTLET MOUNTED ABOVE BENCH
CM	DEVICE MOUNTED ON UNDERSIDE OF CEILING
CT	COOKTOP
DW	DISHWASHER
F	FRIDGE OUTLET
HWU	HOT WATER UNIT
IC	DENOTES DEVICE IN CEILING SPACE
MW	MICROWAVE
OV	OVEN
RH	RANGEHOOD
RM	ROOF MOUNTED
RS	ROLLER SHUTTER
UB	DEVICE MOUNTED UNDER BENCH
(E)	EXISTING DEVICE TO REMAIN
(R)	EXISTING DEVICE TO BE REMOVED

PRELIMINARY ISSUE
REFER TO REVISION COLUMN

DATE	No.	REVISION	CHKD
23.07.26	A	ISSUED FOR DESIGN DEVELOPMENT	PJ

CLIENT
HYDEN PROGRESS ASSOCIATION

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
LEGEND OF SYMBOLS

DATE	I 10/07/26	DWG	REV
SCALE @A1	I N.T.S	E.01	A
JOB No	I 22580		
DRAWN BY	I MR		
CHECKED	I JP		

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PRELIMINARY ISSUE
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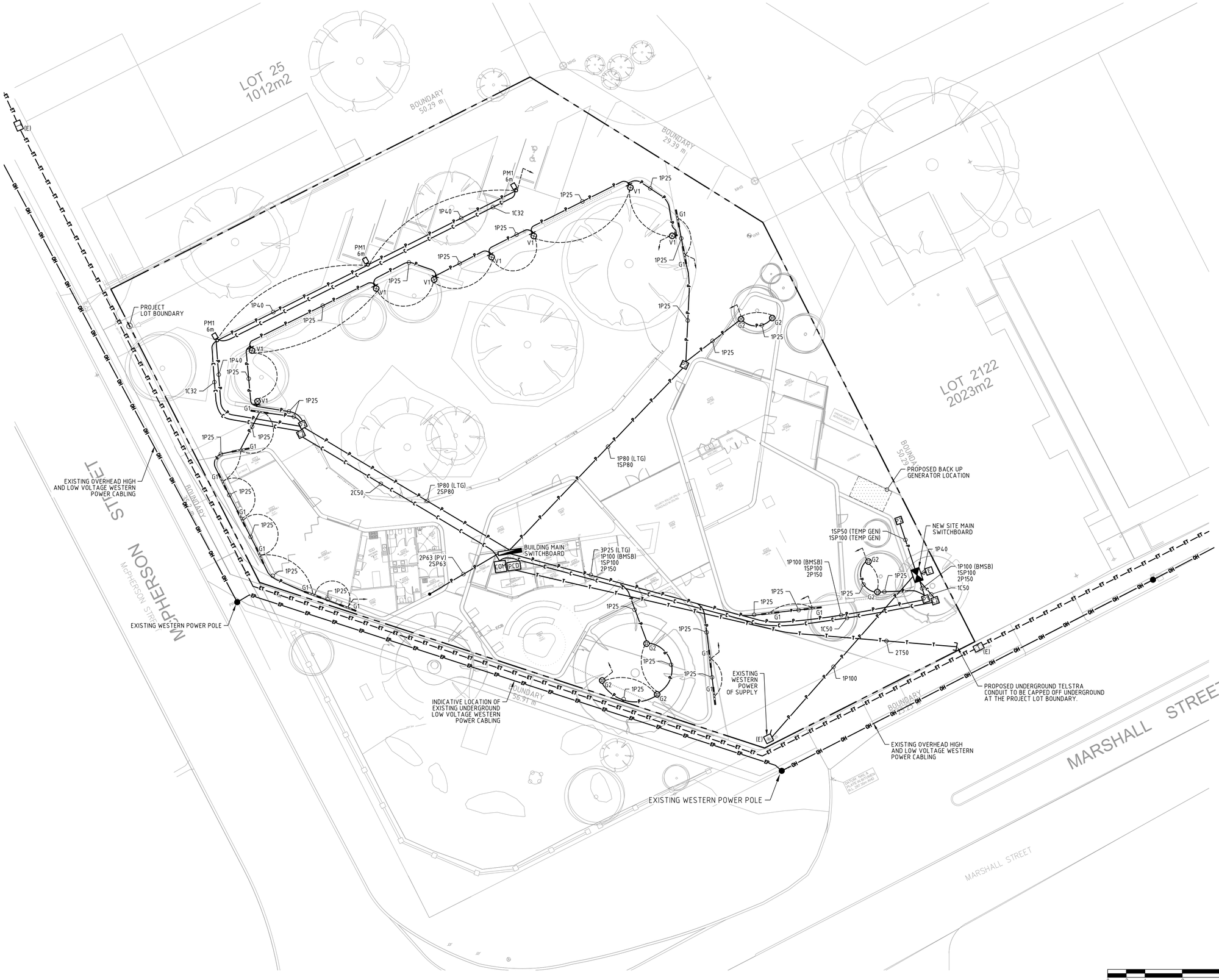
PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
EXISTING SITE PLAN

		DWG	REV
DATE	I 10/07/26		
SCALE @A1	I 1:250		
JOB No	I 22580		
DRAWN BY	I MR	E.02	A
CHECKED	I JP		

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HYDEN PROGRESS ASSOCIATION

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PO BOX 108, LEEDERVILLE WA 6007
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FWA PROJ# 2526-155

Site Architecture Studio
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T 08 9226 5661
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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
PROPOSED SITE PLAN

DATE	I 10/07/26	DWG	REV
SCALE @A1	I 1:200	E.03	A
JOB No	I 22580		
DRAWN BY	I MR		
CHECKED	I JP		

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

1/07/2026 5:59:04 PM



23.07.26	A	ISSUED FOR DESIGN DEVELOPMENT	PJ
DATE	No.	REVISION	CHKD

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
MULTIPURPOSE BUILDING - PROPOSED POWER & ELV SERVICES

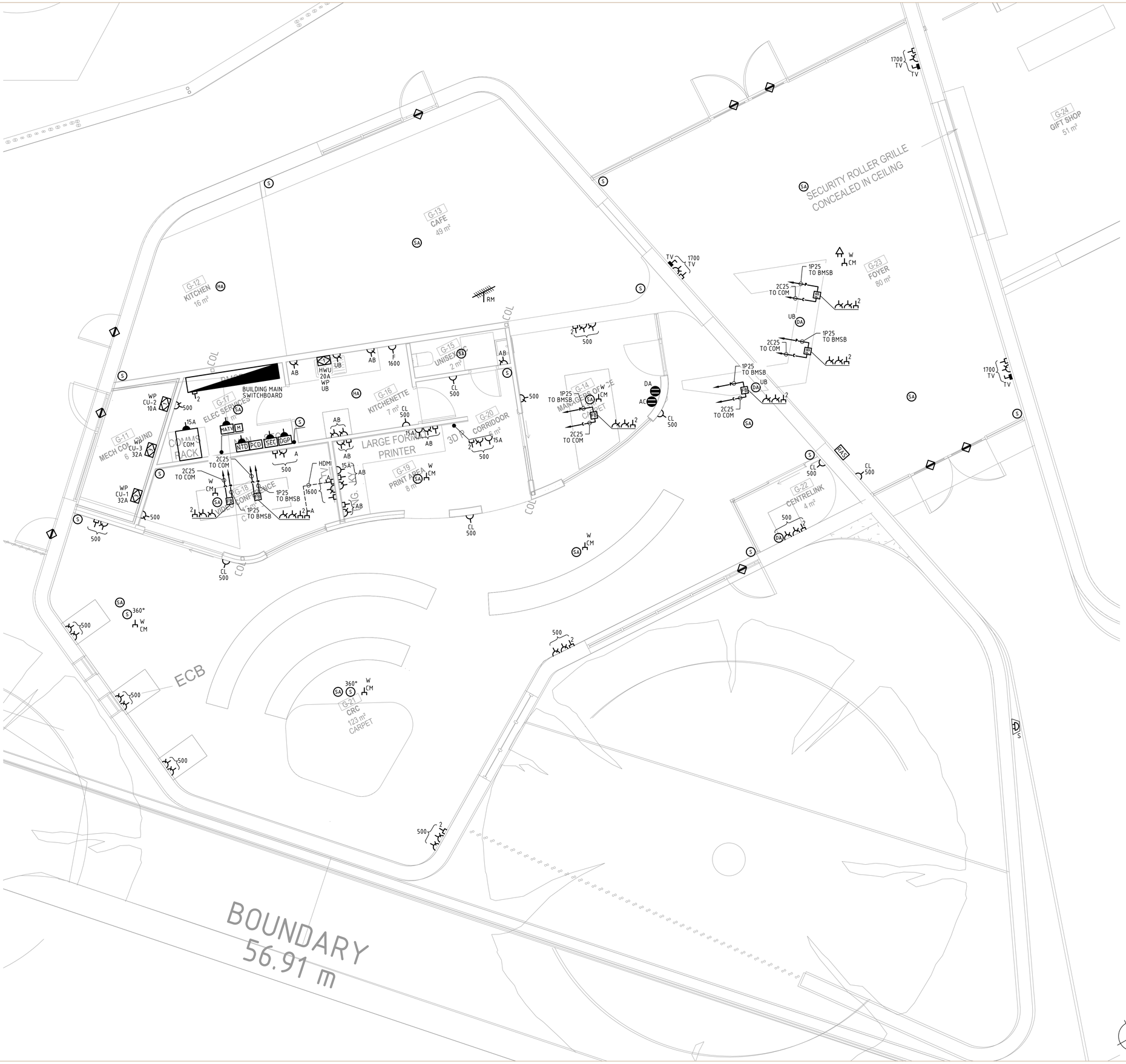
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PRELIMINARY ISSUE
REFER TO REVISION COLUMN

		DWG	REV
DATE	I 10/07/26		
SCALE @A1	I 1:50		
JOB No	I 22580		
DRAWN BY	I MR	E.04	A
CHECKED	I JP		

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PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
CRC BUILDING - PROPOSED POWER & ELV SERVICES

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PRELIMINARY ISSUE
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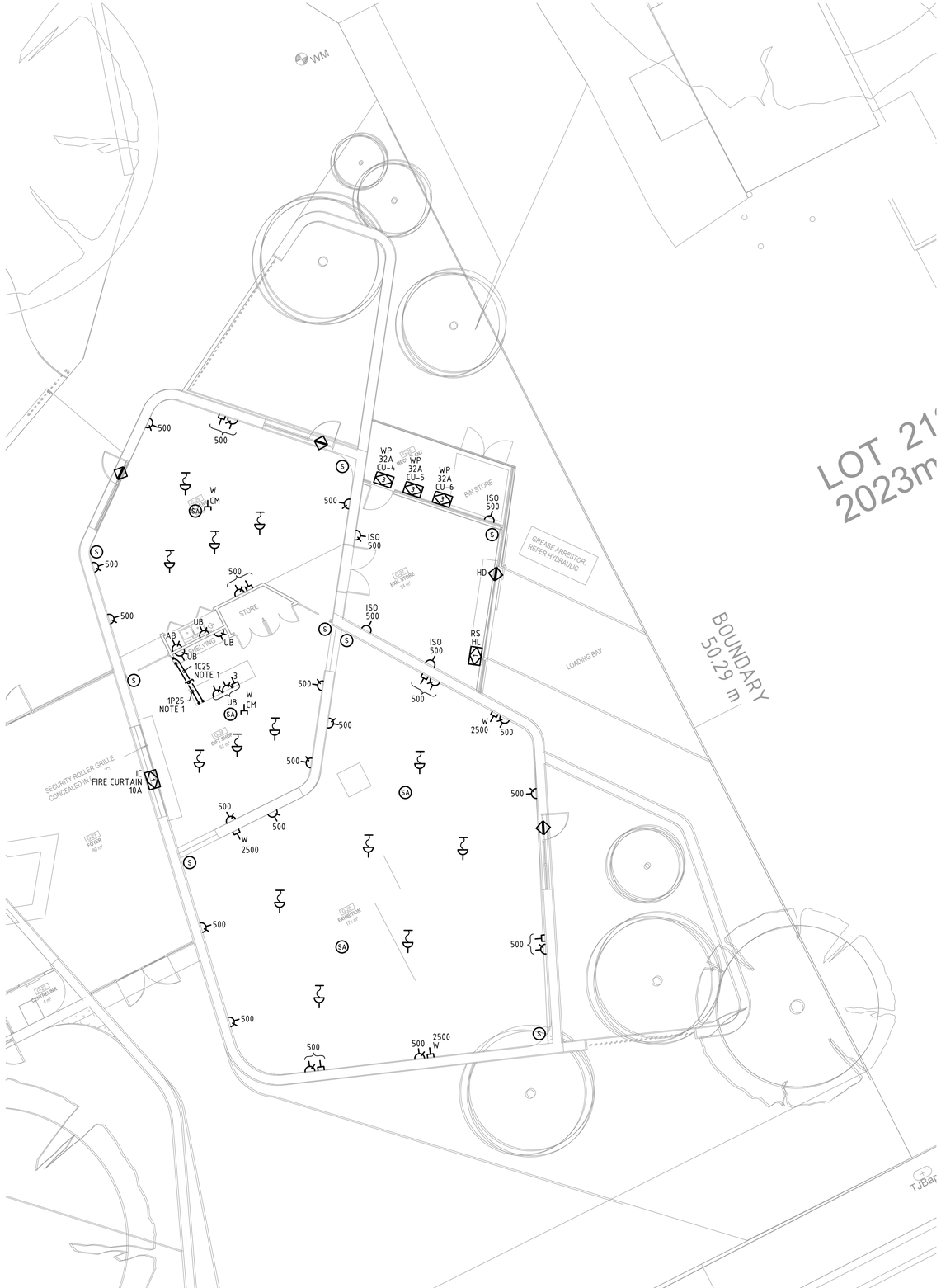
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JOB No	I 22580		
DRAWN BY	I MR	E.05	A
CHECKED	I JP		

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NOTES

1. PROVIDE IN SLAB CONDUITS TO SERVICE THE GIFT SHOP DESK. CONDUITS TO RISE WITHIN THE BUILDING WALL CAVITY AND UNDER THE GIFT SHOP DESK TO FACILITATE CABLING TO ALL OUTLETS DOCUMENTED.



SCALE 1:100
0 1 2 4 6 8 10

PRELIMINARY ISSUE
REFER TO REVISION COLUMN

DATE	No.	REVISION	CHKD
23.07.26	A.	ISSUED FOR DESIGN DEVELOPMENT	PJ

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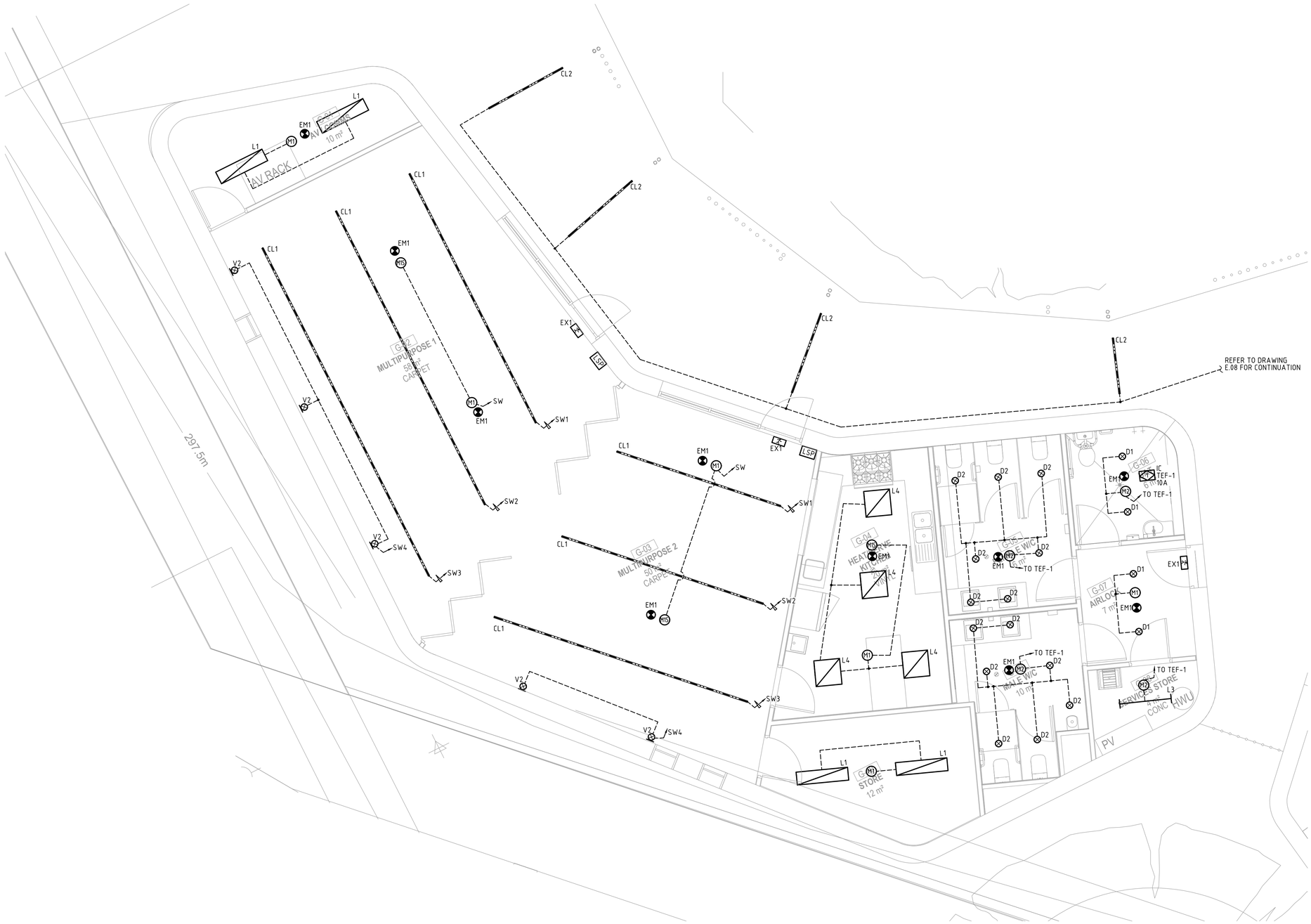
PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
EXHIBITION BUILDING - PROPOSED POWER & ELV SERVICES

		DWG	REV
DATE	I 10/07/26		
SCALE @A1	I 1:100		
JOB No	I 22580		
DRAWN BY	I MR	E.06	A
CHECKED	I JP		

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PROJECT
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36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
MULTIPURPOSE BUILDING - PROPOSED LIGHTING LAYOUT

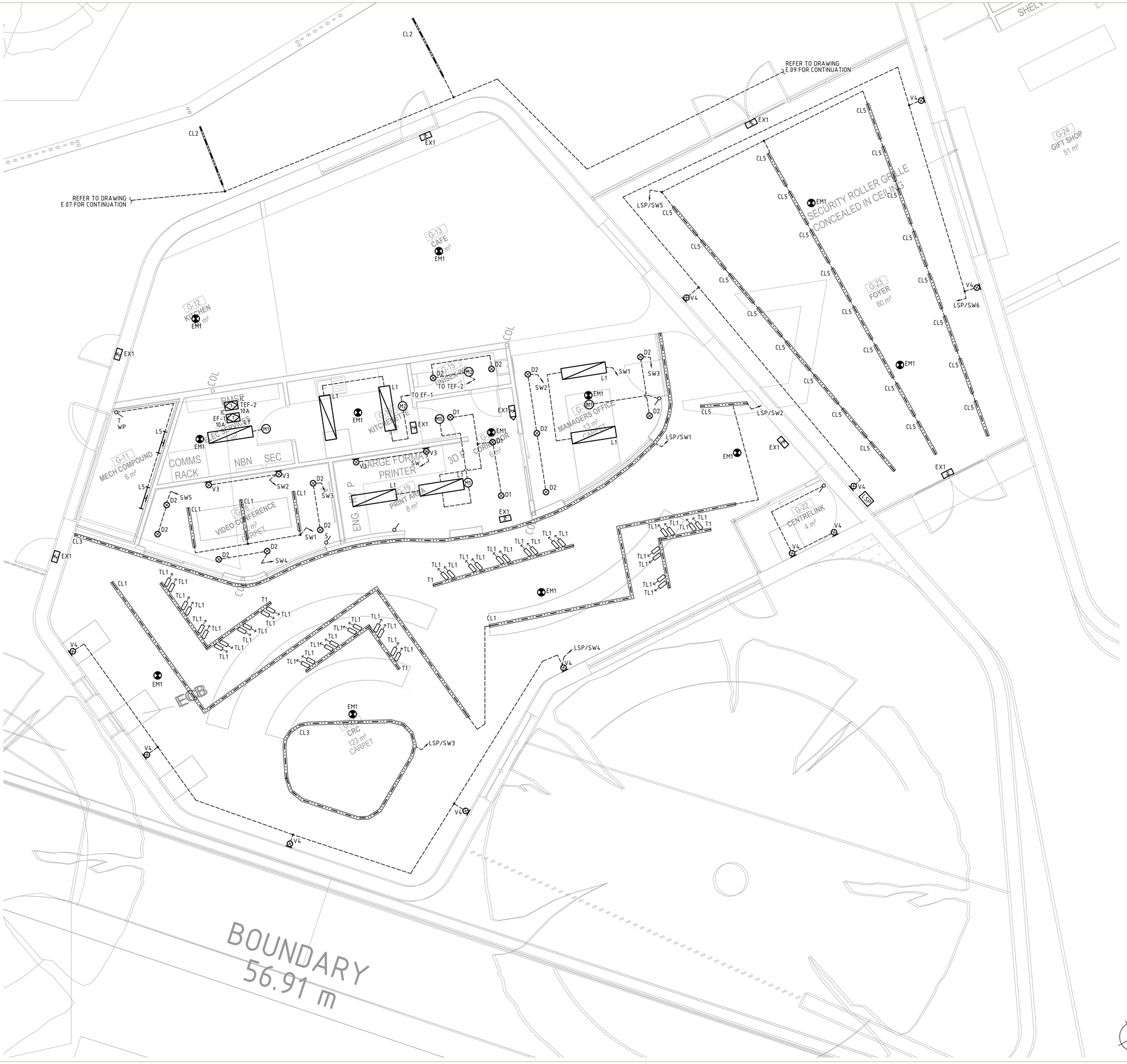
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PRELIMINARY ISSUE
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DATE	I 10/07/26	DWG	REV
SCALE @A1	I 1:50		
JOB No	I 22580		
DRAWN BY	I MR	E.07	A
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36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
CRC BUILDING - PROPOSED LIGHTING LAYOUT

SCALE 1:50
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REFER TO REVISION COLUMN

DATE	I 10/07/26	DWG	REV
SCALE @A1	I 1:50	E.08	A
JOB No	I 22580		
DRAWN BY	I MR		
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ELECTRICAL SERVICES
EXHIBITION BUILDING - PROPOSED LIGHTING LAYOUT

SCALE 1:100
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PRELIMINARY ISSUE
REFER TO REVISION COLUMN

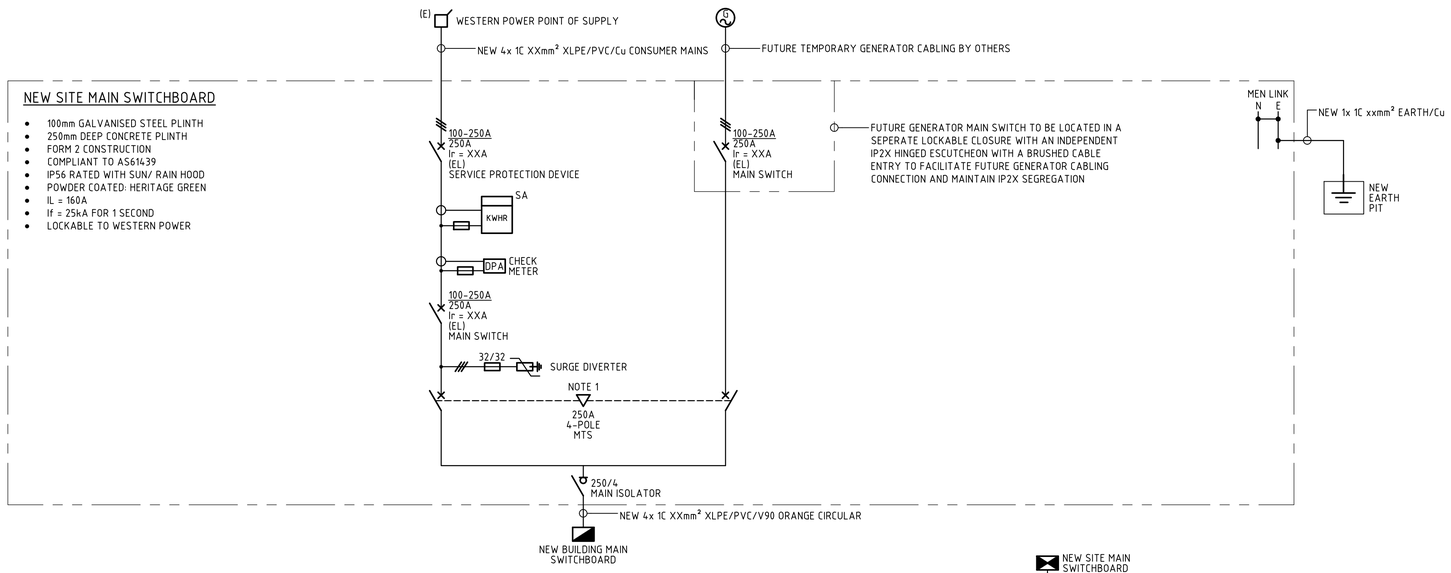
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JOB No	I 22580		
DRAWN BY	I MR	E.09	A
CHECKED	I JP		

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

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NOTES

1. DO NOT CONNECT NEUTRAL TO THE 4-POLE MTS.

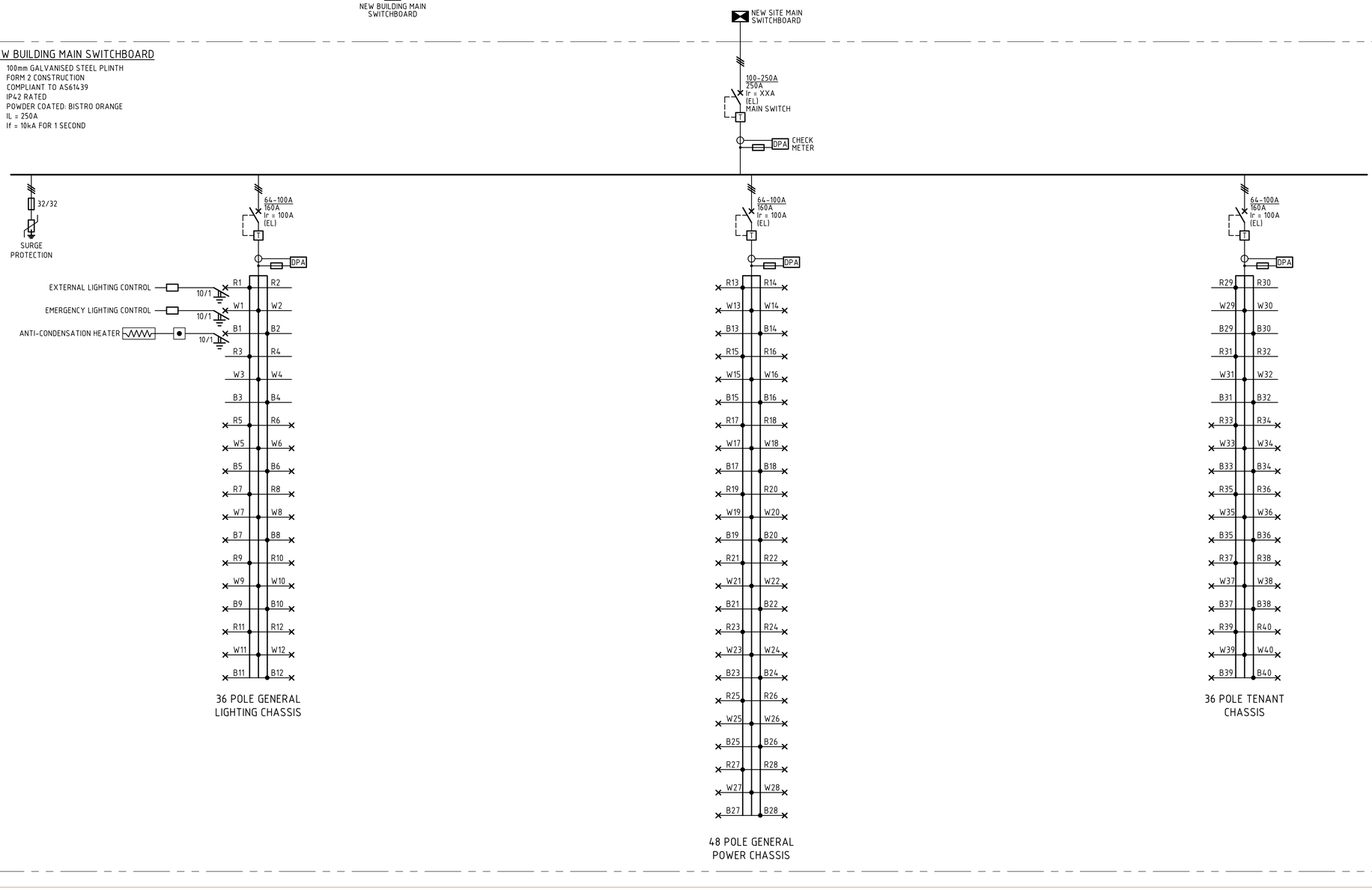


NEW SITE MAIN SWITCHBOARD

- 100mm GALVANISED STEEL PLINTH
- 250mm DEEP CONCRETE PLINTH
- FORM 2 CONSTRUCTION
- COMPLIANT TO AS61439
- IP56 RATED WITH SUN/ RAIN HOOD
- POWDER COATED: HERITAGE GREEN
- IL = 160A
- If = 25kA FOR 1 SECOND
- LOCKABLE TO WESTERN POWER

NEW BUILDING MAIN SWITCHBOARD

- 100mm GALVANISED STEEL PLINTH
- FORM 2 CONSTRUCTION
- COMPLIANT TO AS61439
- IP42 RATED
- POWDER COATED: BISTRO ORANGE
- IL = 250A
- If = 10kA FOR 1 SECOND



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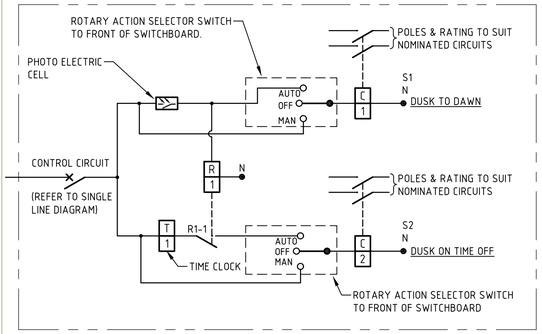
PROJECT
KATTER KICH WAVE ROCK DISCOVERY CENTRE
36 MARSHALL STREET, HYDEN WA 6359

ELECTRICAL SERVICES
SINGLE LINE DIAGRAMS

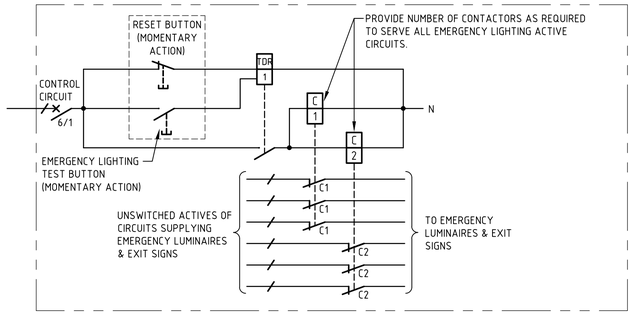
DATE	I 10/07/26	DWG	REV
SCALE @A1	I N.T.S		
JOB No	I 22580		
DRAWN BY	I MR	E.10	A
CHECKED	I JP		

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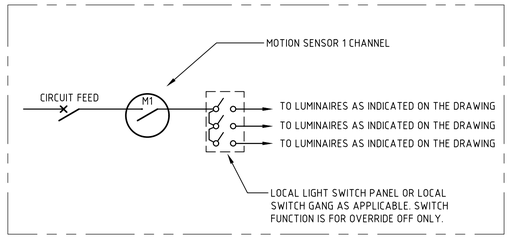
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DETAIL - EXTERNAL LIGHTING CONTROL SCHEMATIC
N.T.S.

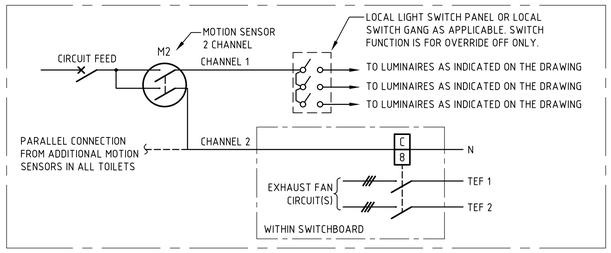


DETAIL - EMERGENCY LIGHTING TEST SCHEMATIC
N.T.S.

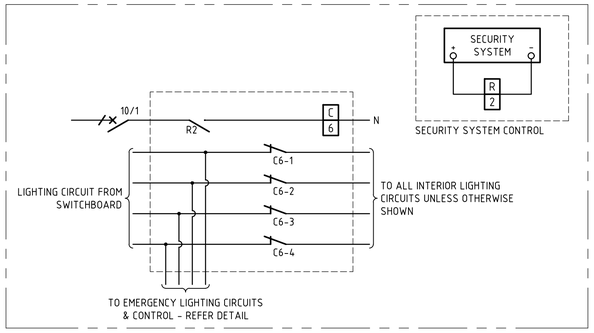


NB - ENSURE NOT TO EXCEED OUTPUT RATING OF MOTION SENSOR

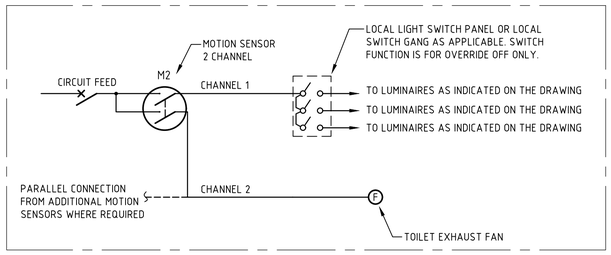
DETAIL - TYPICAL 1 CHANNEL MOTION SENSOR CONTROL SCHEMATIC
N.T.S.
NB - IF SWITCH IS NOT INDICATED THE LUMINAIRE WILL BE CONNECTED DIRECT TO THE MOTION SENSOR.



DETAIL - TYPICAL 2 CHANNEL MOTION SENSOR CONTROL SCHEMATIC FOR THREE PHASE EXHAUST FANS
N.T.S.
NB - ENSURE NOT TO EXCEED OUTPUT RATING OF MOTION SENSOR

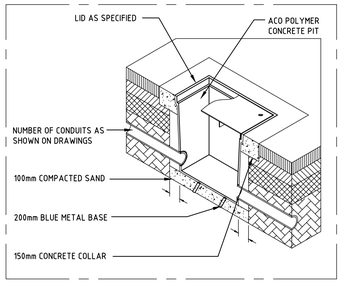


DETAIL - LIGHTING CONTROL SCHEMATIC
N.T.S.

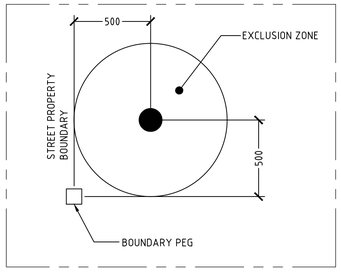


DETAIL - TYPICAL 2 CHANNEL MOTION SENSOR CONTROL SCHEMATIC FOR SINGLE PHASE EXHAUST FANS
N.T.S.

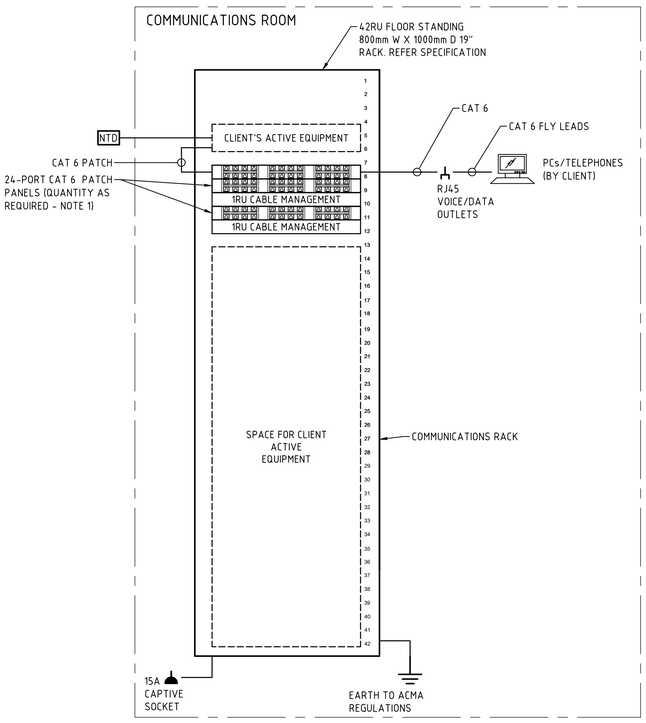
NB - ENSURE NOT TO EXCEED OUTPUT RATING OF MOTION SENSOR



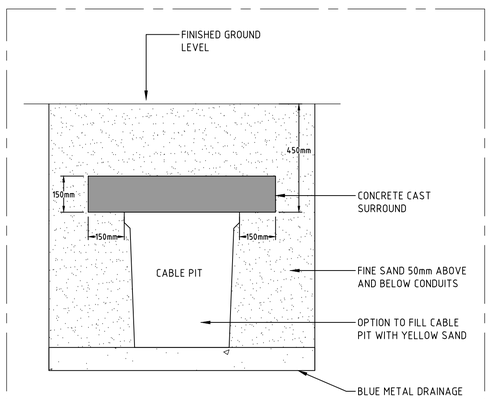
DETAIL -MEDIUM DUTY POLYMER CONCRETE PIT
N.T.S



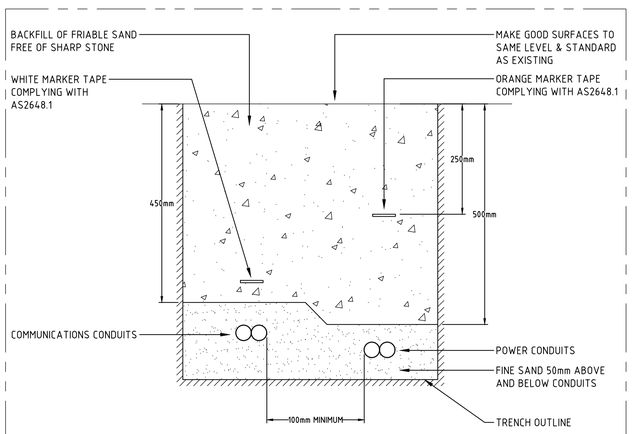
POWER PILLAR EXCLUSION BOUNDARY
N.T.S.



DETAIL - COMMUNICATIONS SYSTEMS SCHEMATIC
N.T.S.



DETAIL - BURIED CABLE PIT INSTALLATION
N.T.S



DETAIL - TYPICAL POWER & COMMUNICATIONS CONDUIT INSTALLATION
N.T.S

PRELIMINARY ISSUE
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ELECTRICAL SERVICES
DETAILS

DATE I 10/07/26
SCALE @A1 I N.T.S
JOB No I 22580
DRAWN BY I MR
CHECKED I JP

DWG E.11 | REV A

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Wave Rock Discovery Centre - Electrical Order of Probable Cost (Rev B)

Description	Distance	Cable Carrying Capacity (Amps)	Quantity	Measure	Quantity	Rate		Cost		
						Labour	Material	Labour	Material	Total
Electrical Services										**$ 302,200.00**
WPC Headworks Charges				#	1	$ 55,000.00	$ 55,000.00	$ 55,000.00	$ 55,000.00	$ 110,000.00
Telstra/ NBN Headworks Charges				#	1	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 30,000.00
Site Establishment				#	1	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 5,000.00
Removal of Redundant				#	1	$ 1,500.00	$ 1,500.00	$ 1,500.00	$ 1,500.00	$ 3,000.00
New Site Main Switchboard (SMSB)				#	1	$ 10,000.00	$ 20,000.00	$ 10,000.00	$ 20,000.00	$ 30,000.00
New Building Main Switchboard (BMSB)				#	1	$ 10,000.00	$ 30,000.00	$ 10,000.00	$ 30,000.00	$ 40,000.00
Trenching				m	360	$ 40.00	$ 40.00	$ 14,400.00	$ 14,400.00	$ 28,800.00
Underground Conduit				m	990	$ 9.00	$ 9.00	$ 8,910.00	$ 8,910.00	$ 17,820.00
Cable Pits				m	6	$ 650.00	$ 1,000.00	$ 3,900.00	$ 6,000.00	$ 9,900.00
New consumer mains to SMSB	28	300	1	m * Amps	8400	$ 3,780.00	$ 3,780.00	$ 3,780.00	$ 3,780.00	$ 7,560.00
New submains from SMSB to BMSB	56	300	1	m * Amps	16800	$ 7,560.00	$ 7,560.00	$ 7,560.00	$ 7,560.00	$ 15,120.00
Testing & Inspection				#	1	$ 2,500.00	$ 500.00	$ 2,500.00	$ 500.00	$ 3,000.00
As Constructed & Manuals				#	1	$ 1,500.00	$ 500.00	$ 1,500.00	$ 500.00	$ 2,000.00
Power & Lighting Services										**$ 360,800.00**
New Single/Double GPO				#	115	$ 200.00	$ 200.00	$ 23,000.00	$ 23,000.00	$ 46,000.00
New Suspended GPO				#	13	$ 200.00	$ 250.00	$ 2,600.00	$ 3,250.00	$ 5,850.00
New Weatherproof GPO				#	4	$ 200.00	$ 250.00	$ 800.00	$ 1,000.00	$ 1,800.00
New Single Phase Power Supply				#	4	$ 200.00	$ 200.00	$ 800.00	$ 800.00	$ 1,600.00
New Three Phase Power Supply				#	4	$ 200.00	$ 350.00	$ 800.00	$ 1,400.00	$ 2,200.00
New Hand Dryer				#	2	$ 200.00	$ 500.00	$ 400.00	$ 1,000.00	$ 1,400.00
New CL1 luminiares				m	65	$ 150.00	$ 350.00	$ 9,750.00	$ 22,750.00	$ 32,500.00
New CL2 luminiares				m	18	$ 150.00	$ 350.00	$ 2,700.00	$ 6,300.00	$ 9,000.00
New CL3 luminiares				m	30	$ 150.00	$ 350.00	$ 4,500.00	$ 10,500.00	$ 15,000.00
New CL4 luminiares				m	9	$ 150.00	$ 350.00	$ 1,350.00	$ 3,150.00	$ 4,500.00
New CL5 luminiares				m	29	$ 150.00	$ 350.00	$ 4,350.00	$ 10,150.00	$ 14,500.00
New D1 luminiares				#	8	$ 200.00	$ 250.00	$ 1,600.00	$ 2,000.00	$ 3,600.00
New D2 luminiares				#	29	$ 200.00	$ 250.00	$ 5,800.00	$ 7,250.00	$ 13,050.00
New EM1 emergency luminiares				#	24	$ 200.00	$ 150.00	$ 4,800.00	$ 3,600.00	$ 8,400.00
New EM2 emergency luminiares				#	2	$ 200.00	$ 150.00	$ 400.00	$ 300.00	$ 700.00
New EX1 emergency luminiares				#	17	$ 200.00	$ 150.00	$ 3,400.00	$ 2,550.00	$ 5,950.00
New G1 luminiares				#	13	$ 500.00	$ 1,000.00	$ 6,500.00	$ 13,000.00	$ 19,500.00
New G2 luminiares				#	7	$ 500.00	$ 1,000.00	$ 3,500.00	$ 7,000.00	$ 10,500.00
New L1 luminiares				#	5	$ 200.00	$ 200.00	$ 1,000.00	$ 1,000.00	$ 2,000.00
New L2 luminiares				#	2	$ 200.00	$ 200.00	$ 400.00	$ 400.00	$ 800.00
New L3 luminiares				#	5	$ 200.00	$ 200.00	$ 1,000.00	$ 1,000.00	$ 2,000.00
New L3E luminiares				#	2	$ 200.00	$ 250.00	$ 400.00	$ 500.00	$ 900.00
New L4 luminiares				#	4	$ 200.00	$ 200.00	$ 800.00	$ 800.00	$ 1,600.00
New L5 luminiares				#	2	$ 200.00	$ 200.00	$ 400.00	$ 400.00	$ 800.00
New PM1 luminiares				#	3	$ 1,000.00	$ 1,500.00	$ 3,000.00	$ 4,500.00	$ 7,500.00
New Light Pole				#	3	$ 1,250.00	$ 2,200.00	$ 3,750.00	$ 6,600.00	$ 10,350.00
New Light Pole Footing				#	3	$ 650.00	$ 1,500.00	$ 1,950.00	$ 4,500.00	$ 6,450.00
New T1 luminiare track				m	17	$ 150.00	$ 250.00	$ 2,550.00	$ 4,250.00	$ 6,800.00
New T2 luminiare track				m	70	$ 150.00	$ 250.00	$ 10,500.00	$ 17,500.00	$ 28,000.00
New T3 luminiare track				m	19	$ 150.00	$ 250.00	$ 2,850.00	$ 4,750.00	$ 7,600.00
New TL1 luminiares				#	100	$ 100.00	$ 250.00	$ 10,000.00	$ 25,000.00	$ 35,000.00
New TL2 luminiares				#	37	$ 100.00	$ 250.00	$ 3,700.00	$ 9,250.00	$ 12,950.00
New V1 luminiares				#	8	$ 200.00	$ 500.00	$ 1,600.00	$ 4,000.00	$ 5,600.00
New V2 luminiares				#	5	$ 200.00	$ 500.00	$ 1,000.00	$ 2,500.00	$ 3,500.00
New V3 luminiares				#	4	$ 200.00	$ 500.00	$ 800.00	$ 2,000.00	$ 2,800.00
New V4 luminiares				#	11	$ 200.00	$ 500.00	$ 2,200.00	$ 5,500.00	$ 7,700.00
New Floor Box				#	6	$ 1,000.00	$ 500.00	$ 6,000.00	$ 3,000.00	$ 9,000.00
New Motion Detector				#	19	$ 200.00	$ 200.00	$ 3,800.00	$ 3,800.00	$ 7,600.00
New Light Switch Panel				#	5	$ 300.00	$ 300.00	$ 1,500.00	$ 1,500.00	$ 3,000.00
New Light Switch				#	7	$ 200.00	$ 200.00	$ 1,400.00	$ 1,400.00	$ 2,800.00
Communications Services										**$ 26,200.00**
New Communications Rack				#	1	$ 1,500.00	$ 3,000.00	$ 1,500.00	$ 3,000.00	$ 4,500.00
New Data Outlet - Cat6A				#	53	$ 200.00	$ 200.00	$ 10,600.00	$ 10,600.00	$ 21,200.00
New HDMI to HDMI outlet				#	1	$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 500.00
Assistance Call Services										**$ 3,750.00**
Assistance Call Master Panel				#	1	$ 650.00	$ 1,500.00	$ 650.00	$ 1,500.00	$ 2,150.00
Assistance Call Button				#	2	$ 200.00	$ 200.00	$ 400.00	$ 400.00	$ 800.00
Assistance Call Indicator				#	2	$ 200.00	$ 200.00	$ 400.00	$ 400.00	$ 800.00
MATV Services										**$ 4,500.00**
New MATV Headend Equipment				#	1	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 2,000.00
New TV Outlet				#	4	$ 250.00	$ 250.00	$ 1,000.00	$ 1,000.00	$ 2,000.00
New Roof Mounted TV Antenna				#	1	$ 250.00	$ 250.00	$ 250.00	$ 250.00	$ 500.00
Security Services										**$ 35,500.00**
New Security Panel				#	2	$ 750.00	$ 1,500.00	$ 1,500.00	$ 3,000.00	$ 4,500.00
New Remote Arming Station				#	1	$ 200.00	$ 200.00	$ 200.00	$ 200.00	$ 400.00
New PIR Detector				#	28	$ 200.00	$ 200.00	$ 5,600.00	$ 5,600.00	$ 11,200.00
New Reed Switch				#	13	$ 200.00	$ 200.00	$ 2,600.00	$ 2,600.00	$ 5,200.00
New Security Strobe and Siren				#	1	$ 300.00	$ 300.00	$ 300.00	$ 300.00	$ 600.00
New Smoke Detector (connected to the security system)				#	26	$ 200.00	$ 200.00	$ 5,200.00	$ 5,200.00	$ 10,400.00
New Thermal Detector (connected to the security system)				#	4	$ 200.00	$ 200.00	$ 800.00	$ 800.00	$ 1,600.00
New Duress Alarm Button				#	3	$ 200.00	$ 200.00	$ 600.00	$ 600.00	$ 1,200.00
New Duress Alarm Indicator				#	1	$ 200.00	$ 200.00	$ 200.00	$ 200.00	$ 400.00
							$ 36,647.50	**$ 307,250.00**	**$ 425,700.00**	

Estimator	**PRJ**
Area (Meters)	**1.00**
Established Area Rate for a refurbishment (Excluding GST)	**$ 769,597.50**

Total (GST Excluded) **$ 769,597.50**

Exclusions: Audio Visual Services, GST,
Regional Allowance.

CONSTRUCTION HYDRAULIC DESIGN PTY LTD.

ACN 142 458 302
ABN 51 142 458 302

26TH MARCH 2026

SITE ARCHITECTURE
LEVEL 3
56 WILLIAM STREET
PERTH WA 6000

ATTENTION: MICHAEL TYLER-HARE
OUR REF: 26-019

Dear Michael,

RE: WAVE ROCK VISITORS CENTRE
CONCEPT DESIGN REPORT AND OPINION OF PROBABLE COST

Please find attached the Hydraulic Services Concept Design report and OPC for this project. The report shall be read in conjunction with the attached Hydraulic Services Concept Drawings HS1-HS4 Rev A inclusive

I trust the enclosed meets with your requirements. Should you require any further information or clarification please do not hesitate to contact the undersigned.

Yours faithfully,

PAUL M WHITE ***JP LMAHSCA FIPA***
DIRECTOR
CONSTRUCTION HYDRAULIC DESIGN PTY LTD

8A / 663 Newcastle Street, Leederville WA 6007
PO Box 358, North Perth WA 6906
P 9206 2700
E admin@chdwa.com.au
W www.chdwa.com.au

AHSCA
The Association of Hydraulic Services Consultants Australia

1. PROPERTY SEWER WASTES AND DRAINS

An existing Water Corporation main reticulated gravity sewer is currently located within the lane at the rear of the property. There are 2No x existing 100 diameter sewer junction connections available for this development to connect to.

All property sewer shall be of uPVC and installed on gravity to either of the 2 existing Water Corporation sewer junction connections.

As Constructed information obtained for the Water Corporation indicates that the existing junctions are approximately 2200mm below ground level. Given this depth gravity connection of the new development property sewer will be able to be achieved.

2. SANITARY PLUMBING

All sanitary plumbing shall be constructed of uPVC. Pipework shall connect to new fixtures and outlets and in turn connect to the below ground gravity property sewer.

A grease arrestor shall be incorporated within the design to collect and treat waste from the proposed commercial kitchen.

3. DOMESTIC COLD WATER

An existing Water Corporation reticulated water main is currently located within the lane at the rear of the property. A new domestic water connection and meter sized to adequately provide water to the development shall be provided from this main.

Domestic water service pipework shall be extended from the new meter to isolation valves at the various wet areas. Domestic water services shall be extended from the isolation valves and connect to all required fixtures and outlets within the designated wet area.

Backflow Prevention valves shall be provided at the boundary meter and other locations in accordance with Water corporation legislation and AS3500 Plumbing standard.

4. DOMESTIC HOT WATER

Hot water to sanitary fixtures shall be provided from a mixture of electric single phase storage and three phase electric hot water units. The hot water units shall be located centrally to the required wet areas.

Tempering valves shall be installed to the outlets of all hot water units and thermostatic mixing valves installed to UAT fixtures.

5. FIXTURES AND TAPWARE

All sanitary fixtures shall be fit for purpose applicable to the various areas they are serving. Pans, cisterns and basins shall be of white vitreous china. Sinks and cleaners sinks shall be of stainless steel.

Tapware shall be chrome plated lead free brass and of types applicable to the purpose in each wet area.

6. LP GAS SERVICE

There is no requirement for the inclusion or implementation of LP Gas within this project.

7. FIRE HYDRANT AND FIRE HOSE REEL SERVICES

The Architectural design has been undertaken in such a way that the development consists of 2 separate buildings each with a habitable floor area of less than 500m2. By having this arrangement there is no requirement for fire hydrants and fire hose reel systems for this project.

8. STORMWATER DRAINAGE

Refer to Civil Engineers report for description and design requirements for all stormwater drainage scope for carparks and roof water

9. SOIL CONDITIONS

Early advice received indicates that the existing site soil conditions will be Class M to S. Therefore all below ground pipework for property sewer and water services where they exit the building line shall be fitted with approved type flexible joints to enable ground movement around the services pipework without causing breakages for the fixed exit points.
All services installed within the Class M/S soils shall be laid on clean bed sand with clean sand compacted backfill in all trenches to finished ground level.

10. OPINION OF PROBABLE COST

Please find set out below the Opinion of Probable Cost for the Concept Design Stage for the Hydraulic Services for this project based on the aforementioned Services Scope Report and Hydraulic drawings HS1a-HS4A inclusive:

EXTERNAL SERVICES

- Cold water service		$12 200.00
- Grease Arrestor		$15 000.00
- Property sewer		$12 600.00
	TOTAL	**$39 700.00**

The Probable Opinion of Cost excludes the following items -

1. Applicable Builder's Work
2. Applicable Government GST
3. Regional district allowances
4. Water Corporation headworks fees (TBA)
5. Rock/Clay excavation and spoils disposal from site
6. Dewatering
7. Rainwater reuse systems
8. Electrical connections to equipment/HWU's.
9. Stormwater drainage to carparks and Building roof. Refer civil Engineers report
10. Fixtures and Tapware to building
11. Hot water units to building
12. Internal sanitary plumbing and cold water services to fixtures

WAVE ROCK
KATTER KICH DISCOVERY CENTRE
HYDRAULIC SERVICES

LEGEND

———	PROPERTY SEWER
— · — · —	TRADE WASTE
— · — · —	COLD WATER
— — —	EXISTING SERVICES
— — —	HOT WATER
— X — X —	EXISTING SERVICE MADE REDUNDANT
100	100 PVC RETIC SLEEVE
CO	EXTERNAL CLEANOUT POINT
IP	INTERNAL CLEANOUT POINT
EVP	EDUCT VENT PIPE
AAV	AIR ADMITTANCE VALVE
HT	HOSE TAP
BV	ISOLATING BALL VALVE
GC	ISOLATING GAS COCK
FWG	FLOOR WASTE GULLY
TWT	TRADE WASTE TRAP
IWSP	INDUSTRIAL WASTE SAMPLING POINT
DG	DISCONNECTOR GULLY
ORG	OVERFLOW RELIEF GULLY
RPZD	REDUCED PRESSURE ZONE DEVICE
DCV	DOUBLE CHECK VALVE
FH	FIRE HYDRANT
FHR	FIRE HOSE REEL
● DP	DOWNPIPE
● EDP	EXISTING DOWNPIPE
AG	AIR RELIEF GRATE

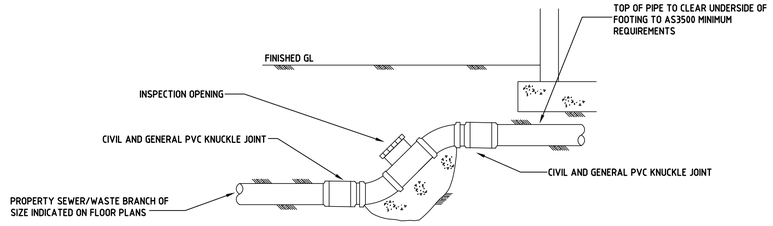
GENERAL NOTES

1 CO-ORDINATE INSTALLATION OF HYDRAULIC SERVICES WITH ALL OTHER SERVICES TO ENSURE ALL NEW CONNECTIONS CAN BE ACHIEVED AND CLASHING OF SERVICES IS AVOIDED.

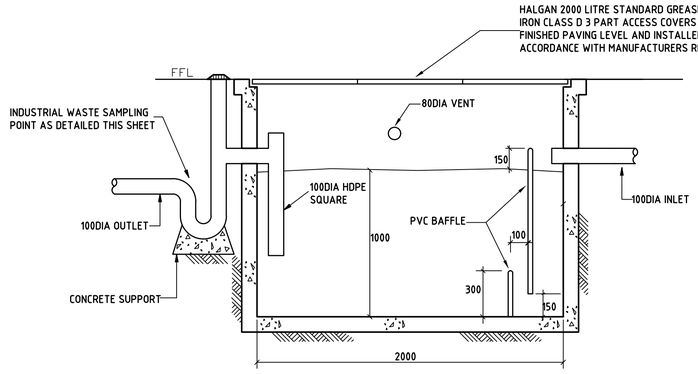
2 THESE HYDRAULIC SERVICES DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE HYDRAULIC SERVICES SPECIFICATION AND ALL OTHER RELEVANT ARCHITECTURAL/SERVICES DOCUMENTATION. ANY DISCREPENCIES SHALL BE RAISED WITH THE ARCHITECT/CONSULTANT DURING THE TENDER PERIOD SO THAT DIRECTIVES CAN BE ISSUED.

3 THE EXACT SIZE, DEPTH, LOCATION AND MATERIAL TYPE OF ALL EXISTING SERVICES SHALL BE DETERMINED AND CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF THE INSTALLATION OF ANY PIPEWORK TO ENSURE ALL NEW CONNECTIONS CAN BE ACHIEVED AND CLASHING OF SERVICES IS AVOIDED.

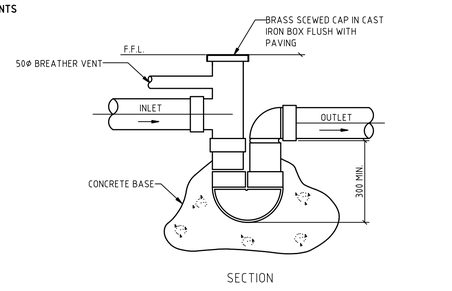
4 ALLOW FOR DEWATERING, CLAY AND ROCK EXCAVATION OF SITE TO ENABLE SERVICES TO BE INSTALLED. ALL SERVICES SHALL BE INSTALLED ON A 100MM BLUE METAL BASE WITH CLEAN COMPACTED SAND BACKFILL TO FINISHED GL



SEWER/WASTE EXPANSION JOINT DETAIL
N.T.S

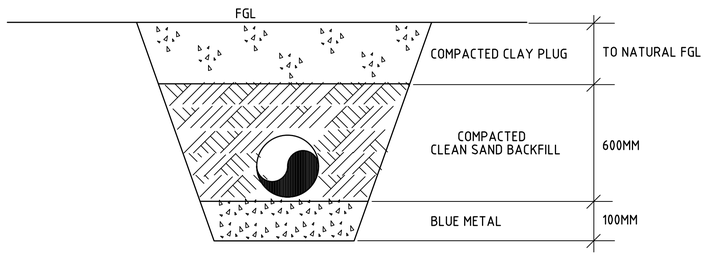


GREASE ARRESTOR DETAIL
NTS@A1

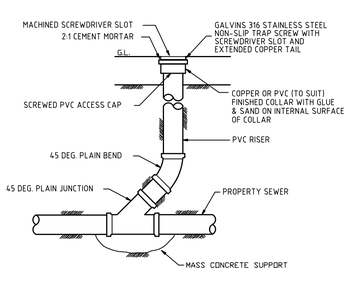


SECTION

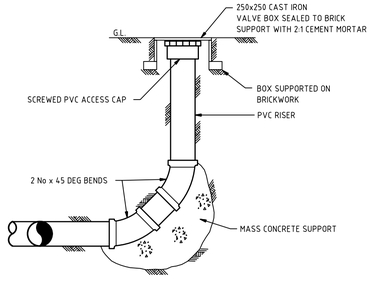
INDUSTRIAL WASTE SAMPLING POINT DETAIL
N.T.S



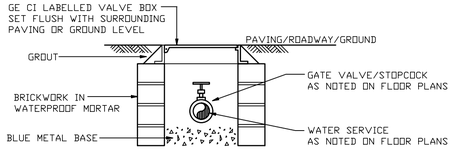
SEWER/WASTE TRENCH DETAIL
N.T.S



INTERNAL SEWER CLEANOUT POINT DETAIL
NTS



EXTERNAL CLEANOUT DETAIL
N.T.S.



ISOLATING VALVE PIT DETAIL
N.T.S

REV	DATE	DESCRIPTION	BY
C	08/07/26	DESIGN DEVELOPMENT ISSUE	PMW
B	26/05/26	SCHEMATIC DESIGN ISSUE	PMW
A	26/03/26	CONCEPT DESIGN ISSUE	PMW

ARCHITECT:

SITE ARCHITECTURE

PROJECT

WAVE ROCK
KATTER KICH DISCOVERY CENTRE

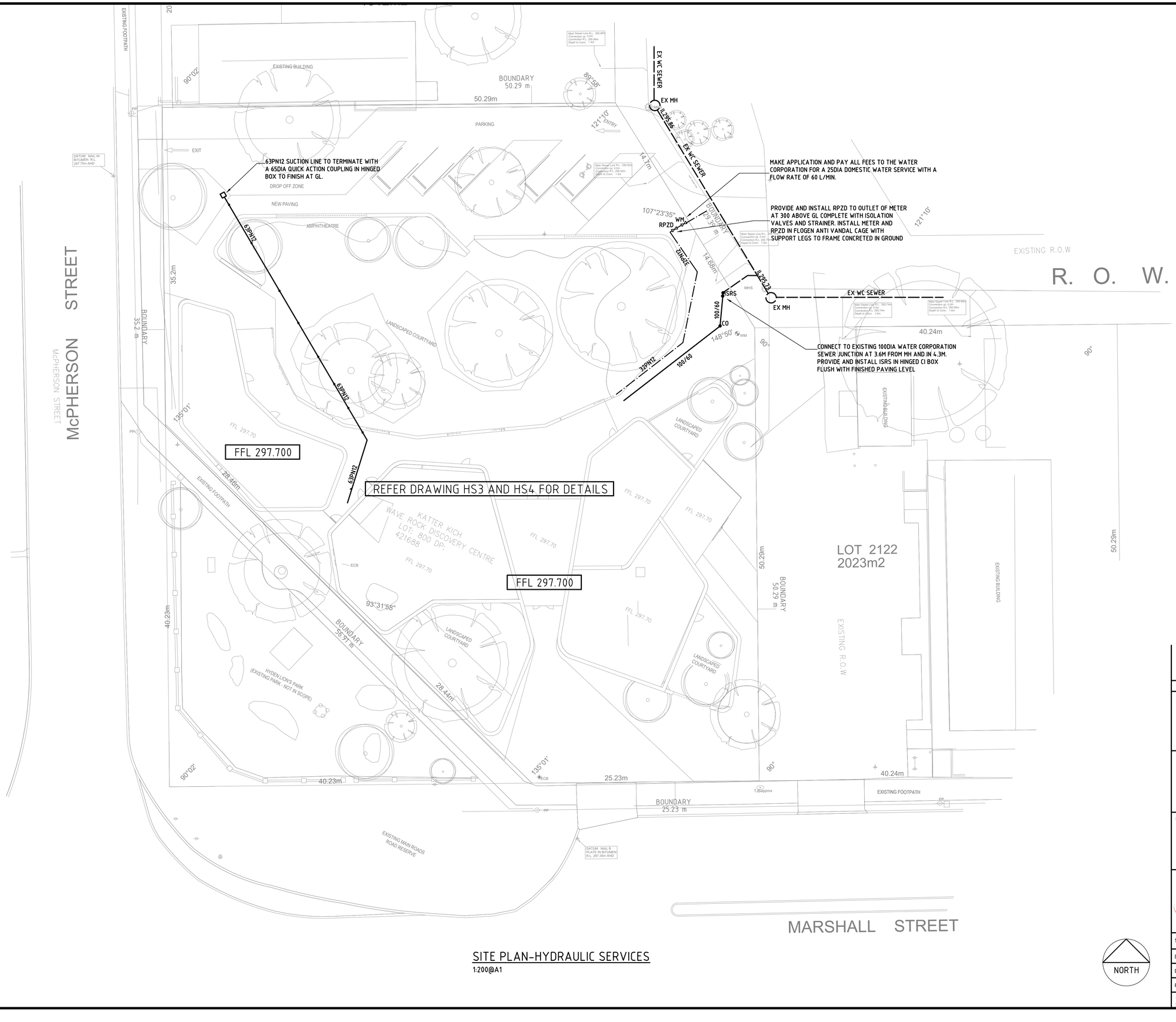
DRAWING: HYDRAULIC SERVICES

GENERAL INFORMATION AND DETAILS

CONSTRUCTION HYDRAULIC DESIGN
Suite 1, 218 Carr Place,
Leederville 6007, Australia
PO Box 358, North Perth, WA 6906
T 9206 2700
www.chdwa.com.au

SCALE AS SHOWN (A1)	DRAWING No HS 1 OF 4	PROJECT No 26-008
DATE JULY 2026		
DRAWN PMW		
PLOT DATE:	REVISION- C	

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SITE PLAN-HYDRAULIC SERVICES

1:200@A1

REV	DATE	DESCRIPTION	BY
C	08/07/26	DESIGN DEVELOPMENT ISSUE	PMW
B	26/05/26	SCHEMATIC DESIGN ISSUE	PMW
A	26/03/26	CONCEPT DESIGN ISSUE	PMW

ARCHITECT:

SITE ARCHITECTURE

PROJECT

WAVE ROCK
KATTER KICH DISCOVERY CENTRE

DRAWING: HYDRAULIC SERVICES

SITE PLAN
HYDRAULIC SERVICES

CONSTRUCTION HYDRAULIC DESIGN
Suite 1, 218 Carr Place,
Leederville 6007, Australia
PO Box 358, North Perth, WA 6906
T 9206 2700
www.chdwa.com.au

SCALE	1:200 (A1)	DRAWING No	PROJECT No
DATE	JULY 2026	HS 2 OF 4	26-008
DRAWN	PMW		
PLOT DATE:		REVISION- C	

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40DIA WASTE TO DISCHARGE INTO SIDE OF 100DIA VERTICAL PVC RISER FINISHING AT GL WITH FINISHING COLLAR AND GRATE

40DIA TUNDISH AND WASTE IN CEILING SPACE OVER FOR MECH AC UNITS(TYPICAL ACTD NOTE)

20DIA PVC STUB THROUGH WALL BEHIND AC UNIT WITH DROPPER IN WALL TO BELOW SLAB

REFER DRAWING HS2 FOR CONTINUATION

CONNECT 100DIA DRAIN TO STORMWATER DRAINAGE. REFER CIVIL ENGINEERS DRAWINGS FOR STORMWATER DRAINAGE LOCATION

63PN12 HARD SUCTION LINE FOR CLEANING OF GREASE ARRESTOR

65DIA TRAPPED STANDING WASTE FOR DISHWASHER

FFL 297.700

50DIA VENT RISER IN STORE TO ABOVE ROOF

50DIA TUNDISH FOR HWU RELIEF PIPES

65DIA VENT RISER IN DUCT TO ABOVE ROOF

80DIA AND 50DIA VENT RISERS IN STORE TO ABOVE ROOF

PROVIDE AND INSTALL EXPANSION JOINT TO TRADE WASTE AND VENT BRANCH LINES AS DETAILED ON DRAWING HS1

PROVIDE AND INSTALL HALGAN OR EQUAL APPROVED 2000 LITRE GREASE ARRESTOR WITH IWSP AS DETAILED ON DRAWING HS1. PROVIDE AND INSTALL CLASS D COVERS SET AT HEIGHT TO SUIT DRIVEWAY ACCESS LEVELS

63PN12 SUCTION LINE TO TERMINATE WITH A 65DIA QUICK ACTION COUPLING IN HINGED BOX TO FINISH AT GL.

CONNECT 100DIA DRAIN TO STORMWATER DRAINAGE. REFER CIVIL ENGINEERS DRAWINGS FOR STORMWATER DRAINAGE LOCATION

PROVIDE AND INSTALL EXPANSION JOINT TO BRANCH LINE AS DETAILED ON DRAWING HS1

PROVIDE AND INSTALL EXPANSION JOINT TO BRANCH LINE AS DETAILED ON DRAWING HS1

50DIA RISER IN WALL WITH AIR ADMITTANCE VALVE IN CEILING SPACE OVER WITH 100 X 100 ACCESS PANEL

100DIA FLOORWASTE WITH 150DIA GRATE

40DIA WASTE TO DISCHARGE INTO SIDE OF 100DIA VERTICAL PVC RISER FINISHING AT GL WITH FINISHING COLLAR AND GRATE

40DIA MECH WASTE DROPPER IN WALL TO BELOW SLAB

40DIA TUNDISH AND WASTE IN CEILING SPACE OVER FOR MECH AC UNITS(TYPICAL ACTD NOTE)

FFL 297.700

CONNECTION TO WATER CORPORATION SEWER JUNCTION AS NOTED ON DRAWING HS2

CONNECT 100DIA DRAIN TO STORMWATER DRAINAGE. REFER CIVIL ENGINEERS DRAWINGS FOR STORMWATER DRAINAGE LOCATION

PROVIDE AND INSTALL EXPANSION JOINT TO BRANCH LINE AS DETAILED ON DRAWING HS1

PROVIDE AND INSTALL EXPANSION JOINT TO BRANCH LINE AS DETAILED ON DRAWING HS1

40DIA WASTE TO DISCHARGE INTO SIDE OF 100DIA VERTICAL PVC RISER FINISHING AT GL WITH FINISHING COLLAR AND GRATE

100DIA FLOORWASTE WITH 150DIA GRATE

INFLOOR STAINLESS STEEL PLASTER TRAP

AIR ADMITTANCE VALVE ON 50DIA RISER IN CUPBOARD

40DIA MECH WASTE DROPPER IN WALL TO BELOW SLAB

40DIA TUNDISH AND WASTE IN CEILING SPACE OVER FOR MECH AC UNITS(TYPICAL ACTD NOTE)

FFL 297.700

LOADING BAY

ECB

GROUND FLOOR PLAN - PROPERTY SEWER

1:100@A1

NORTH

REV	DATE	DESCRIPTION	BY
D	23/07/26	MECH DRAINAGE ADDED	PMW
C	08/07/26	DESIGN DEVELOPMENT ISSUE	PMW
B	26/05/26	SCHEMATIC DESIGN ISSUE	PMW
A	26/03/26	CONCEPT DESIGN ISSUE	PMW

ARCHITECT:

SITE ARCHITECTURE

PROJECT

WAVE ROCK
KATTER KICH DISCOVERY CENTRE

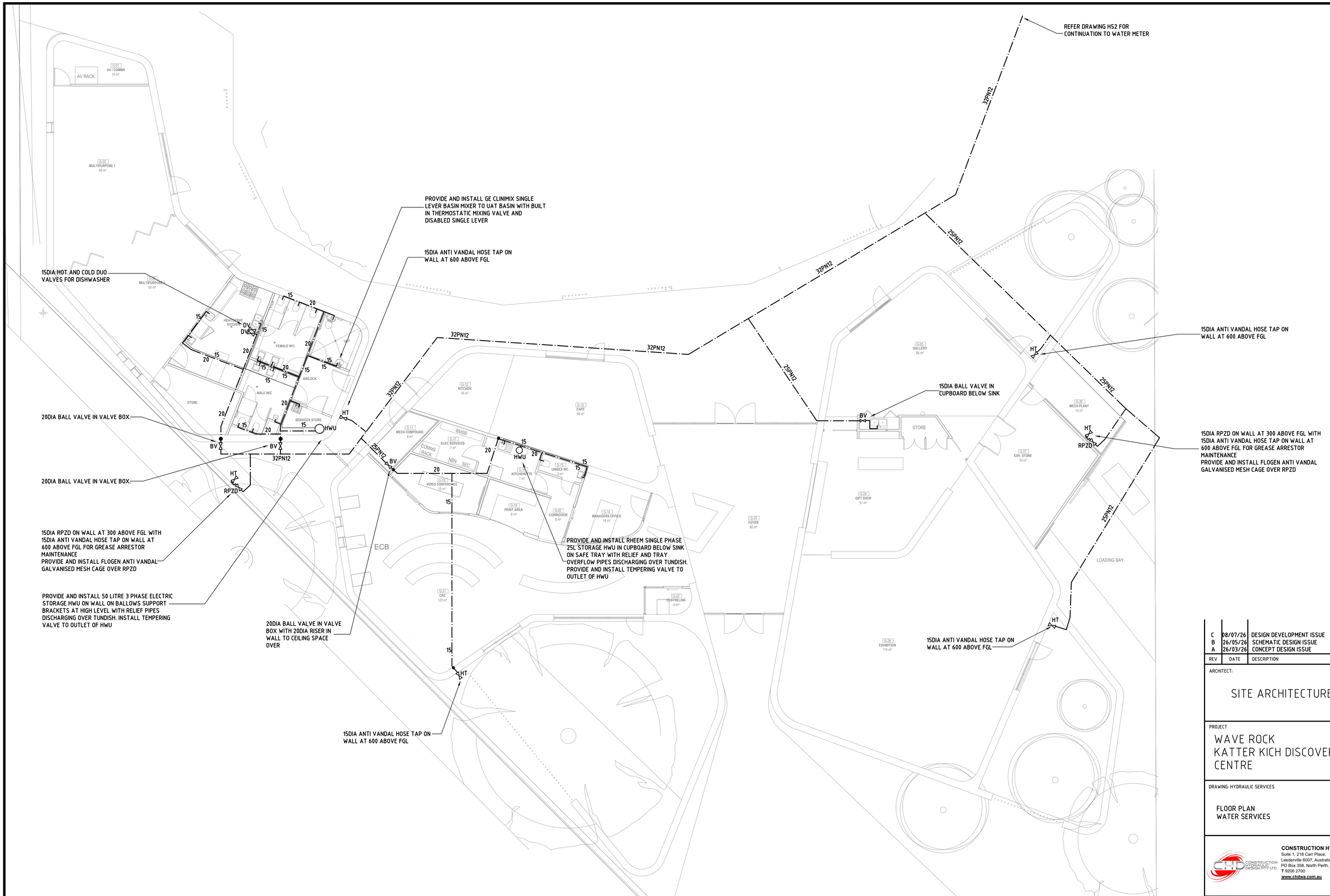
DRAWING: HYDRAULIC SERVICES

FLOOR PLAN
PROPERTY SEWER

CONSTRUCTION HYDRAULIC DESIGN
Suite 1, 218 Carr Place,
Leederville 6007, Australia
PO Box 358, North Perth, WA 6906
T 9206 2700
www.chdwa.com.au

SCALE 1:100 (A1)	DRAWING No HS 3 OF 4	PROJECT No 26-008
DATE JULY 2026		
DRAWN PMW		
PLOT DATE:	REVISION- D	

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GROUND FLOOR PLAN - WATER SERVICES

1:100@A1

NORTH

REV	DATE	DESCRIPTION	BY
C	08/07/26	DESIGN DEVELOPMENT ISSUE	PMW
B	26/05/26	SCHEMATIC DESIGN ISSUE	PMW
A	26/03/26	CONCEPT DESIGN ISSUE	PMW

ARCHITECT:

SITE ARCHITECTURE

PROJECT

WAVE ROCK
KATTER KICH DISCOVERY CENTRE

DRAWING: HYDRAULIC SERVICES

FLOOR PLAN
WATER SERVICES

CONSTRUCTION HYDRAULIC DESIGN
Suite 1, 218 Carr Place,
Leederville 6007, Australia
PO Box 358, North Perth, WA 6906
T 9206 2700
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DATE JULY 2026		
DRAWN PMW		
PLOT DATE:	REVISION- C	

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CONSTRUCTION HYDRAULIC DESIGN PTY LTD.

ACN 142 458 302
ABN 51 142 458 302

8TH JULY 2026

SITE ARCHITECTURE
LEVEL 3
56 WILLIAM STREET
PERTH WA 6000

ATTENTION: ROSALYND BAIRD
OUR REF: 26-008

Dear Rosalynd,

RE: WAVE ROCK KATTER KITCH DISCOVERY CENTRE
DESIGN DEVELOPMENT OPINION OF PROBABLE COST

Please find set out below the Opinion of Probable Cost being the Pre Tender Estimate for the Hydraulic Services for this project.

-	Property Sewer and Trade Waste	$35 400.00
-	Cold Water service and boundary RPZD	$18 600.00
-	Fixtures and Tapware	$50 600.00
-	Hot Water Service	$10 900.00
-	Mechanical Services drainage	$ 5 500.00
-	Water Corporation Headworks	$33 873.00
	TOTAL	**$154 873.00**

The Probable Opinion of Cost excludes the following items -

1. Applicable Builder's Work
2. Applicable Government GST
3. Electrical connections to hot water units
4. Clay and rock excavation of site
5. Applicable Regional loadings and allowances

I trust the enclosed meets with your requirements. Should you require any further information or clarification please do not hesitate to contact the undersigned.

Yours faithfully,

PAUL M WHITE ***JP LMAHSCA FIPA***
DIRECTOR
CONSTRUCTION HYDRAULIC DESIGN PTY LTD

8A / 663 Newcastle Street, Leederville WA 6007
PO Box 358, North Perth WA 6906
P 9206 2700
E admin@chdwa.com.au
W www.chdwa.com.au

AHSCA
The Association of Hydraulic Services Consultants Australia

PERFORMANCE SCHEDULE – FAN COIL UNIT / CONDENSING UNIT

SYSTEM REFERENCE (FCU)	AREA SERVED	COOLING PERFORMANCE			HEATING PERFORMANCE		SUPPLY AIR QTY (L/s)	OUTSIDE AIR QTY (L/s)	NOISE LEVELS dB(A)	DESIGN SELECTION	SYSTEM REFERENCE (CONDENSING UNIT)	DESIGN SELECTION	NOISE LEVELS dB(A)	MOTOR PHASE AND FULL LOAD AMPS
		ON COIL °C	TOTAL kW	SENS. kW	ON COIL °C	TOTAL kW								
FCU-1.1	AV / COMMS	24.0/17.0	3.8	3.4	22	0.3	250	0	41	DAIKIN VRV WALL MOUNTED FXAQ50BVM	CU-1	DAIKIN VRV H/R REYQ16BYM9	61	1Ø : 13.3A (FCU)
FCU-1.2	MULTIPURPOSE 1	28.6/20.2	14.9	9.6	15.9	6.7	780	225	46	DAIKIN VRV DUCTED FXMQ140PVE				& 3Ø : 29.9A (CU)
FCU-1.3	MULTIPURPOSE 2	28.4/20.1	20.8	13.1	16.2	9.4	1100	300	44	DAIKIN VRV DUCTED FXMQ200PVE				
FCU-1.4	HEAT/SERVE KITCHEN	24.0/17.0	2.7	2.6	22	1.4	190	0	37	DAIKIN VRV COMPACT CASSETTE FXZQ40BVM				
FCU-2	ELECT SERVICES	24.0/17.0	0.9	0.9	22	0	150	0	38	DAIKIN H/P COMPACT CASSETTE FTXV20WVMA	CU-2	DAIKIN H/P RXV20WVMA	46	1Ø : 8.5A (CU)
FCU-3.1	MANAGERS OFFICE	24.0/17.0	2.4	1.6	22	1.2	150	0	33	DAIKIN VRV COMPACT CASSETTE FXZQ25BVM	CU-3	DAIKIN VRV H/R REYQ12BYM9	59	1Ø : 9.7A (FCU)
FCU-3.2	VIDEO CONFERENCE	24.0/17.0	2.4	1.6	22	1.2	150	0	33	DAIKIN VRV COMPACT CASSETTE FXZQ25BVM				& 3Ø : 21.3A (CU)
FCU-3.3	CRC	26.9/19.1	22.7	15.4	18.1	9.5	1100	200	46	DAIKIN VRV DUCTED FXMQ250PVE				
FCU-4.1	MAIN FOYER	24.0/17.0	20.2	16.8	22	6.5	1000	0	44	DAIKIN VRV DUCTED FXMQ200PVE	CU-4	DAIKIN VRV H/P RXYQ10TY1A	57	1Ø : 7.3A (FCU)
FCU-4.2	GIFT SHOP	24.0/17.0	4.2	3.1	22	1.2	190	0	37	DAIKIN VRV COMPACT CASSETTE FXZQ40BVM				& 3Ø : 22.0A (CU)
FCU-5	EXHIBITION	26.9/19.1	22.7	15.4	18.1	4.2	1100	200	46	DAIKIN VRV DUCTED FXMQ250PVE	CU-5	DAIKIN VRV H/P RXYQ10TY1A	57	1Ø : 9.3A (FCU)
														& 3Ø : 22.0A (CU)
FCU-6	GALLERY	26.9/19.1	20.8	15.1	18.1	7.7	1100	200	44	DAIKIN VRV DUCTED FXMQ200PVE	CU-6	DAIKIN VRV H/P RXYQ10TY1A	57	1Ø : 7.8A (FCU)
														& 3Ø : 22.0A (CU)

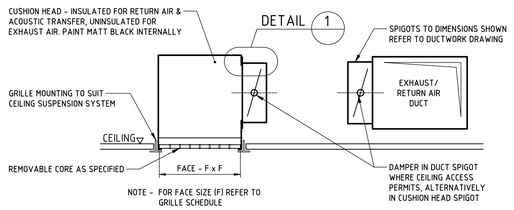
DESIGN CONDITIONS – ABOVE CAPACITIES SHALL BE AT THE FOLLOWING CONDITIONS.
- ROOM DESIGN CONDITIONS: SUMMER 24°C, 50% RH WINTER 22°C
- AMBIENT DESIGN CONDITIONS SUMMER 40.6°C DB / 27.1°C WB WINTER 18°C

NOTE:
- UNITS SHALL BE CAPABLE OF CONTINUOUS OPERATION TO NO LESS THAN 46°C WITHOUT CUT-OUT.
- UNITS SHALL BE SUPPLIED AND INSTALLED WITH ALL HARDWARE TO ACCOMMODATE AUTOMATIC CHANGEOVER MODE OF OPERATION
- CONDENSING UNITS SHALL BE SUPPLIED WITH PROPRIETARY CORROSION PROTECTION COATINGS TO CONDENSER COILS.

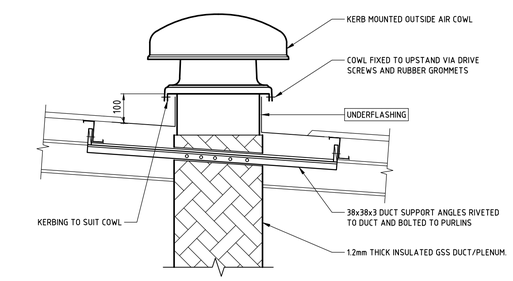
PERFORMANCE SCHEDULE – FANS

SYSTEM REFERENCE	AREA SERVED	NOMINAL SELECTION	FAN DUTY		MOTOR		IN DUCT SOUND POWER LEVELS (Lw dB re 1pW)								dBA@3m
			L/s	Pa	PHASE	MAX kW	63	125	250	500	1K	2K	4K	8K	
EF-1 #	KITCHENETTE	FANTECH MIXED FLOW INLINE TD500/150SIL	60	80	1	0.04	51	47	53	53	48	40	32	28	33 (OUTLET)
TEF-1 #	AMENITIES	FANTECH MIXED FLOW INLINE TD2000/315SIL	300	80	1	0.19	60	69	69	65	66	57	43	42	48 (OUTLET)
TEF-2 #	UNISEX WC	FANTECH MIXED FLOW INLINE TD350/125SIL	30	60	1	0.02	49	45	49	48	47	34	31	27	27 (OUTLET)
OAF-1 #	EXHIBITION / GALLERY	FANTECH MIXED FLOW INLINE TD2000/315SIL	400	120	1	0.29	64	71	75	70	73	64	50	50	55 (OUTLET)

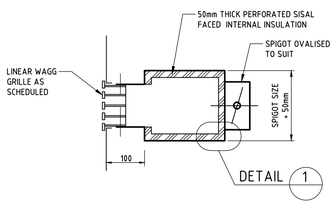
ALL FAN SELECTIONS SHALL COMPLY WITH NCC2022 AND INCORPORATE 10% ADDITIONAL CAPACITY.
DENOTES FAN SUPPLIED AND INSTALLED WITH SPEED CONTROLLER. NOTE 2 SPEED SWITCHING ALONE IS NOT PERMITTED FOR OAFs.
TOILETS EXHAUST FANS SHALL BE SUPPLIED AND INSTALLED WITH 30 MINUTE RUN-ON TIMER PROVISION, REFER TO CONTROLS AND MECHANICAL ELECTRICAL SECTION IN SPECIFICATION.
OUTSIDE AIR FANS AND EXHAUST AIR FANS SERVING AIR CONDITIONED ROOMS SHALL BE SUPPLIED AND INSTALLED WITH DAMPERS TO SEAL THE SPACES SERVED WHEN FANS NOT IN USE.



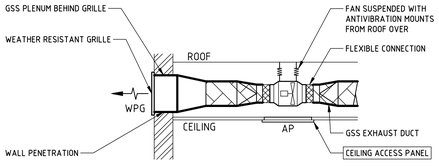
EXHAUST / RETURN / TRANSFER GRILLE DETAIL
SCALE NOT TO SCALE



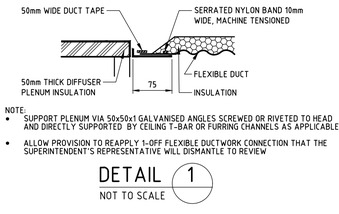
ROOF MOUNTED OUTSIDE AIR COWL
NOT TO SCALE

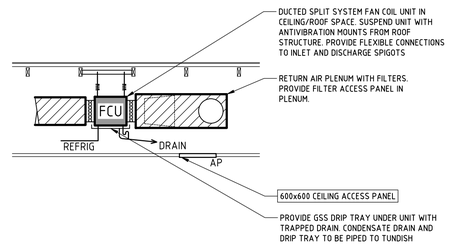


LINEAR DIFFUSER DETAIL
SCALE NOT TO SCALE

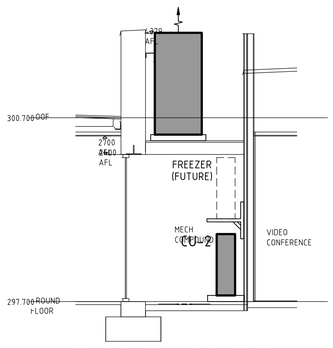


TYPICAL DUCTED EXHAUST FAN
SCALE NOT TO SCALE

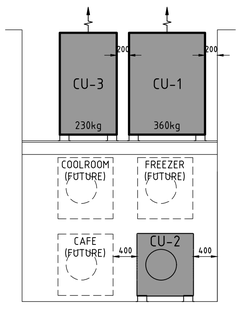




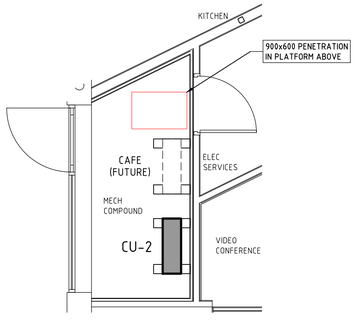
TYPICAL DUCTED FAN COIL UNIT DETAIL
SCALE NOT TO SCALE



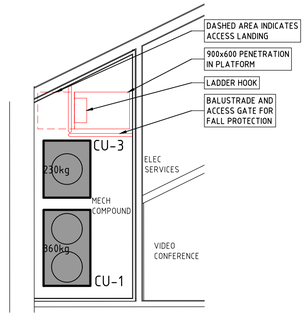
MECH COMPOUND SECTION 1
SCALE 1:50



MECH COMPOUND SECTION 2
SCALE 1:50



MECH COMPOUND LOW LEVEL PART PLAN
SCALE 1:50



MECH COMPOUND HIGH LEVEL PART PLAN
SCALE 1:50

LEGEND

- GSS DUCTWORK
- DUCTWORK WITH 100mm INTERNAL INSULATION
- DUCTWORK WITH 75mm INTERNAL INSULATION
- DUCTWORK WITH 50mm INTERNAL INSULATION
- DUCTWORK WITH 25mm INTERNAL INSULATION
- EQUIPMENT
- FLEXIBLE CONNECTION
- DUCT CUT IN SECTION
- DUCT NOT CUT IN SECTION
- LOUVRED FACE SUPPLY DIFFUSER 4 WAY BLOW
- EXHAUST/RETURN GRILLE
- MSSB — MECHANICAL SERVICES SWITCHBOARD
- MSCP — MECHANICAL SERVICES CONTROL PANEL
- 50mm EXTERNALLY INSULATED FLEXIBLE DUCT
- NEW PIPEWORK
- AIR FLOW DIRECTION
- VOLUME CONTROL DAMPER
- M — VCD MOTOR
- TS ■ — TEMPERATURE SENSOR
- CS ■ — CONTROL STATION
- PB ■ — PUSH BUTTON SWITCH
- ON/OFF ■ — ON/OFF SWITCH
- TD — TUNDISH
- DP — DRAIN POINT
- FW — FLOOR WASTE
- AP — CEILING ACCESS PANEL

No.	AMENDMENT	DATE	CHKD
D	DESIGN DEVELOPMENT AND OPC	2026.07.27	SW
C	FINAL COORDINATION ISSUE	2026.07.22	SW
B	COORDINATION ISSUE	2026.07.15	CT
A	PRELIMINARY	25.03.2026	SW

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PROJECT
KATTER KICH DISCOVERY CENTRE

TITLE
MECHANICAL SERVICES SCHEDULES AND DETAILS

SMW&C

DESIGNED	DRAWN	APPROVED	PROJECT No.
SW	SMWC	SW	4222

SCALE	DATE	DRG No.	REV
1:100 – A1 1:200 – A3	MARCH '26	M1	D

AUTOCAD DRAWING NAME: 4222 – Mech.DWG

35.2m
257.2m
135°01'
28.46m
93°31'58"
28.44m
FCU-1.2
DUCTED FAN COIL UNIT
FCU-1.1
WALL MOUNTED
FAN COIL UNIT
FCU-1.4
CASSETTE FAN COIL UNIT
FCU-1.3
DUCTED FAN COIL UNIT
FCU-3.3
DUCTED FAN COIL UNIT
FCU-3.1
CEILING MOUNTED
CASSETTE FAN COIL UNIT
KITCHEN HOOD RESIDENTIAL STYLE. KITCHEN APPLIANCES TBA. PROVISION OF RANGEHOOD AND DISCHARGE GRILLE
ALUMINIUM CURCULAR BATTEN SCREENS FIXED ALONG VERANDAH EDGE IN ANDOSIED FINISH.
CEILING SPACE ABOVE SOFFIT FOR PIPEWORK TO PASS BETWEEN BUILDINGS TO ENABLE COLLATING THE CONDENSERS ON A COMMON PLATFORM
REFER TO MECH COMPOUND PART PLANS AND SECTIONS FOR MORE DETAILS
ALUMINIUM CURCULAR BATTEN SCREEN IN ANDOSIED FINISH.
BULKHEAD REQUIRED TO ACCOMMODATE PIPEWORK AND OUTSIDE AIR DUCTWORK FROM EXTERNAL STORE AREA TO GIFT SHOP CEILING SPACE.
ALUMINIUM CURCULAR BATTEN SCREEN IN ANDOSIED FINISH.
ALUMINIUM CURCULAR BATTEN SCREEN IN ANDOSIED FINISH.
LANDSCAPED COURTYARD
EXPOSED AGGREGATE COURTYARD
EXPOSED AGGREGATE COURTYARD
BENCH SEAT
BENCH SEAT
LOADING BAY
BIN STORE
GREASE ARRESTOR REFER HYDRAULIC
ECB
SCR02
OAF-1
TEF-1
TEF-2
EF-1
CU1
CU2
CU3
CU4
CU5
CU6
FCU-1
FCU-2
FCU-3.2
FCU-4.1
FCU-4.2
FCU-5
FCU-6
RECEPTION DESK
SECURITY ROLL CONCEALED IN
G-01 AV / COMMS 10 m²
G-02 MULTIPURPOSE 1 58 m²
G-03 MULTIPURPOSE 2 50 m²
G-04 HEAT/SERVE KITCHEN 20 m²
G-05 FEMALE WC 6 m²
G-06 MALE WC 10 m²
G-07 AMB LOCK 7 m²
G-08 SERVICES STORE 6 m²
G-09 STORE 12 m²
G-10 UAT 6 m²
G-11 MECH COMPOUND 0 m²
G-12 MECH PLANT 15 m²
G-13 CAFE 49 m²
G-14 MANAGERS OFFICE 9 m²
G-15 KITCHENETTE 5 m²
G-16 UNISEX WC 3 m²
G-17 KITCHEN 16 m²
G-18 ELEC SERVICES 10 m²
G-19 PRINT AREA 11 m²
G-20 CORRIDOR 3 m²
G-21 CRC 122 m²
G-22 CHEF'S DESK 4 m²
G-23 FOYER 80 m²
G-24 GIFT SHOP 60 m²
G-25 GALLERY 67 m²
G-26 EXH. STORE 34 m²
G-27 EXHIBITION 174 m²
WPG 450x450 225L/s
WG 800x600 555L/s
WG 1500x600 780L/s
WG 1500x350 550L/s
WPG 500x500 200L/s
KH 200L/s
WG 1400x350 800L/s
WPG 500x500 300L/s
G 250x250 60L/s
WPG 900x250 300L/s
WPG 600x250 90L/s
G 250x250 90L/s
G 350x350 60L/s
G 350x350 100L/s
WPG 900x500 300L/s
DDR 600x350 275L/s
WG 600x350 275L/s
WG 1500x350 500L/s
WG 1500x350 1000L/s
WG 1400x350 900L/s
WPG 750x500 400L/s
WG? 900x600 900L/s
WG 600x350 275L/s
WG 1400x350 900L/s
WG 1500x350 500L/s
WG 600x350 275L/s
WG 600x350 275L/s
WG 600x350 275

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J. CRONIN
E. LAM

4222 ltr 02 - KKDC OPC.doc

27th of July 2026

Site Architecture Studio
Level 3
56 William Street
PERTH WA 6000

ATTENTION: ROSALYND BAIRD

Dear Rosalynd,

KATTER KICH DISCOVERY CENTRE, HYDEN
MECHANICAL SERVICES
OPINION OF PROBABLE COST

Initial schematic design documents have been prepared for the above project and the Opinion of Probable Cost has been calculated as follows: -

Theatre, Multipurpose, Heat/Serve Kitchen and Toilets	$130,000 + GST
Library, Comms, Video Conference and Managers Office	$120,000 + GST
Foyer, Exhibition, Gallery and Gift Shop	$240,000 + GST

Total Opinion of Probable Cost for Mechanical Services: - $490,000 + GST

Note:

1) Budget does not include for regional uplift (Perth Based Price), builder's margin, builder's work associated with mechanical services.

2) Budget does not include for services associated with Café air conditioning, Café kitchen exhaust, Coolroom or Freezer.

Yours faithfully
SMW&C PTY LTD

Shane Wilson
DIRECTOR

ISO 9001 BUREAU VERITAS Certification

Landscape Concept

A landscape of discovery

This is a landscape of discovery.

On the sites doorstep lies the largest temperate Mediterranean woodland in the world with the surrounding area is comprised of gentle undulating plains, salt lake chains, and a diverse mosaic of soils and geology.

The design draws these diverse landscapes into the site and offers places for gathering, lingering, and discovery.

The surrounding landscape includes mallee woodlands, halophytic (plants that thrive in high salt environments) shrublands, proteaceous scrub-heath, and large mallet (gimlets, salmon gums etc) woodlands on the valley floors.

These landscape are interpreted on site to enhance visitors and locals experience by embodying the value of discovery. The proposed design reveals and re-establishes these local landscape ecologies.



Landscape Plan

LEGEND

1. Arrival Forecourt
2. Informal Drainage Zone
3. Welcome Area / Alfresco
4. Courtyard Gardens
5. Terraced Rock Seating
6. Gravel Seating Area
7. Raised Shaded Seating
8. Discovery Landscape
9. Discovery Path
10. Native Landscape Garden
11. Secondary Entry
12. Rear Entry Access
13. Back of House

– – Plot Boundary



1:400 @ A3

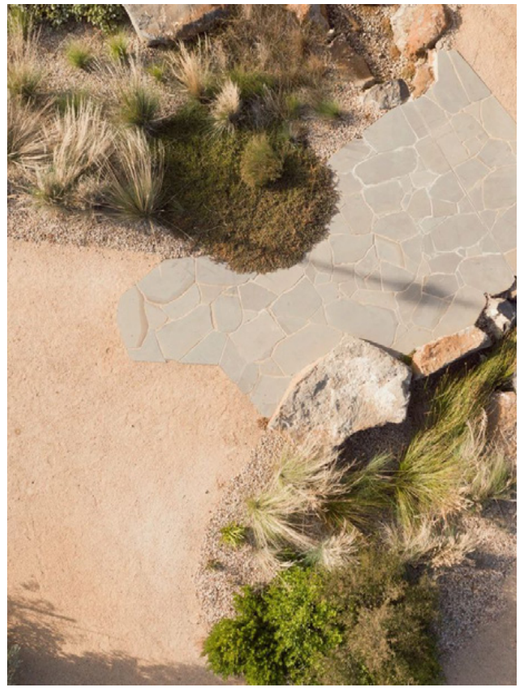
Look and Feel Imagery





Landscape that calms and cues

New rhythm, familiar tone





Local materials



Rocky foreground



Surfaces & Materials Plan

LEGEND

1. Exposed aggregate concrete
2. Recycled hardwood decking
3. Compacted summerstone fines
4. Compacted red gravel fines
5. Red asphalt
6. Custom recycled timber seating
7. Local granite seating rocks
8. Feature local granite rocks
9. Local gravel mulch (to all garden beds)

– – Plot Boundary

NOTE:

Refer to following pages for more information on materials and finishes.



1:400 @ A3

Surface Finishes

Simple, robust, low-maintenance materials

The material selections prioritise durability and simplicity, and considers the ongoing use and maintenance requirements of the landscape.

The material palette draws from the tones, textures and processes of the surrounding landscape, grounding the project in the character of Hyden and the wider Western Woodlands.

The timber decking and concrete surfaces provide contrast and clarity through key arrival spaces and primary pathways.

Compacted gravels are used on secondary pathways and encourage exploration and discovery within the landscape spaces.

Earth-based materials such as local gravel and granite reference the site's geology, while rammed earth and timber elements reinforce a sense of permanence and connection to place.

NOTE: All quantities are approximate.

PAVING

NOTE: Numbers refer to 'Surfaces and Materials Plan' locations.



Material: Exposed Aggregate Insitu Concrete

Colour: Grey Base

Location: Primary pathways

Approximate Area: 700m^2



Material: Recycled Hardwood Decking, with natural oil finish.

Colour: Natural

Location: Entry thresholds

Approximate Area: 210m^2



Material: Summerstone Gravel Fines

Colour: Natural

Location: Secondary pathways

Approximate Area: 140m^2



Material: Compacted Local Gravel Fines

Colour: Natural

Location: Secondary pathways

Approximate Area: 550m^2



Material: Red asphalt with grey concrete kerb edge.

Colour: Red asphalt

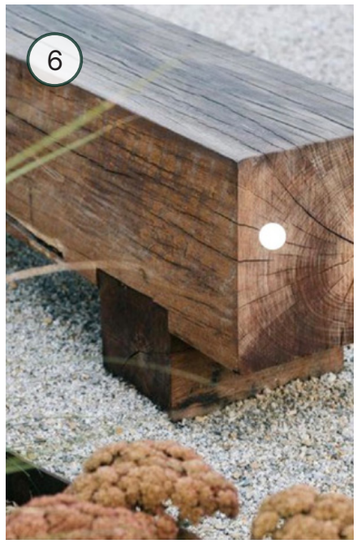
Location: Northern car parking

Approximate Area: 450m^2

Furniture and Materials

SEATING

NOTE: Numbers refer to ‘Surfaces and Materials Plan’ locations.



Material: Custom recycled timber railway sleepers, with natural oil finish.

Colour: Natural.

Location: Central courtyard

Approximate Length: 15 Lm



Material: Local granite seating rocks(400-800mm length)

Colour: Natural

Location: Northern courtyard

Approximate number: 40

FEATURES



Material: Feature local rocks (sizing TBC based on local supply however, typical 1000-1800mm length)

Colour: Natural

Location: Throughout

Approximate number: 20

MULCH



Material: Local gravel mulch (5-25mm size) used on all garden beds to 50mm depth

Colour: Natural

Location: Garden beds

Approximate Area: 1800m^2

NOTE: All quantities are approximate.

Planting

The planting selections prioritise local species, and considers the ongoing use and maintenance requirements. The planting palette below provides examples of key plant species that are local to the area and suitable for use in the landscape design. The use of these plants draws from the surrounding landscapes, grounding the project in the character of Hyden and the wider Western Woodlands.

TREES



Name: Eucalyptus salubris
'Gimlet'
Pot Size: 90L



Name: Eucalyptus salmonphloia
'Salmon Gum'
Pot Size: 90L



Name: Eucalyptus alipes
'Hyden Mallet'
Pot Size: 45L

SHRUBS & GRASSES



Name: Cratystylis conocephala
'False bluebush'
Pot Size: 140ml



Name: Kunzea pulchella
'Granite Kunzea'
Pot Size: Tubestock



Name: Austrostipa elegantissima
'Feather spear-grass'
Pot Size: Tubestock

Approximate quantities for landscape areas
90L Trees x 20
45L trees x 15
140ml pot x 2000
Tubestock x 4000

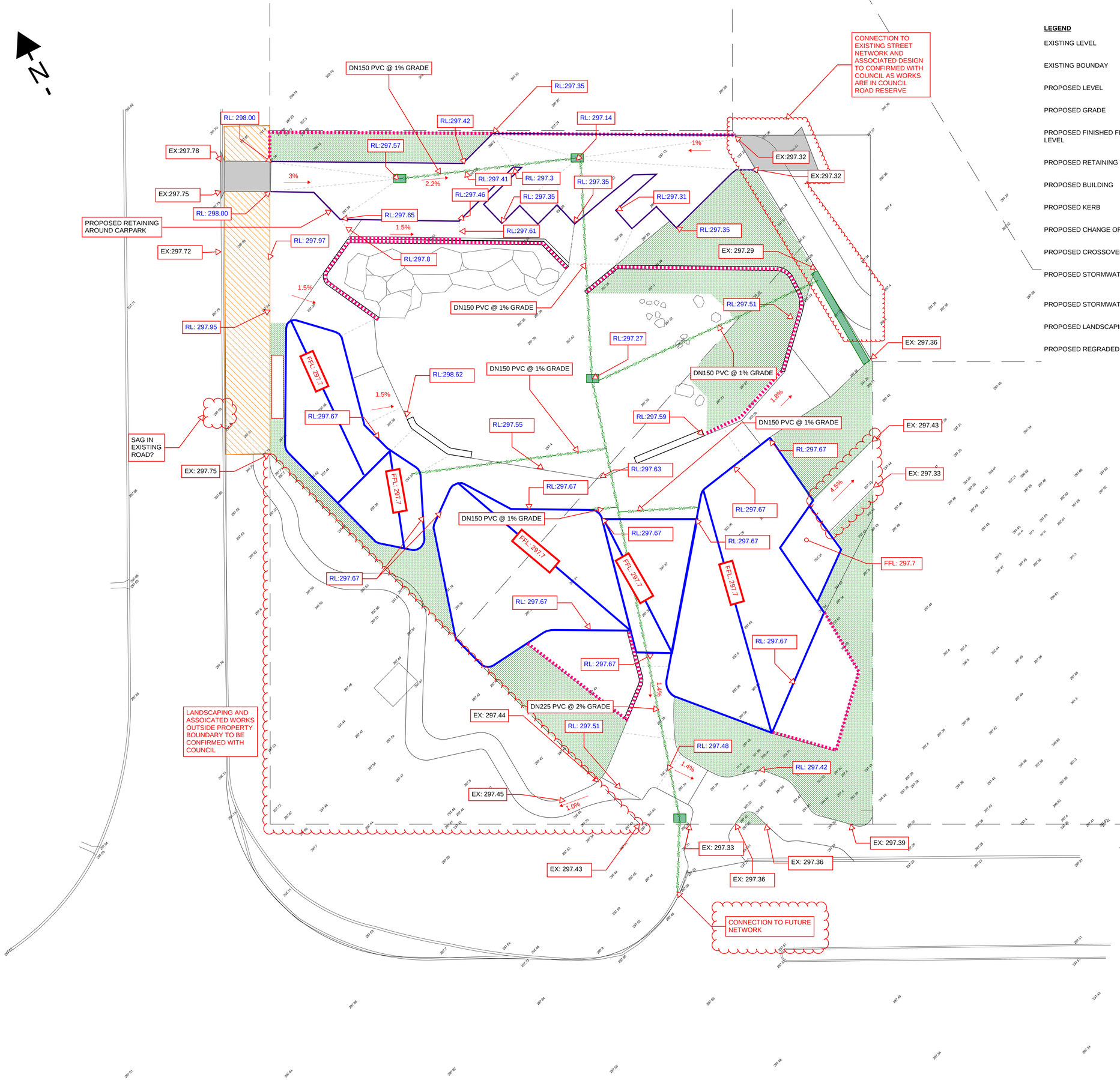
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LEGEND

- EXISTING LEVEL — 297.4 — EX: 297.29
- EXISTING BOUNDAY
- PROPOSED LEVEL — RL:297.32
- PROPOSED GRADE — 6%
- PROPOSED FINISHED FLOOR LEVEL — FFL: 298.35
- PROPOSED RETAINING WALL
- PROPOSED BUILDING
- PROPOSED KERB
- PROPOSED CHANGE OF GRADE
- PROPOSED CROSSOVER
- PROPOSED STORMWATER PIT
- PROPOSED STORMWATER MAIN — SW SW SW
- PROPOSED LANDSCAPING
- PROPOSED REGRADED VERGE

Rev	Date	Description	By	Chk
A	30.07.26	CONCE	JL	SW

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client
SITE ARCHITECTURE STUDIO

Project Name
WAVE ROCK DISCOVERY CENTRE
HYDEN, WA

Title
SITE GRADING CONCEPT PLAN
ALTERNATIVE OPTION

Discipline		Status
CIVIL		PRELIMINARY
Designed By	**Checked By**	**Approved By**
JL	SW	SW
Project No.	**Drawn By**	**Scale**
29385.001	JL	1:200 (at A1)
Drawing No.		**Revision**
SK04		A

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Rev	Date	Description	By	Chk
A	30.07.26	CONCEPT	JL	SW

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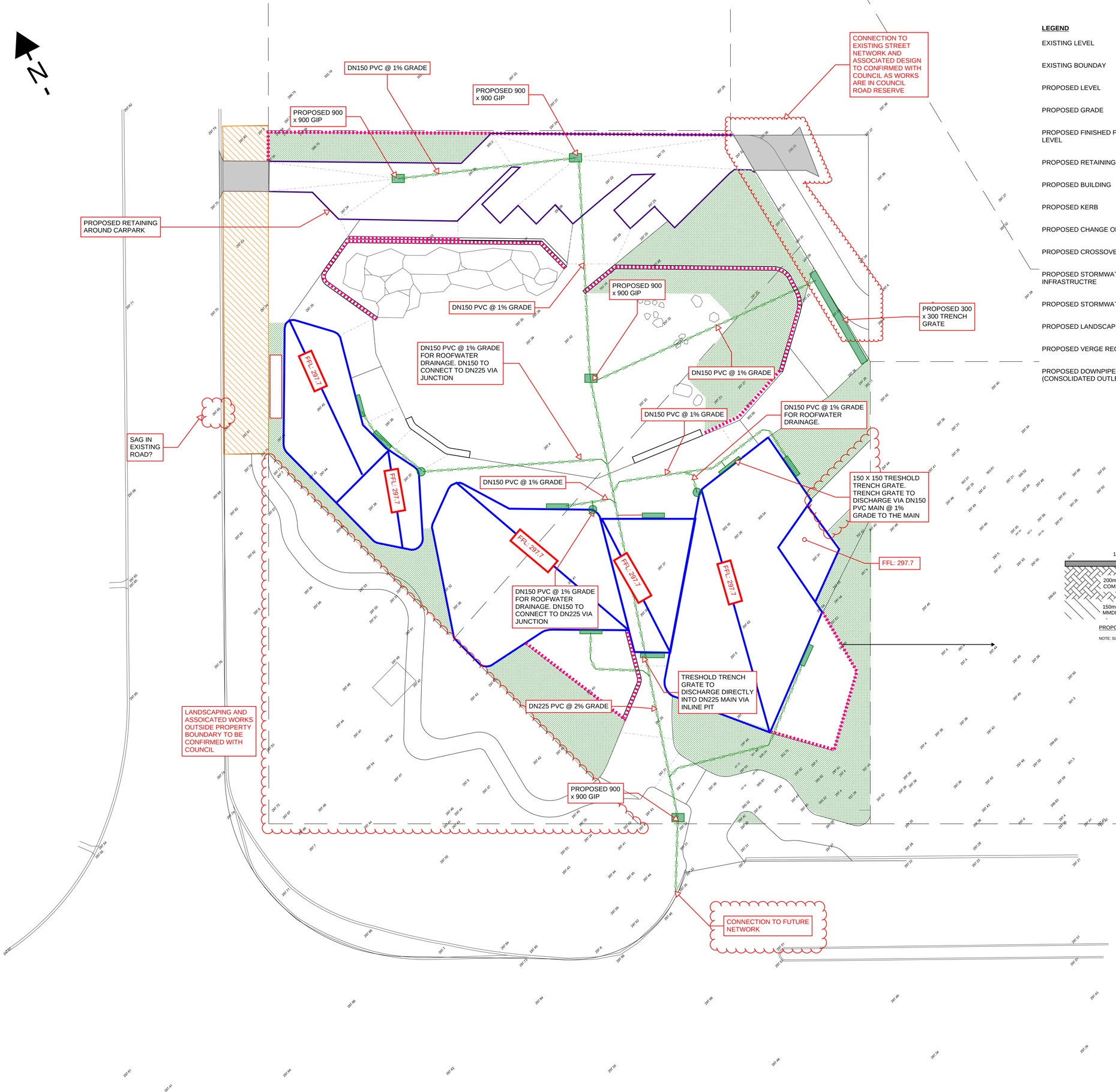
Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client
SITE ARCHITECTURE STUDIO

Project Name
WAVE ROCK DISCOVERY CENTRE
HYDEN, WA

Title
ROADWORKS AND DRAINAGE CONCEPT PLAN
ALTERNATIVE OPTION

Discipline		Status
CIVIL		PRELIMINARY
Designed By	Checked By	Approved By
JL	SW	SW
Project No.	Drawn By	Scale
29385.001	JL	1:200 (at A1)
Drawing No.		Revision
SK05		A



PRELIMINARY
NOT FOR CONSTRUCTION

ADG>

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Rev	Date	Description	By	Chk
A	30.07.26	CONCE PT	JL	SW

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Quality Assurance ISO 9001:2015 | Work Health Safety ISO 45001:2018
Environmental Management ISO 14001:2015

Client
SITE ARCHITECTURE STUDIO

Project Name
WAVE ROCK DISCOVERY CENTRE
HYDEN, WA

Title
STORMWATER CATCHMENT PLAN

ALTERNATIVE OPTION

Discipline		Status
CIVIL		PRELIMINARY
Designed By	Checked By	Approved By
JL	SW	SW
Project No.	Drawn By	Scale
29385.001	JL	1:200 (at A1)
Drawing No.		Revision
SK06		A



LEGEND

- EXISTING LEVEL — 297.4 — EX: 297.29
- EXISTING BOUNDAY
- PROPOSED LEVEL — RL:297.32
- PROPOSED GRADE — 6%
- PROPOSED FINISHED FLOOR LEVEL — FFL: 298.35
- PROPOSED RETAINING WALL
- PROPOSED BUILDING
- PROPOSED KERB
- PROPOSED CHANGE OF GRADE
- PROPOSED CROSSOVER
- PROPOSED STORMWATER INFRASTRUCTRE
- PROPOSED STORMWATER MAIN — SW—SW—
- PROPOSED LANDSCAPING
- PROPOSED VERGE REGRADING
- PROPOSED DOWNPIPE (CONSOLIDATED OUTLET)
- PROPOSED CATCHMENT AREA — C7 — 297 sq m

NOTES

1. FINSIHED FLOOR LEVEL (FFL) IS BASED ON THE EXITING SURFACE LEVEL PLUS 600mm OF FILL PLUS 150mm SLAB

2. THE STORMWATER NETWORK HAS BEEN SIZED Q1 AS THE EXISTING NETWORK IS LIMITED TO THIS.

3. RAINWATER TANKS SHALL BE USED FOR ALL ROOFWATER CATCHMENTS. TANKS TO BE SIZED BY HYDRAULIC ENGINEER

LEGEND

- SITE BOUNDARY
- EXISTING PROPERTY BOUNDARY
- EXISTING SURFACE CONTOURS (12.0)
- EARTHWORKS CONTOURS (12.0)
- FINISHED SURFACE LEVEL (FSL 7.000)
- EXISTING NOMINAL KERB LINE
- EXISTING EDGE OF BITUMEN LINE
- EXISTING ROAD CENTERLINE
- EXISTING EDGE OF BUILDING
- EXISTING EDGE OF BUILDING EAVE
- EXISTING STORMWATER DRAINAGE (SWD)
- EXISTING SEWER (S)
- EXISTING UNDERGROUND ELECTRICITY (E)
- EXISTING OVERHEAD ELECTRICITY (OE)
- EXISTING COMMUNICATIONS (C)
- EXISTING UNKNOWN SERVICE (?)
- EXISTING FENCE
- EXISTING RETAINING WALL
- BUILDING OUTLINE

EARTHWORKS VOLUMES

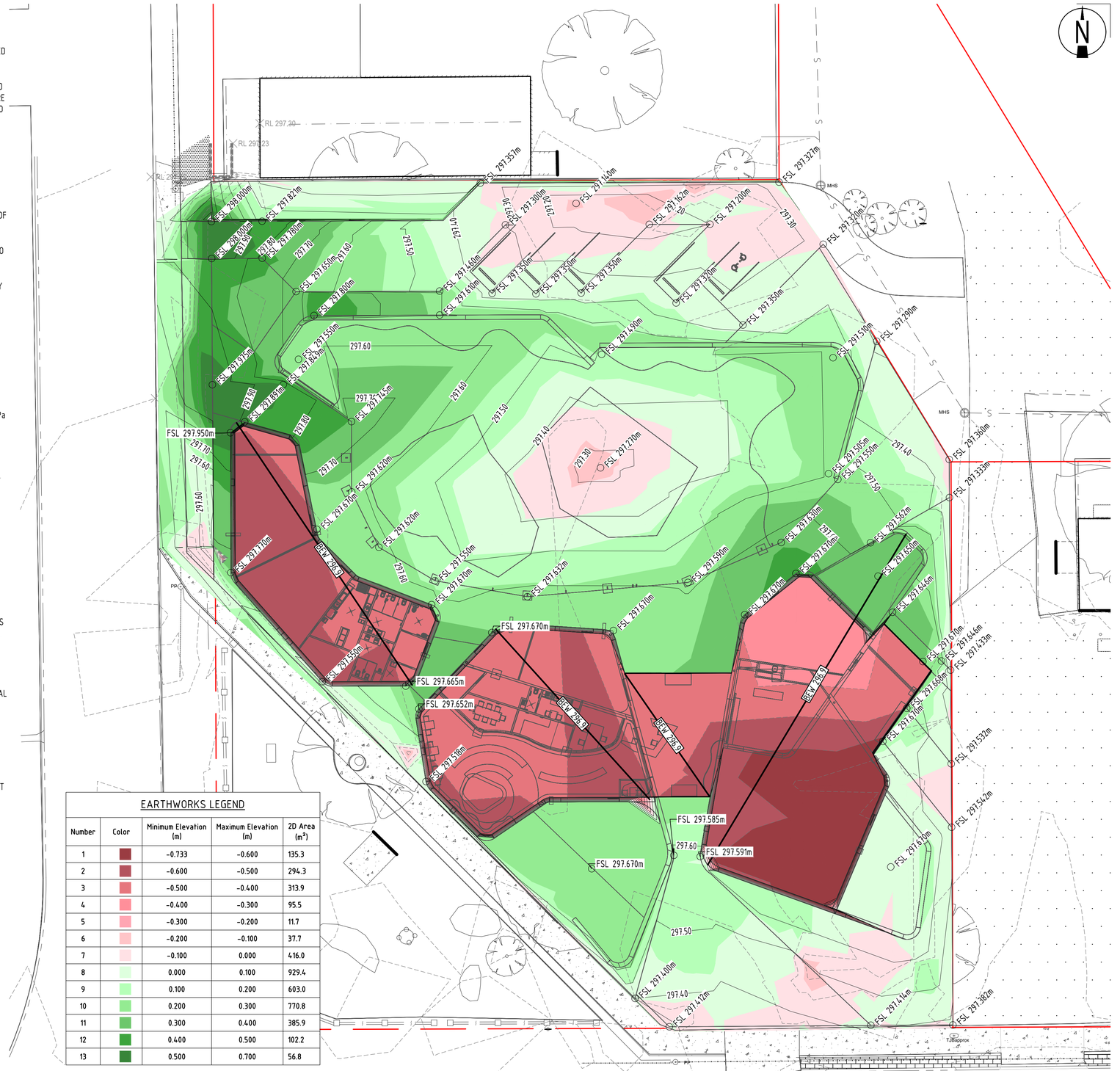
(EXISTING SURFACE TO FINISHED SURFACE)

	TOTAL CUT	488.7m³
	TOTAL FILL	531.6m³
TOTAL BALANCE (SPOIL/ IMPORTED FILL)		42.9m³

NOTE:
1. VOLUMES ARE SOLID VOLUMES AND DO NOT MAKE ALLOWANCE FOR COMPACTION/ SWELLING FACTORS
2. VOLUMES ARE FROM EXISTING TO DESIGN SURFACE LEVELS OUTSIDE OF THE BUILDING FOOTPRINT INCLUDING KERBS, RETAINING WALLS, LANDSCAPING AND PAVEMENT. INSIDE THE BUILDING FOOTPRINT, THE VOLUME IS TAKEN FROM SUBGRADE LEVEL ASSUMING A BUILDING SLAB THICKNESS OF 100mm AND 700mm FOR IMPORTED SELECT FILL IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
3. NO ALLOWANCE HAS BEEN MADE FOR TOP SOIL STRIPPING.
4. NO ALLOWANCE HAS BEEN MADE FOR TRENCHING
5. NO ALLOWANCE HAS BEEN MADE FOR FOOTINGS

EARTHWORKS NOTES

1. GRASS AND TOPSOIL SHALL BE STRIPPED OVER THE EXTENT OF THE WORKS UNLESS DIRECTED OTHERWISE AND STOCKPILED FOR FUTURE USE AS NON-STRUCTURAL FILL IF REQUIRED, OR REMOVE FROM SITE.
2. CONTRACTOR TO CLEAR AND GRUB ALL VEGETATION ON SITE AS IDENTIFIED IN THE APPROVED VEGETATION MANAGEMENT PLAN. CONTRACTOR TO ENSURE ALL TREE ROOTS AND STUMPS ARE COMPLETELY REMOVED AND BACKFILLED TO LEVEL 1 SUPERVISION. CONTRACTOR TO ALLOW TO MULCH ALL CLEARED VEGETATION AND STOCKPILE ON SITE OR REMOVE FROM SITE AS DIRECTED.
3. WHERE SITE TOPSOIL IS TO BE RESPREAD ON SITE, CONTRACTOR TO ALLOW TO SCREEN THE TOPSOIL OF ALL UNSUITABLE AND OVERSIZED MATERIAL. ALL UNSUITABLE MATERIAL GENERATED FROM SCREENING TO BE REMOVED FROM SITE AT CONTRACTORS EXPENSE.
4. CONTRACTOR TO ALLOW FOR ALL COSTS ASSOCIATED WITH ROCK EXCAVATION WITHIN CONTRACT RATES.
5. COMPACT THE EXPOSED SUBGRADE OR LOOSE TOP LEVEL MATERIAL TO A MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY TO AS1289 5.1.1. ANY 'SOFT SPOTS' IDENTIFIED BY THE PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH A COMPACTED IMPORTED SELECT FILL MATERIAL TO THE ABOVE COMPACTION REQUIREMENTS.
6. IMPORTED SELECT FILL MATERIAL SHALL BE SUPPLIED AND COMPACTED WHERE NECESSARY TO OBTAIN SUBGRADE/PLATFORM LEVEL. REFER TO THE GEOTECHNICAL REPORT FROM PERTH GEOTECHNICS FOR FURTHER INFORMATION.
7. ANY PROPOSED RETAINING WALL WORKS MUST BE WHOLLY WITHIN THE PROPERTY BOUNDARY OF THE SUBJECT SITE, INCLUDING REAR OF RETAINING WALL DRAINAGE INFRASTRUCTURE FOR RETAINING WALLS IN CUT.
8. REFER ARCHITECT/LANDSCAPE ARCHITECT DRAWINGS FOR CONFIRMATION OF RETAINING WALL COLOUR AND FINISH.
9. ALL RETAINING WALL STRUCTURAL DESIGN AND CONSTRUCTION CERTIFICATION BY MANUFACTURER / INSTALLER.
10. ALL EARTHWORKS OPERATIONS SHALL BE CARRIED OUT WITH 'LEVEL 1' SOIL ENGINEERING SUPERVISION IN ACCORDANCE WITH APPENDIX B OF AS 3798. THE NOMINATED GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND THE CONTROLLED FILL IS SUITABLE FOR PURPOSE WITH A MINIMUM 150KPa BEARING CAPACITY UNDER THE PLATFORM/STRUCTURES.
11. ALL EARTHWORKS FILL AND EXCAVATED AREAS SHALL BE COMPACTED TO 98% MODIFIED MAXIMUM DRY DENSITY (AS 1289 5.1.1) IN LAYERS NOT EXCEEDING 150MM COMPACTED THICKNESS.
12. THE NOMINATED GEOTECHNICAL TESTING AUTHORITY SHALL PROVIDE CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE DRAWINGS.
13. CONTRACTOR TO UNDERTAKE ALL EARTHWORKS TESTING TO COMPLY WITH THE PROJECT SPECIFICATION AND LOCAL AUTHORITY REQUIREMENTS.
14. FINISHED SURFACES TO ALL DISTURBED AREAS ARE TO BE TREATED IN ACCORDANCE WITH LANDSCAPE DRAWINGS.
15. ALL EARTHWORKS TO BE CARRIED OUT AT +/- 2% OPTIMUM MOISTURE CONTENT.
16. ALL NEW WORKS TO MATCH NEATLY INTO EXISTING
17. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH APPROVED MANAGEMENT PLANS.
18. CONTRACTOR TO ENSURE SUITABLE EROSION CONTROL MEASURES ARE INSTALLED IN ACCORDANCE WITH IECA BPESC
19. ADEQUATE SAFETY FENCING/BARRIERS TO BE APPLIED TO ALL BATTERS OR RETAINING WALLS (TEMPORARY OR PERMANENT) AS PER RELEVANT AUSTRALIAN STANDARDS AND LEGISLATION.
20. DUST CONTROL MEASURES ARE TO INCLUDE SPRAYING WATER ON UNPAVED ROADS, ACCESS TRACKS AND STOCKPILES AT A SUFFICIENT LEVEL TO SUPPRESS DUST GENERATION. ADDITIONALLY CONTRACTORS ARE TO COVER OR ENCLOSE STOCKPILES WHERE REASONABLY PRACTICAL TO RESTRICT DUST MOVEMENT.
21. ALL BATTERS TO BE KEYED/STEPPED INTO EXISTING MATERIAL AS DIRECTED BY GEOTECHNICAL ENGINEER. CONTRACTOR TO ALLOW FOR ALL KEYING/STEPPING AS REQUIRED.
22. ALL TEMPORARY AND FINAL BATTER SLOPES ARE TO BE INSPECTED AND APPROVED BY GEOTECHNICAL ENGINEER. CERTIFICATION OF LONG TERM STABILITY TO BE PROVIDED BY GEOTECHNICAL ENGINEER PRIOR TO PRACTICAL COMPLETION.
23. EARTHWORKS LEVELS SHOWN ARE FINISHED SURFACE LEVELS INCLUSIVE OF TOPSOIL LAYER, PAVEMENT LEVELS, KERBS AND RETAINING WALLS OUTSIDE THE BUILDING PAD AREAS. THE BUILDING PAD AREA IS THE BULK EARTHWORKS LEVELS EXCLUIDNG THE BUILDING SLAB AND THE 700mm REQUIRED IMPORTED SELECT FILL IN ACCORDANCE WITH THE REQUIREMENTS FROM T ETC. REFER STRUCTURAL ENGINEERING DRAWINGS FOR BUILDING SLAB THICKNESSES AND HYDRAULIC DRAWINGS FOR SUB-FLOOR DRAINAGE FOR DETERMINATION OF REQUIRED BULK EARTHWORKS SURFACE.
24. FOR DETAILED GEOTECHNICAL INFORMATION, REFER GEOTECHNICAL INVESTIGATION REPORT BY PERTH GEOTECHNICS DATED 31 DECEMBER 2025 IT IS RECOMMENDED THAT THE GEOTECHNICAL CONSULTANT BE CONTACTED TO CONFIRM THE SOIL CONDITIONS PRIOR TO EARTHWORKS COMMENCING.
25. REFER ARCHITECTURAL DRAWINGS FOR BUILDING SETOUT.
26. ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM (AHD)


N
RL 297.30
RL 297.23
FSL 297.357m
FSL 297.327m
FSL 298.000m
FSL 297.871m
FSL 297.780m
FSL 297.650m
FSL 297.800m
FSL 297.610m
FSL 297.350m
FSL 297.320m
FSL 297.200m
FSL 297.140m
FSL 297.162m
FSL 297.305m
FSL 297.335m
FSL 297.290m
FSL 297.505m
FSL 297.550m
FSL 297.360m
FSL 297.333m
FSL 297.270m
FSL 297.620m
FSL 297.670m
FSL 297.630m
FSL 297.610m
FSL 297.562m
FSL 297.550m
FSL 297.646m
FSL 297.433m
FSL 297.665m
FSL 297.652m
FSL 297.516m
FSL 297.532m
FSL 297.542m
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FSL 297.591m
FSL 297.610m
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FSL 297.412m
FSL 297.444m
FSL 297.382m
FSL 297.950m
FSL 297.895m
FSL 297.714m
FSL 297.770m
FSL 297.550m
FSL 297.632m
FSL 297.630m
FSL 297.610m
FSL 297.646m
FSL 297.633m
FSL 297.666m
FSL 297.610m
FSL 297.532m
FSL 297.542m
FSL 297.610m
FSL 297.670m
FSL 297.591m
FSL 297.585m
FSL 297.400m
FSL 297.412m
FSL 297.444m
FSL 297.382m
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NCC Compliance Report CW2696

For:

Wave Rock Discovery Centre

To:

SITE Architecture Studio

Date:

29 June 2026

Status and Revision:

Concept - Rev A

ComplyWest
Building Surveyors

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ABN 14 639 748 477

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1.0 Quality Information

Project: Wave Rock Discovery Centre
Client: SITE Architecture Studio
Project Number: CW2696
Date: 29 June 2026
Report Status and Revision: Concept Rev A

1.1. Drawings:

The NCC Compliance Report has been prepared based on the following project stage and/or documentation.

Discipline	Title	Revision	Date
Architectural	various	DA	5.06.26

1.2. Document Register:

Audit Title	Revision	Date	Revision Comment
NCC Compliance Report	A	29/06/2026	Concept review

1.3. Purpose:

The purpose of the Concept NCC Compliance Report is to provide the initial advice on the compliance requirements for the design of the proposed building in relation to the deemed-to-satisfy provisions of the Building Code of Australia; Vol 1 2022.

This document will serve as the compliance Report and approach anticipated from the design team. It is the responsibility of the design team to advise of any proposed alternative compliance approach and that the design satisfies the requirements set out in this document.

A further detailed NCC Compliance Report can be undertaken upon receipt of detailed architectural and specialist drawings and documentation.

A Certificate of Design Compliance by ComplyWest Building Surveyors is subject to verification from the design team that the building has been designed and documented to comply with the NCC as outlined in the Compliance Report.

Prepared By:



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Building Surveyor Practitioner Level 1 Reg No. 350
Registered Building Surveyor Contractor Level 1 Reg No. BSC2104
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3.0 Executive Summary

3.1. General

The BCA Compliance Report has been prepared by ComplyWest Building Surveyors for SITE Architecture Studio and sets out the applicable deemed-to-satisfy provisions of the Building Code of Australia (BCA), Vol 1 2022 of the National Construction Code (NCC) for the Wave Rock Discovery Centre.

The Wave Rock Discovery Centre consists of Exhibition, CRC, Multipurpose, Gallery gift Shop and Café. The building has a Class 9b classification, has a Rise in Storeys of 1 and is to be Type C construction. The building is to be designed with BCA Importance Level 2.

This BCA Compliance Report outlines how the proposed Wave Rock Discovery Centre is to meet the performance requirements of the BCA by complying with the Deemed-to-Satisfy (DtS) as set out in the Building Code Requirements section of this report subject to the following.

All relevant Architectural, Electrical, Hydraulic and Fire Services drawings and documents are required to be submitted to the Fire & Emergency Services Authority (DFES) for comment NOT LESS THAN 15 DAYS prior to submission with the Permit Authority.

A Certificate of Design Compliance by ComplyWest Building Surveyors is subject to verification from the design team that the building has been designed and documented to comply with the BCA as outlined in the BCA Compliance Report.

4.0 Introduction

4.1. General

This document prepared for SITE Architecture Studio sets out the NCC Compliance Review for the design of Wave Rock Discovery Centre.

4.2. Project Description

The Wave Rock Discovery Centre consists of Exhibition, CRC, Multipurpose, Gallery, Gift Shop and Café.

The building has a Class 9b classification, has a Rise in Storeys of 1 and is to be Type C construction. The building is to be designed with BCA Importance Level 2.

4.3. Purpose of the Concept NCC Compliance Report

This Concept NCC Compliance Report identifies the BCA deemed-to-satisfy provisions applicable to the proposed development based on an initial review of DA architectural drawings.

4.4. NCC Governing Requirements

Compliance with the NCC is subject to the mandatory administrative Governing Requirements (NCC, Section A) and the technical Performance Requirements of the NCC.

All elements of the design must be demonstrated through the applicable assessment methods set out in the NCC that a Performance Solution or Deemed-to-Satisfy solution meets the mandatory Performance Requirements in accordance with the NCC Governing Requirements.

A Deemed-to-Satisfy solution consist of compliance with applicable deemed-to-satisfy provisions of the NCC and/or reference documents listed in Table 1 of Schedule 2 of the NCC. Care shall be taken on the different forms of reference documents viz: design input, design response, material specification and installation, or testing documents. Demonstrating compliance against ….

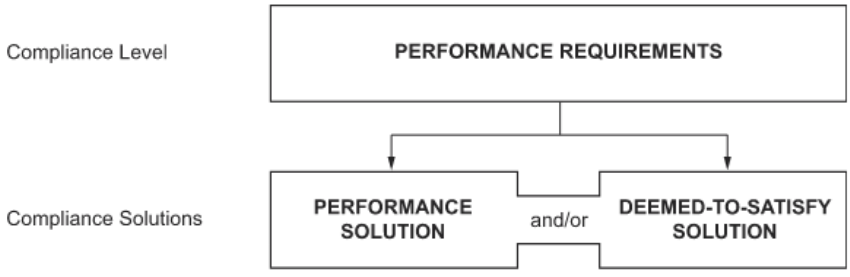
A2G1 Compliance

[2019: A2.0, A2.1]

(1) Compliance with the NCC is achieved by complying with—
  (a) the Governing Requirements of the NCC; and
  (b) the *Performance Requirements*.

(2) *Performance Requirements* are satisfied by one of the following, as shown in Figure A2G1:
  (a) *Performance Solution*.
  (b) *Deemed-to-Satisfy Solution*.
  (c) A combination of (a) and (b).

Figure A2G1: NCC compliance structure



4.5. Applicable Building Code

The applicable National Construction Code (Building Code of Australia) for this NCC Compliance Report is BCA 2022 Volume 1.

4.6. NCC 2025 Transitional arrangements (Western Australian)

The 2025 edition of the National Construction Code (NCC 2025) was published by the Australian Building Codes Board (ABCB) on 1 May 2026.

The WA Government has drafted transitional regulation where Volume One of the NCC 2025 will become mandatory in WA on 1 May 2027. The use of NCC 2025 until this date is voluntary and NCC 2022 Vol 2 is applicable.

4.7. Report Qualifications

a) This Concept NCC Compliance Report has been based on architectural DA drawings. Further detail/clarification may be required to ascertain BCA compliance.
b) Mechanical, electrical, hydraulic, fire and lift services, structural design, fire rating and protection etc are specialist disciplines and beyond scope of this report other than generally related provisions of BCA and subject to verification from the design team that the building has been designed and documented to comply with the BCA.
c) Whilst every effort has been made to identify design non-compliance items this report cannot, by the nature of reviewing documentation, identify all such items. This report identifies applicable compliance that were observed during the assessment. It should be noted that non-compliance issues may arise upon further development of documentation and during the construction phase that have not been identified in this report due to their being insufficient detailing.
d) Amendments to the design/building after this Concept NCC Compliance Report will require reassessment by ComplyWest Building Surveyors to verify consistency with the analysis and assumptions contained in this report.
e) All relevant Architectural, Electrical, Hydraulic and Fire Services drawings and Performance Solutions are required to be submitted to the Department of Fire & Emergency Services (DFES) for comment NOT LESS THAN 15 DAYS prior to submission with the Permit Authority.
f) A Certificate of Design Compliance by ComplyWest Building Surveyors for this project is subject to verification from the design team that the building has been designed and documented to comply with the BCA as outlined in the NCC Compliance Report.
g) Building and Occupant characteristics set out in this report apply.
h) Building services, equipment and strategies will be maintained to the compliance requirements and operational capacity to which they were designed and will correctly function and operate as required.
i) The use of the facilities and fixtures are as intended and within the capacity and purpose for which they were designed.
j) The purpose of this document is to provide BCA compliance advice for the project for the purpose of the design/construction team achieving compliance for certification by ComplyWest Building Surveyors. This document is not to be taken as design service or providing design solutions.
k) Reference to the Building Code of Australia (BCA) shall be taken as a reference to Volume 1 of the the National Construction Code.
l) NCC clauses and provisions referenced and quoted in this report are paraphrased and not complete or in full and readers must refer to the NCC for full wording and context. This report sets out applicable NCC requirements for the project where it can be reasonably foreseen from the information provided. It is the responsibility of the design consultant to verify design compliance with the National Construction Code, Building Code of Australia and applicable standards. The

authors of this report take no responsibility for the accuracy or appropriateness of design or documentation by others.

4.8. Product Certification

ComplyWest Building Surveyors are not Certifiers of materials, products, manufacturer, assembly, design or construction and do not 'Certify' or provide 'Product Certification'.

Product test reports, compliance certificates, and design and construction compliance certificates are to be provided by the supplier/manufacture, designer, or contractor/builder demonstrating suitable documentary evidence of compliance with the applicable National Construction Code and Australian Standards to be accepted by ComplyWest Building Surveyors.

Upon receipt of suitable documentation demonstrating compliance in accordance with the above a Certificate of Design Compliance or Certificate of Construction Compliance can be issued.

4.9. Limitations

ComplyWest Building Surveyors (COMPLYWEST) advice is given in good faith based upon our technical expertise to interpret the provisions of the BCA. Compliance with this document does not discharge a user's legal obligations. The report should only be read and used subject to, and in conjunction with, the general disclaimer.

Preparation of alternative solutions and specialist design and certification (certificates of design compliance or installation commissioning reports) are taken on face value. ComplyWest Building Surveyors will not be responsible for the accuracy, appropriateness or third party review of documents relied upon for the purpose of determining compliance.

The extent of the NCC Audit and or certification excludes any reference to and/or consideration of compliance with the requirements of the Department of Consumer and Employment Protection (Worksafe Division) and Safety Codes of Practice for "Safe Design of Buildings and Structures".

The NCC is separate legislation created by Federal agreement and adopted by each State through the respective Building Acts and it should be noted that the Code of Practice extends beyond the design compliance requirements of the NCC to the extent that it covers design for occupational safety and health, continuing use and demolition.

Although this audit covers the BCA requirements, the design team will need to consider their obligations to the client with respect to the Code of Practice. Available at www.worksafe.wa.gov.au

5.0 Building Code Requirements

5.1. General

This BCA Compliance Report outlines how the proposed Wave Rock Discovery Centre is to meet the performance requirements of the BCA by complying with the Deemed-to-Satisfy (DtS) based on an initial review of DA Architectural drawings subject to the compliance items set out in this report.

5.2. Principle Building Information

<table>
<tr><th>Project Description</th><th>Wave Rock Discovery Centre</th></tr>
<tr><td>Relevant BCA</td><td>BCA Vol 1, 2022</td></tr>
<tr><td>Classification(s)</td><td>Class 9b</td></tr>
<tr><td>Rise in Storeys</td><td>Rise in Storeys of 1</td></tr>
<tr><td>Effective Height</td><td>not applicable</td></tr>
<tr><td>Floor Area/ Volume</td><td>
<table>
<tr><th>Building</th><th>Approx. Area (m^2)</th><th>Approx. Volume (m^3)</th></tr>
<tr><td>Building</td><td>975m^2</td><td>3,000m^3</td></tr>
</table>
Comment:- Building/Fire Compartments do not exceed maximum compartment size for Class 9b, Type C construction.
</td></tr>
<tr><td>Type of Construction</td><td>Type C</td></tr>
<tr><td>Importance Level</td><td>Importance Level 2.</td></tr>
<tr><td>Number of Persons Accommodate</td><td>Number of persons accommodated determined by:
▪ the sum of the number of persons over the applicable floor area for:-
o 1 person per 10m^2 for Office,
o 1 person per 1m^2 for Café,
o 1 person per 1m^2 for Multipurpose,
o 1 person per 5m^2 for Exhibition, Gallery
o 1 person per 3m^2 for Retail
based on the designed capacity ie seating, FF&E, design scope etc
Comment:- Design Brief population requirements for building to be confirmed</td></tr>
<tr><td>Fire Engineering</td><td>Nil</td></tr>
</table>

5.3. Compliance Items/Notes

The following compliance items are highlighted and applicable to the Wave Rock Discovery Centre. Refer also to Building Code Requirements section in this report and attached drawing mark-ups.

Section A. General

BCA Classification, Type of Construction, Importance Level

Wave Rock Discovery Centre has a Class 9b classification, a Rise in Storeys of 1 and is required to be Type C construction and Importance Level 2.

Earthworks and works to and adjoining land and street

Extent of excavations (retaining walls for cut/ fill, impact on adjoining properties/buildings, disability access), easements and existing services, street verge conditions and services, location of existing buildings/structures and the like subject to Contour Feature Survey of site.

Section B1. Structure

The building to be designed, for during construction and for use, to resist the greater of the most critical action effect resulting from different combinations of actions as determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0 and as determined in accordance with B1D4 for Class 9b Type C construction and Importance Level 2.

Section C. Fire Resistance, Compartmentation and Protection of Openings

Part C2. Fire Resistance and Stability

Building elements not required to have a Fire Resistance Level in accordance with Specification 5 - Fire-resisting construction

Fire Hazard Properties [C2D11]

Floor materials and floor covering, wall and ceiling linings and all other materials used in a building to be specified with minimum required fire hazard properties.
Test certificates, Compliance certificates and Manufacturers specifications and installation manuals of materials and building elements required to:-

- have fire hazard properties,

to be provided demonstrating compliance with applicable requirements of the BCA.

Part C3. Compartmentation and Separation

General

Building not required to be fire compartmentised with total floor area not exceeding maximum fire compartment for Class 9b Type C construction.

Electrical systems

Electricity supply systems required to be provided which sustains emergency equipment operating in the emergency mode.

Switchboards which sustain electricity to emergency equipment to be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear to minimise the spread of a fault from the non-emergency equipment switchgear.

Electricity meters, distribution boards, central telecommunications - Distribution boards or equipment, or electrical motors installed in a required exit (except for fire-isolated exits) or in any corridor, hallway, lobby or the like leading to a required exit to be enclosed by non-combustible construction or a fire-protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure.

Part C4. Protection of Openings

Openings in external walls not required to be protected.

Section D Access and Egress

Part D2 Egress

The number of exits, egress distances from any point within the building to an exit, distances between exits and discharge of exits is compliant with NCC DtS provisions.

Part D3 Construction of Exits

Doors serving as exits to swing in direction of egress.

Door latches to doors in the path of travel to an exit to operate such that it is readily openable without a key from side facing person seeking egress. Doors in a Class 9b building forming part of an exit or in a part of travel to an exit serving more than 100 persons to be readily openable without a key with a single pushing action such as a Panic Bar. Automatic and secured exit doors to be tested and certified including fail-safe device which automatically unlocks doors upon power failure.

Part D4 Access for People with a Disability

Parts of building to be accessible - Sanitary facilities, doorway clear opening widths, doorway circulation clearances, accessway widths and the like throughout the building are to be provided with

dimensions and/or wheelchair circulation templates to demonstrated compliance with AS 1428.1. Including:-

- Minimum passage widths, wheelchair circulation and doorway openings with clear opening widths including 850mm to doorways to accessible areas and 750mm to all other areas.
- Door thresholds to be flush or 35mm maximum with threshold ramp.
- Universally Accessible and Ambulant sanitary facilities and fixtures to be installed in accordance with AS 1428.1.
- Directional signage and Signage to Sanitary facilities (including colour and braille) for people with a disability to be installed in accordance with the BCA and AS 1428.1.

Section E. Fire Services and Equipment Requirements

Part E1. Fire Fighting Equipment

E1D2 Fire Hydrants

Fire Hydrant system to be in accordance with BCA, AS 2419.1 and DFES operation requirements (Guidelines) by Fire Services Engineer.

Comments:- Street Fire Hydrant flow and pressure test to be undertaken.
Fire hydrant coverage to be confirmed.
*Booster assembly and external hydrants not less than **10.0m from building** or suitably protected to be confirmed.*

E1D3 Fire Hose Reels

Fire Hose Reels to be in accordance with BCA, AS 2441.

Comments:- Fire Hydrant and Fire Hose Reel coverage plans to be provided.

E1D14 Portable Fire Extinguishers

Portable fire extinguishers - the appropriate type, number and location of portable fire extinguishers to be selected and installed in accordance with AS 2444.

E1D4 Sprinklers & E1D13 Occupancies of Excessive Hazard - not applicable

E1D15 Fire Control Centre Facility/Fire Control Room - not applicable

E1D17 Provision for special hazards (refer E1D4 & E1D13)

No Special Hazard has been identified which would likely result in special problems associated with occupant safety and/or fire fighting operations.

Part E2. Smoke Hazard Management

E2D3 – S2D20 Detection, Alarm System and Smoke Control Systems - not applicable

E2D21 Provision for special hazards (refer E1D4 & E1D13)

No Special Hazard has been identified which would likely result in special problems associated with occupant safety and/or fire fighting operations.

Part E3. Lift Installations - not applicable

Part E4. Visibility in an emergency, exit signs and warning systems

Emergency Lighting, Exit Signage and Warning Systems

Emergency Lighting and exit signage to be provided to AS/NZS 2293.1.

Emergency warning and intercom system (EWIS) - not applicable

Section F. Health and Amenity Requirements

Part F1 Surface Water Management, Rising Damp and External Waterproofing

Stormwater

Stormwater drainage to comply with AS/NZS 3500.3.

External Damp and Waterproofing

Waterproofing membranes for external above ground to comply with AS 4654.1 and AS 4654.2.

Roof and wall covering, flashings, waterproofing membranes and sarking to comply with applicable Australian Standard.

Part F2 Wet areas and overflow protection

Waterproofing of wet areas to be water resistant or waterproof in accordance with the Specification 26 and comply with AS 3740.

Part F3 Roof and wall cladding

A roof must be covered with—

- metal sheet roofing complying with AS 1562.1; or
- an external waterproofing membrane complying with F1D5.

Or, if not listed above, be subject to a Performance Solution.

Glazed assemblies in an external wall to comply with AS 2047
External Wall cladding to comply with-

- Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700.
- Metal wall cladding: AS 1562.1.
- Façade System design and compliance to be verified; viz material and assembly system compliance and/or Performance Solution.

Part F4 Sanitary and other Facilities

Sanitary facilities to be provided according to the number and activities of occupants in the building or part.

Population served by sanitary facilities:

Class 9b	Pans		Urinals		Washbasins	
Public halls	Provided	Serves	Provided	Serves	Provided	Serves
Male patrons	2	300	6	350	2	200
Female patrons	3	100	-	-	3	350

Note:- Accessible unisex facility counted as one female facility.

Sanitary compartments to be provided with a clear space between the closet pan and door of not less than 1.2m radial distance (from the door hinge). Alternatively, the door to a fully enclosed sanitary compartment must open outwards, slide or be readily removable from the outside or sufficient space is available above the partitioning.

Hydraulic

Hydraulic Services to be installed to AS/NZS 3500 Parts 1-4 National Plumbing and Drainage Standard.

Part F5 Room Heights

Habitable rooms (excluding a kitchen) to be 2.4m. Kitchen, laundry, corridor, passageway or the like and bathrooms to be 2.1m. Stairways, landing or the like to be 2.0m.

Part F6 Light and Ventilation

Lighting to be provided in accordance with AS/NZS 1680.0, and
Ventilation to be provided in accordance with:-

- Natural ventilation to be provided through openings of area of 5% of the floor area of the habitable rooms, office, shop, factory, workroom, sanitary compartment, laundry or other room requiring ventilation, or by
- mechanical ventilation to:-

AS 1668.2 – 2012	The use of ventilation and air conditioning in buildings — Mechanical ventilation in buildings, and
AS/NZS 3666.1 - 2011	Air handling and water systems of buildings.

Part F7. Sound Transmission and Insulation - not applicable

Part F8. Condensation Management - not applicable

Section G. Ancillary Provisions - not applicable

Bush fire protection construction - not applicable

Building not in a Bush Fire Prone Area

Section I. Special Use Buildings - not applicable

Section J. Energy Efficiency

Envelope of Conditioned Spaces

Thermal insulation, glazing and services applicable to envelope of conditioned spaces to comply with Part J4 and Part J5 of Section J Energy Efficiency, BCA.

Building Services

Air-conditioning and ventilation system for the control of air-conditioning, space heating and ventilation equipment, the efficiency, sealing and insulation requirements for ductwork systems containing fans, and for the efficiency and insulation of pipework and pump systems to be in accordance with Part J6, BCA.

Artificial lighting and power to comply Part J7 of Section J Energy Efficiency, BCA.

Energy Monitoring

Facilities for energy monitoring (J9D3) required to building with a floor area of more than 500m^2 must have energy meters configured to record the time-of-use consumption of gas and electricity.

Administration

1. All relevant Architectural, Electrical, Hydraulic and Fire Services drawings and documents are required to be submitted to the Fire & Emergency Services Authority (DFES) for comment NOT LESS THAN 15 DAYS prior to submission with the Permit Authority.
2. Design consultants to confirm design approach to be as outlined in accordance with relevant parts of the NCC Compliance Report.

3. Confirmation of completion and compliance with all planning approvals and conditions required prior to lodgement for Building Permit.

Construction Notes

1. All other statutory submissions, approvals and the like are the responsibility of contractor.
2. Construction of stairs, ramps, accessways (including doorways, thresholds, finished surfaces, abutments of different surfaces etc) and the like to be within permissible construction tolerances of AS 1428.4.1.
3. Testing and commissioning of services and systems to be in accordance with relevant Australian Standards. Compliance certificates to be provided stating element tested, commissioned and compliant with Australian Standard.
4. Certificates for the construction, installation and materials are to be provided certifying that the particular building element is tested, commissioned and compliant with the relevant provisions of the Building Code of Australia, Australian Standards and project documentation.
5. DFES inspection of fire services and subsequent testing and commissioning of fire pumps and hydrant system.
6. The builder, sub-contractors and suppliers are required to provide a Notice of Completion (BA7 form), installation compliance certificate and material product/test certificates respectively verifying works have been completed in accordance with applicable BCA provisions and relevant Australian Standards.

5.4. Documentation subject to Certificate of Design Compliance

1. Contour Feature Survey of site including any Property Easements, caveats and the like
2. Location of street Hydrant and receipt of current Flow and Pressure test.
3. Geotechnical and groundwater investigations & report.
4. Architectural, Hydraulic, Fire Services, Electrical, Mechanical Services and Structural drawings
5. Energy Efficiency Report
6. Building Specifications
7. Design certificates from services/structural consultants as setout below in Certificate of Design Compliance Requirements

5.5. Other Authorities and Legislative Requirements

The following authorities, persons or organisations that may require approval under any statute or law separate to the Building Permit Process are beyond the scope of this report (these are for information only and are not the responsibility of COMPLYWEST; acting as the certifier):

- Water Corporation
- Western Power
- Health (Public Buildings Regulations) - contact local authority
- Health (Food and Hygiene Regulations) - contact local authority
- Town Planning Considerations - Local approvals as well as regional
- Local Council Local Laws and by-laws.
- Council drainage requirements
- Council engineering and crossover requirements
- Council verge requirements

5.6. Health, Liquor & Food Requirements

The proposed Wave Rock Discovery Centre is likely to be classified as a Public Building by the Department of Health/Local Government Health Officer and will therefore be subject to the following health, liquor and food statutory requirements:-

Health Act 1911 and Health (Public Building) Regulations 1992

Liquor Control Act 1988

Food Act 2008

Accordingly, a number of other legislative, and non-legislative, standards and documents could be applicable to the building design and operation. These requirements are beyond the provisions of the Building Code of Australia, and is not the subject of this Report. Due consideration, therefore, is required to ensure that other legislative requirements are adopted into the design.

6.0 References

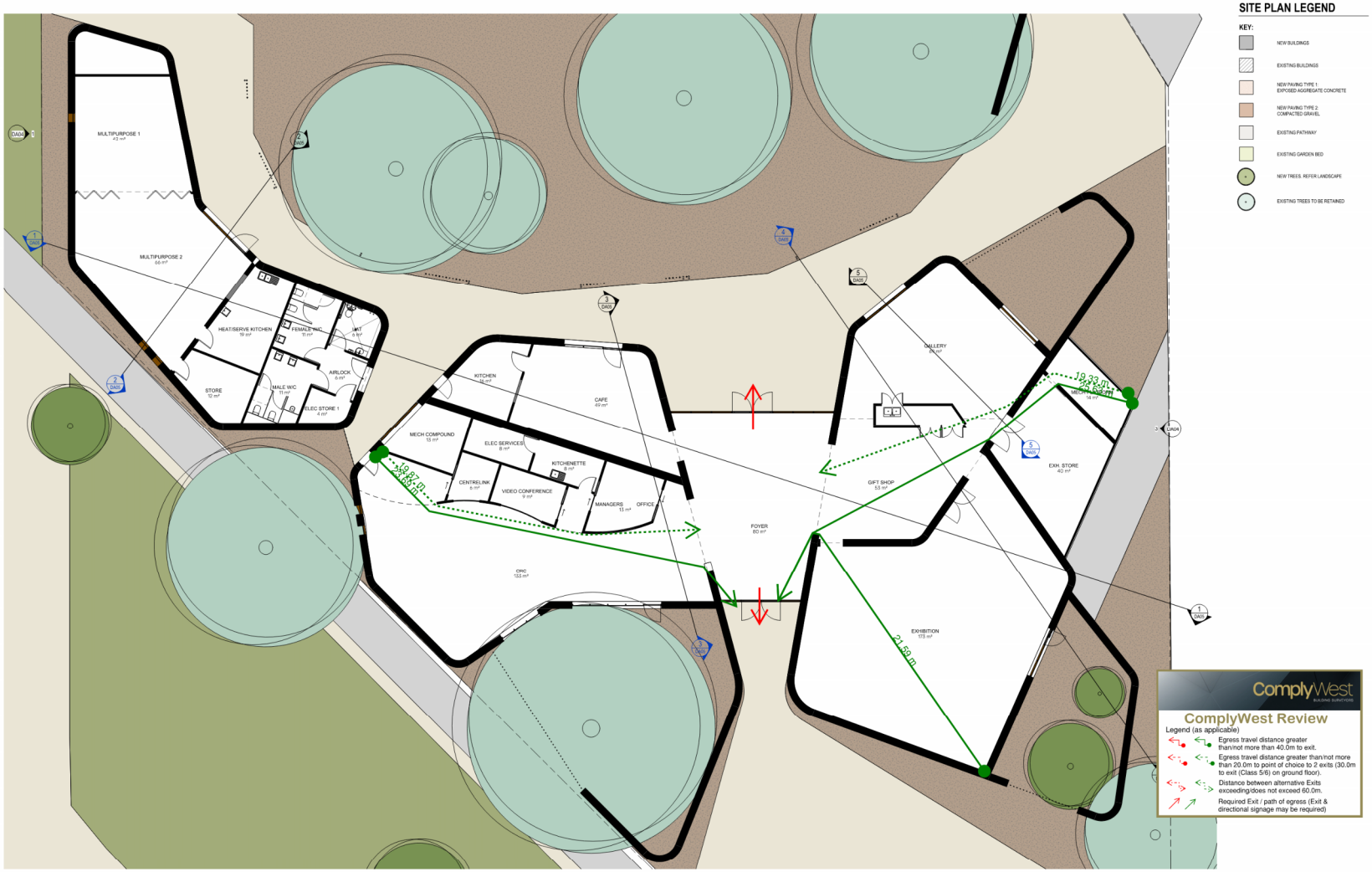
Australian Building Codes Board, National Construction Code (NCC) 2022, Building Code of Australia (BCA), Volume 1. Canberra: CanPrint Communications Pty Ltd.

Australian Building Codes Board, National Construction Code (NCC) 2022, Building Code of Australia (BCA), Volume 2. Canberra: CanPrint Communications Pty Ltd.

Australian Building Codes Board. Guide to the Building Code of Australia, Class 2 to Class 9 Buildings. Canberra: CanPrint Communications Pty Ltd

Australian Standard: AS1428.1-2009 Design for Access and mobility, Part 1: General requirements for access-New building work

7.0 Appendix – Drawing Mark-up



DA03 FLOOR PLAN
DEVELOPMENT APPLICATION
05.06.26
REV A
HYDEN PROGRESS ASSOCIATION KATTER KICH DISCOVERY CENTRE
NORTH
SITE ARCHITECTURE STUDIO

EMERGEN

J1V3 PERFORMANCE SOLUTION REPORT

NCC 2022 SECTION J BUILDING FABRIC

KATTER KICH DISCOVERY CENTRE

4 MCPHERSON STREET, HYDEN WA 6359

PREPARED FOR
SITE ARCHITECTURE STUDIO

PREPARED BY
GLENN UNDERWOOD

PROJECT NO
133171

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EMERGEN

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DRAWING SERIES	DRAWING TITLE	REV
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DISCLAIMER

This report is provided for information and coordination purposes only. It may be relied upon to demonstrate NCC Section J compliance for approval or certification only where the referenced design documentation remains unchanged from the date of issue. Any subsequent design changes will require reassessment.

Insulation R-values and indicative thicknesses adopted in the assessment reflect readily achievable performance using commonly available insulation systems and modelling assumptions. These values are provided for coordination purposes only. Final insulation selection, detailing, and installation remain the responsibility of the design team and must achieve thermal performance equal to or greater than that modelled.

This report does not assess or confirm compliance of specific proprietary products, including fire performance or combustibility requirements, which fall outside the scope of NCC Section J and this assessment.

Insulation placement within building assemblies may influence condensation risk, particularly where foil-faced or vapour-resistant products are used. Condensation management, vapour control strategies, membrane selection, and ventilation provisions are not governed by NCC Section J Volume One and have not been assessed as part of this report.

CONFIDENTIALITY

The contents of the report are confidential. This report is for the purpose of design certification under the requirements of the National Construction Code of Australia.

All included information and documentation shall remain the property of EMERGEN (CADDS Group) therefore shall not be replicated in any form without written consent from EMERGEN.

EXECUTIVE SUMMARY

This report presents a Performance-Based Assessment of the proposed Class 9b – Public with Café, Shop, and Offices building located at 4 Mcpherson Street, Hyden WA 6359, prepared on behalf of Site Architecture Studio. In accordance with Clause A2G2 of the National Construction Code (NCC) 2022, this assessment has been conducted to demonstrate compliance with Performance Requirement J1P1 – Energy use under Section J of NCC 2022 Volume One.

A Performance Solution has been developed for Part J4 – Building Fabric, using Verification Method J1V3 – Verification using a reference building. The proposed building was modelled using BetterBuilding simulation software and compared against a reference building designed in accordance with the Deemed-to-Satisfy (DtS) Provisions.

The simulation results confirm that the proposed building fabric meets the greenhouse gas emissions and thermal comfort acceptance criteria set out in the Performance-Based Design Brief (PBDB). Accordingly, the design is considered **compliant** with Part J4, provided that the building fabric specification outlined below is incorporated into the final construction documentation without alteration.

Table i: Opaque building fabric thermal performance requirements

OPAQUE ELEMENTS	GENERIC DESCRIPTION	THERMAL PERFORMANCE (M^2.K/W)
WALLS	Heavyweight wall (RE01): 400mm Rammed Earth Wall	RT = 0.98 (SA = 0.60)
	Lightweight wall (CLA02): Fiber-cement cladding, horizontal top hats, steel studs fitted with R2.50 insulation batts, internal lining.	RT = 1.76 (SA = 0.60)
FLOOR	Slab on ground: Concrete slab on ground. No insulation.	RT = 2.00
ROOF OR CEILING	Metal deck roof – with ceiling: Metal deck, R1.8 foil faced insulation blanket under roof, steel purlins, air cavity, suspended ceiling with R3.0 insulation batt, ceiling lining.	RT = 4.10 (SA = 0.45)
	Metal deck roof - no ceiling: Metal deck, R3.6 foil faced insulation blanket, steel purlins, air cavity.	RT = 4.25 (SA = 0.45)

Table ii: Transparent building fabric thermal performance requirements[1]

TRANSPARENT ELEMENTS	LOCATION	THERMAL PERFORMANCE ($W/M^2.K$) PROPOSED DESIGN
EXTERNAL WINDOWS	All aspects	$U_w = 6.00$ $SHGC_w = 0.60$
SKYLIGHTS	All aspects	$U_w = 3.50$ $SHGC_w = 0.35$

[1]*Windows should come with a WERS (The Window Energy Rating Scheme) Certificate, which ensures the thermal performance data of the window system was calculated in accordance with AFRC protocols. If any films are being applied to improve the energy efficiency of the window, the film applicator should hold a WERS License.*

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1 INTRODUCTION

The 2022 National Construction Code (NCC) specifies minimum Performance Requirements for the energy efficiency of buildings through the Building Code of Australia (BCA) Volume 1, Section J.

This report outlines the compliance approach and supporting evidence used to demonstrate compliance with Performance Requirement J1P1 – Energy Use for the proposed Class 9b – Public with Café, Shop, and Offices Class 9b – Public with Café, Shop, and Offices building at 4 Mcpherson Street, Hyden WA 6359**Error! Reference source not found.**.

The compliance approach was developed through a Performance-Based Design Brief (PBDB) and comprises a combination of a Performance Solution for the building fabric and an intent to apply the Deemed-to-Satisfy (DtS) Provisions for the remaining elements of Section J.

2 PERFORMANCE BASED DESIGN BRIEF

2.1 OVERVIEW

The stakeholder group comprised of the Architect (Site Architecture Studio) and Sustainability Consultant (EMERGEN) engaged in discussions to explore the possibility of achieving compliance with the applicable Performance Requirements, as per the performance-based design and approval process.

The applicable Performance Requirement for the proposed Class 9b – Public with Café, Shop, and Offices building was identified to be:

- J1P1 – Energy use

2.2 COMPLIANCE STRATEGY

To satisfy J1P1, a Performance Solution has been adopted for Part J4 – Building Fabric, with compliance to Parts J5 to J9 intended to be demonstrated via Deemed-to-Satisfy (DtS) Solutions, as summarised in the table below. This approach has been adopted to allow flexibility in the architectural design of the building fabric.

Accordingly, this report addresses the Performance Solution for Part J4 only. Compliance with J1P1 is contingent on separate verification that the requirements of Parts J5 to J9 are met under the DtS pathway. These elements are outside the scope of this report and have not been assessed.

Table 1: J1P1 compliance strategy

SECTION J PART	CLAUSES	COMPLIANCE PATHWAY	ASSESSMENT METHOD
J4 – Building Fabric	J4D2 to J4D7	Performance Solution	Verification Method J1V3 (Reference Building)
J5 – Building Sealing	J5D2 to J5D8	Deemed-to-Satisfy Solution	Comparison with DtS Provisions
J6 – HVAC & Ventilation	J6D2 to J6D13	Deemed-to-Satisfy Solution	Comparison with DtS Provisions
J7 – Lighting & Power	J7D2 to J7D9	Deemed-to-Satisfy Solution	Comparison with DtS Provisions
J8 – Heated Water & Pool Plant	J8D2 to J8D4	Deemed-to-Satisfy Solution	Comparison with DtS Provisions
J9 – Energy monitoring and on-site distributed energy resources	J9D3	Deemed-to-Satisfy Solution	Comparison with DtS Provisions

2.3 SUPPORTING DOCUMENTATION

The following supporting documentation must be provided to the building certifier to demonstrate compliance with J1P1:

- **Performance Solution**: a J1V3 Performance Solution Report (this report), which includes the building fabric and window thermal performance requirements.
- **DtS Solution**: a certification from a professional engineer or qualified person that the DtS Provisions have been satisfied.

2.4 ACCEPTANCE CRITERIA

The following acceptance criteria have been established in accordance with Verification Method J1V3, and are used to assess compliance with Performance Requirement J1P1 – Energy Use for Part J4 – Building Fabric:

- the Proposed Building, incorporating the proposed building fabric specification, must demonstrate annual greenhouse gas (GHG) emissions no greater than those of the Reference Building, which complies with all DtS requirements for Sections J4 – J8.
- in the Proposed Building, a thermal comfort level between a Predicted Mean Vote (PMV) of -1 to +1 must be achieved across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation.

3 PERFORMANCE BASED ASSESSMENT

3.1 SCOPE OF WORKS

This assessment relates to the thermal performance requirements of Part J4 – Building Fabric, forming part of compliance with J1P1 – Energy Use. It does not assess services, systems, or provisions under Parts J5 to J9.

3.1.1 LIMITATIONS

- Full compliance with J1P1 requires that Parts J5 to J8 meet the relevant DtS Provisions, which are outside the scope of this assessment.
- Performance Requirement J1P4 (renewable energy and EV charging) is not addressed in this report. For full compliance with the NCC 2022 Section J this requirement must also be addressed. Applicability is assumed to be assessed separately by the building certifier.

3.2 METHODOLOGY

3.2.1 APPROACH

This assessment has been conducted using Verification Method J1V3 – Verification using a reference building, as an Alternative Solution for the building fabric.

A building-fabric-only J1V3 approach has been adopted, whereby the thermal performance of the building envelope is assessed independently of detailed HVAC system design. Heating and cooling energy outcomes and associated greenhouse gas emissions are used to compare the relative impact of building fabric performance between the Proposed and Reference Buildings, with building services assumed to be identical in both cases.

Accordingly, the Proposed Building has been modelled with the proposed building fabric and reference services and assessed against a Reference Building model that complies with all applicable Deemed-to-Satisfy requirements (refer to Figure 1).

3.2.2 ASSUMPTIONS

- Parts J3, J5, J6, J7, J8 and J9 are not part of this assessment.
- Specification 34 Modelling parameters for J1V3 S34C1 Scope, S34C2 Reference building and S34C3 Proposed building and reference building have been used to form the basis of the Method of Assessment.
- S34C4 Services Proposed and Reference Building is not part of this assessment as the minimum performance requirements of the services are not included.

3.2.3 SIMULATION METHODOLOGY

The simulation interface, **Error! Reference source not found.**, using EnergyPlus has been used for the modelling analysis, meeting the ANSI/ASHRAE Standard 140 requirements for a building's thermal envelope and fabric test.

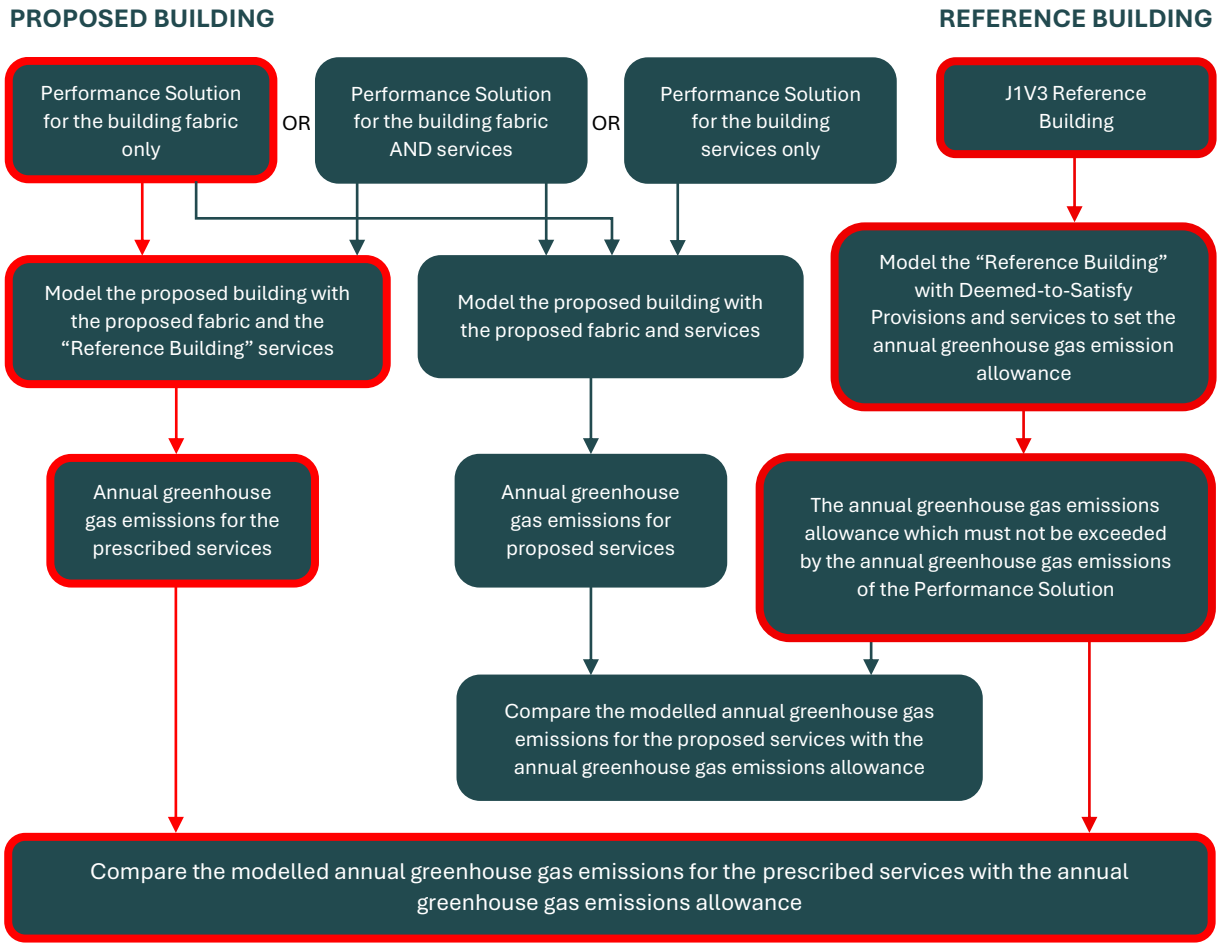


Figure 1: J1V3 modelling approach

3.3 LOCATION

The development is located in ABCB Climate Zone 4 – Hot dry summer, cool winter, as shown in the figure below.

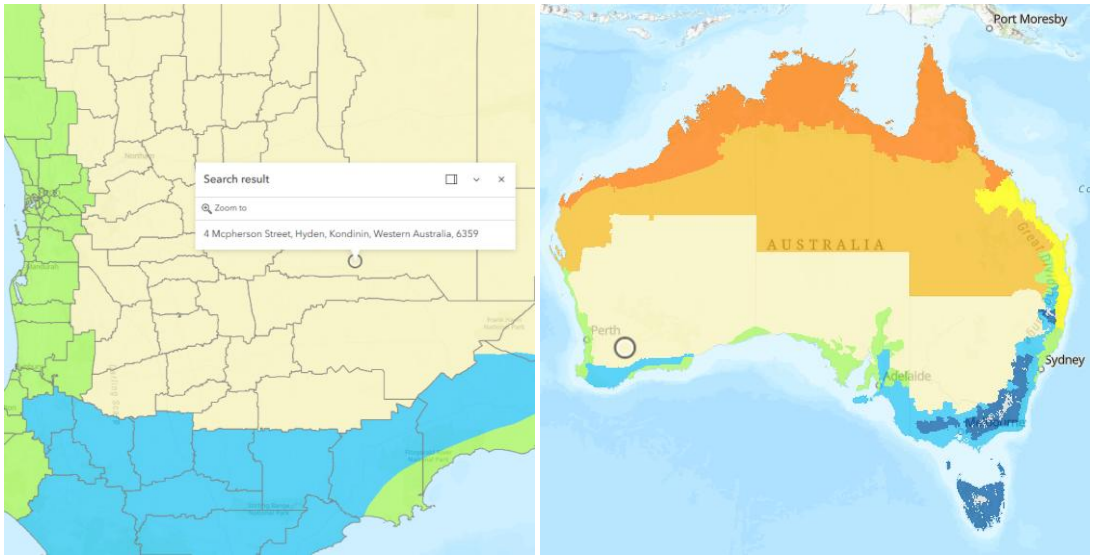


Figure 2: Site location climate zone classification.

4 J1V3 ASSESSMENT

4.1 RESULTS

4.1.1 HEATING AND COOLING ENERGY USE

A comparison in heating and cooling energy demand between the Proposed Building and the Reference Building, has been shown in the table below, allowing for a quantifiable comparison of the building fabric performance.

Table 2: Estimated heating and cooling energy

MODEL	HEATING	COOLING	TOTAL
Proposed (kWh/m2)	2.22	20.28	22.50
Reference (kWh/m2)	2.02	24.11	26.13

4.1.2 BUILDING EMISSIONS

The Proposed Buildings energy emissions are less than the Reference Building, as shown in the table below, thereby meeting the acceptance criteria. The greenhouse gas emission factors are based on Table S34C3 as defined in Clause S34C3(2)(a).

Table 3: Building GHG emissions

BUILDING MODEL	GHG EMISSIONS	COMPLIANCE
Proposed ($kgCO_2$-e/m^2)	44.11	**PASS**
Reference ($kgCO_2$-e/m^2)	46.81	

4.1.3 THERMAL COMFORT (PMV)

The Proposed Buildings occupied zones are deemed comfortable for most occupants (within ±1 PMV) for at least 98% of the occupied hours, as shown in the table below, thereby meeting the acceptance criteria.

Table 4: Proposed Building PMV results

PMV	VALUE	COMPLIANCE
Total area (m^2)	703.21	**PASS**
Required compliant area (%)	95	
Compliant area (%)	100	

5 CONCLUSION

The proposed design is deemed capable of satisfying Performance Requirement J1P1 – Energy use, provided that:

- the building fabric and window thermal performance requirements outlined in Section 1A.1.3 are fully implemented, and
- the relevant Deemed-to-Satisfy (DtS) Provisions of Parts J5 to J9 are adopted and verified by the design team.

Compliance has been demonstrated through detailed energy modelling using BetterBuilding **Error! Reference source not found.** simulation software, with the results confirming that the acceptance criteria established in the Performance-Based Design Brief (PBDB) have been met, as documented in Section 4.1 – Results.

To achieve full compliance with Section J of the NCC 2022, it is also necessary to address Performance Requirement J1P4 – Renewable energy and electric vehicle charging infrastructure. This component falls outside the scope of this report and must be verified separately. The relevant design consultants and contractors are responsible for providing appropriate documentation, such as professional certification to the building certifier as evidence of compliance.

APPENDIX 1 – MODELLING ASSUMPTIONS

A.1 GEOMETRY AND ENVELOPE

A.1.1 GEOMETRY

The building can be seen visually represented in the modelling platform BetterBuilding **Error! Reference source not found.**in the figure belowFigure 3. The key thermal envelope geometry characteristics have been noted in the table below.

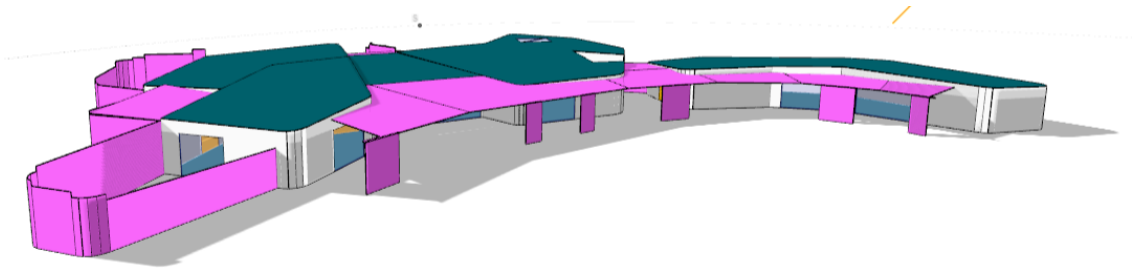


Figure 3: Modelled geometry

Table 5: Building geometry characteristics

CHARACTERISTIC	PARAMETER
Window-Wall Ratio (%)	17.6
Treated Floor Area (m^2)	811.03

A.1.2 SHADING

External shading to the Proposed Building has been included as per the architectural drawings listed in Sources of Information. External shading to the Reference Building has been included identical to the Proposed Building, expect where shading is used specifically for the use of solar control. The buildings shading can be seen in pink in Figure 3.

A.1.3 BUILDING FABRIC

The building fabric thermal performance requirements are summarised in Table 6 and Table 7, and are based on the architectural drawings listed in the Sources of Information section. The construction build-ups **have been confirmed** by the Architect as representative of the proposed design at the time of assessment.

- The indicative location of the thermal envelope elements is shown on the floors plans in Appendix 2.
- All insulation must be selected/installed in accordance with Part J4D3 Thermal construction – general. An excerpt of these requirements can be found in Appendix 3.
- Any changes to the build-up description of the building fabric elements post-report will require reassessment.
- R-values were calculated in accordance with AS/NZS 4859.2 for thermal bridging.
- The descriptions are not intended to represent the full construction build-up, nor specify specific products.
- Insulation thicknesses provided are indicative only, actual thickness will depend on product selection.
- Windows should come with a WERS (The Window Energy Rating Scheme) Certificate, which ensures the thermal performance data of the window system was calculated in accordance with

AFRC protocols. If any films are being applied to improve the energy efficiency of the window, the film applicator should hold a WERS License.

Table 6: Opaque building fabric thermal performance requirements

OPAQUE ELEMENTS	GENERIC DESCRIPTION	THERMAL PERFORMANCE ($M^2.K/W$) PROPOSED DESIGN		REFERENCE DESIGN
WALLS	Heavyweight wall (RE01): 400mm Rammed Earth Wall	RT = 0.98 (SA = 0.60)	≤	RT = 1.40 (SA = 0.60)
	Lightweight wall (CLA02): Fiber-cement cladding, horizontal top hats, steel studs fitted with R2.50 insulation batts, internal lining.	RT = 1.76 (SA = 0.60)	≥	RT = 1.40 (SA = 0.60)
FLOOR	Slab on ground: Concrete slab on ground. No insulation.	RT = 2.00	=	RT = 2.00
ROOF OR CEILING	Metal deck roof – with ceiling: Metal deck, R1.8 foil faced insulation blanket under roof, steel purlins, air cavity, suspended ceiling with R3.0 insulation batt, ceiling lining.	RT = 4.10 (SA = 0.45)	≥	RT = 3.70 (SA = 0.45)
	Metal deck roof - no ceiling: Metal deck, R3.6 foil faced insulation blanket, steel purlins, air cavity.	RT = 4.25 (SA = 0.45)	≥	RT = 3.70 (SA = 0.45)

Table 7: Transparent building fabric thermal performance requirements

TRANSPARENT ELEMENTS	LOCATION	THERMAL PERFORMANCE ($W/M^2.K$) PROPOSED DESIGN		REFERENCE DESIGN
EXTERNAL WINDOWS	All aspects	U_w = 6.00 $SHGC_w$ = 0.60	=	U_w = 4.08 $SHGC_w$ = 0.25
SKYLIGHTS	All aspects	U_w = 3.50 $SHGC_w$ = 0.35	=	U_w = 3.90 $SHGC_w$ = 0.29

A.1.4 CLIMATE AND SITE

Climate and site inputs are identical for both the Proposed Building and Reference Building, as shown in

Table 8: Climate and site inputs

PARAMETER	INPUT
Climate file	AUS_WA_Hyden.956270_TMYx.2007-2021
Climate file location	Hyden, WA, AUS
Source	Climate.OneBuilding
Building orientation	297° CCW

A.1.5 INTERNAL LOADS AND PROFILES

Occupancy densities, internal heat gains, lighting power densities and operating profiles have been adopted in accordance with NCC 2022 Specification 35 for J1V3 modelling. As this assessment adopts a building-fabric-only approach, identical inputs have been applied to the Proposed and Reference Buildings. The adopted inputs are summarised in Table 9.

The operating profiles applied are defined in NCC Specification 35 and are therefore not repeated in this report.

Table 9: Occupancy, internal heat gains and lighting power density inputs (NCC 2022 Specification 35)

PARAMETER	INPUT	NCC REFERENCE
Occupant density (m^2/person)	Class 9b – Public / Assembly: 4 Class 5 – Office: 10 Class 6 – Retail / Shop: 5 Class 6 – Restaurant / Café: 1	Clause D2D18(a) Table D2D18 Area per person according to use
Equipment density (W/m^2 or W/room)	Class 9b – School / Childcare: 5 Class 5 – Office: 11 Class 6 – Retail / Shop: 5 Class 6 – Restaurant / Café: 11	Clause S35C2(1)(b)(ii) Table S35C2l Internal heat gains for appliances and equipment
Lighting power density (W/m^2)	Class 9b – Public / Assembly: 8.0 Class 5 – Office: 4.5 Class 6 – Retail / Shop: 14.0 Class 6 – Restaurant / Café: 14.0	Clause J7D3(2)(a) Table J7D3a Maximum illumination power density
Occupants and hot meals heat gain (W)	Other: 75 sensible & 55 latent Eating: 80 sensible & 80 latent	Clause S35C2(1)(b)(i) Table S35C2n Internal heat gains for occupants and hot meals

A.1.6 HVAC

Heating and cooling energy demand for the Proposed and Reference Building models has been derived from simulated zone sensible heating and cooling loads, using identical conditioning setpoint temperatures and operating schedules applied at the zone level in accordance with Clause S35C2(1)(a) of NCC 2022 Specification 35.

Detailed HVAC system design, including plant configuration, fan energy, and outside air ventilation, has not been explicitly modelled, as services are not being assessed under this pathway and are assumed to be identical for the Proposed and Reference Buildings. This approach ensures that differences in simulated energy consumption are attributable solely to changes in building fabric performance.

Table 10: Modelled HVAC inputs

HVAC DETAILS	
Cooling setpoint (°C)	24
Heating setpoint (°C)	21

A.1.7 THERMAL COMFORT CONDITIONS

Thermal comfort has been assessed using Predicted Mean Vote (PMV) indices derived from simulated zone conditions. Zone conditioning has been modelled using idealised control to maintain setpoint temperatures during occupied periods, representing a consistent conditioning assumption for both the Proposed and Reference Buildings. Under this approach, differences in thermal comfort outcomes reflect the influence of building fabric performance on internal thermal conditions rather than HVAC system response characteristics.

Simulations were undertaken using a 10-minute timestep, with comfort metrics reported at an hourly interval. Clothing insulation values are seasonally adjusted in accordance with Table 12.

Table 11: Thermal comfort condition inputs

THERMAL COMFORT CONDITIONS		
Clothing level (Clo)	Warmer months (January–February & October–December)	Cooler months (April–September)
	0.6	0.9
Activity level (W)	130	
Air velocity (m/s)	0.1	

EMERGEN

APPENDIX 2 – THERMAL ENVELOPE MARK-UP

[REFER OVERLEAF]

EMERGEN

APPENDIX 3 – THERMAL CONSTRUCTION - GENERAL

Excerpt from the NCC, Volume One - Part J4D3

Thermal Construction - General

1) Where required, insulation must comply AS/NZS 4859.1 and be installed so that it –
   a) Abuts or overlaps adjoining insulation other than at supporting members such as studs, noggings, joists, furring channels and the like where the insulation must be against the member; and
   b) Forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and
   c) Does not affect the safe or effective operation of a domestic service or fitting.
2) Where required, reflective insulation must be installed with –
   a) The necessary airspace, to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; and
   b) The reflective insulation closely fitted against any penetration, door or window opening; and
   c) The reflective insulation adequately supported by framing members; and
   d) Each adjoining sheet of roll membrane being –
      i) Overlapped not less than 50 mm; or
      ii) Taped together.
3) Where required, bulk insulation must be installed so that -
   a) It maintains its position and thickness, other than where it crosses roof battens, water pipes, electrical cabling or the like; and
   b) In a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50mm.
4) Roof, ceiling, wall and floor materials, and associated surfaces are deemed to have the thermal properties listed in Specification 36
5) The required Total R-Value and Total System U-Value, including allowance for thermal bridging, must be –
   a) Calculated in accordance with AS/NZS 4859.2 for a roof or floor; or
   b) Determined in accordance with Specification 37 for wall-glazing construction; or
   c) Determined in accordance with Specification 39 or Section 3.5 of CIBSE Guide A for soil or sub-floor spaces.

NO BOUNDARY RE-SURVEY HAS BEEN UNDERTAKEN AS PART OF THIS WORK. BOUNDARY CONFIGURATION FROM DIAGRAM OF SURVEY HAS BEEN POSITIONED AS A BEST FIT WITH VARIOUS WALLS AND FENCES LOCATED. IT DOES NOT REPRESENT THE ACTUAL POSITION OF BOUNDARIES.
IF BUILDING IS BEING CONTEMPLATED ON OR NEAR TO BOUNDARIES IT IS RECOMMENDED THAT A RE-SURVEY OF THE RELEVANT BOUNDARIES BE UNDERTAKEN.

EXTENT OF SURVEY
1. EXTENT OF AREA SURVEYED IS RESTRICTED TO AREA SHOWN ON AERIAL PLAN SUPPLIED WITH QUOTATION.
2. NO DETAILS OF SERVICES CONTAINED WITHIN 'GALVIN SERVICE BOXES' IS PROVIDED AS THIS IS SUBJECT TO INTERPRETATION AND THEREFORE ERROR. QUALIFIED SERVICE IDENTIFIERS SHOULD BE ENGAGED TO DETERMINE WHAT THESE SERVICES ARE.

NOTES:
1. LEVELS TO AHD ASSUMED FROM WATERCORP MANHOLE LID LEVEL SUPPLIED BY WATERCORP.
notes: some Watercorp manholes levels are not always accurate. If precise AHD level is required then further survey is required at further cost.
2. DIMENSIONS OF BUILDINGS TAKEN FROM THIS PLAN SHOULD BE VERIFIED ON SITE FIRST.
3. STEPS SHOWN BUT NUMBERS OF STEPS ARE INDICATIVE ONLY
4. BOUNDARY INFORMATION NOT SHOWN
5. FULL DETAIL OF GARDEN AREAS IS NOT SHOWN.

McPHERSON STREET

R. O. W.

R.

LOT 25
1012m2

LOT 24
2145m2

LOT 23
809m2

LOT 2122
2023m2

89°58'
50.29m
90°02'
20.12m
148°52'
43.64m
121°10'
14.7m
107°23'35"
14.68m
148°50'
40.24m
90°
50.29m
135°01'
57.03m
93°31'58"
28.44m
135°01'
40.23m
90°02'
40.23m
28.46m
25.23m
90°
40.24m

Brick & CB roof shops, Floor Level 297.33m AHD

covered conc verandah set down

pvc drain pipe put under path to drain kerb

retaining wall L/S

NOTE: gas bottles, HWS, aircons, plumbing along wall not shown

copper log barriers

Main Sewer Line R.L. 295.86m Connection up 0.0m Connection R.L. 295.86m Depth to Conn. 1.4m

Main Sewer Line R.L. 295.82m Connection up 0.0m Connection R.L. 295.82m Depth to Conn. 1.5m

Main Sewer Line R.L. 295.75m Connection up 0.0m Connection R.L. 295.75m Depth to Conn. 1.5m

Main Sewer Line R.L. 295.74m Connection up 0.0m Connection R.L. 295.74m Depth to Conn. 1.6m

Main Sewer Line R.L. 295.66m Connection up 0.0m Connection R.L. 295.66m Depth to Conn. 1.6m

MHS

MWM

bitumen hardstand

bare ground

concrete path

line of timber bollards

rubbish bin

stay wire

stay anchor

low brick wall with piers

feature wall

pvc drain pipe put under path to drain kerb

pvc drain pipe outflow

rock border garden approx

large rock approx

shed + tractor - open - conc

flag pole

check accurate position of large DEAD tree if critical

blue pond feature - approx

rock bench feature approx

NOTE: probable underground power connecting poles - location unknown

power box?

ECB

power dome

light pole

paved over-run area

kerbline

flush kerb

DATUM: NAIL IN BITUMEN R.L. 297.75m AHD

DATUM: NAIL IN BITUMEN R.L. 297.19m AHD

DATUM: NAIL & PLATE IN BITUMEN R.L. 297.35m AHD

Old CGI shed, Floor Level 297.23m AHD

NOTE: edge not located; assume R.L.300.28m based on same pitch as other shed

Old CGI shed, Floor Level 297.28m AHD

north extent of shed approx - check

Old CGI shed and disused Shop, Floor Level at front 297.7m AHD

gas bottles, HWS, plumbing not shown

old conc slab

conc slabs

apparent coverded drain??

septic tanks

loading platform

verandah awning

approx edge of bitumen

NOTE: edge of bitumen indistinct

12m shipping contaner

1.8m CB fence

bollards

car parking

wood retaining

low wooden retaining wall

brick paved vdh - covered

CB supermarket, Floor Level 297.65m AHD

line of posts

service and light pole

large IGA sign

brick pave

concrete

concrete xover

concrete path

TJBapprox

PP

rubbish bin

stay wire

traffic island

MARSHALL STREET

centre line of road

edge of bitumen

SSM HDY45

MHS	SEWER MANHOLE
MHD	DRAINAGE MANHOLE
LID	LID (small galvin service box)
ECB	ELECTRICAL CABLE BOX
EMB	ELECTRICAL METER BOX
CBX	COMMS JUNCTION BOX
TJB	TELSTRA JUNCTION BOX
DG	DRAINAGE GRATE
SEP	SIDE ENTRY PIT
CUL	DRAINAGE CULVERT
WM	WATER METER
	WATER CORP VALVE
HYD	FIRE HYDRANT
LP	LIGHT POLE
PP	POWER POLE
SP	STAY POLE
SW	STAY WIRE
	GATE SGN SIGN
OH	OVERHEAD POWER
	OTHER FENCE (as nominated)
	CONTROL PEG/MARK
RW	RETAINING WALL
LRW	LIMESTONE RET. WALL
GB	GARDEN BED
SHR	SHRUB
T.O.W	TOP OF WALL
B.O.W	BOTTOM OF WALL
T.O.G.	TOP OF GUTTER
3H 2W	TREE 3high 2wide

CONCRETE
BRICK PAVING
BITUMEN
BLOCK PAVING
BUILDING FOOTPRINT

SCALE
0 5 10 15 20

Monaghan MAPPING & SURVEYING
UNIT 11 / 4 FLINDELL ST,
OCONNOR, W.A. 6163.
Mob 0418 928065
Email : jmon @ aapt.net.au
Web: www.fremantlesurveying.com.au

	BY	DATE
DRAWN	JTM	11.5.21
APP'D		11.5.21
CHK'D	JTM	11.5.21
ISSUED	JTM	11.5.21

CONTOUR AND FEATURE SURVEY
CNR McPHERSON AND
MARSHALL STREET , HYDEN

Lots 23, 24 & 2122 and surrounds

CLIENT:	SLAVIN ARCHIT
SCALE:	1:200A1
DATE	8.5.21
DATUM	AHD
DRAWN	JTM

DRAWING

REVISION

HYD 001

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Report on
Geotechnical Investigation at
36 Marshall Street, Hyden WA

For
Hyden Progress Association

Reference: GI862725PG_Rev0
Date: 31 December 2025



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Quality Information

Document Geotechnical Investigation for 36 Marshall Street, Hyden WA

Project Ref GI862725PG_Rev0

Date 31 December 2025

Prepared for Hyden Progress Association

Revision History

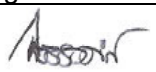
Rev.	Date	Details	Prepared by	Authorised	
				Name/Position	Signature
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APPENDICES

Appendix A: Site Plan and Site Layout Plan
Appendix B: Bore hole Logs, DCP and Field Permeability Test (FPT) Certificates
Appendix C: Laboratory Test Certificates
Appendix D: Site Photograph

1.0 INTRODUCTION

Perth Geotechnics (PG) has carried out a geotechnical investigation at 36 Marshall Street, Hyden WA in order to provide a site investigation report in accordance with AS 1726-2017. The project was engaged by Mr. Tyron Utley on behalf of Hyden Progress Association (the client).

The total site area is 3,938m^2 and the proposed development at the site will be multifunctional community and visitor centre.

The site location map is shown is below figure.

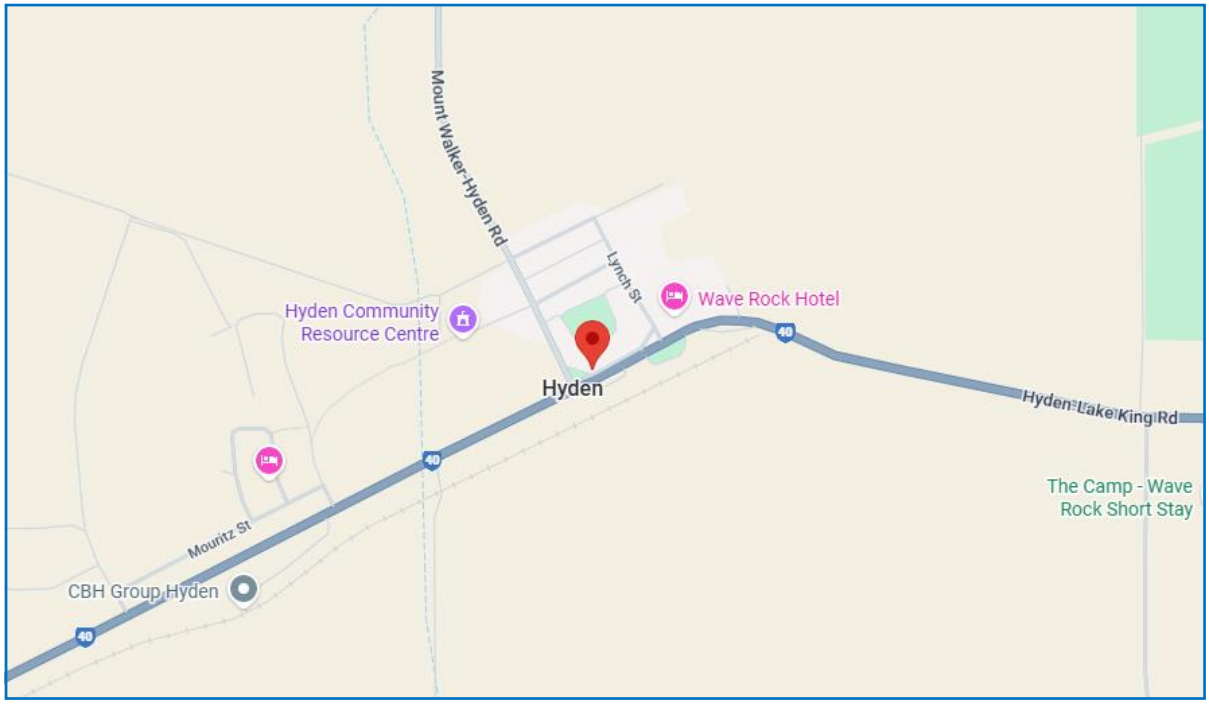


Figure 1: The site location map (source: Google map).

This report has to read or implement in full. No partial implementation of this report is allowed. It should be noted that our investigation is not includes environmental and acid sulphate assessment.

The geotechnical investigation consisted of a desktop study, site investigation, site classification, stormwater drainage recommendation, earthworks recommendation, bearing capacity, design parameters, site sub-soil class assignment and earthquake hazard factor.

2.0 OBJECTIVES

The objectives of the investigation are following:

- Desktop study and available information.
- The factual data (field test results), including borehole logs as per AS1726.
- Interpretation of the subsurface conditions across the site.
- Groundwater table information if it is encountered.
- Site classification in accordance with AS2870-2011,
- Recommendation on stormwater drainage disposal.
- Recommendations on remedial works including earthworks, site preparations and compaction requirements.
- Recommendation on geotechnical design parameters.

- Recommendation on design parameters for retaining structure.
- Site sub-soil class and earthquake classifications as per AS1170.
- Recommendation on the type of suitable foundation.
- Recommendation on allowable bearing capacity and settlement analysis.
- Recommendation on design parameters for road pavement.

3.0 DESKTOP STUDY

3.1 Site History

A review of Landgate Information and aerial photography of the site indicates that the site is situated in a mix commercial and residential area.

3.2 Groundwater Information

Groundwater table was not observed at any of the boreholes up to the investigation depth of 1.7m below ground level. There is no record found regarding the depth of groundwater of this property address into department of water map.

4.0 SITE INVESTIVATION

The geotechnical site investigation was undertaken on 12 November 2025 in the full-time presence of a geotechnical engineer from PG. The site investigation comprised of following:

- Site walkover and taking photograph.
- Excavation of six (6) bore holes (BH1 to BH6) by machine auger up to a depth of 2.0 m or refusal.
- Logging of the site soil profile as per AS1726.
- Conducting six (6) Dynamic Cone Penetrometer (DCP1 to DCP6) tests adjacent to boreholes to a depth of 2.0 m or refusal.
- Conduct soil sampling for laboratory testing, which includes:
  - Particle Size Distribution (PSD)
  - Atterberg Limits Test or PI test
- Conducting two (2) Field Permeability Tests (FPT1 and FPT2) by Guelph permeameter.
- Recording of the locations of BH, DCP and FPT by handheld GPS.

A site plan showing the locations of the Bore hole, DCP and Field Permeability Tests are provided in Appendix A.

4.1 Site Location and General Description

The site is located at 36 Marshall Street, Hyden WA. Currently there are two sheds at eastern side of the site which will be demolished before construction commence. Rest of the site currently using as a hardstand area. There are few medium size trees at the site and site level is found mostly flat. The site is bounded by McPherson Street at western side, Marshall Street at southern side and other two sides commercial properties. The site photograph was taken during the field investigation are shown in Appendix D.

4.2 Bore Hole Logs

A total of six (6) Bore holes (BH1 to BH6) were excavated across the site by using machine auger to a depth of 2.0 m or refusal.

Boreholes BH1 to BH6 revealed similar soil profile and consists of
0.0 - 0.2 m: Sandy Gravelly CLAY- low plasticity, yellowish brown, brown, dry, very stiff to hard, fine to coarse grained gravel, fine to medium grained sand, overlying
0.2 – 1.7 m Gravelly Sandy CLAY- medium plasticity, yellowish brown, pale grey, brown, dry to moist, stiff to hard, fine to medium grained sand, fine to coarse grained gravel.

Groundwater table was not observed at any of the boreholes up to the investigation depth of 1.7m below ground level. Boreholes BH1 to BH6 were terminated at a depth of 1.5 m, 1.7 m, 1.7 m, 1.5 m, 1.5 m and 1.6 m respectively due to auger refusal on hard clay layer. Bore Hole logs are attached in Appendix B to this report.

4.3 Dynamic Cone Penetrometers (DCP) Test

Six (6) Dynamic Cone Penetrometer tests (DCP1 to DCP6) were conducted adjacent to borehole locations. All DCP tests were conducted to a depth of 2.0 m or refusal. The tests were conducted in accordance with test method AS1289.6.3.2, Ref Table 6.4.6.1 (A) & (B) HB 160-2006. DCP tests revealed that the site is in stiff to hard condition.

The DCP test certificates are attached to this report in Appendix B.

4.4 Field Permeability Test

Two (2) Field permeability tests (FPT1 and FPT2) were conducting by using Guelph permeameter as per ASTM D 5126 – 90 at two locations. The tests were conducted to a depth of 1.0 m below ground level. The Guelph Permeameter is a constant head device that operates on the Mariotte siphon principle. It provides a straightforward way of determining the field saturated hydraulic conductivity, matrix flux potential and the soil sorptivity in the field.

Field Permeability tests report is attached in Appendix B and summary is presented in Table 1.

Table 1. Summary of Field Permeability Test Results

Permeability Test ID	Co-ordinates (GDA94)		Permeability Rate		Soil Description	Test Depth (m)
	Easting	Northing	cm/sec	m/day		
FPT1	50 675 132	6 408 216	5.4×10^{-5}	0.047	Gravelly Sandy Clay	1.0
FPT2	50 675 181	6 408 200	8.0×10^{-5}	0.070	Gravelly Sandy Clay	1.0

The coefficient of permeability or hydraulic conductivity of the site varies from 0.047 to 0.07 m/day.

5.0 GEOTECHNICAL LABORATORY TEST

Laboratory tests were conducted at 'Western Geotechnical Laboratory Services, a NATA accredited soil testing laboratory located at Welshpool WA. The following geotechnical laboratory tests were undertaken:

- Particle Size Distribution (PSD, Test Method: AS 1289 3.6.1)
- Atterberg Limits Test or PI test (Test Method AS1289. 3.9.2, 3.2.1, 3.3.1, 3.4.1)

The laboratory test results are summarised in Table 2. Laboratory test certificates are included in Appendix C.

Table 2. Summary of Laboratory Test Results

Soil Sample Location	BH2 (0.2 – 1.3) m
Particle Size Distribution (PSD)	
Sand (%)	-
Percent Fines < 75µm (%)	40
Atterberg Limit Test or PI Test	
Liquid Limit (%)	31
Plastic Limit (%)	14
Plasticity Index (%)	17
Linear Shrinkage (%)	9

It was observed from the laboratory test results that the medium reactive clay has 40 percent (%) fines or clay material.

6.0 ENGINEERING CONSIDERATIONS AND RECOMMENDATIONS

6.1 Inferred Subsurface Conditions

The following generalised subsurface profile can be inferred based on the site investigation data:

Sandy Gravelly CLAY (CL)/ Gravelly Sandy CLAY (Cl)

The dominant clay layer consists of low to medium plasticity, yellowish brown, brown, pale grey, dry to moist, stiff to hard, fine to medium grained sand, fine to coarse grained gravel, extending from the surface to the depth up to 1.7 m, terminated depth.

6.2 Groundwater Level

Groundwater table was not observed at any of the boreholes up to the investigation depth of 1.7m below ground level. There is no record found regarding the depth of groundwater of this property address into department of water map.

6.3 Inferred Geotechnical Design Parameters

Geotechnical design parameters for the site were inferred on the basis of the site investigation data, generalised subsoil units and are presented in Table 3.

Table 3. Inferred Geotechnical Design Parameters for Generalised Subsoil Model

Depth (m)	Soil Layer Description	γ (kN/m^3)	ϕ' (°)	E' (MPa)	cu/c' (kN/m^3)	ν'
0.0 – 1.8	Gravelly Sandy CLAY (CL-Cl) Stiff to hard	18	25	30	100/5	0.3

Notes:

γ = Bulk unit weight of soil, ϕ' = Effective friction angle, E' = Drained Young's Modulus, cu = Undrained shear strength, c' = Drained cohesion, ν' = Drained Poisson's Ratio.

Depth and thickness provided in the table should be considered as valid for a generalised subsoil model only. Bore hole logs can be reviewed for better understanding.

6.4 Geotechnical Design Parameters for Retaining Structures

Earth pressure parameters for the design of retaining structures are presented in Table 4. These parameters should be considered as preliminary.

Table 4. Geotechnical Design Parameters for Retaining Structures

Material type	γ (kN/m^3)	ϕ' (degrees)	K_0	Wall friction, δ = 0°	
				K_a	K_p
Loose Sand	16	28	0.51	0.34	2.85
Medium Dense to Dense Sand	18	35	0.44	0.28	3.54

Notes: γ = Bulk unit weight, ϕ'= Effective friction angle, K_0 = Coefficient of earth pressure at rest, K_a = Coefficient of drained active earth pressure, K_p = Coefficient of drained passive earth pressure.

6.5 Site Classification

Based on the subsurface surrounding site conditions observed during the field investigation, and the laboratory test results the site is classified as **'M'** site classification in accordance with the definitions provided in Australian Standard AS2870-2011. The characteristic surface movement can be considered 20< Ys ≤ 40 mm. The soil suction change of 2.5 m is considering in this case.

The site can be reclassified to **'S'** classification by conducting the remedial measures or site preparation as describe at *Section 6.7.* The characteristic surface movement can be considered up to (0 < Ys ≤ 20 mm) in accordance with the definitions provided in Australian Standard AS2870-2011.

General definition of 'Site Class' is shown in Table 5 (Source: AS 2870-2011).

Table 5. General Definition of Site Class (Source: AS 2870-2011)

Site Class	Soil Description	Characteristic Surface Movement, Ys (mm)
A	Most SAND and ROCK sites with little or no ground movement due to moisture content variation	little or no ground movement
S	Slightly reactive clayey or silty SAND, which will cause slight ground movement due to moisture content variation	0< Ys ≤ 20
M	Moderately reactive clayey or silty soil which will cause moderate ground movement due to moisture content variation	20< Ys ≤ 40
H1	Highly reactive clayey or silty soil which will cause high ground moved due to moisture content variation	40< Ys ≤ 60
H2	Highly reactive clayey or silty soil which will cause high ground moved due to moisture content variation	60< Ys ≤ 75
E	Extremely reactive clayey or silty soil which will cause extreme ground movement due to moisture content variation	Ys >75
P	Problematic sites, consisted of soft soils, soft clay or silt or loose sand; landfills, mine subsidence, collapsing soils, very reactive soils, subjected to erosion and sites which cannot be classified as A to E.	-

6.6 Earthquake Design Factor and Sub-Soil Class

Australian Standard AS1170.4-2007 Structural Design Actions Part 4 "Earthquake actions in Australia" is recommended for earthquake consideration. AS1170.4-2007 outlines the design criteria required for a structure in consideration of the risk of being subjected to earthquake loads. Earthquake design factors for the site are summarized in Table 6.

Table 6. Earthquake Design Factors

Factor/Class	Value/Name	Ref. AS1170.4- 2007
Hazard Factor (z), Hyden Zone	0.07 – 0.08	Section 3 Table 3.2
Site sub-soil class	Class C_e – Shallow Soil	Section 4 Clause 4.1

6.7 Earthworks

This section discusses the recommended remedial measures with procedures and site preparation across the site.

6.7.1 Structural Fill or Non Reactive Fill

Suitable materials for structural fill shall be a clean sand fill. The fill material at compaction should comprise sand that is free from oversized material (i.e. material > 75 mm in any dimension), contains less than 5% fines (material passing 0.075 mm sieve), free from foreign material, organic material or other deleterious material. It should also be free from industrial waste, solid waste, or construction and demolition debris.

6.7.2 Recommended Remedial Measures

Earthworks should be carried out in general accordance with the Australian Standard AS 3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments". The following are the recommended remedial measures to be followed during preparation of the site areas within the proposed development footprints:

- Remove and grab all trees from the site, including root masses and tree stumps.
- Clear uncontrolled fill, grasses, paved materials, demolition debris, concrete slabs, strip footings, pond lining, soft clay or other deleterious and organic material and stockpile separately and then remove from the site.
- **For site class 'S',** prepare a sand pad of **700mm** over reactive clay and compact as per AS 3798.
- Compact /proof roll the exposed surface, with required number of passes (a minimum of 6 passes) of a vibratory roller to a dense state, i.e., to 95% of MMDD in accordance with AS1289.5.2.1. Add moisture as needed during the compaction. Compaction must not be attempted if the exposed ground is saturated or groundwater is at excavation level.
- Backfill the site with clean sand (select fill). Place the sand material in lifts not exceeding 300 mm in loose thickness and compact the lift using a vibratory compactor to 95% of its modified maximum dry density in accordance with AS1289.5.2.1. The material at compaction should be moisture conditioned within -1% to +2% of its optimum moisture content. Follow the same procedure of lift and compaction up to the finished ground level.
- Subgrade (or backfill lifts/layers) at carpark, driveway, hardstand area, access road areas shall be compacted to 98% of MMDD in accordance with AS1289.5.2.1. Add moisture as needed during the compaction.
- Undertake necessary excavation to the required depth for the proposed shallow foundation, raft, pad and strip footing. Footing bases should be comprised of a minimum of 700 mm thick sand pad. Temporary excavation up to 1 m depth can be conducted with a maximum dry slope angle of 1V: 1.5H. It is highly recommended to undertake a series of DCP tests at each footing base to ensure that the ground beneath the footing, at least to 1 m depth, does not comprise loose sands or other deleterious, clay or weak materials. Hand held compactor can be used if the base ground is not in dense state.
- Care will need to be taken when compacting in the vicinity of existing structures to avoid damage from excessive vibrations.

- The Owner needs attention regarding the CSIRO publication in Building Technology File Number 18 from “Guide to Home Owners on Foundation Maintenance and Footing Performance”.

It is highly recommended that during the course of construction to verify site preparation and compaction prior to pouring of concrete checked by a geotechnical engineer.

6.8 Bearing Capacity

As discussed in Section 6.7.2, all footing bases should be comprised of a minimum of 300 mm thick sand pad overlies on dense or stiff to very stiff material, to a minimum depth of 1 m below the footing excavation level.

The allowable bearing pressures are estimated (Table 7) to limit settlements to less than or equal to 25 mm and provide a minimum factor of safety of 2.0 against general bearing capacity failure. These bearing pressures do not consider eccentric and inclined loading conditions and interaction effects (i.e., loadings from adjacent foundations). Furthermore, the calculations assume that the areas beneath the pad and strip foundations have been compacted to a density ratio of 95% modified compaction, MMDD, and are founded at least 0.5 m to 1.0 m below final ground level.

Table 7. Allowable Bearing Pressures for Typical Strip and Pad Footings

Embedment Depth (m)	Footing Type	Footing Width (m)	Allowable Bearing Pressure (kPa)	Estimated Settlement (mm)
0.5	Strip	0.5	80	20
		1	100	20
		1.5	120	25
0.5	Pad	1	100	20
		2	130	20
		3	160	25

6.9 Excavatability

The stiff to hard states of the in-situ soils suggest that the materials should be excavatable with standard earthmoving equipment (e.g. 8 to 20 tonne excavator). Temporary excavation up to 1 m depth can be conducted with a maximum dry slope angle of 2H:1V.

6.10 Stormwater Drainage

The site is generally comprising of gravelly sandy clay up to the investigation depth. Groundwater table was not observed at any of the boreholes up to the investigation depth of 1.7m below ground level. It is found from field permeability test that the coefficient of permeability or hydraulic conductivity of the site varies from 0.047 to 0.07 m/day.

Onsite disposal of stormwater via soakwell is not appropriate for this site. We recommend to disposal of stormwater or roof runoff to offsite of the property or to the council drain. The drainage system has to fulfil the requirements of local shire.

6.11 California Bearing Ratio (CBR)

The subgrade of the driveway/ access road areas shall be prepared as per the general guidelines set out in Section 6.7.2 and compacted to a density ratio of **98% MMDD**.

We recommend a design CBR value of 5% can be considered for this project.

7.0 REFERENCES

Australian Standard AS1170.4-2007, “Earthquake Actions in Australia”.

Australian Standard AS 1726-1993, "Geotechnical Site Investigations".

Australian Standard AS 2870-2011, "Residential Slabs and Footings".

Australian Standard AS 3798-2007, "Guidelines on Earthworks for Commercial and Residential Developments".

Standards Australia, Hand Book HB 160-2006 "Soil Testing".

Perth Ground Atlas onlineversion, https://maps.water.wa.gov.au/#/webmap/gwm, Department of Environment, WA.

CSIRO publication *“Guide to Home Owners on Foundation Maintenance and Footing Performance”* in Building Technology File Number 18.

Slavin Architects architectural drawings, Hyden Visitor's Centre Plan - REV 4.

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APPENDIX – A

SITE PLAN AND SITE LAYOUT PLAN



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Project: Geotechnical Investigation
Location: 36 Marshall Street, Hyden WA

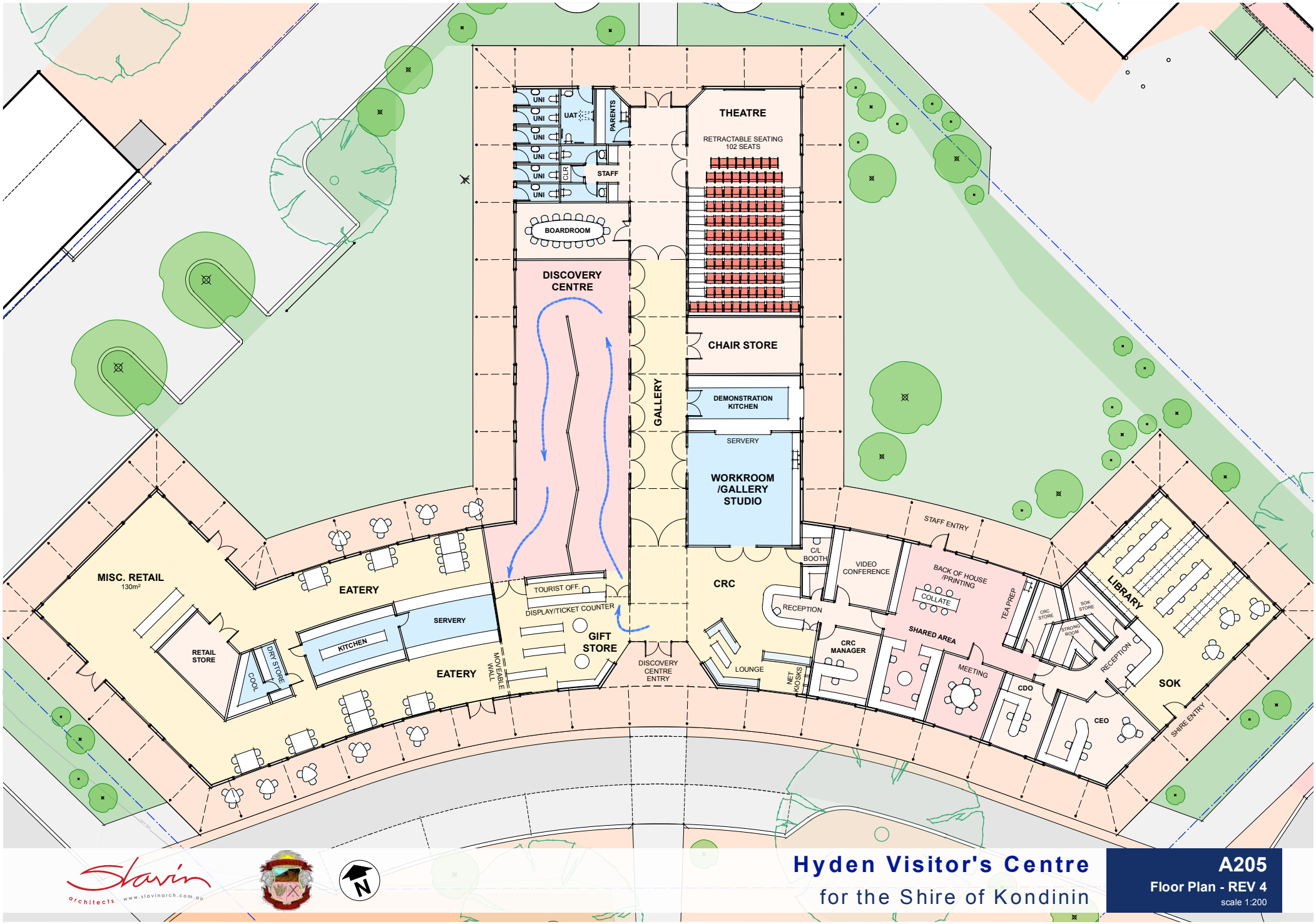
Client: Hyden Progress Association

Reference: GI862725PG | **Scale:** N.T.S.

Date: 31/12/2025 | **Drawn By:** MH

Site Plan:
Bore Hole (BH), Dynamic Cone Penetrometer (DCP) and Permeability (FPT) Test Locations

Drawing No: 862725_Rev0



Slavin architects www.slavinarch.com.au

Hyden Visitor's Centre

for the Shire of Kondinin

A205

Floor Plan - REV 4

scale 1:200


TOILETS
51m²
GATHERING
33m²
THEATRE
102m²
BOARDROOM
25m²
CHAIR STORE
25m²
DISCOVERY CENTRE
147m²
GALLERY
63m²
KITCHEN
25m²
STUDIO
50m²
BOOTH
6m²
STORE
3m²
VIDEO CONFERENCE
19m²
REC'TN
8m²
CIRC.
6m²
PRINT / STAFF / TEA
51m²
STORE
8m²
STORE
8m²
STORE
8m²
LIBRARY
77m²
REC'TN
10m²
CIRC.
9m²
FOYER
11m²
CDO
16m²
CEO
30m²
MEETING
18m²
OPEN PLAN
18m²
MANAGER
18m²
CRC/LOUNGE
58m²
FOYER
20m²
GIFT STORE
56m²
EATERY
127m²
SERVERY
21m²
KITCH
21m²
KITCH STORE
12m²
RETAIL
17m²
RETAIL
113m²

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APPENDIX – B

BORE HOLE LOGS, DCP & FIELD PERMEABILITY TEST CERTIFICATES

BORE HOLE LOG

Perth Geotechnics
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Reference:	GI862725PG	**Client:**	Hyden Progress Association
Project:	Geotechnical Investigation	**Bore Hole ID:**	BH1
Location:	36 Marshall Street, Hyden WA	**Date Commenced:**	12/11/2025
Easting:	50 675 160	**Equipment Type**	Machine Auger
Northing:	6 408 242	**Logged By:**	HA
Sampling Type:	B - Bulk Sample	**Checked By:**	MH

Scale (m)	Depth (m)	GWT (m)	Sampling Type/Depth	Graphic Log	UCS Symbol	Sample ID	Soil Description	Moisture Condition	Density	Remarks/Field observations
					CL		**Sandy Gravelly CLAY**- low plasticity, yellowish brown, brown, fine to coarse grained gravel, fine to medium grained sand	D	H-VSt	
	0.2									
					CI		**Gravelly Sandy CLAY**- medium plasticity, yellowish brown, pale grey, brown, fine to medium grained sand, fine to coarse grained gravel	D	St-VSt	
	0.5									
1.0								SM	St-VSt	
	1.5							SM	H	
							Terminated at a depth of 1.5m due to auger refusal on hard clay			
2.0										
3.0										
4.0										
5.0										

Remarks:
Sampling Type:
B - Bulk Sample (/Disturbed),
U - Undisturbed Sample

Moisture Condition:
D - Dry, **M** - Moist, **W** - Wet
SM- Slightly Moist
= Water Table

Density:
VL = Very Loose, **L** = Loose,
MD = Medium Dense
D = Dense, **VD** = Very Dense

VS = Very Soft
F = Firm
St = Stiff

VSt = Very Stiff
H = Hard
R = Refusal

BORE HOLE LOG

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Reference:	GI862725PG	**Client:**	Hyden Progress Association
Project:	Geotechnical Investigation	**Bore Hole ID:**	BH2
Location:	36 Marshall Street, Hyden WA	**Date Commenced:**	12/11/2025
Easting:	50 675 152	**Equipment Type**	Machine Auger
Northing:	6 408 204	**Logged By:**	HA
Sampling Type:	B - Bulk Sample	**Checked By:**	MH

Scale (m)	Depth (m)	GWT (m)	Sampling Type/Depth	Graphic Log	UCS Symbol	Sample ID	Soil Description	Moisture Condition	Density	Remarks/Field observations
					CL		**Sandy Gravelly CLAY**- low plasticity, yellowish brown, brown, fine to coarse grained gravel, fine to medium grained sand	D-M	H-VSt	
	0.2									
					CI		**Gravelly Sandy CLAY**- medium plasticity, grey, brown, dark grey, fine to coarse grained gravel, fine to medium grained sand	M	St-VSt	
	0.5		BH2							
1.0								M	St-VSt	
	1.3									
	1.5							M	VSt-H	
	1.7						**Terminated at a depth of 1.7m due to auger refusal on hard clay**			
2.0										
3.0										
4.0										
5.0										

Remarks:
Sampling Type:
B - Bulk Sample (/Disturbed),
U - Undisturbed Sample

Moisture Condition:
D - Dry, **M** - Moist, **W** - Wet
SM- Slightly Moist
= Water Table

Density:
VL = Very Loose, **L** = Loose,
MD = Medium Dense
D = Dense, **VD** = Very Dense

VS = Very Soft
F = Firm
St = Stiff

VSt = Very Stiff
H = Hard
R = Refusal

BORE HOLE LOG

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Reference:	GI862725PG	**Client:**	Hyden Progress Association
Project:	Geotechnical Investigation	**Bore Hole ID:**	BH3
Location:	36 Marshall Street, Hyden WA	**Date Commenced:**	12/11/2025
Easting:	50 675 129	**Equipment Type**	Machine Auger
Northing:	6 408 222	**Logged By:**	HA
Sampling Type:	B - Bulk Sample	**Checked By:**	MH

Scale (m)	Depth (m)	GWT (m)	Sampling Type/Depth	Graphic Log	UCS Symbol	Sample ID	Soil Description	Moisture Condition	Density	Remarks/Field observations
	0.2				CL		**Sandy Gravelly CLAY**- low plasticity, yellowish brown, brown, fine to coarse grained gravel, fine to medium grained sand	D-M	H-VSt	
	0.5				Cl		**Gravelly Sandy CLAY**- medium plasticity, grey, brown, dark grey, fine to coarse grained gravel, fine to medium grained sand	M	St-VSt	
1.0								M	St-VSt	
	1.5							M	VSt-H	
	1.7						**Terminated at a depth of 1.7m due to auger refusal on hard clay**			
2.0										
3.0										
4.0										
5.0										

Remarks:
Sampling Type:
B - Bulk Sample (/Disturbed),
U - Undisturbed Sample

Moisture Condition:
D - Dry, **M** - Moist, **W** - Wet
SM- Slightly Moist
= Water Table

Density:
VL = Very Loose, **L** = Loose,
MD = Medium Dense
D = Dense, **VD** = Very Dense

VS = Very Soft
F = Firm
St = Stiff

VSt = Very Stiff
H = Hard
R = Refusal

BORE HOLE LOG

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Reference:	GI862725PG	**Client:**	Hyden Progress Association
Project:	Geotechnical Investigation	**Bore Hole ID:**	BH4
Location:	36 Marshall Street, Hyden WA	**Date Commenced:**	12/11/2025
Easting:	50 675 160	**Equipment Type**	Machine Auger
Northing:	6 408 221	**Logged By:**	HA
Sampling Type:	B - Bulk Sample	**Checked By:**	MH

Scale (m)	Depth (m)	GWT (m)	Sampling Type/Depth	Graphic Log	UCS Symbol	Sample ID	Soil Description	Moisture Condition	Density	Remarks/Field observations
					CL		**Sandy Gravelly CLAY**- low plasticity, yellowish brown, brown, fine to coarse grained gravel, fine to medium grained sand	D	H-VSt	
	0.2									
					CI		**Gravelly Sandy CLAY**- medium plasticity, yellowish brown, grey, brown, fine to medium grained sand, fine to coarse grained gravel,	D	St-VSt	
	0.5									
1.0								SM	St-VSt	
	1.5							SM	H	
							Terminated at a depth of 1.5m due to auger refusal on hard clay			
2.0										
3.0										
4.0										
5.0										

Remarks:
Sampling Type:
B - Bulk Sample (/Disturbed),
U - Undisturbed Sample

Moisture Condition:
D - Dry, **M** - Moist, **W** - Wet
SM- Slightly Moist
= Water Table

Density:
VL = Very Loose, **L** = Loose,
MD = Medium Dense
D = Dense, **VD** = Very Dense

VS = Very Soft
F = Firm
St = Stiff

VSt = Very Stiff
H = Hard
R = Refusal

BORE HOLE LOG

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Reference:	GI862725PG	**Client:**	Hyden Progress Association
Project:	Geotechnical Investigation	**Bore Hole ID:**	BH5
Location:	36 Marshall Street, Hyden WA	**Date Commenced:**	12/11/2025
Easting:	50 675 171	**Equipment Type**	Machine Auger
Northing:	6 408 232	**Logged By:**	HA
Sampling Type:	B - Bulk Sample	**Checked By:**	MH

Scale (m)	Depth (m)	GWT (m)	Sampling Type/Depth	Graphic Log	UCS Symbol	Sample ID	Soil Description	Moisture Condition	Density	Remarks/Field observations
					CL		**Sandy Gravelly CLAY**- low plasticity, yellowish brown, brown, fine to coarse grained gravel, fine to medium grained sand	D	H-VSt	
	0.2									
					Cl		**Gravelly Sandy CLAY**- medium plasticity, yellowish brown, pale grey, brown, fine to medium grained sand, fine to coarse grained gravel	D	St-VSt	
	0.5									
1.0								SM	St-VSt	
	1.5							SM	VSt-H	
							Terminated at a depth of 1.5m due to auger refusal on hard clay			
2.0										
3.0										
4.0										
5.0										

Remarks:
Sampling Type:
B - Bulk Sample (/Disturbed),
U - Undisturbed Sample

Moisture Condition:
D - Dry, **M** - Moist, **W** - Wet
SM- Slightly Moist
= Water Table

Density:
VL = Very Loose, **L** = Loose,
MD = Medium Dense
D = Dense, **VD** = Very Dense

VS = Very Soft
F = Firm
St = Stiff

VSt = Very Stiff
H = Hard
R = Refusal

BORE HOLE LOG

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Reference:	GI862725PG	**Client:**	Hyden Progress Association
Project:	Geotechnical Investigation	**Bore Hole ID:**	BH6
Location:	36 Marshall Street, Hyden WA	**Date Commenced:**	12/11/2025
Easting:	50 675 187	**Equipment Type**	Machine Auger
Northing:	6 408 192	**Logged By:**	HA
Sampling Type:	B - Bulk Sample	**Checked By:**	MH

Scale (m)	Depth (m)	GWT (m)	Sampling Type/Depth	Graphic Log	UCS Symbol	Sample ID	Soil Description	Moisture Condition	Density	Remarks/Field observations
	0.2				CL		**Sandy Gravelly CLAY**- low plasticity, yellowish brown, brown, fine to coarse grained gravel, fine to medium grained sand	D-M	H-VSt	
	0.5				Cl		**Gravelly Sandy CLAY**- medium plasticity, grey, brown, fine to medium grained sand, fine to coarse grained gravel	M	St-VSt	
1.0								M	St-VSt	
	1.5							M	VSt-H	
	1.6						**Terminated at a depth of 1.6m due to auger refusal on hard clay**			
2.0										
3.0										
4.0										
5.0										

Remarks:
Sampling Type:
B - Bulk Sample (/Disturbed),
U - Undisturbed Sample

Moisture Condition:
D - Dry, **M** - Moist, **W** - Wet
SM- Slightly Moist
= Water Table

Density:
VL = Very Loose, **L** = Loose,
MD = Medium Dense
D = Dense, **VD** = Very Dense

VS = Very Soft
F = Firm
St = Stiff

VSt = Very Stiff
H = Hard
R = Refusal

Perth Geotechnics

DYNAMIC CONE PENETROMETER (DCP)
TEST CERTIFICATE

(AS 1289.6.3.2)
Correlation of Sand Density - Table 6.4.6.1 (A) & (B) HB 160-2006

Client	Hyden Progress Association	Project	Geotechnical Investigation
Reference	GI862725PG	Location	36 Marshall Street, Hyden WA
Date Tested	12/11/2025	Tested By	HA

References:	DCP1	DCP2	DCP3	DCP4	DCP5
Depth below ground level test commenced	Penetration Resistance - Blows/100mm & Density Classification				
0-100	15 (H)	12 (H)	12 (H)	12 (H)	13 (H)
100-200	14 (H)	10 (VSt)	10 (VSt)	10 (VSt)	12 (H)
200-300	10 (VSt)	12 (H)	9 (VSt)	10 (VSt)	10 (VSt)
300-400	8 (VSt)	7 (VSt)	9 (VSt)	9 (VSt)	8 (VSt)
400-500	8 (VSt)	6 (VSt)	6 (VSt)	6 (VSt)	7 (VSt)
500-600	5 (VSt)	6 (VSt)	4 (St)	5 (VSt)	6 (VSt)
600-700	7 (VSt)	5 (VSt)	4 (St)	4 (St)	7 (VSt)
700-800	6 (VSt)	5 (VSt)	5 (VSt)	5 (VSt)	5 (VSt)
800-900	4 (St)	4 (St)	4 (St)	4 (St)	5 (VSt)
900-1000	5 (VSt)	4 (St)	5 (VSt)	5 (VSt)	4 (St)
1000-1100	4 (St)	5 (VSt)	4 (St)	4 (St)	5 (VSt)
1100-1200	5 (VSt)	4 (St)	3 (St)	5 (VSt)	5 (VSt)
1200-1300	4 (St)	3 (St)	4 (St)	6 (VSt)	4 (St)
1300-1400	4 (St)	5 (VSt)	5 (VSt)	8 (VSt)	6 (VSt)
1400-1500	11 (H)	5 (VSt)	6 (VSt)	11 (H)	10 (VSt)
1500-1600	-	6 (VSt)	8 (VSt)	-	-
1600-1700	-	10 (VSt)	11 (H)	-	-
1700-1800	-	-	-	-	-
1800-1900	-	-	-	-	-
1900-2000	-	-	-	-	-

Remarks: R= Refusal/ Hard

Table A: H = Hard >10, VSt = Very Stiff, 5 – 10, St = Stiff, 3 – 4, F = Firm, 1 – 2, S = Soft, 0 - 1, VS = Very Soft < 1

Table B: VD = Very Dense > 8, D = Dense, 4 – 8, MD = Medium Dense, 2 – 3, L = Loose, 1 – 2, VL = Very Loose < 1

Perth Geotechnics

DYNAMIC CONE PENETROMETER (DCP)
TEST CERTIFICATE

(AS 1289.6.3.2)
Correlation of Sand Density - Table 6.4.6.1 (A) & (B) HB 160-2006

Client	Hyden Progress Association	Project	Geotechnical Investigation
Reference	GI862725PG	Location	36 Marshall Street, Hyden WA
Date Tested	12/11/2025	Tested By	HA

References:	DCP6	DCP7	DCP8	DCP9	DCP10
Depth below ground level test commenced	Penetration Resistance - Blows/100mm & Density Classification				
0-100	11 (H)				
100-200	10 (VSt)				
200-300	9 (VSt)				
300-400	8 (VSt)				
400-500	7 (VSt)				
500-600	6 (VSt)				
600-700	5 (VSt)				
700-800	4 (St)				
800-900	4 (St)				
900-1000	5 (VSt)				
1000-1100	5 (VSt)				
1100-1200	6 (VSt)				
1200-1300	4 (St)				
1300-1400	7 (VSt)				
1400-1500	8 (VSt)				
1500-1600	11 (H)				
1600-1700	-				
1700-1800	-				
1800-1900	-				
1900-2000	-				

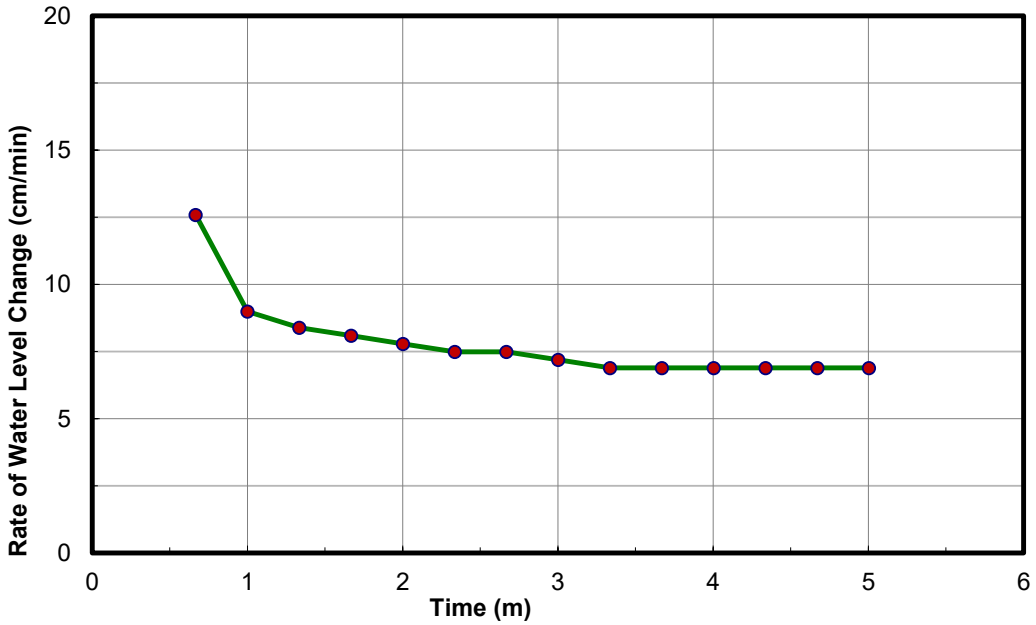
Remarks: R= Refusal/ Hard

Table A: H = Hard >10, VSt = Very Stiff, 5 – 10, St = Stiff, 3 – 4, F = Firm, 1 – 2, S = Soft, 0 - 1, VS = Very Soft < 1

Table B: VD = Very Dense > 8, D = Dense, 4 – 8, MD = Medium Dense, 2 – 3, L = Loose, 1 – 2, VL = Very Loose < 1

PERTH GEOTECHNICS				
Test ID	FPT1		Reference	GI862725PG
Project	Geotechnical Investigation		Client	Hyden Progress Association
Location	36 Marshall Street, Hyden WA		Soil Type	Gravelly Sandy Clay
Co-ordinates	Easting: 50 675 132	Northing: 6 408 216	Test Depth	1.0 m below ground level
Instrument Name	Guelph Permeameter		Date Tested	12/11/2025

PERMEABILITY TEST CERTIFICATES
(ASTM D 5126-90)



Water Hydraulic conductivity K_{fs}: **5.4E-05** **cm/sec**

4.7E-02 **m/day**

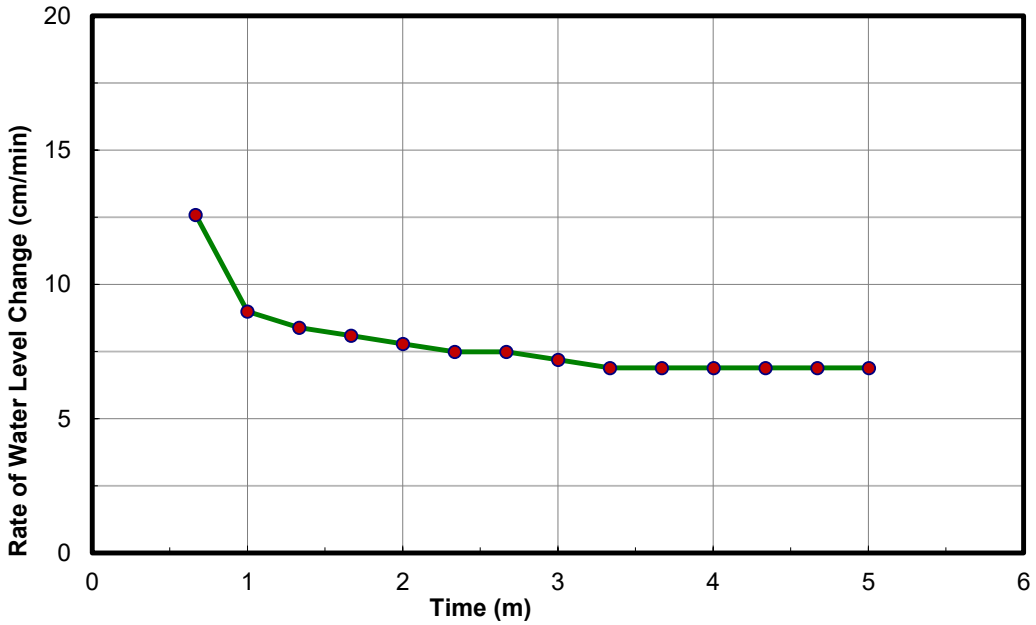
Tested By: *Mohammad Amzad Hossain* Date: 31/12/2025

Perth Geotechnics
Tel: 08 6396 2675; M: 0430 130 677
PO Box 165, Gosnells WA 6990
www.perthgeotechnics.com.au

PERTH GEOTECHNICS

Test ID	FPT2	Reference	GI862725PG
Project	Geotechnical Investigation	Client	Hyden Progress Association
Location	36 Marshall Street, Hyden WA	Soil Type	Gravelly Sandy Clay
Co-ordinates	Easting: 50 675 181 Northing: 6 408 200	Test Depth	1.0 m below ground level
Instrument Name	Guelph Permeameter	Date Tested	12/11/2025

PERMEABILITY TEST CERTIFICATES
(ASTM D 5126-90)



Water Hydraulic conductivity K_{fs}: **8.0E-05** **cm/sec**

7.0E-02 **m/day**

Tested By: *Mohammad Amzad Hossain* Date: 31/12/2025

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APPENDIX – C

LABORATORY TEST CERTIFICATES

WESTERN GEOTECHNICAL & Laboratory Services

SOIL | AGGREGATE | CONCRETE | CRUSHING

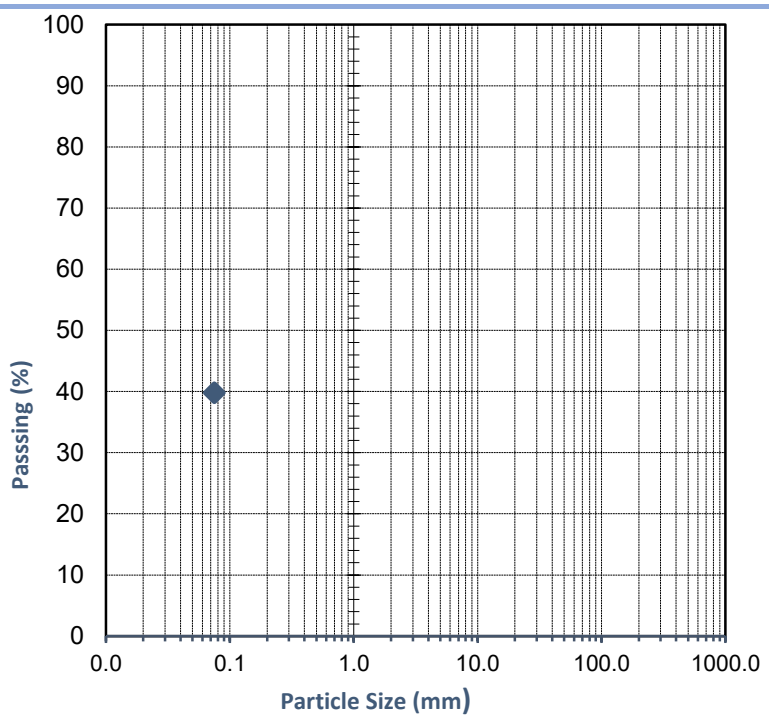
TEST REPORT - AS 1289.3.9.2, 3.2.1, 3.3.2, 3.4.1 & 3.6.1

Client:	Perth Geotechnics	*Ticket No.*	S19538
Client Address:	PO Box 165, Gosnells	*Report No.*	WG25.20400_1_PSDPI
Project:	Material Assessment	*Sample No.*	WG25.20400
Location:	31 Marshall Street, Hyden	*Date Sampled:*	Not Specified
Sample Identification:	BH2 (0.2-1.3m)	*Date Tested:*	19/11 - 20/11/2025

Sampling Method: **Sampled by Client, Tested as Received**

TEST RESULTS - Particle Size Distribution of Soil

Sieve Size (mm)	Percent Passing Sieve (%)
125.0	
75.0	
53.0	
37.5	
19.0	
9.5	
4.75	
2.36	
1.18	
0.600	
0.425	
0.300	
0.150	
0.075	40



TEST RESULTS - Consistency Limits (Casagrande)

AS 1289.3.9.2	AS 1289.3.2.1	AS 1289.3.3.2	AS 1289.3.4.1		
Liquid Limit (%)	Plastic Limit (%)	Plastic Index (%)	Linear Shrinkage (%)	Mould Length (mm)	Condition of Dry Specimen:
31	14	17	9	250	Cracked, Curled

Method of Preparation: Dry Sieved — History of Sample: Oven Dried <50°C

Comments: Clients request for the % fines of material passing 0.075mm only.

Approved Signatory:

Name: Danielle Reynolds

Date: 21/November/2025

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Perth Geotechnics

APPENDIX – D

SITE PHOTOGRAPH

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Photo 01: Site is looking from McPherson Street, Hyden WA



Photo 02: Subsurface probing by hand auger at Borehole BH6 location

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Photo 03: Subsurface probing by hand auger at Borehole BH2 location



Photo 04: Soil from borehole location BH2

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Photo 05: Soil from Borehole BH3 location



Photo 06: Conducting Dynamic Cone Penetrometer test at DCP1 location

Perth Geotechnics
ABN: 74 660 182 061
PO Box 165, Gosnells WA 6990
E: info@perthgeotechnics.com.au
www.perthgeotechnics.com.au

Date: 15/05/2026

Our Ref: LT921826PG

To
Site Architecture

RE: Laboratory tests for Sand pit and Stockpile samples, Hyden WA.

The tested soil/rock samples were suppled by the client, see below the summary of laboratory test results.

Table 2. Summary of Geotechnical Laboratory Test Results for Soil

Sample ID	Gravel (%)	Sand (%)	Fines (%)	LL (%)	PL (%)	PI (%)	LS (%)	Soil Class (AS1726)
Koolami Paddock 9 Pit	1	79	20	27	19	8	3	Low Plasticity Clayey SAND (SC)
Kent Mouritz Sand Pit	1	87	12	20	NP	NP	0	Sand trace clay (SP)
Stockpile sample_ SP1	74	22	4	17	14	3	1	Sandy Gravel (GP) trace clay
Stockpile sample_ SP2	0	93	7	20	NP	NP	0	Sand (SP)

Note: LL= Liquid Limit, PL = Plastic Limit, PI = Plasticity Index, LS = Linear Shrinkage, Non-Plastic= NP

3.0 CONCLUSIONS & RECOMMENDATIONS

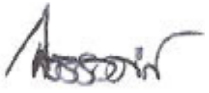
Koolami Paddock 9 pit, is not recommended for any engineering fil, can be used for garden bed, landscape area.

Stockpile sample_ SP1, can be used for driveway, carpark, hardstand area etc.

Kent Mouritz Sand Pit and Stockpile sample_ SP2, can be considered as engineering fill/ fill materials for sand pad and concrete and plaster work.

Appendix: Soil samples photographs and Laboratory test certificates.

For and on behalf of Perth Geotechnics.



Mohammad Amzad Hossain
B Eng. (Civil), MIEAust, MAGS, MIEB
Sr Geotechnical Engineer

Perth Geotechnics
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Photo 01: Soil samples for Laboratory tests



Photo 02: Soil Sample_ Koolami Paddock 9 Pit

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Photo 01: Stockpile sample_ SP1



Photo 02: Soil Sample_ Kent Mouritz Sand Pit

WESTERN GEOTECHNICAL & Laboratory Services

SOIL | AGGREGATE | CONCRETE | CRUSHING

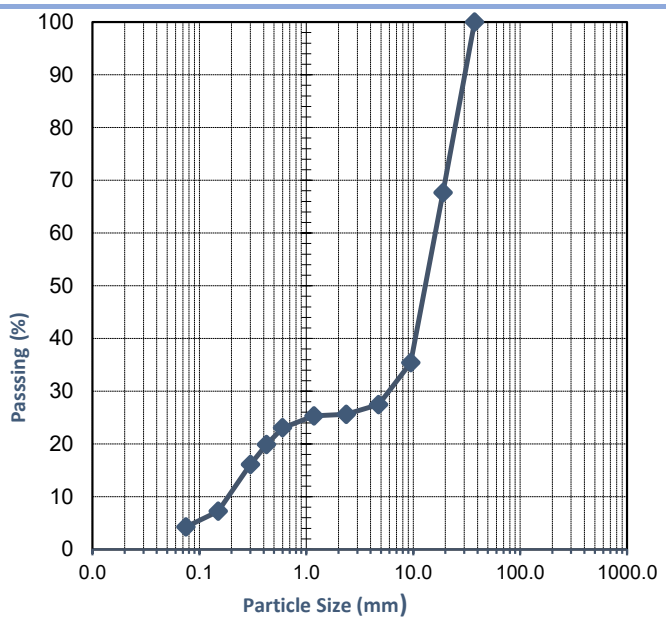
TEST REPORT - AS 1289.3.9.2, 3.2.1, 3.3.2, 3.4.1 & 3.6.1

Client:	Perth Geotechnics	*Ticket No.*	S21235
Client Address:	PO Box 165, Gosnells	*Report No.*	WG26.5455_1_PSDPI
Project:	Material Assessment	*Sample No.*	WG26.5455
Location:	Hyden	*Date Sampled:*	Not Specified
Sample Identification:	SP1	*Date Tested:*	13/04 - 14/04/2026

Sampling Method: **Sampled by Client, Tested as Received**

TEST RESULTS - Particle Size Distribution of Soil

Sieve Size (mm)	Percent Passing Sieve (%)
150.0	
100.0	
75.0	
37.5	100
19.0	68
9.5	35
4.75	27
2.36	26
1.18	25
0.600	23
0.425	20
0.300	16
0.150	7
0.075	4



TEST RESULTS - Consistency Limits (Casagrande)

AS 1289.3.9.2		AS 1289.3.2.1	AS 1289.3.3.2	AS 1289.3.4.1		
Liquid Limit (%)	Retained on 425µm (%)	Plastic Limit (%)	Plastic Index (%)	Linear Shrinkage (%)	Mould Length (mm)	Condition of Dry Specimen:
17	44	14	3	1	250	-

Method of Preparation: Dry Sieved **History of Sample:** Oven Dried <50°C

Comments: Clients request for the % fines of material passing 0.075mm only.

Approved Signatory:

Name: Danielle Reynolds

Date: 16/April/2026

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WESTERN GEOTECHNICAL & Laboratory Services

SOIL | AGGREGATE | CONCRETE | CRUSHING

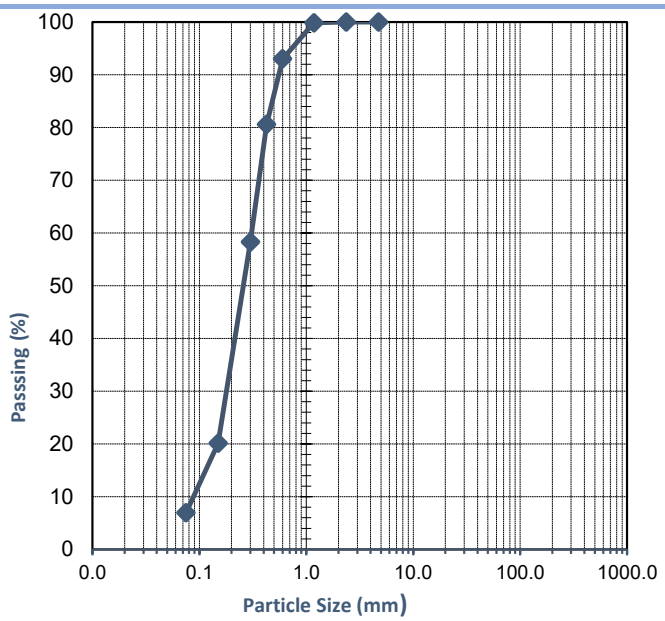
TEST REPORT - AS 1289.3.9.2, 3.2.1, 3.3.2, 3.4.1 & 3.6.1

Client:	Perth Geotechnics	*Ticket No.*	S21235
Client Address:	PO Box 165, Gosnells	*Report No.*	WG26.5456_1_PSDPI
Project:	Material Assessment	*Sample No.*	WG26.5456
Location:	Hyden	*Date Sampled:*	Not Specified
Sample Identification:	SP2	*Date Tested:*	13/04 - 14/04/2026

Sampling Method: **Sampled by Client, Tested as Received**

TEST RESULTS - Particle Size Distribution of Soil

Sieve Size (mm)	Percent Passing Sieve (%)
150.0	
100.0	
75.0	
37.5	
19.0	
9.5	
4.75	100
2.36	100
1.18	100
0.600	93
0.425	81
0.300	58
0.150	20
0.075	7



TEST RESULTS - Consistency Limits (Casagrande)

AS 1289.3.9.2		AS 1289.3.2.1	AS 1289.3.3.2	AS 1289.3.4.1		
Liquid Limit (%)	Retained on 425µm (%)	Plastic Limit (%)	Plastic Index (%)	Linear Shrinkage (%)	Mould Length (mm)	Condition of Dry Specimen:
20	26	Non-Plastic	Non-Plastic	0	250	-

Method of Preparation: Dry Sieved **History of Sample:** Oven Dried <50°C

Comments: Clients request for the % fines of material passing 0.075mm only.

Approved Signatory:

Name: Danielle Reynolds

Date: 16/April/2026

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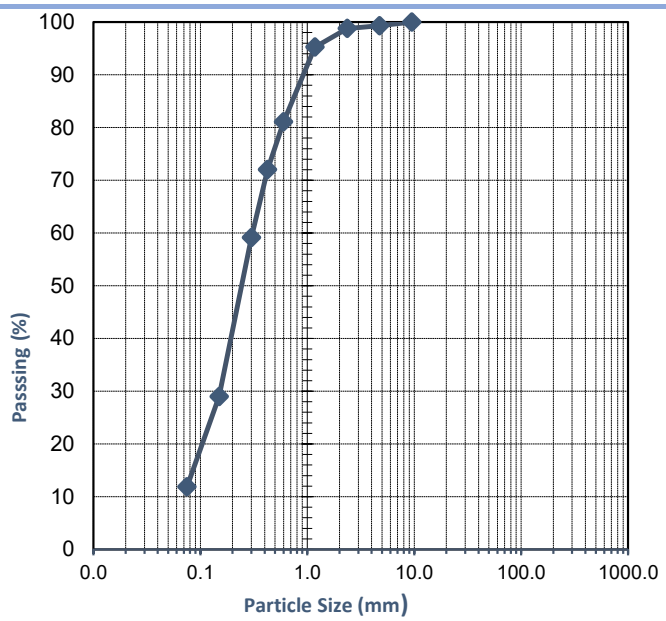
TEST REPORT - AS 1289.3.9.2, 3.2.1, 3.3.2, 3.4.1 & 3.6.1

Client:	Perth Geotechnics	*Ticket No.*	S21235
Client Address:	PO Box 165, Gosnells	*Report No.*	WG26.5457_1_PSDPI
Project:	Material Assessment	*Sample No.*	WG26.5457
Location:	Hyden	*Date Sampled:*	Not Specified
Sample Identification:	Sand Pit - 32.3241600, 118.747083, MSK 325.3m	*Date Tested:*	13/04 - 14/04/2026

Sampling Method: **Sampled by Client, Tested as Received**

TEST RESULTS - Particle Size Distribution of Soil

Sieve Size (mm)	Percent Passing Sieve (%)
150.0	
100.0	
75.0	
37.5	
19.0	
9.5	100
4.75	99
2.36	99
1.18	95
0.600	81
0.425	72
0.300	59
0.150	29
0.075	12



TEST RESULTS - Consistency Limits (Casagrande)

AS 1289.3.9.2		AS 1289.3.2.1	AS 1289.3.3.2	AS 1289.3.4.1		
Liquid Limit (%)	Retained on 425µm (%)	Plastic Limit (%)	Plastic Index (%)	Linear Shrinkage (%)	Mould Length (mm)	Condition of Dry Specimen:
20	40	Non-Plastic	Non-Plastic	0	250	-

Method of Preparation: Dry Sieved **History of Sample:** Oven Dried <50°C

Comments: Clients request for the % fines of material passing 0.075mm only.

Approved Signatory:

Name: Danielle Reynolds

Date: 16/April/2026

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SOIL | AGGREGATE | CONCRETE | CRUSHING

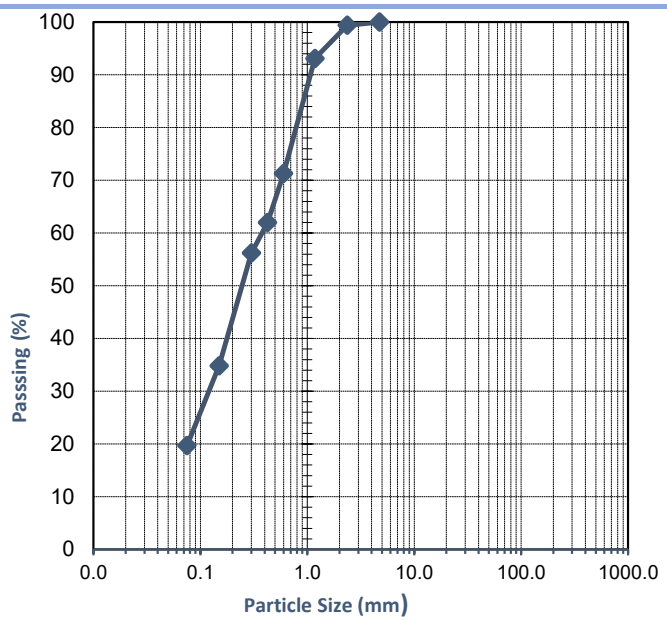
TEST REPORT - AS 1289.3.9.2, 3.2.1, 3.3.2, 3.4.1 & 3.6.1

Client:	Perth Geotechnics	*Ticket No.*	S21235
Client Address:	PO Box 165, Gosnells	*Report No.*	WG26.5458_1_PSDPI
Project:	Material Assessment	*Sample No.*	WG26.5458
Location:	Hyden	*Date Sampled:*	Not Specified
Sample Identification:	Paddock 9 Pit - 32.3930517, 118.8887733, MSL 327.5m	*Date Tested:*	13/04 - 14/04/2026

Sampling Method: **Sampled by Client, Tested as Received**

TEST RESULTS - Particle Size Distribution of Soil

Sieve Size (mm)	Percent Passing Sieve (%)
150.0	
100.0	
75.0	
37.5	
19.0	
9.5	
4.75	100
2.36	99
1.18	93
0.600	71
0.425	62
0.300	56
0.150	35
0.075	20



TEST RESULTS - Consistency Limits (Casagrande)

AS 1289.3.9.2		AS 1289.3.2.1	AS 1289.3.3.2	AS 1289.3.4.1		
Liquid Limit (%)	Retained on 425µm (%)	Plastic Limit (%)	Plastic Index (%)	Linear Shrinkage (%)	Mould Length (mm)	Condition of Dry Specimen:
27	45	19	8	3	250	-

Method of Preparation: Dry Sieved **History of Sample:** Oven Dried <50°C

Comments: Clients request for the % fines of material passing 0.075mm only.

Approved Signatory:

Name: Danielle Reynolds

Date: 16/April/2026

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APPENDIX E

STAKEHOLDER MEETING MINUTES

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 1 Startup Meeting – Minutes

Time / Date: 21st January 2026 – 10:00 am

Location: Teams

Attendees:

Tyron Utley	TU	Hyden Progress Association	HPA
Gerard Lynch	GL	Hyden Progress Association	HPA
Monique Brown	MB	Hyden Progress Association	HPA
Bruce Wright	BW	Shire of Kondinin	SoK
Michael Tyler-Hare	MTH	SITE Architecture Studio	SITE
Stephen Hart	SH	SITE Architecture Studio	SITE

Apologies:

Juliet Grist	JG	Rural & Regional Economic Solutions	RRE

Note – All items in Red are new items discussed within meeting

ITEM	MINUTES	ACTION	BY DATE
1.0	PROJECT TEAM	ALL	
1.1	Lines of communication for the project: **Principal – Hyden Progress Association** Secretary – Tyron Utley (Primary Contact) President – Gerard Lynch Community Resource Centre Chair – Monique Brown **Local Government – Shire of Kondinin** CEO - BW **Project Manager (Funding & Procurement) – Rural & Regional Economic Solutions** Contact - JG **Lead Consultant/ Architect - SITE** Project Director and **Primary Contact** – SH Project Leader– MTH Note - CC all above on PCG related correspondence. **Consultants** As per consultant section **Other**	NOTE	
2.0	BRIEF & PROJECT OBJECTIVES		
2.1	Summary of key outcomes as documented in RFQ listed below: • Design & Documentation Development of a new Discovery Centre in Hyden's town Centre • Discovery Centre to include: o Shire Administration and Community Service Areas o Community Resource Centre (inc Library) o Lecture Theatre/ Small Performance Space o Art Studio o Exhibition, Interpretative and Visitor Experience Spaces o Associated External Works	NOTE	

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 1 Startup Meeting – Minutes

Time / Date: 21st January 2026 – 10:00 am

Location: Teams

ITEM	MINUTES	ACTION	BY DATE
2.2	Program See below proposed program/ key dates for the delivery of the project as per RFQ: **Key Dates**: • Initial Concept Design – end February 2026 • Final Concept Design - end March 2026 • D&C Tender Documentation – end June 2026 • Practical Completion - 2029 Program based on best outcome for federal & state government funding. Regional Services Infrastructure (September). JG to confirm. Potentially target deliverables against Grant Application vs what can be done after. SITE to provide detailed program. Include Review/ Milestones (April to May) & November to December are busy periods to be avoided for consultation ideally. DA application requirements TBC – requires early engagement with planning team.	NOTE JG NOTE SITE BW	
2.2	Budget Anticipated Project Budget as per RFQ: $11,000,000.00 ex GST for the Total Project Cost. Max Budget Cap - $11m – ideally would like to see less due to Grant Application requirements. SITE to provide assumed (extra over) construction costs for review/ confirmation.	NOTE	
2.3	Scope of Services As per the RFQ Documents, and SITE submission, the scope is to complete a fully detailed documentation set suitable for a D&C Tender. Assumed Novation of consultant team to D&C Contractor following completion of the above.	NOTE	
2.4	Scope of Works Detailed Scope of Works to be developed based on the Key Outcomes. The scope of works will be reduced from the previous scheme to align with the project budget. SITE will produce an initial draft Schedule of Accommodation (SoA) for discussion and initial cost estimate by the QS. This will need to be refined and reviewed through the design process. HPA to issue through excel spreadsheet of rooms to be used as a base for the SoA	SITE TU	
2.5	Briefing Information Required To be confirmed in detail. Currently the below is based on other similar projects • Geotechnical Reports (provided) • Land Survey obtained from previous design process (provided) • Any information on existing services.	NOTE	

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 1 Startup Meeting – Minutes

Time / Date: 21st January 2026 – 10:00 am

Location: Teams

ITEM	MINUTES	ACTION	BY DATE
3.0	CONSULTATION		
3.1	Stakeholder Engagement Relevant Organisations • HPA • Local Government (Shire of Kondinin) • Local Community Groups (TBC) • Exhibition Designer • ECI Contractor (Devlyn) Existing Working group has been established. From this point would be more effective for HPA to manage this internally and provide feedback to the design team as needed.	NOTE	
3.2	Consultants Nominal Consultant team listed below as per RFQ response: **Structural** ADG **Civil** ADG **Mechanical** SMWC **Hydraulic** CHD **Electrical** Focus WA **Landscape** MORO **Quantity Surveyor** HWA **Building Certifier** Comply West **Land Surveyor** Not required **ESD** Emergen **Interpretative/ Exhibition** TBC (by HPA) – possibly Multistory to be discussed (SITE to reissue Multistory capability statement for review) Creative Spaces are a potential option. **Geotech** Perth Geotechnics (by HPA) Currently there is no allowance for Acoustic, Bushfire, Town Planner, or AV Consultants. If required SITE will obtain quotes for approval for HPA before proceeding.	SITE/ HPA NOTE	
3.3	Assumptions		
4.0	GENERAL PRINCIPLES		
4.1	Procurement & Program To be tracked and updated against brief in future revisions of minutes as project develops.		
4.2	Budget To be tracked and updated against brief in future revisions of minutes as project develops. SoA will be reviewed and preliminary estimate provided by the building certifier.	SITE	
4.3	Site planning Masterplan for SITE to be developed for review at next PCG meeting. Clearing of Trees to be confirmed. Potentially resolved in previous stages of project.	BW	
4.4	Architecture Spatial relationship plans to be developed for review at next PCG meeting.	SITE	

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 1 Startup Meeting – Minutes

Time / Date: 21st January 2026 – 10:00 am

Location: Teams

ITEM	MINUTES	ACTION	BY DATE
4.5	Structure To be tracked and updated against brief in future revisions of minutes as project develops. • Rammed Earth a preferred option. (indicative soil profile of local) To be discussed with Devlyn	NOTE	
4.6	Mechanical Services To be tracked and updated against brief in future revisions of minutes as project develops.		
4.7	Electrical Services To be tracked and updated against brief in future revisions of minutes as project develops. Information on current supply to the site requested. Western Power information from green dome (assumed 80A 3 phase). HPA to provide details on the unipillar to SITE for the electrical consultant to review and advise.	TU/ SITE	
4.8	Hydraulic Services To be tracked and updated against brief in future revisions of minutes as project develops.		
	Landscape To be tracked and updated against brief in future revisions of minutes as project develops. HPA to provide local planting information. Noting draught & flooding issues to the area (up to 300mm rain).	TU	
4.9	Risks Identify any risks to be included in PDP report & discussed in Workshops ie. - Planning & Approvals - Budget (Funding) - Program - Buildability & Construction		
4.10	Other Contract – Client Architect Agreement to be prepared by SITE and issued by Tuesday next week. (27th January).	SITE	
5.0	NEXT MEETING		
	Next meeting: - Site Inspection & Full Team Start Up (On site) – Timing TBC by SITE. Prefer after 2nd February. *SITE advise the Friday the 6th February would be ideal. Target to arrive 11am and leave by 3pm.*	SITE	

Distribution: All nominated

Author: Michael Tyler-Hare **Date:** 21/01/2026

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 2 Startup Meeting – Minutes

Time / Date: 6 February 2026 - 8.30 – 10:30 am

Location: Hyden

Attendees:

Tyron Utley	TU	Hyden Progress Association	HPA
Gerard Lynch	GL	Hyden Progress Association	HPA
Monique Brown	MB	Hyden Progress Association	HPA
Bruce Wright	BW	Shire of Kondinin	SoK
Michael Tyler-Hare	MTH	SITE Architecture Studio	SITE
Stephen Hart	SH	SITE Architecture Studio	SITE
Paul Sawyer	PS	AMASS	AM
Kieran Ward	KW	AMASS	AM
Paul Jeffs	PJ	Focus Consulting	FC
Jono Marshall	JM	MORO	MO
Scott Watson	SW	Multistory	M

Apologies:

Juliet Grist	JG	Rural & Regional Economic Solutions	RRE

ITEM	MINUTES	ACTION	BY DATE
1.0	PROJECT TEAM	ALL	
1.1	Lines of communication for the project: **Principal – Hyden Progress Association** Secretary – Tyron Utley (Primary Contact) President – Gerard Lynch Community Resource Centre Chair – Monique Brown **Local Government – Shire of Kondinin** CEO - BW **Project Manager (Funding & Procurement) – Rural & Regional Economic Solutions** Contact - JG **Lead Consultant/ Architect - SITE** Project Director and **Primary Contact** – SH Project Leader– MTH Note - CC all above on PCG related correspondence. **Consultants** As per consultant section **Other**	NOTE	
2.0	BRIEF & PROJECT OBJECTIVES		
2.1	Summary of key outcomes as documented in RFQ listed below: • Design & Documentation Development of a new Discovery Centre in Hyden's town Centre • Discovery Centre to include: o Shire Administration and Community Service Areas	NOTE	

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 2 Startup Meeting – Minutes

Time / Date: 6 February 2026 - 8.30 – 10:30 am

Location: Hyden

ITEM	MINUTES	ACTION	BY DATE
	○ Community Resource Centre (inc Library) ○ Lecture Theatre/ Small Performance Space ○ Art Studio ○ Exhibition, Interpretative and Visitor Experience Spaces ○ Associated External Works		
2.2	Program See below proposed program/ key dates for the delivery of the project as per RFQ: **Key Dates**: • Initial Concept Design – end February 2026 • Final Concept Design - end March 2026 • D&C Tender Documentation – end June 2026 • Practical Completion - 2029		
2.2	Budget Anticipated Project Budget as per RFQ: $11,000,000.00 ex GST for the Total Project Cost.		
2.3	Scope of Services As per the RFQ Documents, and SITE submission, the scope is to complete a fully detailed documentation set suitable for a D&C Tender. Assumed Novation of consultant team to D&C Contractor following completion of the above.		
2.4	Scope of Works Schedule of Accommodation (SoA) to be tabled and discussed the SoA is slightly more (200m2) than the QS has indicated in their initial review of the budget during the preparation of our response to the RFQ		
2.5	Briefing Information Required To be confirmed in detail. Currently the below is based on other similar projects • Town stormwater system details		
3.0	**CONSULTATION**		
3.1	Stakeholder Engagement Relevant Organisations • HPA • Local Government (Shire of Kondinin) • Local Community Groups – Mike Ward • Exhibition Designer – status of phase 1 fee approval • ECI Contractor (Devlyn)		
3.1	Discussion with Mike Ward		
4.0	**GENERAL PRINCIPLES**		
4.1	Procurement & Program SITE will produce detailed program for issue next week breaking down submission points, proposed meetings and activities to achieve a end of June D&C Tender Date.		
4.2	Budget The initial advice from the QS is that the rough area of the building should be approx. 800m2 to achieve the $11m budget. The current SoA indicates just over 1000m2.		

Project : Katter Kich Wave Rock Discovery Centre

Meeting : Meeting 2 Startup Meeting – Minutes

Time / Date: 6 February 2026 - 8.30 – 10:30 am

Location: Hyden

ITEM	MINUTES	ACTION	BY DATE
	Group to discuss a reduction/ staging of scope vs an increase in the budget.		
4.3	Site planning		
4.4	Architecture • SITE Architecture note the initial desire to use rammed earth as a feature material.		
4.5	Risks Identify any risks to be included in PDP report & discussed in Workshops ie. - Planning & Approvals - Budget (Funding) - Program - Buildability & Construction		
5.0	CONSULTANTS		
5.1	Structural engineering (SE) SE have reviewed the geotechnical report		
5.2	Electrical consultant		
5.3	Hydraulic consultant		
5.4	Mechanical consultant		
5.5	Quantity surveyor		
5.6	Landscape Architect		
5.7	Building surveyor		
5.8	Energy		
5.9	Civil engineer		
5.10	Exhibition consultant		
6.0	OTHER Contract – Client Architect Agreement tabled and discussed in confidence.	SITE	
7.0	NEXT MEETING		
	Next meeting: Proposed Fortnightly PCG Meetings via Teams		

Distribution: All nominated

Author: Michael Tyler-Hare **Date:** 05/02/2026