Statement of Environmental Effects & DA Package

In Support of a Development Application

Proposal	✓ ERECTION OF FUNCTION CENTRE - in conjunction with use of former church ✓ ERECTION OF A BRIDAL SUITE/GUEST OF HONOUR ACCOMMODATION – Preparation before and short stay accommodation after events ✓ FUNCTION VENUE – Weddings, Christenings,. Funerals ✓ FUNCTION VENUE - Training, Yoga/Pilates Retreats, Local Events (School & Community)
Subject Land and address	Lots 11, 12, 13 Section 45 DP 758547 10 Parry Street (fronting Alonzo St & accessed from Stapylton St) YOUNG NSW 2594
Applicant	Mr Kim Coulter
Owner	GOKAD PTY LTD (Kim Coulter Director) Teresa Anne Vom Bruch
Application prepared by	DA Busters – Development Assistance Services Ph: 0466 722 869 Email: Craig@DAbusters.com
LGA	Hilltops Council – formerly Harden Shire Council

DA assisted by:

DA BUSTERS P/L
Craig Filmer Craig@DAbusters.com 0466 722 869
DEVELOPMENT ASSISTANCE SERVICE

A. The Site and Area

The Site

Your address and lot details: ***Lots 11-13 in Sec 45 of DP 758547, No 10 Parry Street, JUGIONG*** *(as stated on title, there is no Parry St near property – land fronts Alonzo Street and Stapylton Streets in Jugiong and is even listed and rated as Jugiong Rd?)*

What is the present and past use of the site: ***The premises are presently disused former Anglican Church lands and houses the 1892 Christ Church Anglican Church building.***

Has your site ever been occupied by a potentially contaminating activity (e.g. workshop, service station, land filling, lead paint removal, termite treatment) ***None known – prior uses were Church and parishioner uses.***

If so provide details of that activity ***None known.***

What is the area of your site (m^2)?: **Each of the three (3) allotments that make up this parcel are 2 roods in size, 2 of which are square and the other is rectangular alongside the 2 square lots. At 6 roods or 1.5 acres, the area is – total 6,070.28 sq.m, or 2,023.43 sq.m per allotment.**

If applicable, describe the existing commercial premises on the land, the existing building(s) on the site, the use of any existing buildings, the building(s) location on the site, number of storeys and building materials:

Upon the land (Lot 12) stands a stone walled and metal roofed former Anglican Church building.

This building has been disused since the 1970's except fopr seasonal masses and was deconsecrated and sold by the Church in the last 10 years

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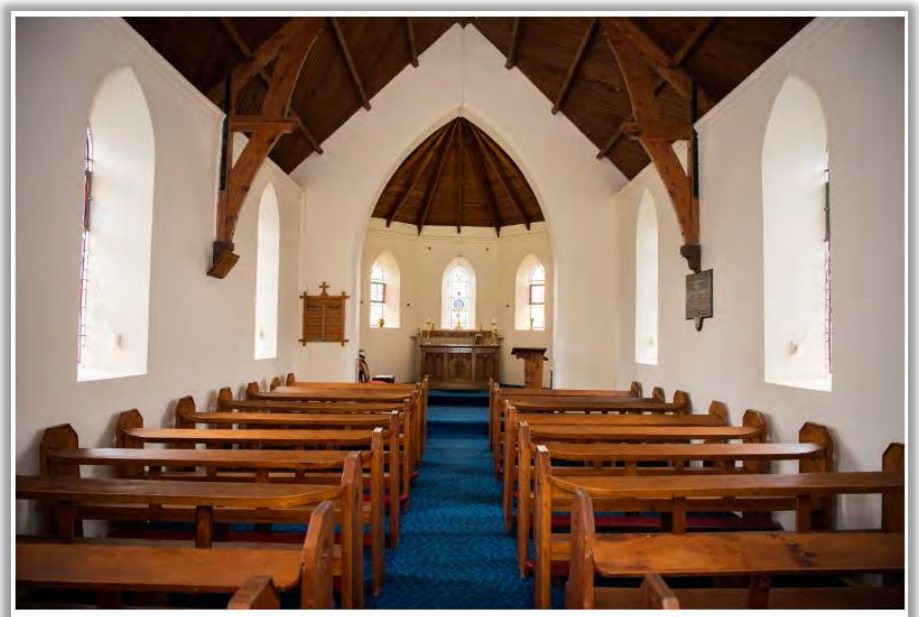


Anglican Christ Church Jugiong — visit Jugiong Visit

APPENDIX D
Statements of Significance

Jugiong

Christ Church Anglican Church
Statement of Significance The site of Christ Church, Jugiong was dedicated for a Church of England in 1873, and a church building constructed in the same year. By the mid 1890s this church had become inadequate to meet the needs of the population, and the original building was demolished to allow for erection of a larger structure. The site served as a place of meeting and worship since 1873. The building has direct associations with the community of Jugiong and district, and with a number of prominent families. These include the Osborns and Coggans. The church is a very restrained Victorian Gothic style structure, which unusually features a pebbledash render. This render was possibly applied to the reconstructed church in 1895 and possibly reflects an early adaptation of Arts and Crafts design features. The place is representative of the development of Jugiong in the late 19th century. It has local historical, historical association, aesthetic and social significance, representativeness and a high degree of integrity.

It is intended to use the Church and keep it in its full glory and also to build support buildings on adjacent lots so that the Church can again serve a purpose and function.

Aerial image (SIX NSW) – circa 10 years old

If there is an existing building on the site how does it address the street and is there laneway access?

The building has a distant street presence to the nearby Main Road (see below)

Google image circa 2022

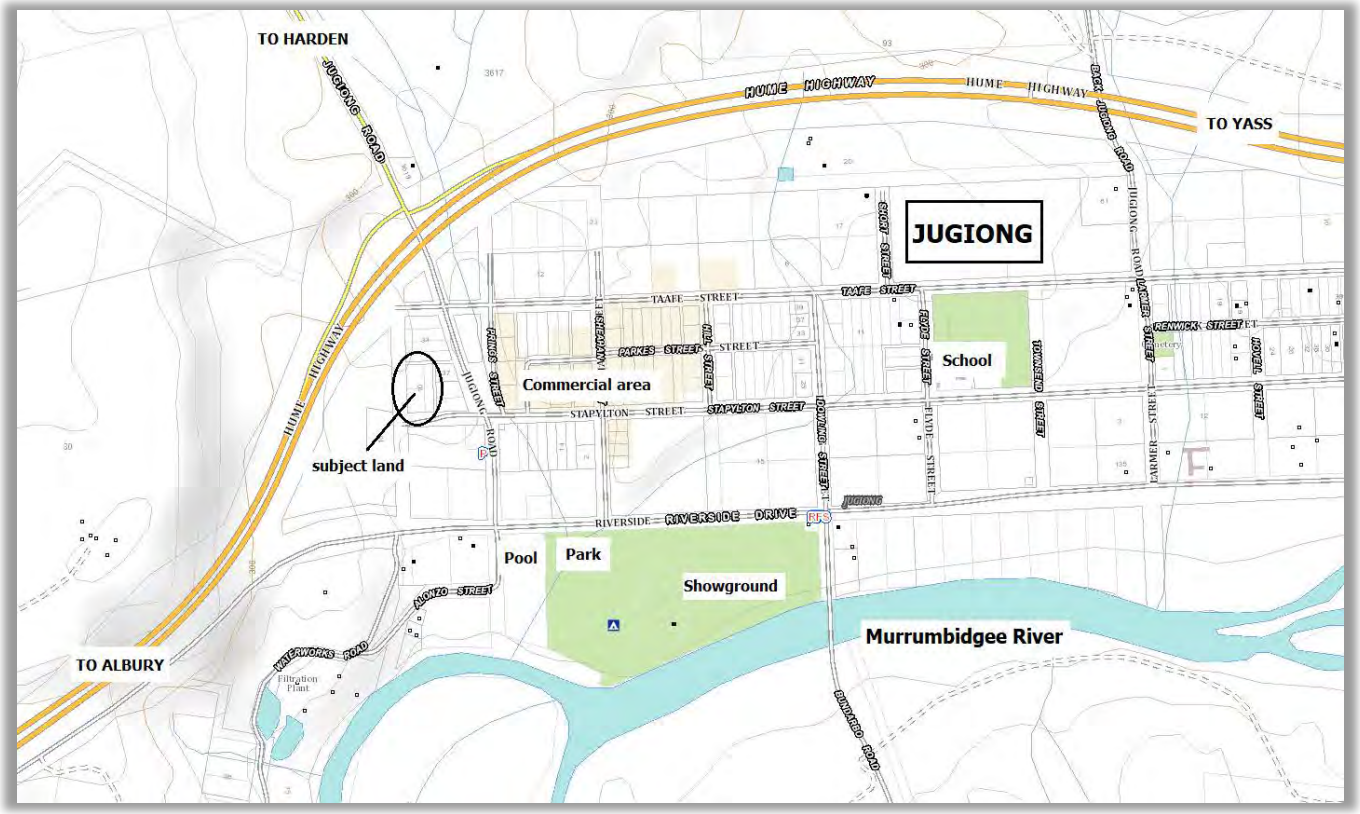
The Site Context

How would you describe the area (residential, commercial, mixed, etc):

The area is within the wider township of Jugiong yet on the western fringe in peri village land edged by the Hume Highway not much further west.

Describe the neighbouring land uses and proximity of neighbours (approximately):

***East**: vacant land, dwelling and Jugiong Rd*	***West**: Farmhouse then Hume Hwy*
***North**: dwelling and Jugiong Rd*	***South**: larger holding – former Police Station and Seargent's house*



Locality analysis adjacent the subject site

B. The Proposed Development

The development proposed can best be summarised as;

- ❖ ERECTION & USE OF A FUNCTION CENTRE/VENUE - in conjunction with use of former church
- ❖ ERECTION OF A BRIDAL SUITE/GUEST OF HONOUR/MANAGER ACCOMMODATION – Preparation before and short stay accommodation after events
- ❖ FUNCTION VENUE – Weddings, Christenings,. Funerals
- ❖ FUNCTION VENUE - Training, Yoga/Pilates Retreats, Local Events (School & Community)

The proposal combines three primary elements for use of the site;

- effective re-use of an Historic building by allowing events to be conducted in a solemn yet historic setting, coupled with
- a supporting new function centre whereby special events held in the former Church may be celebrated then by guests, on-site.
- Sole part guest of honour or manager accommodation rooms

The construction materials and colour scheme proposed

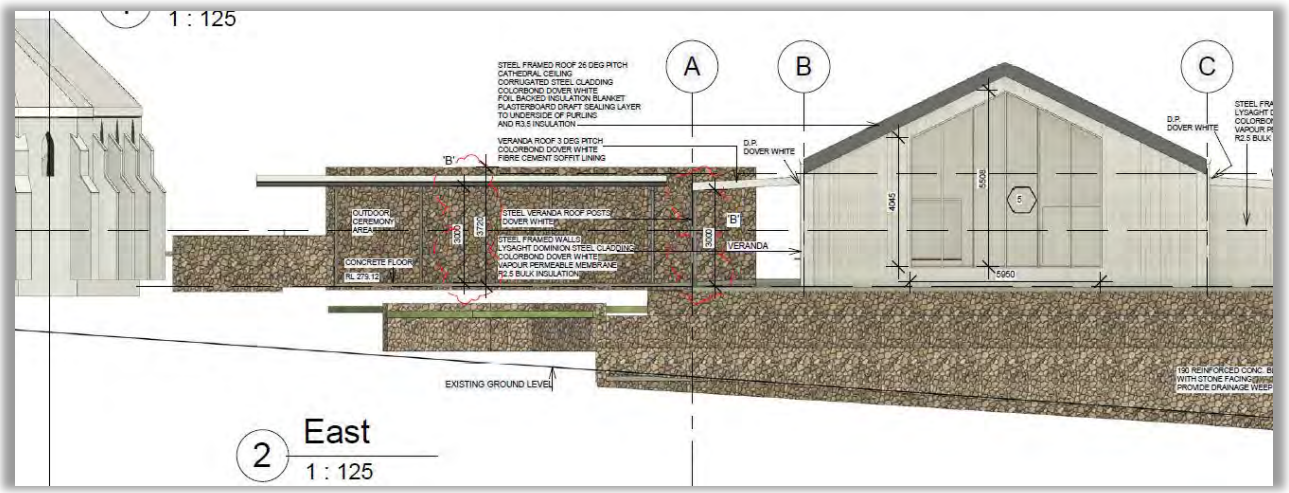
The existing building will be unchanged.

The new buildings are proposed to be steel framed and colorbond clad (Lysaght's Dominion) structures in Dover White. These will be offset by neutral landscaping, colonnade and retaining, but a very colourful landscaping palette as detailed by Somewhere Landscape Architects..

Example of Lysaght's Dominion in lighter colour

The number of storeys proposed

The development will be single storey yet some substantial subfloor fill/terracing will occur due to undulation of the site ,



Plan extract and terracing/colonnade proposed

The roof type proposed	*Colorbond Dover white*
The type of business	*The business potentials have been identified by the Owners as;* *Function Type – Weddings, Christenings, Funerals* *Function Type – Yoga & Pilates Retreat* *Function Type – Training, Management & Conference Venue* *Function Venue – Fundraising, School assemblies, School plays, Community event etc*
The number of staff and expected number of customers	*Staff assigned to the site will be one (Letting and Site Manager) and may not always be in attendance or living at site.*
The hours of trade	*It is expected that the business will operate* *Function Type – Weddings, Christenings, Funerals (*Mon-Thurs, 7am to 9pm & Fri-Sun, 7am to 10:30pm) *From 7am – Hairdresser, Makeup artist, florist, styling* *From 9am – Deliveries, caterers* *From Midday – Wedding reception* *Venue closed 10pm* *All guests off site 10:30pm* *Function Type – Yoga & Pilates Retreat (7am – 9pm Mon – Fri)* *Function Type – Training, Management & Conference Venue (7am – 9pm Mon – Fri)* *Function Venue – Fundraising, School assemblies, School plays, Community event etc (7am to 10pm as required)* *Outside of these hours it is just the residential section that would see traffic movements if the Manager came to visit and stay between events.*
The plant machinery and production processes and noise control	*Only office related equipment (air con & pool filtration) will be used and are all noise rated, existing, or not going to cause amenity loss during business or after hours.* **Noise Control** ▪ Building orientation to reduce noise to neighbouring property. ▪ House near church operated as a full time Airbnb so will be occupied by Wedding guests Arbour wall to block noise to this house ▪ Owner owns front 2 vacant blocks ▪ No amplified music after 10pm ▪ All Guests off site by 10:30pm ▪ Full control of music system, lighting and security on ipad **Complaints Management** ▪ Email address provided on website ▪ Security system Otherwise, mowing and vehicles arriving/leaving

- An Integrated Development application? No
- Concurrence or referral to another state authority? No
- Assessment under the Threatened Species Legislation? No

Describe the extent of any demolition proposed:

Nil Demolition

Describe the parking, loading and access provisions included as part of the proposal (include details such as frequency of truck movements and size of vehicles)

On day of an event we may have bridal parties etc arrive to do flowers or table settings, band arrival and set-up or school event material drop off

Describe how your proposal addresses the needs of people with walking difficulties or sensory impairments, wheelchair users and people with young children including parking, access and toilet facilities.

The proposed commercial occupancy will be AS1428.1 compliant in terms of level grade from parking space to a min 920mm door set at principal point of entry, and throughout the building/s. Specific facilities will be provided in accordance with the BCA & Standard. No access performance solutions are anticipated. Access from parking spot at rear adjacent.

If any trees are to be removed, or impacted upon, describe the trees (species if known and (approximate height):

No tree removal required – site sympathetic design employed.

What will be the maximum wall height and roof height of your building measured from existing ground level?:

Proposed buildings. Height from floor to eave is approx. 3.3m in Function Centre and to ridge is approx. 6.7m. Subfloor yo this structure is varying due to slope yet is up to 1.5m at ext wall.

For the Guest Accommodation Unit the height to eave is 2.6m and to ridge is 4.4m,

What will the gross floor area (GFA) of your new building be (m^2):

Function Venue 300 sq.m,
Guest Accommodation Unit is 134 sq.m = 94.5 sq.m

What will the setback of your new building be from each site boundary?

The footprint will be as shown on the Architectural Plan Set

Guest Accomm – 11.9m from Nth bdy, 65.7m from South (road)
5.09m from West (Road), 48.3m from Lane (east)

Function Venue Building

East: 19.17m to Laneway	*West: 9.6m to Alonzo Street at Rear (being formed for access and parking)*
North: 40.4m to Nth boundary rear	*South: 46.5m to Stapylton Street (approach road)*

If any earthwork is proposed (including excavation or fill) describe same.

Please review between landscaping and Architects Plans. Majority of height relief is subfloor yet with graded exterior levels, terracing, landscaping and colonnade to make this not so obvious.

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C. Compliance with Planning Controls

GENERAL REQUIREMENTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

1.7 Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994

As per these sections of the above Acts, it is not considered that the development is likely to significantly affect threatened species, populations or ecological communities, because:

Biodiversity Conservation Act 2016

- the development will not significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, as there are no trees and shrubs to be removed, the development will not adversely impact the life cycle or habitat of any of the threatened species that may occur in the region, and the development is not a key threatening process. [7.2(1)(a)],
- the development does not exceed the biodiversity offsets scheme thresholds (the site is not mapped as high biodiversity value on the Biodiversity Values Map, and the development does not exceed the clearing threshold) – see attached BVM&T Report [7.2(1)(b)],
- the site has not been declared as an area of outstanding biodiversity value [7.2(1)(c)].
- The mapping supplied in the attached BMAT report is broad brush yet the intermittent water course on the rear neighbouring land is picked up for biodiversity values. The dwelling is sited away from this area.

Fisheries Management Act 1994

- as per the seven-part test under section 221ZV of the Act, there are no threatened species, populations or ecological communities, occurring on-site, or are known to be in the area, there is no declared critical habitat in the region and the development is not a key threatening process.

4.10 Designated development

This development is not a category of designated development, under Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*.

4.14 Consultation and development consent—certain bush fire prone land

The land is not mapped as bushfire prone so consideration of the requirements of Planning for Bush Fire Protection is not required.

4.36 Development that is State significant development

The development is not State significant development, as it is not identified in *State Environmental Planning Policy (State and Regional Development) 2011*.

4.46 Integrated development

The development is not integrated development, with the only relevant consideration being proximity to watercourses. The proposed dwelling is greater than 40 metres from any watercourse nearby.

SECTION 4.15 CONSIDERATIONS UNDER THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979:

State Environmental Planning Policies (SEPPs)

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021) *see separate search and result mapping* – ***development is outside of mapped area and does not exceed thresholds***
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004: Land Application (pub. 25-6-2004) – ***see Sec J Certificate prepared Aug 2023***
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008) – ***pathway not chosen nor eligible***
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021) – ***not applicable this development***
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021) – ***not applicable this development***
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12- 2021) – ***not applicable this development***
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12- 2021) – ***not applicable this development (RU5 and development is permissible)***
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2 -12-2021)) – ***not applicable this development***
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021) – ***development not adjacent any energy or resource infrastructure***
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021) – ***not applicable this development***
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development: Land Application (pub. 26-7-2002) – ***not applicable this development***

The Hilltops Local Environmental Plan 2022 (YLEP) provides the key local planning controls for development within the Shire of Hilltops. It is necessary for each application to consider the relevant controls within these documents to enable Council to complete its assessment of your application.

At the outset it should be noted that at merger, the former Harden Shire Council did not have much in the way of further Local Approvals Policy or a Development Control Plan. Where possible, common assessment provisions will be listed, noted and discussed below to evaluate the project.

Hilltops Local Environmental Plan 2022

What is the zoning of your land: RU5 Village

Does your proposal satisfy the zone objectives: Yes

Zone B4 Mixed Use	
1 Objectives of zone	
• To provide for a range of land uses, services and facilities that are associated with a rural village.	**Consistent – Jugiong now a tourist destination and the proposal caters for local, visitor and community needs**
• To ensure that development is sustainable and does not unreasonably increase the demand for public services or public facilities.	**Consistent - development proposed is site and self sufficient. Connections available and required to power and water**
• To promote and encourage development that will strengthen the character and economies of Hilltops villages.	**Consistent – varies and strengthens community services available**

• To enable a range of development, including diverse housing forms and complementary business uses taking into account the distinct character of each village.	**N/A**

Is your development permissible within the zone? : ***Yes – "function centre" and "entertainment venue" permissible by way of the innominate clause.***

function centre *means a building or place used for the holding of events, functions, conferences and the like, and includes convention centres, exhibition centres and reception centres, but does not include an entertainment facility.*

entertainment facility *means a theatre, cinema, music hall, concert hall, dance hall and the like, but does not include a pub or registered club.*

Zone RU5 Village

1 Objectives of zone

- To provide for a range of land uses, services and facilities that are associated with a rural village.
- To ensure that development is sustainable and does not unreasonably increase the demand for public services or public facilities.
- To promote and encourage development that will strengthen the character and economies of Hilltops villages.
- To enable a range of development, including diverse housing forms and complementary business uses taking into account the distinct character of each village.

2 Permitted without consent

Environmental protection works; Home occupations

3 Permitted with consent

Centre-based child care facilities; Community facilities; Dwelling houses; Light industries; Liquid fuel depots; Neighbourhood shops; Oyster aquaculture; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Respite day care centres; Roads; Schools; Sewage reticulation systems; Tank-based aquaculture; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Boat building and repair facilities; Boat launching ramps; Charter and tourism boating facilities; Co-living housing; Correctional centres; Creative industries; Crematoria; Eco-tourist facilities; Electricity generating works; Extractive industries; Farm buildings; Forestry; Garden centres; Hardware and building supplies; Heavy industrial storage establishments; Helipads; High technology industries; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Landscaping material supplies; Local distribution premises; Marinas; Mooring pens; Moorings; Multi dwelling housing; Open cut mining; Residential flat buildings; Restricted premises; Rural industries; Rural workers' dwellings; Sewerage systems; Sex services premises; Specialised retail premises; Timber yards; Warehouse or distribution centres; Water recreation structures

The LEP Compliance Table below provides a summary of the relevant standards.

Local Environmental Plans (LEPs)

Hilltops LEP 2022

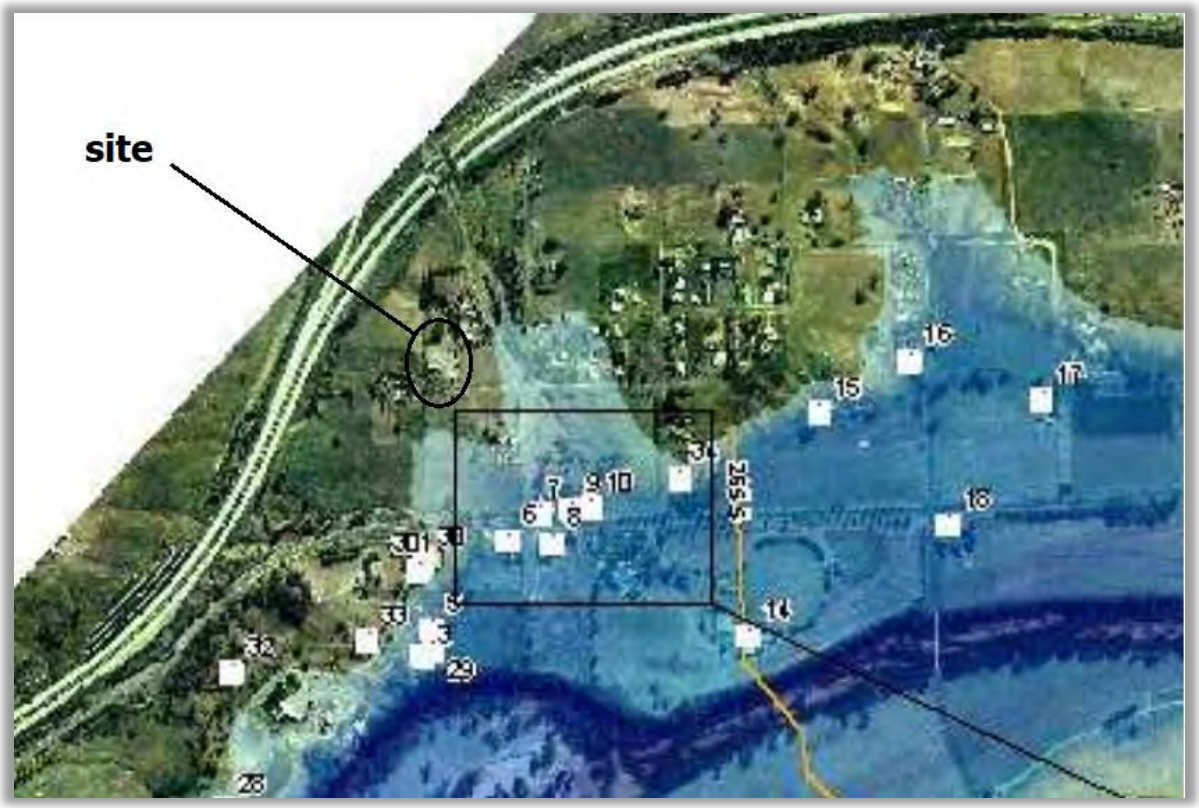
The relevant provisions of the above LEP, are discussed as follows:

Clause	Complies	Comments
1.2 Aims of plan	Yes	The development is consistent with the following critical residential aims of the LEP: (aa) to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts, (a) to advance the environmental, economic and social goals of Hilltops, (c) to build and sustain healthy, diverse and empowered communities that actively participate in planning and managing their future, including by providing for the following— (i) social infrastructure that is appropriately planned and located in response to demand and demographic change, (ii) the protection and enhancement of cultural heritage values, (iii) land management practices that support sustainable outcomes, including water efficiency, (iv) the siting and arrangement of land uses for development in response to climate change, (v) the planning of development to manage emissions, (vi) planning decisions that recognise the basic needs and expectations of diverse community members, The remainder of the aims are not relevant to this proposal, or are not impacted by the proposal.
1.4 Definitions	N/A	The proposed development is defined as; ***"function centre" & "entertainment venue" as defined above*** The development is consistent with the definitions and each of the development standards enumerated for the purposes sought by this DA on this site
1.9A Suspension of covenants, agreements and instruments	Yes	No restrictions apply on title excepting Crown minerals and standard obligations.
2.2 Zoning	N/A	The site is zoned RU5 Village
2.3 Zone objectives and land use table	Yes	The development is permitted with consent, in accordance with the land use table, and it is consistent with the objectives of the zone. Per that outlined before this table above in the report
2.7 Demolition	N/A	No demolition proposed. Shed dismantled for resale.
2.8 Temporary use of land	N/A	The application is not for the temporary use of land.
4.1 Min Subdiv Lot Size	N/A	Managers Dwelling cum Guest Accomm (occasional occupancy) proposed and is permissible in zone
4.1A Dual Occupancy Lot sizes	N/A	n/a –
4.2A Dwellings in RU1, RU4 & C3	N/A	n/a

Clause	Complies	Comments
4.6 Exceptions to development standards	N/A	Development permissible so no variation sought
5.10 Heritage Conservation	N/A	The Church on Lot 12 is a listed item in the LEP. No work other than maintenance in an ongoing manner is proposed to this building. The other structures are on the next allotment (Lot 11), and this adjacent land is not listed as Heritage nor in a HCA. It is believed that the proposal is sympathetic to and reinvigorates the use of an abandoned Church without drastic change to structure or use. It could reasonably be argued that this clauses renders the proposal permissible notwithstanding the land use table as it permits sympathetic heritage uses.
5.16 Subdivision of, or dwellings on, land in certain rural, residential EP zones	N/A	Not subdividing further and cannot for secondary dwellings regardless
6.1 Earthworks	OK	None required
6.2 Essential Services	Complies	Development consent must not be granted to development unless the consent authority is satisfied the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required— (a) the supply of water, ***extension of existing connection proposed,*** (b) the supply of electricity, ***extension of existing connection proposed,*** (c) the disposal and management of sewage, ***see GeoTech Report and site disposal of OSM waters*** (d) stormwater drainage or on-site conservation, ***disposal to site proposed after tank collection/detention*** (e) suitable road access ***exists via Stapylton. Access to rear Alonzo Street to be provided including car parking on street behind the buildings***
6.3 Terrestrial Biodiversity	N/A	Not Mapped as affected
6.4 Water - Riparian	N/A	Not mapped as affected
6.5 Water – G/water Vulnerable	Yes OK	Is mapped as affected however GeoTech Report on OSM and disposal on site
6.6 Salinity	N/A	Not mapped as affected
6.7 Highly Erodible Soils	N/A	Not mapped as affected
6.8 Drinking Water Catchments	N/A	N/A
6.9 Development along Lachlan & Boorowa Rivers & Lake Wyangla	N/A	N/A
6.10 Development on Carinya Estate	N/A	N/A
6.11 DCP for Urban Release Areas	N/A	Not an identified release area

Flood Planning

Jugiong is on the banks of the Murrumbidgee River. Applicable map (Figure 18 PMF) attached. Land in question not affected.



Flood Planning Level Map (Lyall Flood Study/Policy)

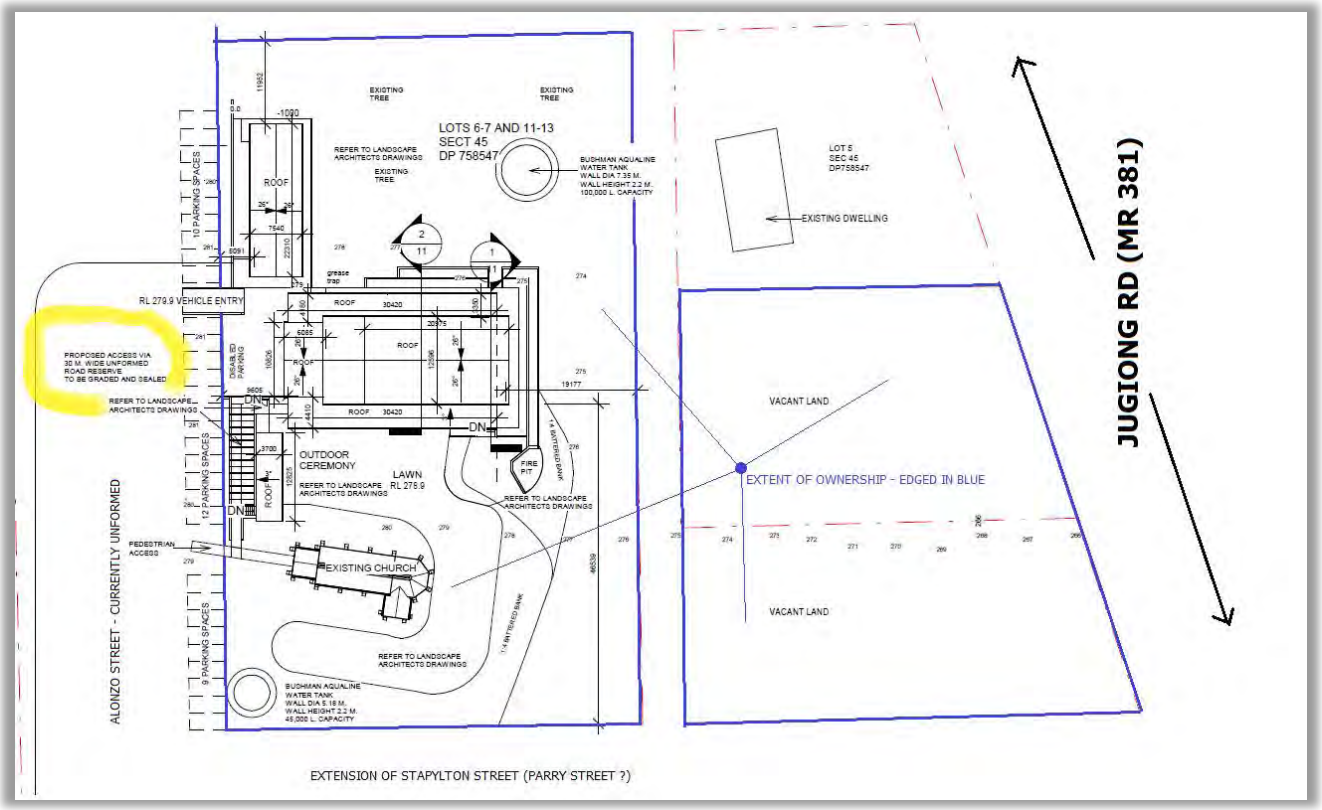
The Church building exists, has no history of flooding nor inundation and the Flood mapping is clear that the site is outside Possible Maximum Flood therefore would not be in a risk category.

UTILITY MAPPING

ELECTRICAL ASSETS ADJACENT

Extract of Essential Energy Asset Mapping. Infrastructure appears confined to road reserves or adjacent lands.

ROADS ADJACENT



As may be seen above highlighted in yellow on the Architect's site plan, the proposal relies on use of a Council Road and improvement of same to achieve viable parking for this proposal.

The Owner has tried to have the discussion numerous times with Council's Engineering/Infrastructure team yet excepting being required to lodge a DA all that is confirmed that Alonzo Street is not Crown and is Council. A 1.5 wide vehicle track of gravel road standard is proposed with parking and fence line marking of same being proposed.

The client is willing to meet Council and discuss standards as has been put before.~ The client is not seeking ownership, merely to form and use4 the road to base level (non through road) standard.

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Young Development Control Plan 2011 (YDCP)

The Compliance Table below provides a summary of the relevant controls for Commercial Development in the former Young Shire. **This set of controls did NOT apply in the former Harden Shire yet are discussed so that a better rounded SEE is put forward on common controls or policy matters.**. Please refer to the *YDCP* if you require clarification of the control or performance objective.

Compliance Table for YDCP 2011		
Clause	**Control / Performance Criteria**	**If non-compliance state and address**
Commercial, Business and Retail Development - *These controls apply to commercial development in any zone.*		
Character	• Shop fronts to reflect style of the existing building and be consistent in style and colour scheme; • The character of old buildings is protected and new development is consistent with the existing bulk and scale; • Appearance of development is appropriate to area; • No existing windows are painted over; • Building front setbacks are consistent with adjoining buildings, or if adjoining buildings have different setbacks, with the average of those setbacks; • Pedestrian links between shop fronts and public parking areas to be retained or provided in convenient locations and to be well lit and safe; and • Primary access to a development from street.	**No frontage to a prominent road for new structures** **Within walking distance of Village CBD or commercial area** **Access to site from Stapylton Street and proposed work off Alonzo Street**
	• The re-development of parking areas should not detract from the character of the surrounding area; • Maximum building height of 9 metres measured vertically from the natural ground level immediately below that part (excluding any architectural or service features); • Signage is appropriate to the building and to the surrounding area; • Developments to provide services and dispose of waste in accordance with the relevant authority's requirement.	**Parking rationalised to meet needs and sited on Alonzo Street** **Supplemental Bus use from common locations in Village to reduce parking obligations.** **Venue attendance capped to 100 persons** **Site Manager for rubbish control**
Food Premises – Additional Provisions *These controls apply to a food premises in any zone.*		
	• Food preparation and storage to enable easy cleaning; • Food premises should comply with the Australian Standard for Food Premises (AS 4674); • Provide customer sanitary facilities as per BCA;	**Site will have commercial kitchen compliant with ANFA Food Guidelines and Aust Std**

Compliance Table for YDCP 2011		
Clause	**Control / Performance Criteria**	**If non-compliance state and address**
	• Comply with Council's Trade waste Policy.	Patron and Accessible WC proposed and parking space per NCC BCA obligations
Heritage Conservation Area Provisions *These controls apply to a development in any zone affected by a heritage item or conservation zone.*		
	Any development within a conservation zone should be in accordance with the guidelines from the Heritage Office: *Design in Context: Guidelines for infill development in Historic Environment.*	**Not in HCA zone and not a heritage identified property at LEP**
	Provide a heritage impact statement for development within the conservation zone, or adjacent to a heritage item.	**N/A**
	Avoid painting / rendering of face brick within the heritage area.	**N/A**
	Avoid visible air conditioning plant to street frontage.	**N/A**
Enterprise Corridor (B6) and Business Park (B7) Zones – Additional Provisions - *These controls apply to a commercial development in (B6) and (B7) zones.*		
	• Not in B6 or B7 zone	
Village Development – Zone RU5 *These controls apply to a commercial development in the RU5 zone.*		
	AV2.1 Commercial or industrial uses are constructed with pre-painted metal with unpainted metal type finishes avoided. Note: This is a minimum requirement and other finishes are considered acceptable; AV2.2 All-weather parking areas (not necessarily sealed) are provided for commercial and industrial uses;	**Complies – Lysaghts Dominion & Colorbond Custom Orb** **Gravel Alonzo St and provide Parking**
Car parking and Vehicle Access – *these controls show the required parking rate for any commercial development*		
Parking Rates	Entertainment facility | 1 space per 5 seats	Min 20 spaces – see site plan
	• Car parking to be provided on the site of the development; • Vehicles enter and leave the site in a forward direction; • All parking spaces to be marked by lines or spaces • The layout and dimensions of car parking areas are in accordance with Figures 4.1 and 4.2 of this DCP;	Compliant – see site plan and discussion above Variance sought as to standard of finish. To be road base standard on Alonzo St. Use of sites restricted due to OSM disposal

Compliance Table for YDCP 2011		
Clause	**Control / Performance Criteria**	**If non-compliance state and address**
General Provisions for Car Parking Areas – *these controls apply to commercial premises required to provide a car parking area.*		
	• Car parking areas to comply with Australian Standard AS2890; • Pedestrian access to within the car parking area to be separated from vehicular traffic; • Any blind aisles to be: less than 15m in length; a minimum of 6.5 metres wide; clear of all obstructions; and provided with a manoeuvring area at the blind end of the aisle. • Separation of entry and exits points; • Entry to and exit from the site to be in a forward direction; • Holding areas have a maximum grade of 5% for a minimum distance of 6 metres behind the road boundary; • All car parking areas to be sealed, graded and drained; • The maximum acceptable grade for sloping parking (including access aisles) is 10%.; • The minimum clear head room for undercover parking is 2.3 metre for passenger vehicles or 4.6 metres where other vehicles will access the parking area; • For required turning circle dimensions refer to *Appendix F of the YDCP;* • Where 15 or more spaces provided at least 30% of spaces to be shaded; • For driveway types and the design of access points refer to *Tables 4.2, 4.3 and 4.4 in the YDCP.*	Noted, yet see comments above. Gravel street adjacent proposed for use.
Development Requiring Tree Removal or Lopping - *These controls apply to commercial development in all zones other than RU1 and RU3.*		
	Designated trees should be protected and retained where possible. *Designated trees are defined within Section 4.3.1 of the YDCP*	No trees to be removed.
	Where a designated tree is removed it should be replaced by at least 2 trees local to the area of a similar size at maturity.	n/a
	Work should not occur within the drip line of a retained tree unless an arborist report has been prepared.	
Footpath Display and Use – *these controls apply to commercial development in the B4, B6 or B7 zones.*		
Signage (footpath based)	• The use of the footpath for display requires a permit; • Use of footpath requires retailers to hold a current Public Liability Insurance Policy;	No footpath use proposed. Business/Building Identification sign proposed. See plans

Compliance Table for YDCP 2011		
Clause	**Control / Performance Criteria**	**If non-compliance state and address**
	• Advertising signs to be stable and weighted so as to prevent them being moved by the wind; • Signs to be a durable material and attached to a frame; • Advertising signs to be displayed outside the premises to which they relate and only when that business is open; • The maximum dimensions of an advertising sign shall be 1000mm wide and 1100mm high, and no part of the sign shall protrude beyond the main area of the sign. • Advertising signs are displayed at least 900 mm from the kerb line and no more than 1000mm from the building line; • Advertising signs to be produced by a commercial firm.	
Tables and Chairs	• Tables and chairs to be outside the premises to which they relate and only when that business is open; • If table service is provided patrons but pay inside premises; • Tables and chairs must allow minimum 2 metre clearance adjoining the building line; • No barrier or table/chair is placed closer than 900mm to the kerb edge; • Barriers to be included to enclose obstacles such as light posts or electricity poles (where existing); • Any street bins are not obscured in any way; • All Structures (tables, chairs and barriers) are temporary and portable and are removed at the close of trade; • An umbrella used in conjunction with a table and chairs to have a minimum height above ground level of 2100mm; should not protrude beyond the kerb at any time; and to be stable and not able to be moved by wind.	N/A
Goods and Charity Bins	• Goods for display or sale to be outside the premises to which they relate and only when that business is open; • 1 x Charity bin per business only; • Goods or charity bins to be no more than 1 metre from the building; • Displays do not exceed 1100mm in height for general goods and 1500mm for clothes racks; • Goods for display or sale not be attached to any building, street sign or footpath;	N/A

Compliance Table for YDCP 2011		
Clause	**Control / Performance Criteria**	**If non-compliance state and address**
	• Display stands for goods are to be of stable construction; have no part protruding beyond the main body of the stand; and to be placed so as to prevent them being moved by wind • Where food is displayed minimum height of 750mm above the footpath.	

D. Assessment of Likely Impacts of Development

Construction Impacts

Will your proposal impact upon any trees, or have any impact on the soil or site drainage patterns during construction?

Negligible impact – footing and slab excavation for new in clear site area, or internal works.

If so, what measure will be taken to minimise that impact?

Any site cut to be protected from a sed/erosion control perspective until out of ground.

General Accessibility

Will your proposal adequately provide easy access and useable areas for everyone in accordance with the Commonwealth Disability Discrimination Act 1991?

Yes – level across front from accessible parking space to doorway and internally.

Privacy

Will your proposal result in the loss of visual or acoustic privacy to any neighbouring land use? ***No***

If so, what measure will be taken to minimise that loss?

Reasonable setbacks, effective design, development operational controls to be employed to manage amenity impacts

Views

Will your proposal result in the loss of views to any neighbouring land use? ***No***

Overshadowing

Will your proposal result in any additional overshadowing to a neighbouring land use? ***No***

Economic and Social Impacts

Will your proposal result in any social and economic impacts within the locality?

Yes (positive) – additional commercial and residential development proposed in keeping with CBD fringe nature of the area, and in keeping with new growing tourist and visitor as well as community local demand.

Drainage

What are the proposed methods of disposing of stormwater from the site and are any new easements required?

Stormwaters collected and dispersed via pipes to tanks for effective re-use then to site or to adjacent public drainage system.

APPENDIX # 1

NSW E-SPATIAL PORTAL REPORT

Property Report

10 PARRY STREET JUGIONG 2726

Property Details

Address:	10 PARRY STREET JUGIONG 2726
Lot/Section /Plan No:	11/45/DP758547 12/45/DP758547 13/45/DP758547
Council:	HILLTOPS COUNCIL

Summary of planning controls

Planning controls held within the Planning Database are summarised below. The property may be affected by additional planning controls not outlined in this report. Please contact your council for more information.

Local Environmental Plans	Hilltops Local Environmental Plan 2022 (pub. 23-12-2022)
Land Zoning	RU5 - Village: (pub. 23-12-2022)
Height Of Building	NA
Floor Space Ratio	NA
Minimum Lot Size	2000 m²
Heritage	Christ Church Anglican Church Significance: Local
Land Reservation Acquisition	NA
Foreshore Building Line	NA
Groundwater Vulnerability	Groundwater Vulnerability

Detailed planning information

State Environmental Planning Policies which apply to this property

State Environmental Planning Policies can specify planning controls for certain areas and/or types of development. They can also identify the development assessment system that applies and the type of environmental assessment that is required.

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Allowable Clearing Area (pub. 21-10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Subject Land (pub. 2-12-2021)
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004: Land Application (pub. 25-6-2004)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008)
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021)
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2 -12-2021)
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development: Land Application (pub. 26-7-2002)

Other matters affecting the property

Information held in the Planning Database about other matters affecting the property appears below. The property may also be affected by additional planning controls not outlined in this report. Please speak to your council for more information

Land near Electrical Infrastructure	This property may be located near electrical infrastructure and could be subject to requirements listed under ISEPP Clause 45. Please contact Essential Energy for more information.
Local Aboriginal Land Council	YOUNG
Regional Plan Boundary	South East and Tablelands

APPENDIX # 2

TITLE
CROWN PLAN

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 11/45/758547

SEARCH DATE	TIME	EDITION NO	DATE
4/10/2023	9:13 AM	3	11/3/2022

LAND

LOT 11 OF SECTION 45 IN DEPOSITED PLAN 758547
AT JUGIONG
LOCAL GOVERNMENT AREA HILLTOPS
PARISH OF JUGIONG COUNTY OF HARDEN
(FORMERLY KNOWN AS ALLOTMENT 11 OF SECTION 45)
TITLE DIAGRAM CROWN PLAN 295.730

FIRST SCHEDULE

TERESA ANNE VOM BRUCH
IN 1/2 SHARE
GOKAD PTY LTD
IN 1/2 SHARE
AS TENANTS IN COMMON (T AR956308)

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

COULTER PRINTED ON 4/10/2023

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 12/45/758547

SEARCH DATE	TIME	EDITION NO	DATE
4/10/2023	9:17 AM	3	11/3/2022

LAND

LOT 12 OF SECTION 45 IN DEPOSITED PLAN 758547
AT JUGIONG
LOCAL GOVERNMENT AREA HILLTOPS
PARISH OF JUGIONG COUNTY OF HARDEN
(FORMERLY KNOWN AS ALLOTMENT 12 OF SECTION 45)
TITLE DIAGRAM CROWN PLAN 295.730

FIRST SCHEDULE

TERESA ANNE VOM BRUCH
IN 1/2 SHARE
GOKAD PTY LTD
IN 1/2 SHARE
AS TENANTS IN COMMON (T AR956308)

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

COULTER PRINTED ON 4/10/2023

Title Search

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 13/45/758547

SEARCH DATE	TIME	EDITION NO	DATE
4/10/2023	9:18 AM	3	11/3/2022

LAND

LOT 13 OF SECTION 45 IN DEPOSITED PLAN 758547
AT JUGIONG
LOCAL GOVERNMENT AREA HILLTOPS
PARISH OF JUGIONG COUNTY OF HARDEN
(FORMERLY KNOWN AS ALLOTMENT 13 OF SECTION 45)
TITLE DIAGRAM CROWN PLAN 17.1040

FIRST SCHEDULE

TERESA ANNE VOM BRUCH
IN 1/2 SHARE
GOKAD PTY LTD
IN 1/2 SHARE
AS TENANTS IN COMMON (T AR956308)

SECOND SCHEDULE (1 NOTIFICATION)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

COULTER PRINTED ON 4/10/2023

Received: 04/10/2023 09:18:11

GOKAD PTY LTD

ACN 630 098 252

ASIC EXTRACT SNAPSHOT

Date Extracted	30/09/2021
ACN	630 098 252
ABN	-
Current Name	GOKAD PTY LTD
Registered In	New South Wales
Registration Date	19/11/2018
Review Date	19/11/2021
Company Type	ACN (Australian Company Number)
Current Directors	2
Current Secretaries	1

CURRENT ORGANISATION DETAILS

Start Date	19/11/2018
Name	GOKAD PTY LTD
Name Start Date	19/11/2018
Status	Registered
Type	Australian Proprietary Company
Class	Limited By Shares
Sub Class	Proprietary Company
Disclosing Entity	No

Share Structure (Displaying Top 4 Only)

Go to Full ASIC Results

Class	Class Type	Shares Issued	Amount Paid
ORD	ORD SHARES	200	$200.00

REVEAL - Company Visualisation

Go to full workspace

InfoTrack
1800 738 524

ASIC
Current Organisation Extract

ASIC Data Extracted 30/09/2021 at 04:37

This extract contains information derived from the AustralianSecurities and Investment Commission's (ASIC) database undersection 1274A of the Corporations Act 2001.Please advise ASIC of any error or omission which you may identify.

No changes to the company information have been detected since last extracted.

- 630 098 252 GOKAD PTY LTD -

ACN (Australian Company Number):	630 098 252	**Document No.**
ABN:		
Current Name:	GOKAD PTY LTD	
Registered in:	New South Wales	
Registration Date:	19/11/2018	
Review Date:	19/11/2021	
Company Bounded By:		

- Current Organisation Details -

Name:	GOKAD PTY LTD
Name Start Date:	19/11/2018
Status:	Registered
Type:	Australian Proprietary Company
Class:	Limited By Shares
Sub Class:	Proprietary Company

- Company Addresses -

- Registered Office 0EEL99579
Address: 8 SUPERBA AVENUE CRONULLA NSW 2230
Start Date: 19/11/2018

- Principal Place of Business 0EEL99579
Address: 8 SUPERBA AVENUE CRONULLA NSW 2230
Start Date: 19/11/2018

- Company Officers -

Note:
A date or address shown as UNKNOWN has not been updated since ASIC took over the records in 1991. For details, order the appropriate historical state or territory documents, available in microfiche or paper format.
* Check documents listed under ASIC Documents Received for recent changes.

Director

Name:	GREGORY OWEN COULTER	0EEL99579
Address:	8 SUPERBA AVENUE CRONULLA NSW 2230	
Birth Details:	23/04/1958 CRONULLA NSW	
Appointment Date:	19/11/2018	
Cease Date:	//	

Name:	KIM GABRIELLE COULTER	0EEL99579
Address:	8 SUPERBA AVENUE CRONULLA NSW 2230	
Birth Details:	18/04/1964 CARINGBAH NSW	
Appointment Date:	19/11/2018	
Cease Date:	//	

Secretary

Name:	KIM GABRIELLE COULTER	0EEL99579
Address:	8 SUPERBA AVENUE CRONULLA NSW 2230	
Birth Details:	18/04/1964 CARINGBAH NSW	
Appointment Date:	19/11/2018	
Cease Date:	//	

- Share Structure -

Current

Class:	ORD SHARES	0EEL99579
Number of Shares Issued:	200	
Total Amount Paid / Taken to be Paid:	$200.00	
Total Amount Due and Payable:	$0.00	

Note:
For each class of shares issued by a company, ASIC records the details of the twenty members of the class (based on shareholdings). The details of any other members holding the same number of shares as the twentieth ranked member will also be recorded by ASIC on the database. Where available, historical records show that a member has ceased to be ranked amongst the twenty members. This may, but does not necessarily mean, that they have ceased to be a member of the company.

- Share/Interest Holding -

Current

- Holding -

Class:	ORD	**Number Held:**	100	0EEL99579
Beneficially Owned:	Yes	**Fully Paid:**	Yes	

- Members -

Name:	GREGORY OWEN COULTER
Address:	8 SUPERBA AVENUE CRONULLA NSW 2230
Joint Holding:	No

- Holding -

Class:	ORD	**Number Held:**	100	0EEL99579
Beneficially Owned:	Yes	**Fully Paid:**	Yes	

- Members -

Name:	KIM GABRIELLE COULTER
Address:	8 SUPERBA AVENUE CRONULLA NSW 2230
Joint Holding:	No

- External Administration Documents -

There are no external administration documents held for this organisation.

- Charges -

There are no charges held for this organisation.

Notes:
On 30 January 2012, the Personal Property Securities Register (PPS Register) commenced.
At that time ASIC transferred all details of current charges to the PPS Registrar.
ASIC can only provide details of satisfied charges prior to that date.
Details of current charges, or charge satisfied since 30 January 2012 can be found on the PPS Register, www.ppsr.gov.au.
InfoTrack may cap documents for on-file searches to 250.

- Document List -

Notes:
* Documents already listed under Registered Charges are not repeated here.
* Data from Documents with no Date Processed are not included in this Extract.
* Documents with '0' pages have not yet been imaged and are not available via DOCIMAGE. Imaging takes approximately 2 weeks from date of lodgement.
* The document list for a current/historical extract will be limited unless you requested ALL documents for this extract.
* In certain circumstances documents may be capped at 250.

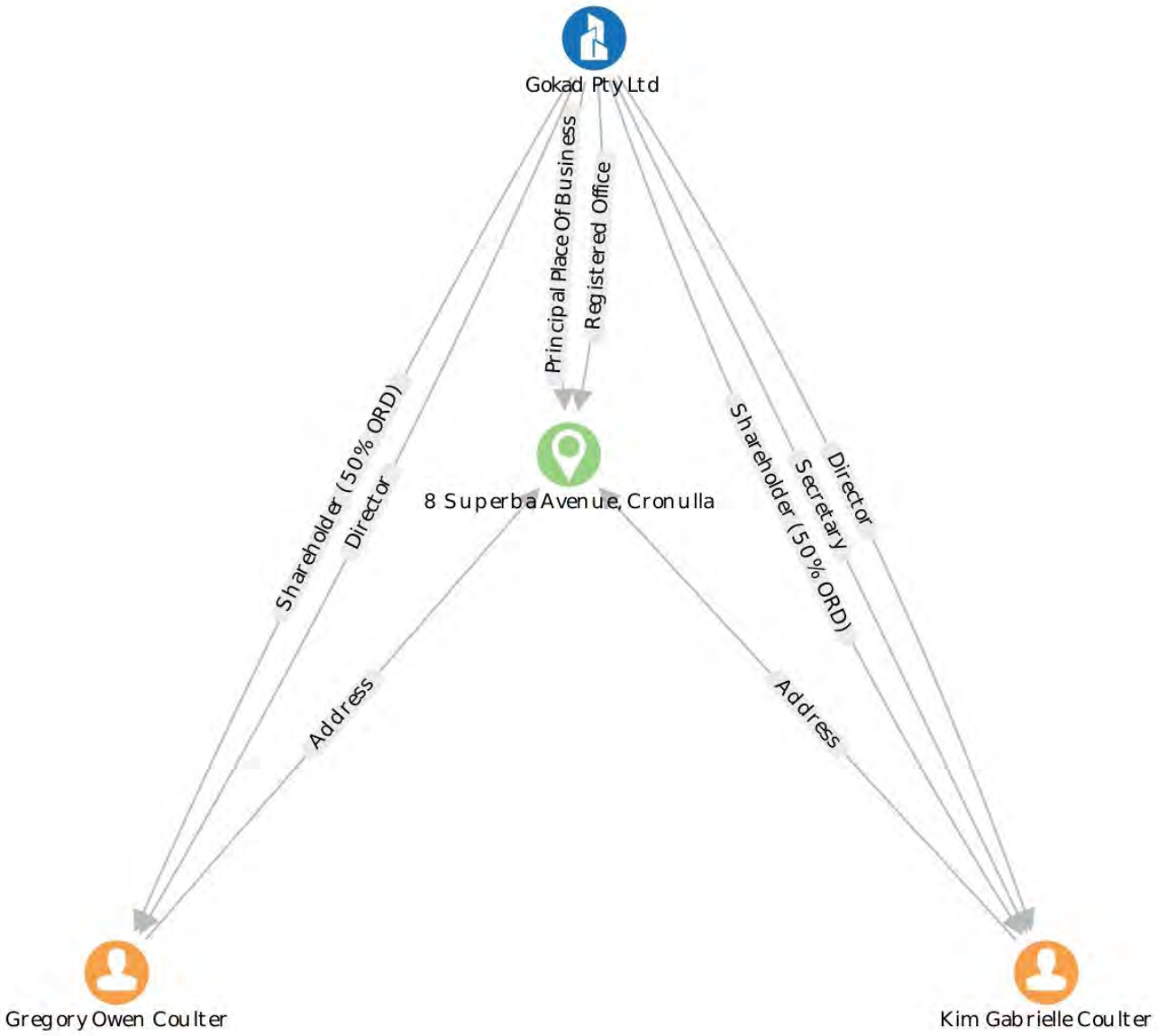
Form Type	Date Received	Date Processed	No. Pages	Effective Date	Document No.
201	19/11/2018	19/11/2018	3	19/11/2018	0EEL99579
201C	Application For Registration as a Proprietary Company				

- Company Contact Addresses -

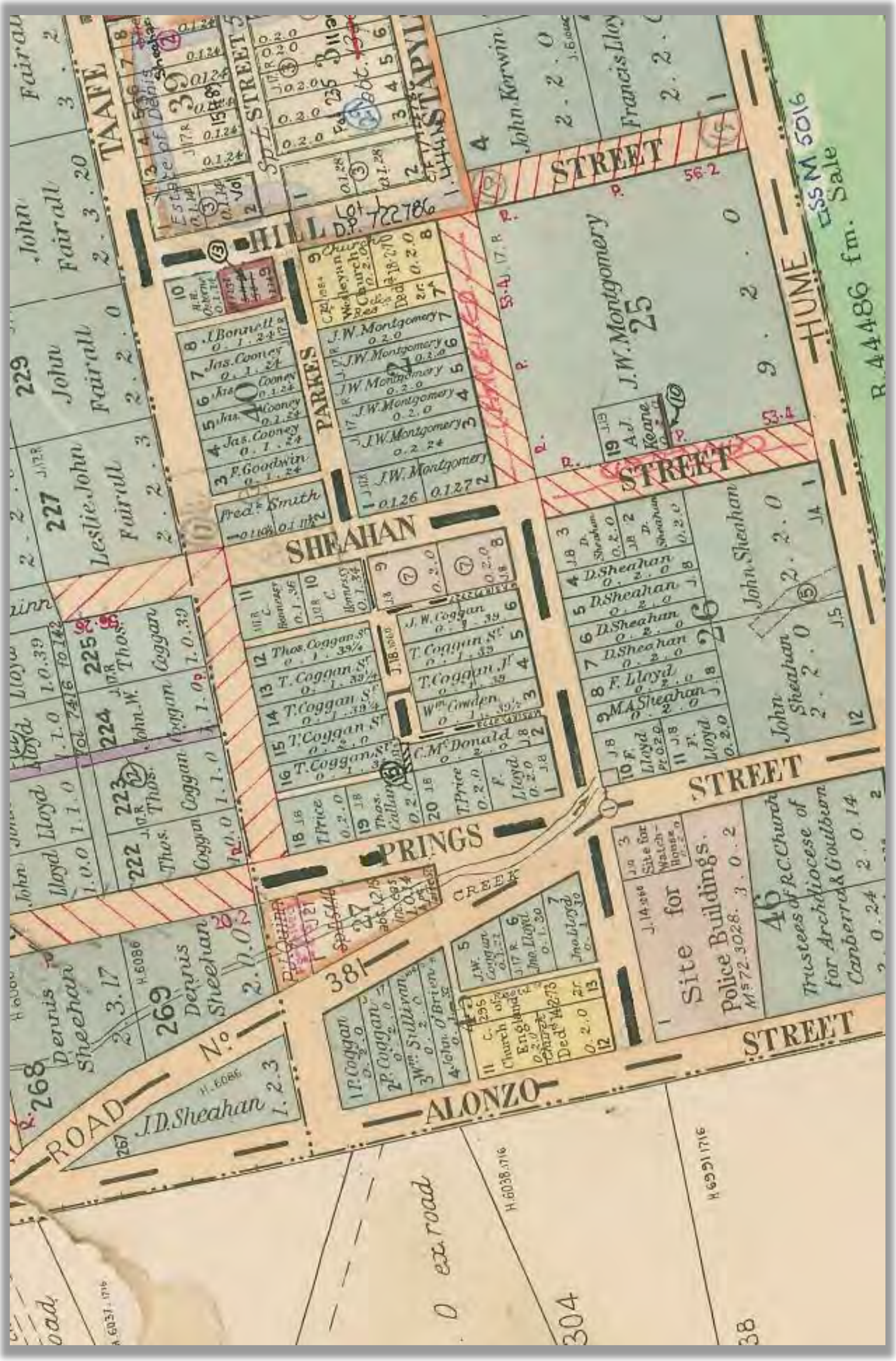
*** End of Document ***

Workspace: GOKAD PTY LTD ACN 630 098 252
Matter: COULTER
Created: 04/10/2023 9:15 AM

REVEAL

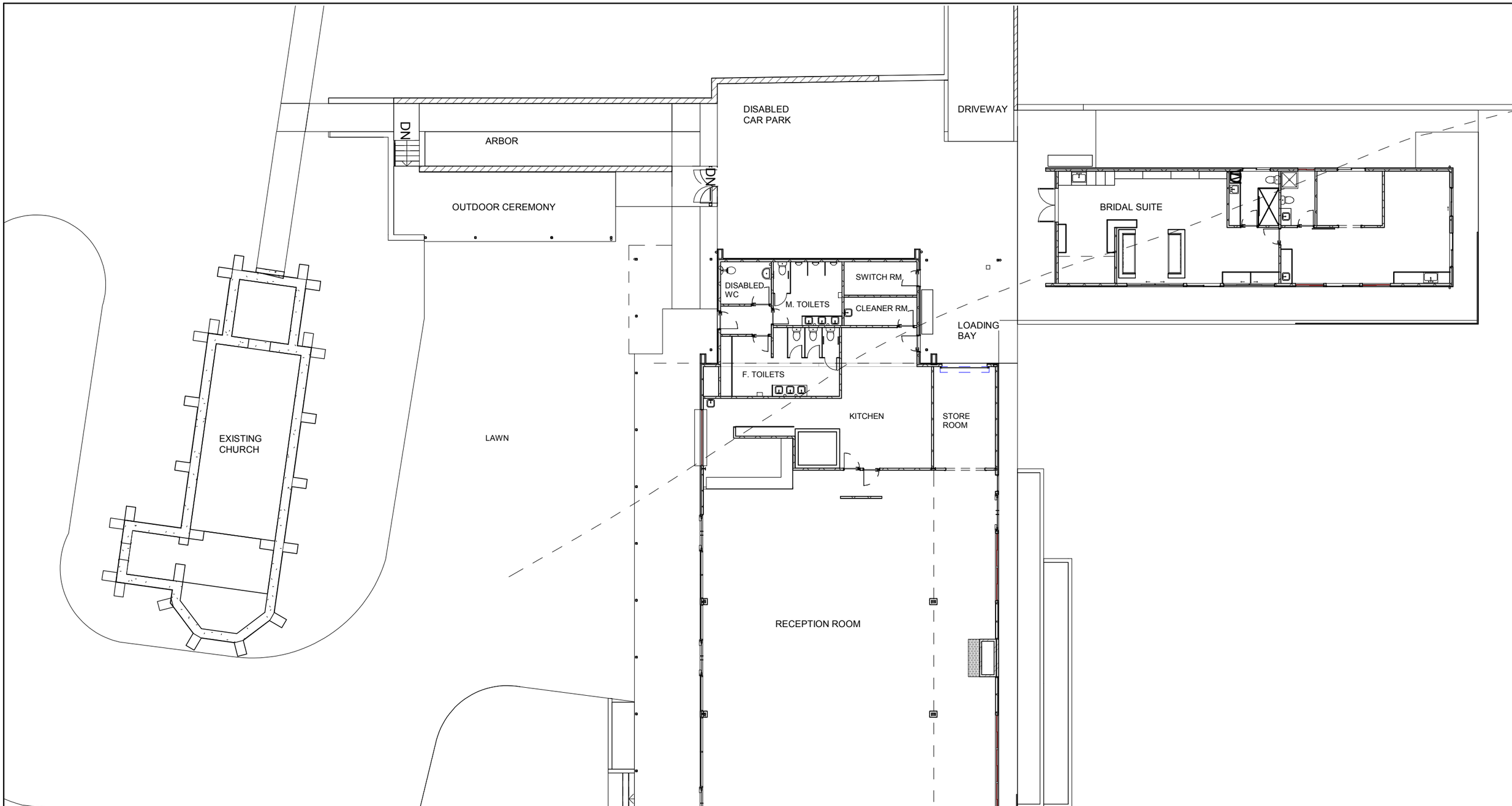



PLAN
OF ALLOTMENTS IN SECTIONS NUMBERED 1, 2, 3, 4, 8, 28, 36, 38, 39, 40 & 45
TOWN OF JUGIONG
AND SUBURBAN PORTIONS
Nos 169 TO 172 & 222 TO 257 IN
PARISH OF JUGIONG COUNTY OF HARDEN
MEASURED FOR SALE
also shewing Reserve for Public Recreation, Police Reserve and re-measurement of Sec 25
Scale of Chains
Reference to Corners
Temporary Common
Notified 16th June 1879
Reserve for Recreation
MURRUMBIDGEE RIVER
MAIN SOUTH ROAD
HOLLOWAY STREET
TAAFE STREET
STAPYLTON STREET
AUDLEY STREET
VULTURE STREET
ODIN STREET
ARROGANT STREET
SOLID STREET
CRESCENT STREET
HUME STREET
HOVELL STREET
LARMER STREET
TOWNSEND STREET
FLYDE STREET
DOWLING STREET
HILL STREET
SHEAHAN STREET
PRINCE STREET
RENWICK STREET
PARKES STREET
PRUDENCE ST.
ROAD 100 WIDE
ROAD 150 WIDE
ROAD 200 WIDE
Police Reserve
School Reserve
PLAN MICROFILMED
17-1060


TAAFE
STREET
HILL
PARKES
SHEAHAN
PRINGS
STREET
STREET
HUME
ALONZO
STREET
ROAD
CREEK
Site for
Police Buildings
J.W. Montgomery
25
John Sheahan
26
46
40
21
J.D. Sheahan
ex road
R.44486 fm.
Sale
304

APPENDIX # 3

ARCHITECTURAL PLAN SET



DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME

Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT

RECEPTION HALL

10 Parry Street, Jugiong
NSW 2726

MASTER PLAN VIEW

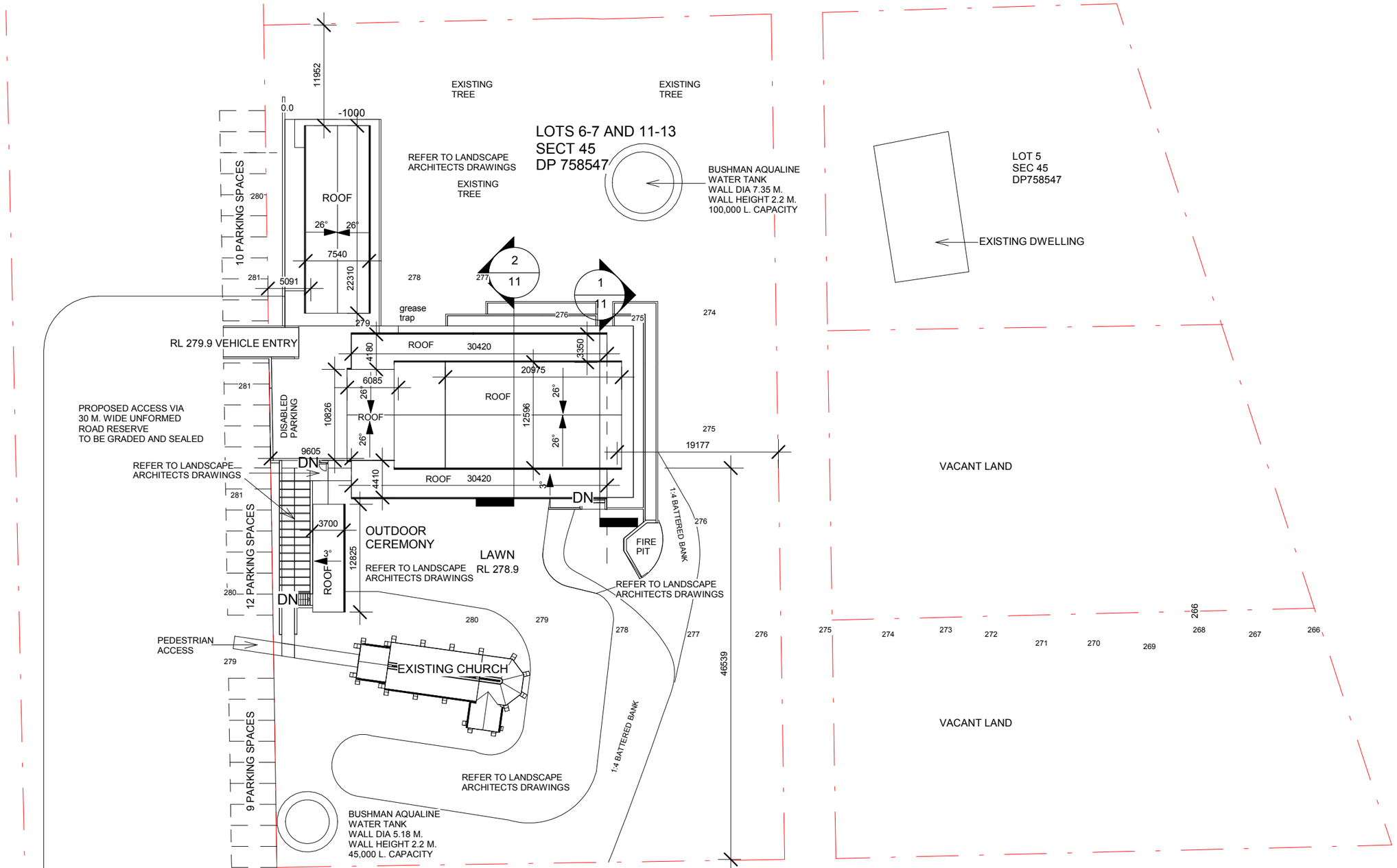
MGA NORTH

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 200

DRAWING NUMBER 01

Revision No. A

15/08/2023 1:27:10 PM



DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

SITE PLAN

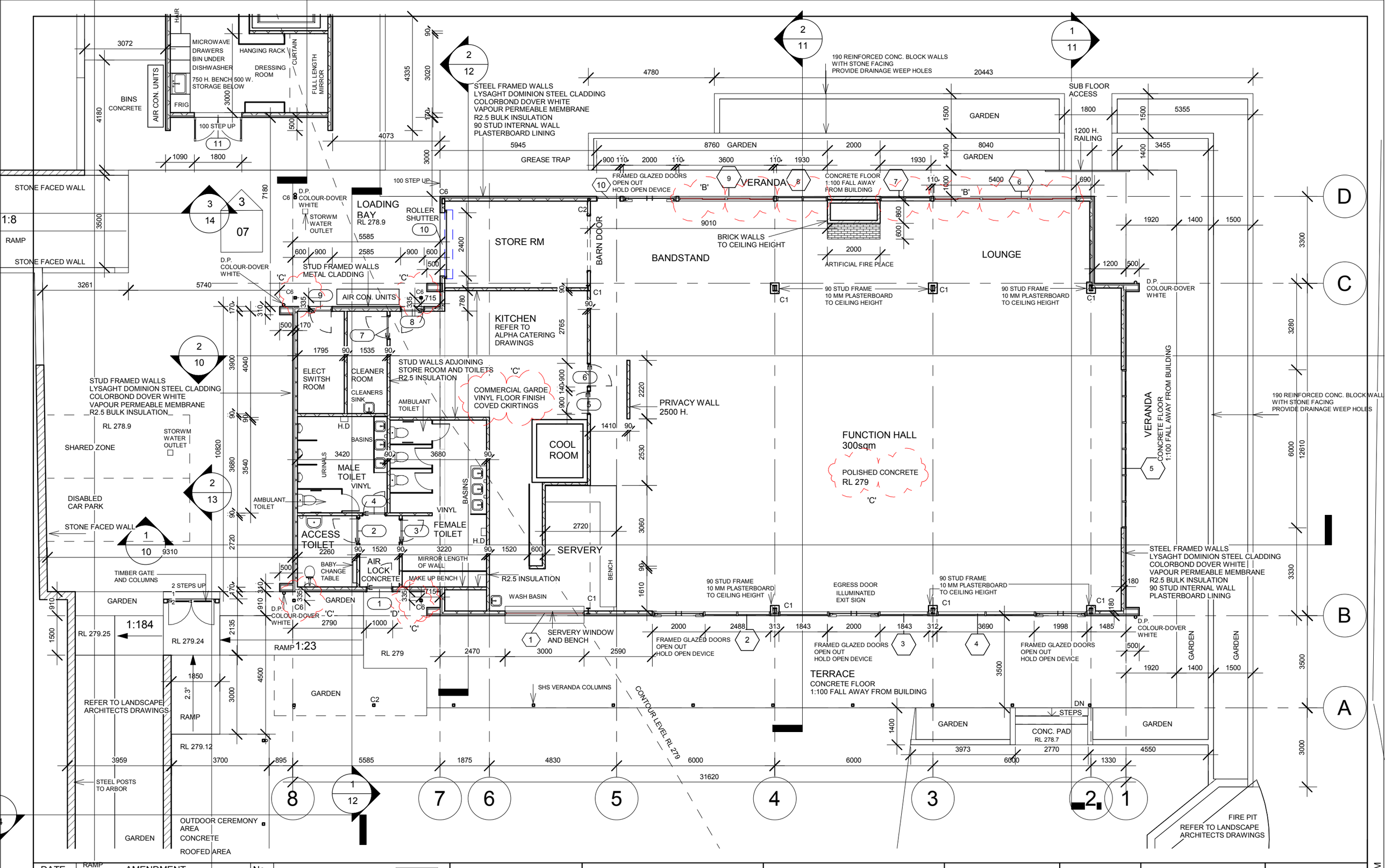
MGA NORTH

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 500

DRAWING NUMBER 02

Revision No. A

15/08/2023 1:25:33 PM



DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
31.05.23	AMEND WINDOWS W6 W7 W8 AND W9	B
21.6.23	CHANGE VERANDA ROOF HEIGHT AND OUTDOOR CEREMONY ROOF HEIGHT TO 3.0 M ADD COLUMNS TO VERANDA ROOFS ADD FLOOR FINISHES	C
9.8.23	DELETE GARDEN BED	D

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL 3
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

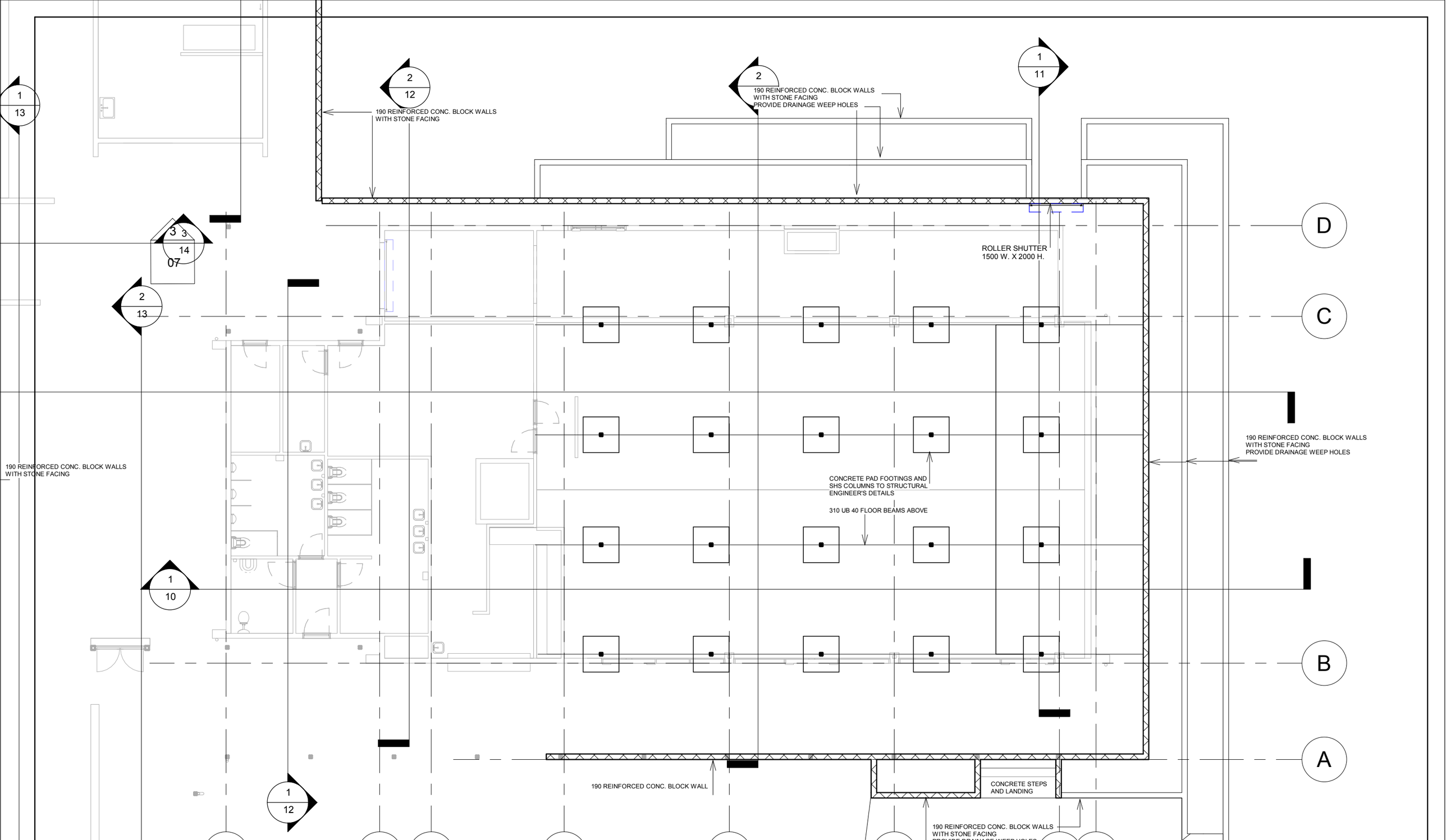
GROUND FLOOR PLAN

MGA NORTH

Project number	22-678
Date	15.08.23
Drawn by	KM
Checked by	KM
Scale	1 : 125

DRAWING NUMBER 03
Revision No. D

15/08/2023 1:27:39 PM



DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
15.08.23	CO ORDINATION WITH STRUCTURAL ENGINEER	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE
WITH REQUIREMENTS OF THE N.C.C.
AUSTRALIAN STANDARDS, LOCAL
COUNCILS AND ALL RELEVANT
AUTHORITIES CONFIRM ALL
DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME

Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT

RECEPTION HALL

10 Parry Street, Jugiong
NSW 2726

SUB FLOOR LEVEL PLAN

Project number LS 22-678	
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 125

DRAWING NUMBER 04

Revision No. B

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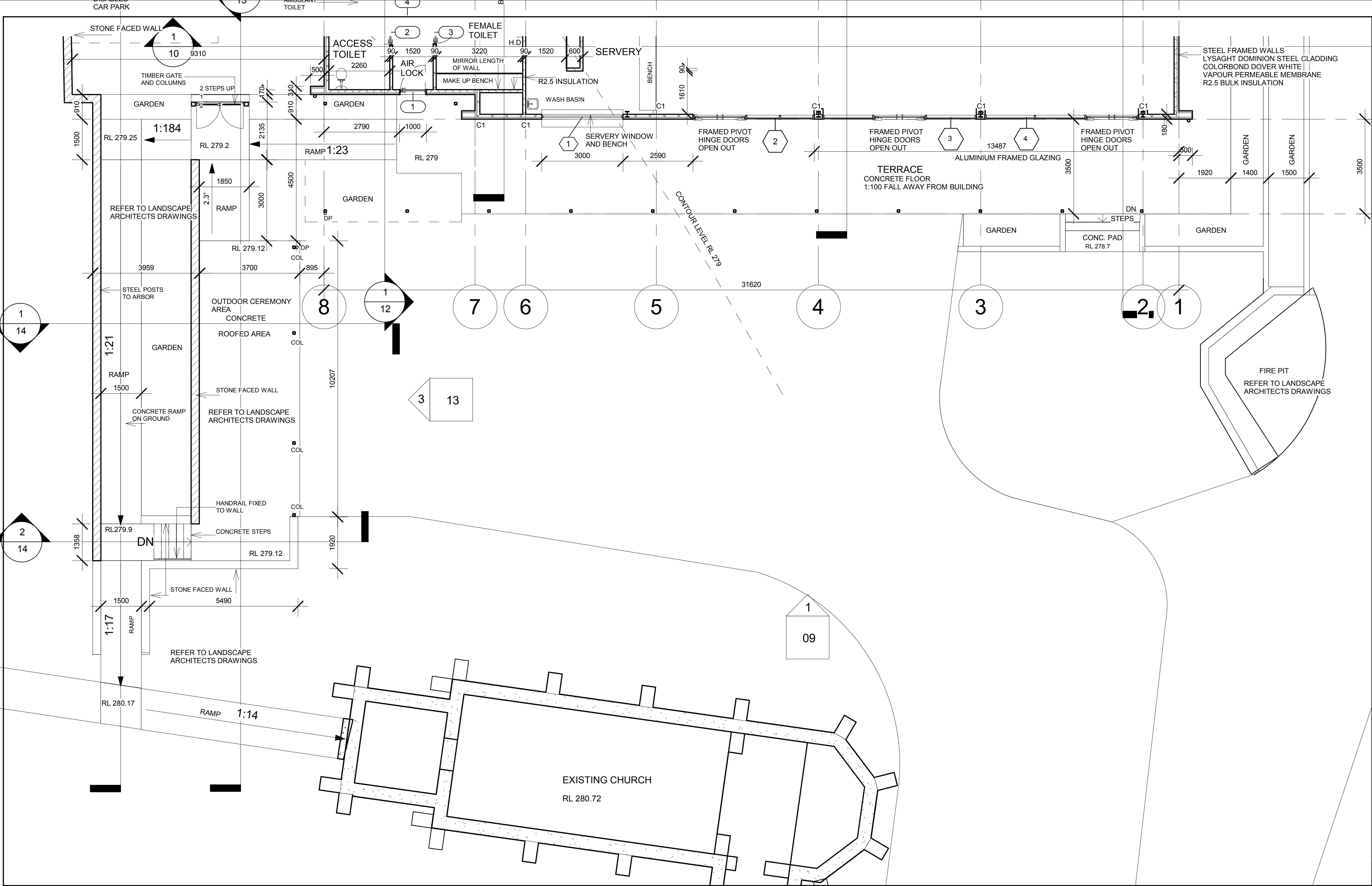

STONE FACED WALL
ACCESS TOILET
AIR LOCK
FEMALE TOILET
MIRROR LENGTH OF WALL
MAKE UP BENCH
R2.5 INSULATION
SERVERY
WASH BASIN
BENCH
STEEL FRAMED WALLS
LYSAGHT DOMINION STEEL CLADDING
COLORBOND DOVER WHITE
VAPOUR PERMEABLE MEMBRANE
R2.5 BULK INSULATION
TIMBER GATE AND COLUMNS
2 STEPS UP
GARDEN
RL 279.25
1:184
RL 279.2
RAMP 1:23
RL 279
SERVERY WINDOW AND BENCH
FRAMED PIVOT HINGE DOORS OPEN OUT
ALUMINIUM FRAMED GLAZING
TERRACE
CONCRETE FLOOR
1:100 FALL AWAY FROM BUILDING
CONTOUR LEVEL RL 279
REFER TO LANDSCAPE ARCHITECTS DRAWINGS
RAMP
RL 279.12
STEPS
CONC. PAD
RL 278.7
STEEL POSTS TO ARBOR
OUTDOOR CEREMONY AREA
CONCRETE
ROOFED AREA
1:21
STONE FACED WALL
CONCRETE RAMP ON GROUND
HANDRAIL FIXED TO WALL
CONCRETE STEPS
RL279.9
DN
FIRE PIT
1:17
RL 280.17
RAMP 1:14
EXISTING CHURCH
RL 280.72

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

ARBOR PLAN

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 125

DRAWING NUMBER
05

Revision No.
A

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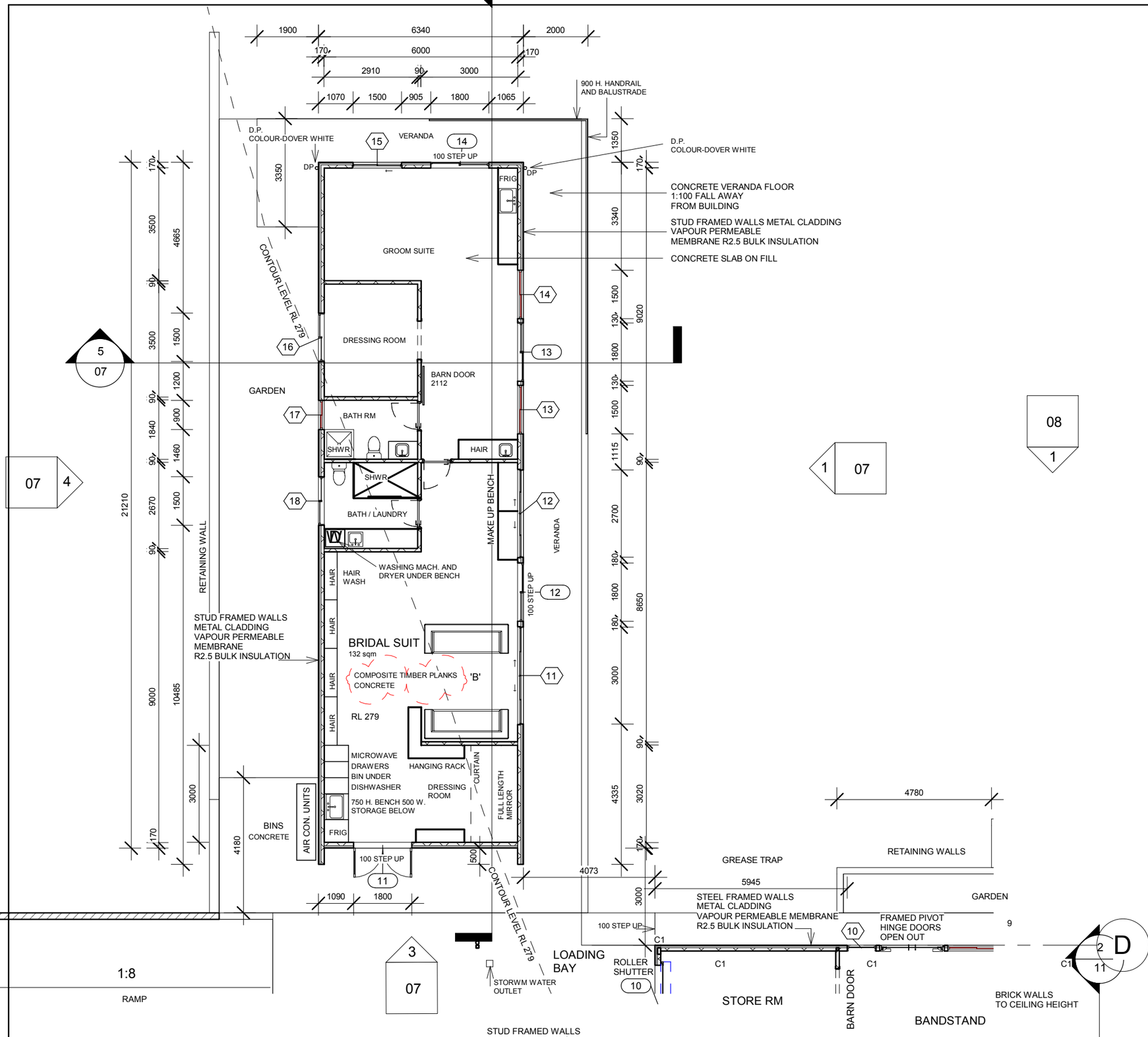


DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	ADD FLOOR FINISH	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

BRIDAL SUITE PLAN

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 125

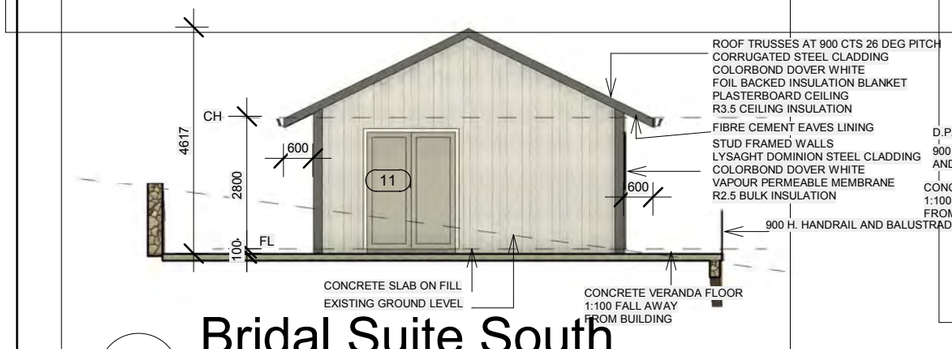
DRAWING NUMBER
06

Revision No.
B

15/08/2023 1:30:51 PM

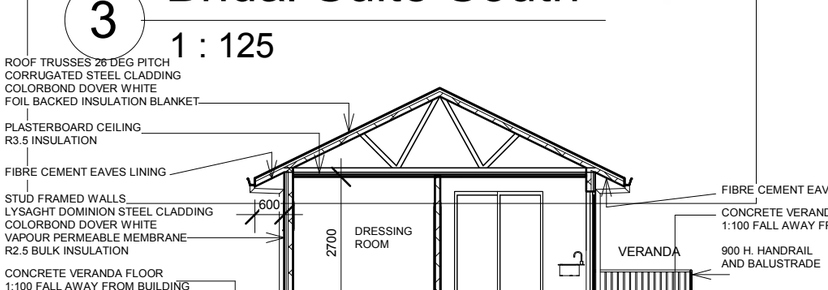
2 Bridal Suite North

1 : 125



3 Bridal Suite South

1 : 125

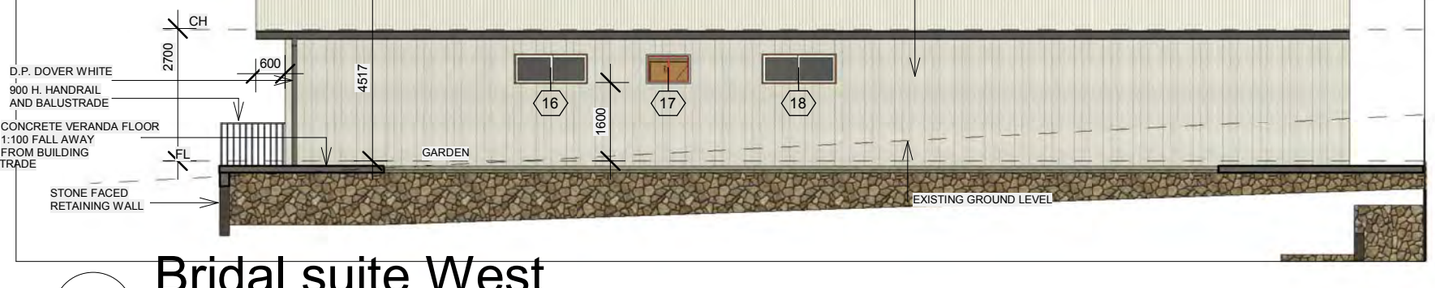


5 Section 10 bridal suite

1 : 125

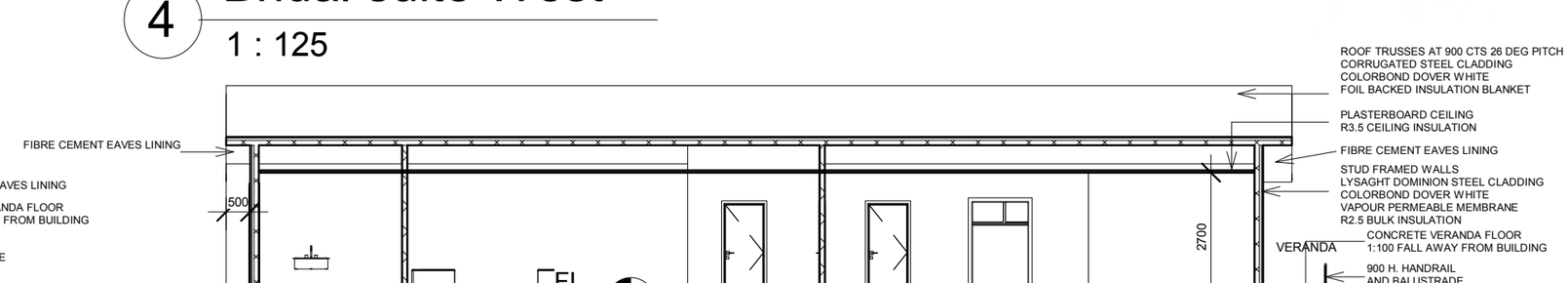
1 Bridal Suite East

1 : 125



4 Bridal suite West

1 : 125



6 Section 11 bridal suite

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

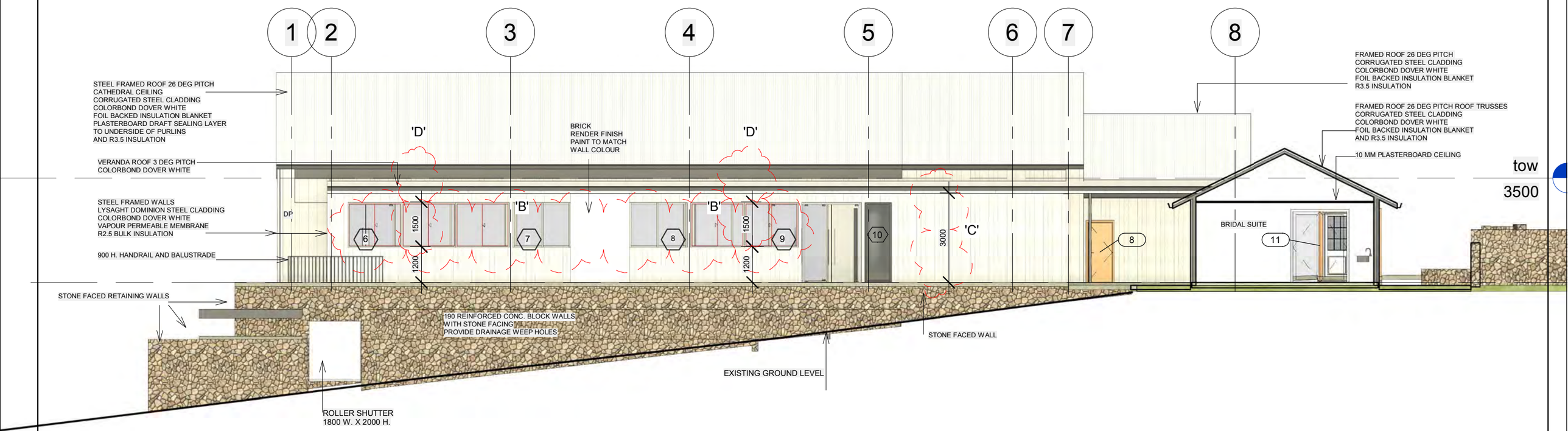
CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

BRIDAL SUITE ELEVATIONS AND SECTIONS

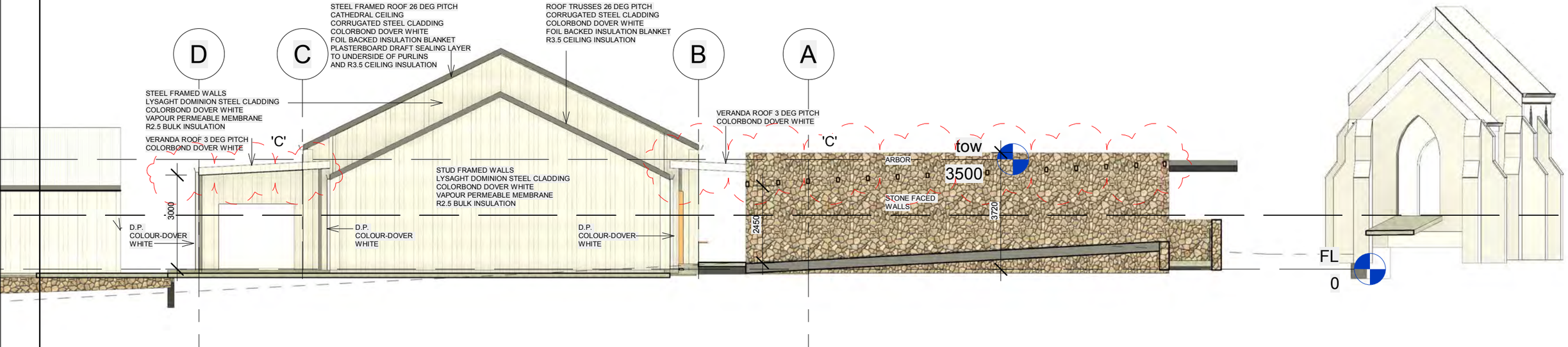
Project number	22-678	DRAWING NUMBER	07
Date	15.08.23		
Drawn by	Author		
Checked by	Checker	Revision No.	A
Scale	1 : 125		

15/08/2023 1:33:37 PM



1 North

1 : 125



4 West

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
31.05.23	AMEND WINDOWS W6 W7 W8 AND W9	B
21.6.23	CHANGE VERANDA ROOF AND OUTDOOR CEREMONY ROOF HEIGHTS FROM 2.4 M. TO 3.0M. CHANGE HEIGT OF ARBOR WALL	C
24.7.23	AMEND WINDOW HEAD HEIGHTS	D

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

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mob. 0401 390 714

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Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

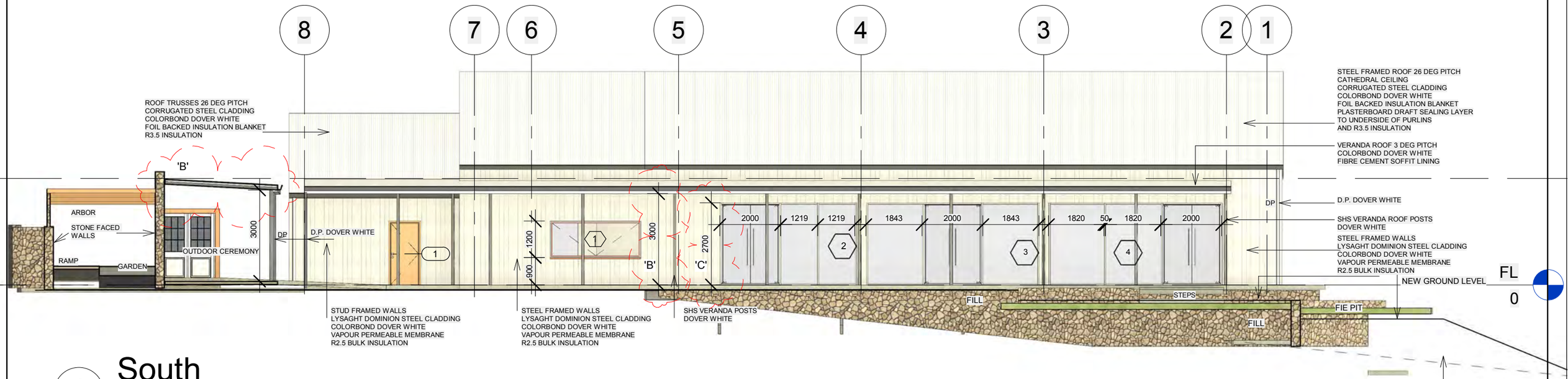
NORTH ELEVATION
WEST ELEVATION

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 125

DRAWING NUMBER
08

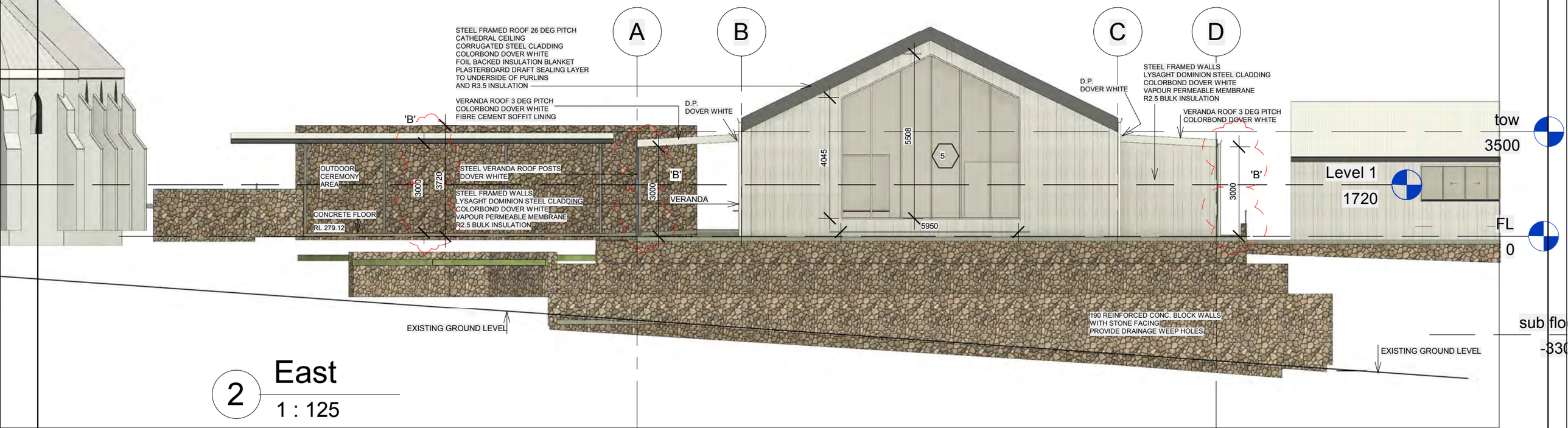
Revision No.
D

15/08/2023 1:39:45 PM



1 South

1 : 125



2 East

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	CHANGE VERANDA ROOF HEIGHT AND OUTDOOR CEREMONY ROOF HEIGHT FROM 2.4M. TO 3.0M. CHANGE HEIGHT OF ARBOR WALL	B
24.7.23	CHANGE WINDOW HEAD HEIGHTS TO 2700	C

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
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CLIENT NAME

Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT

RECEPTION HALL

10 Parry Street, Jugiong
NSW 2726

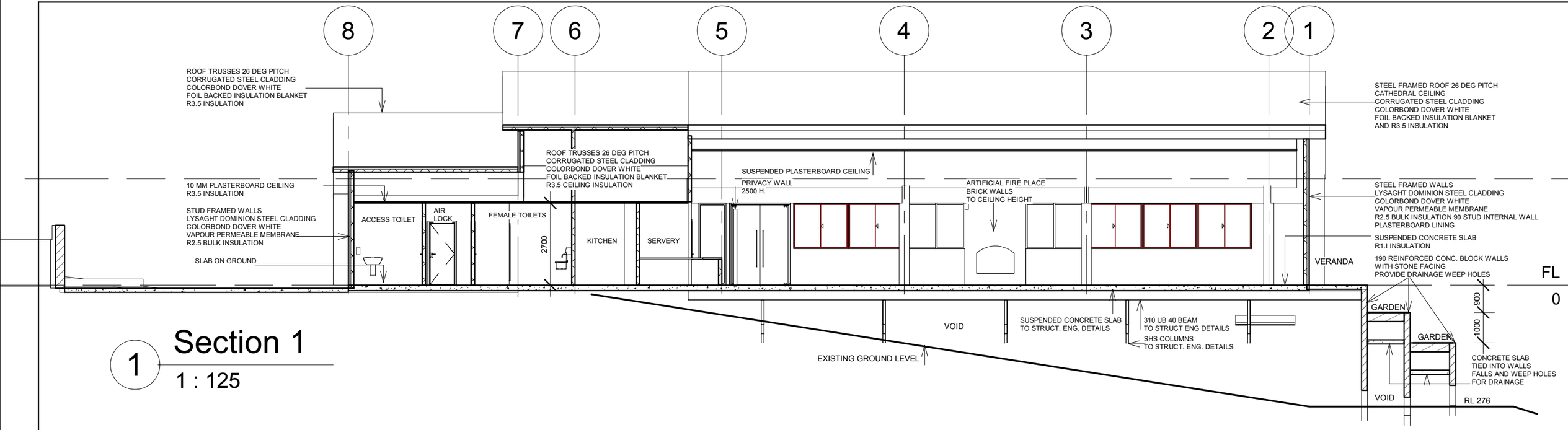
SOUTH ELEVATION
EAST ELEVATION

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 125

DRAWING NUMBER 09

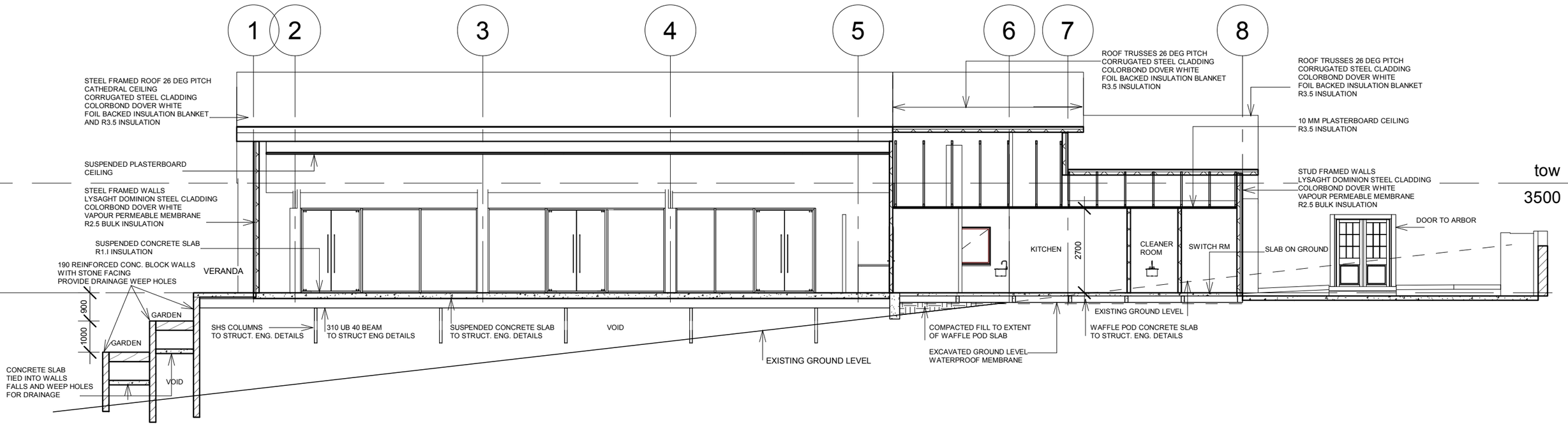
Revision No. C

15/08/2023 2:00:51 PM



1 Section 1

1 : 125



2 Section 2

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
15.08.23	CO ORDINATE WITH STRUCTURAL ENGINEER	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
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CLIENT NAME

Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT

RECEPTION HALL

10 Parry Street, Jugiong
NSW 2726

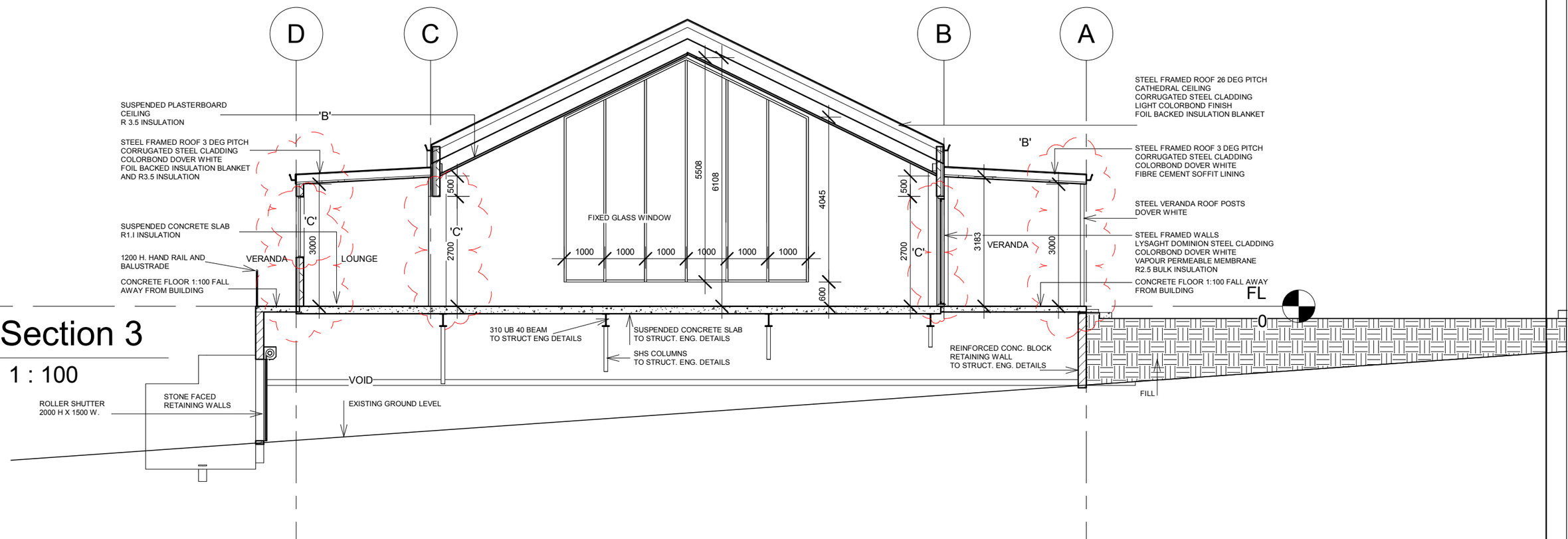
SECTION 1
SECTION 2

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 125

DRAWING NUMBER 10

Revision No. B

15/08/2023 2:03:04 PM



1 Section 3

1 : 100

2 Section 4

1 : 100

sub flo

-33

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	CHANGE VERANDA ROOF AND OUTDOOR CEREMONY ROOF HEIGHTS FROM 2.4 M. TO 3.0 M.	B
24.07.23	INCREASE WINDOW HEAD HEIGHTS TO 2700 INCREASE BULKHEAD HEIGHT TO 2700	C
15.08.23	CO ORDINATE WITH STRUCTURAL ENGINEER	D

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
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Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

SECTION 3
SECTION 4

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 100

DRAWING NUMBER
11
Revision No.
D

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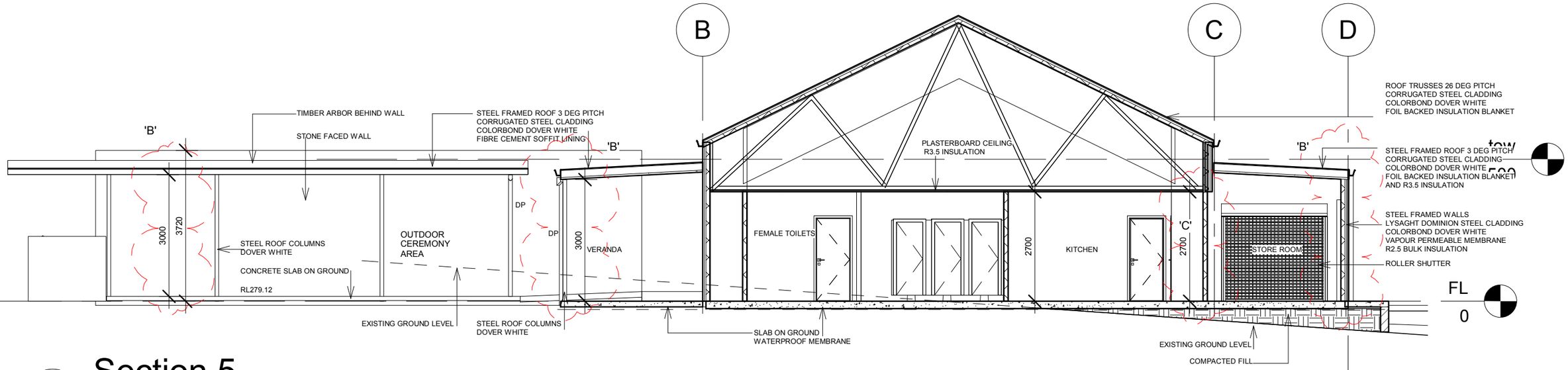
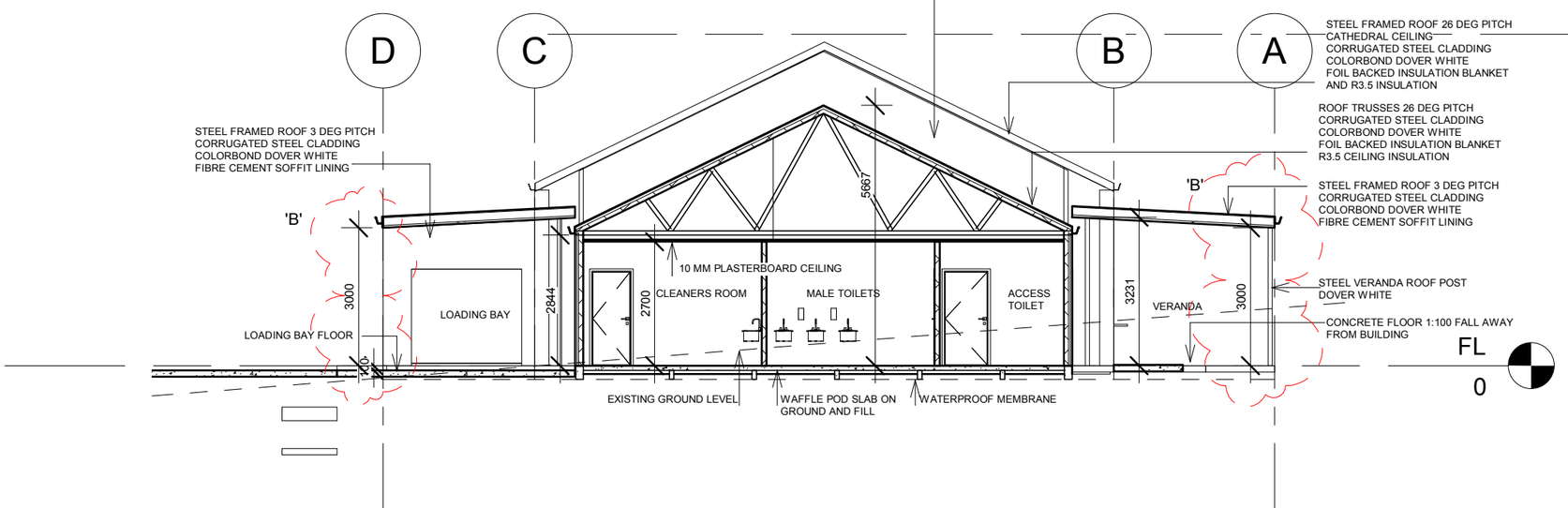


2 Section 5

1 : 100



1 Section 6

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	CHANGE VERANDA ROOF AND OUTDOOR CEREMONY ROOF HEIGHTS FROM 2.4 M. TO 3.0 M. CHANGE HEIGHT OF ARBOR WALL	B
24.7.23	SECTN 5 BULKHEAD HEIGHT INCREASED TO 2700	C
15.08.23	CO ORDINATE WITH STRUCTURAL ENGINEER	D

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
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mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

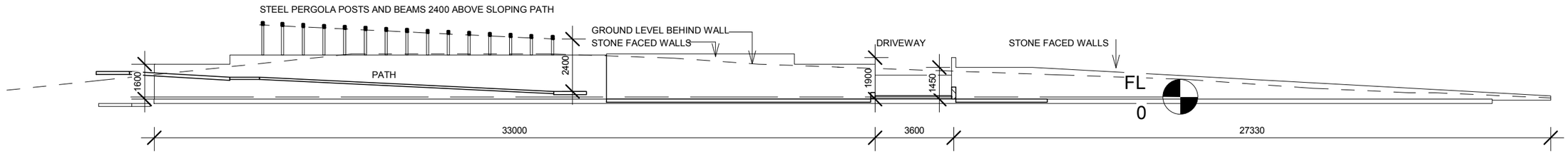
SECTION 5
SECTION 6

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	As indicated

DRAWING NUMBER
12

Revision No.
D

15/08/2023 2:05:39 PM



1 Section 9

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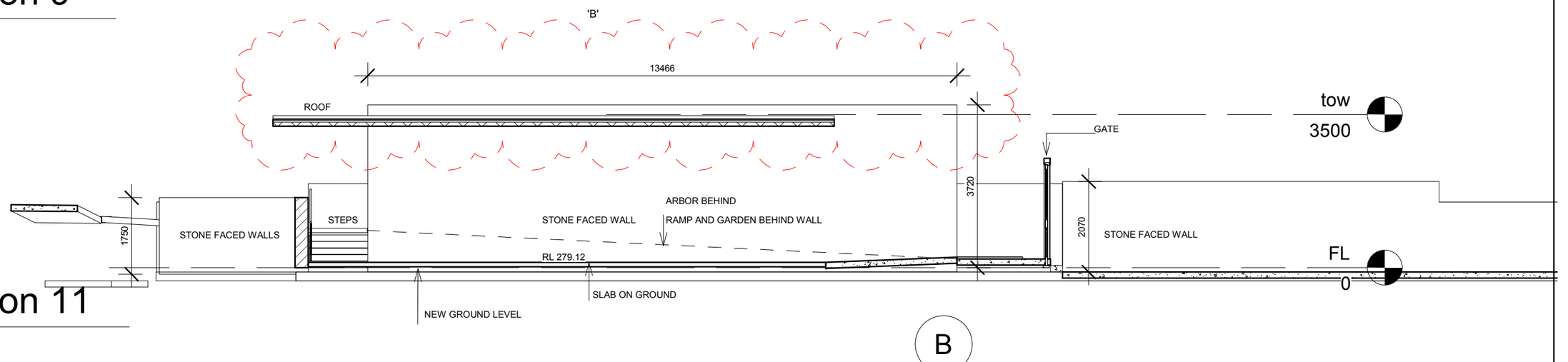

2 Section 11

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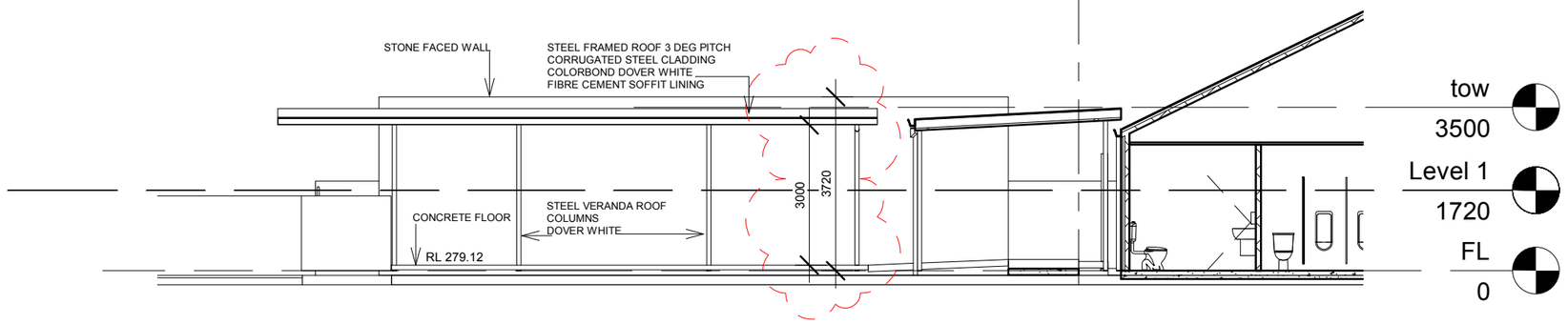

3 Outdoor ceremony elevation

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	CHANGE HEIGHT OF OUTDOOR CEREMONY ROOF AND ARBOR WALL ADD OUTDOOR CEREMONY ELEVATION	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
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BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

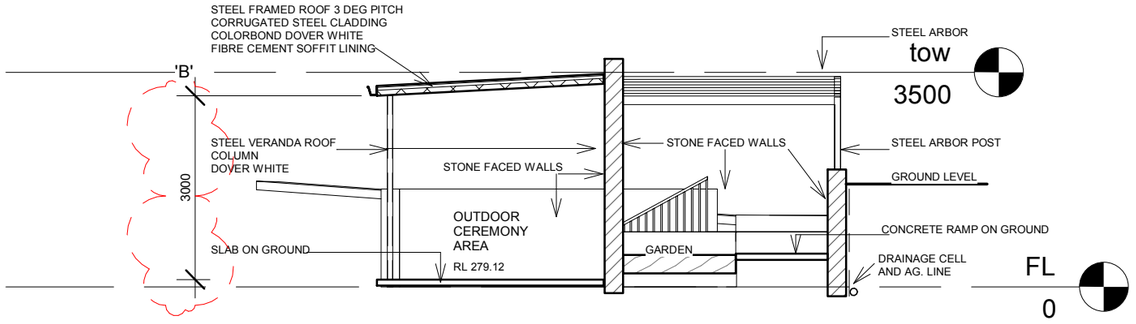
SECTIONS 9 AND 11 OUTDOOR CEREMONY ELEVATION

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	As indicated

DRAWING NUMBER 13

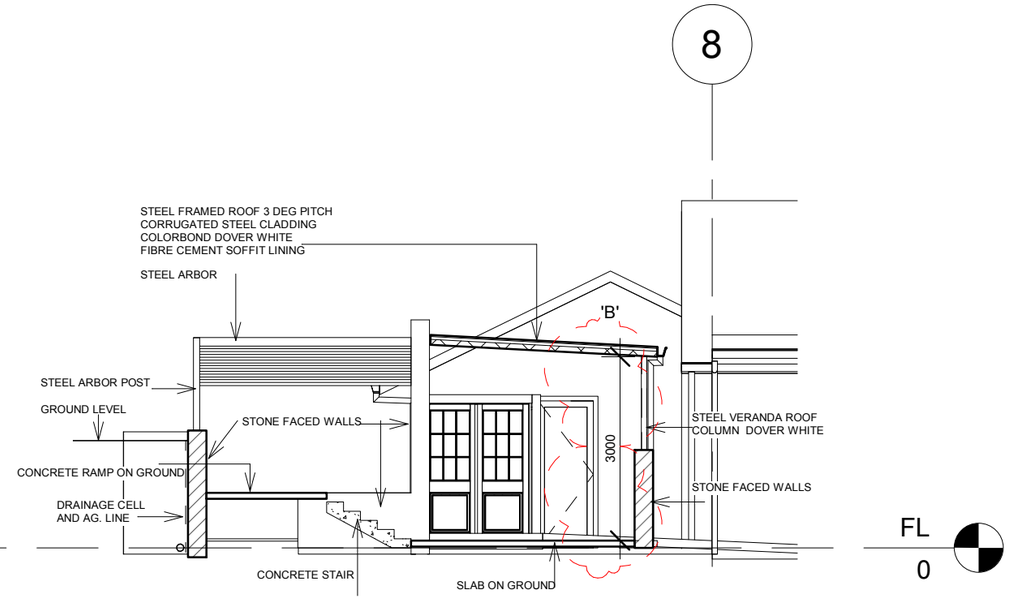
Revision No. B

15/08/2023 2:06:34 PM



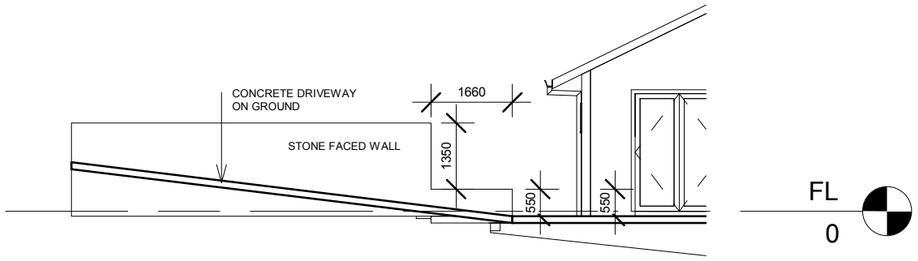
1 Section 8

1 : 100



2 Section 13

1 : 100



3 Section 7

1 : 125

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	CHANGE VERANDA ROOF AND OUTDOOR CEREMONY ROOF HEIGHTS FROM 2.4 M. TO 3.0 M.	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
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mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

Section 7
Section 8
Section 13

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	As indicated

DRAWING NUMBER
14

Revision No.
B

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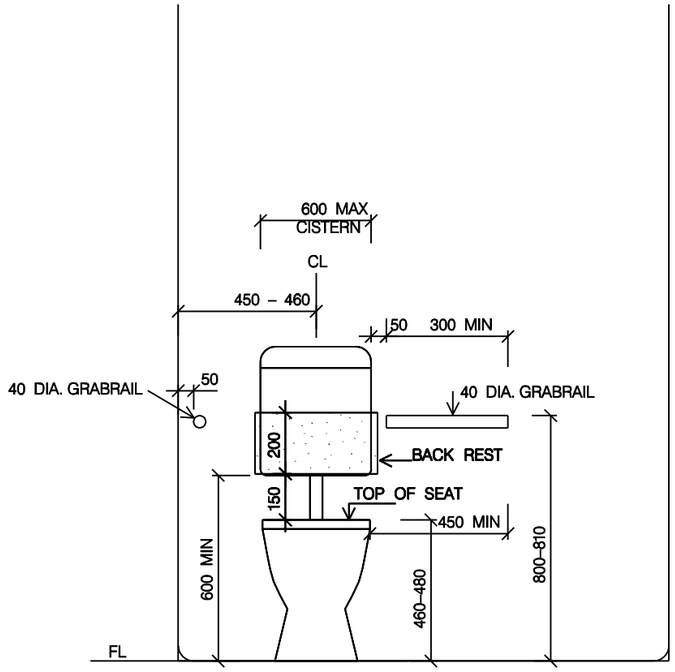
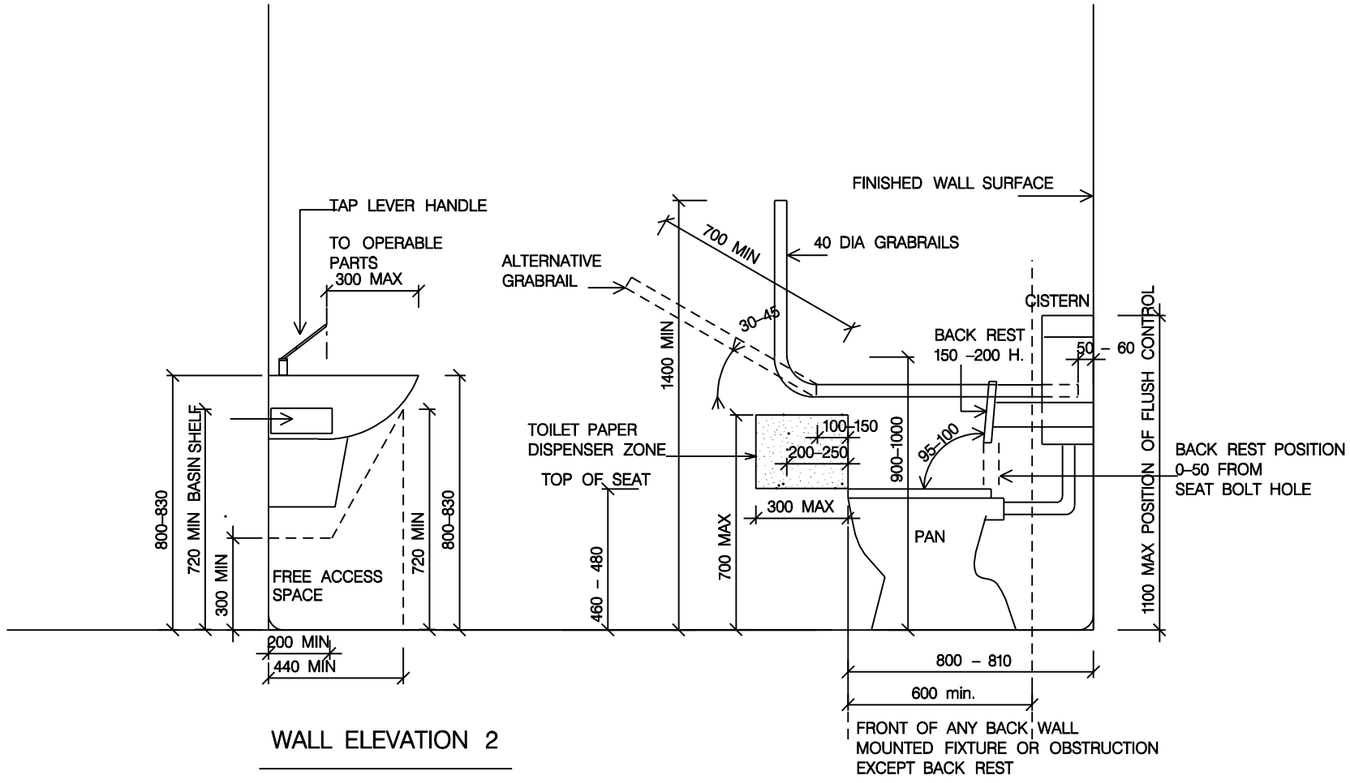
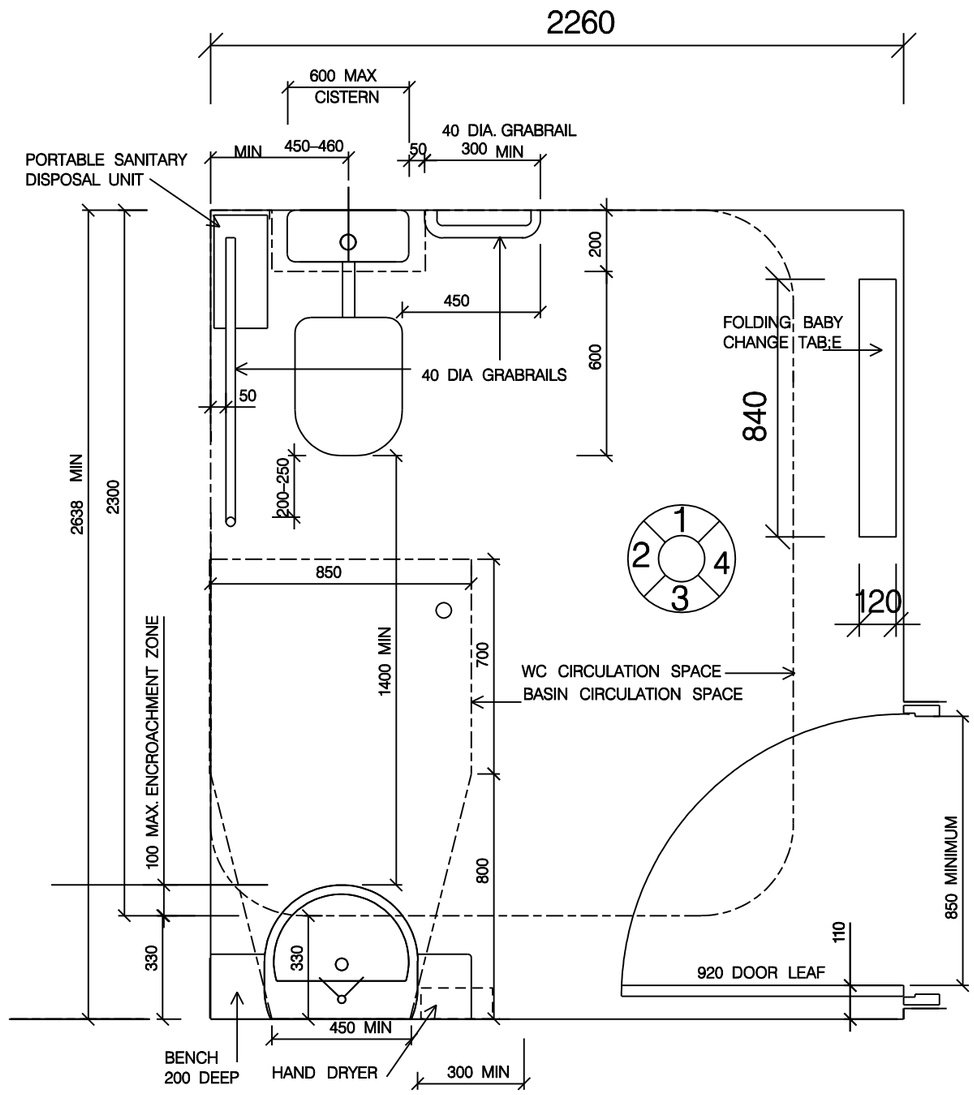


WALL ELEVATION 1



WALL ELEVATION 2

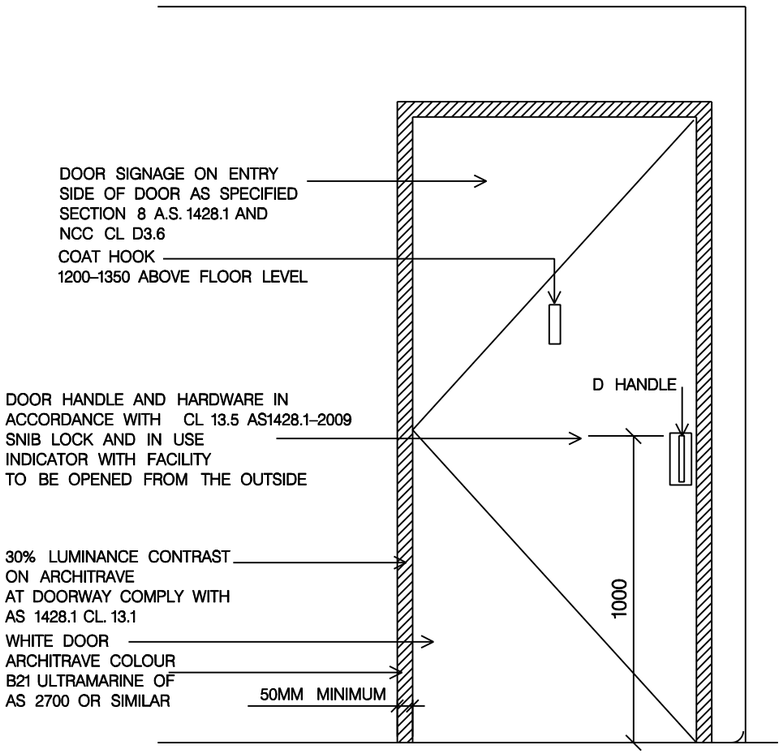


FLOOR PLAN

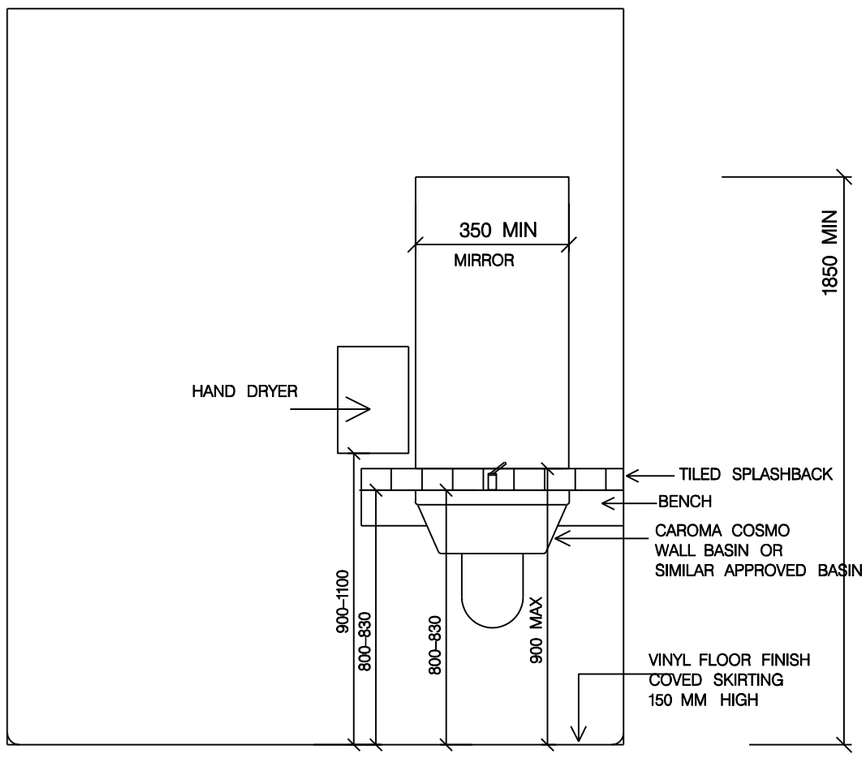
DATE	AMENDMENT	No.	NOTES				
			DO NOT SCALE DRAWINGS WALL THICKNESSES IS NOMINAL EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE LOCAL AUTHORITIES AND UTILITIES, AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA	KIM MURRAY ARCHITECT REG. NO. 5800 17 HOADS ROAD, BENDICK MURRELL NSW 2803 PH. 0401 390 714	PROPRIETOR BENDICK MURRELL COMMUNITY HALL 121 BENDICK MURRELL ROAD BENDICK MURRELL NSW 2803	PROJECT DISABLED TOILET INSTALLATION 10 PARRY STREET, JUGIONG NSW 2726	DRAWING TITLE DISABLED ACCESS TOILET PLAN WALL ELEVATIONS 1 AND 2

DATE 15.08.23	DRAWING NUMBER
SCALE 1:20	DA /CC 15
JOB NO. 22–678	

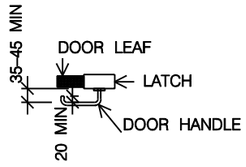
...\disabled toilets and ramp.dgn Aug. 15, 2023 12:58:37



WALL ELEVATION 4



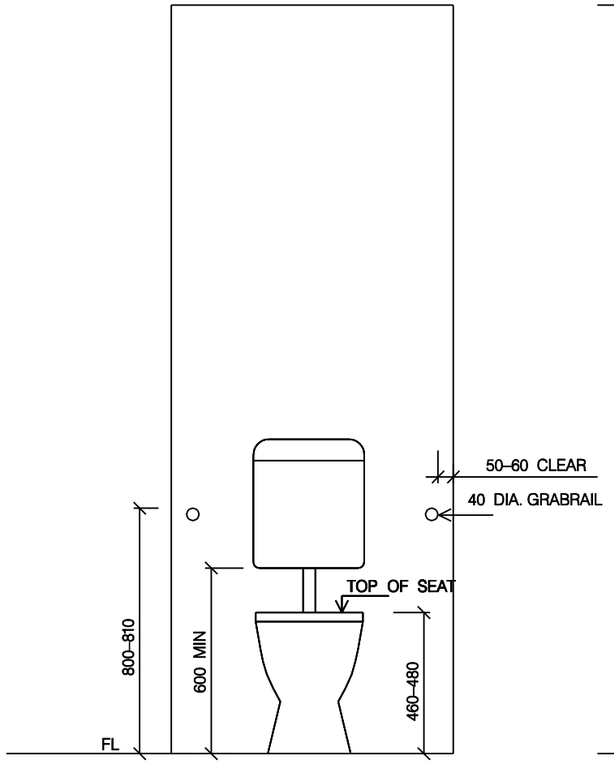
WALL ELEVATION 3



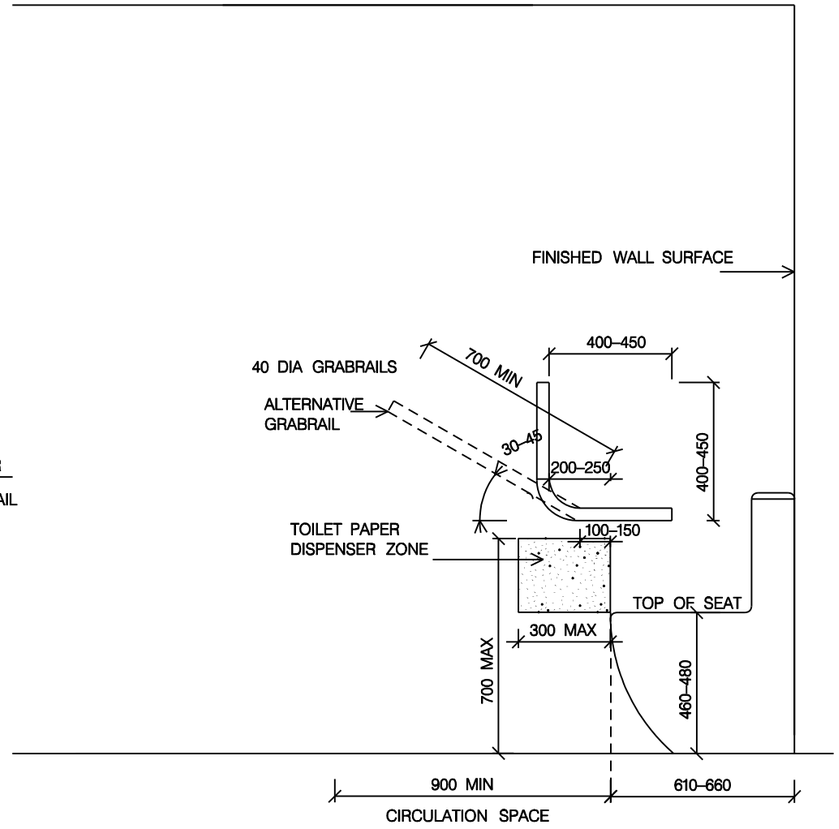
DOOR HANDLE PLAN VIEW

DATE	AMENDMENT	No.	NOTES		PROPRIETOR	PROJECT	DRAWING TITLE			DRAWING NUMBER
			DO NOT SCALE DRAWINGS WALL THICKNESSES IS NOMINAL EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE LOCAL AUTHORITIES AND UTILITIES, AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA	KIM MURRAY ARCHITECT REG. NO. 5800 17 HOADS ROAD, BENDICK MURRELL NSW 2803 PH. 0401 390 714	CHAPEL 1872 ESTATE 18 SUPERBA AVENUE CRONULLA NSW 2230	RECEPTION HALL AT 10 PARRY STREET, JUGIONG NSW 2726	DISABLED TOILETS WALL ELEVATIONS 3 AND 4		DATE 26.05.23 SCALE 1:20 JOB NO. 22–678	DA /CC 16

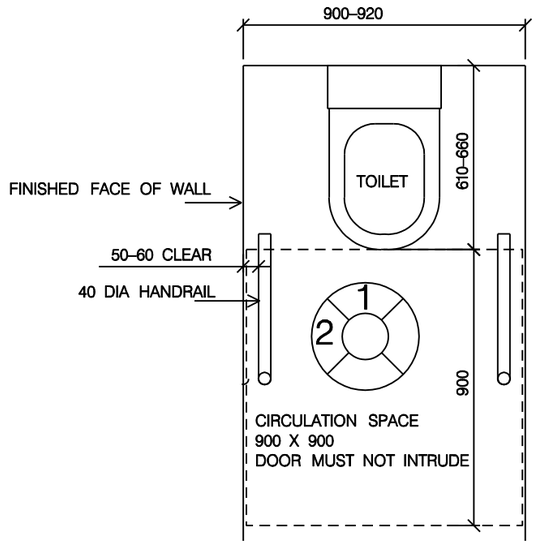
...\disabled toilets and ramp.dgn May. 27, 2023 14:48:21



WALL ELEVATION 1

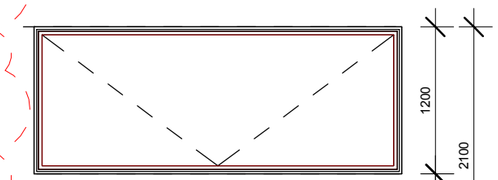


WALL ELEVATION 2



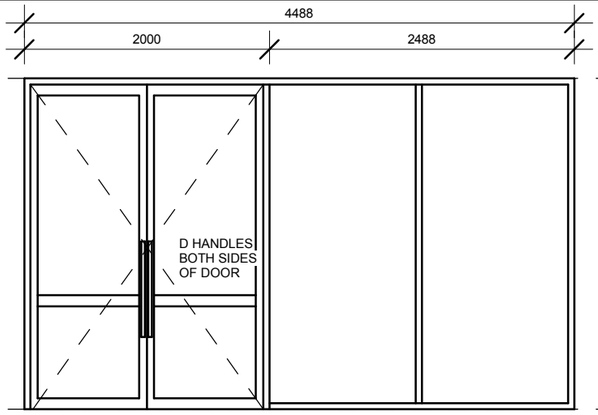
DATE	AMENDMENT	No.	NOTES	KIM MURRAY ARCHITECT	PROPRIETOR	PROJECT	DRAWING TITLE		DATE 26.05.23	DRAWING NUMBER
			DO NOT SCALE DRAWINGS WALL THICKNESSES IS NOMINAL EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE LOCAL AUTHORITIES AND UTILITIES, AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA	REG. NO. 5800 17 HOADS ROAD, BENDICK MURRELL NSW 2803 PH. 0401 390 714	CHAPEL 1872 ESTATE 18 SUPERBA AVENUE CRONULLA NSW 2230	RECEPTION HALL AT 10 PARRY STREET, JUGIONG NSW 2726	DISABLED TOILETS WALL ELEVATIONS 3 AND 4		SCALE 1:20	DA /CC 17
									JOB NO. 22–678	

...\disabled toilets and ramp.dgn May. 27, 2023 14:49:56



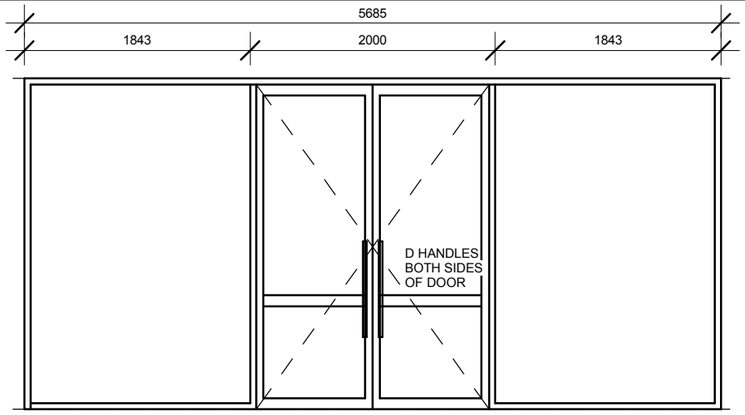
SOUTH ELEVATION

W1
AWNING WINDOW
HYDRAULIC STRUTS
1230



FRAMED GLAZED DOORS
OPEN OUT
HOLD OPEN DEVICE

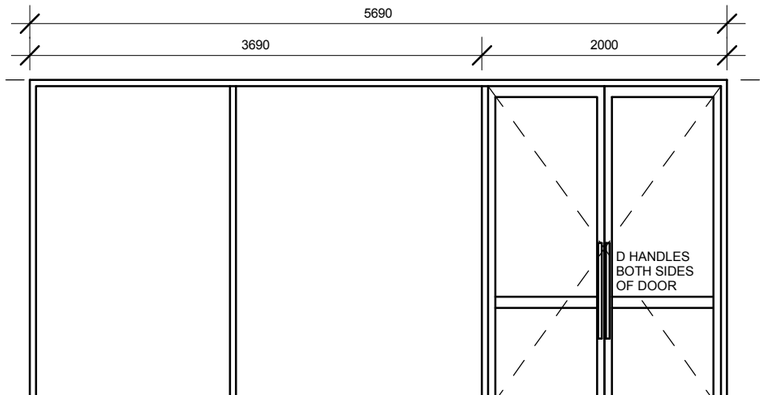
WINDOW W2
27 4815



WINDOW W3
27 5945

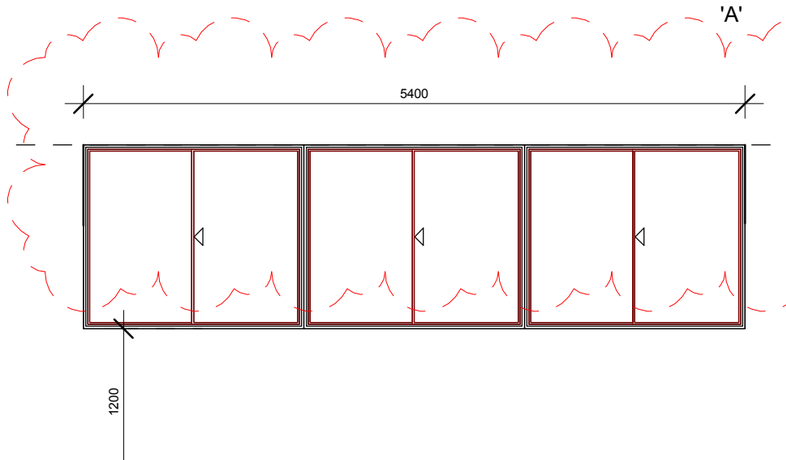
FRAMED GLAZED DOORS
OPEN OUT
HOLD OPEN DEVICE

'A'

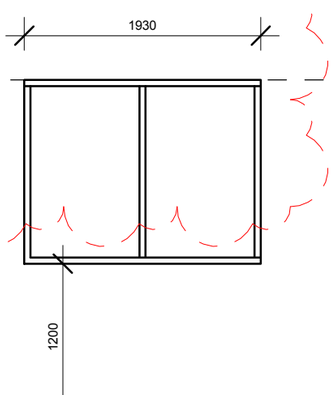


SOUTH ELEVATION
WINDOW W4
27 5945

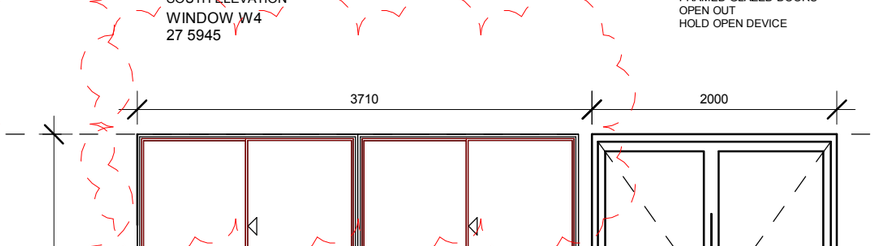
FRAMED GLAZED DOORS
OPEN OUT
HOLD OPEN DEVICE



NORTH ELEVATION
W6 SLIDING WINDOWS
15 5400

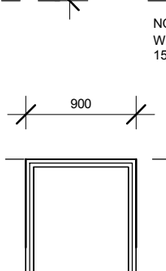


W7 W8 FIXED GLASS
15 1930



W9 SLIDING WINDOWS
15 3600

FRAMED GLAZED DOORS
OPEN OUT
HOLD OPEN DEVICE



W10 FIXED GLASS
2709

'C'

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
31.05.23	AMEND WINDOWS W6 W7 W8 AND W9	B
14.08.23	AMEND ALL DOOR AND WINDOW HEAD HEIGHTS TO 2700 MM ABOVE FLOOR LEVEL	C
15.08.23	ADJUST WINDOW DIMENSIONS	D

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

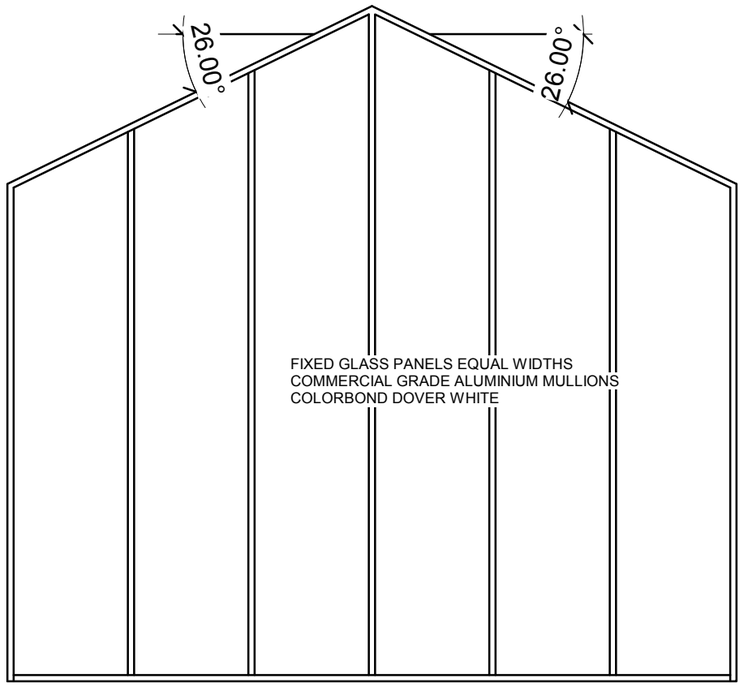
WINOW SCHEDULE 1

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 50

DRAWING NUMBER
18

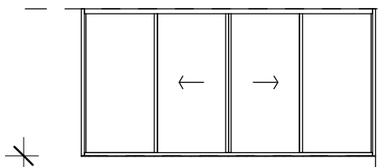
Revision No.
D

15/08/2023 2:10:07 PM



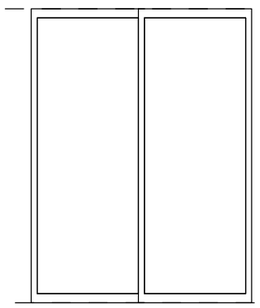
FL EAST ELEVATION

W5 FIXED GLASS

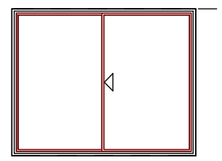


BRIDAL SUITE

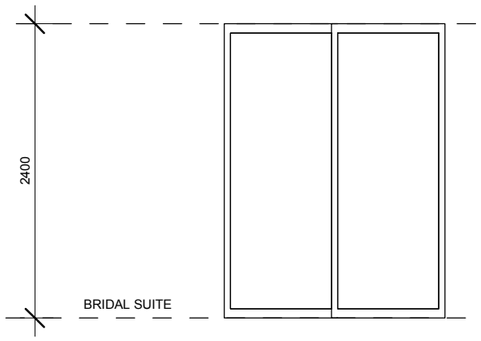
W11 W12
ASW 1227



D12 SLIDING DOOR
2418

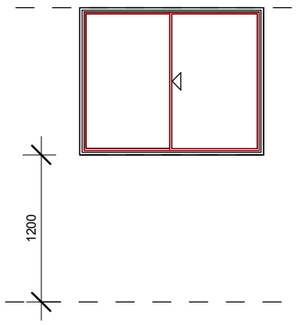


W13 W14 SLIDING WINDOW
1215

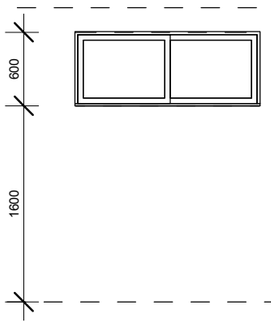


BRIDAL SUITE

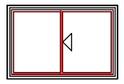
D14
ASD
2418



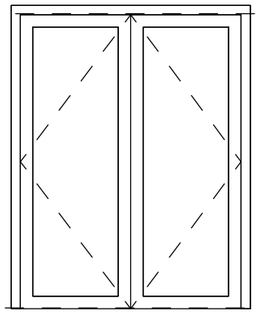
W15
ASW
1215



W16 W18
ASW 0615



W17
ASW
0609



D11 GLAZED DOOR
2418

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
15.08.23	ADJUST WINDOW DIMENSIONS	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME

Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT

RECEPTION HALL

10 Parry Street, Jugiong
NSW 2726

WINDOW SCHEDULE 2

Project number	22-678
Date	15.08.23
Drawn by	Author
Checked by	Checker
Scale	1 : 50

DRAWING NUMBER 19

Revision No. B

15/08/2023 2:11:49 PM

Legend

- Aboriginal Land Claim Boundary
- Licence (Structure Point)
- Licence (Structure Line)
- Licence (Structure Polygon)
- Licence (Land Area)
- Crown Lease
- Enclosure Permit
- Crown Reserve
- Crown Land (Other)
- Crown Land
- Crown Land - Status Unknown
- Non Crown Land
- Crown Land - Undefined Status
- Crown Road
- Shared Crown / Council Road
- Crown Road - Undefined Status
- Crown Waterway
- All Crown (Land, Road & Water)
- Local Government Area
- Suburb
- National Parks Reserve
- State Forest

Crown Account Details

Parish: JUGIONG
County: HARDEN
LGA: HILLTOPS
Suburb: JUGIONG

Author: DPI\franklm
Map Created: 1/04/2022 12:30:47 PM

NSW GOVERNMENT

N

0 23 46 69 92 m

Scale 1: 2257

Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

A0

APPROX TRUE NORTH
MGA NORTH

LEGEND:

AWN = AWNING
BAL = BALCONY
BBK = BOTTOM OF BANK
BEX = BOTTOM OF EXCAVATION
BIT = BITUMEN
BLD = EXTERNAL BUILDING
BOL = BOLLARD
BRK = BOTTOM OF ROCK
BS = BOTTOM STEPS
BW = BOTTOM OF WALL
CEIL = CEILING LEVEL
CH = CHIMNEY
CL = CENTRELINE
COL = COLUMN
CON = CONCRETE
COP = COPING
CP = CARPORT
DK = DECK
DRN = DRAIN
DSIL = DOOR SILL LEVEL
EB = EDGE OF BITUMEN
ELEC = ELECTRICITY
ELP = ELECTRICITY LIGHT POLE
FCE = FENCE
FL = FLOOR LEVEL
GAR = GARAGE
GAS = GAS METER
GDN = GARDEN
GFL = GARAGE FLOOR LEVEL
GRAV = GRAVEL
GRT = GRATE
GTE = GATE
GUT = GUTTER
JET = JETTY
HL = WINDOW HEAD LEVEL
HYD = HYDRANT
IL = INVERT LEVEL
LAN = LANDING LEVEL
LID = MISCELLANEOUS PIT LID
LIN = LINTEL
LP = LIGHT POLE
MH = MANHOLE
NS = NATURAL SURFACE
PAR = PARAPET
PATO = PATIO
PAV = PAVING
PER = PERGOLA
PINV = PIPE INVERT
PIT = MISCELLANEOUS PIT LID
PL = POOL
PP = POWER POLE
PTH = PATH
REND = RENDERED
RET = RETAINING
RK = ROCK
RF = TOP OF ROOF
RR = ROOF RIDGE
SHD = SHED
SGN = SIGN
SIP = SEWER INSPECTION PIT
SL = WINDOW SILL LEVEL
SMH = SEWER MANHOLE
SOF = SOFFIT
STR = STEPS
SUB = ELECTRICITY SUBSTATION
SV = STOP VALVE
SVENT = SEWER VENT
SW = STORMWATER
TBK = TOP OF BANK
TEL = TELSTRA
TER = TERRACE
TEX = TOP OF EXCAVATION
TFCE = TOP OF FENCE
TIL = TILE
TG = TOP OF GUTTER
TKB = TOP OF KERB
TL = TRAFFIC LIGHT
TP = TOP OF PIPE
TR = TREE
TRK = TOP OF ROCK
TS = TOP STEPS
TW = TOP OF WALL
UE = UNDERSIDE OF EAVE
VC = VEHICLE CROSSING
VER = VERANDAH
WM = WATER METER
= ELECTRICITY OVERHEAD
= SEWER UNDERGROUND
TREE SPREAD-DIAMETER-HEIGHT

Notes:

- **BOUNDARIES HAVE NOT BEEN DEFINED - BOUNDARY DEFINITION IS SUBJECT TO FURTHER SURVEY.**
- **A BASIC BOUNDARY SURVEY HAS BEEN UNDERTAKEN SUITABLE FOR COUNCIL DA SUBMISSION (TITLE DIMENSIONS ONLY).**
- **IF CONSTRUCTION ON OR NEAR BOUNDARIES IS REQUIRED IT IS RECOMMENDED THAT THE BOUNDARIES OF THE LAND BE MARKED.**
- **AREA IS APPROXIMATE ONLY AND HAS BEEN CALCULATED BY TITLE DIMENSIONS. ALL TITLE DIMENSIONS OF THE LAND HAVE NOT BEEN CONFIRMED BY SURVEY. IF AREAS ARE CRITICAL WE RECOMMEND A BOUNDARY SURVEY FOR PUBLIC RECORD.**
- **THIS SURVEY IS FOR DESIGN PURPOSES OF THE SUBJECT LAND ONLY. THIS PLAN MUST NOT BE USED FOR ANY OTHER MATTER, PURPOSE OR CONSTRUCTION SETOUT.**
- TREE SIZES ARE ESTIMATES ONLY.
- THIS PLAN HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF CHAPEL 1872 ESTATE.
- RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES IS DIAGRAMMATIC ONLY. WHERE OFFSETS ARE CRITICAL THEY SHOULD BE CONFIRMED BY FURTHER SURVEY.
- EXCEPT WHERE SHOWN BY DIMENSION LOCATION OF DETAIL WITH RESPECT TO BOUNDARIES IS INDICATIVE ONLY.
- ONLY VISIBLE SERVICES HAVE BEEN LOCATED. UNDERGROUND SERVICES HAVE NOT BEEN LOCATED. DIAL BEFORE YOU DIG SERVICES (on 1100) SHOULD BE USED AND A FULL UTILITY INVESTIGATION, INCLUDING A UTILITY LOCATION SURVEY, SHOULD BE UNDERTAKEN BEFORE CARRYING OUT ANY CONSTRUCTION ACTIVITY IN OR NEAR THE SURVEYED AREA.
- TELSTRA LINES HAVE BEEN PLOTTED FROM DIAL BEFORE YOU DIG DIAGRAMS. AS ABOVE, FURTHER INVESTIGATION WORK SHOULD BE UNDERTAKEN.
- CRITICAL SPOT LEVELS SHOULD BE CONFIRMED WITH SURVEYOR.
- CONTOURS SHOWN DEPICT THE TOPOGRAPHY. THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT. ONLY SPOT LEVELS SHOULD BE USED FOR CALCULATIONS OF QUANTITIES WITH CAUTION.
- CONTOUR INTERVAL - 0.5 METRE. - SPOT LEVELS SHOULD BE ADOPTED.
- THE INFORMATION IS ONLY TO BE USED AT A SCALE ACCURACY OF 1:200.
- DO NOT SCALE OFF THIS PLAN / FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED READINGS.
-
-
- ANY PERMITTED DOWNLOADING, ELECTRONIC STORAGE, DISPLAY, PRINT, COPY OR REPRODUCTION OF THIS SURVEY SHOULD CONTAIN NO ALTERATION OR ADDITION TO THE ORIGINAL SURVEY.
- THIS NOTICE MUST NOT BE ERASED.

0 5 10 15 20
SCALE 1:200

			HORIZONTAL DATUM:	**VERTICAL DATUM:**	**CLIENT:**	**SURVEY PLAN**	C.M.S. Surveyors Pty Limited
			CO-ORDINATE SYSTEM: MGA 56 GROUND	DATUM: AUSTRALIAN HEIGHT DATUM (AHD)	CHAPEL 1872 ESTATE	SHOWING DETAIL & LEVEL	ACN: 096 240 201
			MARKS ADOPTED: PM40495	B.M. ADOPTED: PM40495	No.8 SUPERBA AVENUE,	OVER LOT 6-7 & 11-13 SECT45 IN DP758547	PO Box 525 COOTAMUNDRA NSW 2590
				R.L. 276.982 (B)	CRONULLA, NSW, 2230	No.10 PARRY STREET	90 WALLENDOON STREET, COOTAMUNDRA NSW 2590
1	FIRST ISSUE	/05/2021	L.G.A. HILLTOPS	SOURCE: S.C.I.M.S. (06/08/2021)		JUGIONG, NSW, 2726	Telephone: (02) 6942 3395 Facsimile: (02) 6942 4046 E-mail: cootas@cmssurveyors.com.au

SURVEYED	DRAWN	CHECKED	APPROVED
ABS	ABS	TS	TS
SURVEY INSTRUCTION	SCALE	DATE OF SURVEY	
20938	1:200 @ A0	14/12/2021	
DRAWING NAME		SHEET	ISSUE
20938detail		1 OF 1	1
CAD FILE			
20938detail .dwg			

54 Wiare Cct
Orange NSW 2800
ABN: 57 021 223 814
P: 0428 619 282
E: info@enviroseer.com.au
http://www.enviroseer.com.au/

Services completed for this site

☒ Lot Classifications ☐ Contamination Report ☐ Wastewater Management Report

LOT CLASSIFICATION REPORT

Revision: 01/07/2021
Site Test: 06/05/2022
Lab Test: 21/05/2022
Customer Job: KC10PJ
Job Number: 22078
Technician: JM

Prepared for: KIM COULTER

Site Address: LOTS 11,12 SEC 45 DP 758547 10 PARRY ST JUGIONG NSW 2581

Site Classification

S

Soil Classification

S

Ys 10-20 mm

Standards

Test results completed in this report are in accordance with the following standards:

- AS 2870-2011 Residential slabs and footings
- AS 1726-1993 Geotechnical site investigations
- AS 3798-2007 Guidelines on earthworks for commercial and residential developments
- AS 1289.6.3.2-1997 Dynamic Cone Penetrometer
- ASNZS 1547-2012 On-Site Domestic Wastewater Management

1.0 BACKGROUND

Site is the BE for a proposed Function Centre to be built, 20 E of the existing stone former Anglican Church building which was designed by Edmund Blackett in 1872 and completed in 1895. Topography is undulating. Slope is 18% to the S. Geology is granite. Topsoil is gravelly and moderately shallow. Site classification is 'S' with a net vertical ground surface movement of 10 mm.

2.0 SITE ANALYSIS

Is there current evidence of the following that would likely affect this site?

NB: * denotes relevant to PROBLEM SITE

2.1*	Existing fill (>400 mm onsite)	No
2.2*	Fill containing wood, metal, plastic or other deleterious materials	No
2.3*	Residential allotment (<1000 m^2) with over 1.6 m fill	No
2.4*	Rural allotment (>1000 m^2) with over 2.4 m fill	No
2.5*	Soft or collapsing soils	No
2.6*	Are there any trees (or removed trees) on site or adjoining site?	No
	If yes, show locations at 6.0	
2.7	Is the project a knock down re-build?	No
2.8	Floating boulders	No
2.9	Rock (difficult excavation)	No
2.10	Underground flowing water and/or seepage evidence	No
2.11	Marine environment or other risk of corrosion (within 1km from water with surf)	No
2.12	Erosion	No

3.0 INSPECTION OF SITE

3.1 Site status - platform slope is:

Slope: 18 Degrees **Fall direction:** S

3.2	Slope stability assessment recommended (> 11 Degrees)	No
3.3	Are there any Retaining Walls supporting this site? (if yes, see attached plan drawing 6.0)	No

4.0 VISUAL OBSERVATION OF NEIGHBOURHOOD

4.1	Presence of rock Is near-surface rock visible on this site? or on adjoining lots? in nearby excavations?	No
4.2	Existing masonry buildings Is there significant cracking of existing masonry walls? Building Type:	No
.3	Indicators of movement in the following: Roads, Kerbs, Pavements, Masonry Fences, and/or Ground Surfaces. Is there significant movement in any of the above?	No

5.1 FIELD LOG

Date: 06/05/2022

Customer Job: KC10PJ
Job Number: 22078
Site Address: LOTS 11,12 SEC 45 DP 758547 10 PARRY ST JUGIONG NSW 2581

Borehole: BH1/DCP1
Surface RL: 284 m
Latitude: -34.8206
Longitude: 148.3225

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.15	6				Silty gravelly sand, dark brown, co.ag. 1-3 mm 20%,	M			F	
	0.30	5				Gravelly clay, co.ag. 1-5 mm 40%, dark reddish yellow	M			St	
	0.45	9				White, brown, yellowish brown	11.7	2.5	30		
	0.60	20				Clayey gravel, co.ag. 1-15 mm 70% quartzose	Da			H	
	0.75					Dark brownish red, white, reddish brown, dusky red					
	0.9					End of Borehole 1.0 m					
	1.05										
	1.20										
	1.35										
	1.50										
	1.65										
	1.80										
	1.95										
	2.10										
	2.25										
	2.40										
	2.55										
	2.70										
	2.85										
	3.00										
	3.15										
	3.30										
	3.45										
	3.60										
	3.75										
	3.90										
	4.05										
	4.20										
	4.35										
	4.50										

WT – Water Table **UTP** – Unable to pernitrate **DCP** – 9kg Dynamic Cone Penetrometer **PP-** Pocket Penetrometer

AND – Density Index vs Approx. Penetrometer results

DENSITY	Density Index	DCP Blow Count (blows/100mm)
VL - Very Loose	< 15 %	< 1
L – Loose	15 – 35 %	1 – 3
MD – Medium Dense	35 – 65 %	3 – 9
D – Dense	65 – 85 %	9 – 15
VD - Very Dense	> 65 – 85 %	> 15

SILTS & CLAY – Cu vs Approx. Penetrometer results

CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Dial Indicator
VS – Very Soft	0 – 12	< 1	0 - 0.2
S – Soft	12 - 25	1 - 2	0.2 - 0.5
F – Firm	25 – 50	2 – 3	0.5 - 1.0
St – Stiff	50 - 100	3 – 5	1.0 - 2.0
VSt – Very Stiff	100 – 200	5 – 8	3.0 - 4.0
H – Hard	> 200	> 8	> 4.0

MOISTURE

D – Dry
Da- Damp
M – Moist
W – Wet
W_P - Plastic Limit
W_L – Liquid Limit

5.1 FIELD LOG

Date: 06/05/2022

Customer Job: KC10PJ
Job Number: 22078
Site Address: LOTS 11,12 SEC 45 DP 758547 10 PARRY ST JUGIONG NSW 2581

Borehole: BH1/DCP1
Surface RL: 284 m
Latitude: -34.8207
Longitude: 148.3228

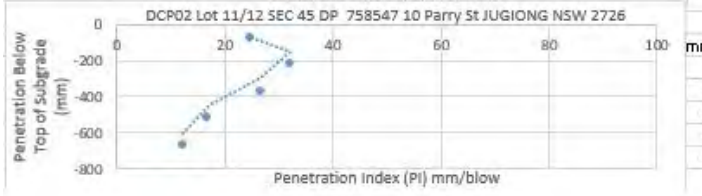
Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.15	3									
	0.30	4									
	0.45	7									
	0.60	17									
	0.75	24									
	0.9										
	1.05										
	1.20										
	1.35										
	1.50										
	1.65										
	1.80										
	1.95										
	2.10										
	2.25										
	2.40										
	2.55										
	2.70										
	2.85										
	3.00										
	3.15										
	3.30										
	3.45										
	3.60										
	3.75										
	3.90										
	4.05										
	4.20										
	4.35										
	4.50										

WT – Water Table **UTP** – Unable to pernitrate **DCP** – 9kg Dynamic Cone Penetrometer **PP-** Pocket Penetrometer

AND – Density Index vs Approx. Penetrometer results			SILTS & CLAY – Cu vs Approx. Penetrometer results				MOISTURE
DENSITY	Density Index	DCP Blow Count (blows/100mm)	CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Dial Indicator	
VL - Very Loose	< 15 %	< 1	VS – Very Soft	0 – 12	< 1	0 - 0.2	D – Dry
L – Loose	15 – 35 %	1 – 3	S – Soft	12 - 25	1 - 2	0.2 - 0.5	Da- Damp
MD – Medium Dense	35 – 65 %	3 – 9	F – Firm	25 – 50	2 – 3	0.5 - 1.0	M – Moist
D – Dense	65 – 85 %	9 – 15	St – Stiff	50 - 100	3 – 5	1.0 - 2.0	W – Wet
VD - Very Dense	> 65 – 85 %	> 15	VSt – Very Stiff	100 – 200	5 – 8	3.0 - 4.0	W_P - Plastic Limit
			H – Hard	> 200	> 8	> 4.0	W_L – Liquid Limit

6.0 LOCATION SKETCH

mmbgsl	kPa indicative
-75	100
-225	75
-375	150
-525	>300



mmbgsl	kPa indicative
-75	50
-225	75
-375	125
-525	275
-675	400

7.0 COMMENTS & RECOMMENDATIONS

Site classification is ‘S with a net vertical soil movement of 10 mm. Slope is steep. Soil is lithic.

8.0 CERTIFICATION

The attachment of the signature below is to certify that this report has been compiled in accordance with Australian Standards AS2870-2011, AS1726-1993 and AS3798-2007.

9.0 REPORT CONDITIONS & LIMITATIONS

CONDITIONS OF THE RECOMMENDATIONS

- This is a site classification report generally in accordance with AS-2870-2011 and should be sufficient for a qualified person to design footings for structures covered under the scope of this standard.

- This site classification was completed by an experienced soil technician and does not make any allowance for any possible mine subsidence within the building envelope.

- The advice given in this report assumes that the test results are representative of the overall subsurface conditions. However, it should be noted that actual conditions in some parts of the building site may differ from those found in the boreholes. If excavations reveal soil conditions significantly different from those shown in our attached Borehole Log(s), Enviroseer must be consulted, and excavations stopped immediately.

- Any sketches in this report should be considered as only approximate pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions or slope information should not be used for any building cost calculations and/or positioning of the building. Dimensions on logs are correct.

REPORT LIMITATIONS

The investigations addressed in this report are not intended nor designed to locate all possible ground conditions on the site. It is not possible to identify all possible ground conditions. Further, one site may have a variety of ground conditions and, the ground conditions identified by the testing articulated in this report may change, even over noticeably short periods of time.

The advice and recommendations contained in this report are based on the test results obtained from the samples tested, and on the assumption that those test results are representative of the overall ground conditions of the entire site. The actual conditions in some parts of the site might differ from those tested. If excavation reveals ground conditions that vary from those outlined in our findings in this report and the advice contained in this report may differ significantly and must be revisited. If this occurs, Enviroseer must be consulted before any further work is carried out on the site, Enviroseer should be engaged for a supplementary report and updated recommendations.

The scope and relevance of the advice provided in the report is subject to restrictions and limitations. Enviroseer did not perform a complete assessment of all possible conditions or circumstances that may exist on the site. If a service is not expressly indicated that means it has not been provided, and the reader should not assume that it has been. If a matter is not specifically addressed then Enviroseer has not decided in relation to it, and the reader should not assume that it has.

Where data and information has been supplied by the client or a third party, the accuracy of the advice and recommendations in this report is dependent upon the accuracy of that data and information. Enviroseer is not responsible for verifying the accuracy of data or information provided to it by third parties. Enviroseer is not liable nor responsible for inaccurate advice provided upon reliance of incomplete or inaccurate data supplied by third parties.

Foundation Maintenance and Footing Performance:
A Homeowner's Guide

CSIRO

BTF 18
replaces
Information
Sheet 10/91

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the homeowner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

This Building Technology File is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking in buildings.

Soil Types

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. The table below is Table 2.1 from AS 2870, the Residential Slab and Footing Code.

Causes of Movement

Settlement due to construction
There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction, but has been known to take many years in exceptional cases.

These problems are the province of the builder and should be taken into consideration as part of the preparation of the site for construction. Building Technology File 19 (BTF 19) deals with these problems.

Erosion
All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

Saturation
This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume – particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

Seasonal swelling and shrinkage of soil
All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

Shear failure
This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.
- In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

GENERAL DEFINITIONS OF SITE CLASSES

Class	Foundation
A	Most sand and rock sites with little or no ground movement from moisture changes
S	Slightly reactive clay sites with only slight ground movement from moisture changes
M	Moderately reactive clay or silt sites, which can experience moderate ground movement from moisture changes
H	Highly reactive clay sites, which can experience high ground movement from moisture changes
E	Extremely reactive sites, which can experience extreme ground movement from moisture changes
A to P	Filled sites
P	Sites which include soft soils, such as soft clay or silt or loose sands; landslip; mine subsidence; collapsing soils; soils subject to erosion; reactive sites subject to abnormal moisture conditions or sites which cannot be classified otherwise

Tree root growth
Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.
- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

Unevenness of Movement

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Swelling gradually reaches the interior soil as absorption continues. Shrinkage usually begins where the sun's heat is greatest.

Effects of Uneven Soil Movement on Structures

Erosion and saturation
Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpends).

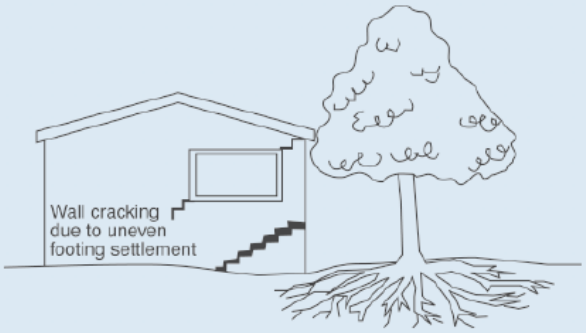
Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

Seasonal swelling/shrinkage in clay
Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.

Trees can cause shrinkage and damage



As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the external footings. The doming is accentuated and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

Movement caused by tree roots
In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

Complications caused by the structure itself
Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

Effects on full masonry structures
Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.

The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

Effects on framed structures
Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation cause a footing to fall away, this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

Effects on brick veneer structures
Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

Water Service and Drainage

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem.
Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.
- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

Seriousness of Cracking

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. The table below is a reproduction of Table C1 of AS 2870.

AS 2870 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

Prevention/Cure

Plumbing
Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible, and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

Ground drainage
In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a grated drain system connected to the stormwater collection system is usually an easy solution.

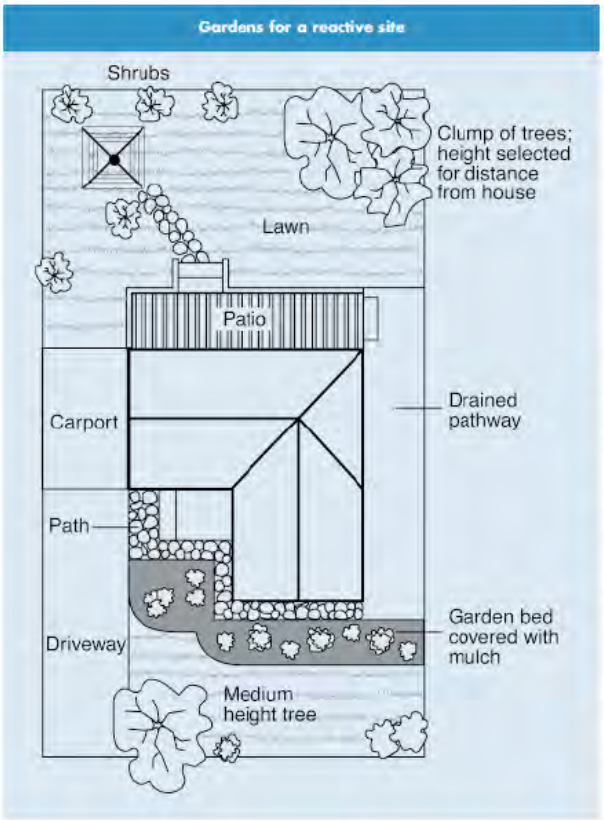
It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject is referred to in BTF 19 and may properly be regarded as an area for an expert consultant.

Protection of the building perimeter
It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving

CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS

Description of typical damage and required repair	Approximate crack width limit (see Note 3)	Damage category
Hairline cracks	<0.1 mm	0
Fine cracks which do not need repair	<1 mm	1
Cracks noticeable but easily filled. Doors and windows stick slightly	<5 mm	2
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired	5–15 mm (or a number of cracks 3 mm or more in one group)	3
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted	15–25 mm but also depend on number of cracks	4



should extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill from it (see BTF 19).

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

Condensation
In buildings with a subfloor void such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

Warning: Although this Building Technology File deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

The garden
The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order.

Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

Existing trees
Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

Information on trees, plants and shrubs
State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information. For information on plant roots and drains, see Building Technology File 17.

Excavation
Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

Remediation

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the homeowner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

This BTF was prepared by John Lewer FAIB, MIAMA, Partner, Construction Diagnosis.

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Services completed for this site

☐ Lot Classifications ☐ Site Contamination Report ☒ Wastewater Management Report

DOMESTIC WASTEWATER REPORT

Revision: 01/07/2021
Site Test: 06/05/2022
Lab Test: 18/05/2022
Customer Job: KC10PJ
Job Number: 22079
Technician: JM

Prepared for: KIM COULTER
Site Address: LOTS 11,12 SEC45 DP 758547 10 PARRY ST JUGIONG NSW 2726

STD
ASNZS 1547 2011

Ksat
1.1 m/d

Facility
150 people

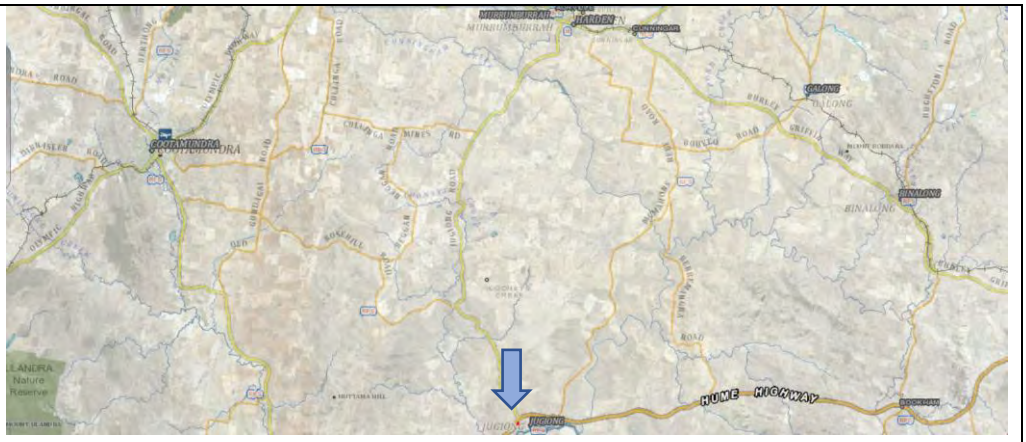
DLR
Wide Bed 15
Trench 15
ETA Not Advised

DIR
AGI 4.0
SSI 3.5

1.0 SUMMARY

The BE for a proposed 150 people Wedding/Function Centre lie approximately 25 m E of the existing church building Circa 1895. The surround 0.6 ha area that has been allocated for the build and supporting infrastructure including wastewater disposal area. Land slopes SW at 5-20%. Soils are lithic, with coarse aggregate from 20% to 40% for the first 0.5 m and > 50% in weathered granodiorite thereafter. Slope favours ETA bed. Soil type does not. Topography is steeper than desirable for wide bed and septic trench, necessitating placement along the contour, and multiple septic tanks. Secondary treatment by AWTS can be directed to a wide bed, trenches or irrigation above- or below-ground. The former is more difficult unless capacity is stored then irrigated outside of function hours. Irrigation of filtered greywater and composting of black water is a low maintenance solution with nutrient and humus consolidation of the surrounding garden landscape.

2.0 SITE LOCATION

REGION **JUGIONG**	
LOCALITY 10 Parry St	

3.0 SITE ANALYSIS

Geology & Water	Parent Geology is granodiorite. Surface water in the form of the Murrumbidgee River is 530 m S. There are the registered bores within 0.5 km of the drain field. SWL ranges from 8-12 m bgsl. Risk of impingement on drinking water is minor.
Constraints	The key constraints for the downslope drain-field area S of the BE of this 0.6 ha rural residential property are: 1) Maximum potential daily wastewater load; depth of soil, and coarse aggregate content >20%
Advantages	The key advantage is available land area; good evaporation, and moderate permeability.
Soil Physico-chemistry	

Parameter	B1 0-0.5 m	B2 0-0.6 m
pH	7.3 ± 0.1	7.2 ± 0.1
Electrical Conductivity uS/cm (ppm)	50 ± 1	55 ± 1
ECe	non-saline 0.5	non-saline 0.5
Phosphorus Absorption mg/kg	Estimated : >400	
Emerson Aggregate Test	surface non-dispersive, subsoil minor-dispersive	

Soil Attributes	Units	Ideal	Problematic	Notes
Proximity to BE	m	<20	>20	consider BE placement
Depth	m	>1 m	<1 m	Soil depth 0.5 m
Coarse Aggregate	%	<20	>20	20-50%
pH	pH	5.5-8.0	<5.5, >8.0	neutral
ECe	dS/m	<2.5	>2.5	non-saline
Emerson Aggregate	class	7,4,5	1,2,3,6	non dispersive
Phosphorus Sorption	mg/kg	>400	<400	sandy soils have lower CEC, P-Sorp.
Site Attributes				
Slope	%	<5	>5	ca. 18%
Landform	n/a	dispersive	convergent	land drains W to dam NW
Tree coverage	%	<20	>20	shade reduces evaporation
Neighbour upslope	m	>3	<3	capilliary action
Neighbour down-gradient	m	>6	<6	capilliary and gravity effects
Surface Water dam bund	m	>10	<10	low strength
Surface Water creek bank	m	>40	<40	porous alluvium; sands
Groundwater e.g. bore	m	<250	>250	consider hydrogeology
Neighbour if irrigation	m	>50	<50	Drift risk : Human Health
Surface Water if irrigation	m	>50	<50	Drift risk : Human Health & Ecological
Groundwater if irrigation	m	<250	>250	Drift risk : Human Health
Town Water Supply if irrigatior	m	>1000	<1000	Drift risk: Human Health

4.0 RESULTS

PRIMARY

Primary Effluent	Wide Bed	Trench	ETA Bed
Number (#)	2	8	
Width (m)	4	1.3	Not
Length (m)	25	20	recommended
Topsoil (m)	0.3	0.4	despite
Aggregate (m)	0.2	0.1	slope
Sand (m)	0.0	0.0	being
Total depth	0.40	0.40	>5%
Topsoil (m3)	51	71.4	
Aggregate (m3)	31	10.2	
Sand (m3)	0	0	
Judgement	Igneus gravel near	low aggregate	gravelly loam

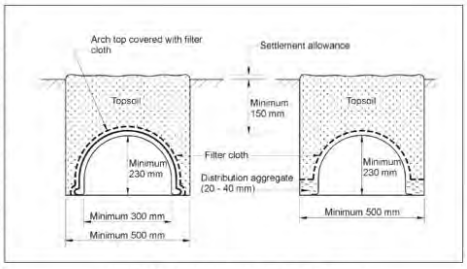
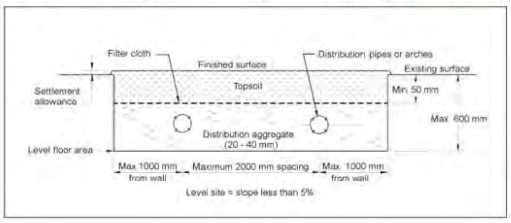
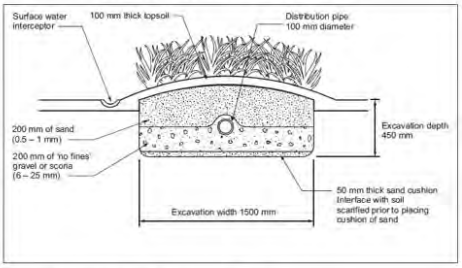


FIGURE L2 SELF-SUPPORTING ARCH TRENCH



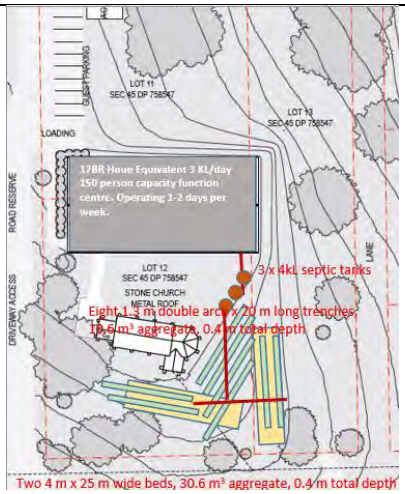
NOTE: LPED lines can be used instead of distribution pipes when dose loading effluent into beds.

FIGURE L5 CONVENTIONAL BED



NOTE: An LPED line can be used to dose load the ETA/ETS bed.

Wide Bed Trench & ETA bed



Trench and bed configurations are sub-surface and can use primary (septic tank) effluent. Trench, double width uses least aggregate. Wide bed uses least space but requires more aggregate than trench. ETA beds usually occupy a slope >5% requiring as much aggregate as wide bed and 20% more sand than aggregate as well.

Recommendation

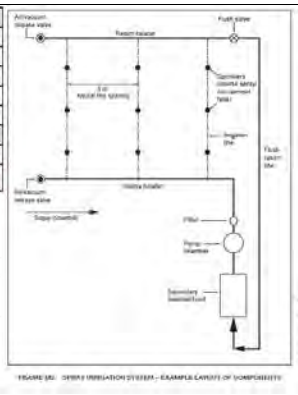
Eight 1.3 m wide x 20 m long double arch trenches – if igneous aggregate scarce

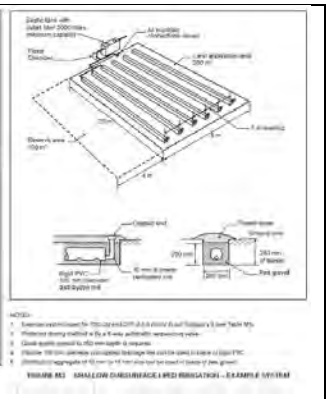
Two 4 m wide x 25 m wide beds- if igneous aggregate plentiful

SECONDARY

Secondary Effluent	Wide Bed	Trench	ETA Bed
Number (#)	1	4	Not
Width (m)	4.0	1.3	recommended
Length (m)	25	20	despite
Total depth	0.40	0.40	slope
Topsoil (m3)	25.5	35.7	being
Aggregate (m3)	15.3	5.1	>5%
Sand (m3)	0.0	0.0	
Judgement	consider if space limited	consider if space limited	gravelly loam

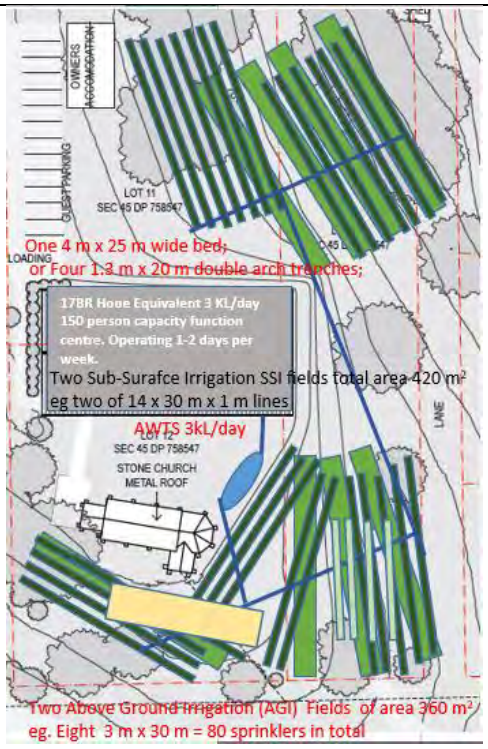
Secondary Effluent	Above Ground	Sub-surface
Example	Large droplet Sprinkler	LPED
Field Number	2	2
Area (m2)/field	360	420
Sprinklers or lines/field	40	14
Field Size Example	3 m x 30 m	30
Judgement	Ample buffer setback. Avoid mowers	Use oversize 40 mm lines; filters 36 mm, and flush valves





Above Ground & Sub-Surface Irrigation

Secondary treatment is typically by aerated wastewater treatment system AWTS. AWTS disposal to bed and trench effectively halves the area required by septic tank in moderately low K_{sat} environments. AWTS is usual when wastewater is irrigated either Above-Ground for flexibility of watering or Sub-Surface if regular watering of tree lots is proposed. A split system can mine phosphorus from blackwater and/or utilizes moisture from greywater, without the employ of AWTS and the requisite chlorination. Composting toilets provide conditions where enteric pathogens are out-competed by less harmful soil microflora. Product is spade-able compost.



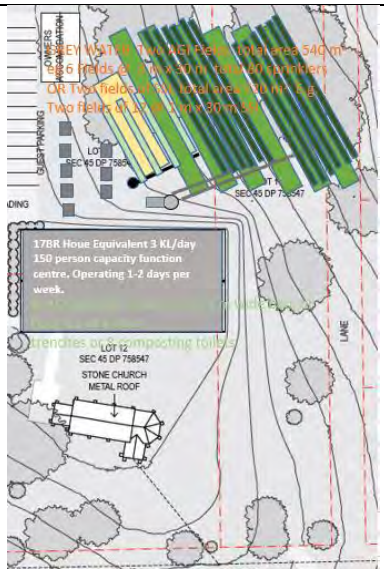
Secondary effluent treatment to above ground irrigation, is a good use of water in summer.
In winter, rainfall run-off can be problematic. Large droplet sprinkler minimizes drift.
Secondary treated effluent to sub-surface Irrigation (SSI) removes drift risk, while directing water to tree lots and orchard and garden.
Stock and vehicular movements can damage pipes and compact the soil. AGI is movable and accessible. SSI is harder to troubleshoot.

Recommendation

AWTS secondary treated wastewater to sub-surface irrigation comprising two alternating fields of 14 lines 30 m in length

Split black and greywater systems

Blackwater	Composting T	Wide Bed	Trench	ETA Bed	Greywater	Above Ground	Sub-surface	
Distribution	Re-useable	1	4	Not	Technology	Large Droplet Sprinkler	LPED Lines	Not
Width (m)	n.a	4	1.3	Recommended	Fields/Beds	6	2	Recommended
Length (m)	n.a.	21	16	despite >5%	Separation (m)	3	1	despite
Judgement	humus	small	easy	steep	Width (m)	3	0.2	slope
					Length/field (m)	30	420	>5%
					Sprinklers/field	30	n.a.	n.a.
					Judgement	avoid stock, consider drift	Good for a fenced tree line.	gravelly loam



Split systems are typically used in areas with lithic (poor) soils, by those prepared to manage the system for nutrient and water reuse. They are preferred by gardeners and retirees who prioritize long term soil productivity over immediate aesthetic amenity.

Recommendation

Composting toilets (8) and greywater filtered and irrigated to SSI for optimal nutrient relaimation.

DESIGN CALCULATIONS		
Annual Rainfall	607 mm	Harden
Annual Evaporation	1500 mm	Estimated
Hydraulic Loading	3000 L/day	Rainwater
Soil Classification	Average	Subsoil class 3b
Permeability K_{sat}	m/ day	1.1
DIR	litres mm/day	4 AGI 3.5 SSI

RECOMMENDATION	Primary Effluent to Trench double arch	
Design Load Rate DLR	mm/day	15 primary 30 secondary
Double arch trenches	Number	8
Trench Dimensions (m)	L x W x D	1.3 m x 25 m
Minimum Input Quality	Primary	septic tank
Tank Size (kL) Table J1	4 day residence	3 tanks @ 4.0kL
Design Irrigation Area : Meterol.	m^2	850
Design Irrigation Area : Nutrient	m^2	1060
Design Irrigation Area : Hydrau	SSI/AGI m^2	720/840

RECOMMENDATION	Secondary Effluent to SSI	
Design Load Rate DIR	mm/day	3
Sub-surface Irrigation	Fields	2
Lines	No./field	14
Length	m	30
Volume Pea gravel	m^3	9.6
Minimum Input Quality	Secondary	AWTS - 3kL/day
Tank Size (kL)	2.4 days residence	7200

RECOMMENDATION	Split System – Black Water Composting Toilet	
Blackwater Load	L	1000
Greywater Load	L	2000
Composting toilet	kL	8
AGI sprinklers	Number	20
Grey water filtration system	Capacity	1800 - 2400L

5.0 CONCLUSION & RECOMMENDATIONS

The critical consideration in this design is maximum occupancy. A rainwater source (2 x 20kL tanks between the Church and Function Hall will reduce the total daily load from 4kL to 3kL. Water reduction features are also helpful. It is very unlikely that there will be multiple consecutive days of 150 people functions. Current use is expected to be 1.5 days/week. It is possible that the total flow (Q) for 1.5 days- 4.5kL could be housed in a 6kL reservoir and released at 700L/day into the drainage field of equivalent size to that servicing a 4 BR household. If that is the case, the current recommended design dimensions could be divided by four.

That would be fine and achievable so long as no expansion above 1.5 functions per week is guaranteed. If one considered that to be the case for 10 years; a staged approach could be implemented. The first quarter or third of infrastructure could be installed and after 10 years the next, provided the initial area became the last to fill.

The system is excessive for current use. Drain-fields are intended to last 50 years. So design accommodates an increase in functions say one day extra every 10 years.

Simplicity favours three concrete 4kL septic tanks in series ($7.5K delivered). Placement of two separate 25 m x 4 m wide beds with a switching valve between functions does require a lot of aggregate (30 m^3). The topsoil scalped from the Hall BE would more than suffice for the 50 m^3 required. Further the upper topsoil has 20% coarse aggregate and more soil surface area. Some cut of the slope may be required for a level base. His can be concurrent with footings excavations.

Secondary treatment by AWTS does enable transfer of all wastewaters below surface to trees and garden. However, because of the maximum daily flow, the length of SSI is great (840 m) with 28 individual 30 m lines required. This makes the troubleshooting protocol of critical importance for addressing line blockage and redundancy.

Composting toilets have improved in amenity. The hillside is gravelly and low in humic matter due to near surface weathered rock. Conversion of human waste to spadable compost is a win-win for garden development provided the units chosen to fulfil reasonable amenity requirements. General acceptance of this approach for regional public roadside amenities has been high. Grey water can be settled, filtered through a sand bed and or geotextile and irrigated.

Since the main function is Wedding, and sensitivities to amenity are likely to be high, I would run septic in series to wide beds, simply because 200 m2 can be levelled, the investment in aggregate is worth it and the topsoil from the BE is readily available.

5.1 FIELD LOG

Date: 06/05/2022

Customer Job: KC10PJ
Job Number: 22079
Site Address: LOTS 11,12 SEC45 DP 758547 10 PARRY ST JUGIONG NSW 2726

Borehole: BE1
Surface RL: 282 m
Latitude: -34°82.063'
Longitude: 148°32.243'

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.15					Silty gravelly sand, coarse aggregate 1-3 mm 30% dark brown	M			F	
	0.30					Clayey gravelly sand, co.ag. 1-4 mm 20%, brown	M			F	
	0.45										
	0.60					Gravelly clay, co.ag. 1-5 mm 40%,dark yellowish red Gravelly clay, dark brownish red, white	M M			St VSt	
	0.75					Co.ag 1-5 mm 50% Clayey gravel, co.ag. 1-15 mm 70%, dark brownish red, white	Da			H	
	0.9					reddish brown					
	1.05										
	1.20										
	1.35										
	1.50										
	1.65										
	1.80										
	1.95										
	2.10										
	2.25										
	2.40										
	2.55										
	2.70										
	2.85										
	3.00										
	3.15										
	3.30										
	3.45										
	3.60										
	3.75										
	3.90										
	4.05										
	4.20										
	4.35										
	4.50										

WT – Water Table **UTP** – Unable to pernitrate **DCP** – 9kg Dynamic Cone Penetrometer **PP**- Pocket Penetrometer

AND – Density Index vs Approx. Penetrometer results			SILTS & CLAY – Cu vs Approx. Penetrometer results				
DENSITY	Density Index	DCP Blow Count (blows/100mm)	CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Dial Indicator	MOISTURE
VL - Very Loose	< 15 %	< 1	VS – Very Soft	0 – 12	< 1	0 - 0.2	D – Dry
							Da- Damp
L – Loose	15 – 35 %	1 – 3	S – Soft	12 - 25	1 - 2	0.2 - 0.5	M – Moist
MD – Medium Dense	35 – 65 %	3 – 9	F – Firm	25 – 50	2 – 3	0.5 - 1.0	W – Wet
D – Dense	65 – 85 %	9 – 15	St – Stiff	50 - 100	3 – 5	1.0 - 2.0	W_P - Plastic Limit
VD - Very Dense	> 65 – 85 %	> 15	VSt – Very Stiff	100 – 200	5 – 8	3.0 - 4.0	W_L – Liquid Limit
			H – Hard	> 200	> 8	> 4.0	

CONDITIONS OF THE RECOMMENDATIONS

- This on-site domestic wastewater report generally in accordance with AS NZS 1547 2012 guidance on and should be sufficient for a qualified person to ascertain the consequence of its findings.

- This domestic wastewater report was completed by an experienced soil technician and does not make any allowance for the lot outside of the proposed drainage field situated near the BE.

- The advice given in this report assumes that the test results are representative of the overall subsurface conditions. However, it should be noted that actual conditions in some parts of the site may differ from those found in the boreholes. If excavations reveal soil conditions significantly different from those shown in our attached Borehole Log(s), enviroseer should be consulted and excavations stopped immediately.

- Any sketches in this report should be considered AS only approximate pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions or slope information should not be used for any building cost calculations and/or positioning of the building. Dimensions on logs are correct.

REPORT LIMITATIONS

The investigations addressed in this report are the minimum required to facilitate both regulatory oversight and effective trade installation for a designated area. They are not intended nor designed to locate all possible ground conditions on the site. It is not possible to identify all possible ground conditions. Further, while anomalies are usually detected by site visit and historical searches, the potential for undisclosed hotspots of CoPC arising from undisclosed spillage or dumping cannot be entirely removed.

The advice and recommendations contained in this report are based on analyses obtained from the samples tested, and on the assumption that those test results are representative of the overall ground conditions of the entire building envelope and house yard. The actual conditions in some parts of the site might differ from those tested.

The scope and relevance of the advice provided in the report is subject to restrictions and limitations. enviroseer did not perform a complete assessment of all possible conditions, contaminants or circumstances that may exist on the site. If a service is not expressly indicated that means it has not been provided, and the reader should not assume that it has been. If a matter is not specifically addressed then enviroseer has not decided in relation to it, and the reader should not assume that it has.

Where data and information has been supplied by the client or a third party, the accuracy of the advice and recommendations in this report is dependent upon the accuracy of that data and information. enviroseer is not responsible for verifying the accuracy of data or information provided to it by third parties. enviroseer is not liable nor responsible for inaccurate advice provided upon reliance of incomplete or inaccurate data supplied by third parties.

PROPOSED RECEPTION HALL

NO.10 PARRY STREET, JUGIONG

DRAWING REGISTER

320168-S.00	COVER & DRAWING REGISTER
320168-S.01	GENERAL NOTES
320168-S.02	CONCRETE FOOTING PLAN
320168-S.03	STEELWORK MARKING PLAN
320168-S.04	CONCRETE SLAB PLAN
320168-S.05	EXTERNAL SLAB PLAN
320168-S.10	CONCRETE DETAILS '1'
320168-S.11	CONCRETE DETAILS '2'
320168-S.12	CONCRETE DETAILS '3'
320168-S.20	ROOF MARKING PLAN
320168-S.21	STEELWORK ELEVATIONS & SECTION
320168-S.30	ROOF DETAILS

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

DO NOT SCALE

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STRUCTURAL ENGINEERS
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PO BOX 1935, ORANGE NSW 2800
COOKANDROE.COM.AU

Project: PROPOSED RECEPTION HALL
NO.10 PARRY STREET, JUGIONG

Title: COVER & DRAWING REGISTER

Client: CHAPEL 1872 ESTATE

Drawn	JTB	Designed	Approved
Scale	-	Date AUGUST '23'	This Drawing must not be used for Construction unless signed as Approved

Job No: 230168 | Drawing No: S.00 | Rev: A | Original Size A1

GENERAL NOTES:

G1. ALL DIMENSIONS ARE IN MILLIMETERS, ALL LEVELS IN METRES U.N.O.

G2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT SAA CODES AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.

G3. THIS OFFICE SHOULD BE NOTIFIED IMMEDIATELY IF OTHER CONSULTANTS DRAWINGS DIFFER TO THAT SHOWN ON THIS DRAWING.

G4. MARK NUMBERS MUST BE CLEARLY SHOWN ON ALL ITEMS.

G5. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE PRIOR TO CONSTRUCTION.
ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. IF IN DOUBT – ASK

G6. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

G7. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS, SPECIFICATIONS & OTHER CONSULTANTS DRAWINGS.

DESIGN LOADS

DL1. THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH AS/NZS.1170 (CURRENT EDITION) FOR DESIGN LOADING.

DL2. U.N.O. THE FOLLOWING DESIGN LOADS SHALL APPLY:
- SUPERIMPOSED DEAD LOAD - ROOF/CEILINGS = 0.4 kPa.
- LIVE LOADS. = 5.0kPa. (FLOOR)
= 0.25kPa. (ROOF)
- WIND LOADING TAKEN AS Vsoo = 45m/s. - EXPOSURE CATEGORY OF 2.0, REGION A3.
- MINIMUM ALLOWABLE BEARING PRESSURE = 300 kPa.
ENGINEER TO BE NOTIFIED IMMEDIATELY OF ANY VARIATION TO DESIGN.

FOUNDATIONS:

F1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 300 kPa MINIMUM AS ADVISED BY ENVIROSEER JOB NO:22078

F2. FOUNDATION MATERIAL SHALL BE INSPECTED AND APPROVED BY THE ENGINEER FOR THE ABOVE ALLOWABLE BEARING PRESSURE BEFORE PLACING CONCRETE.

REINFORCED BLOCKWORK - RETAINING WALL NOTES

RW1. ALL WORKMANSHIP AND MATERIALS SHALL IN ACCORDANCE WITH AS 3700 (CURRENT EDITION WITH AMENDMENTS) EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

RW2. MASONRY UNITS SHALL COMPLY WITH AS/NZS 4455.1 AND HAVE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH (f'uc) = 15 MPa.

RW3. ALL BLOCKS SHALL BE "DOUBLE-U" UNITS WITH RECESSED WEBS FOR REINFORCEMENT.

RW4. ALL MORTAR SHALL HAVE A MINIMUM CLASSIFICATION OF M3.

RW5. MORTAR ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER / SUPERINTENDENT.

RW6. CLEAN OUT OPENINGS SHALL BE PROVIDED AT THE BOTTOM OF EACH CORE CONTAINING VERTICAL REINFORCEMENT. REINFORCING CORES SHALL BE CLEANED OF MORTAR PROTRUSIONS BEFORE GROUTING.

RW7. ALL PERPENDS, EXCEPT WHERE REQUIRED FOR WEEPHOLES, SHALL BE FULLY FILLED WITH MORTAR.

RW8. FILL ALL CORES WITH GROUT AND THOROUGHLY COMPACT BY MECHANICAL VIBRATOR AND/OR RODDING WITH A PLAIN ROUND BAR. GROUT SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATION, CONFORMING TO AS3600.
CHAR. STRENGTH f'c = 20 MPa
SPECIFIED SLUMP = 230 mm MAX.
AGGREGATE SIZE = 10 mm
MIN. CEMENT CONTENT = 300 kg/m³

RW9. PROVIDE TEMPORARY PROPPING TO WALLS WHERE REQUIRED FOR STABILITY DURING CONSTRUCTION.

RW10. STARTER BARS SHALL BE ACCURATELY POSITIONED IN ACCORDANCE WITH THE STRUCTURAL DOCUMENTATION.

RW11. STARTER BARS SHALL BE TIED TO VERTICAL BARS THROUGH INSPECTION OPENINGS AT THE BASE OF THE WALL AND ALSO ACCURATELY FIXED IN POSITION AT THE TOP BY AN APPROPRIATE METHOD.

RW12. REINFORCEMENT SHALL BE ACCURATELY PLACED AND FIRMLY HELD IN POSITION TO A TOLERANCE OF ± 10mm.

RW13. DRAINAGE SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS.

RW14. BACKFILLING SHALL BE CARRIED OUT AFTER GROUT HAS REACHED A MINIMUM STRENGTH OF 0.85 f'c. BACKFILLING SHALL BE APPROVED GRANULAR MATERIAL COMPACTED IN LAYERS NOT EXCEEDING 200mm TO 95% STANDARD COMPACTION U.N.O..

REINFORCED CONCRETE NOTES

RC1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600-2009 WITH AMENDMENTS EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

RC2.

STRUCTURAL ELEMENT.	CONCRETE GRADE IN ACCORDANCE WITH AS1379
FOOTINGS.	25
INTERNAL SLABS	32
EXTERNAL SLABS	25
PIERS	20

RC3. THE EXPOSURE CLASSIFICATIONS ARE AS FOLLOWS. PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING MINIMUM CLEAR CONCRETE COVER TO ALL REINFORCEMENT U.N.O. ON THE DRAWINGS.

ELEMENT	STANDARD FORMWORK AND COMPACTION.				
	INTERIOR ENVIRONMENTS			EXTERIOR ENVIRONMENTS	CAST AGAINST GROUND.
	TOP	BTM	SIDE		
FOOTINGS	50	50	50	50	50
SLABS ON GROUND	20	20	20	30	-

RC4. COVER TO REINFORCEMENT SHALL BE OBTAINED BY THE USE OF APPROVED BAR CHAIRS. ALL CHAIRS TO BE SPACED AT 900 CENTRES MAXIMUM.

RC5. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED. VIBRATORS SHALL NOT BE USED TO SPREAD CONCRETE.

RC6. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

RC7. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS.

RC8. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

RC9. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER. ALL CONSTRUCTION JOINTS SHALL BE TREATED AS SPECIFIED.

RC10. REPRESENTATION OF REINFORCEMENT IS DIAGRAMMATIC. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.

RC11. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN UNLESS THE APPROVAL OF THE ENGINEER IS OBTAINED FOR ANY OTHER SPLICE.

RC12. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

RC13. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.

RC14. REINFORCEMENT SYMBOLS:-
N- DENOTES GRADE 500 NORMAL DUCTILITY DEFORMED BAR TO AS4671
R- DENOTES GRADE 250 NORMAL DUCTILITY PLAIN ROUND BAR TO AS4671
SL- DENOTES GRADE 500 LOW DUCTILITY WELD SQUARE MESH TO AS4671

RC15. ALL FABRIC FOR SLABS POURED ON GROUND MUST BE IN PLACE BEFORE CONCRETING COMMENCES AND SHALL BE SUPPORTED ON BAR CHAIRS IN ACCORDANCE WITH NOTE RC4.

RC16. LAPS IN REINFORCEMENT SHALL BE MADE ONLY WHERE SHOWN ON THE DRAWING UNLESS OTHERWISE APPROVED. LAP LENGTHS SHALL BE 40 x BAR DIAMETERS U.N.O.
NOTE: THERE BARS WITH DIFFERENT DIAMETERS LAP, THE LAP LENGTH SHALL APPLY FOR THE SMALLER BAR DIAMETER. ALL COGS TO BE STANDARD COGS U.N.O.
FABRIC LAP DETAILS:-

RC17. THE CONCRETE SHALL BE ALLOWED TO CURE BY COVERING WITH BLACK PLASTIC AND KEEPING THE CONCRETE WET UNDER THE PLASTIC. THE CONCRETE SHALL BE COVERED FOR A MINIMUM OF 14 DAYS.ALTERNATE CURING SYSTEMS ARE TO BE SUBMITTED TO THIS OFFICE FOR APPROVAL.

RC18. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY AN INDEPENDENT "NATA" TESTING LABORATORY FOR COMPRESSIVE STRENGTH IN ACCORDANCE WITH AS3600.
ALL CONCRETE TRUCKS SHALL BE SLUMP TESTED BY INDEPENDENT "NATA" PERSONNEL. REJECTION FOR SLUMP SHALL BE +/- 15mm.

STRUCTURAL STEEL

SS1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 AND AS1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

SS2. STRUCTURAL STEELWORK FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH AS/NZS 5131:2016. ALL FABRICATION AND ERECTION WORKS SHALL BE CARRIED OUT BY A SUITABLY QUALIFIED CONTRACTOR FAMILIAR WITH THE REQUIREMENTS OF THIS STANDARD.

SS3. CONSTRUCTION CATEGORY = CC2 IN ACCRODANCE WITH AS 4100:2020 AND AS/NZS 5131:2016.

SS4. USE THE FOLLOWING GRADES OF ORDINARY WELDABLE STEEL:
ROLLED SECTIONS ---------- GRADE 300 plus
RECTANGULAR HOLLOW SECTION ---------- GRADE 350
CIRCULAR HOLLOW SECTIONS ---------- GRADE 250

SS5. WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION.

SS6. BOLT NOTATION:
4.6/S -- MILD STEEL COMMERCIAL BOLT "SNUG TIGHT"
8.8/S -- HIGH STRENGTH STRUCTURAL BOLT "SNUG TIGHT"
8.8/T -- HIGH STRENGTH STRUCTURAL BOLT WITH LOAD-INDICATING WASHER, TENSIONED

SS7. ALL NOTCHES IN MEMBERS TO HAVE 11mm COPING RADIUS IN CORNERS U.N.O..

SS8. ALL STIFFENERS TO HAVE 15mm MIN. CHAMFER AT ROOT RADIUS OF MEMBER.

SS9. TB AND TF BOLTS TO BE INSTALLED USING APPROVED LOAD INDICATING WASHERS. PROVIDE BOLTS IN THE COMPLETED STRUCTURE WITH EQUIVALENT CORROSION PROTECTION AS FOR THE STEEL MEMBERS THEY CONNECT.

SS10. UNLESS NOTED, ALL WELDS SHALL BE 6mm CONTINUOUS FILLET TYPE SP USING E49XX ELECTRODES FOR MMAW & W500 WIRE (OR APPROVED EQUIVALENT) FOR GMAW. BUTT WELDS SHALL BE COMPLETED PENETRATION BUTT WELDS TO AS1554.

SS11. PROVIDE MINIMUM 6mm CONTINUOUS FILLET WELDS, 2-M20 8.8/S BOLTS MINIMUM AND 10mm THICK PLATES FOR CONNECTIONS U.N.O..

SS12. PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS, WITH "BREATHER" HOLES IF MEMBERS TO BE HOT DIP GALVANISED.

SS13. THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL HOLES NECESSARY FOR FIXING STEEL AND TIMBER AND OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED IN THE DRAWINGS.

SS14. ABBREVIATIONS:
UB --- UNIVERSAL BEAM
UC --- UNIVERSAL COLUMN
EA --- EQUAL ANGLE
UA --- UNEQUAL ANGLE
PFC -- PARALLEL FLANGED CHANNEL
LB --- INDUSTRIAL LIGHT BEAM
CHS --- CIRCULAR HOLLOW SECTION
RHS --- RECTANGULAR HOLLOW SECTION
SHS --- SQUARE HOLLOW SECTION
TFC --- TAPERED FLANGE CHANNEL
C --- COLD ROLLED C SECTION

SS15. PROVIDE TRIMMING MEMBERS TO SUPPORT THE SKEW-CUT EDGES OF ROOF AND WALL SHEETING.

SS16. WE HAVE DETERMINED THE CORROSION CATEGORY FOR THIS SITE IN ACCORDANCE WITH AS4312 & AS/NZS2312.1. A SELECT RANGE OF CORROSION PROTECTION OPTIONS ARE PROVIDED BELOW FOR THE RELEVANT CORROSION CATEGORIES, EXTRACTED FROM AS/NZS 2312.1 & AS/NZS 2312.2

CORROSION CATEGORY	LOCATION	PROTECTIVE COATING SYSTEM	AS/NZS 2312.1 REF.
C1	INTERNAL STEELWORK - HIDDEN	ALKYD PRIMER SYSTEM	ALK1
C2	EXTERNAL STEELWORK	HOT DIP GALVANISE TO REQUIREMENTS OF AS/NZS 5131	-
		INORGANIC ZINC SILICATE	IZS1
		HIGH BUILD ALKYD PRIMER	ALK3

FOR FURTHER CORROSION PROTECTION OPTIONS, REFER TO TABLE 6.3 OF AS/NZS 2312.1.
ALTERNATE CORROSION PROTECTION SYSTEMS SHALL BE CERTIFIED BY THE PAINT SUPPLIER AS BEING SUITABLE FOR THE CORROSION CATEGORIES ADVISED ABOVE

SS17. RESTORE DAMAGED OR UNTREATED SURFACES ON SITE TO THEIR REQUIRED SHOP TREATMENT CONDITIONS.

SS18. PROVIDE HIGH STRENGTH NON-SHRINK GROUT TIGHTLY PACKED UNDER ALL BEARING AND BASE PLATES.

SS19. PROVIDE 230mm MINIMUM BEARING LENGTH OF EACH END OF ALL BEAMS AND 150mm AT LINTELS U.N.O.

SS20. WHERE MASONRY WALLS ABUT STEELWORK U.N.O. PROVIDE SECURE ATTACHMENTS (WALL TIES) AT 600mm CENTRES.

SS21. FOR PURLINS AND GIRTS PROVIDE CHANNEL-SECTION BRIDGING AT 20 x WEB DEPTH OR 4000mm CENTRES WHICHEVER IS THE LEAST U.N.O. WHERE LAPS ARE SHOWN, PROVIDE A MINIMUM TOTAL LAP LENGTH OF 15% OF THE SPAN. PROVIDE PURLINS AT 900 CTS MAXIMUM AT RIDGES AND EAVES, 1200 CTS MAXIMUM AT SUSPENDED CEILINGS U.N.O. ERECT IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION. USE THE FOLLOWING CLEATS WITH 2 x M12 BOLTS PER CONNECTION U.N.O.

MAXIMUM CLEARANCE BETWEEN PURLIN/GIRT & SUPPORTING MEMBER	CLEAT
UP TO 75 mm	8 PL.
75 TO 200mm	75 x 6 EA.

SS22. WHERE RHS/SHS MEMBERS ARE TO BE SPLICED, PROVIDE FULL PENETRATION BUTT WELDS TO CONNECTIONS U.N.O.

SITEWORKS NOTES

SW1. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER/SUPERINTENDENT.

SW2. STRIP ALL TOPSOIL FROM THE CONSTRUCTION AREA AND REMOVE OR STOCKPILE ON SITE AS APPROVED TO BE LATER SPREAD AS DIRECTED.

SW3. MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.

SW4. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND OR AN APPROVED GRANULAR MATERIAL AND COMPACTED TO A MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1.

SW5. PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN STRUCTURES AND ALL CONCRETE OR UNIT PAVEMENTS.

RIGID PAVEMENT DESIGN NOTES

RP.1 THE RIGID CONCRETE PAVEMENT HAS BEEN DESIGNED BASED ON A CALIFORNIA BEARING RATIO, **CBR = 4%**. A GEOTECHNICAL INVESTIGATION SHOULD BE CARRIED OUT TO CONFIRM CBR RESULTS OF THE SUBGRADE PRIOR TO CONSTRUCTION.

RP.2 SUBBASE MATERIAL SHALL BE A DENSE, WELL GRADED GRANULAR MATERIAL (DGB 20 OR APPROVED EQUIVALENT).
- AMOUNT BY WEIGHT PASSING 75 MICRON SEIVE = 15% MAXIMUM
- MAXIMUM PLASTICITY INDEX = 6
- MAXIMUM LIQUID LIMIT = 25%

SUBBASE MATERIAL TO BE COMPACTED TO MINIMUM 98% STANDARD COMPACTION DENSITY.

RP.3 CONCRETE SHALL BE MINIMUM STRENGTH GRADE **N40**, MAXIMUM AGGREGATE SIZE = 20mm, AND MAXIMUM SLUMP = 80 mm ± 15 mm.

RP.4 SAWN JOINTS ARE TO BE CUT AS SOON AS POSSIBLE AND NOT GREATER THAN 16 HOURS AFTER CONCRETE POUR. JOINTS ARE TO BE CUT USING A GREEN CONCRETE BLADE OR SOFF CUT SAW.

RP.5 PAVEMENT DESIGN LOADS:
THE PAVEMENT HAS BEEN DESIGNED FOR THE FOLLOWING LOADS
- SINGLE AXLE LOAD OF 5T (52,000 REPETITIONS)

COMPACTED FILLING

CF.1 BEFORE PLACING ANY FILL, ALL ORGANIC MATERIAL & TOP SOIL ARE TO BE REMOVED. THE SUBGRADE SHALL BE PROOF ROLLED WITH A MINIMUM OF 10 PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) TO IDENTIFY ANY LOW STRENGTH AREAS. WHERE IDENTIFIED, LOW STRENGTH MATERIAL IS TO BE EXCAVATED AND COMPACTED FILL INSTALLED AS PER NOTE CF.2.

CF.2 WHERE FILL IS REQUIRED, A FILL MATERIAL APPROVED BY THE SUPERINTENDENT SHALL BE PLACED IN 200mm MAX LAYERS, COMPACTED TO A DENSITY RATIO NOT LESS THAN 98% STANDARD COMPACTION DENSITY AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3798-2007 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".

TIMBER WORK

TW1. ALL TIMBER WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH:
AS1606 --- CODE OF PRACTICE FOR WATER REPELLENT TREATMENT OF TIMBER, JOINERY, & OTHER TIMBER PRODUCTS.
AS1684 --- TIMBER & FRAMING CODE.
AS1720 --- S.A.A. TIMBER STRUCTURES CODE.
AS1728 --- TYPES OF TIMBER SPECIES.

TW2. DESIGN OF TIMBER ELEMENTS IN ACCORDANCE WITH AS 1720 TIMBER STRUCTURES CODE. FIRE RESISTANCE REQUIREMENTS FOR TIMBER STRUCTURES CODE. FIRE RESISTANCE REQUIREMENTS FOR TIMBER IS TO BE ASSESSED IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA.

TW3. MINIMUM STRENGTH OF TIMBER THAT MAY BE USED WITHIN THE WORKS IS TO BE F7 SEASONED SOFTWOOD. U.N.O. ALL OTHER GRADES OF TIMBER WILL BE IDENTIFIED ON THE RELEVANT DRAWING.

TW4. ALL TIMBER TO BE OF HIGH QUALITY, WITH NO MAJOR VISIBLE IMPERFECTIONS SUCH AS KNOTS, DRY ROTTING ETC.

TW5. FIXING, CONNECTIONS OF TIMBER ELEMENTS TO BE UNDERTAKEN IN ACCORDANCE WITH AS1684 & OTHER RELEVANT AUSTRALIAN STANDARDS. ALL EXPOSED TIMBERS TO BE FIXED WITH GALVANIZED NAILS OR FIXINGS.

TW6. THE CONTRACTOR IS TO PROVIDE ALL OPERATIONS INCLUDING GROOVING, REBATING, FRAMING, HOUSING, BEADING, MITERING, SCRIBING, NAILING, SCREWING, GLUING AS NECESSARY TO CARRY OUT WORKS.

ALL FOOTING BEAMS TO BE FOUNDED ON CONSISTENT STRATA.

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

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Project: PROPOSED RECEPTION HALL
NO.10 PARRY STREET, JUGIONG

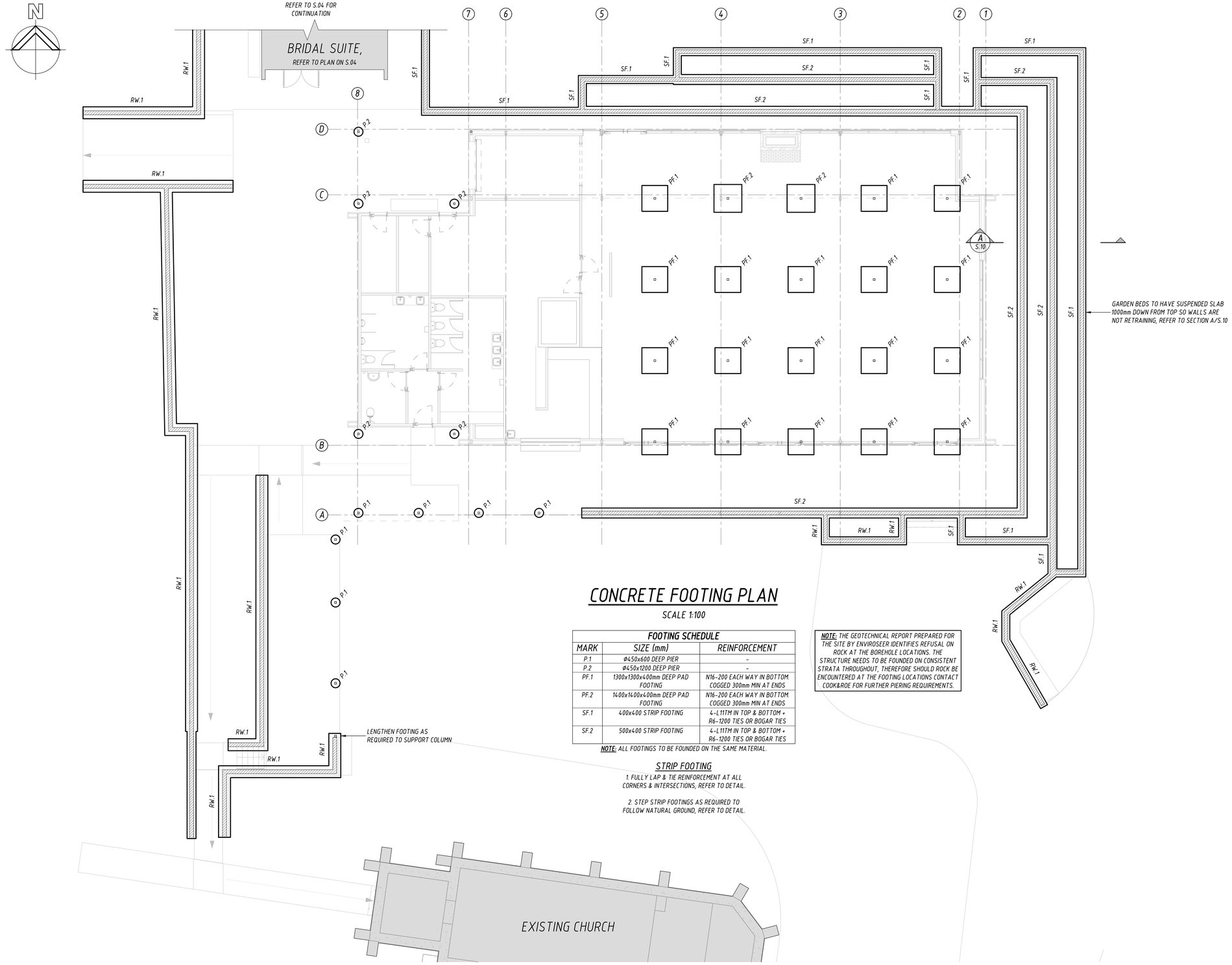
Title: GENERAL NOTES

Client: CHAPEL 1872 ESTATE

Drawn	JTB	Designed	Approved
Scale	-	Date	AUGUST '23'

This Drawing must not be used for Construction unless signed as Approved

Job No: 230168 | Drawing No: S.01 | Rev: A | Original Size A1



CONCRETE FOOTING PLAN

SCALE 1:100

FOOTING SCHEDULE		
MARK	SIZE (mm)	REINFORCEMENT
P.1	ø450x600 DEEP PIER	-
P.2	ø450x1200 DEEP PIER	-
PF.1	1300x1300x400mm DEEP PAD FOOTING	N16-200 EACH WAY IN BOTTOM. COGGED 300mm MIN AT ENDS
PF.2	1400x1400x400mm DEEP PAD FOOTING	N16-200 EACH WAY IN BOTTOM. COGGED 300mm MIN AT ENDS
SF.1	400x400 STRIP FOOTING	4-L11TM IN TOP & BOTTOM + R6-1200 TIES OR BOGAR TIES
SF.2	500x400 STRIP FOOTING	4-L11TM IN TOP & BOTTOM + R6-1200 TIES OR BOGAR TIES

NOTE: ALL FOOTINGS TO BE FOUNDED ON THE SAME MATERIAL.

NOTE: THE GEOTECHNICAL REPORT PREPARED FOR THE SITE BY ENVIROSEER IDENTIFIES REFUSAL ON ROCK AT THE BOREHOLE LOCATIONS. THE STRUCTURE NEEDS TO BE FOUNDED ON CONSISTENT STRATA THROUGHOUT, THEREFORE SHOULD ROCK BE ENCOUNTERED AT THE FOOTING LOCATIONS CONTACT COOK&ROE FOR FURTHER PIERING REQUIREMENTS.

STRIP FOOTING

1. FULLY LAP & TIE REINFORCEMENT AT ALL CORNERS & INTERSECTIONS, REFER TO DETAIL.

2. STEP STRIP FOOTINGS AS REQUIRED TO FOLLOW NATURAL GROUND, REFER TO DETAIL.

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 1000 2000 3000 4000 5000mm
SCALE 1:100 AT ORIGINAL SIZE

DO NOT SCALE

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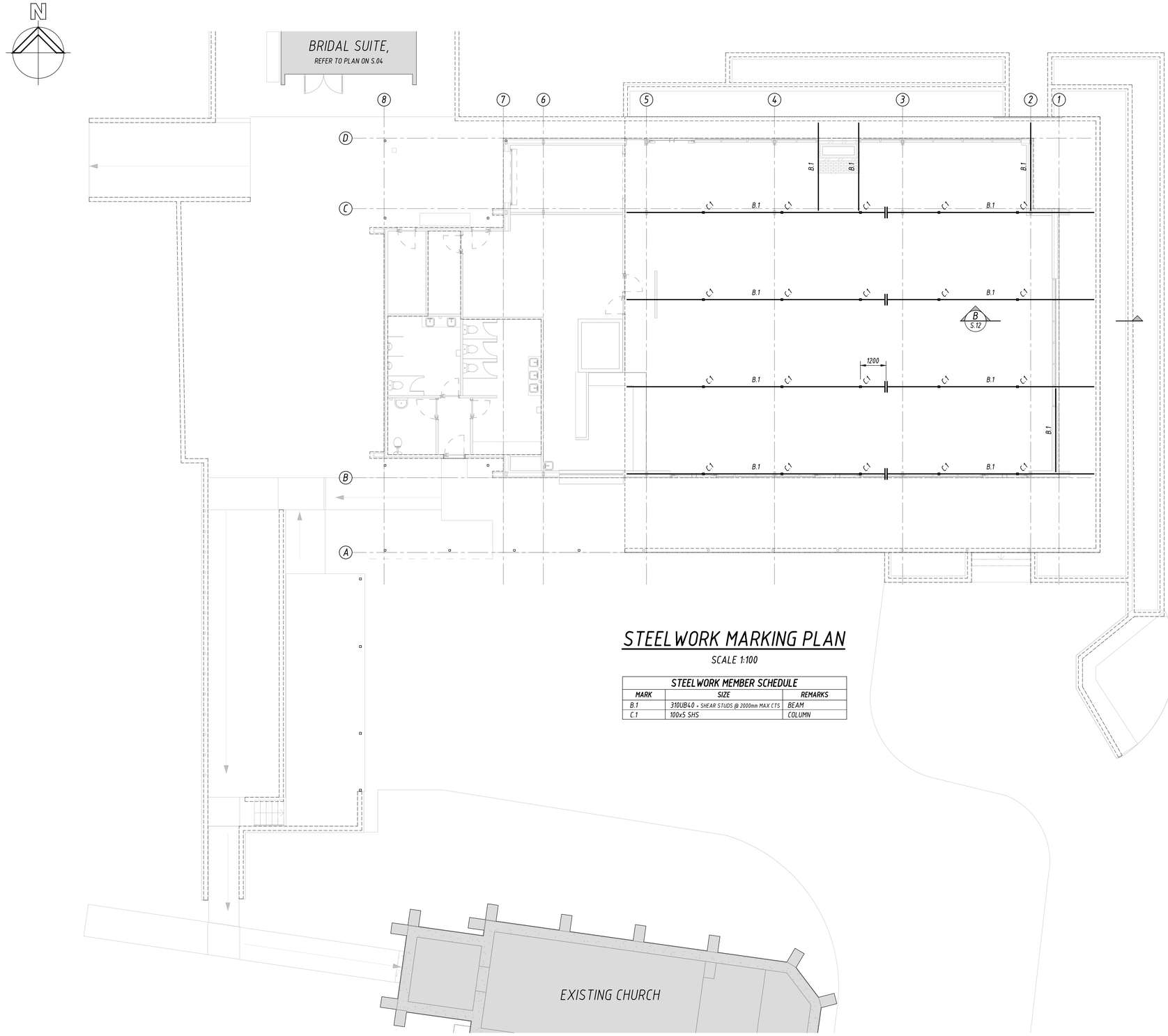
Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

Title: **CONCRETE FOOTING PLAN**

Client: **CHAPEL 1872 ESTATE**

Drawn	JTB	Designed		Approved	
Scale	AS SHOWN	Date	AUGUST '23'	This Drawing must not be used for Construction unless signed as Approved	
Job No: 230168	Drawing No: S.02	Rev: A	Original Size A1		



STEELWORK MARKING PLAN

SCALE 1:100

STEELWORK MEMBER SCHEDULE		
MARK	SIZE	REMARKS
B.1	310UB40 + SHEAR STUDS @ 2000mm MAX CTS	BEAM
C.1	100x5 SHS	COLUMN

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 1000 2000 3000 4000 5000mm

SCALE 1:100 AT ORIGINAL SIZE

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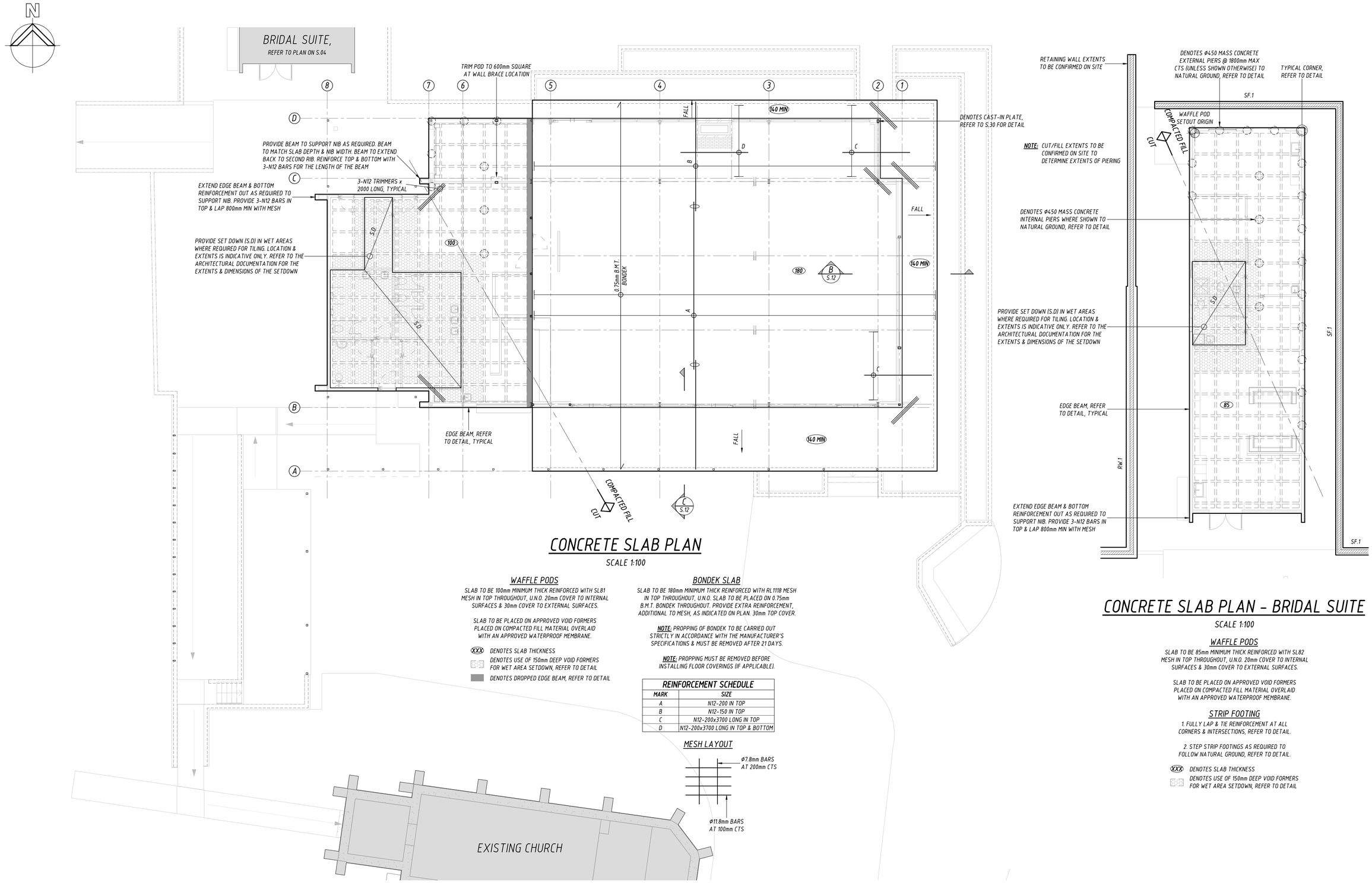
Project
PROPOSED RECEPTION HALL
NO.10 PARRY STREET, JUGIONG

Title
STEELWORK MARKING PLAN

Client **CHAPEL 1872 ESTATE**

Drawn	JTB	Designed		Approved	
Scale	AS SHOWN	Date	AUGUST '23'	This Drawing must not be used for Construction unless signed as Approved	
Job No: 230168	Drawing No: S.03	Rev: A	Original Size A1		



CONCRETE SLAB PLAN

SCALE 1:100

WAFFLE PODS

SLAB TO BE 100mm MINIMUM THICK REINFORCED WITH SL81 MESH IN TOP THROUGHOUT, U.N.O. 20mm COVER TO INTERNAL SURFACES & 30mm COVER TO EXTERNAL SURFACES.

SLAB TO BE PLACED ON APPROVED VOID FORMERS PLACED ON COMPACTED FILL MATERIAL OVERLAID WITH AN APPROVED WATERPROOF MEMBRANE.

(XXX) DENOTES SLAB THICKNESS

DENOTES USE OF 150mm DEEP VOID FORMERS FOR WET AREA SETDOWN, REFER TO DETAIL

DENOTES DROPPED EDGE BEAM, REFER TO DETAIL

BONDEK SLAB

SLAB TO BE 180mm MINIMUM THICK REINFORCED WITH RL1118 MESH IN TOP THROUGHOUT, U.N.O. SLAB TO BE PLACED ON 0.75mm B.M.T. BONDEK THROUGHOUT. PROVIDE EXTRA REINFORCEMENT, ADDITIONAL TO MESH, AS INDICATED ON PLAN. 30mm TOP COVER.

NOTE: PROPPING OF BONDEK TO BE CARRIED OUT STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS & MUST BE REMOVED AFTER 21 DAYS.

NOTE: PROPPING MUST BE REMOVED BEFORE INSTALLING FLOOR COVERINGS (IF APPLICABLE).

REINFORCEMENT SCHEDULE

MARK	SIZE
A	N12-200 IN TOP
B	N12-150 IN TOP
C	N12-200x3700 LONG IN TOP
D	N12-200x3700 LONG IN TOP & BOTTOM

MESH LAYOUT

CONCRETE SLAB PLAN - BRIDAL SUITE

SCALE 1:100

WAFFLE PODS

SLAB TO BE 85mm MINIMUM THICK REINFORCED WITH SL82 MESH IN TOP THROUGHOUT, U.N.O. 20mm COVER TO INTERNAL SURFACES & 30mm COVER TO EXTERNAL SURFACES.

SLAB TO BE PLACED ON APPROVED VOID FORMERS PLACED ON COMPACTED FILL MATERIAL OVERLAID WITH AN APPROVED WATERPROOF MEMBRANE.

STRIP FOOTING

1. FULLY LAP & TIE REINFORCEMENT AT ALL CORNERS & INTERSECTIONS, REFER TO DETAIL.

2. STEP STRIP FOOTINGS AS REQUIRED TO FOLLOW NATURAL GROUND, REFER TO DETAIL.

(XXX) DENOTES SLAB THICKNESS

DENOTES USE OF 150mm DEEP VOID FORMERS FOR WET AREA SETDOWN, REFER TO DETAIL

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 1000 2000 3000 4000 5000mm
SCALE 1:100 AT ORIGINAL SIZE

DO NOT SCALE

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Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

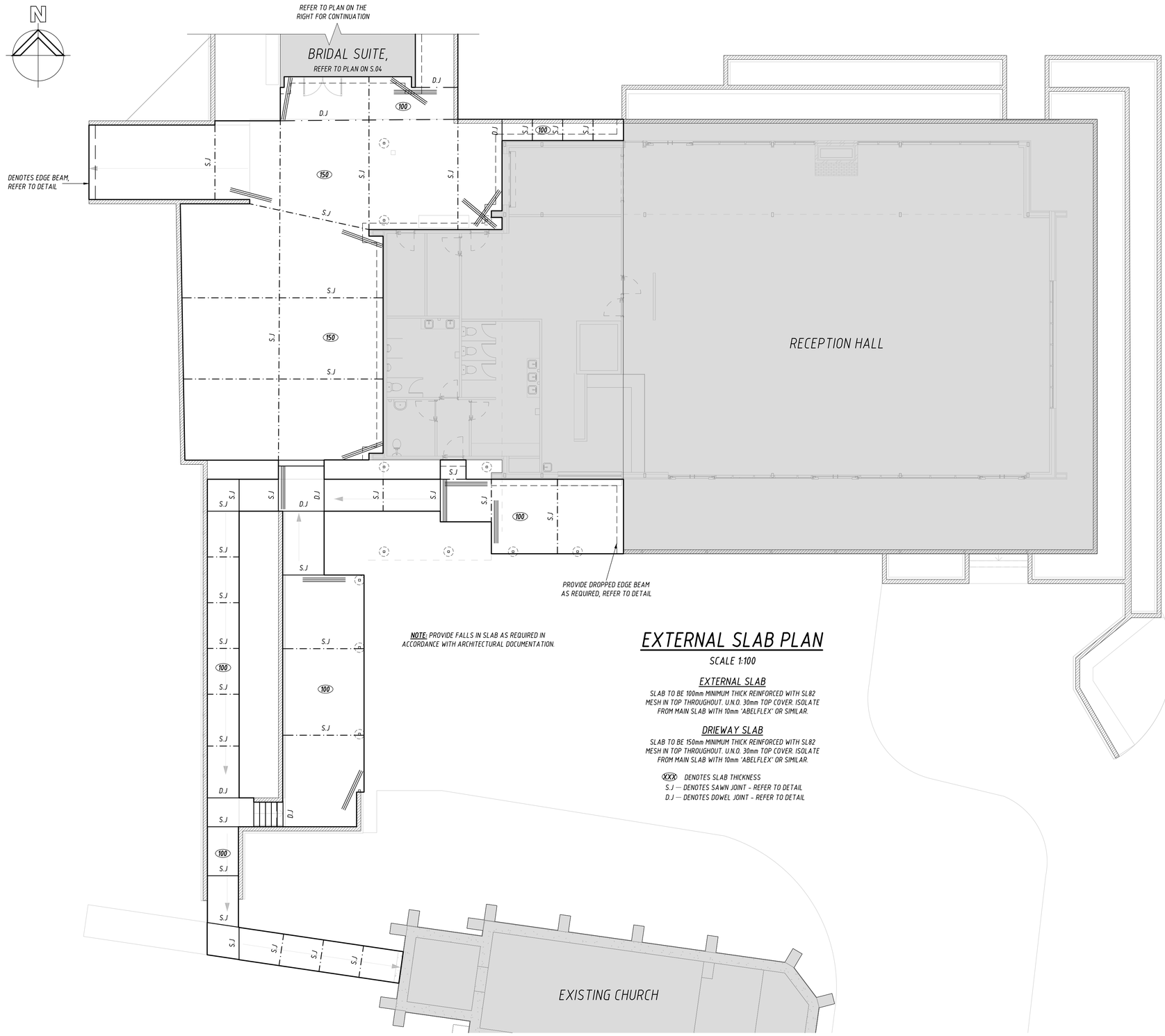
Title: **CONCRETE SLAB PLAN**

Client: **CHAPEL 1872 ESTATE**

Drawn	JTB	Designed	Approved
Scale	AS SHOWN	Date	AUGUST '23'

This Drawing must not be used for Construction unless signed as Approved

Job No: **230168** Drawing No: **S.04** Rev: **A** Original Size **A1**



NOTE: PROVIDE FALLS IN SLAB AS REQUIRED IN ACCORDANCE WITH ARCHITECTURAL DOCUMENTATION.

EXTERNAL SLAB PLAN

SCALE 1:100

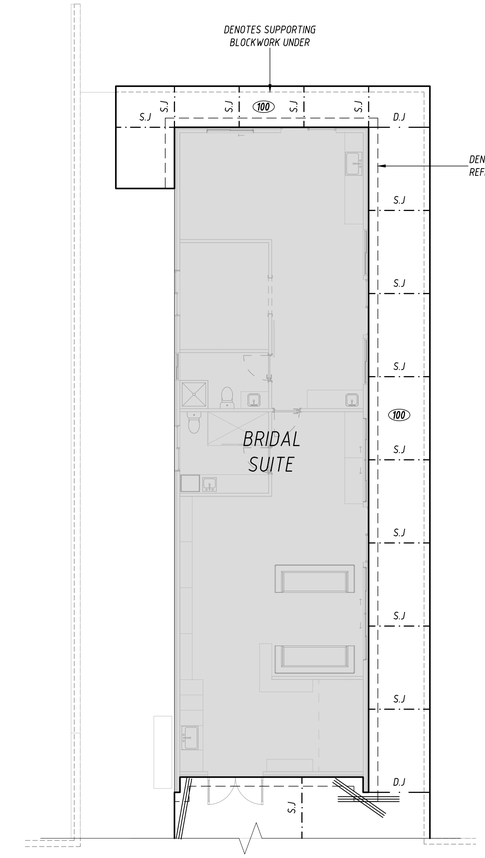
EXTERNAL SLAB

SLAB TO BE 100mm MINIMUM THICK REINFORCED WITH SL82 MESH IN TOP THROUGHOUT. U.N.O. 30mm TOP COVER. ISOLATE FROM MAIN SLAB WITH 10mm 'ABELFLEX' OR SIMILAR.

DRIEWAY SLAB

SLAB TO BE 150mm MINIMUM THICK REINFORCED WITH SL82 MESH IN TOP THROUGHOUT. U.N.O. 30mm TOP COVER. ISOLATE FROM MAIN SLAB WITH 10mm 'ABELFLEX' OR SIMILAR.

(XXX) DENOTES SLAB THICKNESS
S.J — DENOTES SAWN JOINT - REFER TO DETAIL
D.J — DENOTES DOWEL JOINT - REFER TO DETAIL



EXTERNAL SLAB PLAN - BRIDAL SUITE

SCALE 1:100

EXTERNAL SLAB

SLAB TO BE 100mm MINIMUM THICK REINFORCED WITH SL82 MESH IN TOP THROUGHOUT. U.N.O. 30mm TOP COVER. ISOLATE FROM MAIN SLAB WITH 10mm 'ABELFLEX' OR SIMILAR.

(XXX) DENOTES SLAB THICKNESS
S.J — DENOTES SAWN JOINT - REFER TO DETAIL
D.J — DENOTES DOWEL JOINT - REFER TO DETAIL

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 1000 2000 3000 4000 5000mm
SCALE 1:100 AT ORIGINAL SIZE

DO NOT SCALE

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Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

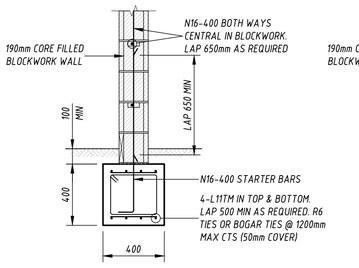
Title: **EXTERNAL SLAB PLAN**

Client: **CHAPEL 1872 ESTATE**

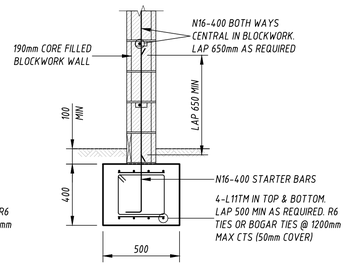
Drawn	JTB	Designed	Approved
Scale	AS SHOWN	Date	AUGUST '23'

This Drawing must not be used for Construction unless signed as Approved

Job No: **230168** | Drawing No: **S.05** | Rev: **A** | Original Size **A1**

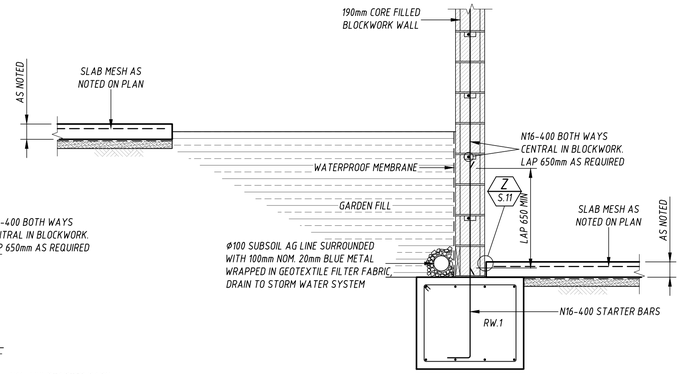


SF.1 DETAIL

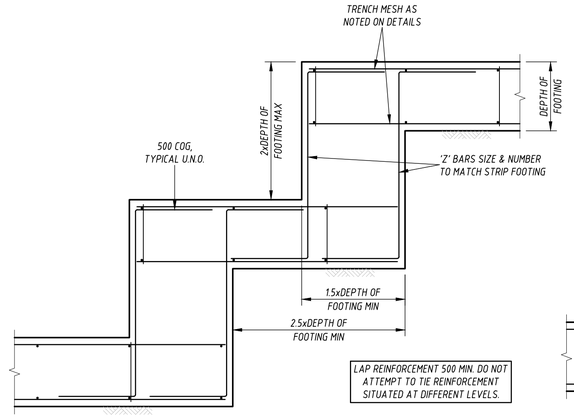


SF.2 DETAIL

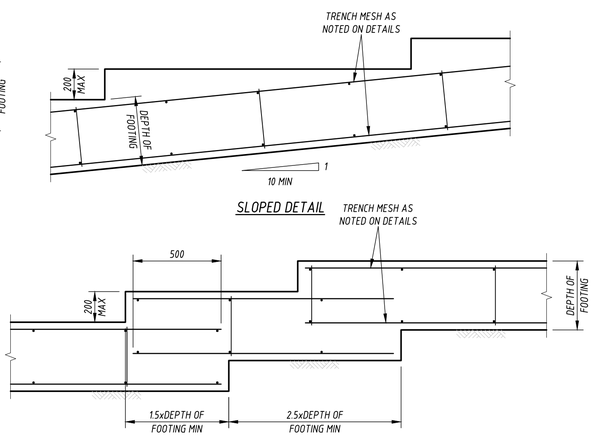
STRIP FOOTING DETAILS



RW.1 DETAIL AT OUTDOOR CEREMONY/ARBOR



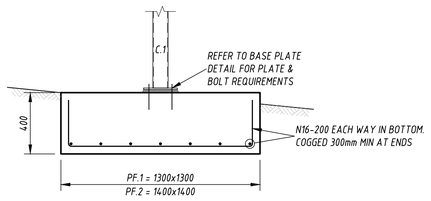
900mm MAX STEP



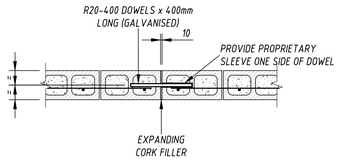
200mm MAX STEP

TYPICAL STRIP FOOTING STEP DETAILS

(RETAINING WALL FOOTING STEP SIMILAR)

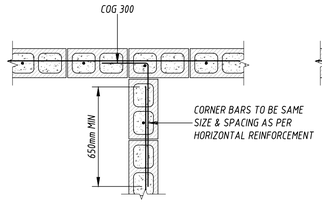


PAD FOOTING DETAIL

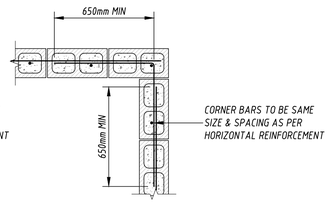


STANDARD COURSE

(PROVIDE JOINTS @ 8m MAX CTS)



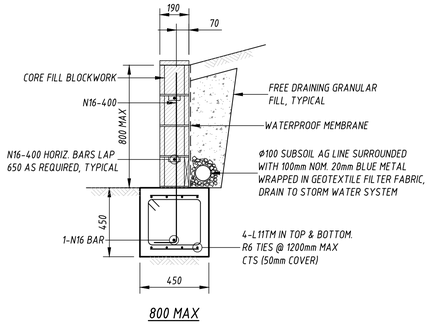
JUNCTION DETAIL



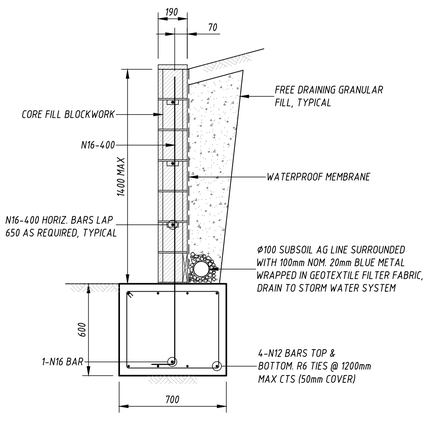
CORNER DETAIL

TYPICAL BLOCKWORK DETAILS

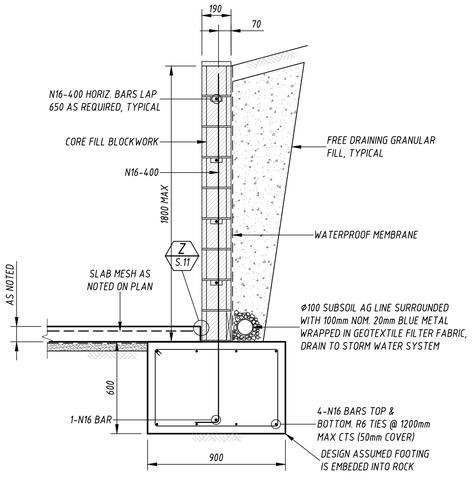
SCALE 1:20



800 MAX



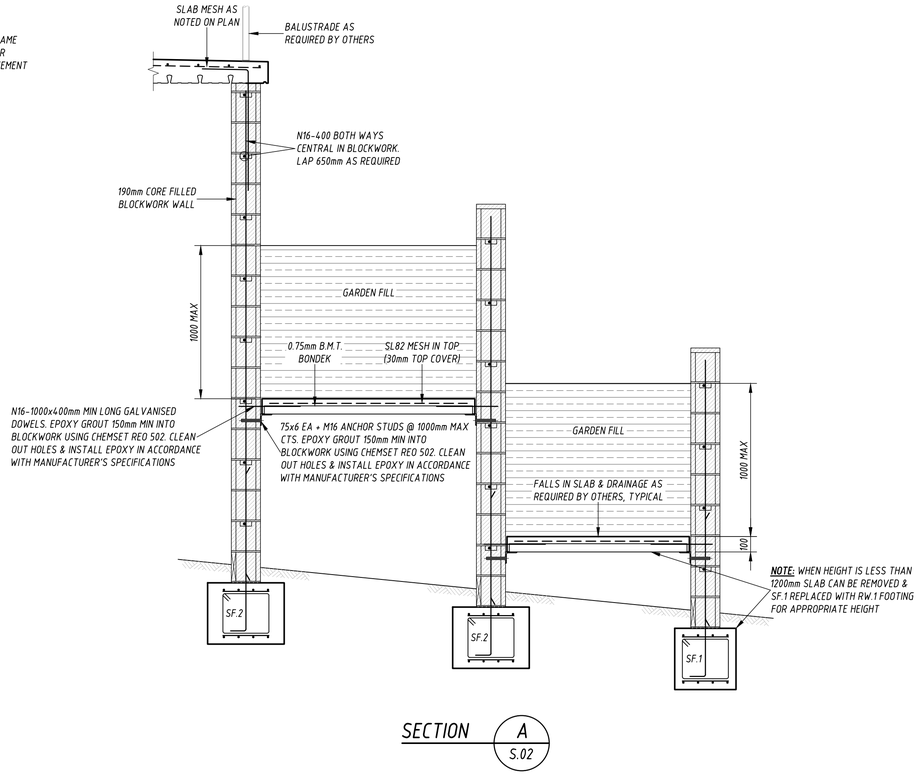
1400 MAX



1800 MAX

RETAINING WALL (RW.1) DETAILS

SCALE 1:20



SECTION A S.02

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 200 400 600 800 1000mm

SCALE 1:20 AT ORIGINAL SIZE

DO NOT SCALE

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Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

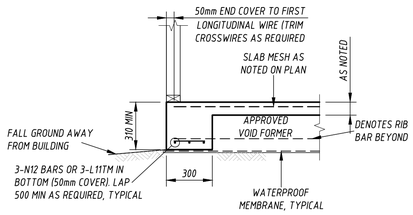
Title: **CONCRETE DETAILS '1'**

Client: **CHAPEL 1872 ESTATE**

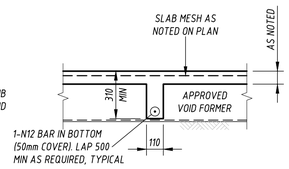
Drawn	JTB	Designed	Approved
Scale	AS SHOWN	Date	AUGUST '23'

This Drawing must not be used for Construction unless signed as Approved

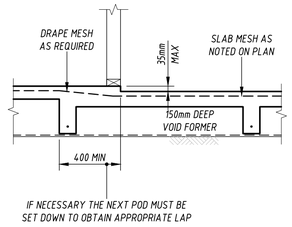
Job No: **230168** Drawing No: **S.10** Rev: **A** Original Size **A1**



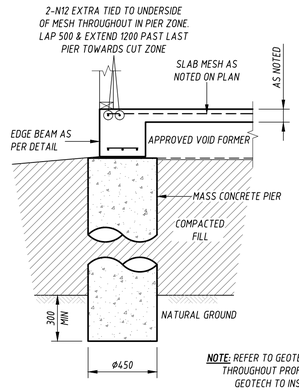
EDGE BEAM DETAIL



INTERNAL RIB DETAIL

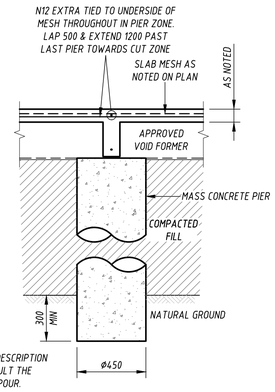


SLAB SETDOWN (S.D) DETAIL



EXTERNAL MASS CONCRETE PIER DETAIL

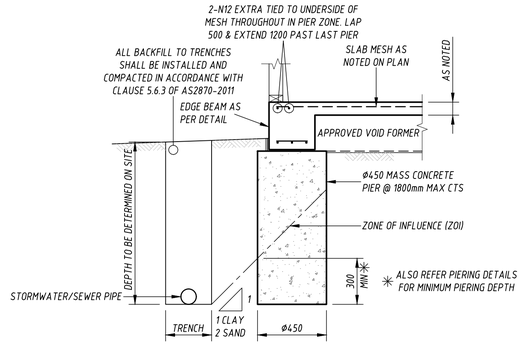
WHERE REQUIRED



INTERNAL MASS CONCRETE PIER DETAIL

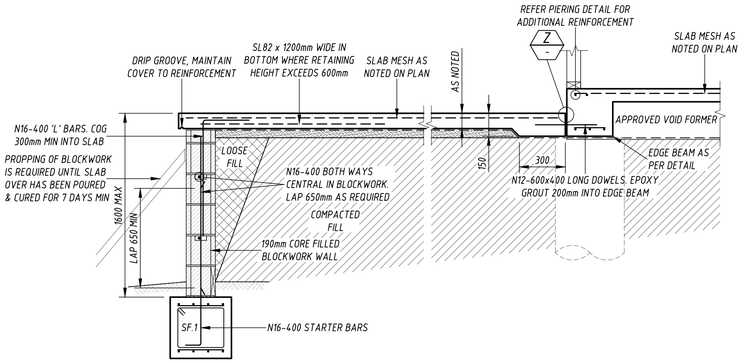
WHERE REQUIRED

NOTE: REFER TO GEOTECH REPORT FOR SOIL DESCRIPTION THROUGHOUT PROFILE. IF IN DOUBT, CONSULT THE GEOTECH TO INSPECT PIERS PRIOR TO POUR.

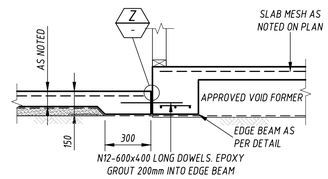


SEWER/STORMWATER PIERING DETAIL

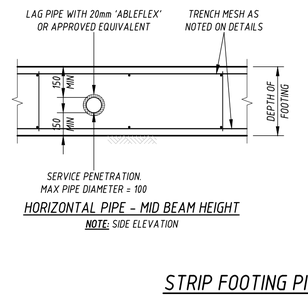
NOTE: IT IS THE BUILDERS RESPONSIBILITY TO DETERMINE IF PIERING IS REQUIRED AS THE DEPTH OF THE SERVICES & LOCATION HAS NOT BEEN MADE AVAILABLE TO THIS OFFICE



BRIDAL SUITE VERANDAH SLAB DETAIL

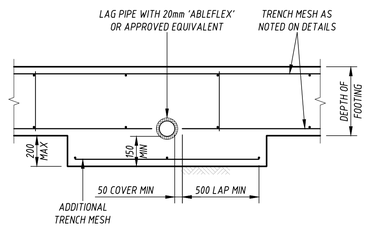


EXTERNAL SLAB TO EDGE BEAM DETAIL



HORIZONTAL PIPE - MID BEAM HEIGHT

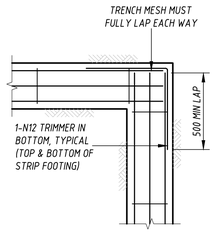
NOTE: SIDE ELEVATION



HORIZONTAL PIPE - LOWER BEAM HEIGHT

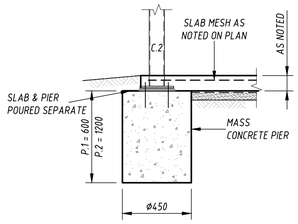
NOTE: SIDE ELEVATION

STRIP FOOTING PIPE PENETRATION DETAILS



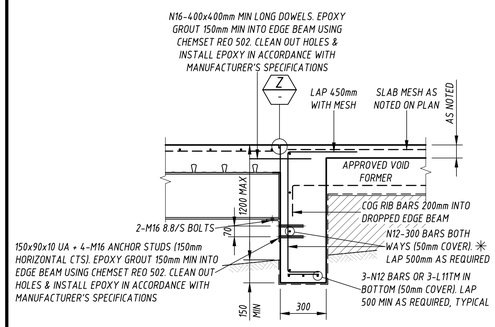
TYPICAL CORNER DETAIL

PLAN VIEW: TYPICAL AT ALL CORNERS



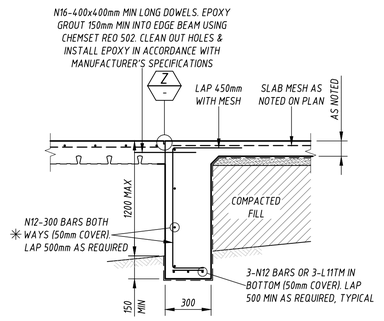
PIER (P.1) DETAIL

(P.2 SIMILAR)



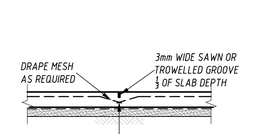
EXTERNAL DROPPED EDGE BEAM DETAIL

✳ WHERE DROPPED EDGE IS LESS THAN 450mm ABOVE GROUND, N12-300 BARS EACH WAY MAY BE OMITTED



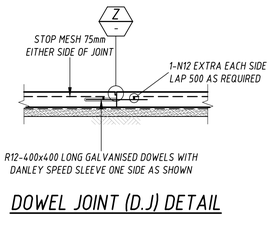
EXTERNAL PAVEMENT TO BONDEK SLAB DETAIL

✳ WHERE DROPPED EDGE IS LESS THAN 450mm ABOVE GROUND, N12-300 BARS EACH WAY MAY BE OMITTED

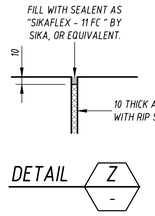


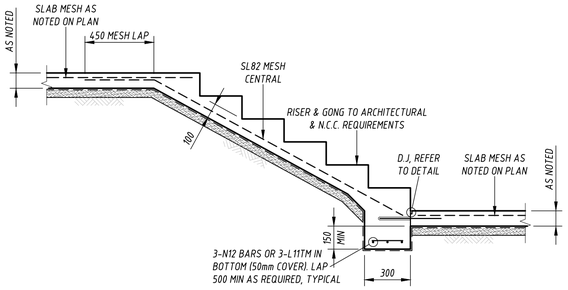
SAWN CONTROL JOINT (S.J) DETAIL

NOTE: SAWCUT TO BE MADE WITHIN 16 HOURS MAX. AFTER SLAB IS POURED



DOWEL JOINT (D.J) DETAIL





CONCRETE STAIR DETAIL

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 100 200 300 400 500mm
SCALE 1:10 AT ORIGINAL SIZE

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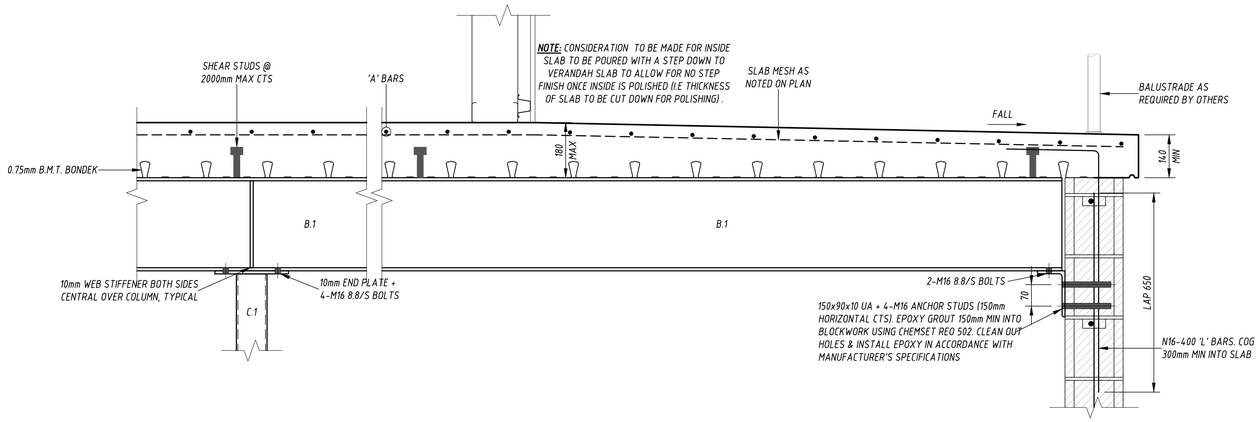
Project
PROPOSED RECEPTION HALL
NO.10 PARRY STREET, JUGIONG

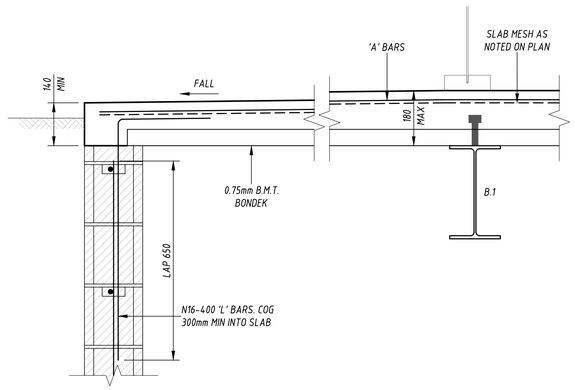
Title
CONCRETE DETAILS '2'

Client **CHAPEL 1872 ESTATE**

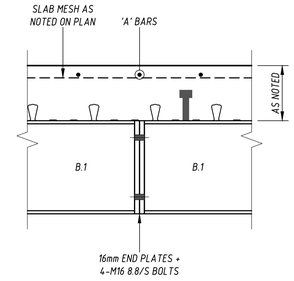
Drawn	JTB	Designed		Approved	
Scale	AS SHOWN	Date	AUGUST '23'	This Drawing must not be used for Construction unless signed as Approved	
Job No:	230168	Drawing No:	S.11	Rev: A	Original Size A1



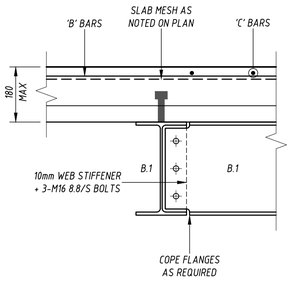
SECTION B
SCALE 1:10 — S.03



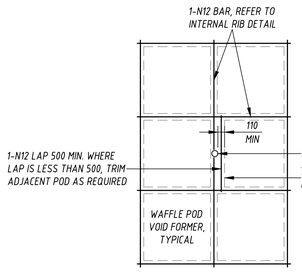
SECTION C
SCALE 1:10 — S.04



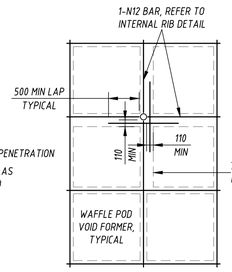
TYPICAL B.1 SPLICE DETAIL
SCALE 1:10



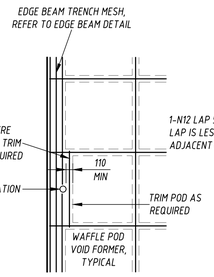
B.1 TO B.1 DETAIL
SCALE 1:10



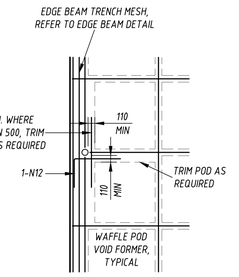
PIPE PENETRATION TO INTERNAL RIB DETAIL
SCALE 1:50



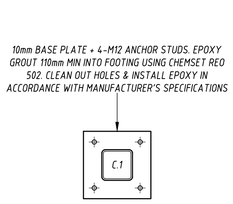
PIPE PENETRATION @ INTERNAL RIB INTERSECTION
SCALE 1:50



PIPE PENETRATION TO EDGE BEAM DETAIL
SCALE 1:50

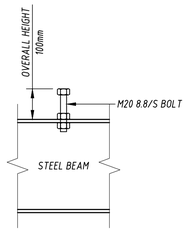


PIPE PENETRATION @ EDGE BEAM & INTERNAL RIB DETAIL
SCALE 1:50



TYPICAL BASE PLATE DETAIL
SCALE 1:10

NOTE: PROVIDE 20mm NOMINAL GROUT UNDER BASE PLATES TO ACCOMMODATE PACKING/LEVELING OF COLUMN FOR INSTALLATION.



TYPICAL SHEAR CONNECTOR DETAIL
SCALE 1:10

NOTE: DETAILS SHOW DESIGN INTENT. BUILDER/WORKSHOP DETAILER TO ACCURATELY DETERMINE POSITION OF FRAMING AND CONTACT COOK&ROE IF ANYTHING DIFFERS FROM THE DETAILS SHOWN

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 100 200 300 400 500mm
SCALE 1:10 AT ORIGINAL SIZE

0 500 1000 1500 2000 2500mm
SCALE 1:50 AT ORIGINAL SIZE

DO NOT SCALE

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Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

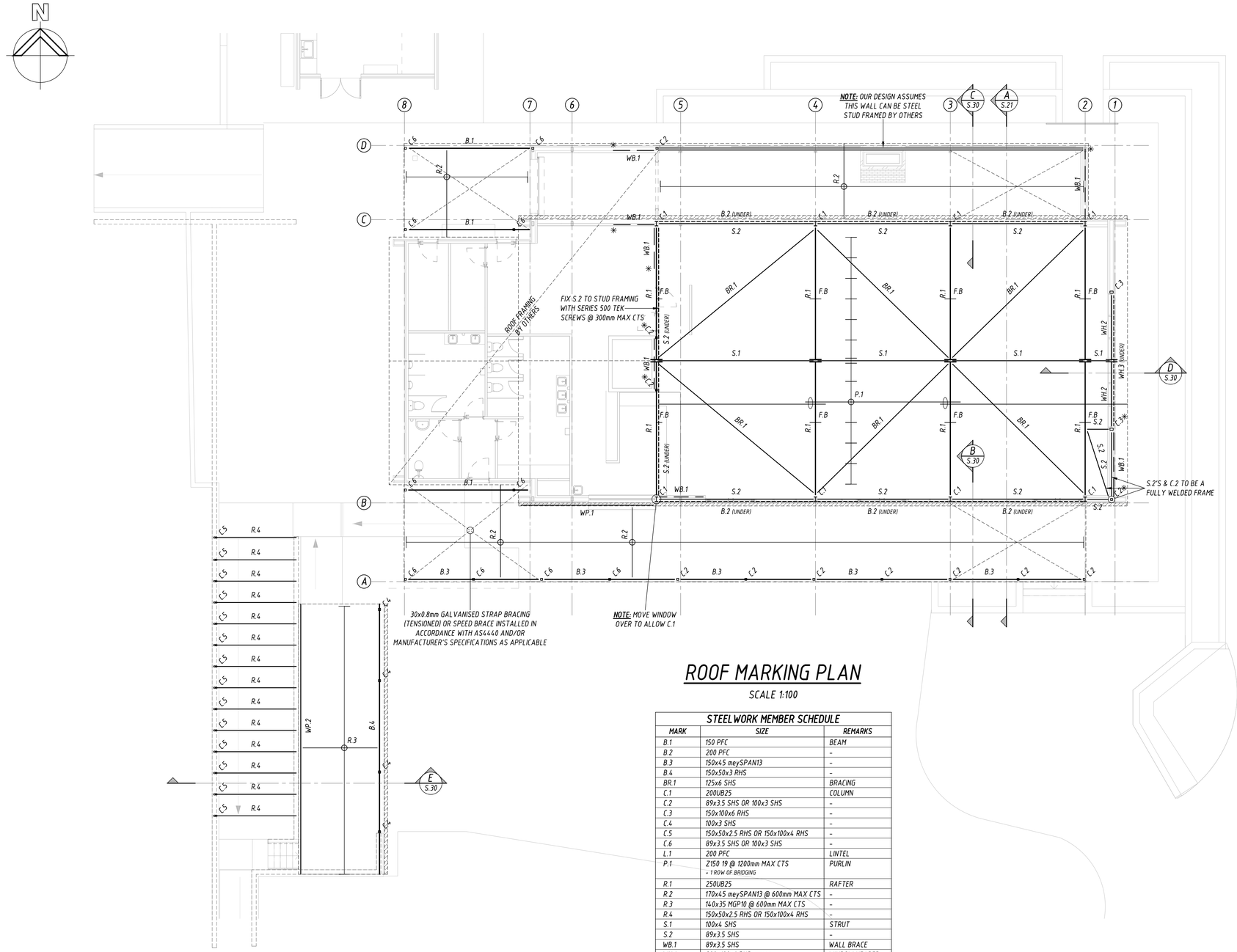
Title: **CONCRETE DETAILS '3'**

Client: **CHAPEL 1872 ESTATE**

Drawn	JTB	Designed	Approved
Scale	AS SHOWN	Date	AUGUST '23'

This Drawing must not be used for Construction unless signed as Approved

Job No: **230168** Drawing No: **S.12** Rev: **A** Original Size: **A1**



ROOF MARKING PLAN

SCALE 1:100

STEELWORK MEMBER SCHEDULE		
MARK	SIZE	REMARKS
B.1	150 PFC	BEAM
B.2	200 PFC	-
B.3	150x45 meySPAN13	-
B.4	150x50x3 RHS	-
BR.1	125x6 SHS	BRACING
C.1	200UB25	COLUMN
C.2	89x3.5 SHS OR 100x3 SHS	-
C.3	150x100x6 RHS	-
C.4	100x3 SHS	-
C.5	150x50x2.5 RHS OR 150x100x4 RHS	-
C.6	89x3.5 SHS OR 100x3 SHS	-
L.1	200 PFC	LINTEL
P.1	Z150 19 @ 1200mm MAX CTS + 1 ROW OF BRIDGING	PURLIN
R.1	250UB25	RAFTER
R.2	170x45 meySPAN13 @ 600mm MAX CTS	-
R.3	140x35 MGP10 @ 600mm MAX CTS	-
R.4	150x50x2.5 RHS OR 150x100x4 RHS	-
S.1	100x4 SHS	STRUT
S.2	89x3.5 SHS	-
WB.1	89x3.5 SHS	WALL BRACE
WH.1	200x100x6 RHS (ON FLAT)	WINDOW HEADER
WH.2	200 PFC	-
WH.3	150x6 SHS	-
WP.1	170x45 meySPAN13	WALL PLATE
WP.2	150x50x3 RHS	-

F.B - DENOTES FLY BRACING, REFER TO DETAIL.

NOTE: DESIGN ASSUMES 0.42mm B.M.T. CUSTOM-ORB ROOF SHEETING U.N.O.

DENOTES GUTTER

NOTE: ALL ROOF FRAMING & CONNECTIONS TO BE IN ACCORDANCE WITH AS1684.2-2021/NASH DOCUMENTATION.

DENOTES LOAD BEARING STUD FRAMING, BY OTHERS TO AS1684.2-2021/NASH DOCUMENTATION.

✳ DENOTES CAST-IN BASE PLATE, REFER TO DETAIL

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 1000 2000 3000 4000 5000mm
SCALE 1:100 AT ORIGINAL SIZE

DO NOT SCALE

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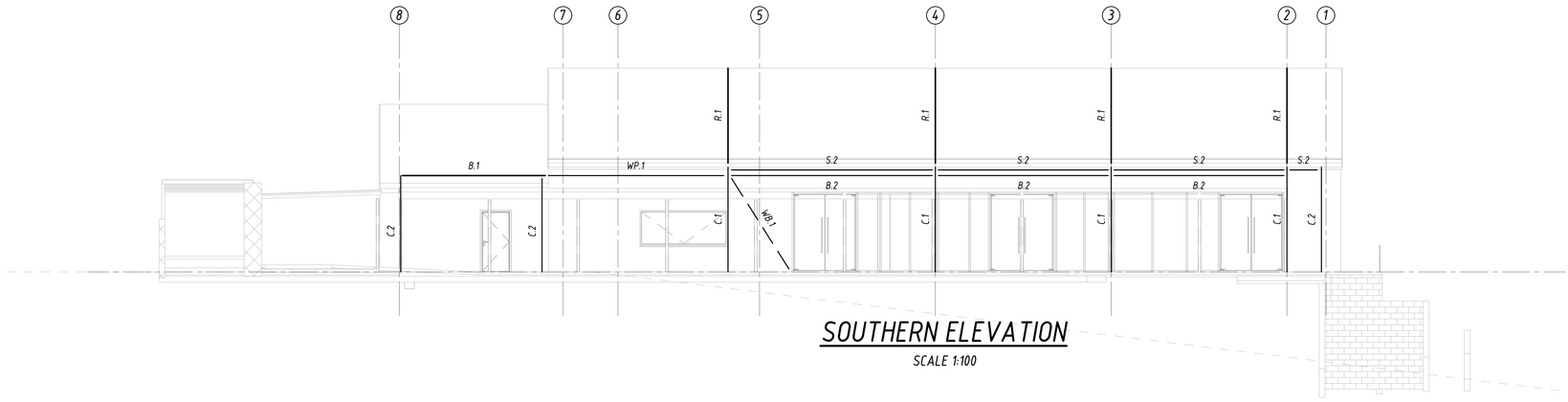
Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

Title: **ROOF MARKING PLAN**

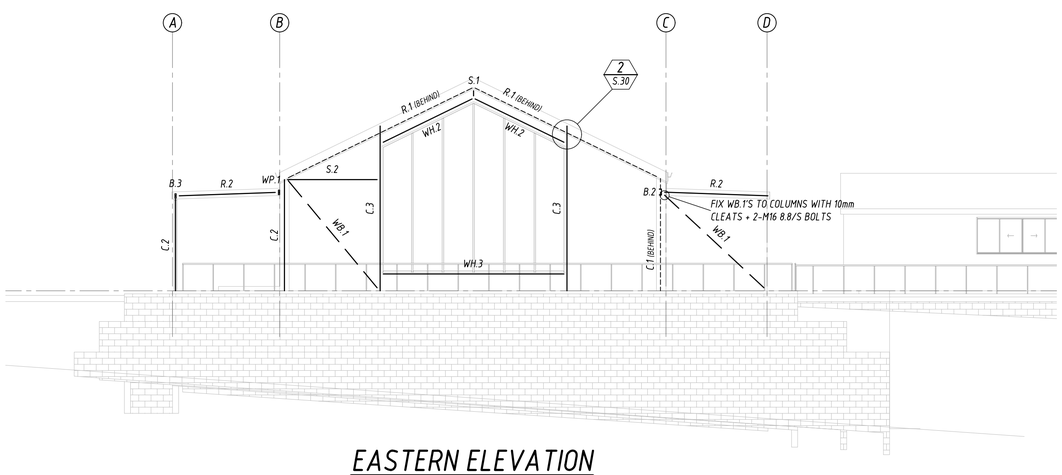
Client: **CHAPEL 1872 ESTATE**

Drawn	JTB	Designed		Approved	
Scale	AS SHOWN	Date	AUGUST '23'	This Drawing must not be used for Construction unless signed as Approved	
Job No:	230168	Drawing No:	S.20	Rev: A	Original Size A1



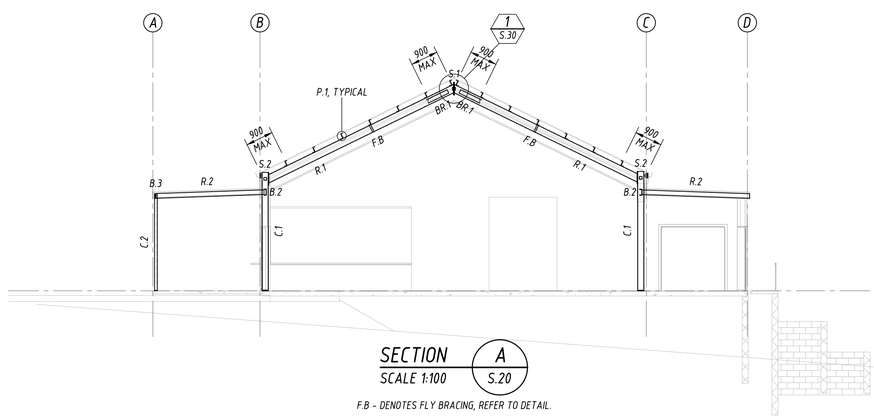
SOUTHERN ELEVATION

SCALE 1:100



EASTERN ELEVATION

SCALE 1:100



SECTION A / S.20

SCALE 1:100

F.B - DENOTES FLY BRACING, REFER TO DETAIL.

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 1000 2000 3000 4000 5000mm

SCALE 1:100 AT ORIGINAL SIZE

DO NOT SCALE

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Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

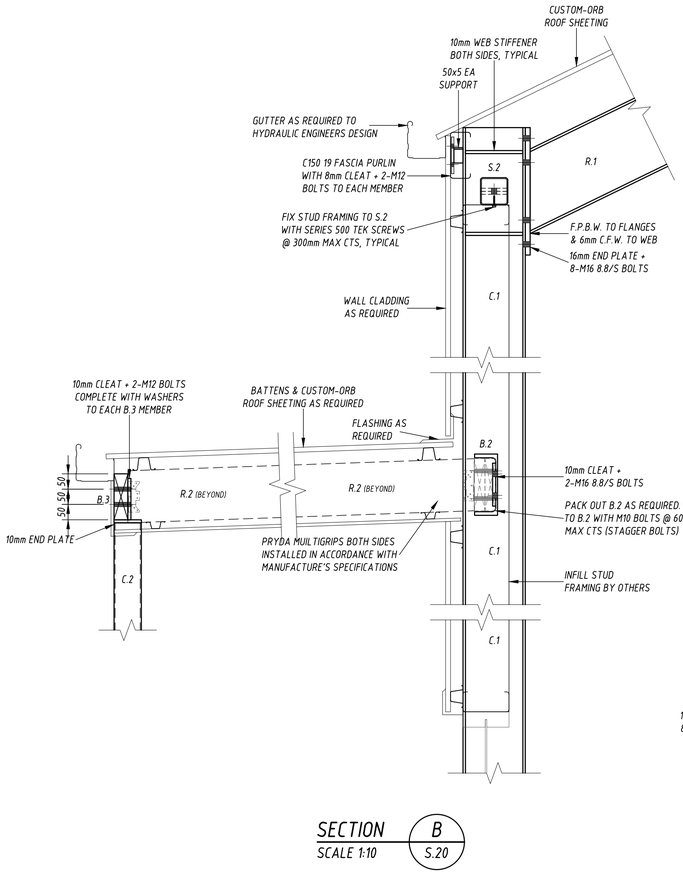
Title: **STEELWORK ELEVATIONS & SECTION**

Client: **CHAPEL 1872 ESTATE**

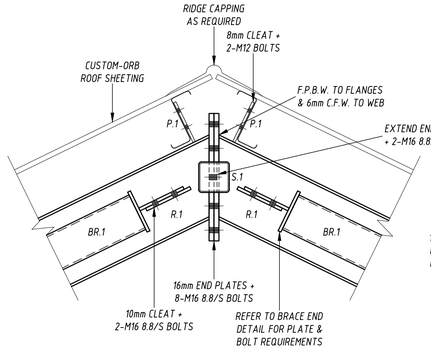
Drawn	JTB	Designed	Approved
Scale	AS SHOWN	Date	AUGUST '23'

This Drawing must not be used for Construction unless signed as Approved

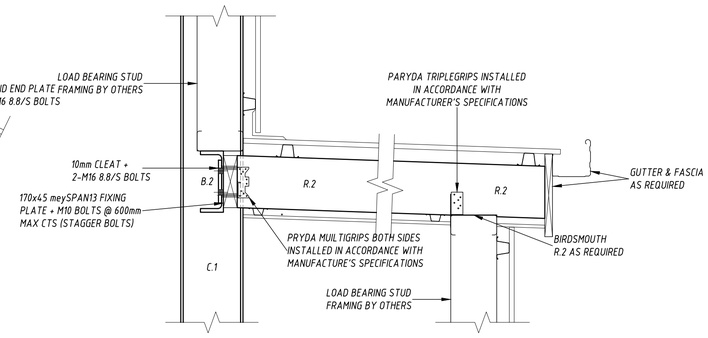
Job No: **230168** Drawing No: **S.21** Rev: **A** Original Size **A1**



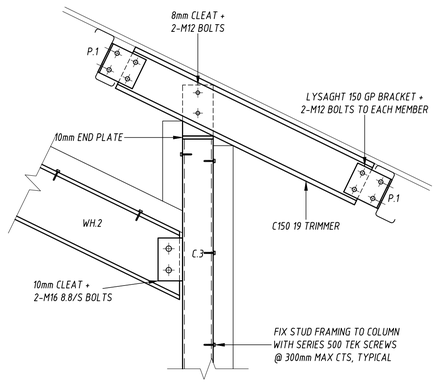
SECTION B
SCALE 1:10 S.20



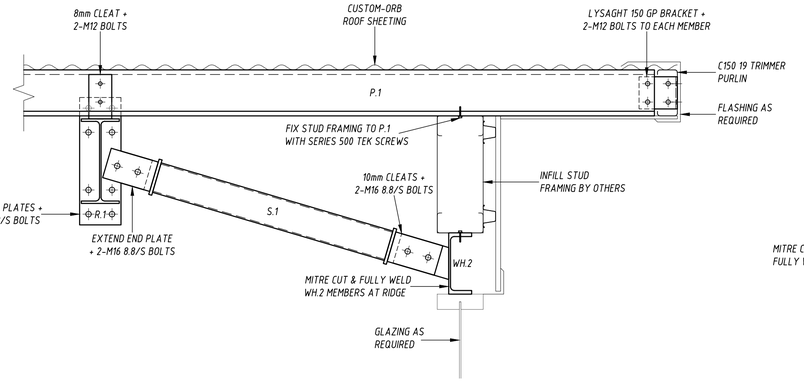
DETAIL 1
SCALE 1:10 S.21



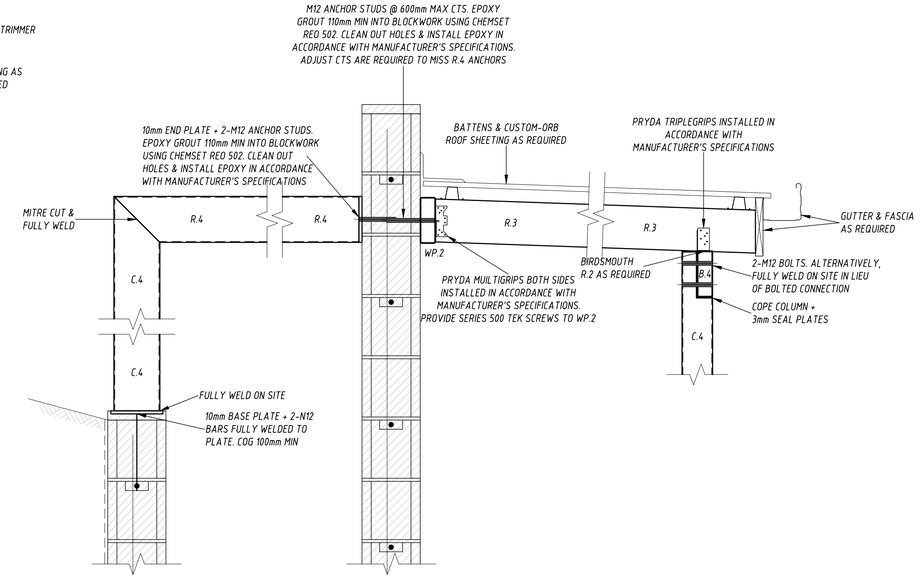
SECTION C
SCALE 1:10 S.20



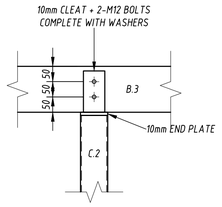
DETAIL 2
SCALE 1:10 S.21



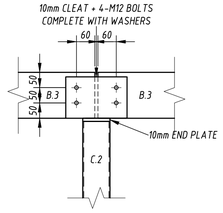
SECTION D
SCALE 1:10 S.20



SECTION E
SCALE 1:10 S.20

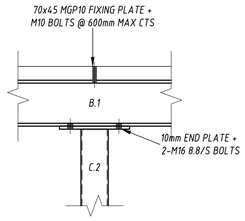


B.3 CONTINUOUS DETAIL

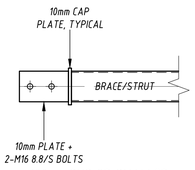


B.3 STOP/START DETAIL

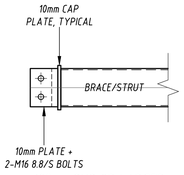
B.3 TO C.2 DETAILS
SCALE 1:10



B.1 TO C.2 DETAIL
SCALE 1:10

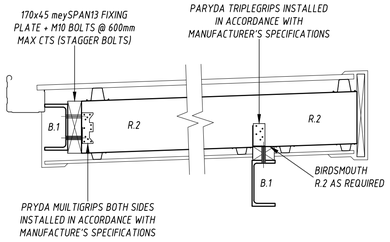


100mm SHS OR SMALLER

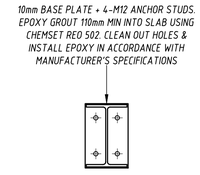


125mm SHS OR LARGER

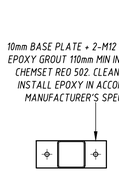
BRACE END DETAILS
SCALE 1:10



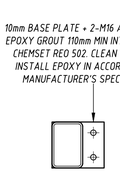
LOADING DOCK ROOF DETAIL
SCALE 1:10



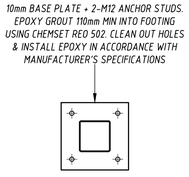
C.1 DETAIL



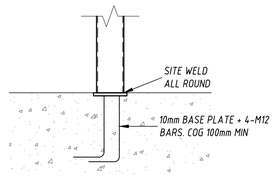
C.2 DETAIL



C.3 DETAIL



C.4 DETAIL
(C.6 SIMILAR)



CAST-IN DETAIL

TYPICAL BASE PLATE DETAILS
SCALE 1:10

NOTE: PROVIDE 20mm NOMINAL GROUT UNDER BASE PLATES TO ACCOMMODATE PACKING/LEVELING OF COLUMN FOR INSTALLATION.

NOTE: DETAILS SHOW DESIGN INTENT. BUILDER/WORKSHOP DETAILER TO ACCURATELY DETERMINE POSITION OF FRAMING AND CONTACT COOK&ROE IF ANYTHING DIFFERS FROM THE DETAILS SHOWN

FOR APPROVAL

No	Revision Description	Drawn	Approved	Date
A	ISSUED FOR APPROVAL	JTB	DOC	03.08.23

0 100 200 300 400 500mm
SCALE 1:10 AT ORIGINAL SIZE

DO NOT SCALE

COOK ROE
STRUCTURAL ENGINEERS
P 02 6360 2561 F 02 6360 2907
E OFFICE@COOKANDROE.COM.AU
PO BOX 1935, ORANGE NSW 2800
COOKANDROE.COM.AU

Project: **PROPOSED RECEPTION HALL NO.10 PARRY STREET, JUGIONG**

Title: **ROOF DETAILS**

Client: **CHAPEL 1872 ESTATE**

Drawn	JTB	Designed	Approved
Scale	AS SHOWN	Date	AUGUST '23'

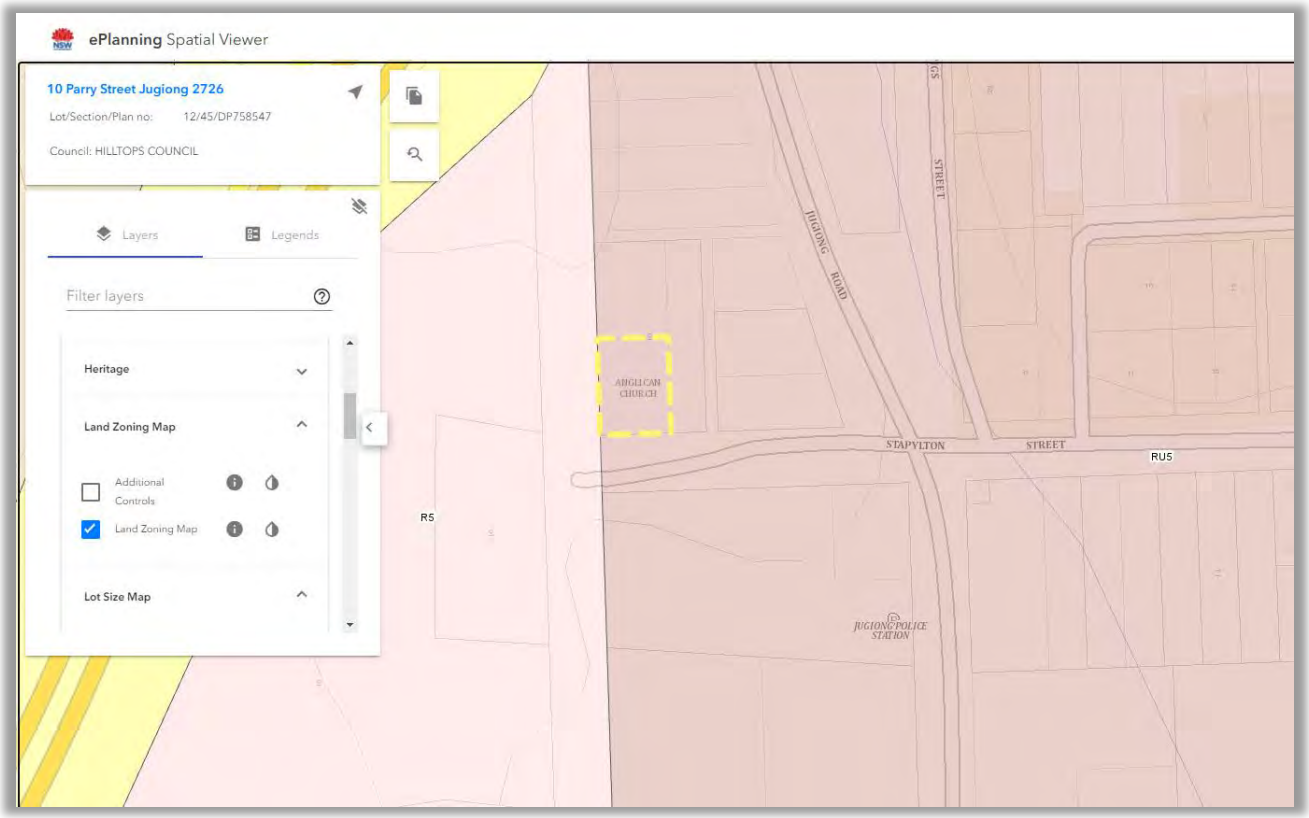
This Drawing must not be used for Construction unless signed as Approved

Job No: **230168** Drawing No: **S.30** Rev: **A** Original Size **A1**

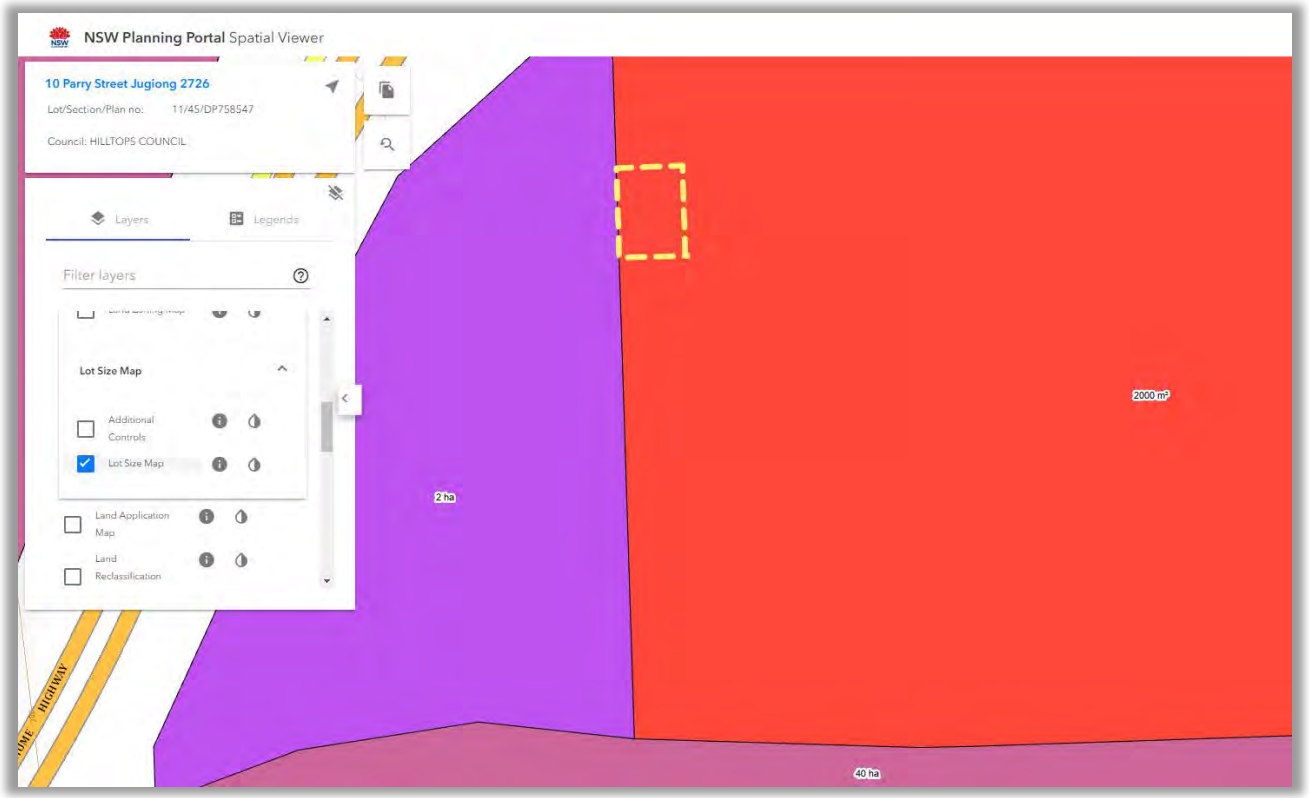
APPENDIX # 4

SITE PHOTO'S

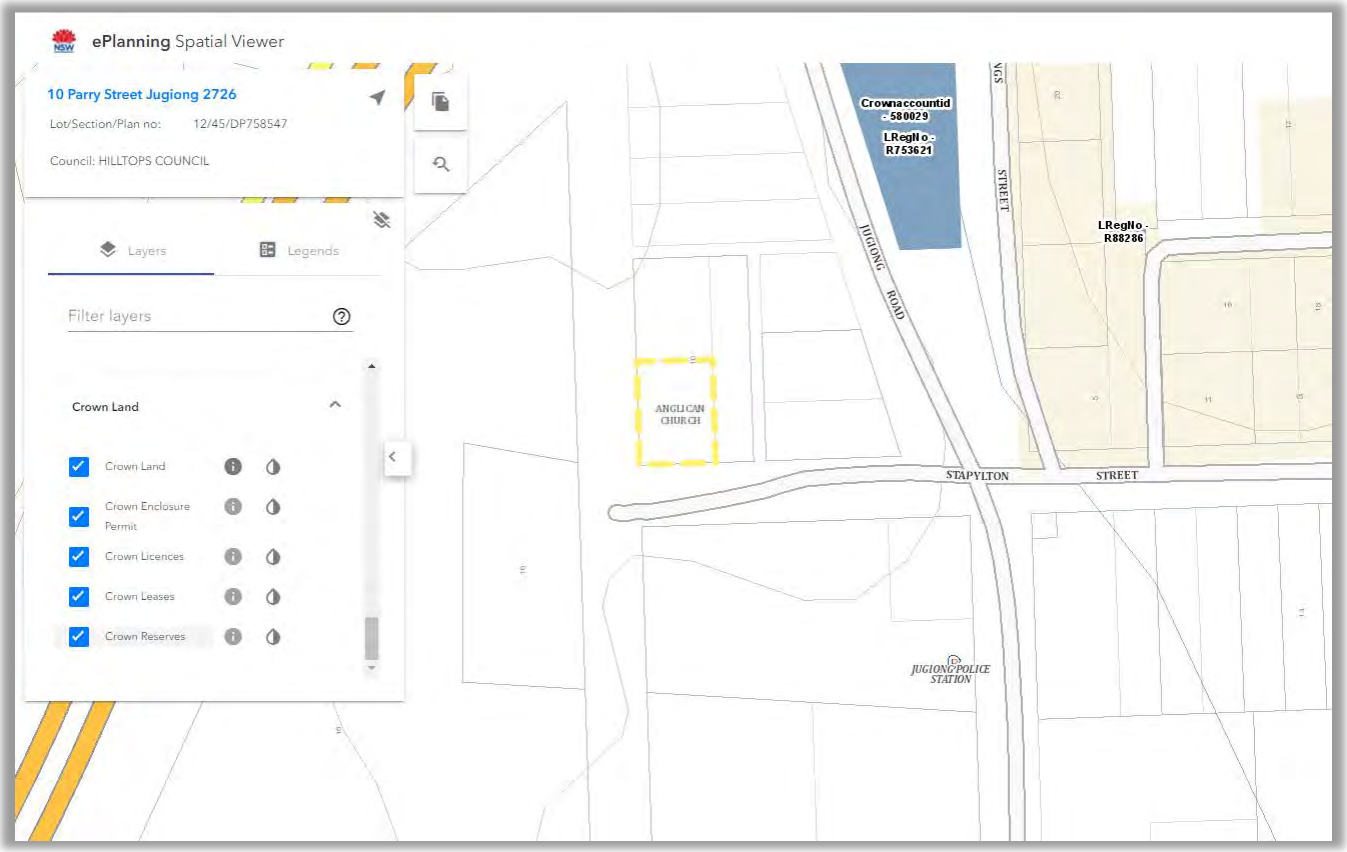
PLANNING SEARCH IMAGES



ZONE MAP – ZONE RU5 VILLAGE

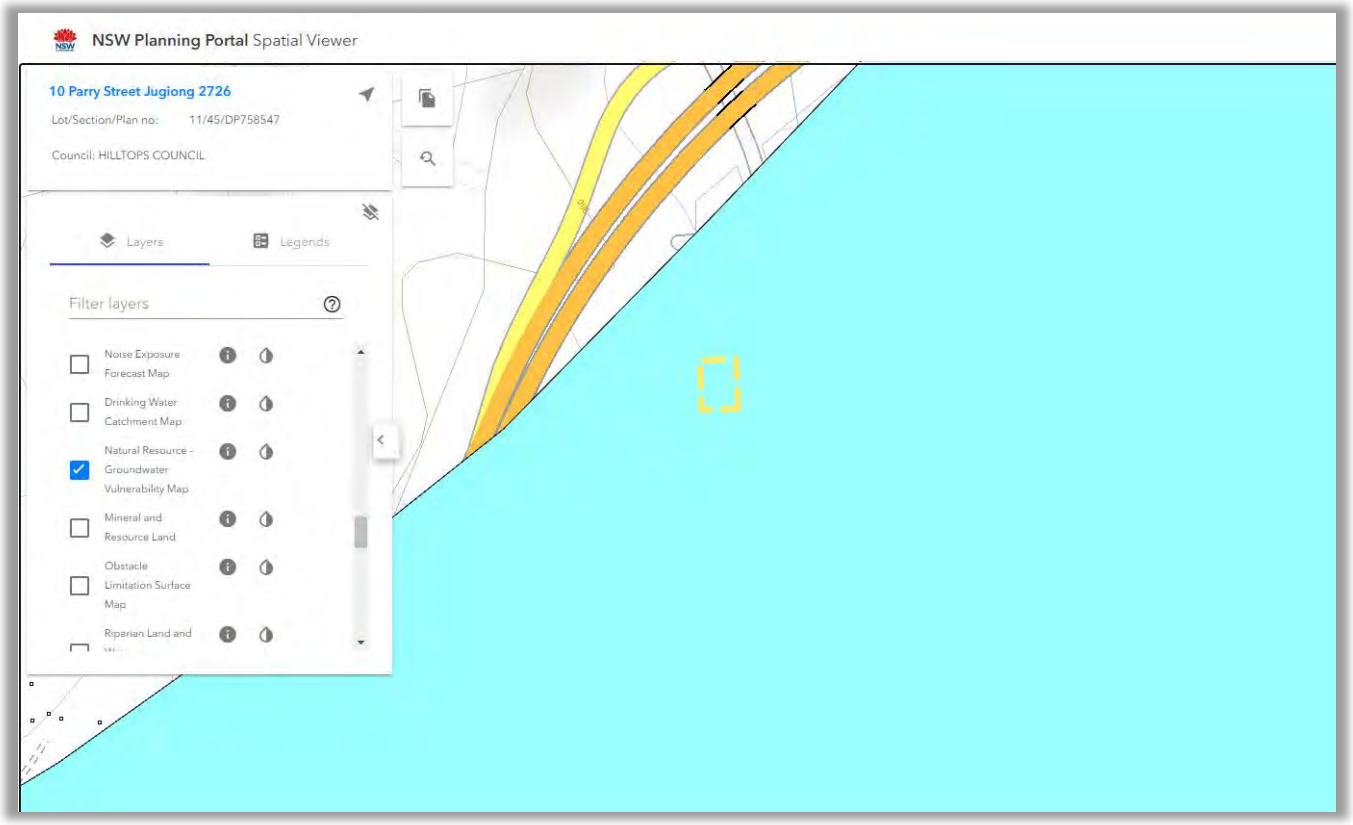


LOT SIZE FOR DWELLING – MIN MAP (2000 SQ.M)

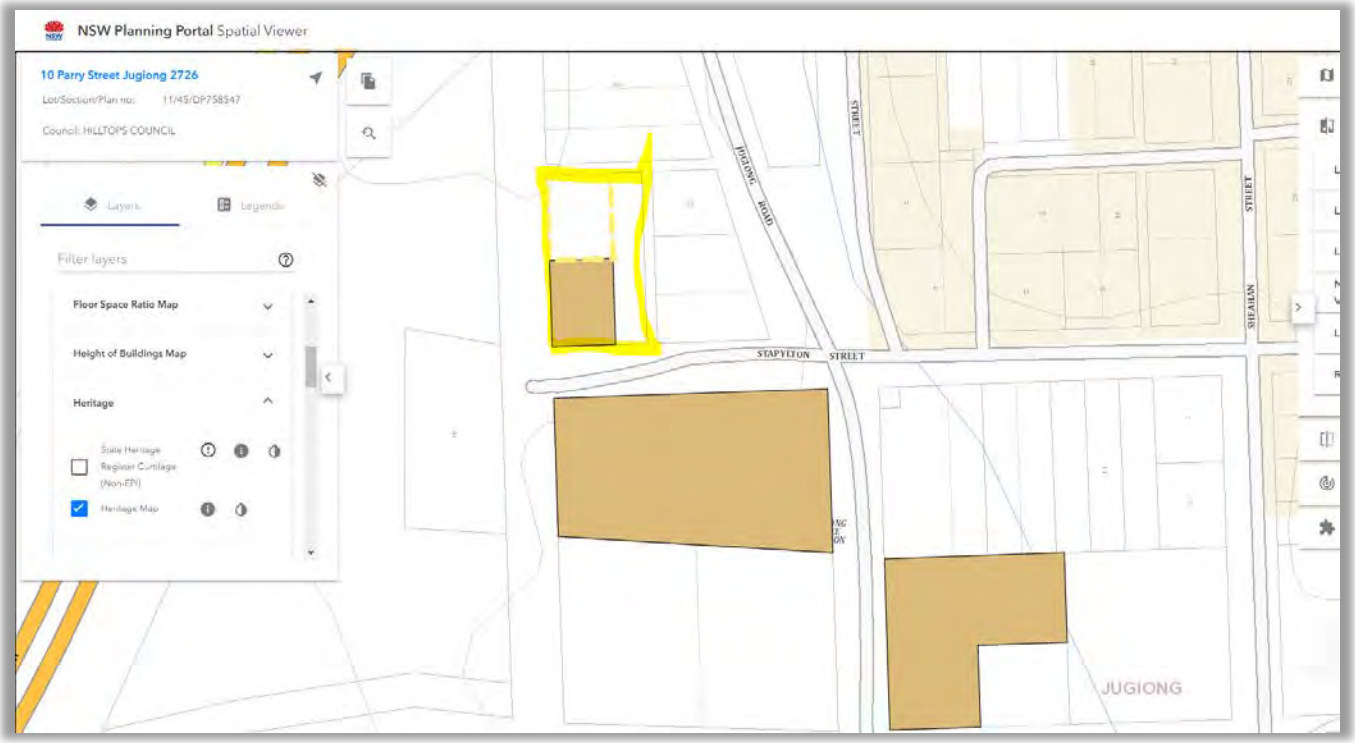


TOPOGRAPHIC MAP – NEARBY CROWN LAND

CONTOUR SURVEY EXTRACT



NRW – RIPARIAN MAPPING



HERITAGE ITEM – ITEM I-117

SIX NSW – AERIAL CIRCA 2012

GOOGLE MAPPING CIRCA 2023

VIEW – NEAREST MAJOR STREET

VIEW FROM ON SITE


10/4/23, 8:57 AM
Jugiong, NSW - Christ Church Anglican :: Australian Christian Church Histories
Home
About
Research
Architecture
Links & Resources
Contact
ustralian Christian Church Histories
A portal for historical information on Australian Christian Churches
Search for churches or clergy
GO
Jugiong, NSW - Christ Church Anglican
Year Built: 1895
Denomination: Anglican
Address: Jugiong Road, Jugiong, New South Wales, 2726
Architect: Unknown
Last Updated: 01/06/2020
Click on the image to view larger
See Street View
Send your photos
History and Architecture:
In 1863 the first site selected for a church, school and Parsonage was section No 7 bounded by Larmar Renwick and Stapyton streets. This was dedicated on 16 July 1863 but was later revoked and rrserved for the preservation of graves. The Foundation stone was laid on 21 December 1872 by Mr H Howe Esq JP. A further Foundation stone was laid on 27 October 1895 by Miss Osborne.

APPENDIX # 5

BCA

SEC J REPORT

\

National Construction Code
Building Code of Australia (2022)

BCA Assessment Report - Section J

Proposed reception hall & bridal suite – 10 Parry Street, Jugiong NSW.

Prepared for Kim Coulter

Report No: 23031
Version: B
Date prepared: 01/08/2023
Report author: Marc Kiho
B.Tech (Civil), Dip.EHBS

Kiho Building Consulting
PO Box 1732 Orange NSW 2800 - P: 0400 680 815 - E: energy_rating@bigpond.com

Register

Issue No	Remarks	Date
A		15/04/2023
B	Amended glazing – reception hall	01/08/2023

Introduction

This Section J – Energy Efficiency report has been prepared for Kim Coulter and refers to the proposed reception hall and bridal suite at 10 Parry Street, Jugiong NSW.

The report is based on, and limited to, the information shown on the following documentation:

- Project No. 22-678 sheets 01-07 (dated 30/03/23) & sheets 08, 09, 11, 12 (dated 26/05/23).

Exclusions

This report does not include:
- Assumptions regarding the design intention or the like (except as noted in the report).
- An assessment of sections A through to H of the Building Code of Australia (2022).

Report Format

The report identifies the parts of Section J of the Building Code of Australia (2022) relevant to the project as summarised in the following table (see below).

The prescriptive BCA requirements and status of each of the relevant parts is discussed in the following body of the report.

Building description

- Proposed reception hall and bridal suite at 10 Parry Street, Jugiong NSW.
- BCA Building Classification – 9b
- Floor areas (approximate) – 432 m2 (reception hall) & 123 m2 (bridal suite)
- BCA climate zone - 4
- The proposed reception hall and bridal suite will require compliance with Section J as each building meets the definition of a conditioned space.
- The reception hall storage area and toilets are exempt from the thermal construction requirements of Section J (Parts J4 to J6) as the space will not be heated or cooled.

The above is addressed in the following Section J analysis and summary table located at the end of the report.

Section J – Energy Efficiency

BCA Section J – parts	Referenced	Comment
J2D2 – Application of Section J	Y	compliance readily achievable
J3D3 – Heating and Cooling Loads Class 2 & 4	N	not applicable
J3D4 – Ceiling Fans Class 2 & 4	N	not applicable
J3D5 – Roof Thermal Breaks Class 2 & 4	N	not applicable
J3D6 – Wall Thermal Breaks Class 2 & 4	N	not applicable
J4D3 – Thermal Construction General	Y	compliance readily achievable
J4D4 – Roof and Ceiling Construction	Y	compliance readily achievable
J4D5 – Roof Lights	N	n/a – not present
J4D6 – Walls and Glazing	Y	compliance readily achievable
J4D7 – Floors	Y	compliance readily achievable
J5D3 – Chimneys and Flues	N	n/a – not present
J5D4 – Roof Lights	N	n/a – not present
J5D5 – Windows and Doors	Y	compliance readily achievable
J5D6 – Exhaust Fans	Y	compliance readily achievable
J5D7 – Construction of roofs, walls and floors	Y	compliance readily achievable
J5D8 – Evaporative coolers	N	n/a – not present
J6D3 – Air-conditioning system control	Y	compliance readily achievable
J6D4 – Mechanical ventilation system control	Y	compliance readily achievable
J6D5 – Fans and duct systems	N	n/a – not present
J6D6 – Ductwork insulation	Y	compliance readily achievable
J6D7 – Ductwork sealing	N	n/a – not present
J6D8 – Pump systems	N	n/a – not present
J6D9 – Pipework insulation	N	n/a – not present
J6D10 – Space heating	Y	compliance readily achievable
J6D11 – Refrigerant chillers	N	n/a – not present
J6D12 – Unitary air-conditioning equipment	Y	compliance readily achievable
J6D13 – Heat rejection equipment	N	n/a – not present
J7D3 – Artificial lighting	Y	compliance readily achievable
J7D4 – Interior artificial lighting and power control	Y	compliance readily achievable
J7D5 – Interior decorative and display lighting	N	n/a – not present
J7D6 – Exterior artificial lighting	Y	compliance readily achievable
J7D7 – Boiling water and chilled water storage units	Y	compliance readily achievable
J7D8 – Lifts	N	n/a – not present
J7D9 – Escalators and moving walkways	N	n/a – not present
J8D2 – Heated water supply	Y	compliance readily achievable
J8D3 – Swimming pool heating & pumping	N	n/a – not present
J8D4 – Spa pool heating and pumping	N	n/a – not present
J9D3 – Facilities for energy monitoring	Y	compliance readily achievable
J9D4 – Facilities for electric vehicle charging	N	n/a – not present
J9D5 – Facilities for solar PV and battery systems	Y	compliance readily achievable

Section J – Energy Efficiency Assessment – Analysis

The parts identified in the previous table are further analysed and comments regarding the project are included in italics and bold.

A summary sheet is included which should be attached to the drawings and read in conjunction with this report.

BCA Reference	**Prescriptive BCA requirements / comments**
J2D2 Application of Section J	Performance requirement J1P1 is satisfied by complying with Parts J4, J5, J6, J7, J8 and J9.
J4D3 Thermal Construction general	Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it abuts or overlaps adjoining insulation and forms a continuous barrier with ceilings, walls, bulkheads, floors or the like. **Compliance to be certified during construction.**
J4D4 Roof and Ceiling Construction	The ceiling must achieve a *Total R-Value* greater than or equal to R3.7 for a downward direction of heat flow; And; The solar absorptance (SA) of the upper surface of the roof sheeting must be not more than 0.45. Compliance with J4D4 can be achieved by the following combination: • *Installation of R3.5 bulk insulation to the ceiling; and* • *Reflective sarking / anticon blanket under roof sheeting.* *Note: recessed lighting will reduce the effectiveness of ceiling insulation. Contact author of report for advice if recessed lighting is proposed*. **Compliance to be certified during construction.**

J4D6 Walls & glazing	The Total System U-Value of the internal and external wall-glazing construction must not be greater than U2.0; and the Total System U-Value of wall-glazing construction must be calculated in accordance with Specification 37. And; The solar admittance of externally facing wall-glazing construction must not be greater than the values specified in Table J4D6b; and the solar admittance of a wall-glazing construction must be calculated in accordance with Specification 37. Compliance with J4D6 can be achieved by the following insulation and glazing combination(s): <u>*External walls*</u> *Lightweight clad framed walls:* • Installation of R2.5 bulk insulation within a minimum 90mm framed wall and vapour permeable sarking fixed to outside of framed wall with an air gap to the wall panel / external cladding. <u>*Internal walls adjoining storeroom & toilets*</u> *Lightweight clad framed walls:* • Installation of R2.5 bulk insulation within a minimum 90mm framed wall. Note: if any internal or external walls are steel framed, an R0.2 thermal break is required beneath the external cladding (AirCell Insulbreak or similar). <u>*Reception hall windows & glass doors:*</u> *Total U value (NFRC) = 5.0 (U values less than this value are satisfactory)* *Total SHGC value (NFRC) = 0.35 (SHGC values less than this value are satisfactory)* <u>*Bridal suite windows & glass doors:*</u> *Total U value (NFRC) = 5.0 (U values less than this value are satisfactory)* *Total SHGC value (NFRC) = 0.35 (SHGC values less than this value are satisfactory)* Note: Any variation to the shading indicated on the plans will require a reassessment of the glass type specified in J4D6. **Compliance to be certified during construction.**

J4D7 Floors	The proposed floor construction consists of a concrete slab on ground (no in-slab heating). The floor slab requires a minimum total construction R-value of R2.0 for a downward direction of heat flow. <u>Reception hall:</u> Compliance with J4D7 is achieved by the R-value of soil in contact with the underside of the slab (R>2.0). No additional insulation is required. <u>Bridal suite:</u> Compliance with J4D7 can be achieved by the following insulation: • R-value of soil in contact with underside of slab of R1.0; and • Installation of R1.1 polystyrene insulation boards (25mm KingSpan Kooltherm K3) on the underside of the slab. **Compliance to be certified during construction.**
J5D5 Windows and Doors	The following draught sealing is required (conditioned areas only): • A foam seal around the perimeter of the frame and a draught stopper along the bottom edge of external doors. • External doors to be fitted with a self-closer. • Windows to comply with AS2047. **Compliance to be certified during construction.**
J5D6 Exhaust fans	Any exhaust fans in the bathrooms (bridal suite only) must be fitted with a self-closing damper or the like. **Compliance to be certified during construction.**
J5D7 Construction of roof, walls and floors	Construction of the conditioned spaces using plasterboard lined walls and ceilings with cornices, skirting and architraves will achieve draught sealing compliance.
J6D3 Air-conditioning system control	The following controls apply to air-conditioning systems installed in the buildings: • An air-conditioning system must be capable of being deactivated when the building or part of a building served by that system is not occupied; and comply with J6D3 (1) as applicable. • Single conditioned zone OR when serving more than 1 zone, thermostatically control the temperature of each zone in accordance with J6D3 (1)(b) and (2). • A time switch must be provided to control — o an air-conditioning system of more than 2 kWr; and o a heater of more than 1 $kW_{heating}$ used for air-conditioning. The time switch must be capable of switching electric power on and off at variable pre-programmed times and on variable pre-programmed days. **Compliance to be certified during construction.**

J6D4 Mechanical ventilation system control	(if installed) The mechanical ventilation system control must comply with the requirements of J6D4 (1) and (4) as applicable. **Compliance to be certified during construction.**
J6D6 Ductwork insulation	Ductwork and fittings in an air-conditioning system must be provided with insulation complying with AS/NZS 4859.1; and the requirements of J6D6 (1-4) as applicable. • All supply and return ductwork insulated to R1.0 and sealed. **Compliance to be certified during construction.**
J6D10 Space heating	Space heating forming part of an air-conditioning system must comply with the requirements of J6D10 (1)(a), (b), (c), and (d) as applicable. Compliance with J6D10 can be achieved using the following space heating system: • heat pump heater (package AC system complying with MEPS).
J6D12 Unitary air-conditioning equipment	Unitary air-conditioning equipment including packaged air-conditioners, split systems, and variable refrigerant flow systems must comply with MEPS. **Compliance to be certified during construction.**
J7D3 Artificial Lighting	The aggregate maximum illumination power density must not exceed the following (except as allowed by adjustment factors from table J6.2a where motion detectors, dimming, daylight sensors or room size allows). See author of report for upgrade calculations if limits noted below are unachievable - • Reception / bar areas: 14W / sq.m. (4,500 W maximum) • Bridal suite areas: 8W / sq.m. (880 W maximum) • Kitchen area: 4W / sq.m. (190 W maximum) • Toilets, bathroom & storage areas: 3W / sq.m. (180 W maximum) The above wattage allowances generally limit all fixed lighting to low wattage fluorescent or LED sources. The following is exempt from the above: • Emergency lighting required by part E4; • A heater where the heater also emits light, such as in a bathroom; • Lighting of a specialist process nature. **Compliance to be certified during construction.**

J7D4 Interior artificial lighting and power control	Artificial lighting and power within the building must incorporate the following controls: • All artificial lighting of a room or space must be individually operated by a switch or other control device; or a combination of both. • An artificial lighting switch or other control device must (if an artificial lighting switch) be located: o in a visible and easily accessed position in the room or space being switched; or in an adjacent room or space from where 90% of the lighting being switched is visible; & o not operate lighting for an area of more than 250 m^2. • 95% of the light fittings must be controlled by: o a time switch in accordance with Specification J6; or o an occupant sensing device such as a security key card reader that registers a person entering and leaving the building; or a motion detector in accordance with Specification 40. The above requirements do not apply to the following: • Emergency lighting in accordance with Part E4; and • Artificial lighting in a space where the sudden loss of artificial lighting would cause an unsafe situation, • plant room or lift motor room, workshops where power tools are used; and • A heater where the heater also emits light, such as in bathrooms. **Compliance to be certified during construction.**
J7D6 Exterior artificial lighting	Artificial lighting around the perimeter of the building must: • Be controlled by a daylight sensor or time switch (complying with spec 40), and • When the total perimeter lighting load exceeds 100W – o Must use LEDs for 90% of the total lighting load; or o Be controlled by a motion sensor • When used for façade or signage lighting have a separate time switch in accordance with Specification 40. Emergency lighting required by part E4 is exempt from the above. **Compliance to be certified during construction.**
J7D7 Boiling water and chilled water storage units	Power supply to any boiling water or chilled water storage units (if installed) must be controlled by a time switch in accordance with Specification 40. **Compliance to be certified during construction**.
J8D2 Heated water supply	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia).

J9D3 Facilities for energy monitoring	The following facilities for energy monitoring are required: • Electricity meter to be installed to record time-of-use consumption (to local supply authority requirements). • Sub metering of individual building services is not required.
J9D5 – Facilities for solar PV and battery systems	The following facilities for solar PV and battery systems are required: • The main electrical switchboard is designed to accommodate a future solar PV and battery system in accordance with J9D5(1)(a); and • At least 20% of the roof area is left clear for the installation of solar panels.

Section J BCA requirements – 10 Parry St, Jugiong NSW

(to be read in conjunction with Section J report)

Insulation

- Roof (light colour with SA<0.45): reflective sarking / anticon blanket
- Ceiling: R3.5
- External walls: R2.5 bulk insulation and vapour permeable sarking
- Internal walls adjoining storeroom / toilets: R2.5 bulk insulation
- Floor slab (reception hall): Nil
- Floor slab (bridal suite): R1.1 (Kingspan K3 board)
- Thermal breaks required for steel framed construction: R0.2

External windows

- All façades: U = 5.0 & SHGC = 0.35
- Glazing to comply with AS2047

Draught sealing

- External doors to have foam seal around perimeter, draught stopper along bottom edge and self-closer.
- Bathroom / kitchen exhaust fans to be fitted with a self-closing damper.

Air conditioning & mechanical ventilation

- To comply with Part J6 as applicable
- Package AC units to comply with MEPS
- Single conditioned zone OR when serving more than 1 zone, thermostatically control the temperature of each zone in accordance with J6D3.
- All AC units with a heating or cooling capacity of more than 2kWr to have a time switch controller (refer to spec 40 of BCA for details).
- Ductwork (if installed) to be insulated to R1.0.
- Mechanical fresh air ventilation to comply with AS 1668.2

Internal lighting & power control

- Dining / bar areas - maximum illumination power density of 14 W/m2
- Bridal suite areas - maximum illumination power density of 8 W/m2
- Kitchen area - maximum illumination power density of 4 W/m2
- Storeroom area - maximum illumination power density of 3 W/m2
- Toilet / bathroom areas - maximum illumination power density of 3 W/m2
- 95% of lighting to be controlled by a time switch or occupant sensing device.
- Reception hall lighting to be separately controlled from kitchen & bathroom areas.
- Maximum of 250 sq.m of lighting controlled per light switch.

External lighting

- All new external lighting to be controlled by either a daylight sensor or time switch and where total perimeter lighting exceeds 100W have a minimum of 90% of light fittings to be LEDS or be controlled by a motion sensor.
- Façade lighting or illuminated signs to be controlled by a time switch or daylight sensor.

Hot water supply

- Heated sanitary water systems to be designed and installed as per part B2 NCC vol. 3

Boiling / chilled water units (if any)

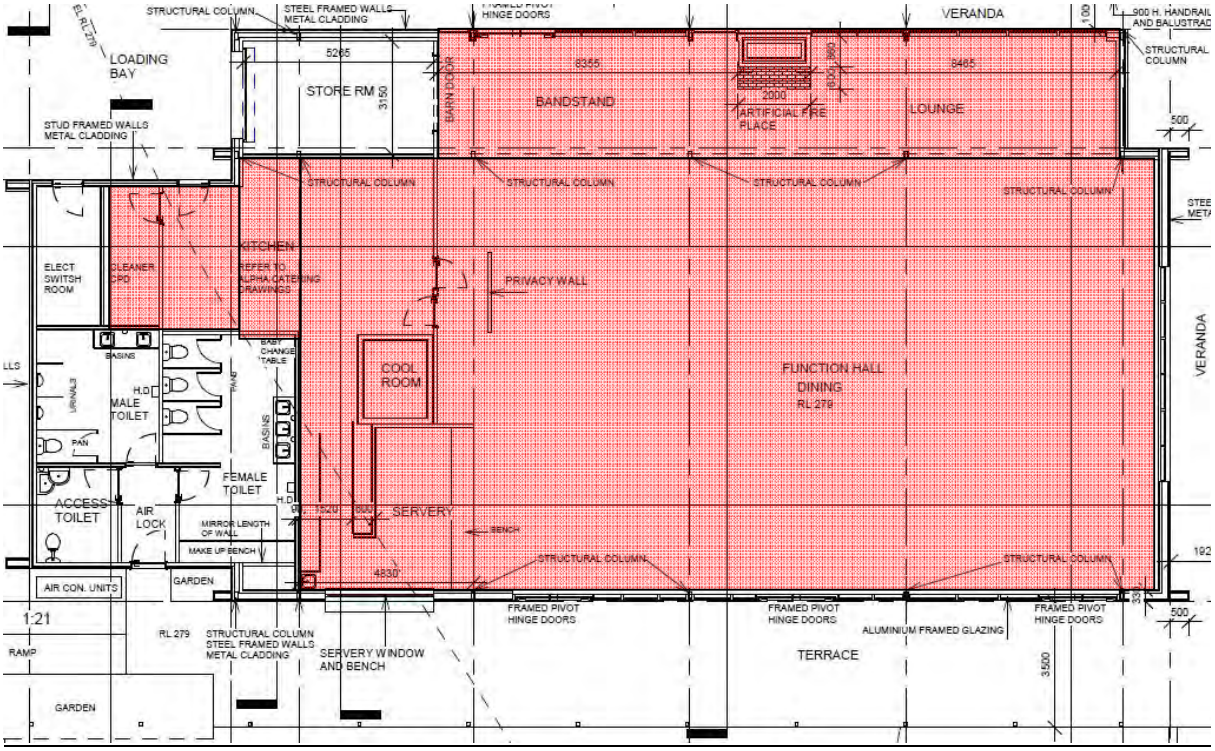
- To be controlled by a time switch

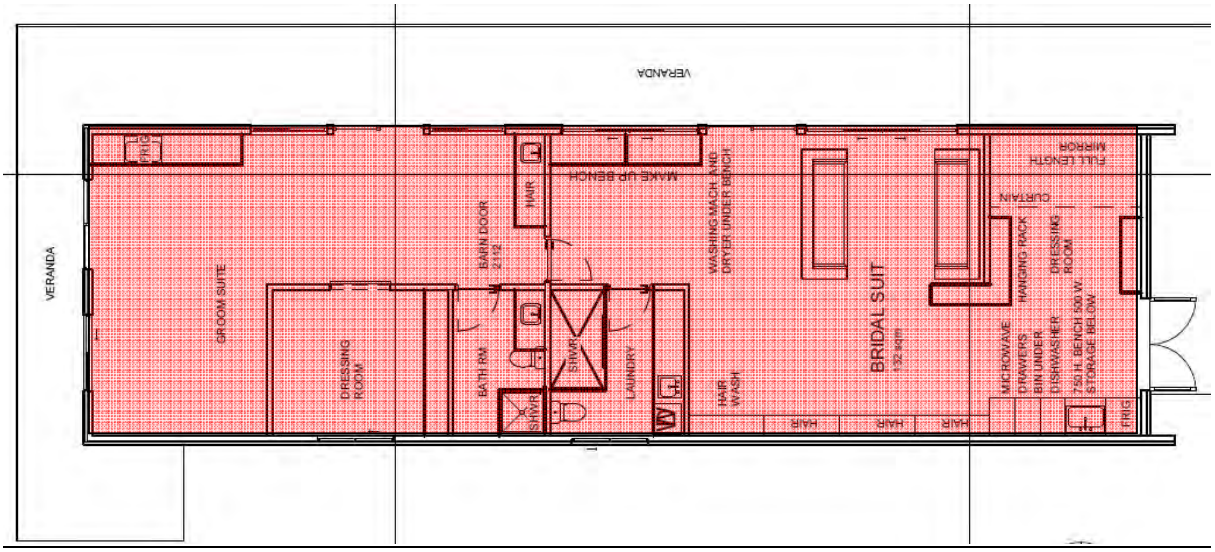
Metering of gas / electricity

- Electricity meter (as per supply authority requirements) to be installed.
- Sub metering is not required
- Main switchboard with provision for future solar PV & battery system.
- 20% of roof space left clear for future solar PV system.

Attachments

1/ Conditioned floor areas shown **red** below.





2/ Façade reports (compliance achieved with method 2).

Façade

Report

Calculator

Project Summary

Date
1/08/2023

Name
Marc Kiho

Company
Kiho Building Consulting

Position
Section J / NatHERS Assessor

Building Name / Address
Reception hall - 10 Parry St Jugiong

Building State
NSW

Climate Zone
Climate Zone 4 - Hot dry summer, cool winter

Building Classification
Class 9b - public halls, function rooms or the like

Storeys Above Ground
1

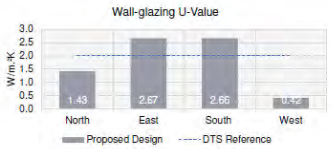
Tool Version
1.2 (June 2020)

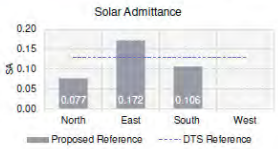
The summary below provides an overview of where compliance has been achieved for Specification J1.5a - Calculation of U-Value and solar admittance - Method 1 (Single Aspect) and Method 2 (Multiple Apects).

Compliant Solution =
Non-Compliant Solution =

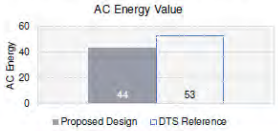
	Method 1 North	East	South	West	Method 2 All
Wall-glazing U-Value (W/m².K)	1.43	2.67	2.66	0.42	1.86
Solar Admittance	0.08	0.17	0.11		
AC Energy Value					44

Method 1





Method 2



Project Details

	North	East	South	West
Glazing Area (m²)	22.2	28	49.5	0
Glazing to Façade Ratio	22%	49%	49%	0%
Glazing References	W02	W02	W02	
Glazing System Types	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)	
Glass Types	Single Glazing - low-E coating	Single Glazing - low-E coating	Single Glazing - low-E coating	
Frame Types	Aluminium	Aluminium	Aluminium	Aluminium
Average Glazing U-Value (W/m².K)	5.00	5.00	5.00	
Average Glazing SHGC	0.35	0.35	0.35	0.00
Shading Systems	Horizontal	Horizontal	Horizontal	Horizontal
Wall Area (m²)	78.8	29	51.5	57
Wall Types	Wall	Wall	Wall	Wall
Methodology	Wall			
Wall Construction	Clad R2.5	Clad R2.5	Clad R2.5	Clad R2.5
Wall Thickness	110	110	110	110
Average Wall R-value (m².K/W)	2.38	2.38	2.38	2.38
Solar Absorptance	0.5	0.5	0.5	0.5

Façade

Report

Calculator

Project Summary

Date
1/05/2023

Name
Marc Kiho

Company
Kiho Building Consulting

Position
Section J / NatHERS Assessor

Building Name / Address
Bridal suite - 10 Parry St Jugiong

Building State
NSW

Climate Zone
Climate Zone 4 - Hot dry summer, cool winter

Building Classification
Class 9b - public halls, function rooms or the like

Storeys Above Ground
1

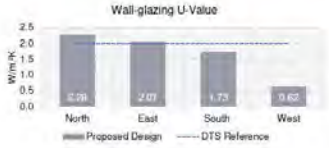
Tool Version
1.2 (June 2020)

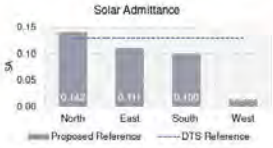
The summary below provides an overview of where compliance has been achieved for Specification J1.5a - Calculation of U-Value and solar admittance - Method 1 (Single Aspect) and Method 2 (Multiple Apects).

Compliant Solution =
Non-Compliant Solution =

	Method 1				Method 2
	North	East	South	West	All
Wall-glazing U-Value (W/m².K)	2.28	2.07	1.73	0.62	1.49
Solar Admittance	0.14	0.11	0.10	0.01	
AC Energy Value					16

Method 1



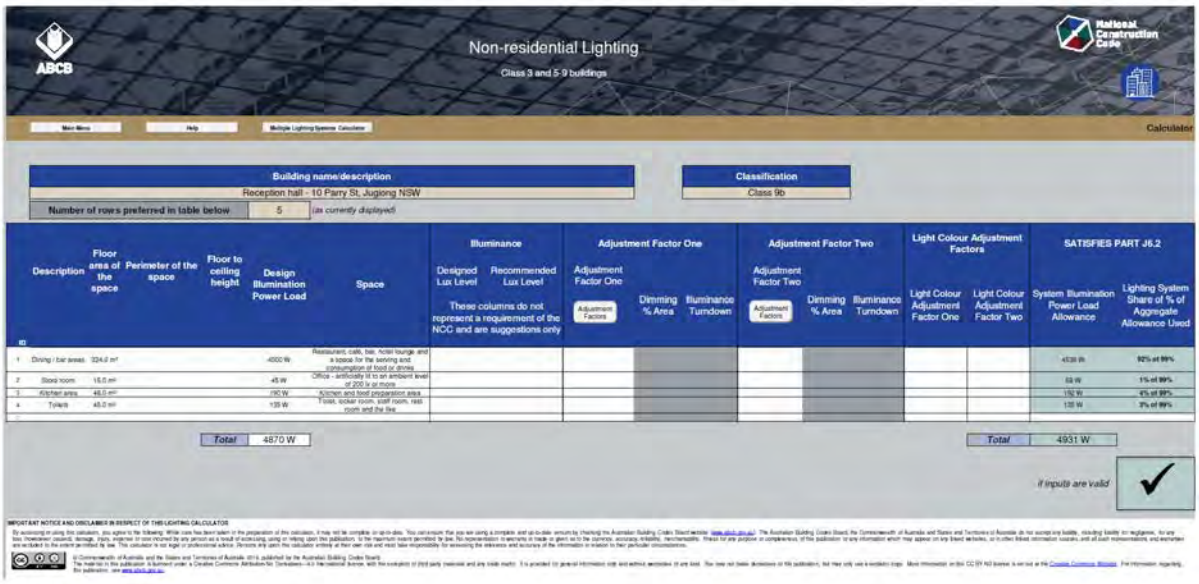


Method 2

Project Details

	North	East	South	West
Glazing Area (m²)	6.1	18.7	4.3	2.3
Glazing to Façade Ratio	41%	36%	29%	4%
Glazing References	W02	W02	W02	W02
Glazing System Types	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)
Glass Types	Single Glazing - low-E coating	Single Glazing - low-E coating	Single Glazing - low-E coating	Single Glazing - low-E coating
Frame Types	Aluminium	Aluminium	Aluminium	Aluminium
Average Glazing U-Value (W/m².K)	5.00	5.00	5.00	5.00
Average Glazing SHGC	0.35	0.35	0.35	0.35
Shading Systems	Horizontal	Horizontal	Horizontal	Horizontal
Wall Area (m²)	8.9	33.3	10.7	49.7
Wall Types	Wall	Wall	Wall	Wall
Methodology	Wall			
Wall Construction	Clad R2.5	Clad R2.5	Clad R2.5	Clad R2.5
Wall Thickness	110	110	110	110
Average Wall R-value (m².K/W)	2.38	2.38	2.38	2.38
Solar Absorptance	0.5	0.5	0.5	0.5

3/ Lighting Calculations.



Non-residential Lighting

Class 3 and 5-9 buildings

Calculator

Building name/description	Classification
Reception hall - 10 Parry St, Jugiong NSW	Class 9b

Number of rows preferred in table below: 5 (as currently displayed)

ID	Description	Floor area of the space	Perimeter of the space	Floor to ceiling height	Design Illumination Power Load	Space	Illuminance: Designed Lux Level	Illuminance: Recommended Lux Level	Adjustment Factor One	Adjustment Factor One: Dimming % Area	Adjustment Factor One: Illuminance Turndown	Adjustment Factor Two	Adjustment Factor Two: Dimming % Area	Adjustment Factor Two: Illuminance Turndown	Light Colour Adjustment Factors: Light Colour Adjustment Factor One	Light Colour Adjustment Factors: Light Colour Adjustment Factor Two	SATISFIES PART J6.2: System Illumination Power Load Allowance	SATISFIES PART J6.2: Lighting System Share of % of Aggregate Allowance Used
1	Dining / bar areas	324.0 m²			4000 W	Restaurant, cafe, bar, hotel lounge and a space for the serving and consumption of food or drinks											4130 W	92% of 99%
2	Store room	15.0 m²			45 W	Office - artificially lit to an ambient level of 200 lx or more											53 W	1% of 99%
3	Kitchen area	48.0 m²			192 W	Kitchen and food preparation area											192 W	4% of 99%
4	Toilets	48.0 m²			135 W	Toilet, locker room, staff room, rest room and the like											135 W	3% of 99%

These columns do not represent a requirement of the NCC and are suggestions only

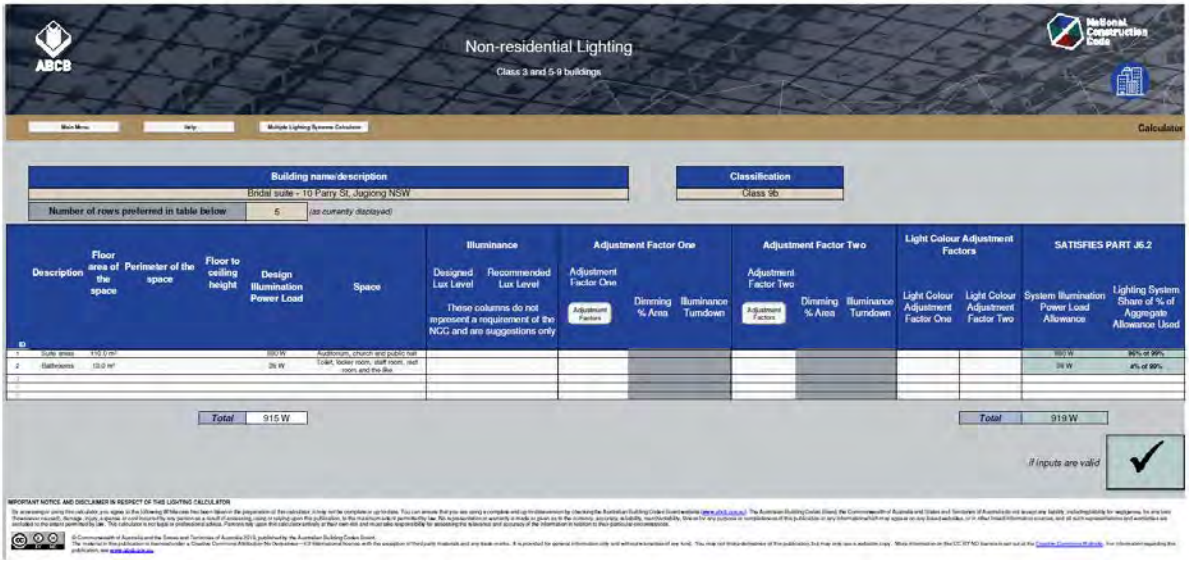
Adjustment Factors

Total	4870 W	Total	4931 W

If inputs are valid ✓

IMPORTANT NOTICE AND DISCLAIMER IN RESPECT OF THIS LIGHTING CALCULATOR

By accessing or using this calculator you agree to the following: While care has been taken in the preparation of this calculator, it may not be complete or up-to-date. You can ensure that you are using a complete and up-to-date version by checking the Australian Building Codes Board website (www.abcb.gov.au). The Australian Building Codes Board, the Commonwealth of Australia and States and Territories of Australia do not accept any liability, including liability for negligence, for any loss, howsoever caused, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying upon this publication, to the maximum extent permitted by law. No representation or warranty is made or given as to the currency, accuracy, reliability, merchantability, fitness for any purpose or completeness of this publication or any information which may appear on any linked websites, or in other linked information sources, and all such representations and warranties are excluded to the extent permitted by law. This calculator is not legal or professional advice. Persons rely upon this calculator entirely at their own risk and must take responsibility for assessing the relevance and accuracy of the information in relation to their particular circumstances.



Non-residential Lighting

Class 3 and 5-9 buildings

Calculator

Building name/description	Classification
Bridal suite - 10 Parry St, Jugiong NSW	Class 9b

Number of rows preferred in table below: 5 (as currently displayed)

ID	Description	Floor area of the space	Perimeter of the space	Floor to ceiling height	Design Illumination Power Load	Space	Illuminance: Designed Lux Level	Illuminance: Recommended Lux Level	Adjustment Factor One	Adjustment Factor One: Dimming % Area	Adjustment Factor One: Illuminance Turndown	Adjustment Factor Two	Adjustment Factor Two: Dimming % Area	Adjustment Factor Two: Illuminance Turndown	Light Colour Adjustment Factors: Light Colour Adjustment Factor One	Light Colour Adjustment Factors: Light Colour Adjustment Factor Two	SATISFIES PART J6.2: System Illumination Power Load Allowance	SATISFIES PART J6.2: Lighting System Share of % of Aggregate Allowance Used
1	Suite areas	110.0 m²			880 W	Auditorium, church and public hall											880 W	96% of 99%
2	Bathrooms	13.0 m²			35 W	Toilet, locker room, staff room, rest room and the like											39 W	4% of 99%

These columns do not represent a requirement of the NCC and are suggestions only

Adjustment Factors

Total	915 W	Total	919 W

If inputs are valid ✓

IMPORTANT NOTICE AND DISCLAIMER IN RESPECT OF THIS LIGHTING CALCULATOR

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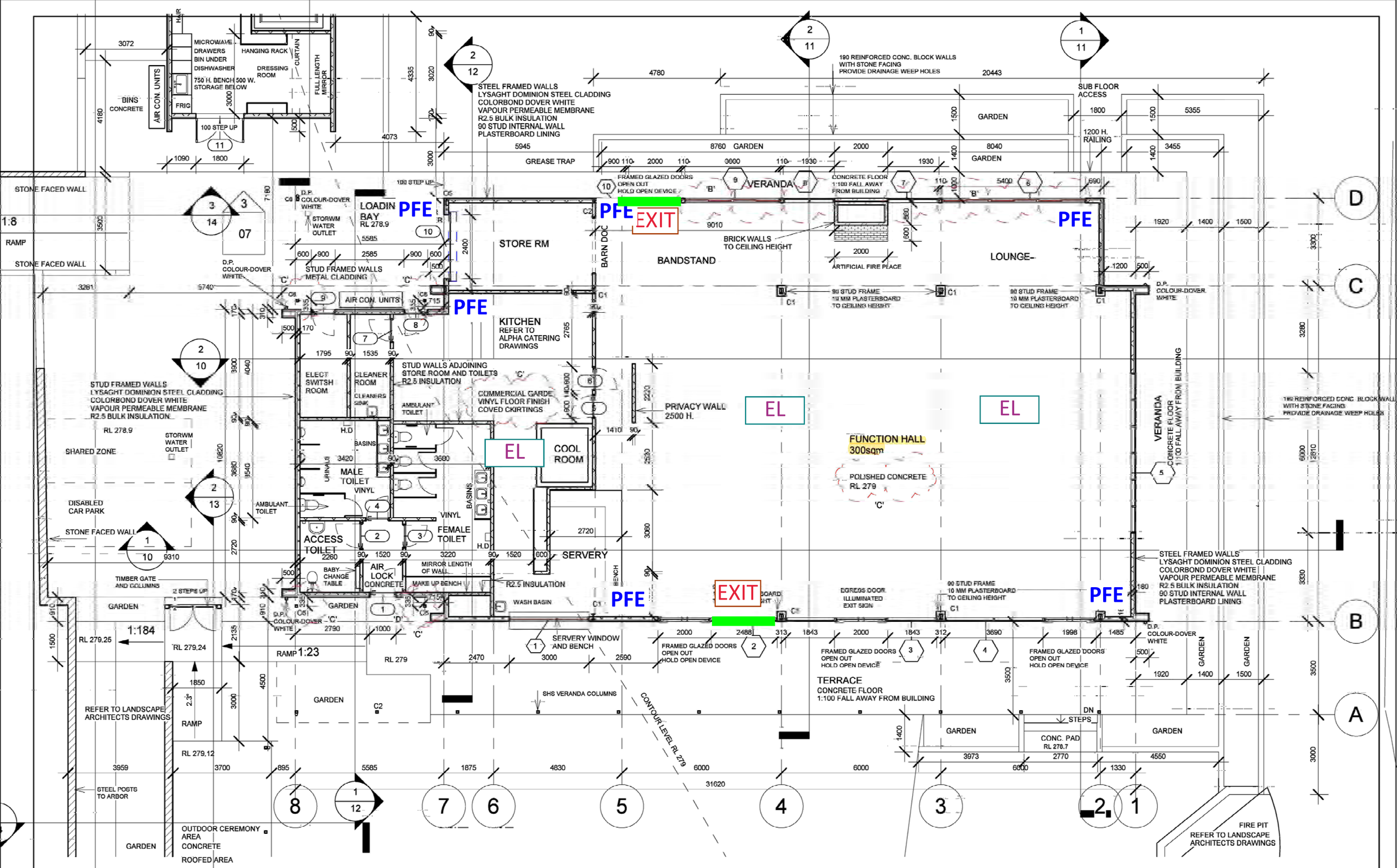
APPENDIX # 6

BCA

FIRE SERVICES PLAN



DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
31.05.23	AMEND WINDOWS W6 W7 W8 AND W9	B
21.6.23	CHANGE VERANDA ROOF HEIGHT AND OUTDOOR CEREMONY ROOF HEIGHT TO 3.0 M ADD COLUMNS TO VERANDA ROOFS ADD FLOOR FINISHES	C
9.8.23	DELETE GARDEN BED	D

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL 3
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

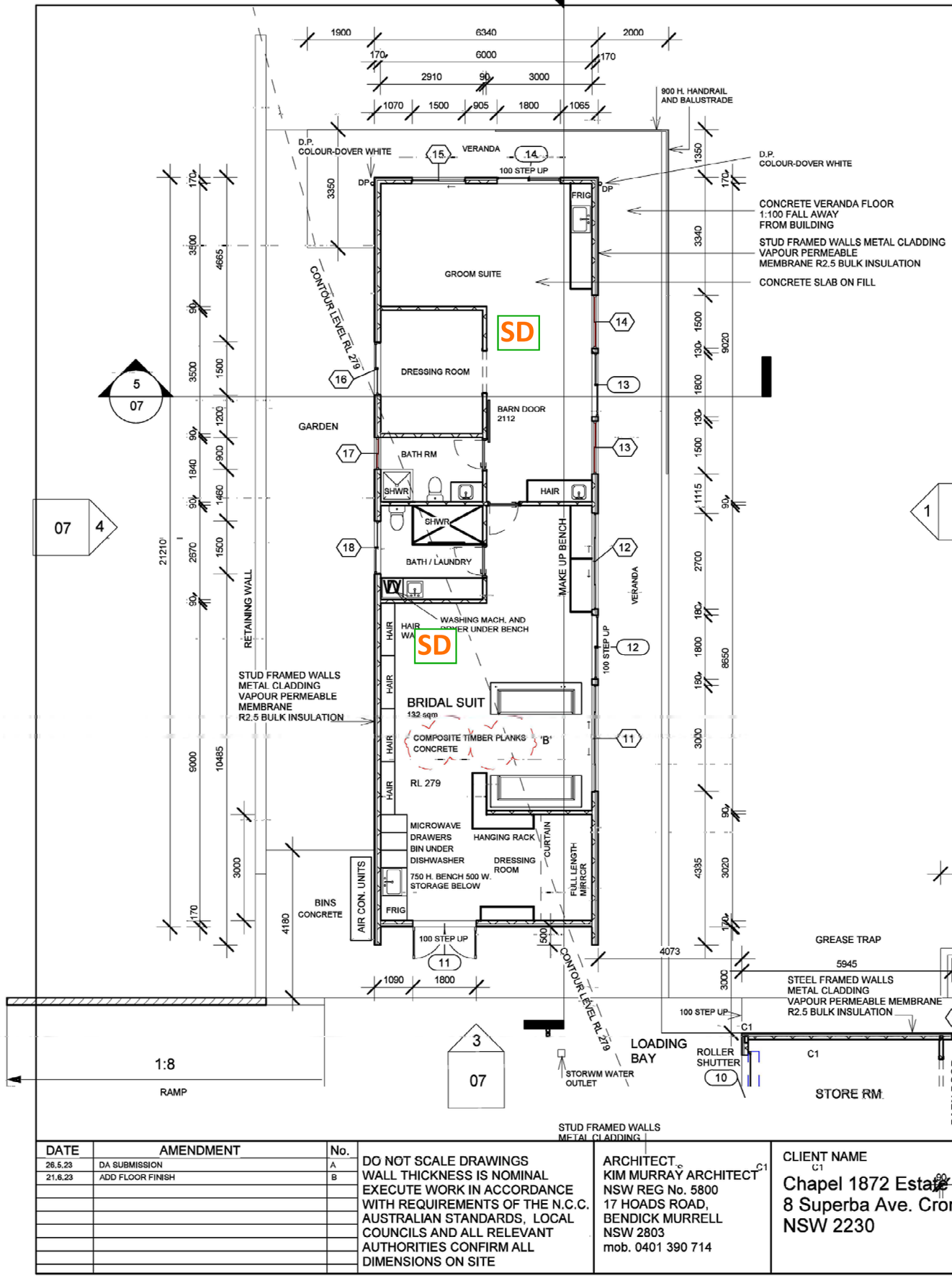
GROUND – FLOOR PLAN

MGA NORTH

Project number	22-678
Date	15.08.23
Drawn by	KM
Checked by	KM
Scale	1 : 125

DRAWING NUMBER 03
Revision No. D

15/08/2023 1:27:39 PM



FIRE SERVICES KEY

PFE	Portable Fire Extinguishers (AS2444)
EL	Emergency Lighting (AS2441)
EXIT	Illuminated Exit Sign (AS2441)
SD	Smoke Detector (Hard wired) - AS3786
▬	NB: Required Exit Doors in Entertainment Area MUST have Crash Bars as marked

DATE	AMENDMENT	No.
26.5.23	DA SUBMISSION	A
21.6.23	ADD FLOOR FINISH	B

DO NOT SCALE DRAWINGS
WALL THICKNESS IS NOMINAL
EXECUTE WORK IN ACCORDANCE WITH REQUIREMENTS OF THE N.C.C. AUSTRALIAN STANDARDS, LOCAL COUNCILS AND ALL RELEVANT AUTHORITIES CONFIRM ALL DIMENSIONS ON SITE

ARCHITECT
KIM MURRAY ARCHITECT
NSW REG No. 5800
17 HOADS ROAD,
BENDICK MURRELL
NSW 2803
mob. 0401 390 714

CLIENT NAME
Chapel 1872 Estate
8 Superba Ave. Cronulla
NSW 2230

PROJECT
RECEPTION HALL
10 Parry Street, Jugiong
NSW 2726

BRIDAL SUITE PLAN

Project number	22-678	DRAWING NUMBER	06
Date	15.08.23		
Drawn by	Author		
Checked by	Checker	Revision No.	B
Scale	1 : 125		

15/08/2023 1:30:51 PM

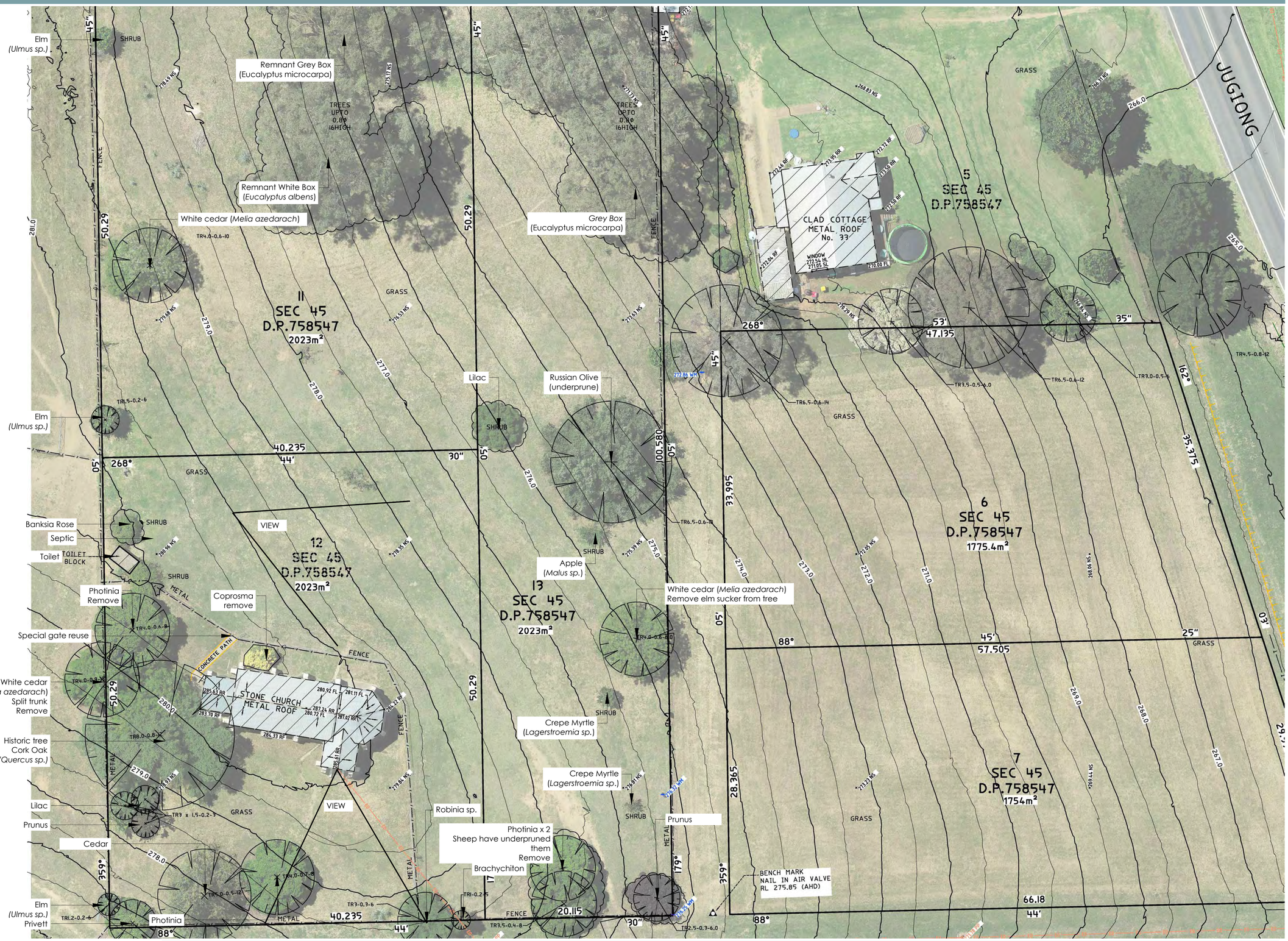
APPENDIX # 7

LANDSCAPE ARCHITECT

DESIGN

Analysis Plan

L01



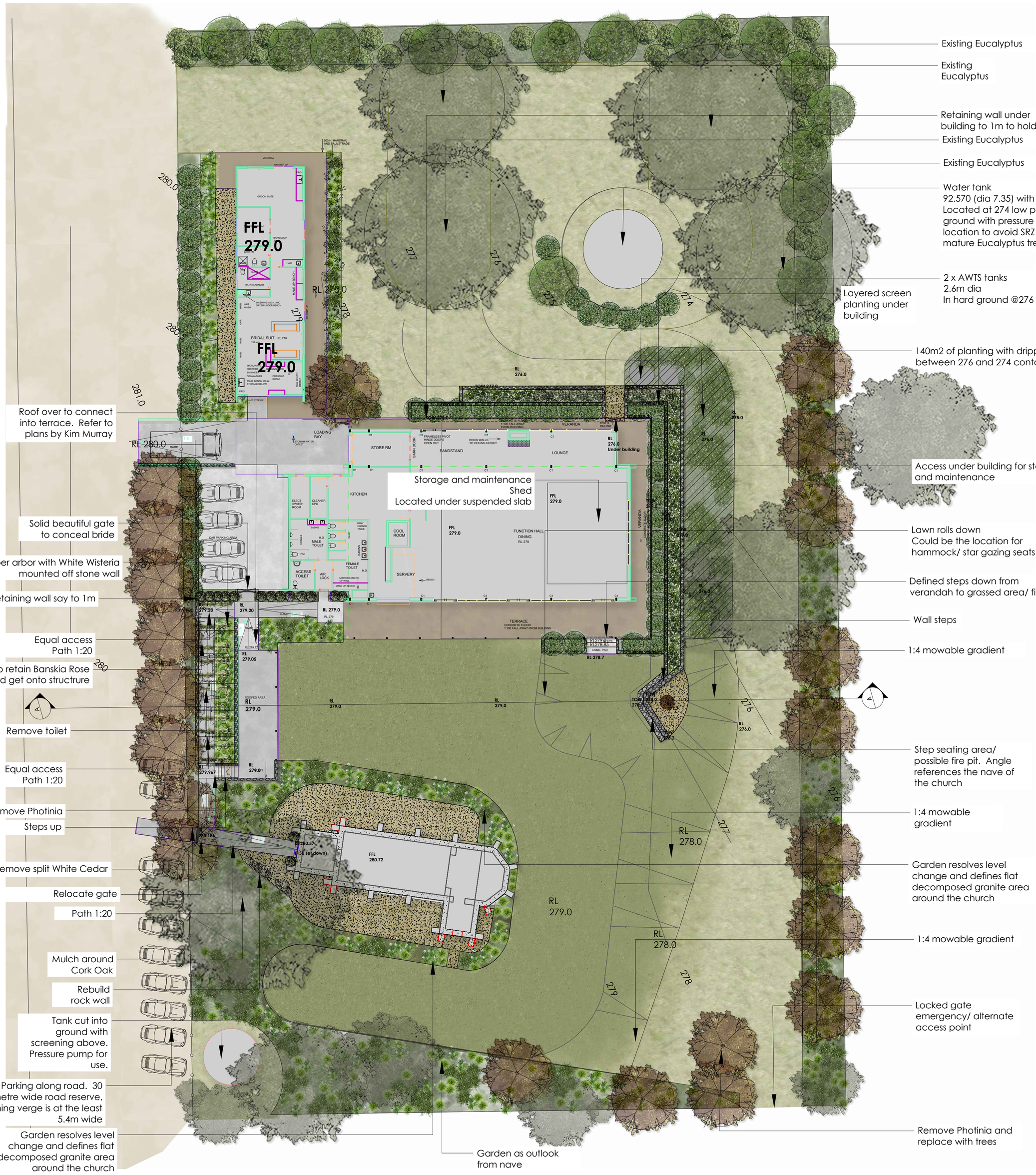
somewhere.
LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

Chapel 1872
10 Parry St
Jugiong NSW
Wiradjuri Country

CLIENT	Kim Coulter	**SCALE**	1:200 @ A1
DATE	09.05.23	**REVISION**	B
PROJECT	J696	**STATUS**	Final for DA

Landscape masterplan

L02



LEGEND

Existing trees retained

Existing contour level

Proposed level
Reshaping contour
RL revised level
ToW Top of wall level
FFL Finished floor level

Equal access path
1:20 gradient

Connecting path between church and venue

Stone wall to say 3m height
Low wall to west to say 1m height

Stone steps shown as 150mm riser

Decomposed granite around church

Beautiful gate relocated
Solid gate to conceal the bride

Proposed trees
Melia azaderach Elite (Low fruiting White Cedar) to replace removed tree
Arbutus unedo (Irish Strawberry Tree) for the builders
Olea Swan Hill (Low fruiting Olive) for the hill
Jacaranda mimosifolia (Jacaranda) depending on frosts
Paulownia tomentosa (Chinese Empress Tree) for the brides
Brachychiton populneus (Kurrajong) for the hill
Magnolia sp. (Magnolia) for Kim

Planting area
Layered, hardy country garden species. Some for foliage and flower.

Lawn area irrigated

Lawn area/ rough
Existing native grasses

Lighting of landscape to be confirmed

Taps/ water connection to be confirmed

SUGGESTED SPECIES
Shrubs- Mediterranean/ neat plantings/ foliage use
Cotinus coggygria Grace (Smokebush)
Elaeagnus ebbengei (Russian Olive)
Epacris sp. (Epacris)
Eucalyptus pulverulenta Baby Blue (Baby Blue)
Laurus nobilis (Bay Tree)
Olea Piccolo (Olive)
Philotheca myoporoides 'Profusion' (Wax Flower)
Ungi molinae (Chilean Guava)
Viburnum burkwoodii (Viburnum)
Viburnum 'Dense Fence' (Viburnum)
Syringa x hyacinthiflora 'Cora Brandt' (White flowering lilac)

Endemic plantings to extend habitat and connect to remnant
Eucalyptus albens (White Box) and *Eucalyptus microcarpa* (Grey Box)
Northern and NE boundary
Acacia pycnantha (Golden Wattle)
Acacia decora (Western Golden Wattle)
Bursaria spinosa (Bursaria)
Dodonea viscosa subsp. cuneata (Hop Bush)

Small ground covers/ shrubs
Buxus microphylla var. japonica (Box hedge)
Westringia Blue Gem (Native Rosemary)
Rhagodia spinescens (Ground cover salt bush)
Teucrium maram (Cat Thyme)

Flowering species for wedding flowers
Achillea millefolium (White Yarrow)
Alstroemeria Inticancha 'Magic White' (Peruvian Lily)
Limonium perezzi (Sea Lavender)
Pelargonium graveolens (Rose geranium)
Perovskia atriplicifolia (Russian Sage)
Salvia sp. (Flowering Sage)

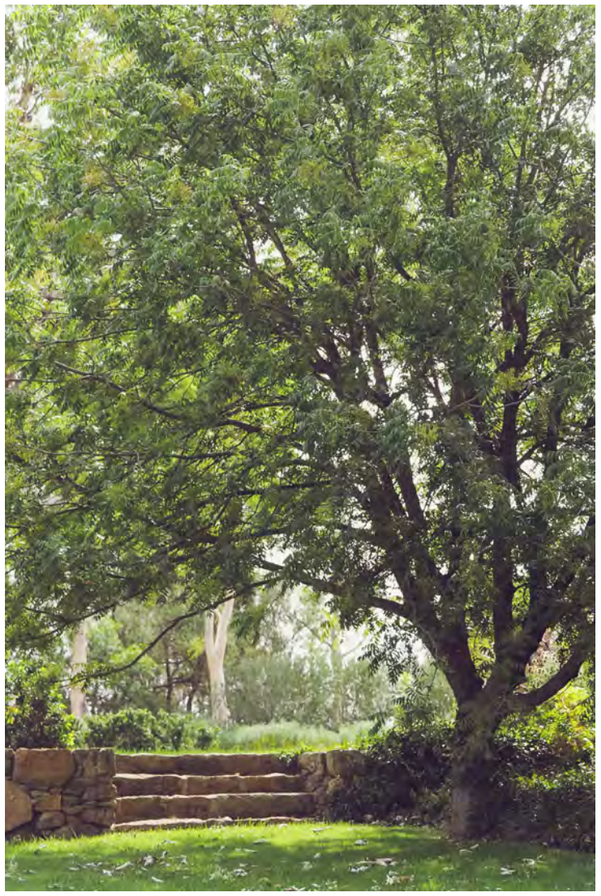
Somewhere.
LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

Chapel 1872
10 Parry St
Jugiong NSW
Wiradjuri Country

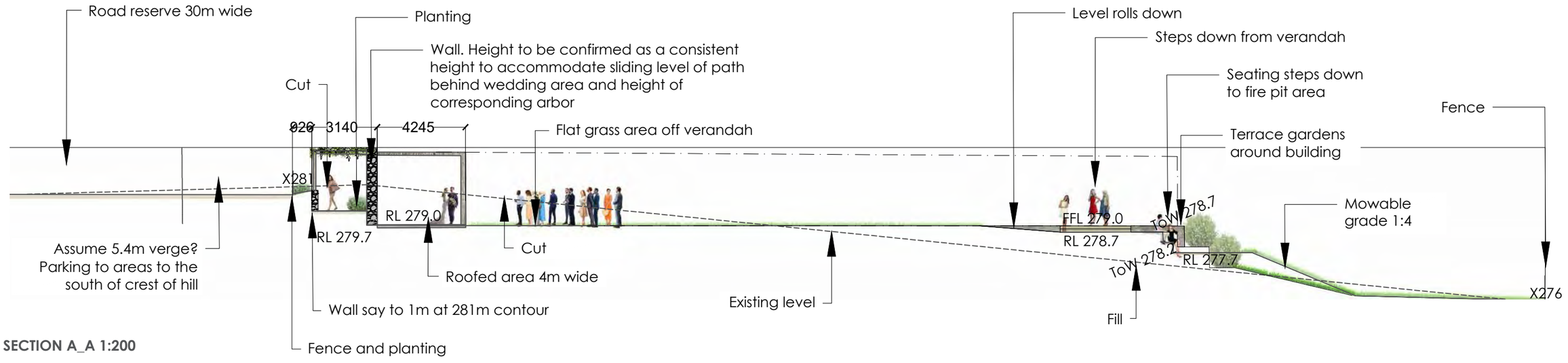
CLIENT	Kim Coulter	**SCALE**	1:200 @ A1
DATE	09.05.23	**REVISION**	I
PROJECT	J696	**STATUS**	FINAL for DA

IMAGES and SECTIONS

L03



SECTIONS



SECTION A_A 1:200

Somewhere.
LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

Chapel 1872
10 Parry Street Jugiong
Wiradjuri Country

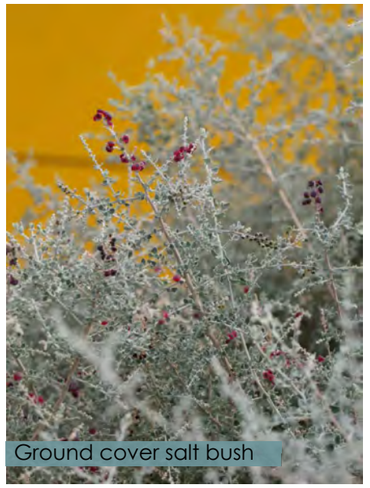
CLIENT	Kim	SCALE	NA
DATE	09.05.23	REVISION	F
PROJECT	J696	STATUS	Final for DA

PLANTING PALETTE

GROUND COVERS


Baby Blue


Olive


Ground cover salt bush


Native Rosemary


Cat Thyme

SHRUBS

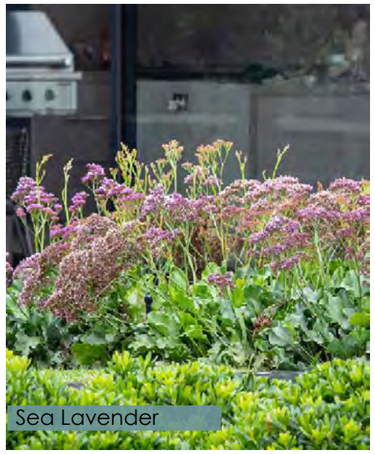

Smoke Bush


White Lilac


Epacris

FLOWERING PERENNIALS


Russian Sage


Sea Lavender


Rose geranium


White Yarrow

Somewhere.
LANDSCAPE ARCHITECTS, DESIGNERS AND DREAMERS

Chapel 1872
10 Parry Street Jugiong
Wiradjuri Country

CLIENT	Kim	**SCALE**	NA
DATE	09.05.23	**REVISION**	A
PROJECT	J696	**STATUS**	Final for DA

APPENDIX # 8

AHIMs search

bMAT REPORT

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : COULTER

Client Service ID : 825513

Kenneth Filmer

18 Pineview Cct 91 Boorowa Street Young
Young New South Wales 2594

Attention: Kenneth Filmer

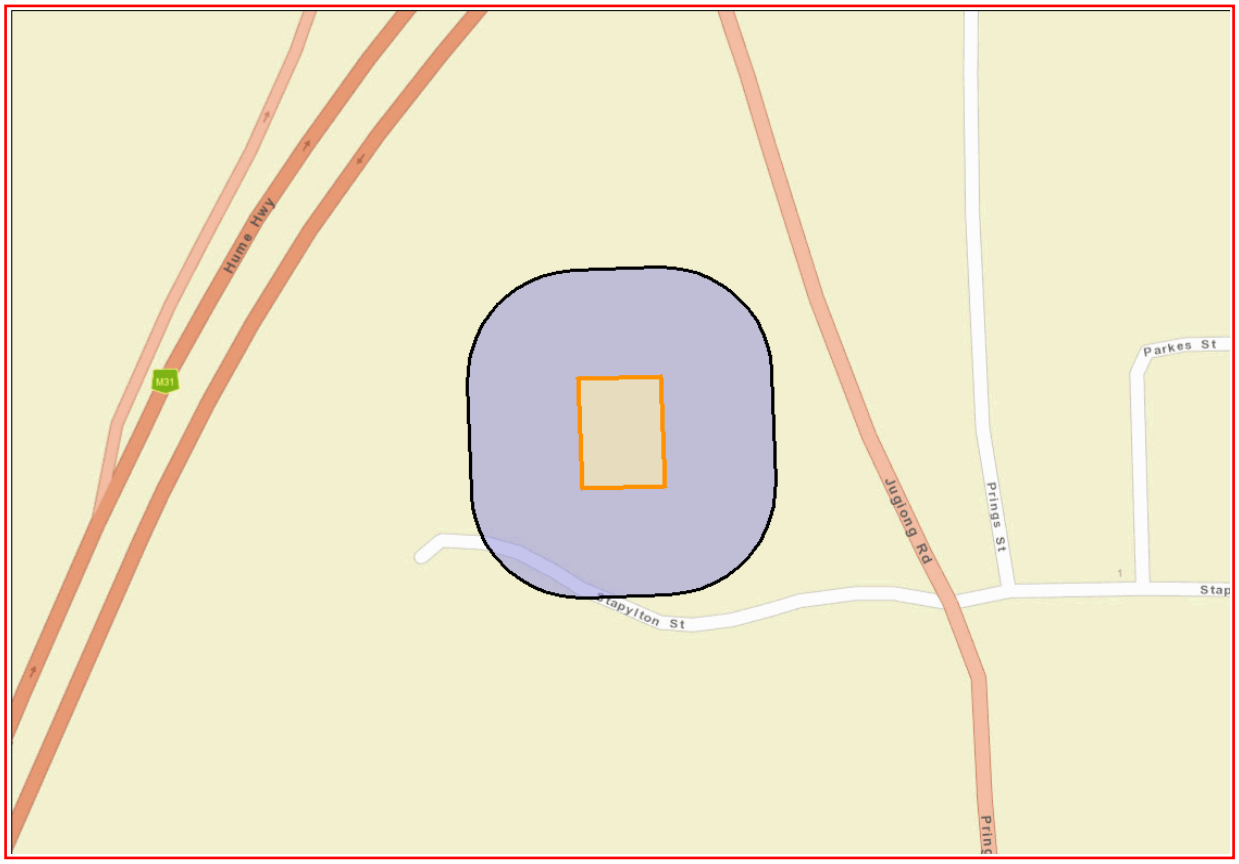
Email: craig@dabusters.com

Date: 04 October 2023

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 11, DP:DP758547, Section : 45 with a Buffer of 50 meters, conducted by Kenneth Filmer on 04 October 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

Level 6, 10 Valentine Ave, Parramatta 2150
Locked Bag 5020 Parramatta NSW 2124
Tel: (02) 9585 6345

ABN 34 945 244 274
Email: ahims@environment.nsw.gov.au
Web: www.heritage.nsw.gov.au

Department of Planning and Environment

Biodiversity Values Map and Threshold Report

This report is generated using the Biodiversity Values Map and Threshold (BMAT) tool. The BMAT tool is used by proponents to supply evidence to a consent authority to determine whether or not a Biodiversity Development Assessment Report (BDAR) is required under the Biodiversity Conservation Regulation 2017 (Cl. 7.2 & 7.3).

The report provides results for the proposed development footprint area identified by the user and displayed within the blue boundary on the map.

There are two pathways for determining whether or not a BDAR is required for the proposed development:

1. Is there Biodiversity Values Mapping?
2. Is the 'clearing of native vegetation area threshold' exceeded?

Biodiversity Values Map and Threshold Report

Date of Report Generation		04/10/2023 2:57 PM
Biodiversity Values (BV) Map Threshold - Results Summary		
1	**Does the development Footprint intersect with BV mapping?**	no
2	**Was ALL of the BV Mapping within the development footprinted added in the last 90 days?** (dark purple mapping only, no light purple mapping present)	no
3	**Date of expiry of dark purple 90 day mapping***	N/A
4	**Is the Biodiversity Values Map threshold exceeded?**	no
Area Clearing Threshold - Results Summary		
5	**Size of the development or clearing footprint**	600.9 sqm
6	**Native Vegetation Area Clearing Estimate (NVACE)**	456.7 sqm
7	**Method for determining Minimum Lot Size**	LEP
8	**Minimum Lot Size** (10,000sqm = 1ha)	2,000 sqm
9	**Area Clearing Threshold** (10,000sqm = 1ha)	2,500 sqm
10	**Is the Area Clearing Threshold exceeded?**	no

Is the proposed development assessed above the Biodiversity Offsets Schema (BOS) threshold? Exceeding the BOS threshold will require completion of a Biodiversity Development Assessment Report (BDAR). More details provided on page 2.	**no**

What do I do with this report?

• If the result above indicates a BDAR is required, a Biodiversity Development Assessment Report may be required with your development application. Go to https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor to access a list of accredited assessors. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR.

• If the result above indicates a BDAR is not required, you have not exceeded the BOS threshold. This report can be provided to Council to support your development application. You may still require a permit from your local council. Review the development control plan and consult with council. You may still be required to assess whether the development is '"likely to significantly affect threatened species" as determined under the test in Section 7.3 of the Biodiversity Conservation Act 2016. You may also be required to review the area where no vegetation mapping is available.

• If all Biodiversity Values mapping within your development footprint are less than 90 days old, i.e. mapping is displayed as dark purple on the map, a BDAR may not be required if your Development Application is submitted within that 90 day period. *Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 3 above.

For more detailed advice about actions required, refer to the Interpreting the evaluation report section of the Biodiversity Values Map Threshold Tool User Guide.

Review Options:

• If you believe the Biodiversity Values mapping is incorrect please refer to our BV Map Review webpage for further information.

• If you disagree with the NVACE result for Line Item 6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared) you can undertake a self-assessment. For more information about this refer to the Guide for reviewing BMAT Tool area clearing threshold results.

Acknowledgement

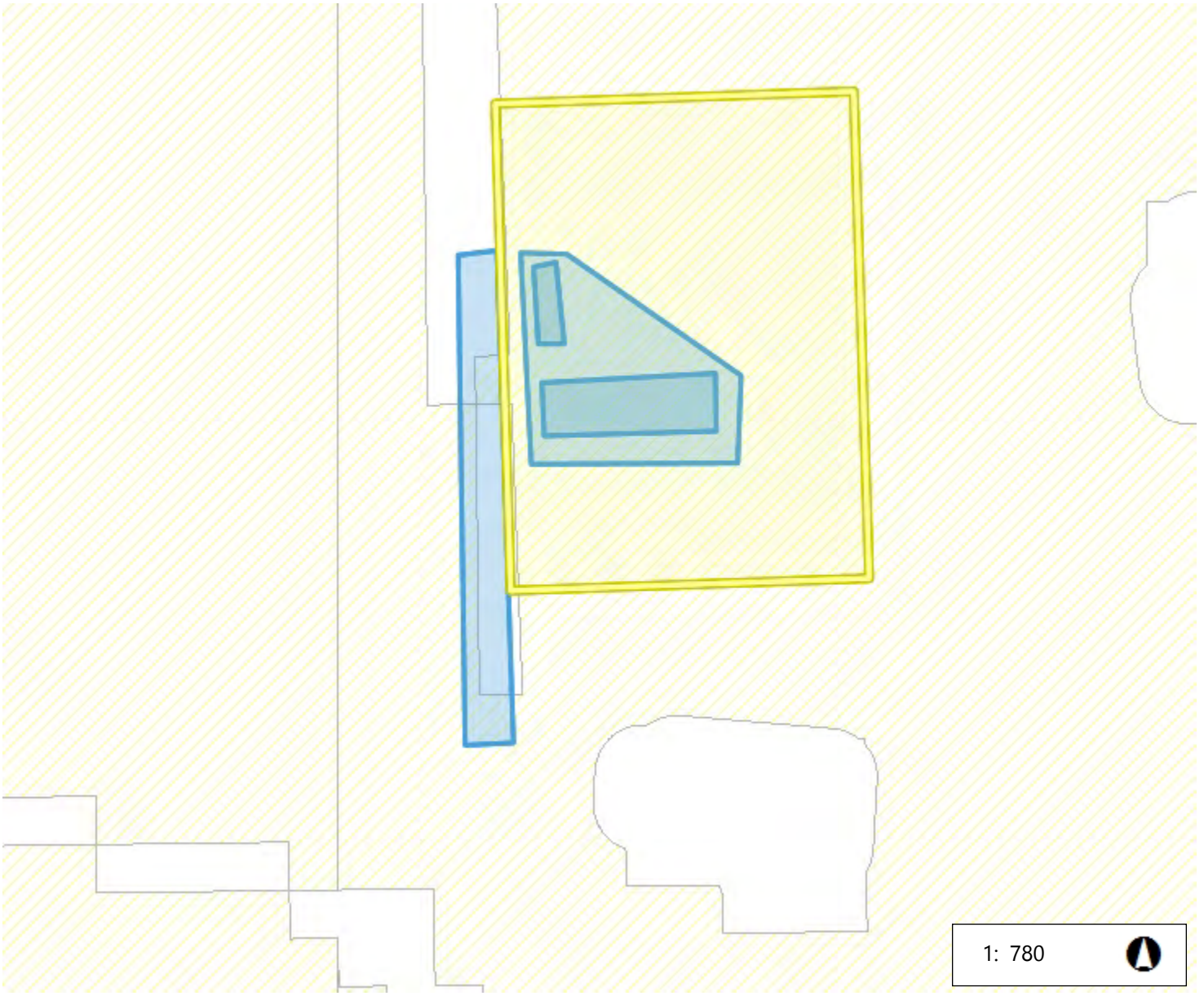
I, as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature: _____ Date:_____

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

04/10/2023 02:57 PM

Biodiversity Values Map



39.6 0 19.82 39.6 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days
- Native Vegetation Area Clearing Estimate (NVACE)
- Development area selected by proponent

04/10/2023 02:57 PM

The results provided in this tool are generated using the best available mapping and knowledge of species habitat requirements.

This map is valid as at the date the report was generated. Checking the Biodiversity Values Map viewer for mapping updates is recommended.