



Mailing Address: PO Box 390, Gayndah Qld 4625  
 Street Address: 34-36 Capper Street, Gayndah Qld 4625  
 Telephone: 1300 696 272  
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 Web: northburnett.qld.gov.au  
 ABN: 23 439 388 197

## REQUEST FOR CONCURRENCE AGENCY ASSESSMENT

Contact Council if you have any specific enquiries regarding fees or how to complete this form. Type or print clearly and select boxes where applicable. Enter "n/a" if the question does not apply.

<b>Type of Assessment Required</b>  (tick applicable boxes - the more information provided will assist with assessment)	<input type="checkbox"/> Concurrence Agency Referral prior to Building Application (s57, PA 2016) <input checked="" type="checkbox"/> Concurrence Referral (s55, PA 2016) <input checked="" type="checkbox"/> Design & Siting (QDC) <input type="checkbox"/> Building over or near relevant infrastructure. <input type="checkbox"/> Planning Scheme – Alternate Siting provisions <input type="checkbox"/> Other  Supporting documentation must be provided i.e site plan, foundation plan, elevations floor plans. Where additional information is required a request will be made to the applicant.
<b>Select as applicable.</b>	<b>APPLICANT DETAILS:</b> <input checked="" type="checkbox"/> Business <input type="checkbox"/> Private Applicants Name <i>David Wright Properties P/L</i> Contact Person <i>Smiley Wright</i> Your Ref Postal address <i>242 Bruce Hwy</i>  Locality / Town <i>BURMONGAH</i> State <i>QLD</i> Postcode <i>4505</i> Contact phone <i>07 2888 2234</i> Contact fax    Email <i>Salgedandwright@nbc.qld.gov.au</i>  APPLICANT'S SIGNATURE ..... <i>[Signature]</i> ..... Date <i>15/01/2011</i>
<b>Address</b>  <b>Real property description</b>	<b>PROPERTY DETAILS:</b> Street No <i>Lot 111 Glenrae Dip Rd.</i> Street Locality / Town <i>Glenrae</i> State <i>QLD</i> Postcode <i>4626</i> Lot no. <i>111</i> Registered plan <i>M2910</i> Parish Description of property: (eg. Dwelling, vacant, industrial, etc) <i>Dwelling to be sited.</i>
	<b>PROPERTY DETAILS:</b> Has the building application been lodged? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – Date of lodgement Building Certifier:    Engagement Date: Postal Address:  Phone:    Email:
	<b>OFFICE USE ONLY</b> Total    Receipt No    Date    /    /

### Information Privacy Act Collection Notice

North Burnett Regional Council is collecting this information in order to process your application. This information will not be disclosed to any third party without your written or verbal authorisation unless required by law.

<b>Proposal Details</b> (tick applicable boxes)	<b>DESCRIPTION OF PROPOSED BUILDING WORKS:</b> <input type="checkbox"/> New Dwelling <input type="checkbox"/> Dwelling Alteration <input type="checkbox"/> Carport/Shed <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Relocated building <input type="checkbox"/> Other:
	<b>REASON FOR APPLICATION:</b> <input type="checkbox"/> Front Boundary Setback <input type="checkbox"/> Rear Boundary Setback <input type="checkbox"/> Side Boundary Setback <input type="checkbox"/> Clearance from sewer <input type="checkbox"/> Other:
<b>Proposal Details</b> (tick applicable boxes)	<b>INFORMATION TO BE SUBMITTED WITH APPLICATION:</b> <input checked="" type="checkbox"/> Site Plan (inc. existing buildings on-site, distances to all boundaries for all structures). <input checked="" type="checkbox"/> Building Plans (e.g. proposed floor plans, existing floor plans, elevations). <input checked="" type="checkbox"/> Additional details of relaxation/justification to further support your request. <input checked="" type="checkbox"/> Details of setbacks of buildings on adjoining properties (for request to relax setback to the street only). <input checked="" type="checkbox"/> Details of height of buildings on adjoining properties (for request to relax setback to the street only). <input checked="" type="checkbox"/> <del>Copy of building application (including forms) lodged with certifier (only if a building application has already been lodged with a Private Certifier).</del> <input type="checkbox"/> Copy of acknowledgement notice issued by the building certifier (only if a building application has already been lodged with a Private Certifier). <input type="checkbox"/> Additional information as required by the assessing officer
<b>Written comments to support the request – consideration to requirements set out in North Burnett Regional Planning Scheme</b>	<b>JUSTIFICATION:</b> <div style="border: 1px solid black; padding: 10px; min-height: 500px;"> <p style="font-size: 1.2em; margin: 0;">- House is a beautiful home</p> <p style="font-size: 1.2em; margin: 0;">- Will NEED NEW ZINC Roof + gutters</p> </div>

**Section 2**  
*Only if required by the  
Assessing Officer*

**Adjoining Land Owner's  
Consent**

Where the application to Council is for a performance decision in relation to siting within the Town Zone – Residential Precinct; Village Zone: Rural Residential Zone as a courtesy, it is requested that the proposal be shown to the owners of adjoining land. This provides them with the opportunity to submit their view of the proposal to Council.

The following forms may be used for this purpose, and attached at the time of lodging the application.

1.

**Adjoining / Adjacent / Opposite Property Owner/s Comment regarding the Proposal**

I/We agree with the attached proposal for (Address); \_\_\_\_\_  
or  
 I/We object to the proposal.

Reason for Objection: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: **(Mr./Mrs./Ms/Miss)** Surname: \_\_\_\_\_ Given name: \_\_\_\_\_

Your Property Address:

Postal address: \_\_\_\_\_

Phone: (H): \_\_\_\_\_ (W): \_\_\_\_\_ (M): \_\_\_\_\_

Signature/s: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_

2.

**Adjoining / Adjacent / Opposite Property Owner/s Comment regarding the Proposal**

I/We agree with the attached proposal for (Address); \_\_\_\_\_  
or  
 I/We object to the proposal.

Reason for Objection: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: **(Mr./Mrs./Ms/Miss)** Surname: \_\_\_\_\_ Given name: \_\_\_\_\_

Your Property Address:

Postal address: \_\_\_\_\_

Phone: (H): \_\_\_\_\_ (W): \_\_\_\_\_ (M): \_\_\_\_\_

Signature/s: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_

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M : 0467 554 848

Licensee: Adeleh Mollaei  
QBCC : 15197524

# PROPOSED DWELLING FOR G HOOPER AT LOT 111 GLENRAE DIP ROAD GLENRAE



David Wright House Removers and Demolition  
240 Bruce Hwy, Eastern Service Road  
Burpengary East, QLD 4505  
P | (07) 38882234 F | (07) 3888 2231  
E | info@davidwright.com.au

SHEET	REVISION	DRAWING TITLE
HOO - 001	D	SITE PLAN
HOO - 002	D	EXISTING FLOOR PLAN
HOO - 003	D	PROPOSED FLOOR PLAN
HOO - 004	D	ELEVATIONS
HOO - 005	D	ELEVATIONS
HOO - 006	D	SECTION A-A'
HOO - 007	D	DETAILS

**GENERAL NOTES:**

The proposed dwelling is to comply with standard building by-laws, Building Code of Australia NCC 2022 and all Australian Standards relevant to the classification of the building.

**THE PROPOSED DWELLING**

- The proposed dwelling is a relocated building and is to be sited as shown.
- Location of building approximate only. Building must adhere to local council's minimum setbacks.
- All plumbing and drainage to local council requirements.
- Finished levels to be determined onsite.

**TIMBERWORK**

- This building is an existing timber framed building with chamferboard cladding.

**CONCRETE**

- Refer to Engineer's Specifications.

**ADDITIONAL TIMBERWORK**

- Refer to Engineer's Specifications.

**TIMBER SCHEDULE**

- Refer to Engineer's Documents.

**TERRAIN**

- Refer to Site Classification Report CQ24307 by CQ Soil Testing.

**SITE CLASSIFICATION**

- The site classification has been determined to be classified as a " M" site as per soil report CQ24307 by CQ Soil Testing dated 22/11/2023. Refer to engineer's specifications for bored pier diameter and a minimum depth.

**STUMPS**

- Stump positions are indicative only. Refer to Engineer's Documents.

**BRACING**

- Refer to Engineer's Specifications.

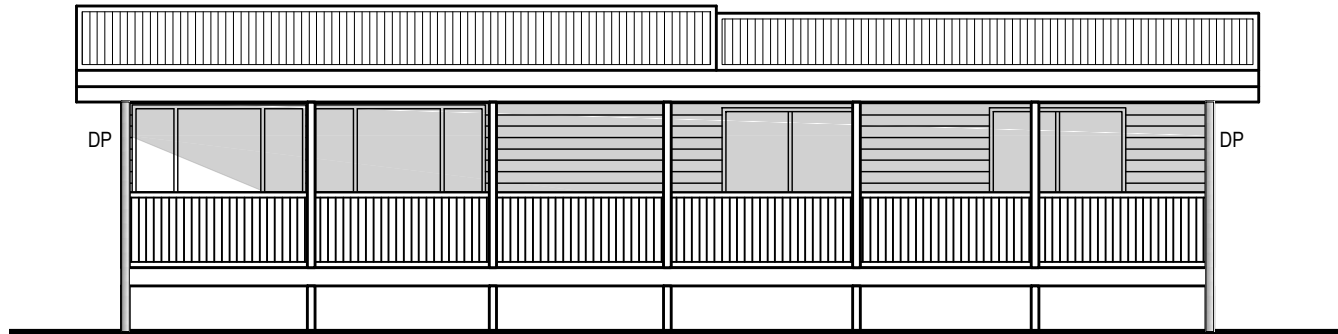
**TIE DOWN**

- Refer to Engineer's Specifications.

**SUSTAINABILITY**

As per Queensland Development Code Part MP4.1 & MP4.2:

- Ceiling Batts with minimum R3 Rating to be installed.
- All shower roses to be AAA-rated unless otherwise noted.
- All WC cisterns to be 6/3 litre dual-flush.
- Provide energy efficient lighting to at least 80 per cent of the house.
- Water pressure to any fixture must not exceed 500kPa. Water pressure limiting devices to be installed in areas with high water pressure.
- Provide greenhouse efficient hot water systems such as solar, heat pump or gas hot water with minimum 14 renewable energy certificates. Provide temp. limiting devices to all bathroom fixtures.



**PROPOSED NORTH ELEVATION**

Scale 1:100

LEGEND	
○ <sup>DP</sup>	Downpipe
□ <sup>EF</sup>	Exhaust Fan
— —	Line of Roof Above
Ⓢ	Smoke Alarm
□ <sup>SL</sup>	Skylight

LEGEND - DEMOLITION	
	Demolished Roof
	Demolished Wall
	Demolished Masonry Wall
	Existing Roof
	Existing Wall
	Masonry Wall
	Extent Of Removed Surface

WINDOW SCHEDULE	
a   Awning	gb   Glass Brick
bf   Bi-Fold	l   Louvre
c   Casement	obs   Obscured Glass
da   Double Awning	s   Sliding
dh   Double Hung	v   Vented
f   Fixed	

**NOTE:**

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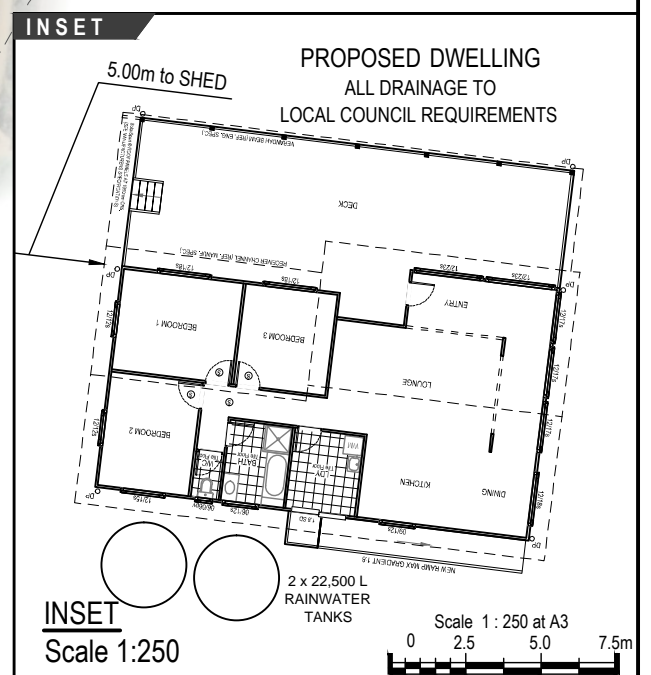




**WARNING:  
BUILDING LOCATION SUBJECT TO  
SEPTIC / WATER TREATMENT DESIGN**

LOT INFORMATION	
LOT PLAN	111 MZ910
STREET NUMBER	LOT 111
STREET NAME	GLENRAE DIP
LOCALITY	GLENRAE
AREA CODE	4626
SITE COVER	
SITE AREA	64.6 ha
EXISTING SHEDS FOOTPRINT	285m <sup>2</sup> APPROX.
PROPOSED DWELLING FOOTPRINT	177m <sup>2</sup> APPROX.
PROPOSED SITE COVER	462m <sup>2</sup> , 0.07% APPROX.

**SITE PLAN**  
Scale 1:4000

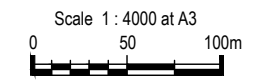


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QBCC : 15197524

REV	DESCRIPTION	DATE	DRN.	APPRVD.
A	ISSUED FOR DESIGN APPROVAL	23.10.2023	MP	AM
B	ISSUED FOR ENGINEERING	23.11.2023	MP	AM
C	BUILDING HEIGHT CHANGE	28.11.2023	MP	AM
D	BUILDING HEIGHT CHANGE	11.03.2024	MP	AM

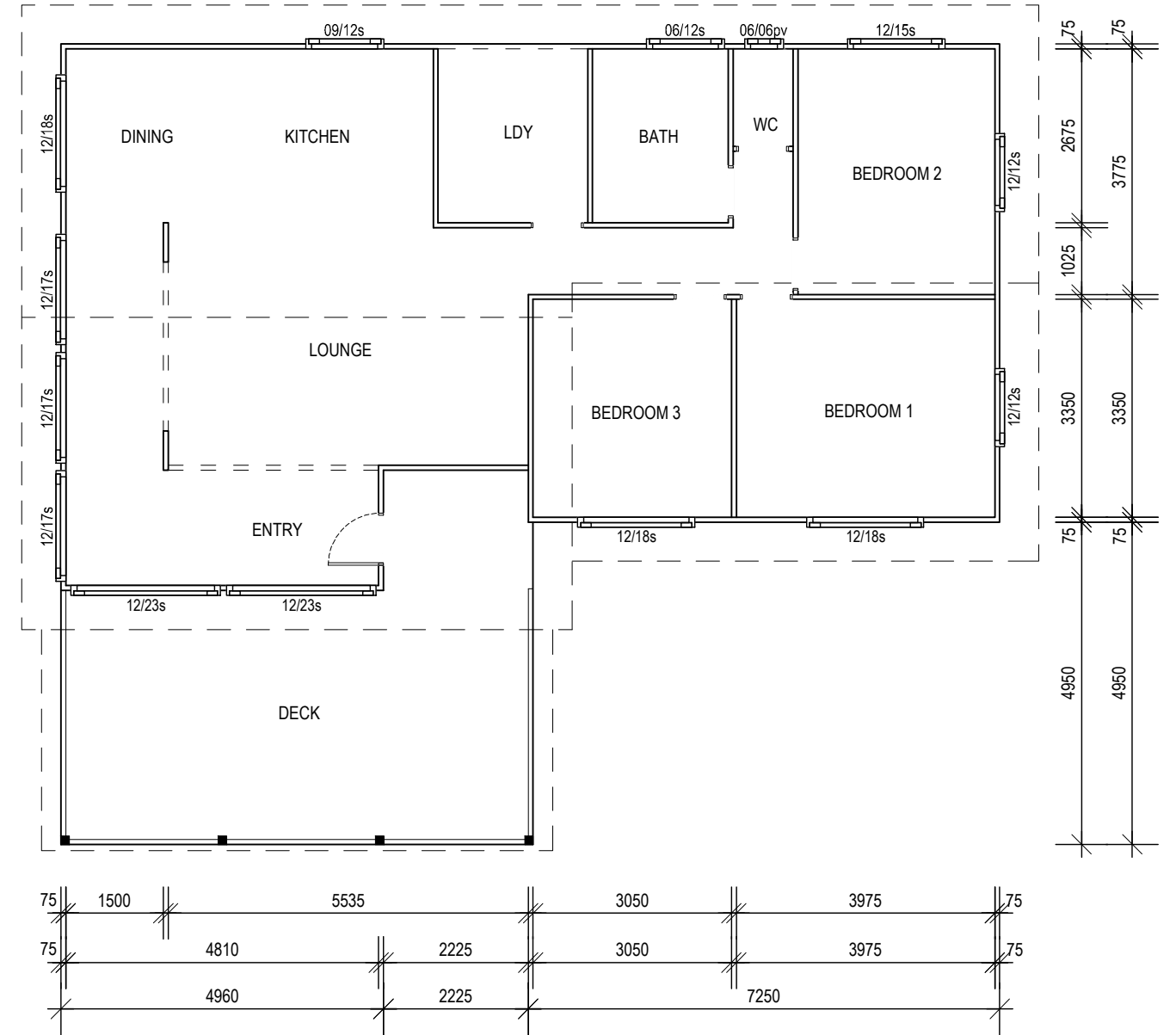
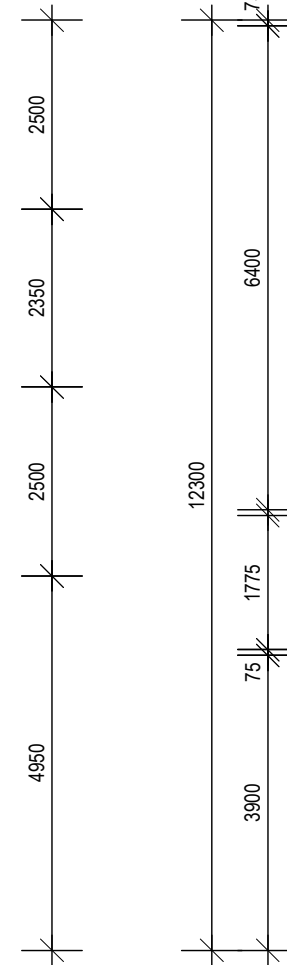
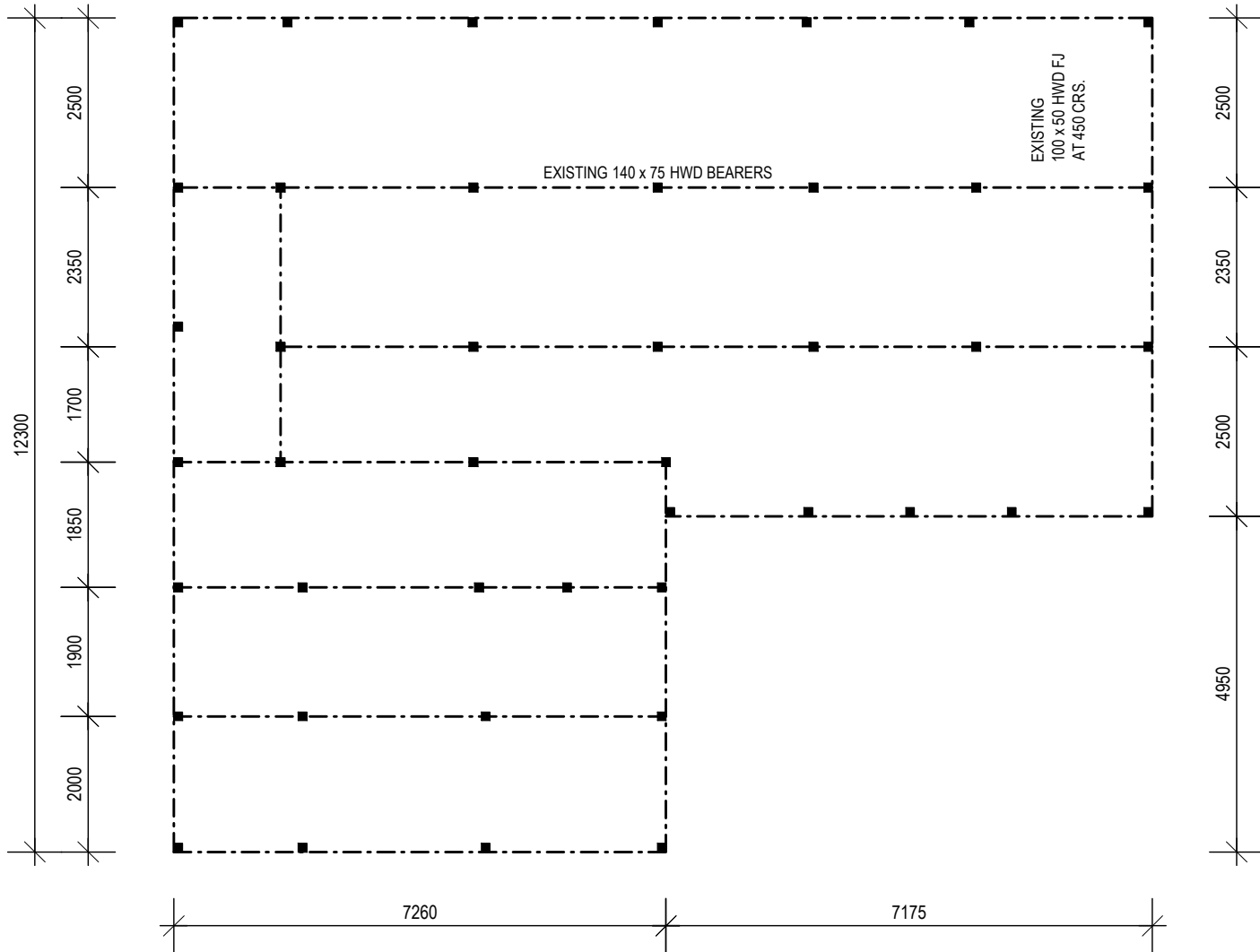
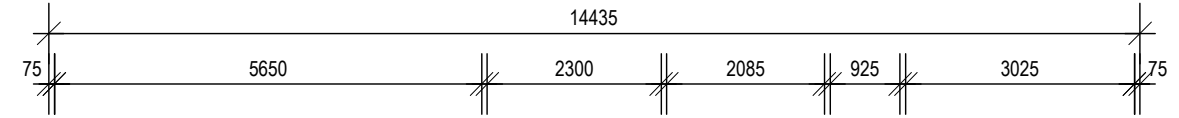
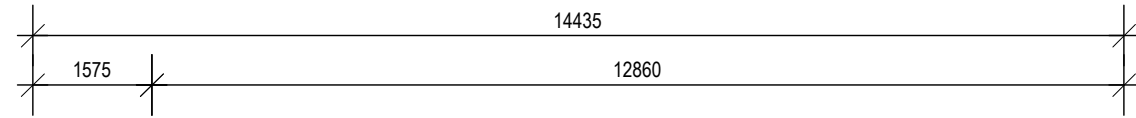
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Project Address  
**PROPOSED DWELLING AT  
LOT 111 GLENRAE DIP  
ROAD  
GLENRAE**

Client	G HOOPER		
Sheet	<b>SITE PLAN</b>		
Drawing No.	HOO-001	Job Code.	900143
REV	D		



**EXISTING SUB-FLOOR PLAN**  
Scale 1:100

**EXISTING FLOOR PLAN**  
Scale 1:100

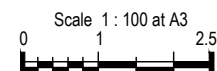
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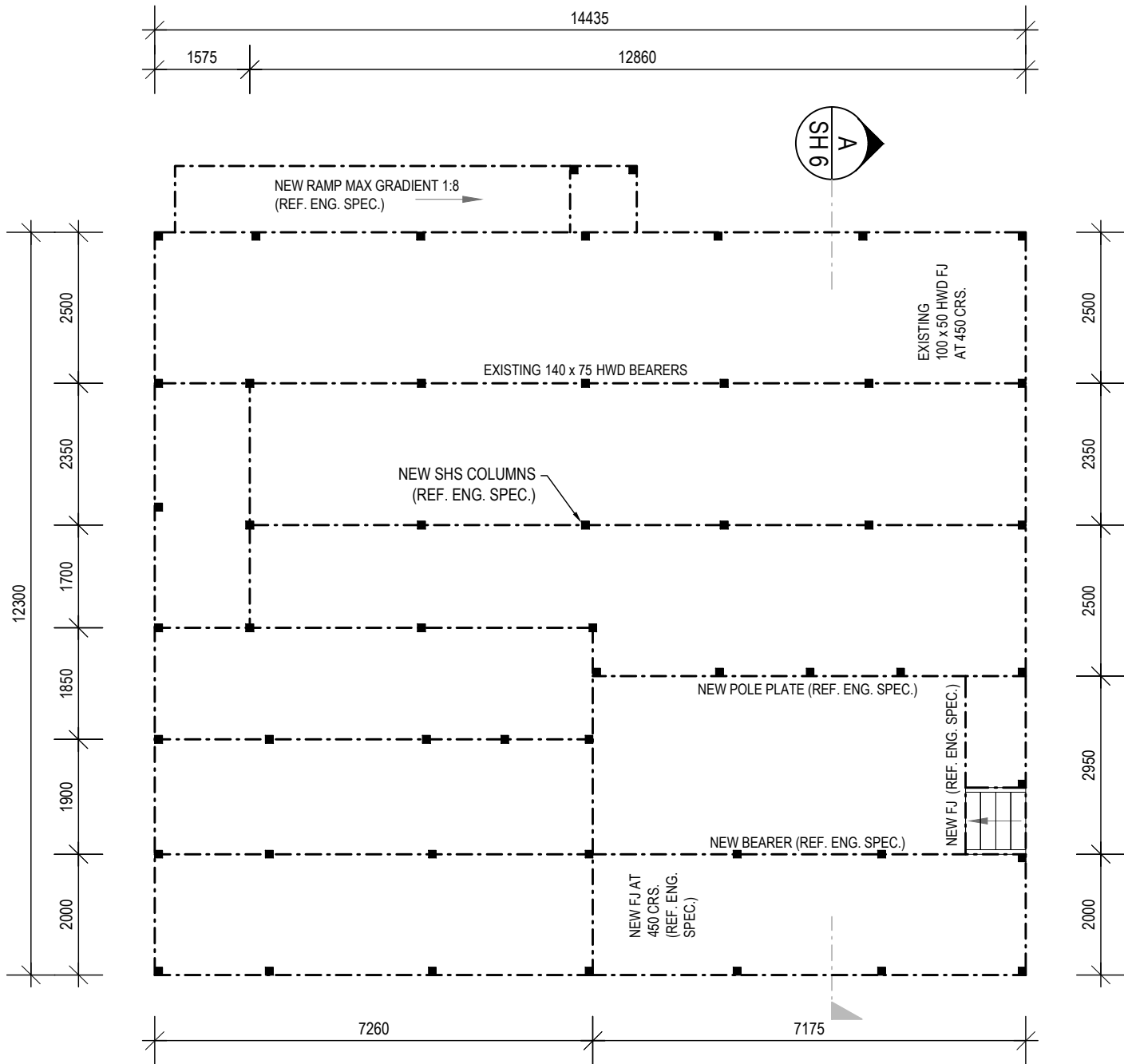
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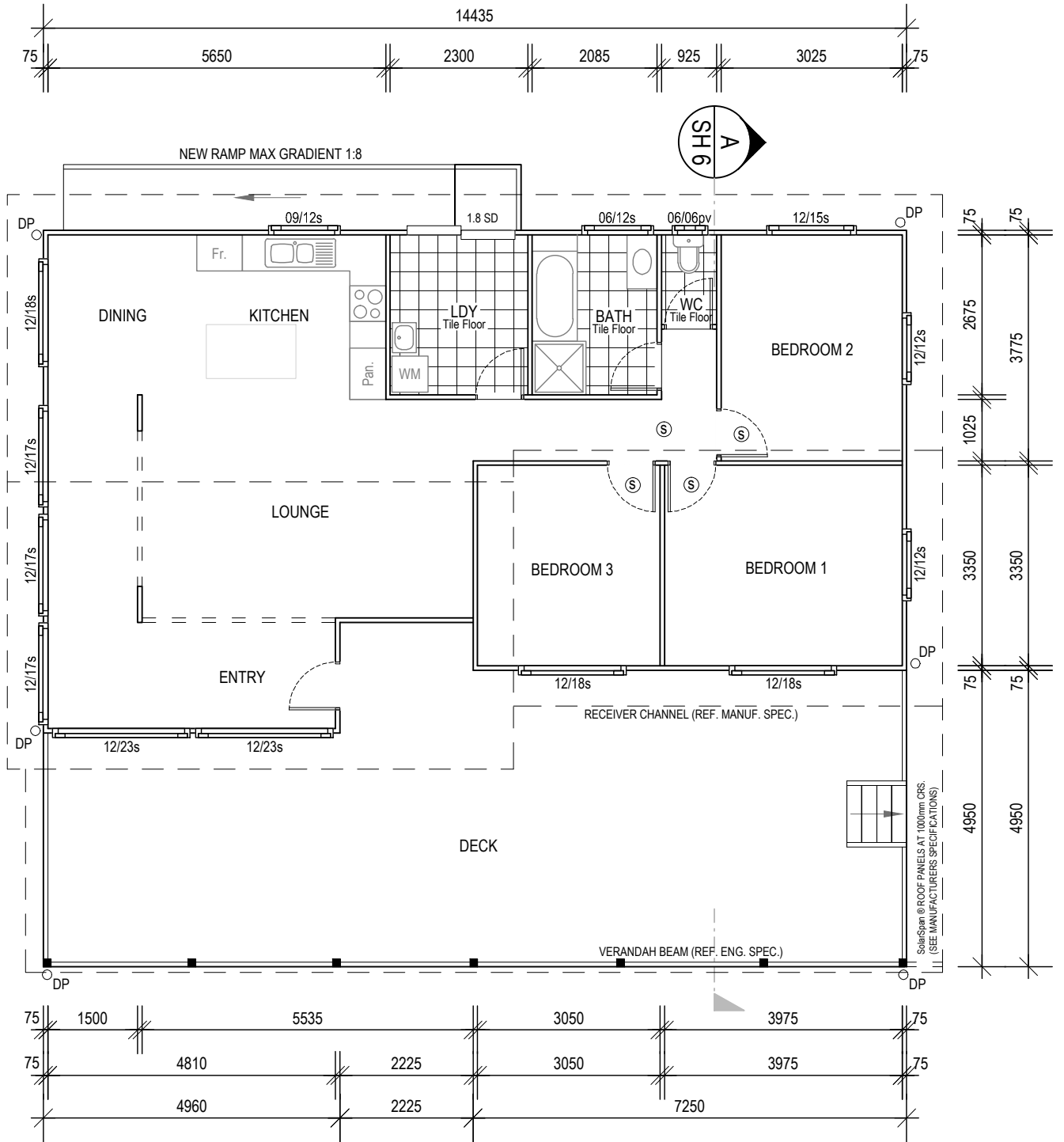
Project Address  
**PROPOSED DWELLING AT  
LOT 111 GLENRAE DIP  
ROAD  
GLENRAE**

Client	G HOOPER		
Sheet	<b>EXISTING FLOOR PLAN</b>		
Drawing No.	HOO-002	Job Code.	900143
REV	D		





**PROPOSED SUB-FLOOR PLAN**  
Scale 1:100



**PROPOSED FLOOR PLAN**  
Scale 1:100

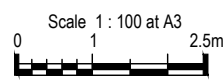
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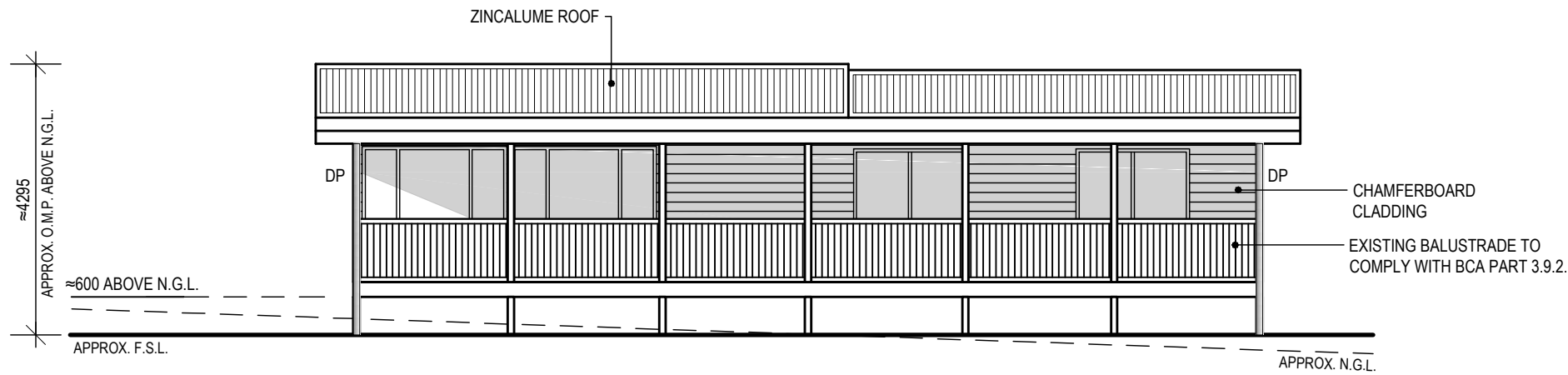
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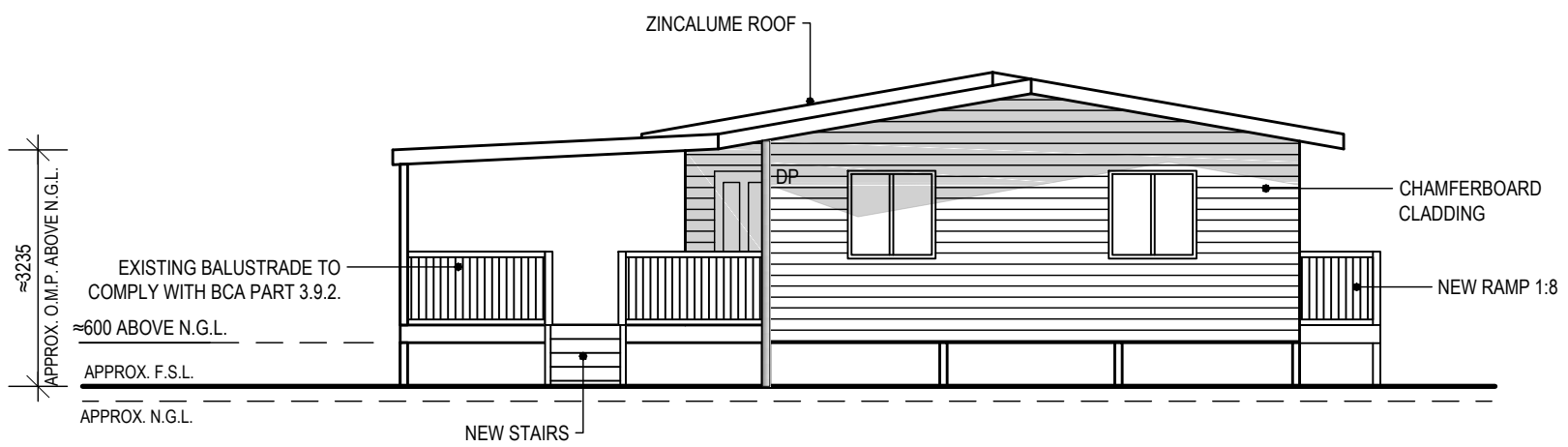


Project Address  
**PROPOSED DWELLING AT LOT 111 GLENRAE DIP ROAD GLENRAE**

Client	G HOOPER		
Sheet	<b>PROPOSED FLOOR PLAN</b>		
Drawing No.	HOO-003	Job Code.	900143
REV	D		



**PROPOSED NORTH ELEVATION**  
Scale 1:100



**PROPOSED WEST ELEVATION**  
Scale 1:100

**N.B.**  
N.G.L. = NATURAL GROUND LINE  
F.S.L. = FINISHED SURFACE LEVEL

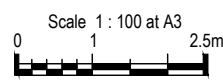


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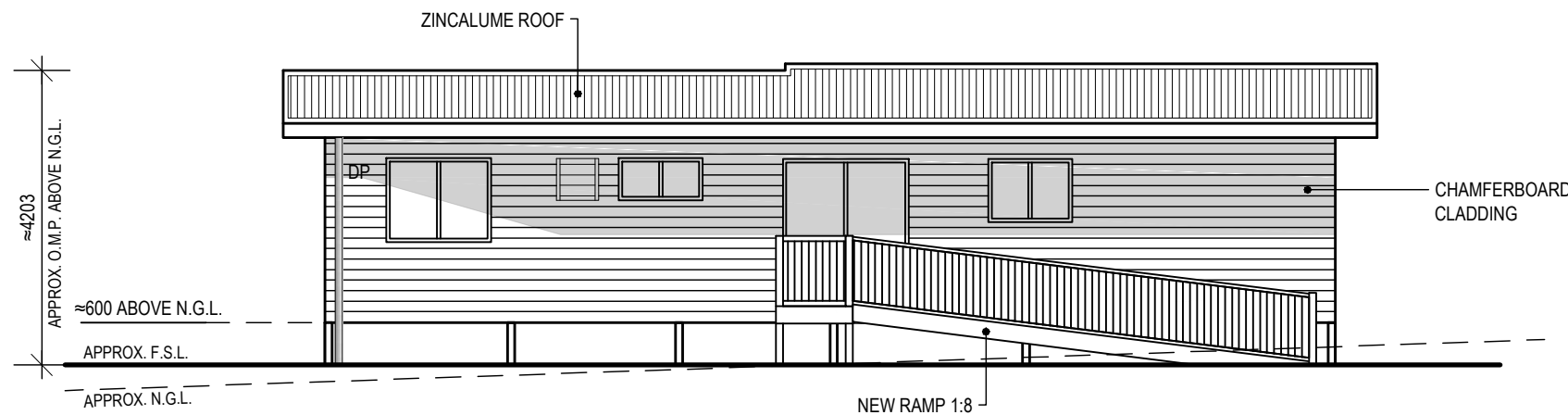
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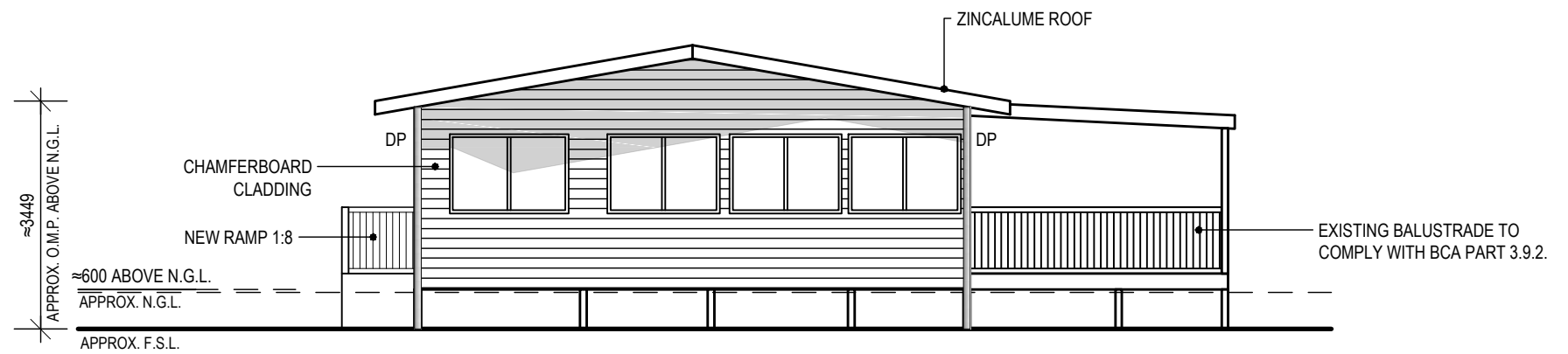
Project Address  
**PROPOSED DWELLING AT  
LOT 111 GLENRAE DIP  
ROAD  
GLENRAE**

Client	G HOOPER		
Sheet	<b>ELEVATIONS</b>		
Drawing No.	HOO-004	Job Code.	900143
REV	D		





**PROPOSED SOUTH ELEVATION**  
Scale 1:100



**PROPOSED EAST ELEVATION**  
Scale 1:100

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F.S.L. = FINISHED SURFACE LEVEL



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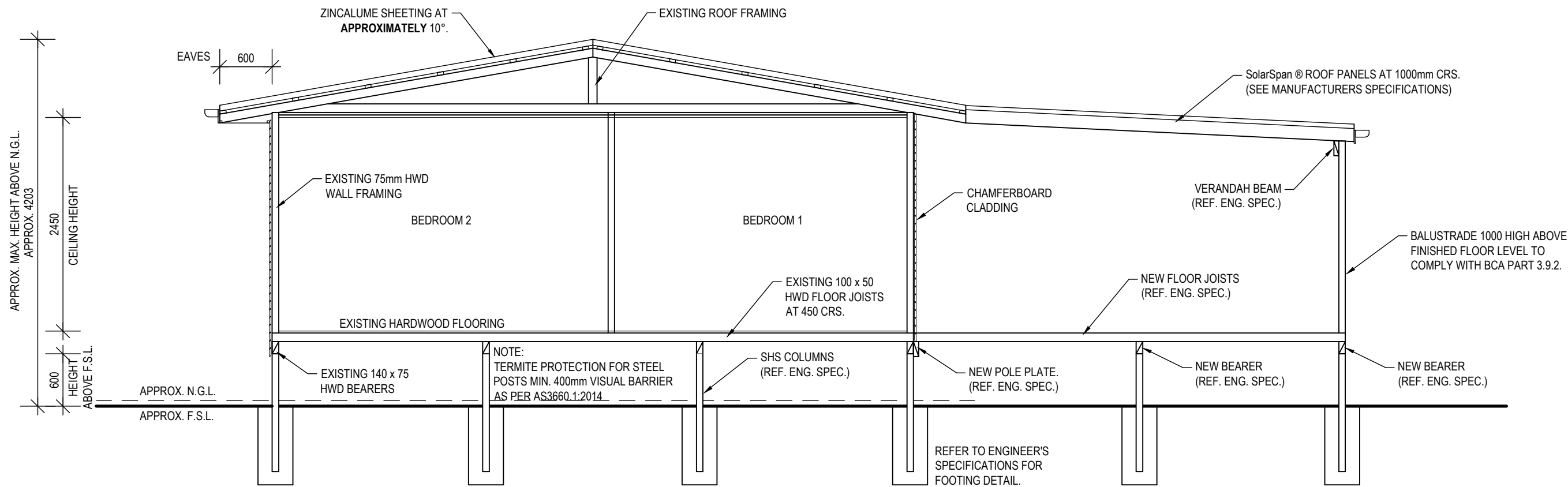
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Sheet	<b>ELEVATIONS</b>		
Drawing No.	HOO-005	Job Code.	900143
REV	D		



**SECTION A-A**  
Scale 1:50

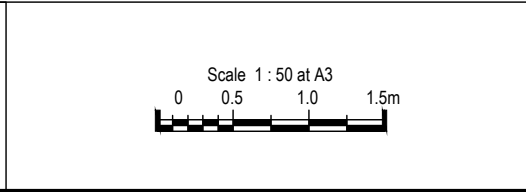
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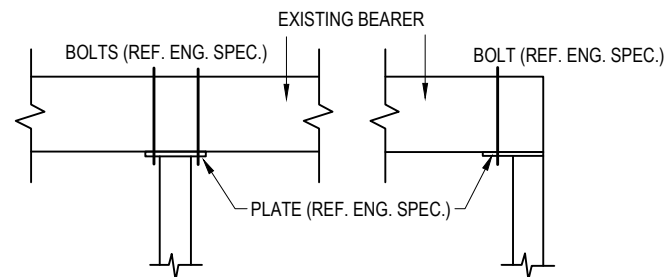
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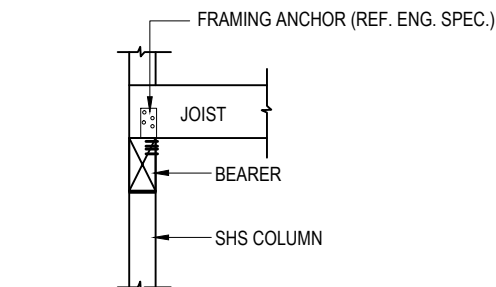


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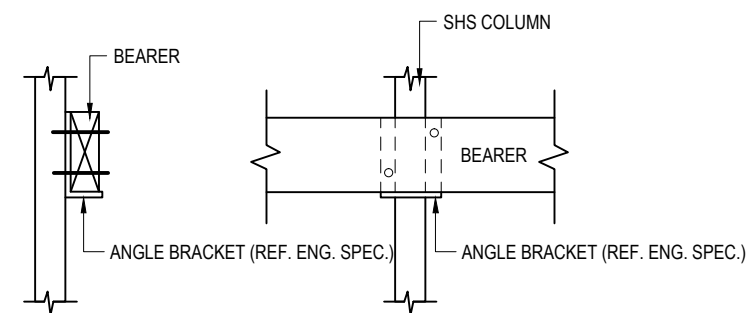
Client	G HOOPER		
Sheet	<b>SECTION A-A'</b>		
Drawing No.	HOO-006	Job Code.	900143
REV			D



1 TYPICAL SHS POST TO BEARER  
NOT TO SCALE



2 TYPICAL JOIST TO BEARER DETAIL  
NOT TO SCALE

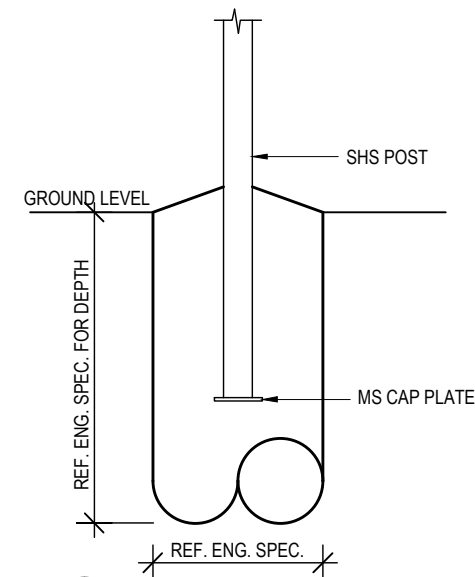
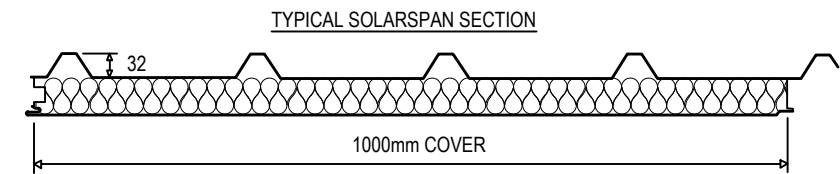


3 TYPICAL CONTINUOUS SHS POST TO BEARER  
NOT TO SCALE

SOLARSPAN SPAN TABLE

Wind Class	ULS Design Wind Pressure (kPa)	Panel Thickness																	
		50mm			75mm			100mm			125mm			150mm			200mm		
		Max Span (m)	Max. Cantilever (mm)	Max. Span (m)	Max. Cantilever (mm)	Max Span (m)	Max. Cantilever (mm)	Max Span (m)	Max. Cantilever (mm)	Max Span (m)	Max. Cantilever (mm)	Max Span (m)	Max. Cantilever (mm)	Max Span (m)	Max. Cantilever (mm)				
N2	2	4	4	550	5	5	900	5.1	6.0	1200	5.7	6.6	1600	6.0	7.2	2400	7.6	9.0	2750
N3	2	3	3	550	4	4	900	3.9	4.8	1200	4.5	5.4	1600	4.8	5.1	1900	5.9	5.7	2400
N4	4	2	2	550	3	2	900	3.3	3.3	1200	3.6	3.3	1400	3.9	3.3	1500	4.8	3.8	1600
N5	5	2	-	550	2	2	800	2.7	2.1	900	3.0	2.1	900	3.0	2.1	900	3.9	2.5	1100

SolarSpan Panel Properties						
Panel Thickness (mm)	50	75	100	125	150	200
Mass (kg/m <sup>2</sup> )	10.6	10.9	11.3	11.6	12.0	12.7
Thermal Performance at 8°C						
R' Value (m <sup>2</sup> K/W)	1.6	2.3	2.9	3.6	4.2	5.5
Thermal Performance at 20°C						
R' Value (m <sup>2</sup> K/W)	1.6	2.2	2.8	3.5	4.1	5.3



4 TYP. BORED PIER  
N.T.S.

NOTE:  
The structural drawings are indicative only and require to be confirmed with structural engineer prior to work. AM20 Design does not accept any responsibility for the structural components and their designs for the proposed dwelling. Structure Engineer's drawings take precedence over AM20 Design drawings and documents.



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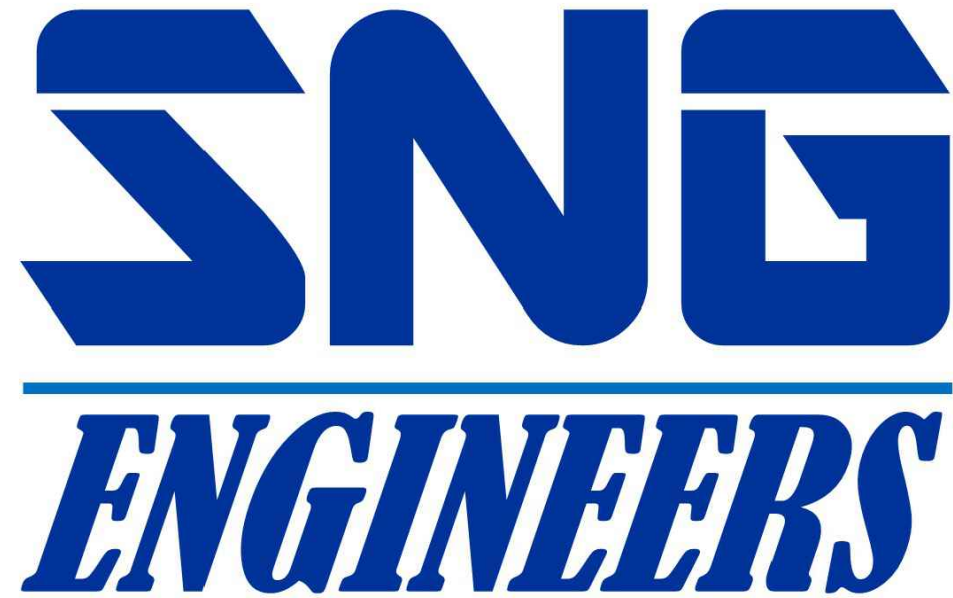
REV	DESCRIPTION	DATE	DRN.	APPRVD.
A	ISSUED FOR DESIGN APPROVAL	23.10.2023	MP	AM
B	ISSUED FOR ENGINEERING	23.11.2023	MP	AM
C	BUILDING HEIGHT CHANGE	28.11.2023	MP	AM
D	BUILDING HEIGHT CHANGE	11.03.2024	MP	AM

WARNING NOTICE:  
1. Engineer's and or Manufacturer's Designs & Specifications to take precedence over this document.  
2. All contractors to confirm all levels, angles and dimensions on site before commencing work.  
3. All construction to comply with the Building Code of Australia 2022 and current Australian Standards.  
4. Do not scale off drawings.

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Project Address  
PROPOSED DWELLING AT  
LOT 111 GLENRAE DIP  
ROAD  
GLENRAE

Client	G HOOPER		
Sheet	DETAILS		
Drawing No.	HOO-007	Job Code.	900143
REV	D		




**DRAWING INDEX**

SHEET NO.	DRAWING TITLE
000	INDEX PAGE
001	NOTES 1
002	NOTES 2
003	NOTES 3
004	NOTES 4
101	FOOTING PLAN
102	SURFACE DRAINAGE DETAILS
103	PLUMBING DETAILS
104	FRAMING & BRACING PLAN
105	CONNECTION DETAILS - 1
106	CONNECTION DETAILS - 2

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6. IF EVER IN DOUBT, DON'T ASSUME. ASK!

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

APPROVED BY:   
RPEQ 18398

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ARCHITECT: AM 20 DESIGN  
 JOB NO: 900143  
 REV C  
 DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD  
 GLENRAE

TITLE: INDEX PAGE

SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 000	REVISION: 1	



**GENERAL NOTES**

- G.1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL & OTHER CONSULTANTS DRAWINGS & SPECIFICATIONS & WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT/ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G.2. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL CHECK AND CO-ORDINATE WITH THE ARCHITECT AND OTHER CONSULTANTS FOR ALL STEPS, FALLS, REBATES, SETDOWNS, CHASES AND PENETRATIONS.
- G.3. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G.4. VERIFY ALL DIMENSIONS ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING FABRICATION.
- G.5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE AND ADJACENT STRUCTURES IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED DURING THE WORKS.
- G.6. THE CONTRACTOR MUST ENSURE THAT NO STRUCTURE PROJECTS OUTSIDE THE TITLE BOUNDARIES.
- G.7. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS, THE NCC, AND LOCAL COUNCIL REGULATIONS.
- G.8. THIS REPORT IS BASED ON INFORMATION SUPPLIED BY THE CLIENT. IF ANY ASPECT OF THE SITE PREPARATION OR PROPOSED CONSTRUCTION CHANGES FROM THAT ORIGINALLY ADVISED, THE ENGINEER MUST BE NOTIFIED SO THAT ANY NECESSARY AMENDMENTS CAN BE MADE.
- G.9. ALL NON-LOADBEARING WALLS SHALL BE KEPT 20MM CLEAR OF THE UNDERSIDE OF SLABS, BEAMS AND OTHER STRUCTURAL ELEMENTS, UNLESS NOTED OTHERWISE.
- G.10. THE CONTRACTOR IS TO CONFIRM THE LOCATIONS OF ALL EXISTING UNDERGROUND SERVICES AND TAKE NECESSARY MEASURES TO AVOID CLASHES PRIOR TO COMMENCING EARTHWORKS AND/OR PILING.
- G.11. THE STRUCTURAL ENGINEERING DESIGN DOCUMENTED FOR THIS PROJECT RELATES TO THE PROPOSED NEW CONSTRUCTION OF BUILDING ELEMENTS. THE CONDITION AND COMPLIANCE OF EXISTING STRUCTURAL COMPONENTS HAVE NOT BEEN ASSESSED NOR CERTIFIED AS PART OF SNG ENGINEERS COMMISSION ON THIS PROJECT UNLESS SPECIFICALLY STATED ON THE DESIGN DOCUMENTS.
- G.12. THESE NOTES HAVE BEEN PROVIDED TO SUPPLEMENT THE DRAWINGS WITH REGARD TO STANDARD OF CONSTRUCTION AND MATERIALS. NOT ALL NOTES ARE NECESSARILY RELEVANT TO ALL DRAWINGS.

**FOOTING & SLAB**

- F.1. FOOTINGS SHALL BE LOCATED CENTRALLY UNDER COLUMNS AND WALLS UNLESS NOTED OTHERWISE.
- F.2. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS 2870 & NATIONAL CONSTRUCTION CODE (N.C.C.).
- F.3. REFER TO SOIL REPORT AND FOOTING PLAN FOR REFERENCE TO THE REQUIRED FOUNDING MATERIAL FOR THE FOOTINGS, THE SOIL PROFILE ACROSS THE SITE AND SPECIFIC SITE RECOMMENDATIONS.
- F.4. SHOULD SOIL CONDITIONS ENCOUNTERED ON SITE DIFFER SIGNIFICANTLY FROM THOSE INDICATED IN THE SOIL TEST NOTED IN THIS DESIGN, THE ENGINEER MUST BE NOTIFIED BEFORE PROCEEDING AS THE SITE CLASSIFICATION MAY NEED REVISING & MODIFICATIONS TO THE DESIGN MAY BE REQUIRED.
- F.5. WHILE A REASONABLE EFFORT IS MADE TO ASSESS THE SITE'S SUITABILITY FOR THE PROPOSED CONSTRUCTION, THIS DESIGN DOES NOT TAKE INTO ACCOUNT SLOPE STABILITY. IF REQUIRED BY THE COUNCIL, A SUITABLY QUALIFIED PERSON SHOULD BE ENGAGED TO UNDERTAKE.
- F.6. THE FOOTING DETAILS SHOWN ARE FOR THE SITE CLASSIFICATION STIPULATED. WHILST EVERY CARE HAS BEEN TAKEN TO VERIFY THAT THE INFORMATION SHOWN IS CORRECT, SNG ENGINEERS TAKE NO RESPONSIBILITY FOR VARIATIONS WHICH MAY OCCUR DUE TO VARIATIONS IN SITE CONDITIONS.
- F.7. TOPSOIL & ORGANIC MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION PAD AND STOCKPILED FOR LATER USE IN LANDSCAPING. ANY LOOSE OR SOFT MATERIAL ENCOUNTERED SHALL ALSO BE REMOVED. VOIDS CREATED FROM THE REMOVAL OF POOR MATERIAL OR VEGETATION SHALL BE FILLED AND COMPACTED WITH SUITABLE MATERIAL TO A MINIMUM DENSITY RATIO OF 95% STANDARD COMPACTION FOR COHESIVE SOILS OR 65% MINIMUM DENSITY INDEX FOR COHESIONLESS SOILS.

- F.8. FILL USED IN THE CONSTRUCTION OF A SLAB EXCEPT WHERE THE SLAB IS SUSPENDED SHALL CONSIST OF A CONTROLLED FILL OR ROLLED FILL IN ACCORDANCE WITH AS 2870:
  - F.8.1. ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 600MM COMPACTED IN LAYERS NOT MORE THAN 300MM FOR SAND MATERIAL OR 400MM COMPACTED IN LAYERS NOT MORE THAN 150MM FOR OTHER MATERIAL.
  - F.8.2. CONTROLLED FILL CONSISTS OF WELL GRADED SAND FILL UP TO 800MM DEEP, WELL COMPACTED IN NOT MORE THAN 300MM LAYERS BY VIBRATING PLATE OR VIBRATING ROLLER. NON SAND FILL UP TO 400MM DEEP, WELL COMPACTED IN NOT MORE THAN 150MM LAYERS BY A MECHANICAL ROLLER. CLAY FILL SHOULD BE MOIST DURING COMPACTION. THE DEPTHS OF FILL GIVEN ABOVE ARE DEPTHS MEASURED AFTER COMPACTION. FOR COMPACTED DEPTHS GREATER THAN THAT GIVEN ABOVE THE FILL SHALL BE SUBJECT TO CONTROL & TESTING. IF TEST FAILS THEN PIERS ARE REQUIRED. CONTACT THIS OFFICE PRIOR TO FURTHER CONSTRUCTION.
- F.9. SUITABLE QUARRY PRODUCT (20-80MM MAX IN DEPTH) MAY BE USED AS LEVELLING/BEDDING LAYER TO LEVEL THE BUILDING PLATFORM PRIOR TO SLAB CONSTRUCTION. THE BEDDING LAYER SHALL BE COMPACTED TO THE SATISFACTION OF THE BUILDING INSPECTOR.
- F.10. IF ANY FOOTING IS LOCATED SUCH THAT A LINE DRAWN AT 45 DEGREES (FOR CLAY & 30 DEGREES FOR SAND) FROM ITS BASE INTERSECTS A PRIVATE SERVICE TRENCH, THEN PIERS ARE REQUIRED. REFER TO THE PRIVATE TRENCH SERVICE DETAIL FOR EXAMPLE.
- F.11. FOOTING & SLAB PIERS ARE REQUIRED WHERE UNCONTROLLED FILL UNDER THE EDGE BEAM/SLAB IS PRESENT.
- F.12. WHERE PIERS ARE USED TO SUPPORT A SLAB ON UNCONTROLLED FILL, PLUMBING & DRAINAGE PIPES FOUNDED WITHIN SUCH FILL SHALL BE HUNG FROM THE SLAB MESH WITH CORROSIVE RESISTANT STRAPS.
- F.13. UNLESS DISPLAYED ON THESE PLANS THE EFFECTS FROM TEMPORARY EXCAVATIONS FOR THE REPAIR OR REPLACEMENT OF SERVICES HAVE NOT BEEN TAKEN INTO ACCOUNT.
- F.14. ALL WATER AND LOOSE MATERIAL SHALL BE REMOVED FROM FOOTING EXCAVATIONS PRIOR TO CONCRETING.
- F.15. UNLESS OTHERWISE NOTED ON DRAWINGS, ALL FOOTINGS SHALL BE FOUNDED INTO MATERIAL HAVING A SAFE BEARING CAPACITY OF NOT LESS THAN 100KPA.
- F.16. IT IS STRONGLY RECOMMENDED THAT SNG ENGINEERS BE CONTACTED TO CONDUCT AT LEAST ONE INSPECTION DURING CONSTRUCTION TO CONFIRM THE SITE CLASSIFICATION AND SOIL CONDITIONS. SHOULD CONDITIONS DIFFERING FROM THOSE USED IN THE DESIGN STAGE BE DISCOVERED AT THE TIME OF INSPECTION, SNG ENGINEERS RESERVES THE RIGHT TO AMEND DESIGN DETAILS IF NECESSARY.
- F.17. A LEVELING SAND LAYER (50MM MINIMUM IN THICKNESS) SHALL BE PLACED UNDER SLABS ON GROUND UNO. THE SAND SHALL BE SALT FREE AND COMPACTED TO 65% DENSITY INDEX.
- F.18. A VAPOUR BARRIER OF 0.2MM (200UM) MINIMUM THICK POLYTHENE SHEETING SHALL BE PLACED BENEATH SLABS ON GROUND UNLESS NOTED OTHERWISE.
- F.19. UNLESS NOTED OTHERWISE ALL RE-ENTRANT CORNERS MUST HAVE 2000mm LONG 3/N12 OR 3-L11 TRENCH MESH TIED UNDER THE SLAB TOP MESH.

**CONCRETE NOTES:**

- C.1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 AND/OR AS2870 AND THE REFERENCED STANDARDS THEREIN.
- C.2. U.N.O. THE CONCRETE STRENGTH GRADE AND THE COVER TO REINFORCEMENT FOR THE VARIOUS CONCRETE ELEMENTS SHALL BE AS LISTED BELOW:

ELEMENT	CONCRETE GRADE	COVER U.N.O (mm)
RESIDENTIAL SLABS ON GROUND PROTECTED BY DAMP-PROOF MEMBRANE	N20	20 TOP
		30 BTM. & SIDES
		40 TOP (EXT.)
RESIDENTIAL FOOTINGS	N20	50 TYPICAL
INDUSTRIAL OR EXTERNAL SLABS	N32	40 TOP
PAD FOOTINGS OR BORED PIERS	N25	65
STRIP FOOTINGS	N25	65
BORED PIERS	N25	75
SUSPENDED SLAB	N32	30 TOP & SIDES
		20 BTM.
BEAMS	N32	45 TYPICAL
STAIRS	N32	45 TOP
WALLS	N32	30 SIDES (INT.)
		40 SIDES (EXT.)
COLUMNS	N32	40 TYPICAL

- C.3. CONCRETE TO HAVE A MAXIMUM AGGREGATE SIZE OF 20mm WITH 80mm MAXIMUM SLUMP (AND 100mm SLUMP FOR FOOTINGS & SLAB ON GROUND), A WATER/CEMENT RATIO OF NOT GREATER THAN 0.65 AND A MAXIMUM FINAL BASIC DRYING SHRINKAGE STRAIN OF 800 x 10-6 UNLESS APPROVED OTHERWISE.
- C.4. NO ADDITIVES SHALL BE ADDED OR APPLIED TO THE CONCRETE MIX WITHOUT THE APPROVAL OF THE ENGINEER.
- C.5. THE MAXIMUM PERMISSIBLE TRANSPORT TIME FOR CONCRETE BETWEEN BATCHING AND PLACEMENT ON SITE SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE.

AMBIENT AIR TEMPERATURE	MAX. BATCHING TO PLACEMENT TIME
10° - 24°C	120 MINUTES
25° - 27°C	90 MINUTES
28° - 30°C	60 MINUTES
31° - 33°C	45 MINUTES
34° - 36°C	30 MINUTES
37°C+	NOT RECOMMENDED

- C.6. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED. VIBRATORS SHALL NOT BE USED TO SPREAD CONCRETE.
- C.7. ALL CONCRETE SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AS1379 ADOPTING THE PROJECT ASSESSMENT METHOD FOR COMPRESSIVE STRENGTH AND SLUMP COMPLIANCE. THE RESULTS OF ALL TESTS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEER FOR REVIEW.
- C.8. ALL CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH AS3600. WHERE CURING COMPOUNDS ARE USED IT MUST BE APPLIED AS FOLLOWS:
  - C.8.1. ONTO SLAB WITHIN 2HRS OF FINISHING OPERATION.
  - C.8.2. ONTO WALLS AND COLUMNS IMMEDIATELY AFTER REMOVAL OF FORMWORK.
- C.9. WHEN THE AIR TEMPERATURE EXCEEDS 300C, ALIPHATIC ALCOHOL SHALL BE APPLIED TO THE CONCRETE SURFACE OF SLABS IMMEDIATELY AFTER THE INITIAL SCREED AND AGAIN AFTER BULL FLOATING.
- C.10. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C.11. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY.
- C.12. WHERE FALLS IN SLABS OCCUR, THICKNESSES NOTED ARE MINIMUM REQUIRED.
- C.13. CONCRETE SHALL BE KEPT FREE OF SUPPORTING BRICKWORK WITH 2 LAYERS OF MALTHOID. HORIZONTAL FORMWORK SHALL BE STRIPPED WHEN APPROVED BY THE ENGINEER.
- C.14. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR APPROVED BY THE ENGINEER.
- C.15. NO HOLES, CHASES OR EMBEDDED ITEMS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER. CONDUITS, PIPES ETC. SHALL NOT BE PLACED IN THE COVER THICKNESS OF THE CONCRETE.
- C.16. WHERE SERVICE PIPES PENETRATE CONCRETE ELEMENTS, PROVISION SHOULD BE MADE TO ALLOW FOR MOVEMENT OF THE ELEMENT.
- C.17. FORMWORK SHALL BE DESIGNED, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610 FORMWORK CODE, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- C.18. STRIPPING OF FORMWORK AND REPROPPING OF SUSPENDED SLABS AND BEAMS SHALL BE CARRIED OUT PROGRESSIVELY SO THAT AT NO STAGE IS THE SLAB OR BEAM UNSUPPORTED UNTIL IT IS PERMITTED TO FULLY REMOVE ALL PROPPING.
- C.19. IN MULTISTORY CONSTRUCTION, PROPS SHALL BE LOCATED IN THE SAME POSITION ON EACH FLOOR SO THAT THEY WILL BE CONTINUOUS IN THEIR SUPPORT FROM FLOOR TO FLOOR. WHERE THE NUMBER OF PROPS ON A FLOOR IS REDUCED, THE REMAINING PROPS SHALL BE LOCATED DIRECTLY UNDER PROPS ON THE FLOOR ABOVE.
- C.20. PROPPING TO SUSPENDED SLABS AND BEAMS SHALL NOT BE REMOVED UNTIL THE CONCRETE HAS ACQUIRED SUFFICIENT STRENGTH TO SUPPORT SAFELY ITS OWN WEIGHT AND ANY SUPERIMPOSED LOAD WITHOUT DAMAGE OR UNACCEPTABLE DEFLECTION.
- C.21. NO MASONRY WALLS OR SIMILAR PERMANENT LOADINGS SHALL BE ERECTED ON ANY PART OF THE STRUCTURE WHILE THE PART IS STILL SUPPORTED BY PROPS.
- C.22. U.N.O NO ALLOWANCE HAS BEEN MADE FOR STACKED MATERIALS OR MACHINERY ON THE CONCRETE STRUCTURE.
- C.23. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION OR SCALE.


- C.24. ALL REINFORCING BARS SHALL COMPLY WITH AS 4671. ALL FABRIC SHALL COMPLY WITH AS 4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.
- C.25. WELDING AND HEATING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER.
- C.26. ALL STEEL REINFORCEMENT IN CONCRETE ELEMENTS SHALL BE INSPECTED BY THE ENGINEER AND PASSED PRIOR TO POURING OF ANY CONCRETE.
- C.27. FOR CONCRETE USING NORMAL PORTLAND CEMENT AS3972 - TYPES A OR D WITHOUT ADMIXTURES, STRIPPING STAGES SHALL CONFORM TO THE MINIMUM STRIPPING TIMES FOR THE APPROPRIATE EFFECTIVE SPANS AND TEMPERATURES GIVEN IN THE FOLLOWING TABLE.

MEMBER TYPE	MEMBER	MEMBER SPAN (m)	MINIMUM STRIPPING TIME (DAYS) FOR AVERAGE AIR TEMP. DURING PERIOD PRIOR TO STRIPPING		
			21°C+	10-21°C	5-10°C
VERTICAL AND UNLOADED	WALL COLUMN BEAM SIDE		2	2	5
VERTICAL AND LOADED	WALL, COLUMN OR LOAD-BEARING STRUCTURE		5	6	7
HORIZONTAL	SLAB	UNDER 3	7	10	14
		3-6	10	14	21
		OVER 6	14	21	28
HORIZONTAL	BEAM	UNDER 3	10	14	21
		3-6	14	21	28
		OVER 6	21	28	28

NOTE: THIS TABLE IS BASED ON SUPERIMPOSED CONSTRUCTION LOADS NOT EXCEEDING 1.0kPa.

- C.28. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS GENERALLY AT NOT GREATER THAN 800 CENTRES BOTH WAYS. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS. PLASTIC CHAIRS TO BE USED AT ALL EXTERNAL SOFFITS AND SIDES WITHIN 1KM OF FORESHORE SEAWALL UNO.

1	CONSTRUCTION ISSUE	SG	07/03/24
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STATUS: CONSTRUCTION ISSUE			

APPROVED BY:   
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ARCHITECT: AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD  
GLENRAE

TITLE: NOTES -1

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:100 UNO	07/03/2024	JJ	SG
PROJECT NO:	DRAWING NO:	REVISION:	
SNG-3798	001	1	

**CONCRETE NOTES CONT.**

**C29. REINFORCEMENT SYMBOLS:**

Symbol	Description
N	DENOTES GRADE D500 HIGH STRENGTH DEFORMED BARS TO AS 4671.
R	DENOTES GRADE R250 HOT ROLLED PLAIN BARS TO AS 4671.
SL	DENOTES HARD-DRAWN WIRE SQUARE REINFORCING FABRIC TO AS 4671.
RL	DENOTES HARD-DRAWN WIRE RECTANGULAR REINFORCING FABRIC TO AS 4671.

C.30. SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.

C.31. SLAB FABRIC SHALL BE LAPPED ONE FULL PANEL OF FABRIC PLUS 50MM SO THAT THE TWO OUTERMOST TRANSVERSE WIRES OF ONE SHEET OVERLAP THE TWO OUTERMOST TRANSVERSE WIRES OF THE SHEET BEING LAPPED BY 50MM.

C.32. BAR REINFORCEMENT SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING TABLE.

TYPICAL BAR REINFORCEMENT LAP LENGTHS		
BAR	LAP LENGTH UNO	HORIZONTAL BARS WITH GREATER THAN 300mm OF CONCRETE CAST BELOW THEM
N12	550	750
N16	800	1100
N20	1100	1400
N24	1250	1600
N28	1400	1800
N32	1600	2100
N36	2000	2500

WHERE LAPS ARE SHOWN ON THE DRAWINGS THE ABOVE LAP LENGTHS SHALL BE ADOPTED UNLESS NOTED OTHERWISE. WHERE BARS OF DIFFERENT DIAMETER ARE SHOWN LAPPED, ADOPT THE LAP LENGTH APPROPRIATE TO THE SMALLER DIAMETER BAR.

**DRAINAGE/PLUMBING/TREES & MAINTENANCE**

- D.1. ALL WORKMANSHIP & MATERIAL SHALL BE IN ACCORDANCE WITH AS2870.
- D.2. DRAINAGE SHALL BE CONSTRUCTED TO AVOID WATER PONDING AGAINST OR NEAR THE FOOTING. THE GROUND IN THE IMMEDIATE VICINITY OF THE PERIMETER FOOTING, INCLUDING THE GROUND UPHILL FROM THE SLAB ON CUT & FILL SITES, SHALL BE GRADED TO FALL 50MM MINIMUM AWAY FROM THE FOOTING OVER A DISTANCE OF 1.0M. SURFACE OR SUBSURFACE DRAINS SHALL BE USED TO CHANNEL WATER AWAY & CONNECT TO STORMWATER SYSTEM. ANY PAVING SHALL ALSO BE SUITABLY SLOPED. ATTENTION TO SITE GRADING/SITE DRAINAGE IS REQUIRED FROM THE START OF CONSTRUCTION.
- D.3. WHERE FILLING IS PLACED ADJACENT TO THE BUILDING, THE FILLING SHALL BE COMPACTED & GRADED TO ENSURE DRAINAGE OF WATER AWAY FROM THE FOOTINGS.
- D.4. DISCHARGE FROM THE DOWNPIPES MUST BE DIRECTED AWAY FROM THE BUILDING DURING CONSTRUCTION TO ENSURE WATER DOES NOT DISCHARGE OR POND ADJACENT TO THE FOOTINGS.
- D.5. PLUMBING TRENCHES SHALL BE SLOPED AWAY FROM THE HOUSE & SHALL BE BACKFILLED WITH CLAY IN THE TOP 300MM WITHIN 1.5M OF THE HOUSE. THE CLAY USED FOR BACKFILLING SHALL BE COMPACTED. WHERE PIPES PASS UNDER THE FOOTING SYSTEM, THE TRENCH SHALL BE BACKFILLED WITH MOIST CLAY OR BENTONITE AT THE HIGH END OF THE FLOW TO RESTRICT THE INGRESS OF WATER BENEATH THE FOOTING SYSTEM.
- D.6. EXCAVATIONS NEAR THE EDGE OF THE FOOTING SYSTEM SHALL BE BACKFILLED IN SUCH A WAY AS TO PREVENT ACCESS OF WATER TO THE FOUNDATION. FOR EXAMPLE, EXCAVATIONS SHOULD BE BACKFILLED ABOVE OR ADJACENT THE FOOTING WITH MOIST CLAY, COMPACTED BY HAND-RODDING/TAMPING. POROUS MATERIAL SUCH AS SAND, GRAVEL OR BUILDING RUBBLE SHOULD NOT BE USED.
- D.7. WATER RUN-OFF SHALL BE COLLECTED & CHanneled AWAY FROM THE HOUSE DURING CONSTRUCTION.
- D.8. PENETRATIONS OF THE EDGE BEAMS & FOOTING BEAMS ARE TO BE AVOIDED, BUT WHERE NECESSARY SHALL BE SLEEVED TO ALLOW FOR MOVEMENT.

- D.9. CONNECTION OF STORMWATER DRAINS & WASTE DRAINS SHALL INCLUDE FLEXIBLE CONNECTIONS (AS NECESSARY).
- D.10. ADDITIONAL PLUMBING REQUIREMENTS ARE NEEDED FOR MODERATELY, HIGHLY & EXTREMELY REACTIVE SITES IN ACCORDANCE WITH CLAUSE 6.6 (F) FROM AS 2870.
- D.11. PLUMBING & DRAINAGE UNDER THE SLAB SHOULD BE AVOIDED WHERE PRACTICAL. REFER AS 2870 CLAUSE 5.6.4 (D).
- D.12. ALL PIPEWORK INCLUDING STORMWATER FITTINGS & ADAPTERS SHOULD BE PROTECTED FROM MECHANICAL DAMAGE.
- D.13. PROVISIONS SHOULD BE MADE FOR THE CONNECTION OF OVERFLOW OR WATER DISCHARGE FROM FIXTURES SUCH AS HOT WATER SYSTEMS & AIR CONDITIONERS TO A DRAIN AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY.
- D.14. WHERE TERMITE PROTECTION IS REQUIRED, INSTALL IN ACCORDANCE WITH AS3660. BUILDER SHALL CONFIRM WITH OWNER THE PREFERRED METHOD OF TERMITE MANAGEMENT. OWNER IS RESPONSIBLE FOR ONGOING INSPECTION OF STRUCTURAL ELEMENTS & ENSURING THAT TERMITE MANAGEMENT SYSTEMS ARE NOT BREACHED.
- D.15. THE RECOMMENDED DISTANCE THAT A NEW TREE SHOULD BE LOCATED FROM A DWELLING WOULD BE EQUAL OR GREATER THAN 75% OF THE MATURE HEIGHT FOR CLASS M SITES, 100% OF THE MATURE HEIGHT FOR CLASS H1 & H2 SITES, 150% OF THE MATURE HEIGHT FOR CLASS E SITES.
- D.16. THIS DESIGN IS BASED UPON THE NORMAL FOOTING PERFORMANCE CRITERIA PROVIDED IN TABLE 2.2 OF AS2870-2011 WITH DAMAGE CATEGORIES DETAILED IN APPENDIX C. IF THESE PERFORMANCE CRITERIA IS UNSUITABLE FOR THIS DWELLING PLEASE CONSULT THIS OFFICE FOR ADDITIONAL ENGINEERING ADVICE & DESIGN SERVICES.
- D.17. APPENDIX A OF AS 2870 DEFINES THE OWNER AS THE PERSON OR ORGANISATION RESPONSIBLE FOR THE MAINTENANCE OF THE BUILDING & THE SITE.
- D.18. THE OWNER'S ATTENTION IS DRAWN TO APPENDIX B 'PERFORMANCE CRITERIA & FOUNDATION MAINTENANCE' & APPENDIX C 'CLASSIFICATION OF DAMAGE DUE TO FOUNDATION MOVEMENTS' OF AS 2870-2011.
- D.19. WE ALSO DIRECT THE OWNER TO THE CSIRO PUBLICATION BTF 18 'FOUNDATION MAINTENANCE & FOOTING PERFORMANCE: A HOMEOWNER'S GUIDE. COPIES OF THIS PUBLICATION ARE AVAILABLE FROM CSIRO PUBLISHING ON PH: 1300-788-000 OR AT [HTTP://WWW.PUBLISH.CSIRO.AU/PID/7076](http://www.publish.csiro.au/PID/7076). THIS REPORT MAY BE RENDERED INVALID IF THE PROPERTY IS NOT MAINTAINED AS RECOMMENDED IN THIS PUBLICATION.
- D.20. THE LONG TERM PERFORMANCE OF THE FOOTINGS AS DESIGNED IS DEPENDANT ON THE ONGOING SITE MAINTENANCE BY OWNER INCLUDING FACTORS SUCH AS SITE DRAINAGE, VEGETATION & WATERING OF AREAS ADJACENT TO THE DWELLING.
- D.21. WATERING OF LAWNS & GARDENS SHOULD BE CONSISTENT. OVER WATERING CAN DAMAGE FOOTINGS. EQUALLY FOOTINGS MAY BE DAMAGED BY PROLONGED PERIODS OF NEGLECT AFTER YEARS OF CAREFUL WATERING. LEAKING TAPS & PIPES & BLOCKED DRAINS SHOULD BE REPAIRED PROMPTLY. PROLONGED NEGLECT CAN LEAD TO DAMAGED FOOTINGS.
- D.22. IT IS HIGHLY RECOMMENDED THAT CONCRETE PAVING BE INSTALLED AROUND THE ENTIRE PERIMETER OF THE DWELLING. ALL CONCRETE PATHS & THE GROUND ON WHICH THEY ARE LAID SHALL SLOP AWAY FROM THE BUILDING & BE DRAINED. DRAINAGE IN THE FORM OF SPOON DRAINS &/OR PITS, CONNECTED TO A LEGAL POINT OF DISCHARGE SHALL BE PROVIDED. ALL CONCRETE PATHS SHALL BE SEPARATED FROM STRUCTURES WITH A 10MM LAYER OF "ABLEFLEX" OR SIMILAR.
- D.23. WHERE SEAL COATS HAVE BEEN APPLIED TO EXTERNAL SLABS WITHIN 1KM OF SALT WATER, THE CONDITION OF THE SEALANT IS TO BE MONITORED & MAINTAINED THROUGH THE LIFE OF THE SLAB.
- D.24. AS PER CLAUSE 1.3.1 BUILDINGS DESIGNED & CONSTRUCTED TO AS 2870 ON A NORMAL SITE DOES NOT GUARANTEE A DISTRESS FREE DWELLING. BUILDINGS ARE EXPECTED TO EXPERIENCE EITHER NO DAMAGE, A LOW INCIDENCE OF DAMAGE CATEGORY 1 & OCCASIONAL INCIDENCE OF DAMAGE CATEGORY 2 AS SHOWN IN TABLE BELOW.

SUMMARY OF AS2870-2011 - APPENDIX C TABLES C1 & C2			
DAMAGE CATEGORIES	WALL CRACKS	SLAB CRACKS	LEVEL CHANGES OVER 3m
0 - Negligible	< 0.1mm	< 0.3mm	< 8mm
1 - Very Slight	< 1mm	< 1mm	< 10mm
2 - Slight	< 5mm	< 2mm	< 15mm
3 - Moderate	5mm to 15mm	2mm to 4mm	15mm to 25mm
4 - Severe	15mm to 25mm	4mm to 10mm	> 25mm

**LOADINGS**

L.1. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:

LOCATION	UNIFORM LOAD (kPa)	POINT LOAD (kN)
GENERAL	1.5	1.8
BALCONIES	2.0	1.8
LOBBY, STAIRS, CORRIDORS	4.0	4.5
CAR PARKS	2.5	13.0
ROOF	0.25	1.1
PLANT ROOMS & OFFICE	5.0	4.5

L.2. WIND LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH AS/NZS 1170.2 & AS 4055 AND THE FOLLOWING PARAMETERS: IMPORTANCE LEVEL - 2, REGION - B, TERRAIN CATEGORY - 3, TOPOGRAPHIC CLASS - T0 & PARTIAL SHIELDING.

L.3. LOAD COMBINATIONS HAVE BEEN CALCULATED IN ACCORDANCE WITH AS/NZS 1170.0

**TIMBER FRAMING NOTE**

- T.1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1720 - TIMBER STRUCTURES CODE, AS1684 - RESIDENTIAL TIMBER FRAMED CONSTRUCTION STANDARD AND THE REFERENCED STANDARDS THEREIN.
  - T.2. ALL FRAMING, BRACING AND TIE-DOWN INFORMATION SPECIFIED FORM THE BASIS FOR THE DESIGN OF THE STRUCTURAL SUPPORT ELEMENTS DOWN TO THE FOUNDATIONS. ALTERNATIVE SOLUTIONS WILL ONLY BE PERMITTED UPON WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
  - T.3. PREFABRICATED TIMBER ROOF TRUSSES, PROPRIETARY FLOOR JOIST SYSTEMS AND ALTERNATIVE TIMBER ELEMENTS TO THOSE SHOWN ON THE ENGINEERING DRAWINGS ARE TO BE DESIGNED AND CERTIFIED BY THE SUPPLIER'S STRUCTURAL ENGINEER. DESIGN AND INSPECTION CERTIFICATES FOR THESE ELEMENTS ARE TO BE ISSUED TO THE BUILDER FOR LODGMENT WITH THE LOCAL AUTHORITY.
  - T.4. LINTELS CARRYING CONCENTRATED LOADS FROM GIRDER TRUSSES SHALL BE CHECKED BY THE TRUSS MANUFACTURER AND RE-SPECIFIED IF REQUIRED.
  - T.5. UNLESS NOTED OTHERWISE THE FLOOR AND DECK JOISTS TO BE AT MAXIMUM 450mm SPACING & BEARERS AT MAXIMUM 2400mm SPACING.
  - T.6. WALL STUDS FOR LOAD BEARING WALLS SHALL NOT BE NOTCHED.
  - T.7. ALL BRACING PANELS TO COMPLY WITH AS/NZS 2269:1994.
  - T.8. PLYWOOD BRACING PANELS TO BE FIXED IN ACCORDANCE WITH AS1684.2-1999 TABLE 8.18 TYPE (H) METHOD B TO PROVIDE THE MINIMUM BRACING CAPACITY SPECIFIED.
  - T.9. ALL WALL CLADDING SHALL BE FIXED IN ACCORDANCE WITH THE MANUFACTURE'S SPECIFICATIONS.
  - T.10. TERMITE PROTECTION TO BE PROVIDED TO ALL SUSCEPTIBLE TIMBER FRAMING IN ACCORDANCE WITH A.S.3660.1
  - T.11. ALL TIMBER MEMBERS USED ARE TO HAVE A MINIMUM LEVEL OF DURABILITY AS SPECIFIED IN AS1684.2-APPENDIX B
  - T.12. ALL MEMBERS SHALL CARRY AN INDUSTRY STANDARD LABEL OR MARKING IDENTIFYING THE STRESS GRADE, SEASONING CONDITION AND TIMBER SPECIES WHERE APPLICABLE.
  - T.13. ALL TIMBER SHALL BE SEASONED UNLESS NOTED OTHERWISE. THE MINIMUM STRESS GRADE FOR TIMBER SHALL BE F5 JD4 U.N.O.
  - T.14. ALL TIMBER SHALL BE FREE OF GUM VEINS, KNOTS AND ANY OTHER IMPERFECTIONS WITHIN CONNECTION ZONES.
  - T.15. ALL FRAMING, BRACING AND TIE-DOWN NOT DETAILED TO BE CONSTRUCTED IN ACCORDANCE WITH AS1684.2-1999 RESIDENTIAL TIMBER FRAMED CONSTRUCTION (NON-CYCLONIC AREAS).
  - T.16. UNLESS NOTED ON THE STRUCTURAL DRAWINGS, THE TIMBER ELEMENTS SPECIFIED HAVE NOT BEEN DESIGNED TO SUPPORT HANGING DOORS, AIR CONDITIONING UNITS, WATER TANKS, ETC. THE CONTRACTOR IS TO SUPPLY THE STRUCTURAL ENGINEER WITH THE NECESSARY INFORMATION TO DESIGN CHECK THE FRAMING ELEMENTS AND MAKE CHANGES ACCORDINGLY IF REQUIRED.
  - T.17. WASHERS SHALL BE PROVIDED UNDER ALL NUTS AND BOLT HEADS BEARING AGAINST TIMBER IN ACCORDANCE WITH THE FOLLOWING TABLE:
- | BOLT SIZE | WASHER                |
|-----------|-----------------------|
| UP TO M12 | 50 x 50 x 3.0mm THICK |
| M16       | 57 x 57 x 4.0mm THICK |
| M20       | 65 x 65 x 5.0mm THICK |
| OVER M20  | 75 x 75 x 6.0mm THICK |
- T.18. THE TIMBER MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE THOSE REQUIRED FOR THE COMPLETE STRUCTURE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY CONNECTIONS, SUPPORTS AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF THE TIMBERWORK THROUGHOUT THE CONSTRUCTION PERIOD.


**STRUCTURAL STEEL FRAMING**

- S.1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS4100-STEEL STRUCTURES AND AS/NZS 4600-COLD-FORMED STEEL STRUCTURES CODE AND THE REFERENCED STANDARDS THEREIN. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH PROVISIONS OF AS4100.
- S.2. THE CONTRACTOR SHALL SUBMIT STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW BY THE ENGINEER AND ARCHITECT, BEFORE FABRICATION COMMENCES.
- S.3. THE STEEL MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE THOSE REQUIRED FOR THE COMPLETED STRUCTURE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY CONNECTIONS, SUPPORTS AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF THE STEELWORK THROUGHOUT THE CONSTRUCTION PERIOD.
- S.4. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL STEELWORK, CLEATS AND BOLTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- S.5. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:

ELEMENT	STEEL GRADE
HOT ROLLED SECTIONS	300 PLUS
WELDED SECTIONS (WB, WC)	300 PLUS
CHS UP TO AND INCLUDING 168 DIA.	C250
CHS GREATER THAN 168 DIA, SHS AND RHS	C350
FLOOR PLATES	250
MERCHANT BAR - ROUNDS, SQUARES & FLATS	300 PLUS
COLD FORMED STEEL SECTIONS COMPLYING WITH AS1397.	G450, G500, G550

≤ 1.0mm BMT min. G550, 1.0-1.2mm min. G500, ≥ 1.6mm BMT min. G450. UNIDENTIFIED STEEL HAS NOT BEEN CONSIDERED AND THEREFORE NOT PERMITTED

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

APPROVED BY:   
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ARCHITECT: AM 20 DESIGN  
 JOB NO: 900143  
 REV C  
 DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD  
 GLENRAE

TITLE: NOTES - 2

SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 002	REVISION: 1	



S.6. WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF AS/NZS 1554.1.  
WELDING CONSUMABLES SHALL BE GRADE E48XX OR W50X U.N.O. ALL WELDS SHALL BE 6MM CFW SP CATEGORY U.N.O. ALL BUTT WELDS SHALL BE SP CATEGORY U.N.O. INSPECTION IS REQUIRED IN ACCORDANCE WITH AS/NZS 1554.1. ALL GP / SP WELDS SHALL BE 100% VISUALLY SCANNED. SP FILLET WELDS SHALL HAVE 10% VISUAL EXAMINATION U.N.O SP BUTT WELDS SHALL HAVE 50% VISUAL EXAMINATION U.N.O. ALL GP WELDS SHALL HAVE 10% VISUAL EXAMINATION.  
CPBW: DENOTES COMPLETE PENETRATION BUTT WELD.  
CFW: DENOTES CONTINUOUS FILLET WELD.

S.7. STEELWORK IS TO BE THOROUGHLY CLEANED OF MILL SCALE TO CLASS 2.5 FINISH. APPLY 75UM OF AN APPROVED INORGANIC ZINC SILICATE PRIMER. FOR TOP COATS REFER TO ARCHITECTS DRAWINGS OR SPECIFICATION. STEELWORK TO BE ENCASED IN CONCRETE, CONNECTIONS TO BE FIELD WELDED AND CONTACT FACES IN FRICTION GRIP BOLTED CONNECTIONS SHALL NOT BE PAINTED. ALL EXPOSED EXTERIOR STEEL AND STEEL BUILT INTO MASONRY SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS1650.

S.8. ALL CLEATS AND GUSSET PLATES SHALL BE 10MM THICK, UNLESS NOTED OTHERWISE.

S.9. ALL BOLTS SHALL BE M16 8.8/S UNLESS NOTED OTHERWISE. BOLT HOLES SHALL BE 2MM GREATER THAN SPECIFIED BOLT SIZE UNLESS NOTED OTHERWISE.

S.10. BOLT DESIGNATIONS SHALL CONFORM TO THE FOLLOWING:

DESIGNATION	AUST. STANDARD	INSTALLATION METHOD
4.6/S	AS 1111	SNUG TIGHT
8.8/S	AS/NZS 1252	SNUG TIGHT
8.8/TB	AS/NZS 1252	FULLY TENSIONED (SOME SLIP ALLOWED)
8.8/TF	AS/NZS 1252	FULLY TENSIONED WITH NO SLIP. CONTACT SURFACES TO BE FREE FROM APPLIED FINISHES

S.11. LOAD INDICATING WASHERS SHALL BE USED TO VERIFY TIGHTENING OF BOLTS IN TF AND TB CONNECTIONS.

S.12. WASHERS SHALL BE INSTALLED UNDER BOTH BOLT HEAD AND NUT AT ALL SLOTTED BOLT HOLES LOCATIONS.

S.13. CONCRETE ENCASED AND FIRE SPRAYED STEELWORK SHALL NOT BE PAINTED.

S.14. CONCRETE ENCASED STEELWORK SHALL HAVE A MINIMUM OF 50MM OF COVER CONCRETE REINFORCED WITH W5 WIRE AT 150 CRS. OR FGW41 FABRIC UNLESS NOTED OTHERWISE.

S.15. THE POSITION AND DETAIL OF ANY SPLICES REQUIRED OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER.

S.16. FULL CONTACT BEARING SURFACES, WHERE SPECIFIED, SHALL COMPLY WITH CLAUSE 14.4.4.2 OF AS4100.

S.17. THE ENDS OF ALL TUBULAR MEMBERS SHALL BE SEALED WITH 5MM MINIMUM PLATES AND CONTINUOUS FILLET WELDS UNLESS NOTED OTHERWISE.

S.18. CLADDING TRIMMING MEMBERS FOR VALLEYS, EDGES, MECHANICAL AND HYDRAULIC PENETRATIONS ARE NOT NECESSARILY SHOWN. REFER PURLIN MANUFACTURER FOR DETAILS.

S.19. SUPPORT RODS FOR CEILINGS, SERVICES, ETC, WHICH ARE SUSPENDED FROM PURLINS SHALL BE CONNECTED TO PURLIN WEBS ONLY. NO HOLES SHALL BE DRILLED THROUGH PURLIN FLANGES.

S.20. INTERNAL STEELWORK SHALL BE THOROUGHLY CLEANED TO CLASS 1 AND COATED WITH ONE SHOP COAT OF HIGH BUILD ZINC PHOSPHATE PRIMER TO 75PM DFT, OR APPROVED EQUIVALENT PAINT SYSTEM, IN ACCORDANCE WITH AS2312, UNLESS NOTED OTHERWISE.

S.21. UNLESS NOTED OTHERWISE, EXTERNAL STEELWORK SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS4680.

S.22. ALL BOLTS, WASHERS AND DRILLED IN ANCHORS SPECIFIED IN EXTERNAL AREAS ARE TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS1214.

S.23. ALL SITE WELDS CONCEALED FROM ATMOSPHERIC CONDITIONS ARE TO BE THOROUGHLY CLEANED, PREPARED AND PAINTED WITH 2 COATS OF A GOOD QUALITY ZINC RICH PAINT IN ACCORDANCE WITH AS2312.

S.24. NON-DESTRUCTIVE WELD TESTING, WHERE SPECIFIED, SHALL BE CARRIED OUT BY SUITABLY QUALIFIED PERSONNEL IN ACCORDANCE WITH CLAUSE 7.4 OF AS1554.1 USING APPROPRIATE RADIOGRAPHIC, ULTRASONIC, MAGNETIC PARTICLE OR DYE PENETRATION TECHNIQUES. THE RESULTS SHALL BE PROMPTLY FORWARDED TO THE ENGINEER FOR REVIEW PRIOR TO ERECTION OF THE STEELWORK.

S.25. ALL SITE WELDS EXPOSED TO ATMOSPHERIC CONDITIONS ARE TO BE THOROUGHLY CLEANED, PREPARED AND PAINTED WITH AN INORGANIC ZINC SILICATE COAT PAINTING SYSTEM (IZS2) WITH A MINIMUM DFT OF 75UM IN ACCORDANCE WITH AS2312.

**MASONRY BLOCKWORK & BRICKWORK**

M.1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3700 MASONRY CODE AND THE REFERENCED STANDARDS THEREIN.

M.2. MINIMUM DURABILITY REQUIREMENTS.

LOCATION	SALT ATTACK RESISTANCE GRADE OF MASONRY UNITS	MORTAR CLASS	DURABILITY CLASS OF WALL TIES AND BUILT IN COMPONENTS
INTERIOR MASONRY	GENERAL PURPOSE	M3	R3
EXTERIOR MASONRY GREATER THAN 1 km FROM COAST	GENERAL PURPOSE	M3	R3
EXTERIOR MASONRY UP TO 1 km FROM COAST	EXPOSURE	M4	R4

M.3. ALL MASONRY BLOCKS SHALL HAVE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 15MPA.

M.4. ALL LOAD-BEARING BRICKS SHALL HAVE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 20MPA.

M.5. CLAY BRICKS SHALL EXHIBIT A MAXIMUM 5 YEAR EXPANSION OF 1.0MM/M. THE BRICK SUPPLIER SHALL PROVIDE A RECENT TEST CERTIFICATE CONFIRMING THE EXPANSION.

M.6. MORTAR SHALL BE CLASS M3 OR M4 IN ACCORDANCE WITH NOTE M2 ABOVE. REFER TO AS3700 FOR COMPLYING MIX PROPORTIONS. SAND SHALL BE CLEAN WELL GRADED AND FREE OF SILT AND CLAY. NO "BRIKIES LOAM" ALLOWED.

M.7. GROUT FOR CORE FILLING SHALL BE STRENGTH GRADE S20. THE GROUT SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 10MM, A MAXIMUM SLUMP OF 230MM +/-25MM AND A MINIMUM CEMENT CONTENT OF 300KG/M3

M.8. ADDITIVES SHALL NOT BE ADDED TO THE GROUT OR MORTAR WITHOUT THE SPECIFIC PERMISSION OF THE ENGINEER.

M.9. PROVIDE CLEANOUT BLOCKS AT THE BASE OF ALL REINFORCED CORES.

M.10. ALL MORTAR DAGS AND PROTRUSIONS INTO THE BLOCK OR BRICK CORES SHALL BE REMOVED PRIOR TO THE PLACEMENT OF ANY CONCRETE. LOOSE MATERIAL AND DEBRIS SHALL ALSO BE REMOVED FROM THE MASONRY CORES.

M.11. FULLY BED SOLID UNITS, FACE BED HOLLOW UNITS AND FULLY FILL VERTICAL JOINTS. NO RAKING OF MORTAR JOINTS IS PERMITTED.

M.12. GROUTING SHALL NOT COMMENCE UNTIL THE MORTAR JOINTS HAVE GAINED SUFFICIENT STRENGTH TO RESIST BLOWOUT AND CORES HAVE BEEN CLEANED OUT.

M.13. GROUT SHALL BE COMPACTED BY VIBRATOR OR BY RODDING WITH A ROD NOT LESS THAN 24MM DIAMETER.

M.14. ALL CORES SHALL BE FILLED WITH GROUT, UNLESS NOTED OTHERWISE.

M.15. REINFORCEMENT SHALL BE PLACED ACCURATELY AND TIED SECURELY BEFORE PLACEMENT OF GROUT.

M.16. NO HOLES OR CHASES SHALL BE CUT INTO BLOCKWORK /BRICKWORK WITHOUT PRIOR APPROVAL OF THE ENGINEER.

M.17. ALL WALL INTERSECTIONS SHALL BE OF BONDED CONSTRUCTION OR TIED WITH MEDIUM DUTY TIES AT 400MM MAXIMUM CRS.

M.18. MASONRY ARTICULATION

M.18.1. THIS DESIGN ASSUMES THAT MASONRY ARTICULATION JOINTS WILL BE INSTALLED TO AS 4773 UNLESS NOTED OTHERWISE. ANY MASONRY ARTICULATION JOINTS SHALL BE POSITIONED IN ACCORDANCE WITH AS 4773 & AS 3700 SECTION 12.16.4 AND AS FOLLOWS;

- M.18.1.1. MAXIMUM JOINT SPACING = 5.0M U.N.O
- M.18.1.2. WITHIN 2.0M - 4.5M OF EXTERNAL CORNERS
- M.18.1.3. CHANGES OF WALL HEIGHT & MASONRY WALL THICKNESS
- M.18.1.4. JUNCTION OF DIFFERENT MASONRY MATERIALS
- M.18.1.5. WHERE OLD BRICKWORK MEETS NEW BRICKWORK
- M.18.1.6. ABOVE JOINTS IN FOOTINGS & SLABS & SLIP JOINT LOCATIONS
- M.18.1.7. ABOVE JUNCTION OF STRIP FOOTINGS TO SLABS
- M.18.1.8. FOR MASONRY WALLS OVER 3.0M HIGH, REFER

M.18.2. WHERE MASONRY ARTICULATION IS SHOWN BESIDE OPENINGS, THE JOINT IS TO CONTINUE BETWEEN THE WINDOW/DOOR FRAME & THE BRICKWORK TO THE FULL HEIGHT OF THE WALL. AT THESE LOCATIONS, THE FRAMES ARE TO BE FIXED WITH FASTENERS THAT WILL ALLOW MOVEMENT OF THE JOINT.

M.18.3. TO ENSURE FULL COMPLIANCE WITH AS 4773 & LOCAL REQUIREMENTS (I.E. QBCC SUBSIDENCE POLICY) SNG ENGINEERS RECOMMENDS A MASONRY ARTICULATION LAYOUT IS PREPARED PER DESIGN. THE TABLE BELOW IS TO BE CONSIDERED ONLY IF NO PLAN IS PROVIDED BY AN ENGINEER.

MAX SPACING OF ARTICULATION JOINTS TO AS 4773 (UNREINFORCED MASONRY) U.N.O			
SITE CLASS	CONSTRUCTION & SURFACE FINISH	10mm JOINT SPACING (m)	
		< 4m HIGH	4m TO 8.5m
A & S	EXPANSION JOINTS ONLY	7.0000	6.0000
M, M-D	EXTERNAL FACE FINISH	6.0000	4.2000
	EXTERNAL RENDERED/PAINTED	5.5000	3.9000
H1, H2, H1-D, H2-D	EXTERNAL FACE FINISH	5.0000	3.5000
	EXTERNAL RENDERED/PAINTED	4.5000	3.2000
P, E, E-D	REFER NOTE 2 / LOCATIONS	4.0 U.N.O	3.0 U.N.O

NOTES:

- THE SITE CLASS REFERS TO THE SOIL CLASSIFICATION AS DEFINED IN AS 2870
- JOINTS ON CLASS E, E-D & P SITES, REFER TO ENGINEER FOR ADVICE
- IF 15mm JOINTS ARE TO BE USED, SPACINGS MAY BE RELAXED AS PER AS 4773

M.19. IN CAVITY/BRICK VENEER WALLS PROVIDE MEDIUM DUTY GALVANISED WALL TIES AT 600 CENTRES VERTICALLY AND HORIZONTALLY AND AT 300 AVERAGE CENTRES ADJACENT TO OPENINGS. TIES TO BE EMBEDDED A MINIMUM OE 50MM INTO THE MORTAR JOINTS. STAINLESS STEEL TIES SHALL BE USED IN LOCATIONS LESS THAN 1KM FROM THE COAST.

**ROOF TRUSSES**

RT.1. THE BASIS OF DESIGN OF THE PERFORMANCE ROOF TRUSSES SHALL BE SAA LOADING CODE AS 1170 PARTS 0, 1, PART 2, SAA TIMBER STRUCTURES CODE AS 1720.1 AND COLD-FORMED STEEL STRUCTURES CODE AS/NZS 4600.

RT.2. DESIGN THE ROOF TRUSSES @ 600 CRS. MAX. FOR THE DESIGN WIND SPEED AS SPECIFIED IN 2.0 DESIGN CRITERIA.

RT.3. IN ADDITION TO THE NOMINATED PERMANENT BRACING, PROVIDE ANY ADDITIONAL PERMANENT BRACING REQUIRED FOR STRUCTURAL SUFFICIENCY OF THE TRUSS SYSTEM.

RT.4. PROVIDE ANY TEMPORARY BRACING REQUIRED TO MAINTAIN THE STABILITY OF THE TRUSSES AT ALL STAGES OF ERECTION.

RT.5. NOT MORE THAN 1 IN 3 BATTENS TO BE SPLICED ON ONE TRUSS.


RT.6. THE TRUSS DESIGNER SHALL PROVIDE DETAILS OF ALL PLATES AND CLEATS TO BE ATTACHED TO STEELWORK TO SUPPORT ROOF TRUSSES UNLESS NOTED OTHERWISE.

RT.7. DEFLECTION OF TRUSSES TO BE LIMITED TO SPAN/600 UNDER LONG TERM DEAD LOAD.

RT.8. MINIMUM CAMBER IS TO BE 5MM. MAXIMUM DIFFERENTIAL CAMBER BETWEEN ADJACENT TRUSSES IS 6MM.

RT.9. PROVIDE CERTIFICATION FROM A STRUCTURAL ENGINEER, AS DEFINED IN THE QUEENSLAND BUILDING BY-LAWS 1991, THAT THE ROOF TRUSSES AND PERMANENT BRACING REQUIRED FOR THE TRUSS SYSTEM ARE STRUCTURALLY SUFFICIENT.

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

APPROVED BY:   
RPEQ 18398

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ARCHITECT: AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD GLENRAE			
TITLE: NOTES - 3			
SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 003	REVISION: 1	

**SAFE DESIGN REPORT**

IN ACCORDANCE WITH THE WORK HEALTH AND SAFETY ACT AND REGULATIONS 2011 THE FOLLOWING TASKS HAVE BEEN IDENTIFIED AS POTENTIAL CONSTRUCTION HAZARDS ASSOCIATED WITH IMPLEMENTING THE DESIGN AS DOCUMENTED.

- DEMOLITION
- GROUND VIBRATIONS
- SURROUNDING PROPERTY AND INFRASTRUCTURE INCLUDING TREES
- EXCAVATIONS
- UNDERGROUND AND ABOVE GROUND SERVICES AND OBSTRUCTIONS
- LIFTING AND POSITIONING OF STRUCTURAL COMPONENTS
- HAZARDOUS MATERIALS
- OVER LOADING DUE TO CONSTRUCTION LOADS
- FORMWORK CONSTRUCTION
- WORKING AT HEIGHTS
- GENERAL SITE WORKS AND USE OF CONSTRUCTION EQUIPMENT
- SITE ACCESS INCLUDING STAIRS, SCAFFOLD, LADDERS, RAILINGS, SAFE WORK PLATFORMS FREE FROM FALLING DEBRIS AND ADEQUATE WORKSPACE


THE ABOVE LISTED HAZARDS ARE TO BE ADDRESSED BY IMPLEMENTING AND COMPLYING WITH THE FOLLOWING NOTES:

- S.1. IT IS THE CLIENT'S RESPONSIBILITY TO PROVIDE THIS 'SAFE DESIGN REPORT' TO THE BUILDER, PROJECT MANAGER AND/OR PRINCIPAL CONTRACTOR.
- S.2. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORKS STRICTLY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOT TO MAKE ANY VARIATIONS TO THE CONSTRUCTION WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE DESIGNER.
- S.3. IT IS THE CLIENT'S RESPONSIBILITY, THROUGH CONSULTATION AND ENGAGEMENT OF SUITABLY QUALIFIED PROFESSIONALS, TO MAKE THE DESIGNER AWARE OF ANY INFORMATION RELATING TO HAZARDS AND RISKS WHERE CONSTRUCTION WORK IS TO BE CARRIED OUT, INCLUDING BUT NOT LIMITED TO: THE LOCATION OF UNDER GROUND AND ABOVE GROUND SERVICES, IDENTIFICATION OF CONTAMINATED SOILS AND OTHER MATERIALS OR THE PRESENCE OF DANGEROUS MATERIALS INCLUDING ASBESTOS.
- S.4. WHERE THESE DESIGN DRAWINGS ONLY DOCUMENT PART OF A STRUCTURE, IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL DESIGN DRAWINGS ARE CO-ORDINATED BETWEEN CONSULTANTS. FOR EXAMPLE, CO-ORDINATION TO ENSURE APPROPRIATE SLAB THICKENINGS AND DETAILING FOR LOAD-BEARING AND BRACING WALL ELEMENTS, CAST IN FIXINGS, ETC.
- S.5. THIS DESIGN HAS BEEN DOCUMENTED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS, LOCAL AUTHORITY REGULATIONS AND STANDARD BUILDING CODES OF PRACTICE UNLESS NOTED OTHERWISE. EACH LEVEL OF CONSTRUCTION IS TO BE STRUCTURALLY COMPLETED AND INSPECTED TO ENSURE DESIGN COMPLIANCE BY THE CERTIFYING AUTHORITY PRIOR TO ADVANCING TO THE NEXT STAGE OF WORK. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO PROGRAM THE WORKS IN A SAFE MANNER AND TO HIGHLIGHT TO THE DESIGNER ANY ASPECTS OF THE WORK THAT MAY REQUIRE FURTHER CLARIFICATION OR ADVICE WITH REGARD TO THE HEALTH AND SAFETY OF THE PROJECT.
- S.6. ALL ASPECTS DETAILED OR NOTED IN THE STRUCTURAL DOCUMENTS ARE THOSE REQUIRED FOR THE COMPLETED STRUCTURE ONLY. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY CONNECTIONS AS WELL AS SUPPORTS AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF THE STRUCTURE THROUGHOUT THE CONSTRUCTION PERIOD. THIS INCLUDES ELEMENTS SUCH AS PREFABRICATED TIMBER AND STEEL ELEMENTS, UNRESTRAINED WALLS, CONCRETE COLUMNS, BEAMS AND SLABS, PRECAST PANELS, ETC WHICH REQUIRE TEMPORARY SUPPORT OR PROPPING TO PREVENT OVER STRESS, EXCESSIVE DEFORMATION OR INSTABILITY UNTIL THE FINAL STRUCTURAL SYSTEM IS COMPLETED. THE DESIGNER IS TO BE CONTACTED FOR FURTHER ADVICE IF REQUIRED.
- S.7. NO ALLOWANCE HAS BEEN MADE FOR CONSTRUCTION LOADS INCLUDING STACKING OF MATERIALS ON DECKS, FLOORS OR ROOF PLATFORMS, LOADS IMPOSED DUE TO PLANT, MACHINERY, LIFTING DEVICES, IMPACT/VIBRATION/CYCLIC LOADS, ETC. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE DESIGNER OF ANY LOADS, THAT ARE NOT DOCUMENTED, THAT THE STRUCTURE MAY BE SUBJECTED TO DURING CONSTRUCTION.
- S.8. UNLESS NOTED ON THE DRAWINGS NO STRUCTURAL ALLOWANCE HAS BEEN MADE FOR SPECIFIC LOADS ASSOCIATED WITH THE MAINTENANCE OF THE STRUCTURE. THE DESIGNER IS TO BE INFORMED OF ANY REQUIREMENTS NECESSARY TO EXTERNALLY SUPPORT PLATFORMS, SCAFFOLDS ETC AS REQUIRED.

- S.9. DURING CONSTRUCTION, THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL PROTECT NEIGHBOURING PROPERTIES FROM NOISE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS, RADIATION, GROUND VIBRATIONS AND OTHER CONSTRUCTION HAZARDS. CONDITION REPORTS ON NEIGHBOURING PROPERTIES AND STRUCTURES ARE RECOMMENDED PRIOR TO CONSTRUCTION.
- S.10. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS REQUIRED TO VERIFY AND IF NECESSARY CONDUCT FURTHER SEARCHES TO ACCURATELY LOCATE EASEMENTS, UNDER GROUND AND ABOVE GROUND SERVICES, PROPERTY BOUNDARIES, TREES, EXISTING STRUCTURES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. THE DESIGNER IS TO BE IMMEDIATELY NOTIFIED OF ANY ELEMENTS NOT SHOWN ON THE APPROVED DRAWINGS AS THE DESIGN AND SAFETY DESIGN REPORT MAY REQUIRE AMENDING.
- S.11. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR MUST OBTAIN DESIGN AND INSPECTION CERTIFICATES ON ALL SUNDRY ELEMENTS OF THE STRUCTURE INCLUDING BUT NOT LIMITED TO CLADDING DESIGN AND FIXINGS, WINDOWS, BALUSTRADES, STAIRS, SUSPENDED CEILINGS, INTERNAL FIT-OUT ITEMS AND ALL OTHER ELEMENTS NOT DETAILED IN THE DESIGN DOCUMENTS.
- S.12. THE CONSTRUCTION IS TO BE FULLY CARRIED OUT IN ACCORDANCE WITH ALL DESIGN DRAWINGS AND NOTES AS DOCUMENTED. IF CONSTRUCTION CEASES AT ANY STAGE, THE DESIGNER IS TO BE NOTIFIED TO PROVIDE ADVICE ON THE SAFETY OF COMPLETED CONSTRUCTION WORK AT THAT TIME.
- S.13. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO INFORM THE DESIGNER OF ANY CHANGE TO CONTRACTUAL ARRANGEMENTS BETWEEN THE CLIENT AND THEMSELVES WHICH MAY IMPACT ON THE DESIGN AND SAFETY OF THE DESIGN.
- S.14. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL PROVIDE SUITABLE FENCING AROUND ALL EXCAVATIONS AND AT NO STAGE SHOULD AN EXCAVATION BE APPROACHED OR ENTERED INTO UNLESS AN APPROVED AND CERTIFIED SHORING SYSTEM HAS BEEN INSTALLED OR THE BANKS HAVE BEEN BATTERED AND/OR BENCHED IN ACCORDANCE WITH THE PROJECTS GEOTECHNICAL ENGINEERING SPECIFICATION AND/OR WRITTEN INSTRUCTIONS BY THE INSPECTING GEOTECHNICAL ENGINEER.
- S.15. AT NO STAGE SHALL SITE PERSONNEL PASS UNDER MATERIALS BEING LIFTED AND MOVED AROUND ON SITE. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SITE MATERIALS ARE DELIVERED, TRANSPORTED, STORED AND POSITIONED IN A SAFE MANNER AND IN ACCORDANCE WITH THE PRODUCT SPECIFICATION, THE SITE SPECIFIC SAFETY PLAN AND GENERAL SAFETY INDUCTION REGULATIONS.
- S.16. CONTRACTORS ARE REQUIRED TO OBTAIN AND COMPLY WITH MATERIAL PRODUCT SPECIFICATIONS AND RECOMMENDATIONS WHEN USING MATERIALS SPECIFIED IN THE DESIGN DOCUMENTS.
- S.17. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR MUST ELIMINATE OR LIMIT (SO FAR AS REASONABLE PRACTICABLE) SLIP HAZARDS AND PROTRUDING, SHARP OR ABRASIVE ELEMENTS ON SITE. HAZARDOUS ELEMENTS MUST BE CAPPED, ADEQUATELY SCREENED OR CLEARLY MARKED TO ENSURE SITE SAFETY.
- S.18. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SITE WORKERS ARE SUITABLY QUALIFIED, TRAINED AND INSURED FOR THE TASKS BEING UNDERTAKEN ON SITE.
- S.19. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SITE PERSONNEL ARE PROVIDED ADEQUATE SPACE, VENTILATION AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT TO UNDERTAKE THE WORKS REQUIRED. ALL CONSTRUCTION EQUIPMENT IS TO BE USED IN ACCORDANCE WITH BEST INDUSTRY SAFETY PRACTICES AND REGULATIONS.
- S.20. DEMOLITION WORKS ARE REQUIRED TO BE CARRIED OUT IN A SAFE, SYSTEMATIC AND ORDERLY MANNER IN ACCORDANCE WITH THE SITE SPECIFIC SAFETY PLAN AND ALL GENERAL SAFETY INDUCTION REGULATIONS. TEMPORARY PROPPING OF MEMBERS MAYBE REQUIRED IN ACCORDANCE WITH THE DIRECTION OF A SUITABLY QUALIFIED PROFESSIONAL IN ACCORDANCE WITH INDUSTRY SAFETY PRACTICES AND REGULATIONS.
- S.21. AT ALL TIMES THE BUILDER, PROJECT MANAGER, OR PRINCIPAL CONTRACTOR IS TO PROVIDE SAFE ACCESS ONTO AND AROUND THE BUILDING SITE INCLUDING ADEQUATE STAIRS, SCAFFOLDING, SECURE LADDER ACCESS, SAFE WORKING PLATFORMS, ACCESS PATHS FREE FROM FALLING OBJECTS, ADEQUATE RAILINGS, FALL ARREST SYSTEMS, ETC.
- S.22. ALL FORMWORK AND SCAFFOLDING SYSTEMS ARE TO BE DESIGNED AND CERTIFIED BY A LICENSED CONTRACTOR TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND KEPT AND MAINTAINED IN A GOOD WORKING ORDER. REGULAR CHECKS ON ERECTED MEMBERS AND FIXINGS MUST BE CARRIED OUT BY A QUALIFIED PROFESSIONAL TO ENSURE COMPLIANCE WITH THE DESIGN.

- S.23. CLIMBING ON SCAFFOLDING OR FORMWORK AND WORKING AT HEIGHTS WITHOUT SUITABLY APPROVED RAILINGS, BARRIERS AND RESTRAINTS FIXED OLE TO CERTIFIED ANCHOR POINTS IS STRICTLY PROHIBITED.
- S.24. ALL SITE MACHINERY AND ELECTRICAL EQUIPMENT IS TO BE KEPT IN GOOD WORKING ORDER WITH CURRENT SAFETY TAGGING AND SERVICING WHERE APPLICABLE.
- S.25. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO ADEQUATELY TREAT AND DISPOSE OF DANGEROUS SITE MATERIALS INCLUDING CONTAMINATED SOILS AND ASBESTOS IN ACCORDANCE WITH AUTHORITY REGULATIONS, INDUSTRY STANDARDS AND PRACTICES.
- S.26. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO ENSURE THAT THE SITE IS MAINTAINED IN A SAFE WORKING MANNER AND THAT ALL SITE PRACTICES ARE IN ACCORDANCE WITH CURRENT WORK PLACE HEALTH AND SAFETY LAWS AND REGULATIONS.

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

APPROVED BY:   
RPEQ 18398

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 LOT 111 GLENRAE DIP ROAD  
 GLENRAE  
 QLD 4626

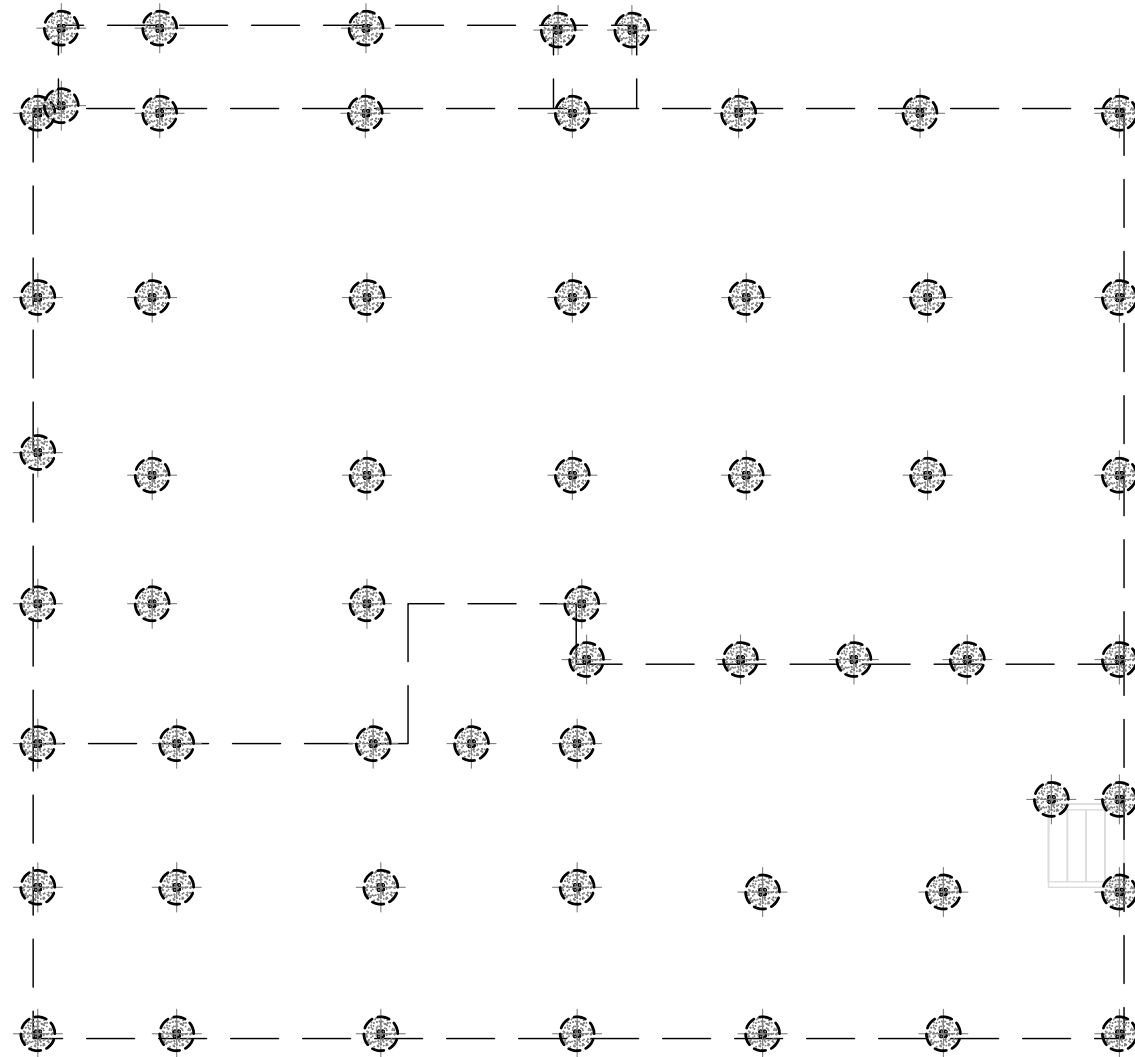
ARCHITECT: AM 20 DESIGN  
 JOB NO: 900143  
 REV C  
 DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD GLENRAE			
TITLE: NOTES - 4			
SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 004	REVISION: 1	



**SITE PREPARATION NOTES:**

- SITE TO BE STRIPPED OF ALL VEGETATION, TREE ROOTS, UN-COMPACTED FILL MATERIAL AND ANY OTHER DELETERIOUS MATERIAL, AND THEN PROOF-ROLLED. ANY SOFT SPOTS TO BE REMOVED AND RE-COMPACTED PRIOR TO CREATING BUILDING PLATFORM. SLAB/FOOTINGS TO BE FOUNDED TO APPROVED FOUNDING MATERIAL. CONSULT ENGINEER FOR ADVICE IF UNSURE.
- SITE EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3798 – GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
- ANY FILLED BUILDING PLATFORMS IN SHALL BE CONTROLLED OR ROLLED FILL IN ACCORDANCE WITH AS3798 – GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
- REFER ARCHITECTURAL PLANS FOR STEPS, FALLS & SET-DOWNS.
- BUILDER TO CONFIRM ALL DIMENSIONS & SETBACKS BEFORE STARTING THE CONSTRUCTIONS AND NOTIFY ENGINEER IF DIFFERENT THAN SHOWN ON THIS PLAN.

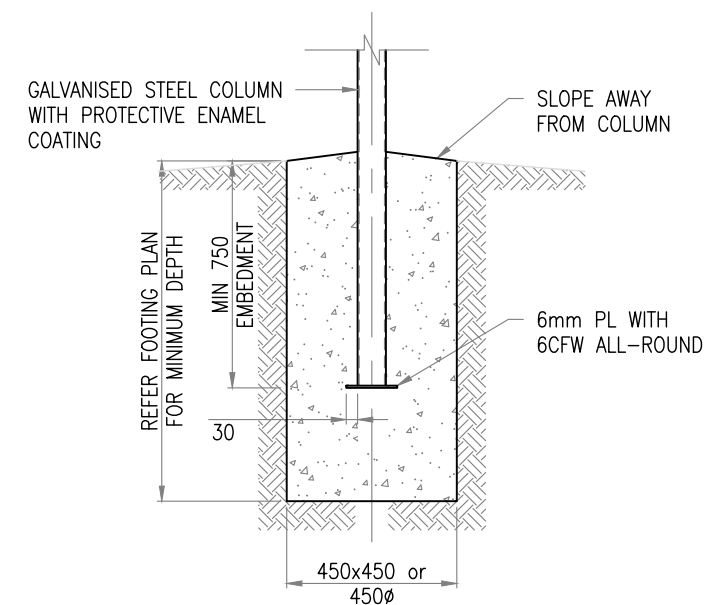


**FOOTING PLAN**  
1:100

GEOTECHNICAL INFORMATION	
SOIL CLASSIFICATION	"M" CLASS PROPERTIES
SOIL TEST BY:	CQ SOIL TESTING
REFERENCE #:	CQ24307
DATE:	22/11/2023
RECOMMENDED FOUNDING MATERIAL (RFM):	GRAVELLY SANDY CLAY

CONCRETE EXPOSURE CLASS	
EXPOSURE CLASS	A1
CONCRETE STRENGTH (28 days)	20 MPa
TOP COVER TO REINF'T (INTERNAL)	25mm
TOP COVER TO REINF'T (EXTERNAL)	40mm

LEGEND		
	CONCRETE BORED PIER WITH CAST-IN STEEL COLUMN	
	DEPTH: MIN. 900mm	DIAMETER: ø450mm



**BP1 BORED PIER DETAIL**  
SCALE 1:20

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

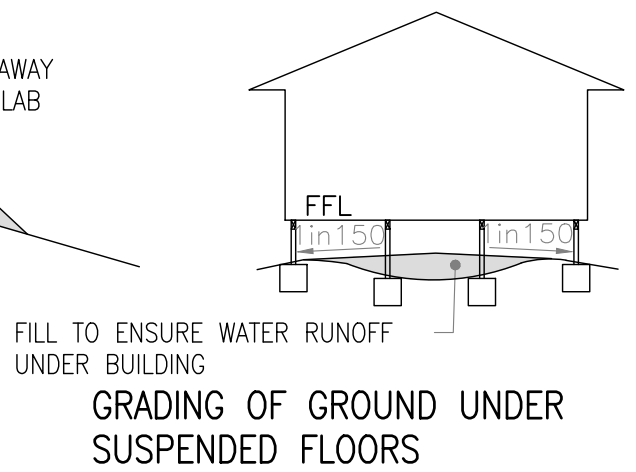
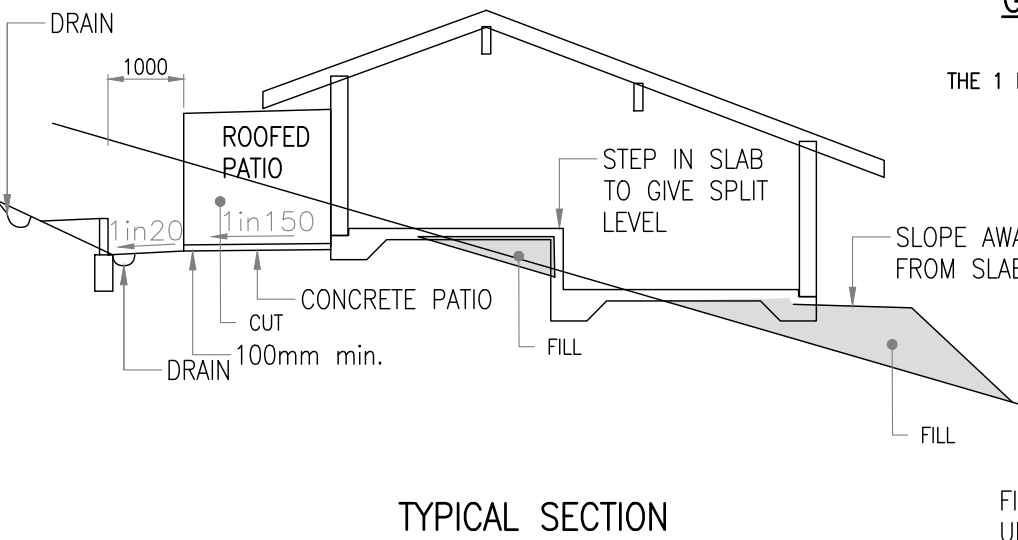
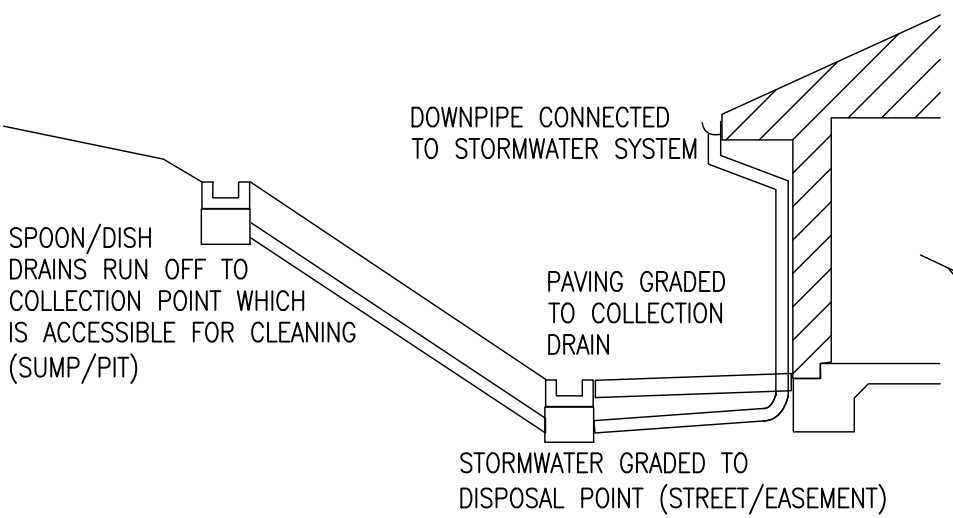
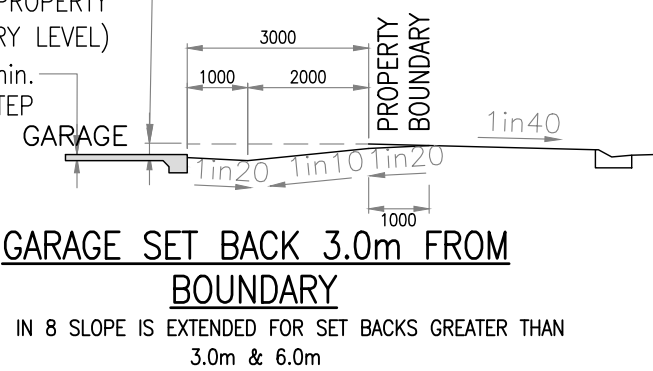
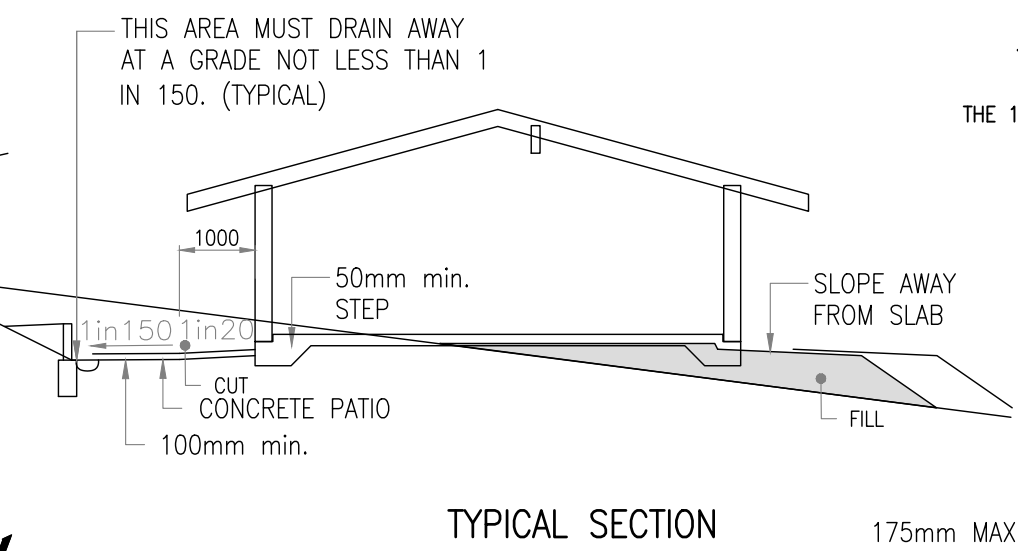
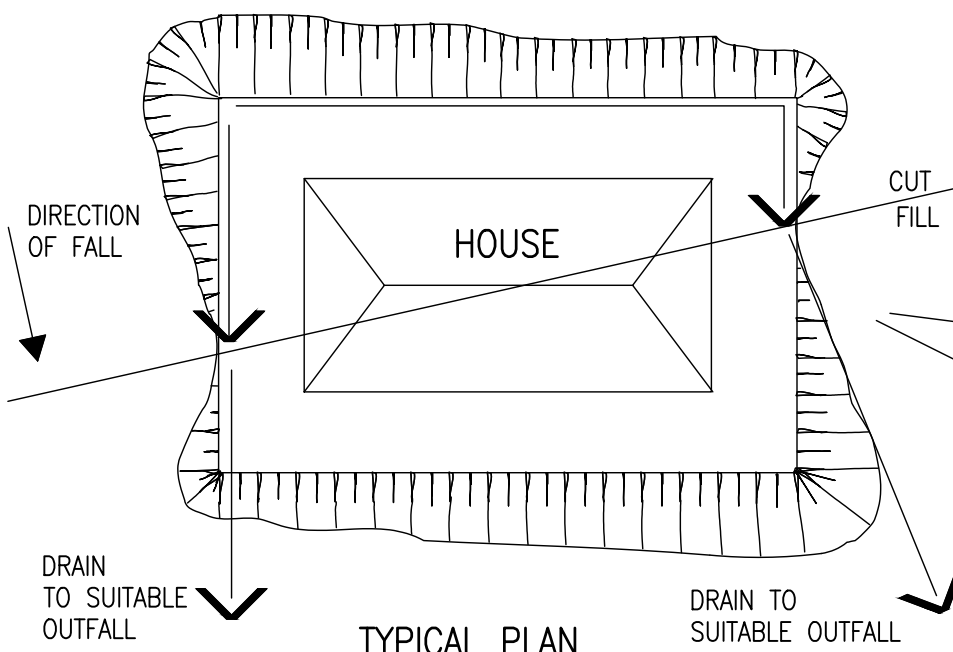
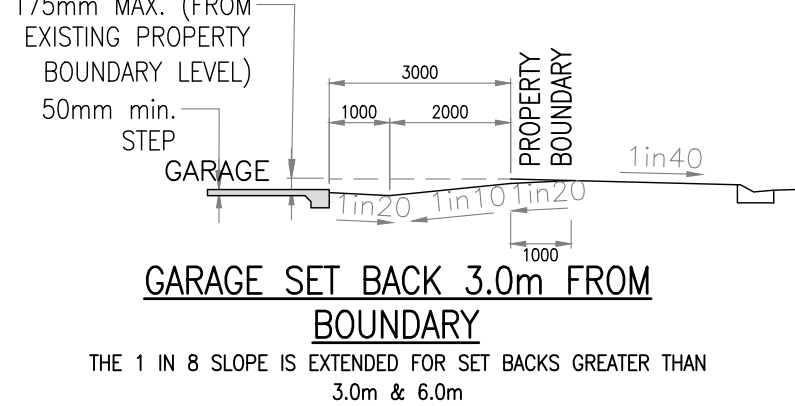
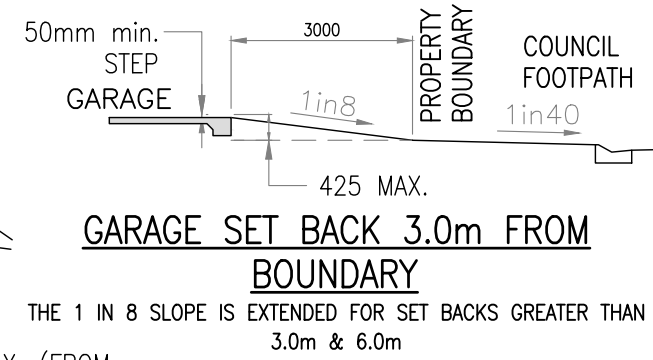
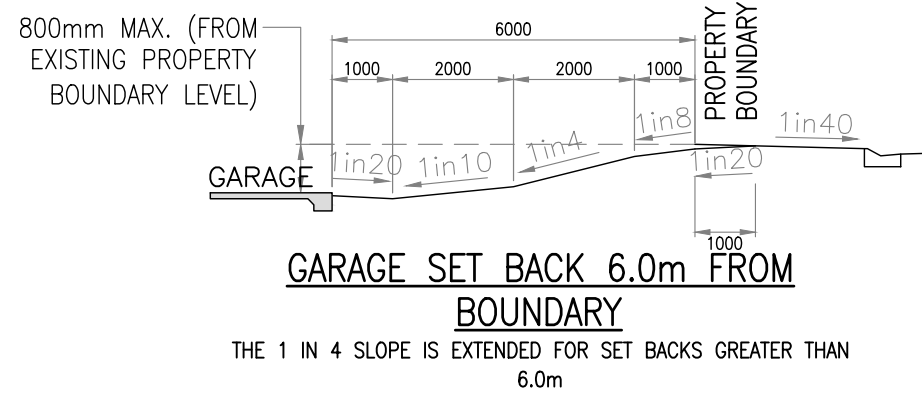
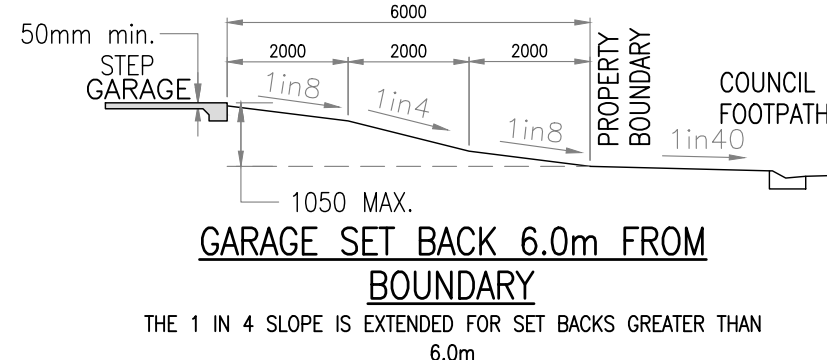
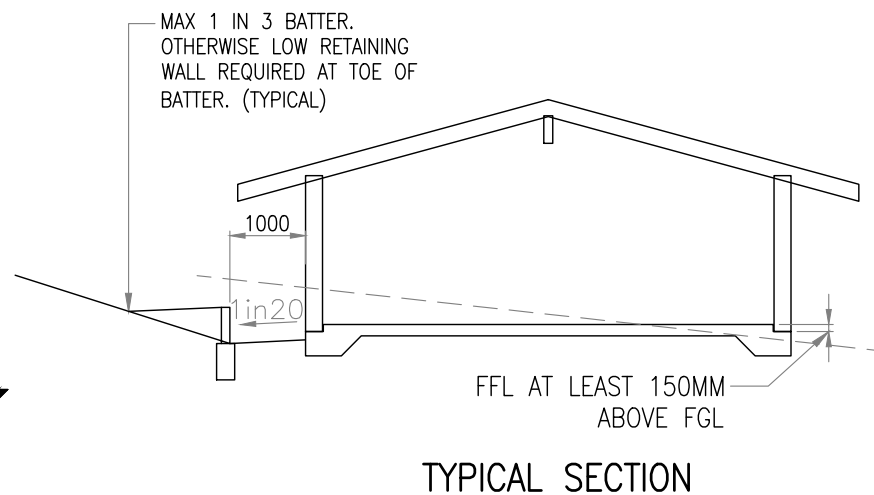
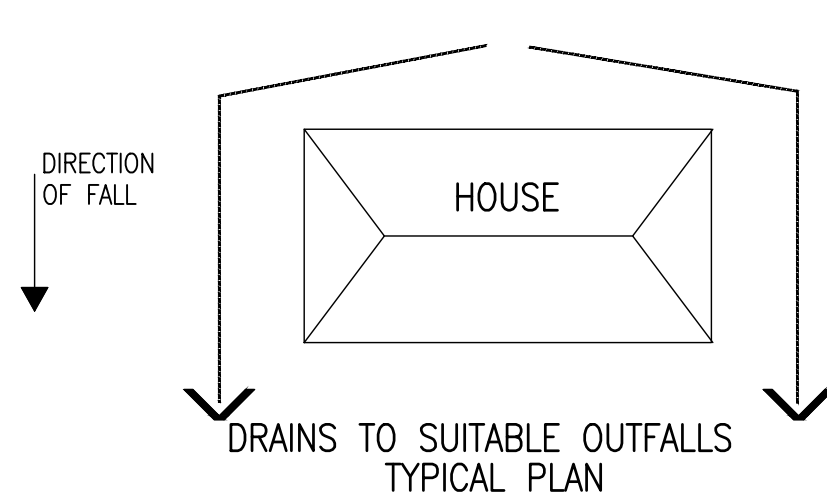
APPROVED BY:   
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LOT 111 GLENRAE DIP ROAD  
GLENRAE  
QLD 4626

ARCHITECT: AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD GLENRAE			
TITLE: FOOTING PLAN			
SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 101	REVISION: 1	



- SURFACE DRAINAGE NOTES:**
- CLAUSE 3.1.2.3 OF VOLUME 2 OF THE NATIONAL CONSTRUCTION CODE (NCC) REQUIRES THAT THE FINISHED HEIGHT OF ANY SLAB BE A MINIMUM OF 150mm, GENERALLY, ABOVE THE FINISHED GROUND LEVEL AFTER LANDSCAPING, AND THAT THE EXTERNAL SURFACE DRAINS AWAY WITH A MINIMUM OF 50mm FALL OVER THE FIRST METRE. IT SHOULD ALSO BE NOTED THAT CLAUSE 4.6.6.6 OF AS/NZS 3500.2-2003 REQUIRES THAT THE TOP OF THE OVERFLOW RELIEF GULLY BE A MINIMUM OF 150mm BELOW THE LOWEST GRATE IN THE SLAB AND 75mm ABOVE THE FINISHED GROUND LEVEL.
  - FINISHED GROUND AND FLOOR LEVELS SHALL BE AS SHOWN IN THE TYPICAL SURFACE DRAINAGE DETAILS ON THIS PAGE AND THE FOLLOWING REQUIREMENTS:
  - DURING CONSTRUCTION, SURFACE WATER SHALL BE DIVERTED AWAY FROM FOOTINGS TO A LAWFUL POINT OF DISCHARGE.
  - PITS AND PIPES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500.3-2003.
  - THE FINISHED FLOOR LEVEL OF ANY GARAGE OR CARPORT SHALL ALSO BE SET SUCH THAT DRIVEWAY SLOPES COMPLY WITH AS/NZS 2890.1-2004. REFER TO THE TYPICAL DRIVEWAY DETAILS ON THIS PAGE.

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

APPROVED BY: *[Signature]*  
RPEQ 18398

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ARCHITECT: AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD GLENRAE			
TITLE: SURFACE DRAINAGE DETAILS			
SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 102	REVISION: 1	

TYPICAL DETAILS AT CUTTING

TYPICAL SECTION

SITES WITH FALLS GREATER THAN 1 IN 8

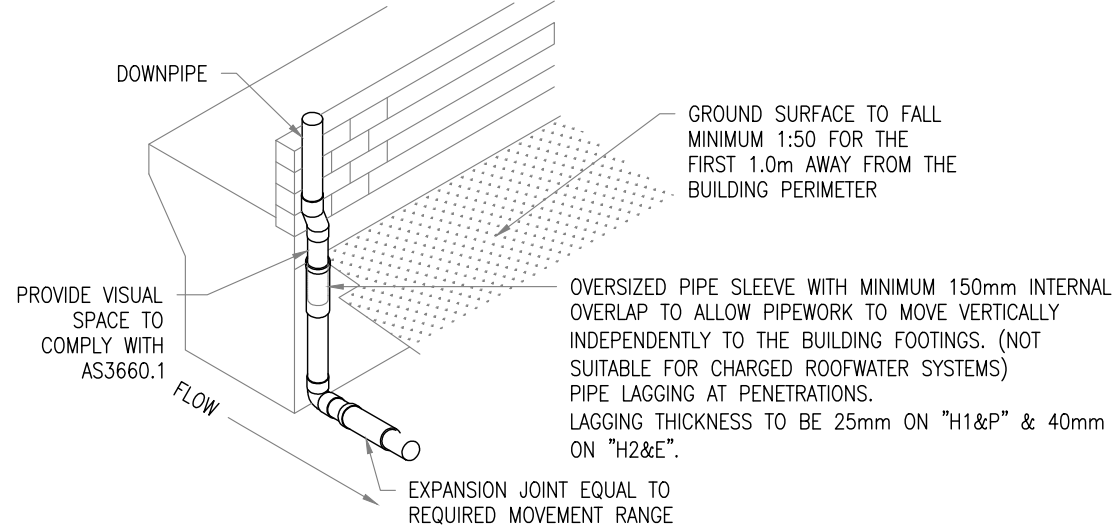
GRADING OF GROUND UNDER SUSPENDED FLOORS

**ELEVATED PIPEWORK ARTICULATION NOTE:**

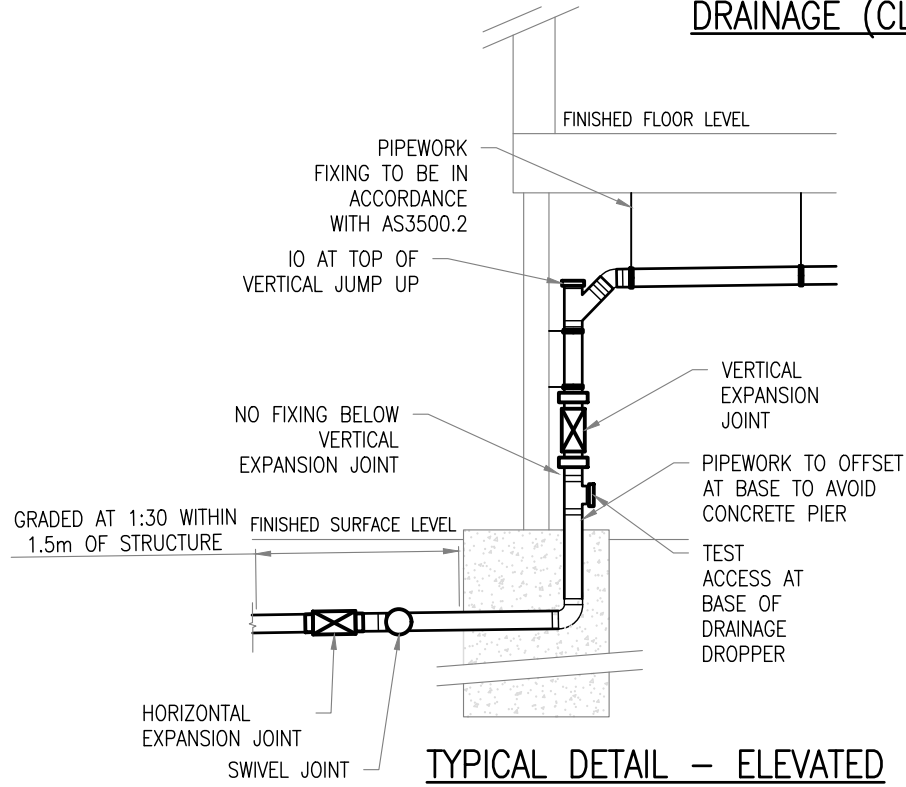
- EXPANSION JOINTS TO BE AN APPROVED PRODUCT EQUAL TO "STORMPLASTICS DWV EXPANSION JOINT SERIES". MINIMUM TRAVEL:  
 "E" 150mm  
 "H1" 60mm  
 "H2" 75mm  
 "P" BASED ON UNDERLYING CLASSIFICATION  
 75mm (FOR UNDERLYING CLASS 'S' & 'M', WHEN 'P' IS FOR UNCONTROLLED FILL)  
 "S & M" NOT REQUIRED (UNLESS NOTED OTHERWISE)
- SWIVEL JOINTS TO BE AN APPROVED PRODUCT EQUAL TO "STORM PLASTICS SWIVEL JOINTS SERIES" (NOT REQUIRED ON CLASS 'S', CLASS 'M' OR CLASS 'P' SITES WITH UNDERLYING CLASS 'S' OR 'M' SOILS WHEN THE 'P' CLASSIFICATION IS FOR REASONS OTHER THAN UNCONTROLLED FILL).
- VERTICAL EXPANSION JOINTS ARE REQUIRED ON PIPE DROPPERS WHEN:  
 CLASS 'E' & CLASS 'P' (WHERE 'P' CLASS RELATES TO UNCONTROLLED FILL OTHERWISE REFER TO UNDERLYING SOIL CHARACTERISTIC REQUIREMENTS)
- HORIZONTAL EXPANSION JOINTS ARE REQUIRED FOR ALL PIPEWORK WITHIN 1.5m EXTERNAL TO THE BUILDING FOOTPRINT WHEN:  
 CLASS 'H1', CLASS 'H2', CLASS 'E' & CLASS 'P' (WHERE UNDERLYING SOIL CHARACTERISTICS ARE EQUAL TO CLASS 'H1/H2/E')  
 AND SHOULD BE LOCATED:  
 • WITHIN 1.0m OF EXISTING THE BUILDING FOOTPRINT, ADJACENT A SWIVEL JOINT  
 • AT EVERY CHANGE IN GRADE, ADJACENT A SWIVEL JOINT  
 • DOWNSTREAM EVERY JUNCTION AND HORIZONTAL CHANGE IN DIRECTION GREATER THAN 45°.
- PIPEWORK AND BASE OF PIPE TRENCH TO BE GRADED AT MINIMUM 1:30 FOR A MINIMUM DISTANCE OF 1.5m DOWNSTREAM OF EXITING THE BUILDING FOOTPRINT TO PREVENT INGRESS OF WATER.
- ALL TRENCHING TO BE GRADED UNIFORMLY WITH DRAINAGE TO ENSURE ADEQUATE TRENCH DRAINAGE.
- SNG ENGINEERS RECOMMENDS WRAPPING ALL EXPANSION JOINTS AS "GOOD PRACTICE" IN A SUITABLE MATERIAL WHICH ALLOWS FULL MOVEMENTS AND PREVENTS THE INGRESS OF FOREIGN MATTER AND TREE ROOTS.
- ALL PLUMBING ( WITHIN AND BEYOND THE FOOTPRINT ON THE STRUCTURE) IS TO BE CONSTRUCTED IN ACCORDANCE WITH AS3500.2 AND THE PLUMBING CODE OF AUSTRALIA.
- ARTICULATION JOINTS MAY BE OMITTED ON CLASS 'P' SITES (FOR UNCONTROLLED FILL) WITH AN UNDERLYING CLASSIFICATION OF CLASS 'S' OR 'M' WHEN PIPEWORK IS LAID INTO NATURAL SOILS OR SUPPORTED ON PIERS FOUNDED TO NATURAL SOILS.
- FOR CLASS 'E' SITES WITH A COMBINED 'Ys + Yt' MOVEMENT RANGE EQUAL OR GREATER THAN 90mm, REFER BACK TO SNG ENGINEERS FOR A SITE SPECIFIC ENGINEERED SOLUTION.

**ROOF ARTICULATION NOTE:**

ARTICULATION JOINTS TO BE AN APPROVED PRODUCT EQUAL TO "STORM PLASTICS DWV EXPANSION JOINT SERIES" OR "PLASTEC'S FLEXI JOINT RANGE" AND ARE RECOMMENDED TO BE WRAPPED IN A SUITABLE MATERIAL TO ALLOW FULL MOVEMENT AND TO PREVENT THE INGRESS OF FOREIGN MATTER AND TREE ROOTS.  
 MINIMUM TRAVEL:  
 "H1" 60mm  
 "H2" 75mm  
 "E" 150mm  
 "P" BASED ON UNDERLYING CLASSIFICATION  
 (FOR CLASS 'E' SITES WITH A COMBINED 'Ys + Yt' MOVEMENT RANGE EQUAL OR GREATER THAN 90mm, REFER BACK TO SNG ENGINEERS FOR A SITE SPECIFIC ENGINEERED SOLUTION)



**TYPICAL DETAIL – ROOFWATER DRAINAGE (CLASS 'H/E/P')**  
SCALE N.T.S.



**TYPICAL DETAIL – ELEVATED PIPEWORK/STACK DROPPER**  
SCALE N.T.S.

**MINIMUM PLUMBING RECOMMENDATIONS**

COMPONENT	SITE/DESIGN CLASSIFICATION								
	A & S	M	H1	H2	E	P *	M-D	H-D	E-D
HORIZONTAL PENETRATION LAGGING (mm)	x	20	20	40	40	40	40	40	40
JOINT EXPANSION SIZE (mm)	x	x	100	100	150	150	100	150	150-220
VERTICAL EXPANSION JOINTS (UNDER SLAB)	x	x	x	x	✓	✓	x	x	✓
SWIVEL JOINTS	x	x	✓	✓	✓	✓	✓	✓	✓
DOWNPIPE EXPANSION JOINTS	x	x	✓	✓	✓	✓	✓	✓	✓
GULLY PITS FOR HOSE COCKS & AC UNITS	x	x	✓	✓	✓	✓	✓	✓	✓
ALLOWABLE ROTATION	x	x	15°	15°	15°	15°	15°	15°	15°

\* 'P' CLASSIFICATION PLUMBING REQUIREMENTS ARE SPECIFIC TO UNCONTROLLED FILL ONLY

**NOTE:**  
 THESE RECOMMENDATIONS ARE GUIDELINES ONLY. FINAL PLUMBING REQUIREMENTS TO BE DETERMINED BY LOCAL PLUMBING AUTHORITY IN CONJUNCTION WITH AS/NZS 3500

**RECOMMENDED GUIDELINES FOR SANITARY AND STORMWATER INSTALLATION REACTIVE CLAY SITES:**

- THE FOLLOWING NOTES & DETAILS PROVIDED ARE A GUIDE ONLY FOR ARTICULATION FOR SANITARY PLUMBING, DRAINAGE & SHOULD BE READ IN CONJUNCTION WITH AS/NZS 3500, AS 2870 & ANY OTHER RELEVANT STANDARD & OTHER REQUIREMENTS OF THE BUILDING CODE OF AUSTRALIA.
- ALL DRAINS INSTALLED IN GROUND THAT IS FILLED, UNSTABLE, EXPANSIVE (E.G. M, H, E & P SITES) OR WATER CHARGED AND WHERE SOIL MOVEMENT MAY AFFECT THE PERFORMANCE OF ANY DRAIN, A CERTIFIED PLAN AND SPECIFICATION SHOULD BE PROVIDED BY APPROPRIATELY QUALIFIED PERSON. WHERE A COMPLIANCE PERMIT AND ASSESSMENT IS REQUIRED BY THE LOCAL AUTHORITY, A SOIL REPORT AND ALL CALCULATIONS SHOWING PROPOSED METHOD TO PROJECT THE DRAINAGE FROM POTENTIAL GROUND MOVEMENTS MAY BE REQUIRED.
  - ALL SEWER & STORMWATER TO BE CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 & THE REQUIREMENTS OF AS 2870 SECTION 5: CLAUSE 5.5 & SECTION 6: CLAUSE 6.6. FOR SLAB OR STRIP FOOTINGS ON HIGHLY AND EXTREMELY REACTIVE SITES, THE FOLLOWING REQUIREMENTS APPLY: DRAINS ATTACHED TO OR EMERGING FROM UNDERNEATH THE BUILDING SHALL INCORPORATE FLEXIBLE JOINTS IMMEDIATELY OUTSIDE THE FOOTING AND COMMENCING WITHIN 1m OF THE BUILDING PERIMETER COMPLY WITH AS1260 TO ACCOMMODATE A TOTAL RANGE OF DIFFERENTIAL MOVEMENT IN ANY DIRECTION EQUAL TO THE ESTIMATED CHARACTERISTIC SURFACE MOVEMENT OF THE SITE (Ys). IN THE ABSENCE OF SPECIFIC DESIGN REQUIREMENTS, THE FITTINGS OR OTHER DEVICES THAT ARE PROVIDED TO ALLOW FOR THE MOVEMENT SHALL BE SET AT THE MID POSITION OF THEIR RANGE OF POSSIBLE MOVEMENT AT THE TIME OF INSTALLATION, SO AS TO ALLOW FOR MOVEMENT EQUAL TO 0.5YS IN ANY DIRECTION FROM THE INITIAL SETTING. THIS REQUIREMENT APPLIES TO ALL STORMWATER AND SANITARY PLUMBING DRAINS AND DISCHARGE PIPES.
  - PLUMBING AND DRAINAGE UNDER THE SLAB SHOULD BE AVOIDED WHERE PRACTICAL (REFER AS/NZS 3500 CLAUSE 4.10).
  - GRADE IN PIPE WORK ON M, H & P SITES SHOULD HAVE A MINIMUM GRADE OF 1:30 WITHIN 1.5 METRES OF THE BUILDING AND 1:60 ELSEWHERE. GRADES IN FLEXIBLE FITTINGS TO BE SET AT THE MINIMUM GRADE.
  - ALL EXPANSION AND ARTICULATION JOINTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. ALL JOINT TO BE SET MID POINT SO AS TO ALLOW FOR MAXIMUM MOVEMENT IN EITHER DIRECTION.
  - STORMPLASTICS (SA) PTY LTD "SWIVEL JOINT" SHOULD NOT BE USED AS A BEND TO ACHIEVE CORRECTION IN FALLS. THE JOINTS SHOULD BE SET IN STRAIGHT LINE AND THE DRAIN TO ALLOW MAXIMUM POSITIVE OR NEGATIVE MOVEMENT.. A MINIMUM OF 15° BEND TO BE INSTALLED BEFORE SWIVEL JOINTS TO ACHIEVE MINIMUM GRADES FROM THE FOOTING.
  - GULLY PITS ARE RECOMMENDED UNDER ALL HOSE COCK LOCATIONS.
  - 20mm PENETRATION LAGGING IS ONLY RECOMMENDED THROUGH PENETRATIONS GREATER THAN 50mm DIA.
  - DETAILS AND SUPPORT OF THE TRAPS AT THE O.R.G TO BE CONSIDERED ON SITE. TO ALLOW FOR POTENTIAL MOVEMENT INCLUDING ISOLATION AND ARTICULATION ASSOCIATED WITH PATHS & PAVEMENTS. THE O.R.G. SHOULD BE CAST IN CONCRETE MONOLITHICALLY WITH THE FOOTING SYSTEM ON CLASS H AND E SITES.
  - ALL PVC PIPE WORK PASSING THROUGH CONCRETE MUST HAVE 25mm LAGGING.

- STORM WATER SYSTEMS THAT COLLECT ROOF WATER AND SURFACE WATER ARE REQUIRED TO BE DESIGN AND CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 PART 5.
- THE USE OF CORRUGATED FLEXIBLE PVC PIPE PRODUCTS SHOULD BE AVOIDED ON CLASS H & E SITES AS THEY ARE NOT ABLE TO EXPAND LONGITUDINALLY TO ACCOMMODATE POTENTIAL VERTICAL & LATERAL MOVEMENTS AT THE SLAB OR FOOTING EDGES UNLESS SPECIFICALLY DETAILED BY THE MANUFACTURER.
- ALL JOINT IN STORMWATER PIPES WITHIN 3m OF THE HOUSE UNDER CONSTRUCTION SHOULD BE ARTICULATED TO ACCOMMODATE GROUND MOVEMENTS WITHOUT LEAKAGE.
- SEPTIC TANKS AND ASSOCIATED SOAKAGE AREAS SHOULD BE LOCATED TO MINIMISE SOIL MOISTURE INCREASES WITH THE FOUNDATION. SEPTIC TANKS IN PARTICULAR REQUIRE CAREFUL DETAILING.
- ALL PIPE WORK INCLUDING STORM WATER FITTINGS AND ADAPTERS SHOULD BE PROTECTED FROM MECHANICAL DAMAGE.
- TERMITE PROTECTION NOT SHOWN ON THE DRAWINGS AS THERE ARE VARIOUS OPTION. REFER THE BUILDING DESIGNER.
- ALL DETAILS ARE INDICATIVE ONLY. DESIGN OF THE PATHS FOOTING ETC. AND LOCATION OF PENETRATIONS TO BE SPECIFIED BY A PLUMBER.
- PROVISIONS SHOULD BE MADE FOR THE CONNECTION OF OVERFLOW OR WATER DISCHARGE FROM FIXTURE SUCH AS H.W.S AND A.C. TO A DRAIN AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY.
- REFER TABLE BELOW FOR RECOMMENDED MINIMUM PLUMBING REQUIREMENTS.
  - EXPANDABLE JOINT & SWIVEL SPECIFICATIONS TO BE MANUFACTURED AND COMPLY WITH AS 1280 AND AS1415.
  - TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS AND INSPECTED BY THE LOCAL AUTHORITY.

1	CONSTRUCTION ISSUE	SG	07/03/24
REV:	DESCRIPTION:	BY:	DATE:
STATUS: CONSTRUCTION ISSUE			

APPROVED BY: *[Signature]*  
RPEQ 18398

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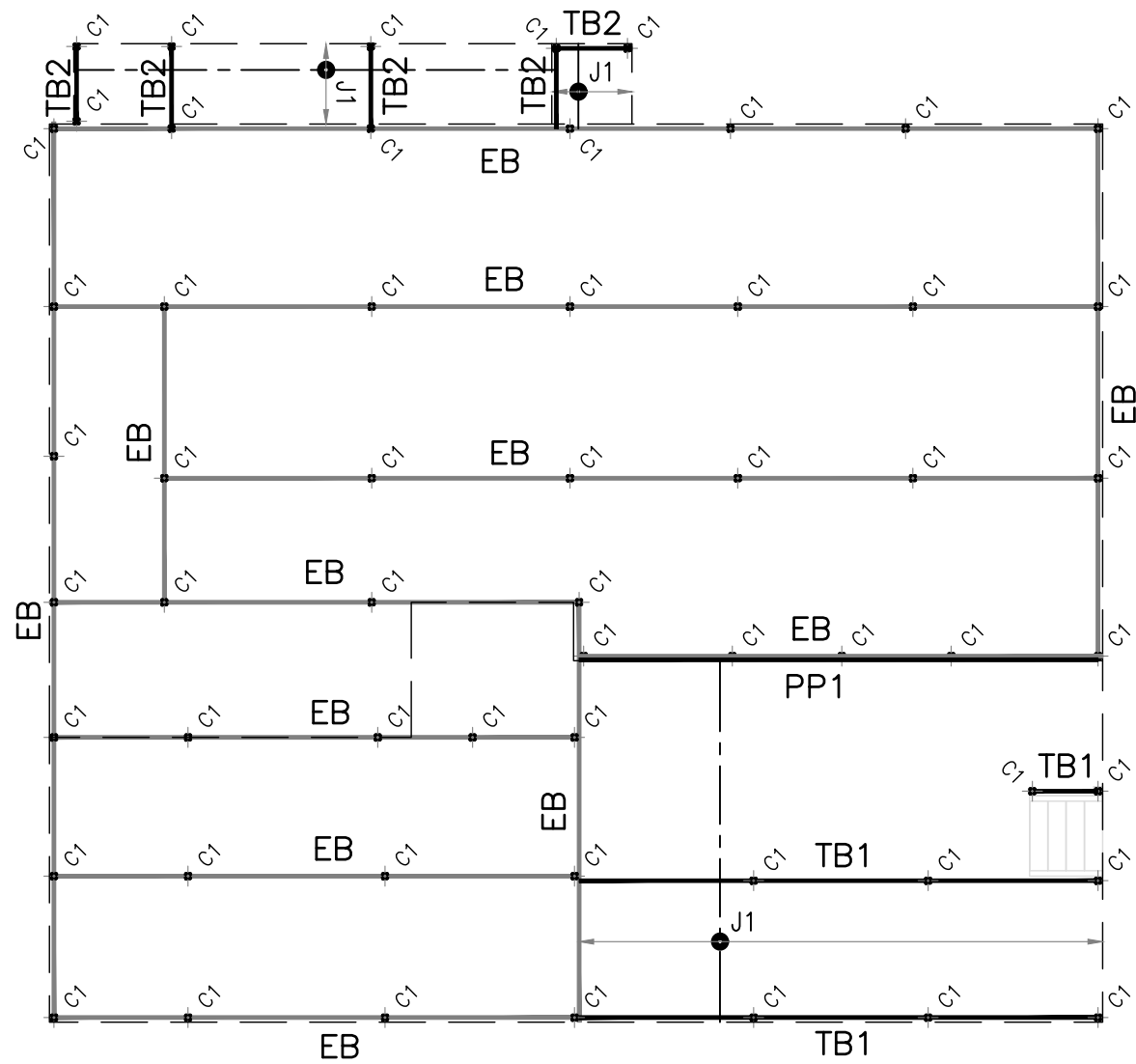
ARCHITECT: AM 20 DESIGN  
 JOB NO: 900143  
 REV C  
 DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD  
GLENRAE

TITLE: PLUMBING DETAILS

SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 103	REVISION: 1	



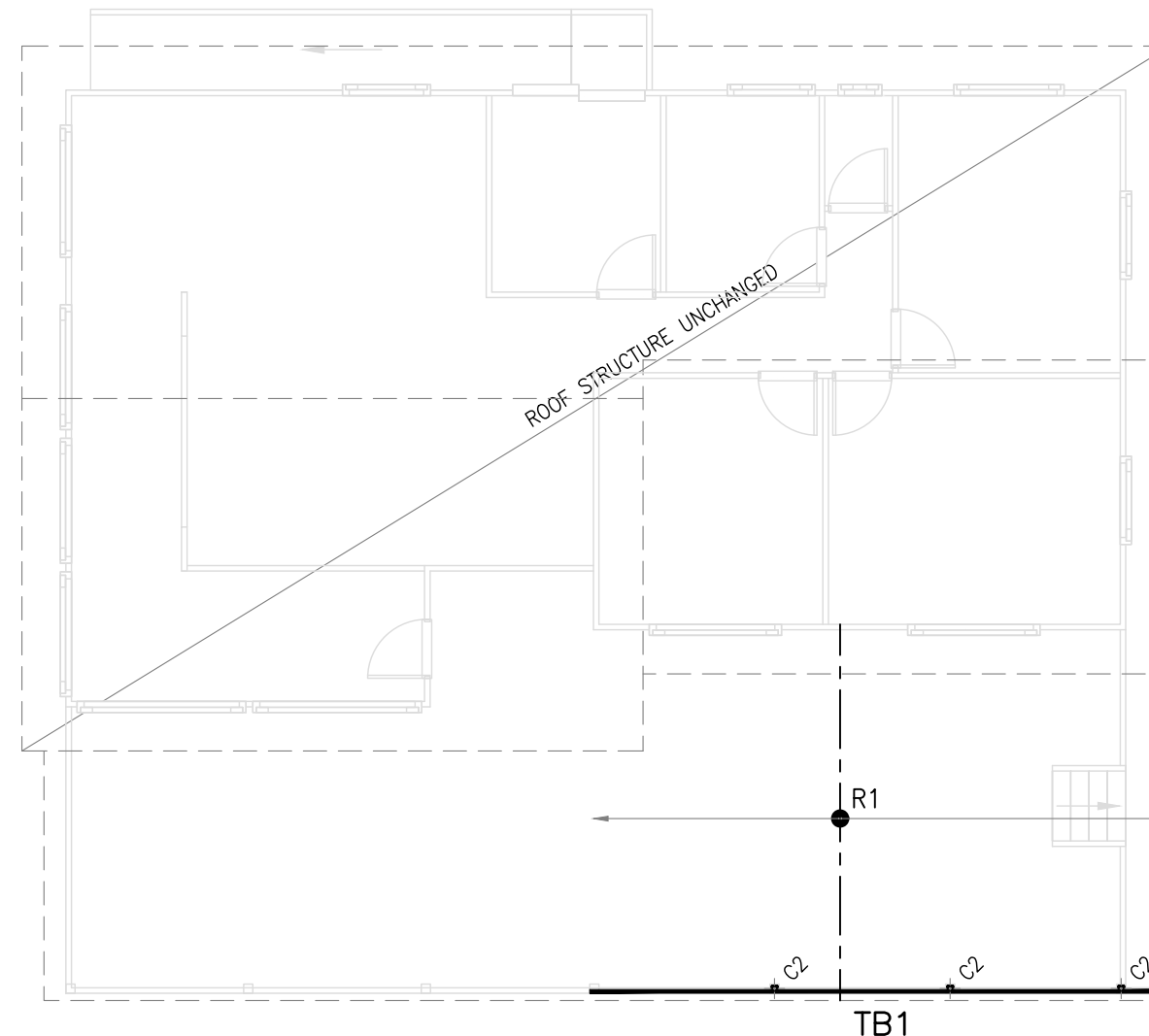


### SUB-FLOOR FRAMING & BRACING PLAN

1:100

MEMBER SCHEDULE		
MARK	MEMBER SIZE	DESCRIPTION
TB1	2/190x35 MGP12 or 200x63 E13LVL	TIMBER BEAM
TB2	2/140x35 MGP12 or 150x63 E13LVL	TIMBER BEAM
PP1	190X45 MGP12 or 200X45 E13LVL	POLE PLATE
EB	EXISTING BEARER	-
J1	190x45 MGP12 or 200x45 E13LVL @ 450 CRS	FLOOR JOIST
R1	240x45 MGP12 or 200x45 E13LVL @ 600 CRS	ROOF RAFTER
C1	75x4.0 SHS	STEEL COLUMN
C2	100 SQ F14 HWD	TIMBER POST

WIND BRACING SCHEDULE					
WIND DIRECTION		DIRECTION A		DIRECTION B	
WIND BRACING REQUIRED (kN)		88.00 kN		65.00 kN	
BRACING TYPE	RATE (kN)	QUANTITY	AMOUNT (kN)	QUANTITY	AMOUNT (kN)
75x4.0 SHS CANTILEVER COLUMN MAX 900 HIGH	4.50/each	57.00 OFF	256.50	57.00 OFF	256.50
WIND BRACING PROVIDED (kN)		256.50		256.50	



### ROOF FRAMING PLAN

1:100


#### NOTES:

- REINSTATEMENT OF BRACING & TIE-DOWN SHALL BE NECESSARY FOLLOWING RELOCATION AND SHALL BE UPGRADED AS PER THE TIE-DOWN SCHEDULE.
- ADDITIONAL BRACING PLY OR CROSS BRACING MAY BE REQUIRED AFTER RELOCATION. CONTACT ENGINEER IF IN DOUBT.
- ALL CONNECTIONS, TIE-DOWN AND INFORMATION NOT SHOWN TO BE IN ACCORDANCE WITH AS1684.3:2010 - RESIDENTIAL TIMBER-FRAMED CONSTRUCTION.
- MANUFACTURED TIMBER ELEMENTS (eg. LVL) EXPOSED TO WEATHERING SHALL BE LOSP TREATED TO 'H3' LEVEL. WHERE EXPOSED TO DIRECT SUNLIGHT, FURTHER PROTECTION WITH A GOOD QUALITY PAINT SYSTEM IS REQUIRED. FOR EXPOSED LVL JOIST & BEAMS USE PVC JOIST & BEAM PROTECTION STRIP ON TOP.
- U.N.O. ALL TIMBER TO BE JD4 JOINT GROUP.
- REFER ARCHITECT FOR SETOUTS, FALLS AND STEPS.
- CONT. DENOTES MINIMUM 2-SPAN CONTINUOUS MEMBER.

#### WIND BRACING NOTES:

- BRACING PANELS, INCLUDING FIXINGS AT TOP & BOTTOM ARE TO BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION AND AS 1684-2021.
- CONSTRUCTION BRACING: 60% OF BRACING TO BE IN PLACE BEFORE ROOFING IS INSTALLED.
- STRUCTURAL PLY SHEET BRACING IN ACCORDANCE WITH AS 1684-2021. PLYWOOD BRACING PANELS LESS THAN 900mm IN WIDTH ARE TO HAVE ADDITIONAL FIXINGS OF M12 RODS EACH END.
- PLYWOOD BRACING (6kN/m RATING) FIXED IN ACCORDANCE WITH AS 1684 (TABLE 8.18 H) CONSIDERING JD4 JOINT STRENGTH GROUP.
- DOUBLE BRACED WALLS TO HAVE M12 RODS AT 1200mm CRS FOR PLY BRACING PANELS GREATER THAN 900mm AND M16 RODS AT EACH END OF PLY BRACING PANELS LESS THAN 900mm.
- M12 RODS TO BE INSTALLED AT EACH END FOR BRACING WALLS SMALLER THAN 900mm.
- CEILING DIAPHRAGM ACTION IS REQUIRED TO DISTRIBUTE LOADS TO BRACING WALLS. CEILING BATTENS TO BE DIRECTLY FIXED TO THE TRUSSES/RAFTERS OR JOISTS. HANGING BRACKET WILL NOT BE PERMITTED UNLESS THE BRACKET IS CERTIFIED BY THE MANUFACTURER, SPECIFICALLY THAT IT WILL NOT AFFECT THE CEILING DIAPHRAGM.
- IN ABSENCE OF CEILING, DIAGONAL 30x0.8GI TENSIONED STRAPS TO BE INSTALLED UNDERNEATH TRUSS BOTTOM CHORD OR JOIST.
- CROSS BRACING RODS NOT BE WELDED WITH EACH OTHER.
- BRACING DESIGNED FOR JD4 JOINT STRENGTH GROUP.

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STATUS: CONSTRUCTION ISSUE			

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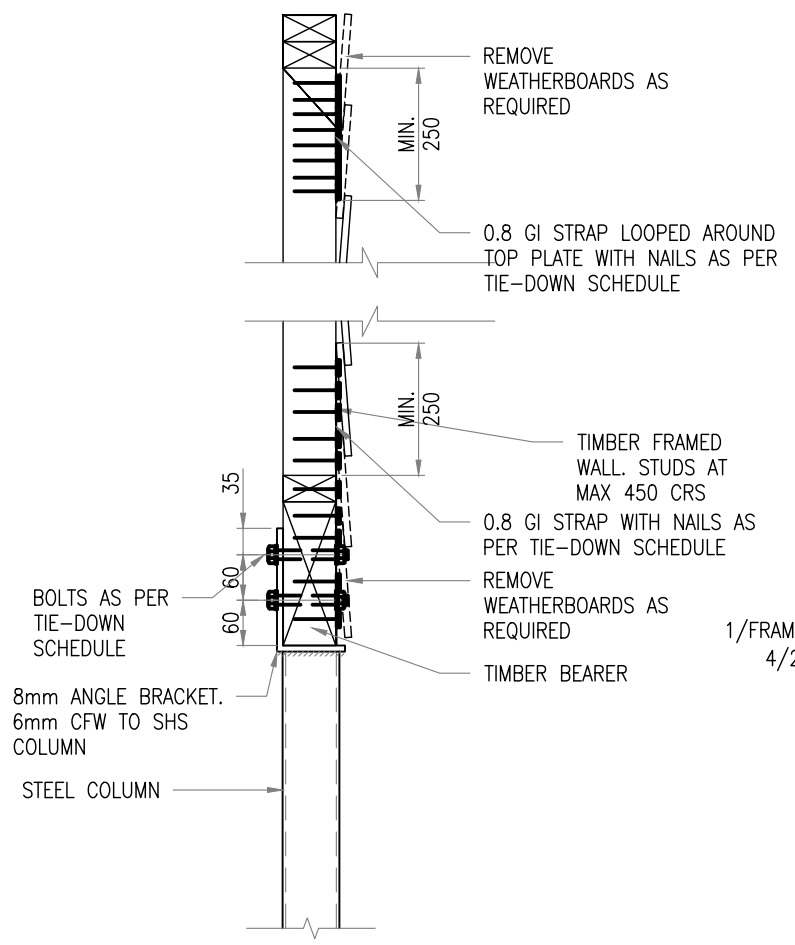
ARCHITECT: AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD  
GLENRAE

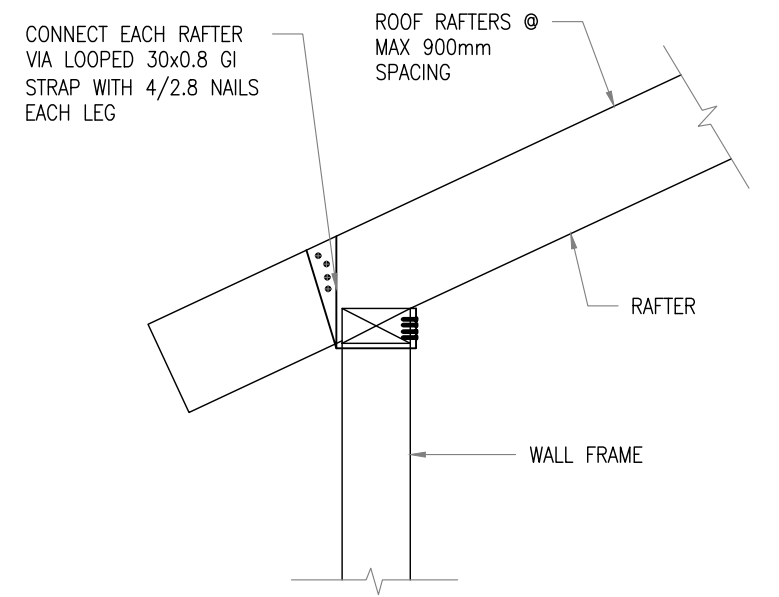
TITLE: FRAMING & BRACING  
PLAN

SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 104	REVISION: 1	

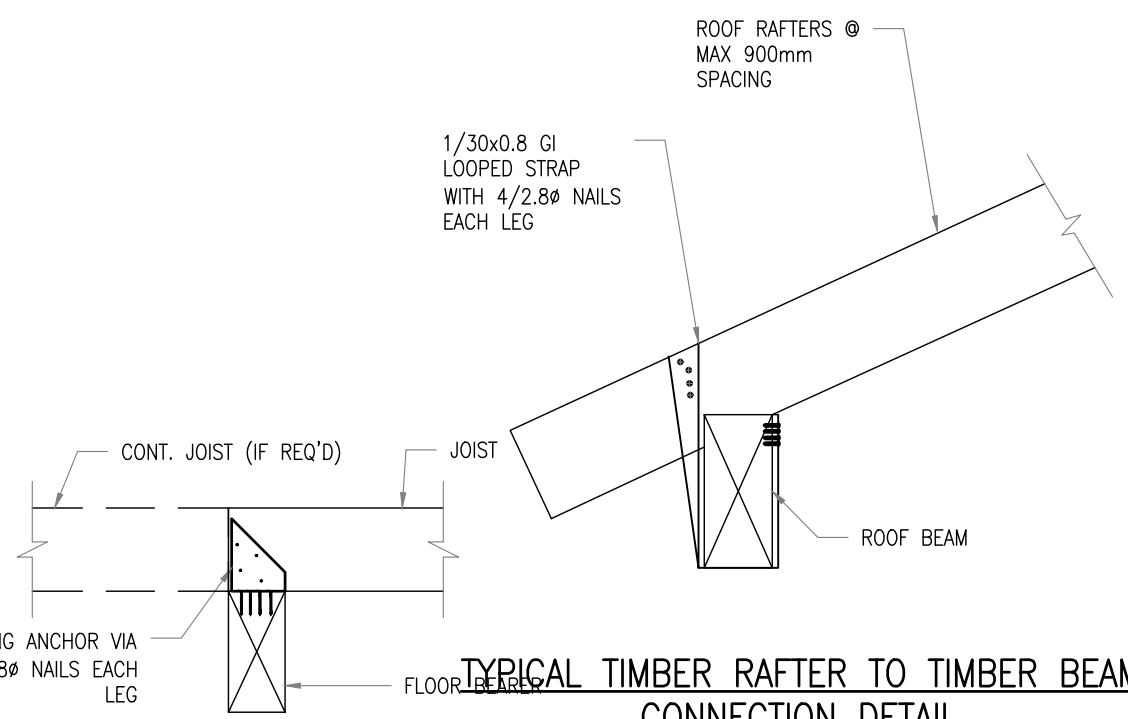




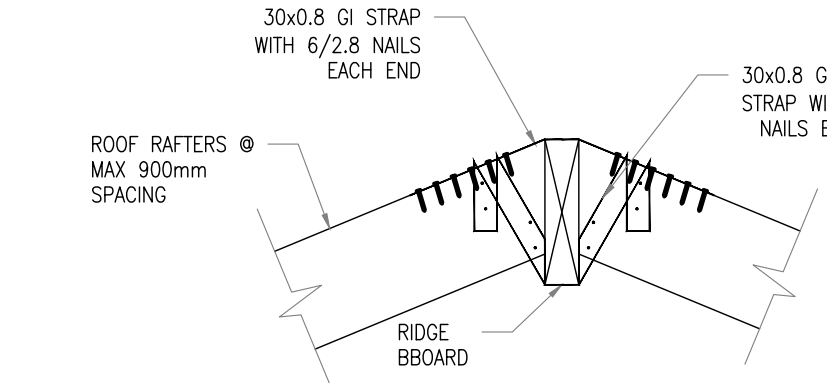
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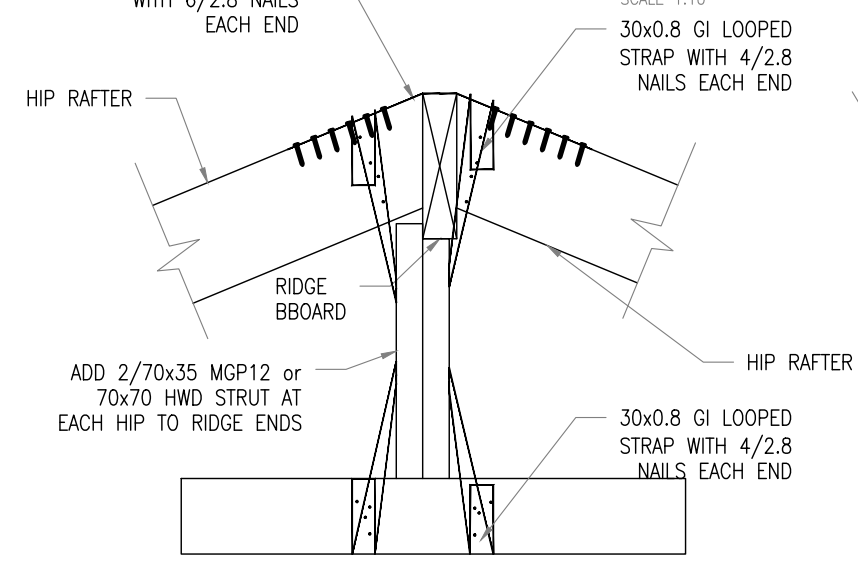
**TYPICAL TIMBER RAFTER TO WALL FRAME CONNECTION DETAIL**  
SCALE 1:10



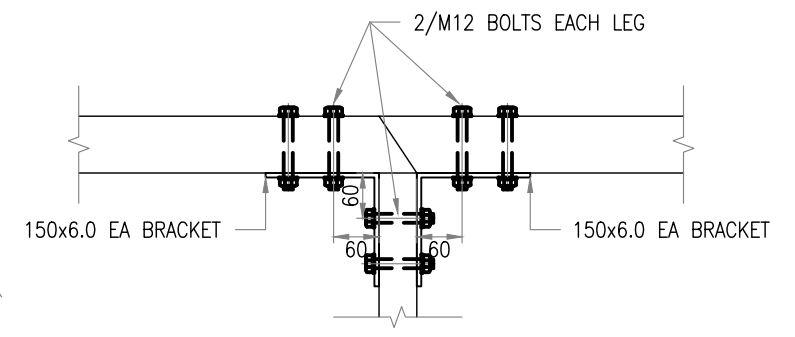
**TYPICAL JOIST TO BEARER CONNECTION DETAIL**  
SCALE 1:10



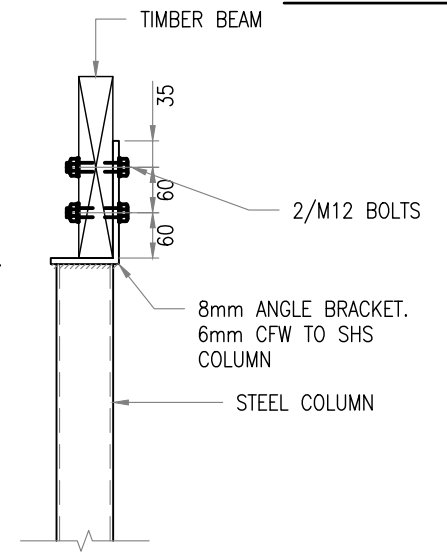
**RAFTER TO RIDGE BOARD CONNECTION DETAIL**  
SCALE 1:10



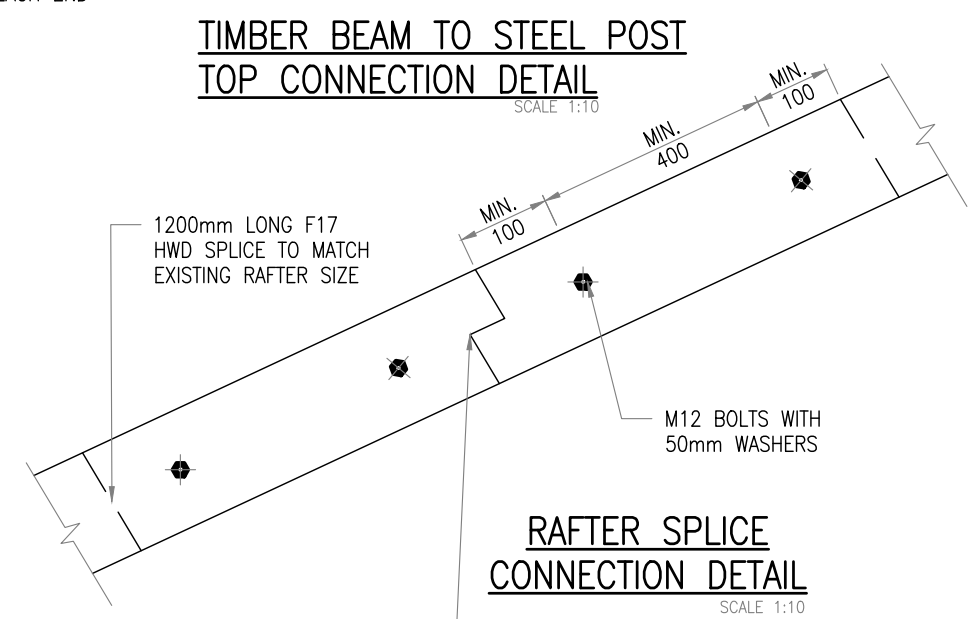
**HIP RAFTER TO RIDGE BOARD CONNECTION DETAIL**  
SCALE 1:10



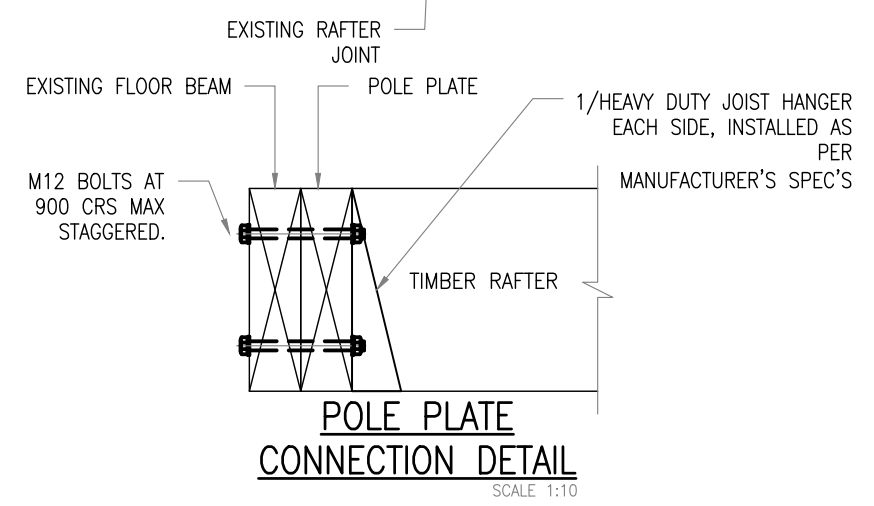
**TIMBER BEARER TO BEARER CONNECTION DETAIL**  
SCALE 1:10



**TIMBER BEAM TO STEEL POST TOP CONNECTION DETAIL**  
SCALE 1:10



**RAFTER SPLICE CONNECTION DETAIL**  
SCALE 1:10



**POLE PLATE CONNECTION DETAIL**  
SCALE 1:10

1	CONSTRUCTION ISSUE	SG	07/03/24
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ARCHITECT: AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

SITE: LOT 111 GLENRAE DIP ROAD  
GLENRAE

TITLE: CONNECTION DETAILS - 1

SCALE AT A3: 1:100 UNO	DATE: 07/03/2024	DRAWN: JJ	CHECKED: SG
PROJECT NO: SNG-3798	DRAWING NO: 105	REVISION: 1	

**IMPORTANT NOTES**

- ALL TIMBER MEMBERS ASSUMED TO BE JD4 JOINT GROUP.
- BOTTOM PLATE TO FLOOR FRAME IS ASSUMED TO BE NOMINAL TIE-DOWN IN ACCORDANCE WITH AS-1684.2-2010 WITH MINIMUM 2/3.05 $\phi$  SKEW NAILS FROM BOTTOM PLATE STUDS & BOTTOM PLATE TO FLOOR FRAME VIA 2/3.05 $\phi$  NAILS AT 600 CRS.
- THE ROOF TIE-DOWN IS DESIGNED FOR A WIND CLASSIFICATION - N3.
- CONTACT ENGINEER IF ANY OF THE ABOVE ASSUMPTION DO NOT SATISFY ON SITE.

METAL TOP HAT BATTENS AT MAX. 900mm CRS INSTALLED TO MANUFACTURER SPECIFICATION

2/ NO. 14 TYPE 17 SCREWS AT EACH CEILING JOIST TO RAFTER CONNECTION

2/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

1/NO. 14 TYPE 17 BATTEN SCREW FROM TOP PLATE TO STUDS WITH 50mm MIN. PENETRATION INTO STUDS

EXISTING EXTERNAL WALL

EXISTING RAFTERS AT MAX. 600 CRS

1/30x0.8 GI STRAPS VIA 4/2.8 $\phi$  NAILS EACH LEG OVER UNDER PURLIN & HANGING BEAM TO ROOF STRUT

EXISTING CEILING JOISTS

MAX. 4000mm

2/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

1/NO. 14 TYPE 17 BATTEN SCREW FROM TOP PLATE TO STUDS WITH 50mm MIN. PENETRATION INTO STUDS

EXISTING INTERNAL LOAD BEARING WALL

MAX. 1200mm

2/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

MAX. 4000mm

1/NO. 14 TYPE 17 BATTEN SCREW FROM TOP PLATE TO STUDS WITH 50mm MIN. PENETRATION INTO STUDS

EXISTING EXTERNAL WALL

2/ NO. 14 TYPE 17 SCREWS AT EACH COLLAR TIE TO RAFTER CONNECTION

1/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

1/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

EXISTING RIDGE BOARD

2/ NO. 14 TYPE 17 SCREWS AT EACH COLLAR TIE TO RAFTER CONNECTION

1/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

EXISTING JACK RAFTERS

2/FRAMING ANCHOR WITH 4/2.8 $\phi$  NAILS EACH LEG

EXISTING HIP RAFTER OR HIP BOARD

**RAFTERS TO HIP RAFTER CONN. DETAIL**

SCALE 1:20

**TYPICAL PITCHED ROOF TIE-DOWN DETAIL**

SCALE 1:20

**STANDARD NOTES FOR RELOCATED RESIDENCE**

**FOUNDATIONS**  
FOOTINGS SHALL BE AS PER AS2870 BASED ON A SITE CLASSIFICATION REPORT FOR THE PROPOSED SITE. THE COLUMNS SHALL BE INSTALLED MINIMUM 750mm INTO ANY FOOTING, BACKFILL WITH CONCRETE. A COMPETENT PERSON PRIOR TO THE POURING OF THE CONCRETE SHOULD INSPECT ALL FOOTINGS AND COLUMNS SHOULD BE PLACED 750mm INTO EXCAVATION AND BACKFILLED WITH 20MPa CONCRETE.

**TIE-DOWN SCHEDULE**  
REINSTATEMENT OF TIE-DOWN SHALL BE NECESSARY FOLLOWING RELOCATION AND SHALL BE AS NOTED IN THE TIE-DOWN SCHEDULE.

**BEARERS TO STUMPS**  
TIMBER STUMPS - INSTALL 12mm DIAMETER ROD EXTENDING FROM THE TOP OF THE BEARER TO 500mm DOWN THE STUMP WITH 100X56X6mm G.I. PLATE WELDED TO ROD (500mm MIN), BOLT POLE TO STUMP WITH 16mm DIA THROUGH STUMP.  
STEEL STUMPS - BOLTED AS PER TABLE BELOW. ALL CONNECTIONS SHALL BE GALVANISED OR TREATED TO PREVENT CORROSION.

**MAXIMUM ROOF AREA PER CONNECTION**

- UP TO 9 m<sup>2</sup> 1-NO. M12 - 100 MM LONG COACH SCREW
- UP TO 15 m<sup>2</sup> 2-NO. M12 - 100 MM LONG COACH SCREWS
- UP TO 30 m<sup>2</sup> 2- NO. M12 BOLTS (HORIZONTAL) OR 1 M12 BOLT (VERTICALLY THROUGH BEARERS)

**PLATES TO BEARERS/JOISTS**

- REMOVE TOP AND BOTTOM WEATHERBOARD OR SHEETING AND STRAP THE TOP OF EVERY STUD TO PLATE AND THE BOTTOM OF EVERY STUD TO BEARERS WITH 30X0.8 GALVANISED STRAP WITH A MINIMUM OF 6 NAILS TO EACH LEG.
- IF CONSTRUCTED OF VERTICAL VJ LINING BOARDS, PROVIDE ALL BOARDS WITH OF 2 NO 75 mm LONG NO. 14 TYPE 17 SCREWS TO BEARER AND TOP PLATE. DRILLS NAIL HOLES TO PREVENT SPLITTING OF BOARDS.
- 12MM CYCLONE RODS REQUIRES BESIDE EA. WINDOW AND DOOR OPENING NOT LARGER THAN 2400 mm.
- ALTERNATIVELY THE STUDS MAY BE FIXED TO THE FLOOR JOISTS VIA THE ABOVE METHOD AND THE FLOOR JOISTS FIXED TO THE BEARERS BY THE FOLLOWING METHODS.
- FOR ROOF AREAS UP TO 2 m<sup>2</sup> PER JOIST 2 NO. 75 X 3.05 mm SKEW NAILS MAY BE PROVIDED PER JOIST INTO THE SUPPORTING BEARER.
- FOR ROOF AREAS BETWEEN 2 m<sup>2</sup> AND 5.8 m<sup>2</sup> PER JOIST 1 NO. FRAMING ANCHOR WITH 4-NO. 3.05 mm NAILS PER LEG OF EACH FRAMING ANCHOR.

**RAFTERS TO TOP PLATES**

- FOR RAFTERS AT 900 CRS WITH A MAXIMUM LENGTH OF 3m FIX WITH 1 TRIPLE GRIP, 4/2.8 NAILS EA. LEG.
- FOR RAFTERS AT 900 CRS EXCEEDING 3m LENGTH FIX WITH 2 TRIPLE GRIPS, 4/2.8 NAILS EA. LEG. 1/30X0.8 G.I.
- 1 NO. 30 X 0.8 GI LOOPED STRAPS MAY BE USED IN LIEU OF TIE-DOWN GIVEN ABOVE BUT STRAPPING MUST BE TIGHT AND NAILED WITH 4/2.8 NAILS EA. LEG. IF RAFTERS ARE IN-LINE VERTICALLY ABOVE WALL STUDS THEN STRAPPING OF RAFTERS CAN BE FIXED DIRECTLY TO WALL STUDS AND ELIMINATE STRAPPING OF STUDS TO TOP PLATES.


**RAFTERS TO RIDGE AND HIP**  
USE 30X0.8 G.I. STRAP TO EACH RAFTER. STRAP EACH RAFTER TO EACH RIDGE OR HIP BY NAILING EACH PAIR OF RAFTERS WITH STRAPPING PASSING UNDER RIDGE. ALL RIDGE AND HIP WILL BE STRAPPED DOWN TO INTERNAL WALLS AT MAXIMUM 900 CRS. INTERNAL WALLS TO BE BOLTED OR STRAPPED TO BEARERS UNDER HOUSE.

**BATTENS TO RAFTERS**  
FIX ALL ROOF BATTENS TO RAFTERS WITH 1/75mm NO.14 TYPE 17 SCREW, BUT ALL BATTEN JOINS WILL BE MITRED ACROSS RAFTERS AND STRAPPED TO EACH SIDE OF RAFTER.

**KING POSTS, COLLAR TIES AND STRUTTING BEAMS**

- COLLAR TIES SHALL BE FIXED TO RAFTERS WITH 1/M12 BOLTS. PROVIDE 2 TRIPLE GRIPS WITH 4/2.8 NAILS EA. LEG AT ALL INTERSECTIONS OF MEMBERS UNLESS SPECIFIED OTHERWISE.
- ALL BEARER SPANS SHALL BE AS PER EXISTING LOCATIONS PRIOR TO REMOVAL EXCEPT WHERE REINFORCED AS PER APPROVED ENGINEERING DRAWINGS.

1	CONSTRUCTION ISSUE	SG	07/03/24
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**ARCHITECT:** AM 20 DESIGN  
JOB NO: 900143  
REV C  
DATED: 28/11/23

**SITE:** LOT 111 GLENRAE DIP ROAD  
GLENRAE

**TITLE:** CONNECTION DETAILS - 2

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:100 UNO	07/03/2024	JJ	SG
PROJECT NO:	DRAWING NO:	REVISION:	
SNG-3798	106	1	