

General Notes:

- 1. These drawings shall be read in conjunction with the architectural and other consultants drawings...
2. All dimensions are in millimeters. Unless noted otherwise.
3. These drawings shall not be scaled, refer to dimensions given only or refer to the Architectural drawings.
4. All levels and setting out dimensions shown on the drawings shall be checked on site prior to the commencement of work.
5. During construction the structure shall be maintained in a stable condition with no part being overstressed with temporary supports / bracing installed as required.
6. The engineer shall approve any proposed substitution prior to the commencement of works.

Earthworks:

- 1. The earthworks shall be carried out in accordance with the geotechnical report and engineering specifications.
2. The site shall be stripped a minimum depth of 150mm under pavements and buildings to remove the top soil. Any remaining uncontrolled fill matter, organic material, refuse or roots shall be removed.
3. If a vibrating type roller is used, consideration shall be given to the effects on adjacent properties.
4. All filling shall be under the supervision of the project geotechnical engineer who shall provide compaction certificates to the engineer for approval.

Safety in Design:

- 1. Workplace Health and Safety (WHS) is important to Vision Engineers and "Safety in Design" is a core component of our service. We recognise that identifying design solutions that eliminate hazards, not only improves WHS outcomes, but also has potential to reduce costs associated with fixing design problems.
2. Under the new harmonised model of Work Health Safety Legislation, there are a range of new legislation and regulatory requirements, supported by a suite of Codes of Practice clarifying how these obligations can be met. Vision Engineers is committed to its legislative obligations. The components designed by Vision Engineers have been designed in accordance with the relevant Australian Standards and to meet the performance criteria of the National Construction Code (NCC). In this instance we cannot foresee any significant WHS implications or risks that can be avoided or mitigated by design.
3. The beams, columns and connections can reasonably be expected to be constructed in accordance with a construction process that is an "industry standard" construction process within the capabilities of a competent Licensed Contractor. Furthermore, this process is generally a low risk operation and the site a question does not pose any unique risks or hazards. Therefore, providing that all other parties associated with the design conduct their duties in a professional manner and in accordance with the relevant Safe Work Australia codes of practice, all requirements relating to the Work Health and Safety Act 2011 No 10 will be satisfied. If you require further information please contact the Vision Engineers office.

Formwork:

- 1. All workmanship and materials shall be in accordance with AS3610 & AS3600, except where varied by the project documentation. The design certification and the performance of the formwork shall be the responsibility of the contractor.
2. During construction support propping shall be required where there are loads from stacked materials, formwork and other supported slabs. Once the concrete has achieved its nominated 28 days strength, the imposed loads shall not exceed those given in the loading table.
3. With masonry construction, it is expected that support propping will extend a minimum of 3 levels below the slab being poured. Prop removal is to be programmed so as not to overstress previously cast floors and shall be submitted to the engineer for approval.
4. The suspended slabs shall be propped until the 28 days strength has been achieved for the slabs. The formwork may be removed once 20 MPa strength has been achieved, however the slab will need to be back propped until 28 days strength has been achieved. No masonry or partition walls are to be constructed on suspended levels until all propping is removed.
5. All exposed corners shall have a 20mm chamfer UNO.
6. All finished shall be in accordance with the architectural specification.

Blockwork:

- 1. All workmanship and materials shall be in accordance with AS3700.
2. Reinforced concrete blockwork shall comply with the following UNO:
- Blocks: Minimum 10 MPa unfaced compressive strength conforming to AS4405.
- Mortar: 1:0.1:6.0 ratio of cement:Lime:Sand UNO.
- Blocks shall be either "H" or "Double U" configuration.
- Provide clean out holes at the base of the wall & rod core holes to remove excess mortar.
- Core filling shall be 20 MPa concrete with maximum 10mm aggregate size with a maximum slump of 120±20mm.
- Minimum cover of 50mm from the outside of the blockwork.
3. Masonry retaining walls are to be back filled with either of the following materials:
- Coarse grained soil with low silt content
- Residual Soil Containing Stones
- Fine silty sand
- Granular materials with low clay content
4. Vertical control joints shall be provided at max 8m centers. They shall be reinforced with N20-400 dowels 600mm long. One end shall be grouted and capped.
5. No admixtures shall be used in the mortar mix or the core fill mix without prior written consent from the engineer.

Foundation/Maintenance:

- 1. All soils are affected by water. Silts are weakened by water and some sands can settle if heavily watered, but most problems arise on clay foundations. Clays swell and shrink due to changes in moisture content and the potential causes of the movement as implied in the site classification in Australian Standard AS2870, which is specified as follows:
A - Stable (Non-reactive) S - Slightly Reactive
M - Moderately Reactive H - Highly Reactive
E - Extremely Reactive
2. All sites shall be maintained at essentially stable moisture conditions and extremes of setting and drying prevented. This will require attention to the following:
3. Site drainage: The site shall be graded or drained so that water cannot pond against or near the house. The ground immediately adjacent to the house shall be graded to a uniform fall of 50mm minimum away from the house over the first meter. The sub-floor space for the houses with suspended floors shall be graded or drained to prevent ponding. The site drainage requirements shall be maintained.
4. Gardens: The gardens shall not interfere with the drainage requirements or the sub-floor ventilation and weep holes drainage requirements. Garden beds adjacent to the house should be avoided. Over watering of gardens close to the house shall be avoided.
5. Restrictions on trees / shrubs: Planting of trees shall be avoided near the footings of the house or neighboring house on reactive sites as they can cause damage due to drying the clay. To minimize the possibility of damage, tree planting should be restricted to a distance from the house of:
- 1.50 x The mature height for Class E sites.
- 1.00 x The mature height for Class H sites.
- 0.75 x The mature height for Class M sites.
6. Where rows or groups of trees are involved, the distance from the building should be increased. Removal of trees from the site can also cause similar problems.
7. Repair of leaks: Leaks in plumbing, including stormwater and sewerage drainage should be repaired promptly.
8. The owners attention is drawn to CSIRO pamphlet "Guide to home owners on foundation maintenance & footing performance". Owner should comply with the recommendations of this pamphlet. The site around the building perimeter & service trenches are to be graded to drain away from the building perimeter.

Timber:

- 1. All workmanship and materials shall be in accordance with AS1684 and AS1720.
2. AS1684 shall be applied to domestic construction in sheltered locations.
3. Softwood to be a minimum of F7 MP10 and hardwood to be a minimum of F17 UNO.
4. External timber shall be either hardwood durability class 1 or 2 as per AS1720 or impregnated pine grade F7 MP10, pressure treated to AS1604 and re-dried prior to use. Supplementary treatment shall be applied to all out surfaces.
5. Two (2) copies of timber truss shop drawings shall be submitted to the engineer for approval, clearly indicating design loads and point loads applied to all out surfaces.
6. All bolts in timber construction shall be M16 4.6/S UNO. Washers under heads and nuts shall be at least 2.5 times the bolt diameter.
7. All timber joints and notches shall be a minimum of 100mm away from loose knots, severe drying grain, gum veins or other minor defects.

Masonry:

- 1. All workmanship and materials shall be in accordance with AS3700.
2. The design strength of masonry shall be:
Exposure Classification to AS3600 Brick Compressive Strength (MPa) Brick Salt Resistance Grade Durability Classification of Build in Components Mortar Mix
3. All masonry walls supporting concrete slabs and beams shall have a slip joint comprising of two layers of galvanized steel in between the concrete and masonry.
4. All masonry walls supporting or supported by concrete floors shall have vertical joints located to match and control / construction joints in the concrete.
5. Do not construct any masonry walls on suspended slabs until the slab formwork has been stripped and de-propped.
6. Non load bearing masonry walls shall be separated from concrete slab or beam above by 20mm thick compressible filler.
7. Provide vertical control joints at 6m maximum centers, and 4 meters maximum from corners in masonry walls, and between new and existing brickwork. The joint shall have expansion joint ties and suitably sealed with mastic sealant.
8. Masonry retaining walls are to be back filled with either of the following material:
- Coarse grained soil with low silt content
- Residual Soil Containing Stones
- Fine silty sand
- Granular materials with low clay content

Concrete:

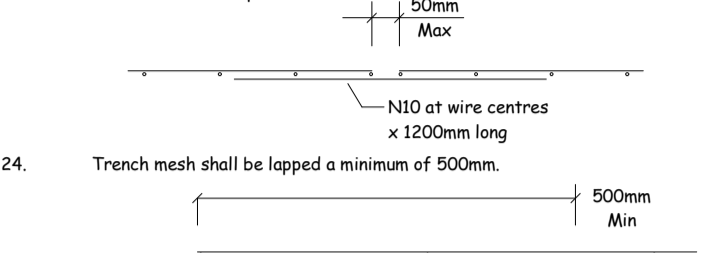
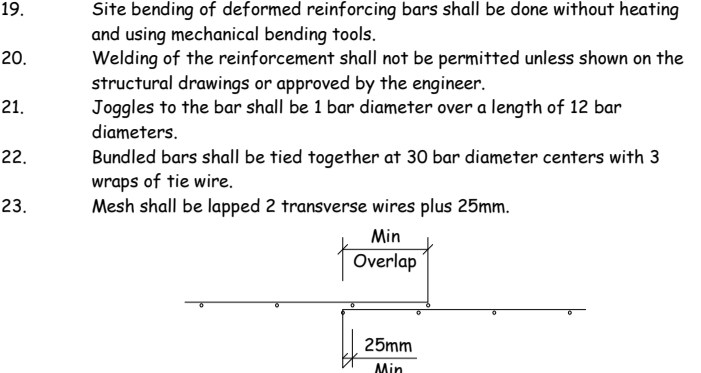
- 1. All workmanship and materials shall be in accordance with AS3600 & AS2870, except where varied by the project documentation.
2. Concrete slabs and footings have been designed to satisfy the performance criteria of section 3 of AS2870 - Residential slabs and footings.
3. In areas of brittle floor coverings e.g. slate or tile, it would be recommended that one of the following measures be utilized:
- Increase mesh size to SL92 or double mesh layer.
- Use a rubberised flexible adhesive bedding.
- Delay placing tiles for a minimum of 3 months.
4. Concrete quality shall be as follows:
(Subject to Subgrade being satisfied):

Table with 8 columns: Element, Slump (mm), Maximum Aggregate size (mm), Cement Type, Strength 28 Days (MPa), Admixture, Normal Portland Cement, and Normal Portland Cement.

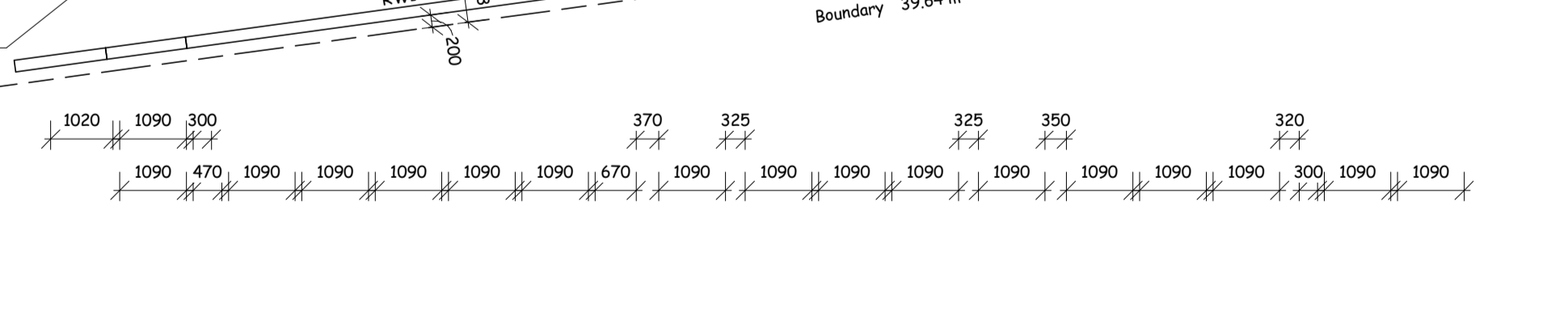
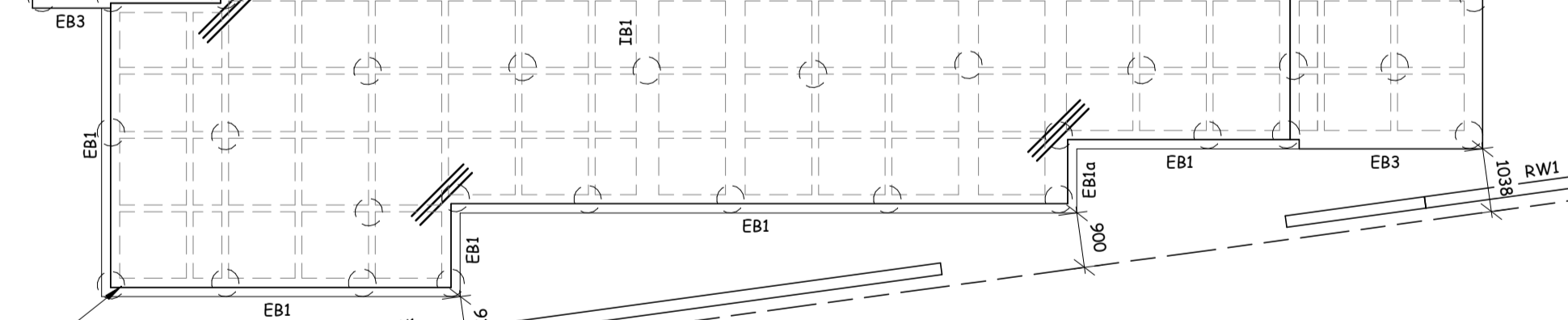
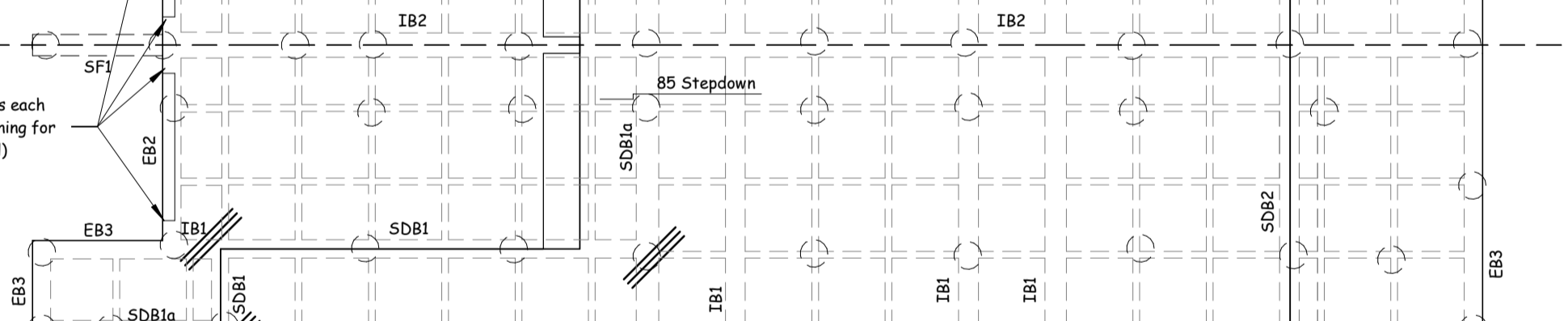
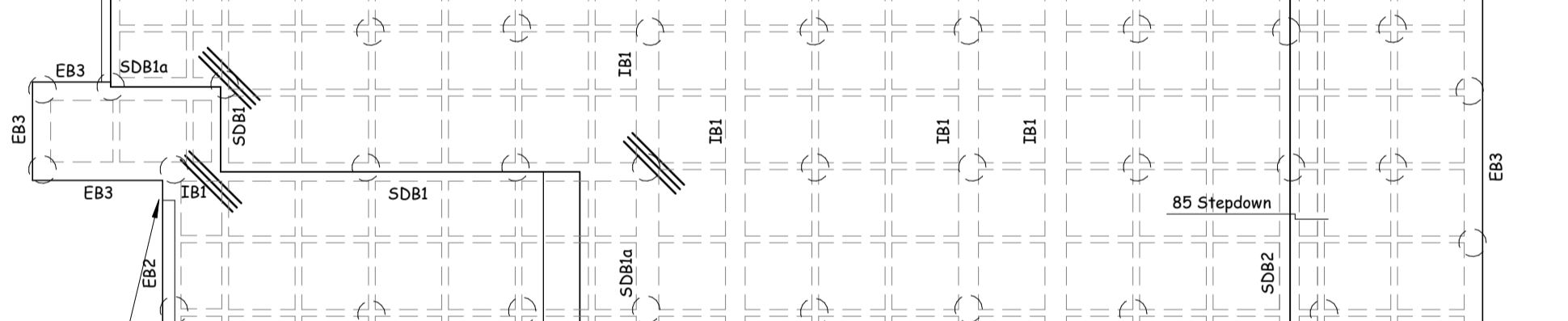
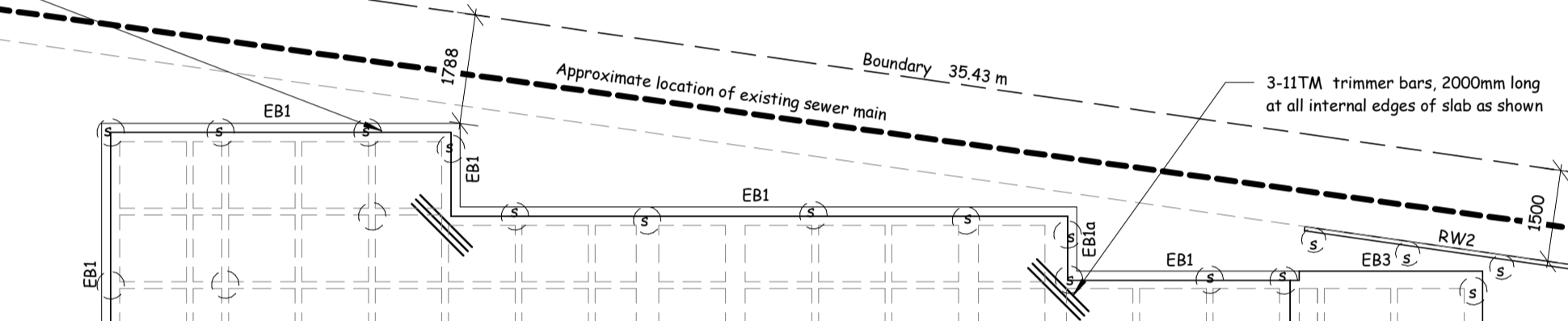
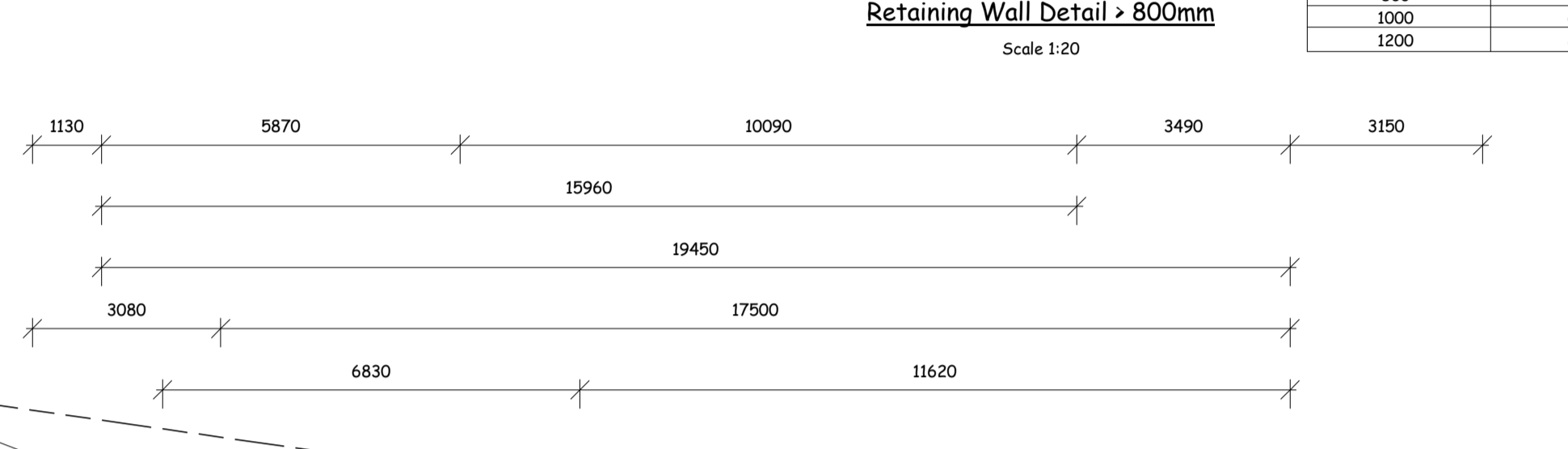
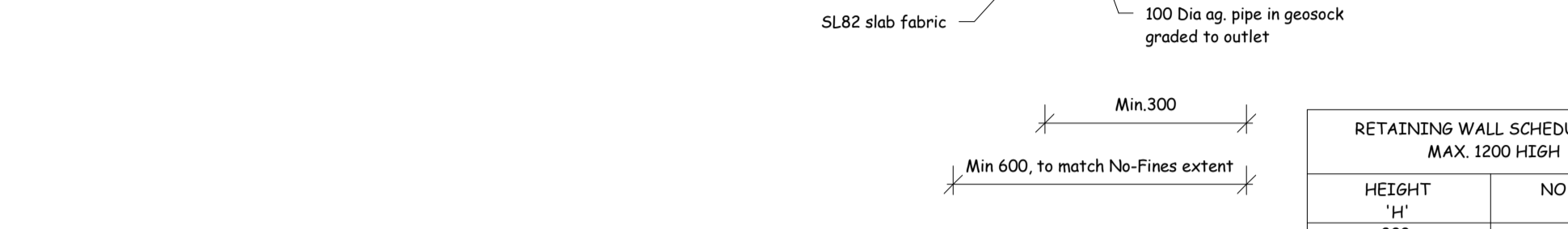
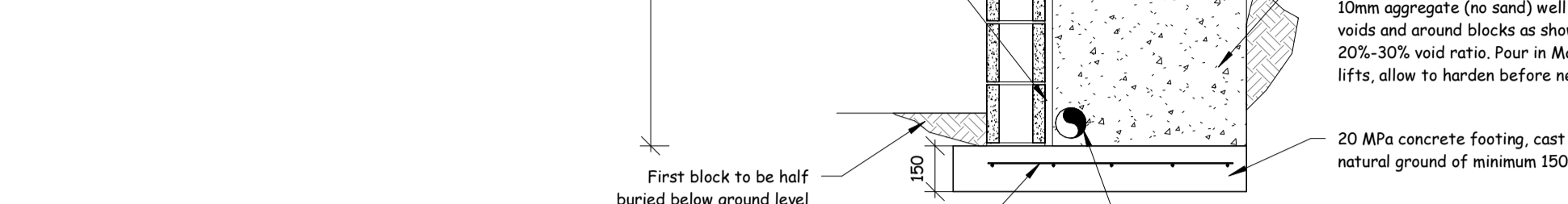
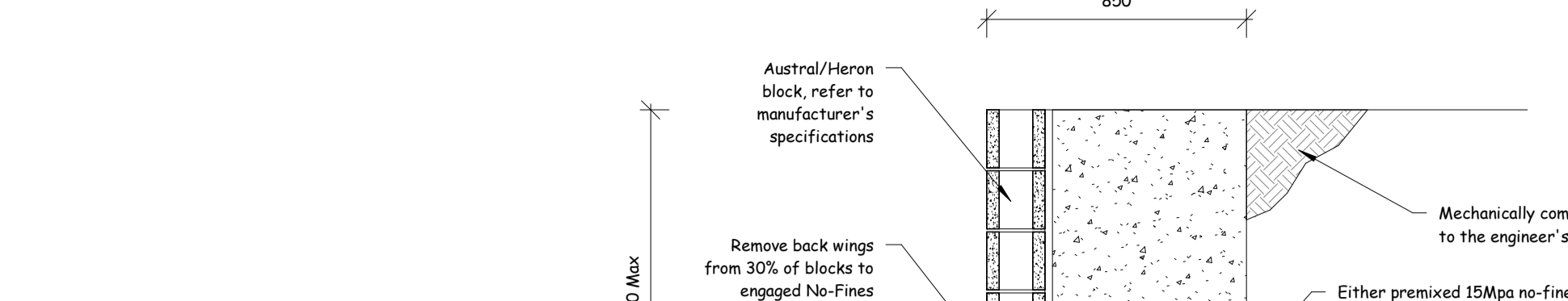
Table with 6 columns: Exposure Classification to AS3600, Strength 28 Days (MPa), Against Formwork Surface, Against Ground Membrane, With Intra-structure, and With No Intra-structure.

- 7. Cover to reinforcement shall be obtained by the use of approved bar chairs placed at maximum 750mm c/c in each direction.
8. All concrete shall be mechanically vibrated and the vibrators SHALL NOT be used to spread the concrete.
9. Size of the concrete elements do not include thickness of the applied final finishes.
10. Approval shall be obtained from the engineer prior to the drilling of any holes or cutting in any chords other than those shown on the structural drawings.
11. Construction joints where not shown on the structural drawings shall be located in accordance with the engineers approval.
12. Curing of all concrete to be achieved by keeping surfaces continuously wet for a period of 7 days (10 days in summer months), and prevention of loss of moisture for a total of 10 days followed by gradual drying out.
13. Approved spray on compounds complying with AS1799 may be used provided that they do not interfere with the performance of the proposed floor finishes. Polythene sheeting or wet hessian may be used if protection from wind and traffic.
14. The suspended slabs shall be propped until 28 day strength has been achieved for slabs. The formwork may be removed once 20 MPa strength has been achieved, however the slab will need to be back propped until 28 days strength has been achieved. No masonry or partition walls are to be constructed on suspended levels until all propping is removed.
15. Conducts, pipes, etc. shall only be placed in the middle third of the slab depth and spaced at not less than 3 diameters. They shall not be placed within the cover of the reinforcement.
16. Reinforcement symbols:
S - Denotes grade 250 5 bars to AS1302
N - Denotes grade 250 normal ductility deformed bars to AS4671
R - Denotes grade 250 normal ductility round bars to AS4671
SL - Denotes grade 500 low ductility square welded mesh to AS4671
RL - Denotes grade 500 low ductility rectangular welded mesh to AS4671
L - Denotes grade 500 low ductility trench welded mesh to AS4671.
17. Reinforcement is represented diagrammatically and is not necessarily shown in true projection.
18. Splices in reinforcement shall be made only in positions shown or otherwise approved by the engineer.
19. Laps and cogs shall be in accordance with AS3600 and not less than the below:

Table with 3 columns: Minimum Splice Lengths, Minimum Overall Coo Lengths, and values for N12, N16, N20, N24, N28.



- 24. Trench mesh shall be lapped a minimum of 500mm.



FOOTING INSPECTION REQUIRED: The installed steel reinforcing for the footing shall be inspected by the design engineer prior to the placement of concrete.

General Notes: 1. Bracing and tie-down details to the engineers details and AS1684.2. 2. All timber and steel to be installed and treated to the manufacturers specifications... 4. JT denotes masonry articulation joint, to be installed to AS 3700 section 4.8 requirements.

VEA Vision Engineers Australia logo and contact information for Murray Palmer, Principal Engineer.

Note: All construction, especially timber components to comply, with AS3959-2009, and planning for bushfire protection 2006, for Bal-12.5 construction. In particular note types of timbers that can be used in the Bal-12.5 zone. Excerpted from AS3959-2009 attached to last sheet.

VEA Vision Engineers Australia logo and contact information: 138 Dora Street, Dora Creek NSW 2264 M 0490 444 007.

BUILDERS NOTE: Use Dimensions in preference to scale. Site verify all dimensions before ordering. Materials Footings information shown on these plans may have to be changed if Builders site excavations reveal non-virgin ground... SURVEY NOTE: Boundary dimensions are assumed only and taken from site information, others or owners information.

Revision Schedule table with columns: Rev, Date, Description.

New Dwelling Client: Address:

Date: 22-06-2020 Drawing No: 320-7128 Sheet: En01 Scale: As indicated © A1

Retaining wall schedule for max. 1800 high. No surcharge load. Table with columns: Retaining Height, Spacing, Diameter, Embedment, Wall nail options (Slab, Wing split, Round).

RW2 Log Retaining Wall Detail (With Surcharge) Scale 1:20

Slab Plan

1:100

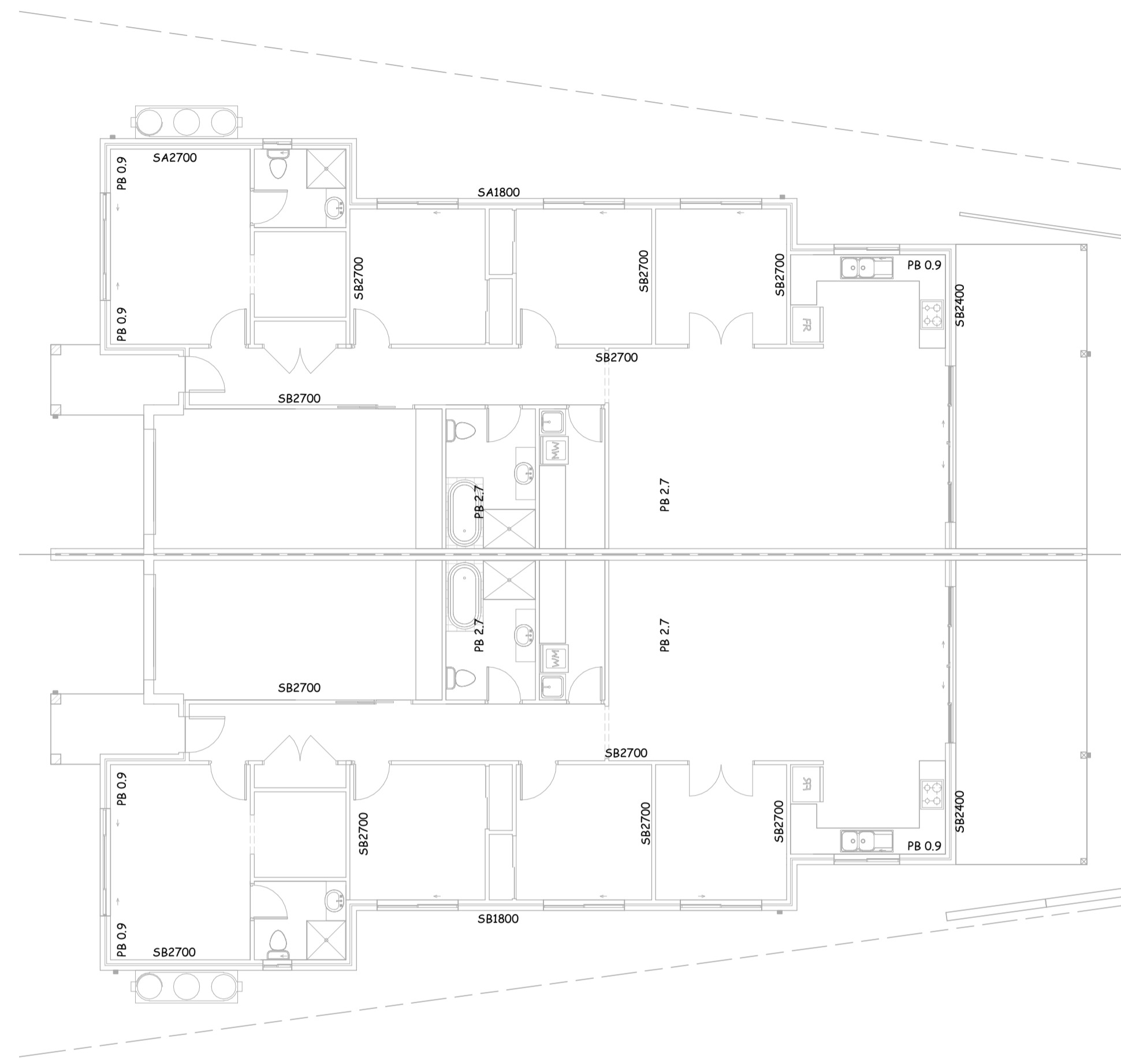


- General Notes**
1. Bracing and tie-down details to the engineers details and AS1684.2
 2. All timber and steel to be installed and treated to the manufacturers specifications, especially for any exterior applications
 3. All white ant protection to be strictly within the guidelines of AS3660 and installed by a qualified licensed pest control consultant
 4. All denotes masonry articulation joint, to be installed to AS 3700 section 4.8 requirements

- Tie-Down Notes**
1. Rafters shall have tie-down fixings in accordance with AS1684.2 Table 9.21 (B), (C) or (D) (typical).
 2. Roof beams shall have tie-down fixings similar to AS1684.2 Table 9.20(A) - 6 nails each end - For where a roof beam sits on stud work
 3. Roof beams shall have tie-down fixings in accordance to AS1684.2 Table 9.20(I) - 2/M12 bolts with washers (typical).

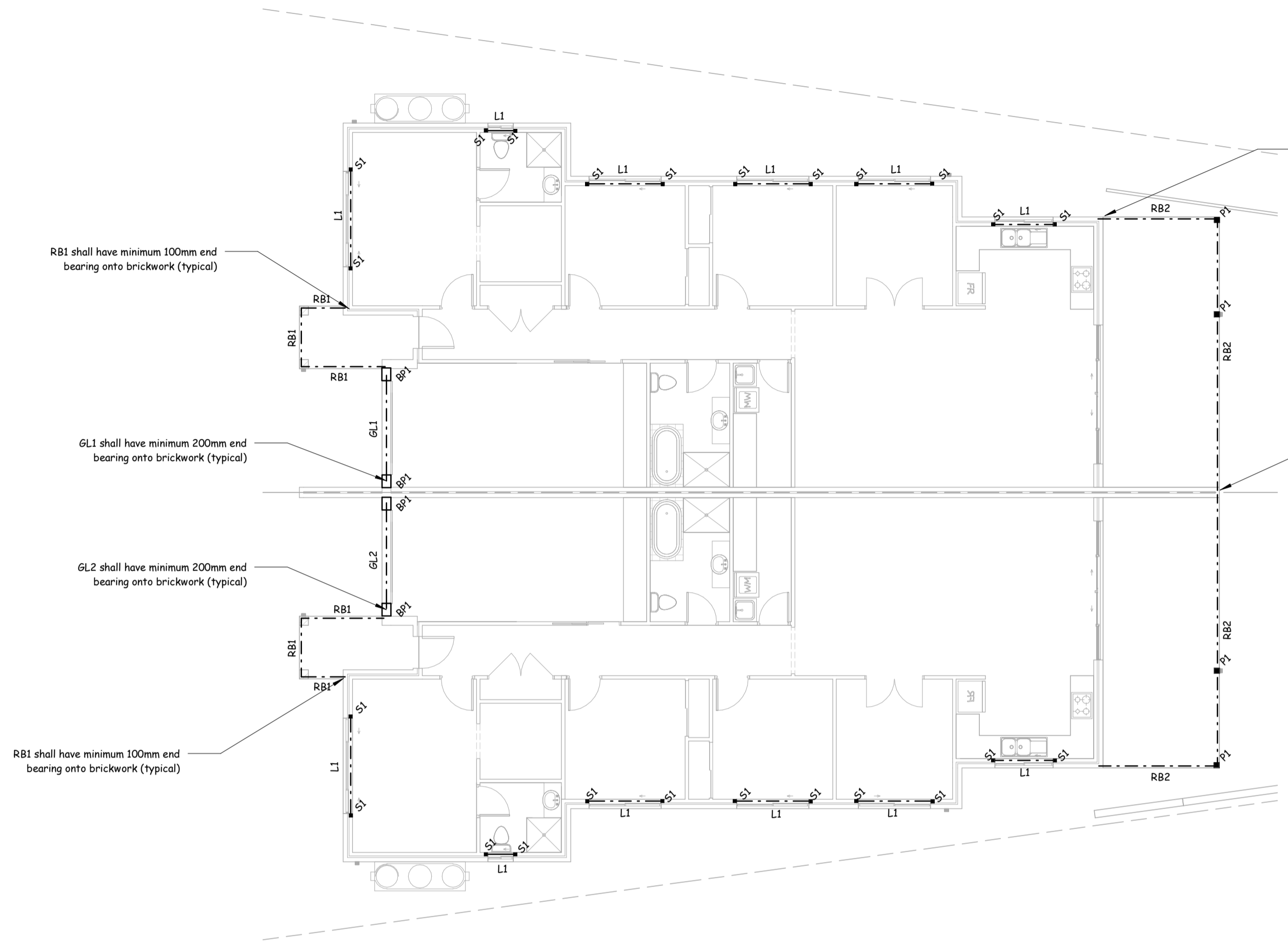
Note: boundaries to be pegged and set out confirmed before commencement of construction

Note: All construction, especially timber components to comply, with AS3959-2009, and planning for bushfire protection 2006, for Bal-12.5 construction. In particular note types of timbers that can be used in the Bal-12.5 zone. Excerpt from AS3959-2009 attached to last sheet



Ground Floor Framing

1 : 100



Ground Floor Roof Framing

1 : 100

Member Schedule (Ground Floor Roof)		
Member	Description	Size
RB1	Beam	140 x 45 MGP10 H3
RB2	Beam	240 x 75 SmartVL15 H3 (continuous spans)
L1	Lintel	Refer to Typical Lintel Tables on En03 for sizing
GL1	Garage Lintel	200 x 10 Vert, 200 x 10 Horiz, HDG
GL2	Garage Lintel	200 x 10 Vert, 200 x 10 Horiz, HDG
P1	Post	140 SQ KD HWD
S1	Studs	2/90 x 45 MGP10, Nail laminated
BP1	Brick Pier	Minimum 230mm x 300mm brick piers 2/N10 vertical bars, Grout filled full height

Note - Lintel sizes to be confirmed once truss layouts are done



BUILDERS NOTE:
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Wind Class: N2 (W33N) (Assumed)
Site Class: 'M' Soil Class: 'M'
Site / Soil Class Assumed

SURVEY NOTE:
Boundary dimensions are assumed only and taken from site information, others or owners information. Confirm boundaries before commencement of construction. Full project specific detailed survey plans have not been supplied to Plan Vision for planning purposes. See schedule of specifications for details.

Revision Schedule		
Rev	Date	Description
A	14/07/20	VEA Eng
B	15/07/20	Changes
C	01/09/20	Interval Garage Length Changes

New Dwelling

Client:

Address:

Date: 22-06-2020

Drawing No: 320-7128

Sheet: **En02**

Scale: 1 : 100 © A1

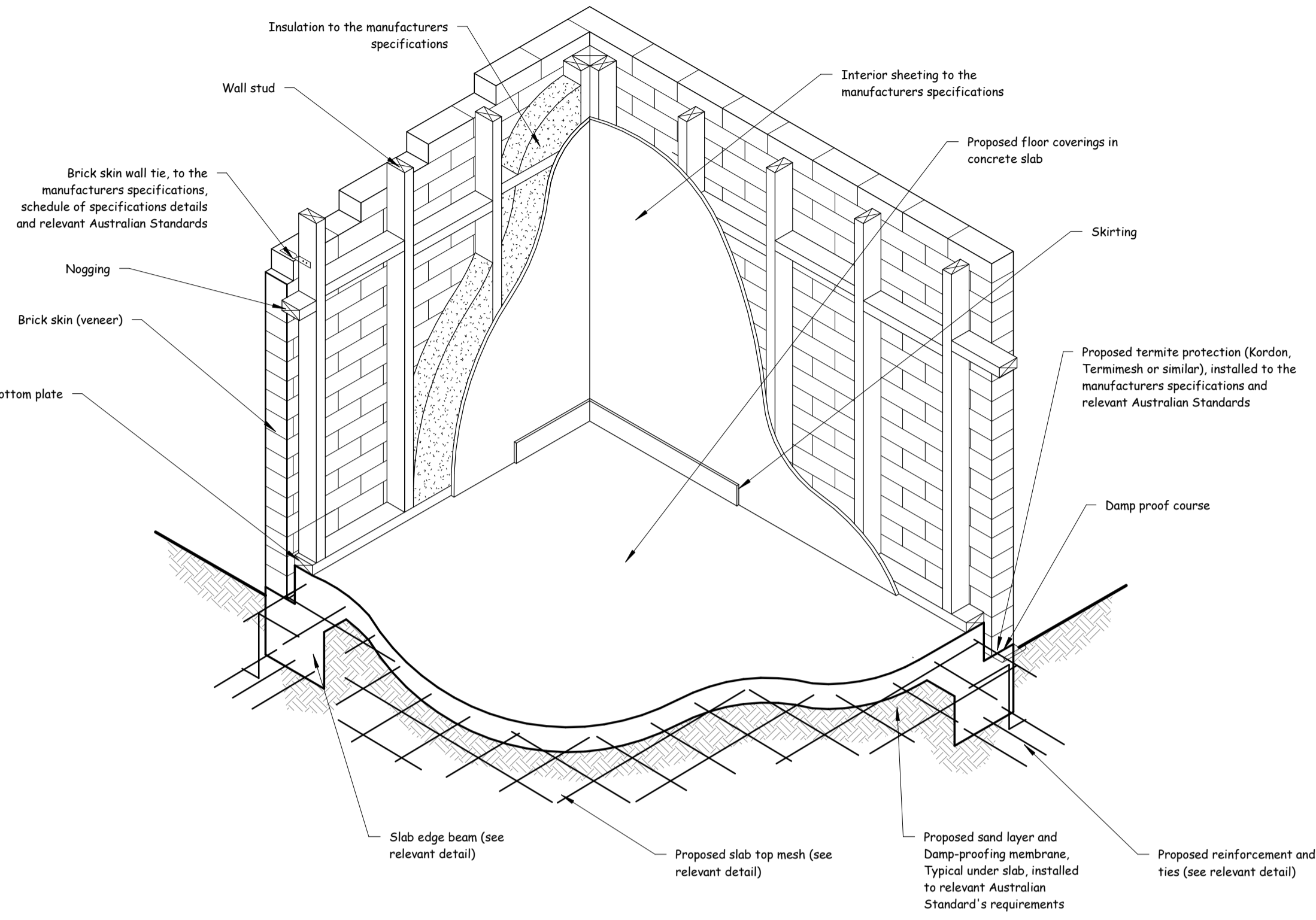
I hereby certify that the above mentioned works are structurally adequate for their intended purpose. This certification is limited to the structural elements detailed, and based on the works being carried out in accordance with these structural/civil plans. The structure has been designed in accordance with the following:

- AS/NZS 1170.0:2002: Structural design actions - General principles
- AS/NZS 1170.1:2002: Structural design actions - Permanent, imposed & other actions
- AS/NZS 1170.2:2011: Structural design actions - Wind actions
- AS 4055-2012: Wind Loads For Housing
- AS 4100-1998: Steel Structures
- AS 1843-1991: Structural Steel Hollow Section
- AS/NZS 1111-1996: ISO Metric Hexagon Commercial Bolts & Screws
- AS 3600-2009: Concrete Structures
- AS 3700-2011: Masonry Structures
- AS 1870-2011: Residential slabs and footings - Construction
- AS 1684-2010: Residential timber framed construction
- AS 1720-1-2010: Timber Structures - Design Methods
- AS 3959-2009: Construction of buildings in bushfire prone areas - Building Code of Australia (BCA)

All works to be carried out by a licensed builder in accordance with the current edition of the Building Code of Australia (BCA) and relevant Australian Standards for construction. Based on the above parameters, I hereby certify that the structural components are adequate under the imposed loading provided that they are constructed in accordance with the relevant Australian Standards. I certify that I am a qualified and practising Structural Engineer in accordance with the requirements of the Building Code of Australia and The Institution of Engineers, Australia.

MPalmer

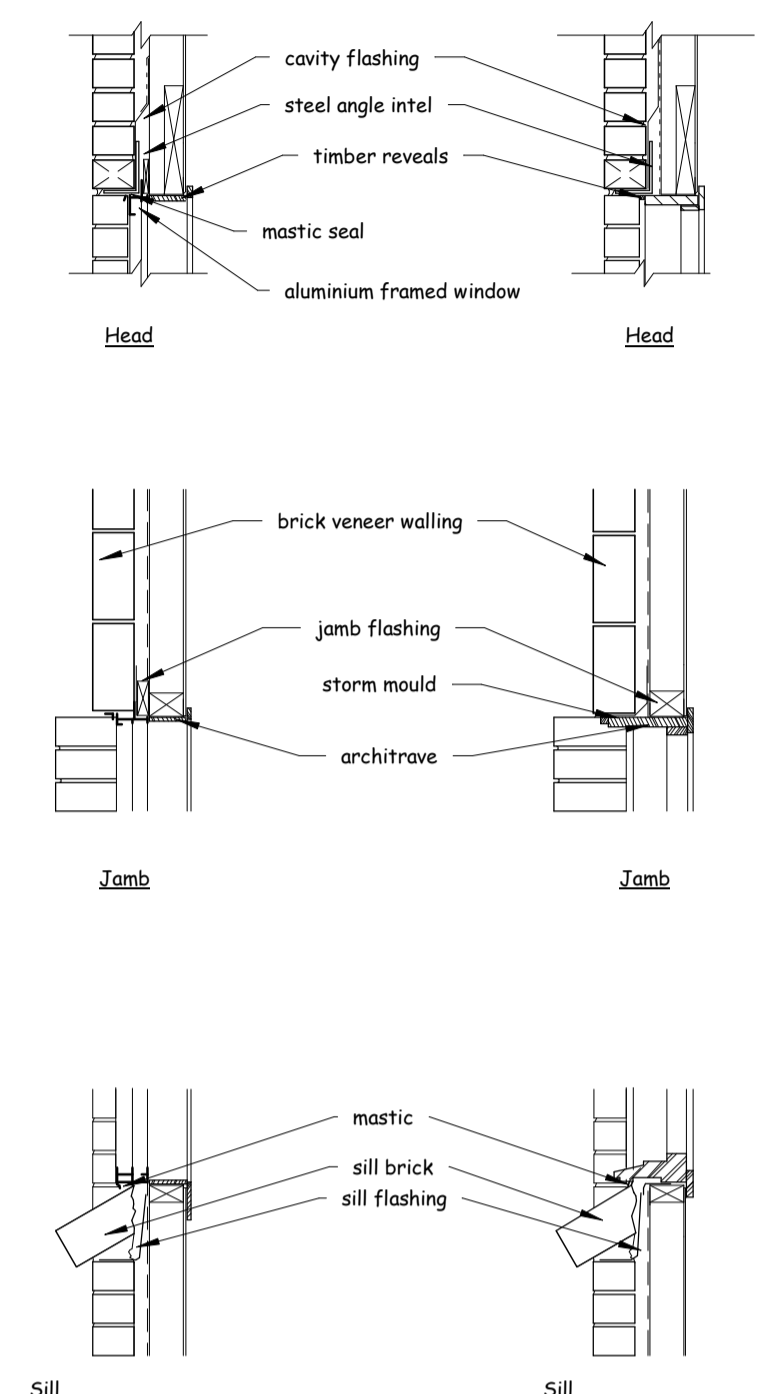
Murray Palmer
BEng (Civil & Structural) Hon
Member No: 3796337
Principal Engineer



Typical 3D Construction Detail - Brick Veneer - Slab

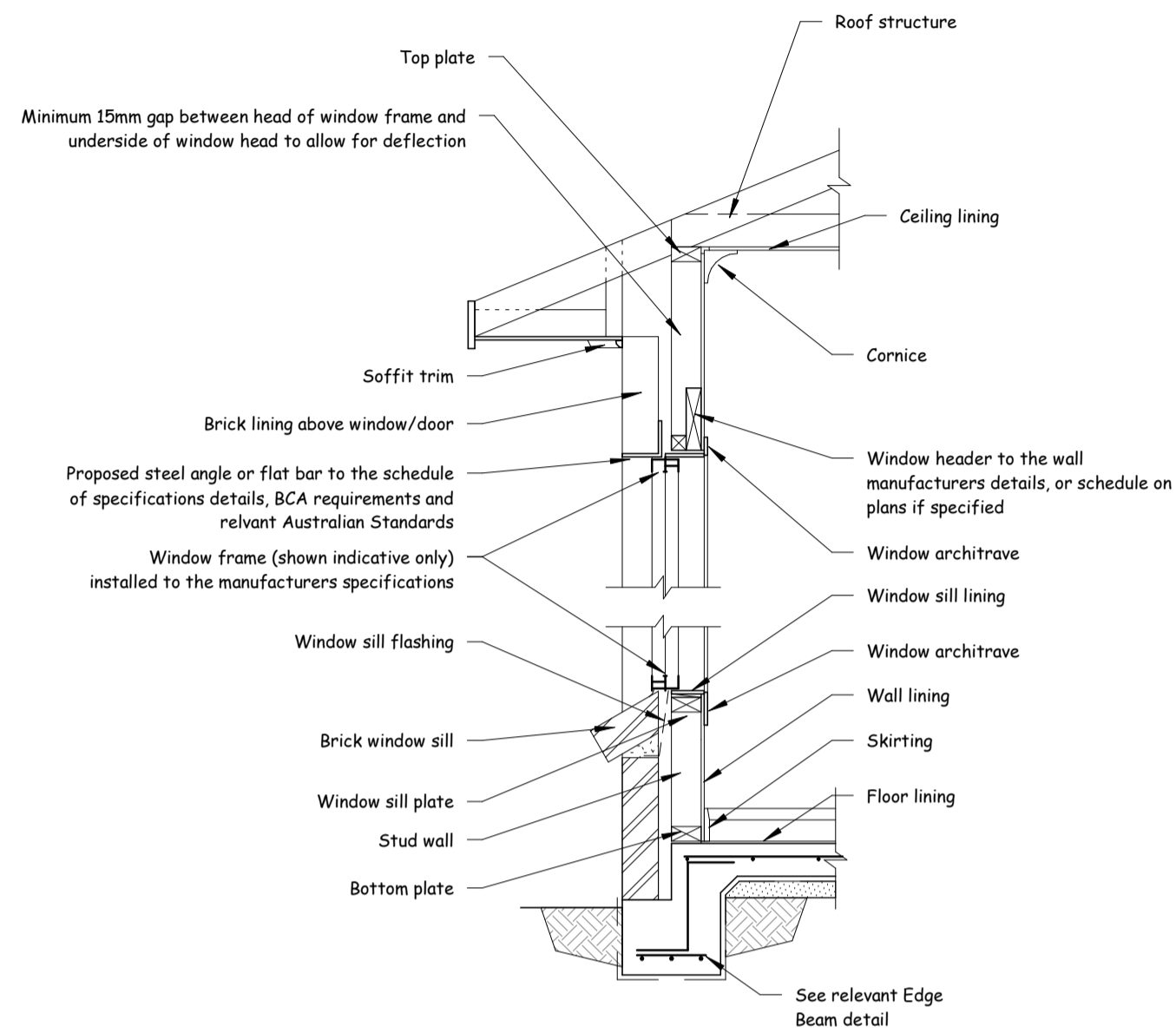
Scale 1:20

ALUMINIUM WINDOWS | TIMBER WINDOWS



Typical Wall/Window Relationship Details - Brick Veneer

Scale 1:20



Typical Wall Section - Brick Veneer - Slab

Scale 1:20



Vision Engineers Australia

138 Dora Street, Dora Creek NSW 2264
M/ 0490 444 007

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Wind Class: N2 (W3N) (Assumed)
Site Class: 'M' Soil Class: 'M'
Site / Soil Class Assumed

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Revision Schedule

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A	14/07/20	VEA Eng
B	15/07/20	Changes
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New Dwelling

Client:

Address:

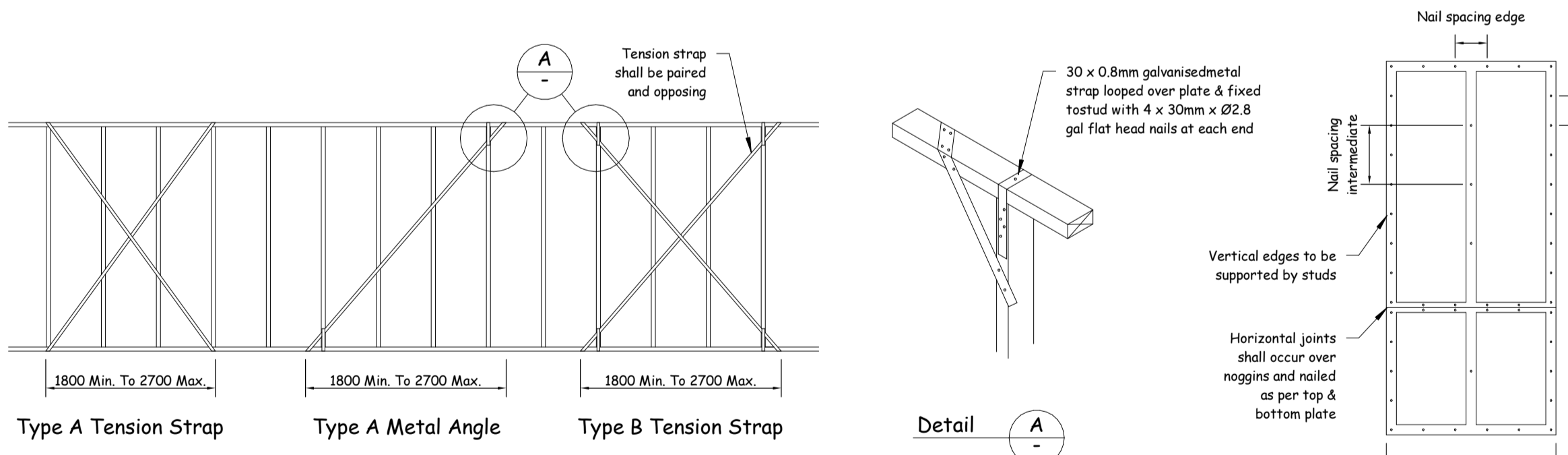
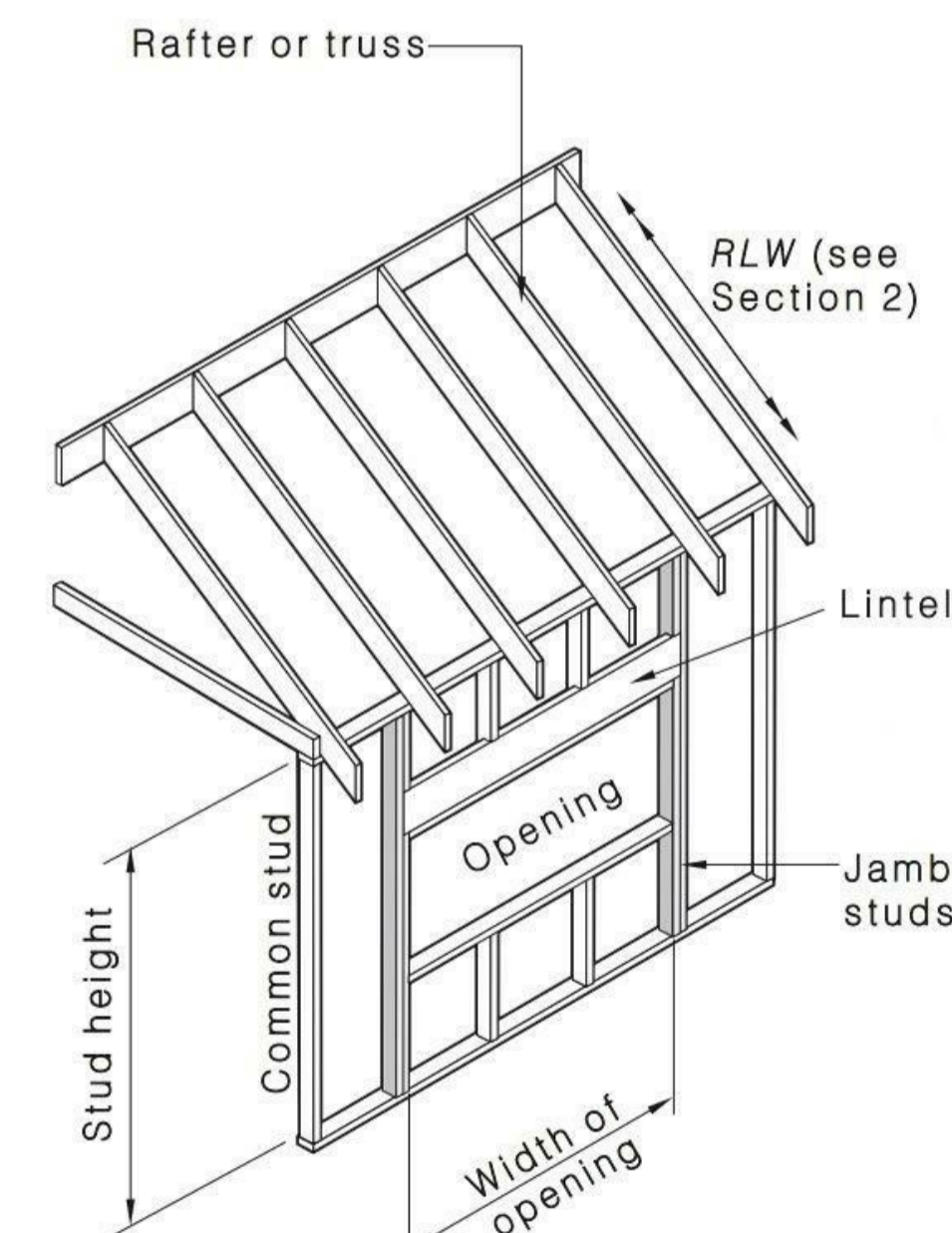
Date: 22-06-2020

Drawing No: 320-7128

Sheet: En03

Scale: As indicated © A1

Typical Sheet Roof Lintels, Jamb and Tie-down Details				
Jamb Stud Sizes				
Jamb Studs A	Jamb Studs B	Jamb Studs C	Jamb Studs D	
2/90 x 35 MG10	2/90 x 45 MG10	3/90 x 45 MG10	2/90 x 63 Hyspan LVL13	
Minimum size for non-loadbearing lintels				
Span				
Timber grade	Up to 1200	Up to 1800	Up to 2400	Up to 3000
MG10/F7	90 x 45	90 x 45	120 x 45	190 x 45
Hyspan LVL13	95 x 36	95 x 45	130 x 36	130 x 45
Smart LVL15	90 x 42	120 x 35	120 x 35	130 x 58
Jamb Studs	A	A	A	A
Jamb size studs above to be used up to a height of 2750mm				
Single / Upper Storey Lintel (Design wind speed N1/N2) - Sheet Roof with RLW up to 3000mm				
Span				
Timber grade	Up to 1200	Up to 1800	Up to 2400	Up to 3000
MG10/F7	2/90 x 45*	140 x 35	190 x 35	240 x 35
Hyspan LVL13	95 x 45	130 x 45	150 x 45	200 x 45
Smart LVL15	120 x 35	120 x 35	150 x 42	170 x 42
Jamb Studs	A	A	A	A
* - Denotes nail laminated together as per AS1684.2				
Jamb size studs above to be used up to a height of 2750mm				
Single / Upper Storey Lintel (Design wind speed N1/N2) - Sheet Roof with RLW 3000mm up to 4500mm				
Span				
Timber grade	Up to 1200	Up to 1800	Up to 2400	Up to 3000
MG10/F7	120 x 45	190 x 35	190 x 45	240 x 45
Hyspan LVL13	90 x 45	130 x 45	150 x 63	200 x 63
Smart LVL15	120 x 35	130 x 42	150 x 42	200 x 58
Jamb Studs	A	A	B	B
* - Denotes nail laminated together as per AS1684.2				
Jamb size studs above to be used up to a height of 2750mm				
Single / Upper Storey Lintel (Design wind speed N1/N2) - Sheet Roof with RLW 4500mm up to 6000mm				
Span				
Timber grade	Up to 1200	Up to 1800	Up to 2400	Up to 3000
MG10	190 x 45	2/190 x 45*	2/240 x 45*	2/290 x 45*
Hyspan LVL13	130 x 45	200 x 45	240 x 45	300 x 58
Smart LVL15	130 x 42	200 x 42	240 x 42	300 x 58
Jamb Studs	A	A	B	C
* - Denotes nail laminated together as per AS1684.2				
Jamb size studs above to be used up to a height of 2750mm				
Single / Upper Storey Lintel (Design wind speed N1/N2) - Sheet Roof with RLW 6000mm upto 7500mm				
Span				
Timber grade	Up to 1200	Up to 1800	Up to 2400	Up to 3000
MG10	190 x 45	2/190 x 45*	2/240 x 45*	2/290 x 45*
Hyspan LVL13	130 x 45	200 x 45	240 x 45	300 x 58
Smart LVL15	130 x 42	200 x 42	240 x 58	300 x 58
Jamb Studs	A	B	B	D
* - Denotes nail laminated together as per AS1684.2				
Jamb size studs above to be used up to a height of 2750mm				
Tie-downs for lintels supporting sheet roof (AS1684.2 Table 9.20)				
Lintel Span				
RLW	Up to 1200	Up to 1800	Up to 2400	Up to 3000
Up to 3000	9.20(A) 4 nails	9.20(A) 4 nails	9.20(A) 6 nails	9.20(A) 6 nails
3001-4500	9.20(A) 4 nails	9.20(A) 6 nails	9.20(A) 6 nails	9.20(A) 6 nails
4501-6000	9.20(A) 4 nails	9.20(B) 6 nails	9.20(B) 6 nails	9.20(B) 6 nails
6001-7500	9.20(A) 4 nails	9.20(B) 6 nails	9.20(B) 6 nails	9.20(C) M12
For all lintels in non-loadbearing walls, the fixings shall be nominal as per AS1684.2 Table 9.4				



Sheet Bracing Details

Type A - Sheet Bracing (PA) Specifics - 3.4 kN/m [Table 8.18(G)]

Product	Australian Standard	Type / Grade	Minimum Thickness For Stud Spacing (mm)		Panel Length (mm)	Nail Size (mm)	Nail Spacing (mm)	Special Requirements
			450	600				
Plywood	AS2269	F8	7	9	900	30mm x Ø2.8 Galv.	150	No noggins req'd except at sheet ends. Nails shall be 7mm from all edges.
		F11	4.5	7				
		F14	4	6				
Hardboard (Massive)	AS2458	G.P.	6.4	6.4	900	30mm x Ø2.8 Galv.	100	Nails to be 10mm from vertical edges & 20mm from horizontal edges. No noggins req'd except at sheet ends.

Type A - Sheet Bracing Notes:
1. Panel length greater than those listed above can be considered as a number of bracing units directly proportioned to their installed length i.e. A 1200mm panel of plywood equals 1200 / 900 = 1.33 bracing units.
2. Nails should be driven just below the surface of the sheet using the hammer face only. Nail spacing shall be as per table.
3. Plywood panel lengths of 600mm are equivalent to 1.5 of Type A bracing unit.
4. For stud spacing of 600mm c/c where noggins are installed and the plywood bracing panels are nailed to the noggins at 200mm c/c, the plywood thickness may be as for stud spacing of 450mm c/c.
5. F27 indicates full length noggins.
6. Refer to AS1684.2 Table 8.18(G) for top & bottom plate fixing details.

Type B - Sheet Bracing (PB) Specifics - 6.0 kN/m [Table 8.18(M)]

Product	Australian Standard	Type / Grade	Minimum Thickness For Stud Spacing (mm)		Panel Length (mm)	Nail Size (mm)	Nail Spacing (mm)	Special Requirements
			450	600				
Plywood	AS2269	F8	7	9	900	30mm x Ø2.8 Galv.	150	No noggins req'd except at sheet ends. Nails shall be 7mm from all edges.
		F11	6	7				
		F14	4	6				
Hardboard (Massive)	AS2458	G.P.	6.4	6.4	900	30mm x Ø2.8 Galv.	100	Nails to be 10mm from vertical edges & 20mm from horizontal edges. No noggins req'd except at sheet ends.

Type B - Sheet Bracing Notes:
1. Panel length greater than those listed above can be considered as a number of bracing units directly proportioned to their installed length i.e. A 1200mm panel of plywood equals 1200 / 900 = 1.33 bracing units.
2. Nails should be driven just below the surface of the sheet using the hammer face only. Nail spacing shall be as per table.
3. Plywood panel lengths of 600mm are equivalent to 1.5 of Type B bracing unit.
4. For stud spacing of 600mm c/c where noggins are installed and the plywood bracing panels are nailed to the noggins at 200mm c/c, the plywood thickness may be as for stud spacing of 450mm c/c.
5. F27 indicates full length noggins.
6. Refer to AS1684.2 Table 8.18(M) for top & bottom plate fixing details.

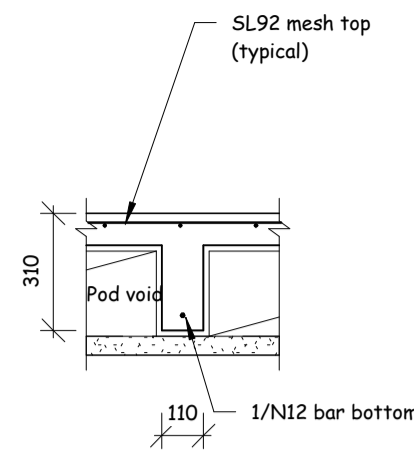
Type A - Strap Bracing (SA) Specifics - 1.5 kN/m [Table 8.18(B)]

Type Of Diagonal Brace	Material & Size	Nailing Requirements	Special Requirements
Metal Angle	Galvanneal angle, nom. Section 20x18x2.2mm min. Net section 42mm ²	To Each Stud: 2x30xØ2.8mm Galv. Flat head nail To Each Plate: 2x30xØ2.8mm Galv. Flat head nail	Drill holes if necessary to prevent nail splitting
Tension Strap	Galvanneal Flat metal tension strapping of min. Thickness 0.8mm & min. Net section of 15.2mm ²	To Each Stud: 1x30xØ2.8mm Galv. Flat head nail To Each Plate: 3x30xØ2.8mm Galv. Flat head nail	Straps must be properly tensioned

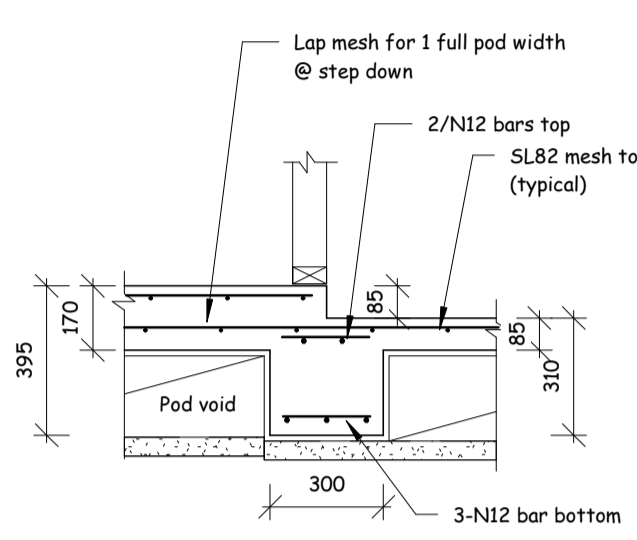
Type B - Strap Bracing (SB) Specifics - 3.0 kN/m [Table 8.18(D)]

Type Of Diagonal Brace	Material & Size	Nailing Requirements	Special Requirements
Tension Strap	Galvanneal Flat metal tension strap nom. Size 30xØ2.8mm & min. Section of 24mm ²	To Each Stud: 2/19xØ2.25mm Galv. Flat head nail To Each Plate: 4/30xØ2.8mm Galv. Flat head nail	Straps must be properly tensioned & strap must return over top plate & under the bottom plate. The stud nearest to each end of each diagonal strap shall be fixed to the plate with straps or framing anchors 4x30xØ2.8mm nails at each end.

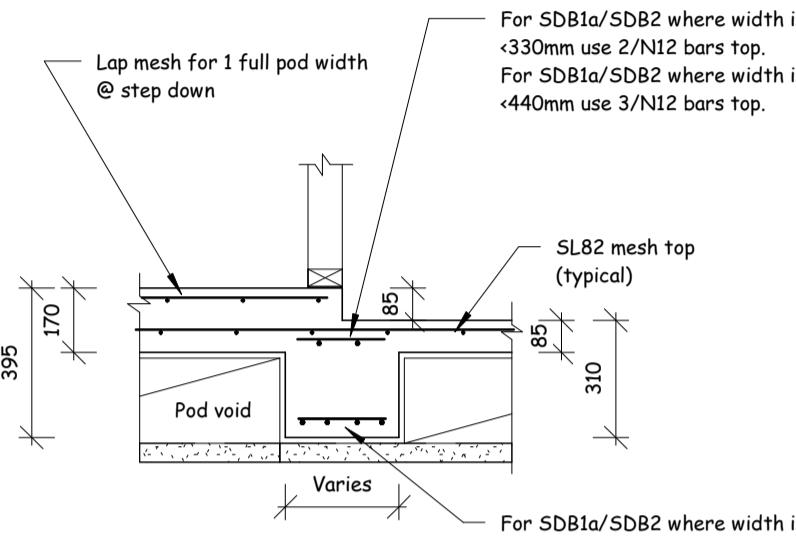
Note: All construction, especially timber components to comply with AS3959-2009, and planning for bushfire protection 2006, for Bal-12.5 zone. Excerpt from AS3959-2009 attached to last sheet



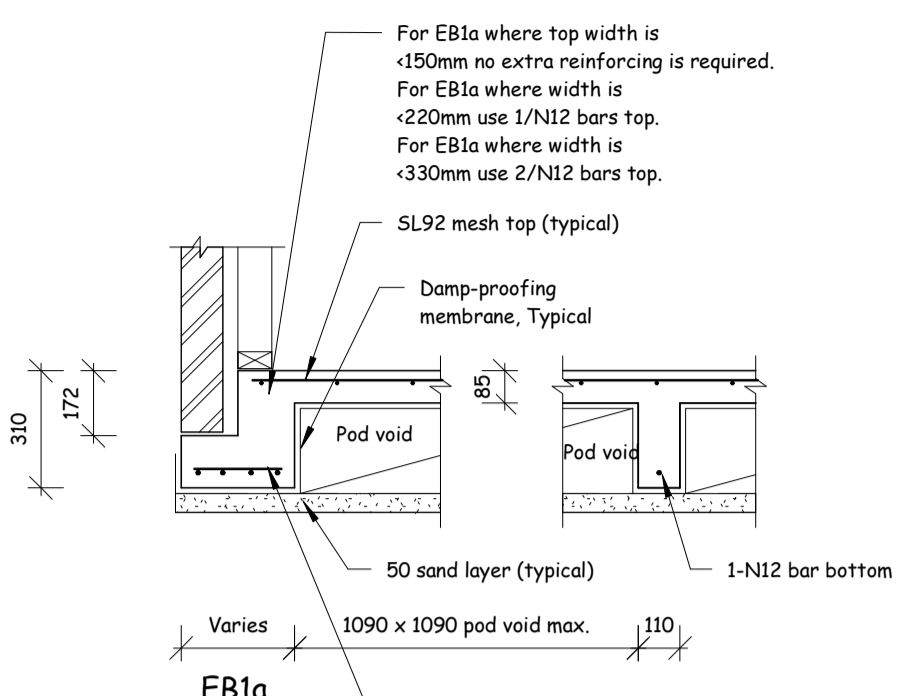
Internal Beam
Scale 1:20



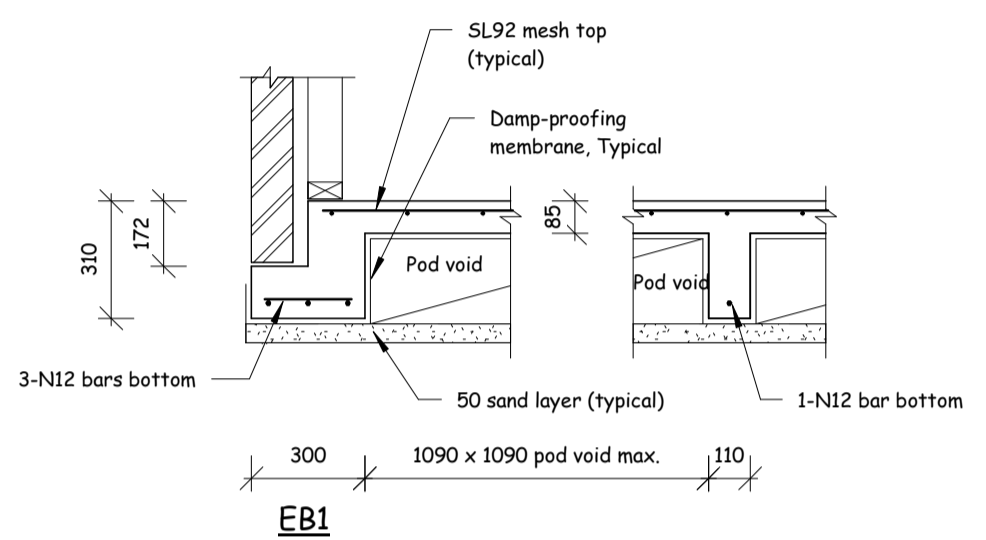
SDB1
Scale 1:20



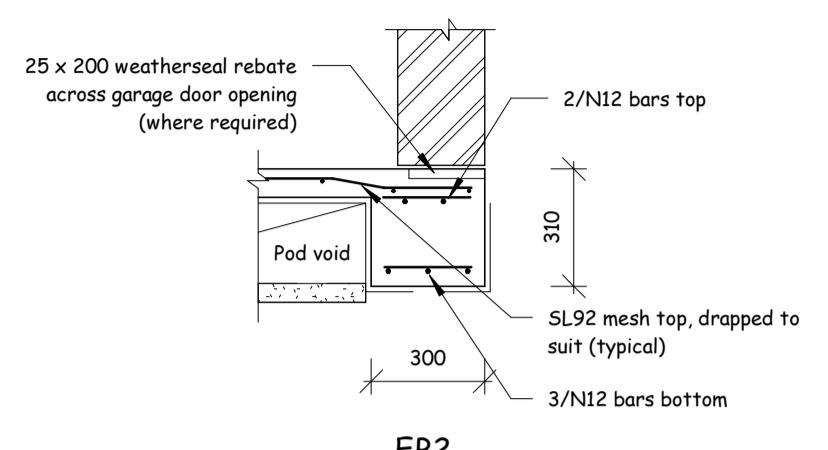
SDB1a/SDB2
Scale 1:20



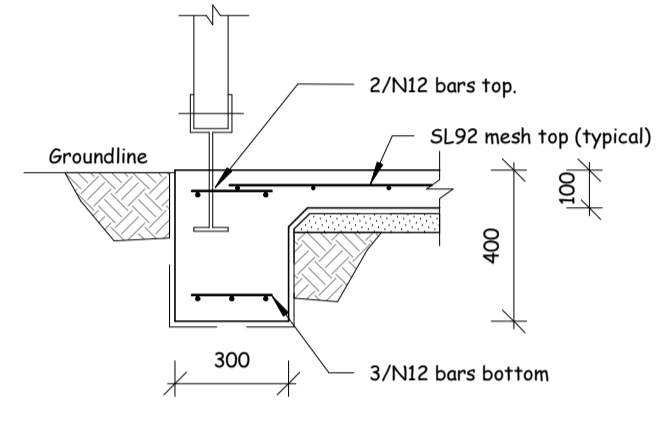
EB1a
Scale 1:20



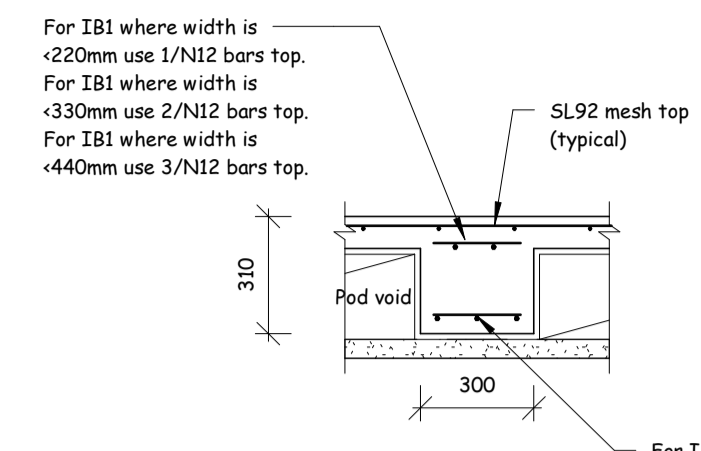
EB1



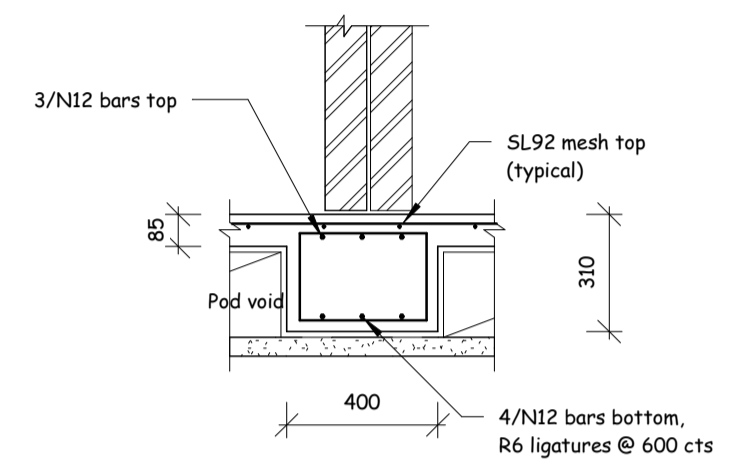
EB2
Scale 1:20



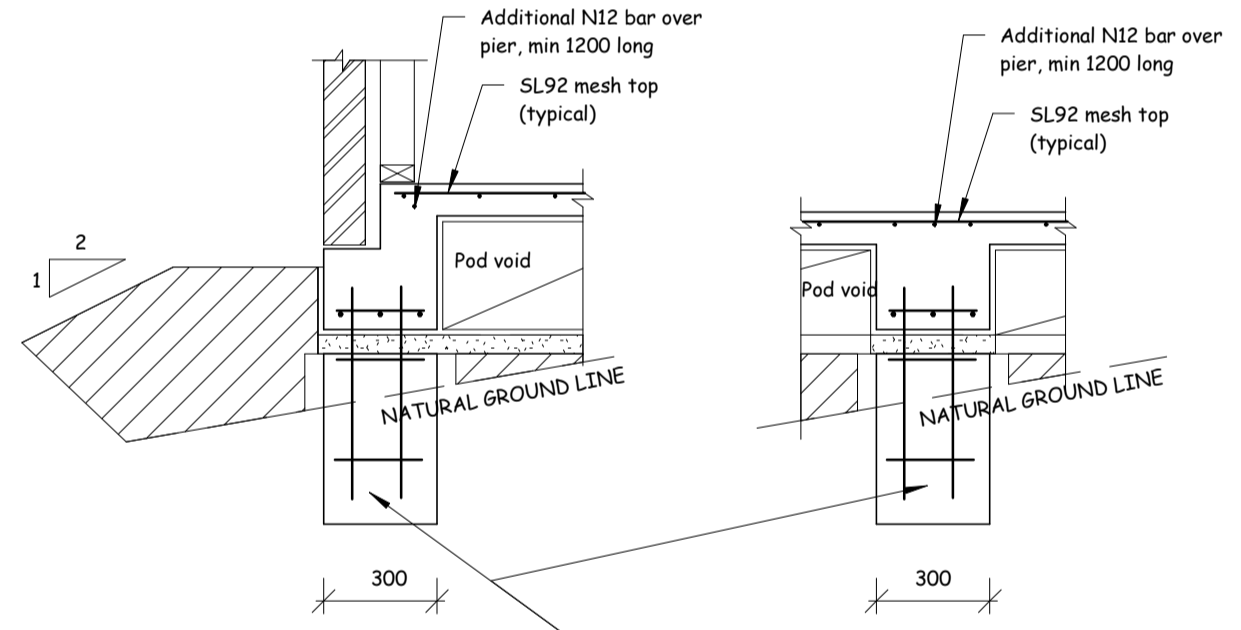
EB3
Scale 1:20



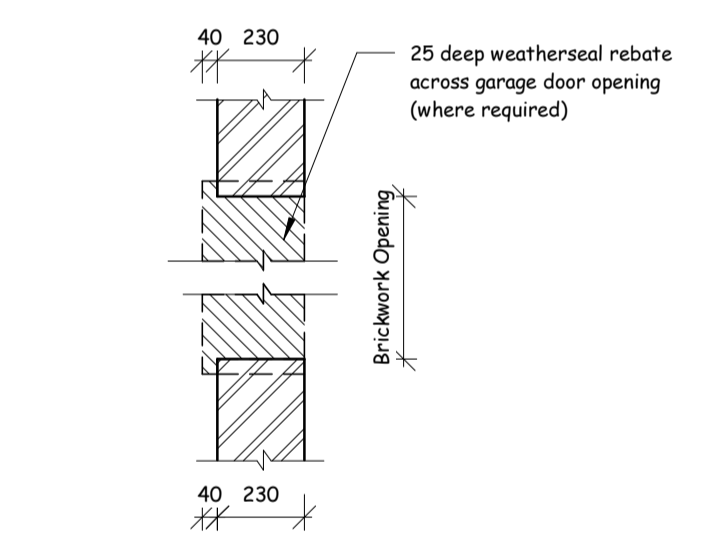
IB1
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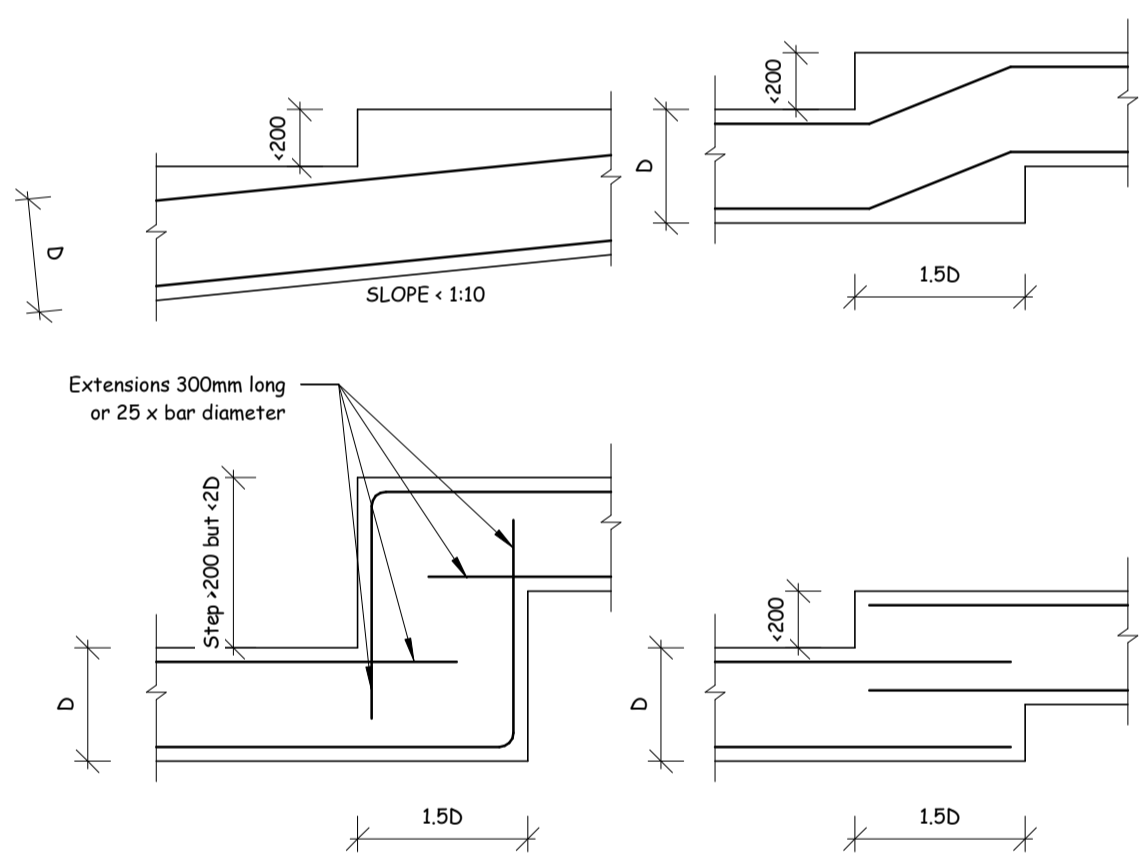
IB2
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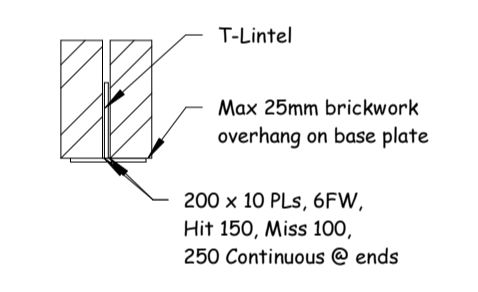
Typical Slab Piering Details
Scale 1:20



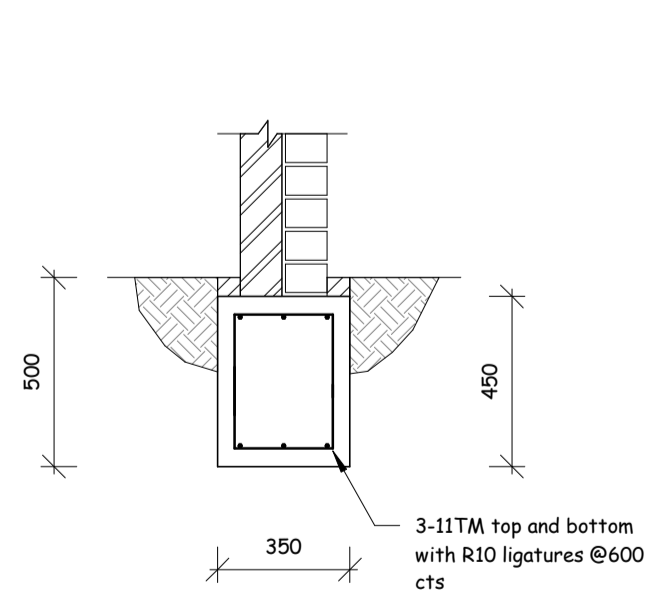
Weatherseal Rebate Detail (Plan)
Scale 1:20



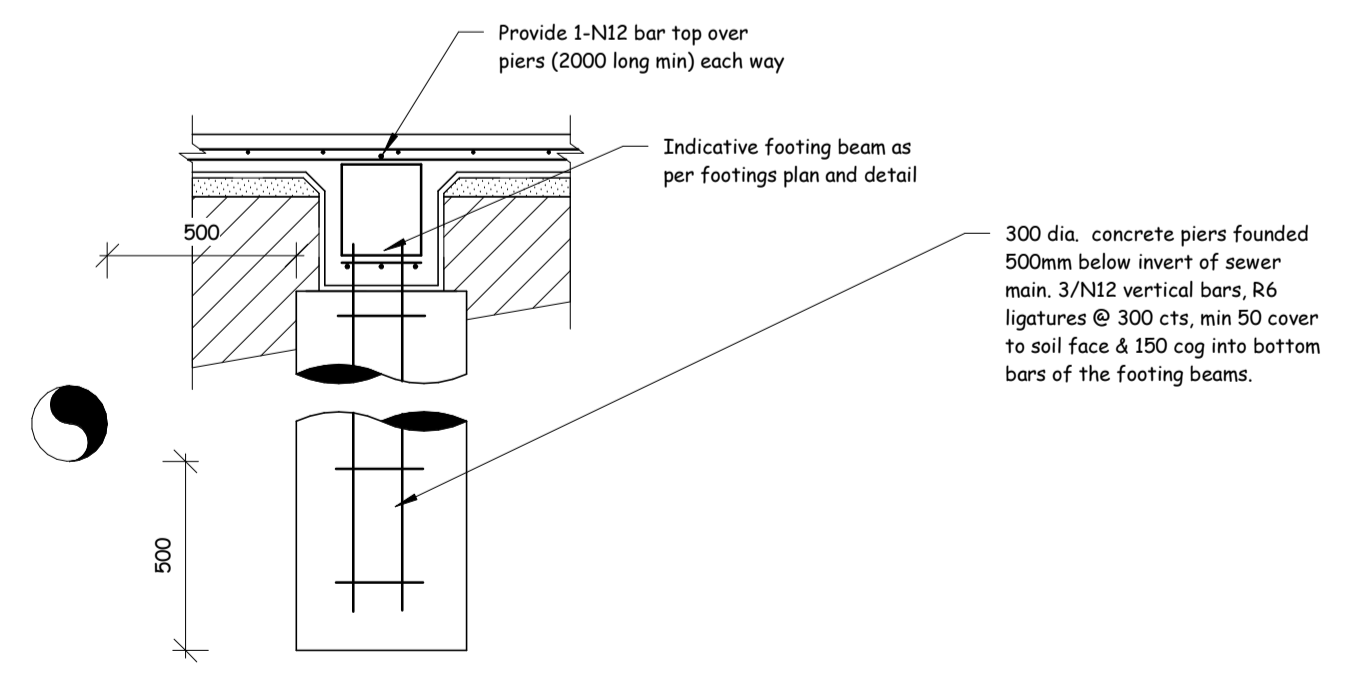
Footing Stepping Details
Scale 1:20



Typical Cross Section Thru 'T' Lintel
Scale 1:20



SF1 Detail
Scale 1:20



Vision Engineers Australia
138 Dora Street, Dora Creek NSW 2264
M/ 0490 444 007

BUILDERS NOTE:
Use Dimensions in preference to scale. Site verify all dimensions before ordering.
Materials. Footings information shown on these plans may have to be changed if Builders site excavations reveal non-virgin ground. Construction of Plan Vision Australia Pty Ltd would then be necessary to determine the required changes.
Materials are ordered in circumstances to be ordered direct off plans.
Materials to be ordered are only to be ordered from a Builders or applicable product manufacturers separate site confirmed Materials list.
Plans are not intended to be the absolute medium for construction information accuracy due to site discrepancies. See schedule of specifications for further details.
Wind Class: N2 (W33N) (Assumed)
Site Class: 'M' Soil Class: 'M'
Site / Soil Class Assumed

SURVEY NOTE:
Boundary dimensions are assumed only and taken from site information, others or owners information.
Confirm boundaries before commencement of construction.
Full project specific detailed survey plans have not been supplied to Plan Vision for planning purposes.
See schedule of specifications for details.

Revision Schedule		
Rev	Date	Description
A	14/07/20	VEA Eng
B	01/09/20	Internal Garage Length Changes

New Dwelling

Client:

Address:

Date: 22-06-2020
Drawing No: 320-7128
Sheet: En04
Scale: 1:20 @ A1