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PROPOSED DWELLING
AT LOT 5 DP 213365
No. 9 SURFVIEW AVENUE, BLACK HEAD, NSW 2430

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ARCHITECTURAL REFERENCE

ENGINEERING PLANS ARE DESIGNED BASED UPON THE FOLLOWING ARCHITECTURAL INFORMATION.

DRAWING No.	REV.	DATE	COMPANY
D5377	G	03/07/24	COLLINSWCOLLINS

GEOTECHNICAL REFERENCE

ENGINEERING PLANS ARE DESIGNED BASED UPON THE FOLLOWING GEOTECHNICAL INFORMATION.

REPORT No.	DATE	COMPANY
G0417-SCFP-001-Rev0	24/01/24	HUNTER CIVILAB

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ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
C1	Construction Issue	TJW	CL	JD	18/03/25
P2	Preliminary Issue	ELC	CL	JD	16/08/24
P1	Preliminary Issue	ELC	CL	JD	20/05/24

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: TITLE PAGE
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S01 / 20
ISSUE: C1

MASONRY DESIGN

REGION - SEVERE MARINE

LOCATION	MASONRY UNIT RESISTANCE GRADE	MINI MORTAR CLASS		DURABILITY CLASS OF BUILT IN COMPONENTS
		BRICKWORK	BLOCKWORK	
INTERNAL EXTERNAL BELOW GROUND	PROTECTED EXPOSURE GENERAL PURPOSE	M2 M4 M4	M3 M4 M4	R1 R4 R4

THE ABOVE TABLE IS FOR BOTH BRICKWORK & BLOCKWORK INTERNAL SKINS OF EXTERNAL CAVITY WALLS ARE CONSIDERED EXTERNAL BELOW GROUND DENOTES BELOW DAMP PROOF COURSE OR IN CONTACT WITH SOIL

DESIGN LOADS

DESCRIPTION	LIVE LOADS	IMPOSED DEAD LOADS
FLOOR	1.5 kPa	0.4 kPa
GARAGE	2.5 kPa	0.4 kPa
STAIRS	2.0 kPa	0.4 kPa
DECK/BALCONY	1.5 kPa	0.7 kPa
ROOF - STEEL	0.25 kPa	0.4 kPa

STEELWORK FINISHES

CATEGORY - C5 (VERY HIGH)

LOCATION	TYPE	CODE
INTERNAL STEELWORK	PAINT SYSTEM	ALK4
STEELWORK BUILT INTO MASONRY	GALVANISED	HDG 600
	PAINT SYSTEM	EHB2 OR IZS2
EXTERNAL STEELWORK	GALVANISED	HDG 600 5D
	PAINT SYSTEM	EHB6 OR PUR5
BARRIER COATING FOR STEELWORK EMBEDDED IN CONCRETE	PRIMER	WATTYL EPINAMEL DTM985
	FINISH COAT	WATTYL POLY U400

- FOR FINISH TYPE & CODE REFER TO STANDARD AS/NZS 2312
- FOR DECORATIVE FINISH REFER TO ARCHITECTURAL OR OWNERS SPECIFICATIONS

ALLOWABLE BEARING CAPACITIES

DESCRIPTION	ALLOW BEARING CAPACITY
SLABS	100 kPa
STRIP FOOTINGS	100 kPa
BORED PIERS	250 kPa

WIND DESIGN PARAMETERS

WIND CLASSIFICATION	BY OTHERS

REVISION A-07/12/23

DESIGN CERTIFICATION NCC VOLUME 1 PART A5

DENNIS PARTNERS & Robert Dennis certify that the attached design fulfills the structural requirements of the NCC & BCA. All design works have been designed in accordance with the following australian standards.

- AS/NZS1170.0:2002 STRUCTURAL DESIGN ACTIONS PART 0: GENERAL PRINCIPALS
- AS/NZS1170.1:2002 STRUCTURAL DESIGN ACTIONS PART 1: PERMANENT, IMPOSED AND OTHER ACTIONS
- AS1170.1:2007 STRUCTURAL DESIGN ACTIONS PART 4: EARTHQUAKE ACTIONS IN AUSTRALIA
- AS1684.2:2010 RESIDENTIAL TIMBER-FRAMED CONSTRUCTION
- AS1720.1:2010 TIMBER STRUCTURES - DESIGN METHODS
- AS2870:2011 RESIDENTIAL SLABS AND FOOTINGS
- AS3600:2018 CONCRETE STRUCTURES
- AS3700:2018 MASONRY STRUCTURES
- AS4100:2020 STEEL STRUCTURES

Name : Robert N Dennis MIEAust CPEng

Signature : .....

GENERAL

G1. THESE DRAWINGS ARE FOR STRUCTURAL PURPOSES ONLY AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL/BUILDING DESIGNER DRAWINGS, OTHER CONSULTANTS DRAWING AND SPECIFICATIONS.

G2. ALL WORKS TO BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT INCLUDING STRIPPING, FILLING AND COMPACTION. REQUEST A COPY FROM DENNIS PARTNERS.

G3. ALL PLANS MUST BE INSPECTED & APPROVED BY THE PCA/COUNCIL OR RELEVANT AUTHORITIES PRIOR TO CONSTRUCTION.

G4. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ONSITE. THESE STRUCTURAL DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS AND ARE NOT WORKSHOP DRAWING FOR FABRICATION. THE RL 'S & LEVELS SHOWN ON THE DRAWING ARE APPROXIMATE AND ARE FOR THE SOLE PURPOSE OF ASSISTING THE STRUCTURAL DOCUMENTATION. THEY ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES. REFER TO ARCHITECTURAL & SURVEY DRAWING FOR CONFIRMATION OF ALL RL 'S, LEVELS AND STEPS.

G5. SHOULD ANY AMBIGUITY, ERROR, OMISSION, DISCREPANCY, INCONSISTENCY, OR OTHER FAULT EXIST OR SEEM TO EXIST IN THE DRAWING, IMMEDIATELY NOTIFY IN WRITING TO THE SUPERINTENDENT AND THE DENNIS PARTNERS.

G6. BUILDER SHALL CONFIRM ALL POINT LOADS, INTERNAL LOAD BEARING WALLS ETC. FROM TRUSS & FRAME MANUFACTURER & PROVIDE PLANS TO DENNIS PARTNERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

G7. ALL ARCHITECTURAL FITMENTS SUCH AS GLAZING, PARTITIONS, CEILINGS ETC SHOULD ALLOW FOR SHORT- AND LONG-TERM DEFLECTION OF THE STRUCTURE.

G8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL SERVICES. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF SERVICES PRIOR TO COMMENCING AND IS RESPONSIBLE FOR REPAIR, DAMAGE AND LOSS CAUSED BY DAMAGE.

G9. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS, RELEVANT BUILDING AUTHORITIES & NATIONAL CONSTRUCTION CODE (NCC).

G10. ALL CONSTRUCTION WORKS & SUPERVISION SHALL BE IN ACCORDANCE WITH THE WORK AND SAFETY ACT 2011 ENFORCED BY THE WORKCOVER AUTHORITY.

G11. SEVERE MARINE ENVIRONMENTS INCLUDE AREAS WITHIN 1km FROM THE SURF COAST OR 100m FROM SHELTERED BAYS OR SALTWATER RIVERS REQUIRE SPECIFIC ATTENTION WITH REGARDS TO DURABILITY AND CORROSIVITY OF CONCRETE, STEEL AND MASONRY AND ITS COMPONENTS.

G12. TERMITE PROTECTION SHALL BE PROVIDED AS REQUIRED BY AS3660.1 AND NCC.

EARTHWORKS, FILLING & FOUNDATIONS

E1. ALL SLABS & FOOTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS2870-2011. "RESIDENTIAL SLABS AND FOOTINGS" AND THE GEOTECHNICAL REPORT.

E2. THE CONSTRUCTION WORKS AREA IS TO BE STRIPPED OF GRASS, TOPSOIL, ROOTS, VEGETABLE MATTER AND SOFT MATERIAL "SOFT SPOTS".

E3. THE GROUND BELOW SLABS SHALL BE PROOF ROLLED WITH AN APPROVED HEAVY COMPACTOR. ALL "SOFT SPOTS" SHALL BE REMOVED AND REPLACED WITH COMPACTED CRUSHED ROCK OR APPROVED FILL IN ACCORDANCE WITH AS2870-2011 & AS3798-2007.

E4. CONTROLLED FILL PLACED, COMPACTED, TESTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER, AS PER AS 3798-200 IS DEEMED SUITABLE TO SUPPORT THE FOOTING. DENNIS PARTNERS MUST REVIEW GEOTECHNICAL REPORT PRIOR TO CONSTRUCTION.

E5. ANY FILL MUST EXTEND PAST THE EDGE OF THE BUILDING BY AT LEAST 1m WITH A RETAINED BATTER BEYOND THIS POINT OF NOT MORE THAN 1V:2H.

E6. THE BASES OF EDGE BEAMS AND FOOTING MAY BE STEPPED OR SLOPED NOT MORE THAN 1:10.

VAPOUR & DAMP PROOF MEMBRANES

SB1. ALL SLABS & FOOTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AS2870-2011. "RESIDENTIAL SLABS AND FOOTINGS" AND THE GEOTECHNICAL REPORT.

VB1. A 0.2mm HIGH IMPACT RESISTANT POLYTHENE MEMBRANE SHALL BE PLACED BENEATH THE SLAB SO THAT THE BTM SURFACE OF THE SLAB AND BEAMS IS ENTIRELY UNDERLAID. THE MEMBRANE SHALL TERMINATE AT GROUND LEVEL.

VB2. THE MEMBRANE SHALL BRANDED "AS 2870 CONCRETE UNDERLAY, 0.2mm HIGH IMPACT RESISTANCE", TOGETHER WITH MANUFACTURES CODE.

VB3. THE MEMBRANE SHALL BE LAPPED 200mm AT JOINTS AND TAPED.

VB4. PENETRATIONS BY PIPES OR PLUMBING FITTINGS SHALL BE TAPED OR SEALED WITH A CLOSE-FITTING SLEEVE OR MADE CONTINUOUS BY TAPING OR BY LAPPING 200mm.

CONCRETE PIERS

C1. FOOTING & SLABS SUPPORTED ON UNCONTROLLED FILL REQUIRE MIN. 450mm DIA. CONCRETE PIERS AT MAX. 2m CTRS TO EDGE BEAMS AND INTERNAL SLABS. (ALTERNATIVELY, SCREW PIERS SHALL USED)

C2. ALL PIERS TO BE POURED SEPARATE FROM SLABS.

C3. PIERS TO BE SOCKED 500mm INTO STIFF CLAY.

C4. SEWER PIERS SHALL BE A MINIMUM 600mm CLEAR OF SEWER, STORMWATER & SERVICES U.N.O. AND MUST COMPLY WITH THE LOCAL COUNCIL REQUIREMENTS FOR ZONE OF INFLUENCE, DEPTH, AND CLEARANCE TO SERVICES.

C5. PIERS ARE TO BE FOUNDED IN STIFF NATURAL STRATA BELOW ANY FILL WITH AN ALLOWABLE BEARING CAPACITY OF 250 KPa.

C6. PIERS SHALL HAVE 2/N12 BARS FOR DEPTHS 1.0m-2.0m & 4/N12 BARS FOR DEPTHS 2.0m-3.0m.

SCREW PIERS

SP1. SCREW PIERS SHALL BE INSTALLED AND CERTIFIED BY AN EXPERIENCED GEOTECHNICAL QUALIFIED CONTRACTOR.

SP2. SCREW PIERS SHALL BE FOUNDED AT A MIN DEPTH 1.25 X Hs TO AS2870.

SP3. SCREW PIERS SHALL BE INSTALLED TO AS2159 & AS2870.

SP4. SCREW PIER SAFE WORKING LOAD (SWL) SHALL BE MIN 70 kN U.N.O.

REINFORCEMENT SLAB ON GROUND

SR1. THE MINIMUM COVER TO REINFORCEMENT SHALL BE:

40mm TO UNPROTECTED GROUND,
40mm TO EXTERNAL SURFACES,
30mm TO A MEMBRANE IN CONTACT WITH THE GROUND, AND
20mm TO INTERNAL SURFACES.

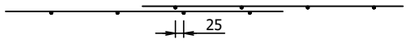
SR2. TRENCH MESH SHALL BE LAID CONTINUOUSLY AND SHALL BE SPLICED WHERE NECESSARY WITH A LAP OF 500mm.

SR3. TRENCH MESH SHALL BE OVERLAPPED BY THE WIDTH OF MESH AT 'T' & 'L' INTERSECTIONS & CORNERS.

SR3. REINFORCING BARS SHALL HAVE A LAP LENGTH AT SPLICES NOT LESS THAN

500mm FOR N12 BARS
700mm FOR N16 BARS

SR4. SLAB MESH SHALL BE PLACED NEAR THE TOP OF THE SLAB AND SHALL ACHIEVE THE REQUIRED COVER. MESH SHALL BE LAPPED A MINIMUM OF TWO WIRES PLUS 25mm AND SHALL BE SET OUT SUCH THAT NO MORE THAN THREE MESH SHEETS OVERLAP AT ANY LOCATION.



SR5. SLAB MESH SHALL BE SUPPORTED ON PLASTIC CHAIRS AT 600mm CTRS MAX OR GENERALLY 4 CHAIRS PER WAFFLE POD.

SR6. RE-ENTRANT CORNERS SHALL HAVE ONE STRIP OF L11TM – 3 BAR OR 3/N12 2m LONG PLACED ACROSS THE DIRECTION OF POTENTIAL CRACKING

SR7. ADDITION REINFORCEMENT BARS AND MESH SHALL BE TIED TO THE UNDERSIDE OF THE SLAB MESH WHERE REQUIRED.

CONCRETE SLAB ON GROUND

CR1. ALL CONCRETE WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH AS3600 AND AS2870.

CR2. CONCRETE QUALITY AND STRENGTH SHALL BE AS PER TABLE AND VERIFIED BY TESTING

ELEMENT	CONCRETE STENGTH f'c (MPa)	COVER (mm) U.N.O
BORED PIERS	N20	65
STRIP FOOTING	N20	50
PAD FOOTING	N20	50
SLAB ON GROUND	N25	20 TOP INTERNAL
		30 BTM & SIDES
		40 TOP EXTERNAL
SUSPENDED SLABS	N32	20 INTERNAL
		45 TOP & BTM EXTERNAL
PAVING SLABS	N20	40 EXTERNAL

MAXIMUM AGGRATE SIZE = 20mm U.N.O
SLUMP DURING PLACING = 100mm
MAXIMUM 56 DAY SHRINKAGE STRAIN
-650 um SLABS
-1000 um STRIP & PAD FOOTING & BORED PIERS

CR3. COMPACT ALL CONCRETE INCLUDING FOOTINGS, BEAMS AND SLABS, USING MECHANICAL VIBRATORS.

CR4. PLACE CONCRETE CONTINUOUSLY BETWEEN CONSTRUCTION JOINTS SHOWN ON PLAN. DO NOT BREAK OR INTERRUPT SUCCESSIVE POURS SUCH THAT COLD JOINTS OCCUR. ANY REVISIONS OR ADDITIONS TO CONSTRUCTION JOINTS SHOWN ON PLAN REQUIRE APPROVAL FROM THE STRUCTURAL ENGINEER.

CR5. SET DOWNS OR FALLS IN FLOOR SURFACES ARE NOT PERMITTED UNLESS SHOWN ON DRAWINGS. MAINTAIN MINIMUM SLAB THICKNESS SHOWN ON PLAN WHERE FALLS OCCUR

CR6. ALL HOOKS, LAPS, COGS, AND BENDS TO BE IN ACCORDANCE WITH AS3600.

CR7. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 7 DAYS, UNLESS SPECIFIED OTHERWISE. APPROVED SPRAY ON CURING COMPOUNDS THAT COMPLY WITH AS3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED.

CR8. CAST-IN CONDUITS SHALL HAVE A MINIMUM 30mm COVER AND BE LAID BETWEEN THE TWO LAYERS OF REINFORCEMENT, OR BELOW TOP LAYER IF SINGLE LAYER.

SLAB & FOUNDATION MAINTENANCE

SF1. THE OWNER'S ATTENTION IS DRAWN TO APPENDIX B "PERFORMANCE CRITERIA AND FOUNDATION MAINTENANCE" AND APPENDIX C "CLASSIFICATION OF DAMAGE DUE TO FOUNDATION MOVEMENTS" OF AS2870-2011 "RESIDENTIAL SLABS AND FOOTINGS".

SF2. WE ALSO DIRECT THE OWNER'S ATTENTION TO THE CSIRO PUBLICATION 'FOUNDATION MAINTENANCE AND FOOTING PERFORMANCE: 'A HOME OWNER'S GUIDE': HTTPS://WWW.PUBLISH.CSIRO.AU/BOOK/7942/#CONTENTS

SF3. TREES SHOULD NOT BE LOCATED WITHIN 1 X HEIGHT OF MATURE TREE FOR CLASS H1 SITES AND 0.75 X HEIGHT OF MATURE TREE FOR CLASS M SITES.

SF4. GARDEN BEDS ADJACENT BUILDINGS AND SLABS SHOULD BE AVOIDED.

DRAINAGE REQUIREMENTS

D1. THE GROUND SURROUNDING THE SLAB SHALL HAVE ITS SURFACE AT LEAST 150mm LOWER THAN THE SLAB SURFACE AND BE GRADED AWAY FROM THE SLAB EDGE OR FOOTING TO THE SITE DRAINAGE SYSTEM.

D2. THE BASE OF SERVICE TRENCHES SHALL BE SLOPED AWAY FROM THE BUILDING. TRENCHES SHALL BE BACKFILLED WITH CLAY TO THE TOP 300mm WITH 1.5m OF THE BUILDING AND THE CLAY COMPACTED WHERE PIPES PASS UNDER THE FOOTING SYSTEM THE FULL DEPTH OF THE TRENCH SHALL BE BACKFILLED WITH CLAY OR CONCRETE. SUBSURFACE DRAINS TO REMOVE GROUND WATER SHALL NOT BE USED WITHIN 1.5m OF THE BUILDING UNLESS NOTED OTHERWISE.

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ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
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P2	Preliminary Issue	ELC	CL	JD	16/08/24
P1	Preliminary Issue	ELC	CL	JD	20/05/24

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

BUILDING DESIGNER: collinswcollins BUILDING DESIGNERS

PROJECT: PROPOSED DWELLING AT LOT 5 DP213365 No. 9 SURFVIEW AVENUE, BLACK HEAD, NSW 2430

TITLE: GENERAL NOTES

FOR: AYRES

SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S02 / 20
ISSUE: C1

D3. THE SITE SHOULD BE GRADED SO WATER CANNOT POND AGAINST OR NEAR THE BUILDING.

D4. THE GROUND IMMEDIATELY ADJACENT TO THE PERIMETER OF THE BUILDING SHALL BE GRADED TO A FALL OF MIN 50mm AWAY FROM THE BUILDING OVER THE FIRST 1m OF DISTANCE.

PLUMBING DETAILS

P1. THE FOLLOWING NOTES PROVIDED ARE GUIDE ONLY FOR ARTICULATION FOR SANITY PLUMBING, DRAINAGE & SHOULD BE READ IN CONJUNCTION WITH AS3500, AS2870 & NCC.

P2. ALL SEWER & STORMWATER TO BE CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 & REQUIREMENTS OF AS 2870 SECTION 5: CALUSE 5.6 & SECTION 6: CLAUSE 6.6: FOR SLAB OR STRIP FOOTINGS ON HIGHLY REACTIVE SITES.

P3. CLOSED-CELL POLYETHYLENE LAGGING SHALL BE USED AROUND ALL PIPE PENETRATIONS THOUGH FOOTINGS. THE LAGGING SHALL BE MIN 20mm THICK ON CLASS H1 AND 40mm THICK ON CLASS "H2" AND CLASS "E" SITES. VERTICAL PENETRATIONS DO NOT REQUIRE LAGGING.

P4. DRAINS ATTACHED TO OR EMERGING FROM UNDERNEATH THE BUILDING SHALL INCORPORATE FLEXIBLE JOINTS IMMEDIATELY OUTSIDE THE FOOTINGS AND COMMENCING WITHIN 1m OF THE BUILDING PERIMETER TO ACCOMMODATE A TOTAL RANGE OF DIFFERENTIAL MOVEMENT IN ANY DIRECTION EQUAL TO THE ESTIMATED CHARACTERISTIC SURFACE MOVEMENT OF THE SITE (YS). MAX YS VALUES EQUAL 20mm FOR CLASS S, 40mm FOR CLASS M, 60mm FOR CLASS H1 AND 75MM FOR CLASS H2. IN THE ABSENCE OF SPECIFIC DESIGN GUIDANCE, THE FITTING 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, TO ALLOW FOR A MOVEMENT EQUAL TO 0.5YS IN ANY DIRECTION. THIS APPLIES TO ALL STORMWATER, SANITARY AND DISCHARGE PIPES.

P5. ALL EXPANSION AND ARTICULATION JOINTS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL JOINTS TO BE SET MID POINT SO AS TO ALLOW FOR MAXIMUM MOVEMENT IN EITHER DIRECTION

SHRINKAGE & CRACKING CONTROL

SC1. THE OWNER, ARCHITECT AND BUILDERS' ATTENTION ARE DRAWN TO THE ACCEPTABLE LEVELS OF FOUNDATION PERFORMANCE AS OUTLINED BY AS2870-2011 APPENDIX C. ACCORDINGLY, CATEGORIES 1 OR 2 DAMAGE MAY BE EXPECTED UNDER SOME CONDITIONS SHOULD A HIGHER LEVEL OF CRACK CONTROL BE REQUIRED THEN THE ENGINEER SHOULD BE NOTIFIED SO THAT THIS CAN BE INCORPORATED INTO THE DESIGN.

SC2. WHERE BRITTLE FLOOR COVERINGS ARE TO BE USED OVER AN AREA OF 16m2 ADDITIONAL MEASURE SHALL BE TAKEN. SUCH MEASURES SHALL INCLUDE ONE OR MORE OF THE FOLLOWING:

A. SLAB REINFORCED IN THE PART OF THE SLAB WHERE BRITTLE FINISHED ARE APPLIED SHALL NOT BE LESS THAN SL92 OR AN ADDITIONAL SHEET OF MESH SHALL BE PLACED IN THOSE AREAS.

B. THE BEDDING SYSTEM FOR BRITTLE COVERING SHALL BE SELECTED BASED ON THE EXPECTED SLAB MOVEMENTS AND THE CHARACTERISTICS OF THE FLOOR COVERINGS.

C. THE PLACEMENT OF FLOOR COVERINGS SHALL BE DELAYED FOR A MINIMUM OF 3-MONTHS.

SC3. ANY COMBINATION OF HOT WEATHER, LOW HUMIDITY AND STRONG WINDS CAN CAUSE SHRINKAGE CRACKS. EXTRA PRECAUTIONS SUCH AS THE USE OF EVAPORATIVE RETARDERS (ALIPHATIC ALCOHOL) IS RECOMMENDED HOT WEATHER POURS.

SC4. INSUFFICIENT COVER TO REINFORCEMENT CAN CAUSE PLASTIC SETTLEMENT CRACKING. MAINTAIN MINIMUM COVER TO REINFORCEMENT.

SC5. WATER SHALL NOT BE ADDED TO THE CONCRETE ONSITE TO INCREASE THE SLUMP.

SC6. CURING THE CONCRETE SLAB SHOULD START IMMEDIATELY AFTER THE SLAB HAS BEEN FINISHED TO PREVENT LOSS OF MOISTURE. THE METHODS INCLUDE EITHER, WETTING THE SLAB CONTINUOUSLY FOR UP TO 7 DAYS OR THE USE OF CURING COMPOUNDS WHICH SHOULD BE APPLIED AS SOON A AS FINISHED AND FREE WATER HAS EVAPORATED FROM THE SURFACE AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

SC7. SLABS HAVE NOT BEEN DESIGNED AS POLISHED OR BURNISHED CONCRETE U.N.O.

CLAY BRICK MASONRY

CB1. MASONRY UNITS, MORTAR, GROUT & BUILT IN MASONRY COMPONENTS SHALL COMPLY WITH AS3700, AS4773, AS2699 & NCC.

CB2. CONTROL JOINTS SHALL BE PROVIDED IN ACCORDANCE WITH THE NCC, BUT GENERALLY AT A MAX SPACING OF 5m AND AT A DISTANCE FROM ALL CORNERS BETWEEN 470mm AND 4.5m. GUIDANCE IS PROVIDED IN CEMENT CONCRETE & AGGREGATES AUSTRALIA TECHNICAL PUBLICATION TN61.

CB3. PROVIDE SLIDING HORIZONTAL TIES ACROSS JOINTS IN WALLS EQUIVALENT TO M.E.T 3-3 AT 560mm CTRS VERTICALLY IN EACH FACE OF BRICKS.

CB4. MASONRY TIES SHALL HAVE A DURABILITY CLASSIFICATION:

a. R4 WITHIN 1km OF THE SURF COAST, OR LESS THAN 100m FROM SALTWATER NOT SUBJECT TO BREAKING SURF AND SHALL BE GRADE 316L STAINLESS STEEL.

b. R3 AT DISTANCE BETWEEN 1km TO 10km FROM A SURF COAST OR AT A DISTANCE 100m TO 1km FROM SALTWATER NOT SUBJECT TO BREAKING SURF AND SHALL BE HDG470.

c. R2-R1 GREATER THAN 10km FROM THE SURF COAST SHALL BE HDG300.

CB5. SPACING OF MASONRY TIES SHALL BE IN ACCORDANCE WITH NCC.

CB6. WHERE MASONRY ADJOINS STRUCTURAL STEEL OR PASSES A RETURN WALL ON THE INNER SKIN PROVIDE MEDIUM DUTY TIES AT 360 MAX CTRS. SHOT FIX TIES TO STEELWORK.

CB6. LOAD BEARING WALLS SHALL BE TOPPED WITH M.E.T GRAPHITE GREASED SLIP JOINT OVER TOP COURSE OF BRICKWORK.

CB7. NON-LOAD BEARING WALLS SHALL FINISH 20mm SHORT OF SLAB SOFFIT AND SHALL BE FASTENED TO THE SLAB SOFFIT USING M.E.T - 4 SLIDING TIES OR APPROVED EQUIVALENT AT 460mm CENTRES.

CB8. MASONRY ANCHORS U.N.O INTO CLAY MASONRY SHALL BE HILTI HIT-HY70 CHEMICAL INJECTION ANCHORS OR APPROVED EQUIVALENT & ANCHORS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANISED STEEL.

CB9. ALL LINTELS SUPPORTING BRICKWORK ARE TO BE HDG600. ADDITIONALLY FOR R4 DURABILITY (SEVERE MARINE ENVIRONMENTS) OR C4 MARINE & C5 SEVERE MARINE CORROSIVITY CATEGORY, AN ADDITIONAL PROTECTIVE COATING SHALL BE PROVIDED IN ACCORDANCE WITH AS2699.3:2020 TABLE 3.1. EQUAL TO A MINIMUM 350 µM OF HIGH BUILD EPOXY PAINT TO AS3750.14. APPLY TWO COATS OF WATTYL EPINAMEL DTM985 OR SIMILAR.

CB10. SEVERE MARINE ENVIRONMENTS INCLUDE AREAS WITHIN 1km FROM THE SURF COAST OR 100m FROM SHELTERED BAYS OR SALTWATER RIVERS.

CB11. MINIMUM BEARING EACH END OF LINTELS:

a. SPANS 0mm TO 1800mm = 110mm BEARING EACH END.

b. SPANS 1801mm TO 3000mm = 230mm BEARING EACH END.

c. PROPPING OF LINTELS: TO PREVENT DEFLECTION OR EXCESSIVE ROTATION, TEMPORARILY PROP PROPRIETARY COLD-FORMED LINTELS UNTIL THE MASONRY REACHES ITS REQUIRED STRENGTH. MINIMUM PROPPING PERIOD = 7 DAYS

CB12. MORTAR CLASSES SHALL HAVE THE CEMENT, LIME, AND SAND IN THE FOLLOWING RATIOS:

MORTAR CLASS	CEMENT	LIME	SAND
M2	1	2	9
M3	1	1	6
M4	1	0.5	4.5

CONCRETE BLOCK MASONRY

CBM1. MASONRY CONSTRUCTION, UNITS, MORTAR, GROUT & BUILT IN MASONRY COMPONENTS SHALL COMPANY WITH AS3700, AS4773 & NCC.

CBM2. THE CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH OF THE MASONRY UNITS SHALL BE 15 MPa OR GREATER.

CBM3. MORTAR SHALL COMPLY WITH DURABILITY REQUIREMENTS OF AS3700.

CBM4. GROUT SHALL BE N20 MPa WITH 10mm AGGREGATE AND SLUMP 225mm.

CBM5. CONTROL JOINTS IN UNREINFORCED WALLS SHALL BE PROVIDED IN ACCORDANCE WITH THE AS3700.

CBM6. CONTROL JOINTS IN REINFORCED BLOCKWORK SHALL BE PROVIDED AT MAX 8.0m CTRS, PROVIDE R16-400 (600 LONG) DOWELS, GREASE ONE END AND PROVIDE EXPANSION CAP.

CBM7. PROVIDE CLEANOUT BLOCKS TO BOTTOM COURSE. CLEANOUT ALL CORES AT END OF EACH DAY.

CBM8. MASONRY TIES SHALL COMPLY WITH AS3700 FOR DURABILITY.

CBM9. LOAD BEARING BLOCKWORK WALLS SHALL BE CAPPED WITH M.E.T GRAPHITE GREASED SLIP JOINT.

CBM10. WHERE MASONRY ADJOINS STRUCTURAL STEEL OR PASSES A RETURN WALL ON THE INNER SKIN, INSTALL MEDIUM DUTY TIES AT 400 MAX CTRS. SHOT FIX TIES TO STEELWORK.

CBM11. MINIMUM COVER TO REINFORCEMENT, FROM THE INSIDE FACE OF THE FACE SHELL, IS TO BE 30mm.

CBM12. RETAINING WALLS SHALL BE FULLY CORE FILLED, H TYPE BLOCKS 20.48. NO BACK FILLING FOR 14 DAYS AFTER CORE FILLING.

CBM13. GROUTING IN LIFTS (WALL HEIGHT) OF MORE THAN 1.2m SHOULD NOT BE ATTEMPTED IN ONE POUR. WHERE THE LIFT IS MORE THAN 1.2m, IT IS PREFERABLE TO FILL THE CORES IN TWO STAGES AT LEAST 30 MINUTES APART.

CBM14. SUPPORT REINFORCED CONCRETE LINTELS FOR 14 DAYS MINIMUM.

CBM15. CROSS WALLS SHALL BE FULLY BONDED FOR THE HEIGHT OF THE WALL.

STEELWORK

S1. ALL STRUCTURAL DETAILS TO BE CONFIRMED, CHECKED & SITE MEASURED BY BUILDER PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO DENNIS PARTNERS.

S2. STEEL GRADES TO BE:

SECTIONS AND PLATES TO AS1204	300 MPa.
RHS & SHS	350 MPa.
CHS	350 MPa.

S3. FABRICATE AND ERECT STRUCTURAL STEELWORK IN ACCORDANCE WITH AS4100.

S4. COLD FORMED SECTIONS TO CONFORM WITH AS4600, 350 MPA.

S5. THESE DRAWINGS HAVE BEEN PREPARED TO INDICATE THE STRUCTURAL INTENT FOR DIMENSIONAL COORDINATION WITH OTHER CONSULTANTS. SHOP DRAWING TO BE APPROVED DRAWINGS TO THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.

S6. PROVIDE HOLES, CLEATS AND FIXING FOR TIMBER FRAMING, FINISHES, ETC. SHOWN ON ARCHITECTURAL DRAWINGS.

S7. BOLTS TO BE INSTALLED WITH ONE HARDENED WASHER UNDER THE TURNED PART.

S8. BOLTS TO BE GRADE 8.8 AND SNUG TIGHTENED (8.8/S) HDG U.N.O.

S9. ALL STEELWORK IN CONTACT WITH GROUND TO BE HDG600 AND PAINTED WITH TWO COATS OF INTERPLUS 1180.

S10. TYPICAL STEELWORK CONNECTIONS (UNLESS NOTED OTHERWISE)

a. COLUMN BASE PLATES: 12 BASE PLATE, 4/M16 HILTI HIT HY150 CHEMICAL INJECTION ANCHORS.
b. BEAM TO TOP OF COLUMN; CAP PLATE, 2 BOLTS TO CHANNELS, 4 BOLTS TO RHS/CHS/SHS/UB/UC.
c. BEAM TO SIDE OF COLUMN; FIN PLATE, 2 BOLTS.
d. BEAM TO SIDE OF BEAM; END OR FIN PLATE, 2 BOLTS.
e. COLUMNS TO TOP OF BEAM; BASE PLATE, 2 BOLTS TO CHANNELS, 4 BOLTS TO UB/UC SECTIONS.
f. ALL ROOF & WALL BRACING; CLEAT PLATES, 2 BOLTS.
g. PURLINS/WALL GIRTS; 8 CLEAT PLATES, 2 PURLIN BOLTS.

S11. UNLESS NOTED OTHERWISE, USE:

10MM BASE, CAP, GUSSET, FIN, AND END PLATES.
M20 8.8/S BOLTS.
FILLET WELDS SP CATEGORY WITH A THROAT THICKNESS THE LESSER OF 6 MM AND 1.4 TIMES THE THICKNESS OF THINNER CONNECTED MEMBER MADE WITH E4918 MILD STEEL ELECTRODES.

S12. ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS. SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.

S13. ALL STEEL BEAMS SUPPORTING BRICKWORK ARE TO BE SUPPORTED ON BRICKS WITH BEARING VIA 300 X 90 X 10 BEARING PL OR MIN. 250 LONG BEARING ON 20 WET MORTAR.

S14. ALL SITE WELDING TO BE PERFORMED BY QUALIFIED BOILERMAKER.

S15. TOUCH UP ALL SITE WELDS WITH 2 COATS OF 'COLD GALV.' ZINC RICH PAINT.

S16. GROUT ALL STEEL BASES BY DRY PACKING USING GROUT WHICH IS NON-SHRINK AND HAS A MINIMUM COMPRESSIVE STRENGTH AT 7 DAYS OF 40MPa.

S17. PROVIDE SEAL PLATES TO THE ENDS OF ALL HOLLOW SECTIONS, WITH 'BREATHER' HOLES IF MEMBERS ARE TO BE HOT DIP GALVANISED.

TIMBER

T1. ALL TIMBER, FRAMING, BRACING, TIE DOWNS & BLOCKING TO BE IN ALL TIMBER STRUCTURAL MEMBERS, WORKMANSHIP AND FIXING SHALL BE IN ACCORDANCE WITH AS1684.1 "RESIDENTIAL TIMBERS FRAMED CONSTRUCTION" AND AS1720.1 "TIMBER STRUCTURES".

T2. ALL TIMBER MATERIALS SHALL COMPLY WITH AS2082 "TIMBER HARDWOOD VISUALLY STRESS GRADED FOR STRUCTURAL PURPOSES" AND AS2858 "TIMBER-SOFTWOOD-VISUALLY STRESS-GRADED FOR STRUCTURAL PURPOSES".

T3. ALL EXPOSED TIMBER FRAMING PLATES, CLEATS, BRACKETS, AND BOLTS SHALL BE STAINLESS STEEL OR HDG600. AN ADDITIONAL PROTECTIVE COATING SHALL BE PROVIDED IN ACCORDANCE WITH AS2699.3:2020 TABLE 3.1. EQUAL TO A MINIMUM 350 µM OF HIGH BUILD EPOXY PAINT TO AS3750.14 FOR A C4 & C5 CORROSIVITY CATEGORY.

T4. LVL & GLT MANUFACTURED TIMBERS USED IN AN EXTERIOR ENVIRONMENT MUST BE L.O.S.P TREATED TO H3, INSTALLED, TREATED, AND PROTECTED IN ACCORDANCE WITH THE TIMBER MANUFACTURES SPECIFICATIONS. EXPOSED END SHALL BE PAINTED, FACED WITH SHEETING IN SUN EXPOSURE AND END/TOP CAPPED. MEMBERS SHALL HAVE A "PROTECTADECK" COVER STRIP (OR SIMILAR) TO APPLIED TO ALL TOP EDGES OF DECK JOISTS AND BEARERS TO MINIMISE THE INGRESS OF MOISTURE. POSTPRODUCTION CUTS TO EXTERNAL TIMBERS MUST BE TREATED WITH A SUITABLE "BRUSH/SPRAY" PRESERVATIVE.

T5. ALL PROPRIETARY FIXINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS. ALL METAL FIXINGS SHALL BE COMPATIBLE WITH TIMBER GLUES AND PRESERVATIVE TREATMENTS.

T6. ALL TIMBER SHALL BE PROTECTED FROM THE ELEMENTS DURING CONSTRUCTION.

T7. CAMBER IN BEAMS OR RAFTERS SHALL BE AS NOTED ON THESE STRUCTURAL DRAWINGS AND BEAMS/RAFTERS SHALL BE INSTALLED WITH NATURAL HOG UP.

T8. ALL EXPOSED LINES OF BOLTS SHALL BE EVENLY AND EQUALLY SPACED UNO. AND SHALL ALIGN WITH ADJACENT EXPOSED BOLT GROUPS.

T9. ALL BOLTS IN TIMBER CONSTRUCTION SHALL BE MINIMUM M12. BOLT HOLES TO BE DRILLED TO THE EXACT SIZE. WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 3 TIMES THE BOLT DIAMETER. ALL BOLTED CONNECTIONS SHALL USE WASHERS UNDER HEADS AND NUTS. ALL EXTERNAL BOLTS AND WASHERS SHALL BE HOT DIP GALVANISED

T10. UNLESS NOTED OTHERWISE USE:

a. M12 4.6/S GALVANISED BOLTS WITH 55DIA X 3.0 GALVANISED WASHERS UNDER HEAD AND NUT.
b. M12 4.6/S GALVANISED HEX HEAD COACH SCREWS WITH 55DIA X 3.0 GALVANISED WASHERS.
c. 3.15mm GALVANISED NAILS WITH MINIMUM 35MM EMBEDMENT.
d. 14 GAUGE (6.4mm THREAD DIAMETER) GALVANISED TYPE 17, BUGLE HEADED WITH MINIMUM 50mm EMBEDMENT.
e. GALVANISED CONNECTOR PLATES COMPLYING WITH AS1649.
f. MAINTAIN TIMBER EDGE DISTANCES FOR BOLTS AND FASTENERS AS PER AS1720.
g. ALL TIMBER JOINTS AND NOTCHES ARE TO BE A 100MM MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER DEFECTS.
h. NO PENETRATIONS OR NOTCHES OTHER THAN THOSE SHOWN ON THESE STRUCTURAL DRAWINGS SHALL BE MADE IN ANY TIMBER MEMBERS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

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ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
C1	Construction Issue	TJW	CL	JD	18/03/25
P2	Preliminary Issue	ELC	CL	JD	16/08/24
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DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: GENERAL NOTES
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S03 / 20
ISSUE: C1

i. GLUE LAMINATED TIMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH AS1328. MEMBERS FOR EXTERNAL USE SHALL BE FABRICATED USING RESORCINOL OR PHENOLIC ADHESIVE.

j. NON-LOADBEARING TIMBER FRAMED WALLS SHALL FINISH 10MM SHORT OF THE ROOF FRAMING AND SHALL BE LATERALLY RESTRAINED USING 'PRYDA PHL' BRACKETS WITH SLOTTED HOLES @ 1800 CTS IN ACCORDANCE WITH AS1684.

k. ALL CONSTRUCTION WORK SHOULD BE IN ACCORDANCE WITH AS3660.1-2014 "NEW CONSTRUCTION TERMITE MANAGEMENT".

l. TIMBERS SHALL HAVE A DURABILITY CLASS TO AS1684 APPENDIX B.

m. TIMBERS SHALL BE SELECTED IN ACCORDANCE WITH THE FOLLOWING HAZARD CLASS:

HAZARD CLASS	EXPOSURE/USE
H2	INTERIOR ABOVE GROUND - FRAMING, FLOORING
H3	EXTERIOR ABOVE GROUND - FASCIA, PERGOLAS, DECKING
H4	EXTERIOR IN GROUND, NON-STRUCTURAL.
H5	EXTERIOR IN GROUND, STRUCTURAL - RETAINING WALLS, POST, PILING

FRAMES & TRUSSES

FT1. ALL TIMBER, FRAMING, BRACING, TIE DOWNS & BLOCKING TO BE IN ACCORDANCE WITH AS1684.

FT2. BUILDER SHALL CONFIRM LOAD POINTS, INTERNAL LOAD BEARING WALLS ETC. FROM TRUSS & FRAME MANUFACTURES PLANS AND PROVIDE PLANS TO DENNIS PARTNERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

FT3. IF A DISCREPANCY EXISTS BETWEEN THE TRUSS MANUFACTURES DETAILS AND THESE ENGINEERING PLANS. IMMEDIATELY NOTIFY DENNIS PARTNERS.

FT4. TILED DECKS SHALL HAVE A MIN FALL OF 1 IN 100, DRIP EDGE, MIN 50mm STEPDOWN AND WATERPROOFING MEMBRANE.

FT5. UNLESS NOTED OTHERWISE PROVIDE THE MINIMUM FOR:

a. ROOFS AND HORIZONTAL BRACING - USE DIAGONAL CROSS STRAP BRACING THROUGHOUT ROOF. SCREW FIX TO EACH RAFTER, PURLIN OR TRUSS AND SECURELY FASTEN TO TOP PLATE/BEAM AT ENDS.

b. STUD WALLS - STRAP TOP & BOTTOM PLATE TO A MINIMUM OF EVERY SECOND STUD SECURE BTM PLATE TO SLAB BELOW WITH M10 TRUBOLT AT 2000mm MAX CTRS OR SECURE BTM PLATE TO FLOOR FRAME USING 14 GAUGE TYPE 17 BUGLE SCREWS AT 900 CTRS.

c. MASONRY WALLS - FASTEN TOP PLATE TO BRICKWORK USING ROOF STRAPS (SIMILAR M.E.T. 7.1 OR APPROVED EQUIVALENT) AT A MAXIMUM OF 1200mm SPACING ANCHORED 15 C/S DOWN. PROVIDE STRAPS EACH SIDE OF ALL OPENINGS. PROVIDE ADDITION HOLD DOWNS AS DETAILED.

d. WALL BRACING - PROVIDE VERTICAL BRACING IN ACCORDANCE WITH AS1684. PROVIDE ADDITIONAL VERTICAL BRACING WERE SHOWN AND AS DETAILED ON THESE DRAWINGS.

FT6. WHERE A HOLD-DOWN DETAIL HAS NOT BEEN PROVIDED BUILDER SHALL OBTAIN FROM DENNIS PARTNERS.

FT7. TIMBER SUPPLIER TO & CONFIRM ALL MEMBER SIZES AND REPORT ANY DISCREPANCIES TO DENNIS PARTNERS.

WORKPLACE HEALTH AND SAFETY

WP1. THE CONTRACTOR AND ALL SUBCONTRACTORS AND RESPONSIBLE FOR CONSTRUCTING THE WORK IN ACCORDANCE WITH THE WORK HEALTH AND SAFETY (WHS) ACT 2011; WHS REGULATIONS 2017; RELEVANT CODES OF PRACTICES, AUSTRALIAN STANDARDS, AND OTHER REGULATORY REQUIREMENTS. THE PRINCIPLE CONTRACTOR MUST INFORM ALL STAKEHOLDERS, INCLUDING THE ENGINEER, OF NEW HAZARDS IDENTIFIED IN THE COURSE OF PLANNING AND UNDERTAKING THE WORKS.

WP2. THE HAZARDS IDENTIFIED ON THESE DRAWINGS ARE NOT AN ENTIRE ASSESSMENT OF THE HAZARDS AND DO NO RELIEVE OTHER PARTIES OR STAKEHOLDERS OF THEIR RESPONSIBILITY UNDER THE WHS ACT 2011, WHS REGULATIONS 2017 AND THE CODE OF PRACTICE FOR SAFE DESIGN OF STRUCTURES.

WP3. TEMPORARY BRACING AND SUPPORT OF STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MAINTAINED DURING ALL STAGE OF CONSTRUCTION.

SAFETY IN DESIGN

A SAFETY IN DESIGN REPORT HAS BEEN PREPARED BY DENNIS PARTNERS CONSULTING ENGINEERS FOR THIS PROJECT. IF YOU ARE NOT IN RECEIPT OF THIS REPORT, PLEASE CONTACT DENNIS PARTNERS FOR A COPY PRIOR TO STARTING CONSTRUCTION WORKS.

EXISTING SERVICES

CONTRACTOR TO BE AWARE THAT EXISTING SERVICES ARE LOCATED WITHIN THE SITE. LOCATIONS OF ALL SERVICES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORKS. CONTRACTOR TO CONFIRM WITH RELEVANT AUTHORITY REGARDING MEASURES TO BE TAKEN TO ENSURE SERVICES ARE PROTECTED OR PROCEDURES ARE IN PLACE TO DEMOLISH AND/OR RELOCATE.

EXISTING STRUCTURES

CONTRACTOR TO BE AWARE EXISTING STRUCTURES MAY EXIST WITHIN THE SITE. TO PREVENT DAMAGE TO EXISTING STRUCTURE(S) AND/OR PERSONNEL, SITE WORKS TO BE CARRIED OUT AS FAR AS PRACTICABLY POSSIBLE FROM EXISTING STRUCTURES(S).

EXISTING TREES

CONTRACTOR TO BE AWARE EXISTING TREES MAY EXIST WITHIN THE SITE WHICH NEED TO BE PROTECTED. TO PREVENT DAMAGE TO TREES AND/OR PERSONNEL, SITE WORKS TO BE CARRIED OUT AS FAR PRACTICABLY POSSIBLE FROM EXISTING TREES. ADVICE NEEDS TO BE SOUGHT FROM ARBORIST AND/OR LANDSCAPE ARCHITECT ON MEASURES REQUIRED TO PROTECT TREES.

EXCAVATIONS

IF DEEP EXCAVATION DUE TO STORMWATER DRAINAGE WORKS IS REQUIRED, CONTRACTOR TO ENSURE SAFE WORKING PROCEDURES ARE IN PLACE FOR THE WORKS. ALL EXCAVATIONS TO BE FENCED OFF AND BATTERS ADEQUATELY SUPPORTED TO APPROVAL OF GEOTECHNICAL ENGINEER.

GROUND CONDITIONS

CONTRACTOR TO BE AWARE OF THE SITE GEOTECHNICAL CONDITIONS REFER TO GEOTECHNICAL REPORT FOR DETAILS.

CONFINED SPACES

CONTRACTOR TO BE AWARE OF POTENTIAL HAZARDS DUE TO WORKING IN CONFINED SPACES SUCH AS STORMWATER PITS, TRENCHES AND/OR TANKS. CONTRACTOR TO PROVIDE SAFE WORKING METHODS AND USE APPROPRIATE PPE WHEN ENTERING CONFINED SPACES.

MANUAL HANDLING

CONTRACTOR TO BE AWARE MANUAL HANDLING MAY BE REQUIRED DURING CONSTRUCTION. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ENSURE MANUAL HANDLING PROCEDURES AND ASSESSMENTS ARE IN PLACE PRIOR TO COMMENCING WORKS.

SITE ACCESS/EGRESS/OVER HEAD POWER LINES

CONTRACTOR TO BE AWARE OF SITE WORKS THAT OCCUR IN CLOSE PROXIMITY TO FOOTPATHS, ROADWAYS AND OVERHEAD POWER LINES. CONTRACTOR TO ERECT APPROPRIATE BARRIERS AND SIGNAGE TO PROTECT SITE PERSONNEL AND PUBLIC.

VEHICLE MOVEMENT

CONTRACTOR TO SUPPLY AND COMPLY WITH A TRAFFIC MANAGEMENT PLAN AND PROVIDE ADEQUATE SITE TRAFFIC CONTROL INCLUDING TRAFFIC MARSHAL TO SUPERVISE VEHICLE MOVEMENTS, DELIVERIES ETC. WHEN NECESSARY.

WORKING FROM HEIGHTS

CONTRACTOR TO BE AWARE OF POTENTIAL HAZARDS DUE TO WORKING FROM HEIGHTS SUCH AS ON SCAFFOLDING OR LADDERS. CONTRACTOR TO PROVIDE SAFE WORKING METHODS AND USE APPROPRIATE PPE WHEN WORKING FROM HEIGHTS.

SCAN THE QR CODE TO ACCESS A LIST OF SAFETY GUIDELINES

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ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
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BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE
GENERAL NOTES

FOR
AYRES

SCALE @ A3
AS SHOWN

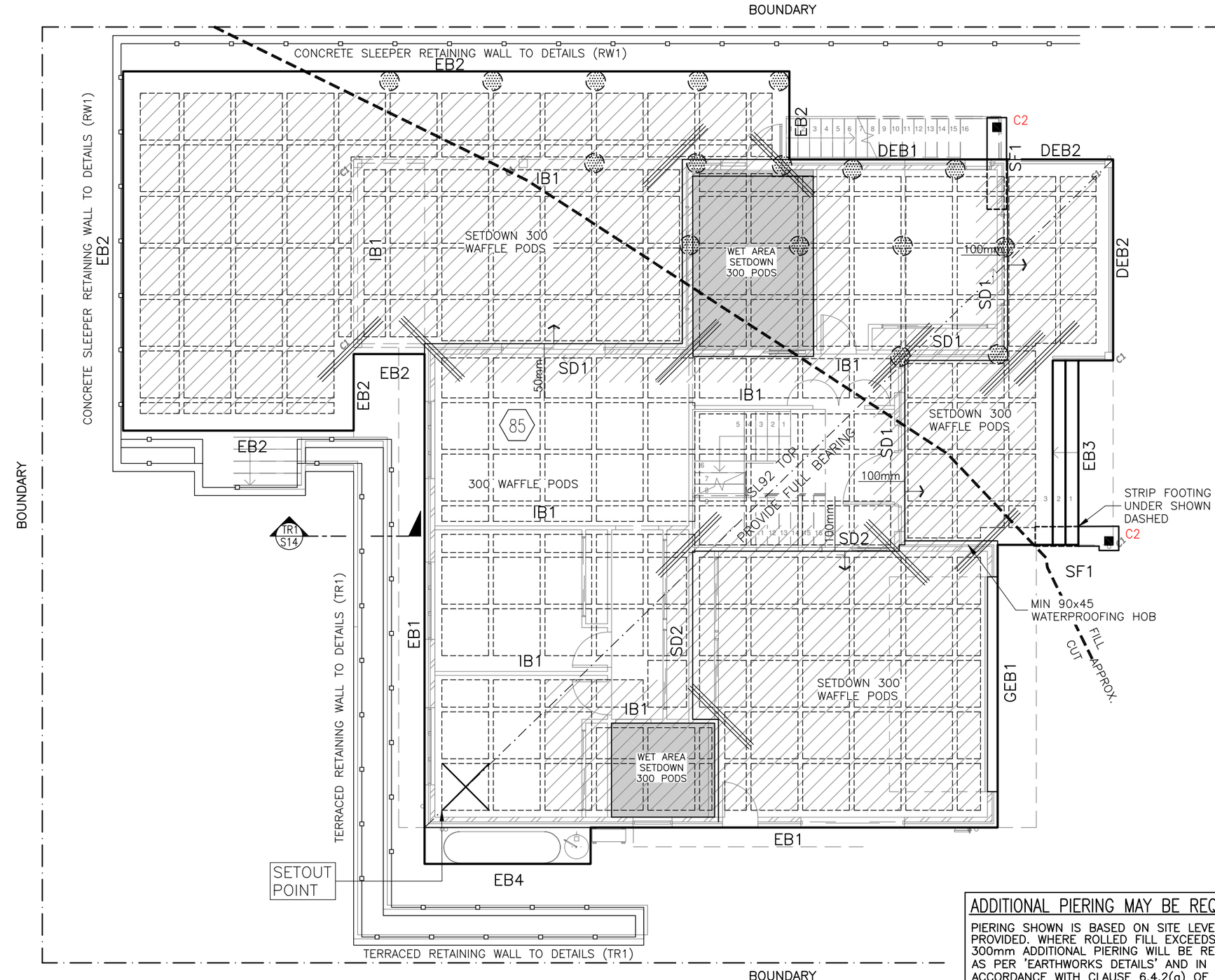
DRAWN
ELC

APPROVED

JOB NO.
5431

SHEET NO.
S04 / 20

ISSUE
C1



CLASSIFICATIONS:

SITE CLASSIFICATION	'P'
SLAB CLASSIFICATION	'H1'
DURABILITY CLASSIFICATION	'R3'
BAL RATING	BAL29

DURABILITY CLASSIFICATION TO BE READ IN CONJUNCTION WITH AS4773, AS3700 AND NCC VOL2 2019.

BAL RATING TO BE IN CONJUNCTION WITH AS3959 AND NCC VOL1 2022.

WAFFLE RAFT SPECIFICATION

CONCRETE GRADE		MAIN DWELLING	
STRENGTH:	N25	FABRIC:	SL92
SLUMP:	100mm	POD:	300
AGGREGRATE:	20mm	THICKNESS:	85mm
GARAGE/VERANDAH		WET AREA	
FABRIC:	SL92	FABRIC:	SL92
POD:	300	POD:	300
THICKNESS:	85mm	THICKNESS:	110mm

PIER DESIGN PARAMETERS

BEAM TYPE	SPACING(mm)
EDGE BEAMS	2400
INTERNAL BEAMS	2400
STEPPED BEAMS	2400
INTERNAL RIBS	2400

FOUNDATION	PIERø (mm)	SOCKET DEPTH
STIFF CLAY	450	500mm

LEGEND

	SETDOWN 300 PODS TO ARCH. SPEC.
	WET AREA SETDOWN
	100 THICK PAVING SLAB SL82 REINFORCEMENT
"CJ"	CRACK CONTROL JOINT
"EJ"	EXPANSION JOINT
	L11TM 3–BAR 2000 LONG
	450ø PIERS INTO VERY STIFF NATURAL STRATA WITH ALLOWABLE END BEARING CAPACITY OF 250kPa

ADDITIONAL PIERING MAY BE REQUIRED

PIERING SHOWN IS BASED ON SITE LEVELS PROVIDED. WHERE ROLLED FILL EXCEEDS 300mm ADDITIONAL PIERING WILL BE REQUIRED AS PER 'EARTHWORKS DETAILS' AND IN ACCORDANCE WITH CLAUSE 6.4.2(a) OF AS2870, SUITABLE FILL AS DEFINED IN AS3798–2007

WAFFLE SLAB PLAN

SCALE 1:100

FILLING UNDER SLABS TO BE IN ACCORDANCE WITH CLAUSE 6.4.2(a) OF AS2870, SUITABLE FILL AS DEFINED IN AS3798–2007

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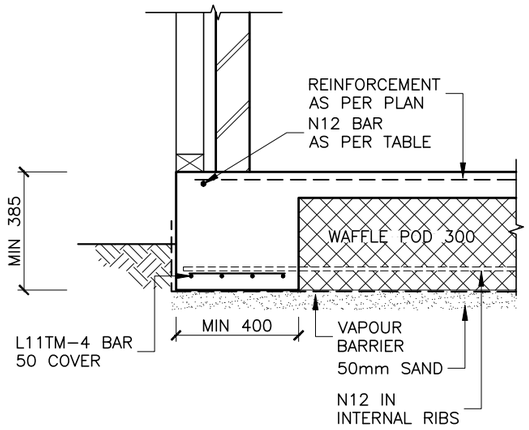
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

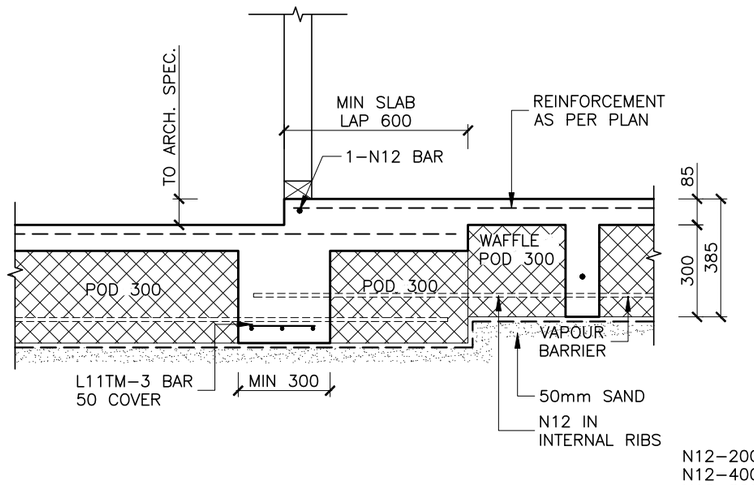
TITLE: WAFFLE SLAB PLAN
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S05 / 20
ISSUE: C1

ALTERNATIVE REINFORCEMENT
DETAILS FOR BEAM WIDTH>300

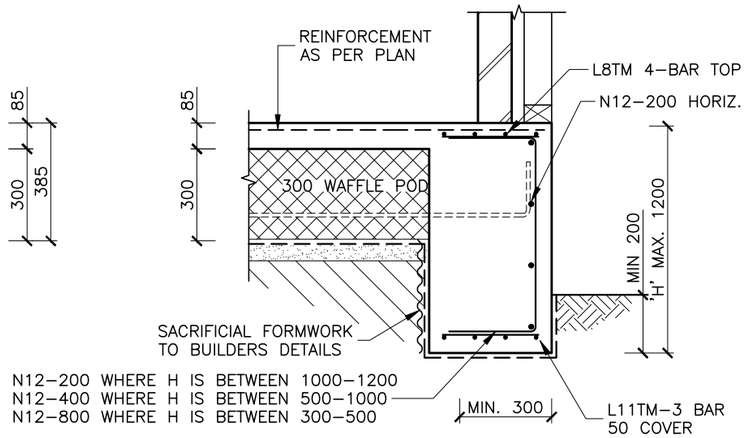
STEM WIDTH (mm)	TOP STEEL
151 TO 220	1–N12
221 TO 330	2–N12
331 TO 440	3–N12
BEAM BASE WIDTH (mm)	BOTTOM STEEL
300 TO 370	L11TM–3 BAR
371 TO 480	L11TM–4 BAR
481 TO 600	L11TM–5 BAR



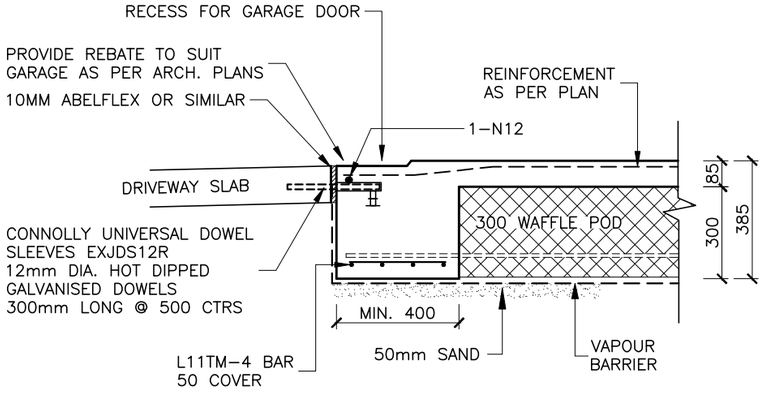
EDGE BEAM DETAIL 'EB1'
SCALE 1:20



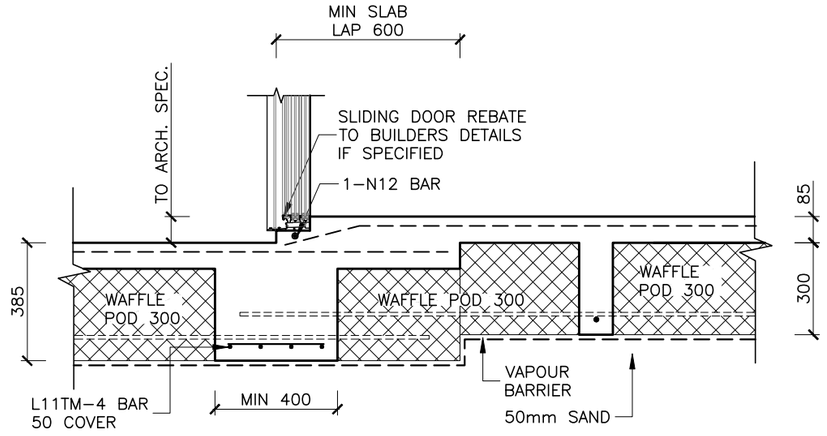
STEP DOWN DETAIL 'SD2'
SCALE 1:20



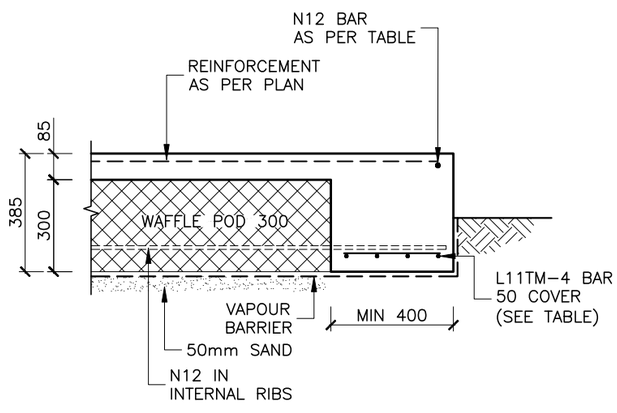
DEEPENED EDGE BEAM DETAIL 'DEB1'
SCALE 1:20
ALTERNATIVE FOR 'EB1' IF REQUIRED



EDGE BEAM DETAIL 'GEB1'
SCALE 1:20



STEP DOWN DETAIL 'SD1'
SCALE 1:20



EDGE BEAM DETAIL 'EB2'
SCALE 1:20

ALTERNATIVE REINFORCEMENT DETAILS
FOR BEAM WIDTH > 300

BEAM BASE WIDTH (mm)	BOTTOM STEEL	TOP STEEL
300 TO 370	L11TM–3 BAR	1–N12
371 TO 480	L11TM–4 BAR	2–N12
481 TO 600	L11TM–5 BAR	3–N12

NOTE:

- CONCRETER TO CONFIRM STEP DOWNS WITH ARCHITECTURAL PLANS.
- CONFIRM POINT LOADS & DISTRIBUTED LOADS FROM FRAMING MANUFACTURER PRIOR TO CONSTRUCTION.

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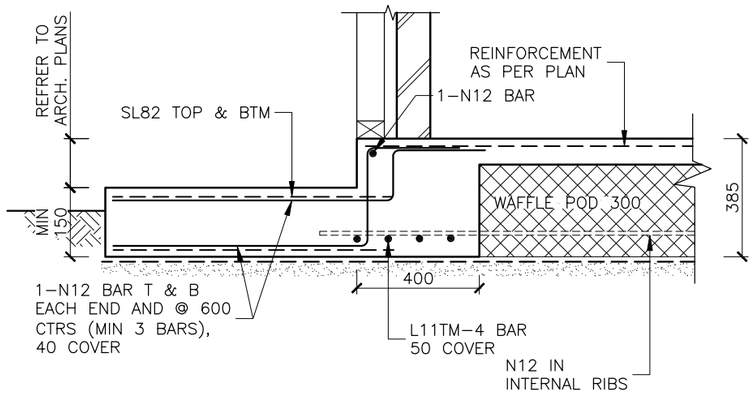
BUILDING DESIGNER: collinswcollins BUILDING DESIGNERS

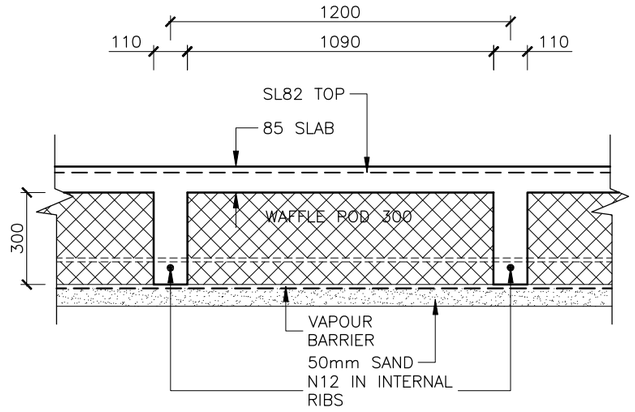
PROJECT: PROPOSED DWELLING AT LOT 5 DP213365 No. 9 SURFVIEW AVENUE, BLACK HEAD, NSW 2430

TITLE: SECTIONS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S06 / 20
ISSUE: C1

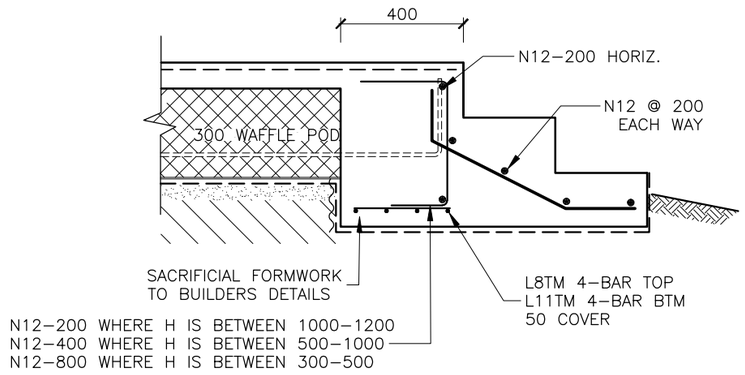


EDGE BEAM DETAIL 'EB4'
SCALE 1:20

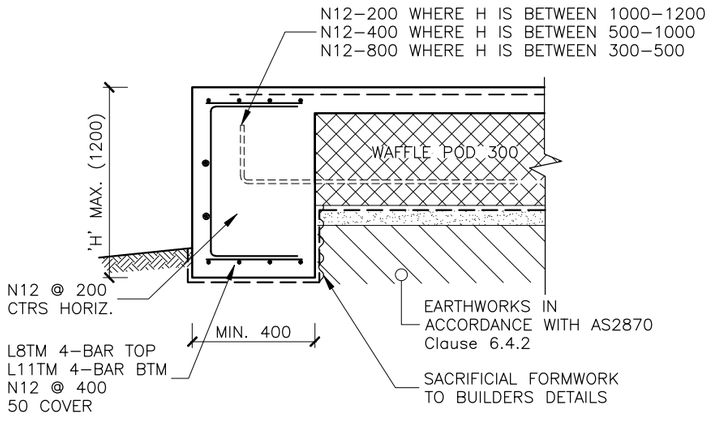
TYPICAL WATER TANK SLAB DETAIL



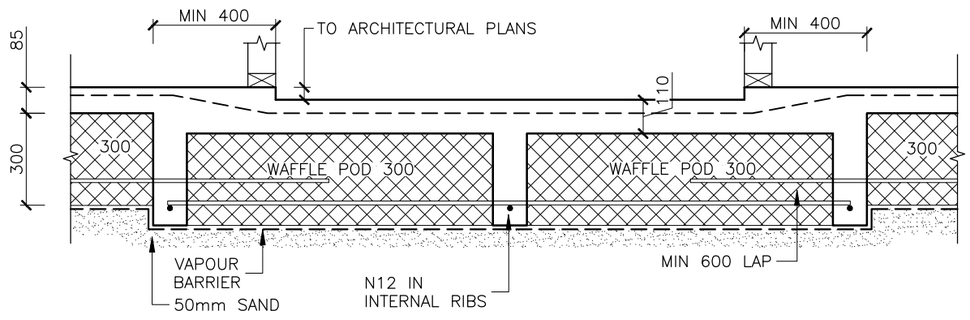
TYPICAL WAFFLE POD DETAIL
SCALE 1:20



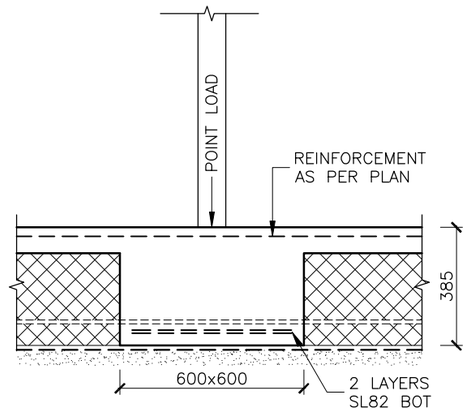
EDGE BEAM DETAIL 'EB3'
SCALE 1:20



DEEPENED EDGE BEAM DETAIL 'DEB2'
SCALE 1:20



TYPICAL WET AREA SET DOWN DETAIL
SCALE 1:20



TYPICAL POINT LOAD PAD
SCALE 1:20

BUILDER TO CONFIRM POINT LOADS ON SITE.

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QLD #09147

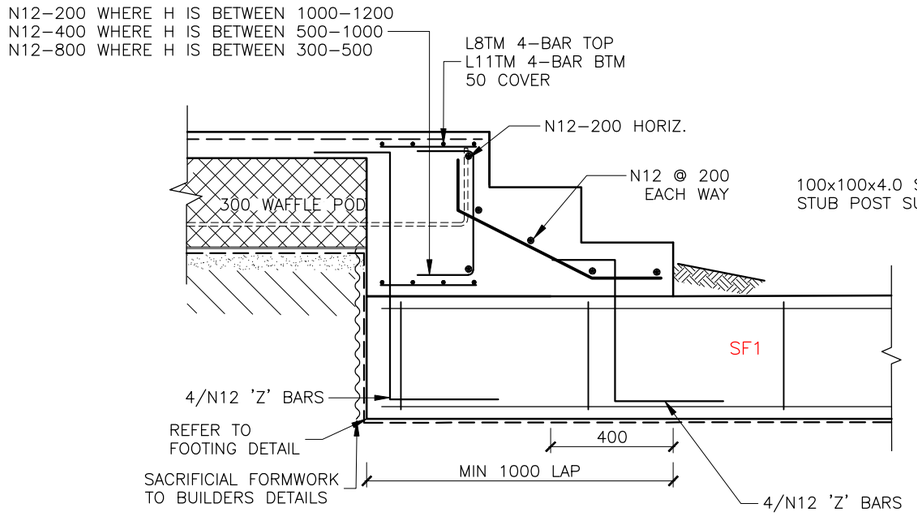
ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
C1	Construction Issue	TJW	CL	JD	18/03/25
P2	Preliminary Issue	ELC	CL	JD	16/08/24
P1	Preliminary Issue	ELC	CL	JD	20/05/24

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

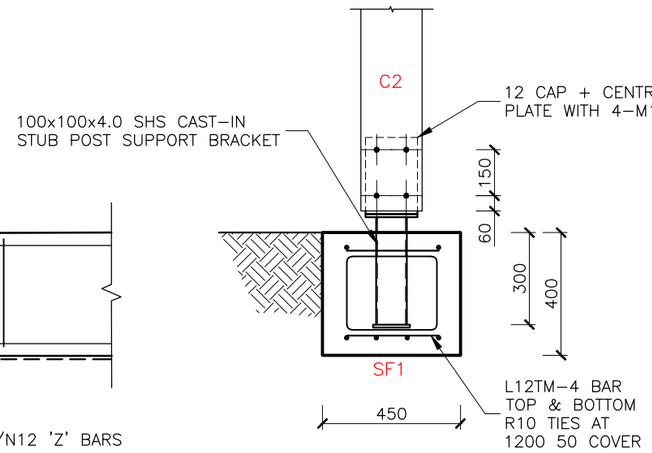
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

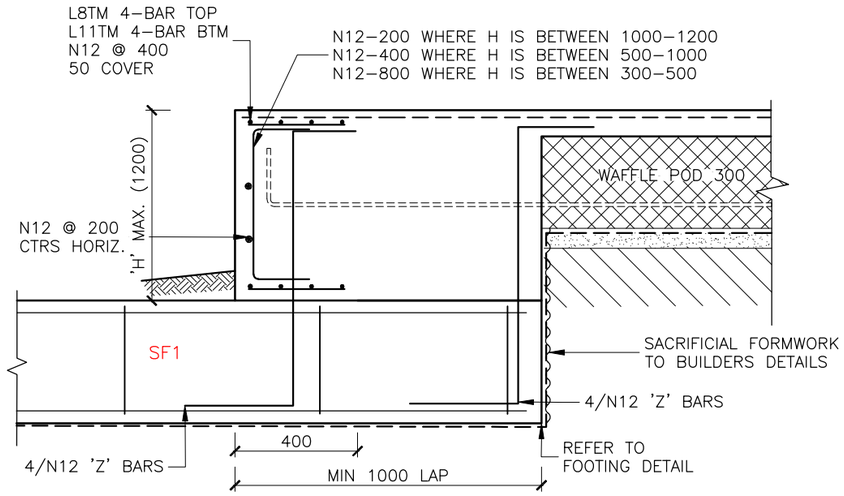
TITLE: SECTIONS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S07 / 20
ISSUE: C1



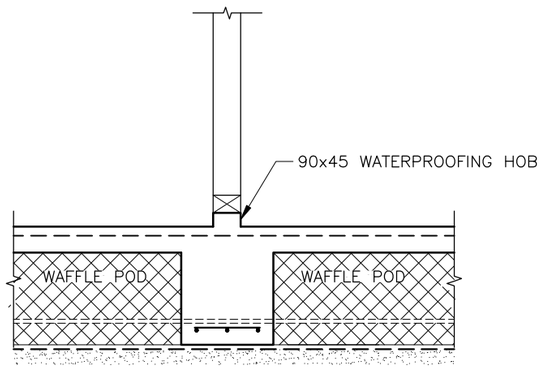
FOOTING CONNECTION TO SLAB
SCALE 1:20



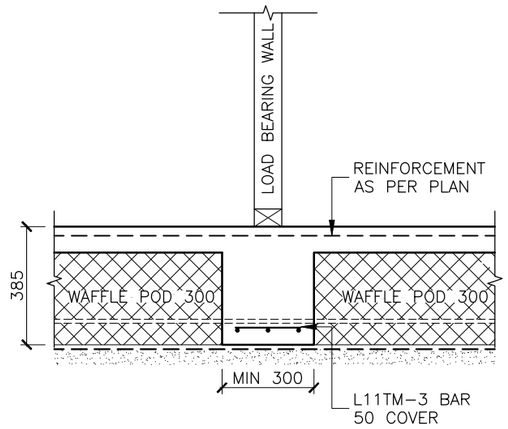
FOOTING DETAIL 'SF1'
SCALE 1:20



FOOTING CONNECTION TO SLAB
SCALE 1:20

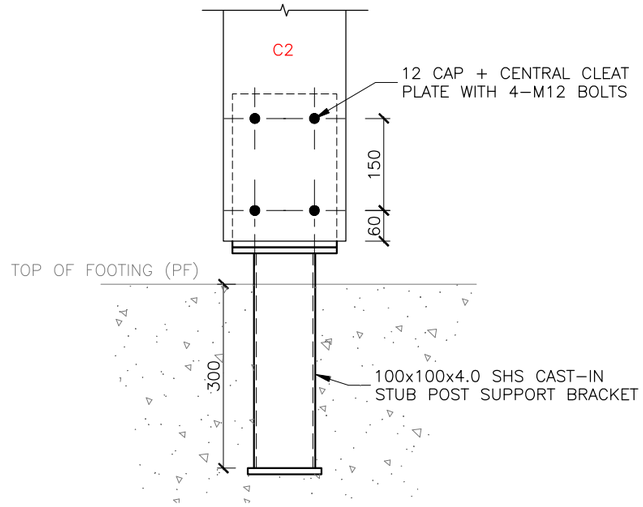


HOB WATERPROOFING DETAIL
SCALE 1:20



INTERNAL BEAM DETAIL 'IB1'
SCALE 1:20

BUILDER TO CONFIRM LOAD BEARING WALLS ON SITE.



TYPICAL 'C2' POST SUPPORT DETAIL
SCALE 1:10

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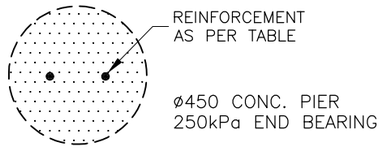
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

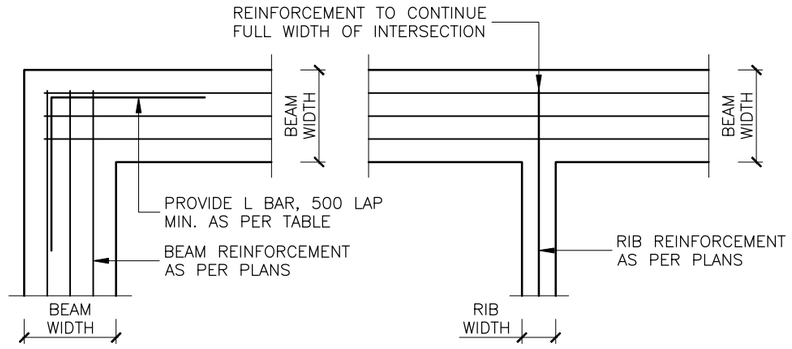
TITLE: SECTIONS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S08 / 20
ISSUE: C1

PIER REINFORCEMENT

PIER DEPTH	REINFORCEMENT
LESS THAN 1m	NONE
1m TO 2m	2/N12
2m TO 3m	4/N12

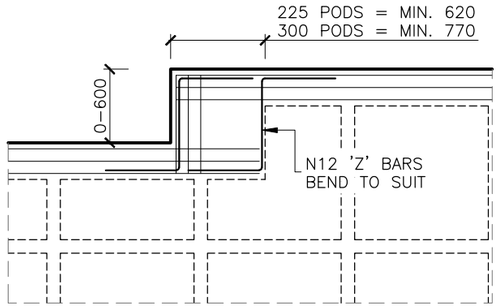


TYPICAL BORED PIER REINFORCEMENT DETAIL
SCALE 1:20

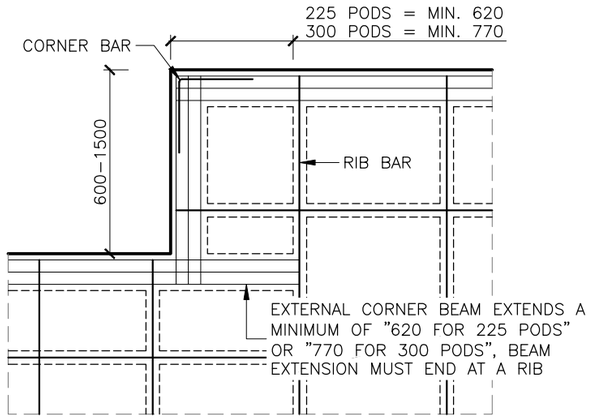


TYPICAL INTERSECTION REINFORCEMENT DETAIL
SCALE 1:20

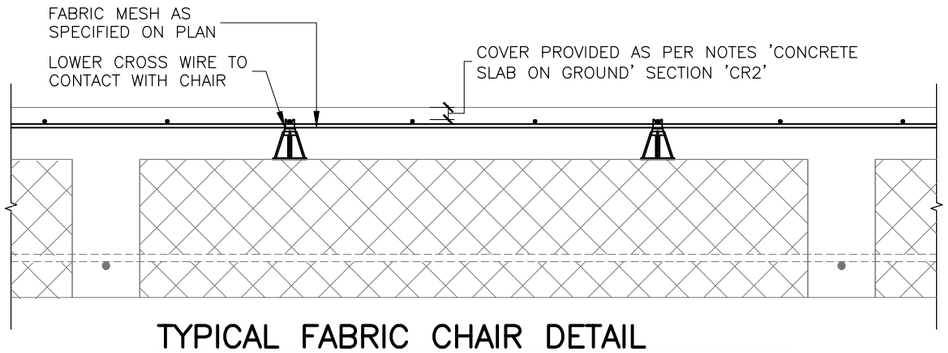
REINFORCEMENT TYPE	MIN. LAP @ CORNERS	MIN. LAP @ 'T' INTERSECTIONS
REINFORCING BARS	L BAR, 500 LONG EACH LEG	FULL WIDTH OF INTERSECTION
TRENCH MESH	FULL WIDTH OF INTERSECTION	FULL WIDTH OF INTERSECTION



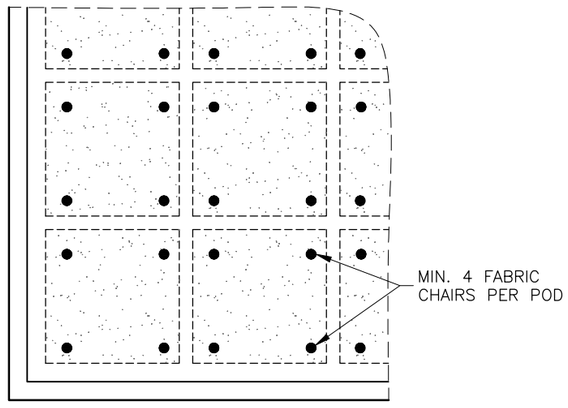
0–600mm EXTERNAL CORNER



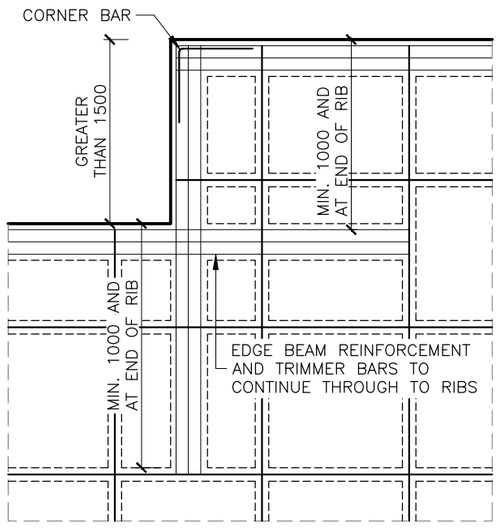
600–1500mm EXTERNAL CORNER



TYPICAL FABRIC CHAIR DETAIL
SCALE 1:10
25–40 CHAIRS ACCEPTABLE WHERE LAPPING OCCURS



TYPICAL FABRIC CHAIR ORIENTATION DETAIL
SCALE 1:50



GREATER THAN 1500mm EXTERNAL CORNER

CONTINUITY OF SLAB BEAMS
SCALE 1:50

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BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: TYPICAL DETAILS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S09 / 20
ISSUE: C1

Revision A 09/01/24

SITE FILLING AND EARTHWORKS OPTIONS

FILLING: FILLING USED IN THE CONSTRUCTION OF A SLAB. EXCEPT WHERE THE SLAB IS SUSPENDED, SHALL CONSIST OF CONTROLLED FILL, ROLLED FILL AND UNCONTROLLED FILL AS FOLLOWS:

OPTION 1 - CONTROLLED FILL EARTHWORKS:

(1A) - CONTROLLED FILL:
CONTROLLED FILL IS MATERIAL THAT HAS BEEN PLACED AND COMPACTED IN LAYERS BY COMPACTION EQUIPMENT WITHIN A DEFINED MOISTURE RANGE TO A DEFINED DENSITY REQUIREMENT. EXCEPT AS PROVIDED BELOW, CONTROLLED FILL SHALL BE PLACED IN ACCORDANCE WITH AS3798.

(1B) - SAND FILL:
SAND FILL UP TO 0.8m DEEP, WELL COMPACTED IN NOT MORE THAN 0.3m THICK LAYERS BY A VIBRATING PLATE OR VIBRATING ROLLER, SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT A SATISFACTORY TEST FOR SAND FILL NOT CONTAINING GRAVEL SIZED MATERIAL IS THE ACHIEVEMENT OF A BLOW COUNT OF 7 OR MORE PER 0.3m USING THE PENETROMETER TEST DESCRIBED IN AS1289.F3.3.

(1C) NON-SAND FILL:
NON-SAND FILL UP TO 0.4m DEEP, WELL COMPACTED IN NOT MORE THAN 0.15m LAYERS BY A MECHANICAL ROLLER, SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. CLAY FILL SHALL BE MOIST DURING COMPACTION.

OPTION 2 - ROLLED FILL EARTHWORKS:

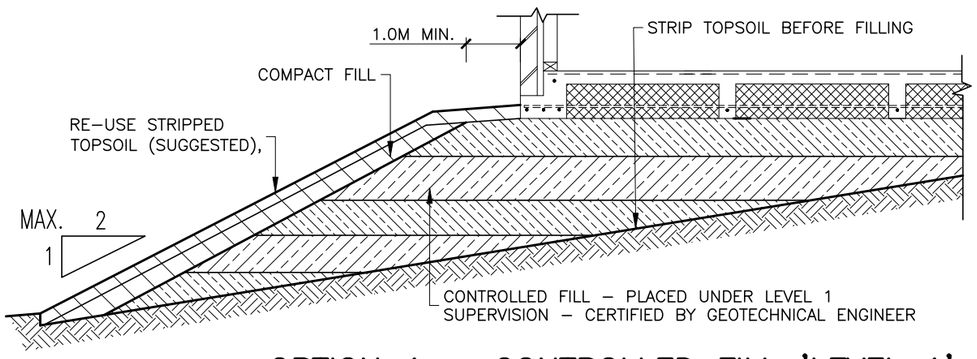
(2A) - ROLLED FILL:
ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 0.6m COMPACTED IN LAYERS NOT MORE THAN 0.3m THICK FOR SAND MATERIAL OR 0.3m COMPACTED IN LAYERS NOT MORE THAN 0.15m THICK FOR CLAYS.

OPTION 3 - UNCONTROLLED FILL EARTHWORKS:

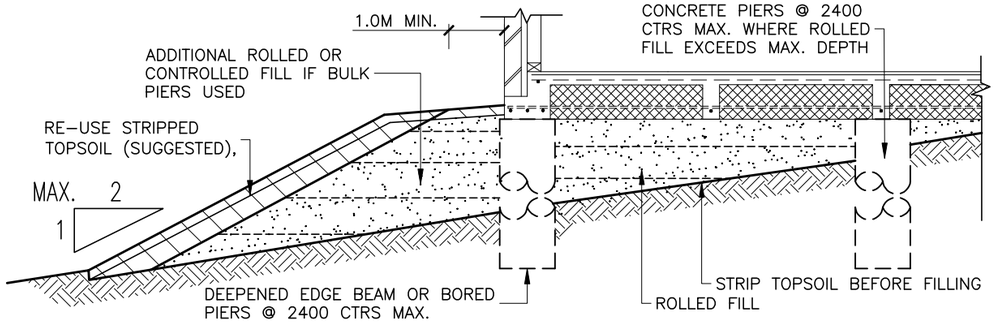
(3A) - UNCONTROLLED FILL
SITE FILL MATERIALS ARE DEEMED UNCONTROLLED FILL WHEN IT HAS NOT BEEN COMPACTED IN ACCORDANCE WITH AS3789. UNCONTROLLED FILL EARTHWORK SITES REQUIRE BORED SLAB PIERING AS PER SLAB PIERING DETAILS. SLAB PIERS TO BE LOCATED AT MAX. 2400 CTRS UNO. DEPTHS TO BE DETERMINED ON SITE AND SOCKETED MIN. 500 BELOW FILL INTO STIFF NATURAL STRATA.

NOTE: THE DEPTHS OF FILL GIVEN IN THIS CLAUSE ARE THE DEPTHS MEASURED AFTER COMPACTION OF FILL MATERIALS.

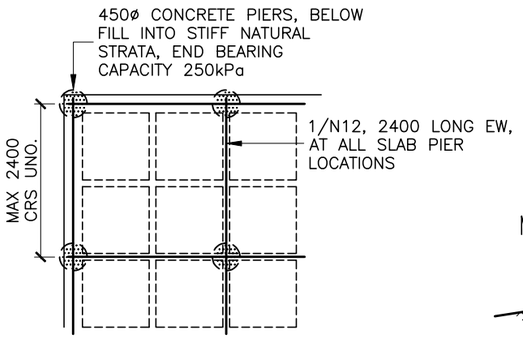
FILL AND SLAB EDGE OPTIONS FOR LOW SIDE OF SLOPED SITES



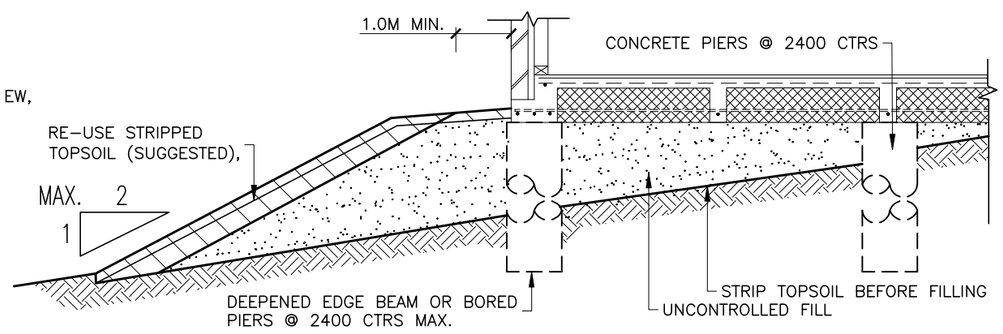
OPTION 1 – CONTROLLED FILL 'LEVEL 1'
NOT TO SCALE



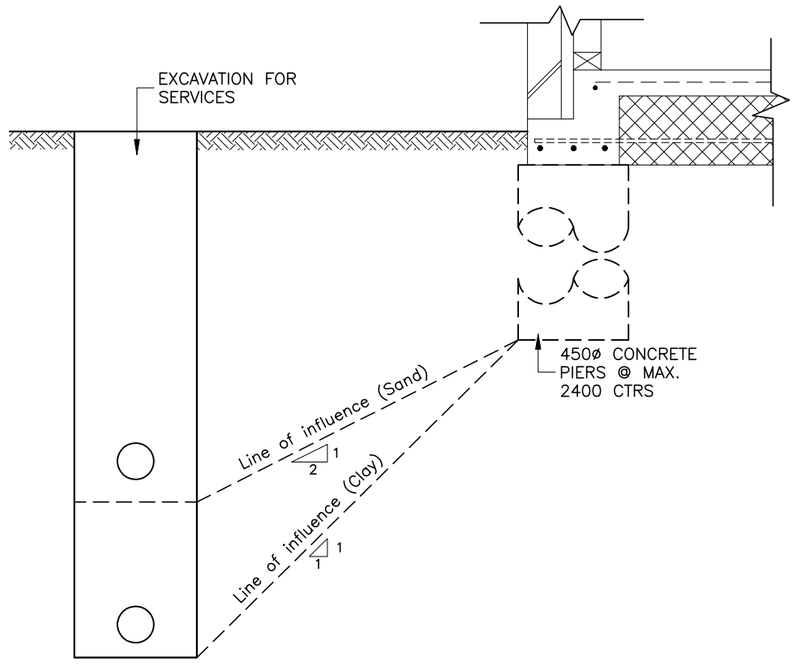
OPTION 2 – ROLLED FILL
NOT TO SCALE



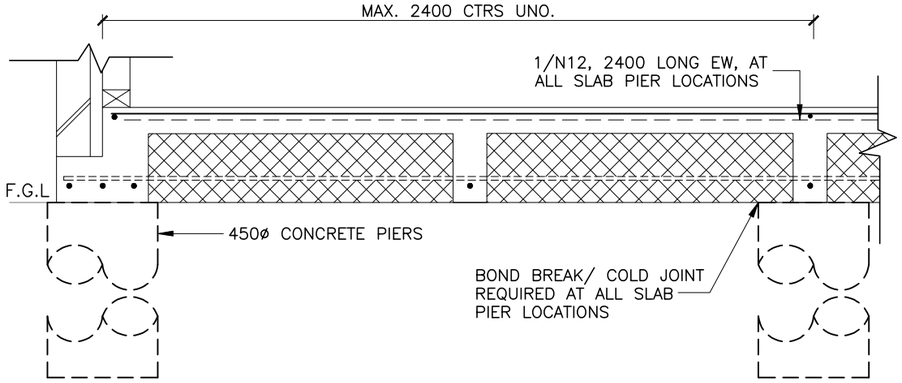
TYPICAL PIER LAYOUT DETAIL
SCALE 1:10



OPTION 3 – UNCONTROLLED FILL
NOT TO SCALE



SERVICE TRENCH ADJACENT TO FOOTINGS
SCALE 1:20



TYPICAL SLAB PIER REINFORCEMENT DETAIL
SCALE 1:20

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DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

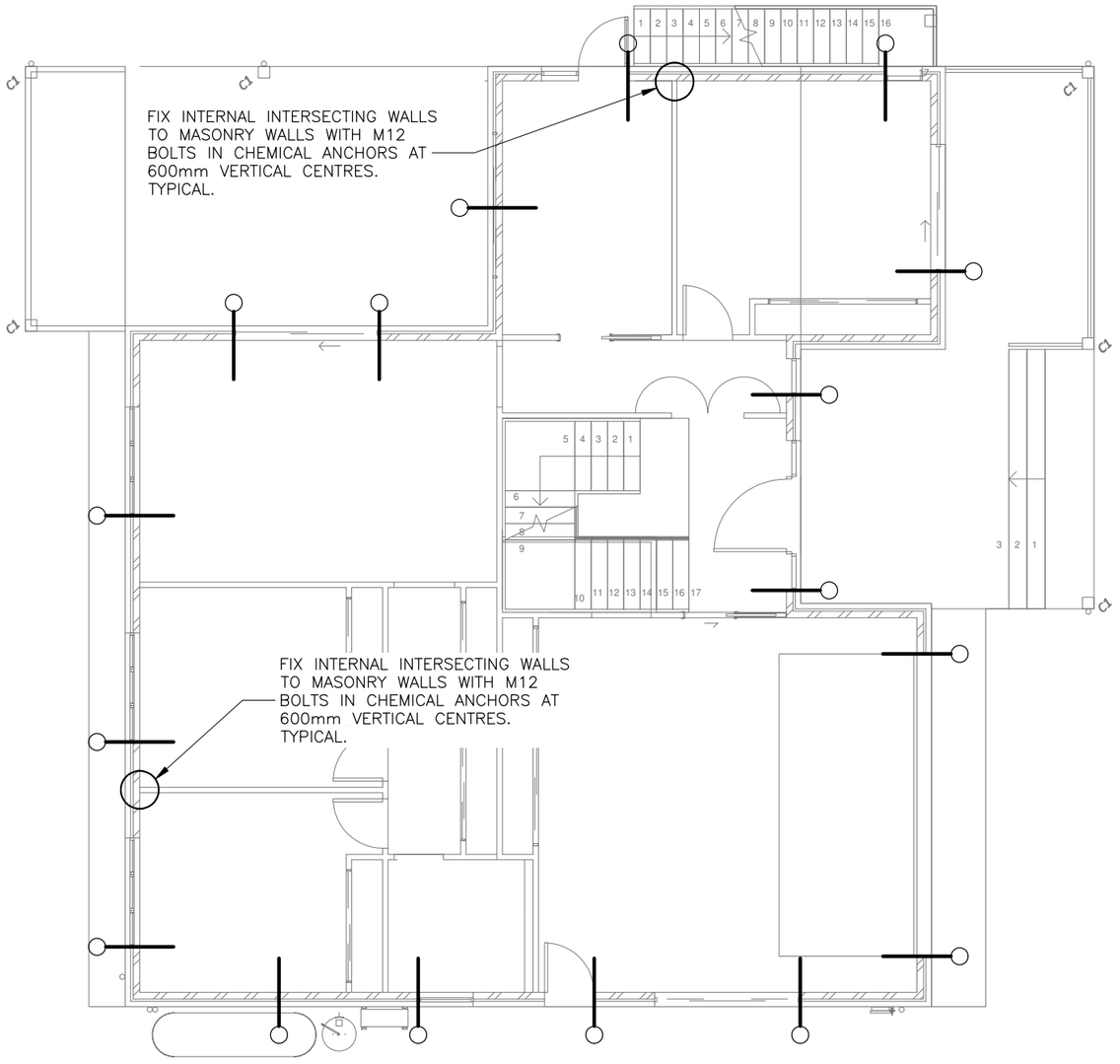
BUILDING DESIGNER: collinswcollins BUILDING DESIGNERS

PROJECT: PROPOSED DWELLING AT LOT 5 DP213365 No. 9 SURFVIEW AVENUE, BLACK HEAD, NSW 2430

TITLE: EARTHWORK DETAILS

FOR: AYRES

SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S10 / 20
ISSUE: C1



LOWER WALL BRICKWORK VERTICAL ARTICULATION JOINT SCHEDULE

SCALE 1:100

Revision A 14/02/24

BRICKWORK ARTICULATION JOINTS

BA1. IN STRAIGHT, CONTINUOUS WALLS HAVING NO OPENINGS, AT NO MORE THAN 6.0m.
BA2. WHERE THE HEIGHT OF THE WALL CHANGES BY MORE 20%, AT POSITION OF CHANGE IN HEIGHT;
BA3. AND WHERE OPENINGS MORE THAN 900x900mm OCCUR, AT NOT MORE THAN 5m CENTRES AND 1.2m AWAY FROM THE OPENING AND POSITIONED IN LINE WITH ONE EDGE OF THE OPENING; AND
BA4. WHERE WALL CHANGE THICKNESS; AND
BA5. AT CONTROL OR CONSTRUCTION JOINTS IN FOOTING SLAB; AND
BA6. AT JUNCTIONS OF WALLS CONSTRUCTED OF DIFFERENT MASONRY MATERIALS; AND
BA7. AT A DISTANCE FROM ALL CORNERS BETWEEN 470mm AND 4.5m.
BA8. BUILDER TO CONFIRM JOINT LOCATION ONSITE.

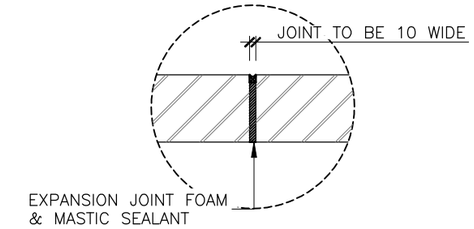
LEGEND

—○	BRICKWORK ARTICULATION

MASONRY NOTES

LINTEL SCHEDULE – SHEET ROOF		
LINTEL SIZE AND PROFILE	MAXIMUM SPAN	
	SUPPORTING ROOF LOADS	NON LOAD BEARING
GALINTEL SOLID BASE FLAT BAR 85x7 (5kg/m)	800	1200
GALINTEL SOLID BASE ANGLE BAR 100x100 (9kg/m)	1500	2100
GALINTEL SOLID BASE ANGLE BAR 150x100 (12kg/m)	2700	3300
TRADITIONAL ANGLE 150x100x10 (19.0kg/m)	3000	4000
REVISION 19/01/23 – LINTEL SCHEDULE		

1. No point loads from roof beams
2. Maximum brick courses above Lintel (6 courses)
3. All lintels to be hot dipped galvanised
4. Min end bearing for Lintels 150mm
5. Maximum roof span = 8m
6. Props at 1.2m CTRS



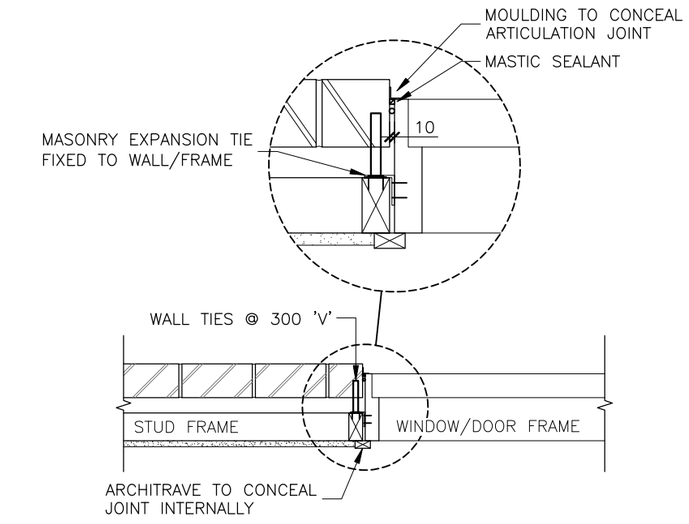
MASTIC SEALANT DETAIL

SCALE 1:10

NOTE: MAXIMUM BRICK TIE FIXING DISTANCE IS 300mm FROM THE ARTICULATION JOINT & WITHIN 300 FROM TOP OF WALL.

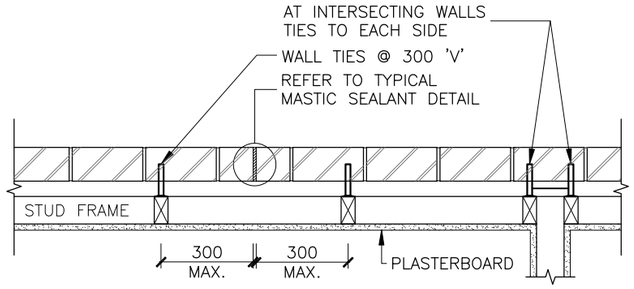
WALL FIXING NOTE:

FIX INTERNAL INTERSECTING WALLS TO MASONRY WALLS WITH M12 BOLTS IN CHEMICAL ANCHORS AT 600mm VERTICAL CENTERS TYPICAL.



MASONRY VENEER WALL JOINT DETAIL

SCALE 1:20
BESIDE OPENINGS



MASONRY VENEER WALL JOINT DETAIL

SCALE 1:20

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BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE
BRICKWORK ARTICULATION SCHEDULE

FOR
AYRES

SCALE @ A3
AS SHOWN

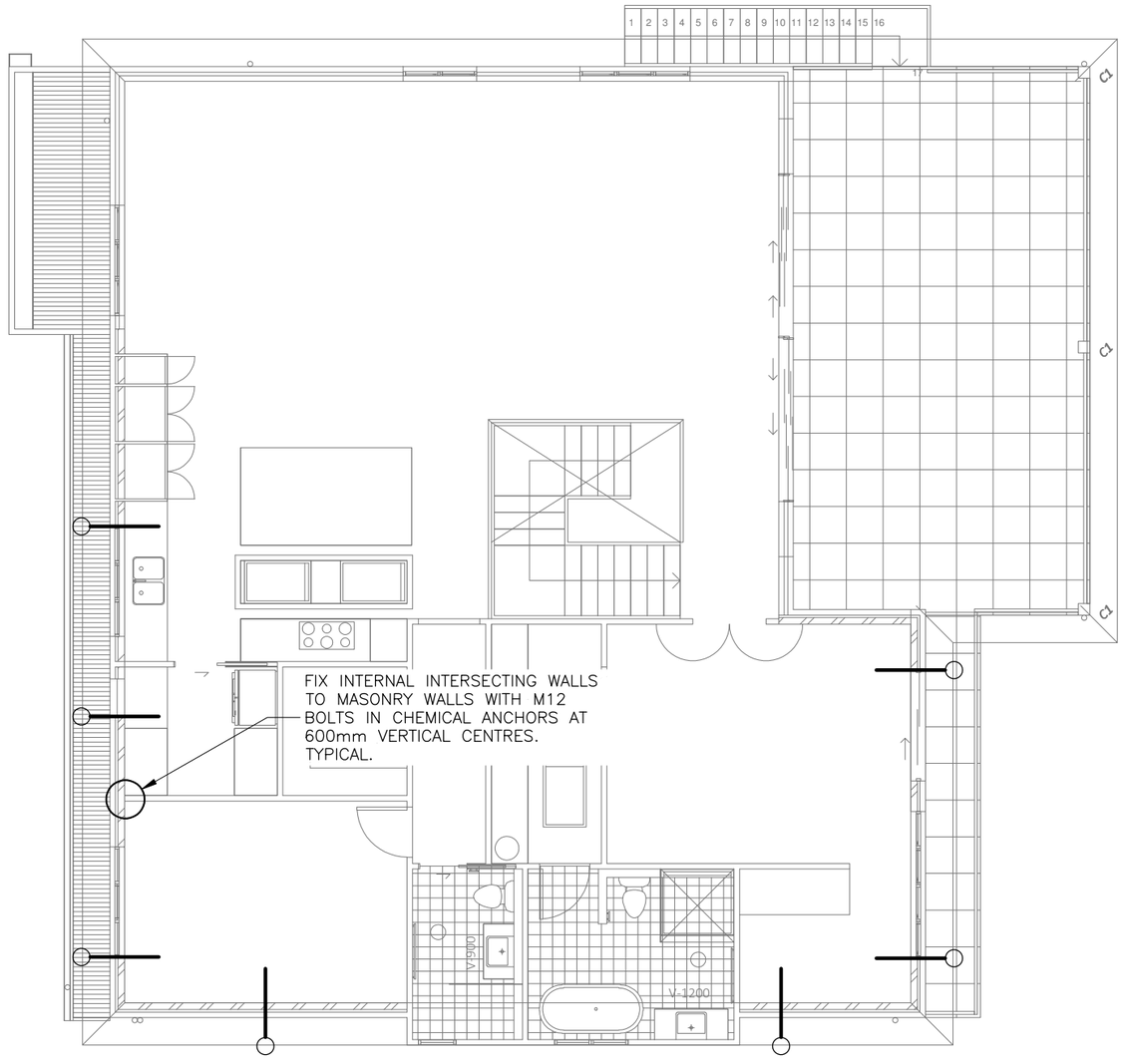
DRAWN
ELC

APPROVED

JOB NO.
5431

SHEET NO.
S11 / 20

ISSUE
C1



UPPER WALL BRICKWORK VERTICAL ARTICULATION JOINT SCHEDULE

SCALE 1:100

Revision A 14/02/24

BRICKWORK ARTICULATION JOINTS

BA1. IN STRAIGHT, CONTINUOUS WALLS HAVING NO OPENINGS, AT NO MORE THAN 6.0m.
BA2. WHERE THE HEIGHT OF THE WALL CHANGES BY MORE 20%, AT POSITION OF CHANGE IN HEIGHT;
BA3. AND WHERE OPENINGS MORE THAN 900x900mm OCCUR, AT NOT MORE THAN 5m CENTRES AND 1.2m AWAY FROM THE OPENING AND POSITIONED IN LINE WITH ONE EDGE OF THE OPENING; AND
BA4. WHERE WALL CHANGE THICKNESS; AND
BA5. AT CONTROL OR CONSTRUCTION JOINTS IN FOOTING SLAB; AND
BA6. AT JUNCTIONS OF WALLS CONSTRUCTED OF DIFFERENT MASONRY MATERIALS; AND
BA7. AT A DISTANCE FROM ALL CORNERS BETWEEN 470mm AND 4.5m.
BA8. BUILDER TO CONFIRM JOINT LOCATION ONSITE.

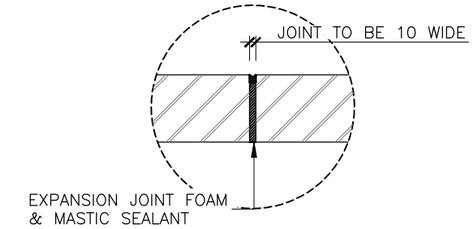
LEGEND

BRICKWORK ARTICULATION

MASONRY NOTES

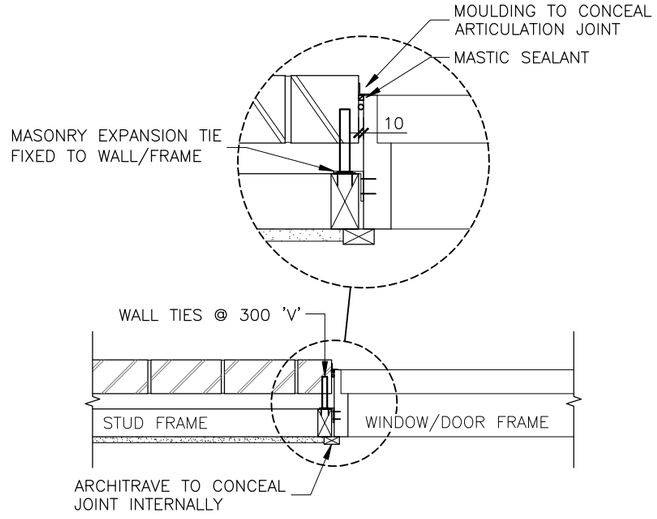
LINTEL SCHEDULE – SHEET ROOF		
LINTEL SIZE AND PROFILE	MAXIMUM SPAN	
	SUPPORTING ROOF LOADS	NON LOAD BEARING
GALINTEL SOLID BASE FLAT BAR 85x7 (5kg/m)	800	1200
GALINTEL SOLID BASE ANGLE BAR 100x100 (9kg/m)	1500	2100
GALINTEL SOLID BASE ANGLE BAR 150x100 (12kg/m)	2700	3300
TRADITIONAL ANGLE 150x100x10 (19.0kg/m)	3000	4000
REVISION 19/01/23 – LINTEL SCHEDULE		

1. No point loads from roof beams
2. Maximum brick courses above Lintel (6 courses)
3. All lintels to be hot dipped galvanised
4. Min end bearing for Lintels 150mm
5. Maximum roof span = 8m
6. Props at 1.2m CTRS



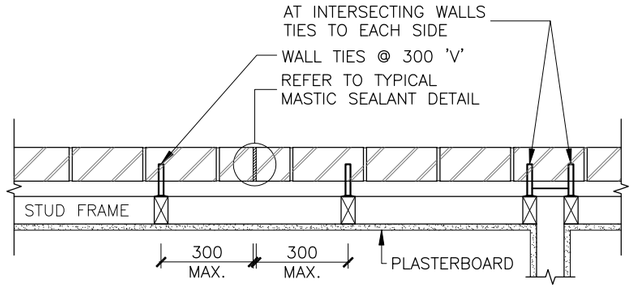
MASTIC SEALANT DETAIL

SCALE 1:10



MASONRY VENEER WALL JOINT DETAIL

SCALE 1:20
BESIDE OPENINGS



MASONRY VENEER WALL JOINT DETAIL

SCALE 1:20

NOTE: MAXIMUM BRICK TIE FIXING DISTANCE IS 300mm FROM THE ARTICULATION JOINT & WITHIN 300 FROM TOP OF WALL.

WALL FIXING NOTE:

FIX INTERNAL INTERSECTING WALLS TO MASONRY WALLS WITH M12 BOLTS IN CHEMICAL ANCHORS AT 600mm VERTICAL CENTERS TYPICAL.

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QLD #09147

ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
C1	Construction Issue	TJW	CL	JD	18/03/25
P2	Preliminary Issue	ELC	CL	JD	16/08/24
P1	Preliminary Issue	ELC	CL	JD	20/05/24

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE
BRICKWORK ARTICULATION SCHEDULE

FOR
AYRES

SCALE @ A3
AS SHOWN

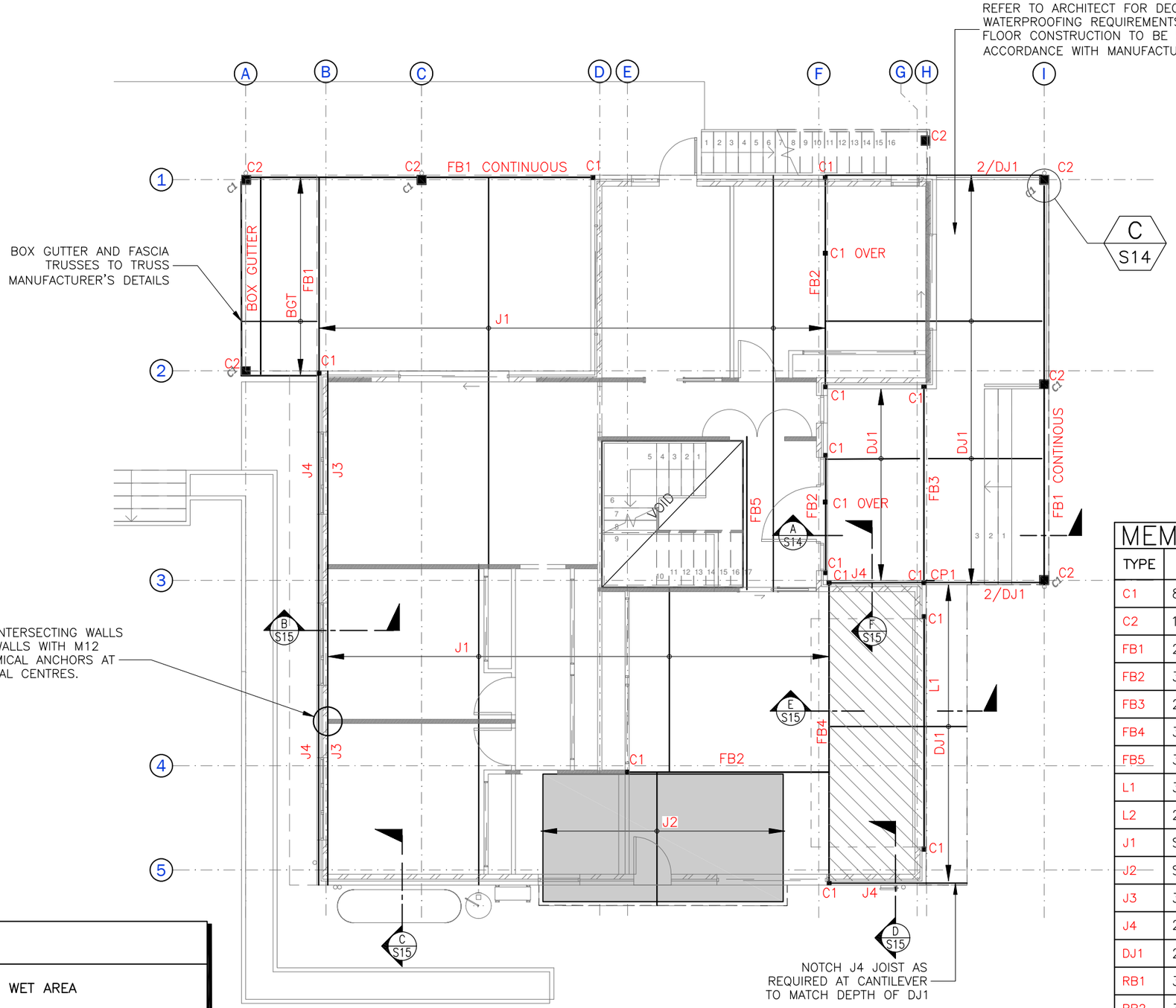
DRAWN
ELC

APPROVED

JOB NO.
5431

SHEET NO.
S12 / 20

ISSUE
C1



NOTES

- ALL WORK TO BE IN ACCORDANCE WITH MANUFACTURERS SPECS.
- BUILDER TO DETERMINE ALL MATERIAL QUANTITIES AND LENGTHS
- ALL EXTERNAL TIMBERS TO BE H3 TREATED
- PROVIDE TERMITE TREATMENT AS REQUIRED BY THE NCC
- TIMBER SUPPLIER TO CHECK & CONFIRM ALL JOISTS & BEARERS SIZES. REPORT ANY DISCREPANCIES TO ENGINEER
- DOUBLE JOISTS TO SUPPORT UNDER LOAD BEARING WALLS WHERE BEARING NOT SUPPORTING

BLOCKING NOTE:

- CONTINUOUS BLOCKING AT JOIST SUPPORTS
- TEMPORARY BRACING TO SMARTJOISTS
- ALL BLOCKING ROOF & FLOOR TO AS 1684.2 & MANUFACTURERS SPECIFICATIONS

MEMBER SCHEDULE

TYPE	DESCRIPTION	REMARKS
C1	89x3.5 SHS	COLUMNS
C2	190x190 HWD	TIMBER POST
FB1	250PFC	FLOOR BEAM
FB2	300PFC	FLOOR BEAM
FB3	250UB37	FLOOR BEAM
FB4	310UB46	FLOOR BEAM
FB5	300x45 LVL13	FLOOR BEAM
L1	300PFC WITH 210x10 PLATE	LINTEL
L2	250PFC	LINTEL
J1	SJ30051 @ 450 CTRS	FLOOR JOISTS
J2	SJ25570 @ 450 CTRS	WET AREA JOISTS
J3	300x45 LVL 13	FLOOR JOIST
J4	2/300X63 LVL 13	FLOOR JOIST
DJ1	240x45 LVL13 @450 CTRS	DECK JOISTS
RB1	330x85 17C	ROOF BEAM
RB2	300x63 LVL 13	ROOF BEAM
BGT	TRUSSES BY OTHERS	BOX GUTTER
TR1	TRUSSES BY OTHERS	ROOF TRUSS
CP1	10mm PLATE WITH 2/M12 BOLTS	WELDED CLEAT PLATE

LEGEND

	WET AREA
	JOISTS PACKED AS REQUIRED
	LOAD BEARING WALLS

FLOOR FRAMING PLAN

SCALE 1:100

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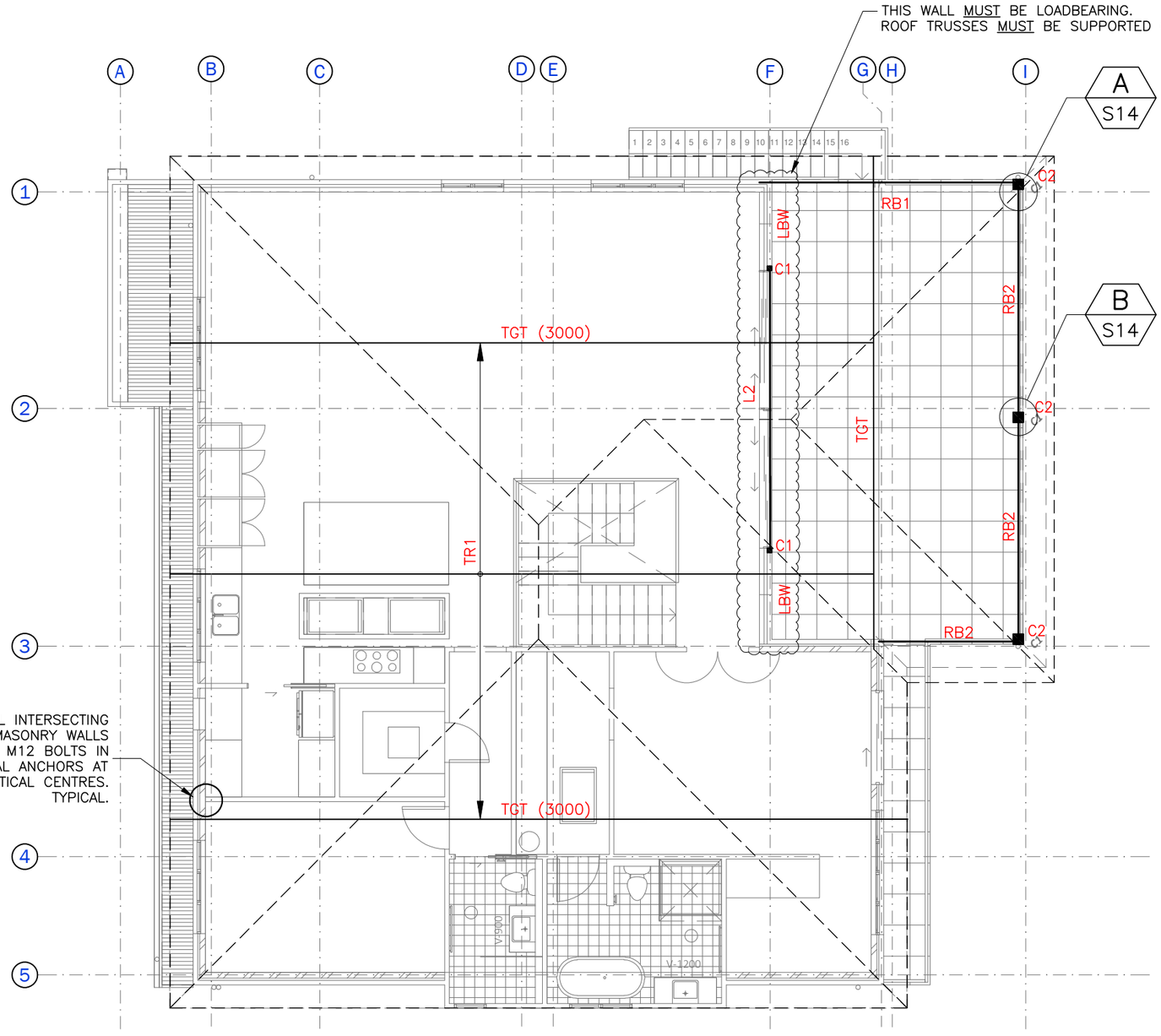
P1	Preliminary Issue	ELC	CL	JD	20/05/24

BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: FLOOR FRAMING PLAN
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
FOR: AYRES
SHEET NO.: S13 / 20
ISSUE: C1



UPPER ROOF FRAMING PLAN

SCALE 1:100

MEMBER SCHEDULE

TYPE	DESCRIPTION	REMARKS
C1	89x3.5 SHS	COLUMNS
C2	190x190 HWD	TIMBER POST
FB1	250PFC	FLOOR BEAM
FB2	300PFC	FLOOR BEAM
FB3	250UB37	FLOOR BEAM
FB4	310UB46	FLOOR BEAM
FB5	300x45 LVL13	FLOOR BEAM
L1	300PFC WITH 210x10 PLATE	LINTEL
L2	250PFC	LINTEL
J1	SJ30051 @ 450 CTRS	FLOOR JOISTS
J2	SJ25570 @ 450 CTRS	WET AREA JOISTS
J3	300x45 LVL 13	FLOOR JOIST
J4	2/300X63 LVL 13	FLOOR JOIST
DJ1	240x45 LVL13 @450 CTRS	DECK JOISTS
RB1	330x85 17C	ROOF BEAM
RB2	300x63 LVL 13	ROOF BEAM
BGT	TRUSSES BY OTHERS	BOX GUTTER
TR1	TRUSSES BY OTHERS	ROOF TRUSS
CP1	10mm PLATE WITH 2/M12 BOLTS	WELDED CLEAT PLATE

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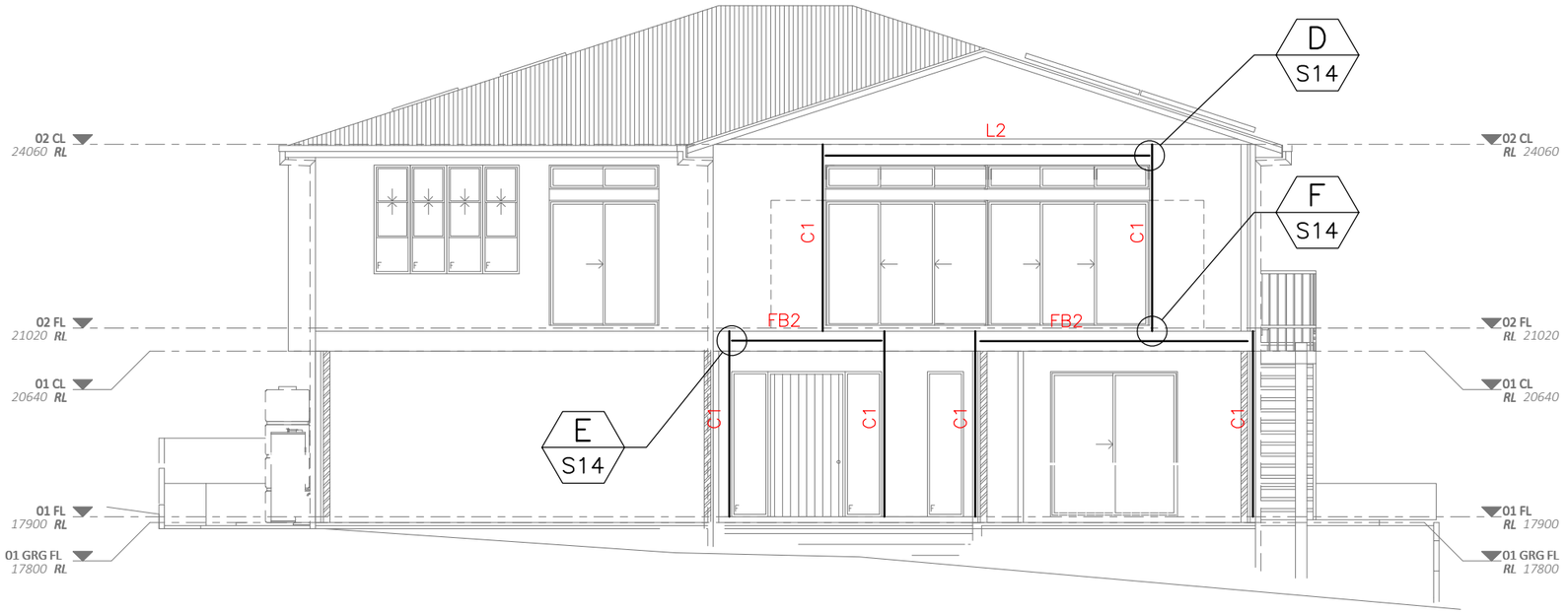
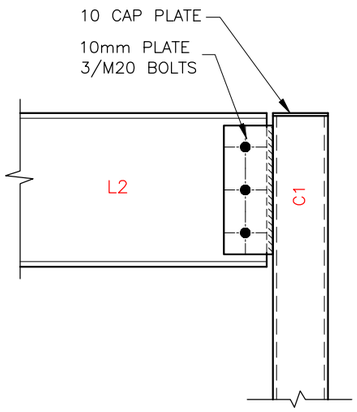
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: ROOF FRAMING PLAN
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S14 / 20
ISSUE: C1



GRID ELEVATION 'F'
SCALE 1:100



DETAIL D
SCALE 1:10
S16

MEMBER SCHEDULE

TYPE	DESCRIPTION	REMARKS
C1	89x3.5 SHS	COLUMNS
C2	190x190 HWD	TIMBER POST
FB1	250PFC	FLOOR BEAM
FB2	300PFC	FLOOR BEAM
FB3	250UB37	FLOOR BEAM
FB4	310UB46	FLOOR BEAM
FB5	300x45 LVL13	FLOOR BEAM
L1	300PFC WITH 210x10 PLATE	LINTEL
L2	250PFC	LINTEL
J1	SJ30051 @ 450 CTRS	FLOOR JOISTS
J2	SJ25570 @ 450 CTRS	WET AREA JOISTS
J3	300x45 LVL 13	FLOOR JOIST
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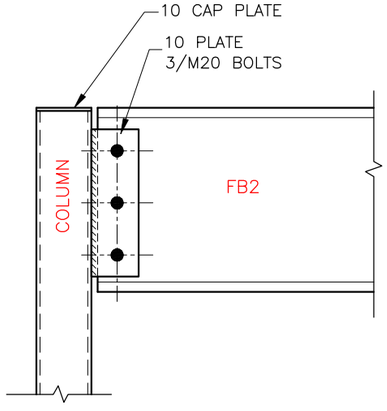
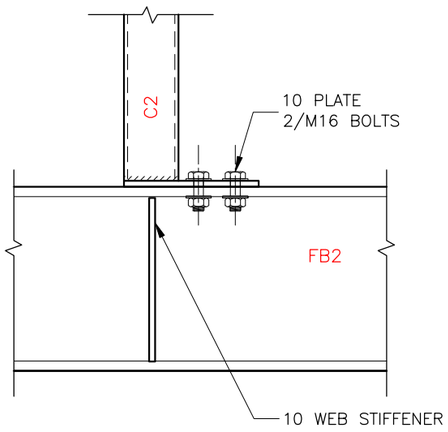
DJ1	240x45 LVL13 @450 CTRS	DECK JOISTS
RB1	330x85 17C	ROOF BEAM
RB2	300x63 LVL 13	ROOF BEAM
BGT	TRUSSES BY OTHERS	BOX GUTTER
TR1	TRUSSES BY OTHERS	ROOF TRUSS
CP1	10mm PLATE WITH 2/M12 BOLTS	WELDED CLEAT PLATE



DETAIL E
SCALE 1:10
S16



DETAIL F
SCALE 1:10
S16

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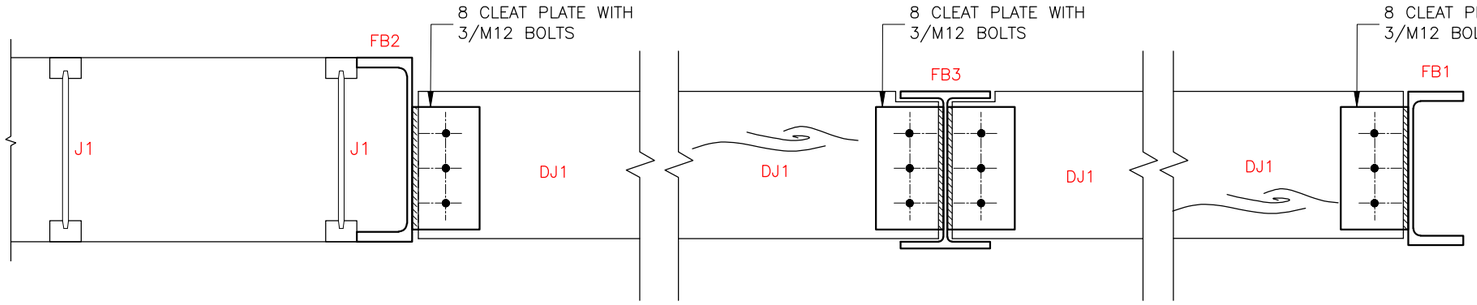
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

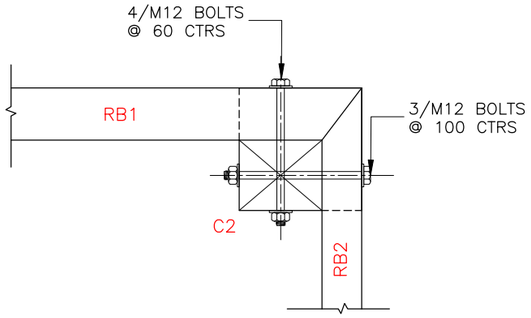
PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: GRID ELEVATION
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S15 / 20
ISSUE: C1

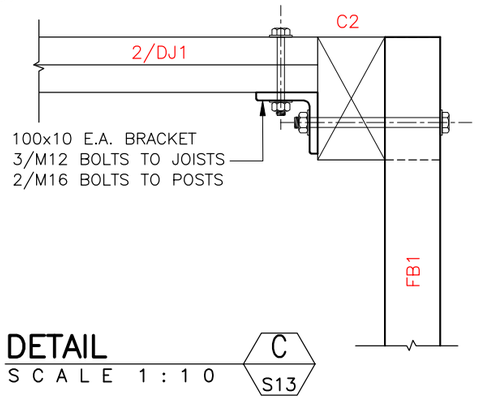


SECTION A
SCALE 1:10
S13

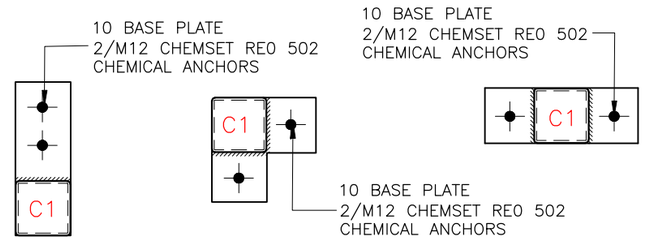
REFER TO ARCHITECT FOR ALL DECK FLASHING, FALLS AND WATERPROOFING REQUIREMENTS.



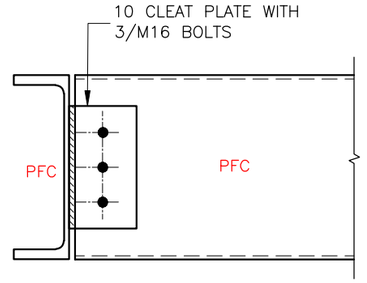
DETAIL A
SCALE 1:10
S16



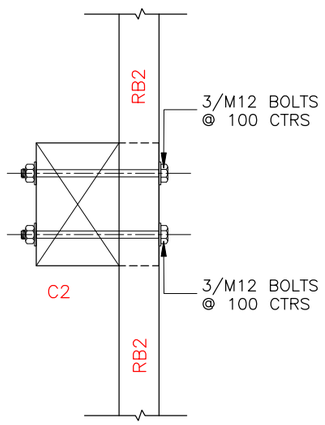
DETAIL C
SCALE 1:10
S13



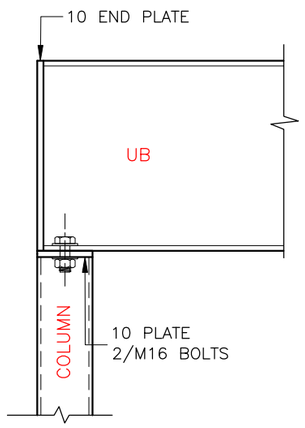
COLUMN C1 BASE PLATE DETAILS
SCALE 1:10
BP1
S13

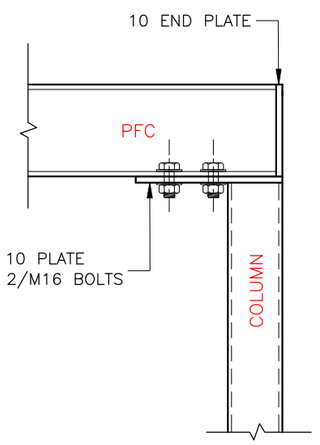


TYPICAL PFC TO PFC CONNECTION DETAIL
SCALE 1:10



DETAIL B
SCALE 1:10
S16





COLUMN TO BEAM CONNECTION DETAIL
SCALE 1:10

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QLD #09147

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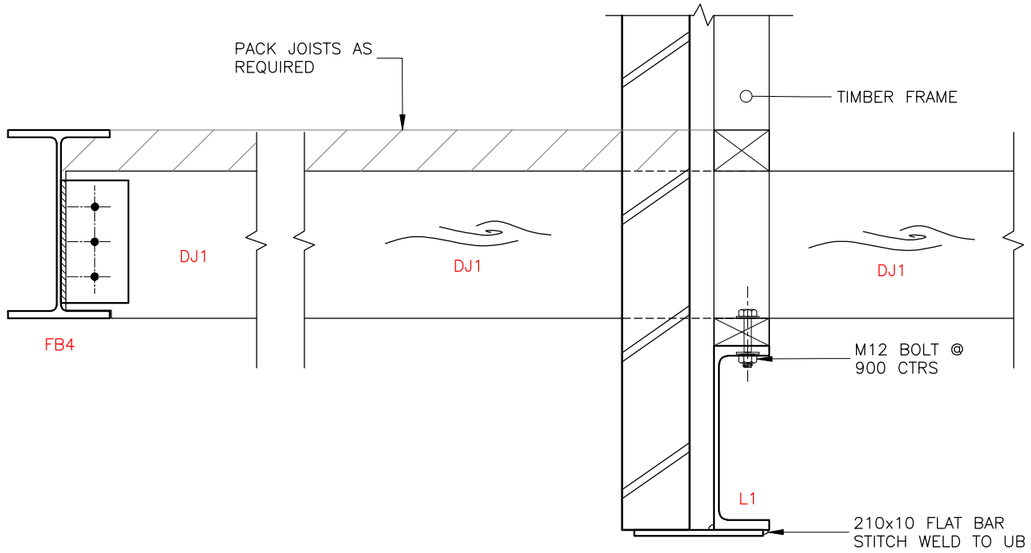
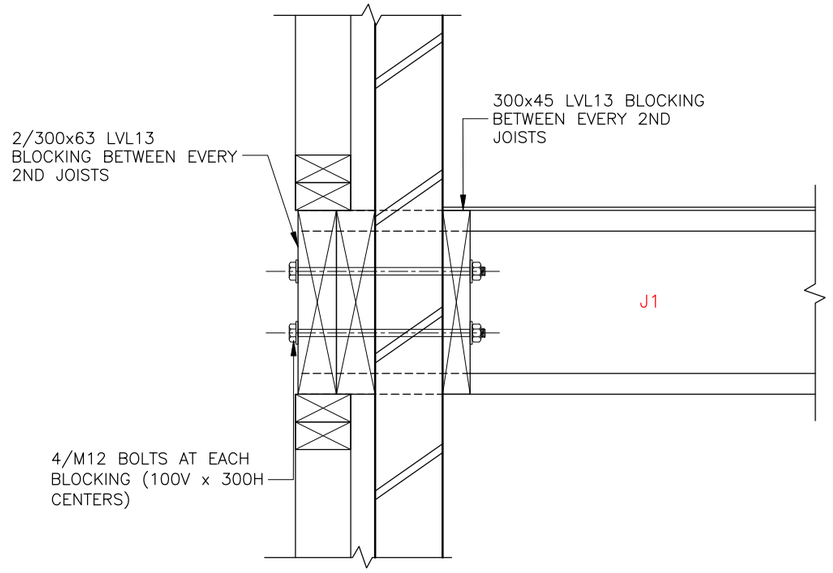
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

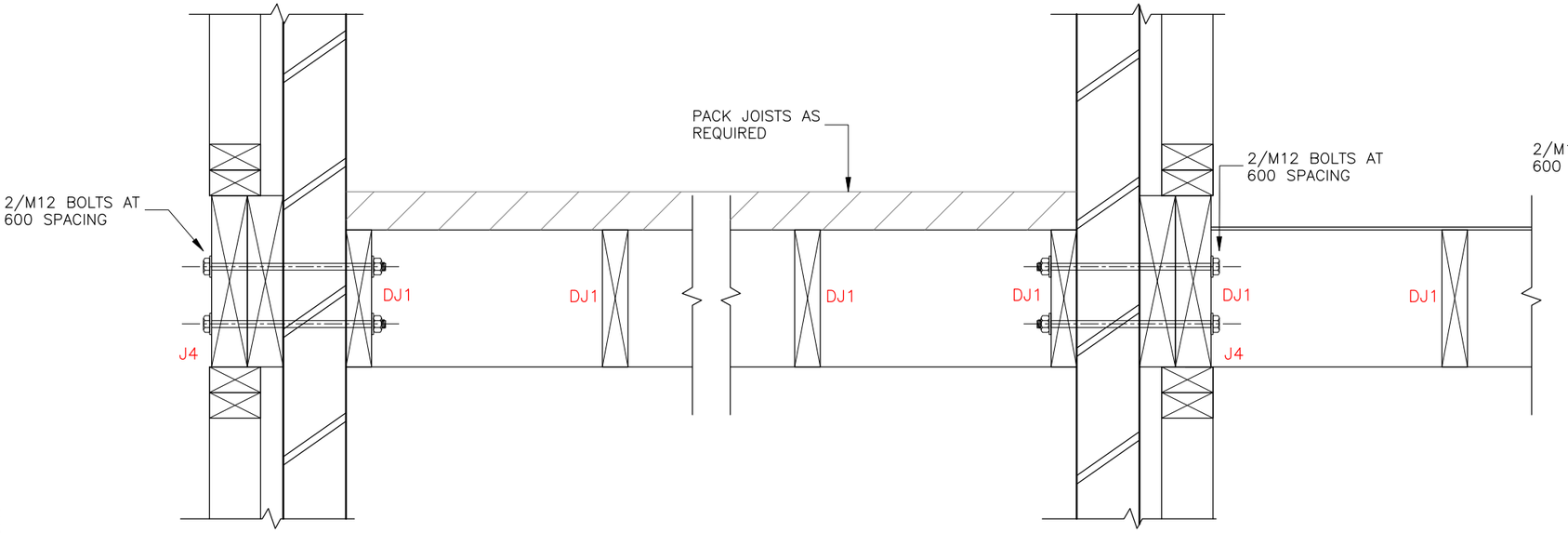
TITLE: SECTIONS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S16 / 20
ISSUE: C1



SECTION E
SCALE 1:20
S13

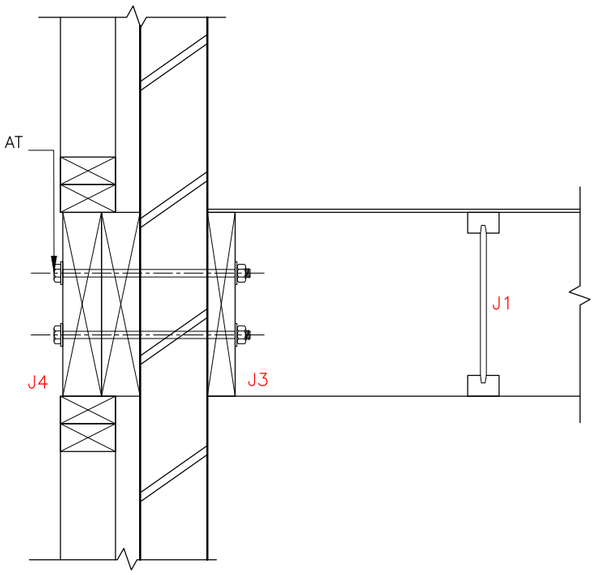


SECTION C
SCALE 1:20
S13



SECTION D
SCALE 1:20
S13

SECTION F
SCALE 1:20
S13



SECTION B
SCALE 1:20
S13

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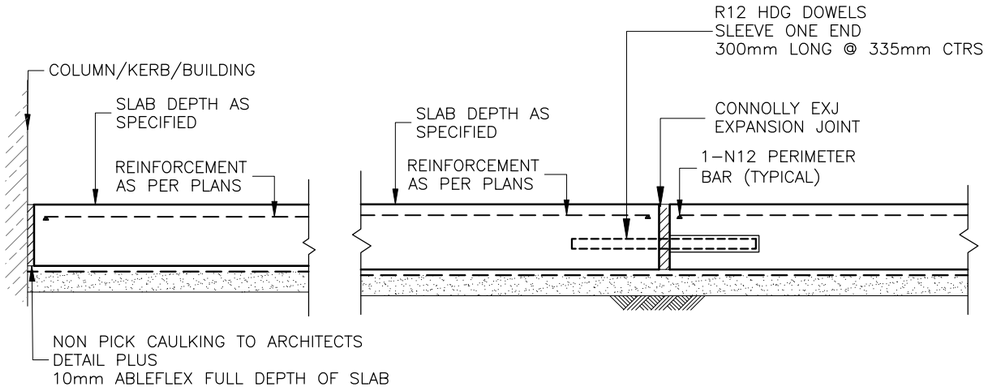
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

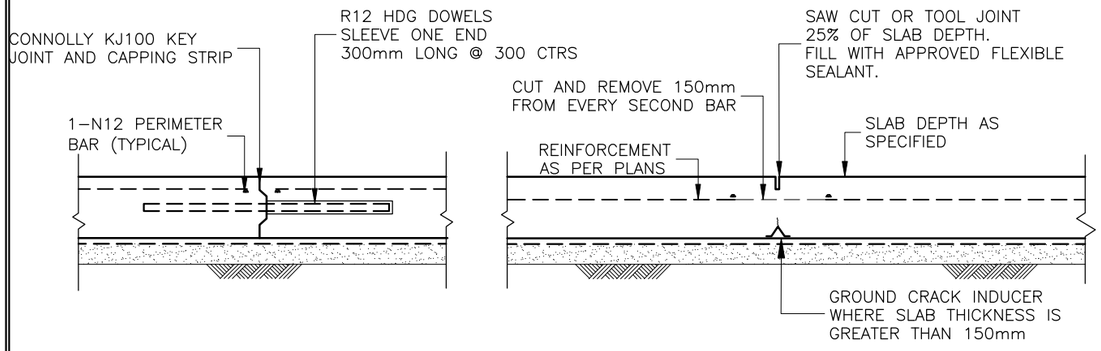
PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: SECTIONS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: ELC
APPROVED:
JOB NO.: 5431
SHEET NO.: S17 / 20
ISSUE: C1



ISOLATION JOINT IJ
SCALE 1:20

EXPANSION JOINT EJ
SCALE 1:20



OPTION 1

OPTION 2

CRACK CONTROL JOINT CJ
NOT TO SCALE

NOTE: SAWCUT TO BE MADE AS SOON AS CONCRETE HAS HARDENED

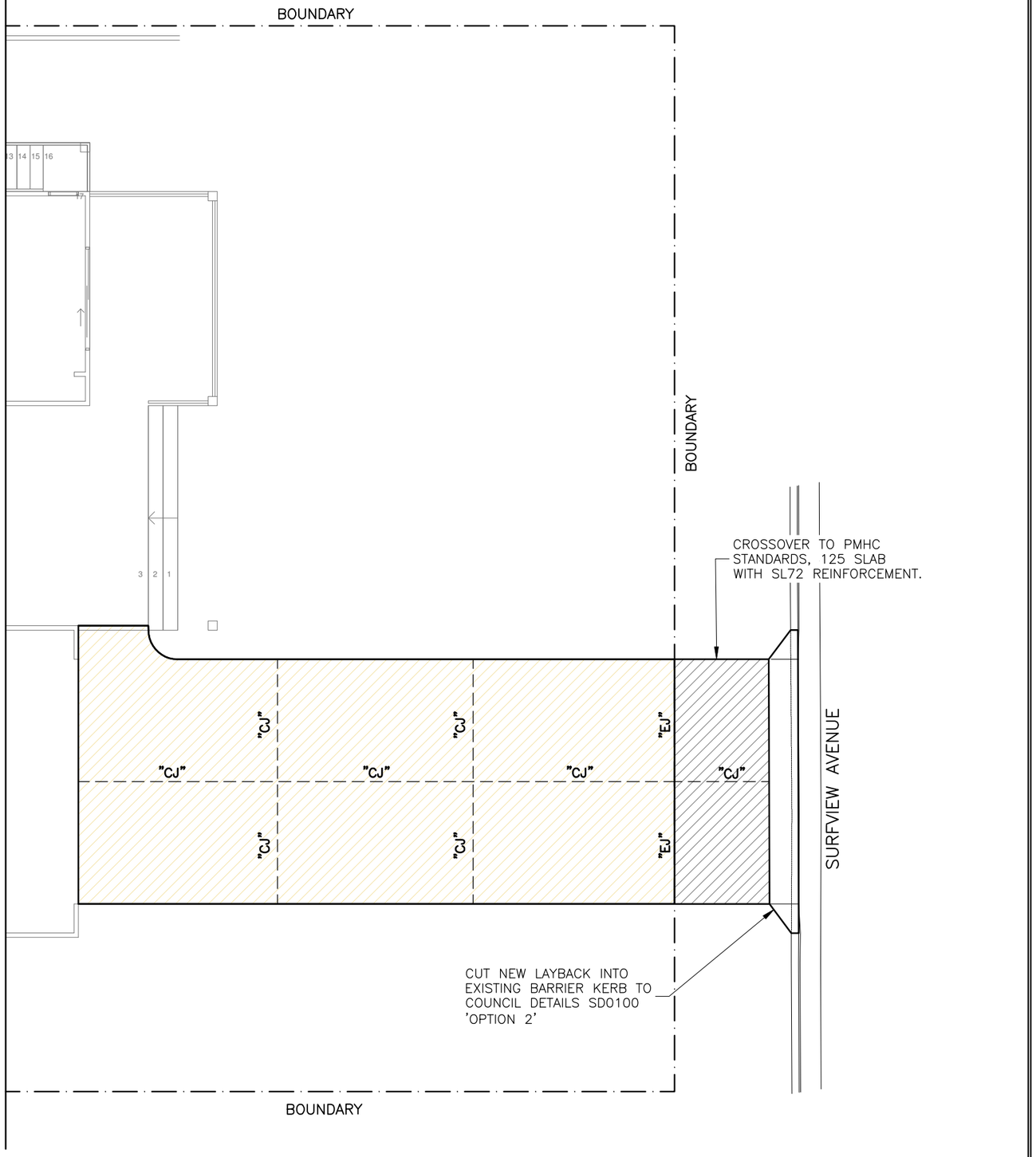
PAVING SLAB PLAN
SCALE 1:100

100mm THICK SLAB U.N.O

N20 CONCRETE GRADE STRENGTH

100mm SLUMP 20mm MAX AGGREGATE

LEGEND	
	100 THICK PAVING SLAB SL72 REINFORCEMENT
"CJ"	CRACK CONTROL JOINT
"EJ"	EXPANSION JOINT



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BUILDING DESIGNER: collinswcollins BUILDING DESIGNERS

PROJECT: PROPOSED DWELLING AT LOT 5 DP213365 No. 9 SURFVIEW AVENUE, BLACK HEAD, NSW 2430

TITLE: PAVING SLAB PLAN

FOR: AYRES

SCALE @ A3: AS SHOWN

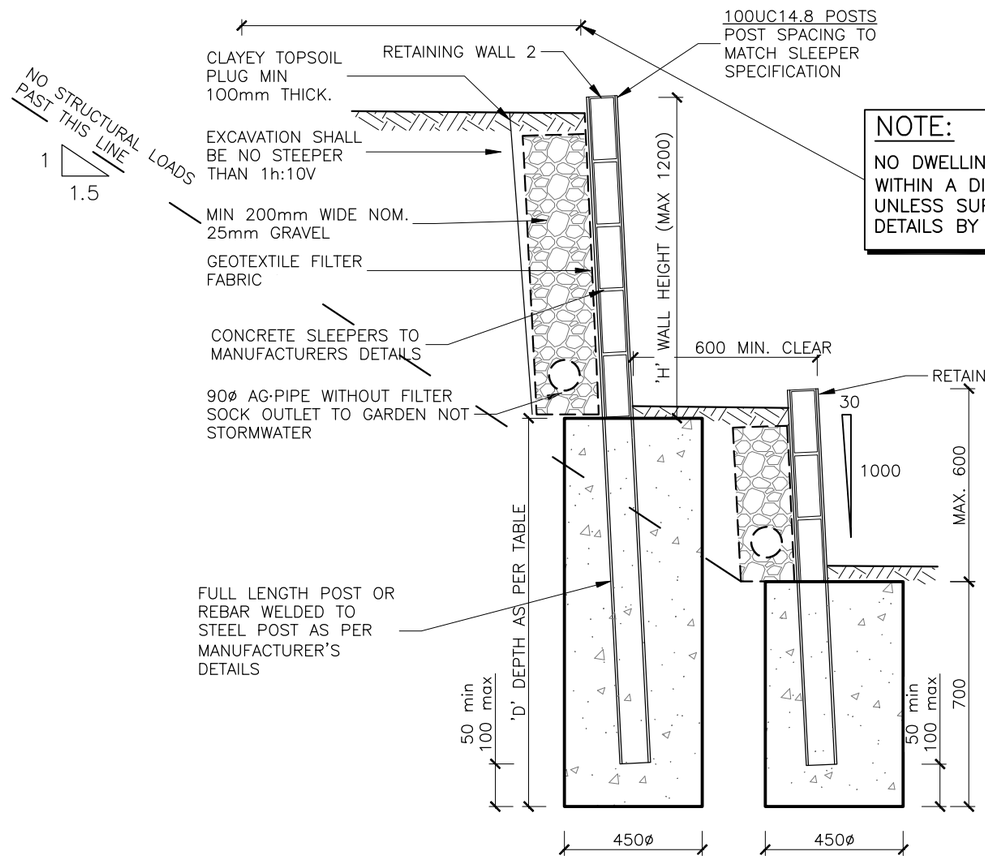
DRAWN: ELC

APPROVED:

JOB NO.: 5431

SHEET NO.: S18 / 20

ISSUE: C1



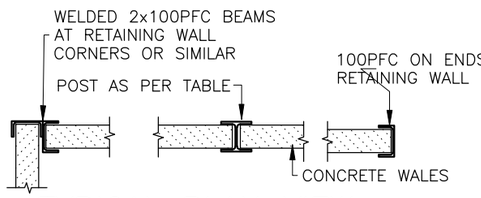
TERRACED RETAINING WALL TR1 S05

SCALE 1:10

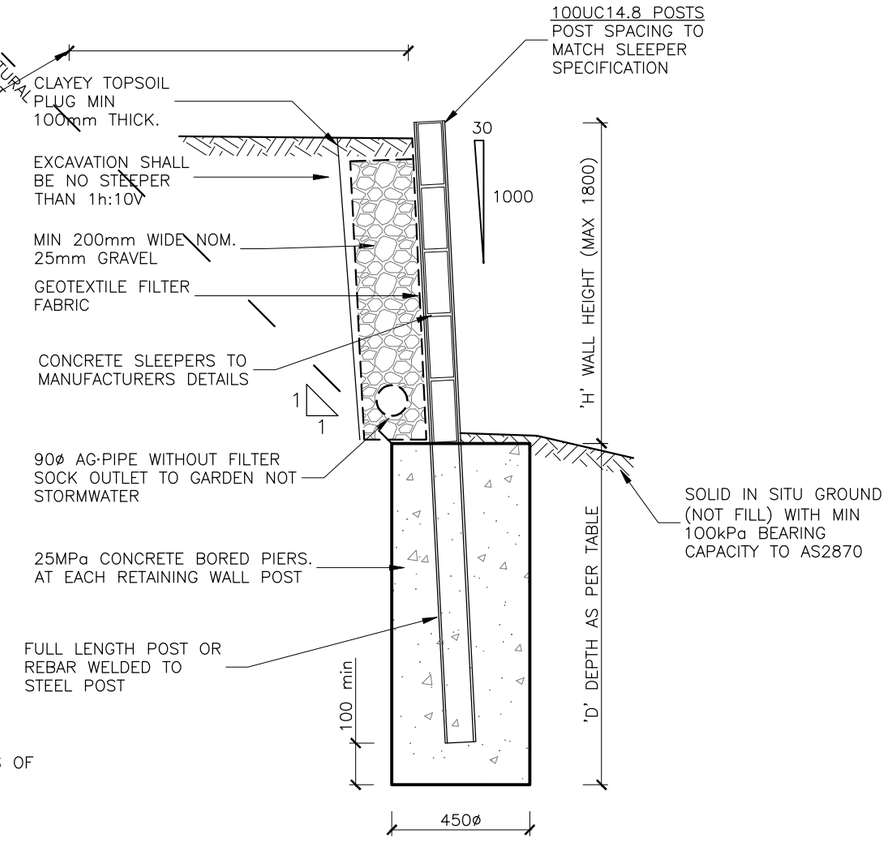
CONCRETE SLEEPERS AS PER MANUFACTURERS DETAILS

NOTE:

NO DWELLINGS OR STRUCTURES TO BE LOCATED WITHIN A DISTANCE OF 1.5x'H' FROM THE WALL UNLESS SUPPORTED ON PIERS TO ENGINEERS DETAILS BY OTHERS



TYPICAL PLAN VIEW



RETAINING WALL RW1 S05

SCALE 1:10

CONCRETE SLEEPERS AS PER MANUFACTURERS DETAILS

TERRACED RETAINING WALL 2 – DETAILS 'TR1'

WALL HEIGHT(H)	POST TYPE	POST SPACING	HOLE DIAMETER	HOLE DEPTH (D)	MIN EMBEDMENT LENGTH
0–0.4m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.20m	1.1m
0.6m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.30m	1.2m
0.8m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.50m	1.4m
1.0m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.70	1.6m
1.2m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.75m	1.65m
CONFIRM POST SPACING WITH SLEEPER MANUFACTURERS DETAILS					

RETAINING WALL DETAILS RW1

WALL HEIGHT(H)	POST TYPE	POST SPACING	HOLE DIAMETER	HOLE DEPTH (D)	MIN EMBEDMENT LENGTH
0–0.4m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	0.60m	0.5m
0.6m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	0.70m	0.6m
0.8m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	0.90m	0.8m
1.0m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.10m	1.0m
1.2m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.15m	1.05m
1.4m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.30m	1.20m
1.6m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.60m	1.55m
1.8m	100UC14.8	SLEEPER LENGTH + 30mm	450mm	1.80m	1.75m
CONFIRM POST SPACING WITH SLEEPER MANUFACTURERS DETAILS					

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ISSUE	DESCRIPTION	DRWN	DESGN	APRVD	DATE
C1	Construction Issue	TJW	CL	JD	18/03/25
P2	Preliminary Issue	ELC	CL	JD	16/08/24
P1	Preliminary Issue	ELC	CL	JD	20/05/24

DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR CONSTRUCTION.

BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE
TYPICAL RETAINING WALL DETAILS

FOR
AYRES

SCALE @ A3
AS SHOWN

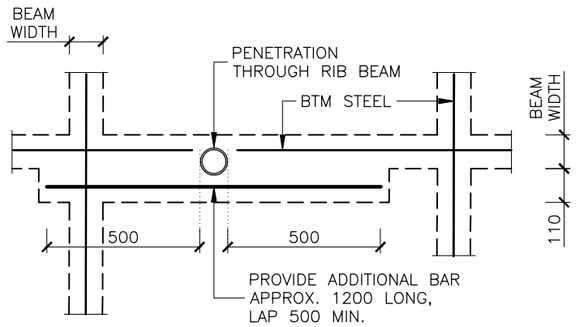
DRAWN
ELC

APPROVED

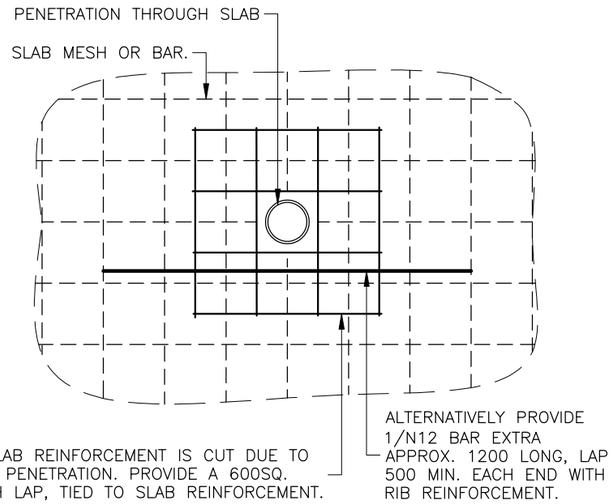
JOB NO.
5431

SHEET NO.
S19 / 20

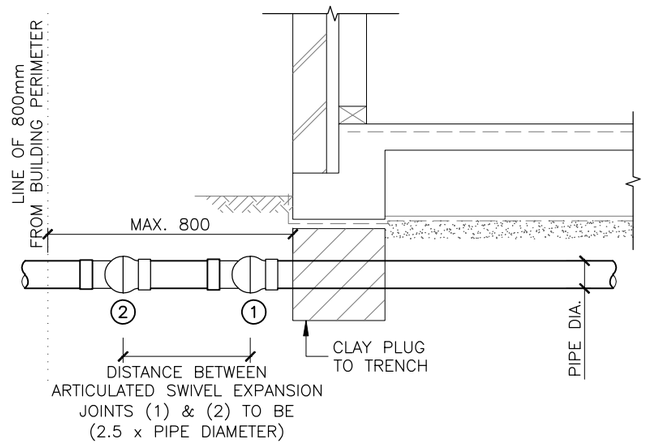
ISSUE
C1



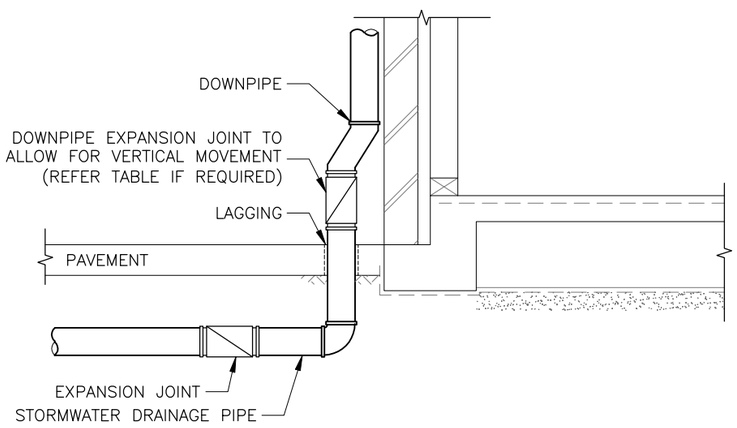
TYPICAL RIB PENETRATION DETAIL
SCALE 1:20



TYPICAL SLAB PENETRATION DETAIL
SCALE 1:20



EDGE BEAM PLUMBING DETAILS
SCALE 1:20
FOR H1, H2 & P SITES



DOWN PIPE DETAIL
SCALE 1:20
FOR H1, H2 & P SITES

MINIMUM PLUMBING RECOMMENDATIONS

	SITE/DESIGN CLASSIFICATION								
COMPONENT	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	✓	✓	✓	✓	✓	✓	✓

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

Revision A 14/02/24

PLUMBING DETAILS

P1. THE FOLLOWING NOTES PROVIDED ARE GUIDE ONLY FOR ARTICULATION FOR SANITY PLUMBING, DRAINAGE & SHOULD BE READ IN CONJUNCTION WITH AS3500, AS2870 & NCC.

P2. ALL SEWER & STORMWATER TO BE CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 & REQUIREMENTS OF AS 2870 SECTION 5: CALUSE 5.6 & SECTION 6: CLAUSE 6.6: FOR SLAB OR STRIP FOOTINGS ON HIGHLY REACTIVE SITES.

P3. CLOSED-CELL POLYETHYLENE LAGGING SHALL BE USED AROUND ALL PIPE PENETRATIONS THOUGH FOOTINGS. THE LAGGING SHALL BE MIN 20mm THICK ON CLASS H1 AND 40mm THICK ON CLASS "H2" AND CLASS "E" SITES. VERTICAL PENETRATIONS DO NOT REQUIRE LAGGING.

P4. DRAINS ATTACHED TO OR EMERGING FROM UNDERNEATH THE BUILDING SHALL INCORPORATE FLEXIBLE JOINTS IMMEDIATELY OUTSIDE THE FOOTINGS AND COMMENCING WITHIN 1m OF THE BUILDING PERIMETER TO ACCOMMODATE A TOTAL RANGE OF DIFFERENTIAL MOVEMENT IN ANY DIRECTION EQUAL TO THE ESTIMATED CHARACTERISTIC SURFACE MOVEMENT OF THE SITE (YS). MAX YS VALUES EQUAL 20mm FOR CLASS S, 40mm FOR CLASS M, 60mm FOR CLASS H1 AND 75MM FOR CLASS H2. IN THE ABSENCE OF SPECIFIC DESIGN GUIDANCE, THE FITTING 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, TO ALLOW FOR A MOVEMENT EQUAL TO 0.5YS IN ANY DIRECTION. THIS APPLIES TO ALL STORMWATER, SANITARY AND DISCHARGE PIPES.

P5. ALL EXPANSION AND ARTICULATION JOINTS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL JOINTS TO BE SET MID POINT SO AS TO ALLOW FOR MAXIMUM MOVEMENT IN EITHER DIRECTION

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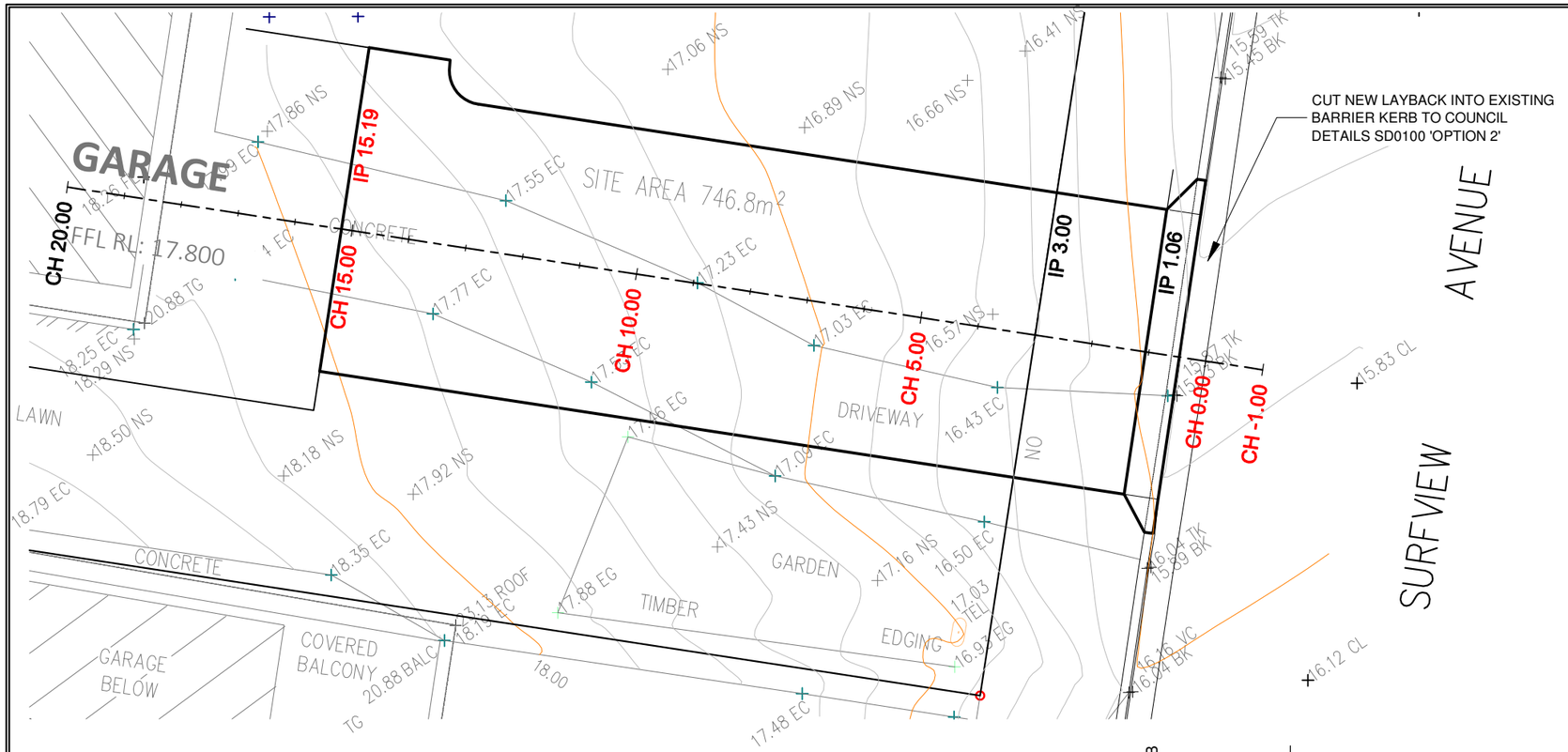
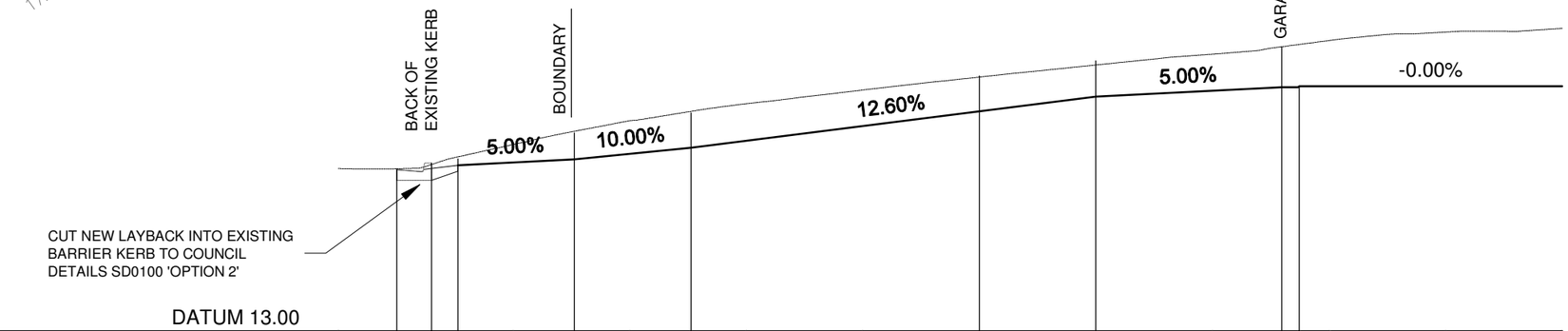
BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: PLUMBING DETAILS
SCALE @ A3: AS SHOWN
DRAWN: ELC
JOB NO.: 5431
FOR: AYRES
APPROVED:
SHEET NO.: S20 / 20
ISSUE: C1





DATUM 13.00

DESIGN LEVEL			15.835	15.883	15.935	16.030	16.135	16.255	16.507	16.759	17.011	17.111	17.170	17.190	17.190	17.190
EXISTING LEVEL	15.78	15.77	15.98	16.19	16.42	16.60	16.76	16.89	17.12	17.35	17.55	17.74	17.86	17.90	17.97	18.12	18.18
CHAINAGE	-1.000	0.000	1.050	2.000	3.050	4.000	5.050	6.000	8.000	10.000	12.000	14.000	15.190	15.490	16.000	18.000	20.000

CONTRACTOR TO DETERMINE THE POSITION AND DEPTH OF ALL SERVICES BEFORE COMMENCING CONSTRUCTION. WHERE A SERVICE MAY INTERFERE WITH OR INFLUENCE THE CONSTRUCTION THE ENGINEER SHALL BE ADVISED. AWAIT INSTRUCTION.

Driveway ROAD LONGITUDINAL SECTION

SCALES: HORIZONAL 1:100 VERTICAL 1:100

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BUILDING DESIGNER
collinswcollins BUILDING DESIGNERS

PROJECT
PROPOSED DWELLING
AT LOT 5 DP213365
No. 9 SURFVIEW AVENUE,
BLACK HEAD, NSW 2430

TITLE: DRIVEWAY DETAILS
FOR: AYRES
SCALE @ A3: AS SHOWN
DRAWN: TJW
APPROVED:
JOB NO.: 5431
SHEET NO.: C01 / 01
ISSUE: C1