

PROPOSED RESIDENCE

40 CHILDE STREET, BELONGIL

DAVID TREWERN

Job No. N17-203

NOTE:
THIS DESIGNED DWELLING ADDITION IS OF A
MODULAR COMPONENT CONSTRUCTION AND IS
AN UNORTHODOX CONSTRUCTION METHOD,
HOWEVER THIS DESIGN WILL MEET ALL RELEVANT
AUSTRALIAN ENGINEERING DESIGN STANDARDS.

	DATE						
Day	14	06					
Month	05	06					
Year	18	19					

Drawing Register	Sheet Size	Drawing No	Revision																	
SAFE DESIGN REPORT	A3	1.0	P1 A																	
CONSTRUCTION NOTES - SHEET 1	A3	1.1	P1 A																	
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CONSTRUCTION NOTES - SHEET 3	A3	1.3	P1 A																	
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SLAB AND FOOTING PLAN	A3	2.0	P1 A																	
FIRST FLOOR FRAMING PLAN	A3	3.0	P1 A																	
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SAFE DESIGN REPORT

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

- ☒ (CCD) CONSTRUCTION CONFORMANCE TO DESIGN – SDR1.2,3,4,5,6,7,11,12,13,16,18,26,27
RISK LEVEL = 3
- ☒ (SA&SWP) SITE ACCESS CONTROL AND FENCING INCLUDING STAIRS, SCAFFOLD, LADDERS, RAILINGS, SAFE WORK PLATFORMS FREE FROM FALLING DEBRIS AND ADEQUATE WORKSPACE – SDR8,14,21,23,27
RISK LEVEL = 6
- ☒ (GSW) GENERAL SITE WORKS – SDR2,6,9,10,11,12,14,15,17,19,25,26,27
RISK LEVEL = 6
- ☒ (CE) USE OF CONSTRUCTION EQUIPMENT – SDR18,24,27
RISK LEVEL = 6
- ☒ (SWD&E) STORMWATER, DRAINAGE AND ELECTRICAL SERVICES WORK – SDR9,10,14,19,27
RISK LEVEL = 6
- ☒ (WOH) WORKING AT HEIGHTS – SDR21,22,23,27
RISK LEVEL = 7
- ☒ (DEM) DEMOLITION – SDR10,20,15,27
RISK LEVEL = 7
- ☒ (EA) ENVIRONMENTAL GROUND VIBRATIONS, NOISE AND DUST – SDR7,9,27
RISK LEVEL = 6
- ☒ (SP&IT) SURROUNDING PROPERTY AND INFRASTRUCTURE INCLUDING TREES – SDR9,10,27
RISK LEVEL = 5
- ☒ (EX) TRENCHING AND EXCAVATIONS – SDR14,27
RISK LEVEL = 7
- ☒ (U/AGS) – WORK AROUND UNDERGROUND AND ABOVE GROUND SERVICES AND OBSTRUCTIONS – SDR9,10,27
RISK LEVEL = 7
- ☒ (HM) EXPOSING AND HANDLING HAZARDOUS MATERIALS – SDR16,25,27
RISK LEVEL = 4
- ☒ (FC) FORMWORK CONSTRUCTION – SDR21,22,23,27
RISK LEVEL = 6
- ☒ (LSC) LIFTING AND POSITIONING OF STRUCTURAL COMPONENTS – SDR15,27
RISK LEVEL = 6
- ☒ (SIC) STRUCTURE/MEMBER INSTABILITY DURING CONSTRUCTION – SDR7,8,12,14,20,27
RISK LEVEL = 6
- ☒ (OL) OVER LOADING DUE TO CONSTRUCTION & MAINTENANCE LOADS – SDR7,8,15,27
RISK LEVEL = 5
- THE ABOVE LISTED TASKS AND HAZARDS HAVE BEEN ASSESSED AND ARE TO BE FURTHER MITIGATED BY IMPLEMENTING AND COMPLYING WITH THE FOLLOWING RISK REDUCTION MEASURES AS INDICATED ABOVE AND IN THE RISK MATRIX TABLE AND SUGGESTED ACTIONS.
- IT IS THE CLIENT'S RESPONSIBILITY TO PROVIDE THIS 'SAFE DESIGN REPORT'

TO THE BUILDER, PROJECT MANAGER AND/OR PRINCIPAL CONTRACTOR. (CCD)
- SDR1

IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORKS STRICTLY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOT TO MAKE ANY VARIATIONS TO THE CONSTRUCTION WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE DESIGNER. (CCD) (GSW)
- SDR2

IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO BUILD THE WORKS STRICTLY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOT TO MAKE ANY VARIATIONS TO THE CONSTRUCTION WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE DESIGNER. (CCD) (GSW)
- SDR3

IT IS THE CLIENT'S RESPONSIBILITY, THROUGH CONSULTATION AND ENGAGEMENT OF SUITABLY QUALIFIED PROFESSIONALS, TO MAKE THE DESIGNER AWARE OF ANY INFORMATION RELATING TO HAZARDS AND RISKS WHERE CONSTRUCTION WORK IS TO BE CARRIED OUT, INCLUDING BUT NOT LIMITED TO: THE LOCATION OF UNDER GROUND AND ABOVE GROUND SERVICES, IDENTIFICATION OF CONTAMINATED SOILS OR UNEXPECTED SOILS AND OTHER MATERIALS OR THE PRESENCE OF DANGEROUS MATERIALS INCLUDING ASBESTOS. (CCD)
- SDR4

THIS DESIGN HAS BEEN DOCUMENTED IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS, LOCAL AUTHORITY REGULATIONS AND STANDARD BUILDING CODES OF PRACTICE UNLESS NOTED OTHERWISE. EACH LEVEL OF CONSTRUCTION IS TO BE STRUCTURALLY COMPLETED AND INSPECTED TO ENSURE DESIGN COMPLIANCE BY THE CERTIFYING AUTHORITY PRIOR TO ADVANCING TO THE NEXT STAGE OF WORK. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO PROGRAM THE WORKS IN A SAFE MANNER AND TO HIGHLIGHT TO THE DESIGNER ANY ASPECTS OF THE WORK THAT MAY REQUIRE FURTHER CLARIFICATION OR ADVICE WITH REGARD TO THE HEALTH AND SAFETY OF THE PROJECT. (CCD)

SDR5 ALL ASPECTS DETAILED OR NOTED IN THE STRUCTURAL DOCUMENTS ARE THOSE REQUIRED FOR THE COMPLETED STRUCTURE ONLY. THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY CONNECTIONS AS WELL AS SUPPORTS AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF THE STRUCTURE THROUGHOUT THE CONSTRUCTION PERIOD. THIS INCLUDES ELEMENTS SUCH AS PREFABRICATED TIMBER AND STEEL ELEMENTS, UNRESTRAINED WALLS, CONCRETE COLUMNS, BEAMS AND SLABS, PRECAST PANELS, ETC WHICH REQUIRE TEMPORARY SUPPORT OR PROPPING TO PREVENT OVER STRESS, EXCESSIVE DEFORMATION OR INSTABILITY UNTIL THE FINAL STRUCTURAL SYSTEM IS COMPLETED. THE DESIGNER IS TO BE CONTACTED FOR FURTHER ADVICE IF REQUIRED. (CCD)

SDR6 WHERE THESE DESIGN DRAWINGS ONLY DOCUMENT PART OF A STRUCTURE, IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL DESIGN DRAWINGS ARE COORDINATED BETWEEN CONSULTANTS. FOR EXAMPLE, CO-ORDINATION TO ENSURE APPROPRIATE SLAB THICKENINGS AND DETAILING FOR LOAD-BEARING AND BRACING WALL ELEMENTS, CAST IN FIXINGS, ETC. (CCD) (GSW)

SDR7 NO ALLOWANCE HAS BEEN MADE FOR CONSTRUCTION LOADS INCLUDING STACKING OF MATERIALS ON DECKS, FLOORS OR ROOF PLATFORMS, LOADS IMPOSED DUE TO PLANT, MACHINERY, LIFTING DEVICES, IMPACT/VIBRATION/CYCLIC LOADS, ETC. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE DESIGNER OF ANY LOADS, THAT ARE NOT DOCUMENTED, THAT THE STRUCTURE MAY BE SUBJECTED TO DURING CONSTRUCTION. (SIC) (OL) (EA) (CCD)

SDR8 UNLESS NOTED ON THE DRAWINGS NO STRUCTURAL ALLOWANCE HAS BEEN MADE FOR SPECIFIC LOADS ASSOCIATED WITH THE MAINTENANCE OF THE STRUCTURE. THE DESIGNER IS TO BE INFORMED OF ANY REQUIREMENTS NECESSARY TO EXTERNALLY SUPPORT PLATFORMS, SCAFFOLDS ETC AS REQUIRED. (SIC) (SA&SWP) (CCD) (OL)

SDR9 DURING CONSTRUCTION, THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL PROTECT NEIGHBOURING PROPERTIES FROM NOISE AND DUST IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS, RADIATION, GROUND VIBRATIONS, STORMWATER FLOWS AND OTHER CONSTRUCTION HAZARDS. CONDITION REPORTS ON NEIGHBOURING PROPERTIES AND STRUCTURES ARE RECOMMENDED PRIOR TO CONSTRUCTION. (EA) (SWD&E) (U/AGS) (P&IT) (GSW)

SDR10 THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS REQUIRED TO VERIFY AND IF NECESSARY CONDUCT FURTHER SEARCHES TO ACCURATELY LOCATE EASEMENTS, UNDER GROUND AND ABOVE GROUND SERVICES, PROPERTY BOUNDARIES, TREES, EXISTING STRUCTURES AND OTHER OBSTRUCTIONS PRIOR TO DEMOLITION AND OR CONSTRUCTION. THE DESIGNER IS TO BE IMMEDIATELY NOTIFIED OF ANY ELEMENTS NOT SHOWN ON THE APPROVED DRAWINGS AS THE DESIGN AND SAFETY DESIGN REPORT MAY REQUIRE AMENDING. (DEM) (SP&IT) (U/AGS) (GSW) (SWD&E)

SDR11 THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR MUST OBTAIN DESIGN AND INSPECTION CERTIFICATES ON ALL SUNDRY ELEMENTS OF THE STRUCTURE INCLUDING BUT NOT LIMITED TO CLADDING DESIGN AND FIXINGS, WINDOWS, BAULSTRADES, STAIRS, SUSPENDED CEILINGS, INTERNAL FIT-OUT ITEMS AND ALL OTHER ELEMENTS NOT DETAILED IN THE DESIGN DOCUMENTS. (GSW) (CCD)

SDR12 THE CONSTRUCTION IS TO BE FULLY CARRIED OUT IN ACCORDANCE WITH ALL DESIGN DRAWINGS AND NOTES AS DOCUMENTED. IF CONSTRUCTION CEASES AT ANY STAGE, THE DESIGNER IS TO BE NOTIFIED TO PROVIDE ADVICE ON THE SAFETY OF COMPLETED CONSTRUCTION WORK AT THAT TIME. (SIC) (GSW) (CCD)

SDR13 IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO INFORM THE DESIGNER OF ANY CHANGE TO CONTRACTUAL ARRANGEMENTS BETWEEN THE CLIENT AND THEMSELVES WHICH MAY IMPACT ON THE DESIGN AND SAFETY OF THE DESIGN. (CCD)

SDR14 THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR SHALL PROVIDE SUITABLE FENCING AROUND ALL EXCAVATIONS AND AT NO STAGE SHOULD AN EXCAVATION BE APPROACHED OR ENTERED INTO UNLESS AN APPROVED AND CERTIFIED SHORING SYSTEM HAS BEEN INSTALLED OR THE BANKS HAVE BEEN BATTERED AND/OR BENCHED IN ACCORDANCE WITH THE PROJECT'S GEOTECHNICAL ENGINEERING SPECIFICATION AND/OR WRITTEN INSTRUCTIONS BY THE INSPECTING GEOTECHNICAL ENGINEER. (SA&SWP) (EX) (GSW) (SIC) (SWD&E)

SDR15 AT NO STAGE SHALL SITE PERSONNEL PASS UNDER MATERIALS BEING LIFTED AND MOVED AROUND ON SITE. IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SITE MATERIALS ARE DELIVERED, TRANSPORTED, STORED AND POSITIONED IN A SAFE MANNER AND IN ACCORDANCE WITH THE PRODUCT SPECIFICATION, THE SITE SPECIFIC SAFETY PLAN AND GENERAL SAFETY INDUCTION REGULATIONS. (LSC) (GSW) (OL) (DEM)

SDR16 CONTRACTORS ARE REQUIRED TO OBTAIN AND COMPLY WITH MATERIAL PRODUCT SPECIFICATIONS AND RECOMMENDATIONS WHEN USING MATERIALS AND ELEMENTS SPECIFIED IN THE DESIGN DOCUMENTS. (HM) (CCD)

SDR17 THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR MUST ELIMINATE OR LIMIT (SO FAR AS REASONABLE PRACTICABLE) SLIP HAZARDS AND PROTRUDING, SHARP OR ABRASIVE ELEMENTS ON SITE. HAZARDOUS ELEMENTS MUST BE CAPPED, ADEQUATELY SCREENED OR CLEARLY MARKED TO ENSURE SITE SAFETY. (GSW)

SDR18 IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT SITE WORKERS ARE SUITABLY QUALIFIED, TRAINED AND INSURED FOR THE TASKS BEING UNDERTAKEN ON SITE. (CCD) (CE)

SDR19 IT IS THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SITE PERSONNEL ARE PROVIDED ADEQUATE SPACE, VENTILATION AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT TO UNDERTAKE THE WORKS REQUIRED. ALL CONSTRUCTION EQUIPMENT IS TO BE USED IN ACCORDANCE WITH BEST INDUSTRY SAFETY PRACTICES AND REGULATIONS. (GSW) (SWD&E)

SDR20 DEMOLITION WORKS ARE REQUIRED TO BE CARRIED OUT IN A SAFE, SYSTEMATIC AND ORDERLY MANNER IN ACCORDANCE WITH THE SITE SPECIFIC SAFETY PLAN AND ALL GENERAL SAFETY INDUCTION REGULATIONS. TEMPORARY PROPPING OF MEMBERS MAYBE REQUIRED IN ACCORDANCE WITH THE DIRECTION OF A SUITABLY QUALIFIED PROFESSIONAL IN ACCORDANCE WITH RELEVANT SAFETY PRACTICES AND REGULATIONS. (DEM) (SIC)

SDR21 AT ALL TIMES THE BUILDER, PROJECT MANAGER, OR PRINCIPAL CONTRACTOR IS TO PROVIDE SAFE ACCESS ONTO AND AROUND THE BUILDING SITE INCLUDING ADEQUATE STAIRS, SCAFFOLDING, SECURE LADDER ACCESS, SAFE WORKING PLATFORMS, ACCESS PATHS FREE FROM FALLING OBJECTS, ADEQUATE RAILINGS, FALL ARREST SYSTEMS, ETC. ALL PITs, COVERS AND GRATES MUST BE MADE SAFE. (SA&SWP) (WOH) (FC)

SDR22 ALL FORMWORK AND SCAFFOLDING SYSTEMS ARE TO BE DESIGNED AND CERTIFIED BY A LICENSED CONTRACTOR TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND KEPT AND MAINTAINED IN A GOOD WORKING ORDER. REGULAR CHECKS ON ERECTED MEMBERS AND FIXINGS MUST BE CARRIED OUT BY A QUALIFIED PROFESSIONAL TO ENSURE COMPLIANCE WITH THE DESIGN. (FC) (WOH)

SDR23 CLIMBING ON SCAFFOLDING OR FORMWORK AND WORKING AT HEIGHTS WITHOUT SUITABLY APPROVED RAILINGS, BARRIERS AND RESTRAINTS FIXED OFF TO CERTIFIED ANCHOR POINTS IS STRICTLY PROHIBITED. (FC) (WOH) (SA&SWP)

SDR24 ALL SITE MACHINERY AND ELECTRICAL EQUIPMENT IS TO BE KEPT IN GOOD WORKING ORDER WITH CURRENT SAFETY TAGGING AND SERVICING WHERE APPLICABLE. (CE) (SWD&E)

SDR25 THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO ADEQUATELY TREAT AND DISPOSE OF DANGEROUS SITE MATERIALS INCLUDING CONTAMINATED SOILS AND ASBESTOS IN ACCORDANCE WITH AUTHORITY REGULATIONS, INDUSTRY STANDARDS AND PRACTICES. (HM) (GSW)


SDR26 THE BUILDER, PROJECT MANAGER OR PRINCIPAL CONTRACTOR IS TO ENSURE THAT THE SITE IS MAINTAINED IN A SAFE WORKING MANNER AND THAT ALL SITE PRACTICES ARE IN ACCORDANCE WITH CURRENT WORK PLACE HEALTH AND SAFETY LAWS AND REGULATIONS. (CCD) (GSW)

SDR27 REFER DRAWING SHEETS FOR ANY SPECIFIC ADDITIONAL REQUIREMENTS.

RISK MATRIX TABLE

RISK LEVEL = CONSEQUENCE + PROBABILITY	CONSEQUENCE IF IT DID OCCUR			
	1 – INSIGNIFICANT NO DAMAGE	2 – MINOR DAMAGE FIRST AID TREATMENT, INJURIES CAUSING LOST TIME.	3 – CONSIDERABLE, REVERSIBLE DAMAGE, PERMANENT DISABILITY.	4 – EXTREME, SERIOUS 5 – CATASTROPHIC, MAJOR DAMAGE MULTIPLE FATALITIES.
5 – EXPECTED TO OCCUR	6	7	8	10
4 – WILL PROBABLY OCCUR	5	6	7	9
3 – LIKELY TO OCCUR SOMETIME	4	5	6	8
2 – COULD OCCUR AT SOMETIME	3	4	5	7
1 – WILL ONLY OCCUR IN EXCEPTIONAL CIRCUMSTANCES	2	3	4	6

RISK LEVEL	2 TO 4 = MINOR	5 TO 6 = MODERATE	7 TO 8 = MAJOR	9 TO 10 = EXTREME
SUGGESTED ACTIONS BY PRINCIPAL BUILDER AND/OR PROJECT MANAGER	BE AWARE OF THE RISK AND ENSURE ALL TAKE ADOQUATE PRECAUTIONS.	ENSURE ADEQUATE CONTROL MEASURES, ENSURE ALL CONTRACTORS HAVE ADEQUATE TRAINING.	PREPARE WORK METHOD STATEMENTS, ENSURE ADEQUATE MONITORING OF THE WORKS, ADHERE CLOSELY TO THE ASSOCIATED NOTES ON THE DESIGN DOCUMENTS.	BEFORE CARRYING OUT WORKS NECESSITATING THIS RISK MEET WITH THE DESIGNER TO DISCUSS ALL MEASURES OUTLINED ON THE DESIGN DOCUMENTS SO THAT NONE ARE MISSED. PREPARE DETAILED WORK PLANS, WORK METHOD STATEMENTS (WMS), PERMIT TO START, MONITORING, TRAINING, ETC.



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SAFE DESIGN REPORT

Sheet: **PROPOSED RESIDENCE**
40 CHILDE STREET, BELONGIL

Client: **DAVID TREWERN**

Consultant: **HARLEY GRAHAM ARCHITECTS**

Job No. **N17-203**

Sheet No. **1.0**

1. NEALE - PREP 2457
For 5 on the design of
Westera Partners Pty, Ltd.

A

Revision

GENERAL NOTES

61 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL
AND OTHER CONSULTANTS DRAWINGS, SPECIFICATIONS AND INSTRUCTIONS.
ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE ENGINEER
FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

62 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL
CHECK AND CO-ORDINATE WITH THE ARCHITECT AND OTHER CONSULTANTS
ALL STEPS, FALLS, REBATES, SETDOWNS, CHASES AND PENETRATIONS.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OFF THE DRAWINGS

G4 ALL DIMENSIONS SHALL BE CHECKED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORKS.

65 THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE AND ADJACENT STRUCTURES IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED DURING THE WORKS.

66 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE
RELEVANT CURRENT AUSTRALIAN STANDARDS, THE BCA, AND LOCAL COUNCIL
REGULATIONS.

G7 ALL NON-LOADBEARING WALLS SHALL BE KEPT 20mm CLEAR OF THE UNDERSIDE OF SLABS, BEAMS AND OTHER STRUCTURAL ELEMENTS, UNLESS NOTED OTHERWISE.

68 THE CONTRACTOR IS TO CONFIRM THE LOCATIONS OF ALL EXISTING UNDERGROUND
SERVICES AND TAKE NECESSARY MEASURES TO AVOID CLASHES PRIOR TO
COMMENCING EARTHWORKS AND/OR PILING.

THE STRUCTURAL ENGINEERING DESIGN DOCUMENTED FOR THIS PROJECT RELATES TO THE PROPOSED NEW CONSTRUCTION OF BUILDING ELEMENTS. THE CONDITION AND COMPLIANCE OF EXISTING STRUCTURAL COMPONENTS HAVE NOT BEEN ASSESSED NOR CERTIFIED AS PART OF WESTERA PARTNERS COMMISSION ON THIS PROJECT UNLESS SPECIFICALLY STATED ON THE DESIGN DOCUMENTS

IT IS THE BUILDERS RESPONSIBILITY TO OBTAIN SUFFICIENT SURVEY & GEOTECHNICAL ADVICE AND TO INSTALL RETENTION SYSTEMS AS NECESSARY TO FACILITATE EXCAVATION ADJACENT TO SITE BOUNDARIES.

LOADINGS

L1 THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:

LOCATION	UNIFORM LOAD (kPa)	POINT LOAD (kN)
GARAGE SLABS	2.5	13
GENERAL AREAS	1.5	1.8
BALCONIES	2.0	1.8
ROOF	0.25	1.1

L2 WIND LOADS HAVE BEEN CALCULATED IN ACCORDANCE WITH AS/NZS 1170.2 AND THE FOLLOWING PARAMETERS:

WIND CATEGORY N4

L3 LOAD COMBINATIONS HAVE BEEN CALCULATED IN ACCORDANCE WITH AS/NZS 1170.0

SITE PREPARATION

SP1 SITE EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH AS3798 – GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS

SP2 REFER TO THE GEOTECHNICAL REPORT FOR THE SOIL PROFILE ACROSS THE SITE AND SITE RECOMMENDATIONS.

SP3 THE SITE SHALL BE STRIPPED OF ALL TOPSOIL & VEGETATION AND PROOF ROLLED TO IDENTIFY SOFT SPOTS, WHICH SHALL BE EXCAVATED AND REPLACED WITH SUITABLE FILL APPROVED BY THE GEOTECHNICAL ENGINEER.

SP4 IN ACCORDANCE WITH AS3798, THE COMPACTION REQUIREMENTS FOR SHALLOW FILL ARE AS FOLLOWS:

A) SAND UP TO 800mm DEEP IS TO BE COMPACTED IN 200mm LAYERS BY A VIBRATING PLATE OR VIBRATION ROLLER. THE FILL IS TO HAVE AN N VALUE OF 7 USING A STANDARD PENETROMETER TEST. DENSITY INDEX IS TO BE NOT LESS THAN 75% IN ACCORDANCE WITH AS1289 TESTING OF DENSITY INDEX SHALL BE DONE IN ACCORDANCE WITH AS1289.

NON-SAND FILL UP TO 400mm DEEP SHALL BE COMPACTED IN NOT MORE THAN 150mm LAYERS BY A MECHANICAL ROLLER, CLAY FILL SHALL BE MOST DURING COMPACTION. STANDARD COMPACTION IS NOT TO BE LESS THAN 95% FOR A RESIDENTIAL PROJECT AND 98% FOR A COMMERCIAL DEVELOPMENT OR PAVEMENT IN ACCORDANCE WITH A12189. REACTIVE CLAY SHOULD BE AVOIDED AS FILL BUT IF USED SHOULD BE PLACED AT A MOISTURE CONTENT WHICH APPROXIMATES THE FIXED EQUILIBRIUM MOISTURE CONTENT.

SP5 ANY FILLED BUILDING PLATFORMS IN EXCESS OF THE FILL LEVELS DESCRIBED ABOVE SHALL BE CONTROLLED FILL IN ACCORDANCE WITH AS3798 – GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. THE TESTING AND CERTIFICATION OF THE FILL PLATFORM SHALL BE CARRIED OUT BY A SUITABLY QUALIFIED TESTING BODY.

SP6 FOR SITES WHERE CUT AND FILL IS REQUIRED, THE FILL SHALL CONTINUE PAST THE EDGE OF THE BUILDING AT LEAST 1m AND SHALL BE RETAINED OR BATTERED BEYOND THIS POINT. REFER TO THE GEOTECHNICAL REPORT FOR BATTER SLOPE DETAILS. THE INTERIOR OF THE SLAB SHALL BE FOUNDED ON COMPACTED MATERIAL AND THE EDGE BEAMS & INTERNAL LOAD-BEARING ELEMENTS SHALL BE FOUNDED ON NATURAL SOIL (REFER GEOTECHNICAL REPORT)

DRAINAGE/PLUMBING/TREES

D1 THE EXTERNAL FINISHED SURFACE SURROUNDING THE FOOTINGS AND SLAB ON GROUND IS TO BE WELL DRAINED AT ALL TIMES BY SLOPING THE SOIL AWAY FROM THE BUILDING AND GRADED TO GIVE A SLOPE OF NOT LESS THAN 50mm OVER THE FIRST 1 METER FROM THE BUILDING. PONDING OF WATER AROUND THE BUILDING IS TO BE PREVENTED DURING & AFTER CONSTRUCTION. ALL WATER IS TO BE DRAINED TO EITHER THE STREETED FRONTAGE OR TO FIELD DRAIN PITS CONNECTED TO A DISCHARGE LINE. SPOON DRAINS ARE TO BE LOCATED AT THE TOP AND BOTTOM OF ALL BATTERS. REFER TO THE BCA CLAUSE 3.1.2 FOR FURTHER DRAINAGE REQUIREMENTS.

D2 ENSURING PLUMBING INCLUDING STORMWATER DISCHARGE, SEWERAGE AND DRAINAGE ARE KEPT IN GOOD WORKING ORDER AND ARE NOT ALLOWED TO SATURATE THE GROUND AROUND THE BUILDING. REPAIRS TO DAMAGE MUST BE ADDRESSED PROMPTLY

D3 TREES AND SHRUBS ARE TO BE KEPT A MINIMUM OF 2 TIMES THEIR MATURE HEIGHT AWAY FROM THE BUILDING. IN THE EVENT THIS CANNOT BE ACHIEVED A "ROOT BARRIER" SYSTEM SHALL BE INSTALLED AND CERTIFIED BY A SPECIALIST CONTRACTOR TO PROTECT THE BUILDINGS FOUNDATION SYSTEM.

No	Date	Issue	Scale:	AS SHOWN
P1	14-05-18	PRELIMINARY ISSUE	Designed:	RS
A	06-06-19	DA ISSUE	Drafted:	JW
			Date:	JUN 19
			PAGE SIZE:	A3

USE FIGURED DIMENSIONS ONLY; DO NOT SCALE. IF A DISCREPANCY ARISES CHECK WITH THE PROJECT ARCHITECT OR SUPERVISING AUTHORITY. DO NOT WORK FROM REDUCED SCALE DRAWINGS (A-4.3 SIZE PAPER). CARRYING OF ALL DIMENSIONS & WORKS EXECUTED FROM THEM IS VESTED IN WESTERN PARTNERS AND USE OF THESE FOR WITHOUT PERMISSION IS STRICTLY PROHIBITED. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE ALL WORKS ARE CARRIED OUT WITH DUE CARE AND DILIGENCE TO COMPLY WITH THE CONTRACT DOCUMENTS.

ALL PLUMBING INSTALLED ON REACTIVE CLAY SITES IS TO BE PLACED IN ACCORDANCE WITH THE BSA RECOMMENDED GUIDELINES FOR SANITARY AND STORMWATER INSTALLATION ON REACTIVE CLAY SITES AS A MINIMUM STANDARD.

FOUNDATIONS

REFER TO SOIL REPORT AND FOOTING PLAN FOR REFERENCE TO THE REQUIRED FOUNDING MATERIAL FOR THE FOOTINGS, THE SOIL PROFFILL ACROSS THE SITE AND SPECIFIC SITE RECOMMENDATIONS.

THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY SHOULD THE FOUNDATION MATERIAL DIFFER FROM THAT STATED IN THE SOIL REPORT.

TOPSOIL CONTAINING PLANT ROOTS AND ANY ORGANIC MATERIAL SHALL BE REMOVED FROM THE BUILDING AREA PRIOR TO CONSTRUCTION.

FOOTINGS SHALL BE LOCATED CENTRALLY UNDER COLUMNS AND WALLS
UNLESS NOTED OTHERWISE.

ALL WATER AND LOOSE MATERIAL SHALL BE REMOVED FROM FOOTING EXCAVATIONS PRIOR TO CONCRETING.

UNLESS OTHERWISE NOTED ON DRAWINGS, ALL FOOTINGS SHALL BE
FOUNDED INTO MATERIAL HAVING A SAFE BEARING CAPACITY OF NOT LESS
THAN 100KPa. TO BE CONFIRMED IN WRITING BY A GEOTECHNICAL ENGINEER

CONCRETE

ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS3600 CONCRETE STRUCTURES CODE AND THE REFERENCED STANDARDS THEREIN.

THE CONCRETE STRENGTH GRADE AND THE COVER TO REINFORCEMENT FOR THE VARIOUS CONCRETE ELEMENTS SHALL BE AS LISTED BELOW:

ELEMENT	STRENGTH GRADE	COVER
FOOTINGS	N25	50
INTERIOR GROUND SLABS	N25	30
EXTERIOR GROUND SLABS	N32	40
INTERNAL SUSPENDED SLABS & BEAMS	N/A	
EXTERNAL SUSPENDED SLABS & BEAMS	N40	30
CONCRETE COLUMNS AND FORMED WALLS	N/A	

CONCRETE TO HAVE A MAXIMUM AGGREGATE SIZE OF 20mm WITH 80mm
MAXIMUM SLUMP, A WATER/CEMENT RATIO OF NOT GREATER THAN 0.65 AND A
MAXIMUM FINAL BASIC DRYING SHRINKAGE STRAIN OF 800×10^{-6} UNLESS
APPROVED OTHERWISE.

NO ADDITIVES SHALL BE ADDED OR APPLIED TO THE CONCRETE MIX WITHOUT THE APPROVAL OF THE ENGINEER.

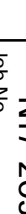
THE MAXIMUM PERMISSIBLE TRANSPORT TIME FOR CONCRETE BETWEEN BATCHING AND PLACEMENT ON SITE SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE

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COLD COAST Level 3, 17 Welch St, Southport E goldcoast@westterpartners.com.au T 07 5571 1599		
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No.	Date	Issue	Scale:	AS SHOWN
P1	14-05-18	PRELIMINARY ISSUE	Designed:	RS
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			Date:	Jul 19
			PAGE SIZE:	A3

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE IF A DISCREPANCY ARISES CHECK WITH THE PROJECT ENGINEER AND/OR SUPERVISING AUTHORITY. DO NOT WORK FROM REDUCED SCALE DRAWINGS (A3/A4 SIZE PAPER). ALL DIMENSIONS & WORKS EXECUTED FROM THESE ARE VESTED IN WESTERPARTNERS. WESTERPARTNERS SHALL BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE ALL WORKS ARE CARRIED OUT WITHOUT CARE AND DILIGENCE TO COMPLY WITH THE CONTRACT DOCUMENTS.

Sheet:	CONSTRUCTION NOTES - SHEET 1
Project:	PROPOSED RESIDENCE
Location:	40 CHILDE STREET, BELONGIL
Client:	DAVID TREWERIN
Consultant:	HARLEY GRAHAM ARCHITECTS

Job No.	N17-203	Revision	1.1
 J. NEALE - PRPO 2451 For 5 on the behalf of Westera Partners Pty. Ltd.		A	

AMBIENT AIR TEMPERATURE	MAX. BATCHING TO PLACEMENT TIME
10° – 24°C	120 MINUTES
25° – 27°C	90 MINUTES
28° – 30°C	60 MINUTES
31° – 33°C	45 MINUTES
34° – 36°C	30 MINUTES
37°C+	NO PLACEMENT OF CONCRETE UNLESS CHILLED WATER OR ICE IN MIX

- C6ALL CONCRETE SHALL BE MECHANICALLY VIBRATED. VIBRATORS SHALL NOT BE USED TO SPREAD CONCRETE.
- C7ALL CONCRETE SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AS1379 ADOPTING THE PROJECT ASSESSMENT METHOD FOR COMPRESSIVE STRENGTH AND SLUMP COMPLIANCE. THE RESULTS OF ALL TESTS SHALL BE PROMPTLY SUBMITTED TO THE ENGINEER FOR REVIEW.
- C8WHEN THE AIR TEMPERATURE EXCEEDS 30°C, ALIPHATIC ALCOHOL SHALL BE APPLIED TO THE CONCRETE SURFACE OF SLABS IMMEDIATELY AFTER THE INITIAL SCREED AND AGAIN AFTER BULL FLOATING.
- C9CURING OF ALL CONCRETE SURFACES SHALL COMMENCE IMMEDIATELY AFTER COMPLETING CONCRETE FINISHING AND SHALL CONTINUE FOR 7 DAYS. CONTRACTOR TO CONFIRM METHOD OF CURING WITH ENGINEER PRIOR TO USE.
- C10SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C11BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY.
- C12CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR APPROVED BY THE ENGINEER.
- C13NO HOLES, CHASES OR EMBEDDED ITEMS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER. CONDUITS, PIPES ETC. SHALL NOT BE PLACED IN THE COVER THICKNESS OF THE CONCRETE.
- C14WHERE SERVICE PIPES PENETRATE CONCRETE ELEMENTS, PROVISION SHOULD BE MADE TO ALLOW FOR MOVEMENT OF THE ELEMENT.
- C15FORMWORK SHALL BE DESIGNED, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610 FORMWORK CODE, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- C16STRIPPING OF FORMWORK AND REPROPPING OF SUSPENDED SLABS AND BEAMS SHALL BE CARRIED OUT PROGRESSIVELY SO THAT AT NO STAGE IS THE SLAB OR BEAM UNSUPPORTED UNTIL IT IS PERMITTED TO FULLY REMOVE ALL PROPPING.
- C17IN MULTISTORY CONSTRUCTION, PROPS SHALL BE LOCATED IN THE SAME POSITION ON EACH FLOOR SO THAT THEY WILL BE CONTINUOUS IN THEIR SUPPORT FROM FLOOR TO FLOOR. WHERE THE NUMBER OF PROPS ON A FLOOR IS REDUCED, THE REMAINING PROPS SHALL BE LOCATED DIRECTLY UNDER PROPS ON THE FLOOR ABOVE.
- C18PROPPING TO SUSPENDED SLABS AND BEAMS SHALL NOT BE REMOVED UNTIL THE CONCRETE HAS ACQUIRED SUFFICIENT STRENGTH TO SUPPORT SAFELY ITS OWN WEIGHT AND ANY SUPERIMPOSED LOAD WITHOUT DAMAGE OR UNACCEPTABLE DEFLECTION.
- C19NO MASONRY WALLS OR SIMILAR PERMANENT LOADINGS SHALL BE ERECTED ON ANY PART OF THE STRUCTURE WHILE THE PART IS STILL SUPPORTED BY PROPS.
- C20FOR CONCRETE USING NORMAL PORTLAND CEMENT AS3972 – TYPES A OR D WITHOUT ADMIXTURES, STRIPPING STAGES SHALL CONFORM TO THE MINIMUM STRIPPING TIMES FOR THE APPROPRIATE EFFECTIVE SPANS AND TEMPERATURES GIVEN IN THE FOLLOWING TABLE.

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

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

REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION OR SCALE.

ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION ON PLASTIC BAR CHAIRS, GENERALLY AT NOT GREATER THAN 800mm CENTRES IN BOTH DIRECTIONS.

WELDING AND HEATING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER.

ALL STEEL REINFORCEMENT IN CONCRETE ELEMENTS SHALL BE INSPECTED BY THE ENGINEER AND PASSED PRIOR TO POURING OF ANY CONCRETE.

LAP REINFORCEMENT ONLY AT LOCATIONS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.

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

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

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

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

A LEVELING SAND LAYER (50mm MINIMUM IN THICKNESS) SHALL BE PLACED UNDER SLABS ON GROUND UNO. THE SAND SHALL BE SALT FREE AND COMPACTED TO 65% DENSITY INDEX.

C29

A VAPOUR BARRIER OF 0.2mm (200um) MINIMUM THICK POLYTHENE SHEETING SHALL BE PLACED BENEATH SLABS ON GROUND UNLESS NOTED OTHERWISE.

CONCRETE SHRINKAGE CRACKING

TO REDUCE THE OCCURENCE OF SHRINKAGE CRACKING IN CONCRETE SLABS, THE FOLLOWING GUIDELINES SHOULD BE FOLLOWED:

SLAB ON GROUND SHOULD BE POURED ON POLYTHENE SHEETING OVER A SMOOTH SUB-BASE.

WATER MUST NOT BE ADDED TO THE CONCRETE MIX AFTER IT LEAVES THE BATCHING PLANT UNLESS ORDERED BY THE SUPPLIER.

PLACE CONCRETE AS SOON AS POSSIBLE.

ADEQUATELY COMPACT THE CONCRETE, PARTICULARLY AROUND CORNERS, PENETRATIONS AND INSERTS.

CLOSE ANY EARLY CRACKING BY RE-COMPACTING THE CONCRETE OR RE-TROWLING THE SURFACE.

IN WINDY CONDITIONS ERECT WIND BREAKS OR WALLS.

APPLY ALIPHATIC ALCOHOL IMMEDIATELY AFTER SCREEDING AND BULLFLOATING.

RE-APPLY ALIPHATIC ALCOHOL TO SURFACES AFTER EACH FINISHING OPERATION.

ONCE THE SLAB IS FINISHED, CONTINUOUSLY CURE FOR 7 DAYS VIA WATER PONDING, IMPERVIOUS SHEETS OVER THE SLAB OR MEMBRANE FORMING CURING COMPOUNDS APPLIED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.

STRUCTURAL ENGINEER IS TO BE NOTIFIED BY THE CLIENT, ARCHITECT OR BUILDER, OF ANY SPECIAL SHRINKAGE REQUIREMENTS FOR EXPOSED CONCRETE ELEMENTS PRIOR TO CONSTRUCTION.

WHERE BRITTLE FLOOR COVERINGS SUCH AS CERAMIC TILES ARE BEING USED, ADDITIONAL SLAB REINFORCEMENT SHOULD BE ADDED TO THE SPECIFIED MINIMUM REINFORCEMENT. IF NO EXTRA REINFORCEMENT IS ADDED, COVERING SHOULD BE DELAYED UNTIL 90 DAYS AFTER THE SLAB HAS BEEN PLACED.

ALL SHRINKAGE CRACKS ARE TO BE TREATED WITH A LOW VISCOSITY ACRYLIC POLYMER SPECIFICALLY DESIGNED TO PENETRATE, REPAIR AND SEAL MOVING CRACKS SUCH AS 3M CP&R 5742 OR APPROVED EQUIVALENT.

POLISHED/HONED CONCRETE SLABS

WHERE POLISHED/HONED CONCRETE SLABS ARE REQUIRED, THE SLAB SHALL COMPLY WITH THE FOLLOWING:

CONCRETE TO HAVE A MINIMUM STRENGTH GRADE OF S32 WITH A MAX. SHRINKAGE STRAIN OF 650x10⁻⁶ AND A MAX. WATER/CEMENT RATIO OF 0.45, U.N.O.

SLABS ON GROUND TO BE MINIMUM 130 THICK, REINFORCED WITH SL81 FABRIC WITH 30mm TOP COVER, U.N.O.

FOLLOW CC44 GUIDELINES FOR CONCRETE SHRINKAGE CRACKING AND POLISHED CONCRETE FLOORS

STRUCTURAL STEEL

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 STEEL STRUCTURES CODE AND THE REFERENCED STANDARDS THEREIN.

THE CONTRACTOR SHALL SUBMIT STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW BY THE ENGINEER AND ARCHITECT, BEFORE FABRICATION COMMENCES.

THE STEEL MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE THOSE REQUIRED FOR THE COMPLETED STRUCTURE ONLY. THE CONTRACTOR SHALL

CONSTRUCTION NOTES - SHEET 2

Sheet: **PROPOSED RESIDENCE**
Project: **40 CHILDE STREET, BELONGIL**
Location: **DAVID TREWERN**
Client: **HARLEY GRAHAM ARCHITECTS**
Consultant:

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE. IF A DISCREPANCY ARISES CHECK WITH THE PROJECT ENGINEER AND/OR SUPERVISING AUTHORITY. DO NOT WORK FROM REDUCED SCALE DRAWINGS (A1-A3 SIZE PAPER). COPYRIGHT OF ALL DRAWINGS & WORKS EXECUTED FROM THEM IS VESTED IN WESTERA PARTNERS AND USE OF THESE FOR E WITHOUT PERMISSION IS STRICTLY PROHIBITED! IT IS THE BUILDERS RESPONSIBILITY TO ENSURE ALL WORKS ARE CARRIED OUT WITH DUE CARE AND DILIGENCE TO COMPLY WITH THE CONTRACT DOCUMENTS.

No.	Date	Issue	Scale:		AS SHOWN
			Designed:	RS	
P1	14-05-18	PRELIMINARY ISSUE	Drafted:	JW	
A	06-06-19	DA ISSUE	Date:	JUN 19	
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Job No.	M17-203	1.2
	Sheet No.	
J. NEALE - RECD 7457 For 6 on the behalf of Westera Partners Pty, Ltd.		A
Revision		

BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY CONNECTIONS, SUPPORTS AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF THE STEELWORK THROUGHOUT THE CONSTRUCTION PERIOD.

THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL STEELWORK, CLEATS AND BOLTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:

ELEMENT	STEEL GRADE
HOT ROLLED SECTIONS	300 PLUS
WELDED SECTIONS (WB, WC)	300 PLUS
CHS UP TO AND INCLUDING 168 DIA.	C250
CHS GREATER THAN 168 DIA, SHS AND RHS	C350
FLOOR PLATES	250
MERCHANT BAR – ROUNDS, SQUARES AND FLATS	300 PLUS

UNLESS NOTED OTHERWISE, ALL WELDS SHALL BE 6mm CONTINUOUS FILLET. ALL WELDS SHALL BE FROM E48XX/W50X ELECTRODES AND SHALL BE CATEGORY GP UNLESS NOTED OTHERWISE.

ALL CLEATS AND GUSSET PLATES SHALL BE 10mm THICK, UNLESS NOTED OTHERWISE.

ALL BOLTS SHALL BE M20 8.8/S UNLESS NOTED OTHERWISE. BOLT HOLES SHALL BE 2mm GREATER THAN SPECIFIED BOLT SIZE UNLESS NOTED OTHERWISE.

BOLT DESIGNATIONS SHALL CONFORM TO THE FOLLOWING:

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

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

WASHERS SHALL BE INSTALLED UNDER BOTH BOLT HEAD AND NUT AT ALL SLOTTED BOLT HOLE LOCATIONS.

CONCRETE ENCASED AND FIRE SPRAYED STEELWORK SHALL NOT BE PAINTED.

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

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

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

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

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

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

UNLESS NOTED OTHERWISE ALL STEELWORK (INCLUDING FIXINGS) SHALL BE HOT DIP GALVANISED OR PAINTED (INCLUDING CLEANING & PREPARATION) BASE ON THEIR LEVEL OF EXPOSURE (ATMOSPHERIC CORROSION CATEGORY)IN ACCORDANCE WITH AS/NZS 2312 AND THE REFERENCED STANDARDS THERE IN.

REGARDLESS OF THE PROTECTIVE COATING SYSTEM ADOPTED, SOME ONGOING MAINTENANCE IS TO BE EXPECTED THROUGHOUT THE DESIGN LIFE OF EXPOSED STEELWORK, PARTICULARLY IN COASTAL ENVIRONMENTS.

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

ALL COATED SURFACES DAMAGED BY SITE WELDS OR CUTTING SHALL BE THOROUGHLY CLEANED, PREPARED AND PAINTED IN ACCORDANCE WITH AS2312.

MASONRY BLOCKWORK & BRICKWORK

M1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3700 MASONRY CODE AND THE REFERENCED STANDARDS THEREIN.

M2 MINIMUM DURABILITY REQUIREMENTS.

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

M3 ALL MASONRY BLOCKS SHALL HAVE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 15MPa.

M4 ALL LOAD-BEARING BRICKS SHALL HAVE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 20MPa.

M5 CLAY BRICKS SHALL EXHIBIT A MAXIMUM 5 YEAR EXPANSION OF 1.0mm/m. THE BRICK SUPPLIER SHALL PROVIDE A RECENT TEST CERTIFICATE CONFIRMING THE EXPANSION.

M6 MORTAR SHALL BE CLASS M3 OR M4 IN ACCORDANCE WITH NOTE M2 ABOVE. REFER TO AS3700 FOR COMPLYING MIX PROPORTIONS. SAND SHALL BE CLEAN WELL GRADED AND FREE OF SILT AND CLAY. NO "BRICKS LOAM" ALLOWED.

M7 GROUT FOR CORE FILLING SHALL BE STRENGTH GRADE S20. THE GROUT SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 10mm, A MAXIMUM SLUMP OF 230mm +/-25mm AND A MINIMUM CEMENT CONTENT OF 300kg/m³.

M8 ADDITIVES SHALL NOT BE ADDED TO THE GROUT OR MORTAR WITHOUT THE SPECIFIC PERMISSION OF THE ENGINEER.

M9 PROVIDE CLEANOUT BLOCKS AT THE BASE OF ALL REINFORCED CORES.

M10 ALL MORTAR DAGS AND PROTRUSIONS INTO THE BLOCK OR BRICK CORES SHALL BE REMOVED PRIOR TO THE PLACEMENT OF ANY CONCRETE. LOOSE MATERIAL AND DEBRIS SHALL ALSO BE REMOVED FROM THE MASONRY CORES.

M11 FULLY BED SOLID UNITS, FACE BED HOLLOW UNITS AND FULLY FILL VERTICAL JOINTS. NO RAKING OF MORTAR JOINTS IS PERMITTED.

M12 GROUTING SHALL NOT COMMENCE UNTIL THE MORTAR JOINTS HAVE GAINED SUFFICIENT STRENGTH TO RESIST BLOWOUT AND CORES HAVE BEEN CLEANED OUT.

M13 GROUT SHALL BE COMPACTED BY VIBRATOR OR BY RODDING WITH A ROD NOT LESS THAN 24mm DIAMETER.

M14 ALL CORES SHALL BE FILLED WITH GROUT, UNLESS NOTED OTHERWISE.

M15 REINFORCEMENT SHALL BE PLACED ACCURATELY AND TIED SECURELY BEFORE PLACEMENT OF GROUT.

M16 UNLESS NOTED OTHERWISE VERTICAL CONTROL JOINTS SHALL BE PROVIDED IN BLOCKWORK AT 8.0m CRS. AND AT 4.0m FROM CORNERS, AND IN BRICKWORK AT 5.0m CRS. AND AT 2m TO 4.5m FROM CORNERS. CONTRACTOR TO CO-ORDINATE LOCATIONS WITH ARCHITECT. JOINTS TO BE 10mm WIDE. JOINTS TO BE CONSTRUCTED IN ACCORDANCE WITH CEMENT CONCRETE & AGGREGATES AUSTRALIA TECHNICAL NOTE TN61.

M17 NO HOLES OR CHASES SHALL BE CUT INTO BLOCKWORK/BRICKWORK WITHOUT PRIOR APPROVAL OF THE ENGINEER.

M18 ALL WALL INTERSECTIONS SHALL BE OF BONDED CONSTRUCTION OR TIED WITH MEDIUM DUTY TIES AT 400mm MAXIMUM CRS.

M19 IN CAVITY/BRICK VENEER WALLS PROVIDE MEDIUM DUTY GALVANISED WALL TIES AT 600 CENTRES VERTICALLY AND HORIZONTALLY AND AT 300 AVERAGE CENTRES ADJACENT TO OPENINGS. TIES TO BE EMBEDDED A MINIMUM OF 50mm INTO THE MORTAR JOINTS. STAINLESS STEEL TIES SHALL BE USED IN LOCATIONS LESS THAN 1km FROM THE COAST.

Sheet: CONSTRUCTION NOTES - SHEET 3

Project: PROPOSED RESIDENCE
Location: 40 CHILDE STREET, BELONGIL
Client: DAVID TREWERN
Consultant: HARLEY GRAHAM ARCHITECTS

Job No. N17-203

Sheet No. 1.3

J. NEALE - RREG 7457
For 5 on the bench of
Westera Partners Pty, Ltd.

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TIMBER FRAMING

T1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1720 – TIMBER STRUCTURES CODE, AS1684 – RESIDENTIAL TIMBER FRAMED CONSTRUCTION STANDARD AND THE REFERENCED STANDARDS THERIN.

T2 ALL FRAMING, BRACING AND TIEDOWN INFORMATION SPECIFIED FORM THE BASIS FOR THE DESIGN OF THE STRUCTURAL SUPPORT ELEMENTS DOWN TO THE FOUNDATIONS. ALTERNATIVE SOLUTIONS WILL ONLY BE PERMITTED UPON WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

T3 PREFABRICATED TIMBER ROOF TRUSSES, PROPRIETARY FLOOR JOIST SYSTEMS AND ALTERNATIVE TIMBER ELEMENTS TO THOSE SHOWN ON THE ENGINEERING DRAWINGS ARE TO BE DESIGNED AND CERTIFIED BY THE SUPPLIER'S STRUCTURAL ENGINEER. DESIGN AND INSPECTION CERTIFICATES FOR THESE ELEMENTS ARE TO BE ISSUED TO THE BUILDER FOR LODGMENT WITH THE LOCAL AUTHORITY.

T4 ALL TIMBER MEMBERS USED ARE TO HAVE A MINIMUM LEVEL OF DURABILITY AS SPECIFIED IN AS1684.2 – APPENDIX B

T5 ALL TIMBER SHALL BE SEASONED UNLESS NOTED OTHERWISE.

T6 ALL TIMBER SHALL BE FREE OF GUM VEINS, KNOTS AND ANY OTHER IMPERFECTIONS WITHIN CONNECTION ZONES.

T7 UNLESS NOTED ON THE STRUCTURAL DRAWINGS, THE TIMBER ELEMENTS SPECIFIED HAVE NOT BEEN DESIGNED TO SUPPORT HANGING DOORS, AIR CONDITIONING UNITS, WATER TANKS, ETC. THE CONTRACTOR IS TO SUPPLY THE STRUCTURAL ENGINEER WITH THE NECESSARY INFORMATION TO DESIGN CHECK THE FRAMING ELEMENTS AND MAKE CHANGES ACCORDINGLY IF REQUIRED.

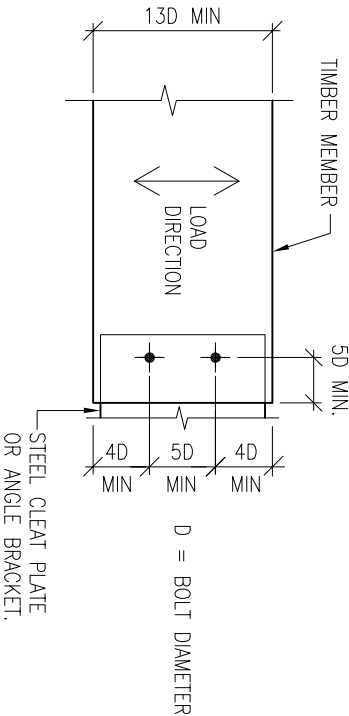
T8 WASHERS SHALL BE PROVIDED UNDER ALL NUTS AND BOLT HEADS BEARING AGAINST TIMBER IN ACCORDANCE WITH THE FOLLOWING TABLE:

BOLT SIZE	WASHER
UP TO M12	50 x 50 x 3.0mm THICK
M16	57 x 57 x 4.0mm THICK
M20	65 x 65 x 5.0mm THICK
OVER M20	75 x 75 x 6.0mm THICK

T9 ALL BOLTS, WASHERS AND DRILLED IN ANCHORS SPECIFIED IN EXTERNAL AREAS ARE TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS1214.

T10 THE TIMBER MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE THOSE REQUIRED FOR THE COMPLETE STRUCTURE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY CONNECTIONS, SUPPORTS AND BRACING TO MAINTAIN THE STABILITY AND SAFETY OF THE TIMBERWORK THROUGHOUT THE CONSTRUCTION PERIOD.

T11 ALL BOLT LOCATIONS TO BE IN ACCORDANCE WITH THE FOLLOWING DETAIL:



MINIMUM SPACING, EDGE & END DISTANCES FOR NAILS & SCREWS			
SPACING TYPE	MINIMUM DISTANCE		
	HOLES FOR NAILS NOT PRE-BORED	HOLES FOR NAILS PRE-BORED TO 80% OF NAIL DIAMETER	FOR SCREWS
END DISTANCE	20D	10D	10D
EDGE DISTANCE	5D	5D	5D
BETWEEN NAILS OR SCREWS – ALONG GRAIN	20D	10D	10D
– ACROSS GRAIN	10D	3D	3D
D = SHANK DIAMETER OF NAIL OR SCREW			

TIMBER SCHEDULE

FIRST FLOOR

LOAD BEARING FRAME (2700 MAX. HIGH)

STUD AT 450cfs – 90 x 35 MGP12
TOP PLATE – 2/35 x 90 MGP12
BOTTOM PLATE – 2/35 x 90 MGP12
NOGINGS – 90 x 35 MGP10 (AT 1350 CRS)

GROUND FLOOR

LOAD BEARING FRAME (2700 MAX. HIGH)

STUD AT 450cfs – 90 x 35 MGP12
TOP PLATE – 2/35 x 90 MGP12
BOTTOM PLATE – 35 x 90 MGP10
NOGINGS – 90 x 35 MGP10 (AT 1350 CRS)

NON LOAD BEARING FRAME

STUDS AT 600 CENTRES, PLATES AND NOGINGS – 90x35 MGP10

STUDS AT SIDE OF OPENINGS

OPENING SPAN 0mm – 900mm 1 STUD
OPENING SPAN 1200mm – 2100mm 2 STUDS
OPENING SPAN 2400mm – 3000mm 3 STUDS
OPENING SPAN 3300mm – 3600mm 4 STUDS

ROOF FRAMING

PREFABRICATED ROOF TRUSSES & RAFTERS AT 600 MAX. CRS. TO MANUFACTURERS DESIGN.
35 x 70 MGP12 BATTENS AT 900 MAX. CRS.

TIE DOWN DETAILS (N4)

BATTENS TO TRUSSES/RAFTERS

ADOPT 1/75mm No.14 TYPE 17 SCREW TO ALL AREAS. OR FOR PROPRIETARY BATTENS, FIX TO MANUFACTURERS SPECIFICATIONS

BATTIES/TRUSSES/PURLINS TO TOP PLATE

2 FRAMING ANCHORS WITH 4/2.86mm NAILS EACH LEG OR 1 FACE MOUNTED G.I. JOIST HANGER WITH 4 WINGS AND 4/2.8mm NAILS EACH WING WITH 4/2.8mm DIA NAILS EACH END, ALL TO SUPPLIERS DESIGN & CERTIFICATION.

GIRDER TRUSS TO FRAME/SLAB BELOW

6mm 'Z' TIEDOWN BRACKET OVER GIRDER TRUSS TIED DOWN WITH 1/M12 ROD TO FRAME/SLAB BELOW.

RIBBON TOP PLATES

JOINTS IN PLATES SHALL BE OVER STUDS AND BE NOT LESS THAN 1200mm APART IN ADJOINING PLATES. A MINIMUM OF 2/75 x 3.05mm NAILS SHALL BE USED TO CONNECT THE DOUBLE PLATES TOGETHER AT EACH END .

TOP PLATES TO UNTELS OVER OPENINGS

30x0.8mm GI STRAPS AT 900 MAX. CRS WITH 4/2.86mm NAILS EACH END.

TOP PLATES TO FRAME/SLAB BELOW

M12 TIEDOWN RODS AS SHOWN ON ROOF & FLOOR FRAMING PLANS. RODS TO BE FIXED TO SLAB VIA RAMSET CHEMSET INJECTION 800 SERIES OR EQUIVALENT. FIXINGS HOLE DEPTH TO BE 125mm WITH 50mm SLAB EDGE CLEARANCE.

UNTELS

M12 TIEDOWN RODS AS SHOWN ON ROOF & FLOOR FRAMING PLANS.

UNTEL TO BRICK PIER

6mm 'Z' TIEDOWN BRACKET OVER UNTEL TIED DOWN WITH 1/M12 ROD CAST 500 MIN. INTO BRICK PIER.

PLATES TO STUDS

2/75mm NAILS SKEWED THROUGH STUD INTO THE PLATE.

MULTIPLE STUDS

1/75mm NAIL AT 600 MAX. CRS.

NOGGING TO STUDS

2/75mm NAILS SKEWED OR THROUGH NAILED INTO STUDS

BOTTOM PLATE TO JOISTS

2/75mm NAILS AT 600 MAX. CRS.

BOTTOM PLATE TO CONCRETE SLAB

PROVIDE M10 BOLT, 75mm MASONRY NAIL(HAND DRIVEN AT SLAB EDGE) OR SCREW @ 1200mm max. cfs.



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A	06-06-19	DA ISSUE	Drafted: JW	
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			PAGE SIZE: A3	

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Sheet: CONSTRUCTION NOTES - SHEET 4


Project: PROPOSED RESIDENCE
Location: 40 CHILDE STREET, BELONGIL
Client: DAVID TREWERN
Consultant: HARLEY GRAHAM ARCHITECTS

M17-203

Job No.

1.4

Sheet No.



J. NEALE - REPRO 7457
For 5 on the 1st of 17

A

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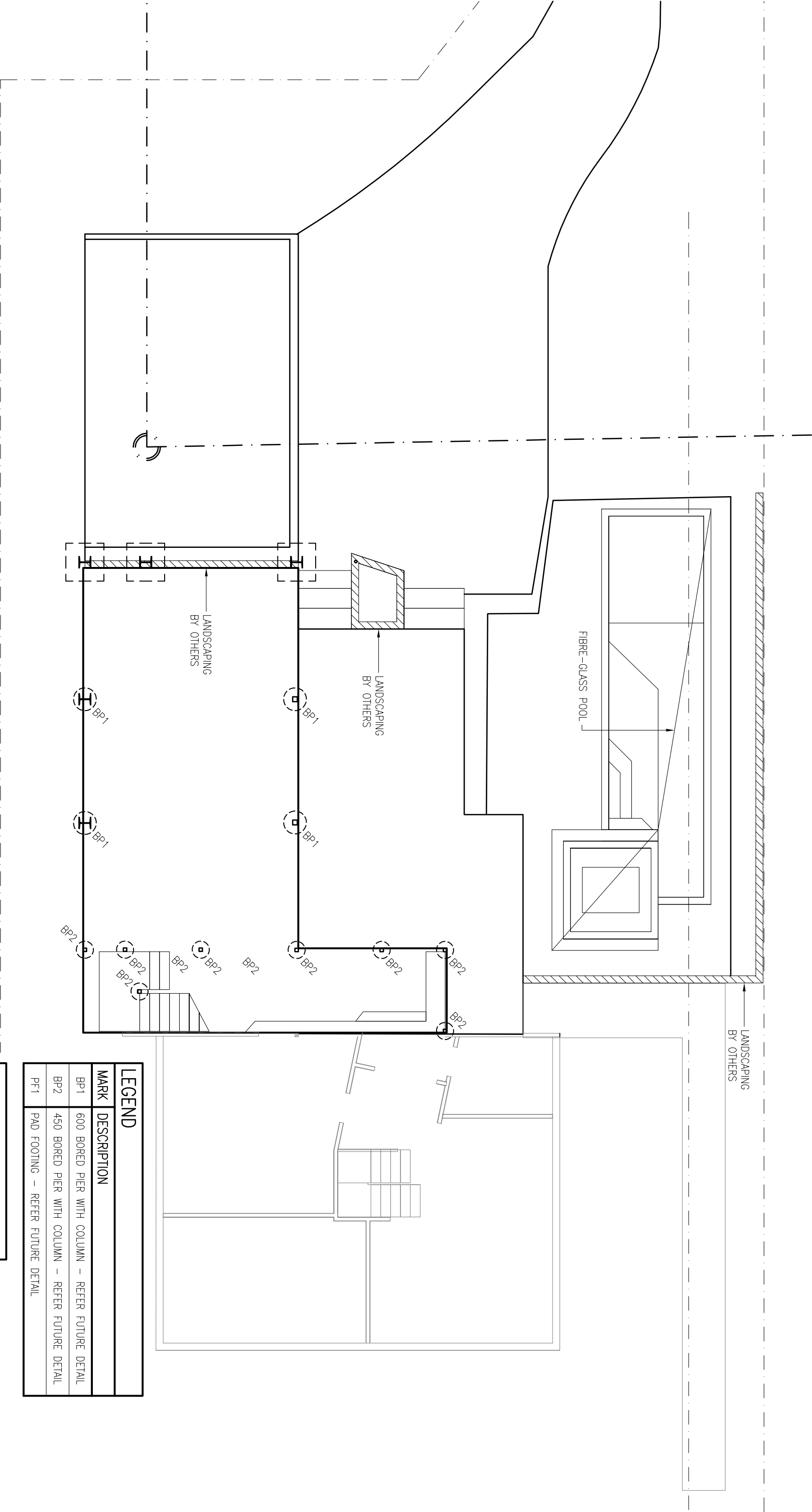


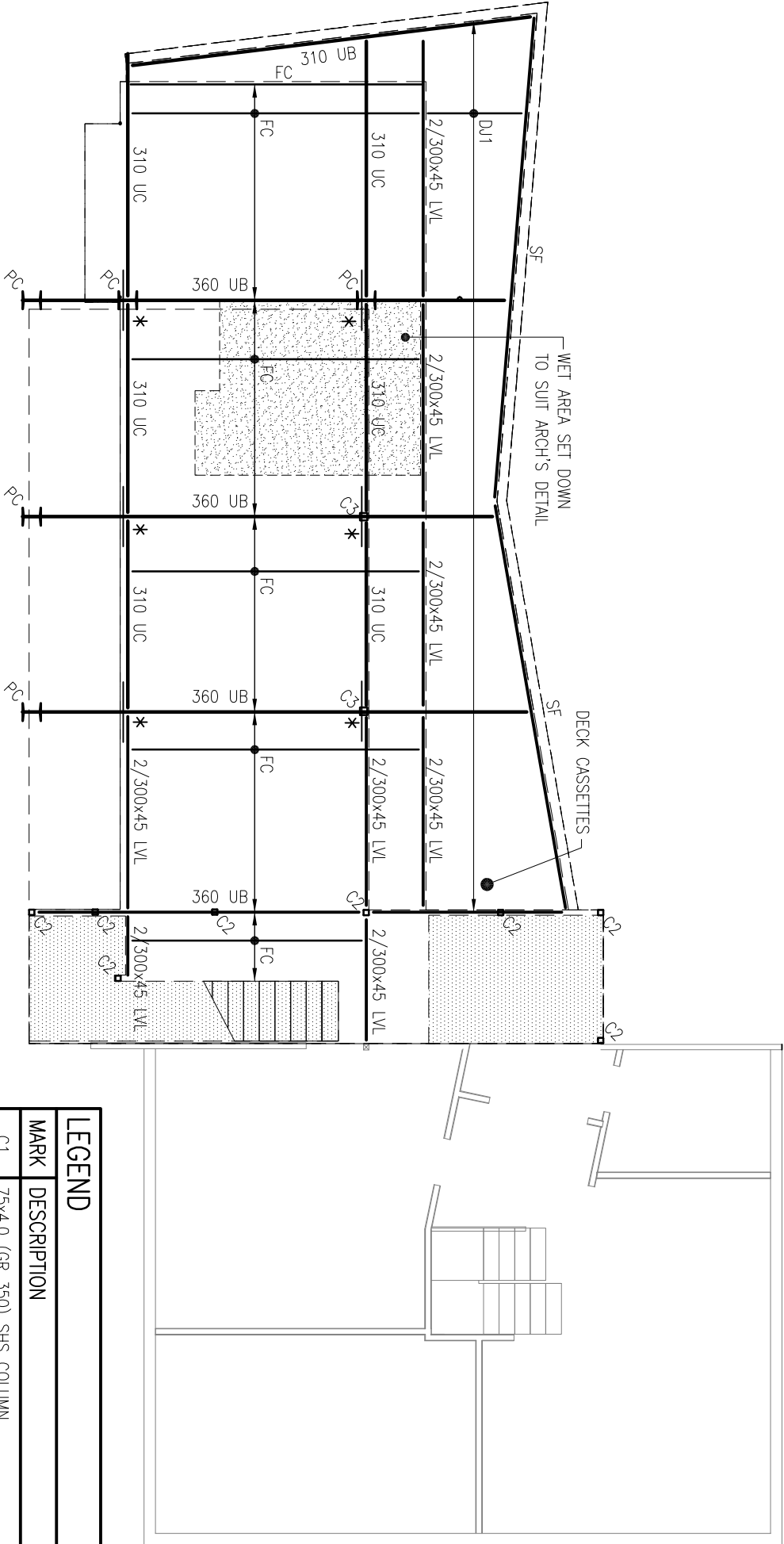
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UPPER FLOOR FRAMING PLAN

SCALE 1:100

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Sheet: **UPPER FLOOR FRAMING PLAN**

Project: **PROPOSED RESIDENCE**
Location: **40 CHILDE STREET, BELONGIL**
Client: **DAVID TREWERN**
Consultant: **HARLEY GRAHAM ARCHITECTS**

**J. NEALE - RP007451**
For & on behalf of
Westera Partners Pty, Ltd.

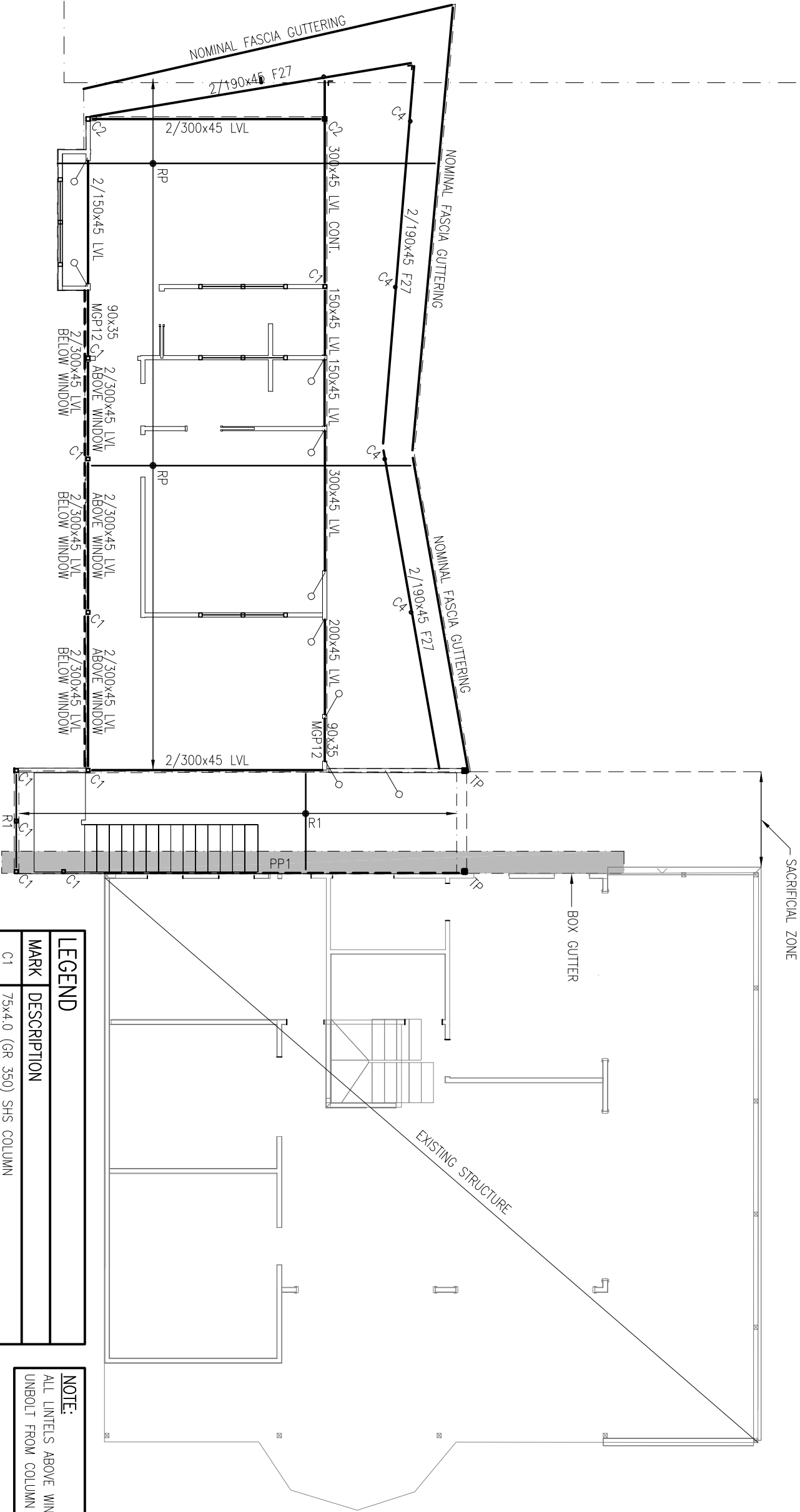
N17-203

3.0

Job No.

Sheet No.

Revision



ROOF FRAMING PLAN

SCALE 1:100

LEGEND	
MARK	DESCRIPTION
C1	75x4.0 (GR 350) SHS COLUMN
C2	89x5.0 (GR 350) SHS COLUMN
C4	89x5.0 (GR 350) CHS COLUMN
R1	190x45 F27 RAFTERS AT 600 CRS. (ROOF CASSETTES AT 1200 LONG x 2100 WIDE)
RP	ROOF SANDWICH PANEL (ARCHPANEL OR SIMILAR) SCREW FIX TO MANUFACTURERS DETAIL
PP1	POLE PLATE FIXED TO EXISTING STRUCTURE
—□—	INDICATES 900 WIDE WALL CASSETTES ABOVE AND BELOW WINDOWS
TP	TIMBER POST

NOTE:
ALL LINTELS ABOVE WINDOWS
UNBOLT FROM COLUMN OR FRAME

No.	Date	Issue	Scale	AS SHOWN
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Sheet: **ROOF FRAMING PLAN**

Project: **PROPOSED RESIDENCE**
Location: **40 CHILDE STREET, BELONGIL**

Client: **DAVID TREWERN**

Consultant: **HARLEY GRAHAM ARCHITECTS**

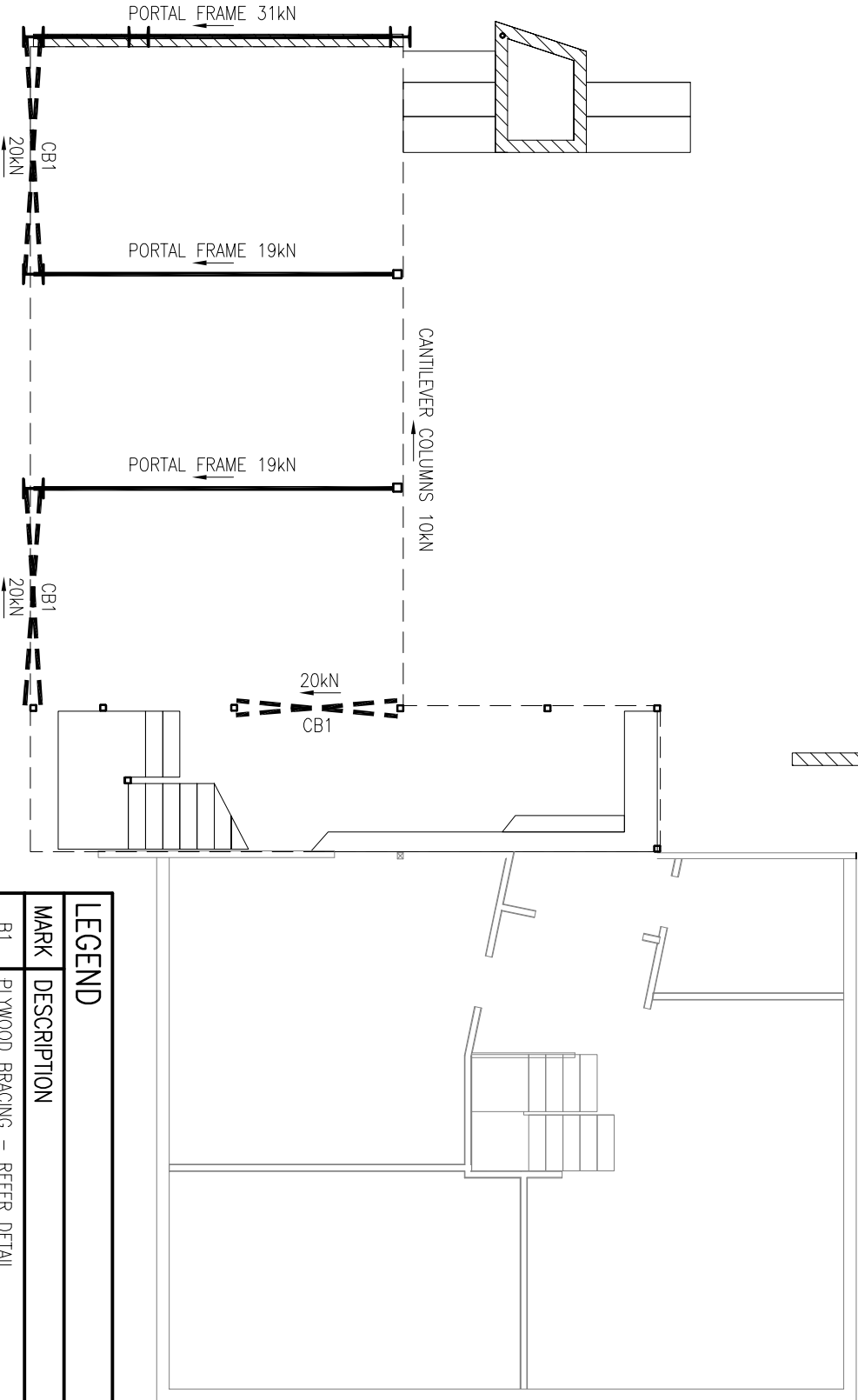
WIND
REQUIRED 46.0kN
PROVIDED 60.0kN

WIND
REQUIRED 85.5kN
PROVIDED 90.0kN

LEGEND	
MARK	DESCRIPTION
B1	PLYWOOD BRACING – REFER DETAIL
CB1	M16 ROD CROSS BRACING

GROUND FLOOR BRACING PLAN

SCALE 1:100



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Sheet:

GROUND FLOOR BRACING PLAN

Project:

PROPOSED RESIDENCE

Location:

40 CHILDE STREET, BELONGIL

Client:

DAVID TREWERN

Consultant:

HARLEY GRAHAM ARCHITECTS

N17-203

Job No.

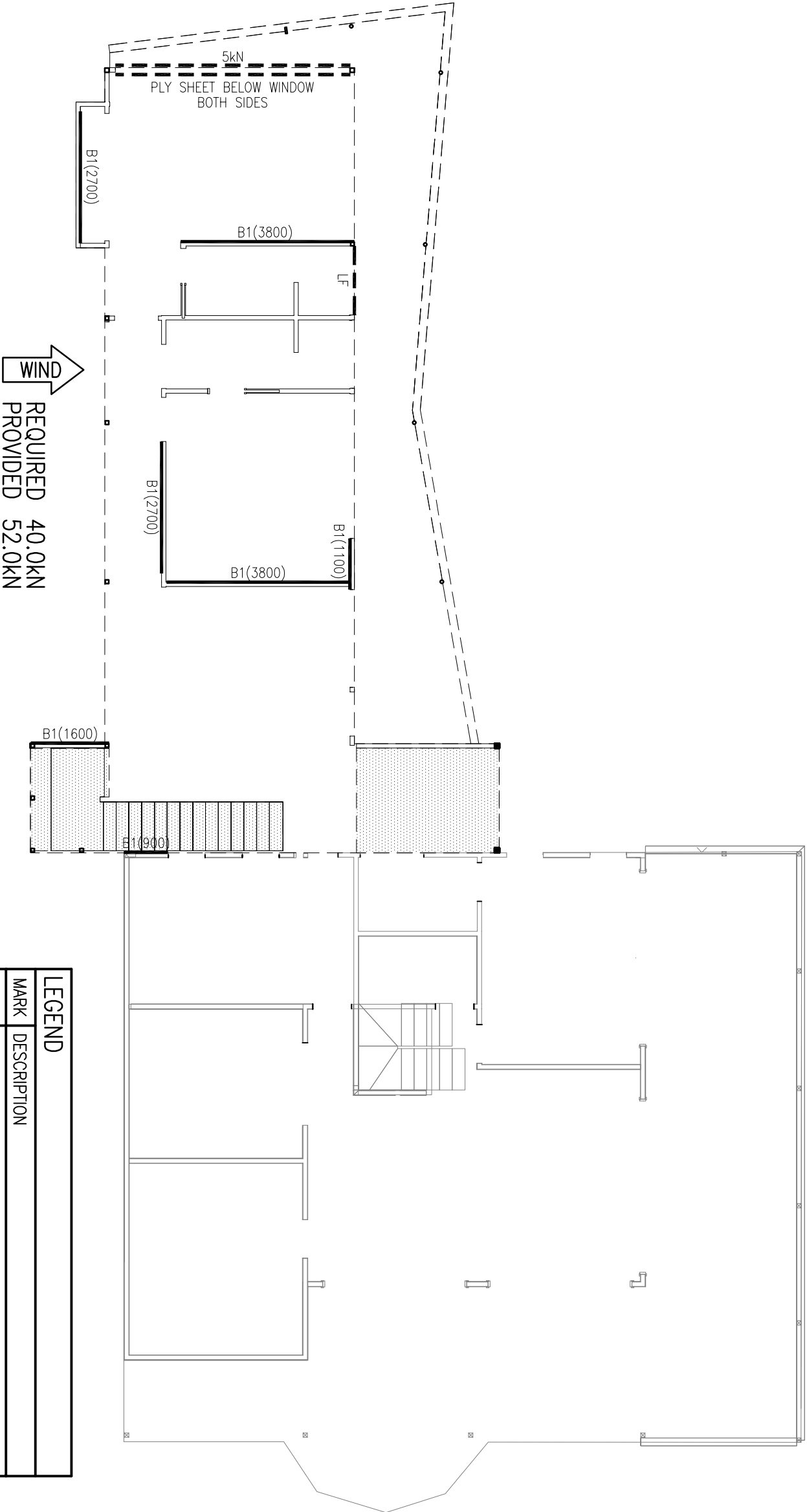
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Sheet No.

J. NEALE - RPEQ 7457
For & on behalf of
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LEGEND	
MARK	DESCRIPTION
B1	PLYWOOD BRACING – REFER DETAIL
LF	75x4.0 SHS LADDER FRAME

UPPER FLOOR BRACING PLAN

SCALE 1:100



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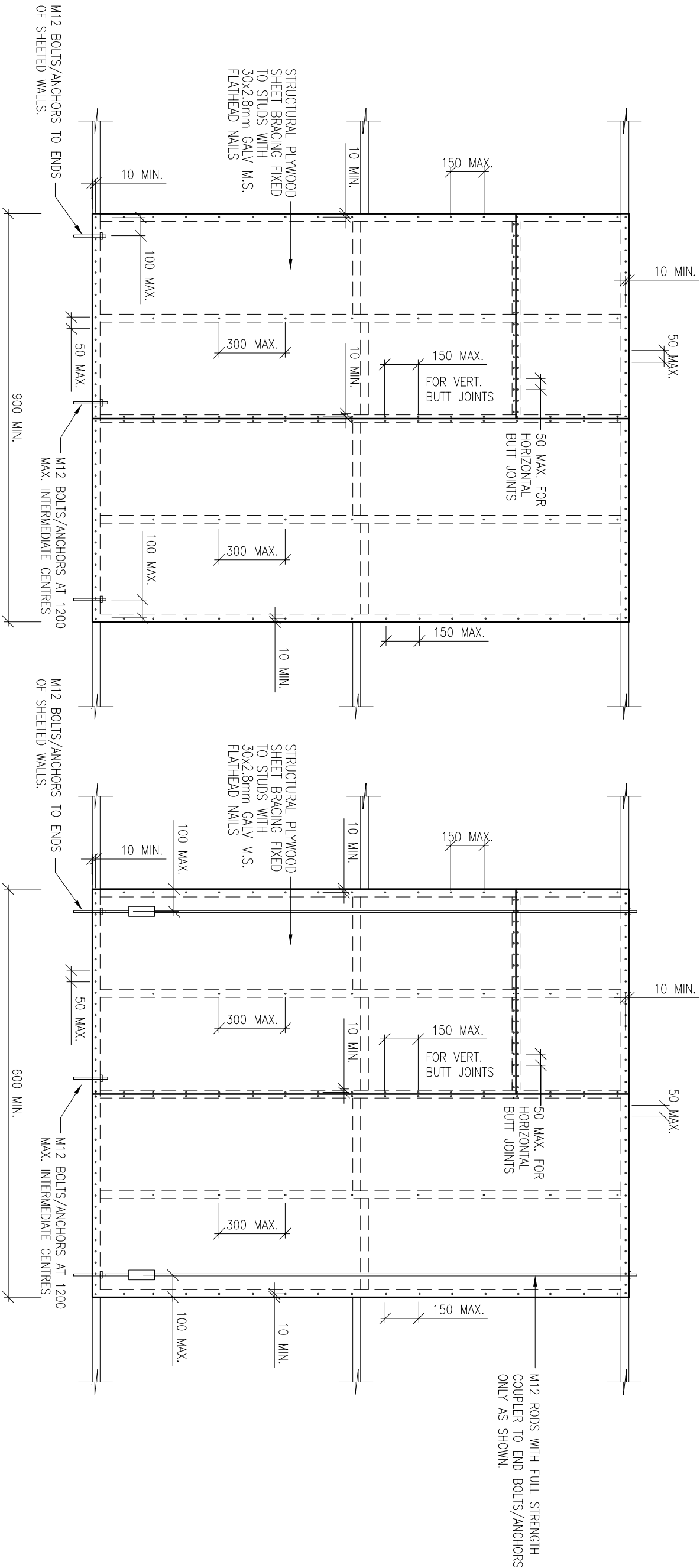
Sheet: UPPER FLOOR BRACING PAN

Project: PROPOSED RESIDENCE
Location: 40 CHILDE STREET, BELONGIL
Client: DAVID TREWERN
Consultant: HARLEY GRAHAM ARCHITECTS

Job No. N17-203

1. NEALE - RP007457
FOR 5 ON THE BASIS OF
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5.1
Revision



B1 = 6.0 kN/m (SHEETED ONE SIDE)

B2 = 9.0 kN/m (SHEETED BOTH SIDES)


STRUCTURAL PLYWOOD SHEET BRACING WALLS

STRESS GRADE	THICKNESS OF PLYWOOD FOR STUD CRS. IN mm	
	450	600
F8	7	9
F11	6	7
F14	4	6
F27	4	4.5

WALL HEIGHT FACTOR	
WALL HEIGHT (m)	FACTOR
3.0	0.9
3.3	0.8
3.6	0.75
3.9	0.7
4.2	0.64

NOTE – THESE CAPACITIES ARE BASED ON A MAXIMUM BRACING WALL HEIGHT OF 2.7m. FOR WALL HEIGHTS GREATER THAN 2.7m, REFER TO THE WALL HEIGHT FACTOR TABLE.

ALL BRACING BOLTS TO BE GRADE 4.6/S U.N.O.



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Project: PROPOSED RESIDENCE

Location: 40 CHILDE STREET, BELONGIL

Client: DAVID TREWERN

Consultant: HARLEY GRAHAM ARCHITECTS



J. NEALE - RP007451
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N17-203

5.2

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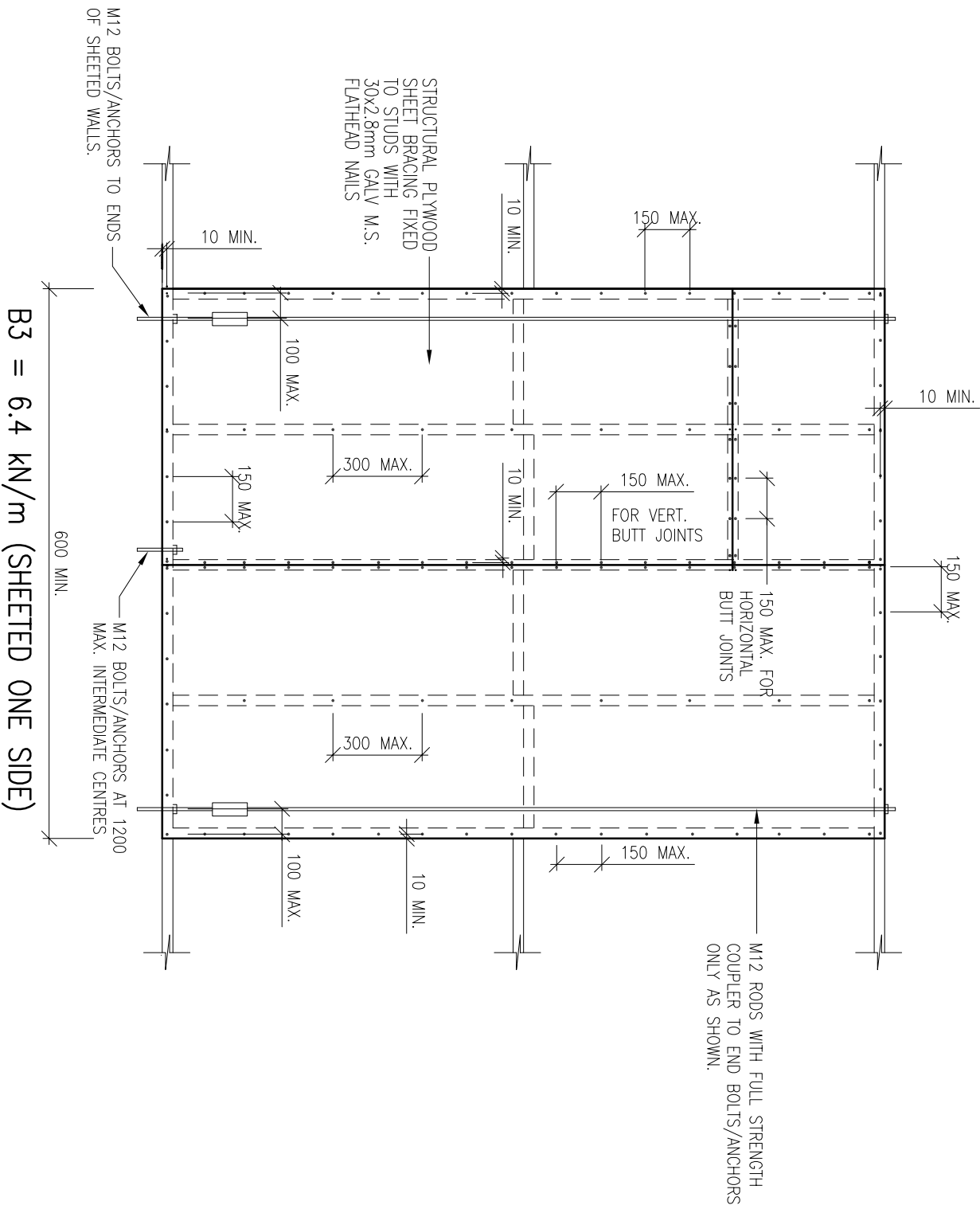
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Sheet:	BRACING DETAILS - SHEET 2
Project:	PROPOSED RESIDENCE
Location:	40 CHILDE STREET, BELONGIL
Client:	DAVID TREWERN
Consultant:	HARLEY GRAHAM ARCHITECTS

Job No.	N17-203	5.3
 J. NEALE - PREQ 7451 - NER 2311597 For & on the behalf of Western Partners Pty. Ltd.	A	Revision

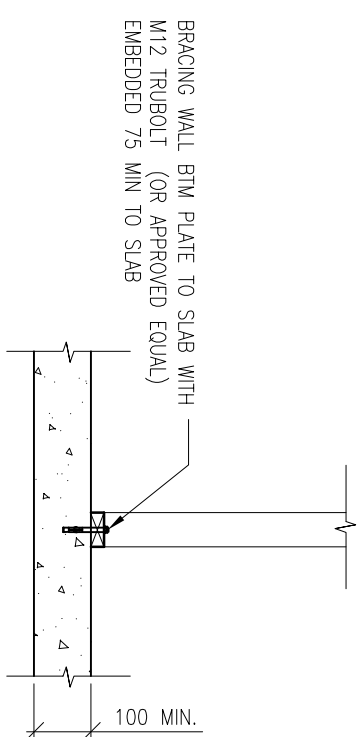
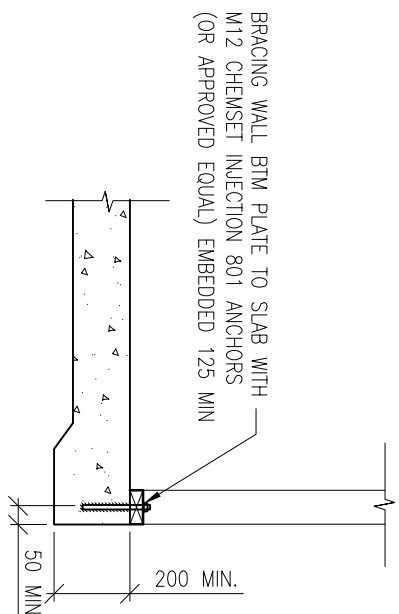
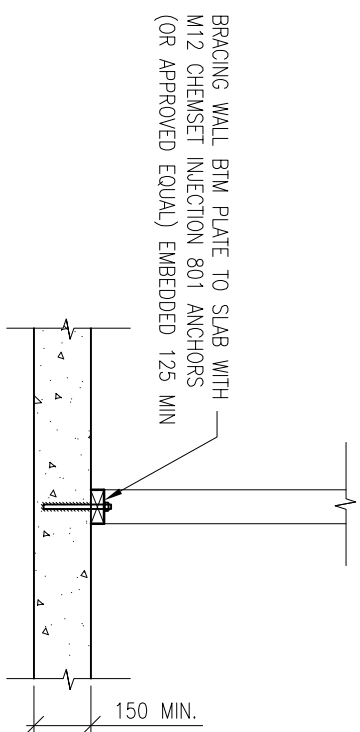
STRUCTURAL PLYWOOD SHEET BRACING WALLS



NOTE - THESE CAPACITIES ARE BASED ON A MAXIMUM BRACING WALL HEIGHT OF 2.7m. FOR WALL HEIGHTS GREATER THAN 2.7m, REFER TO THE WALL HEIGHT FACTOR TABLE.

ALL BRACING BOLTS TO BE
GRADE 4.6/S U.N.O.

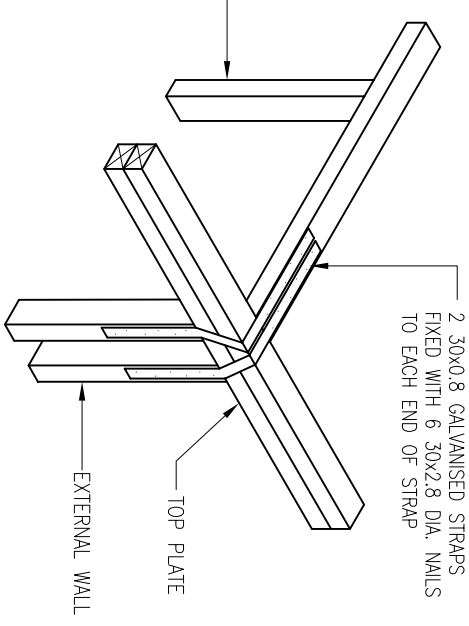
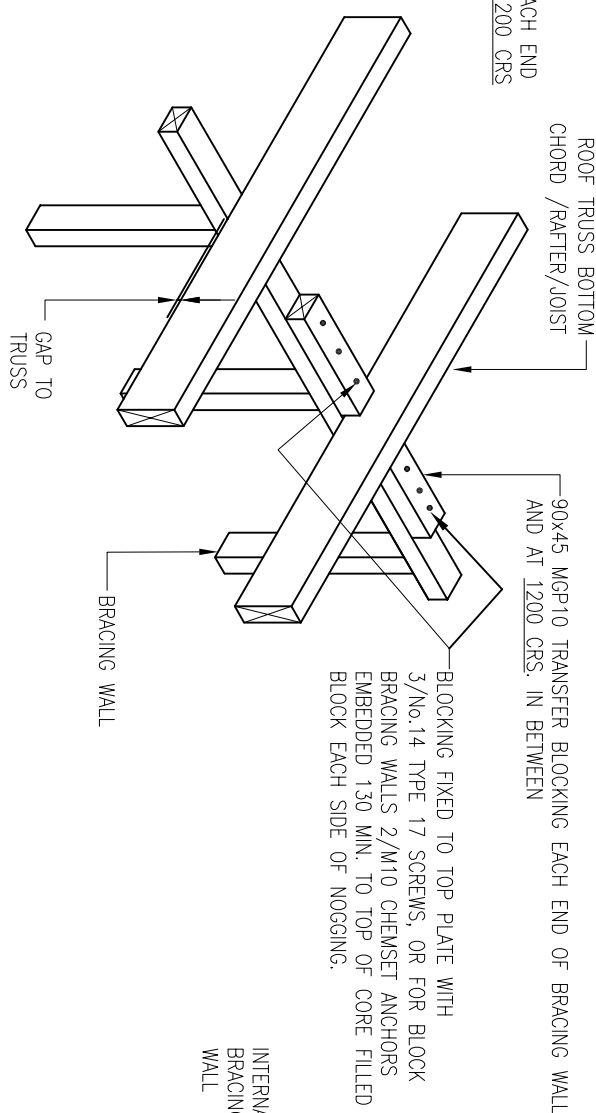
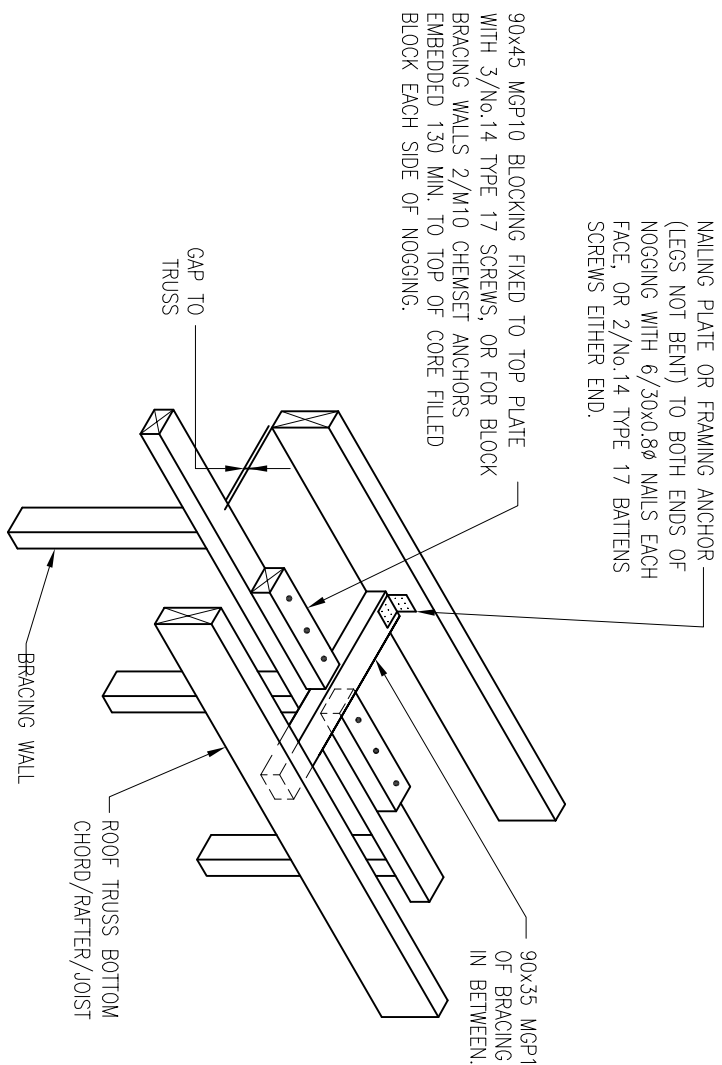
STRESS GRADE	THICKNESS OF PLYWOOD FOR STUD CRS. IN mm		WALL HEIGHT FACTOR	
	450	600	WALL HEIGHT (m)	FACTOR
F8	7	9	3.0	0.9
F11	6	7	3.3	0.8
F14	4	6	3.6	0.75
F27	4	4.5	3.9	0.7
			4.2	0.64



B1, B2 OR B3 BRACING WALL
TO CONCRETE SLAB INTERNALLY

B1, B2 OR B3 BRACING WALL
TO CONCRETE SLAB AT EDGE

B1 OR B3 TO CONCRETE SLAB INTERNALLY



TYPICAL INTERNAL BRACING WALL
TO ROOF TRUSSES/RAFTERS/FLOOR
JOIST PARALLEL CONNECTION

TYPICAL INTERNAL BRACING WALL
TO ROOF TRUSSES/RAFTERS/FLOOR
JOIST PERPENDICULAR CONNECTION

TYPICAL BRACING WALL TO EXTERNAL WALL CONNECTION

Brisbane		AS shown	
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Sheet: **BRACING DETAILS - SHEET 3**

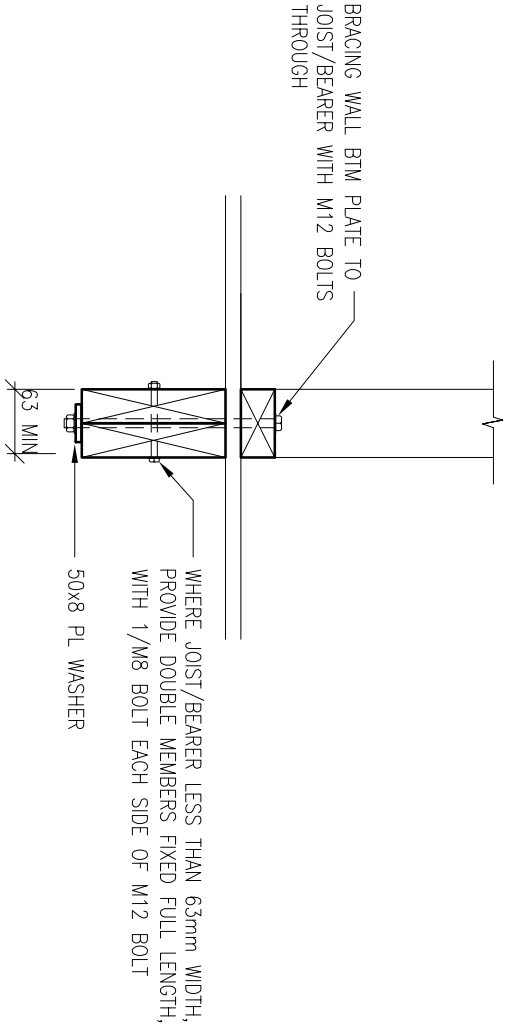
Project:	PROPOSED RESIDENCE
Location:	40 CHILDE STREET, BELONGIL
Client:	DAVID TREWERN
Consultant:	HARLEY GRAHAM ARCHITECTS

N17-203	5.4
Job No.	Sheet No.

1. NEALE - RPEQ 7451
- NER 23m697
For & on the behalf of
Westera Partners Pty. Ltd.

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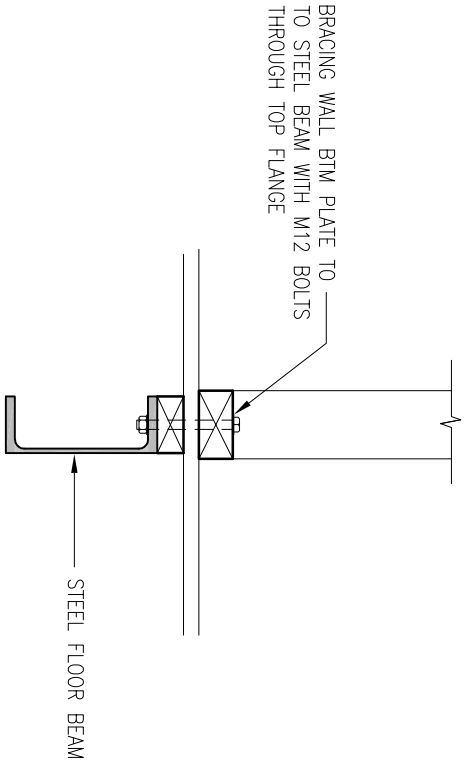
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NOTE – FOR I JOISTS PROVIDE WEB STIFFENERS AT BOLT LOCATIONS TO MANUFACTURERS DETAILS.

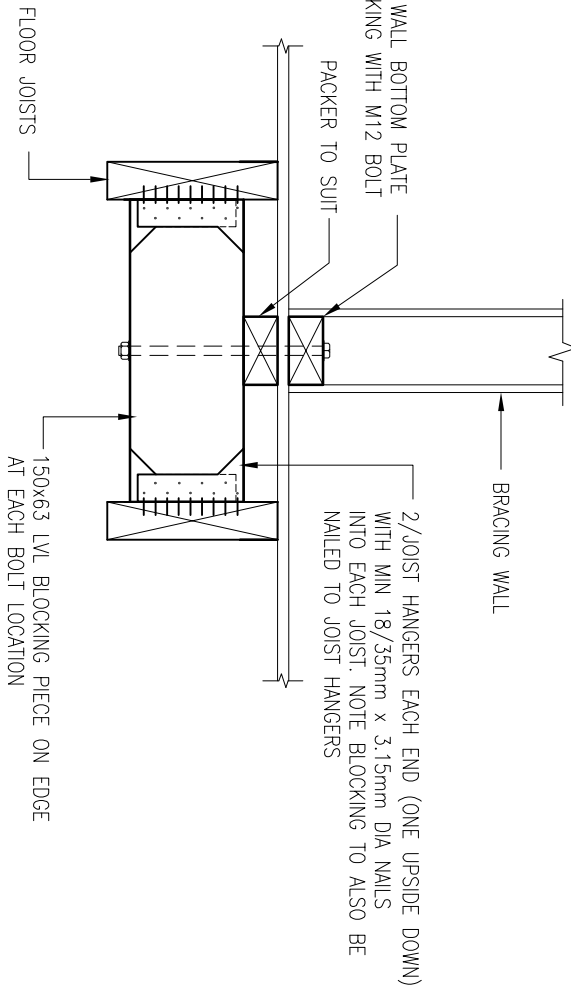
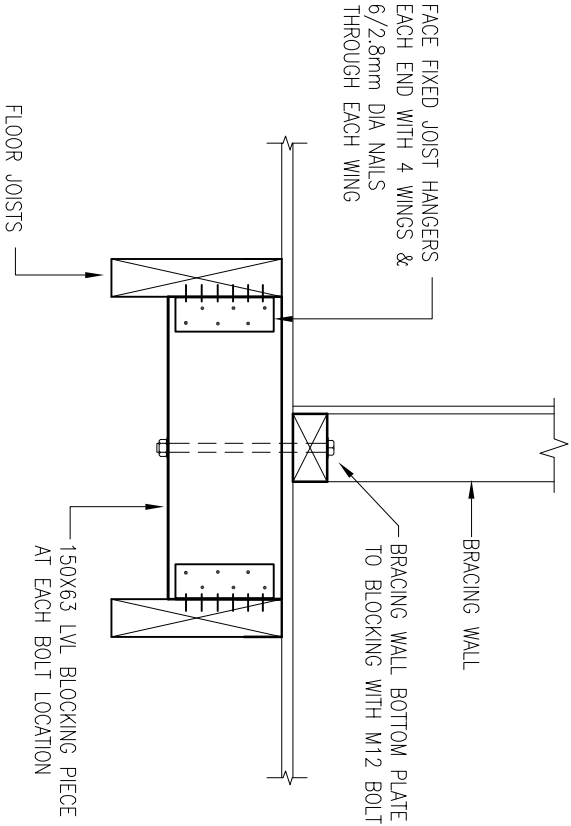
B1, B2 OR B3 BRACING WALL DIRECT TO FLOOR JOIST/BEARER

NOTE – ADOPT THESE DETAILS AT FLOOR EDGES (TYPICAL)



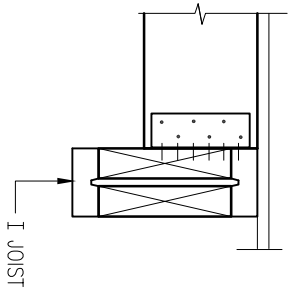
B1, B2 OR B3 BRACING WALL DIRECT TO STEEL FLOOR BEAM

NOTE – ADOPT THESE DETAILS AT FLOOR EDGES (TYPICAL)



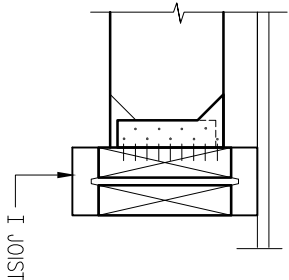
B1 OR B3 BRACING WALL TO INTERNAL FLOOR JOISTS

NOTE – FOR I JOISTS, PROVIDE WEB STIFFENERS TO JOISTS
EACH END OF BLOCKING FIXED TO MANUFACTURERS DETAILS



B2 BRACING WALL TO INTERNAL FLOOR JOISTS

NOTE – FOR I JOISTS, PROVIDE WEB STIFFENERS TO JOISTS
EACH END OF BLOCKING FIXED TO MANUFACTURERS DETAILS



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			Date: JUN 19	
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Sheet: BRACING DETAILS - SHEET 4

Project: PROPOSED RESIDENCE

Location: 40 CHILDE STREET, BELONGIL

Client: DAVID TREWERN

Consultant: HARLEY GRAHAM ARCHITECTS

Job No. N17-203

Sheet No. 5.5

J. NEALE - PREQ 7457
For 5 on the basis of

Western Partners Pty, Ltd.

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Revision