ISO A1 594mm x 841mm

COMPOSITE BEAM & BONDEK SLAB NOTES

CB1. THE TOP FLANGE OF ALL BEAMS WHICH ARE TO RECEIVE THROUGH DECK WELDED SHEAR STUDS, ARE TO BE UNPAINTED UNO.

CB2. SHEAR CONNECTORS TO BE PROPRIETARY HEADED STUDS, MANUFACTURED AND INSTALLED IN ACCORDANCE WITH AS1554.2:2003
DIAMETER: **19 Ø (U.N.O.)**
LENGTH AFTER WELDING: **100mm**

CB3. THE SPACING OF SHEAR STUDS TO BE WELDED TO THE TOP FLANGE OF EACH BEAM UNO, SHALL BE AS NOTED ON THE DRAWINGS.

CB4. THE SHEAR STUDS SHALL BE SPACED AS EVENLY AS POSSIBLE OVER ALL BEAMS UNLESS NOTED OTHERWISE.

CB5. ANY PRE-CAMBER REQUIRED TO THE BEAMS SHALL BE AS NOTED ON THE DRAWINGS.

CB6. ANY TEMPORARY PROPPING REQUIRED TO THE BEAMS DURING THE CONSTRUCTION STAGE SHALL BE AS NOTED ON THE DRAWINGS.

CB7. ALL PROFILED STEEL DECKING IS TO BE 'BLUESCOPE LYSAGHT' BONDEK II SHEETING AND IS TO BE 1.0mm BASE METAL THICKNESS. BONDEK TO HAVE AT LEAST TWO CONTINUOUS SPANS UNO.
ANY OTHER SECTION APPROVED BY THE CONTRACT ADMINISTRATOR, COMPLYING WITH AS1397:2011, GRADE G550 AND A MINIMUM GALVANISED COATING OF Z350 (350 G/sqm).

CB8. ALL DECKING SHALL BE SUPPLIED, LAID AND FIXED IN ACCORDNACE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. THE DECKING SHALL HAVE A MINIMUM BEARING OF 50mm AND SIZED TO SUIT THROUGH-DECK WELDING OF SHEAR STUDS UNO.

CB9. INSERTS SHALL BE PROVIDED TO SEAL ALL SHEET ENDS AND ALL JOINTS IN THE DECKING, EDGE TRIMS, ABUTTING WALLS AND SHUTTERING SHALL BE FULLY AND EFFECTIVELY SEALED BY TAPING PRIOR TO LAYOUT REINFORCEMENT AND POURING CONCRETE.

CB10. EDGE TRIMS TO BE A MINIMUM OF 2mm THICK GALVANISED STEEL, TIED AND FIXED TO DECKING WITH SUITABLE RESTRAINING STRAPS.

CB11. CONTRACTOR TO DETAIL SPACERS AND CHAIRS TO PROVIDE ADEQUATE SUPPORT. TOP MESH MUST BE ADEQUATELY SUPPORTED AND NOT ALLOWED TO REST ON PROFILE. ALL FOOT TRAFFIC DAMAGE MUST BE REMEDIED PRIOR TO CASTING AND THE MESH MAINTAINED AT THE STATED COVER.

CB12. WHEN IT IS NECESSARY TO FORM SERVICE HOLES IN THE COMPOSITE SLAB THE CONTRACT ADMINISTRATOR MUST ADVISED OF ALL REQUIREMENTS IN ADVANCE.

CB13. ALL HOLES SHALL BE EFFECTIVELY FIRE STOPPED.

CB14. DECKING MUST BE CLEAR OF DEBRIS, GREASE AND DIRT PRIOR TO CONCRETE PLACEMENT.

CB15. INDICATES THE DIRECTION OF THE BONDEK RIBS.

CB16. T.S. INDICATES TEMPORARY SUPPORTS TO BE USED DURING CONSTRUCTION.

CB17. REINFORCEMENT:
i) REINFORCE SLAB WITH SL92 FABRIC, 30 TOP COVER
ii) PROVIDE ADDITIONAL REINFROCEMENT WHERE SHOWN ON PLAN AND SECTIONS.

CHEMICAL & MECHANICAL ANCHOR NOTES

CA1. "CHEMSETS" DENOTES RAMSET GRADE 5.8 HOT DIPPED GALV. STUDS FIXED WITH RAMSET CHEMSET REO 502 WITH THE FOLLOWING MINIMUM EMBEDMENT UNO:

M12 CHEMSETS - 110mm EMBEDMENT UNO
M16 CHEMSETS - 125mm EMBEDMENT UNO
M20 CHEMSETS - 150mm EMBEDMENT UNO
M24 CHEMSETS - 160mm EMBEDMENT UNO

CA2. "CHEMSET MAXIMA CAPSULES" DENOTES RAMSET CHEMSET MAXIMA SPIN CAPSULES WITH STUDS AND EMBEDMENTS AS DEFINED IN NOTE CA1.

CA3. "SPATEC PLUS" DENOTES RAMSET SPATEC PLUS CARBON STEEL HOT DIPPED GALV. STUD ANCHORS WITH THE FOLLOWING MINIMUM EMBEDMENT UNO:

M12 SPATEC PLUS - 95mm EMBEDMENT UNO
M16 SPATEC PLUS - 110mm EMBEDMENT UNO
M20 SPATEC PLUS - 130mm EMBEDMENT UNO

CA4. "CHEMSET 101 ANCHORS" DENOTES RAMSET GRADE 5.8 HOT DIPPED GALV. STUDS, FIXED WITH AN EFFECTIVE DEPTH OF 64mm INTO EXTRUDED BRICK OR HOLLOW CONCRETE BLOCK, USING THE MANUFACTURER'S SLEEVES/SIEVES AND RAMSET CHEMSET INJECTION 101.

CA5. ALL ANCHORS ARE TO BE FIXED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS. IN PARTICULAR ENSURE HOLES ARE CLEAN OF DUST PRIOR TO INSTALLATION OF CHEMICAL ANCHORS.

CA6. CONTRACTOR IS TO LOAD TEST 5% OF CHEMICAL ANCHORS AT RANDOM TO MANUFACTURER NOMINATED PROOF LOAD FOLLOWING INSTALLATION. IF ANY ANCHORS FAIL TESTING, LOAD TEST 100% OF REMAINING CHEMICAL ANCHORS.

CA7. DESIGN HAS BEEN CARRIED OUT USING THE PRODUCTS ABOVE. PRODUCTS MAY BE SUBSTITUTED SUBJECT TO ENGINEER'S APPROVAL.

REINFORCEMENT NOTES

R1. SYMBOLS ON DRAWINGS FOR GRADE AND STRENGTH OF REINFORCEMENT ARE:

N DENOTES GRADE D500N HOT-ROLLED DEFORMED REINFORCEMENT BAR TO AS/NZS 4671:2001.
SL DENOTES GRADE 500L WELDED WIRE REINFORCEMENT MESH TO AS/NZS 4671:2001.
L DENOTES GRADE D500L STEEL REINFORCEMENT TO AS/NZS 4671:2001.
R DENOTES GRADE 250R PLAIN ROUND BAR REINFORCEMENT TO AS/NZS4671:2001.
TM DENOTES HARD DRAWN STEEL TRENCH MESH, GRADE 500L TO AS/NZS 4671:2001.

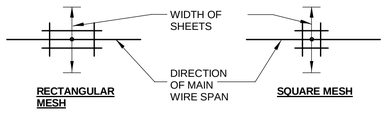
R2. BAR NOTATION GIVES THE FOLLOWING INFORMATION IN THIS ORDER:

NO OF BARS; GRADE; BAR SIZE (mm); SPACING (mm, IF REQUIRED); PLACING INFORMATION EG, 20-N16-200 BTM.

R3. MESH NOTATION GIVES THE FOLLOWING INFORMATION IN THIS ORDER:

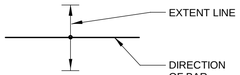
SL OR RL SYMBOL; AS REFERENCE NUMBER IF STANDARD MESH OR SPECIAL CODE IF NON-STANDARD MESH; PLACING INFORMATION.
EG, RL918 TOP.

R4. MAIN WIRES OF MESH AND COVERAGE OF SHEETS SHOWN IN PLAN-VIEW AND ELEVATION THUS:



RECTANGULAR MESH **SQUARE MESH**

R5. EXTENT OF BARS AND MESH SHOWN THUS:



R6. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

R7. REINFORCEMENT DIMENSIONS SHALL NOT BE SCALED.

R8. SPLICE REINFORCEMENT ONLY AT LOCATIONS SHOWN IN THE DRAWINGS. LAP LENGTH SHALL COMPLY WITH AS3600:2009.

REINFORCEMENT SHALL NOT BE SPLICED EXCEPT WHERE SHOWN IN THE DRAWINGS. IF SPLICES ARE NOT INDICATED IN THE DRAWINGS, SUITABLE LOCATIONS SHALL BE PROPOSED FOR WRITTEN APPROVAL BY STRUCTURAL ENGINEER. THE SPLICED LENGTH OF BARS SHALL BE AS GIVEN IN THE FOLLOWING TABLE, EXCEPT WHERE OTHER DIMENSIONS ARE STATED ON THE ACTUAL DETAIL:

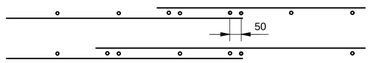
TYPE OF MEMBER	TENSILE LAP LENGTH (mm) FOR GRADE 500N DEFORMED BARS.							
	N10	N12	N16	N20	N24	N28	N32	N36
SLAB OR WALL (WITH 300mm OR LESS DEPTH OF CONCRETE BELOW THE BAR) AND ALL VERTICAL BARS	400	500	750	1000	1250	1500	1800	2200
SLAB OR WALL (WITH GREATER THAN 300mm OF CONCRETE BELOW THE BAR)	500	650	1000	1300	1600	1950	2300	2800

EMBEDMENT LENGTHS FOR STARTER BARS AND SPLICE LENGTHS FOR COLUMN BARS SHALL BE AS GIVEN IN THE FOLLOWING TABLE, EXCEPT WHERE OTHER DIMENSIONS ARE STATED ON THE ACTUAL DETAIL. THE DIMENSIONS IN THE TABLE ALSO INDICATE OVERALL ANCHORAGE (DEVELOPMENT) LENGTHS FOR STARTER / DOWEL BARS. ANY COGS USED SHALL BE DETAILED AS PER AS3600:2009.

BAR SIZE (mm)	SPLICE LENGTH (mm)	NUMBER OF FITMENTS AT COLUMN BAR CRANK
N10	400	1-R10
N12	500	1-R10
N16	650	1-R10
N20	800	2-R10
N24	1000	1-N12
N28	1150	2-N12
N32	1300	3-N12
N36	1450	3-N12

R9. REINFORCEMENT SHALL BE BENT COLD IN ACCORDANCE WITH AS3600:2009 EXCEPT WHERE APPROVED BY THE CONTRACT ADMINISTRATOR. NO REBENDING SHALL BE PERMITTED UNLESS APPROVED BY THE CONTRACT ADMINISTRATOR.

R10. WHERE LAP IS SPECIFIED, MESH SHALL BE LAPPED SUCH THAT THE TWO OUTERMOST WIRES LAP WITH THOSE OF THE OTHER SHEET AS SHOWN:



ALL LAPS ARE TO BE WIRED TOGETHER AT 1000 CRS.

REINFORCEMENT NOTES (CONT')

R11. ALL REINFORCEMENT IS TO BE ACCURATELY POSITIONED, ADEQUATELY SUPPORTED, AND THEN INSPECTED BY THE CONTRACT ADMINISTRATOR BEFORE ANY CONCRETE IS PLACED.

R12. WELDING OF REINFORCEMENT INCLUDING TACK-WELDING FOR FIXING PURPOSES SHALL COMPLY WITH AS3600:2009 AND AS1554.3:2008. WELDING IS PERMITTED ONLY WHERE SHOWN IN THE DRAWINGS OR WHERE OTHERWISE APPROVED BY THE CONTRACT ADMINISTRATOR.

R13. WHERE NO REINFORCEMENT IS SHOWN ON THE DRAWINGS AT RIGHT ANGLES TO THE MAIN REINFORCEMENT, PLACE N12-300 TRANSVERSE TO THE REINFORCEMENT SHOWN TO SUIT THE BAR LAYING SEQUENCE. ALL OPENINGS AND RE-ENTRANT CORNERS IN THE CONCRETE SHALL HAVE 2-N12 BARS x 1200 LONG TOP AND BOTTOM DIAGONALLY ACROSS THE CORNER.

R14. FIRST SLAB BAR IS TO BE POSITIONED MAX. 100mm FROM FACE OF BEAMS, R.C. WALLS AND SLAB THICKENINGS PARALLEL TO BAR. FIRST TIE TO BE PLACED MAX. 50mm FROM FACE OF COLUMN OR SUPPORTING WALL UNDER.

R15. FIX 2-N16 TRIMMER BARS AROUND OPENINGS IN EACH (TOP/BOTTOM) FACE OF MEMBER AND EXTENDING 600mm BEYOND THEIR CROSS-OVER POINT.

R16. REINFORCEMENT SHALL NOT BE CUT, BENT OR HEATED ON SITE WITHOUT THE CONTRACT ADMINISTRATOR'S PRIOR APPROVAL. DO NOT CUT REINFORCEMENT ON SITE TO CLEAR PENETRATIONS. DISPLACE REINFORCEMENT SLIGHTLY AS NECESSARY. MAINTAIN COVER DURING POUR.

R17. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON PLASTIC OR CONCRETE CHAIRS UNLESS NOTED OTHERWISE MAXIMUM CENTRES OF SUPPORTING CHAIRS SHALL BE 600mm FOR FABRIC, 600mm FOR BARS UP TO 12mm DIAMETER, 900mm FOR BARS 16mm AND GREATER. REINFORCEMENT SHALL BE SECURELY TIED WITH GALVANISED WIRE TIES AND ALL TIE ENDS SHALL BE TURNED INTO THE MEMBER CLEAR OF THE COVER ZONE.

R18. REFER TO THE CONCRETE NOTES FOR THE COVER TO REINFORCEMENT NEAREST THE CONCRETE SURFACE. UNLESS NOTED OTHERWISE ON DRAWINGS.

R19. THE REQUIRED COVER SHALL BE MAINTAINED TO ALL PIPES, CONDUITS, REGLETS, DRIP GROOVES ETC.

R20. UNLESS NOTED OTHERWISE SLAB REINFORCEMENT AT SUPPORTING WALLS AND SLAB REINFORCEMENT BARS SHALL EXTEND 100mm ONTO SUPPORTING WALLS, WITH 50% OF BOTTOM BARS COGGED TO ACHIEVE ANCHORAGE AT SIMPLY SUPPORTED ENDS. MESH IN SLABS SHALL EXTEND 100mm ONTO SUPPORTING WALLS AND INCLUDE AT LEAST ONE CROSS WIRE.

STRUCTURAL STEELWORK NOTES

S1. DESIGN, FABRICATION AND ERECTION:
DESIGN CONFORMS TO AS4100:1998, AS/NZS 4600:2005 AND AS2327.1:2003 AS APPROPRIATE.

FABRICATION AND ERECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROVISION OF AS4100:1998 AND AS3828:1998, AS APPROPRIATE.

S2. SETTING OUT DIMENSIONS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.

S3. THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED. SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

S4. UNLESS OTHERWISE NOTED ALL MATERIAL SHALL BE:

- GRADE 250 HOT-ROLLED PLATES COMPLYING WITH AS/NZS 3678:2011
- GRADE 300 HOT-ROLLED UB, UC, PFC, TFC, TFB, EA, UA AND FLATS COMPLYING WITH AS/NZS 3679.1:2010.
- GRADE 300 WB, WC COMPLYING WITH AS/NZS 3679.2:2010
- GRADE 350 RHS, SHS, CHS COMPLYING WITH AS1163:2009

S5. WELDING:
WELDING IS TO BE CARRIED OUT IN ACCORDANCE WITH AS/NZS 1554.1:2011, AS/NZS 1554.2:2003

WELDING CONSUMABLES TO BE E48XX OR W50X UNLESS NOTED OTHERWISE.

ALL WELDS TO BE 6mm CONTINUOUS FILLET WELD (CFW) SP CATEGORY UNLESS NOTED OTHERWISE.

ALL BUTT WELDS TO BE FULL PENETRATION BUTT WELD (FPBW) AND TO BE SP CATEGORY UNLESS NOTED OTHERWISE.

INSPECTIONS TO BE CARRIED OUT TO AS/NZS 1554.1:2011 UNLESS NOTED OTHERWISE IN THE DRAWINGS OR SPECIFICATION. MINIMUM EXTENT OF NON-DESTRUCTIVE EXAMINATION (NDE) SHALL BE AS FOLLOWS:

WELD CATEGORY	EXTENT OF NDE, %			
	VISUAL MEANS		OTHER MEANS	
	VISUAL SCANNING	VISUAL EXAMINATION	MAGNETIC PARTICLE (FOR FILLET WELD)	RADIOGRAPHY OR ULTRASONIC (FOR BUTT WELD)
GP	100	15	2	-
SP	100	50	10	10

S6. BOLTS, NUTS AND WASHERS:
STEEL BOLTS, NUTS AND WASHERS SHALL COMPLY WITH THE RESPECTIVE STANDARDS AS APPROPRIATE.

DESIGNATION:
4.6/S REFERS TO GRADE 4.6 COMMERCIAL BOLTS TO AS1111:2000, TIGHTENED TO A SNUG TIGHT CONDITION TO AS4100:1998.

8.8/S REFERS TO GRADE 8.8 HIGH STRENGTH STRUCTURAL BOLTS TO AS1252:1996, TIGHTENED TO A SNUG TIGHT CONDITION TO AS4100:1998.

8.8/TB REFERS TO GRADE 8.8 HIGH STRENGTH STRUCTURAL BOLTS TO AS1252:1996 FULLY TENSIONED TO AS4100:1998 AS A BEARING TYPE JOINT.

8.8/TF REFERS TO GRADE 8.8 HIGH STRENGTH STRUCTURAL BOLTS TO AS1252:1996 FULLY TENSIONED TO AS4100:1998 AS A FRICTION JOINT WITH CONNECTING SURFACES LEFT UNCOATED.

S7. CONNECTIONS:
ALL DETAILS, GAUGE LINES, ETC. WHERE NOT SPECIFICALLY SHOWN ARE TO BE IN ACCORDANCE WITH AISC DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL AND ASI STANDARDISED STRUCTURAL CONNECTIONS.

ALL PLATES TO BE 10mm THICK, EX-STANDARD SQUARE EDGE FLATS UNLESS NOTED OTHERWISE.

ALL BOLTS TO BE GRADE 8.8/S UNLESS NOTED OTHERWISE.
ALL BOLTS TO BE GALVANISED M20 UNLESS NOTED OTHERWISE.

ALL HOLD-DOWN BOLTS SHALL BE GRADE 4.6 TO AS1111:2000 AND HOT DIP GALVANISED AFTER FABRICATION UNLESS NOTED OTHERWISE.
ALL HOLD DOWN BOLTS TO BE M20 UNLESS NOTED OTHERWISE.

ALL CAST-IN FERRULES AND MASONRY ANCHORS TO BE PASSIVATED ZINC COATED. ALL GALVANISED COMPONENTS TO BE CAST INTO CONCRETE MUST BE PASSIVATED.

ALL CAST-IN H.D. BOLTS ARE TO BE ALIGNED WITHIN STUD WALLS AND SURVEYED PRIOR TO CASTING OF SLAB TO ENSURE SETOUT ACCURACY. FOLLOWING CONFIRMATION OF SETOUT, TACK WELD BOLTS TO REINFORCEMENT MAT TO SECURE.

MINIMUM CONNECTION DETAILS SHALL CONSIST OF 2-M20 8.8/S BOLTS AND 10mm CLEAT PLATE UNLESS NOTED OTHERWISE.

SLOTTED HOLES, WHERE 8.8/TF BOLTS ARE USED IN SLOTTED HOLES, A SPECIAL WASHER OR COVER PLATE, NOT LESS THAN 8mm THICK, IS TO BE USED TO COMPLETELY COVER THE SLOTTED HOLE IN ACCORDANCE WITH AS4100:1998.

ALL BOLT HOLES 2mm OVERSIZE UNLESS NOTED OTHERWISE. HOLES FOR H.D. BOLTS 6mm OVERSIZE. OVERSIZE HOLES FOR HD BOLTS WILL REQUIRE OVERSIZE WASHERS UNDER NUTS.

UNLESS OTHERWISE SPECIFIED, SHEAR STUDS SHALL BE WELDED 19mm DIAMETER HEADED STUDS WITH ALL WORKMANSHIP AND MATERIALS IN ACCORDANCE WITH AS1554.2:2003.

STRUCTURAL STEELWORK NOTES (CONT')

S8. PURLINS AND GIRTS:
PURLINS AND GIRTS SHALL BE BASED ON BLUESCOPE LYSAGHT'S "LYSAGHT ZED AND CEE PURLINS AND GIRTS - USER GUIDE", OR OTHER SECTIONS APPROVED BY THE CONTRACT ADMINISTRATOR, COMPLYING WITH AS1397:1993, AND A MINIMUM GALVANISED COATING OF Z350 (350G/sqm).

CLEAT CONNECTIONS ARE TO BE IN ACCORDANCE TO AISC STANDARDISED CONNECTIONS OR MANUFACTURER'S RECOMMENDATIONS UNLESS NOTED OTHERWISE. BOLTING AND BRIDGING TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

THE NUMBER OF PURLINS SHOWN IS INDICATIVE ONLY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CORRECT NUMBER OF PURLINS ARE USED TO SATISFY SPACING REQUIREMENTS.

AT DIAGONAL RIDGES AND VALLEYS, FIX 2/100x70x2.5 COLD FORMED ANGLE PURLINS TO SUPPORT DIAGONAL CUT EDGE OF ROOF SHEETING, UNLESS DETAILED OTHERWISE.

ALL ROOF RAFTERS TO INCLUDE FLY BRACING EVERY SECOND PURLIN UNO.

S9. CORROSION PROTECTION:
CLEANING AND PAINTING OF STRUCTURAL STEELWORK (INTERNAL):
- ABRASIVE BLAST CLEAN TO CLASS 2 1/2
- ONE COAT OF 'INTERPRIME 198' OR APPROVED EQUIVALENT
- MINIMUM DRY FILM THICKNESS OF 0.075mm

CLEANING AND PAINTING OF STRUCTURAL STEELWORK:
- ABRASIVE BLAST CLEAN TO CLASS 2
- ONE COAT PRIMER (GREY) MINIMUM DRY FILM THICKNESS OF 0.05mm
- ONE COAT (SELECTED COLOUR) TO A DRY FILM THICKNESS OF 0.04mm

THE FOLLOWING STEELWORK SHALL BE HOT DIPPED GALVANISED AFTER FABRICATION TO AS4680:2006 WITH A MINIMUM AVERAGE ZINC COATING MASS OF 600g/m2:
- ALL COLD FORM SECTIONS
- PLATE/ANCHOR ROD ASSEMBLIES CAST INTO CONCRETE
- ALL MEMBERS BUILT INTO BRICK OR BLOCKWORK
- ALL EXTERNAL STEELWORK

FOR CONCRETE ENCASED STEELWORK, PAINTING SHALL EXTEND 100mm INTO THE CONCRETE. THE REMAINDER OF THE ENCASED STEELWORK SHALL BE UNPAINTED AND FREE OF LOOSE RUST, LOOSE MILLSCALE, DIRT, OIL AND GREASE.

ALL STRUCTURAL STEELWORK BELOW GROUND TO BE ENCASED BY N25 CONCRETE 75mm ALL ROUND, UNLESS NOTED OTHERWISE.

CONCRETE ENCASED STEELWORK SHALL BE WRAPPED WITH SL41 MESH, UNLESS OTHERWISE SHOWN.

S10. SHOP DRAWINGS:
THE STEEL FABRICATOR IS TO PROVIDE THE CONTRACT ADMINISTRATOR WITH 1 HARD COPY OF WORKSHOP DRAWINGS FOR REVIEW BEFORE FABRICATION IS STARTED, ALLOWING A MINIMUM OF 5 WORKING DAYS FOR REVIEW COMMENTS TO BE MADE.

S11. GROUT THICKNESS UNDER BASE PLATES SHALL BE MINIMUM 30mm UNLESS NOTED OTHERWISE.

S12. BASE PLATES SHALL BE GROUTED AFTER MEMBER IS LEVELLED AND PLUMBED, AND BEFORE MEMBER IS SUBSTANTIALLY LOADED. GROUT SHALL BE APPROVED PROPRIETARY FLOWABLE NON-SHRINKING PORTLAND CEMENT GROUT, PROPORTIONED AND USED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS WITH A MINIMUM 28-DAYS COMPRESSIVE STRENGTH OF 40MPa.

S13. THE CONTRACTOR SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL, TIMBER OR OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED ON THE DRAWINGS.

S14. THE ENDS OF ALL HOLLOW SECTIONS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS SEAL WELD UNLESS NOTED OTHERWISE SHOWN, WITH 'BREATHER' HOLES IF MEMBERS ARE TO BE HOT DIP GALVANISED.

S15. STIFFENER PLATES WHERE DETAILED ARE TO BE PLACED ON BOTH SIDES OF WEB TO UB's AND UC's.

S16. ALL HOLES IN PLATES AND STEEL MEMBERS SHALL BE DRILLED. EXCEPT FOR PURLINS AND GIRT HOLES WHICH MAY BE PUNCHED.

S17. WHERE DETAILS PREVENT THE NORMAL INSTALLATION OF CFW's, GRIND THE EDGE OF THE MEMBER TO FACILITATE THE INSTALLATION.

S18. CAMBER TO BE AS NOTED ON THE DRAWINGS.

S19. ALL COLUMNS TO INCLUDE FLY BRACING EVERY SECOND GIRT UNO.

S20. HOOK BOLT TO EVERY SECOND PURLIN AGAINST SAG FOR ALL HORIZONTAL DIAGONAL ANGLE OR ROD ROOF BRACING.

NOT FOR CONSTRUCTION

Issue	Description	Dwn	Apvd	Date
02	ISSUED FOR TENDER	HG	J.O.	02.05.2018
01	ISSUED FOR TENDER	J.T.	J.O.	15.12.2017

SAFETY IN DESIGN INFORMATION

SAFETY IN DESIGN ISSUES HAVE BEEN ASSESSED AS PART OF THE DESIGN PROCESS. ALL REASONABLE STEPS HAVE BEEN TAKEN TO ENSURE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF DESIGN HAVE BEEN MITIGATED AND/OR COMMUNICATED. RESIDUAL HAZARDS AND RISKS AND/OR HAZARDS AND RISKS NOT NORMALLY ASSOCIATED WITH THIS TYPE OF WORK WHICH MAY REQUIRE SUBSEQUENT CONSIDERATION AND/OR ACTION ARE DESCRIBED IN - SOH-FOH SAFETY DESIGN REGISTER MATRIX DOCUMENT

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Location

Status	FOR TENDER
Contract	SOH-513
Dwn J.BRAGA	Date 02-05-2018
Ckd J.ONSLOW	Scale

Project BUILDING RENEWAL PROGRAM
ENTRY FOYER ESCALATORS

Title STRUCTURAL
GENERAL NOTES - SHEET 2

Sydney Opera House Trust
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Location	Drawing No:	Sheet:	Rev:	
BX VA	29 BR AEC09	S002	02	A1

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