

## GENERAL NOTES:

- G1 THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVERSTRESSED.
- G2 THE BUILDER SHALL CHECK ALL DIMENSIONS AND ALL EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION.
- G3 ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE MADE GOOD AT THEIR OWN COST.
- G4 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS, EXCEPT WHERE VARIED BY THE SPECIFICATIONS AND/OR DRAWINGS: –  
AS 1684.2(2010) RESIDENTIAL TIMBER FRAMED CONSTRUCTION  
AS 1720.1(2010) TIMBER STRUCTURES  
AS 2870(2011) RESIDENTIAL SLABS AND FOOTINGS  
AS 3600 CONCRETE STRUCTURES  
AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS  
AS 4100 STEEL STRUCTURES
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G6 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE (U.N.O.)
- G7 U.N.O. DENOTES UNLESS NOTED OTHERWISE.
- G8 THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO TENDERING TO FAMILIARISE THEMSELVES WITH ACCESS SITE CONDITIONS
- G9 THE CONTRACTOR MAY OFFER FOR CONSIDERATION ALTERNATIVE PROVEN EQUAL PRODUCTS TO THOSE INDICATED. ALTERNATIVE PRODUCTS ARE NOT TO ADVERSELY AFFECT THE PROJECT AND CANNOT BE SUBSTITUTED WITHOUT PRIOR APPROVAL.
- G10 EXISTING SERVICES TO BE LOCATED BEFORE CONSTRUCTION COMMENCES.
- G11 THE DETAILS OF BUSHFIRE WATER SUPPLY SHELTER INCLUDED IN DRAWING SHEETS 1 TO 3.
- G12 CONSULT BCC ARCHITECTS FOR COLOUR SCHEME OF THE STRUCTURE.

## DESIGN CRITERIA:

WIND LOADS : REGION B TERRAIN CATEGORY 2.5  
ULTIMATE DESIGN WIND SPEED = 54.0 m/s  
DESIGN LIFE : 50 YEARS WITH ROUTINE MAINTENANCE  
LIVE LOADS: : FLOOR = 5.0 kPa. ROOF = 0.25 kPa / 1.4 kN.

STRUCTURE IS DESIGNED TO REMAIN OPEN – NO SCREENS(IMPERMEABLE OR PERMEABLE BARRIERS) TO BE INSTALLED.

## FOUNDATIONS AND SLAB ON GROUND:

- F1 ALL FOOTINGS ARE TO BE FOUNDED IN THE NATURAL UNDISTURBED SOIL PROFILE WITH A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 100kPa UNLESS NOTED OTHERWISE. IF THE SITE CONDITION IS DIFFERENT, CONSULT A STRUCTURAL ENGINEER.
- F2 SOIL TEST IS REQUIRED TO CONFIRM BEARING CAPACITY AND SITE CLASSIFICATION TO AS 2870.
- F3 FOUNDATIONS ARE TO BE CHECKED AND CERTIFIED BY A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER, QUEENSLAND (RPEQ).
- F4 COMPACT AND PREPARE THE BASE TO PROVIDE A SOUND PLATFORM AND ANY ORGANIC, SOFT OR LOOSE MATERIALS REMOVED AND REPLACED WITH COMPACTED FILL – BCC SPECIFICATION S300 QUARRY PRODUCT CLASS 1 MATERIAL.
- F5 FOR CONTROL JOINT LOCATIONS, REFER TO DRAWINGS.
- F6 SLABS ON GROUND SHALL BE UNDERLAIN WITH CONTINUOUS LAYER OF 200 MICRON (0.2mm) THICK POLYETHYLENE DAMPPROOF MEMBRANE AS PER AS 2870, LAPPED AND TAPED TO MANUFACTURER'S SPECIFICATION.

## EARTHWORKS:

- E1 STRIP ALL HUMUS MATERIAL FROM THE AREA OF THE BUILDING IMPRINT AND 1000 BEYOND.
- E2 PROOF ROLL THE AREAS TO BE CONCRETED AND PAVED. REMOVE ANY WEAK MATERIAL.
- E3 COMPACTED FILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm LOOSE DEPTH TO 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. 5.1.1 (STANDARD COMPACTION). CARRY OUT DENSITY TESTS AT A RATE OF 2 PER LAYER OF FILL. EVERY TEST MUST PASS.

## TIMBER NOTES:

- T1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 1720 AND AS 1684.
- T2 TIMBER GRADES SHALL BE AS SHOWN ON THE DRAWINGS. ALL TIMBER TO BE SEASONED OR KILN DRIED GRADE MGP12 MINIMUM U.N.O WITH NATURAL DURABILITY CLASS 4 (ABOVE GROUND) OR BETTER.
- T3 ALL FASTENERS SHALL BE HOT DIP GALVANISED. BOLTS TO BE METRIC HEX-HEAD M16 MINIMUM WITH WASHERS U.N.O. CLEAT PLATES TO BE 10mm THICK U.N.O.
- T4 TIMBER JOINT GROUP JD4 OR BETTER.
- T5 ALL TIMBER SHALL BE FULLY DRESSED AND ALL EDGES, ENDS AND CORNERS TO BE 6mm DRESSED.
- T6 PROTECT ENDS OF EXPOSED MEMBERS. USE A HIGH QUALITY EXTERIOR PAINT FINISH.
- T7 ALL TIMBER FRAMING SHALL BE NATURALLY TERMITE RESISTANT OR TREATED USING LOSP OR ACQ CHEMICALS TO A HAZARD RESISTANCE LEVEL H3 IN ACCORDANCE WITH AS 1684.2 APPENDIX B.
- T8 ALL TIMBER TO BE STAINED OR PAINTED PRIOR TO FIXING INTO FINAL POSITION. REFER TO PROJECT SPECIFICATION FOR EACH PROJECT.

## CONCRETE NOTES:

- C1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS 3600.
- C2 ALL CONCRETE SHALL BE PREMIXED BY AN APPROVED SUPPLIER.
- C3 ALL CEMENT SHALL BE TYPE GP OR GB.
- C4 CONCRETE SPECIFICATION: NOMINAL AGGREGATE SIZE TO BE 20mm, SLUMP TO BE NOT GREATER THAN 80mm.
- C5 CONCRETE STRENGTH AND CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE U.N.O
- | ELEMENT: | F'C (MPa) | REINFORCEMENT COVER |
|----------|-----------|---------------------|
| PIERS    | 25        | 75 MIN.             |
| SLAB     | 25        | 50 MIN.             |
- C6 ALL LAPS IN REINFORCEMENT SHALL BE AS SHOWN IN THE TABLE BELOW UNLESS NOTED OTHERWISE.
- | BAR  | LAP LENGTH (mm) |
|------|-----------------|
| N12  | 500             |
| N16  | 650             |
| MESH | 350             |
- C7 REINFORCEMENT SYMBOLS:  
R STRUCTURAL PLAIN ROUND GRADE 250R TO AS 4671.  
N DEFORMED BAR GRADE D500N TO AS 4671.  
SL HARD DRAWN STEEL REINFORCING FABRIC GRADE D500L TO AS 4671.
- C8 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C9 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL BY THE SUPERINTENDENT.
- C10 ALL CONCRETE SHALL BE COMPACTED USING A MECHANICAL VIBRATION PROCESS.
- C11 ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C12 CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

## INSPECTION AND CERTIFICATION NOTES:

- A1 THE CONTRACTOR'S ENGINEER (RPEQ) SHALL UNDERTAKE INSPECTIONS DURING CONSTRUCTION TO ENSURE ALL CONSTRUCTION WORKS ARE IN ACCORDANCE WITH THE MOST CURRENT ISSUE OF THE STRUCTURAL DRAWINGS AND CONTRACT DOCUMENTS. THE RPEQ SHALL CERTIFY ALL CONSTRUCTION WORK (FORM 16). ANY ALTERNATIVE TECHNIQUE USED IN CONSTRUCTION SHALL BE FOLLOWED BY A DESIGN CERTIFICATE (FORM 15) BY THE CONTRACTOR'S PROFESSIONAL ENGINEER (RPEQ)

## STEELWORK NOTES


- S1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- S2. ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS U.N.O.  
AS 3679 GRADE 300 FOR HOT ROLLED SECTIONS.
- S3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O.  
ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O.  
ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- S4. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- S5. METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS – COLORBOND COLOUR AS PER SPECIFICATION.
- S6. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- S7. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.
- S8. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- S9. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- S10. THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- S11. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.

## STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Lenita Mendis RPEQ:8950 2014.12.10 16:32:39+10'00'	R.Hu (RPEQ No 13885)	Bala Balakumar RPEQ 3963 2014.12.11 08:59:56+10'00'

## BRISBANE CITY COUNCIL STANDARD DRAWING

SCALE AS SHOWN	
DWG No. <b>BSD-10351</b>	
ORIGINAL SIZE A3	REVISION B

DRAWING AUTHORISED FOR PUBLICATION				DESIGN	CPO - P&D	DATE	DEC '14
Inga Condric 2015.06.15 07:05:10+10'00'				DRAWN	CPO - P&D	DATE	DEC '14
for ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				CHECKED	BI - FSG - AS	DATE	DEC '14
DESIGN APPROVED				DRAWING FILENAME	BSD-10351 (B) Bushfire water supply shelter type 1 - Natural area - Notes - Sheet 1 of 3.dwg		
C.Wood				ASSOCIATED PLANS	BSD-10351-Sheets 2 & 3		
SENIOR CO-ORDINATOR NATURAL ENVIRONMENT ASSET SERVICES/BRISBANE INFRASTRUCTURE							
B	Drawing Title Amended	FEB '16	JUL '16				
A	ORIGINAL ISSUE	DEC '14	DEC '14	DEC '14			
ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE			