



FOOTING SCHEDULE						
ND CATEGORY	DIAMETER 'W'	DEPTH 'D'				
CATEGORY 1 (FOR USE IN DASTAL AREAS)	Ø300 Ø450 Ø600	1.0 0.8 0.7				

Ø450

Ø600

150 PFC

125×4.0 SHS

0.65

0.45

MEMBER

В1

C1

CATEGORY 2.5

(FOR USE IN

INLAND AREAS)

110×70×10mm THICK CLEAT PLATE, 6mm CFW TO C1, 2 M16 8.8/S TO B1.	150PFC, 2 M16 8.8/S TO CLEAT PLATE	4mm CAP PLATE, 3CFW TO C1
TYPICAL CONNECTION DETAIL 1 SCALE 1:50	TYPICAL CONNECTION DETAIL 2 SCALE 1:50	TYPICAL CAP PLATE DETAIL SCALE 1:50

26.11.15 P.C. P.Sm.

22.05.15 P.C. P.Sm.

19.05.15 P.C. P.Sm.

FOR COUNCIL APPROVAL

ISSUED FOR COMMENT

REMOVED CHECKERPLATE PLATFORM, MINOR EDITS

NOTES:

<u>NOTES</u>

GENERAL NOTES:

- 1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS. ALL DISCREPANCIES SHALL BE REFERRED TO THE QUALITY MANAGER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- 2. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION ARE COMMENCED.
- THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.
- 4. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE
- CONDITION AND ENSURING NO PART IS OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES. 5. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE RELEVANT SAA CODES INCLUDING ALL
- AMENDMENTS AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS. 6. THE DESIGN WIND CRITERIA TO AS 1170.2- 2002 IS AS FOLLOWS:
- BASIC WIND SPEED WIND CATEGORY 1.0 40.6m/s
- 2.5 35.7m/s TOPOGRAPHIC MULTIPLIER Mt = 1.0SHIELDING MULTIPLIER Ms = 1.0
- 7. DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES UNLESS SHOWN OTHERWISE.
- 8. SITE SURVEYING AND SETTING OUT SHALL BE CARRIED OUT BY A REGISTERED SURVEYOR. 9. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. TEMPORARY WORKS ARE TO BE DESIGNED BY THE
- CONTRACTOR. 10. THESE NOTES SHALL BE SUPPLIED TO ALL SUB-CONTRACTORS.
- 11. MINIMUM ALLOWABLE BEARING CAPACITY REQUIRED FOR FOOTINGS IS 50KPa

- 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100.
- 2. EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS, STEEL MATERIALS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 2 OF AS 4100 AND CLAUSE 1.5 OF AS 4600 AS FOLLOWS:
 - GRADE 300 FOR HOT-ROLLED STEEL MEMBERS (UB, UC, TFB, PFC, EA, UA) TO AS 3679.1 GRADE C350 FOR HOLLOW SECTIONS TO AS 1163
 - GRADE 450 PURLINS AND GIRTS TO AS 1397 GRADE 250 FOR ALL CONNECTING PLATES TO AS 3678
- 3. BOLTS NOT DESIGNATED SHALL BE GRADE 8.8/S BOLTS TO AS 1252 TIGHTENED TO A SNUG TIGHT FIT. BOLTS
- DESIGNATED 4.6/S SHALL BE COMMERCIAL GRADE STEEL BOLTS TO AS 1111 AND AS 1112 TIGHTENED TO A SNUG FIT. WASHERS SHALL BE INSTALLED UNDER BOLT HEADS AND NUTS.
- 4. ALL BOLTS, WASHERS AND NUTS SHALL BE SUPPLIED HOT-DIPPED GALVANISED TO AS 1214. INTERNAL THREADS SHALL BE TAPPED AFTER GALVANIZING AND OILED FOR CORROSION PROTECTION. GALVANISED BOLTS SHALL NOT BE
- 5. HOLDING DOWN BOLTS SHALL BE RIGIDLY TIED TOGETHER PRIOR TO INSTALLATION (EG TACK WELD 12mm DIAMETER REINFORCING BAR TO FORM A RIGID CAGE) TO ENSURE CORRECT BOLT LOCATIONS AND SET OUT USING A 3mm STEEL TEMPLATE SUPPLIED BY THE FABRICATOR.
- 6. BOLT HOLE SIZE SHALL BE AS FOLLOW:
 - BOLT DIAMETER PLUS 2mm FOR STEEL TO STEEL CONNECTIONS. BOLT DIAMETER PLUS 4mm FOR STEEL TO CONCRETE CONNECTIONS.
 - BOLT DIAMETER PLUS 6mm FOR HOLDING DOWN BOLTS.
- WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554.
- 8. EXCEPT WHERE OTHERWISE SHOWN WELDS TO BE 6 mm CONTINUOUS FILLET AND SHALL BE STRUCTURAL PURPOSE (SP) WELDS. WELD ELECTRODES SHALL BE CLASS E48XX UNLESS SHOWN OTHERWISE. BUTT WELD SHALL BE FULL STRENGTH COMPLETE PENETRATION BUTT WELD, DENOTED F.S.B.W ON DRAWINGS. EXTENT OF WELD INSPECTION TO BE AS PER THE PROJECT SPECIFICATION.
- 9. UNLESS SHOWN OTHERWISE MINIMUM BOLTED STRUCTURAL CONNECTION SHALL BE 10mm PLATE WITH 2M20 8.8/S
- 10. UNLESS SHOWN OTHERWISE STRUCTURAL MEMBERS SHALL BE CONCENTRIC AT CONNECTIONS (GRAVITY OR GAUGE LINES TO INTERSECT).
- 11. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET
- WELD UNLESS OTHERWISE SHOWN. 12. BASE PLATES SHALL BE GROUTED USING APPROVED HIGH STRENGTH NON SHRINK GROUTS BEFORE COLUMNS ARE
- 13. DRILLED IN ANCHOR BOLTS & RODS NOTED AS 'CHEM, CHEMSET OR EPOXIED' TO BE INSTALLED TO MANUFACTURERS SPECIFICATION ('CHEM-SET OR 'EPOXY-SET' BY RAMSET, 'POWER-FAST PRO EPOXY' BY POWERS OR APPROVED
- 14. THE STRUCTURAL STEELWORK SHALL BE MADE SAFE DURING ERECTION AGAINST WIND AND ALL ERECTION STRESSES AND LOADING CONDITIONS INCLUDING THOSE DUE TO ERECTION EQUIPMENT.
- 15. ALL STEEL WORK SHALL BE HOT DIPPED GALVANISED HDG500 TO AS4680 THEN PAINTED. PAINT COLOUR TO BE APPROVED PRIOR TO APPLICATION.
- 16. DAMAGE TO GALVANISED COATING OR PAINT SHALL BE CARRIED OUT BY POWER TOOL CLEANING TO AS 1627.2, OR IF INACCESSIBLE, BY HAND TOOL CLEANING TO AS 1627.7, FOLLOWED BY SOLVENT CLEANING/DEGREASING TO AS 1627.1
- AND THE APPLICATION OF TWO COATS OF AN INORGANIC ZINC-RICH PRIMER EACH 75 MICRONS DRY FILM THICKNESS OVERLAPPING SOUND METALLIC ZINC.

CONCRETE:

- 1. SURFACE TREATMENT OF EXPOSED CONCRETE SHALL BE WOOD TROWEL FLOAT UNLESS NOTED OTHERWISE.
- 2. ALL EXPOSED CONCRETE CORNERS TO HAVE 25mm CHAMFER.
- 3. CONCRETE GRADE TO BE 25MPa AND SHALL BE SUPPLIED, PLACED AND TESTED TO AS 3600 (IN SITU). 4. REINFORCEMENT BARS TO BE SUPPLIED, PLACED, FIXED AND SUPPORTED IN ACCORDANCE WITH AS 3600 - CONCRETE
- 5. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600-2009. 6. CLEAR CONCRETE COVER TO REINFORCEMENT FOR IN-SITU CONCRETE ELEMENTS SHALL BE 60mm UNLESS NOTED
- 7. CONCRETE MIX DESIGN SHALL BE PROVIDED TO THE QUALITY MANAGER FOR APPROVAL.
- 8. NO CONCRETE ADMIXTURE OR ADDITIVES SHALL BE USED WITHOUT WRITTEN APPROVAL FROM THE QUALITY
- MANAGER. AIR ENTRAINMENT IS NOT PERMITTED.
- 9. FOOTING SHALL HAVE A CONCRETE GRADE OF N25 10. WATER WITH MORE THAN 0.03% CHLORIDE OR CHLORINE CONTENT SHALL NOT BE USED.
- 11. ALL CONCRETE TO BE READY MIXED SUPPLIED IN ACCORDANCE WITH AS 1379 BY THE BATCH PRODUCTION PROCESS.
- READY MIXED CONCRETE SHALL BE DELIVERED IN AGITATING TRUCKS.
- 12. FORMWORK AND FALSEWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS 3610. 13. FORMS SHALL NOT BE STRIPPED OR ANY FORMWORK SUPPORTS REMOVED UNTIL THE CONCRETE HAS ACQUIRED SUFFICIENT STRENGTH TO SUPPORT ITS OWN WEIGHT AND ANY SUPERIMPOSED LOADS WITHOUT DETRIMENT TO ITS
- 14. UNDER NO CIRCUMSTANCES SHALL FORMWORK OR PROJECTING REINFORCEMENT BE SHAKEN, DISPLACED OR
- DISTURBED MORE THAN TWENTY MINUTES AFTER PLACING THE CONCRETE.
- 15. CONCRETE SHALL BE CONTINUOUSLY CURED FOR AT LEAST 7 DAYS.
- 16. THE CONCRETE SURFACE SHALL BE MAINTAINED AT A TEMPERATURE NOT LESS THAN 5° THROUGHOUT THE CURING PERIOD.

WOOD/PLASTIC COMPOSITE:

1. ALL PRODUCTS AND FITTINGS TO BE IN ADVANCED PLASTIC RECYCLING SPECIFICATIONS.

www.tonkin.com.au	CIVIL INFRASTRUCTURE STRUCTURAL	SHEET SIZE A1	ADVANCED PLASTIC RECYCLING			
	□ ENVIRONMENTAL □ WATER RESOURCES	SCALE: AS SHOWN ORIGINAL SURVEY BY	APR SIGN FOOTING DESIGN			
Tonkin	STORMWATER MANAGEMENTROAD SAFETY & TRAFFICBUILDING SURVEYING	SURVEY DATE:	GENERAL CONSTRUCTION VIEWS			
a better approach	 SPATIAL INFORMATION ELECTRICAL, MECHANICAL AND AUTOMOTIVE 	COORDS & DATUM COORDINATES TO MGA 54 ALL LEVELS TO A.H.D.	FILENAME: 20150432_STRUCTURAL.DWG	JOB NUMBER 2015.0432	SHEET NUMBER 01	REVISION 3