STEELWORK NOTES:

1. ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554 AS APPROPRIATE.

2. ALL STEEL SHALL BE IN ACCORDANCE WITH:
   AS/NZS3679 GRADE 300 FOR HOT ROLLED SECTIONS
   AS1163 GRADE C350L0 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS
   AS1163 GRADE C350L0 FOR CIRCULAR HOLLOW SECTIONS UNO.

3. ALL BOLTS TO BE METRIC HEXAGONAL TO AS/NZS1252 U.N.O.
   ALL BOLTS TO BE M20 8.8/S TO AS/NZS 1252 U.N.O.
   ALL BOLTS TO BE HOT DIP GALVANISED AS1214
   ALL THREADS TO BE TREATED WITH 'LOC-TITE' TO RENDER TAMPER AND VIBRATION PROOF.

4. THE CONTRACTOR SHALL SUBMIT RPEQ CERTIFICATION CONFIRMING THE FOLLOWING TOGETHER WITH THE RELEVANT MILL AND TEST CERTIFICATES TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCING FABRICATION.
   - THAT THE STRUCTURAL STEEL PRODUCTS SUPPLIED ARE FROM EITHER AN AUSTRALIAN OR OVERSEAS ACRS CERTIFIED MANUFACTURER. REFER www.steelcertification.com FOR CURRENT CERTIFICATE HOLDERS. ACRS REFERS TO "AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS".
   - THAT WHERE STRUCTURAL STEEL PRODUCTS ARE SOURCED FROM OVERSEAS FOR THIS PROJECT THE CERTIFYING ENGINEER HAS REVIEWED THE MILL AND TEST CERTIFICATES FROM THE SUPPLIERS OF THE STEEL PRODUCTS AND CONFIRMS THAT THEY COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS IN RELATION TO MATERIAL COMPOSITION AND STRENGTH.
   - THAT ALL BOLTS USED SHALL COMPLY WITH AS1252 AND THE CURRENT REQUIREMENTS OF THE AUSTRALIAN STEEL INSTITUTE ASI TECHNICAL NOTE TN001 VERSION 3.

5. ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 300 U.N.O.

6. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH 5mm THICK PLATES AND CONTINUOUS FILLED WELDED U.N.O.

7. WHERE MEMBERS SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE BENT, CURVED OR ROLLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS REQUIRED TO ACHIEVE THE REQUIRED SHAPES WITHOUT LOCALISED DISTORTION OF THE MEMBERS.

8. BEFORE FABRICATION HAS COMMENCED, THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE SHOP DRAWINGS TO THE SUPERINTENDENT FOR REVIEW. REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.

9. 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/NZS1554. GRIND ALL CORNERS & WELDS SMOOTH. A RPEQ CERTIFICATION CONFIRMING THAT ALL WELDING WORKS HAVE BEEN INSPECTED AND CERTIFIED AS COMPLYING WITH AS1554 BY A QUALIFIED WELDING INSPECTOR APPOINTED BY THE CONTRACTOR SHALL BE SUBMITED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO THE STEELWORK BEING GALVANISED.

10. ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS2312 HDG600 SPECIFICATION. SURFACE PREPARATION FOR CORROSION PROTECTION COATING IS TO BE CLASS 2½ TO AS1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS4680.

11. THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.

12. PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.

13. ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH A HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION AS PER PAINT MANUFACTURER'S RECOMMENDATIONS.

DESIGN CRITERIA

1. DESIGN STANDARDS : AS5100 (2004), AS1170, AS3600 (2009), AS4100 (1998) INCLUDING SUPPLEMENTS AND AMENDMENTS.

2. DESIGN LOADS : IN ACCORDANCE WITH AS5100, AS1170 AND 'DESIGN CRITERIA FOR BRIDGES AND OTHER STRUCTURES: 2012' PUBLISHED BY DEPARTMENT OF TRANSPORT AND MAIN ROADS (DTMR) QLD.

3. DESIGN DATA : WIND LOADS
   - REGION: B
   - TERRAIN CATEGORY: 2
   - STRUCTURE HEIGHT: 8.0m
   - ARI: 2000 YRS (ULS) & 25 YRS (SLS)
   - REGIONAL WIND SPEED: V_{2000} = 63m/s V_{25} = 39m/s

4. WEIGHT OF CAMERAS, HOUSING AND BRACKET 60kg MAX. TOTAL SAIL AREA 0.6m2

DESIGN NOTES

1. ARM AND BRACKET FOR THREE (3) TRAFFIC CAMERAS TO BE MOUNTED ONTO BCC VMS SUPPORT STRUCTURE TYPE BCC-VC.
2. BRACKETS ARE CAPABLE OF SUPPORTING THREE (3) CAMERAS ONLY. CAMERAS SHALL BE:
   - 1 x PTZ ESPRIT ES40E/ES41E CAMERA OR AN APPROVED EQUAL;
   - 2 x 700TVL, TDN, D-WDR FIXED CAMERA OR AN APPROVED EQUAL;

STRUCTURAL DESIGN CERTIFICATION

DESIGN	DESIGN CHECK	AUTHORISED FOR ISSUE
Zhuangzhi HU RPEQ 13885 2014.11.20 14:47:52 +10'00'	Lenita MendisRPEQ 8950 2014.11.20 14:50:25 +10'00'	Bala Balakumar RPEQ 3963 2014.11.20 16:44:42+10'00'

ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
B	Drawing Title Amended	JAN '16	JUL '16	JUL '16
A	ORIGINAL ISSUE	OCT 14	OCT 14	NOV 14

DRAWING AUTHORISED FOR PUBLICATION
Inga Condric 2015.06.16 10:20:32+10'00'
for ASSET ENGINEERING MANAGER
STRATEGIC ASSET MANAGEMENT
DESIGN APPROVED
E.Bradley Signature on Original June 2015
INTELLIGENT TRANSPORT SYSTEMS MANAGER
CONGESTION REDUCTION UNIT

DESIGN	RH	DATE	OCT '14
DRAWN	GVF	DATE	OCTT '14
CHECKED	LM	DATE	OCT '14
DRAWING FILENAME	BSD-4131(B) Arm and bracket for cameras on VMS gantry - Notes - Sheet 1 of 2.dwg		
ASSOCIATED PLANS	BSD-4131 SHEET 2 OF 2		

BRISBANE CITY

BRISBANE CITY COUNCIL STANDARD DRAWING

ARM AND BRACKET FOR CAMERAS ON VMS GANTRY NOTES – SHEET 1 OF 2

SCALE: NOT TO SCALE
DWG No.: BSD-4131
ORIGINAL SIZE: A3
REVISION: B