

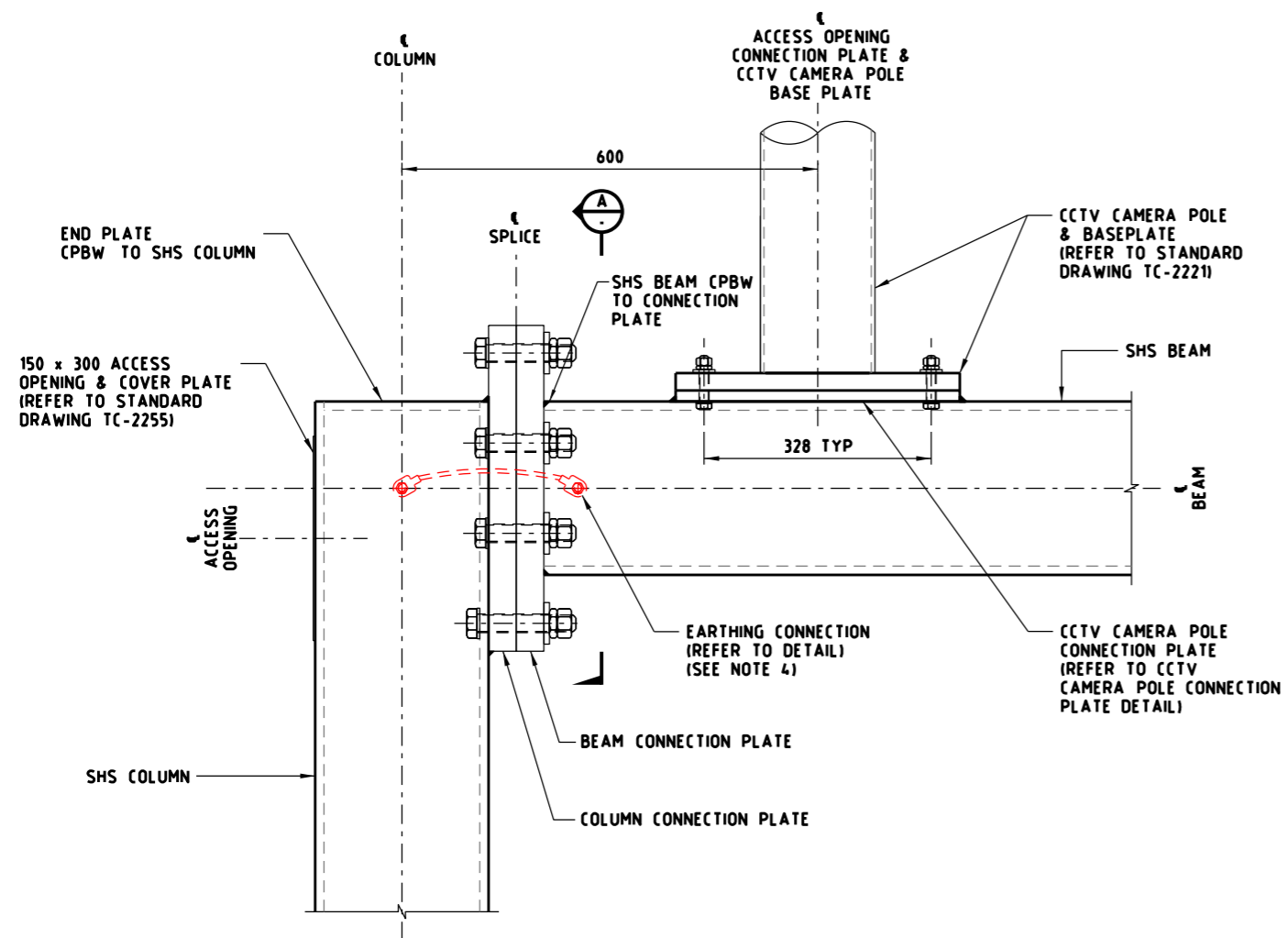
- NOTES:**
- 1 GANTRY BEAM TO BE TRUE HORIZONTAL
 - 2 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH STANDARD DRAWING TC-2251
 - 3 WHERE GANTRY IS LOCATED IN PROXIMITY OF HIGH VOLTAGE POWER LINES ADDITIONAL EARTH PROTECTION SHALL BE PROVIDED AND DESIGNED BY A QUALIFIED ELECTRICAL ENGINEER
 - 4 LIGHTNING PROTECTION TO BE DESIGNED IN ACORDANCE WITH AS 1768 WHERE REQUIRED
 - 5 MINIMUM OFFSET FROM PILE CAP TO BE 1000 EXCEPT WHERE ABOVE GROUND OBSTRUCTIONS PREVENT PEDESTRIAN ACCESS WITHIN 1000 OF THE PILE CAP
 - 6 EARTHING NUT/WASHERS AND LUG TO BE FITTED ON SITE AFTER GANTRY ERECTION GANTRY COLUMN PAINT TO BE REMOVED TO PROVIDE APPROPRIATE ELECTRICAL CONTACT BETWEEN LUG AND EARTH STUD
 - 7 EARTH STUD TO BE PROVIDED AT ACCESS OPENING LEVEL OPPOSITE TO THE ACCESS OPENING EARTH STUD TO BE SHOP WELDED PRIOR TO COATING AND GANTRY ERECTION
 - 8 ANTI-CORROSION TREATMENT TO BE APPLIED TO EARTH CONNECTION FOLLOWING FITTING
 - 9 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE

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A	W H	12/2018	REMOVAL OF STRUCTURAL DETAIL	
ISSUE	APP'D	DATE	AMENDMENT	

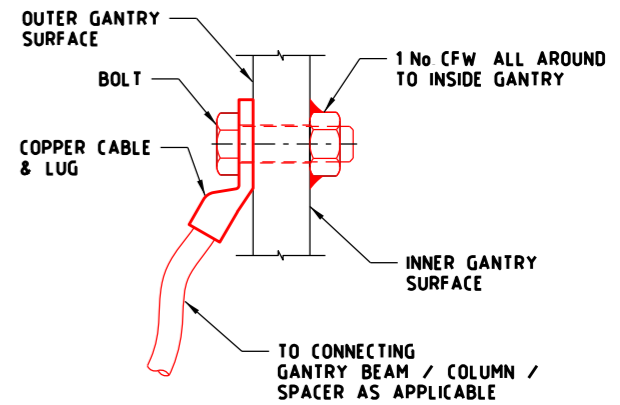
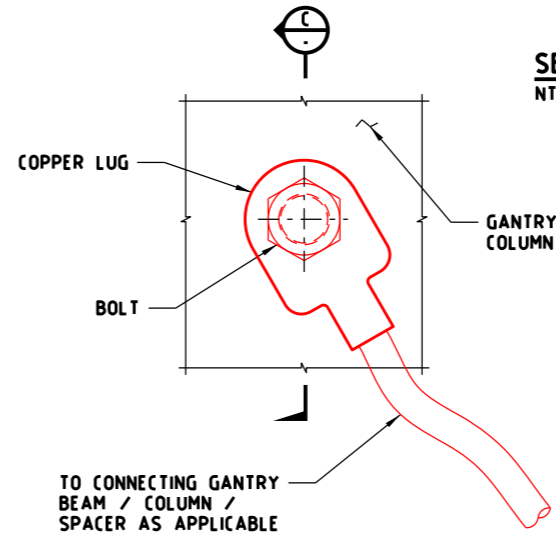
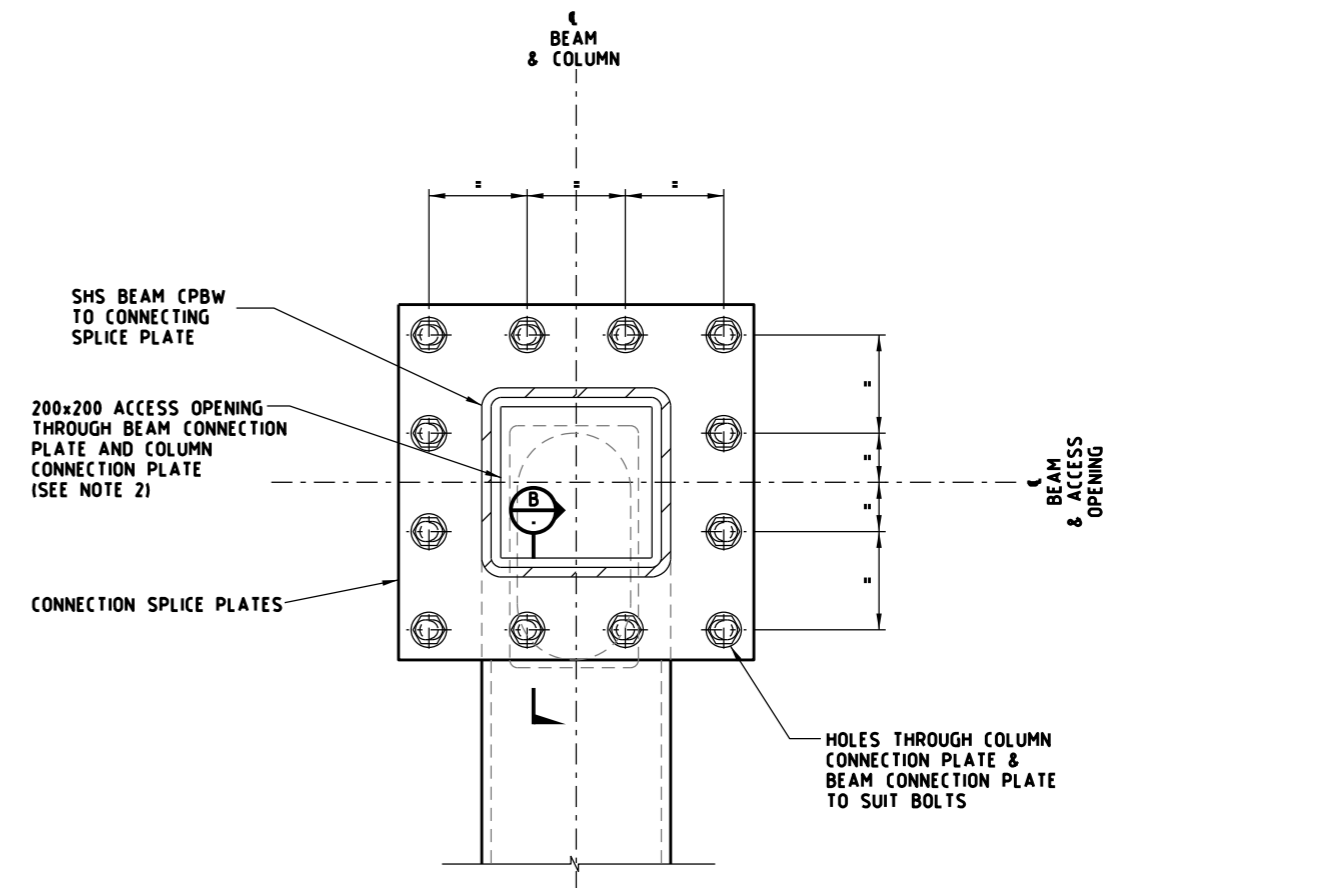
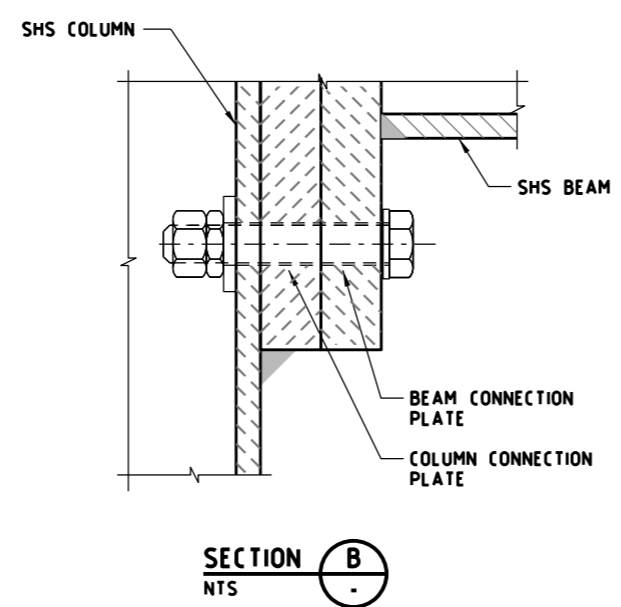
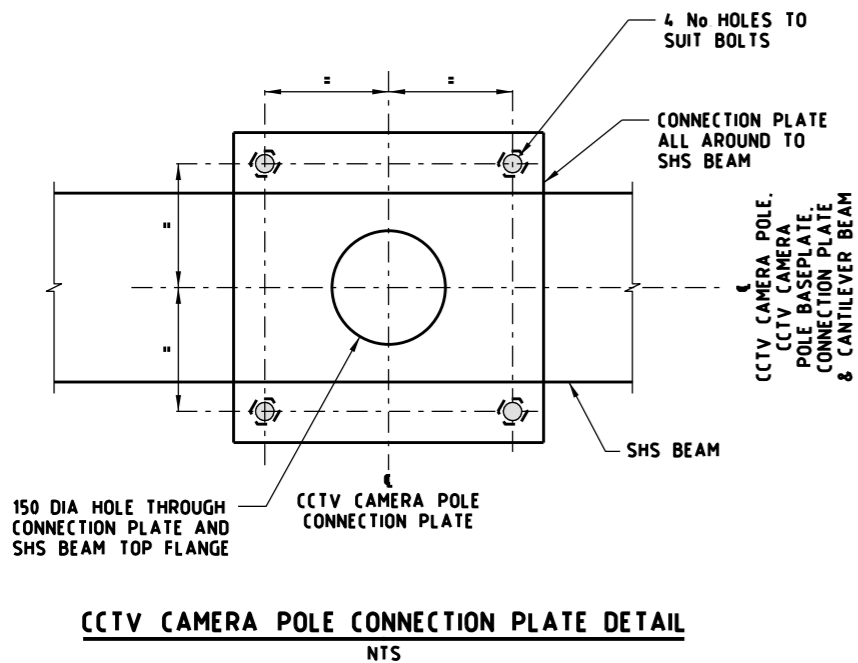
GENERAL NOTES	
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DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015
CAT		
PROJ		
FILE		

STANDARD DRAWING MANAGED MOTORWAY FRS LANTERN SUPPORT STRUCTURES CANTILEVER GANTRY FOR 2 LANES METERED SHEET 1 OF 2 - TYPICAL ARRANGEMENT				
SCALE OF METRES	FILE NO	CONTRACT NO	SHEET NO	DRAWING NO
NTS				TC-2250
HOR				ISSUE
VER				A



COLUMN / BEAM BOLTED CONNECTION
NTS



NOTES

- 1 ALL OPENING EDGES TO BE DEBURRED
- 2 THE OPENING IN SECTION A NEEDS TO BE BIG ENOUGH TO ALLOW TO FASTENER/INSERT THE TWO CENTRE BOLTS ON THE LOWER ROW
- 3 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE
- 4 GANTRY COLUMN PAINT TO BE REMOVED TO PROVIDE APPROPRIATE ELECTRICAL CONTACT BETWEEN GANTRY AND EARTH CABLE LUGS ANTI-CORROSION TREATMENT TO BE APPLIED TO EARTH CONNECTION FOLLOWING FITTING BOLTS, NUTS AND LUGS TO BE RE-COATED IN SAME COLOUR AS GANTRY AFTER INSTALLATION

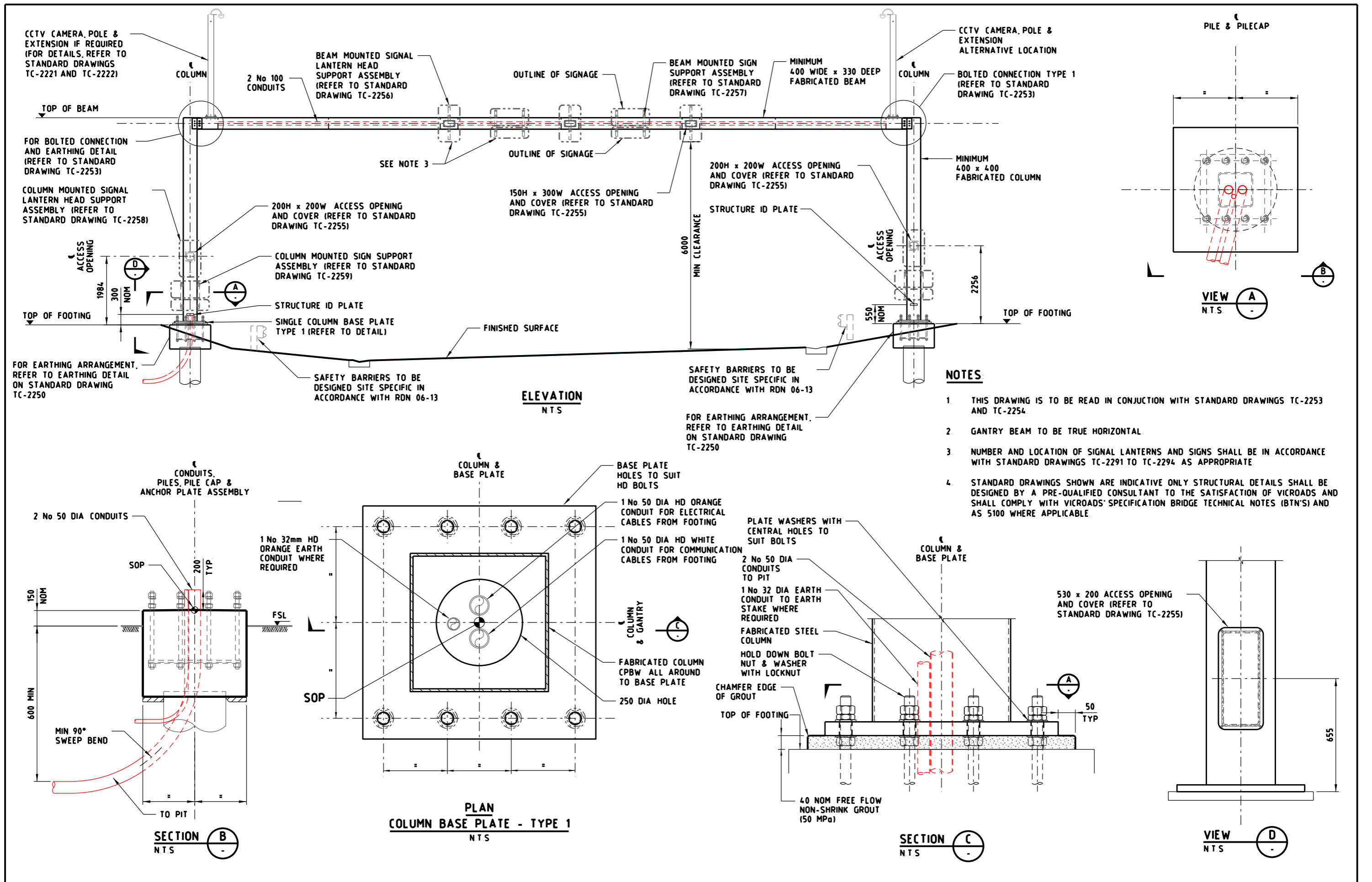
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A	W H	12/2018	REMOVAL OF STRUCTURAL DETAIL	
ISSUE	APP'D	DATE	AMENDMENT	

GENERAL NOTES	

DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	
ITS INFRASTRUCTURE & SYSTEM 08/2015		
CAT:	SCALE OF METRES	
PROJ:	NTS	
FILE:	HOR	VER



STANDARD DRAWING MANAGED MOTORWAY				
FRS LANTERN SUPPORT STRUCTURES CANTILEVER GANTRY FOR 2 LANES METERED SHEET 2 OF 2 - TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2251	A

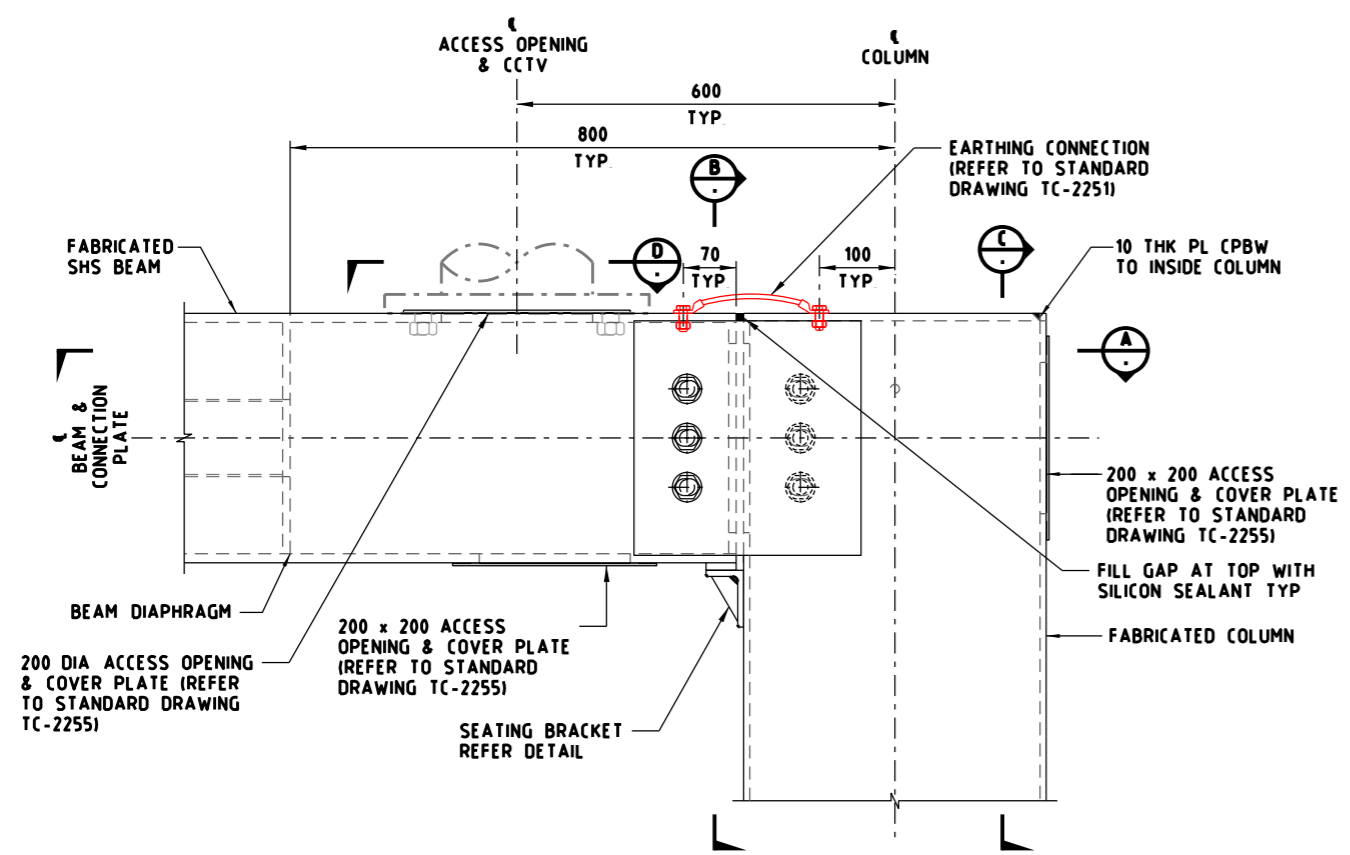


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A	W H	12/2018	REMOVAL OF STRUCTURAL DETAIL
ISSUE	APP'D	DATE	AMENDMENT

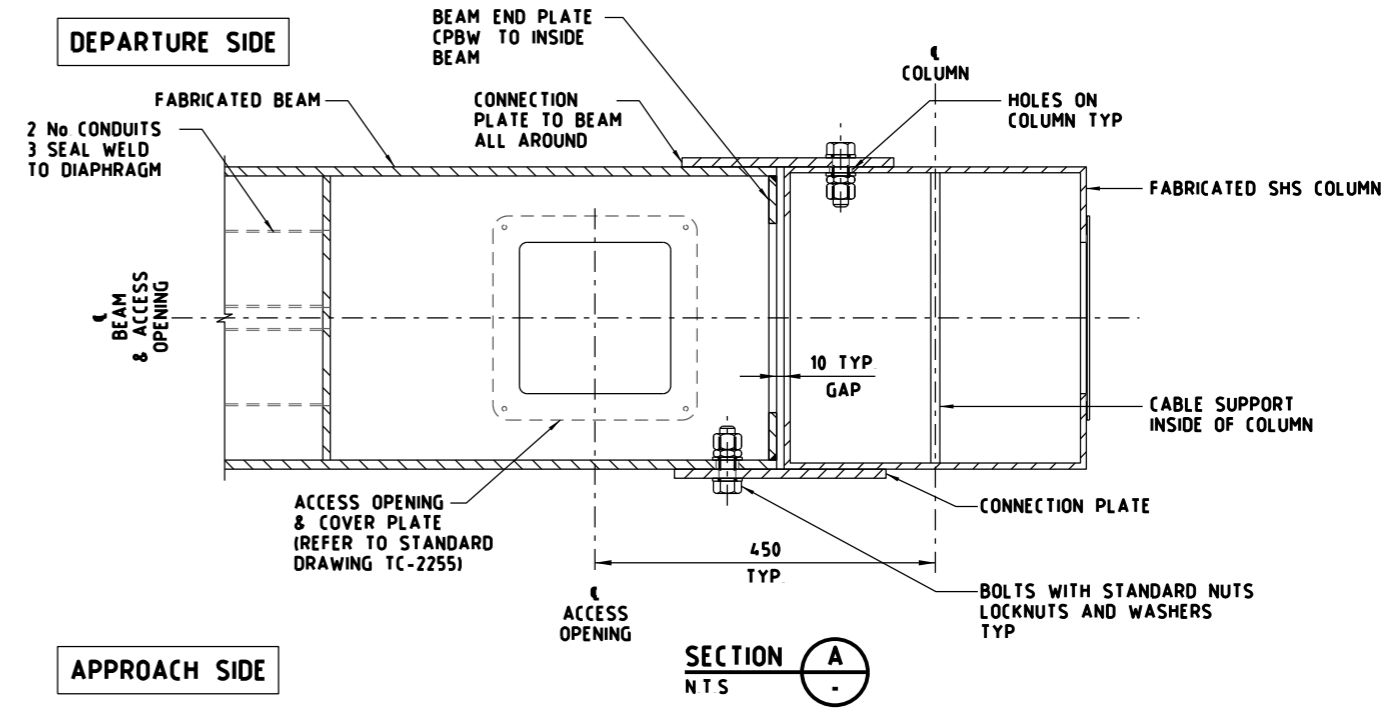
GENERAL NOTES	

DESIGNED	M80 UPGRADE	07/2015	
APPROVED	W HARVEY - MANAGER	ITS INFRASTRUCTURE & SYSTEM 08/2015	
CAT.			SCALE OF METRES
PROJ.			NTS
FILE			HOR VER

STANDARD DRAWING				
MANAGED MOTORWAY				
FRS LANTERN SUPPORT STRUCTURES				
PORTAL GANTRY FOR 3 OR MORE LANES METERED				
SHEET 1 OF 3 - TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2252	A

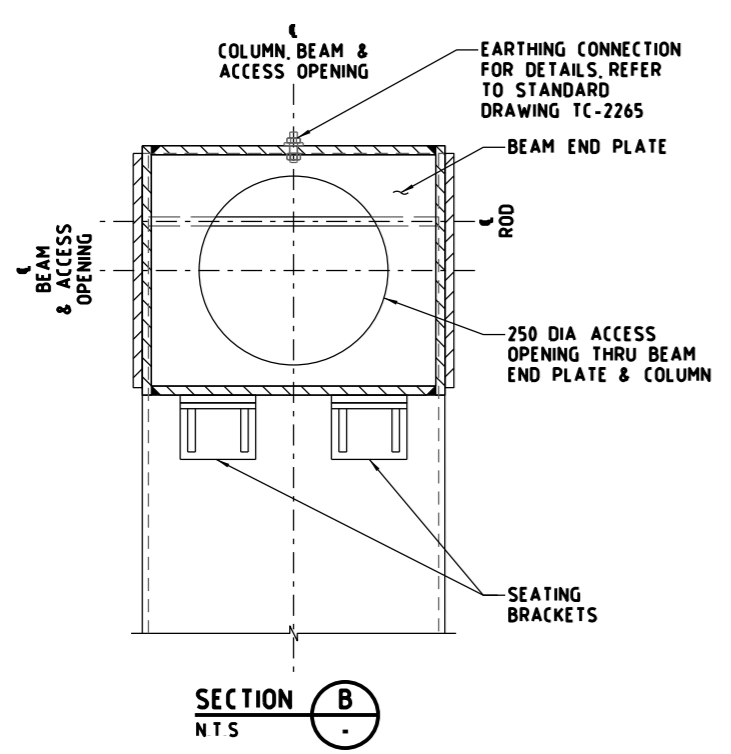


CONNECTION PLATE DETAIL
NTS

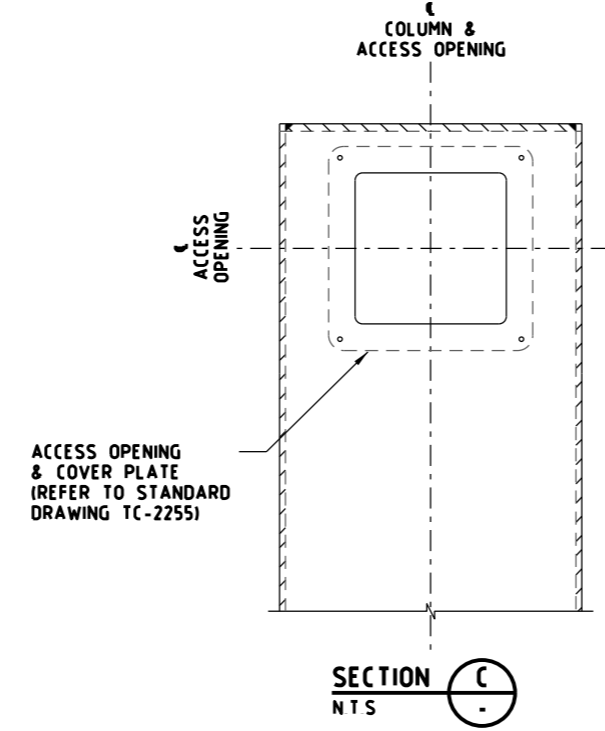


APPROACH SIDE

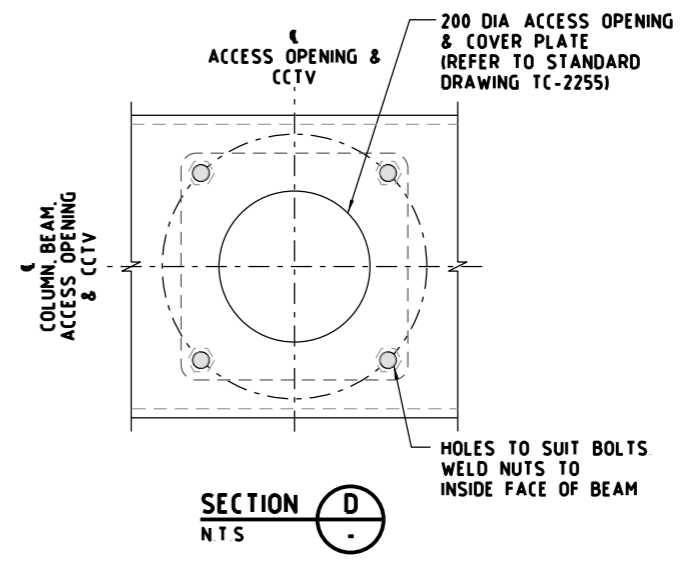
SECTION A
NTS



SECTION B
NTS



SECTION C
NTS



SECTION D
NTS

NOTES

- 1 ALL OPENING EDGES TO BE DEBURRED
- 2 200 DIA ACCESS OPENING COVER PLATE TO BE REMOVED PRIOR TO INSTALLATION OF CCTV CAMERA POLE (WHERE CCTV CAMERA ARE REQUIRED)
- 3 AFTER BEAM INSTALLATION, ALL GAPS BETWEEN BEAM AND COLUMN SHALL BE FILLED WITH SILICON SEALANT
- 4 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE

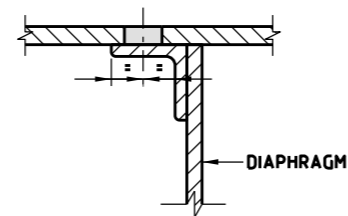
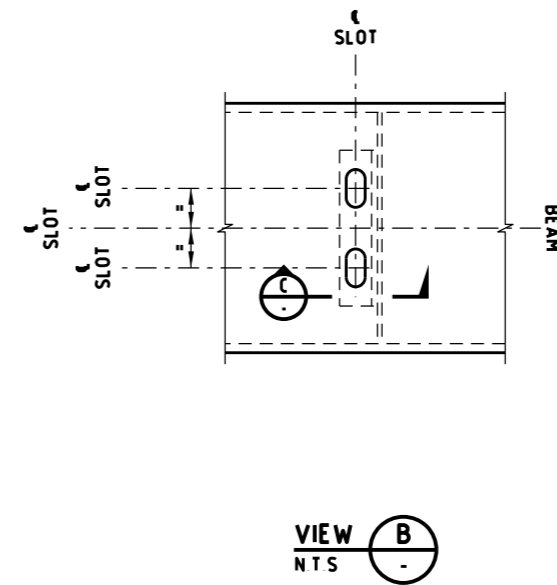
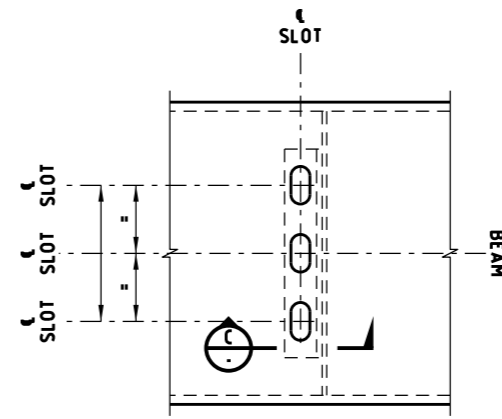
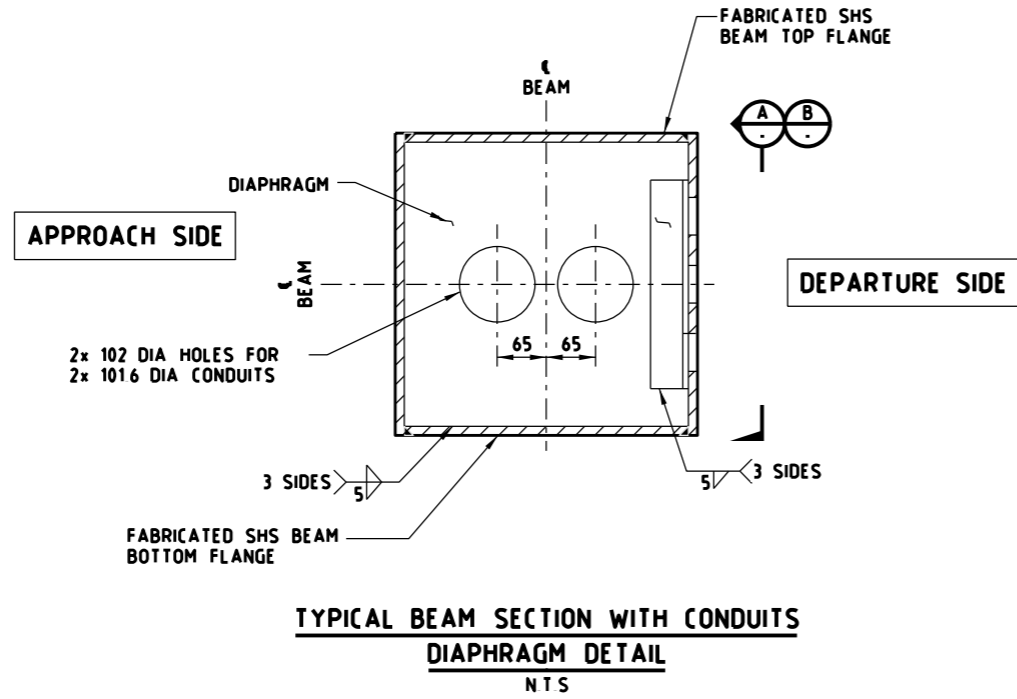
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A	WH	12/2018	REMOVAL OF STRUCTURAL DETAIL
ISSUE	APP'D	DATE	AMENDMENT

GENERAL NOTES

DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	
	ITS INFRASTRUCTURE & SYSTEM 08/2015	
CAT:		SCALE OF METRES
PROJ:		NTS
FILE:		HOR VER



STANDARD DRAWING MANAGED MOTORWAY				
FRS LANTERN SUPPORT STRUCTURES				
PORTAL GANTRY FOR 3 OR MORE LANES METERED				
SHEET 2 OF 3 - TYPICAL ARRANGEMENT				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2253	A




NOTES:

- STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE.

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A	W H	12/2018	REMOVAL OF STRUCTURAL DETAIL
ISSUE	APP'D	DATE	AMENDMENT

GENERAL NOTES

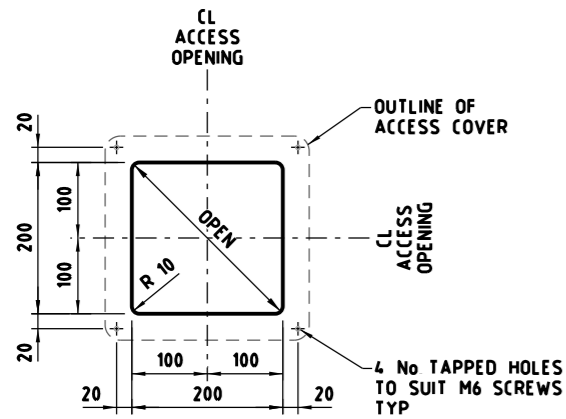
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APPROVED	W HARVEY - MANAGER	
	ITS INFRASTRUCTURE & SYSTEM 08/2015	
CAT:		SCALE OF METRES
PROJ:		NTS
FILE:		HOR VER



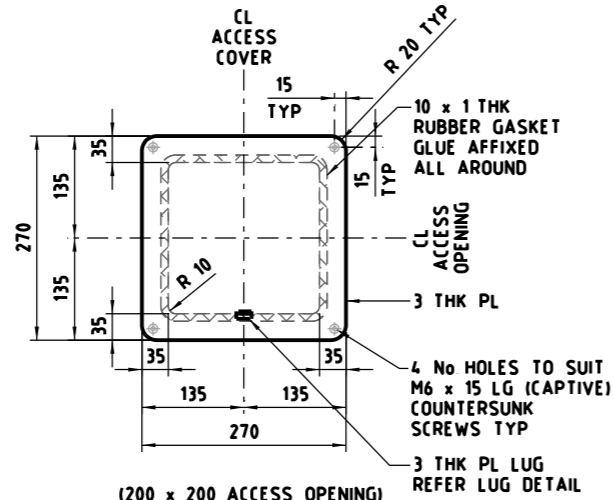
STANDARD DRAWING
MANAGED MOTORWAY

FRS LANTERN SUPPORT STRUCTURES
PORTAL GANTRY FOR 3 OR MORE LANES METERED
SHEET 3 OF 3 - TYPICAL ARRANGEMENT

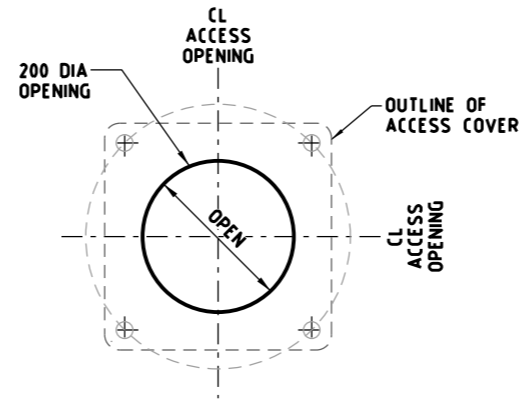
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2254	A



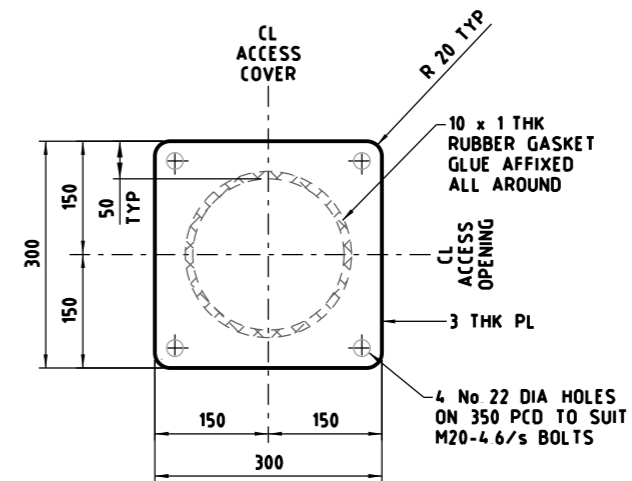
200 x 200 ACCESS OPENING
NTS



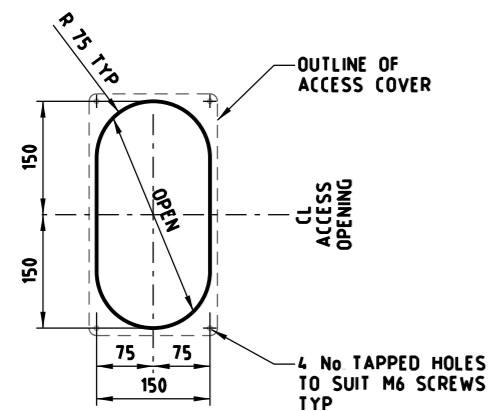
(200 x 200 ACCESS OPENING)
270 x 270 ACCESS COVER
NTS



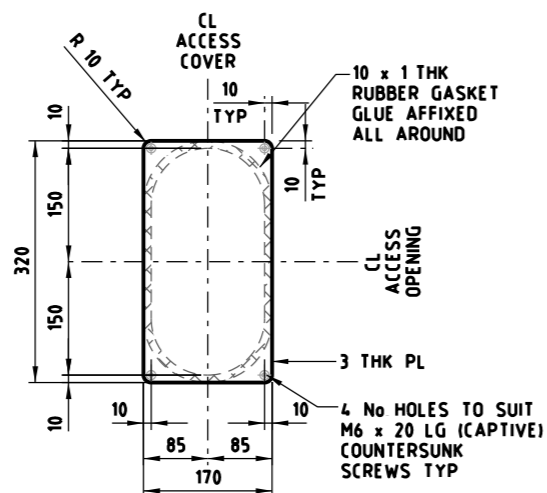
200 DIA ACCESS OPENING
NTS



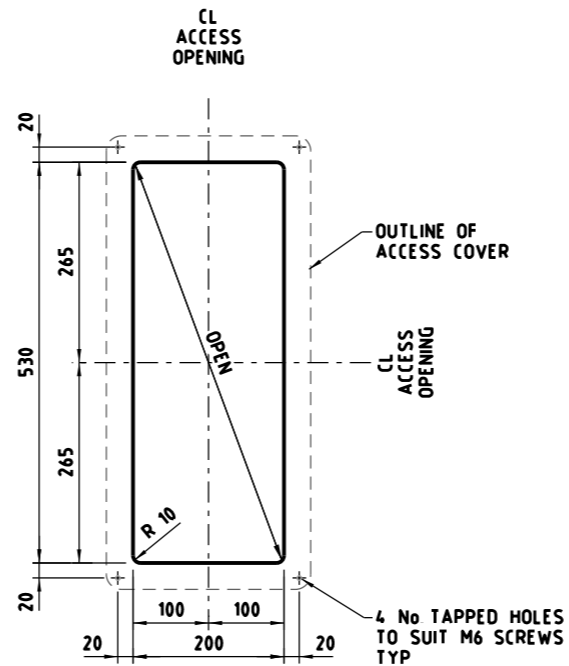
(200 DIA ACCESS OPENING)
300 x 300 ACCESS COVER
NTS



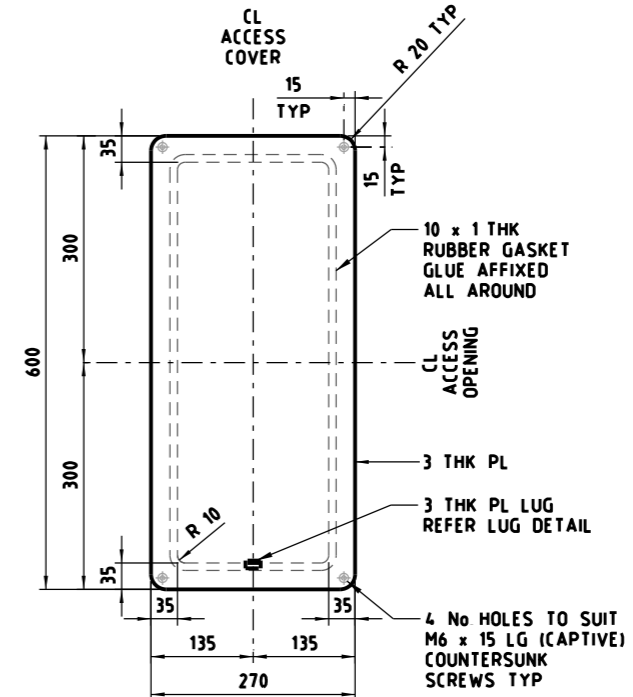
150 x 300 ACCESS OPENING
NTS



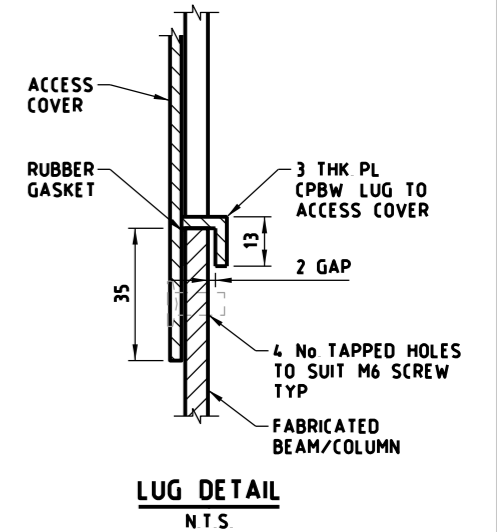
(150 x 300 ACCESS OPENING)
170 x 320 ACCESS COVER
NTS



530 x 200 ACCESS OPENING
NTS



(530 x 200 ACCESS OPENING)
600 x 270 ACCESS COVER
NTS



LUG DETAIL
NTS

NOTES

- 1 ALL OPENING EDGES TO BE DEBURRED

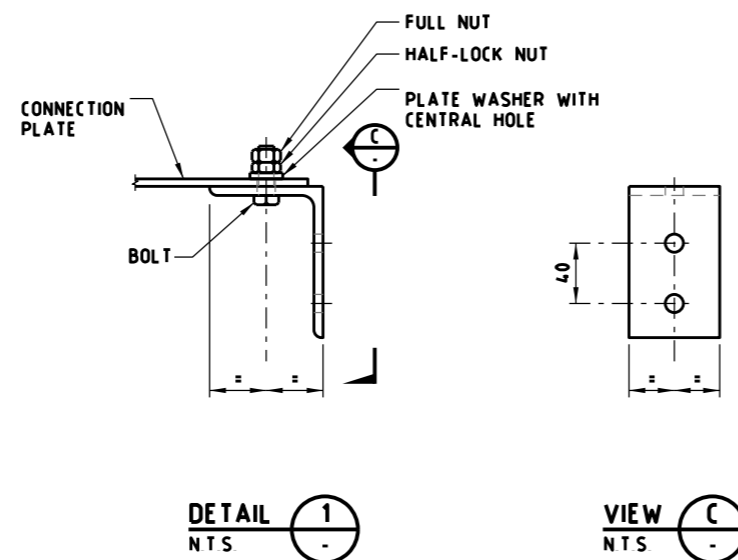
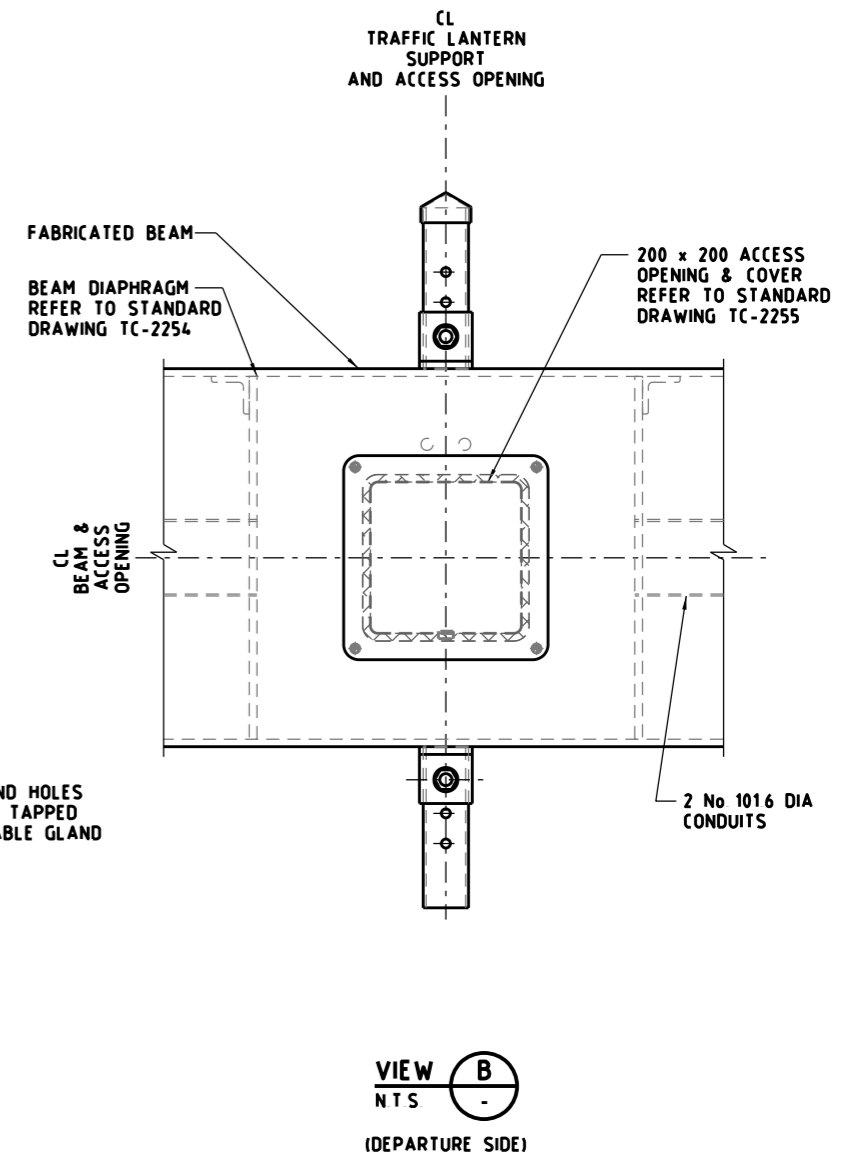
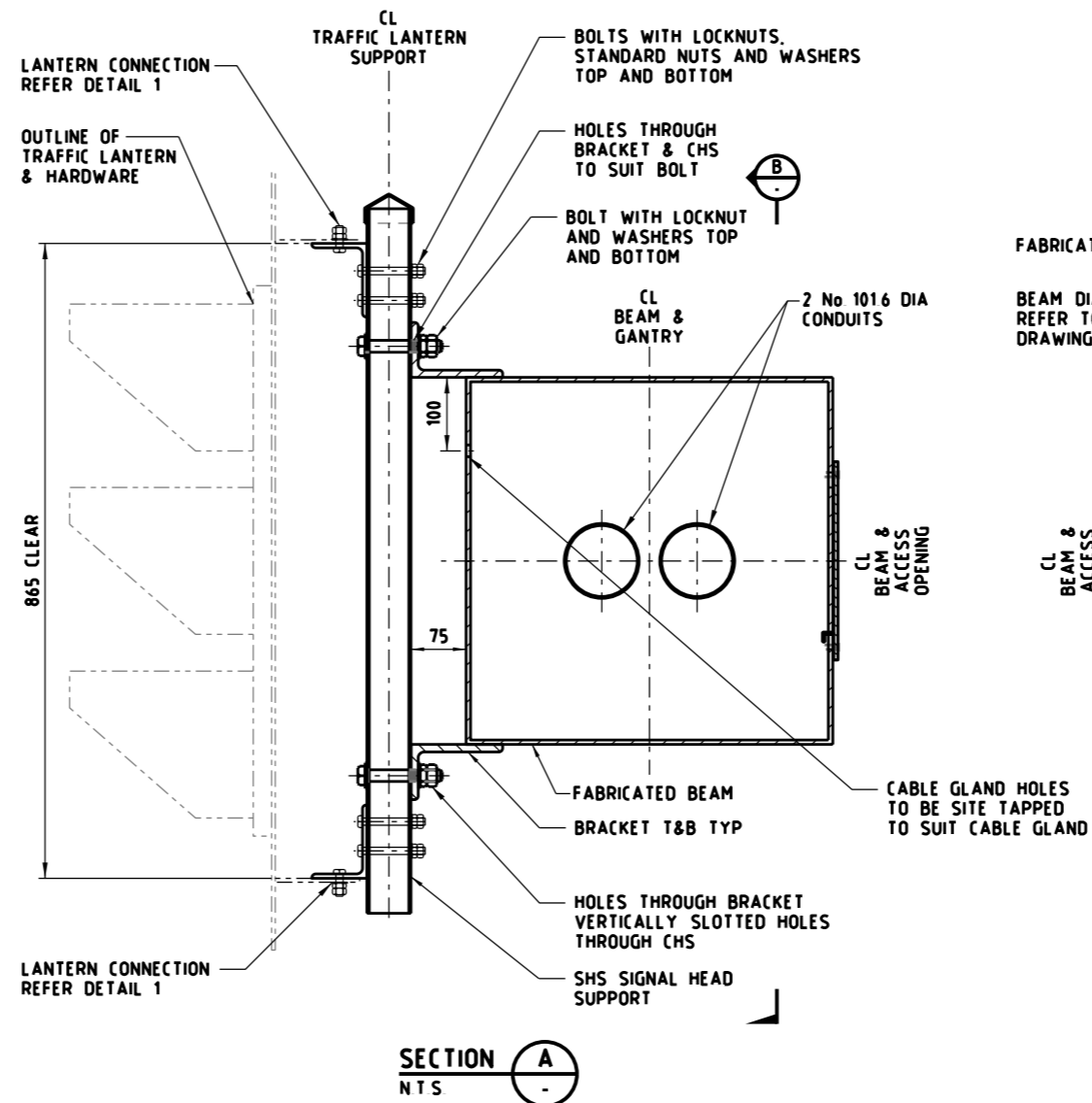
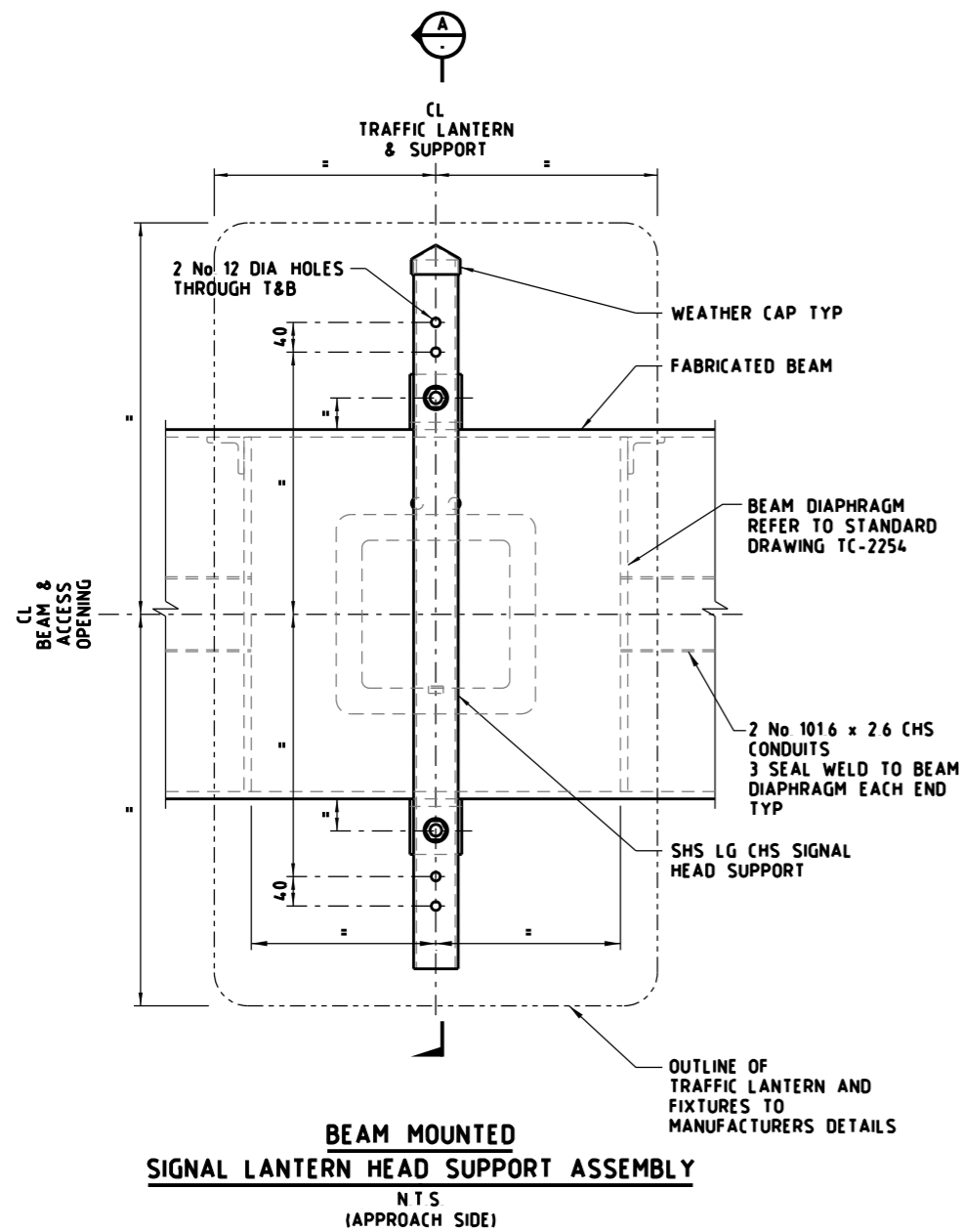
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A	W H	12/2018	REVISION OF DETAIL
ISSUE	APP'D	DATE	AMENDMENT

GENERAL NOTES	

DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	
ITS INFRASTRUCTURE & SYSTEM 08/2015		
CAT:	SCALE OF METRES	
PROJ:	NTS	
FILE:	HOR	VER



STANDARD DRAWING			
MANAGED MOTORWAY			
FRS LANTERN SUPPORT STRUCTURES			
ACCESS OPENINGS & COVERS			
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO
			TC-2255
			ISSUE A



NOTES

- 1 ALL OPENING EDGES TO BE DEBURRED.
- 2 STANDARD DRAWINGS SHOWN ARE INDICATIVE ONLY. STRUCTURAL DETAILS SHALL BE DESIGNED BY A PRE-QUALIFIED CONSULTANT TO THE SATISFACTION OF VICROADS AND SHALL COMPLY WITH VICROADS' SPECIFICATION BRIDGE TECHNICAL NOTES (BTN'S) AND AS 5100 WHERE APPLICABLE.
- 3 THE MOUNTING ARRANGEMENT OF THE LANTERN ASSEMBLY AND STATIC SIGN MAY VARY DEPENDING ON CROSS SECTION SIZE OF THE ANTRY BEAM AND IT SHALL BE DESIGNED TO THE SATISFACTION OF VICROADS.

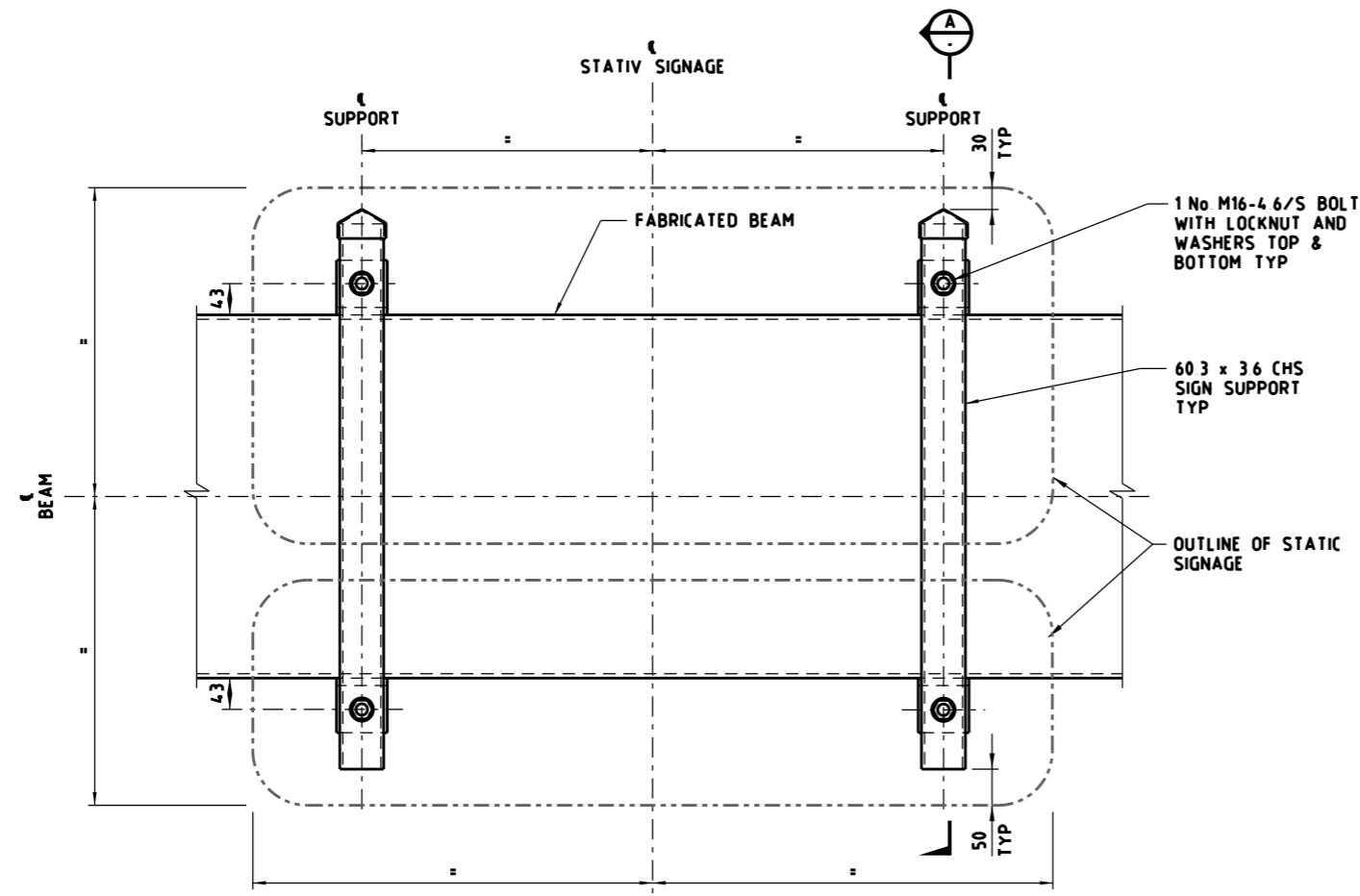
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A	W H	12/2018	REVISION OF DETAIL
ISSUE	APP'D	DATE	AMENDMENT

GENERAL NOTES	
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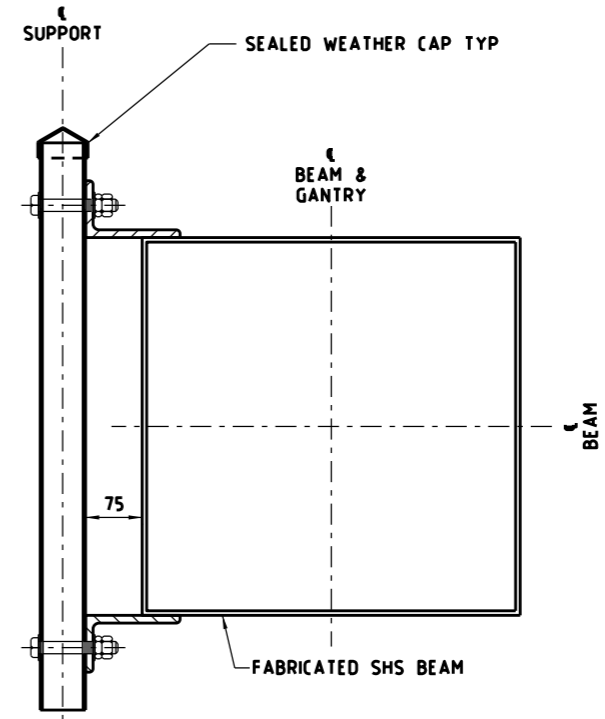
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APPROVED	W HARVEY - MANAGER	
	ITS INFRASTRUCTURE & SYSTEM 08/2015	
CAT:		SCALE OF METRES
PROJ:		NTS
FILE:		HOR
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STANDARD DRAWING			
MANAGED MOTORWAY			
FRS LANTERN SUPPORT STRUCTURES			
BEAM MOUNTED SIGNAL LANTERN HEAD			
SUPPORT ASSEMBLY - TYPICAL ARRANGEMENT			
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO
			TC-2256
			ISSUE A



**BEAM MOUNTED
SIGN SUPPORT ASSEMBLY**
N T S
(APPROACH SIDE)



SECTION A
N T S

NOTE:

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- 2 THE MOUNTING ARRANGEMENT OF THE LANTERN ASSEMBLY AND STATIC SIGN MAY VARY DEPENDING ON CROSS SECTION SIZE OF THE ANTRY BEAM AND IT SHALL BE DESIGNED TO THE SATISFACTION OF VICROADS.

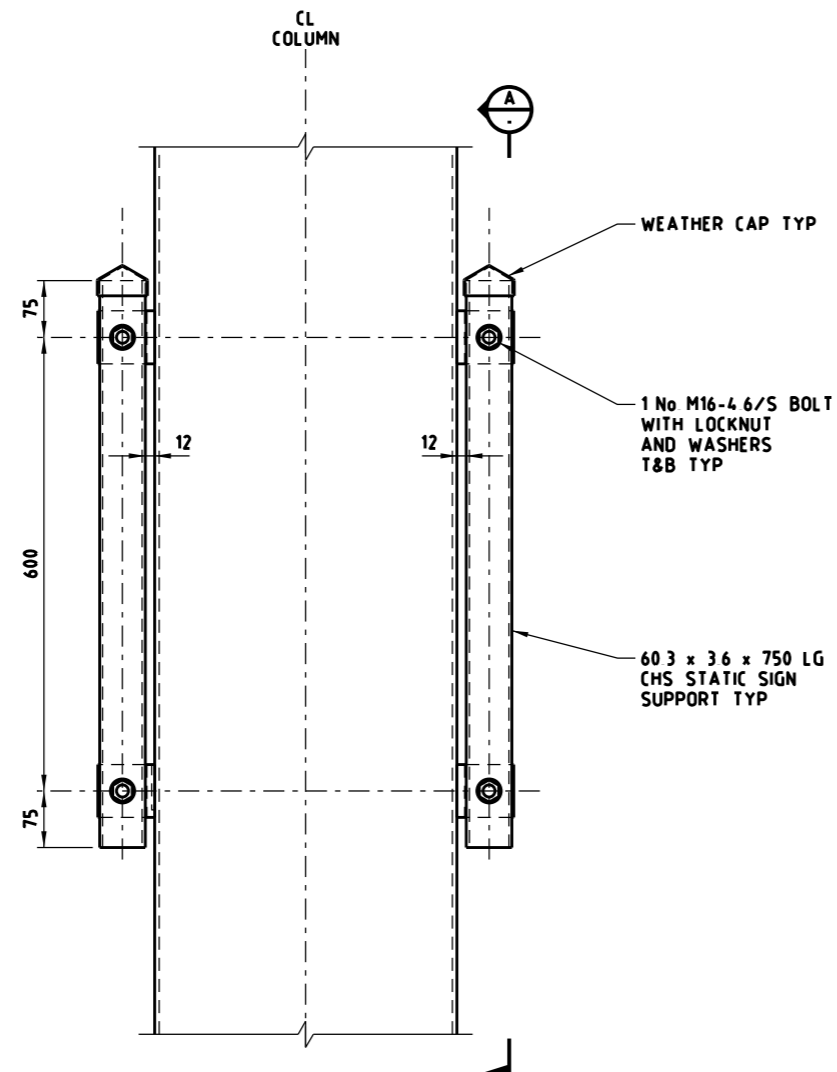
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ISSUE	APP'D	DATE	AMENDMENT

GENERAL NOTES	
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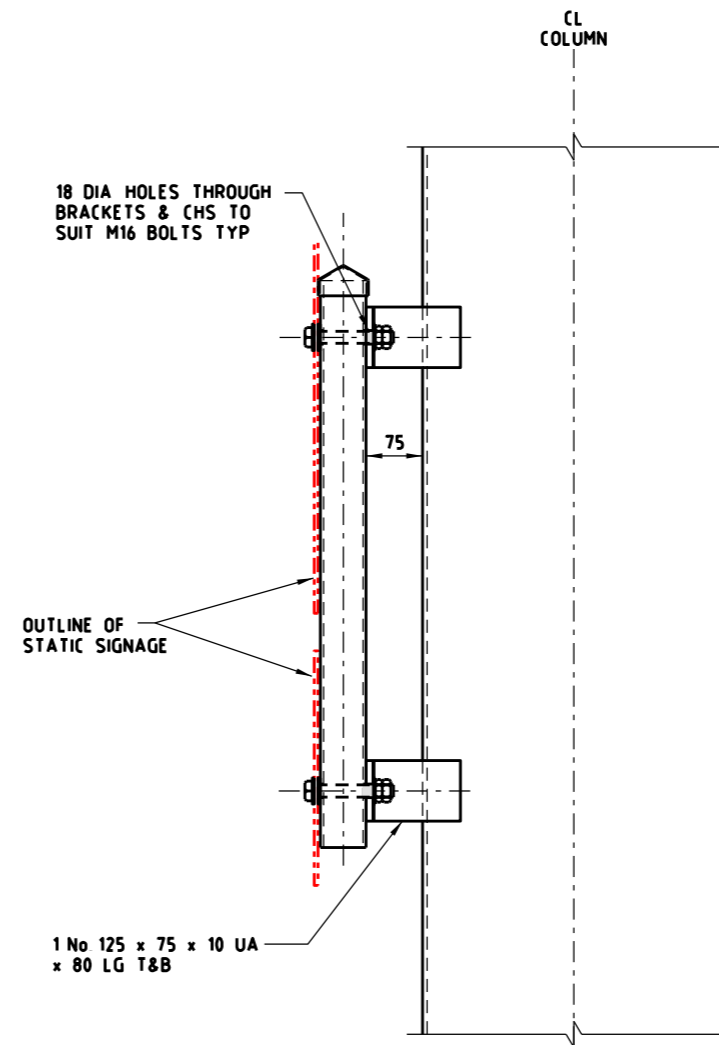
DESIGNED	M80 UPGRADE	07/2015
APPROVED	W HARVEY - MANAGER	
	ITS INFRASTRUCTURE & SYSTEM 08/2015	
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FILE		
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VER		



STANDARD DRAWING MANAGED MOTORWAY				
FRS LANTERN SUPPORT STRUCTURES BEAM MOUNTED STATIC SIGN SUPPORT ASSEMBLY				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2257	A



**COLUMN MOUNTED
STATIC SIGN SUPPORT ASSEMBLY**
NTS
(APPROACH SIDE)



VIEW A
NTS

NOTE

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- THE MOUNTING ARRANGEMENT OF THE LANTERN ASSEMBLY AND STATIC SIGN MAY VARY DEPENDING ON CROSS SECTION SIZE OF THE ANTRY BEAM AND IT SHALL BE DESIGNED TO THE SATISFACTION OF VICROADS.

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GENERAL NOTES	

DESIGNED	M80 UPGRADE	07/2015
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CAT:		SCALE OF METRES
PROJ:		NTS
FILE:		HOR VER



STANDARD DRAWING MANAGED MOTORWAY				
FRS LANTERN SUPPORT STRUCTURES COLUMN MOUNTED STATIC SIGN SUPPORT ASSEMBLY				
FILE NO	CONTRACT NO	SHEET NO	DRAWING NO	ISSUE
			TC-2259	A