

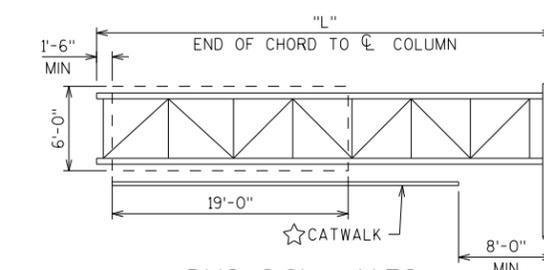
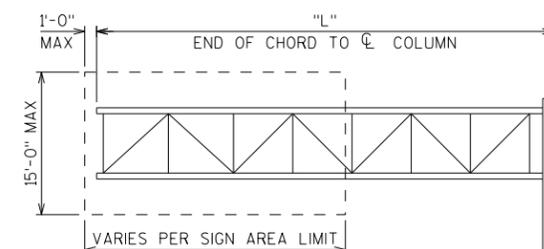
CAMBER DIAGRAM

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT THE END OF TRUSS AS SHOWN. DO NOT RAKE VERTICAL COLUMN BY ADJUSTMENT OF LEVELING NUTS.

CAMBER VALUES

DIM "L"	"Y" (IN)			
	30'		38'	
"H"	TYPE	DMS	TYPE	DMS
22'	2 1/4"	3 1/2"	2 5/8"	4 1/8"
24'	2 3/8"	3 7/8"	2 7/8"	4 1/2"
26'	2 1/2"	4 1/8"	3 1/8"	4 7/8"
28'	2 3/4"	4 1/2"	3 1/4"	5 1/4"
30'	2 1/8"	4 3/4"	3 1/2"	5 5/8"

INTERPOLATE FOR VALUES NOT SHOWN. DMS VALUES INCLUDE DL OF CATWALK.



2,500 LB MAX DMS WEIGHT, INCLUDES DMS VERTICAL SUPPORT MEMBERS

CANTILEVER 4-CHORD TRUSS MEMBER TABLE

STANDARD DESIGN TRUSS	TYPE I SIGN AREA (FT <sup>2</sup> )	DMS AREA (FT <sup>2</sup> )	MAXIMUM SPAN "L"	MAXIMUM COL HEIGHT "H"	DIM "A"	COLUMN OUTER DIA. X THK	CHORD OUTER DIA. X THK	WEB W X D X THK	BOXED END W X D X THK	TRANSVERSE DIAGONAL W X D X THK
I	264	114	30'-0"	30'-0"	1'-3"	20.00" X 0.500"	5.000" X 0.375"	L3X3X1/4	L3X3X1/4	L3X3X1/4
II	240	114	38'-0"	30'-0"	1'-4 1/2"	24.00" X 0.500"	5.563" X 0.375"	L3X3X3/8	L3X3X1/4	L3X3X1/4

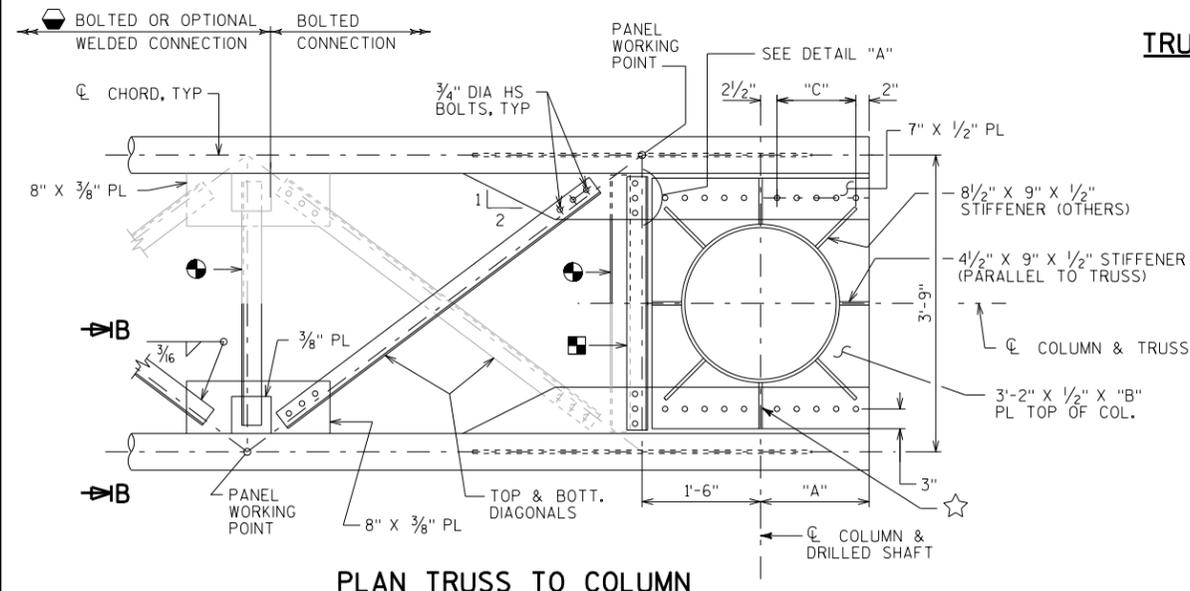
LEGEND

☆ FOR OSS WITH DMS ONLY, PROVIDE HANDHOLES AS SHOWN. SEE "CATWALK DETAILS" AND "ELECTRICAL DETAILS" SHEETS.

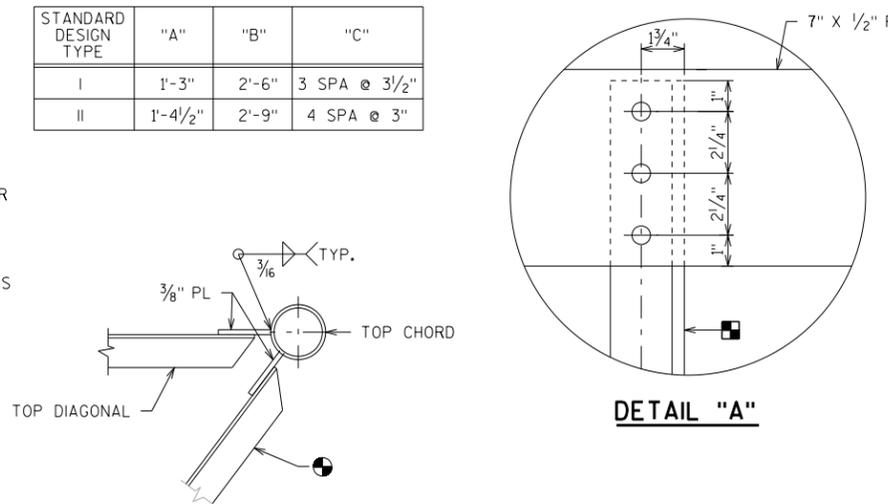
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY		BOS	PLANS CK'D. BOS
4-CHORD TRUSS CANTILEVER			SHEET 1 OF VIII

TRUSS TO COLUMN CONNECTION DATA

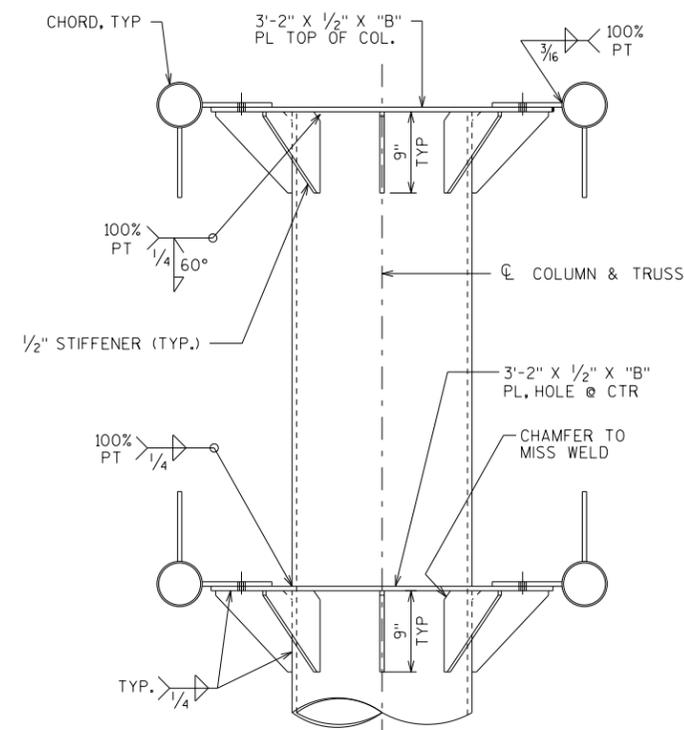
STANDARD DESIGN TYPE	"A"	"B"	"C"
I	1'-3"	2'-6"	3 SPA @ 3/2"
II	1'-4 1/2"	2'-9"	4 SPA @ 3"



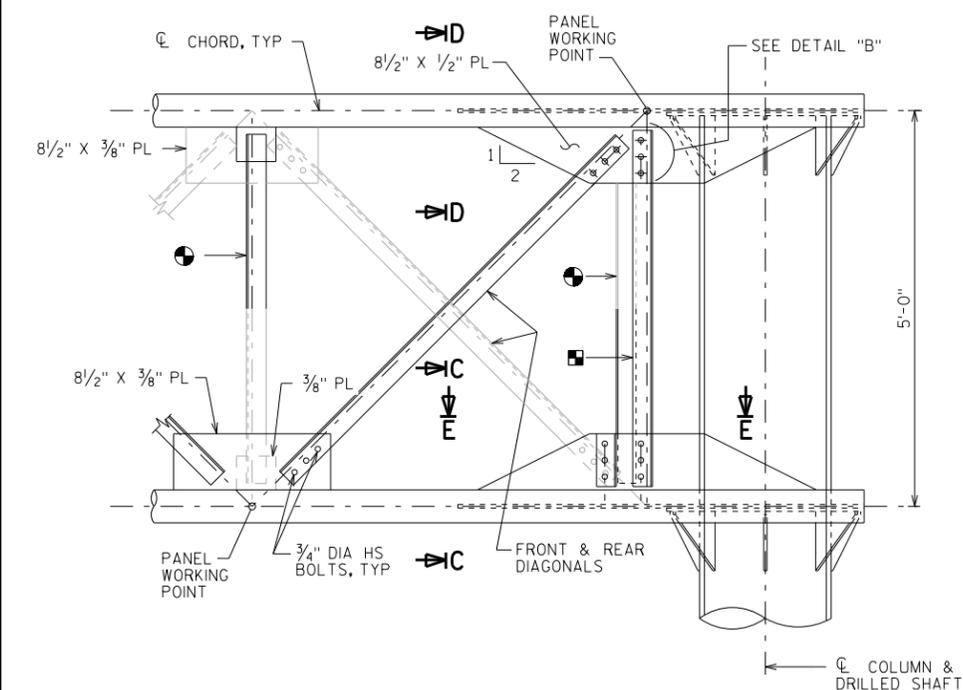
PLAN TRUSS TO COLUMN



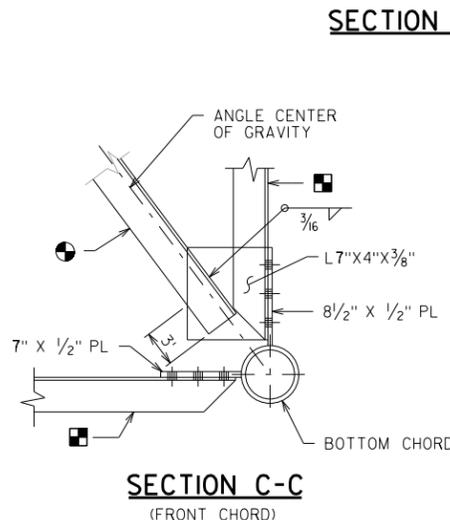
DETAIL "A"



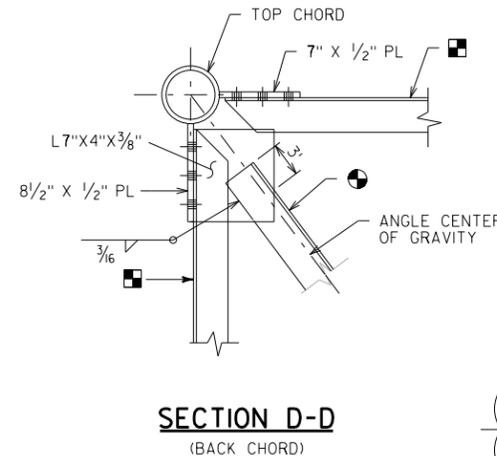
END VIEW TRUSS TO COLUMN  
(WEB MEMBERS NOT SHOWN)



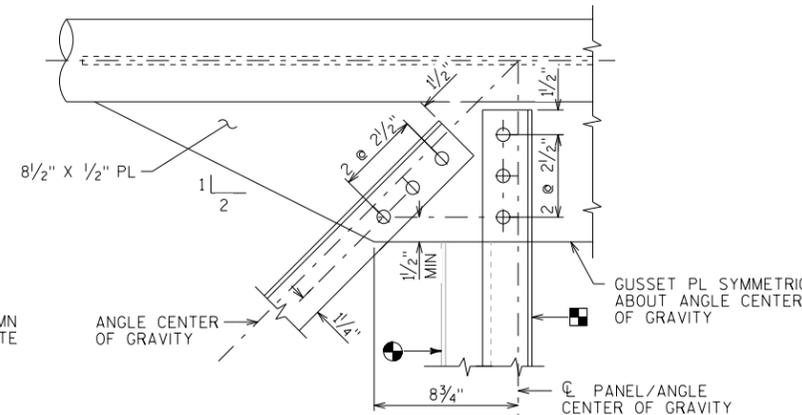
ELEVATION TRUSS TO COLUMN



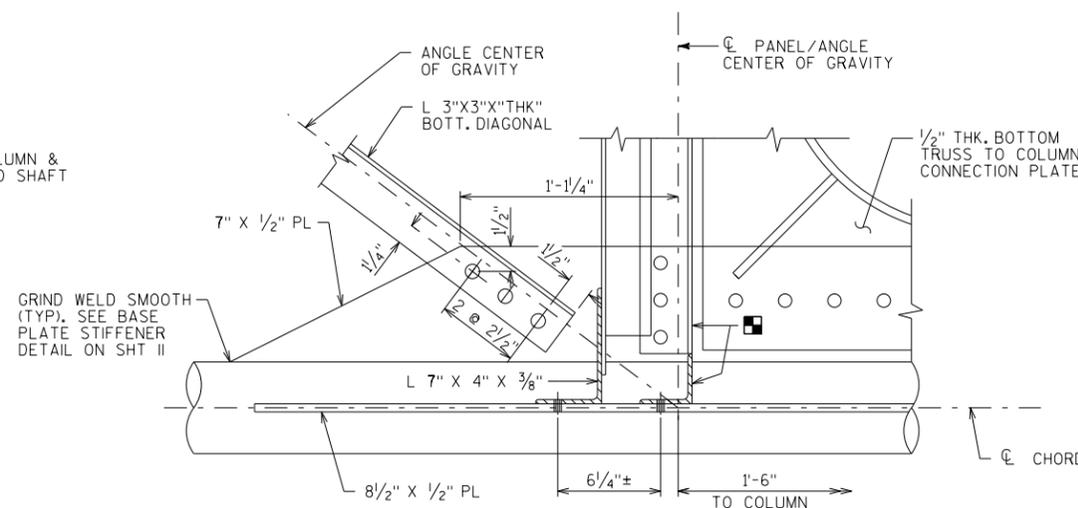
SECTION C-C  
(FRONT CHORD)



SECTION D-D  
(BACK CHORD)



DETAIL "B"



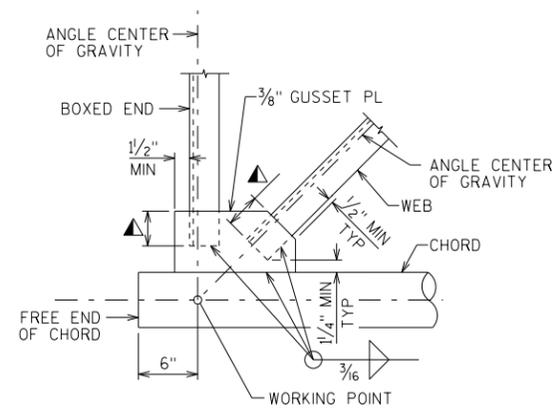
SECTION E-E

(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)

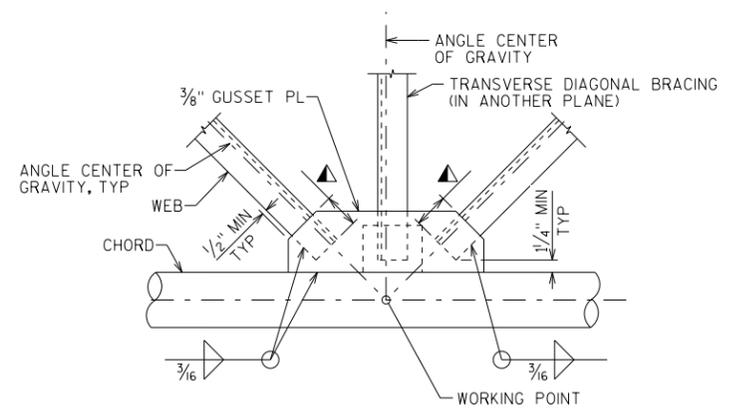
LEGEND

- ⊕ TRANSVERSE DIAGONAL
- ⊠ BOXED END @ SUPPORT
- ⊕ WELDED CONNECTIONS MAY BE USED IF UNIT CAN BE GALVANIZED IN ONE PIECE.
- ☆ 7" x 9" x 1/2" STIFFENER STD DESIGN TYPE 2 ONLY, TYP OPPOSITE SIDE

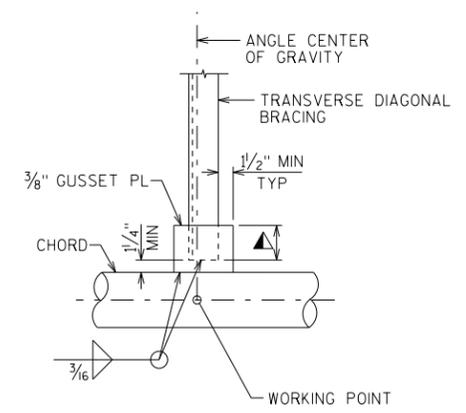
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY		BOS	PLANS CK'D. BOS
4-CHORD TRUSS CANT. CONNECTION DETAILS 1		SHEET II OF VIII	



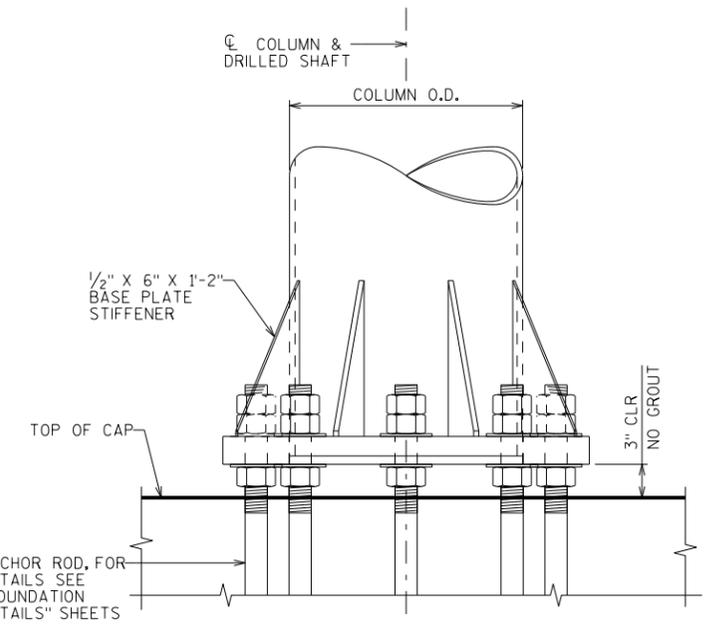
**WELDED BOXED END CONNECTION**



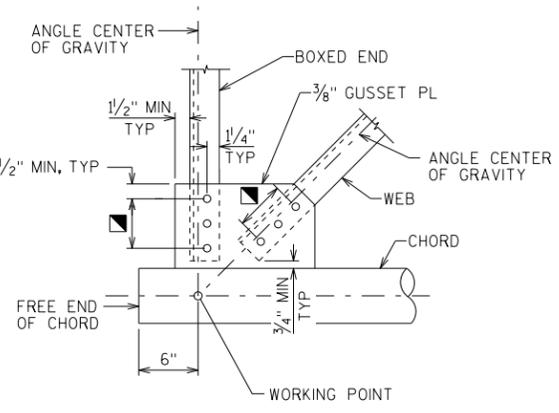
**WELDED PANEL CONNECTION**



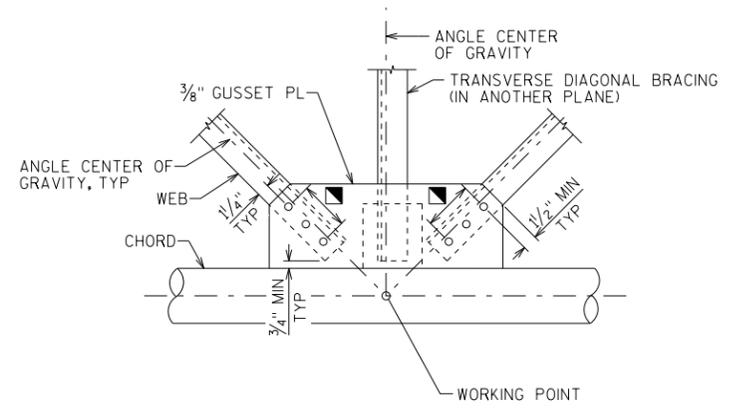
**WELDED INTERIOR DIAGONAL CONNECTION**



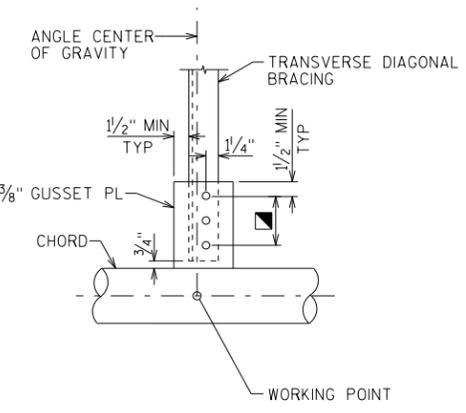
**BASE PLATE & COLUMN DETAIL**



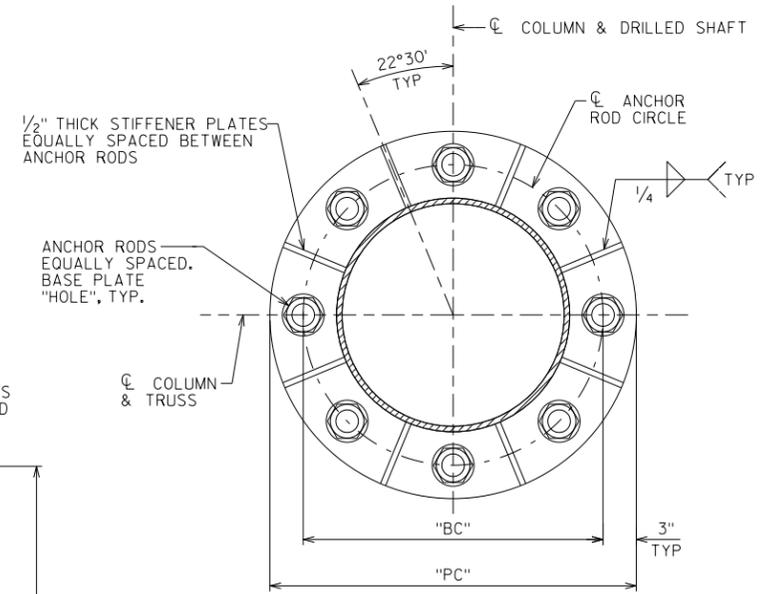
**BOLTED BOXED END CONNECTION**



**BOLTED PANEL CONNECTION**



**BOLTED INTERIOR DIAGONAL CONNECTION**



**BASE PLATE PLAN**

**NOTE**

FABRICATOR HAS THE OPTION TO USE NON-MITERED, RECTANGULAR GUSSET PLATES IN LIEU OF MITERED PLATES SHOWN ON THESE DETAILS.

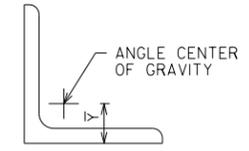
**MEMBER CONNECTION DATA**

STANDARD DESIGN TYPE	WELD LEG LENGTH	NO. OF BOLTS
I	3" MIN	3
II	3" MIN	3

FOR ALL ANGLE TO GUSSET CONNECTIONS, BOLT SPACING = 2 1/2"

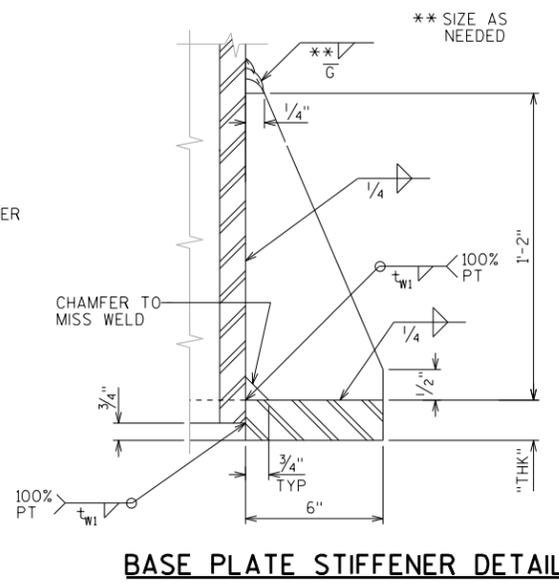
**ANGLE DATA**

ANGLE SIZE	∇
L3x3x1/4	0.836"
L3x3x3/16	0.860"

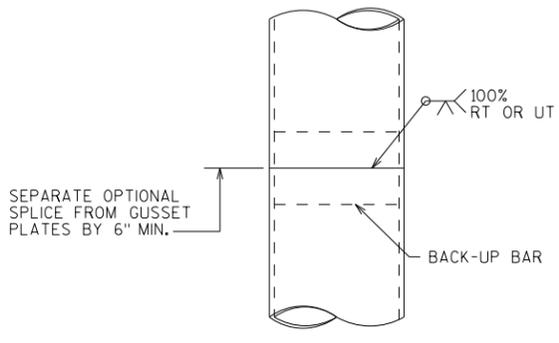


**CANTILEVER 4-CHORD COLUMN DATA TABLE**

STANDARD DESIGN TYPE	COLUMN OUTER DIA X THK	BASE PLATE				
		"T <sub>w1</sub> "	"HOLE"	"THK"	"BC"	"PC"
I	20.00" X 0.500"	5/16"	2 1/4"	2"	2'-2"	2'-8"
II	24.00" X 0.500"	5/16"	2 1/4"	2 1/2"	2'-6"	3'-0"

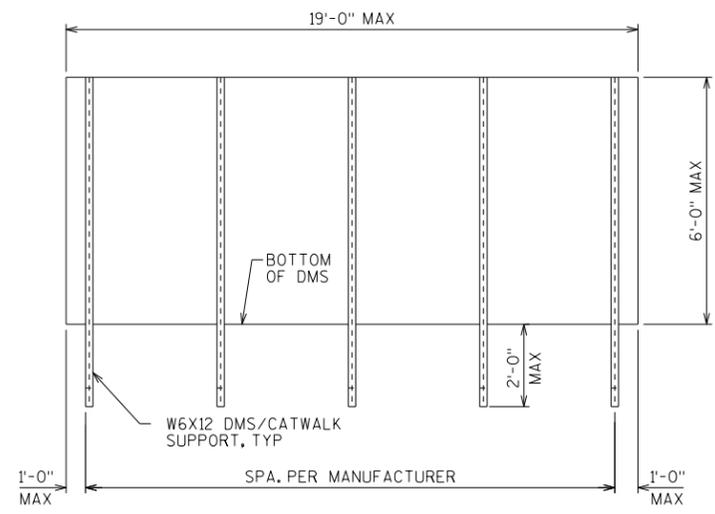
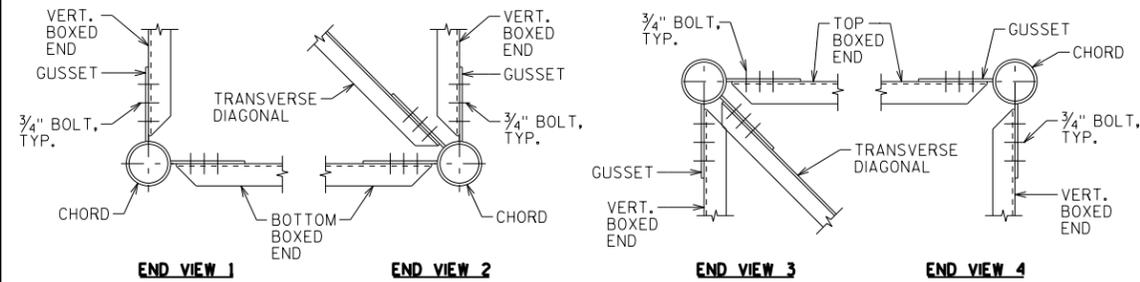


**BASE PLATE STIFFENER DETAIL**



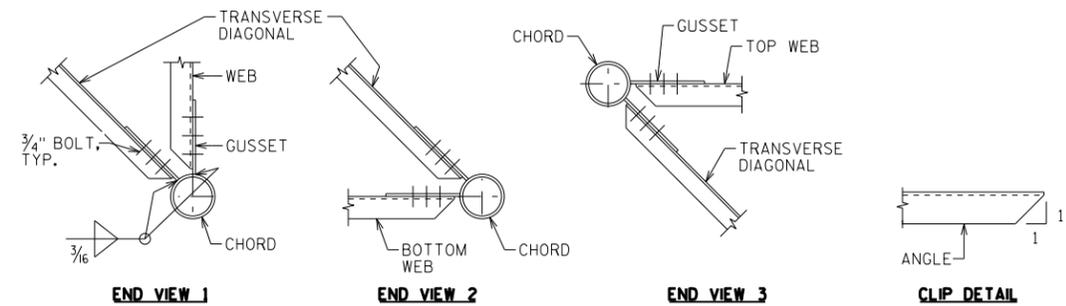
**OPTIONAL COLUMN OR CHORD SPLICE DETAIL**

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY		BOS	PLANS CK'D. BOS
4-CHORD TRUSS CANT. CONNECTION DETAILS 2		SHEET III OF VIII	



**DMS MOUNTING POST SPACING DETAIL**

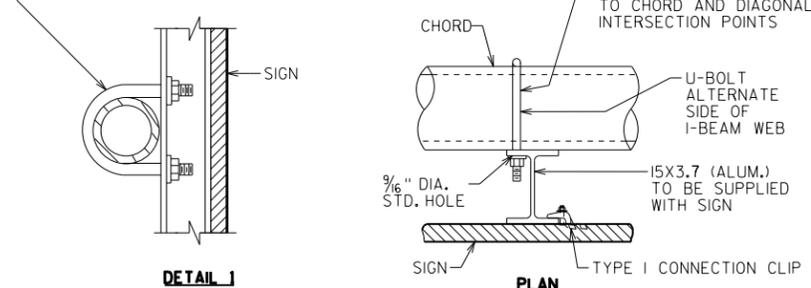
POST SPACING MAY BE ADJUSTED AS REQUIRED IF CONFLICT WITH TRUSS IS ENCOUNTERED.



**TRUSS CONNECTION DETAILS**

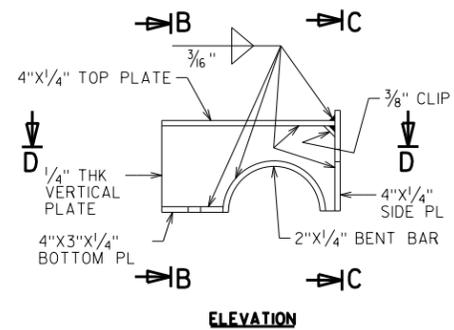
BOLTED CONNECTIONS SHOWN, NUMBER OF BOLTS BY DESIGN  
WELDED CONNECTIONS SIMILAR

1/2" DIA. STAINLESS STEEL U-BOLT WITH 2 LOCK WASHERS AND 2 HEX NUTS PER BOLT. 2 BOLTS REQUIRED PER 15X3.7. LOCATE TOP & BOTTOM U-BOLT ON OPPOSITE SIDE OF FLANGE.

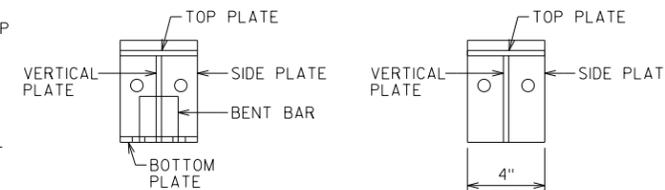


**TYPICAL SIGN CONNECTION**

USE FOR TYPE I AND II SIGNS  
SEE SIGN PLATE MANUAL A4-7A & A4-7B FOR DETAILS

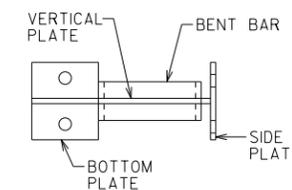


**ELEVATION**



**SECTION B-B**

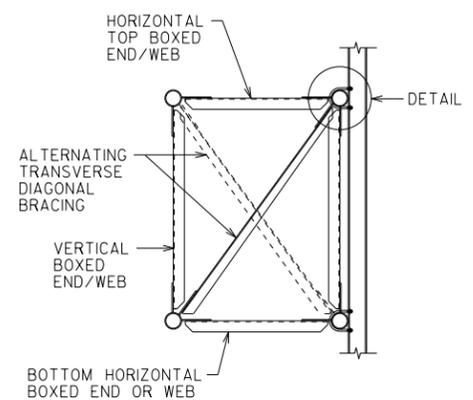
**SECTION C-C**



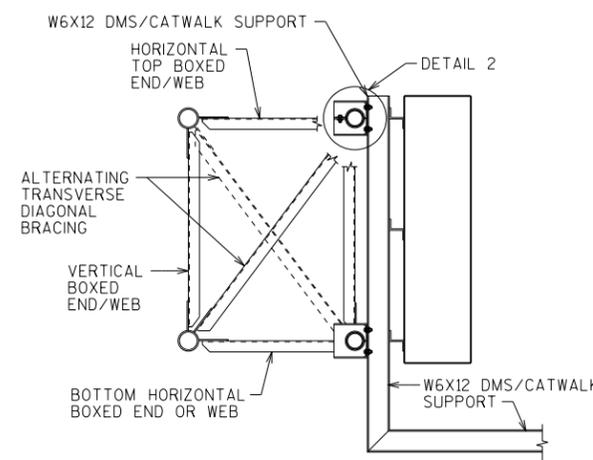
**SECTION D-D**

**DMS WELDED PLATE CONNECTION DETAILS**

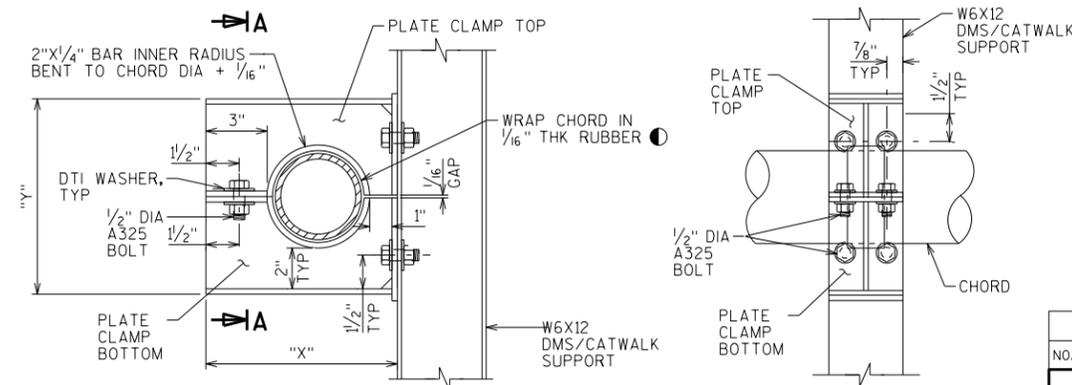
TOP PLATE CLAMP SHOWN  
BOTTOM PLATE CLAMP SIMILAR



**SECTION THRU TRUSS FOR SIGN CONNECTION**



**SECTION THRU TRUSS FOR DMS/CATWALK CONNECTION**



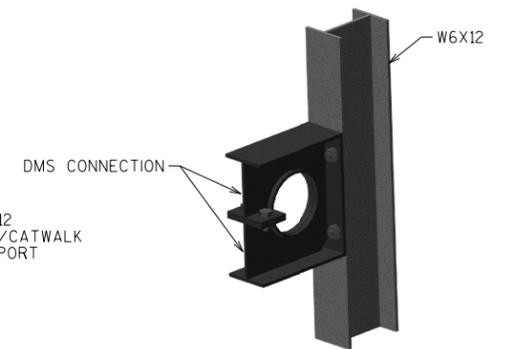
**DETAIL 2**

**SECTION A-A**

CHORD OUTER DIA	"X"	"Y"
5.000"	9 13/16"	10 1/16"
5.563"	10 3/8"	10 5/8"

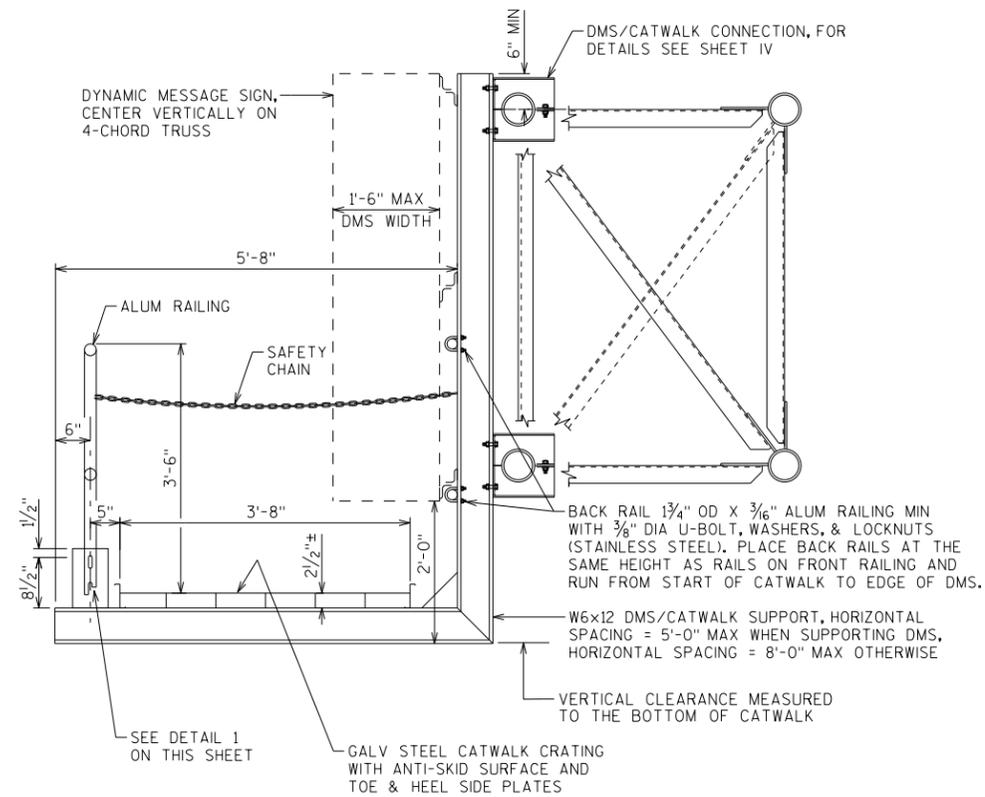
**TYPICAL DMS CONNECTION**

NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD SPEC 506.2.6.1



**3-D VIEW DMS CONNECTION**  
CHORD NOT SHOWN FOR CLARITY

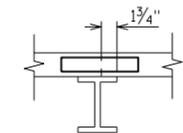
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY: BOS		PLANS CK'D: BOS	
4-CHORD TRUSS CANT. CONNECTION DETAILS 3		SHEET IV OF VIII	



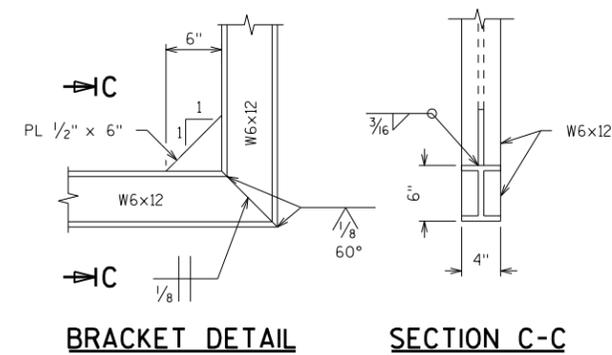
**SECTION THRU WALKWAY**



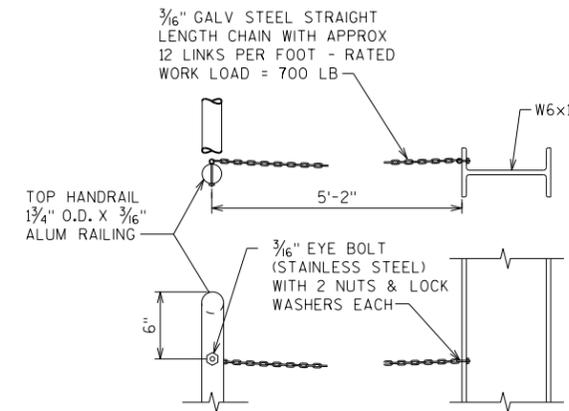
**CATWALK TERMINATION DETAIL**



**CATWALK SPLICE LOCATION DETAIL**

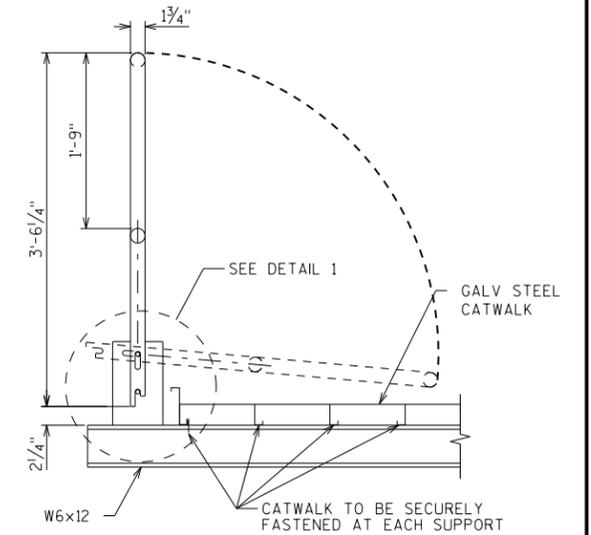


**BRACKET DETAIL SECTION C-C**

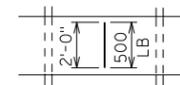


**SAFETY CHAIN DETAIL**

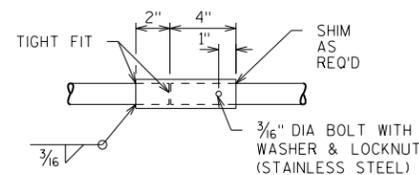
(PROVIDE SAFETY CHAIN AT EACH END OF THE CATWALK)



**RAIL POST DETAIL**

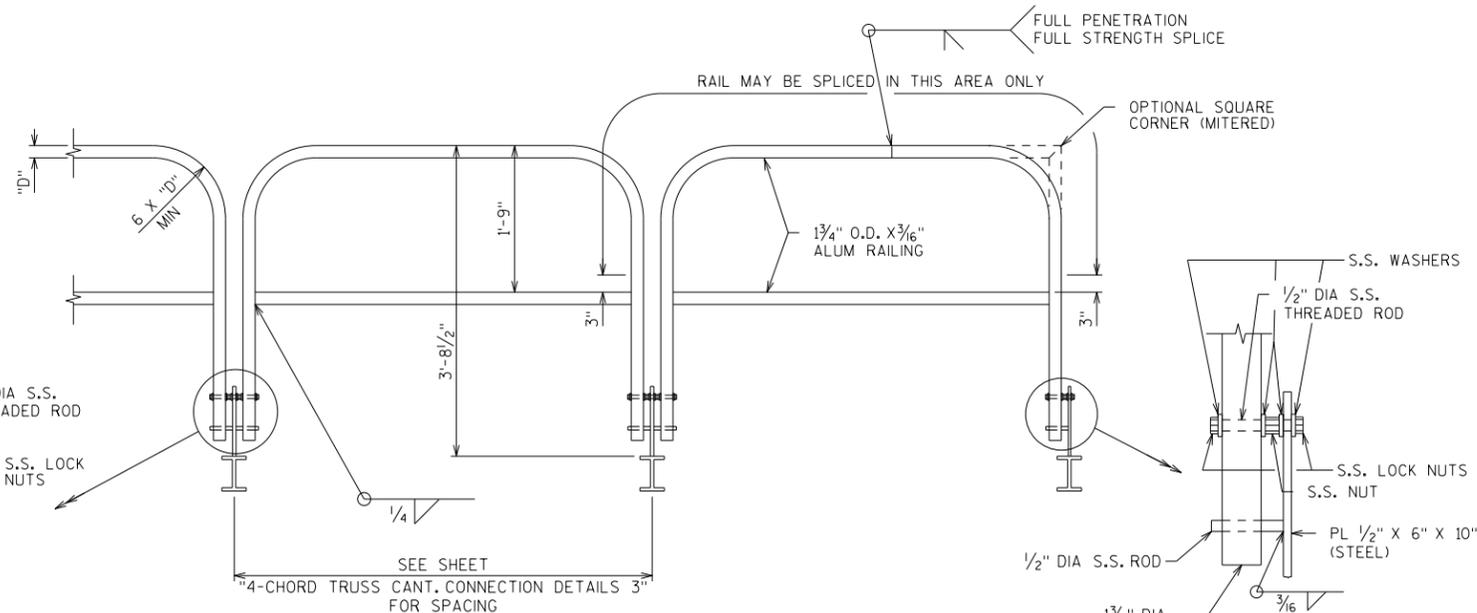


NOTE: CATWALK GRATING SHALL MEET THE CURRENT AASHTO "LRF" SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS", (500 LB LIVE LOAD DISTRIBUTED OVER 2'-0" TRANSVERSELY - MAX SPAN IS 8'-0"). CATWALK SHALL ALSO MEET CURRENT OSHA STD'S FOR WALKING-WORKING SURFACES.

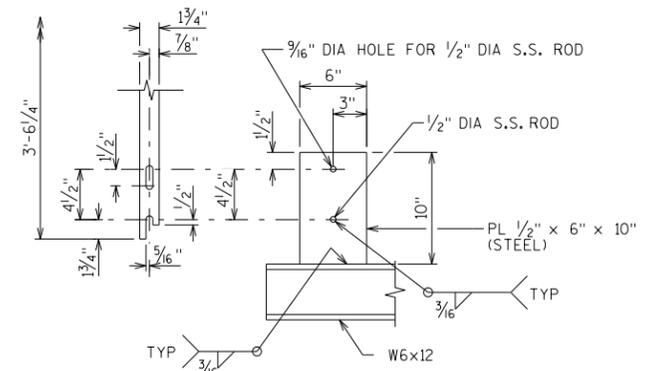


**BACKRAIL SPLICE**

ONE SPLICE ALLOWED FOR LENGTHS OVER 30'-0"



**TYPICAL FRONT RAILING DETAILS**

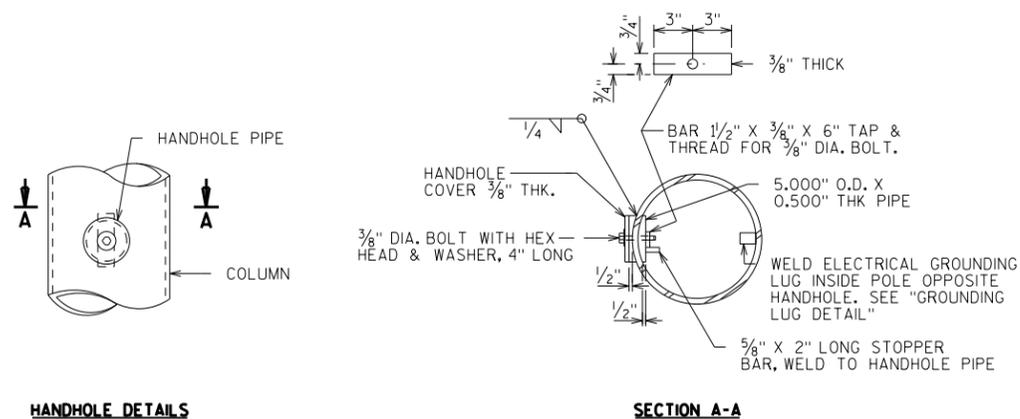


**DETAIL 1**

8

8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY		BOS	PLANS CK'D. BOS
4-CHORD TRUSS CANT. CATWALK DETAILS		SHEET V OF VIII	



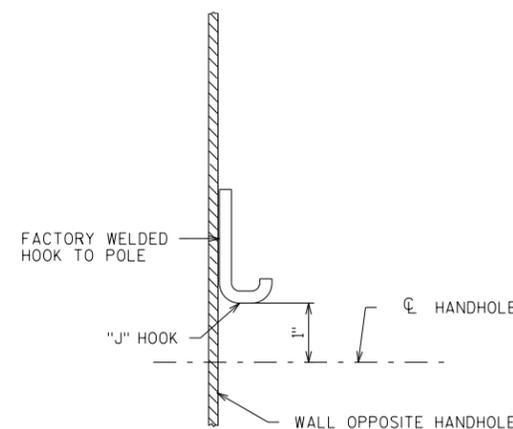
**HANDHOLE DETAILS**

**SECTION A-A**

**HANDHOLE NOTES**

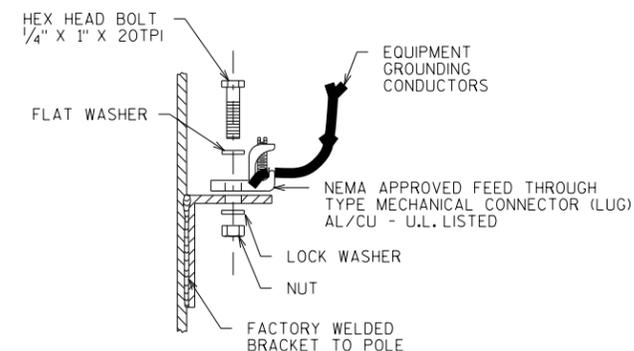
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS NOTED OTHERWISE, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



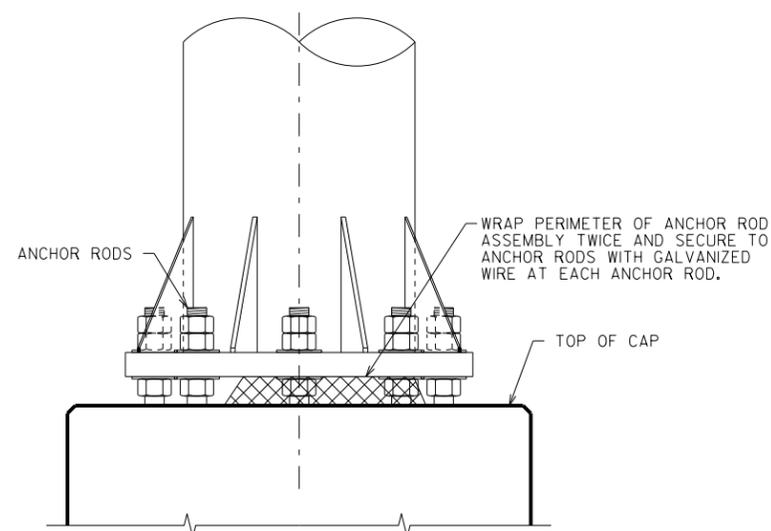
**TYPICAL "J" HOOK LOCATION**

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



**GROUNDING LUG DETAIL**

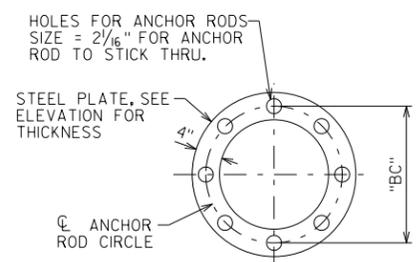
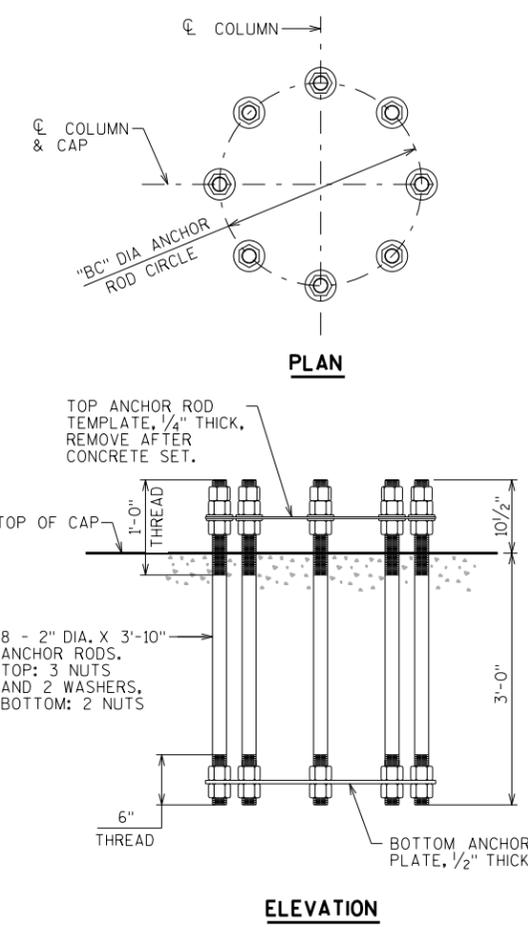
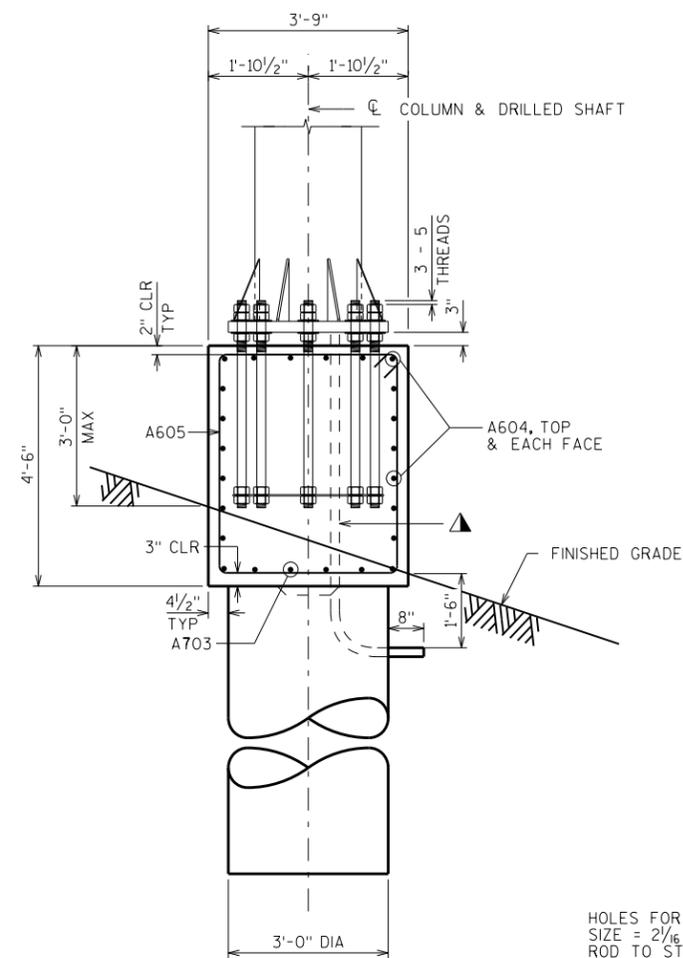
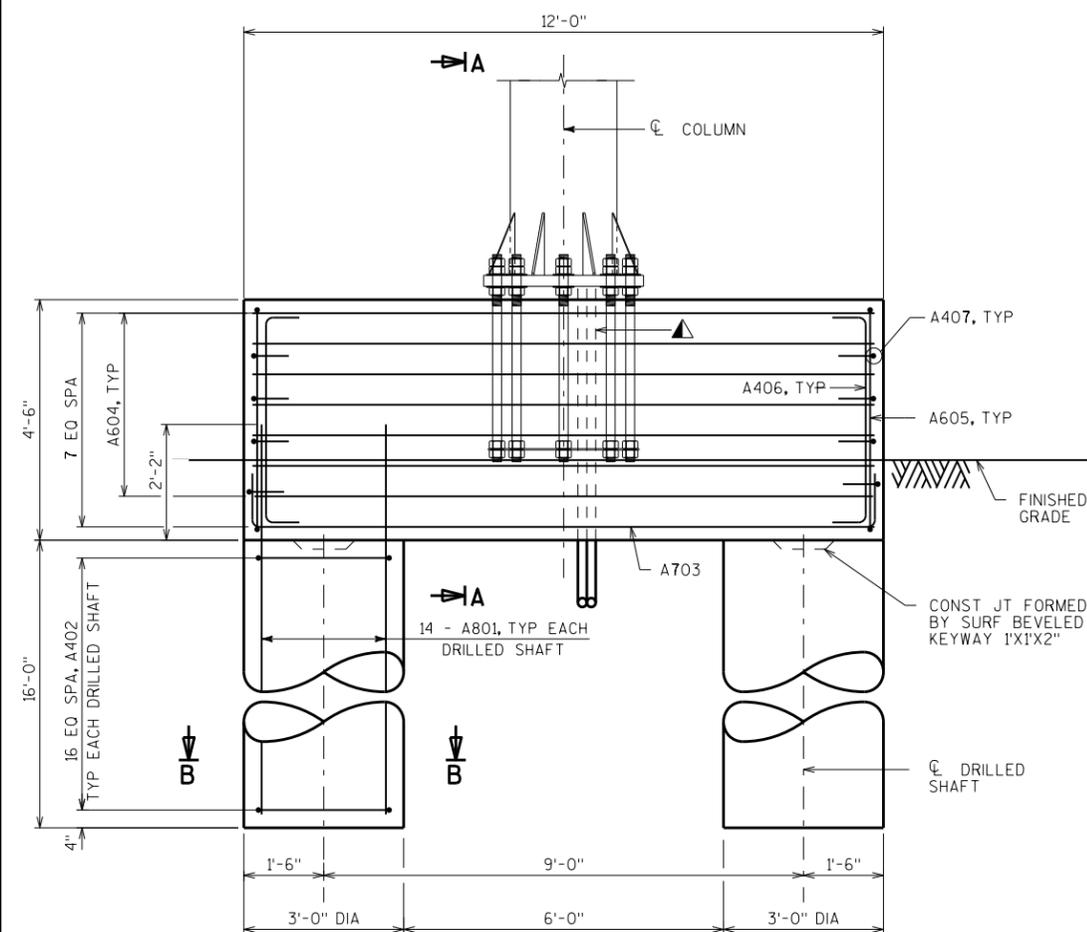
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



**RODENT SCREEN**

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY	BOS	PLANS CK'D.	BOS
4-CHORD TRUSS CANT. ELECTRICAL DETAILS		SHEET VI OF VIII	



**ANCHOR ROD ASSEMBLY DETAILS**

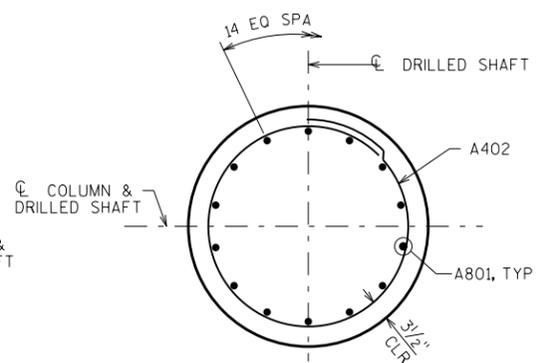
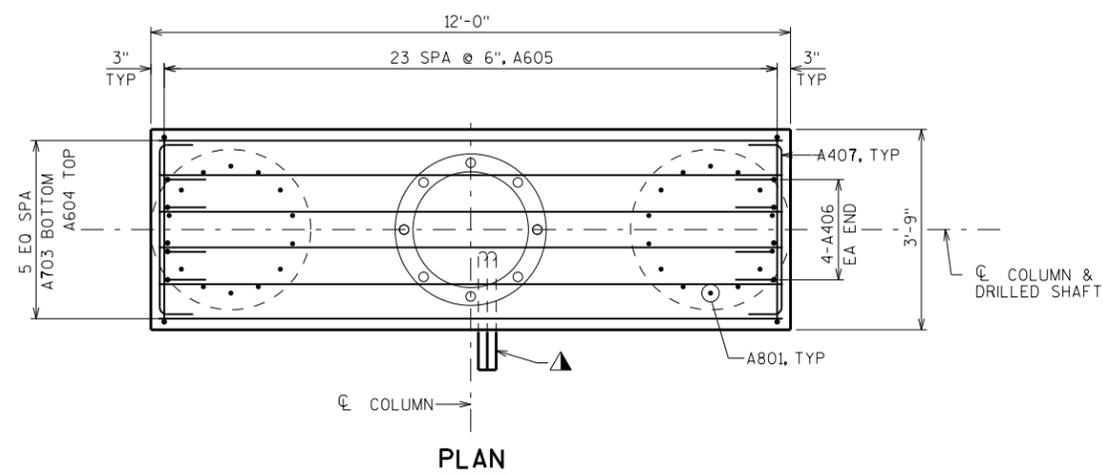
SINGLE ASSEMBLY SHOWN  
8 ANCHOR RODS REQ'D PER ASSEMBLY

**ANCHOR PLATE DATA**

STD DESIGN TRUSS	DIMENSIONS
I	2'-2"
II	2'-6"

**NOTES**

CENTER ANCHOR ROD ASSEMBLY AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED ON PLAN. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.



**LEGEND**

▲ 2 - 2" DIA NONMETALLIC CONDUITS, INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO THE DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY		BOS	PLANS CK'D. BOS
<b>4-CHORD TRUSS CANT. FOUNDATION DETAIL 1</b>		SHEET VII OF VIII	

NOTE:  
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

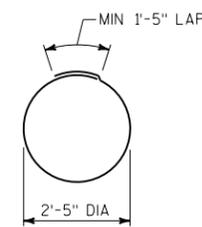
**BILL OF BARS - STANDARD DESIGN TYPE I OR II**

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		28	18'-2"			DRILLED SHAFT - VERTICAL
A402		34	9'-0"	X		DRILLED SHAFT - HORIZONTAL
A703	X	6	13'-7"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	18	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	24	15'-10"	X		CAP - STIRRUP
A406	X	8	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	8	3'-11"	X		CAP - HORIZONTAL - EACH END

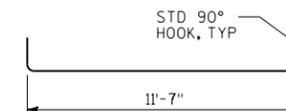
**ESTIMATED QUANTITIES - FOUNDATION**

STANDARD DESIGN TYPE	CONCRETE MASONRY (CY)	STEEL REINFORCEMENT HS (LBS)	STEEL REINFORCEMENT HS COATED (LBS)	ANCHOR ASSEMBLY 2-INCH (EACH)	FOUNDATION DRILLING 36" DIA. (LF)
I/II	16	1,570	1,100	1	32

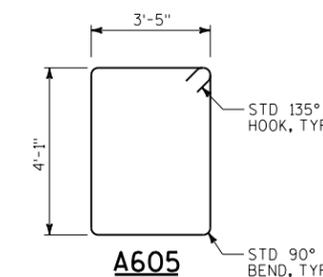
\*\* QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS



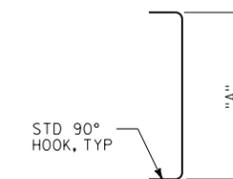
**A402**



**A703**



**A605**



**A406, A407**

BAR MARK	"A"
A406	3'-11 1/2"
A407	3'-3 1/2"

**BAR BENDING DIAGRAMS**

NOTE:  
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		JULY 2020	
DRAWN BY	BOS	PLANS CK'D.	BOS
4-CHORD TRUSS CANT. FOUNDATION DETAILS 2			SHEET VIII OF VIII