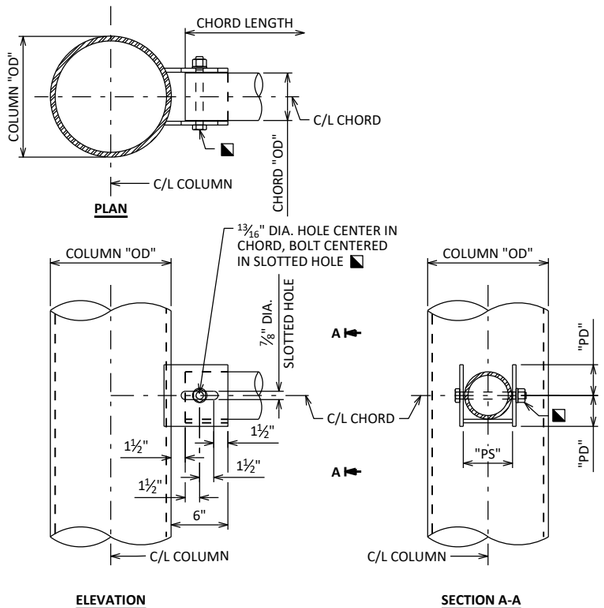
STATE PROJECT NUMBER

STANDARD



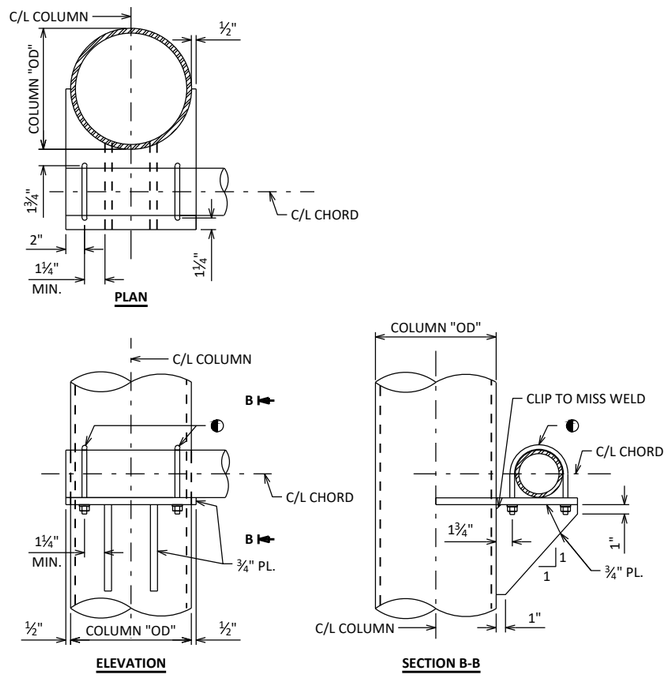
FULL SPAN SADDLE CONNECTION

PREFERRED OPTION

¾" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT AND WASHER SNUG TIGHT ONLY, DO NOT OVER TIGHTEN

"PD" = CHORD "OD"/2 + ¾"

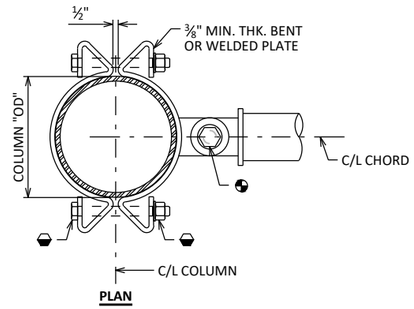
"PS" = CHORD "OD" + 1/16"

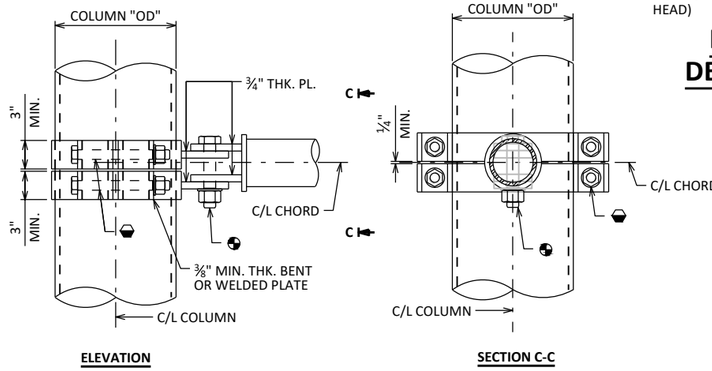


FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

MIN. (2) ½" MIN. GALVANIZED OR STAINLESS U-BOLT, LOCK NUT AND WASHER



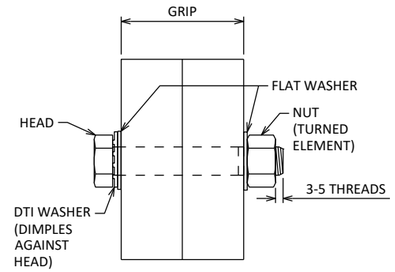


FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY

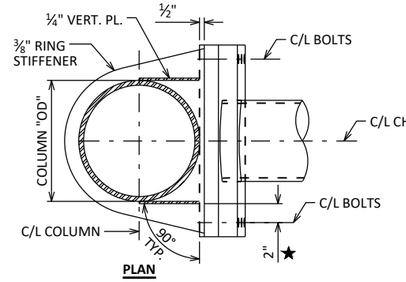
1¼" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

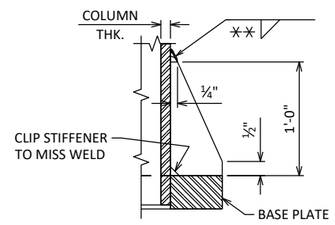
1" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

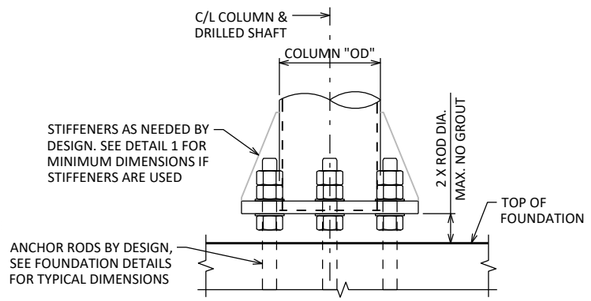


RECOMMENDED BOLT DETAIL WITH DTI WASHER

NUT IS TURNED ELEMENT



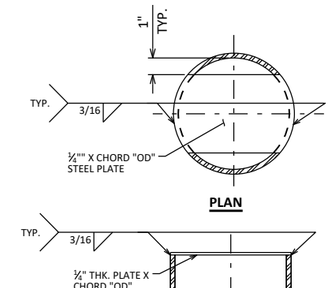




PREFERRED BASE PLATE CONNECTION

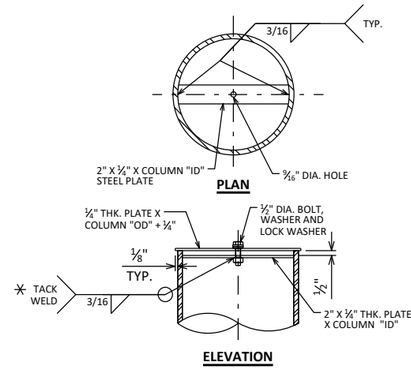
LOOKING AT F.F. OF STRUCTURE.

ALTERNATE BASE PLATE DESIGNS ALLOWED.



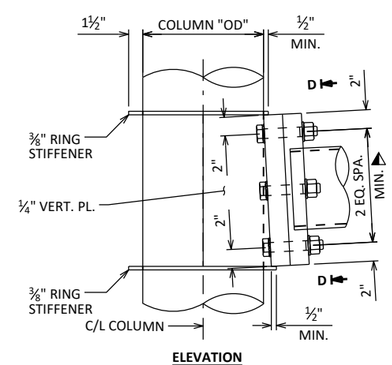
CHORD CAP DETAIL

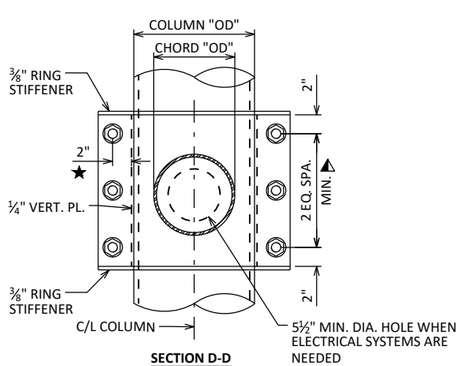
CANTILEVERS ONLY



TOWER CAP DETAIL

✳ PLACE TACK WELD EVERY OTHER FLAT TO SECURE NUT. ALTERNATE: USE ½" THK. PL. AND DRILL AND TAP HOLE FOR BOLT.

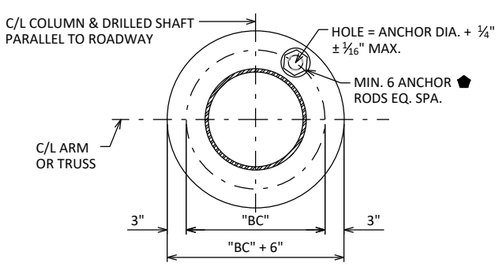




CANTILEVER POST TO CHORD CONNECTION

MIN. (6) 1" GALVANIZED A325 HEAVY HEX BOLT, NUT, DTI WASHER AND WASHER

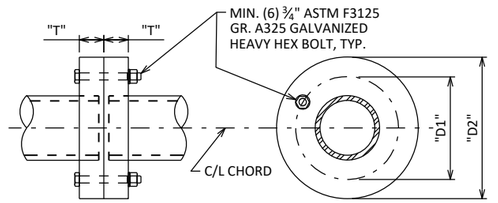
★ MIN. DIMENSIONS MEASURED FROM EXT. FACE OF VERTICAL PLATE.



BASE PLATE

"BC" = COLUMN "OD" + 6"

⬟ ANCHOR SIZE AND ORIENTATION TO BE VERIFIED WITH SHOP DRAWINGS.



CHORD SPLICE DETAIL

"D1" = COLUMN "OD" + (1.5 x DB)

"D2" = COLUMN "OD" + (3 x DB)

"T" = (BY DESIGN)

DB = BOLT DIAMETER (BY DESIGN)

NOTES:

MINIMUM VALUES SHOWN. ALL CONNECTIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURAL LOADS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1

SHEET 1

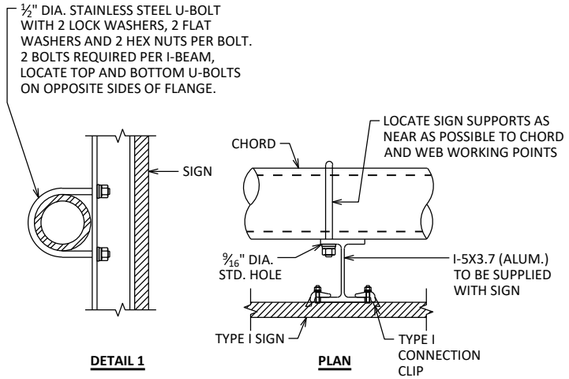
SCALE = 2.0

8

8

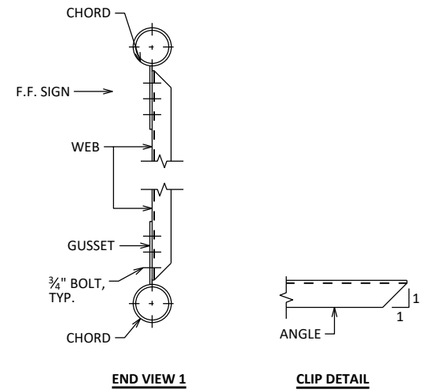
STATE PROJECT NUMBER

STANDARD



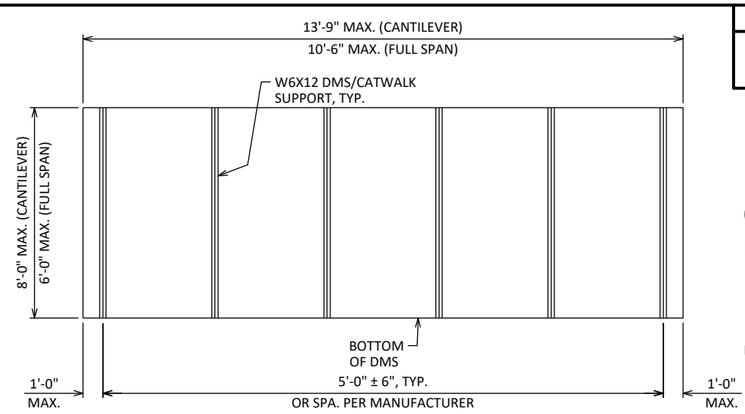
2-CHORD TRUSS SIGN CONNECTION

TYPE I SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7BFOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



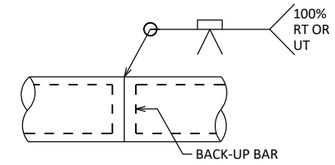
TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR.
ANGLES PREFERRED, OTHER WEB DESIGNS ALLOWED.



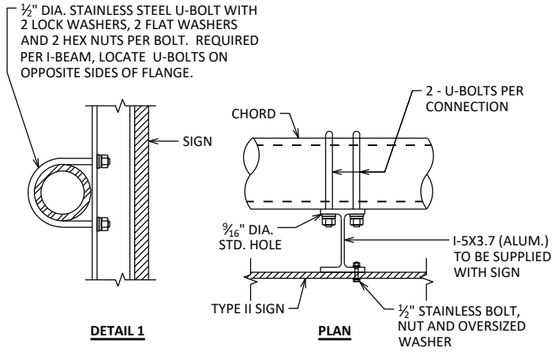
DMS MOUNTING POST DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



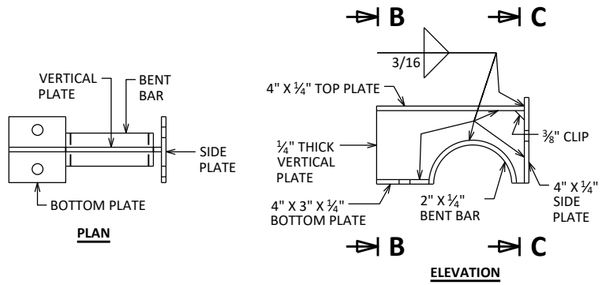
CHORD SPLICE

SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.

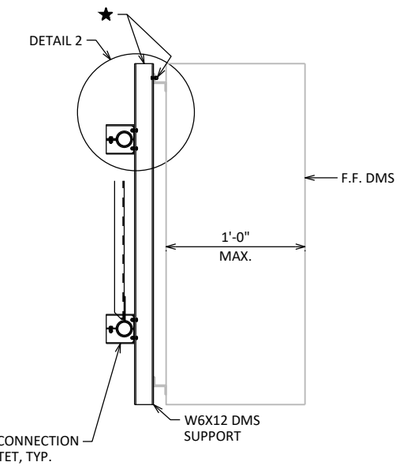


MONOTUBE SIGN CONNECTION

TYPE II SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



DMS WELDED PLATE CONNECTION DETAILS

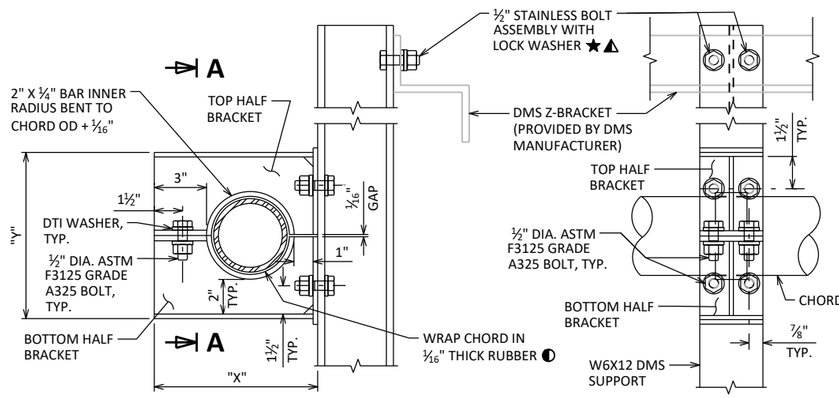


SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.

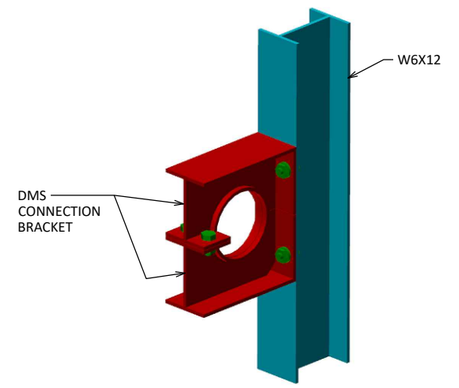


CHORD "OD"	"X"	"Y"
"OD"	"OD" + $4\frac{13}{16}$"	"OD" + $5\frac{5}{16}$"

TYPICAL DMS CONNECTION

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

⚠ IF DMS CONNECTION BRACKET IS USED WITH A TYPE II SIGN PANEL, THE BOLT HOLE MUST BE GALVANIZED AND A STAINLESS WASHER USED BETWEEN THE I-BEAM AND SIGN PANEL.



3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: OCT. 2023

DRAWN BY BOS | PLANS CK'D BOS

MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2

SHEET II

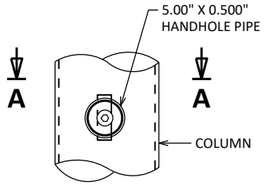
SCALE = 4.0

8

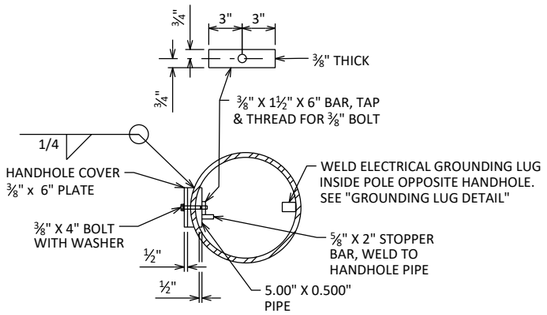
8

STATE PROJECT NUMBER

STANDARD



ELEVATION

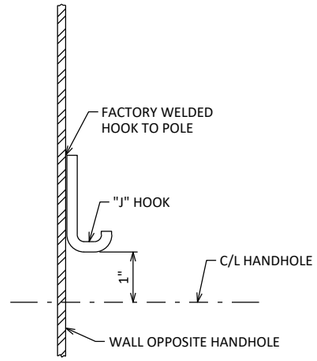


SECTION A-A

HANDHOLE DETAILS

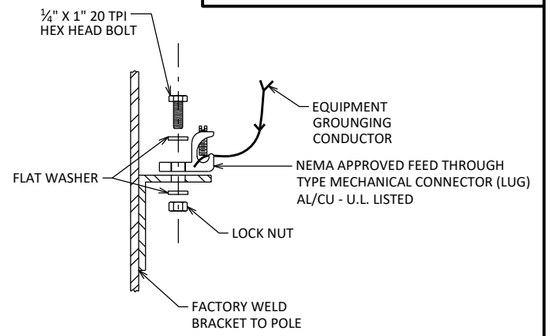
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION 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 OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



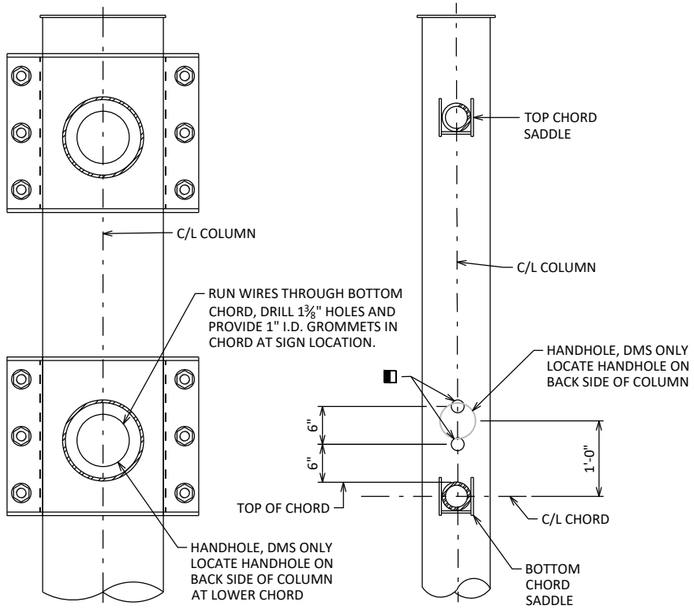
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN 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



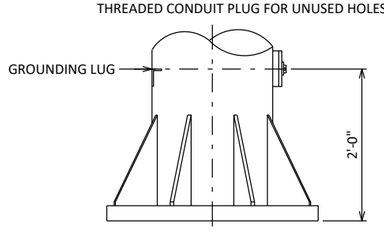
2-CHORD CANTILEVER

2-CHORD FULL SPAN

SADDLE CONNECTION SHOWN, OTHERS SIMILAR

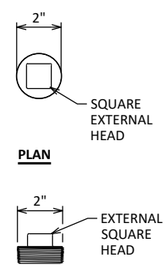
CONDUIT HOLE LOCATIONS

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES



GROUNDING LUG LOCATION

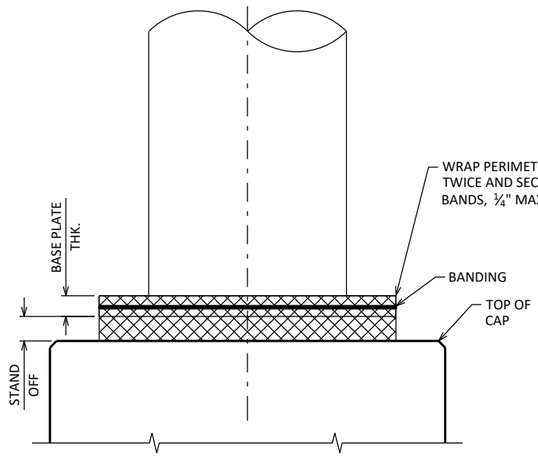
LOOKING AT THE F.F. OF STRUCTURE



PLAN

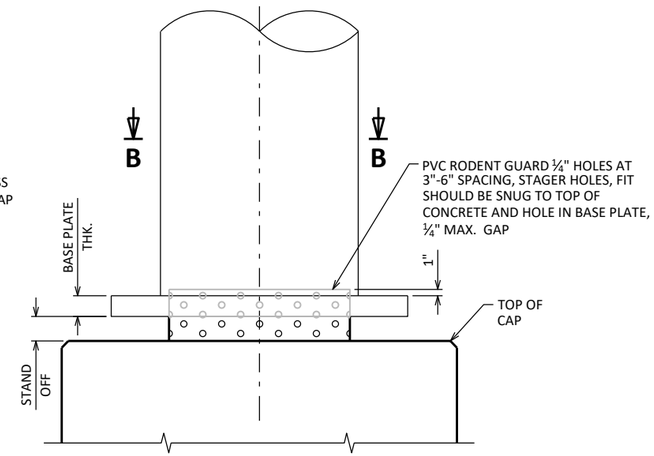
ELEVATION

CONDUIT PLUG DETAILS



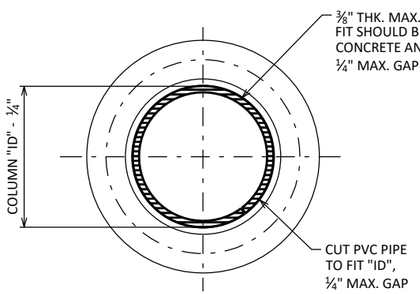
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

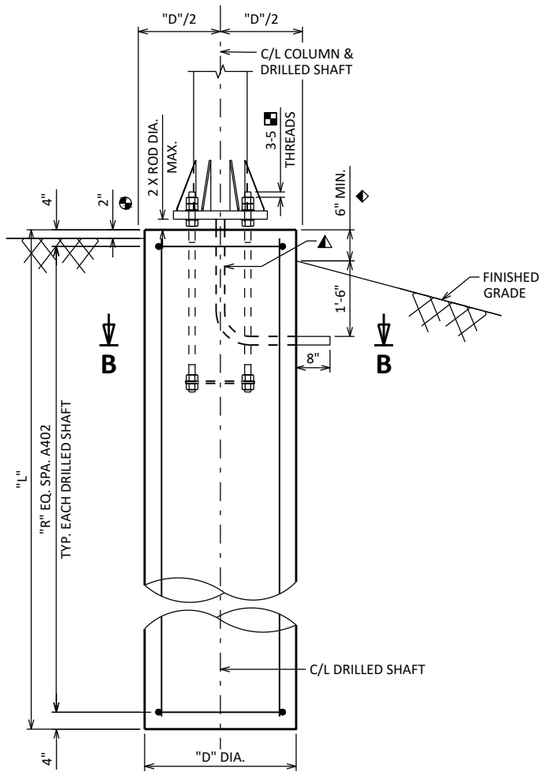
MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS

SHEET III

SCALE = 2.0

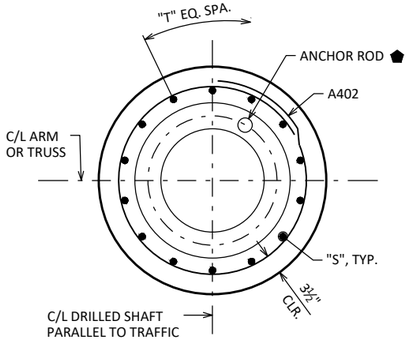
8

8



ELEVATION

- TYPICAL FOR DRILLED SHAFT FOOTINGS INSTALLED ADJACENT TO SIDEWALKS OR BEHIND CURB AND GUTTER ON LOW SPEED ROADS. TOP OF SHAFT SHALL BE FLUSH IF SURROUNDED BY CONCRETE AND 2" ABOVE FINISHED GRADE FOR ALL OTHER SURFACES.
- TYPICAL FOR EACH DRILLED SHAFT FOOTING INSTALLED ADJACENT TO ROADWAY FACILITIES OR ON SIDE SLOPES WITHIN CLEAR ZONE. BARRIER OR BEAMGUARD MAY BE REQUIRED.



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

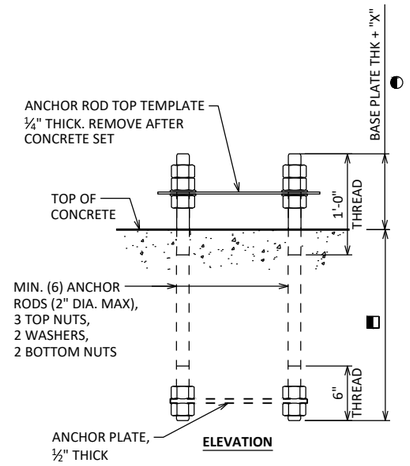
FOUNDATION DIMENSION DATA

STANDARD DESIGN TYPE	FOUNDATION DIMENSIONS					
	"D"	"L"	"R"	"S"	"T"	"BC" MAX.
MFI	2'-0"	12'-0"	12	A801	6	1'-0"
MFII	2'-6"	13'-0"	13	A801	10	1'-5"
MCI/MCII/TFI	2'-6"	17'-0"	17	A801	10	1'-5"
TCI	3'-0"	18'-0"	18	A801	14	1'-10"
TFII	3'-0"	20'-0"	20	A801	14	1'-10"
MCIII/TCII/TFIII	3'-6"	18'-0"	18	A901	14	2'-4"
MCIV/TFIV	3'-6"	23'-0"	23	A901	14	2'-4"
TCIII	4'-0"	23'-0"	23	A1001	14	2'-10"
TCIV	4'-0"	28'-0"	28	A1001	14	2'-10"

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	FOUNDATION DRILLING (DIA.) (LF)				
	(CY)	(LBS)	24"	30"	36"	42"	48
MFI	2	240	12	---	---	---	---
MFII	3	410	---	13	---	---	---
MCI/MCII/TFI	4	540	---	17	---	---	---
TCI	5	780	---	---	18	---	---
TFII	6	860	---	---	20	---	---
MCIII/TCII/TFIII	7	970	---	---	---	18	---
MCIV/TFIV	9	1,250	---	---	---	23	---
TCIII	11	1,560	---	---	---	---	23
TCIV	13	1,900	---	---	---	---	28

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON A SINGLE DRILLED SHAFT. MULTIPLY BY 2 FOR FULL SPAN STRUCTURES.



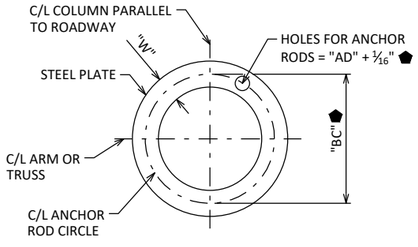
ANCHOR ROD ASSEMBLY DETAILS

◧ ANCHOR RODS PER ASSEMBLY TO BE DESIGNED BY CONTRACTOR AND SHOWN ON SHOP DRAWINGS. SHOW DIAMETER, NUMBER, ORIENTATION AND EMBEDMENT OF ANCHOR RODS.

CENTER ANCHOR ROD ASSEMBLY AND ENSURE ASSEMBLY IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

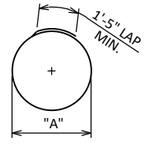
ANCHOR DIAMETER	MAX. STICK OUT ◐
	"X"
1"	5"
1¼"	6"
1½"	7"
1¾"	8"
2"	9"

◐ ADD BASE PLATE THICKNESS TO VALUE SHOWN FOR MAX. STICK OUT DIMENSION. CONTRACTOR TO COORDINATE WITH FABRICATOR FOR PROPER ANCHOR PLACEMENT.



ANCHOR PLATE & TOP TEMPLATE

⬟ ANCHOR SIZE, BOLT CIRCLE, AND POSITION TO BE VERIFIED WITH SHOP DRAWINGS.



A402

LEGEND

◩ ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

◭ 2 - 2" DIA. NON-METALLIC 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 DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

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

BILL OF BARS

STATE PROJECT NUMBER

STANDARD

STANDARD TYPE MFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		6	11'-8"			DRILLED SHAFT - VERTICAL
A402		13	5'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE MFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	12'-8"			DRILLED SHAFT - VERTICAL
A402		14	9'-4"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCI/MCII/TFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		10	16'-8"			DRILLED SHAFT - VERTICAL
A402		18	9'-4"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	17'-8"			DRILLED SHAFT - VERTICAL
A402		19	10'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	19'-8"			DRILLED SHAFT - VERTICAL
A402		21	10'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCIII/TCII/TFIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	17'-8"			DRILLED SHAFT - VERTICAL
A402		19	12'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCIV/TFIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-8"			DRILLED SHAFT - VERTICAL
A402		24	12'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-8"			DRILLED SHAFT - VERTICAL
A402		24	14'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	27'-8"			DRILLED SHAFT - VERTICAL
A402		29	14'-0"	X		DRILLED SHAFT - HORIZONTAL

✶✶ VALUES IN BAR TABLES ARE FOR A SINGLE FOUNDATION ONLY. MULTIPLY BY 2 FOR FULL ✶✶ SPAN STRUCTURES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: OCT. 2023

DRAWN BY BOS | PLANS CK'D BOS

MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

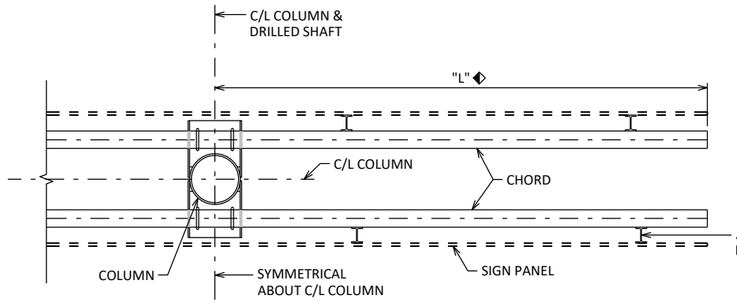
SHEET IV

SCALE = 3.0

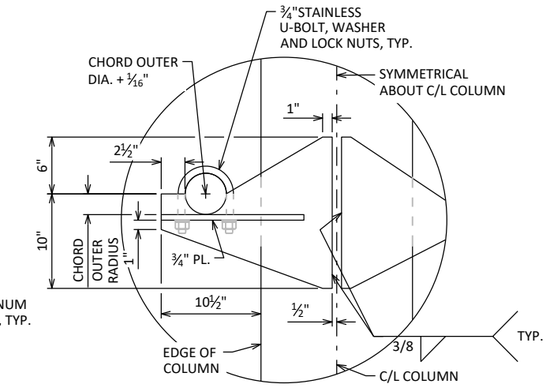
8

STATE PROJECT NUMBER

STANDARD

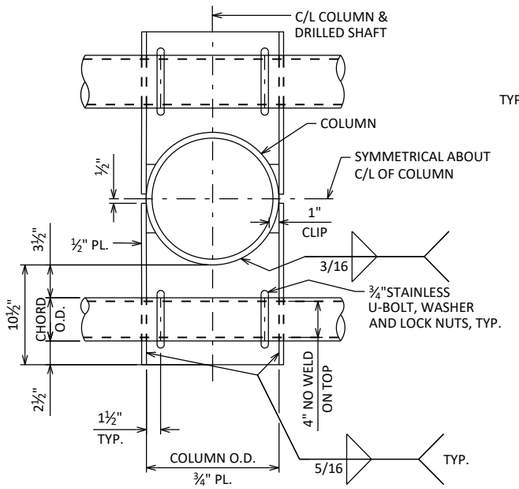


PLAN



DETAIL A

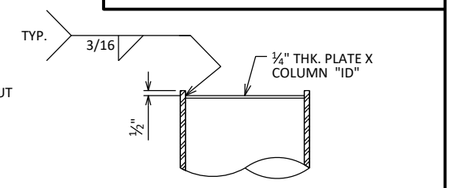
FRONT BRACKET CONNECTION SHOWN
BACK BRACKET SIMILAR



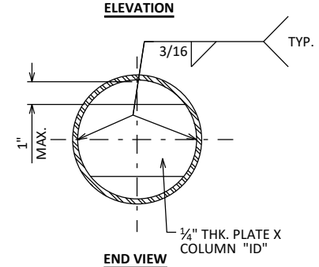
SECTION A-A

FRONT BRACKET CONNECTION SHOWN
BACK BRACKET SIMILAR

BRACKET FOR TOP CHORDS SIMILAR

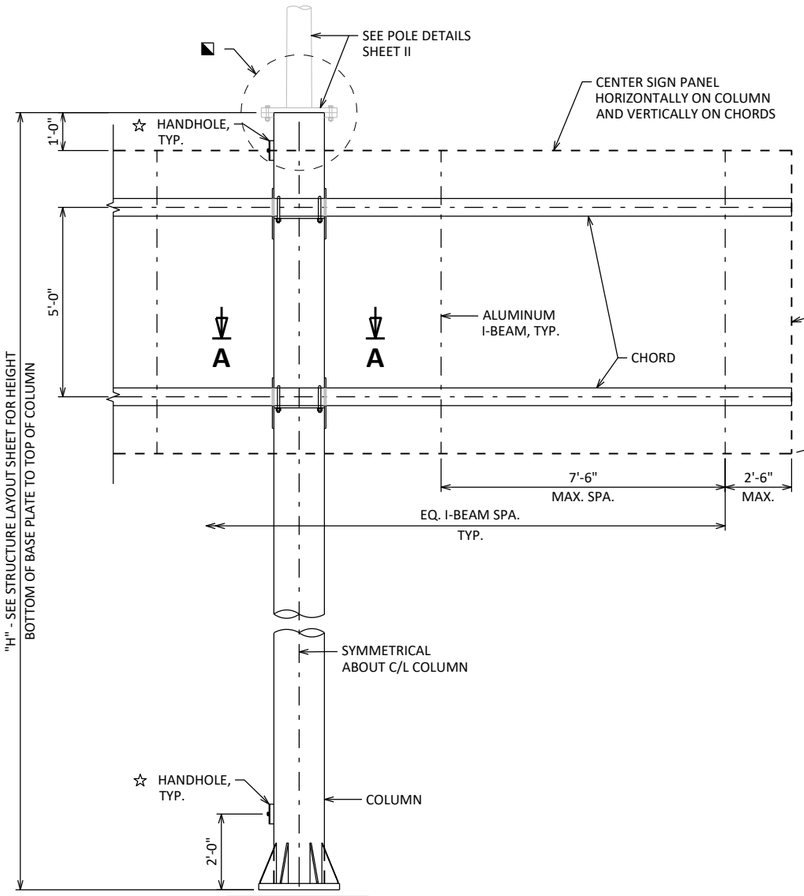


ELEVATION



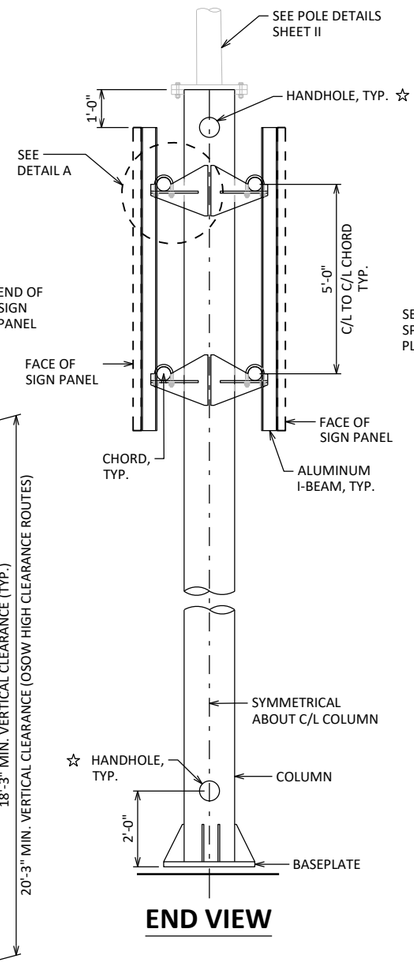
END VIEW

CHORD CAP DETAIL

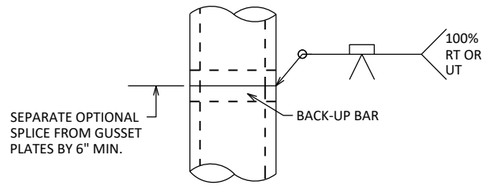


ELEVATION

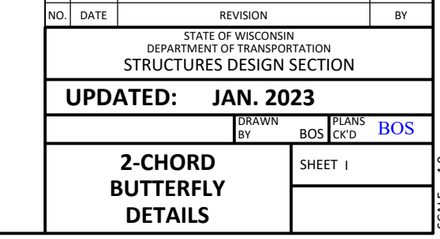
LOOKING AT F.F. OF BUTTERFLY



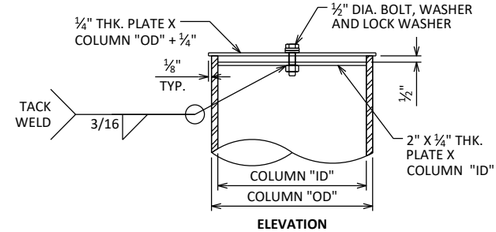
END VIEW



OPTIONAL COLUMN OR CHORD SPLICE



PLAN



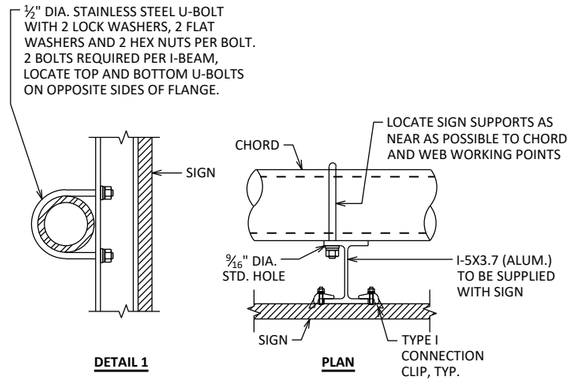
ELEVATION

TOWER CAP DETAIL

◪ USE ON STRUCTURES WITHOUT LIGHT POLE ATTACHEMENTS

BUTTERFLY MEMBER TABLE

STANDARD DESIGN TYPE	TYPE I SIGN AREA (SQ. FT)	MAXIMUM SPAN "L" ◆	MAXIMUM COLUMN HEIGHT "H"	COLUMN "OD" X THK.	CHORD "OD" X THK	ANCHOR ROD DIA.	BASE PLATE "THK"	"BC"	"PC"	"HOLE"
I	200	12'-6"	26'-0"	16" X 0.375"	4.500" X 0.375"	1¾"	1½"	1'-10"	2'-4"	1 13/16"



TYPICAL SIGN CONNECTION

USE FOR TYPE I AND II SIGNS, TYPE I SIGN CONNECTION SHOWN
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.

LEGEND

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

2-CHORD BUTTERFLY DETAILS

SHEET I

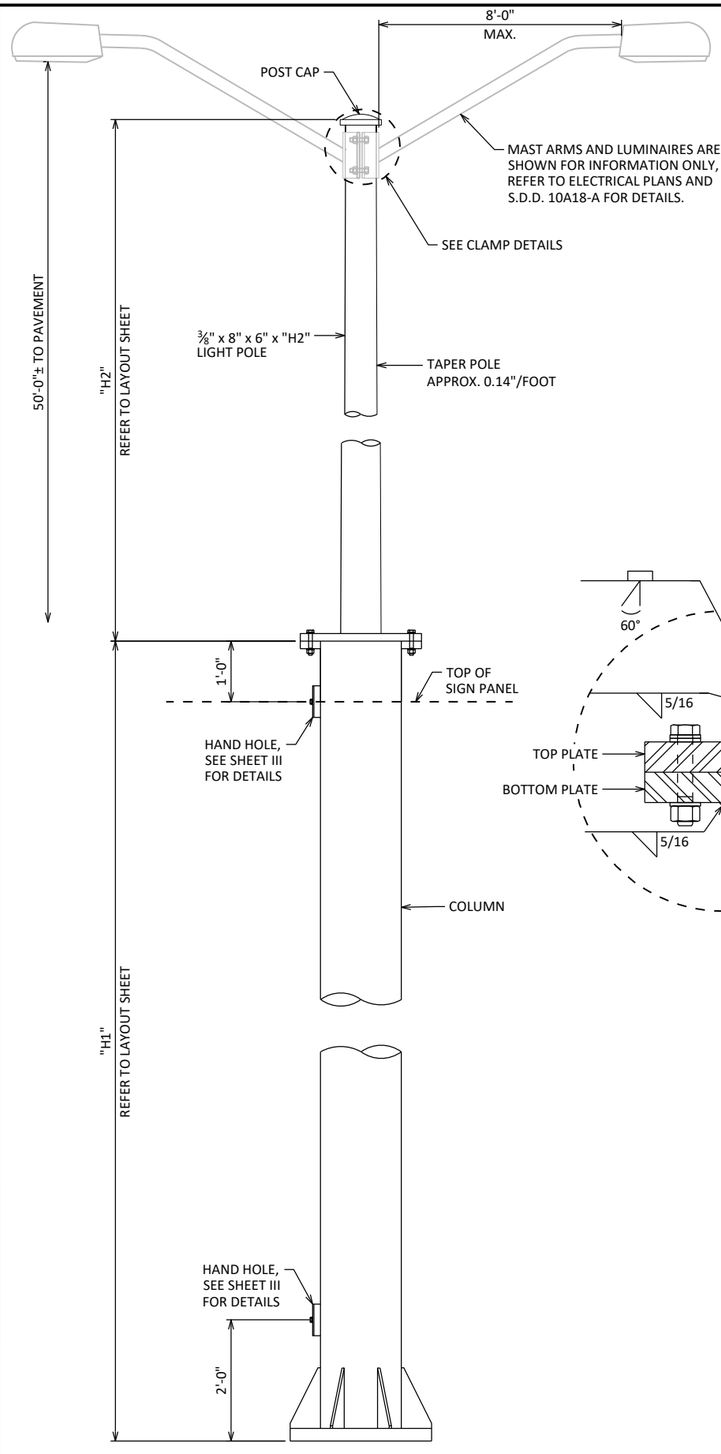
SCALE = 4.0

8

8

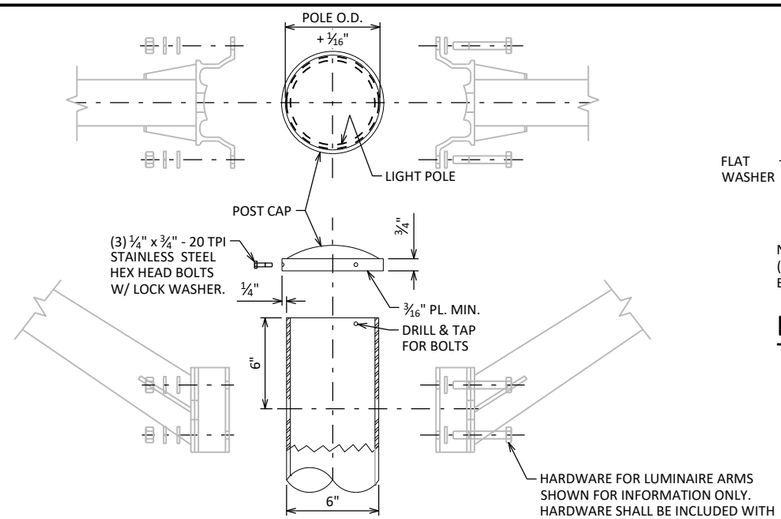
STATE PROJECT NUMBER

STANDARD



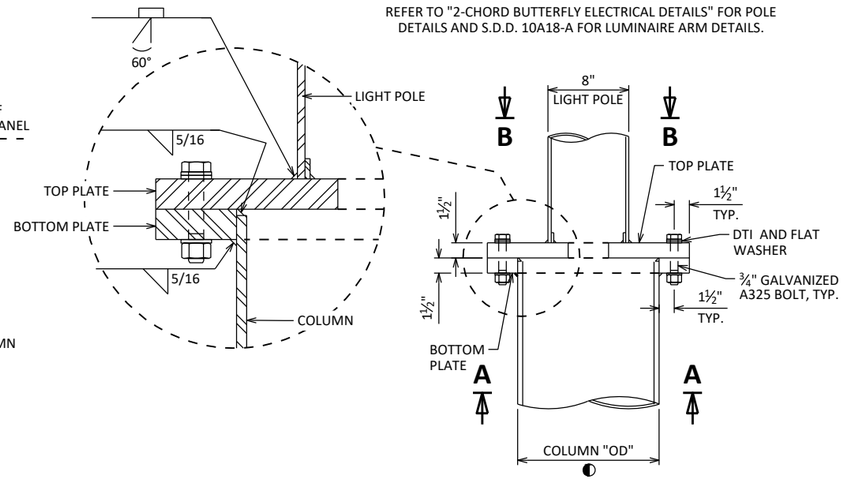
COLUMN & LIGHT POLE ELEVATION

CHORDS AND SIGN PANEL NOT SHOWN FOR CLARITY
LOOKING AT F.F. OF STRUCTURE

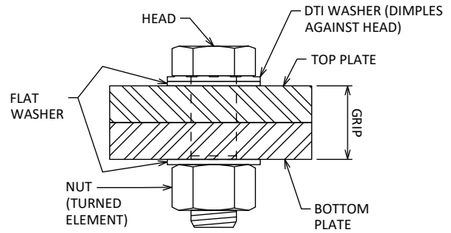


CLAMP DETAILS

REFER TO "2-CHORD BUTTERFLY ELECTRICAL DETAILS" FOR POLE DETAILS AND S.D.D. 10A18-A FOR LUMINAIRE ARM DETAILS.



COLUMN & LIGHT POLE CONNECTION



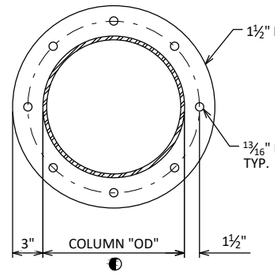
BOLT DETAIL WITH DTI

NOTES:

LUMINAIRE ARMS TO BE PARALLEL TO SIGN PANELS.

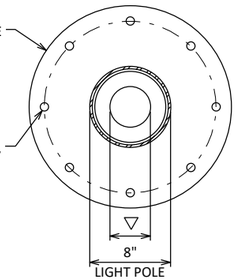
LUMINAIRE LOADING FOR DESIGN WAS CALCULATED USING 50 LBS. AND 1.5 SQ. FT. FOR E.P.A. FOR EACH LUMINAIRE.

SEE S.D.D. 10A18-A FOR LUMINAIRE ARM AND CLAMP DETAILS.



SECTION A-A

BOTTOM PLATE TO COLUMN

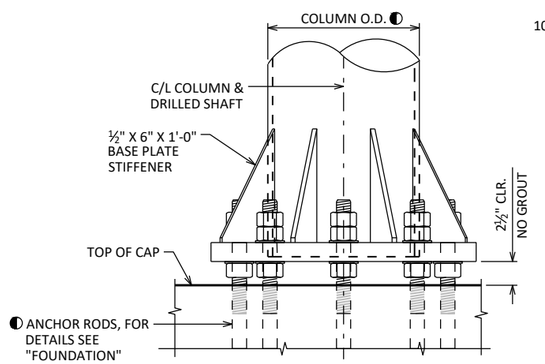


SECTION B-B

TOP PLATE TO LIGHT POLE
▽ 4" DIA. HOLE IN TOP PLATE

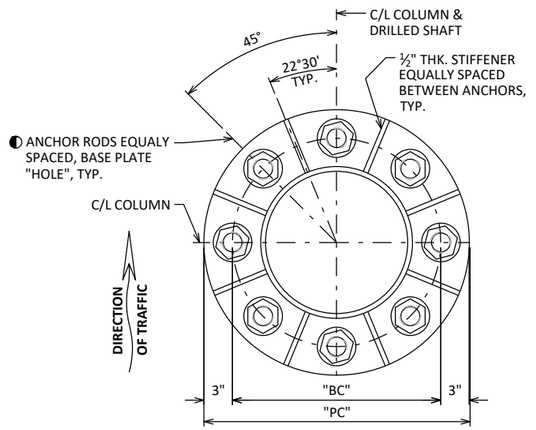
BASE PLATE STIFFENER DETAIL

** SIZE AS NEEDED



BASE PLATE & COLUMN DETAIL

LOOKING AT F.F. OF STRUCTURE



BASE PLATE

◐ SEE TABLE ON "2-CHORD BUTTERFLY DETAILS" SHEET FOR DIMENSIONS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: OCT. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

2-CHORD BUTTERFLY POLE DETAILS

SHEET II

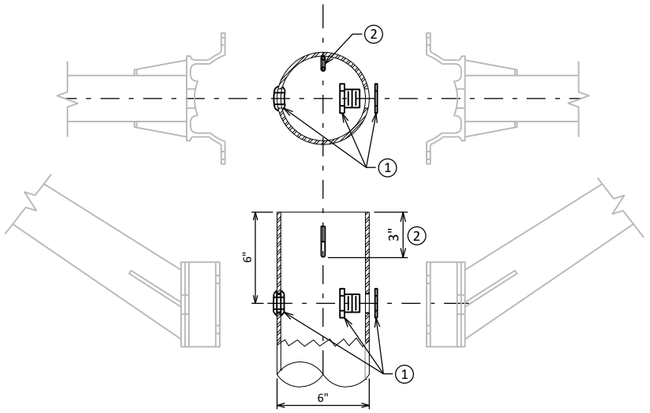
SCALE = 2.5

8

8

STATE PROJECT NUMBER

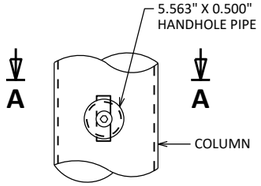
STANDARD



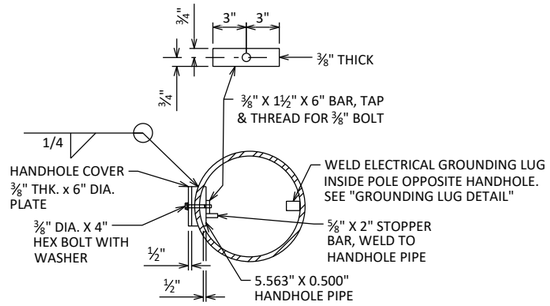
LIGHT POLE DETAILS

(1) 1⅜" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET), PER EACH REQUIRED LUMINAIRE ARM.

(2) FACTORY WELDED "J" HOOK FOR POLE WIRE STRAIN RELIEF.



ELEVATION

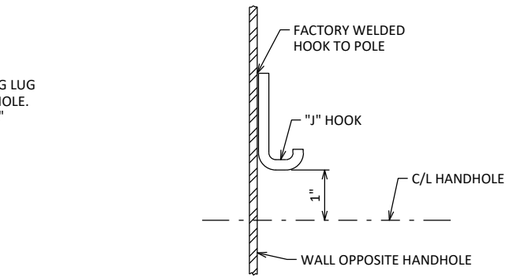


SECTION A-A

HANDHOLE DETAILS

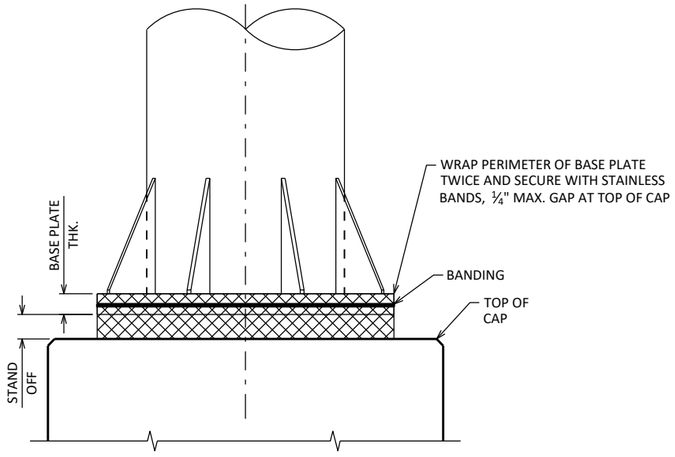
HAND HOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HAND HOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC 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 OTHERWISE NOTED, ALL HAND HOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



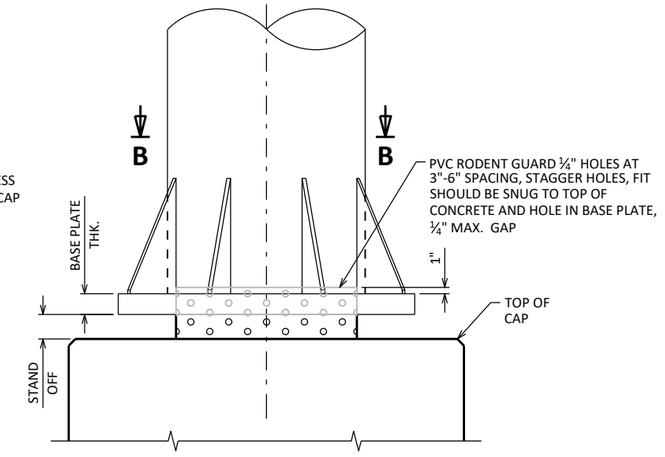
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN 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.



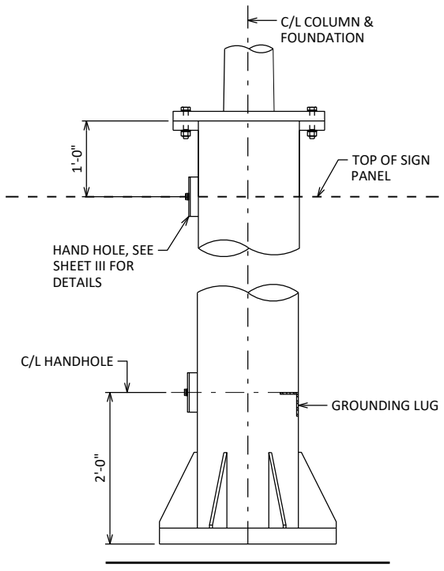
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



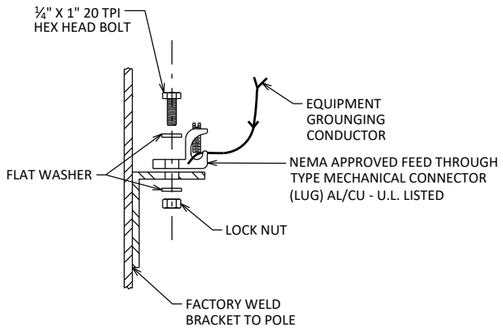
RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



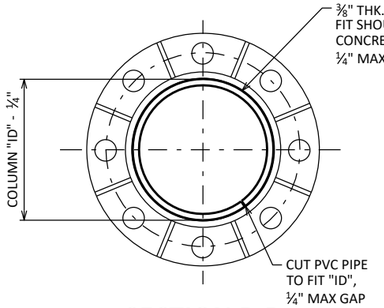
GROUNDING LUG LOCATION

LOOKING ATF.F. OF STRUCTURE



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

2-CHORD BUTTERFLY ELECTRICAL DETAILS

SHEET III

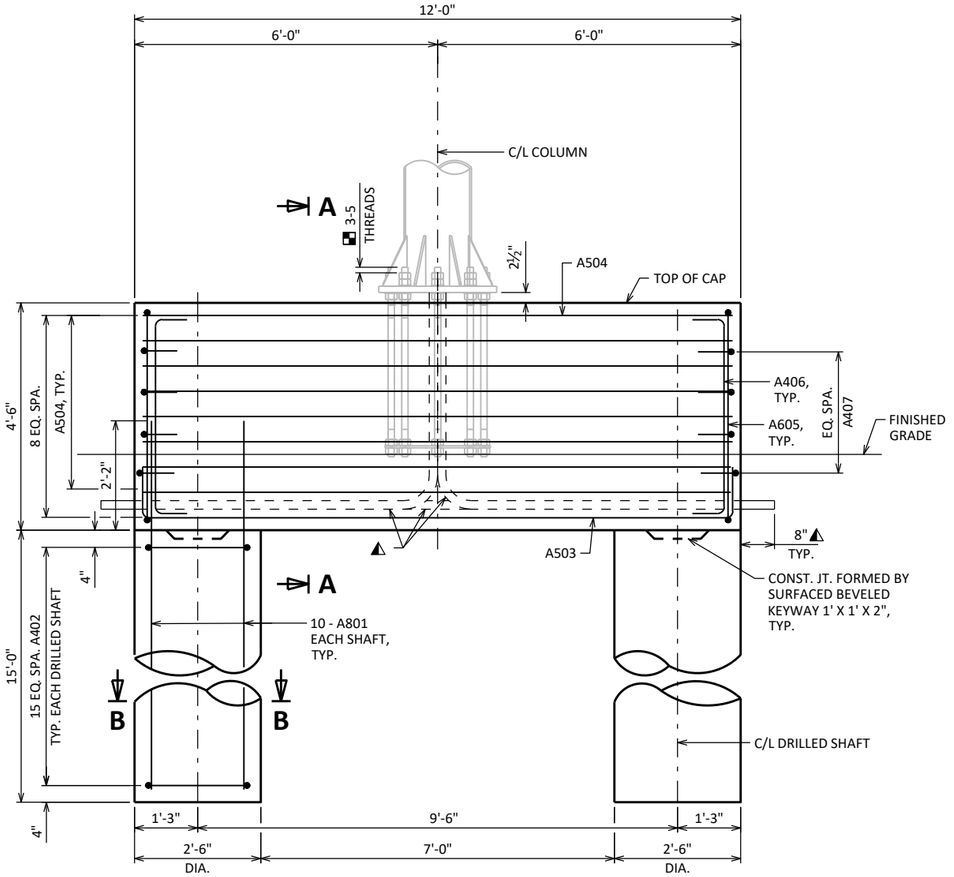
SCALE = 2.0

8

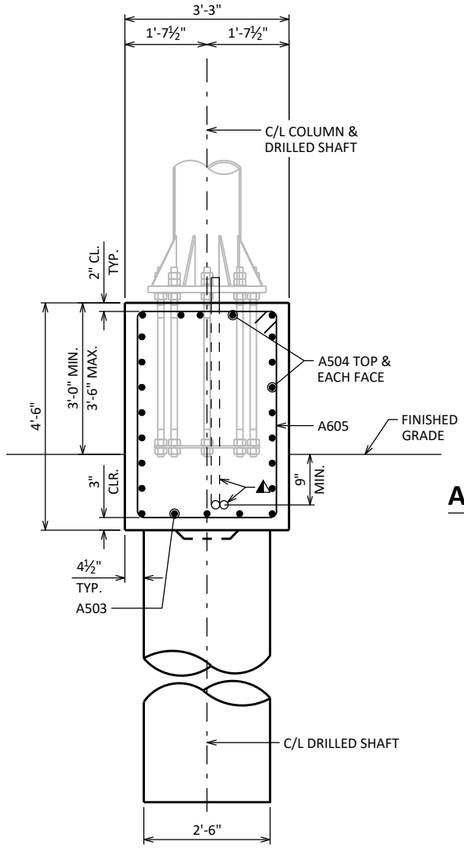
8

STATE PROJECT NUMBER

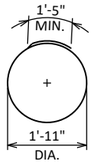
STANDARD



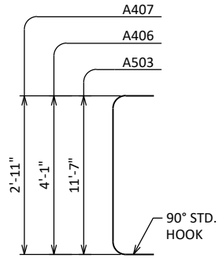
ELEVATION



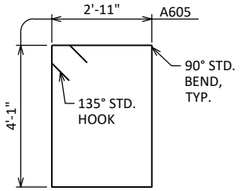
SECTION A-A



A402



A503, A406, A407



A605

BILL OF BARS

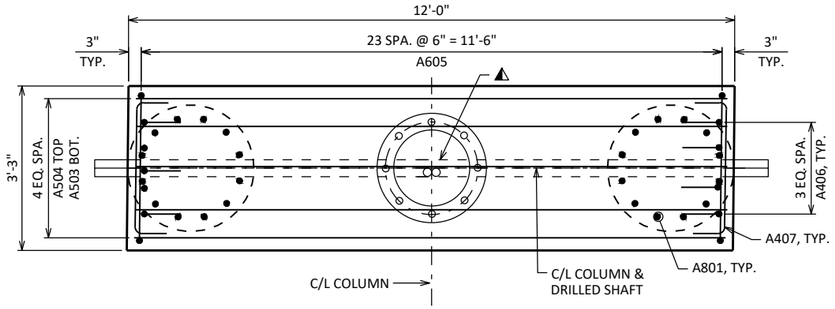
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		20	17'-2"			DRILLED SHAFT - VERTICAL
A402		32	7'-5"	X		DRILLED SHAFT - HORIZONTAL
A503	X	5	12'-7"	X		CAP - LONGITUDINAL - BOTTOM
A504	X	19	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	24	14'-11"	X		CAP - STIRRUP
A406	X	8	4'-9"	X		CAP - VERTICAL - EACH END
A407	X	8	5'-11"	X		CAP - HORIZONTAL - EACH END

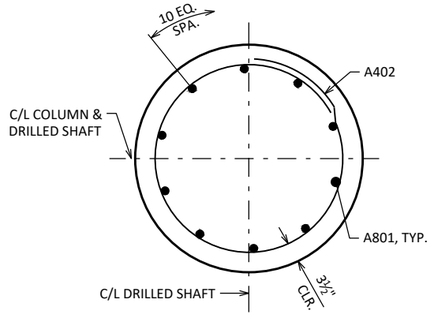
ESTIMATED QUANTITIES - FOUNDATION

CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 1.5-INCH	FOUNDATION DRILLING 30" DIA.
(CY)	(LBS)	(LBS)	(EACH)	(LF)
12	1,080	890	1	30

✳✳ QUANTITIES ARE FOR INFORMATION ONLY . ✳✳

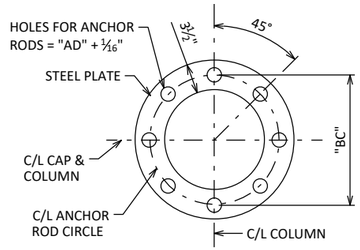


PLAN

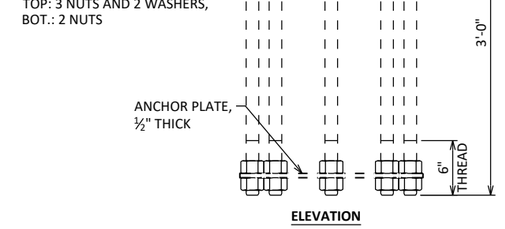


SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING



ANCHOR PLATE & TOP TEMPLATE



ELEVATION

ANCHOR ROD ASSEMBLY DETAILS

SINGLE ANCHOR ASSEMBLY SHOWN, 8 ANCHOR RODS PER ASSEMBLY

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

LEGEND

▲ 3 - 2" DIA. NON-METALLIC CONDUITS. INSTALL AND EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. 1 CONDUIT TO RUN STRAIGHT THROUGH FOUNDATION. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

■ ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

2-CHORD BUTTERFLY FOUNDATION DETAILS

SHEET IV

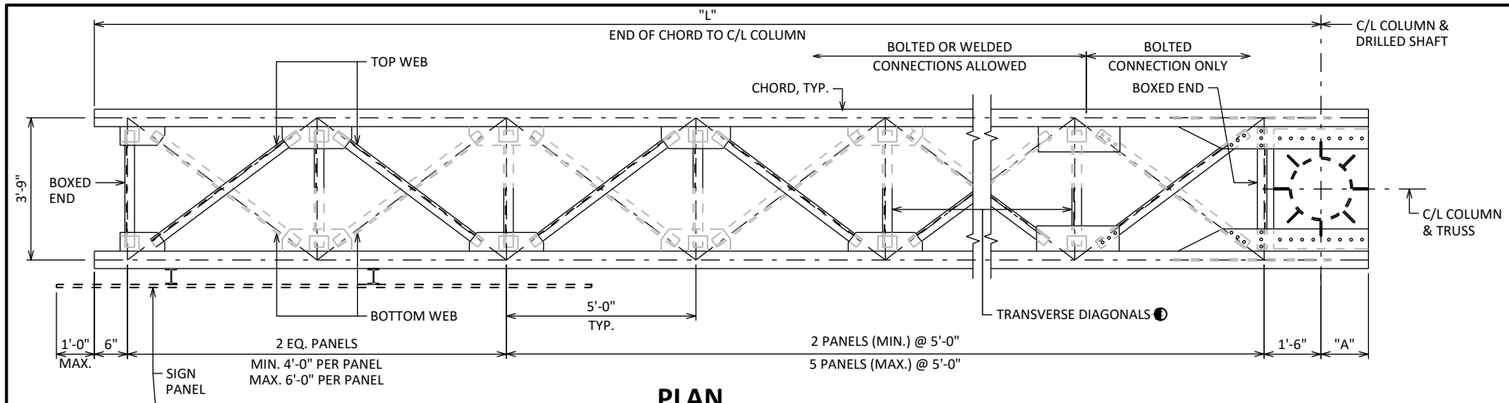
SCALE = 3.0

8

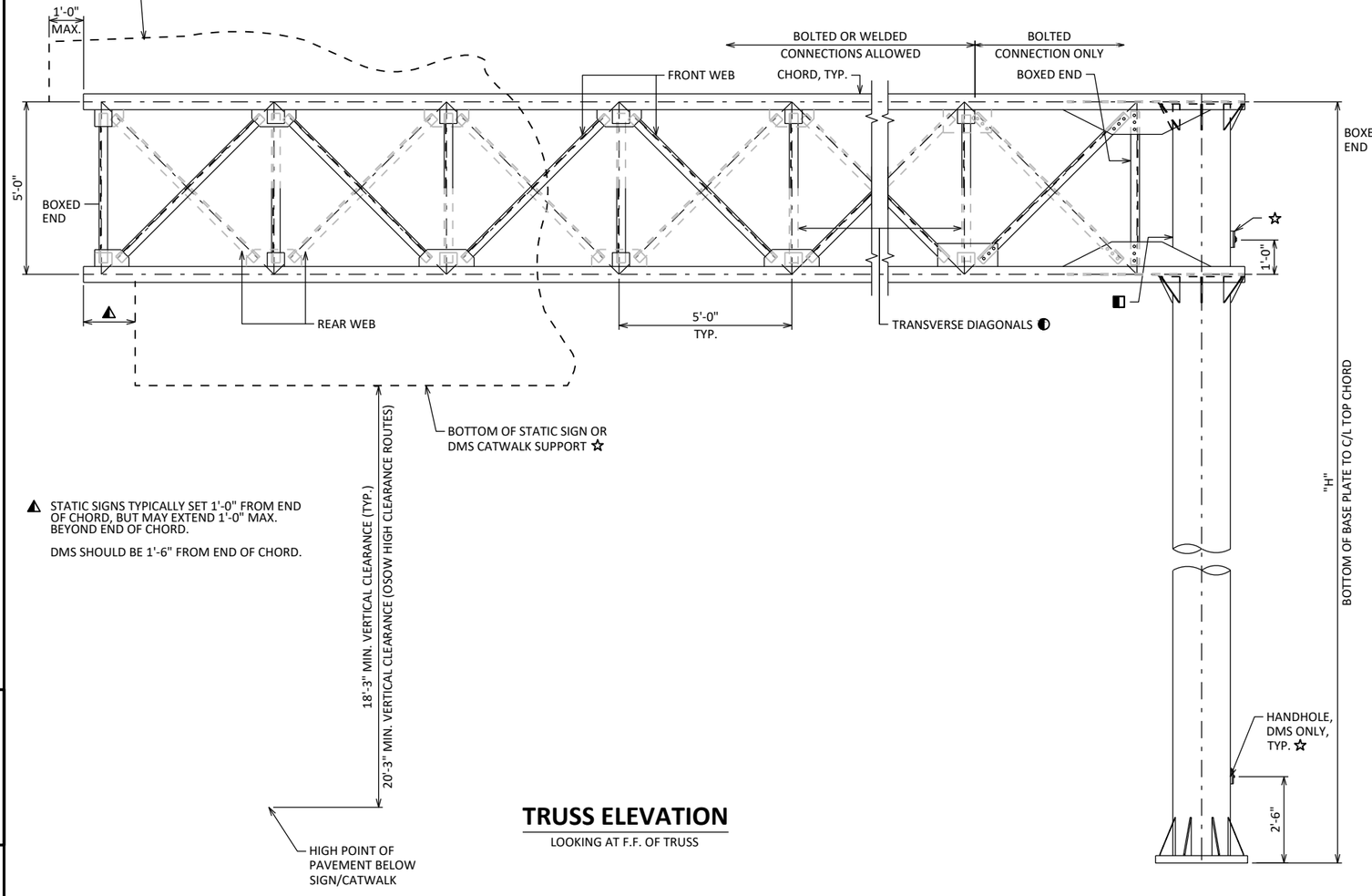
8

STATE PROJECT NUMBER

STANDARD



PLAN

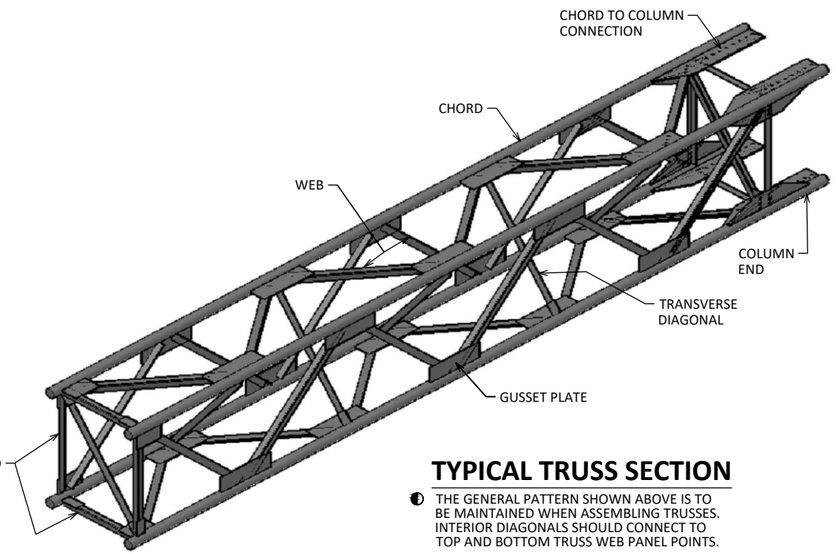


▲ STATIC SIGNS TYPICALLY SET 1'-0" FROM END OF CHORD, BUT MAY EXTEND 1'-0" MAX. BEYOND END OF CHORD.

DMS SHOULD BE 1'-6" FROM END OF CHORD.

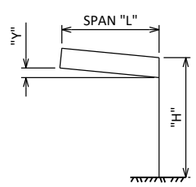
TRUSS ELEVATION

LOOKING AT F.F. OF TRUSS



TYPICAL TRUSS SECTION

◐ THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES. INTERIOR DIAGONALS SHOULD CONNECT TO TOP AND BOTTOM TRUSS WEB PANEL POINTS.



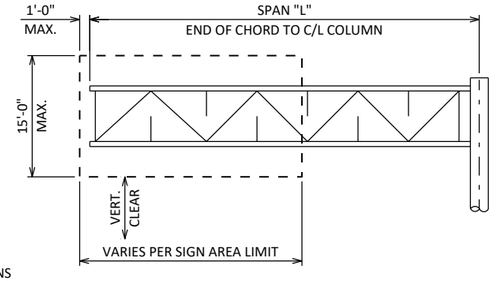
CAMBER DIAGRAM

CAMBER SHALL BE BUILT INTO THE TRUSS DURING FABRICATION. SHIM PLATES BETWEEN TRUSS SECTIONS TO CREATE CAMBER SHALL NOT BE ALLOWED.

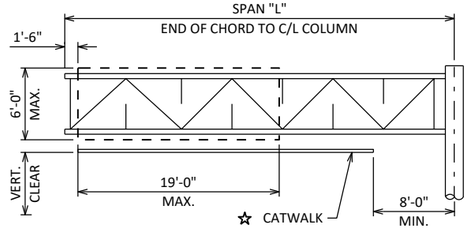
CAMBER VALUES

	"Y"			
SPAN "L"	30'-0"		38'-0"	
"H"	TYPE I	DMS	TYPE I	DMS
22'-0"	2¼"	3½"	2⅝"	4⅛"
24'-0"	2⅜"	3⅞"	2⅞"	4½"
26'-0"	2½"	4⅛"	3⅜"	4⅞"
28'-0"	2¾"	4½"	3¾"	5¼"
30'-0"	2⅞"	4¾"	3½"	5⅝"

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



TYPE I SIGN LIMITS



DMS SIGN LIMITS

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

LEGEND

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

◧ FOR OSS WITH DMS ONLY, DRILL AND TAP FOR 2 - 2" STD. PIPE THREADS. LOCATE CENTER OF BOTTOM HOLE 6" FROM TOP OF BOTTOM CHORD AND SPACE VERTICALLY AT 6" C/C. PLACE CONDUIT PLUG IN HOLES THAT ARE NOT USED FOR WIRING SIGN PANELS. SEE "ELECTRICAL DETAILS" SHEET.

CANTILEVER 4-CHORD TRUSS MEMBER TABLE

STANDARD DESIGN TYPE	TYPE I SIGN AREA (SQ. FT)	DMS AREA (SQ. FT.)	MAXIMUM SPAN "L"	MAXIMUM COLUMN HEIGHT "H"	DIM. "A"	COLUMN "OD" X THK.	CHORD "OD" 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"	L3 X 3 X ¼	L3 X 3 X ¼	L3 X 3 X ¼
II	240	114	38'-0"	30'-0"	1'-4½"	24.00" X 0.500"	5.563" X 0.375"	L3 X 3 X 5/16	L3 X 3 X ¼	L3 X 3 X ¼

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER DETAILS

SHEET 1

SCALE = 4.0

8

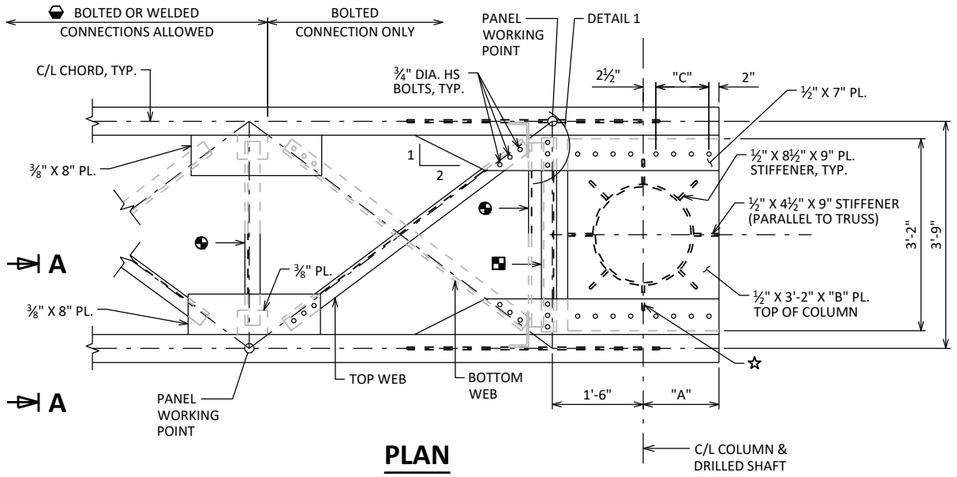
8

STATE PROJECT NUMBER

STANDARD

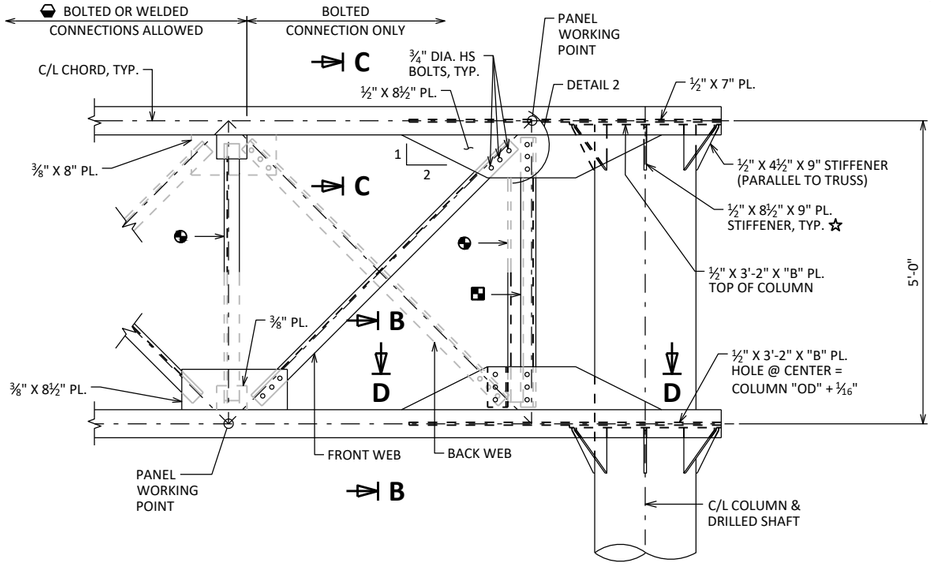
TRUSS TO COLUMN CONNECTION DATA

STANDARD DESIGN TYPE	"A"	"B"	"C"
I	1'-3"	2'-6"	3 SPA. @ 3½"
II	1'-4½"	2'-9"	4 SPA. @ 3"



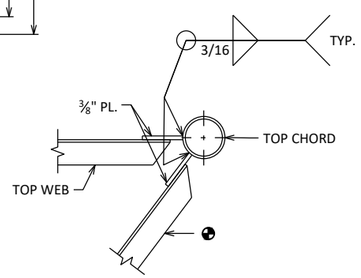
PLAN

TRUSS TO COLUMN CONNECTION

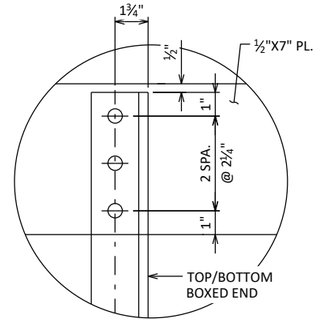


ELEVATION

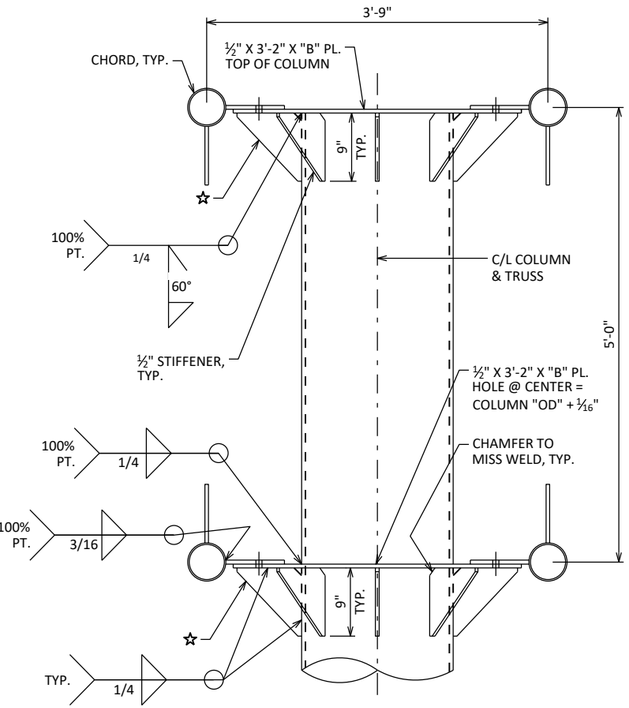
TRUSS TO COLUMN CONNECTION



SECTION A-A

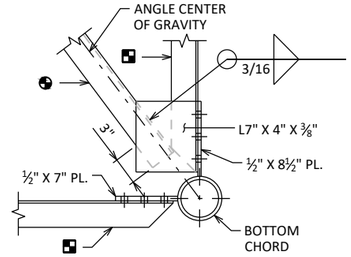


DETAIL 1



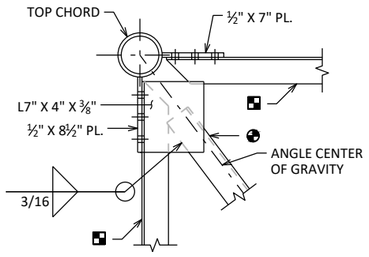
END VIEW

TRUSS TO COLUMN CONNECTION (WEB MEMBERS NOT SHOWN)



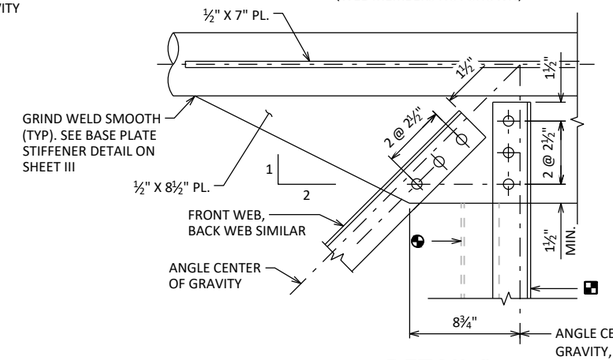
SECTION B-B

FRONT CHORD

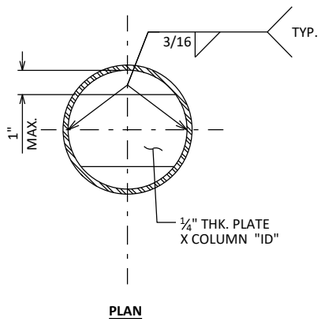


SECTION C-C

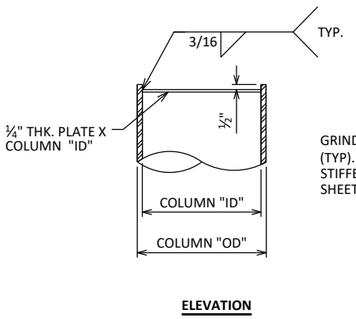
BACK CHORD



DETAIL 2

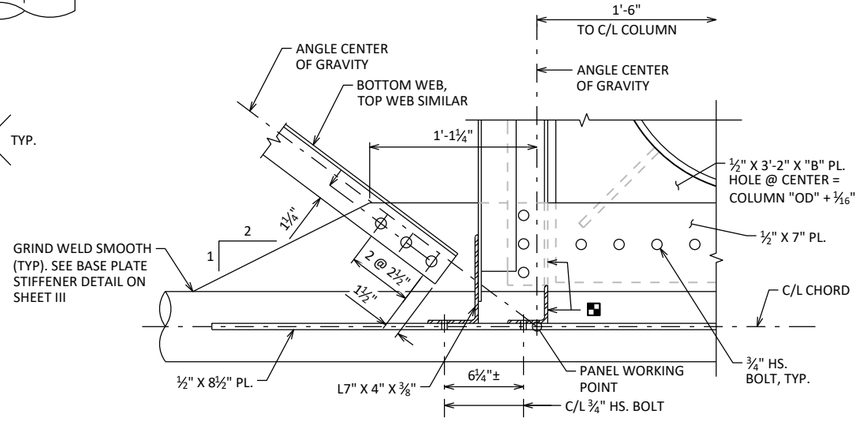


PLAN



ELEVATION

CHORD CAP DETAIL



SECTION D-D

LOOKING DOWN @ BOTTOM HORIZ. GUSSET @ FRONT CHORD

LEGEND

- TRANSVERSE DIAGONAL
- BOXED END AT SUPPORT
- WELDED CONNECTIONS MAY BE USED IF UNIT CAN BE GALVANIZED IN ONE PIECE. FIRST BAY MUST BE BOLTED.
- ☆ ½" X 7" X 9" STIFFENER TYPE II STANDARD DESIGN ONLY. TYP. OPPOSITE SIDE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER CONNECTIONS 1

SHEET II

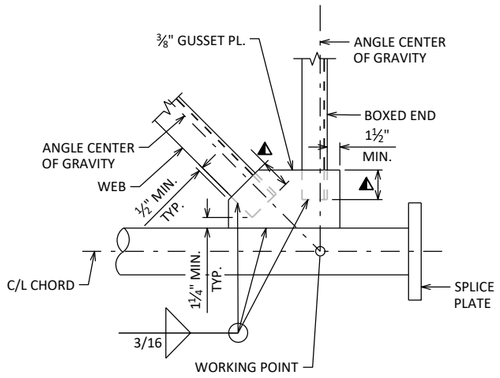
SCALE = 2.5

8

8

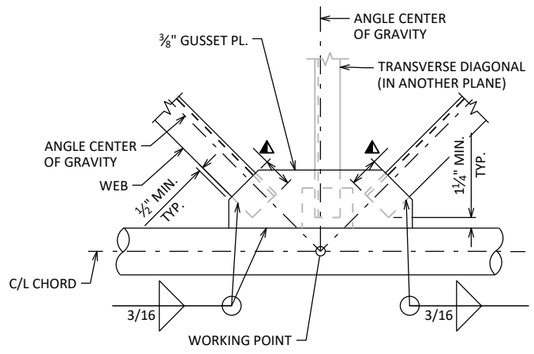
STATE PROJECT NUMBER

STANDARD

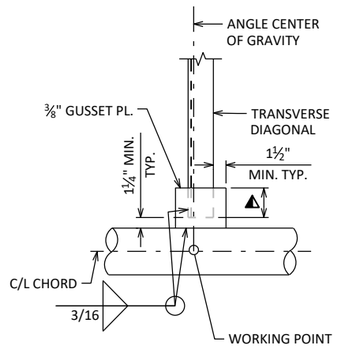


WELDED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE, CONNECTION AT COLUMN END SIMILAR

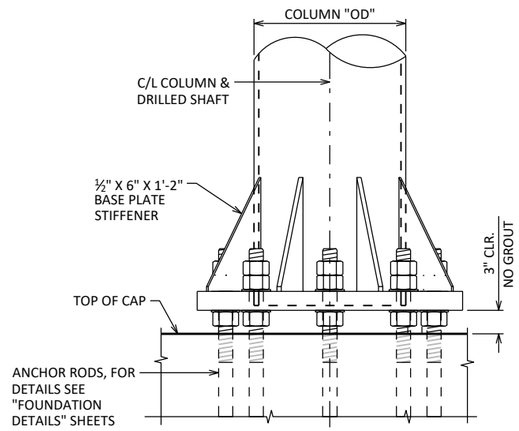


WELDED PANEL CONNECTION



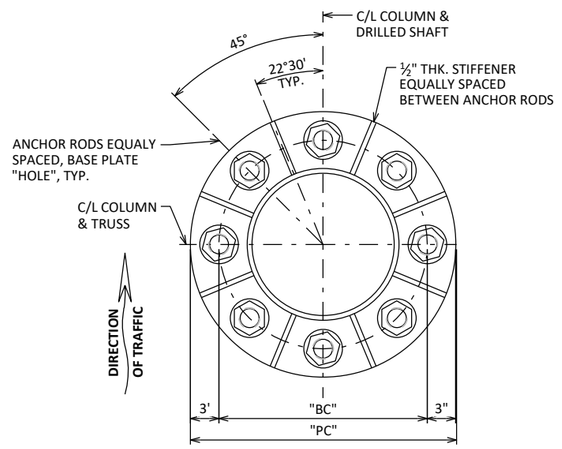
WELDED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY



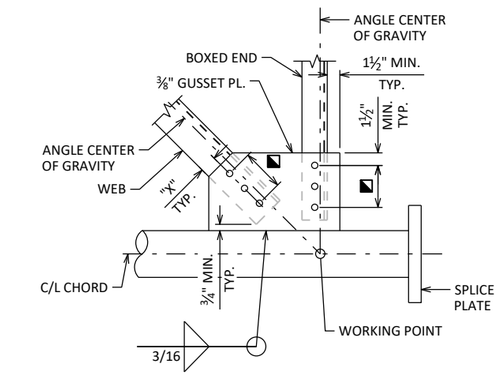
BASE PLATE & COLUMN DETAIL

LOOKING AT F.F. OF STRUCTURE



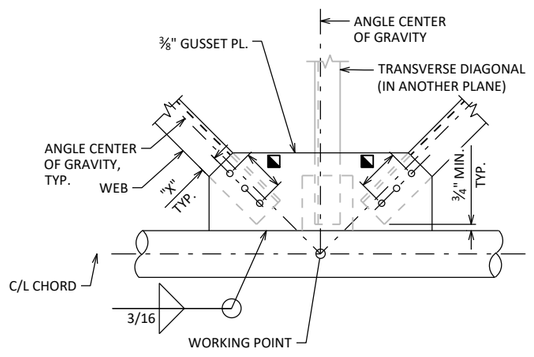
BASE PLATE

PLAN

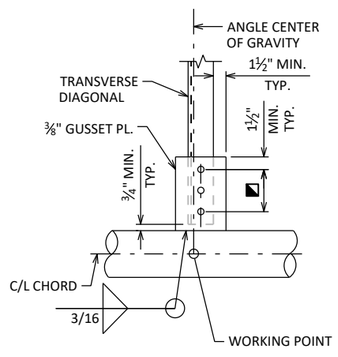


BOLTED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE, CONNECTION AT COLUMN END SIMILAR



BOLTED PANEL CONNECTION



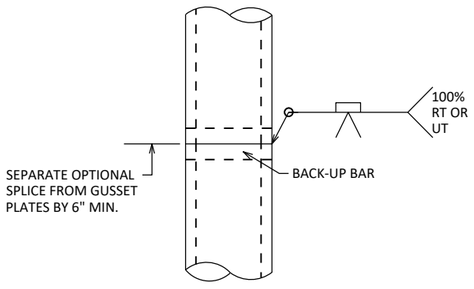
BOLTED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY

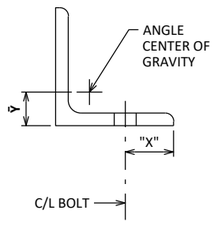
MEMBER CONNECTION DATA

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

FOR ALL ANGLE TO GUSSET CONNECTIONS, BOLT SPACING = 2½"

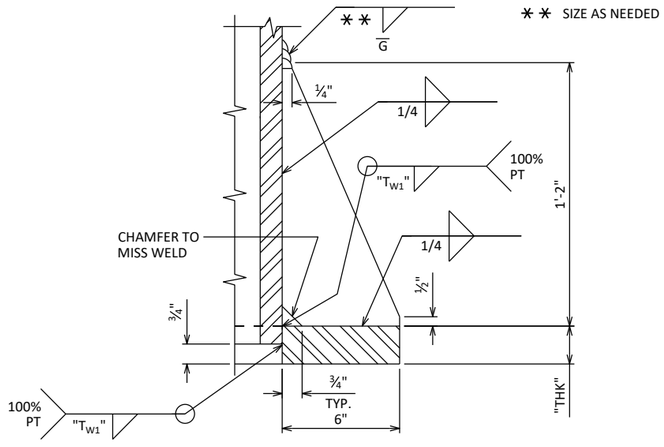


OPTIONAL COLUMN OR CHORD SPLICE DETAIL



ANGLE DATA

ANGLE SIZE	ȳ	"X"
L3 X 3 X ¼	0.84"	1¼"
L3 X 3 X 5/16	0.86"	1¼"



BASE PLATE STIFFENER DETAIL

CANTILEVER 4-CHORD COLUMN DATA

STANDARD DESIGN TYPE	COLUMN "OD" X THK	BASE PLATE "THK"	"TW1"	"HOLE"	"BC"	"PC"
I	20.00" X 0.500"	2"	5/16"	2¼"	2'-2"	2'-8"
II	24.00" X 0.500"	2½"	5/16"	2¼"	2'-6"	3'-0"

NOTE:

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

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4-CHORD TRUSS CANTILEVER CONNECTIONS 2

SHEET III

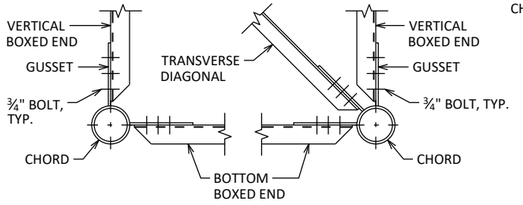
SCALE = 1.5

8

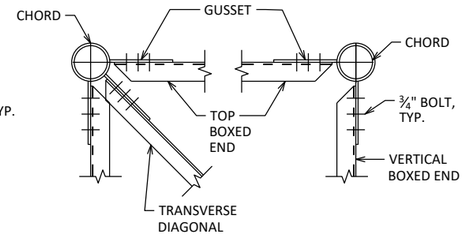
8

STATE PROJECT NUMBER

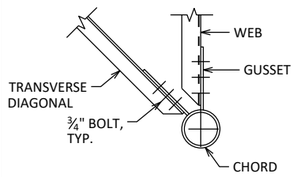
STANDARD



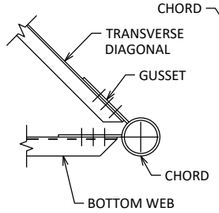
END VIEW 1 | END VIEW 2



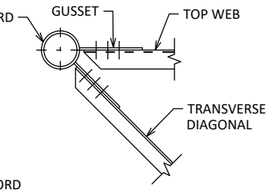
END VIEW 3 | END VIEW 4



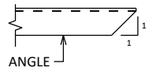
END VIEW 5



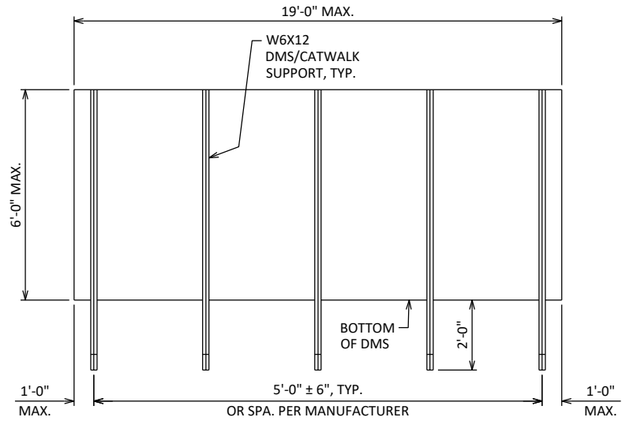
END VIEW 6



END VIEW 7



CLIP DETAIL



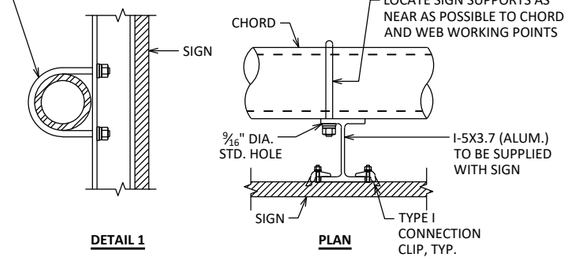
DMS MOUNTING POST SPACING DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.

TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR

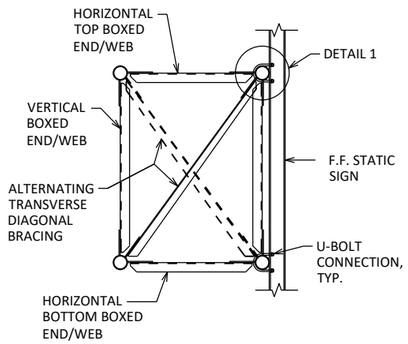
½" DIA. STAINLESS STEEL U-BOLT WITH 2 LOCK WASHERS, 2 FLAT WASHERS AND 2 HEX NUTS PER BOLT. 2 BOLTS REQUIRED PER I-BEAM. LOCATE TOP AND BOTTOM U-BOLTS ON OPPOSITE SIDES OF FLANGE.



DETAIL 1 | PLAN

TYPICAL SIGN CONNECTION

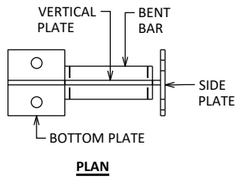
USE FOR TYPE I AND II SIGNS, TYPE I SIGN SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.



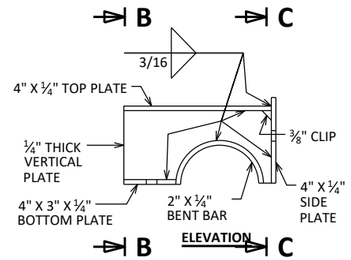
SECTION THRU TRUSS - STATIC SIGN

FOR SIGN CONNECTION

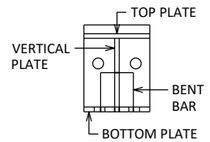
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL. HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



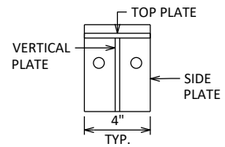
PLAN



ELEVATION



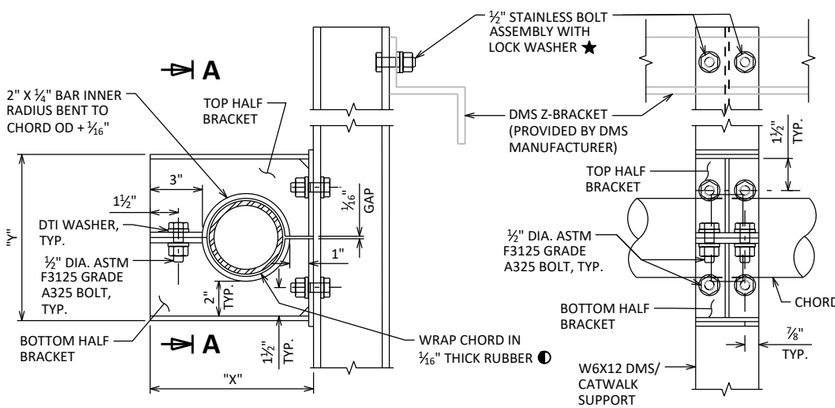
SECTION B-B



SECTION C-C

DMS WELDED PLATE CONNECTION DETAILS

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.

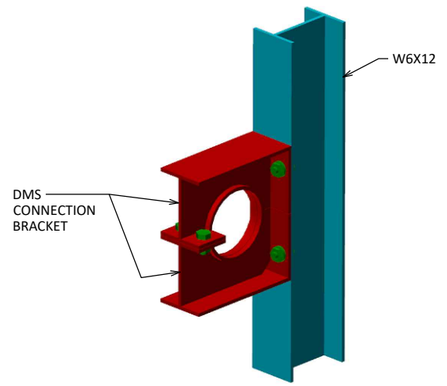


DETAIL 2 | SECTION A-A

CHORD "OD"	"X"	"Y"
5.000"	9 13/16"	10 1/16"
5.563"	10⅜"	10⅝"

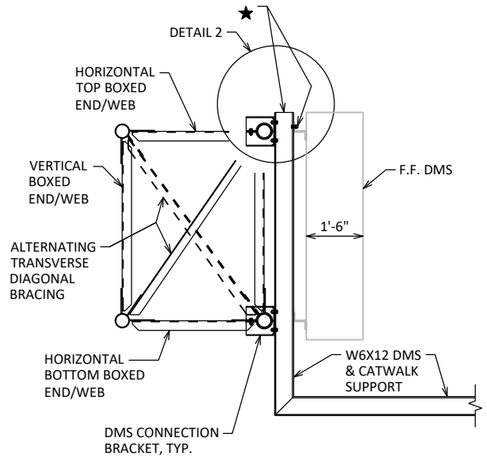
TYPICAL DMS CONNECTION

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



3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY



SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12. FIELD DRILLED HOLES IN STEEL SUPPORTS MUST BE COLD GALVANIZED

NO.	DATE	REVISION	BY

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4-CHORD TRUSS CANTILEVER CONNECTIONS 3

SHEET IV

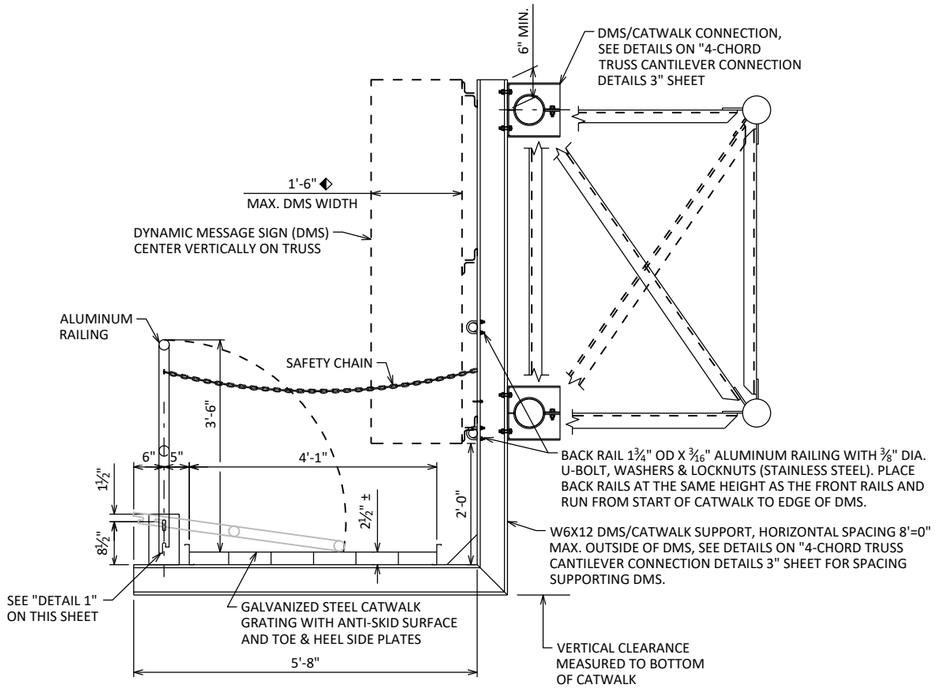
SCALE = 4.0

8

8

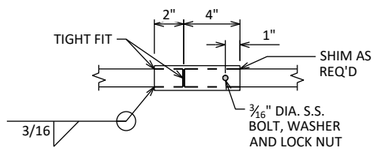
STATE PROJECT NUMBER

STANDARD



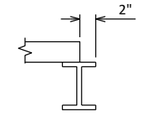
SECTION THRU WALKWAY

◆ DMS MAY BE RECTANGULAR OR TRAPEZOIDAL. IF DMS HAS A TRAPEZOIDAL SHAPE, THIS DIMENSION REPRESENTS THE AVERAGE WIDTH.

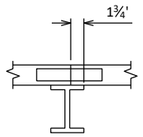


BACKRAIL SPLICE

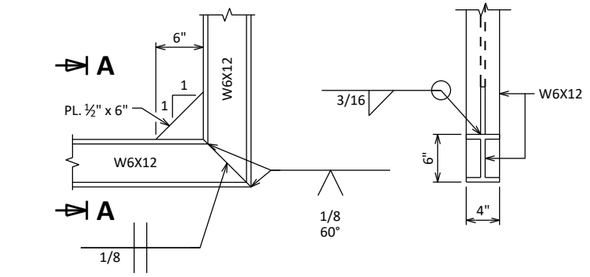
ONE SPLICE ALLOWED FOR LENGTHS OVER 30'-0"



CATWALK TERMINATION DETAIL

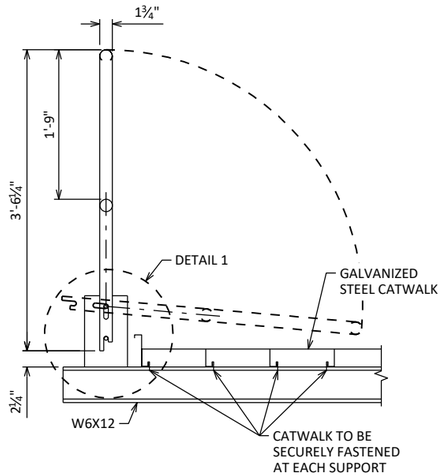


CATWALK SPLICE LOCATION DETAIL

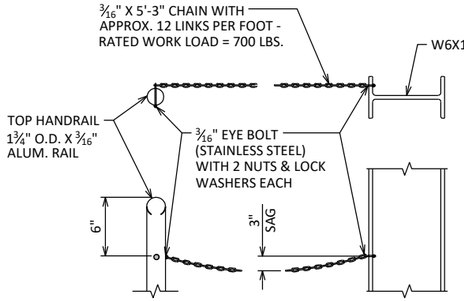


CATWALK BRACKET DETAIL

SECTION A-A

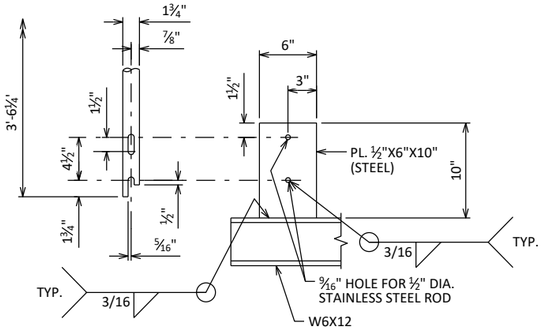


RAIL POST DETAIL

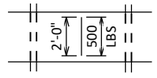


SAFETY CHAIN DETAIL

PROVIDE SAFETY CHAIN AT EACH END OF CATWALK

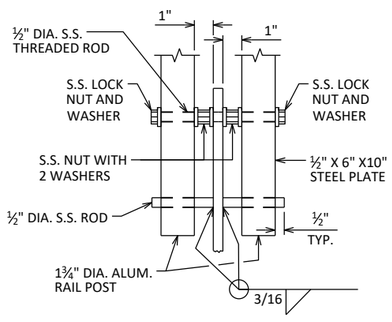


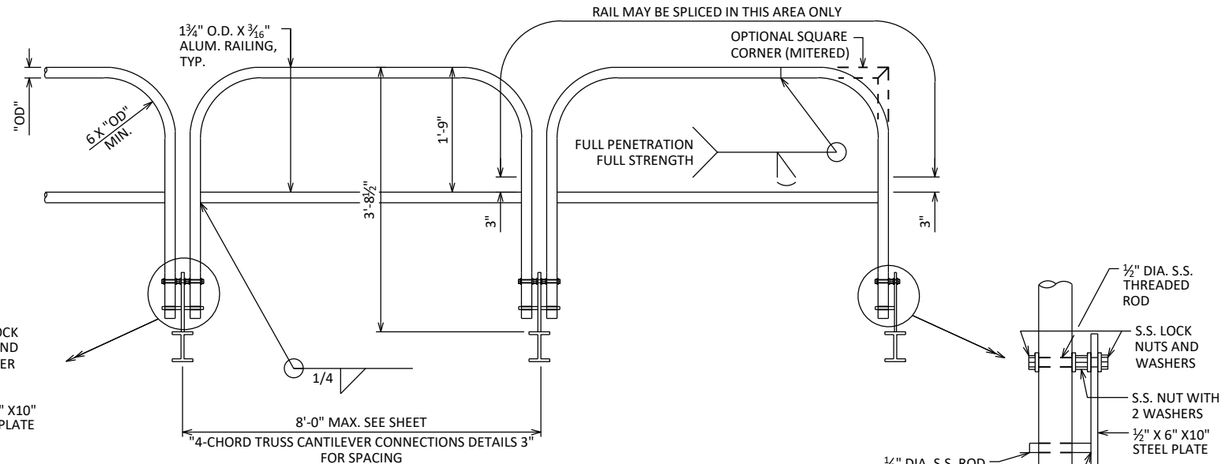
DETAIL 1



CATWALK LOADING DIAGRAM

NOTE:
CATWALK GRATING SHALL MEET THE CURRENT AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" WITH 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.





TYPICAL FRONT RAILING DETAILS

S.S. - STAINLESS STEEL

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

4-CHORD TRUSS CANTILEVER CATWALK DETAILS

SHEET V

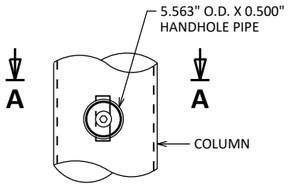
SCALE = 2.5

8

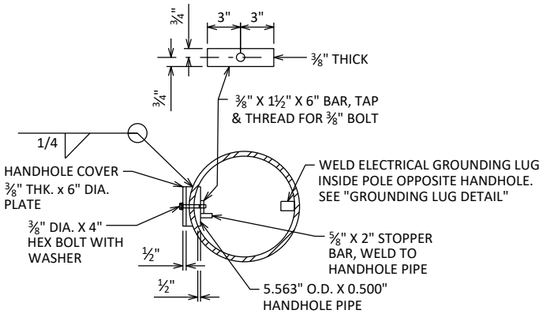
8

STATE PROJECT NUMBER

STANDARD



ELEVATION

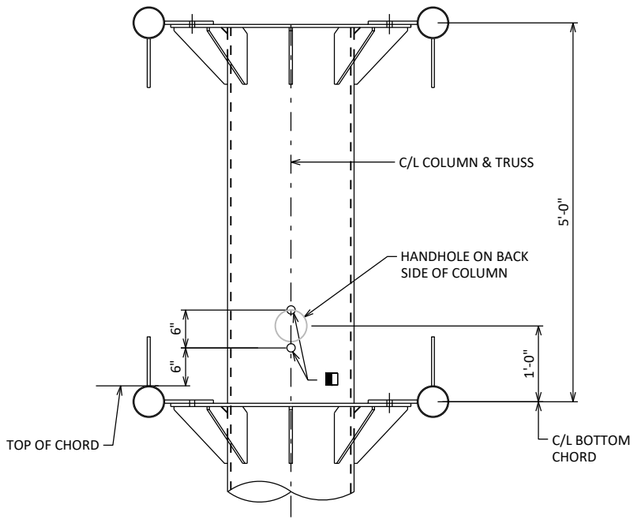


SECTION A-A

HANDHOLE DETAILS

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.

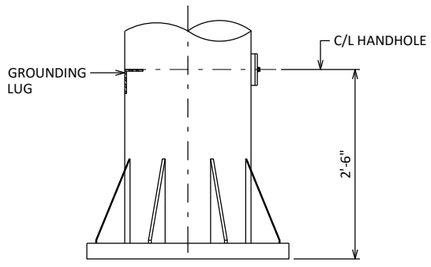
UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



CONDUIT HOLE LOCATIONS

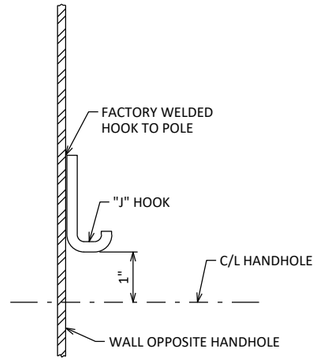
LOOKING AT INSIDE FACE OF COLUMN

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES



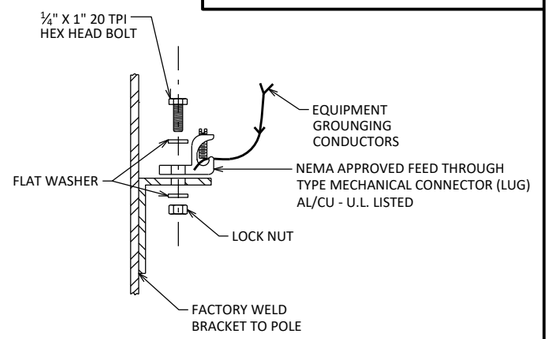
GROUNDING LUG LOCATION

LOOKING AT INSIDE F.F. OF STRUCTURE



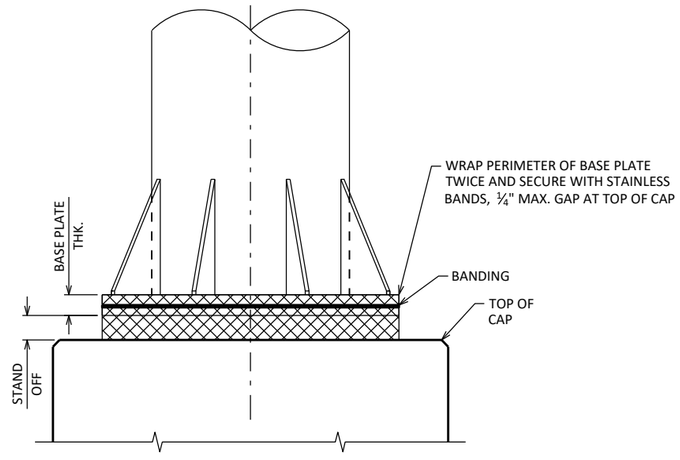
TYPICAL "J" HOOK LOCATION

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.



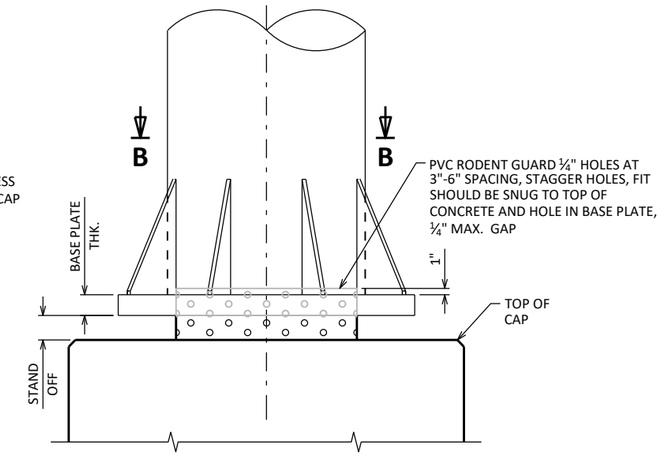
GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



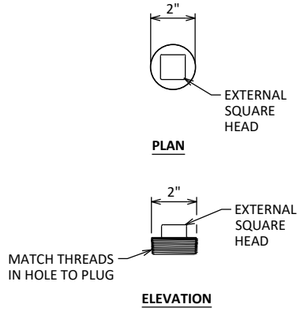
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN

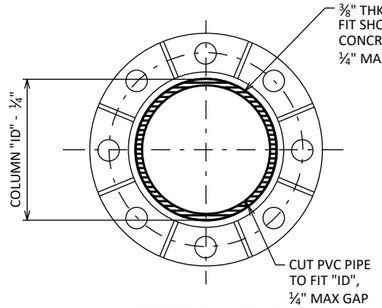


RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



CONDUIT PLUG DETAILS



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER ELECTRICAL DETAILS

SHEET VI

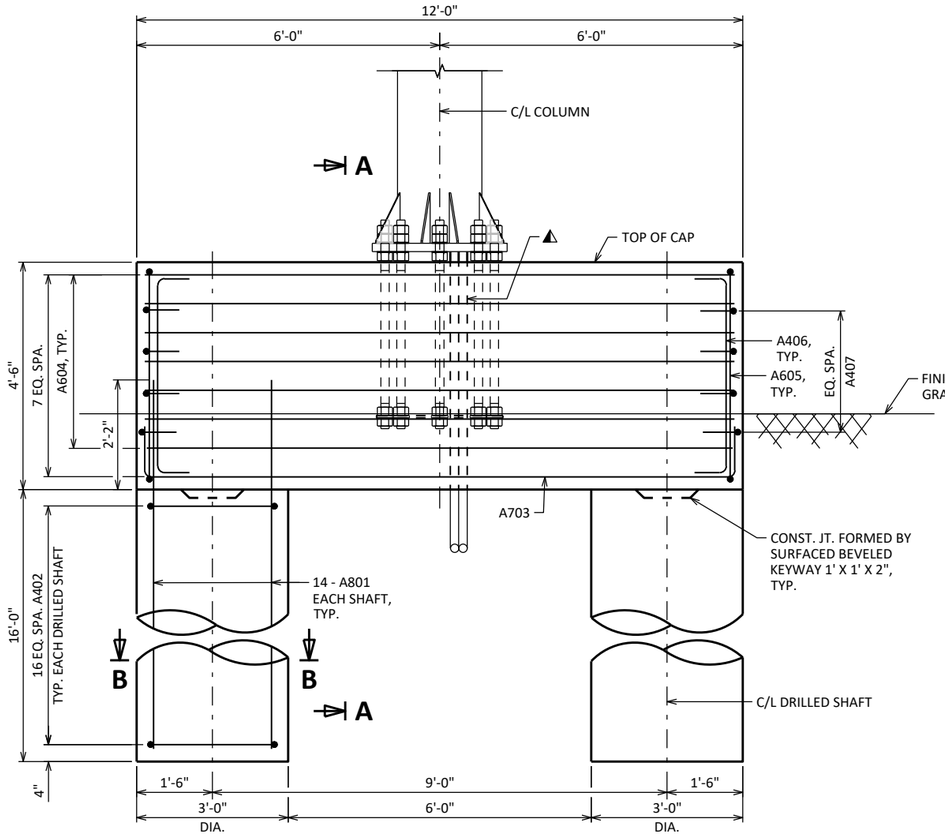
SCALE = 2.0

8

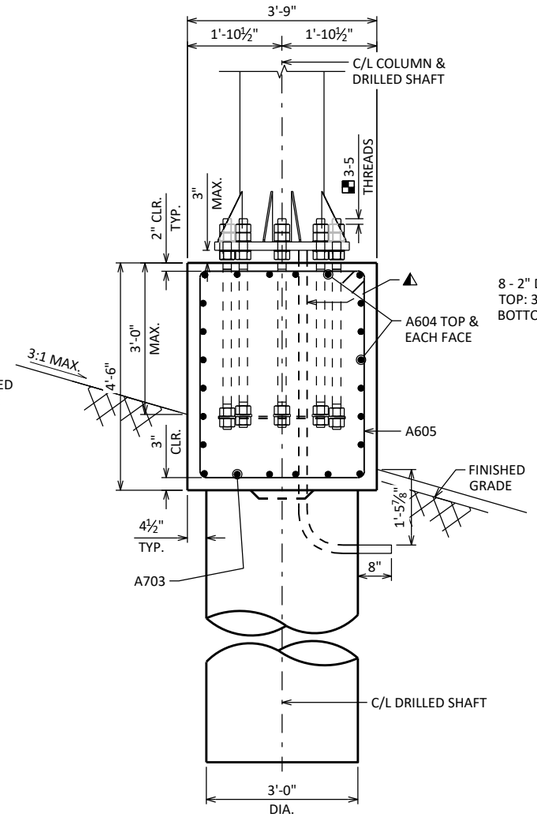
8

STATE PROJECT NUMBER

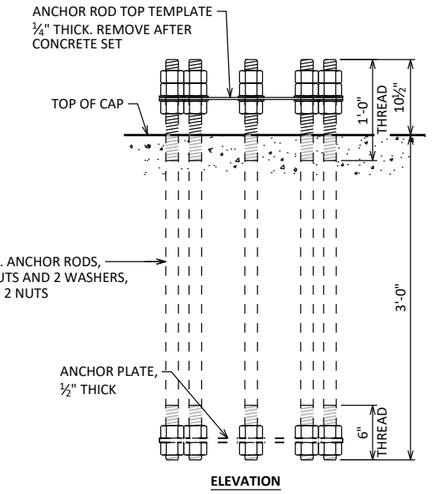
STANDARD



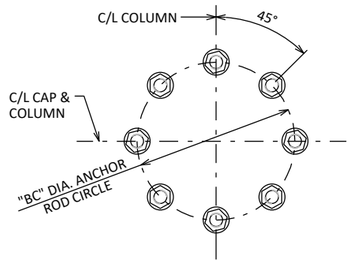
ELEVATION



SECTION A-A



ELEVATION

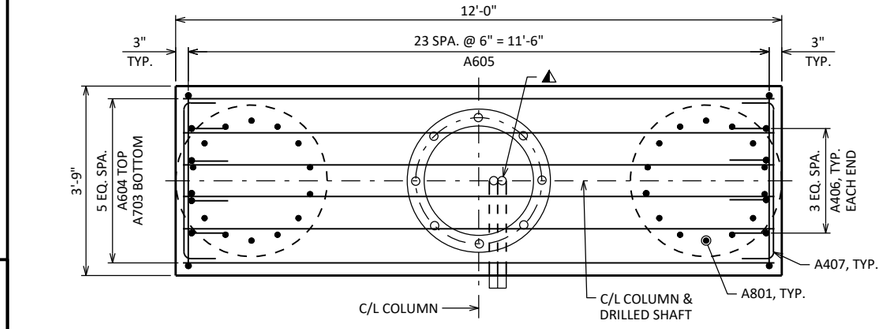


PLAN

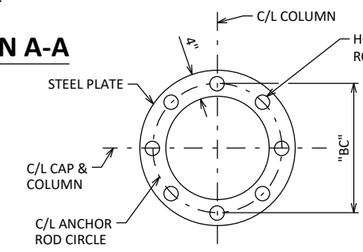
ANCHOR ROD ASSEMBLY DETAILS

SINGLE ANCHOR ASSEMBLY SHOWN, 8 ANCHOR RODS PER ASSEMBLY

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

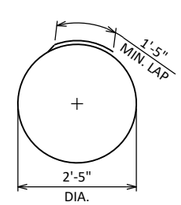


PLAN

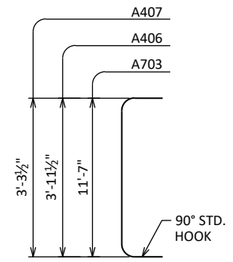


ANCHOR PLATE/ TOP TEMPLATE

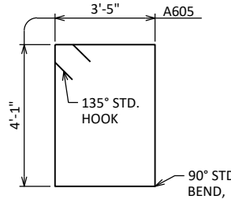
STANDARD DESIGN TYPE	"BC"
I	2'-2"
II	2'-6"



A402



A703, A406, A407



A605

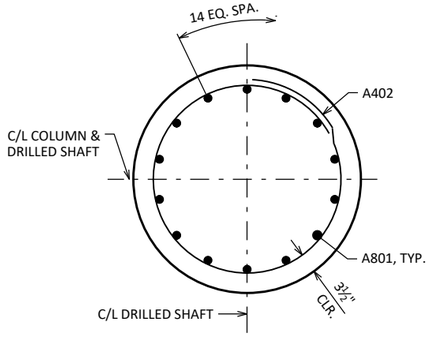
LEGEND

- ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.
- ⚠ 2 - 2" DIA. NON-METALLIC 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 DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 2-INCH	FOUNDATION DRILLING 36" DIA.
	(CY)	(LBS)	(LBS)	(EACH)	(LF)
I/II	16	1,160	1,090	1	32

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS.



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

BILL OF BARS - STANDARD DESIGN TYPE I OR II

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

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

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UPDATED: JAN. 2023

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4-CHORD TRUSS CANTILEVER FOUNDATIONS

SHEET VII

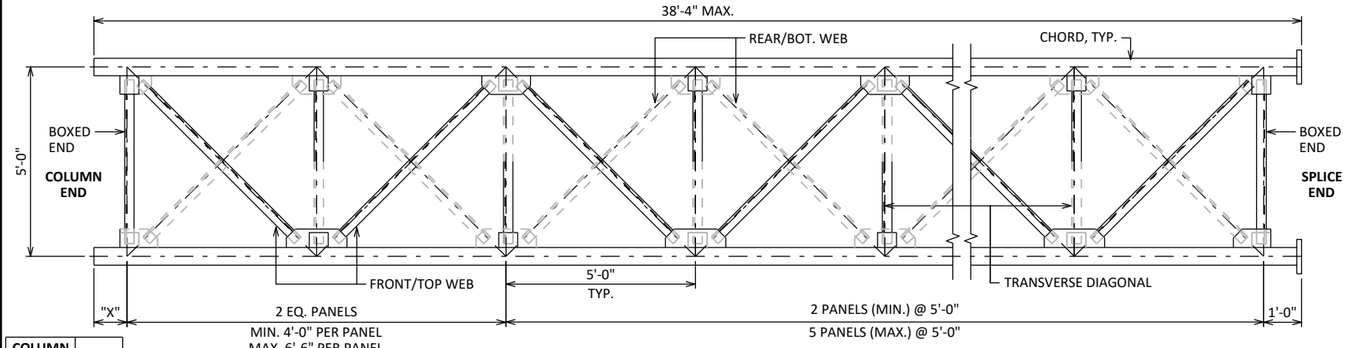
SCALE = 3.0

8

8

STATE PROJECT NUMBER

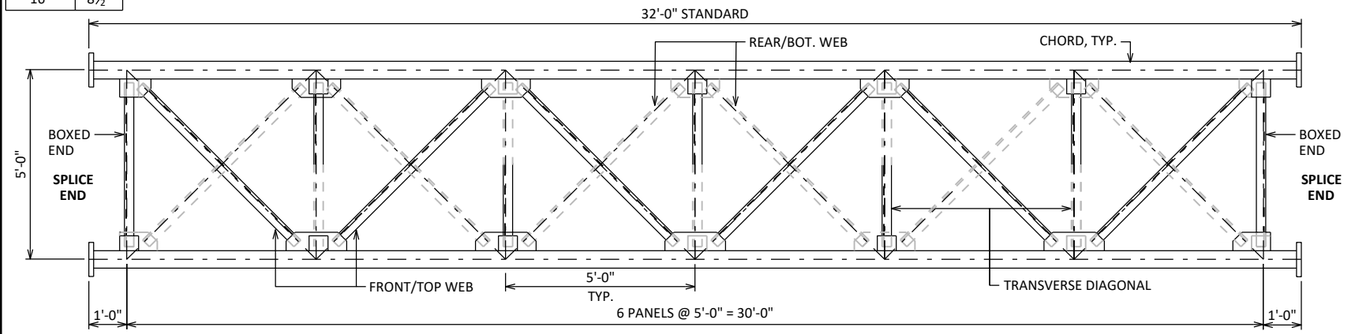
STANDARD



COLUMN "OD"	"X"
12¾"	10⅛"
14"	9½"
16"	8½"

END TRUSS SECTION

◐ LOOKING AT F.F., TOP SIMILAR



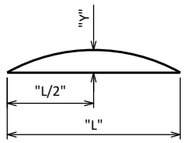
CENTER TRUSS SECTION

◐ LOOKING AT F.F., TOP SIMILAR.

CAMBER VALUES

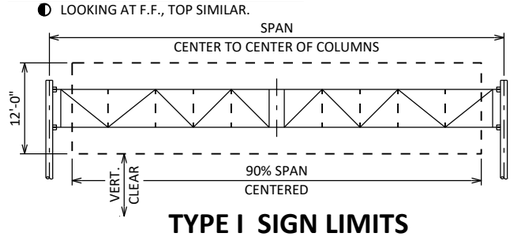
SPAN "L"	"Y"	
	TYPE I	DMS
60'-0"	1"	1¼"
82'-0"	1½"	1⅞"
102'-0"	2⅛"	2⅝"
114'-0"	2⅝"	3¼"
130'-0"	3¼"	4"

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

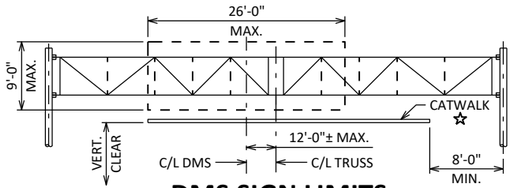


CAMBER DIAGRAM

CAMBER SHALL BE BUILT INTO THE TRUSS DURING FABRICATION. SHIM PLATES BETWEEN TRUSS SECTIONS TO CREATE CAMBER SHALL NOT BE ALLOWED.

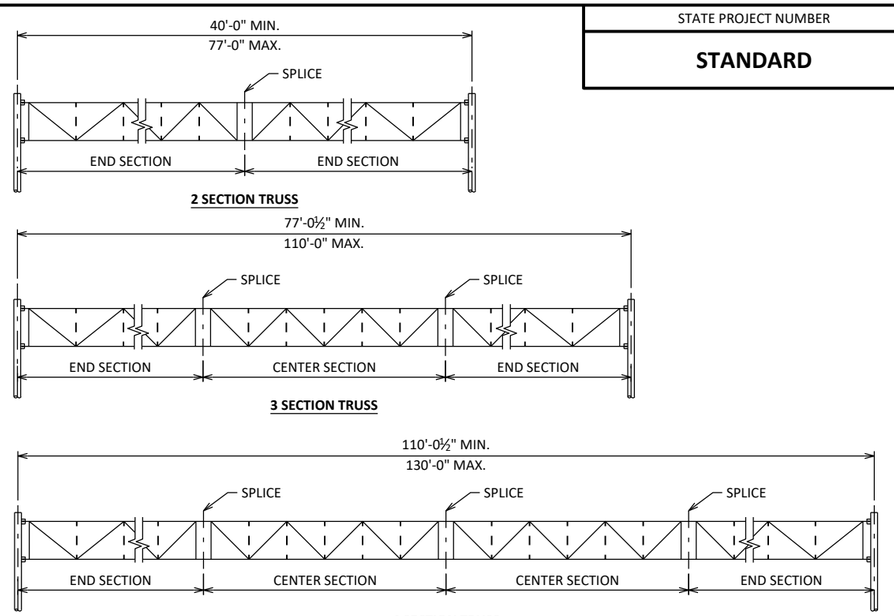


TYPE I SIGN LIMITS



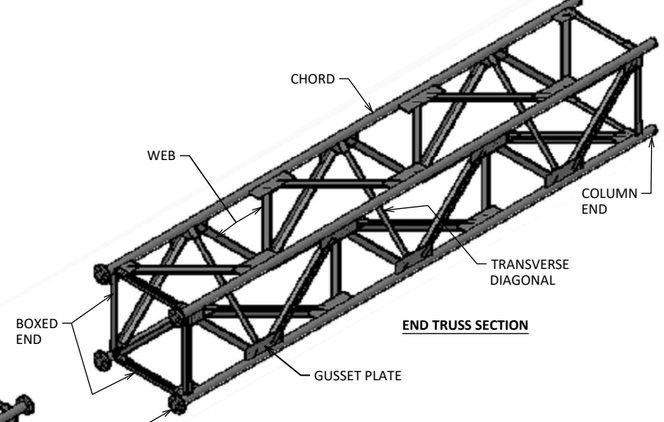
DMS SIGN LIMITS

4,500 LB MAX DMS WEIGHT, INCLUDES DMS VERTICAL SUPPORT MEMBERS

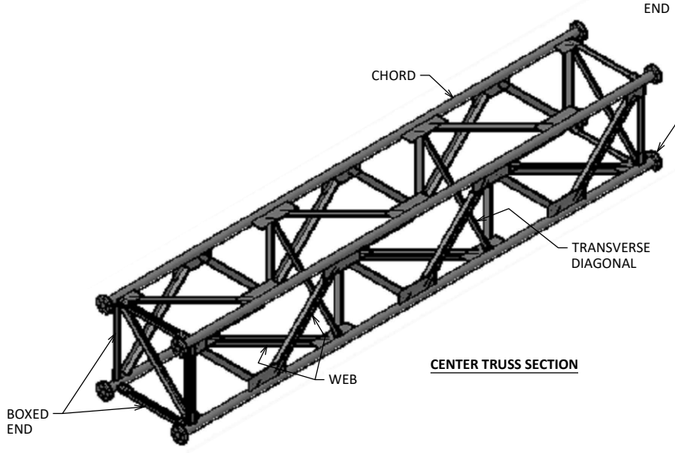


TRUSS CONFIGURATIONS

TRUSS SYMETRICAL ABOUT C/L OF SPAN



END TRUSS SECTION



CENTER TRUSS SECTION

TYPICAL TRUSS SECTION

◐ THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES. INTERIOR DIAGONALS SHOULD CONNECT TO TOP AND BOTTOM TRUSS WEB PANEL POINTS.

FULL SPAN 4-CHORD TRUSS MEMBER TABLE

STANDARD DESIGN TRUSS	TYPE I SIGN AREA (SQ. FT)	DMS AREA (SQ. FT.)	MAXIMUM SPAN	CHORD "OD" X THK	WEB W X D X THK	BOXED END W X D X THK	TRANSVERSE DIAGONAL W X D X THK	SPLICE PLATE "OD" X THK	CHORD SPLICE NO. ¾" BOLTS
I	648	234	60'-0"	5.563" X 0.258"	L3½ X 3½ X 5/16	L3 X 3 X ¼	L3 X 3 X ¼	11⅝" X 1½"	8
II	885	234	82'-0"	5.563" X 0.375"	L3½ X 3½ X ⅜	L3 X 3 X ¼	L3 X 3 X ¼	11⅝" X 1½"	8
III	1102	234	102'-0"	5.563" X 0.500"	L4 X 4 X ⅜	L3 X 3 X ¼	L3 X 3 X ¼	11⅝" X 1½"	8
IV	1232	234	114'-0"	6.625" X 0.375"	L4 X 4 X 7/16	L3 X 3 X ¼	L3 X 3 X ¼	1'-0⅝" X 1½"	8
V	1404	234	130'-0"	6.625" X 0.500"	L4 X 4 X ½	L3 X 3 X ¼	L3 X 3 X ¼	1'-0⅝" X 1½"	8

LEGEND

☆ FOR OSS WITH DMS ONLY, SEE "CATWALK DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS FULL SPAN DETAILS

SHEET I

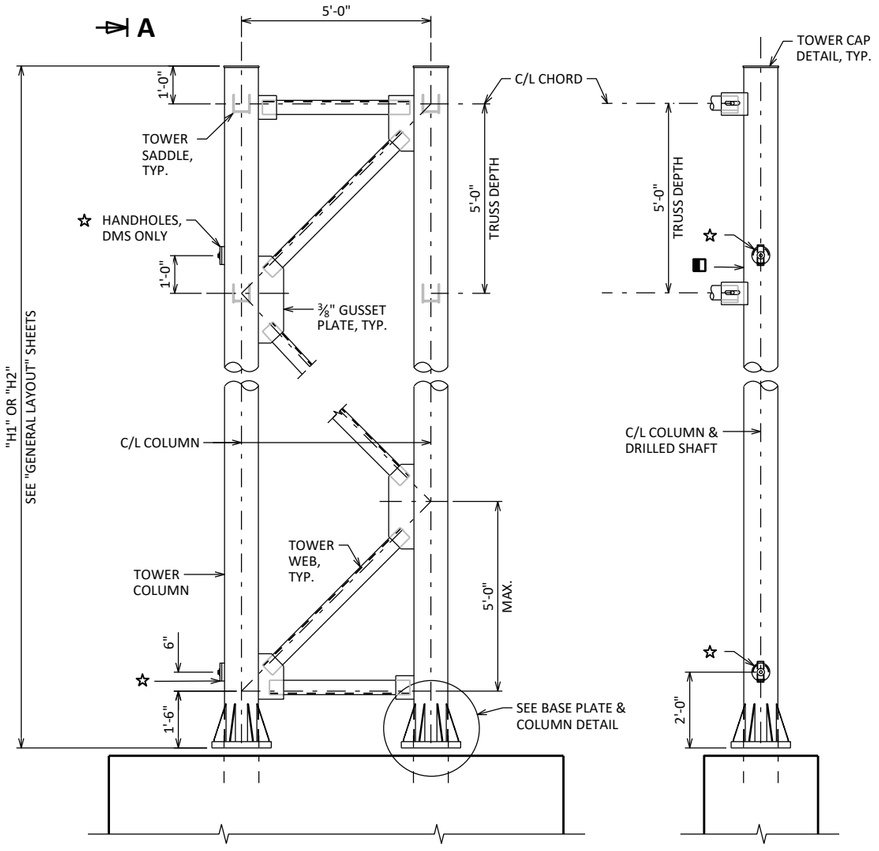
SCALE = 4.0

8

8

STATE PROJECT NUMBER

STANDARD

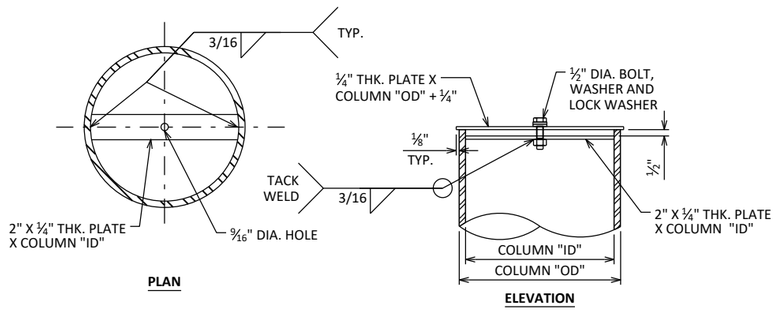


A

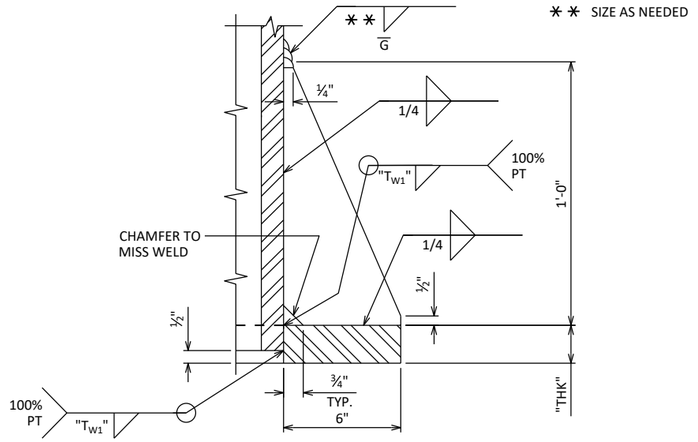
END VIEW COLUMN TRUSS

LOOKING AT OUTSIDE FACE OF COLUMN

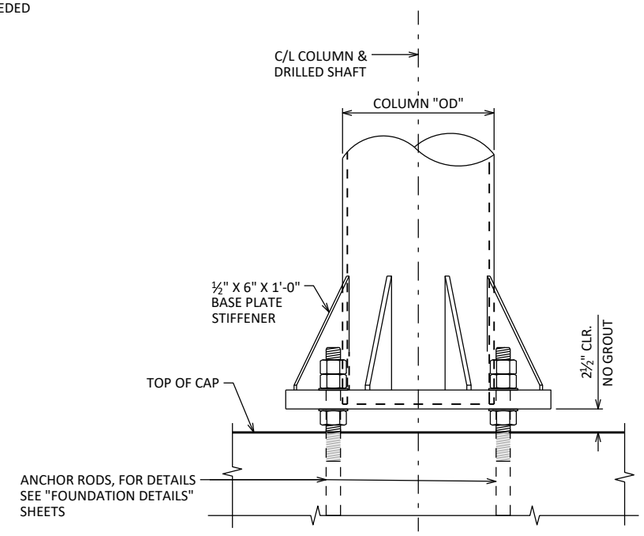
LOOKING AT F.F. OF STRUCTURE, OTHER COLUMN TRUSS SIMILAR



TOWER CAP DETAIL



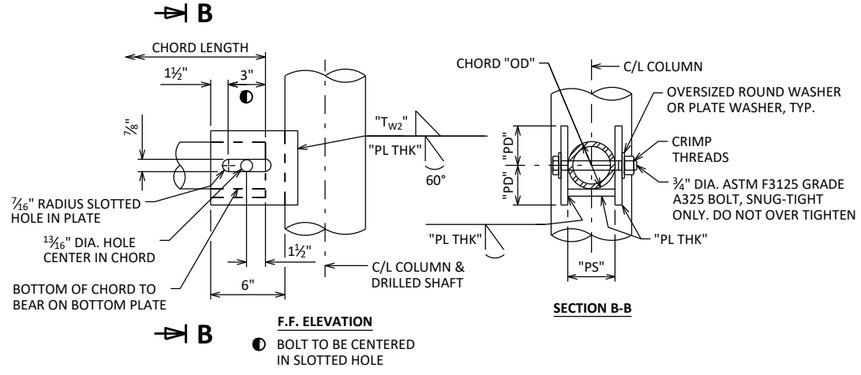
BASE PLATE STIFFENER DETAIL



BASE PLATE & COLUMN DETAIL

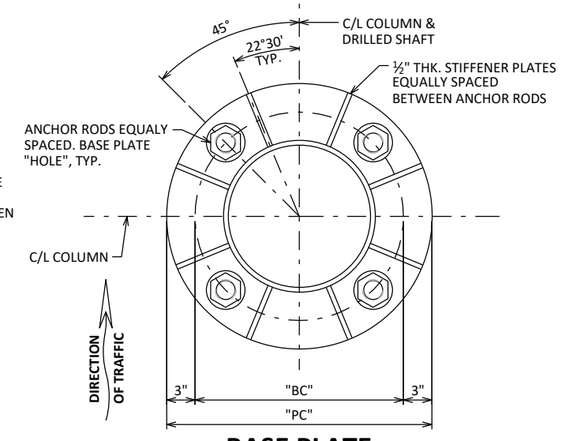
LOOKING AT F.F. OF STRUCTURE

B



TOWER SADDLE CONNECTION DETAILS

BOLT AND HOLE DIMENSIONS SHOWN ARE MINIMUM



BASE PLATE

PLAN

FULL SPAN 4-CHORD COLUMN MEMBER TABLE

STANDARD DESIGN TYPE	MAXIMUM COLUMN HEIGHT	COLUMN "OD" X THK	WEB W X D X THK	STIFFENER THK X W X D	BASE PLATE					TOWER SADDLE CONNECTION			
					T_{W1}	"HOLE"	"THK"	"BC"	"PC"	T_{W2}	"PL THK"	"PS"	"PD"
I	31'-0"	12¾" X 0.250"	L3½ X 3½ X ⅜	½" X 6" X 1'-0'	5/16"	1 13/16"	2"	1'-6¾"	2'-0¾"	¼"	⅜"	5¾"	3 9/16"
II	31'-0"	12¾" X 0.375"	L4 X 4 X ⅜	½" X 6" X 1'-0'	5/16"	1 13/16"	2"	1'-6¾"	2'-0¾"	¼"	⅜"	5¾"	3 9/16"
III	31'-0"	12¾" X 0.500"	L4 X 4 X ½	½" X 6" X 1'-0'	5/16"	2 1/16"	2"	1'-6¾"	2'-0¾"	¼"	7/16"	5¾"	3 9/16"
IV	31'-0"	14" X 0.500"	L5 X 5 X 7/16	½" X 6" X 1'-0'	5/16"	2 1/16"	2"	1'-8"	2'-2"	¼"	7/16"	6 13/16"	4 1/16"
V	31'-0"	16" X 0.500"	L5 X 5 X ½	½" X 6" X 1'-0'	5/16"	2 1/16"	2"	1'-10"	2'-4"	¼"	½"	6 13/16"	4 1/16"

LEGEND

☆ FOR OSS WITH DMS ONLY, PROVIDE HANDHOLES AT COLUMN ADJACENT TO DMS. SEE "ELECTRICAL DETAILS" SHEET.

◧ FOR OSS WITH DMS ONLY, DRILL AND TAP FOR 2 - 2" STD. PIPE THREADS. LOCATE CENTER OF BOTTOM HOLE 6" ABOVE TOP OF BOTTOM CHORD AND SPACE VERTICALLY AT 6" C/C. PLACE CONDUIT PLUG IN HOLES THAT ARE NOT USED FOR WIRING SIGN PANELS. SEE "ELECTRICAL DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: OCT. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS FULL SPAN COLUMN DETAILS

SHEET II

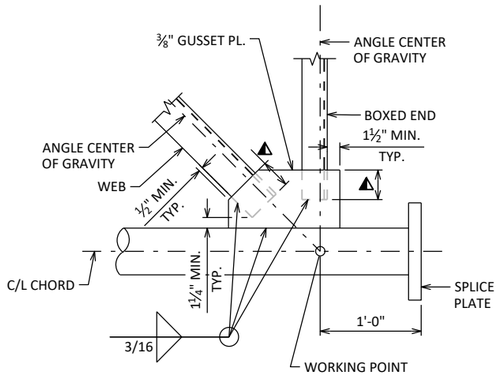
SCALE = 4.0

8

8

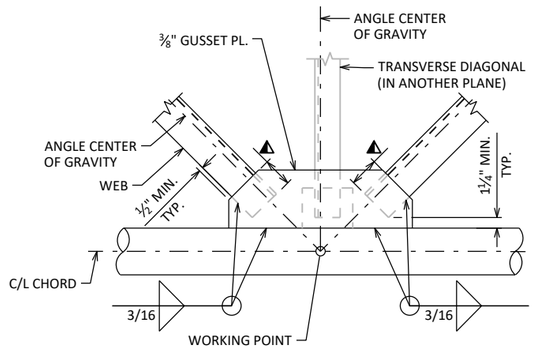
STATE PROJECT NUMBER

STANDARD

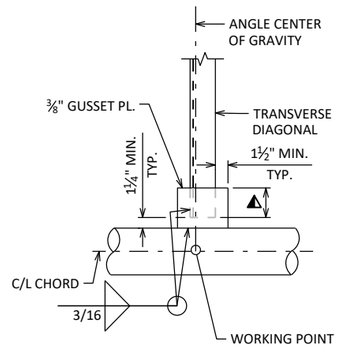


WELDED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE,
CONNECTION AT COLUMN END SIMILAR



WELDED PANEL CONNECTION



WELDED TRANSVERSE DIAGONAL CONNECTION

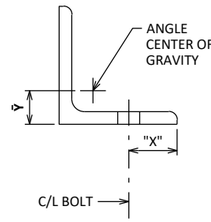
WEB MEMBERS NOT SHOWN FOR CLARITY

MEMBER CONNECTION DATA

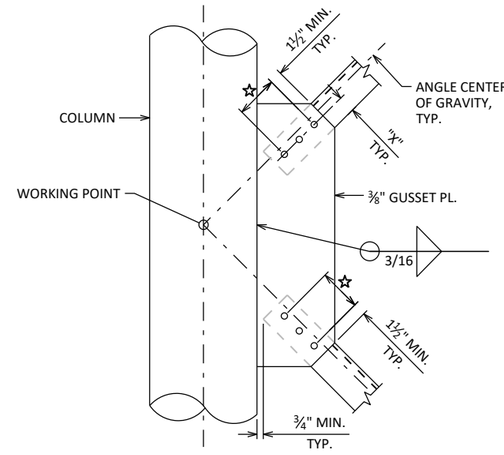
STANDARD DESIGN TYPE	WELD LEG MIN. LENGTH		NO. OF BOLTS	
	◭	◐	◪	☆
I	3"	4"	3	3
II	3½"	6"	3	3
III	3½"	6"	5	3
IV	4"	6¼"	5	4
V	4½"	7¼"	5	4

FOR ALL ANGLE TO GUSSET CONNECTIONS,
BOLT SPACING = 2½"

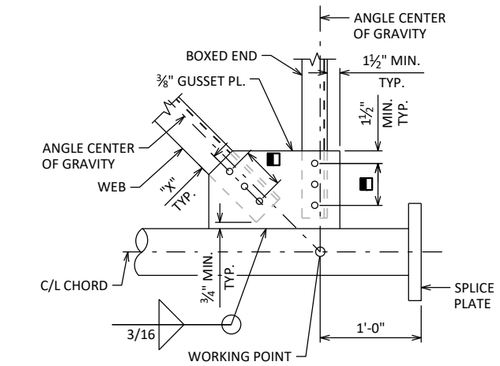
ANGLE DATA



ANGLE SIZE	ȳ	"X"
L3 X 3 X ¼	0.84"	1¼"
L3½ X 3½ X 5⁄16	0.98"	1½"
L3½ X 3½ X ⅜	1.00"	1½"
L4 X 4 X ⅜	1.13"	1½"
L4 X 4 X 7⁄16	1.15"	1½"
L4 X 4 X ½	1.18"	1½"
L5 X 5 X 7⁄16	1.40"	2"
L5 X 5 X ½	1.42"	2"

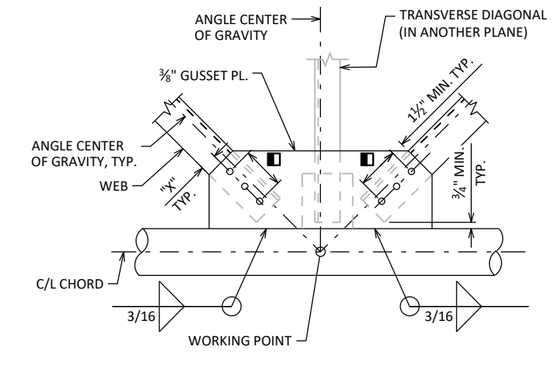


BOLTED COLUMN WEB CONNECTION

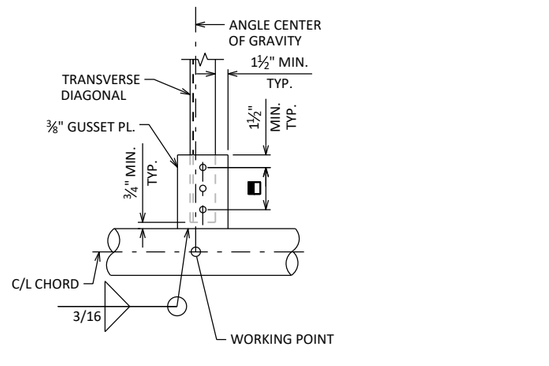


BOLTED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE,
CONNECTION AT COLUMN END SIMILAR

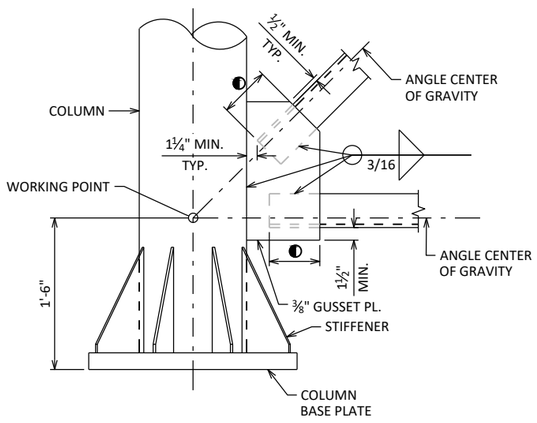


BOLTED PANEL CONNECTION



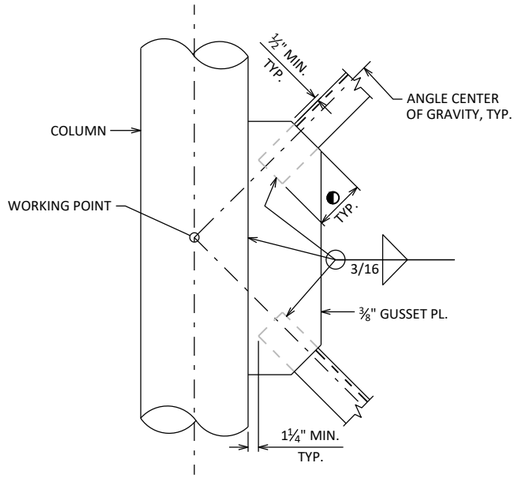
BOLTED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY

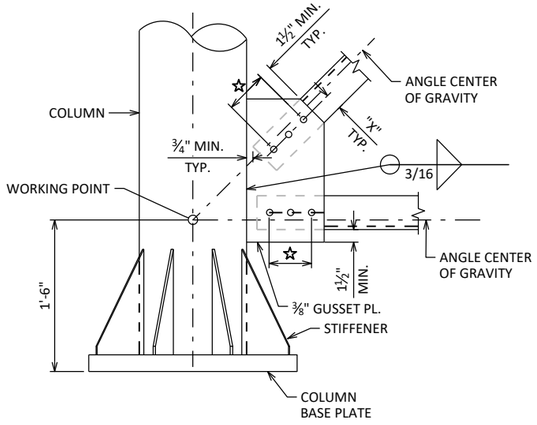


WELDED COLUMN BOTTOM CONNECTION

TOP CONNECTION SIMILAR



WELDED COLUMN WEB CONNECTION



BOLTED COLUMN BOTTOM CONNECTION

TOP CONNECTION SIMILAR

NOTE:

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS
PLANS CK'D: BOS

4-CHORD TRUSS FULL SPAN CONNECTIONS 1

SHEET III

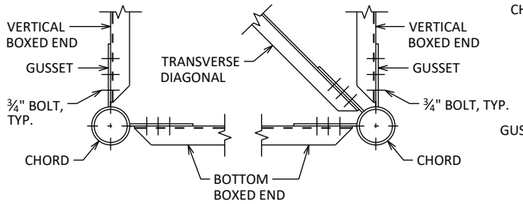
SCALE = 3.0

8

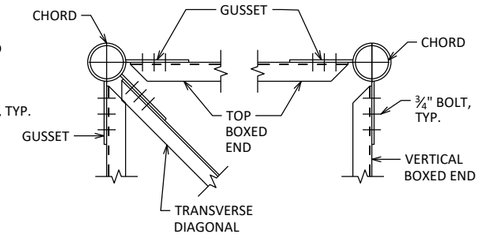
8

STATE PROJECT NUMBER

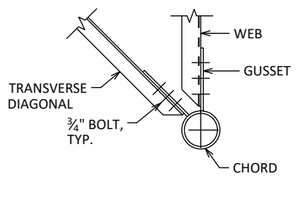
STANDARD



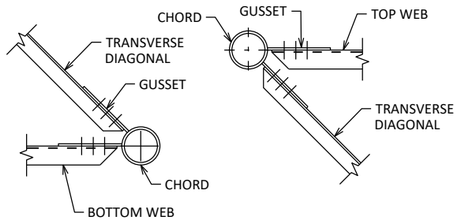
END VIEW 1 **END VIEW 2**



END VIEW 3 **END VIEW 4**

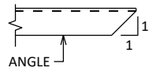


END VIEW 5

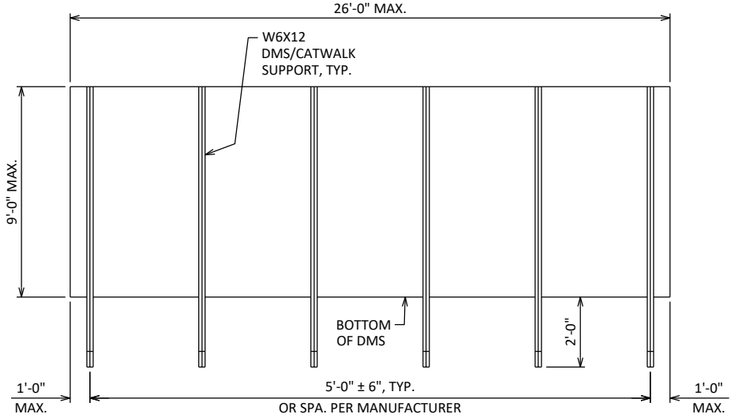


END VIEW 6

END VIEW 7

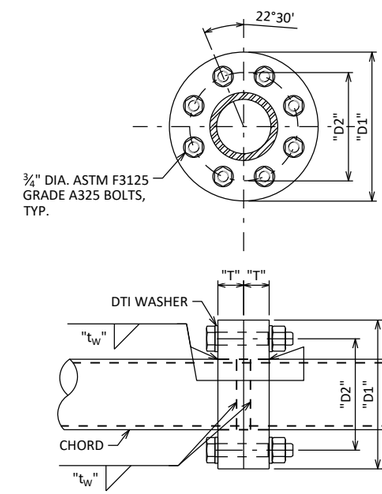


CLIP DETAIL



DMS MOUNTING POST SPACING DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



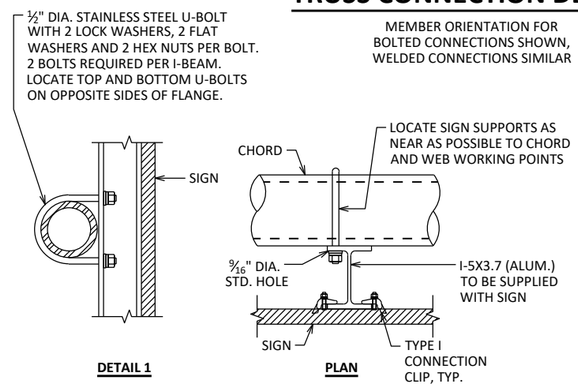
CHORD SPLICE PLATE DETAIL

CHORD SPLICE CONNECTION DATA

STANDARD DESIGN TYPE	"D1"	"D2"	"T"	"t_w"	NO. OF BOLTS
I	11⅝"	8⅝"	1½"	5/16"	8
II	11⅝"	8⅝"	1½"	5/16"	8
III	11⅝"	8⅝"	1½"	⅜"	8
IV	1'-0⅝"	9⅝"	1½"	⅜"	8
V	1'-0⅝"	9⅝"	1½"	⅜"	8

TRUSS CONNECTION DETAILS

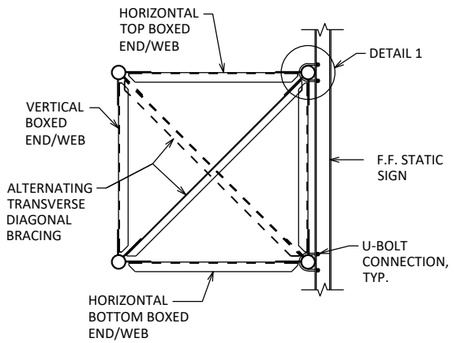
MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR



DETAIL 1 **PLAN**

TYPICAL SIGN CONNECTION

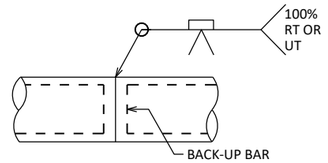
USE FOR TYPE I AND II SIGNS, TYPE I SIGN SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.



SECTION THRU TRUSS - STATIC SIGN

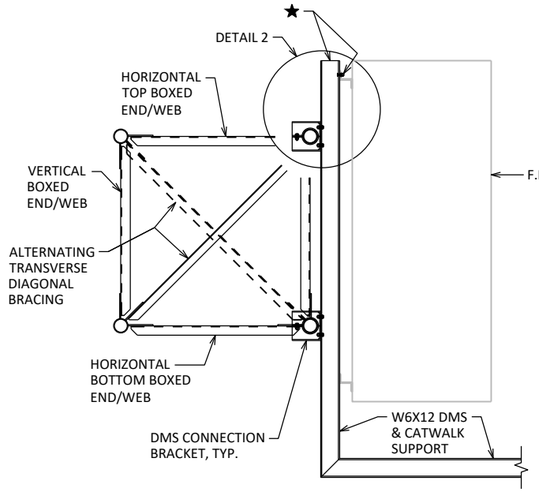
FOR SIGN CONNECTION

ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL. HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



CHORD SPLICE

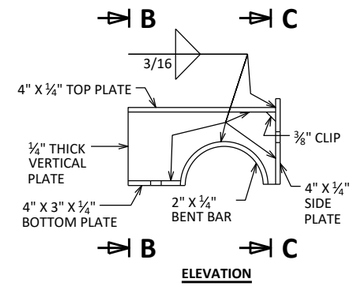
NOT TO BE USED AT ENDS OF TRUSS SEGMENTS.
SEPARATE CHORD SPLICE FROM GUSSET PLATES BY 6" MIN.



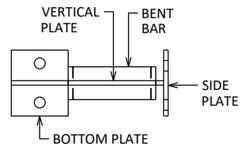
SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

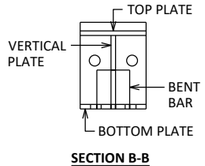
★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12. FIELD DRILLED HOLES IN STEEL SUPPORTS MUST BE COLD GALVANIZED.



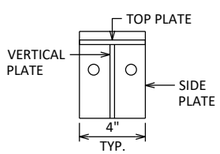
ELEVATION



PLAN



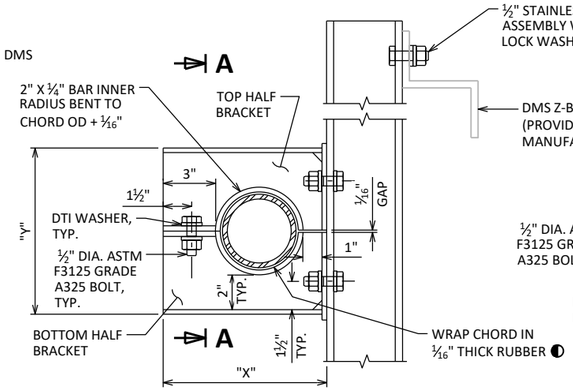
SECTION B-B



SECTION C-C

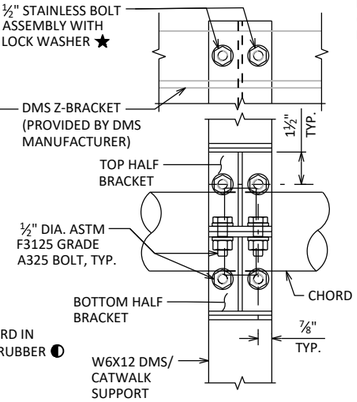
DMS WELDED PLATE CONNECTION DETAILS

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.



DETAIL 2

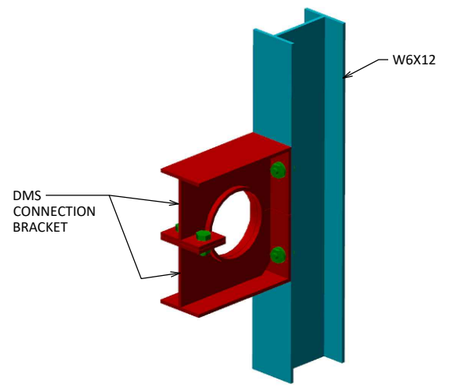
CHORD "OD"	"X"	"Y"
5.563"	10⅜"	10⅝"
6.625"	11⅞"	11¹¹⁄₁₆"



SECTION A-A

TYPICAL DMS CONNECTION

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



3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: OCT. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS FULL SPAN CONNECTIONS 2

SHEET IV

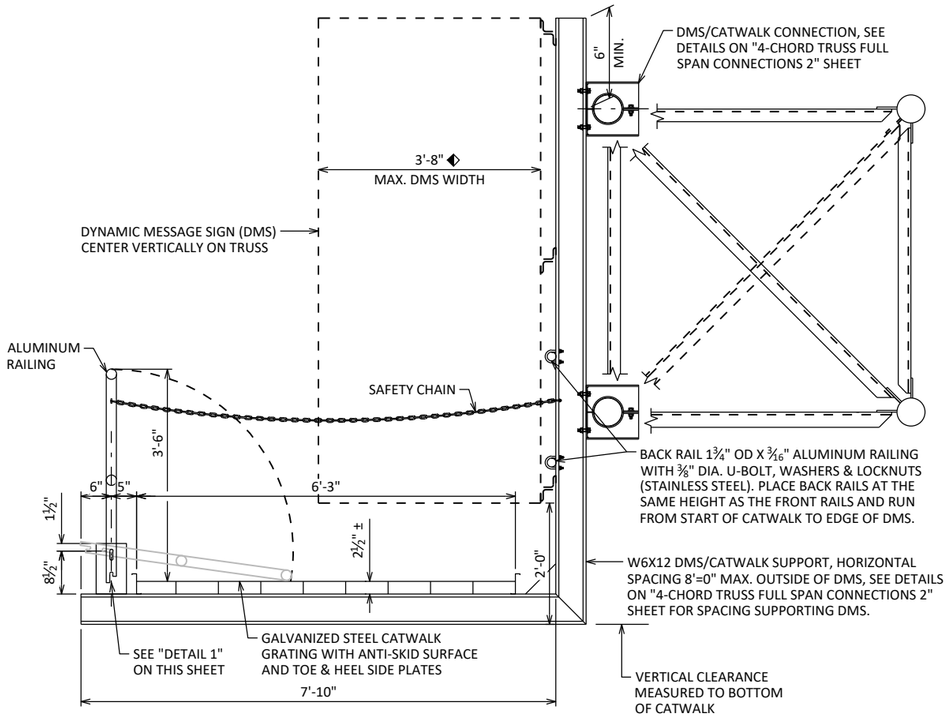
SCALE = 4.0

8

8

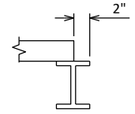
STATE PROJECT NUMBER

STANDARD

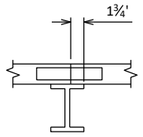


SECTION THRU WALKWAY

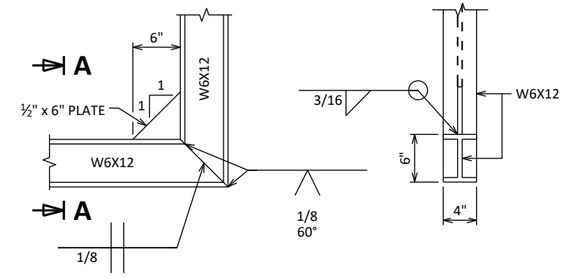
◆ DMS MAY BE RECTANGULAR OR TRAPEZOIDAL. IF DMS HAS A TRAPEZOIDAL SHAPE, THIS DIMENSION REPRESENTS THE AVERAGE WIDTH.



CATWALK TERMINATION DETAIL

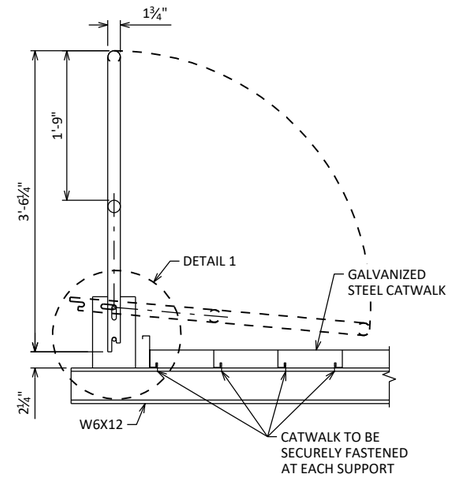


CATWALK SPLICE LOCATION DETAIL

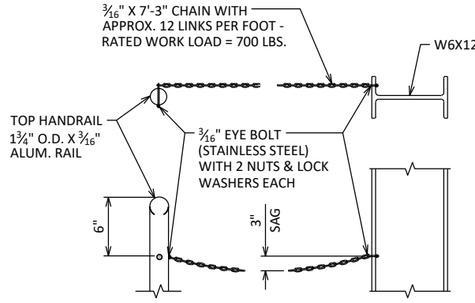


CATWALK BRACKET DETAIL

SECTION A-A

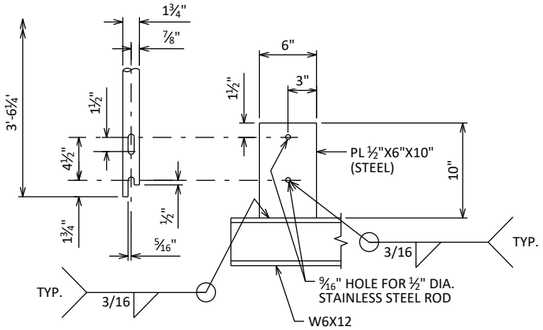


RAIL POST DETAIL

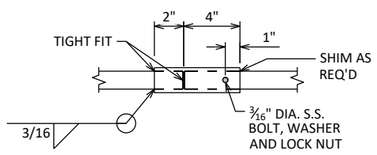


SAFETY CHAIN DETAIL

PROVIDE SAFETY CHAIN AT EACH END OF CATWALK

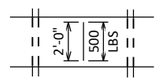


DETAIL 1



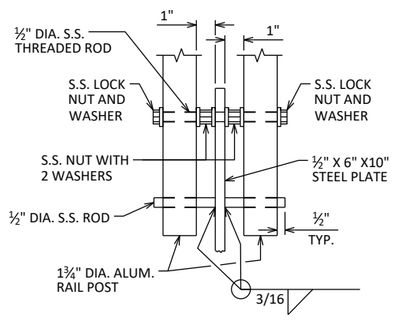
BACKRAIL SPLICE

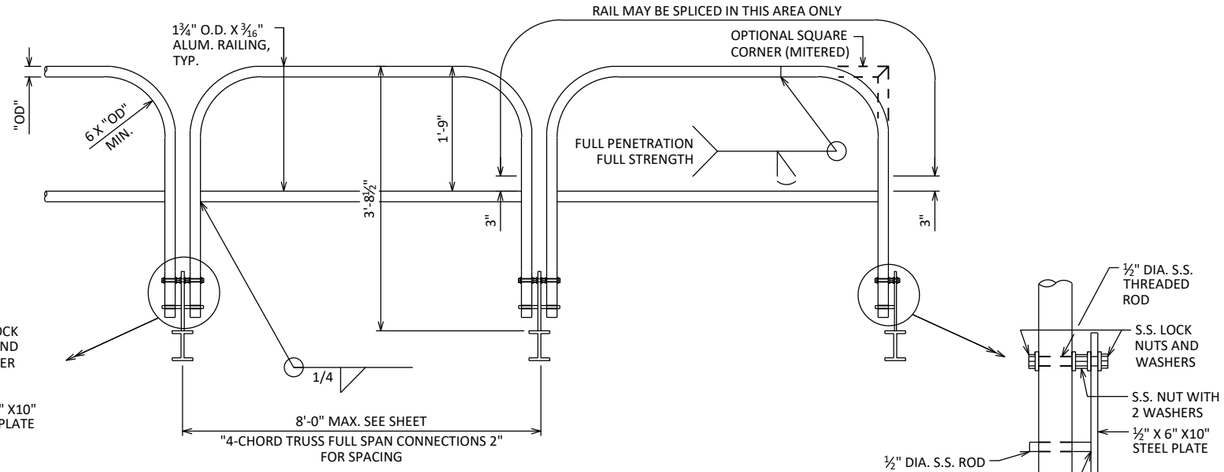
ONE SPLICE ALLOWED FOR LENGTHS OVER 30'-0"



CATWALK LOADING DIAGRAM

NOTE:
CATWALK GRATING SHALL MEET THE CURRENT AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" WITH 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.





TYPICAL FRONT RAILING DETAILS

S.S. - STAINLESS STEEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS FULL SPAN CATWALK DETAILS

SHEET V

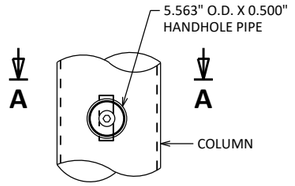
SCALE = 2.5

8

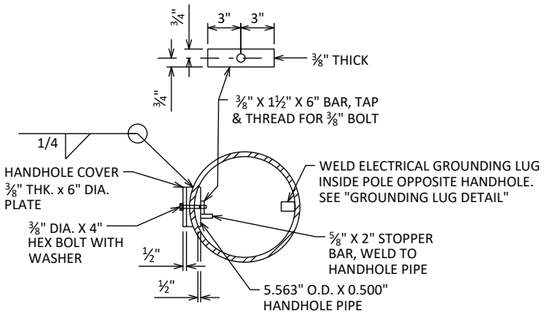
8

STATE PROJECT NUMBER

STANDARD



ELEVATION

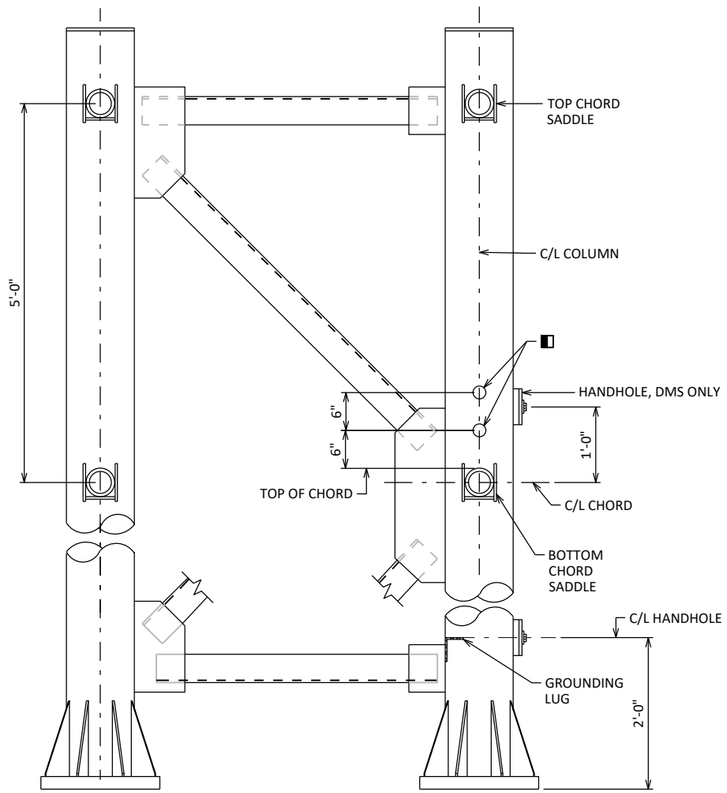


SECTION A-A

HANDHOLE DETAILS

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.

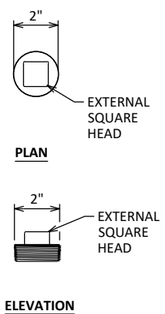
UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



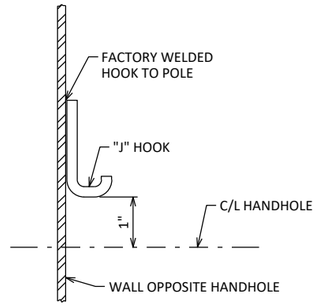
CONDUIT HOLE LOCATIONS

LOOKING AT INSIDE FACE OF COLUMN

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES

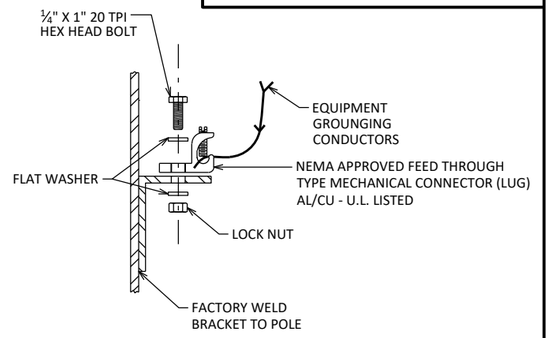


CONDUIT PLUG DETAILS



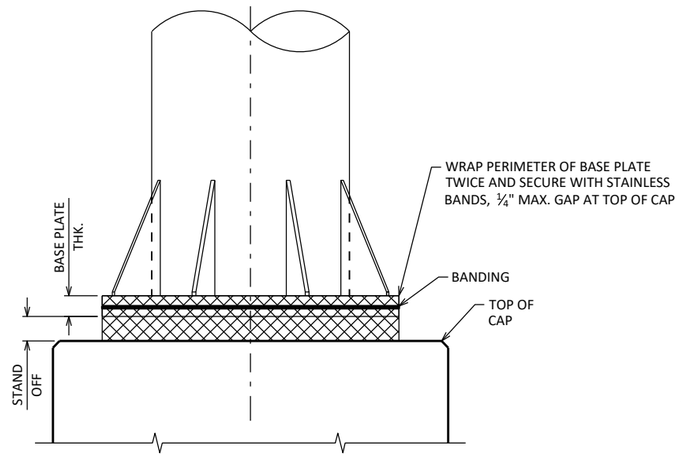
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE 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.



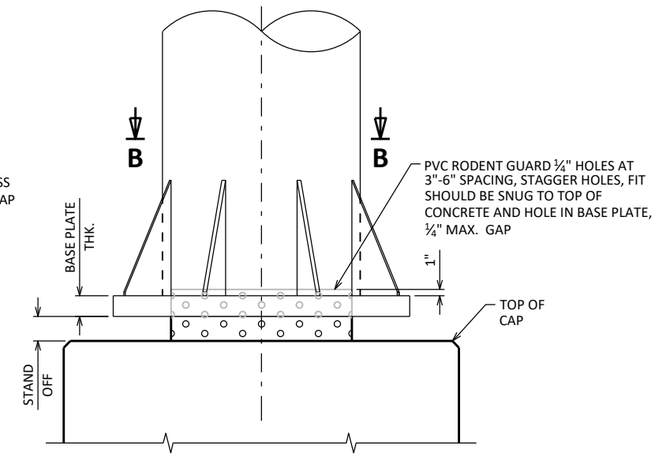
GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



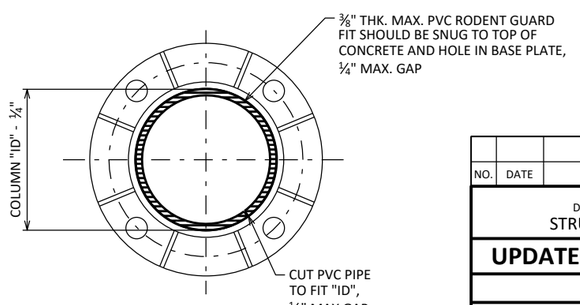
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

4-CHORD TRUSS FULL SPAN ELECTRICAL DETAILS

SHEET VI

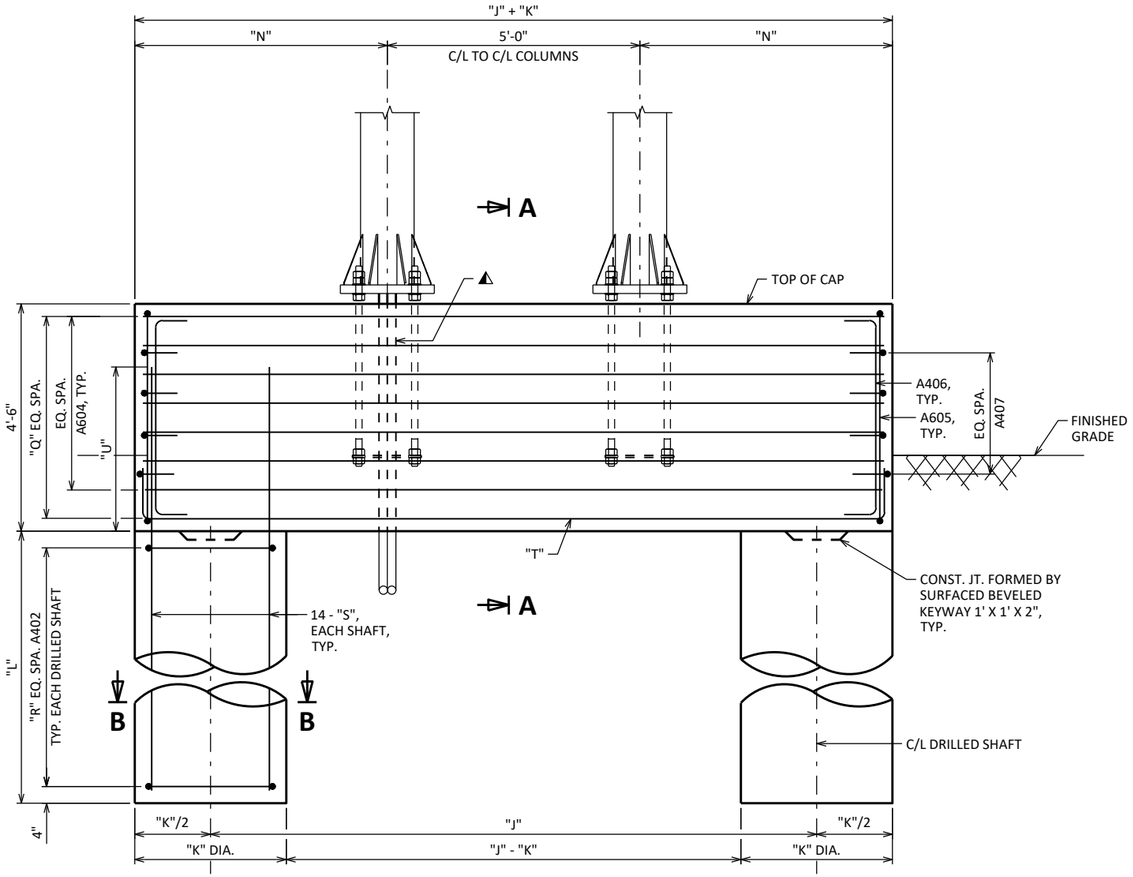
SCALE = 2.0

8

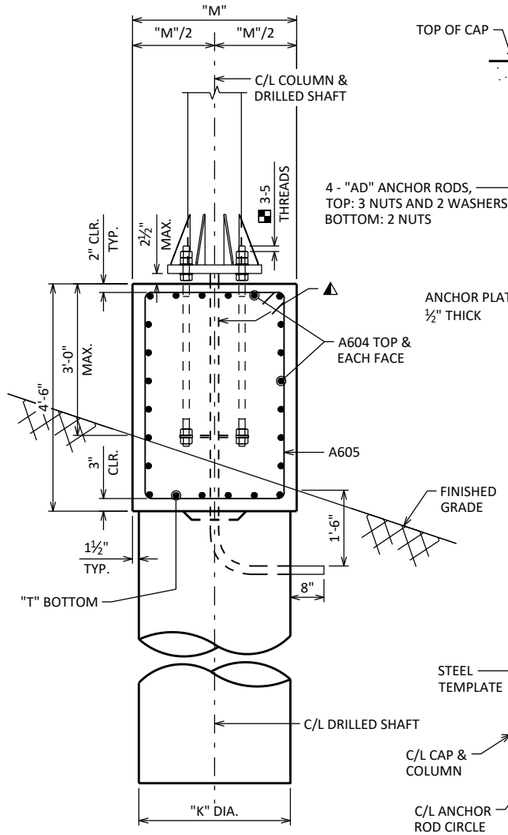
8

STATE PROJECT NUMBER

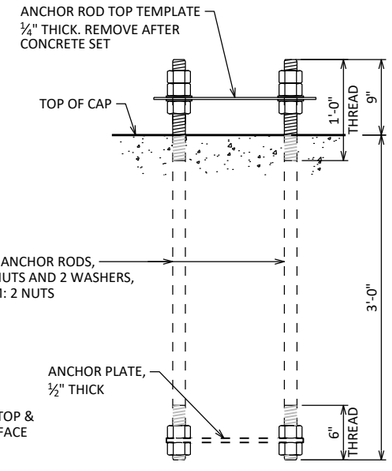
STANDARD



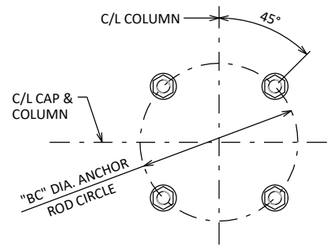
ELEVATION



SECTION A-A



ELEVATION

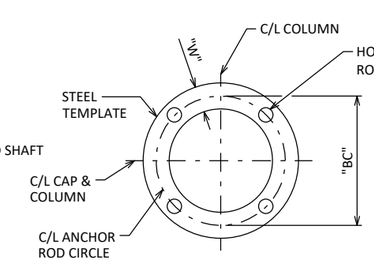


PLAN

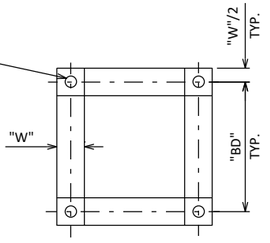
ANCHOR ROD ASSEMBLY DETAILS

SINGLE ANCHOR ASSEMBLY SHOWN, 4 ANCHOR RODS PER ASSEMBLY

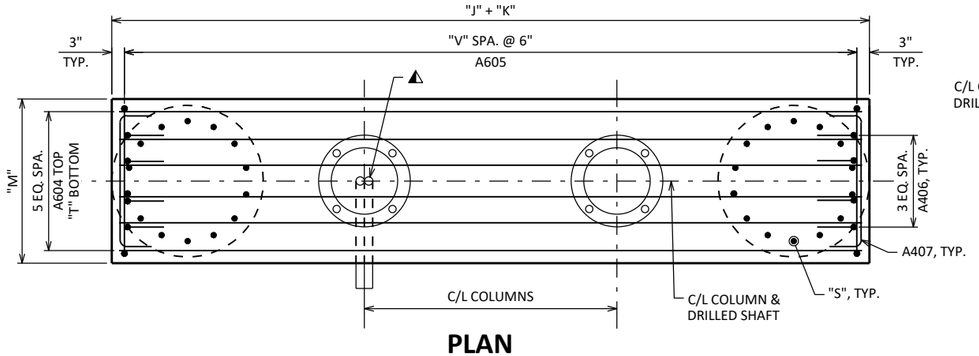
CENTER ANCHOR ROD ASSEMBLY AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.



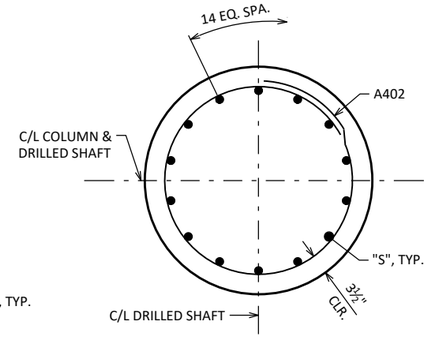
ANCHOR PLATE & TOP TEMPLATE



ALTERNATE ANCHOR PLATE & TOP TEMPLATE



PLAN



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

FOUNDATION, REINFORCING & ANCHOR PLATE DATA

STANDARD DESIGN TYPE	FOUNDATION DIMENSIONS											ANCHOR PLATE DIMENSIONS			
	"J"	"K"	"L"	"M"	"N"	"Q"	"R"	"S"	"T"	"U"	"V"	"AD"	"BC"	"BD"	"W"
I	9'-0"	3'-0"	19'-0"	3'-3"	3'-6"	7	19	A801	A603	2'-2"	23	1½"	1'-6¾"	1'-1¼"	3"
II	12'-0"	3'-0"	22'-0"	3'-3"	5'-0"	7	22	A801	A603	2'-2"	29	1½"	1'-6¾"	1'-1¼"	3"
III	12'-0"	3'-6"	23'-0"	3'-9"	5'-3"	7	23	A901	A703	2'-9"	29	1¾"	1'-6¾"	1'-1¼"	3½"
IV	15'-0"	3'-6"	23'-0"	3'-9"	6'-9"	7	23	A901	A703	2'-9"	36	1¾"	1'-8"	1'-2⅛"	3½"
V	15'-0"	4'-0"	23'-0"	4'-3"	7'-0"	8	23	A1001	A703	3'-5"	37	1¾"	1'-10"	1'-3⅝"	3½"

LEGEND

- ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.
- ⚠ 2 - 2" DIA. NON-METALLIC 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 DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JUNE 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS FULL SPAN FOUNDATIONS 1

SHEET VII

SCALE = 3.0

8

8

STATE PROJECT NUMBER

STANDARD

BILL OF BARS

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

STANDARD DESIGN TYPE I

BAR MARK	COAT	NO. ✳ REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		56	24'-2"			DRILLED SHAFT - VERTICAL
A402		80	9'-3"	X		DRILLED SHAFT - HORIZONTAL
A603	X	12	13'-3"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	48	14'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-5"	X		CAP - HORIZONTAL - EACH END

STANDARD DESIGN TYPE II

BAR MARK	COAT	NO. ✳ REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		56	24'-2"			DRILLED SHAFT - VERTICAL
A402		92	9'-3"	X		DRILLED SHAFT - HORIZONTAL
A603	X	12	16'-3"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	14'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	60	14'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-5"	X		CAP - HORIZONTAL - EACH END

STANDARD DESIGN TYPE III

BAR MARK	COAT	NO. ✳ REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		56	25'-9"			DRILLED SHAFT - VERTICAL
A402		96	10'-6"	X		DRILLED SHAFT - HORIZONTAL
A703	X	12	17'-1"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	15'-2"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	62	15'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-11"	X		CAP - HORIZONTAL - EACH END

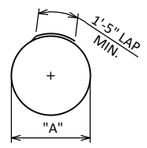
STANDARD DESIGN TYPE IV

BAR MARK	COAT	NO. ✳ REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		56	25'-9"			DRILLED SHAFT - VERTICAL
A402		96	10'-6"	X		DRILLED SHAFT - HORIZONTAL
A703	X	12	20'-1"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	18'-2"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	74	15'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	3'-11"	X		CAP - HORIZONTAL - EACH END

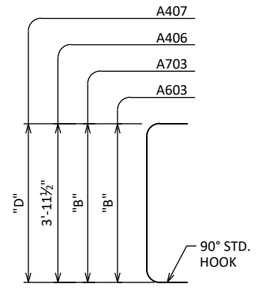
STANDARD DESIGN TYPE V

BAR MARK	COAT	NO. ✳ REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		56	26'-5"			DRILLED SHAFT - VERTICAL
A402		96	12'-1"	X		DRILLED SHAFT - HORIZONTAL
A703	X	12	20'-7"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	36	18'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	76	16'-10"	X		CAP - STIRRUP
A406	X	16	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	16	4'-5"	X		CAP - HORIZONTAL - EACH END

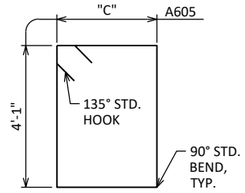
✳ VALUES SHOWN ARE FOR BOTH FOUNDATIONS, DIVIDE VALUES BY 2 IF A STANDARD FOUNDATION IS USED WITH A NON-STANDARD FOUNDATION.



A402



A603, A703, A406, A407



A605

STANDARD DESIGN TYPE	"A"	"B"	"C"	"D"
I	2'-5"	11'-7"	2'-11"	2'-9½"
II	2'-5"	14'-7"	2'-11"	2'-9½"
III	2'-11"	15'-1"	3'-5"	3'-3½"
IV	2'-11"	18'-1"	3'-5"	3'-3½"
V	3'-5"	18'-7"	3'-11"	3'-9½"

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 1½-INCH	ANCHOR ASSEMBLY 1¾-INCH	FOUNDATION DRILLING (DIA.) (LF)		
	(CY)	(LBS)	(LBS)	(EACH)	(EACH)	36"	42"	48
I	33	4,110	2,020	4	---	76	---	---
II	40	4,180	2,510	4	---	88	---	---
III	53	5,280	2,800	---	4	---	92	---
IV	56	5,750	3,320	---	4	---	92	---
V	70	7,140	3,530	---	4	---	---	92

✳✳ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS. VALUES SHOWN ARE FOR BOTH FOUNDATIONS, DIVIDE VALUES BY 2 IF A STANDARD FOUNDATION IS USED WITH A NON-STANDARD FOUNDATION. ✳✳

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS FULL SPAN FOUNDATIONS 2

SHEET VIII

SCALE = 1.0

8

8