GENERAL NOTES

1. THE DESIGN/UPRIGHT POST HEIGHT IS FROM THE CENTER OF THE TRUSS/ARM TO THE BOTTOM OF THE BASE PLATE. THE GAP BETWEEN THE BOTTOM OF THE BASE PLATE AND THE TOP OF FOUNDATION IS NOT CONSIDERED IN THE HEIGHT CALCULATIONS. THIS REQUIRED GAP BETWEEN BASE AND FOUNDATION IS NOTED AS "BOLT DIAMETER PLUS 1" MAX" ON ALL DESIGN AND ERECTION DRAWINGS. NOTE THE AASHTO MAXIMUM LIMIT IS (2) BOLT DIAMETERS.
2. ANCHOR BOLTS – ROD = ASTM F1554, GRADE 55, S1
   – WASHERS = ASTM F436
   – NUTS = ASTM A563, GR DH OR A194, GR 2H
3. PIPE – STEEL = ALL PIPE SHALL MEET THE FOLLOWING SPECIFICATIONS WHICH COMPLY TO THE PROPERTIES OF 52 KSI MINIMUM YIELD, 60 KSI MINIMUM ULTIMATE TENSILE, MINIMUM ELONGATION EQUAL TO 20% IN 2 INCHES, AND YIELD STRENGTH NOT TO EXCEED 82 KSI WITHOUT APPROVAL OF THE ENGINEER; ASTM A500 GR B &/or C ASTM A53 GR A &/or B, ASTM A252 GR 2, or 3, & API 5L X42 through X80
   – ALUMINUM = 6061, T6
4. PLATE – STEEL, 3/16" OR GREATER = ASTM A709, GR 50
   – STEEL, 1/8" OR LESS = ASTM A1011, TYPE 1 MINIMUM
   – STEEL, GAUGE = ASTM A1011, TYPE 1 MINIMUM
5. BAR – STEEL = ASTM A36 MINIMUM
6. WIDE FLANGE – STEEL = ASTM A992
7. CHANNEL – STEEL = ASTM A36 MINIMUM
8. ANGLE – STEEL = ASTM A36 MINIMUM
   – ALUMINUM = 6061, T6
9. REBAR – STEEL = ASTM A706, GR 60 (RUNGS)
10. GRATING – STEEL, GRIP STRUT OR EQUAL = ASTM A1011, TYPE 1 MINIMUM
11. HARDWARE – BOLTS, PRIMARY = ASTM F3125 GR A325 (UN)
    – BOLTS, SECONDARY = ASTM A307
    – U-BOLTS = MEET OR EXCEED ASTM A307
    – WASHERS, FLAT = ASTM F436 (UN)
    – WASHERS, LOCK = ANSI B18.21.1 (UN)
    – WASHERS, DTI = F959
    – NUTS – ASTM A563, GR DH OR A194, GR 2H
12. GALVANIZING – STRUCTURAL = ASTM A123
    – HARDWARE = ASTM A153
13. POLE CAPS – ALUMINUM ALLOY SAND CASTING = 356-F
14. SADDLE SHIMS – ALUMINUM = 356-T6
15. WELDING – AWS SPEC D1.1, LATEST REV
16. ALL PIPE SIZES ARE OUTSIDE DIAMETER
17. ALL WELDS TO BE 3/16 FILLET UNLESS NOTED
18. WELDS INSPECTION NOTES ARE AS FOLLOWS:
    18.1 ALL WELDS SHALL BE VISUALLY INSPECTED (VT)
    18.2 FULL PENETRATION WELDS AT SHOP SPLICES WILL BE 100% (UT) TESTED FOR MATERIAL GREATER THAN OR EQUAL TO 0.25" AND (MT) LESS THAN 0.25"
    18.3 FULL PENETRATION WELDS AT BASE PLATES AND MAST ARMS END PLATES WITH 6" DIAMETER AND GREATER ARMS REQUIRE (UT) INSPECTION. IF THE SPECIFICATIONS CALLS FOR FATIGUE DESIGN MUST BE (UT) AFTER GALVANIZE FOR TOE CRACKS
    18.4 PARTIAL PENETRATION GROOVE AND FILLET WELDS AT TUBE TO BASE PLATE CONNECTIONS REQUIRE A RANDOM SAMPLE OF 25% OF THE STRUCTURES WITH (MT) OF FULL LENGTH OF WELD. (EX: JOB OF 2 DOUBLE-POLED UPRIGHTS WOULD CONSIST OF ONE POST OF ONE UPRIGHT WHEREAS ONE POST UPRIGHT WOULD REQUIRE FULL LENGTH OF WELD TESTED)

FOUNDATION NOTES

1. CONCRETE TO BE CLASS "3000" AND f'c=3000 PSI
2. REINFORCING TO BE ASTM – A706, GRADE 60, DEFORMED, Fy = 60 KSI, fs = 24 KSI
3. REINFORCING TO BE TIED SUFFICIENTLY TO RETAIN ITS PROPER SHAPE DURING PLACEMENT.
4. REINFORCING TO BE HOOKED OR BENT PER ACI CODE.
5. CONTRACTOR TO PROVIDE CONDUIT IN FOOTING AS NECESSARY FOR ELECTRICAL SERVICE.
6. SEE STRUCTURE ERECTION DRAWINGS FOR FOOTING ELEVATIONS & ANCHOR BOLT MARKS, QUANTITIES, & SPACING. ALL ANCHOR BOLTS ARE TO BE SET USING SUPPLIED ANCHOR TEMPLATES AND SOLE PLATES.
7. CONTRACTOR SHALL BACK FILL AS NECESSARY TO COVER FOUNDATION.
8. ALL BACK FILL MUST ACHIEVE 95% COMPACTION.
9. CONSTRUCTIONS JOINT ARE ALLOWED WITH FOLLOWING REQUIREMENTS, UNLESS NOTED ON FOUNDATIONS DRAWINGS
   9.1 FOR CYLINDRICAL FOOTINGS, C.J. MUST BE LOCATED AT A MINIMUM OF 4'-3 FROM THE TOP OF THE FOOTING TO ENSURE ANCHORS ARE LOCATED IN FINAL POUR. IF A GRADE BEAM IS USED, ALL BEAMS GREATER THAN THE MINIMUM CAN BE LOCATED AT BEAM TO CYLINDER JOINT UNLESS OTHERWISE NOTED ON THE FOUNDATION DRAWINGS.
   9.2 FOR SPREAD FOOTINGS, C.J. MUST BE LOCATED AT A MINIMUM OF 4'-3 FOR THE TOP OF FOOTING FOR ALL PEDESTALS GREATER THAN 4'-0. JOINTS ARE ALLOWED AT THE PEDESTAL TO PAD LOCATION.
   9.3 ALL CONSTRUCTION JOINT SURFACES MUST BE ROUGH AND CLEAR OF ANY LOOSE OR FOREIGN MATERIAL. PRIOR TO THE PLACEMENT OF FRESH CONCRETE, JOINT SURFACES MUST BE THOROUGHLY WETTED. (USE A BONDING AGENT IF REQ'D BY SPECIFICATIONS)
10. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL FOUNDATIONS IN ACCORDANCE WITH SPECIFICATION AND PROPER CONSTRUCTION METHODS.
11. ON CYLINDRICAL FOOTING WHERE A SONOTUBE IS EITHER NOT AVAILABLE OR FEASIBLE, THE TOP PORTION OF THE CYLINDER CAN BE FORMED AS A SQUARE EQUAL TO THE DESIGNED CYLINDER DIAMETER. THE SQUARE FORM MUST START AT LEAST 6 INCHES BELOW GROUND ON THE LOWEST SIDE OF THE FOUNDATION.
12. ON CYLINDRICAL FOOTING WHERE A GRADE BEAM IS USED, THE STIRRUPS USED IN THE BEAM MAY BE SHIFTED TO CLEAR OTHER CYLINDRICAL REINFORCEMENT AND/OR ANCHOR BOLTS AS NECESSARY. NOTE: BE SURE TO MAINTAIN THE 12" MAXIMUM SPACING ON THE STIRRUPS BETWEEN THE (2) CYLINDERS AS SHOWN ON THE DRAWINGS.

INFRASTRUCTURE CONSULTING & ENGINEERING

SHOP DRAWING REVIEW

REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR DETAILS.

APPROVED ☒
APPROVED AS NOTED ☐
REVISE AND RESUBMIT ☐
REJECTED ☐

BY: EJL DATE: 12/11/2023

ALL GROUPS

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Sep 8 2023

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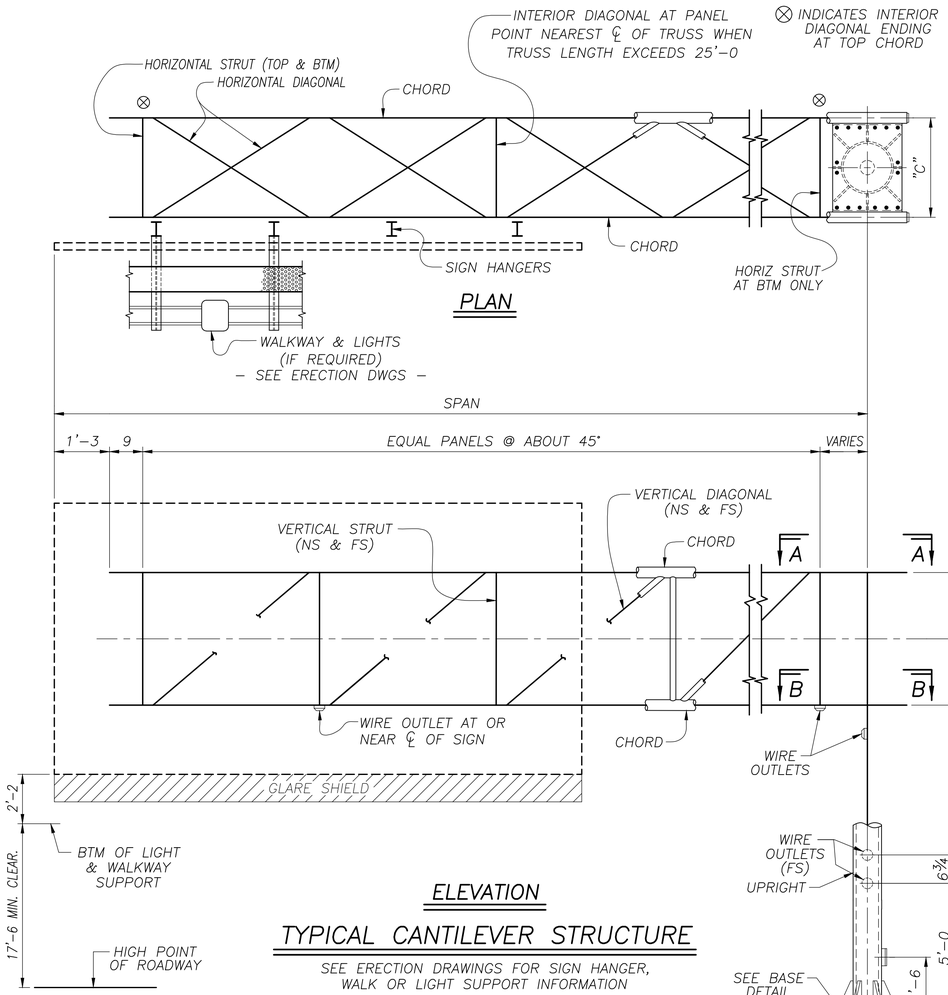
NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/21/23	IWL	DAL

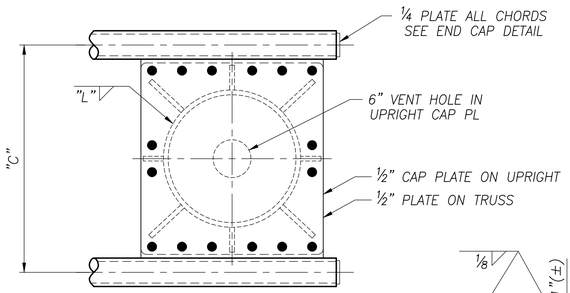
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	GENERAL NOTES FOR PROJECT WALPAR STANDARD DESIGN
FOR:	Archer-United Joint Venture
DRAWN BY:	IWL DATE: 7/19/23
CHECKED BY:	DAL DATE: 8/21/23
DWG NO:	C3546-G1

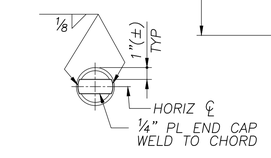
NAME: E:\acad\Djobs\SC\3546\3546-G1.dwg DATE: AUG 21, 2023 TIME: 9:52 AM dl706291

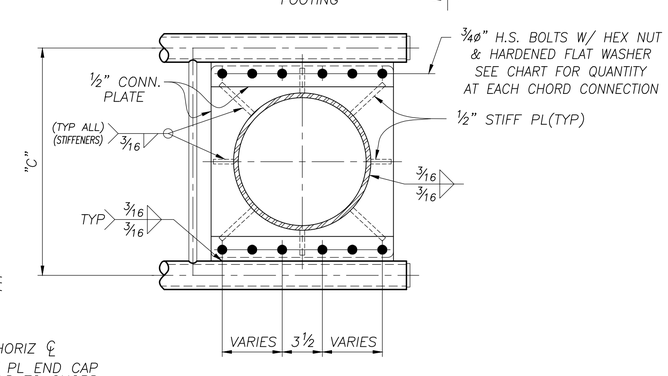
STRUCTURE	STATION	SPAN	UPRIGHT	CHORD	VERTICAL STRUT	VERTICAL DIAGONAL	HORIZ STRUT/DIAG	CAMBER	POST TILT	BOLTS @ CHORD	ANCHOR BOLTS QTY	ANCHOR BOLTS SIZE	ANCHOR BOLTS EMBED	GUSSET REQ'D	"A"	"B"	"C"	"D"	"F"				"L"	DESIGN SIGN AREA
OH–17	452+48.51(WB)	30'–0	24.000 x .312	3.500 x .188	1.315 x .133	1.315 x .133	1.660 x .140	3¾	¾	6	6	1¾	3'–6	6	21'–3¼	3'–6	3'–0	1¾	5/16				¼	228.5

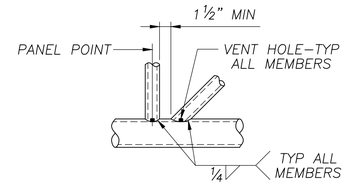
NOTE: ALL PIPE SIZES ARE OUTSIDE DIAMETER

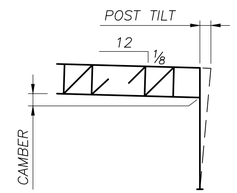


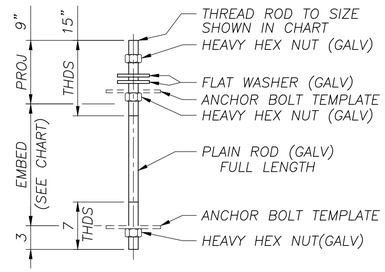


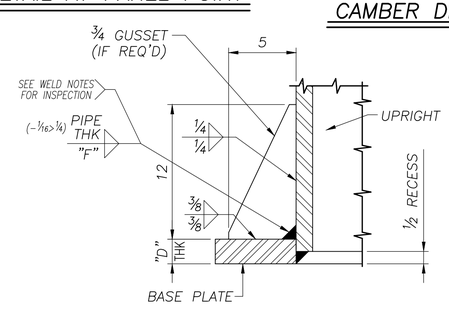


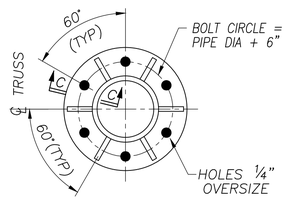












NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665 LICENSED

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/16/23	IWL	DAL

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0

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: BOX TRUSS CANTILEVER SIGN SUPPORTS
WALPAR STANDARD DESIGN
FOR: Archer–United Joint Venture

DRAWN BY: IWL DATE: 7/19/23
CHECKED BY: DAL DATE: 8/16/23

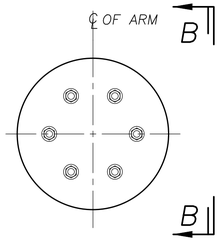
DWG NO: C3546–D1

BTCT–D

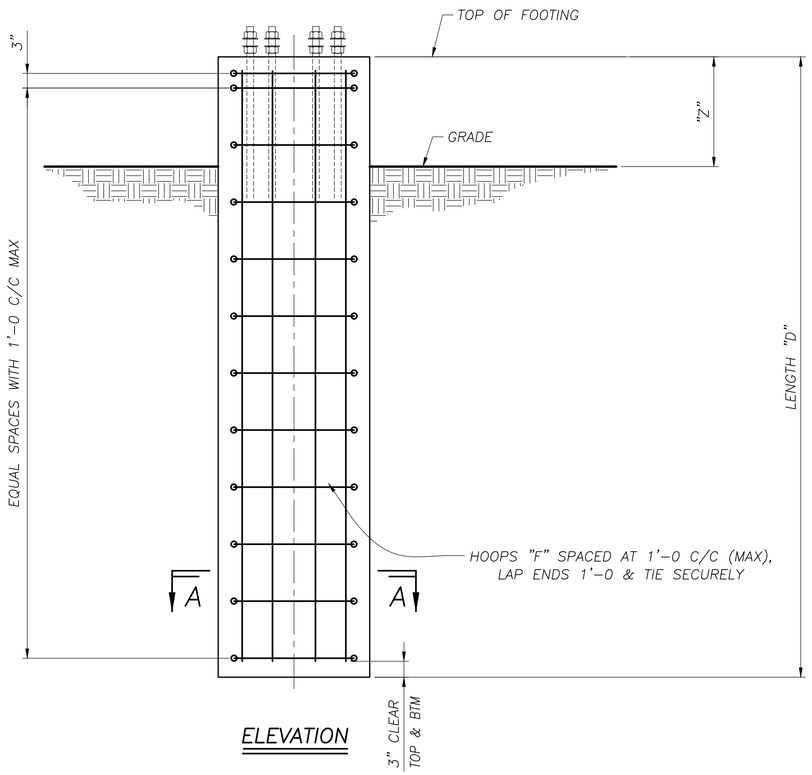
NAME: E:\acad\Djobs\SC\3546\3546–D1.dwg DATE: AUG 16, 2023 TIME: 2:20 PM dl706291

STRUCTURE	STATION	"A"			"D"	BARS "E"	HOOPS "F" (SEE ✱ NOTE)			CONC/FTG (cu yds)	REINF/FTG (lbs)	"Z" @ ℄
OH–17	452+48.51(WB)	4'–0			15'–0	19 – #9 @ 6¼in.	17 – #4 @ 1'–0			6.98	1064	9"

PARALLEL TO TRAFFIC

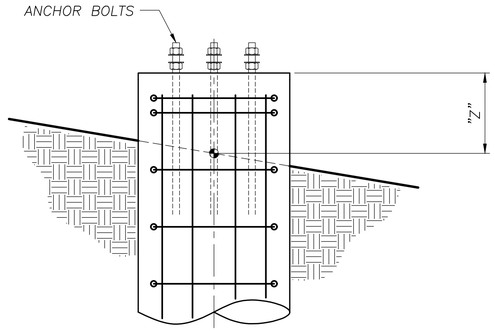


(6) ANCHOR BOLTS
(TYP)

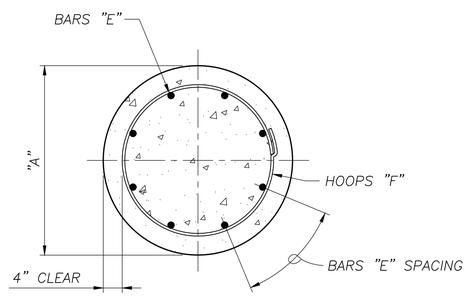


ELEVATION

SINGLE POLE FOOTING
(CANTILEVER/BUTTERFLY)



SECTION B–B



SECTION A–A

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID A LALLONE
No. 38665
LICENSED PROFESSIONAL ENGINEER

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/16/23	IWL	DAL

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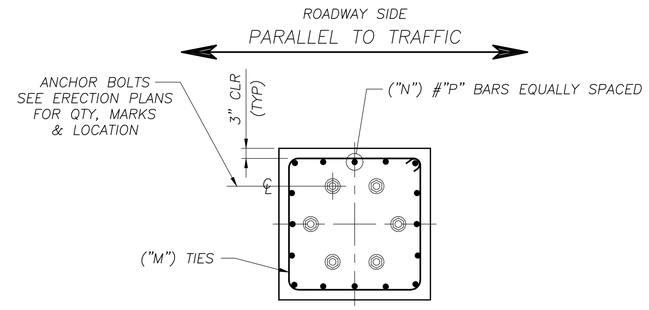
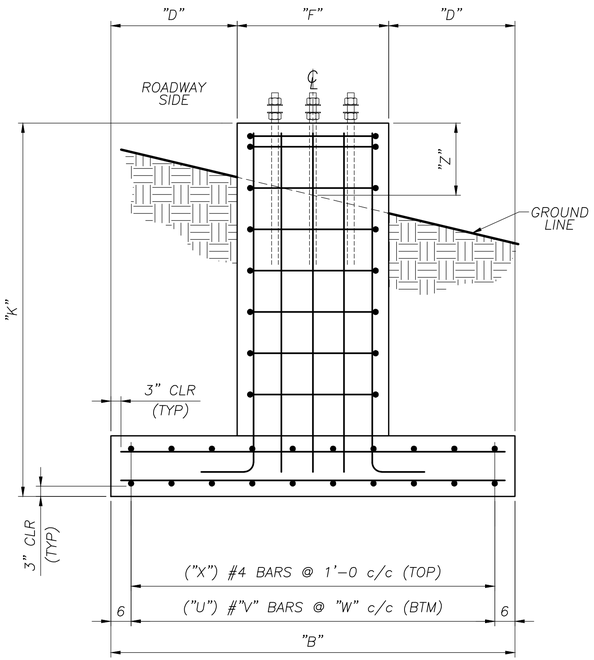
CCF–D

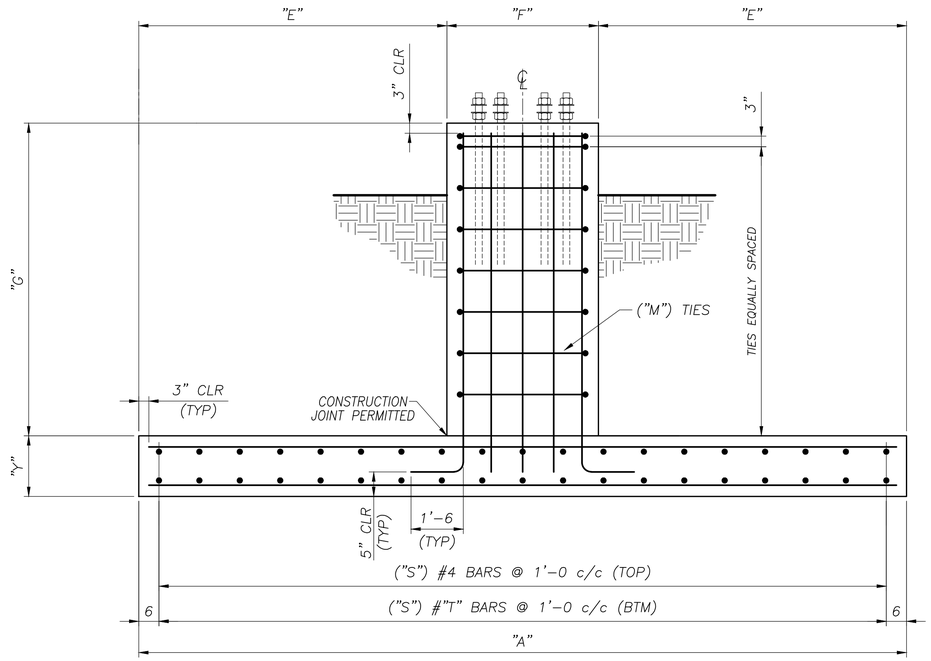
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT
	CANTILEVER/BUTTERFLY CYLINDRICAL FOOTING DESIGN
FOR:	Archer–United Joint Venture
DRAWN BY:	IWL DATE: 7/19/23
CHECKED BY:	DAL DATE: 8/16/23
DWG NO:	C3546–D2



(6) ANCHOR BOLTS
(TYP)



END VIEW



SIDE VIEW

STRUCTURE	STATION	"A"	"B"	"D"	"E"	"F"	"G"	"K"	"M"	"N"	"P"	"S"	"T"	"U"	"V"	"W"	"X"	"Y"	CONC/FTG (cu yds)	REINF/FTG (lbs)	"Z"
OH-17	452+48.51(WB)	17'-0	9'-0	2'-6	6'-6	4'-0	7'-0	8'-6	7-#4	32	8	17	4	9	6	1'-0	9	1'-6	12.65	1369	9"

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/8/23	IWL	DAL

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: OVERHEAD SIGN SUPPORT
SINGLE POLE SPREAD FOOTING DESIGN
FOR: Archer-United Joint Venture

DRAWN BY: IWL DATE: 7/19/23
CHECKED BY: DAL DATE: 9/8/23
DWG NO: C3546-D3

SP-SF-D

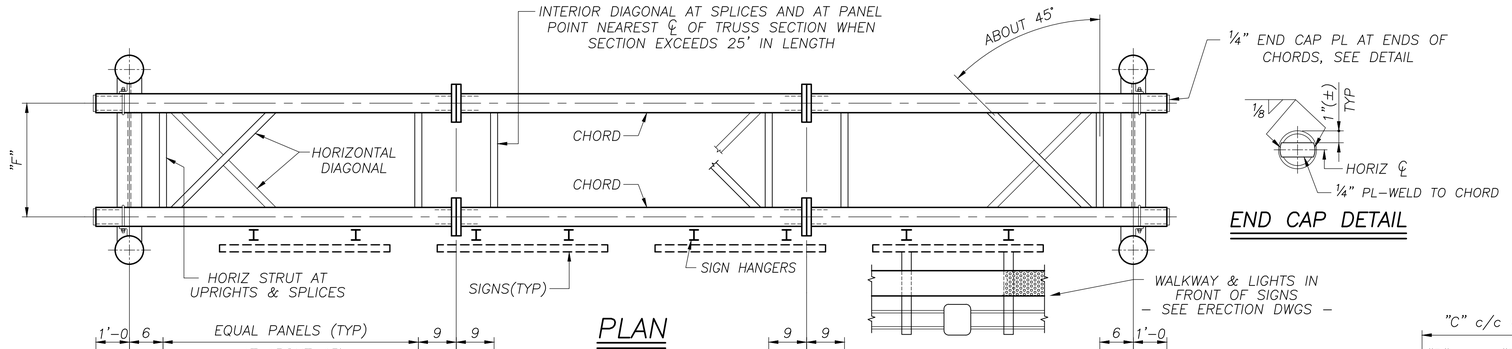
C3546–D4

STRUCTURE	STATION	SPAN	CHORDS	VERTICAL DIAGONAL	HORIZ DIAGONAL	STRUTS	CAMBER	ANCHOR BOLTS SIZE LT	ANCHOR BOLTS EMBED	ANCHOR BOLTS SIZE RT	ANCHOR BOLTS EMBED	LEFT UPRIGHT	RIGHT UPRIGHT	LEFT UPRIGHT DIAG & STRUT	RIGHT UPRIGHT DIAG & STRUT	SEAT	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H" LEFT	"H" RIGHT	CHORD SPLICE INFORMATION "J"	"K"	"L"	"M" LEFT	"M" RIGHT	"N" LEFT	"N" RIGHT	No OF SECTIONS	DESIGN SIGN AREA (ft²)
OH–9	7393+20.45 (WB)	75'–0	5.563 x .258	1.900 x .145	1.900 x .145	1.660 x .140	2¼	2	3'–6	2	3'–6	16.000 x .250	16.000 x .250	4.500 x .188	4.500 x .188	W8x24	52'–9¾	54'–2	5'–6	1'–1½	3'–9	3'–3	½	1'–4	1'–4	¼	1	6–⅞ø	2	2	5/16	5/16	2	684.5
OH–23	5424+27.06 (EB)	70'–0	4.500 x .237	1.660 x .140	1.660 x .140	1.315 x .133	2	1	3'–6	1¾	3'–6	8.625 x .188	16.000 x .250	2.375 x .154	4.500 x .188	LT–WT6x13 RT–W8x24	19'–7¼	63'–1¼	5'–6	1'–1½	3'–9	3'–3	½	10½	1'–4	¼	¾	4–⅞ø	1	1¾	5/16	5/16	2	318.8

NOTE: ALL PIPE SIZES ARE OUTSIDE DIAMETER

OH–9 STUB SPLICE INFORMATION				
"TL"	"U"	"V"	"W"	"X"
19'–5½	1¼	14	1	1'–7
"TR"	"U"	"V"	"W"	"X"
18'–0½	1¼	14	1	1'–7

OH–23 STUB SPLICE INFORMATION				
"TL"	"U"	"V"	"W"	"X"
--	--	--	--	--
"TR"	"U"	"V"	"W"	"X"
27'–10¾	1¼	14	1	1'–7



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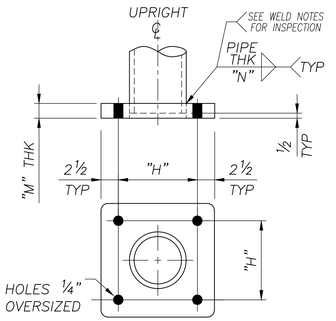

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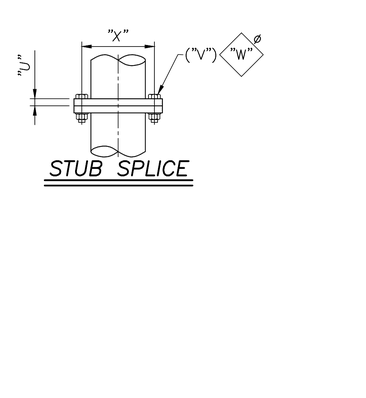
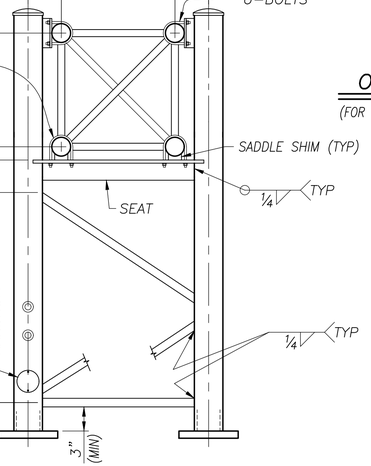


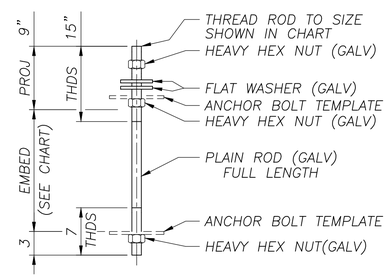
STUB SPLICE



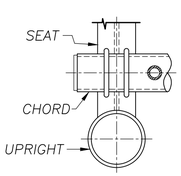


OPTIONAL SPLICE

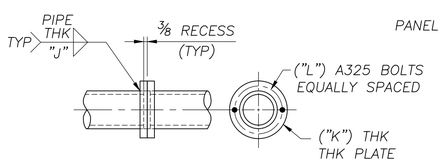
(FOR WALL THK 5/16 OR GREATER ONLY)



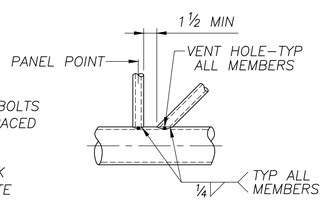
ANCHOR DETAIL



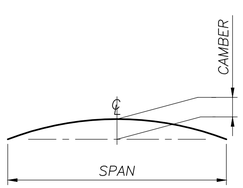
SECTION A–A



TYP SPLICE DETAIL



TYP DETAIL AT PANEL POINT



CAMBER DIAGRAM

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Sep 8 2023

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A valmont COMPANY
POST OFFICE BOX 28650
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4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)–925–4990
FAX (205) 925–7273

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT DESIGN
	WALPAR STD BOX TRUSS DESIGN
FOR:	Archer–United Joint Venture
DRAWN BY:	IWL DATE: 7/19/23
CHECKED BY:	DAL DATE: 8/29/23
DWG NO:	C3546–D4

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/29/23	IWL	DAL

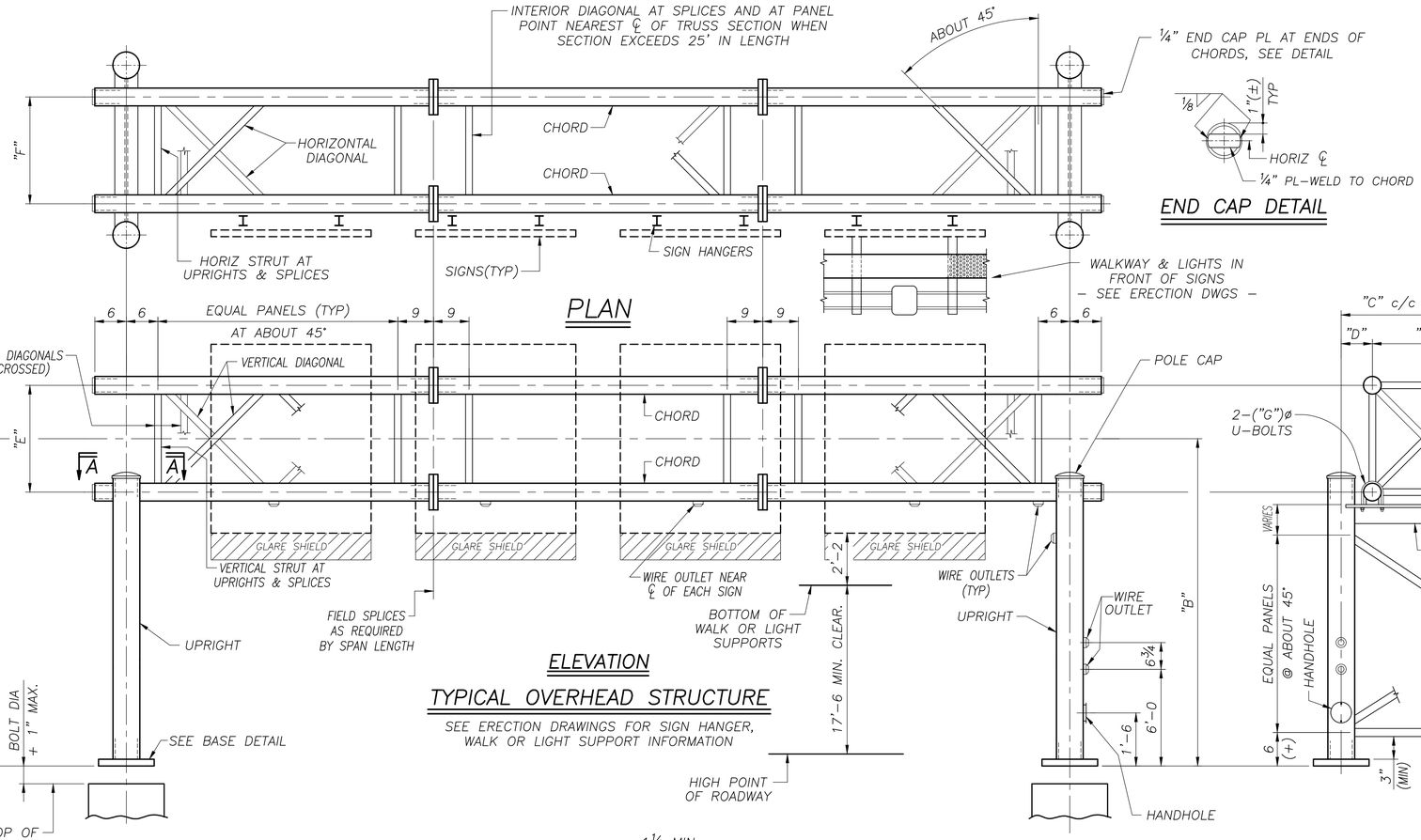
BTDPD–D

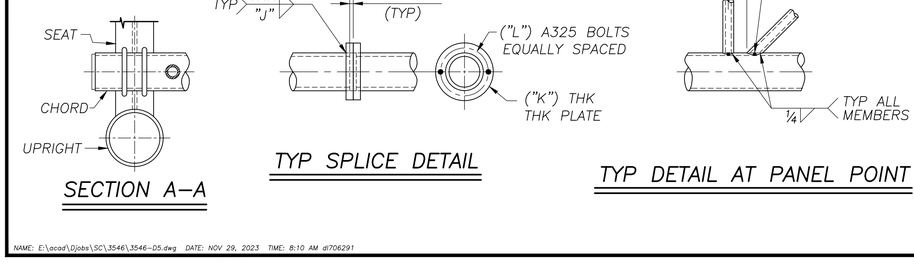
C3546–D5

STRUCTURE	STATION	SPAN	CHORDS	VERTICAL DIAGONAL	HORIZ DIAGONAL	STRUTS	CAMBER	ANCHOR BOLTS SIZE LT	ANCHOR BOLTS EMBED	ANCHOR BOLTS SIZE RT	ANCHOR BOLTS EMBED	LEFT UPRIGHT	RIGHT UPRIGHT	LEFT UPRIGHT DIAG & STRUT	RIGHT UPRIGHT DIAG & STRUT	SEAT	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H" LEFT	"H" RIGHT	CHORD SPLICE INFORMATION "J"	"K"	"L"	"M" LEFT	"M" RIGHT	"N" LEFT	"N" RIGHT	No OF SECTIONS	DESIGN SIGN AREA (ft²)
OH–11	412+69.92 (EB)	104'–0	6.625 x .250	1.900 x .200	1.900 x .200	1.660 x .140	3¾	1¼	3'–6	1¼	3'–6	10.750 x .188	10.750 x .188	2.875 x .203	2.875 x .203	LT–WT7X15 RT–WT6X13	21'–8½	19'–11	5'–3	1'–0	3'–9	3'–3	½	1'–0	1'–0	¼	1	6–1ø	1¼	1¼	5/16	5/16	3	708.0
OH–14	428+79.25 (EB)	84'–0	6.625 x .219	1.900 x .145	1.900 x .200	1.660 x .140	2¾	1½	3'–6	1¾	3'–6	12.750 x .250	12.750 x .250	3.500 x .188	3.500 x .188	WT6x13	24'–4½	30'–11½	5'–3	1'–0	3'–9	3'–3	5/8	1'–1½	1'–1½	¼	1	6–⅞ø	1½	1¾	5/16	5/16	3	908.0
OH–16	440+94.34 (WB)	87'–9	6.625 x .188	1.900 x .200	1.900 x .200	1.660 x .140	2 15/16	1¼	3'–6	1	3'–6	10.750 x .250	8.625 x .188	2.875 x .203	2.375 x .218	LT–WT6x13 RT–WT7x15	21'–8	11'–1¼	5'–3	1'–0	3'–9	3'–3	½	1'–0	10½	¼	1	6–⅞ø	1½	1	5/16	5/16	3	744.3
OH–26	37+34.06 (WB)	88'–0	4.500 x .337	1.900 x .145	1.900 x .145	1.315 x .133	2 15/16	1¼	3'–6	1¼	3'–6	8.625 x .188	8.625 x .188	2.375 x .154	2.375 x .154	WT6x13	20'–1½	17'–0¼	4'–9	9	3'–9	3'–3	½	10½	10½	¼	1	6–⅞ø	1¼	1¼	5/16	5/16	3	444.3

1

NOTE: ALL PIPE SIZES ARE OUTSIDE DIAMETER





NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
1	CORRECTED OH–11 SEAT	11/29/23	IWL	DAL

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1

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

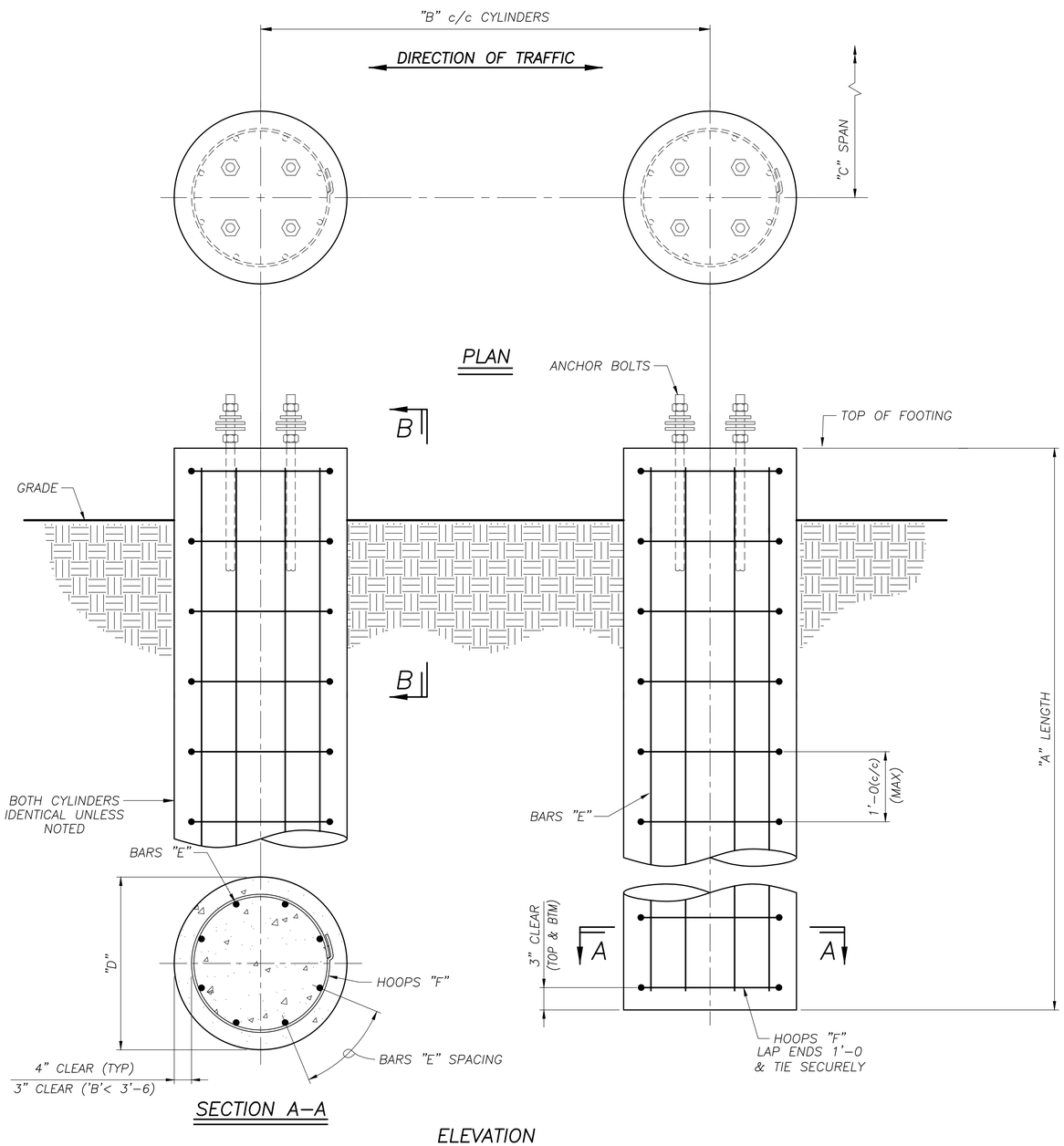
SUBJECT: OVERHEAD SIGN SUPPORT DESIGN
WALPAR STD BOX TRUSS DESIGN
FOR: Archer–United Joint Venture

DRAWN BY: IWL DATE: 7/19/23
CHECKED BY: DAL DATE: 9/8/23
DWG NO: C3546–D5

BTDPD–D

NAME: E:\acad\Djobs\SC\3546\3546–D5.dwg DATE: NOV 29, 2023 TIME: 8:10 AM dl706291

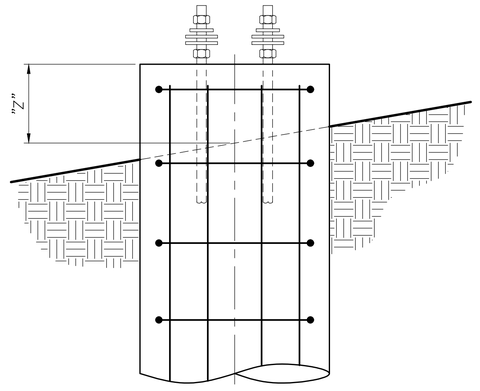
STRUCTURE	STATION	LENGTH "A"	"B"	SPAN "C"	CYL DIA "D"	BARS "E" (±)c/c (per cyl)	HOOPS "F" (±)c/c (per cyl)	TOTAL FOR FOUNDATION REBAR WT	TOTAL FOR FOUNDATION CONCRETE (cu yds)	"Z"
OH–9(L)	7393+20.45 (WB)	22'–0	5'–6	75'–0	4'–0	19 – #9 @ 6¼	23 – #4 @ 1'–0	3122	20.48	1'–6
OH–9(R)	7393+20.45 (WB)	25'–0	5'–6	75'–0	4'–0	16 – #10 @ 7 7/16	26 – #4 @ 1'–0	3763	23.27	1'–9
OH–11(R)	412+69.92 (EB)	17'–0	5'–3	104'–0	3'–0	13 – #8 @ 6¾	18 – #4 @ 1'–0	1352	8.90	1'–6
OH–14(R)	428+79.25 (EB)	24'–0	5'–3	84'–0	3'–6	14 – #9 @ 7⅛	25 – #4 @ 1'–0	2559	17.10	1'–6
OH–23(L)	5424+27.06 (EB)	23'–0	5'–6	70'–0	3'–0	13 – #8 @ 6¾	24 – #4 @ 1'–0	1837	12.04	1'–0
OH–23(R)	5424+27.06 (EB)	18'–0	5'–6	70'–0	4'–0	19 – #9 @ 6¼	19 – #4 @ 1'–0	2546	16.76	9"



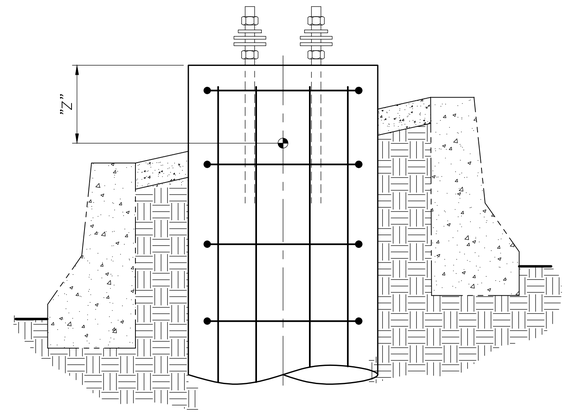
SECTION A–A

ELEVATION

DOUBLE POLE OVERHEAD FOOTING



SECTION B–B



* SECTION B–B

(USE FOR OH–23(L) ONLY)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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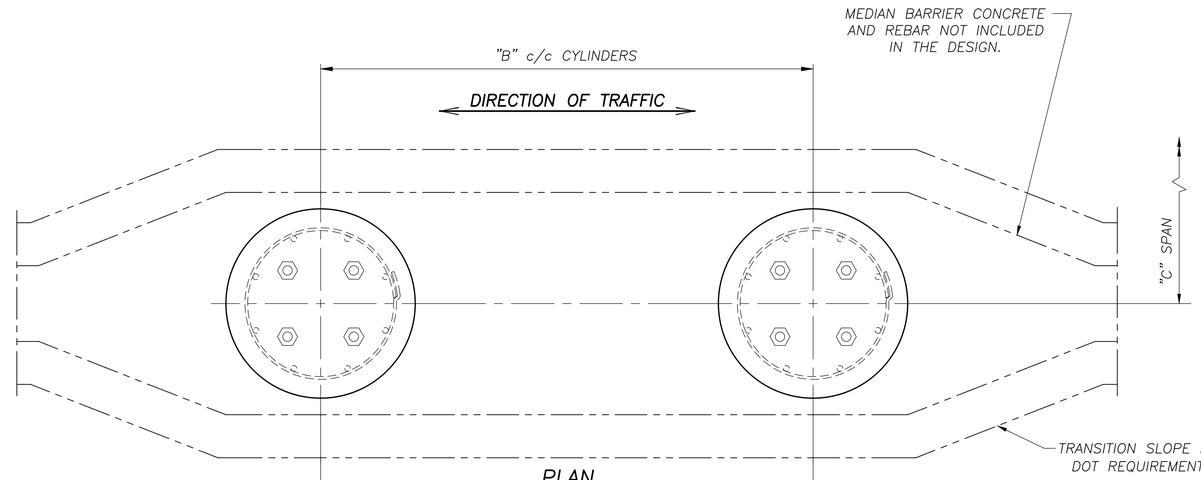
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT CYLINDRICAL FOOTING DRAWING
FOR:	Archer–United Joint Venture
DRAWN BY:	IWL DATE: 7/19/23
CHECKED BY:	DAL DATE: 8/18/23
DWG NO:	C3546–D6

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/18/23	IWL	DAL

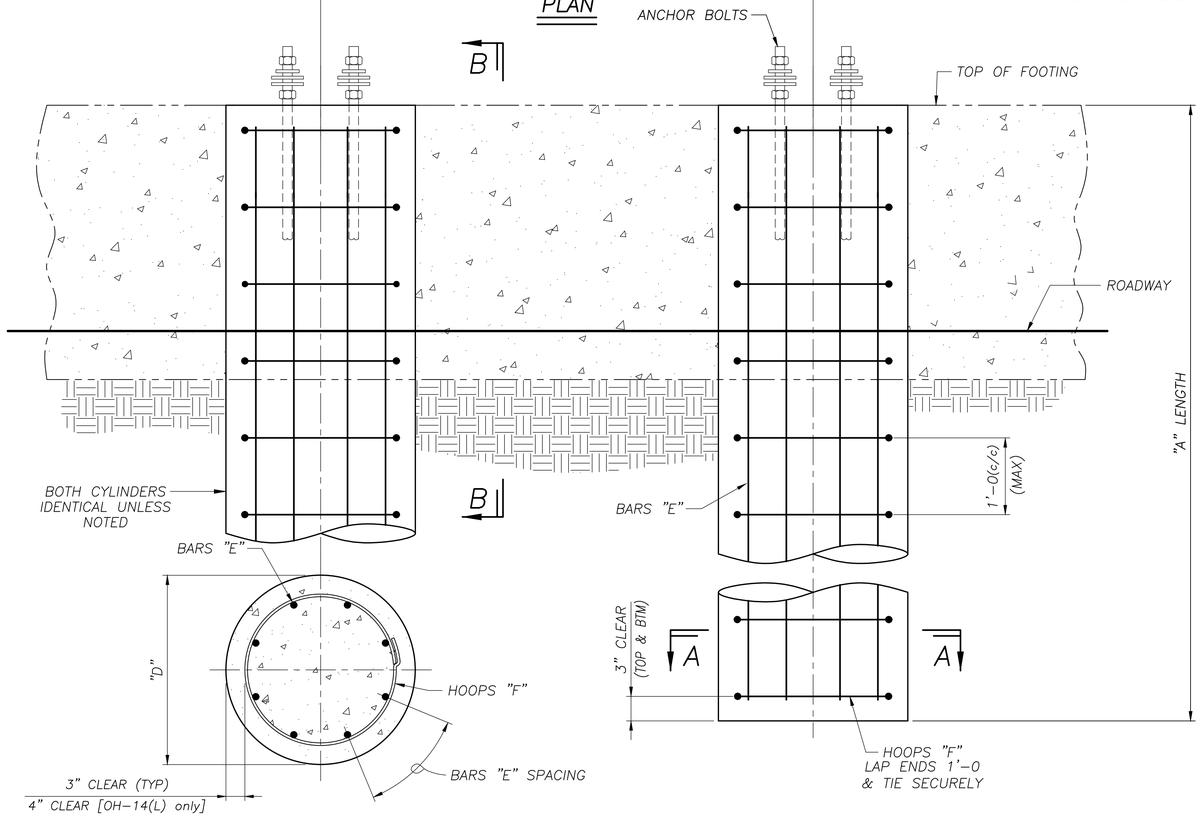
DP–CF–D

STRUCTURE	STATION	LENGTH "A"	"B"	SPAN "C"	CYL DIA "D"	BARS "E" (±)c/c (per cyl)	HOOPS "F" (±)c/c (per cyl)	TOTAL FOR FOUNDATION REBAR WT	TOTAL FOR FOUNDATION CONCRETE (cu yds)	"Z"	"ZZ"
OH–11(L)	412+69.92 (EB)	23'–0	5'–3	104'–0	3'–0	12 – #9 @ 7 5/16	24 – #4 @ 1'–0	2111	12.04	3'–10	3'–10
OH–14(L)	428+79.25 (EB)	23'–0	5'–3	84'–0	3'–6	16 – #9 @ 6 1/4	24 – #4 @ 1'–0	2757	16.39	5'–0	4'–6
OH–16(L)	440+94.34 (WB)	20'–0	5'–3	87'–9	3'–0	12 – #9 @ 7 5/16	21 – #4 @ 1'–0	1832	10.47	4'–5 3/4	4'–6 3/4
OH–26(L)	37+34.06 (WB)	21'–0	4'–9	88'–0	2'–6	9 – #8 @ 7 11/16	22 – #4 @ 1'–0	1192	7.64	4'–6 1/2	4'–6 1/2

1



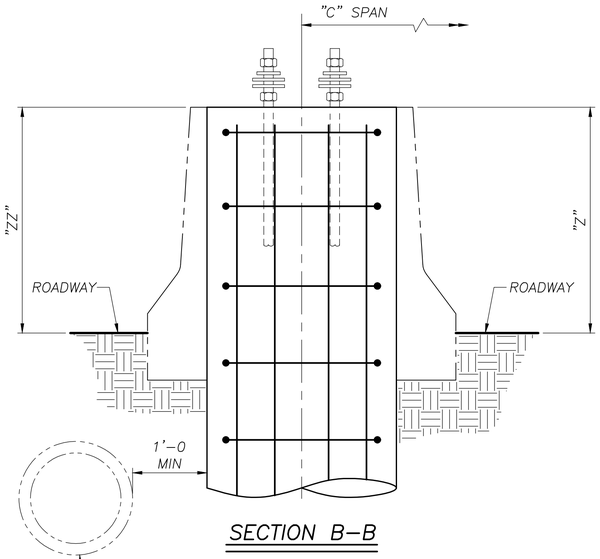
PLAN



SECTION A–A

ELEVATION

DOUBLE POLE OVERHEAD FOOTING



SECTION B–B

ANY ENCOUNTERS WITH RCP DRAINAGE PIPES DURING THE INSTALLATION OF A FOUNDATION SHOULD BE ROUTED AROUND AFTER THE FOUNDATION IS COMPLETED WITH 1'–0 CLEAR

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLOUE

Dec 7 2023

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1

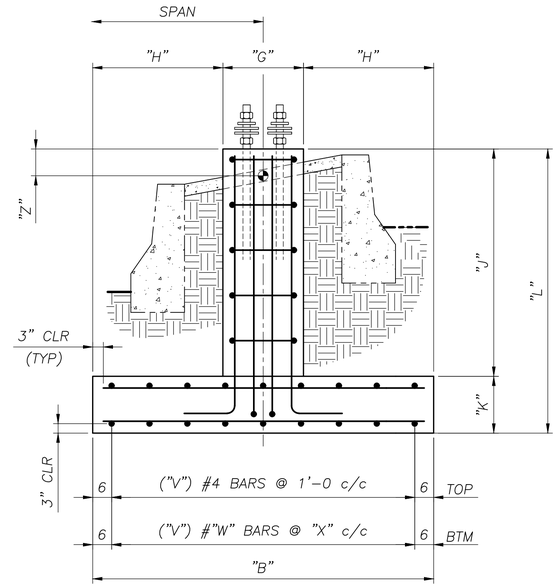
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT CYLINDRICAL FOOTING DRAWING
FOR:	Archer–United Joint Venture
DRAWN BY:	IWL DATE: 7/19/23
CHECKED BY:	DAL DATE: 8/18/23
DWG NO:	C3546–D7

NO:	REVISIONS	DATE	MADE	CHECKED
1	CORRECTED OH–11(L) CONCRETE QUANTITY	11/29/23	IWL	DAL

DP–CF–D

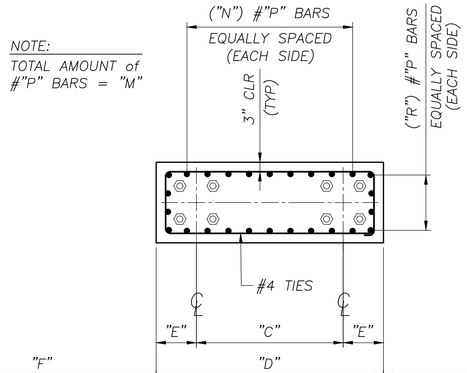
NAME: E:\acad\Djobs\SC\3546\3546–D7.dwg DATE: NOV 29, 2023 TIME: 8:12 AM d706291

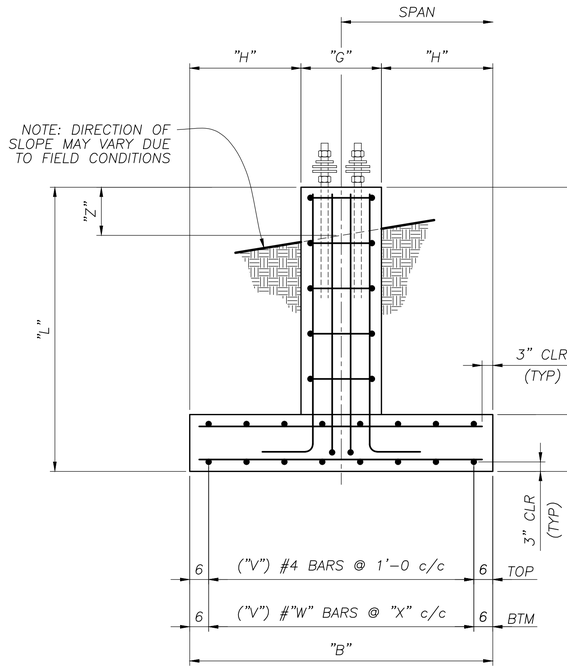
STRUCTURE	STATION	CONC/FTG (yds[3])	REINF/FTG (lbs)	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"L"	"M"	"N"	"P"	"R"	"S"	"T"	"U"	"V"	"W"	"X"	"Z"
OH-9(L)	7393+20.45 (WB)	19.04	2396	23'-0	12'-0	5'-6	8'-0	1'-3	7'-6	2'-6	4'-9	5'-0	1'-6	6'-6	40	15	8	5	6	23	5	12	9	1'-0	1'-6
OH-9(R)	7393+20.45 (WB)	21.11	2919	25'-0	12'-0	5'-6	8'-0	1'-3	8'-6	2'-6	4'-9	6'-0	1'-6	7'-6	40	15	8	5	7	25	5	12	10	1'-0	1'-9
OH-11(R)	412+69.92 (EB)	11.63	1202	17'-0	9'-0	5'-3	7'-6	1'-1½	4'-9	2'-3	3'-4½	5'-0	1'-6	6'-6	32	12	8	4	6	17	4	9	6	1'-0	1'-6
OH-14(R)	428+79.25 (EB)	16.27	1776	21'-0	11'-0	5'-3	7'-6	1'-1½	6'-9	2'-3	4'-4½	5'-6	1'-6	7'-0	32	12	8	4	6	21	4	11	8	1'-0	1'-6
OH-23(L)	5424+27.06 (EB)	12.67	1471	16'-0	8'-0	5'-6	7'-6	1'-0	4'-3	2'-0	3'-0	10'-0	1'-6	11'-6	28	11	8	3	11	16	4	8	6	1'-0	1'-0
OH-23(R)	5424+27.06 (EB)	15.80	1773	21'-0	11'-0	5'-6	8'-0	1'-3	6'-6	2'-6	4'-3	4'-0	1'-6	5'-6	40	15	8	5	5	21	4	11	8	1'-0	9"



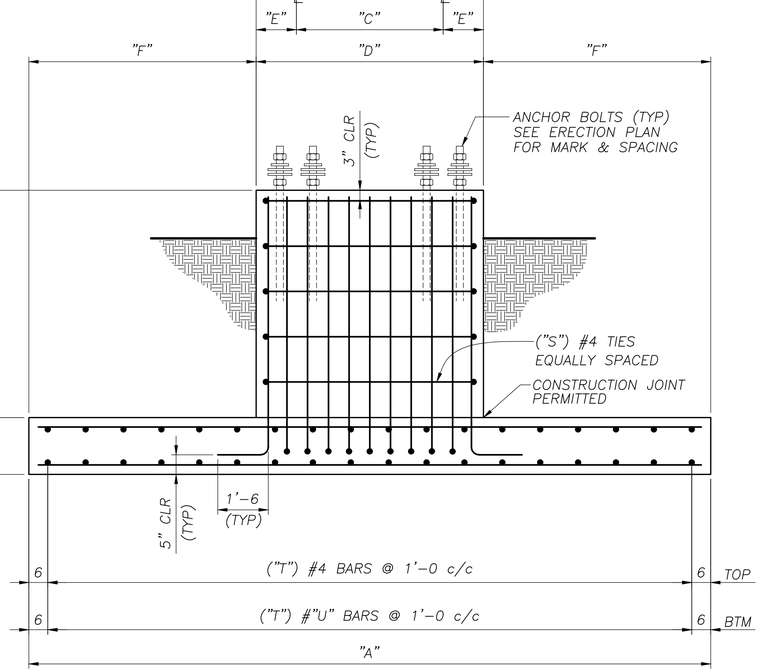
*END VIEW

~ OH-23(L) ONLY ~





END VIEW



SIDE VIEW

(PARALLEL TO ROADWAY)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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FAX (205) 925-7273

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126

SUBJECT: OVERHEAD SIGN SUPPORT
SPREAD FOOTING DRAWING

FOR: Archer-United Joint Venture

DRAWN BY: IWL DATE: 7/19/23
CHECKED BY: DAL DATE: 8/21/23

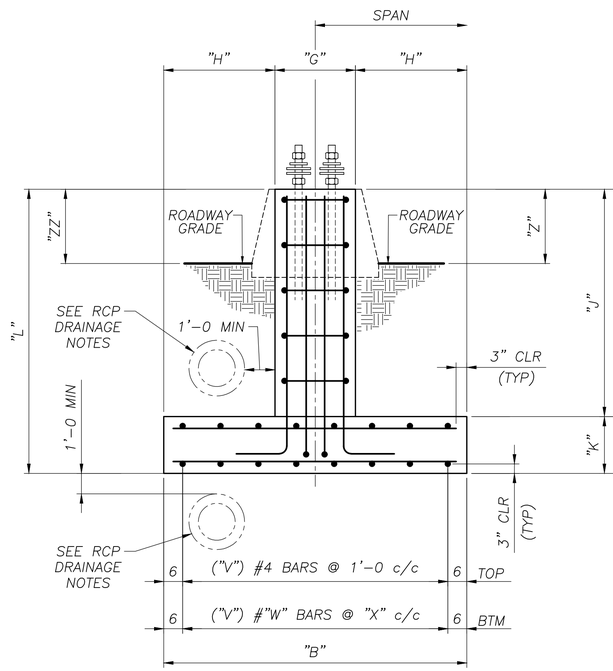
DWG NO: C3546-D8

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/21/23	IWL	DAL

DP-SF-D

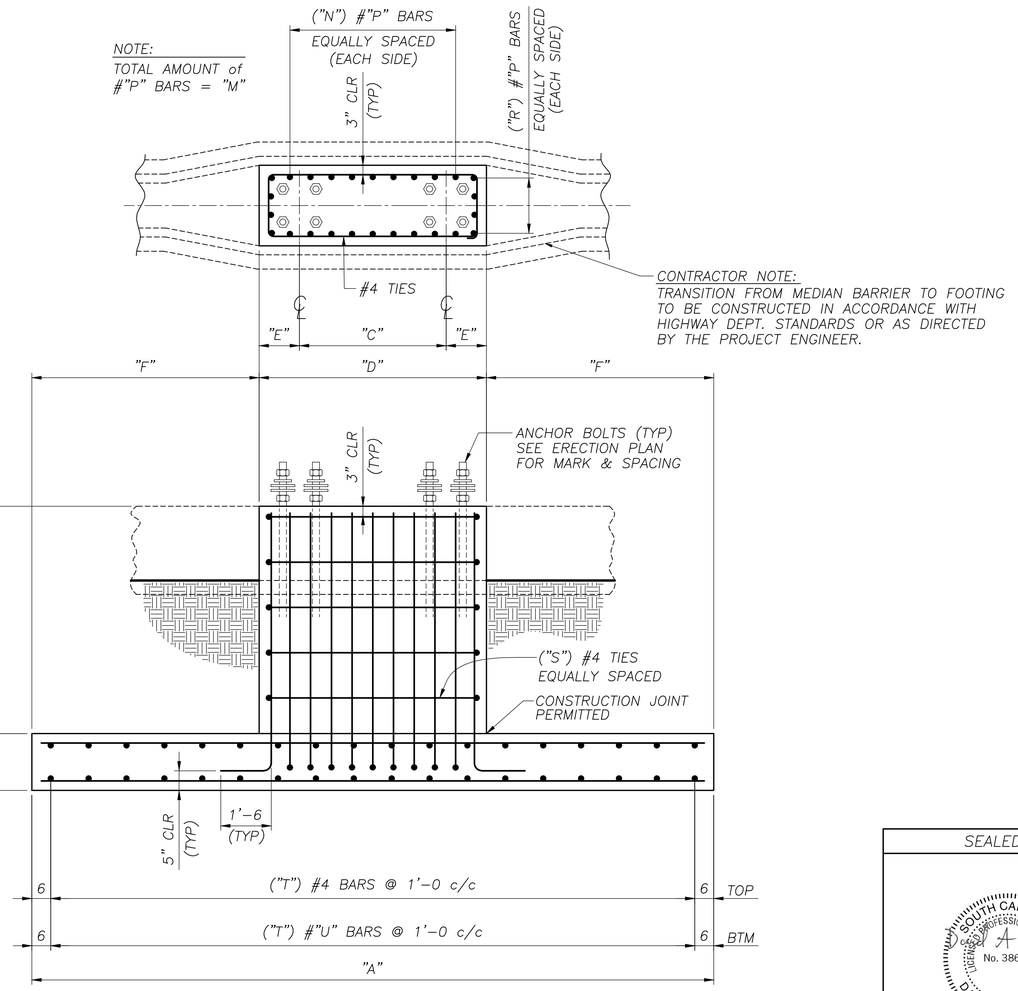
NAME: E:\acad\Djobs\SC\3546\3546-D8.dwg DATE: AUG 21, 2023 TIME: 10:04 AM dl706291

STRUCTURE	STATION	CONC/FTG (yds[3])	REINF/FTG (lbs)	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"L"	"M"	"N"	"P"	"R"	"S"	"T"	"U"	"V"	"W"	"X"	"Z"	"ZZ"
OH–11(L)	412+69.92 (EB)	14.79	1637	21'–0	10'–0	5'–3	7'–6	1'–1½	6'–9	2'–3	3'–10½	5'–0	1'–6	6'–6	32	12	8	4	6	21	4	10	8	1'–0	3'–10	3'–10
OH–14(L)	428+79.25 (EB)	17.51	2184	22'–0	11'–0	5'–3	7'–6	1'–1½	7'–3	2'–3	4'–4½	6'–6	1'–6	8'–0	32	12	8	4	7	22	5	11	9	1'–0	5'–0	4'–6
OH–16(L)	440+94.34 (WB)	14.31	1527	19'–0	10'–0	5'–3	7'–6	1'–1½	5'–9	2'–3	3'–10½	6'–0	1'–6	7'–6	32	12	8	4	7	19	4	10	7	1'–0	4'–5¾	4'–6¾
OH–26(L)	37+34.06 (WB)	10.11	1117	16'–0	8'–0	4'–9	6'–9	1'–0	4'–7½	2'–0	3'–0	6'–0	1'–6	7'–6	28	10	8	4	7	16	4	8	6	1'–0	4'–6½	4'–6½



END VIEW

(LOOKING IN DIRECTION OF TRAFFIC)



SIDE VIEW

(PARALLEL TO ROADWAY)

NOTE:
TOTAL AMOUNT of #"P" BARS = "M"

CONTRACTOR NOTE:
TRANSITION FROM MEDIAN BARRIER TO FOOTING TO BE CONSTRUCTED IN ACCORDANCE WITH HIGHWAY DEPT. STANDARDS OR AS DIRECTED BY THE PROJECT ENGINEER.

RCP DRAINAGE NOTE:

ANY ENCOUNTERS WITH RCP DRAINAGE PIPES DURING THE INSTALLATION OF A FOUNDATION SHOULD BE ROUTED AROUND THE PEDESTAL AS SHOWN IN END VIEW IF LOCATED ABOVE PAD OF FOOTING. IF THE RCP PIPE IS LOCATED BELOW PAD OF THE FOUNDATION, RCP PIPE MUST HAVE A MINIMUM OF 1'–0 PACKED COVER.

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

GROUP 1

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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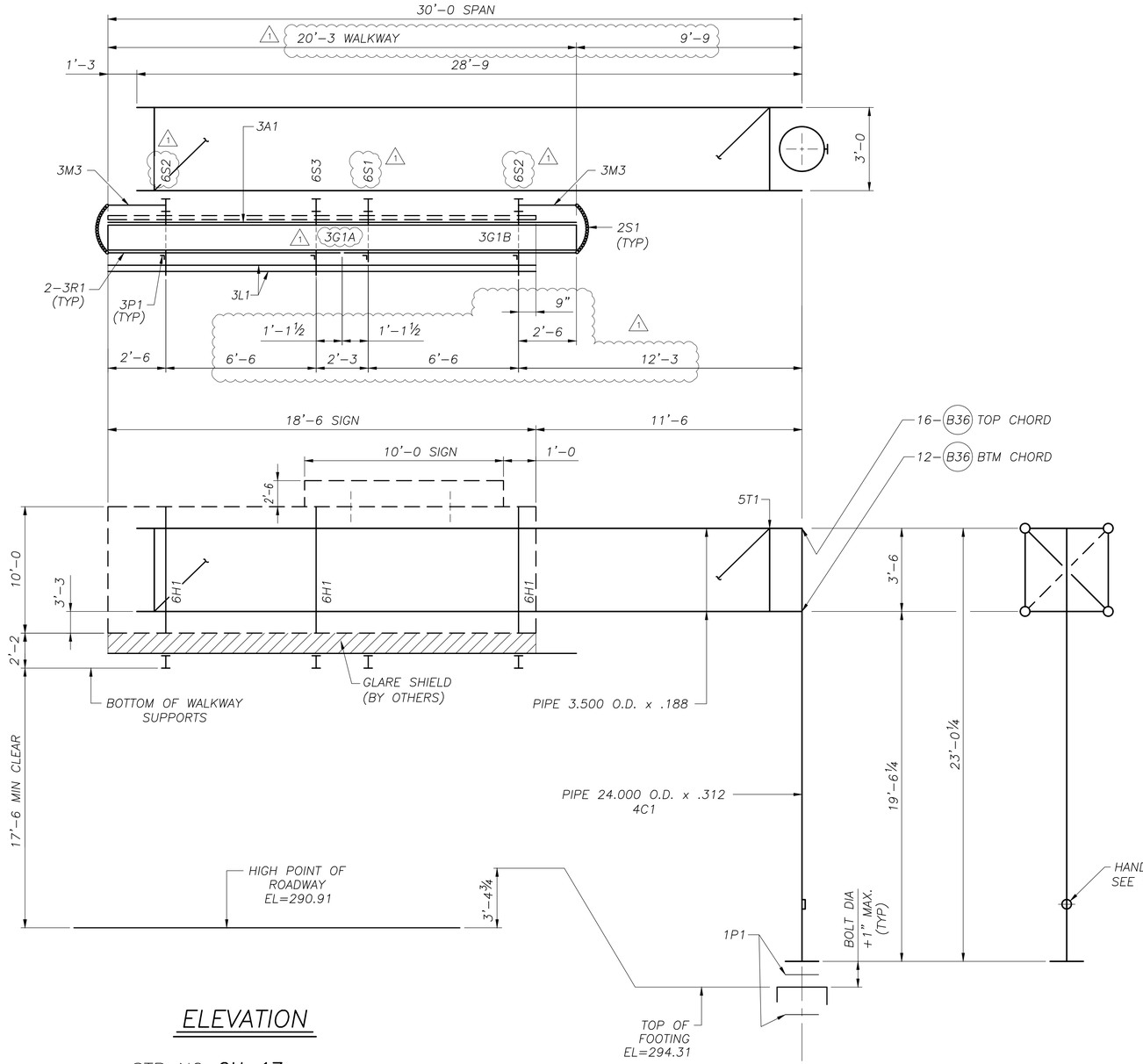
FAX (205) 925–7273

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT MEDIAN SPREAD FOOTING DRAWING
FOR:	Archer–United Joint Venture
DRAWN BY:	IWL — DATE: 7/19/23
CHECKED BY:	DAL — DATE: 8/21/23
DWG NO:	C3546–D9

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/21/23	IWL	DAL

NAME: E:\acad\Djobs\SC\3546\3546–D9.dwg DATE: AUG 21, 2023 TIME: 10:05 AM dl706291

DP–SF–D



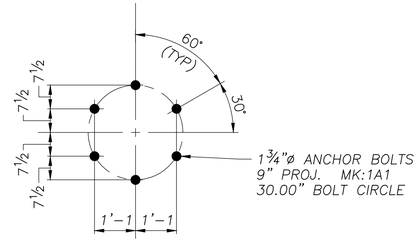
ELEVATION

STR NO: **OH-17**

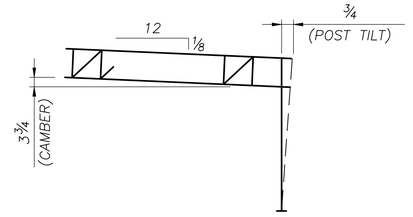
STA NO: **452+48.51(WB)**

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS, SIGN HGR'S OR A SUITABLE VIBRATION DAMPER



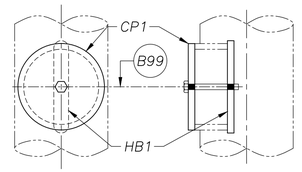
ANCHOR BOLT PLAN



CAMBER DIAGRAM

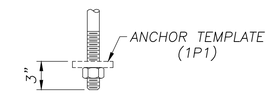
ERECTION NOTE

1) TILT POST AWAY FROM ROADWAY AT ERECTION BY ADJUSTING LEVELING NUTS.
2) 1" MINIMUM PERMANENT CAMBER AFTER DEFLECTION.



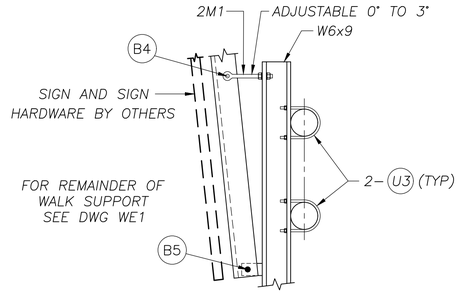
HANDHOLE DETAIL

PRE ASSEMBLE CP1 TO HB1 WITH B99 BOLT. DISTURB THREADS SO HB1 CAN NOT BE REMOVED. INSTALL COVER ASSEMBLY INTO HANDHOLE OPENING AND TIGHTEN BOLT TO SECURE.



ANCHOR DETAIL

(TYPICAL)



TYP SECTION THRU SIGN SUPPORT & SIGN HANGER

NOTE: EXIT PANELS & SUPPORTS BY OTHERS

SHIPPING LIST		C3546-E1
QTY	MARK	DESCRIPTION
6	1A1	ANCHOR BOLTS
2	1P1	ANCHOR TEMPLATES
1	5T1	CANTILEVER TRUSS 3.3' x 3.8' x 30.1'
1	4C1	CANTILEVER POST 2.9' x 2.9' x 23'
1	6S1	WALK SUPPORT
2	6S2	SIGN/WALK/LIGHT SUPPORTS
1	6S3	SIGN/WALK/LIGHT SUPPORTS
2	3M3	SAFETY CHAIN SUPPORT
2	2S1	SAFETY CHAIN
4	2P1	HINGE PIN ASSEMBLIES
8	3M1	CLAMP PLATES
4	3P1	HANDRAIL POSTS
4	3R1	HANDRAILS
1	3G1A	GRATING
3	6H1	SIGN HANGERS (ANGLE ARM)
3	2M1	EYEBOLT ASSEMBLIES
1	3A1	SAFETY ANGLE
2	3L1	LIGHTING SUPPORTS
1	CP1	COVER PLATE ASSEMBLY
1	HB1	HANDHOLE BAR
18	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
8	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
3	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
3	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
4	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
28	B36	3/4" x 2 1/2" HHB w/HN/FW/DTI (A325 GALV)
1	B99	1/4" x 4" HHB (A307 GALV)
8	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
16	U3	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

OH-17

DESIGN DWGS: D1 – D3 DESIGN NO: BC1 **AASHTO 6th Edition Spec's**

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Dec 7 2023

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A valmont COMPANY
POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
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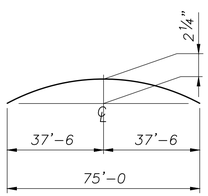
PHONE (205)-925-4990
FAX (205) 925-7273

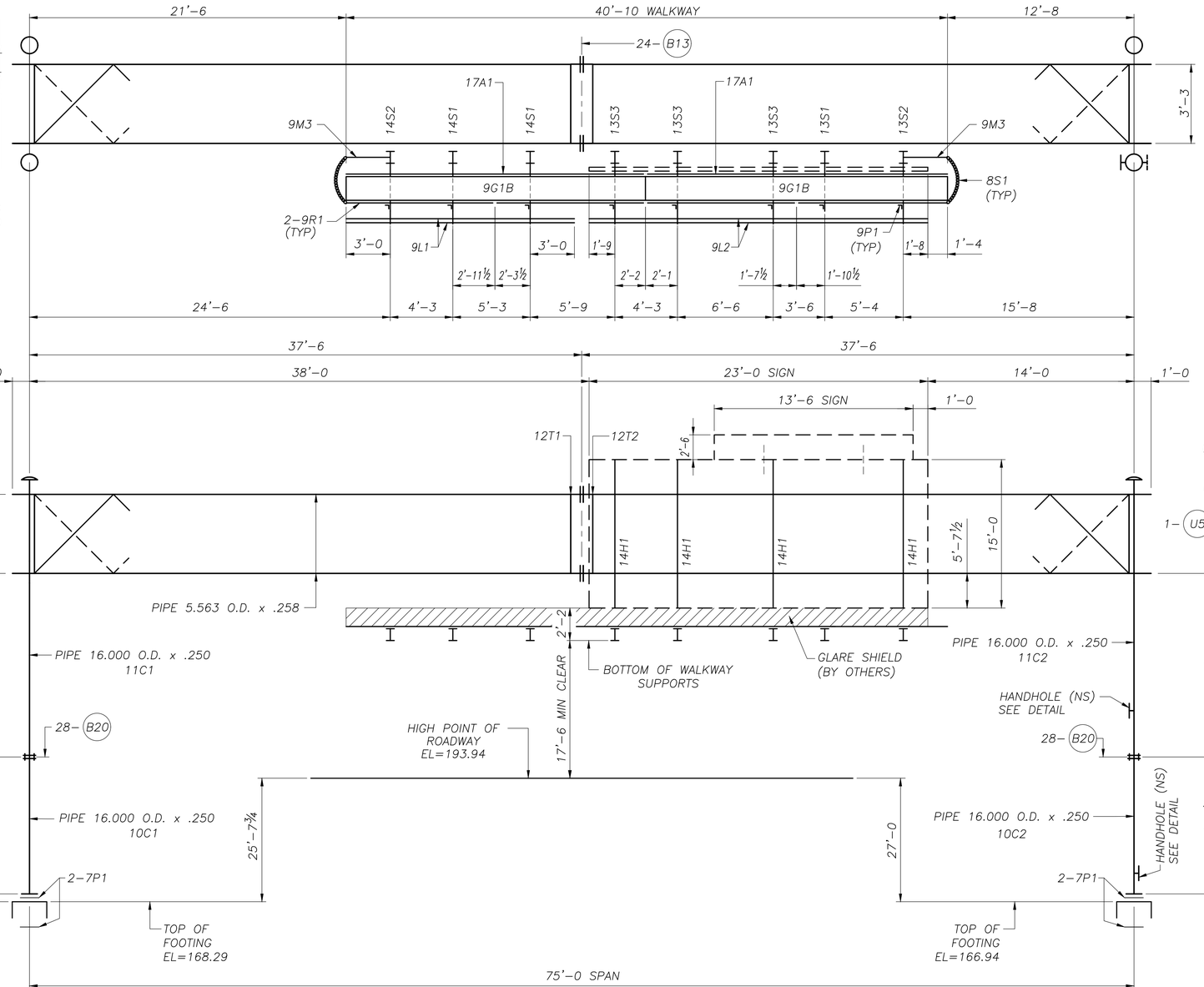
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	CANTILEVER SIGN SUPPORT ERECTION DRAWING
FOR:	Archer-United Joint Venture
DRAWN BY:	DLK DATE: 8/23/23
CHECKED BY:	DLJ DATE: 8/31/23
DWG NO:	C3546-E1

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED WALKWAY LENGTH	12/6/23	DLK	DLJ



CAMBER DIAGRAM

(PERMANENT CAMBER = 1⅝")



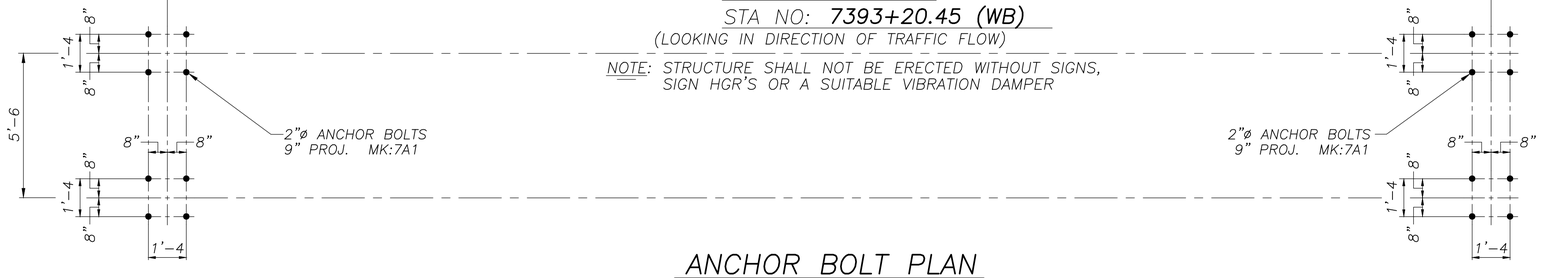
ELEVATION

STR NO: OH-9

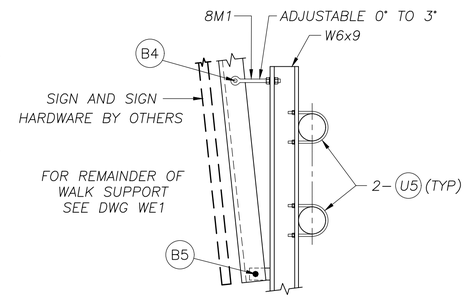
STA NO: 7393+20.45 (WB)

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS, SIGN HGR'S OR A SUITABLE VIBRATION DAMPER

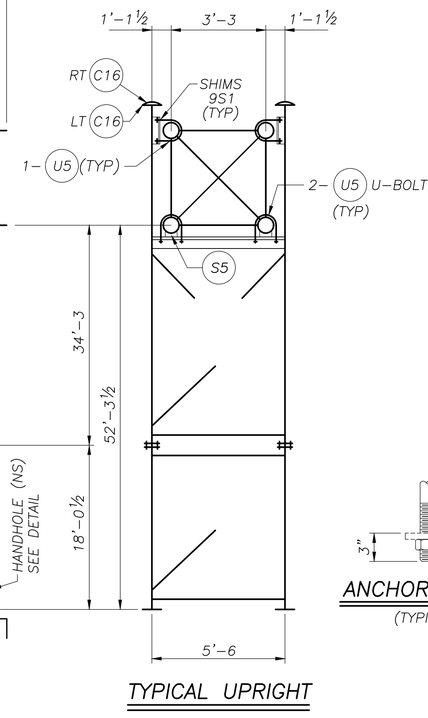


ANCHOR BOLT PLAN

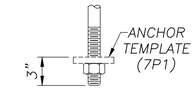


TYP SECTION THRU SIGN SUPPORT & SIGN HANGER

NOTE: EXIT PANELS & SUPPORTS BY OTHERS

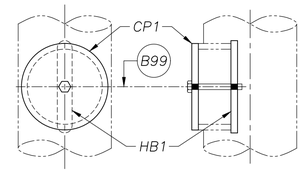


TYPICAL UPRIGHT



ANCHOR DETAIL

(TYPICAL)



HANDHOLE DETAIL

PRE ASSEMBLE CP1 TO HB1 WITH B99 BOLT. DISTURB THREADS SO HB1 CAN NOT BE REMOVED. INSTALL COVER ASSEMBLY INTO HANDHOLE OPENING AND TIGHTEN BOLT TO SECURE.

SHIPPING LIST		C3546-E2
QTY	MARK	DESCRIPTION
16	7A1	ANCHOR BOLTS
8	7P1	ANCHOR TEMPLATES
1	12T1	BOX TRUSS 4.2' x 4.7' x 38.6'
1	12T2	BOX TRUSS 4.2' x 4.7' x 38.6'
1	11C1	UPRIGHT 7.4' x 1.8' x 35.9'
1	11C2	UPRIGHT 7.4' x 1.8' x 38.7'
1	10C1	UPRIGHT STUB 7.4' x 1.8' x 19.5'
1	10C2	UPRIGHT STUB 7.4' x 1.8' x 18.1'
2	9M3	SAFETY CHAIN SUPPORT
2	8S1	SAFETY CHAIN
8	8P1	HINGE PIN ASSEMBLIES
16	9M1	CLAMP PLATES
8	9P1	HANDRAIL POSTS
8	9R1	HANDRAILS
2	9M2	SPLICE PLATES
2	9G1B	GRATING
4	9S1	SHIMS
1	13S1	WALK SUPPORTS
1	13S2	SIGN/WALK/LIGHT SUPPORTS
3	13S3	SIGN/WALK/LIGHT SUPPORTS
2	14S1	WALK & LIGHT SUPPORT
1	14S2	WALK & LIGHT SUPPORT
4	14H1	SIGN HANGERS (ANGLE ARM)
4	8M1	EYEBOLT ASSEMBLIES
2	9L1	LIGHT SUPPORTS
2	9L2	LIGHT SUPPORTS
2	CP1	COVER PLATE ASSEMBLY
2	HB1	HANDHOLE BAR
2	17A1	SAFETY ANGLE
42	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
16	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
4	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
4	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
8	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
24	B13	7/8" x 3 1/2" HHB w/HN/FW/DTI (A325 GALV)
56	B20	1" x 4 1/4" HHB w/HN/FW/DTI (A325 GALV)
2	B99	1/4" x 4" HHB (A307 GALV)
4	C16	POLE CAPS #393 w/ (2) 1/2" SET SCRS(S.S.)
4	S5	SADDLE SHIMS #359
16	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
44	U5	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

DESIGN DWGS: D4, D6, D8 DESIGN NO: BT1 AASHTO 6th Edition Spec's

OH-9

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE
Sep 8 2023

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126

SUBJECT: OVERHEAD BOX TRUSS STRUCTURE ERECTION DRAWING

FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/25/23

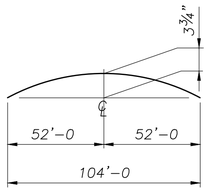
CHECKED BY: DLJ DATE: 8/30/23

DWG NO: C3546-E2

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

BT-E

NAME: E:\acad\JobsNProg\3546\3546-E2.dwg DATE: AUG 30, 2023 TIME: 9:18 AM dj706290



CAMBER DIAGRAM

(PERMANENT CAMBER = 1 13/16")

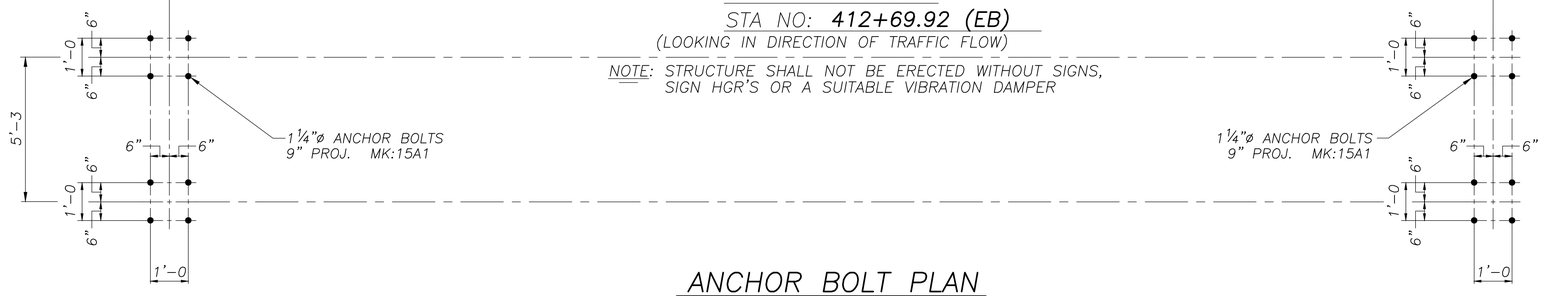
ELEVATION

STR NO: **OH-11**

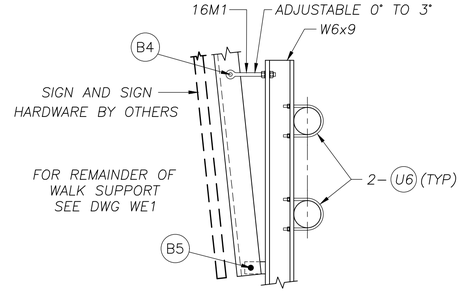
STA NO: **412+69.92 (EB)**

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS, SIGN HGR'S OR A SUITABLE VIBRATION DAMPER

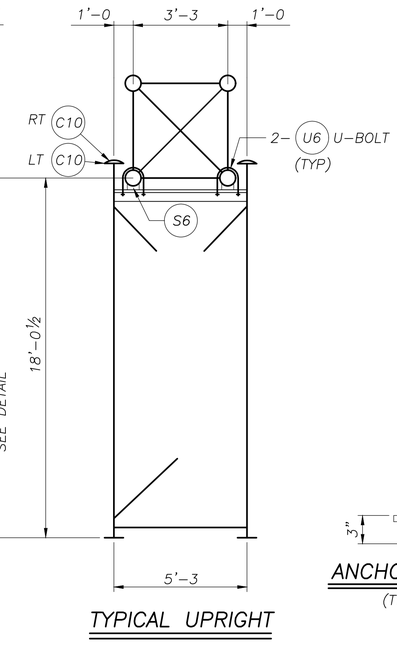


ANCHOR BOLT PLAN

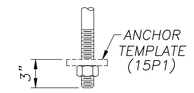


TYP SECTION THRU SIGN SUPPORT & SIGN HANGER

NOTE: EXIT PANELS & SUPPORTS BY OTHERS

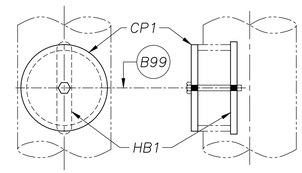


TYPICAL UPRIGHT



ANCHOR DETAIL

(TYPICAL)



HANDHOLE DETAIL

PRE ASSEMBLE CP1 TO HB1 WITH B99 BOLT. DISTURB THREADS SO HB1 CAN NOT BE REMOVED. INSTALL COVER ASSEMBLY INTO HANDHOLE OPENING AND TIGHTEN BOLT TO SECURE.

SHIPPING LIST		C3546-E3
QTY	MARK	DESCRIPTION
16	15A1	ANCHOR BOLTS
8	15P1	ANCHOR TEMPLATES
1	19T1	BOX TRUSS 4.3' x 4.8' x 36.5'
1	20T1	BOX TRUSS 4.3' x 4.8' x 32.4'
1	19T2	BOX TRUSS 4.3' x 4.8' x 36.5'
1	18C1	UPRIGHT 6.7' x 1.4' x 19.9'
1	18C2	UPRIGHT 6.7' x 1.4' x 18.1'
1	21S1	WALK SUPPORT
2	21S2	WALK SUPPORTS
4	21S3	SIGN/WALK/LIGHT SUPPORTS
1	21S4	SIGN/WALK/LIGHT SUPPORT
2	21S5	SIGN/WALK/LIGHT SUPPORTS
2	21S6	WALK/LIGHT SUPPORTS
1	22S1	SIGN HANGER
2	17M3	SAFETY CHAIN SUPPORT
2	16S1	SAFETY CHAIN
12	16P1	HINGE PIN ASSEMBLIES
24	17M1	CLAMP PLATES
4	17M2	SPLICE PLATES
12	17P1	HANDRAIL POSTS
12	17R1	HANDRAILS
2	17A1	SAFETY ANGLES
2	17G1B	GRATING
1	17G2C	GRATING
4	22H1	SIGN HANGERS (ANGLE ARM)
3	22H2	SIGN HANGERS (ANGLE ARM)
7	16M1	EYEBOLT ASSEMBLIES
2	17L1	LIGHT SUPPORTS
2	17L2	LIGHT SUPPORTS
1	CP1	COVER PLATE ASSEMBLY
1	HB1	HANDHOLE BAR
62	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
24	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
7	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
7	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
12	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
48	B18	1" x 3 3/4" HHB w/HN/FW/DTI (A325 GALV)
1	B99	1/4" x 4" HHB (A307 GALV)
4	C10	POLE CAPS #297 w/ (2) 1/2" SET SCRS(S.S.)
4	S6	SADDLE SHIMS #360
24	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
60	U6	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

OH-11

DESIGN DWGS: D5 – D9 DESIGN NO: BT2 **AASHTO 6th Edition Spec's**

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE
Dec 7 2023

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PHONE (205)-925-4990
FAX (205) 925-7273

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126

SUBJECT: OVERHEAD BOX TRUSS STRUCTURE ERECTION DRAWING

FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/26/23

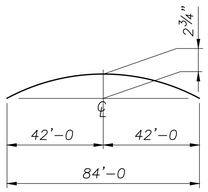
CHECKED BY: DLJ DATE: 8/30/23

DWG NO: C3546-E3

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED WALK SUPPORT MARK	12/6/23	DLK	DLJ

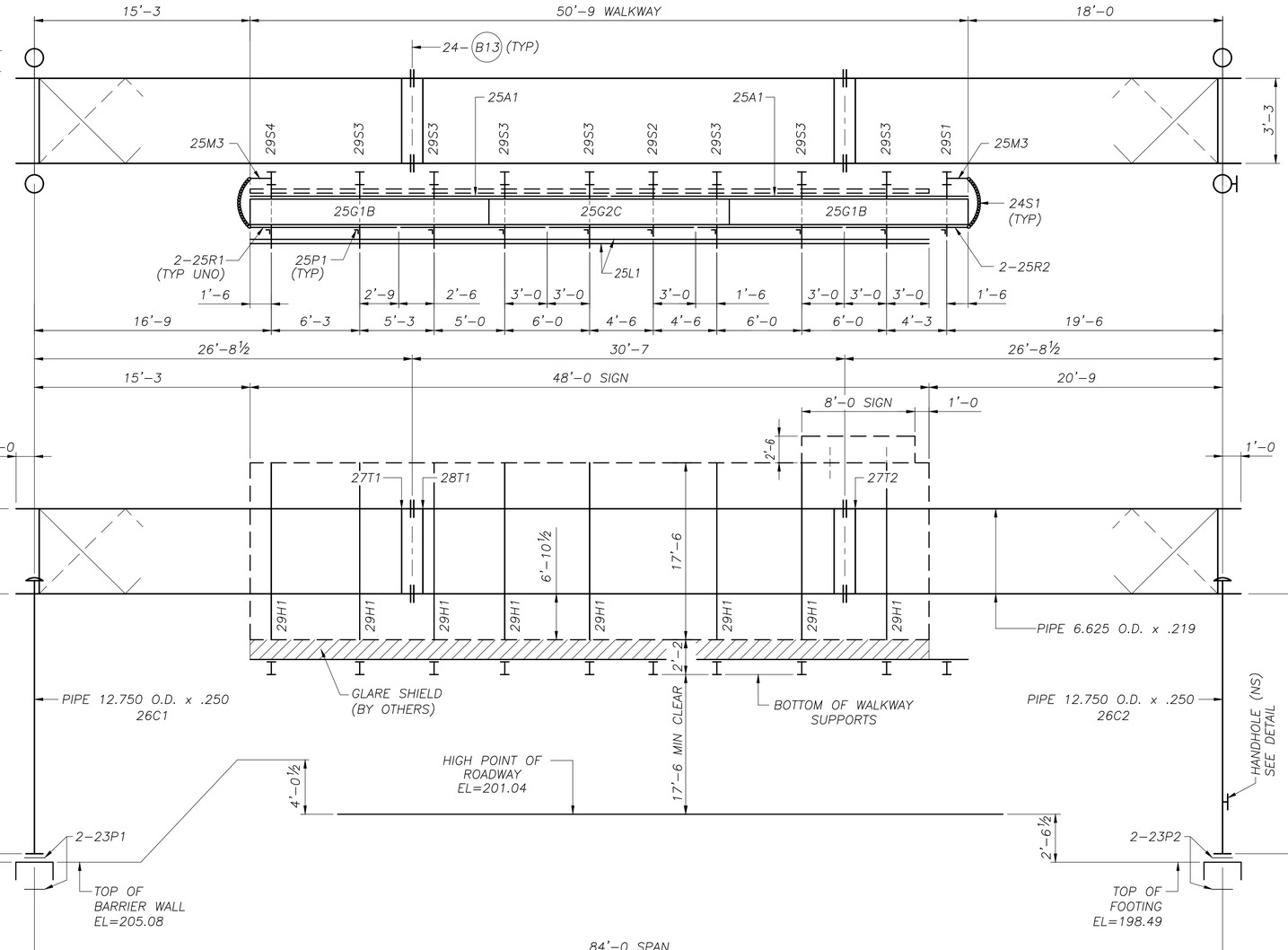
BT-E

NAME: E:\acad\JobsNPrg\3546\3546-E3.dwg DATE: DEC 06, 2023 TIME: 3:17 PM dj706290



CAMBER DIAGRAM

(PERMANENT CAMBER = 1⅝")



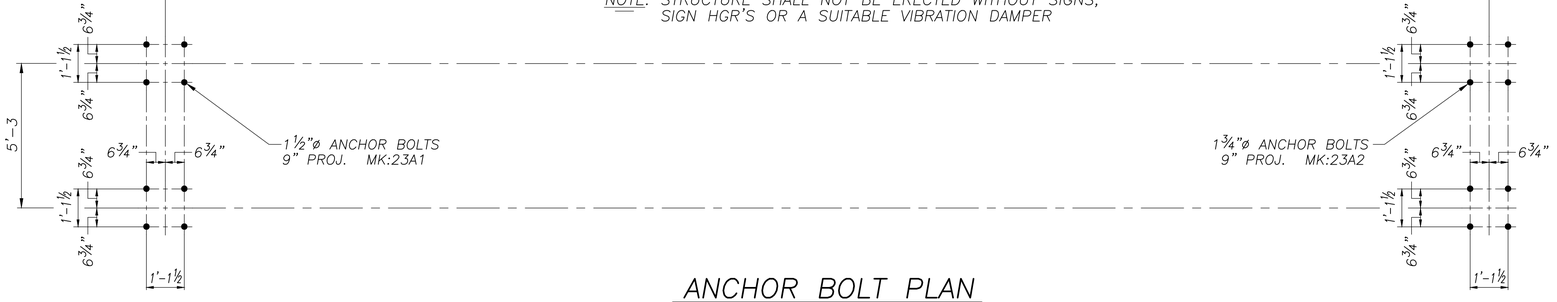
ELEVATION

STR NO: **OH–14**

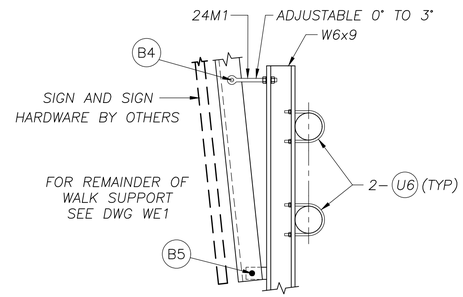
STA NO: **428+79.25 (EB)**

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS, SIGN HGR'S OR A SUITABLE VIBRATION DAMPER

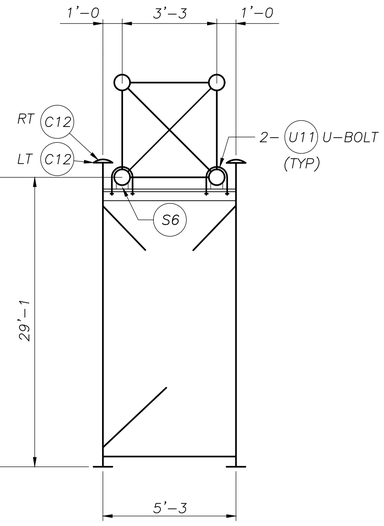


ANCHOR BOLT PLAN

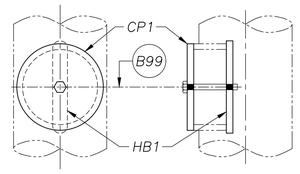


TYP SECTION THRU SIGN SUPPORT & SIGN HANGER

NOTE: EXIT PANELS & SUPPORTS BY OTHERS

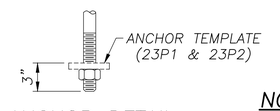


TYPICAL UPRIGHT



HANDHOLE DETAIL

PRE ASSEMBLE CP1 TO HB1 WITH B99 BOLT.
DISTURB THREADS SO HB1 CAN NOT BE REMOVED.
INSTALL COVER ASSEMBLY INTO HANDHOLE
OPENING AND TIGHTEN BOLT TO SECURE.



ANCHOR DETAIL

(TYPICAL)

SHIPPING LIST		C3546–E4
QTY	MARK	DESCRIPTION
8	23A1	ANCHOR BOLTS
8	23A2	ANCHOR BOLTS
4	23P1	ANCHOR TEMPLATES
4	23P2	ANCHOR TEMPLATES
1	27T1	BOX TRUSS 4.3' x 4.8' x 27.8'
1	28T1	BOX TRUSS 4.3' x 4.8' x 30.7'
1	27T2	BOX TRUSS 4.3' x 4.8' x 27.8'
1	26C1	UPRIGHT 6.8' x 1.5' x 22.6'
1	26C2	UPRIGHT 6.8' x 1.5' x 29.2'
1	29S1	WALK SUPPORT
1	29S2	WALK SUPPORTS
2	25M3	SAFETY CHAIN SUPPORT
2	24S1	SAFETY CHAIN
10	24P1	HINGE PIN ASSEMBLIES
1 20	25M1	CLAMP PLATES
4	25M2	SPLICE PLATES
10	25P1	HANDRAIL POSTS
8	25R1	HANDRAILS
2	25R2	HANDRAILS
2	25A1	SAFETY ANGLES
2	25G1B	GRATING
1	25G2C	GRATING
1 7	29S3	SIGN/WALK/LIGHT SUPPORTS
1	29S4	SIGN/WALK/LIGHT SUPPORT
8	29H1	SIGN HANGERS (ANGLE ARM)
8	24M1	EYEBOLT ASSEMBLIES
2	25L1	LIGHT SUPPORTS
1	CP1	COVER PLATE ASSEMBLY
1	HB1	HANDHOLE BAR
1 56	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
1 20	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
8	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
8	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
1 10	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
48	B13	7/8" x 3 1/2" HHB w/HN/FW/DTI (A325 GALV)
1	B99	1/4" x 4" HHB (A307 GALV)
4	C12	POLE CAPS #291 w/ (2) 1/2" SET SCRS(S.S.)
4	S6	SADDLE SHIMS #360
20	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
1 40	U6	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)
8	U11	5/8" U-Bolts w/(2 ea) HN/LW/FW (GALV)

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

DESIGN DWGS: D5 – D9 DESIGN NO: BT3 **AASHTO 6th Edition Spec's**

OH–14

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Dec 7 2023

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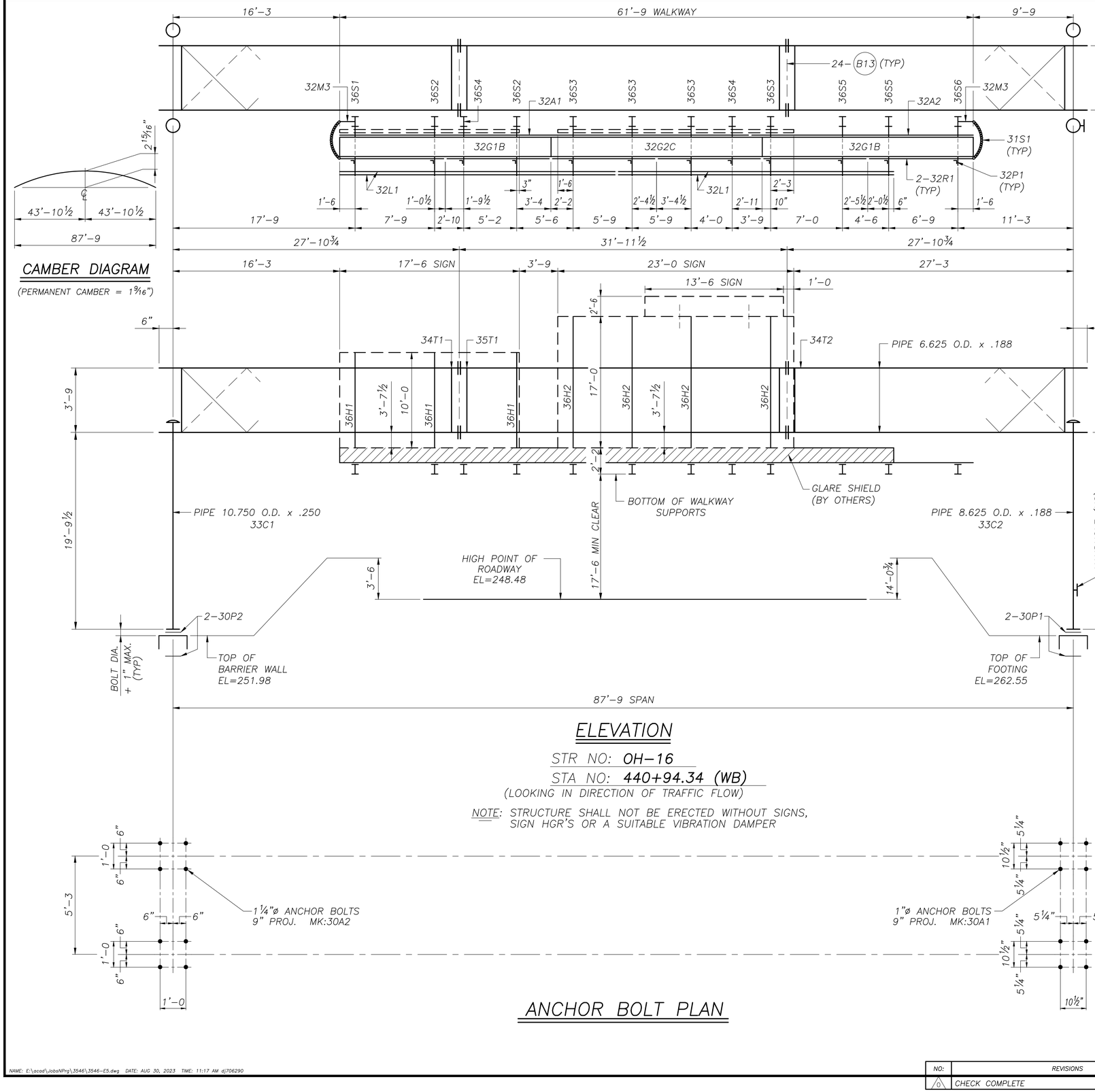
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT:	OVERHEAD BOX TRUSS STRUCTURE ERECTION DRAWING
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546–E4

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED QUANTITIES	12/6/23	DLK	DLJ

BT–E

NAME: E:\acad\JobsNPrg\3546\3546–E4.dwg DATE: DEC 06, 2023 TIME: 3:17 PM dj706290



SHIPPING LIST		C3546-E5
QTY	MARK	DESCRIPTION
8	30A1	ANCHOR BOLTS
8	30A2	ANCHOR BOLTS
4	30P1	ANCHOR TEMPLATES
4	30P2	ANCHOR TEMPLATES
1	34T1	BOX TRUSS 4.3' x 4.8' x 28.5'
1	35T1	BOX TRUSS 4.3' x 4.8' x 32.1'
1	34T2	BOX TRUSS 4.3' x 4.8' x 28.5'
1	33C1	UPRIGHT 6.7' x 1.4' x 19.9'
1	33C2	UPRIGHT 6.5' x 1.3' x 9.3'
2	36S4	WALK SUPPORTS
2	36S5	WALK & LIGHT SUPPORTS
1	36S6	WALK SUPPORTS
2	32M3	SAFETY CHAIN SUPPORT
2	31S1	SAFETY CHAIN
12	31P1	HINGE PIN ASSEMBLIES
24	32M1	CLAMP PLATES
4	32M2	SPLICE PLATES
12	32P1	HANDRAIL POSTS
12	32R1	HANDRAILS
1	32A1	SAFETY ANGLES
1	32A2	SAFETY ANGLES
2	32G1B	GRATING
1	32G2C	GRATING
1	36S1	SIGN/WALK/LIGHT SUPPORT
2	36S2	SIGN/WALK/LIGHT SUPPORT
4	36S3	SIGN/WALK/LIGHT SUPPORT
3	36H1	SIGN HANGERS (ANGLE ARM)
4	36H2	SIGN HANGERS (ANGLE ARM)
7	31M1	EYEBOLT ASSEMBLIES
4	32L1	LIGHT SUPPORTS
1	CP1	COVER PLATE ASSEMBLY
1	HB1	HANDHOLE BAR
62	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
24	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
7	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
7	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
12	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
48	B13	7/8" x 3 1/2" HHB w/HN/FW/DTI (A325 GALV)
1	B99	1/4" x 4" HHB (A307 GALV)
2	C8	POLE CAPS #388 w/ (2) 1/2" SET SCRS(S.S.)
2	C10	POLE CAPS #297 w/ (2) 1/2" SET SCRS(S.S.)
4	S6	SADDLE SHIMS #360
24	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
56	U6	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

DESIGN DWGS: D5, D7, D9 DESIGN NO: BT4 AASHTO 6th Edition Spec's

OH-16

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
DAVID A LALLONE
No. 38665

Sep 8 2023

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD BOX TRUSS STRUCTURE ERECTION DRAWING
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546-E5

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

0

BT-E

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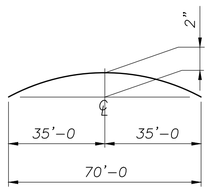
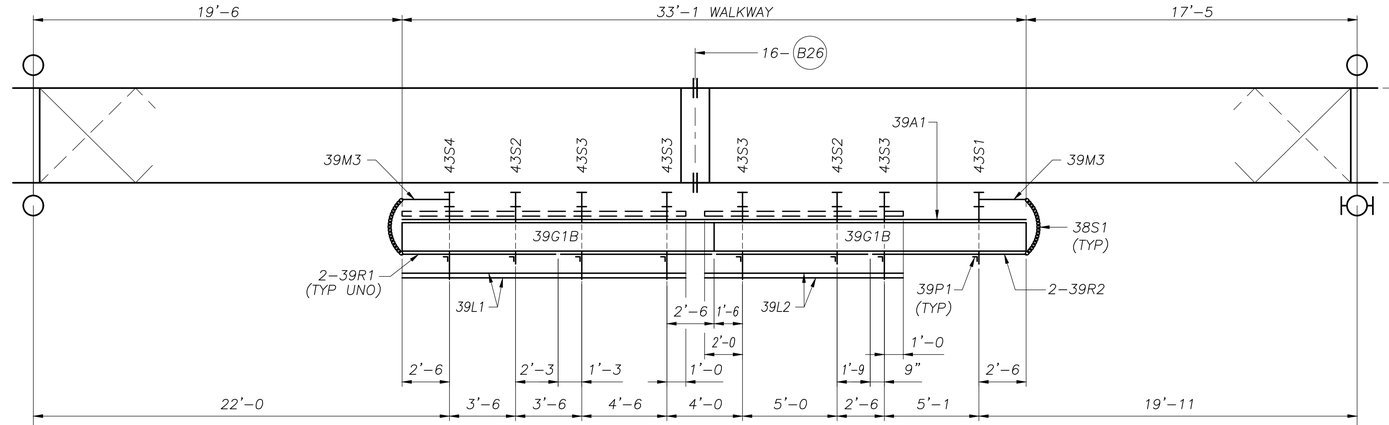
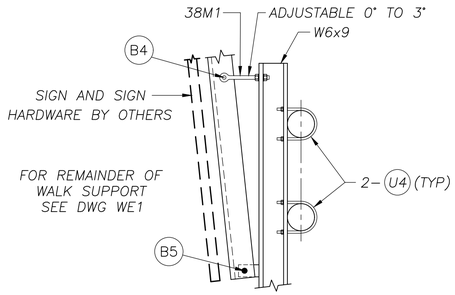


CAMBER DIAGRAM

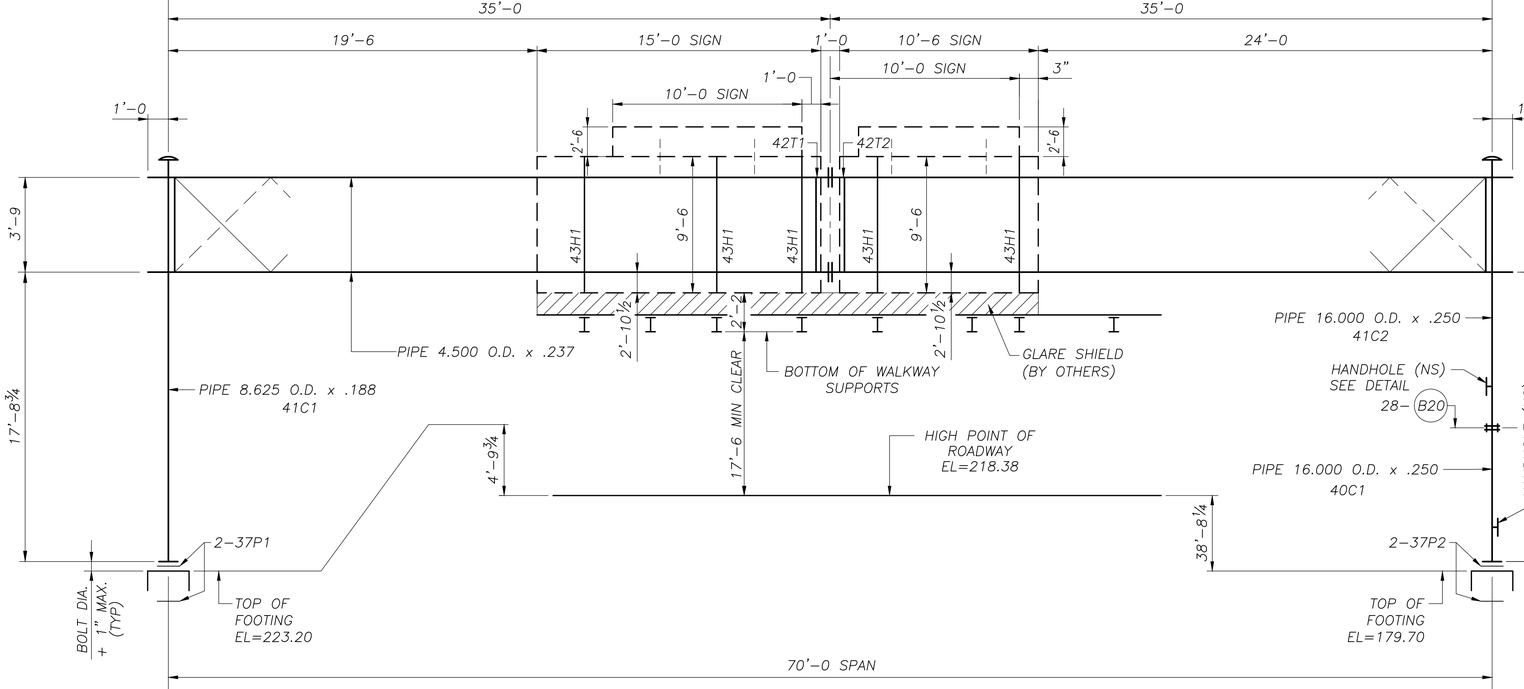
(PERMANENT CAMBER = 1 9/16")

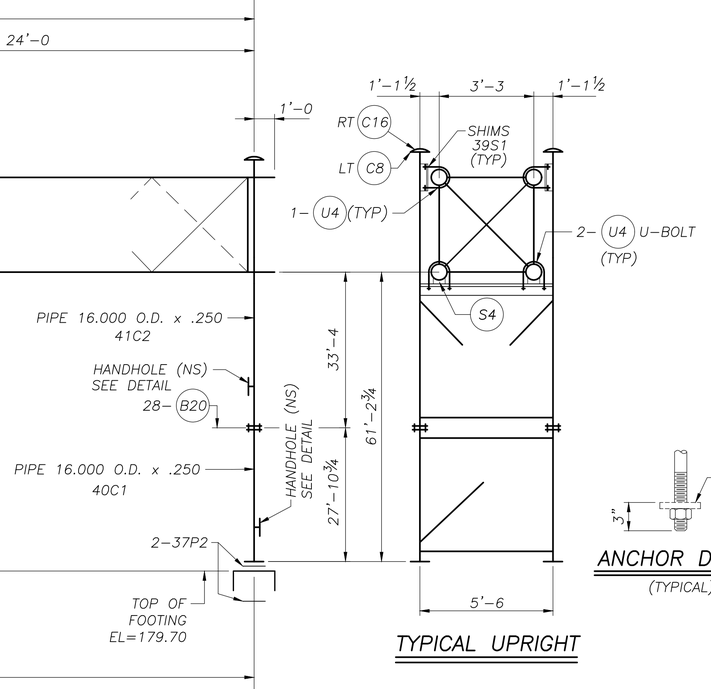




TYP SECTION THRU SIGN SUPPORT & SIGN HANGER

NOTE: EXIT PANELS & SUPPORTS BY OTHERS

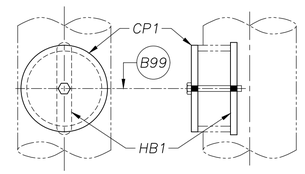




TYPICAL UPRIGHT

ANCHOR DETAIL

(TYPICAL)



HANDHOLE DETAIL

PRE ASSEMBLE CP1 TO HB1 WITH B99 BOLT.
DISTURB THREADS SO HB1 CAN NOT BE REMOVED.
INSTALL COVER ASSEMBLY INTO HANDHOLE OPENING AND TIGHTEN BOLT TO SECURE.

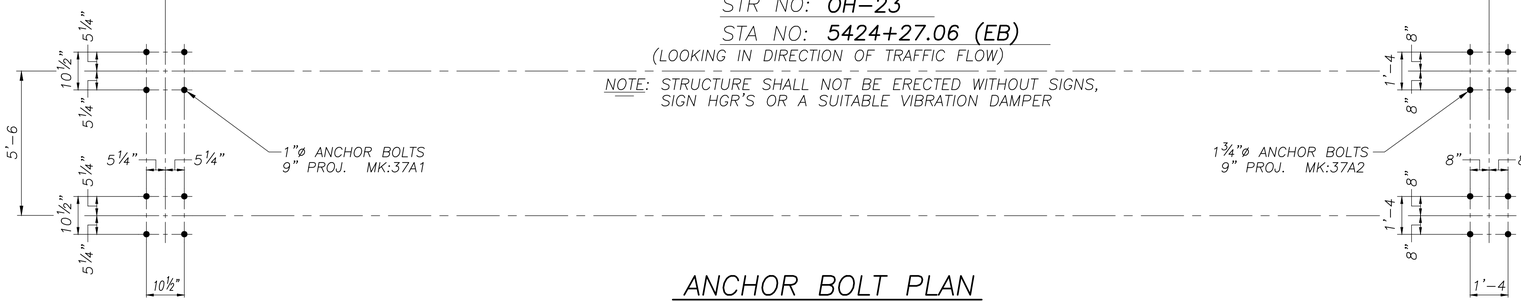
ELEVATION

STR NO: OH–23

STA NO: 5424+27.06 (EB)

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS, SIGN HGR'S OR A SUITABLE VIBRATION DAMPER



ANCHOR BOLT PLAN

SHIPPING LIST		
QTY	MARK	DESCRIPTION
8	37A1	ANCHOR BOLTS
8	37A2	ANCHOR BOLTS
4	37P1	ANCHOR TEMPLATES
4	37P2	ANCHOR TEMPLATES
1	42T1	BOX TRUSS 4.1' x 4.6' x 36.1'
1	42T2	BOX TRUSS 4.1' x 4.6' x 36.1'
1	41C1	UPRIGHT 6.8' x 1.3' x 22.2'
1	41C2	UPRIGHT 7.3' x 1.8' x 37.9'
1	40C1	UPRIGHT STUB 7.3' x 1.8' x 27.9'
1	43S1	WALK SUPPORTS
2	43S2	WALK SUPPORTS
2	39M3	SAFETY CHAIN SUPPORT
2	38S1	SAFETY CHAIN
8	38P1	HINGE PIN ASSEMBLIES
16	39M1	CLAMP PLATES
2	39M2	SPLICE PLATES
8	39P1	HANDRAIL POSTS
6	39R1	HANDRAILS
2	39R2	HANDRAILS
1	39A1	SAFETY ANGLE
2	39G1B	GRATING
4	39S1	SHIMS
4	43S3	SIGN/WALK/LIGHT SUPPORTS
1	43S4	SIGN/WALK/LIGHT SUPPORTS
5	43H1	SIGN HANGERS (ANGLE ARM)
5	38M1	EYEBOLT ASSEMBLIES
2	39L1	LIGHT SUPPORTS
2	39L2	LIGHT SUPPORTS
2	CP1	COVER PLATE ASSEMBLY
2	HB1	HANDHOLE BAR
38	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
16	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
5	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
5	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
8	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
16	B26	7/8" x 3" HHB w/HN/FW/DTI (A325 GALV)
28	B20	1" x 4 1/4" HHB w/HN/FW/DTI (A325 GALV)
2	B99	1/4" x 4" HHB (A307 GALV)
2	C8	POLE CAPS #388 w/ (2) 1/2" SET SCRS(S.S.)
2	C16	POLE CAPS #393 w/ (2) 1/2" SET SCRS(S.S.)
4	S4	SADDLE SHIMS #350
16	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
44	U4	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

DESIGN DWGS: D4, D6, D8 DESIGN NO: BT5 AASHTO 6th Edition Spec's

OH–23

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Sep 8 2023

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NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT: OVERHEAD BOX TRUSS STRUCTURE ERECTION DRAWING

FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/29/23

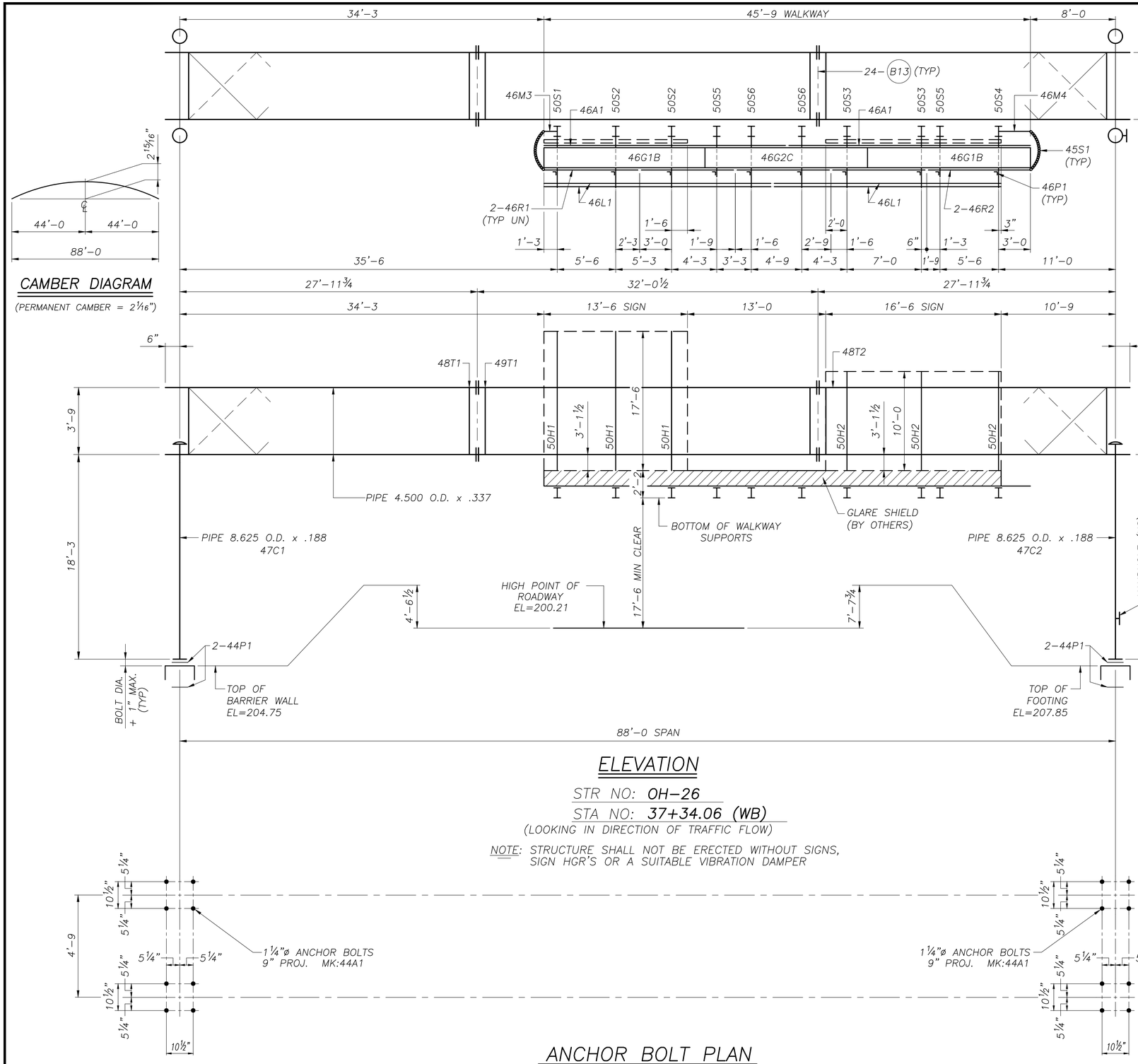
CHECKED BY: DLJ DATE: 9/6/23

DWG NO: C3546–E6

C3546–E6

BT–E

NAME: E:\ocad\JobsNProg\3546\3546–E6.dwg DATE: SEP 06, 2023 TIME: 11:39 AM dj706290



ELEVATION

STR NO: OH-26

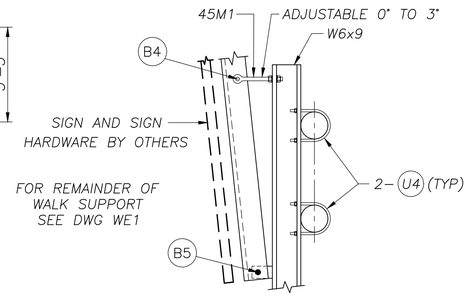
STA NO: 37+34.06 (WB)

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE: STRUCTURE SHALL NOT BE ERECTED WITHOUT SIGNS, SIGN HGR'S OR A SUITABLE VIBRATION DAMPER

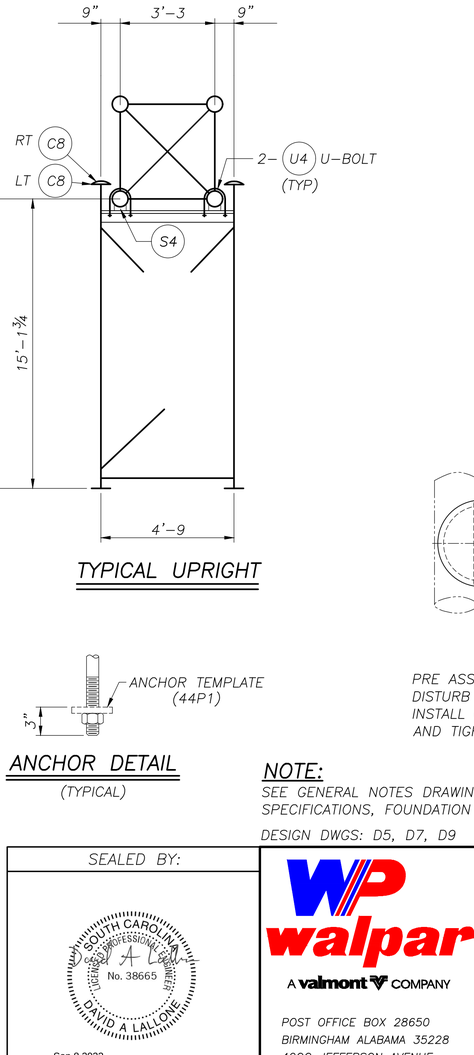
CAMBER DIAGRAM

(PERMANENT CAMBER = 2 1/16")



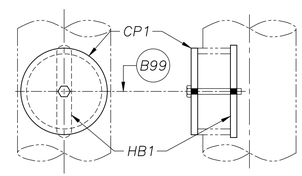
TYP SECTION THRU SIGN SUPPORT & SIGN HANGER

ANCHOR BOLT PLAN



TYPICAL UPRIGHT

SHIPPING LIST		C3546-E7
QTY	MARK	DESCRIPTION
16	44A1	ANCHOR BOLTS
8	44P1	ANCHOR TEMPLATES
1	48T1	BOX TRUSS 4.1' x 4.6' x 28.6'
1	49T1	BOX TRUSS 4.1' x 4.6' x 32.1'
1	48T2	BOX TRUSS 4.1' x 4.6' x 28.6'
1	47C1	UPRIGHT 6' x 1.3' x 18.4'
1	47C2	UPRIGHT 6' x 1.3' x 15.3'
2	50S5	WALK SUPPORTS
2	50S6	WALK & LIGHT SUPPORTS
1	46M3	SAFETY CHAIN SUPPORT
1	46M4	SAFETY CHAIN SUPPORT
2	45S1	SAFETY CHAIN
10	45P1	HINGE PIN ASSEMBLIES
20	46M1	CLAMP PLATES
4	46M2	SPLICE PLATES
10	46P1	HANDRAIL POSTS
8	46R1	HANDRAILS
2	46R2	HANDRAILS
2	46A1	SAFETY ANGLES
2	46G1B	GRATING
1	46G2C	GRATING
1	50S1	SIGN/WALK/LIGHT SUPPORT
2	50S2	SIGN/WALK/LIGHT SUPPORT
2	50S3	SIGN/WALK/LIGHT SUPPORT
1	50S4	SIGN/WALK/LIGHT SUPPORT
3	50H1	SIGN HANGERS (ANGLE ARM)
3	50H2	SIGN HANGERS (ANGLE ARM)
6	45M1	EYEBOLT ASSEMBLIES
4	46L1	LIGHT SUPPORTS
1	CP1	COVER PLATE ASSEMBLY
1	HB1	HANDHOLE BAR
56	B1	3/8" x 1 1/4" BOLT w/HN/LW (A307 GALV)
20	B3	1 3/8" OD x 14 GA WASHER (A307 GALV)
6	B4	3/4" x 2 1/2" HHB w/HN/FW/LW (A325 GALV)
6	B5	3/4" x 2" HHB w/HN/LW (A325 GALV)
10	B6	1/2" x 1 1/2" HHB w/HN/LW (A325 GALV)
48	B13	7/8" x 3 1/2" HHB w/HN/FW/DTI (A325 GALV)
1	B99	1/4" x 4" HHB (A307 GALV)
4	C8	POLE CAPS #388 w/ (2) 1/2" SET SCRS(S.S.)
4	S4	SADDLE SHIMS #350
20	U1	5/16" U-Bolts w/(2 ea) HN/LW (ZINC PL)
48	U4	1/2" U-Bolts w/(2 ea) HN/LW/FW (GALV)



HANDHOLE DETAIL

PRE ASSEMBLE CP1 TO HB1 WITH B99 BOLT.
DISTURB THREADS SO HB1 CAN NOT BE REMOVED.
INSTALL COVER ASSEMBLY INTO HANDHOLE OPENING AND TIGHTEN BOLT TO SECURE.

ANCHOR DETAIL

(TYPICAL)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

DESIGN DWGS: D5, D7, D9 DESIGN NO: BT6 AASHTO 6th Edition Spec's

OH-26

SEALED BY:

Sep 8 2023

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD BOX TRUSS STRUCTURE ERECTION DRAWING
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/30/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546-E7

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

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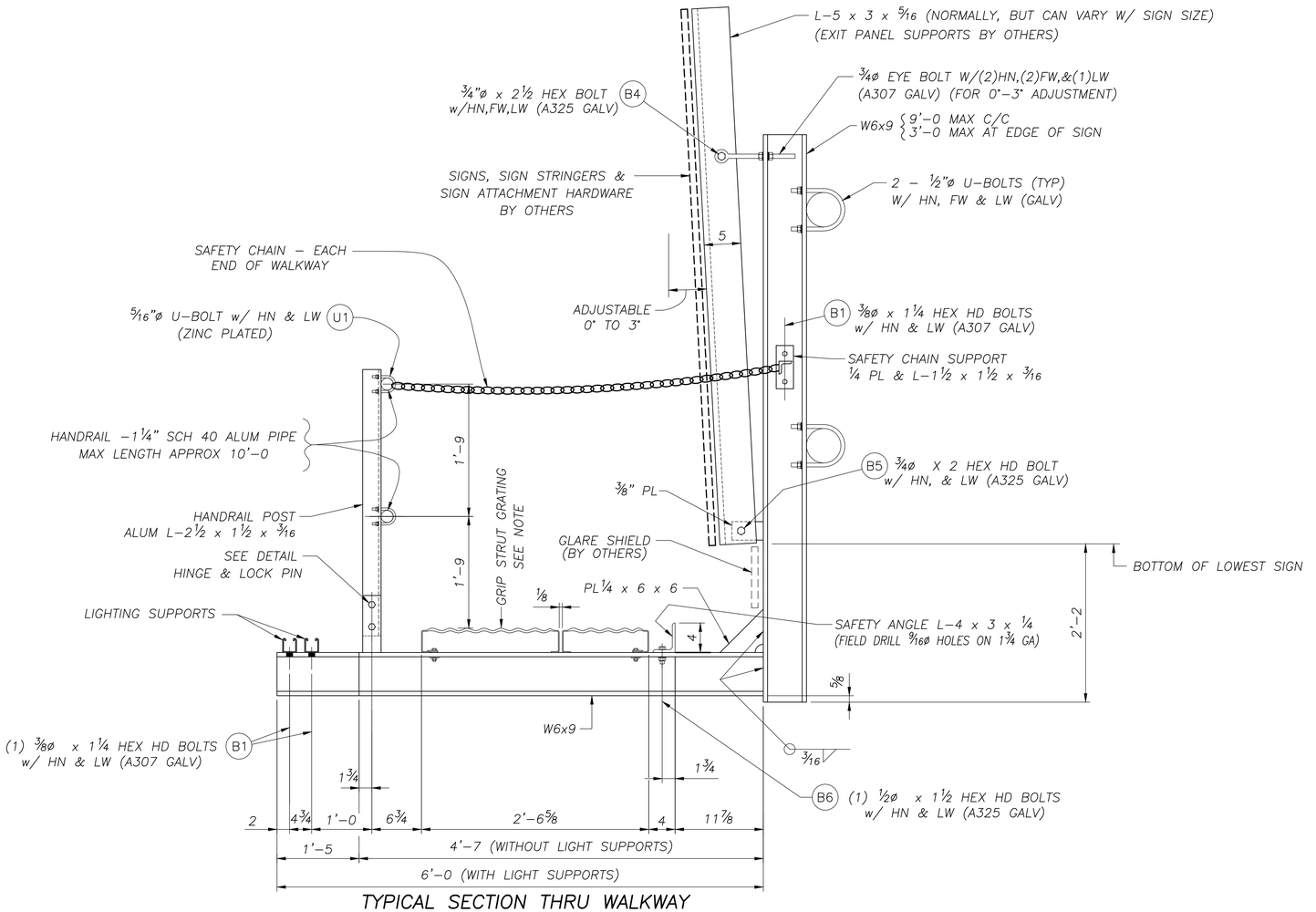
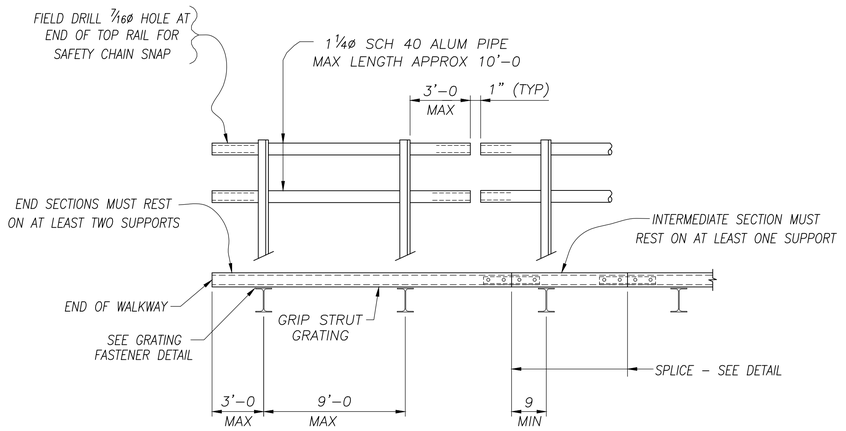
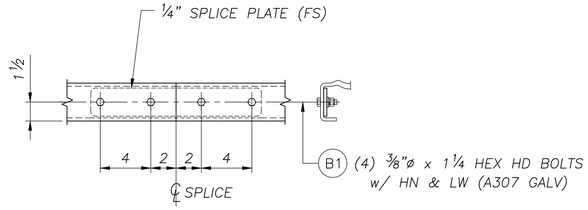
BT-E



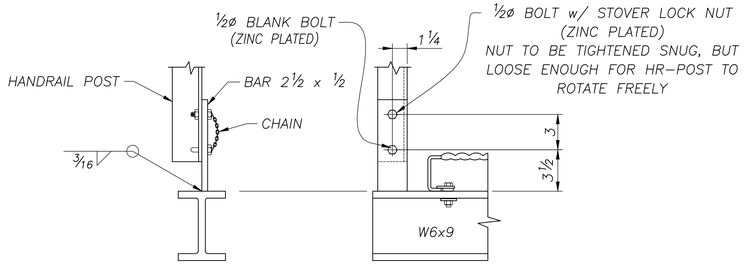
TYPICAL SECTION THRU WALKWAY



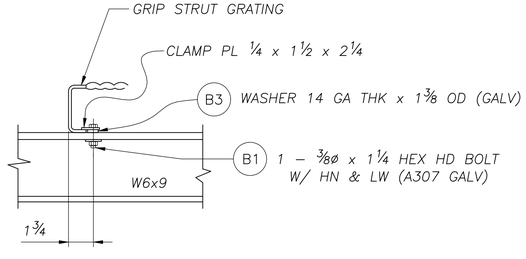
ELEVATION OF WALKWAY



GRATING SPLICE DETAIL



HINGE & LOCKPIN DETAIL



GRATING FASTENER DETAIL

MISC NOTES:

1. GRATING TO BE "GRIP STRUT" SAFETY GRATING OR EQUAL, #5 DIAMOND 11 3/4" WIDTH, 3" DEEP, CAT #53012 & #8 DIAMOND 18 3/4" WIDTH, 3" DEEP, CAT #83012 TACK WELDED TOGETHER TO FORM WALKWAY 30 5/8" WIDE. GALVANIZED AFTER FABRICATION
2. UNISTRUT LENGTHS TO BE EQUAL TO EACH INDIVIDUAL SIGN LENGTHS.

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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BIRMINGHAM ALABAMA 35221
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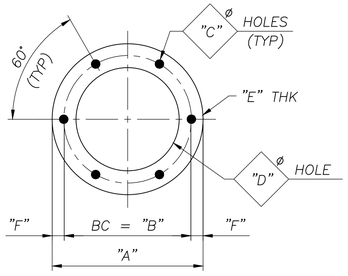
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT
	WALPAR WALKWAY DESIGN
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/29/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546–WE1

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

C3546-1
SOUTH CAROLINA



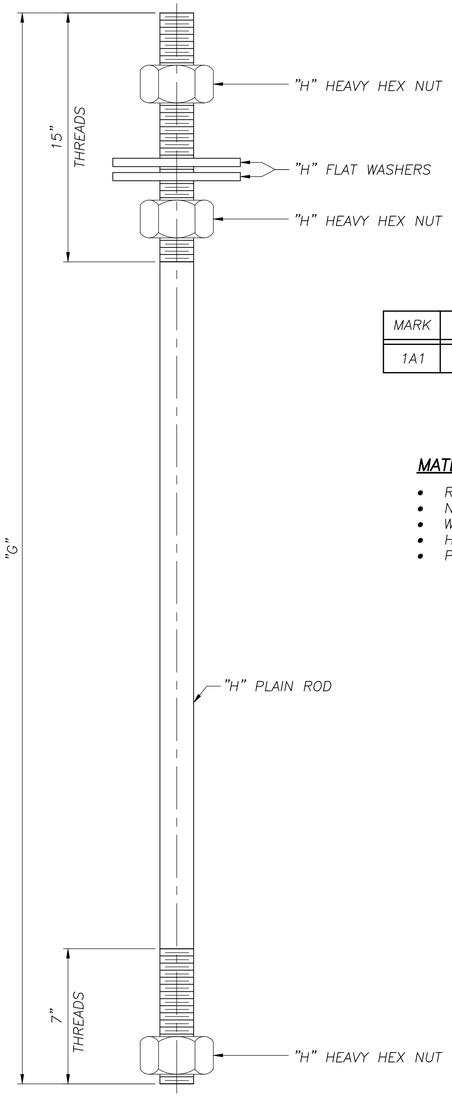
TYPE "CC"
(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
1P1	2	CC	34	30	1 7/8	26	1/4	2

NOTE:
THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
1A1	4'-6	1 3/4	5	6	18	12	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM-A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM-A153

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
	1P1	2		ANCHOR TEMPLATES			
	a	2	PL	1/4 x 34 DIA	–	–	

C3546-1

SHIPPING LIST

QTY	MARK	DESCRIPTION
2	1P1	ANCHOR TEMPLATES
6	1A1	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:
DO NOT GALVANIZE TEMPLATES

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E1

OH-17

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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FAX (205) 925-7273

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/24/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

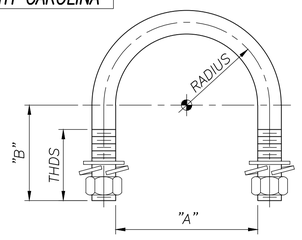
SUBJECT: SIGN STRUCTURE
ANCHOR TEMPLATE & TYPE A PLATE DETAILS

FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/23/23
CHECKED BY: DLJ DATE: 8/24/23

DWG NO: C3546-1

C3546-2
SOUTH CAROLINA



NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

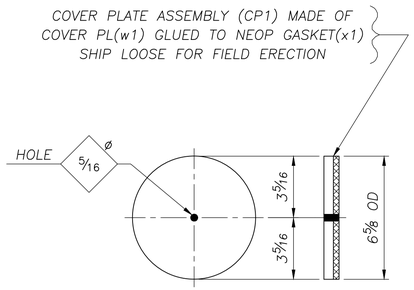
NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U-BOLTS w/(2ea) HN/LW/FW ~

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1

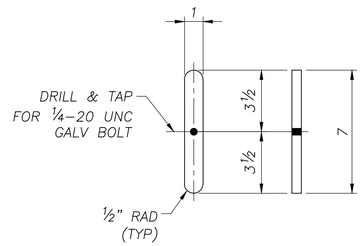
MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	8	5/16	1 11/16	1 5/8	1	1 1/4	NOTE 2
U3	16	1/2	3 5/8	3 3/4	2 1/16	2	NOTE 1

1



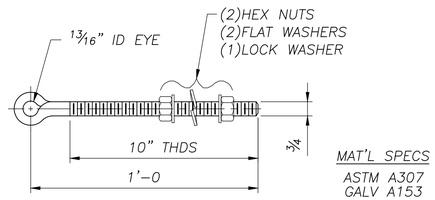
1 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO.	NO. OF PIECES REQ'D.	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	1		COVER PLATE ASSEMBLY			
w1	1	PL	1/4 x 6 5/8 DIA. (GALV A123)	-	-	1
x1	1	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	-	-	1



1 ~ HANDHOLE BAR ~ HB1

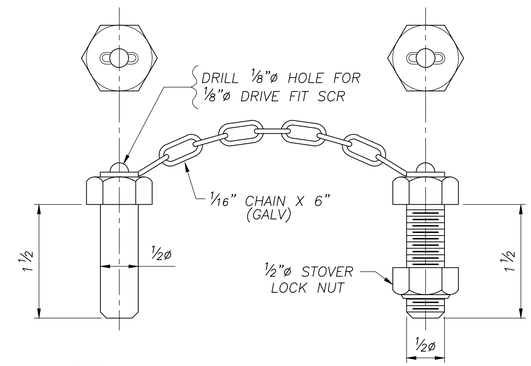
PART MARK NO.	NO. OF PIECES REQ'D.	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	1		HANDHOLE BAR			
w2	1	PL	1/4 x 1 (GALV A123)	0	7	1



MAT'L SPECS
ASTM A307
GALV A153

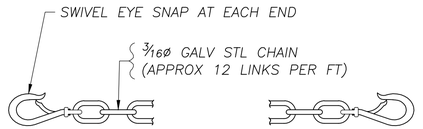
3 ~ EYE BOLT ASSEMBLY ~ 2M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1



1 4 ~ HINGE PIN ASSEMBLY ~ 2P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

MARK	QTY	LENGTH
2S1	2	4'-6

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E1

OH-17

AASHTO 6th Edition Spec's

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1

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

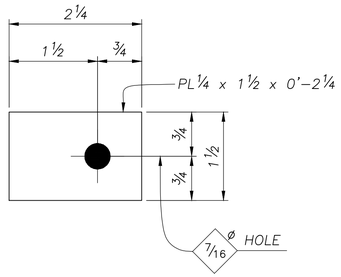
SUBJECT: SIGN STRUCTURES
MISC DETAILS
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/23/23
CHECKED BY: DLJ DATE: 8/24/23
DWG NO: C3546-2

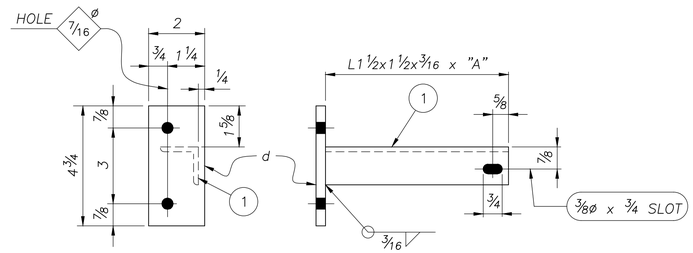
NO:	REVISIONS	DATE	MADE	CHECKED
1	QUANTITIES REVISED	12/6/23	DLK	DLJ

KITDWG3

NAME: E:\acad\JobsNPrg\3546\3546-2.dwg DATE: DEC 06, 2023 TIME: 3:16 PM dj706290



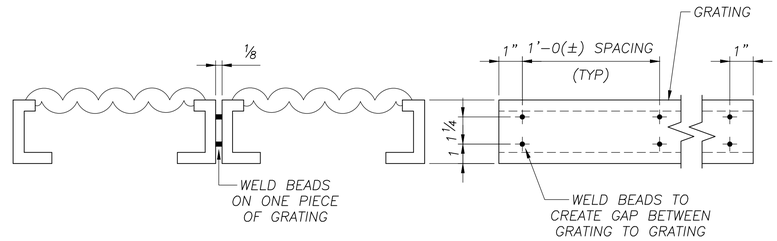
△1 8 ~ CLAMP PLATES ~ 3M1



~ SAFETY CHAIN SUPPORT ~

(SEE CHART)

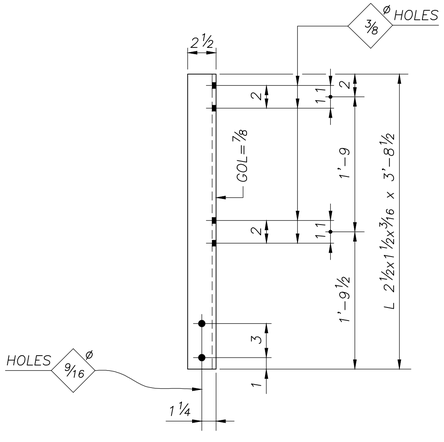
MARK	QTY	"A"	(1)
3M3	2	2'-6	f



GRATING GAP DETAIL

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
	3M1	8		CLAMP PLATES			
△1	a	8	PL	1/4 x 1 1/2	0	2 1/4	
	3M3	2		SAFETY CHAIN SUPPORT			
	d	2	PL	1/4 x 2	0	4 3/4	
	f	2	L	1 1/2 x 1 1/2 x 3/16	2	6	
	3G1A	1		GRATING			
△1	g	1	GRT	18 3/4 WIDE	20	3	
	n	1	GRT	11 3/4 WIDE	20	3	
	3P1	4		HANDRAIL POSTS			
△1	h	4	ALL	2 1/2 x 1 1/2 x 3/16 (ALUM 6061)	3	8 1/2	
	3R1	4		HANDRAIL			
△1	k	4	ALPI	1.660 x .140 (ALUM 6061)	10	1 1/2	
	3A1	1		SAFETY ANGLE			
△1	m	1	L	4 x 3 x 1/4	20	3	
	3L1	2		LIGHTING SUPPORTS (ALUM 6063-T6)			
	p	2	ALUN	UNISTRUT 1 5/8 x 1 5/8 x .105	18	6	

C3546-3

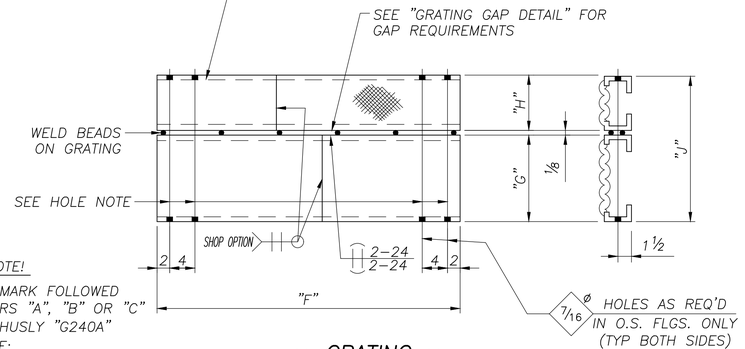


△1 4 ~ HANDRAIL POSTS ~ 3P1

(ALUMINUM)

SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18 3/4" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11 3/4" WIDE – CAT# 53012



HOLE NOTE!

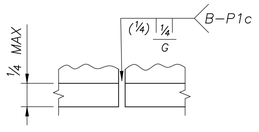
GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A"
DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1-END
"C" – HOLES BOTH ENDS

~ GRATING ~

(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
△1 3G1A	1	2'-3	1'-6 3/4	11 3/4	2'-6 5/8

20' - 3



TOE ANGLE SPLICE

(OPTIONAL)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E1

OH-17

AASHTO 6th Edition Spec's

SEALED BY:



Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
△1	REVISED QUANTITES AND GRATING LENGTH	12/6/23	DLK	DLJ

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BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

△1

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126

SUBJECT: SIGN STRUCTURE
MISC DETAILS

FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/23/23
CHECKED BY: DLJ DATE: 8/28/23

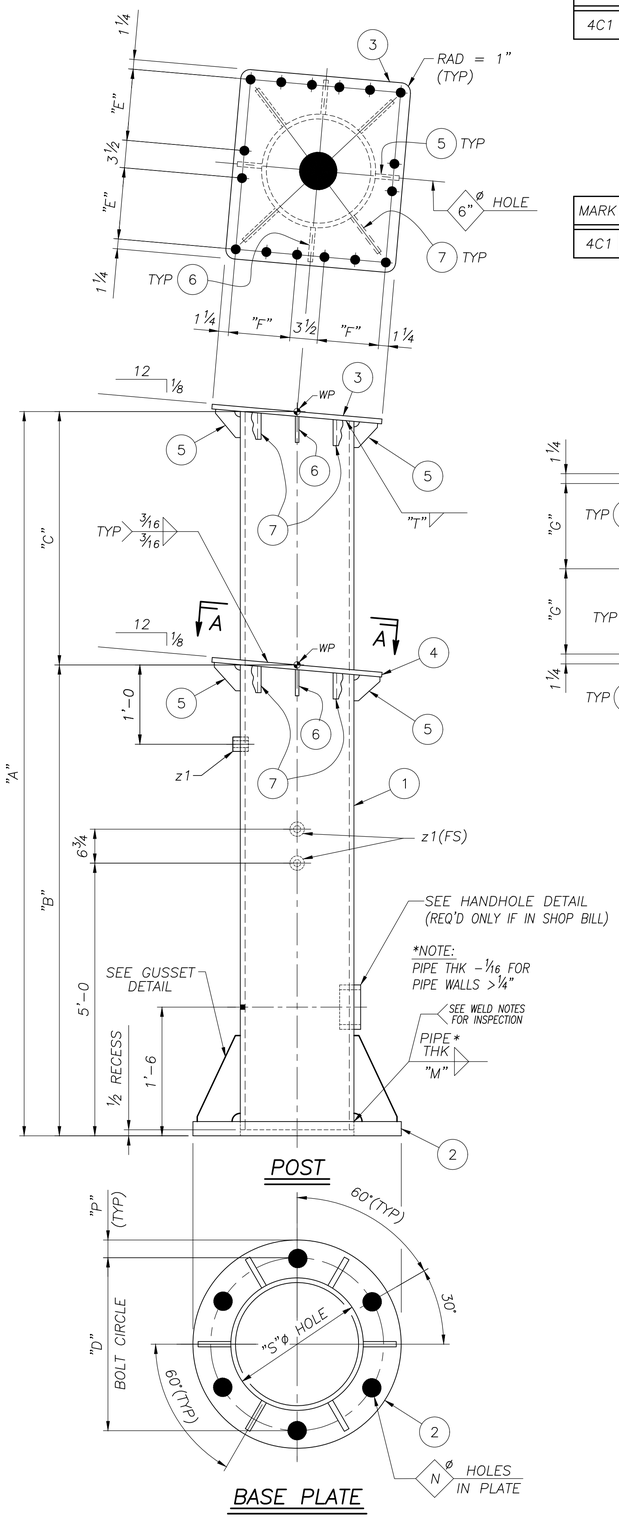
DWG NO: C3546-3

MARK	QTY	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
4C1	1	23'–0	19'–6	3'–6	2'–6	1'–0½	2 @ 6 = 1'–0	1'–2¼	2 @ 6 = 1'–0

MARK	"J"	"K"	"L"	"M"	"N" QTY	"N" DIA	"P"	"S"	"T"	1	2	3	4	5	6	7	8
4C1	2½	2 15/16	6¼	5/16	6	2	2½	2'–0 1/16	¼	a	b	d	f	k	m	n	h

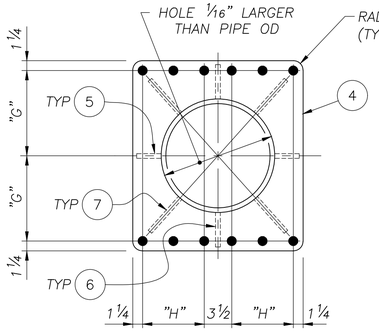
PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
	4C1	1		CANTILEVER POST			
	a	1	PIPE	24.000 x .312	22	11⅛	
	b	1	PL	1¾ x 35 DIA.	–	–	
	d	1	PL	½ x 30	2	7	
	f	1	PL	½ x 30	2	7	
	k	4	PL	½ x 2½	0	2½	
	m	4	PL	½ x 2 15/16	0	2 15/16	
	n	8	PL	½ x 6¼	0	6¼	
	h	6	PL	¾ x 5	1	0	
	v1	1	PIPE	6.625 x .864	0	3	
	z1	3	OP	1¼" FORGED HALF CPLG (3000#)	–	–	

C3546–4

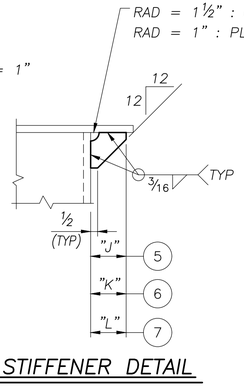


POST

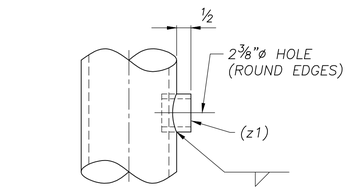
BASE PLATE



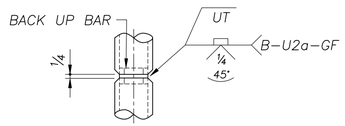
SECTION A–A



STIFFENER DETAIL

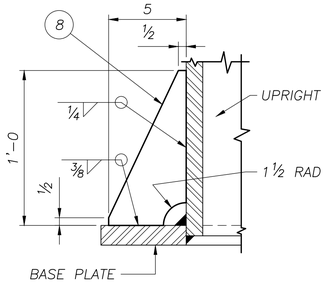


WIRE OUTLET DETAIL

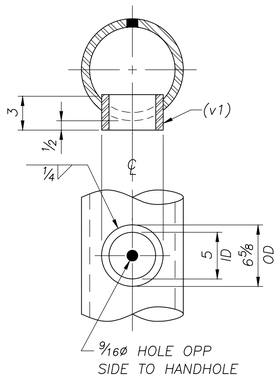


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



TYP GUSSET DETAIL



HANDHOLE DETAIL

NOTE:
ALL HOLES TO BE ⋄ 7/8 ø UNLESS NOTED

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E1

OH–17

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
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0

CBTUPDET

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: CANTILEVER SIGN SUPPORT
DETAILS OF UPRIGHT

FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/23/23
CHECKED BY: DLJ DATE: 8/24/23

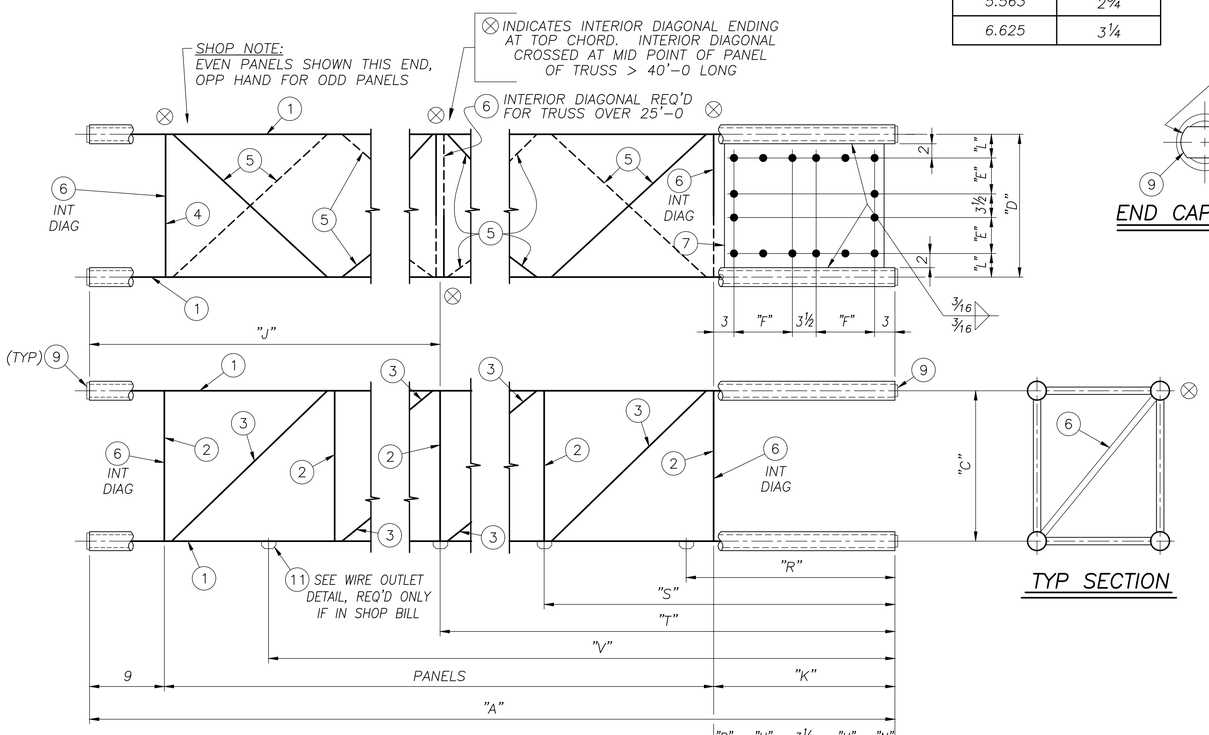
DWG NO: C3546–4

NAME: E:\acad\JobsNPrg\3546\3546–4.dwg DATE: AUG 24, 2023 TIME: 3:52 PM dj706290

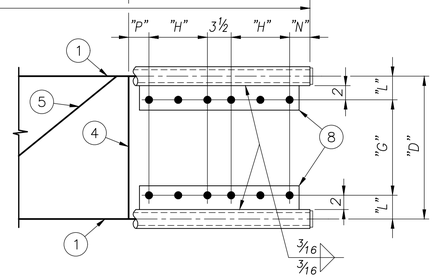
MARK	QTY	"A"	"C"	PANELS	"D"	"E"	"F"	"G"	"H"	"J"	"K"	"L"	"M"	"N"	"P"				
5T1	1	30'–1¾	3'–6	7 @ 3'–9⅝(±) = 26'–7¼	3'–0	1'–0½	2 @ 6 = 1'–0	2'–4½	2 @ 6 = 1'–0	12'–1 13/16	2'–9½	3¾	1½	2 9/16	3 7/16				

MARK	"R"	"S"	"T"	"V"	1	2	3	4	5	6	7	8	9		11
5T1	3'–3½	21'–9 9/16	-------	-------	a	b	d	f	g	h	k	m	n		z1

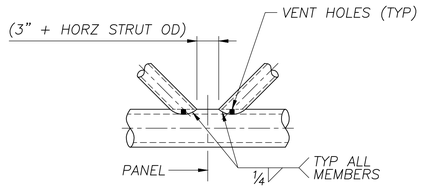
VENT HOLE SIZES	
WEB MEMBER (OD)	HOLE DIA ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼



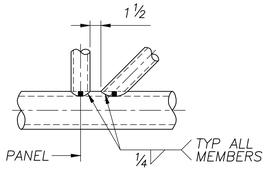
TRUSS



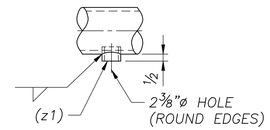
END CAP DETAIL



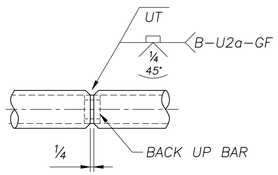
JOINT DETAIL



JOINT DETAIL



WIRE OUTLET DETAIL



OPTIONAL CHORD SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)

SHOP NOTE:

INTERIOR DIAGONALS MAY BE OFFST UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OF OTHER WEB MEMBERS.

NOTE:

ALL HOLES TO BE 7/8ø UNLESS NOTED

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E1

AASHTO 6th Edition Spec's

OH–17

C3546–5

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	5T1	1		CANTILEVER TRUSS				
	a	4	PIPE	3.500 x .188	30	1¾		
	b	16	PIPE	1.315 x .133	3	2 11/16		
	d	14	PIPE	1.315 x .133	4	8 7/16		
	f	3	PIPE	1.660 x .140	2	8 13/16		
	g	14	PIPE	1.660 x .140	4	4¼		
	h	3	PIPE	1.315 x .133	4	4		
	k	1	PL	½ x 30	2	8½		
	m	2	PL	½ x 3¼	2	6		
	n	8	PL	¼ x 1½	0	3¼		
	z1	2	OP	1¼" FORGED HALF CPLG (3000#)	–	–		

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SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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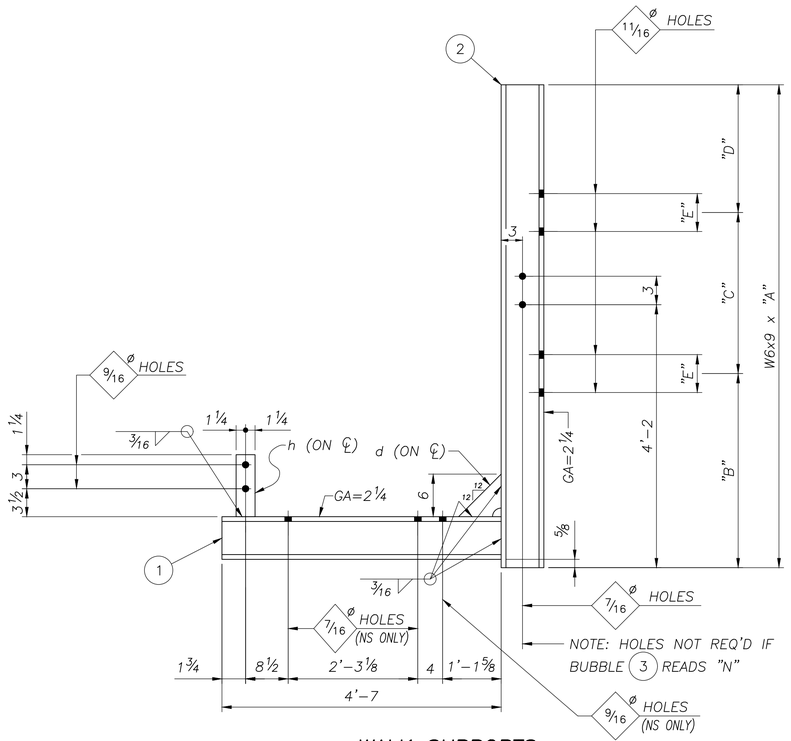
NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/24/23	DLK	DLJ

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	CANTILEVER SIGN SUPPORT
	DETAIL OF TRUSS
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/23/23
CHECKED BY:	DLJ DATE: 8/24/23
DWG NO:	C3546–5

0

BTCTDET

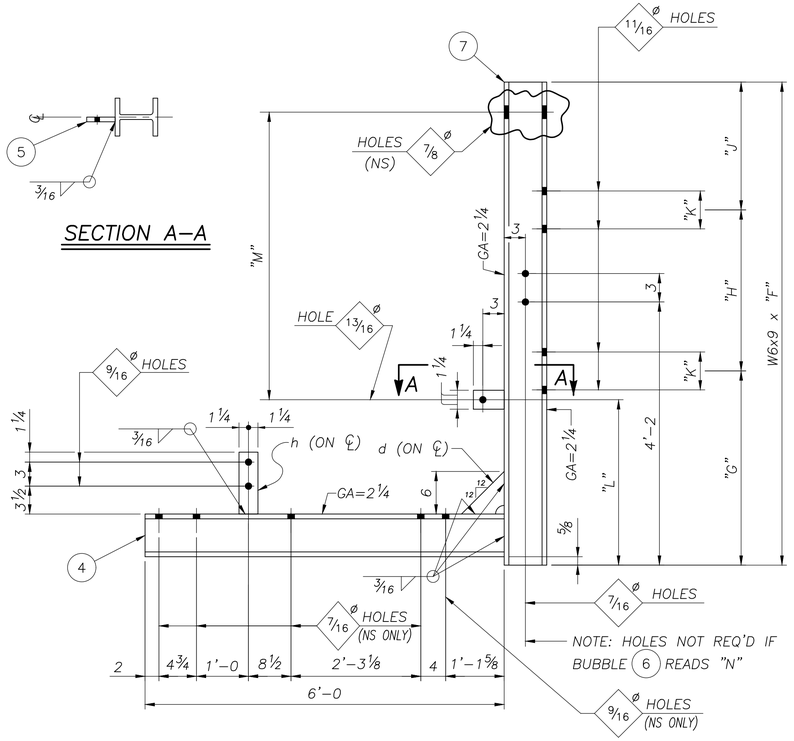
NAME: E:\acad\JobsNPrg\3546\3546–5.dwg DATE: AUG 24, 2023 TIME: 3:52 PM dj706290



WALK SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	1	2	3
6S1	1	9'-5	5'-5	3'-6	6	4⅛	b	a	N

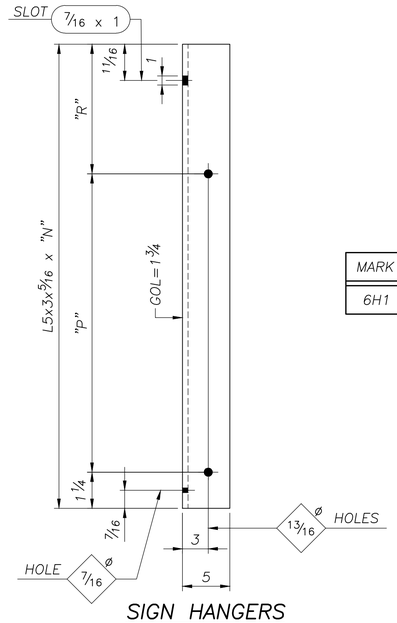
△1 △1



SIGN/WALK/LIGHT SUPPORTS

MARK	QTY	"F"	"G"	"H"	"J"	"K"	"L"	"M"	4	5	6	7
6S2	2	9'-5	5'-5	3'-6	6	4⅛	2'-3¼	6'-2½	bb	f	y	aa
6S3	1	9'-5	5'-5	3'-6	6	4⅛	2'-3¼	6'-2½	bb	f	N	ba

△1 △1



SIGN HANGERS

MARK	QTY	"N"	"P"	"R"
6H1	3	10'-0¼	6'-2½	3'-8½

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	6S1	1		WALK SUPPORTS				
△1	a	1	W	6 x 9	9	5		
	b	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7¾		
	6S2	2		SIGN/WALK/LIGHT SUPPORTS				
△1	aa	2	W	6 x 9	9	5		
	bb	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	f	2	PL	3/8 x 2 1/2	0	4¼		
	h	2	PL	1/2 x 2 1/2	0	7¾		
	6S3	1		SIGN/WALK/LIGHT SUPPORTS				
	ba	1	W	6 x 9	9	5		
△1	bb	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4¼		
	h	1	PL	1/2 x 2 1/2	0	7¾		
	6H1	3		SIGN HANGERS				
	k	3	L	5 x 3 x 5/16	10	0¼		

C3546-6

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E1, WE1

OH-17

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
△1	REVISED SUPPORT QUANTITIES	12/6/23	DLK	DLJ

walpar
A valmont COMPANY
POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
PHONE (205)-925-4990
FAX (205) 925-7273

△1

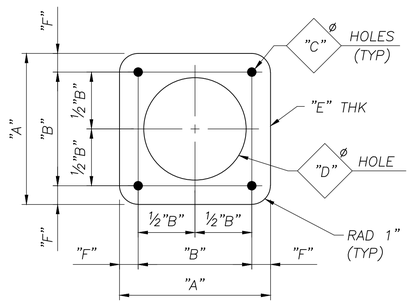
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: SIGN SUPPORT
SIGN HANGER DETAIL
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/23/23
CHECKED BY: DLJ DATE: 8/28/23
DWG NO: C3546-6

SH-DET5

NAME: E:\acad\JobsNPrg\3546\3546-6.dwg DATE: DEC 06, 2023 TIME: 3:16 PM dj706290



TYPE "AA"

(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

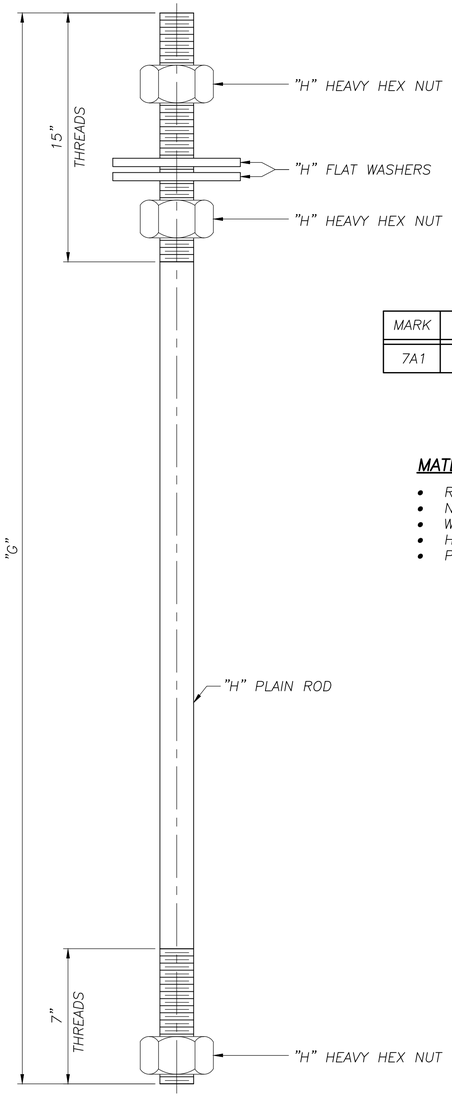
(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
7P1	8	AA	20	16	2⅛	16	¼	2

C3546–7
SOUTH CAROLINA

NOTE:

THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
7A1	4'–6	2	4½	16	48	32	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM–A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM–A153

C3546–7

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	7P1	8		ANCHOR TEMPLATES				
	a	8	PL	¼ x 20	1	8		

SHIPPING LIST

QTY	MARK	DESCRIPTION
8	7P1	ANCHOR TEMPLATES
16	7A1	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:

DO NOT GALVANIZE TEMPLATES

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2

OH–9

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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4200 JEFFERSON AVENUE
BIRMINGHAM ALABAMA 35221
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FAX (205) 925–7273

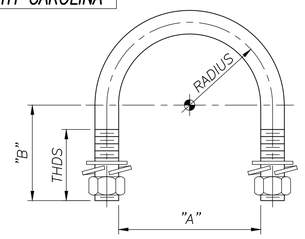
NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/28/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN STRUCTURE
ANCHOR BOLT & TEMPLATE DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/24/23
CHECKED BY: DLJ DATE: 8/28/23
DWG NO: C3546–7

C3546-8
SOUTH CAROLINA



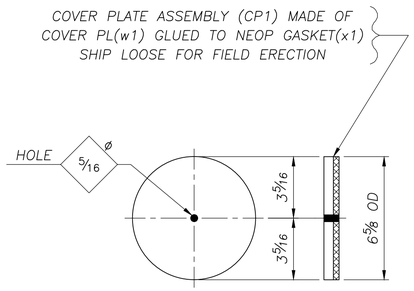
NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U-BOLTS w/(2ea) HN/LW/FW ~

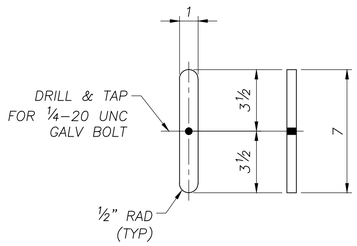
NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1

MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	16	5/16	1 11/16	1 5/8	1	1 1/4	NOTE 2
U5	44	1/2	5 5/8	4 3/4	3 1/16	2	NOTE 1



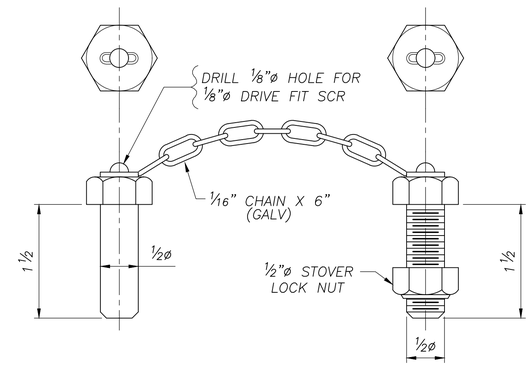
2 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	2		COVER PLATE ASSEMBLY			
w1	2	PL	1/4 x 6 5/8 DIA. (GALV A123)	–	–	1
x1	2	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	–	–	1



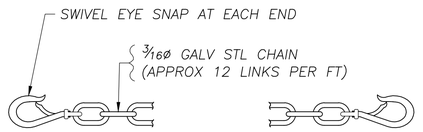
2 ~ HANDHOLE BAR ~ HB1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	2		HANDHOLE BAR			
w2	2	PL	1/4 x 1 (GALV A123)	0	7	1



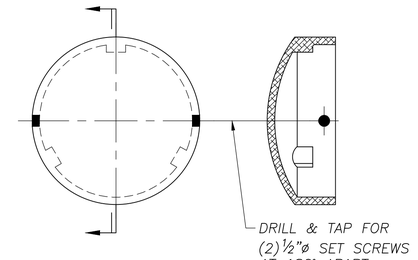
8 ~ HINGE PIN ASSEMBLY ~ 8P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

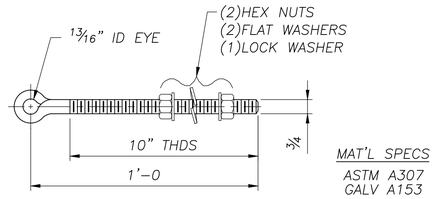
MARK	QTY	LENGTH
8S1	2	4'-6



~ POLE CAPS ~

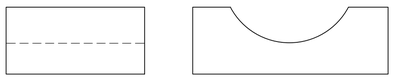
(ALUM 356-F) (ASTM B26, A356)

MARK	QTY	PART No	REMARKS
C16	4	393	16ø PIPE



4 ~ EYE BOLT ASSEMBLY ~ 8M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1



~ SADDLE SHIM DETAIL ~

(ALUM 356-T6)

MARK	QTY	PART No	REMARKS
S5	4	359	FOR 5 9/16

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E2

OH-9

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/28/23	DLK	DLJ

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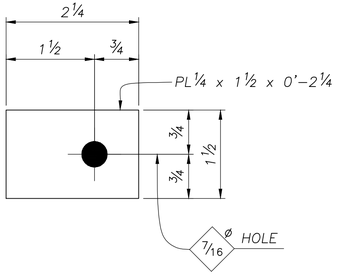
PHONE (205)-925-4990
FAX (205) 925-7273

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

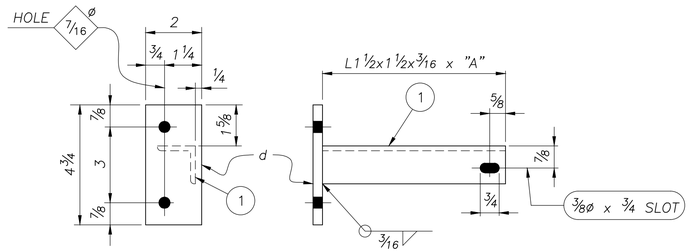
SUBJECT: SIGN STRUCTURES
MISC DETAILS
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/24/23
CHECKED BY: DLJ DATE: 8/28/23
DWG NO: C3546-8

KITDWG3



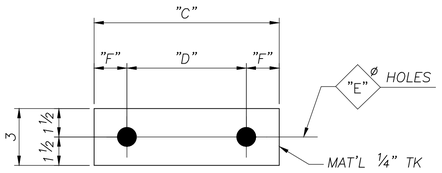
16 ~ CLAMP PLATES ~ 9M1



~ SAFETY CHAIN SUPPORT ~

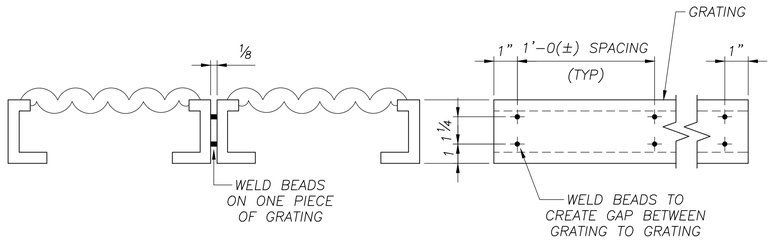
(SEE CHART)

MARK	QTY	"A"	(1)
9M3	2	3'-0	f

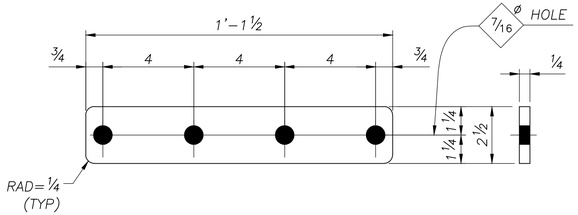


~ SHIMS ~

MARK	QTY	"C"	"D"	"E"	"F"
9S1	4	8⅜	6⅛	11/16	1⅛



GRATING GAP DETAIL

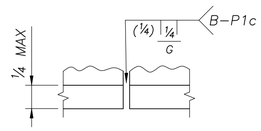


2 ~ SPLICE PLATES ~ 9M2

(FOR GRATING)

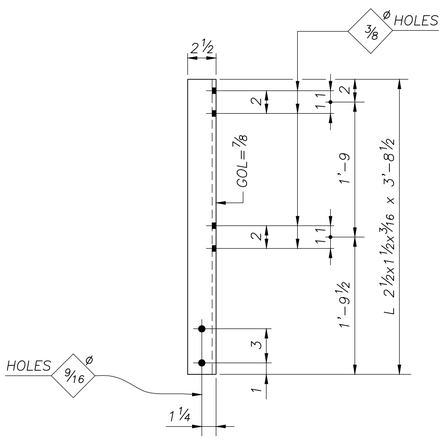
SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18¾" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11¾" WIDE – CAT# 53012



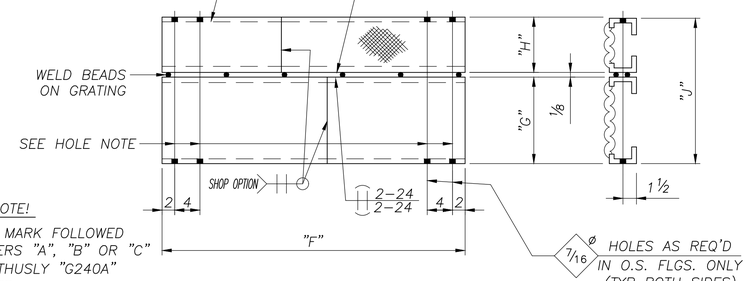
TOE ANGLE SPLICE

(OPTIONAL)



8 ~ HANDRAIL POSTS ~ 9P1

(ALUMINUM)



HOLE NOTE!

GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A" DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1–END
"C" – HOLES BOTH ENDS

~ GRATING ~

(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
9G1B	2	20'-5	1'-6¾	11¾	2'-6⅝

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	9M1	16		CLAMP PLATES				
	a	16	PL	¼ x 1½	0	2¼		
	9M2	2		SPLICE PLATES				
	b	2	PL	¼ x 2½	1	1½		
	9M3	2		SAFETY CHAIN SUPPORT				
	d	2	PL	¼ x 2	0	4¾		
	f	2	L	1½ x 1½ x 3/16	3	0		
	9G1B	2		GRATING				
	g	2	GRT	18¾ WIDE	20	5		
	n	2	GRT	11¾ WIDE	20	5		
	9P1	8		HANDRAIL POSTS				
	h	8	ALL	2½ x 1½ x 3/16 (ALUM 6061)	3	8½		
	9R1	8		HANDRAIL				
	k	8	ALPI	1.660 x .140 (ALUM 6061)	10	2½		
	9S1	4		SHIMS				
	p	4	PL	¼ x 3	0	9⅛		
	9A1	2		SAFETY ANGLE				
	m	2	L	4 x 3 x ¼	20	5		
	9L1	2		LIGHTING SUPPORTS (ALUM 6063-T6)				
	p	2	ALUN	UNISTRUT 1⅝ x 1⅝ x .105	15	6		
	9L2	2		LIGHTING SUPPORTS (ALUM 6063-T6)				
	qp	2	ALUN	UNISTRUT 1⅝ x 1⅝ x .105	23	6		

C3546-9

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2

OH-9

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Sep 8 2023

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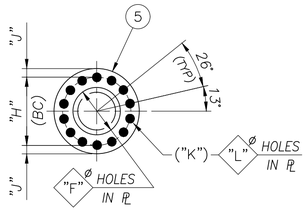
PHONE (205)-925-4990
FAX (205) 925-7273

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	SIGN STRUCTURE MISC DETAILS
FOR:	Archer-United Joint Venture
DRAWN BY:	DLK DATE: 8/24/23
CHECKED BY:	DLJ DATE: 8/28/23
DWG NO:	C3546-9

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/28/23	DLK	DLJ



MARK	QTY	"A"	"B"	"C"	"D"	"E"	"F"	"G"
10C1	1	19'–5½	5'–6	1'–4	2½	2¼	1'–4 1/16	5/16
10C2	1	18'–0½	5'–6	1'–4	2½	2¼	1'–4 1/16	5/16

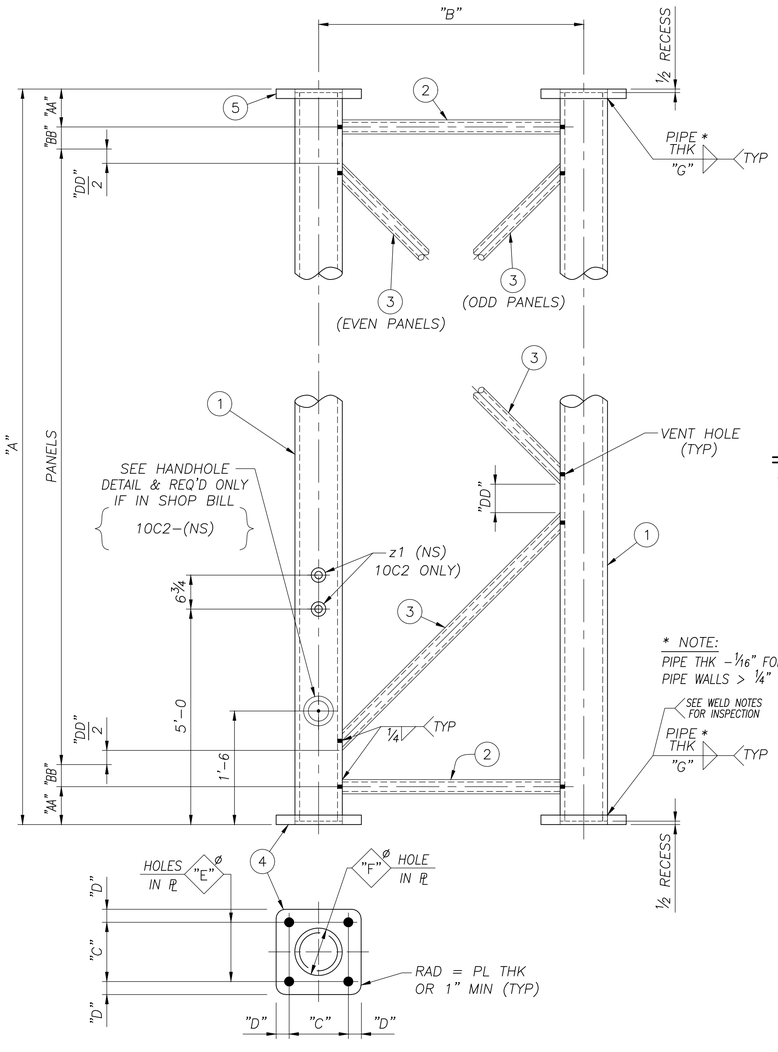
MARK	"H"	"J"	"K"	"L"		1	2	3	4	5
10C1	1'–7	1½	14	1⅛		a	b	d	f	h
10C2	1'–7	1½	14	1⅛		aa	b	ad	f	h

MARK	"AA"	"BB"	"DD"	PANELS
10C1	*8½	3½	7½	3 @ 5'–9 13/16(±) = 17'–5½
10C2	*8½	3½	7½	3 @ 5'–4 3/16(±) = 16'–0½

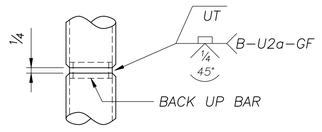
SHOP NOTE:

* NOT TYPICAL DIMENSION

C3546–10								
PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	10C1	1		UPRIGHT STUB				
	a	2	PIPE	16.000 x .250	19	4½		
	b	2	PIPE	4.500 x .188	4	2 9/16		
	d	3	PIPE	4.500 x .188	6	7 13/16		
	f	2	PL	2 x 21	1	9		
	h	2	PL	1¼ x 22 DIA.	–	–		
	10C2	1		UPRIGHT STUB				
	aa	2	PIPE	16.000 x .250	17	11½		
	b	2	PIPE	4.500 x .188	4	2 9/16		
	ad	3	PIPE	4.500 x .188	6	3½		
	f	2	PL	2 x 21	1	9		
	h	2	PL	1¼ x 22 DIA.	–	–		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	2	OP	1¼" FORGED HALF CPLG (3000#)	–	–		

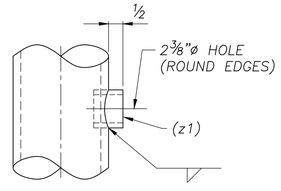


UPRIGHT

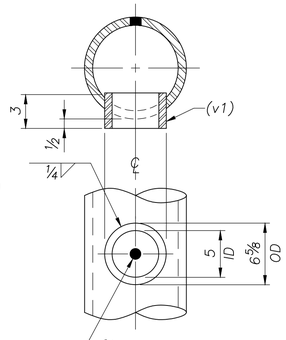


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2

OH–9

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Sep 8 2023

walpar A valmont COMPANY

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PHONE (205)–925–4990
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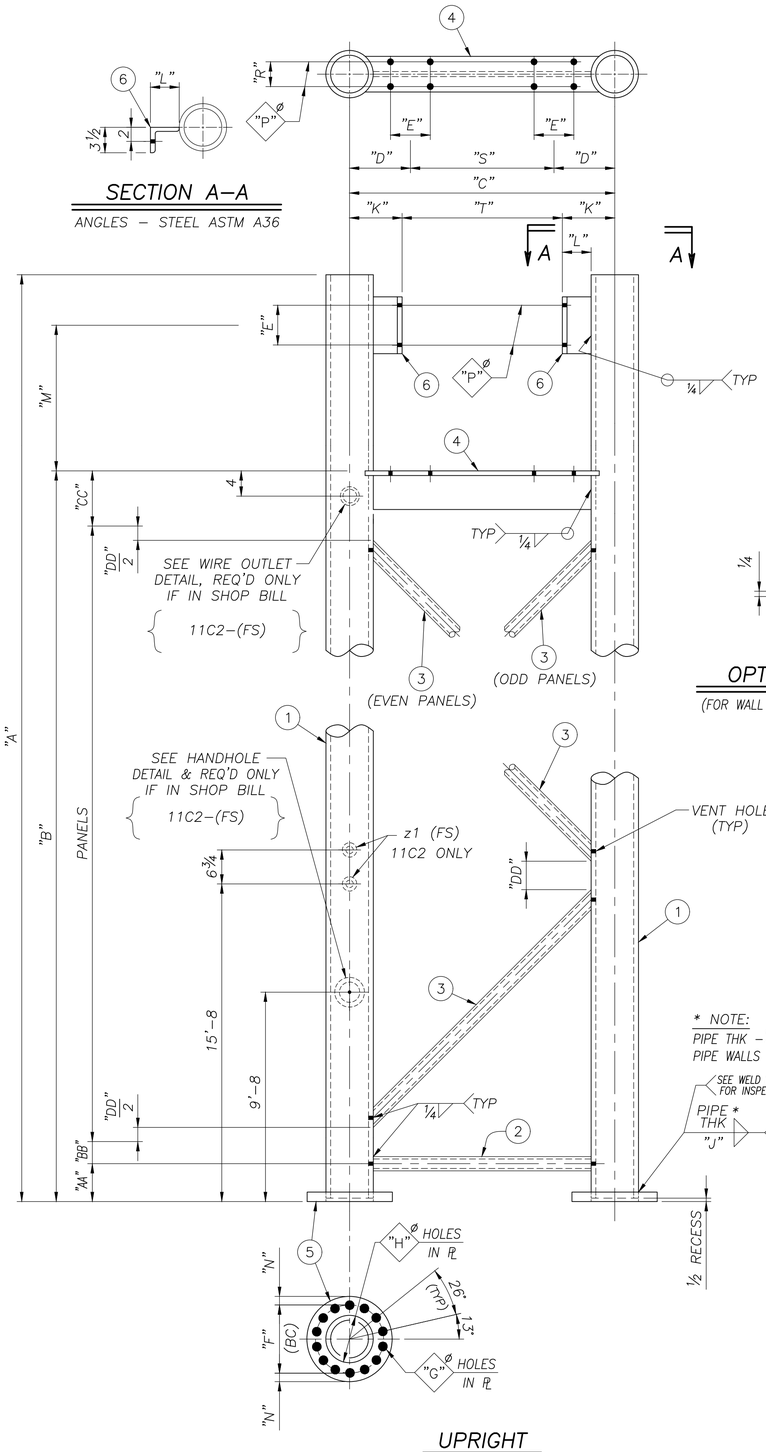
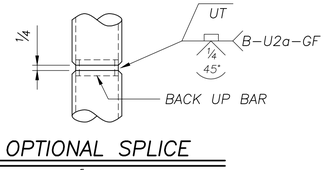
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT
	DETAIL OF UPRIGHT STUB
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/24/23
CHECKED BY:	DLJ DATE: 9/5/23
DWG NO:	C3546–10

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/5/23	DLK	DLJ

BTDPUDET

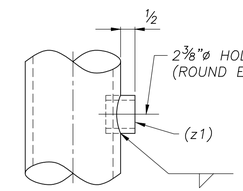
NAME: E:\acad\JobsNProg\3546\3546–10.dwg DATE: SEP 05, 2023 TIME: 1:48 PM dj706290



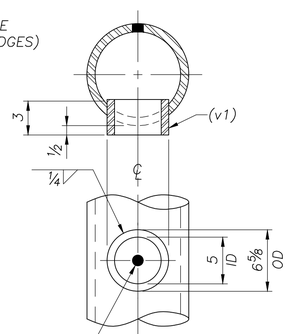


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

MARK	QTY	"A"	"B"	"C"	PANELS	"D"	"E"	"F"	"G"
11C1	1	35'–10¾	31'–2½	5'–6	5 @ 5'–9 13/16(±) = 29'–1	1'–1½	6⅛	1'–7	1⅛
11C2	1	38'–8	33'–11¾	5'–6	6 @ 5'–4 3/16(±) = 32'–1	1'–1½	6⅛	1'–7	1⅛

MARK	"H"	"J"	"K"	"L"	"M"	"N"	"P"	"R"	"S"	"T"	1	2	3	4	5	6	
11C1	1'–4 1/16	5/16	10⅜	2⅜	4'–0¼	1½	11/16	4½	3'–3	3'–9¼	a	b	d	f	h	k	
11C2	1'–4 1/16	5/16	10⅜	2⅜	4'–0¼	1½	11/16	4½	3'–3	3'–9¼	aa	b	ad	f	h	k	

MARK	"AA"	"BB"	"CC"	"DD"
11C1	*8½	3½	*13½	7½
11C2	*8½	3½	*10¾	7½

SHOP NOTE:

* NOT TYPICAL DIMENSION

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼

C3546–11

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	11C1	1		UPRIGHT				
	a	2	PIPE	16.000 x .250	35	10¼		
	b	1	PIPE	4.500 x .188	4	2 9/16		
	d	5	PIPE	4.500 x .188	6	7 13/16		
	f	1	W	8 x 24	4	3⅜		
	h	2	PL	1¼ x 22 DIA.	–	–		
	k	2	L	3½ x 2½ x ½	0	8⅜		
	11C2	1		UPRIGHT				
	aa	2	PIPE	16.000 x .250	38	7½		
	b	1	PIPE	4.500 x .188	4	2 9/16		
	ad	6	PIPE	4.500 x .188	6	3½		
	f	1	W	8 x 24	4	3⅜		
	h	2	PL	1¼ x 22 DIA.	–	–		
	k	2	L	3½ x 2½ x ½	0	8⅜		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	3	OP	1¼" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2

OH–9

AASHTO 6th Edition Spec's

* NOTE:
PIPE THK –1/16" FOR PIPE WALLS > ¼"

SEALED BY:

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No. 38665
DAVID A LALLONE

Sep 8 2023

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT
	DETAIL OF UPRIGHT
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/24/23
CHECKED BY:	DLJ DATE: 9/5/23
DWG NO:	C3546–11

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/5/23	DLK	DLJ

BTDPUDET

NAME: E:\acad\JobsNPrg\3546\3546–11.dwg DATE: SEP 05, 2023 TIME: 1:53 PM dj706290

MARK	QTY	VIEW	"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
12T1	1	OPHAND	38'–6⅛	38'–5⅞	18'–10½	10 @ 3'–7½(±) = 36'–3	3'–9	3'–3		9⅛	8⅞
12T2	1	SHOWN	38'–6⅛	38'–5⅞	18'–10½	10 @ 3'–7½(±) = 36'–3	3'–9	3'–3		9⅛	8⅞

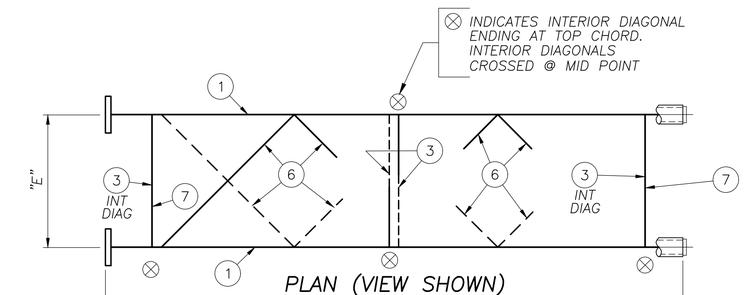
MARK	"J"	"K"	"L"	"M"	"N"	"P"	"R"	1	2	3	4	5	6	7	8	9		11	SHIM	SWEEP
12T1	¼	8½	¼	6	1	1'–6	3½	a	b	n	d	f	h	k	m	s		z1	1/16	⅝
12T2	¼	8½	¼	6	1	1'–6	3½	a	b	n	d	f	h	k	m	s		z1	1/16	⅝

WIRE OUTLET LOCATION CHART

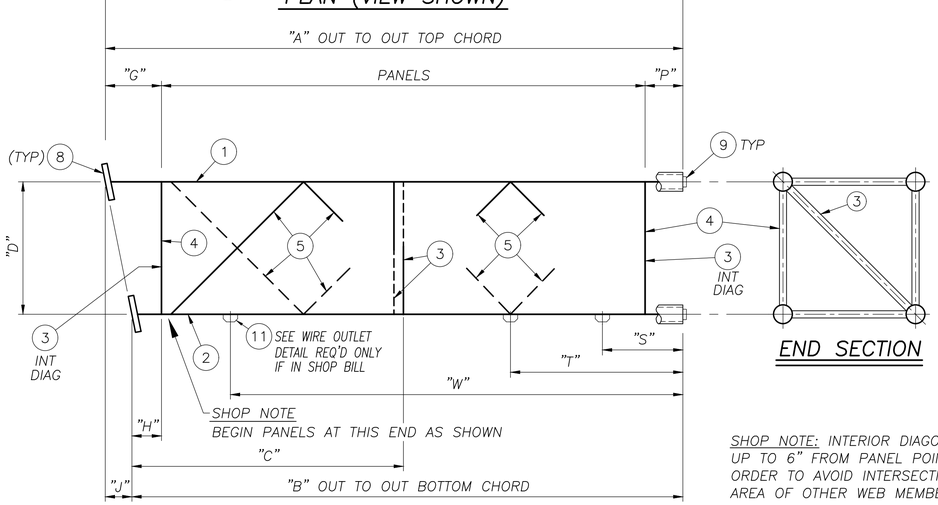
MARK	"S"	"T"	"W"
12T1	30'–6	------	------
12T2	1'–6	26'–10½	------

C3546–12

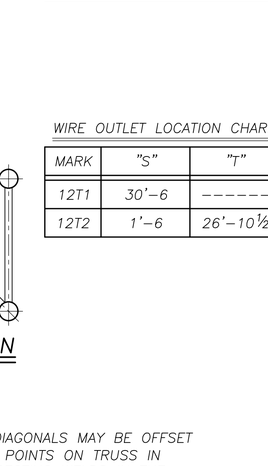
PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	12T1	1		BOX TRUSS				
	a	2	PIPE	5.563 x .258	38	5¾		
	b	2	PIPE	5.563 x .258	38	5½		
	d	4	PIPE	1.660 x .140	3	3 11/16		
	k	4	PIPE	1.660 x .140	2	9 11/16		
	f	20	PIPE	1.900 x .145	4	7⅜		
	h	20	PIPE	1.900 x .145	4	3 5/16		
	n	4	PIPE	1.660 x .140	4	6¼		
	m	4	PL	1 x 11½ DIA.	–	–		
	s	4	PL	¼ x 3½	0	5¼		
	z1	1	OP	1¼" FORGED HALF CPLG (3000#)	–	–		
	12T2	1		BOX TRUSS				
	a	2	PIPE	5.563 x .258	38	5¾		
	b	2	PIPE	5.563 x .258	38	5½		
	d	4	PIPE	1.660 x .140	3	3 11/16		
	k	4	PIPE	1.660 x .140	2	9 11/16		
	f	20	PIPE	1.900 x .145	4	7⅜		
	h	20	PIPE	1.900 x .145	4	3 5/16		
	n	4	PIPE	1.660 x .140	4	6¼		
	m	4	PL	1 x 11½ DIA.	–	–		
	s	4	PL	¼ x 3½	0	5¼		
	z1	2	OP	1¼" FORGED HALF CPLG (3000#)	–	–		



PLAN (VIEW SHOWN)



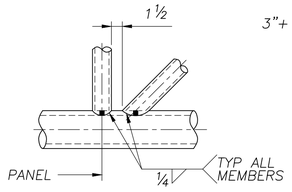
ELEVATION (VIEW SHOWN)
TRUSS



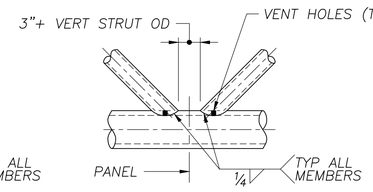
END SECTION

SHOP NOTE: INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.
DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

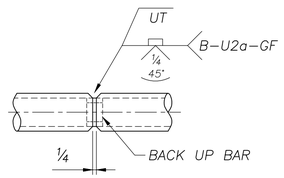
VENT HOLE SIZES	
WEB MEMBER (O.D.)	HOLE DIA. ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼



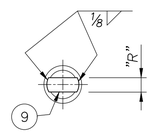
JOINT DETAIL



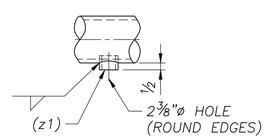
JOINT DETAIL



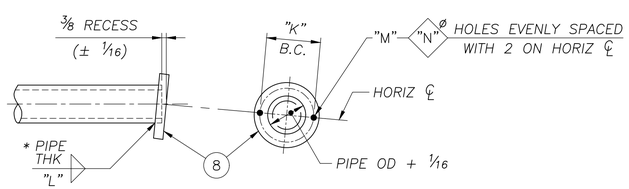
OPTIONAL CHORD SPLICE
(FOR WALL THK 5/16" OR GREATER ONLY)



END CAP DETAIL



WIRE OUTLET DETAIL



* NOTE: PIPE THK –1/16" FOR PIPE WALLS > ¼"

FLANGE DETAIL

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2

OH–9

AASHTO 6th Edition Spec's

SEALED BY:

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No. 38665
DAVID A LALLONE
Sep 8 2023

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF TRUSS
FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/24/23
CHECKED BY: DLJ DATE: 8/28/23
DWG NO: C3546–12

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/28/23	DLK	DLJ

BTESDET

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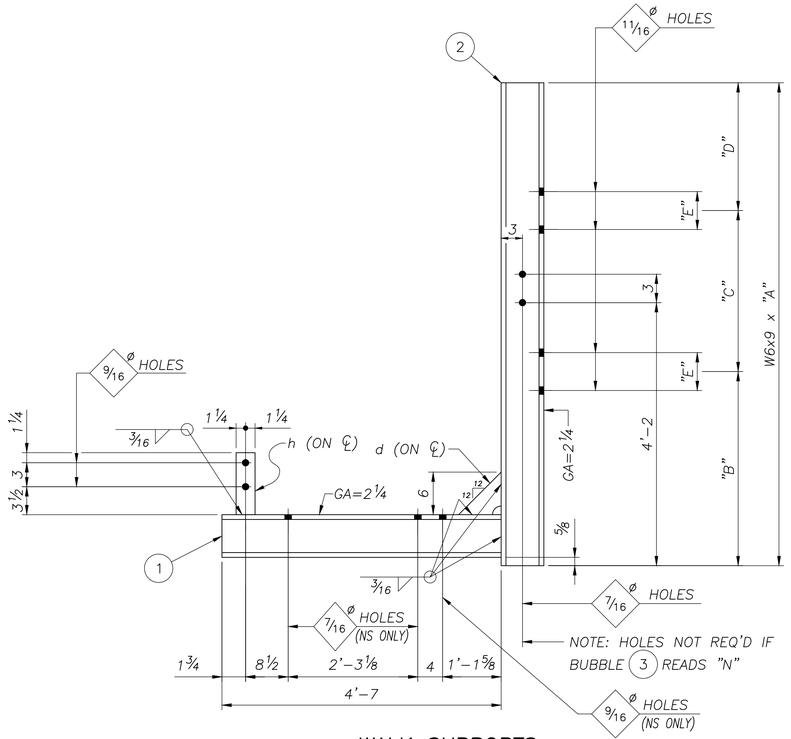
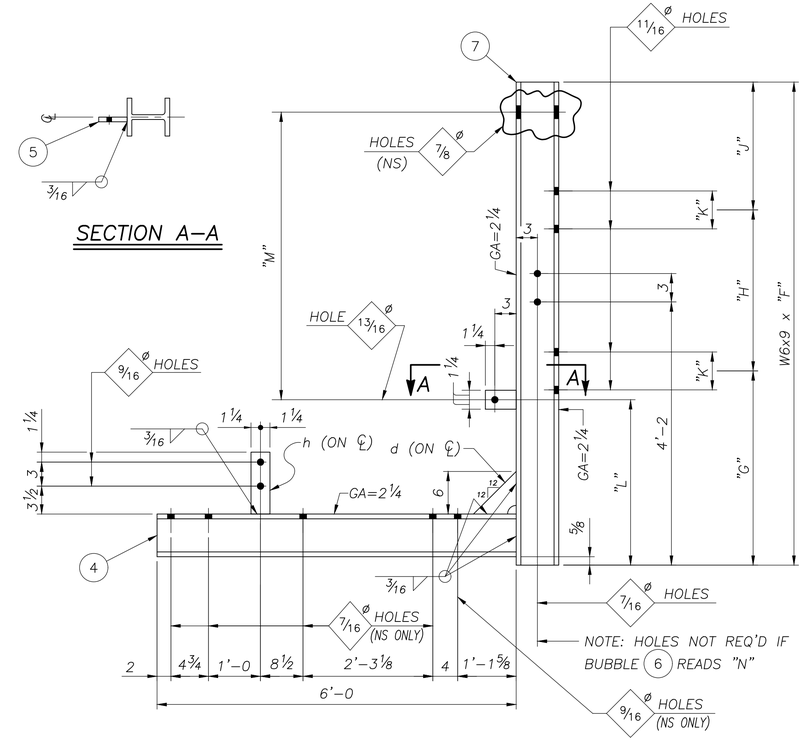


WALK SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	1	2	3
13S1	1	12'-0 1/2	7'-9 1/2	3'-9	6	6 1/8	b	a	N



SIGN/WALK/LIGHT SUPPORTS

MARK	QTY	"F"	"G"	"H"	"J"	"K"	"L"	"M"	4	5	6	7
13S2	1	12'-6	7'-9 1/2	3'-9	11 1/2	6 1/8	2'-3 1/4	10'-0	ab	f	Y	aa
13S3	3	12'-6	7'-9 1/2	3'-9	11 1/2	6 1/8	2'-3 1/4	10'-0	ab	f	N	ba

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
								C3546-13
	13S1	1		WALK SUPPORTS				
	a	1	W	6 x 9	12	0 1/2		
	b	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	13S2	1		SIGN/WALK/LIGHT SUPPORTS				
	aa	1	W	6 x 9	12	6		
	ab	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4 1/4		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	13S3	3		SIGN/WALK/LIGHT SUPPORTS				
	ba	3	W	6 x 9	12	6		
	ab	3	W	6 x 9	6	0		
	d	3	PL	1/4 x 6	0	6		
	f	3	PL	3/8 x 2 1/2	0	4 1/4		
	h	3	PL	1/2 x 2 1/2	0	7 3/4		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2, WE1

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AASHTO 6th Edition Spec's

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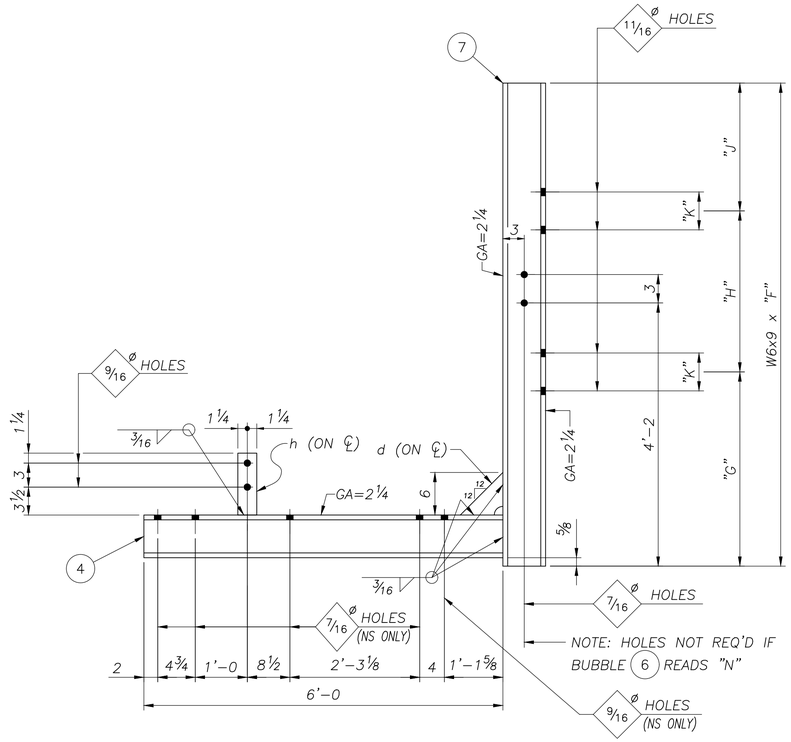
NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/28/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: SIGN SUPPORT
SIGN HANGER DETAIL
FOR: Archer-United Joint Venture

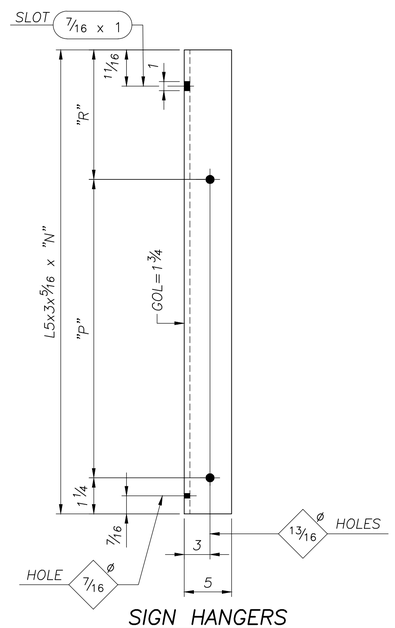
DRAWN BY: DLK DATE: 8/24/23
CHECKED BY: DLJ DATE: 8/28/23
DWG NO: C3546-13

SH-DET5



WALK/LIGHT SUPPORTS

MARK	QTY	"F"	"G"	"H"	"J"	"K"		4		6	7
14S1	2	12'-0½	7'-9½	3'-9	6	6⅛		b		N	a
14S2	1	12'-0½	7'-9½	3'-9	6	6⅛		b		Y	aa



SIGN HANGERS

MARK	QTY	"N"	"P"	"R"
14H1	4	15'-0¼	10'-0	4'-11

				C3546-14	
PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	14S1	2		WALK/LIGHT SUPPORTS				
	a	2	W	6 x 9	12	0½		
	b	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7¾		
	14S2	1		WALK/LIGHT SUPPORTS				
	aa	1	W	6 x 9	12	0½		
	b	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7¾		
	14H1	4		SIGN HANGERS				
	k	4	L	5 x 3 x 5/16	15	0¼		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E2, WE1

OH-9

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Sep 8 2023

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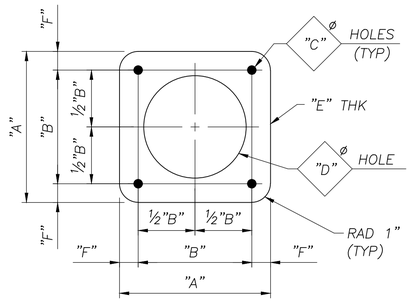
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: SIGN SUPPORT
SIGN HANGER DETAIL
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/24/23
CHECKED BY: DLJ DATE: 8/28/23
DWG NO: C3546-14

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/28/23	DLK	DLJ

SH-DET5



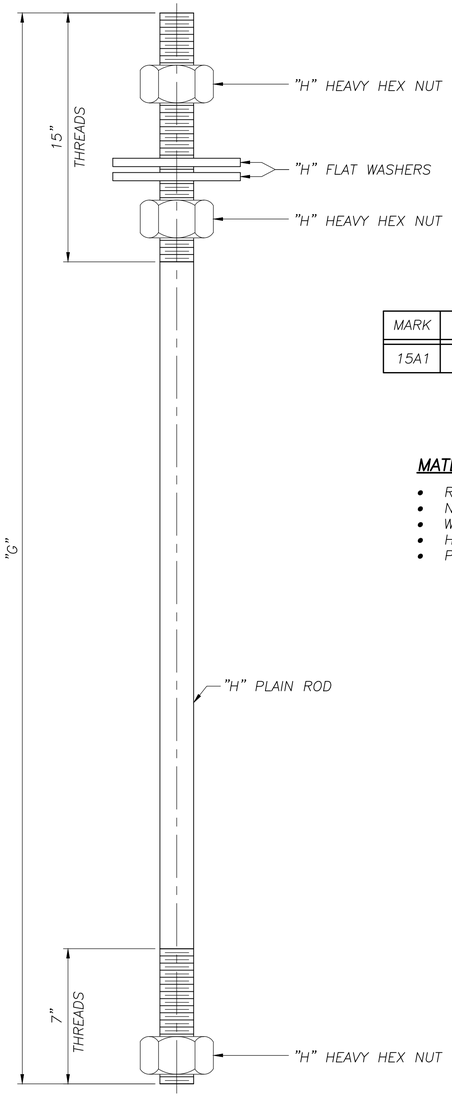
TYPE "AA"
(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
15P1	8	AA	16	12	1⅜	12	¼	2

NOTE:
THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
15A1	4'–6	1¼	7	16	48	32	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM–A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM–A153

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	15P1	8		ANCHOR TEMPLATES				
	a	8	PL	¼ x 16	1	4		

C3546–15

SHIPPING LIST

QTY	MARK	DESCRIPTION
8	15P1	ANCHOR TEMPLATES
16	15A1	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:
DO NOT GALVANIZE TEMPLATES

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3

OH–11

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE
Sep 8 2023

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A valmont COMPANY
POST OFFICE BOX 28650
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4200 JEFFERSON AVENUE
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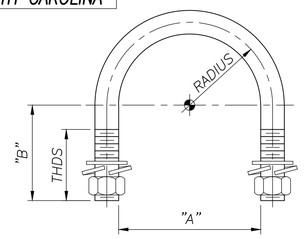
PHONE (205)–925–4990
FAX (205) 925–7273

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN STRUCTURE
ANCHOR BOLT & TEMPLATE DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/25/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546–15



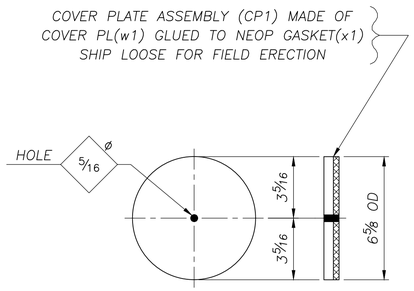
NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U-BOLTS w/(2ea) HN/LW/FW ~

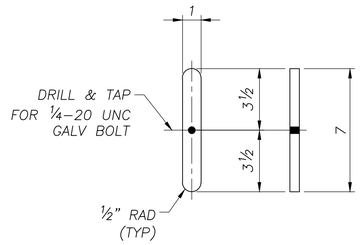
NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1

MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	24	5/16	1 11/16	1 5/8	1	1 1/4	NOTE 2
U6	60	1/2	6 3/4	5 1/4	3 5/8	2	NOTE 1



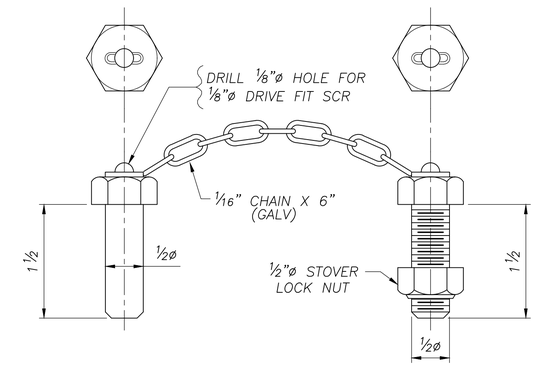
1 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	1		COVER PLATE ASSEMBLY			
w1	1	PL	1/4 x 6 5/8 DIA. (GALV A123)	–	–	1
x1	1	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	–	–	1



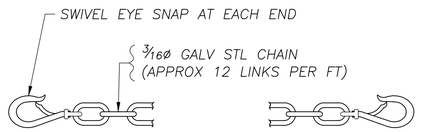
1 ~ HANDHOLE BAR ~ HB1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	1		HANDHOLE BAR			
w2	1	PL	1/4 x 1 (GALV A123)	0	7	1



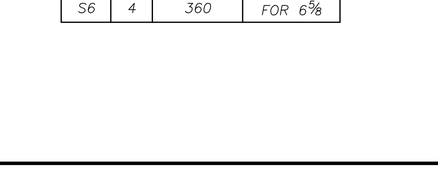
12 ~ HINGE PIN ASSEMBLY ~ 16P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

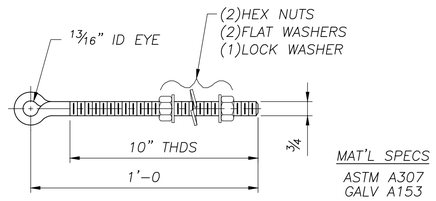
MARK	QTY	LENGTH
16S1	2	4'-6



~ POLE CAPS ~

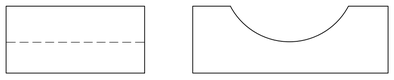
(ALUM 356-F) (ASTM B26, A356)

MARK	QTY	PART No	REMARKS
C10	4	297	10 3/4ø PIPE



7 ~ EYE BOLT ASSEMBLY ~ 16M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1



~ SADDLE SHIM DETAIL ~

(ALUM 356-T6)

MARK	QTY	PART No	REMARKS
S6	4	360	FOR 6 5/8

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E3

OH-11

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
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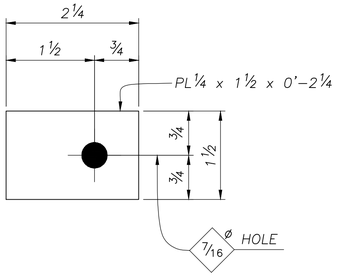
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

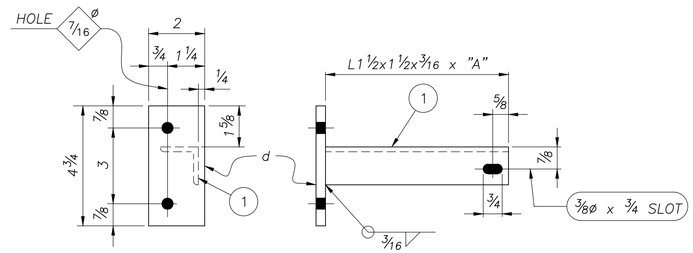
SUBJECT: SIGN STRUCTURES
MISC DETAILS
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/25/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546-16

KITDWG3



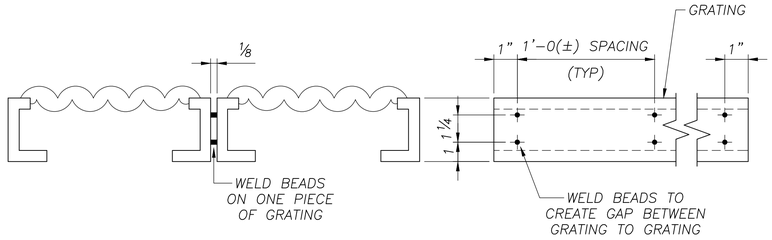
24 ~ CLAMP PLATES ~ 17M1



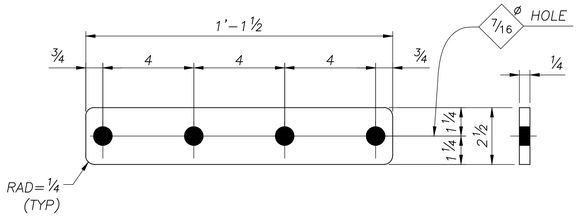
~ SAFETY CHAIN SUPPORT ~

(SEE CHART)

MARK	QTY	"A"	(1)
17M3	2	2'-3	f



GRATING GAP DETAIL

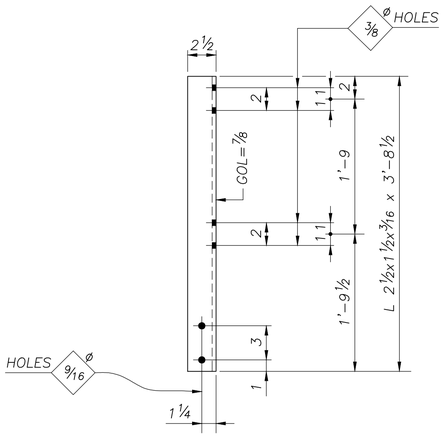


4 ~ SPLICE PLATES ~ 17M2

(FOR GRATING)

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	17M1	24		CLAMP PLATES				
	a	24	PL	⅛ x 1½	0	2¼		
	17M2	4		SPLICE PLATES				
	b	4	PL	¼ x 2½	1	1½		
	17M3	2		SAFETY CHAIN SUPPORT				
	d	2	PL	¼ x 2	0	4¾		
	f	2	L	1½ x 1½ x 3/16	2	3		
	17G1B	2		GRATING				
	g	2	GRT	18¾ WIDE	20	1		
	n	2	GRT	11¾ WIDE	20	1		
	17G2C	1		GRATING				
	ag	1	GRT	18¾ WIDE	21	7		
	an	1	GRT	11¾ WIDE	21	7		
	17P1	12		HANDRAIL POSTS				
	h	12	ALL	2½ x 1½ x 3/16 (ALUM 6061)	3	8½		
	17R1	12		HANDRAIL				
	k	12	ALPI	1.660 x .140 (ALUM 6061)	10	3½		
	17A1	2		SAFETY ANGLE				
	m	2	L	4 x 3 x ¼	30	10½		
	17L1	2		LIGHTING SUPPORTS (ALUM 6063-T6)				
	p	2	ALUN	UNISTRUT 1⅝ x 1⅝ x .105	30	10		
	17L2	2		LIGHTING SUPPORTS (ALUM 6063-T6)				
	ap	2	ALUN	UNISTRUT 1⅝ x 1⅝ x .105	24	8		

C3546-17

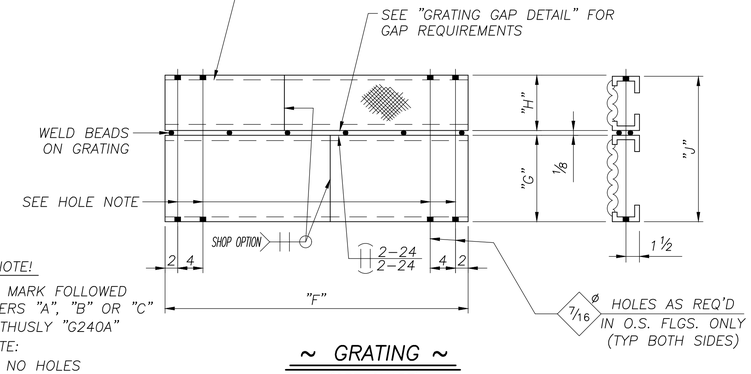


12 ~ HANDRAIL POSTS ~ 17P1

(ALUMINUM)

SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18¾" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11¾" WIDE – CAT# 53012



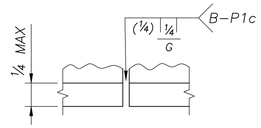
HOLE NOTE!

GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A"
DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1-END
"C" – HOLES BOTH ENDS

~ GRATING ~

(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
17G1B	2	20'-1	1'-6¾	11¾	2'-6⅝
17G2C	1	21'-7	1'-6¾	11¾	2'-6⅝



TOE ANGLE SPLICE

(OPTIONAL)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3

OH-11

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE
Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
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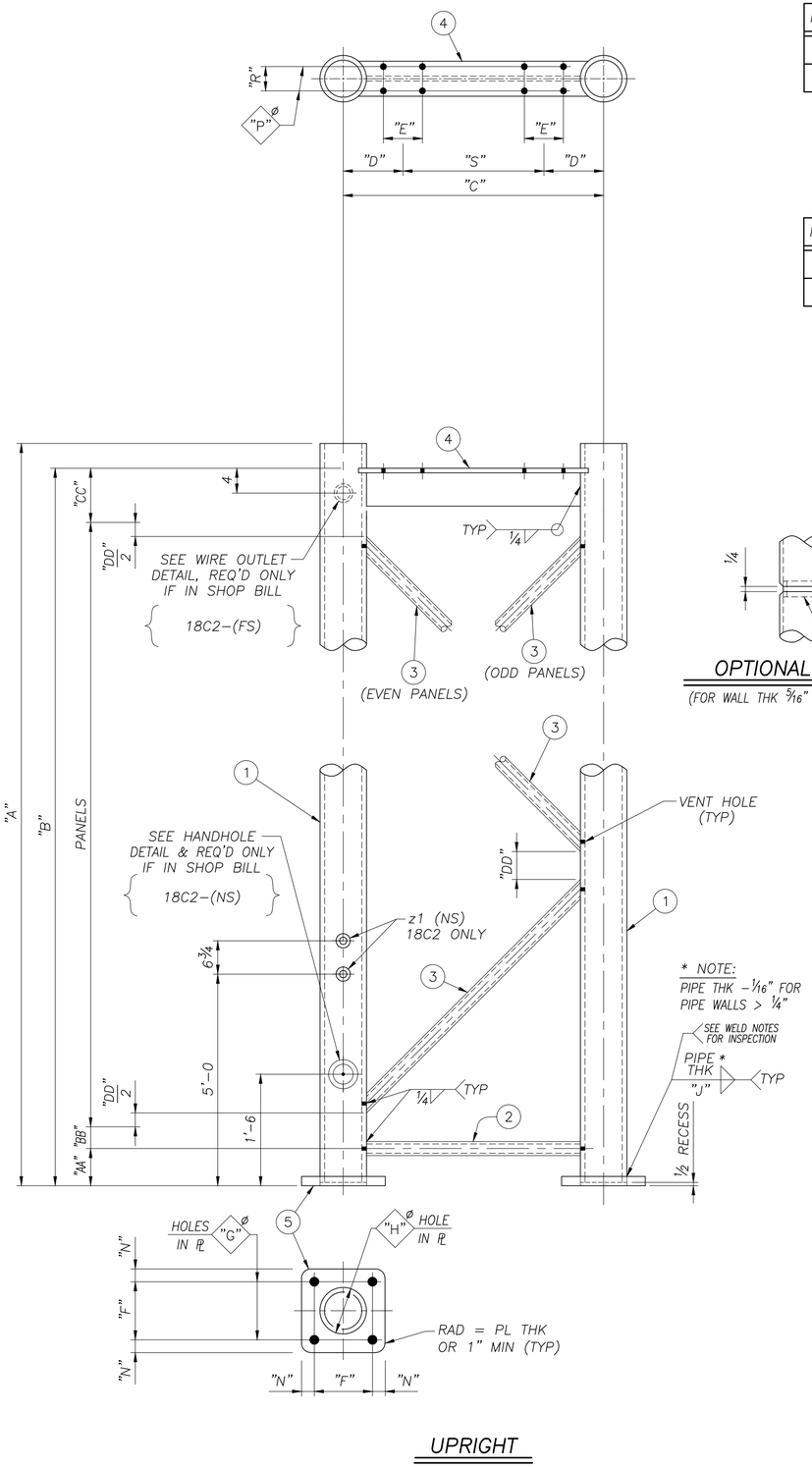
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: SIGN STRUCTURE
MISC DETAILS
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/26/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546-17

WalkWayDetails

NAME: E:\acad\JobsNPrg\3546\3546-17.dwg DATE: AUG 30, 2023 TIME: 9:02 AM dj706290

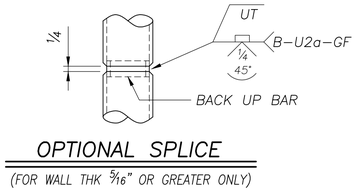


UPRIGHT

MARK	QTY	"A"	"B"	"C"	PANELS	"D"	"E"	"F"	"G"
18C1	1	19'-10 3/16	19'-6 3/16	5'-3	4 @ 4'-6(±) = 17'-11 15/16	1'-0	7 1/4	1'-0	1 1/2
18C2	1	18'-0 1/16	17'-8 1/16	5'-3	3 @ 5'-4 13/16(±) = 16'-2 7/16	1'-0	7 1/4	1'-0	1 1/2

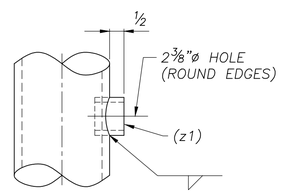
MARK	"H"	"J"				"N"	"P"	"R"	"S"		1	2	3	4	5		
18C1	10 13/16	5/16				2 1/2	11/16	4 1/2	3'-3		a	b	d	f	h		
18C2	10 13/16	5/16				2 1/2	11/16	4 1/2	3'-3		aa	b	ad	af	h		

MARK	"AA"	"BB"	"CC"	"DD"
18C1	6	3 1/2	8 3/4	5 7/8
18C2	6	3 1/2	8 3/4	5 7/8

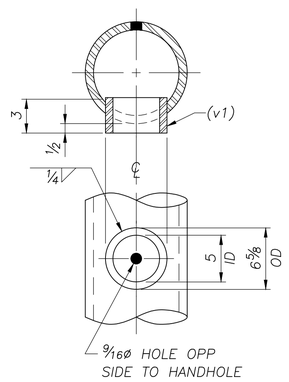


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4

C3546-18							
PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
	18C1	1		UPRIGHT			
	a	2	PIPE	10.750 x .188	19	9 1/16	
	b	1	PIPE	2.875 x .203	4	4 9/16	
	d	4	PIPE	2.875 x .203	5	11	
	f	1	WT	7 x 15	4	6 5/8	
	h	2	PL	1 1/4 x 17	1	5	
	18C2	1		UPRIGHT			
	aa	2	PIPE	10.750 x .188	18	0 3/16	
	b	1	PIPE	2.875 x .203	4	4 9/16	
	ad	3	PIPE	2.875 x .203	6	6 3/4	
	af	1	WT	6 x 13	4	6 7/16	
	h	2	PL	1 1/4 x 17	1	5	
	v1	1	PIPE	6.625 x .864	0	3	
	z1	3	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–	

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3

OH-11

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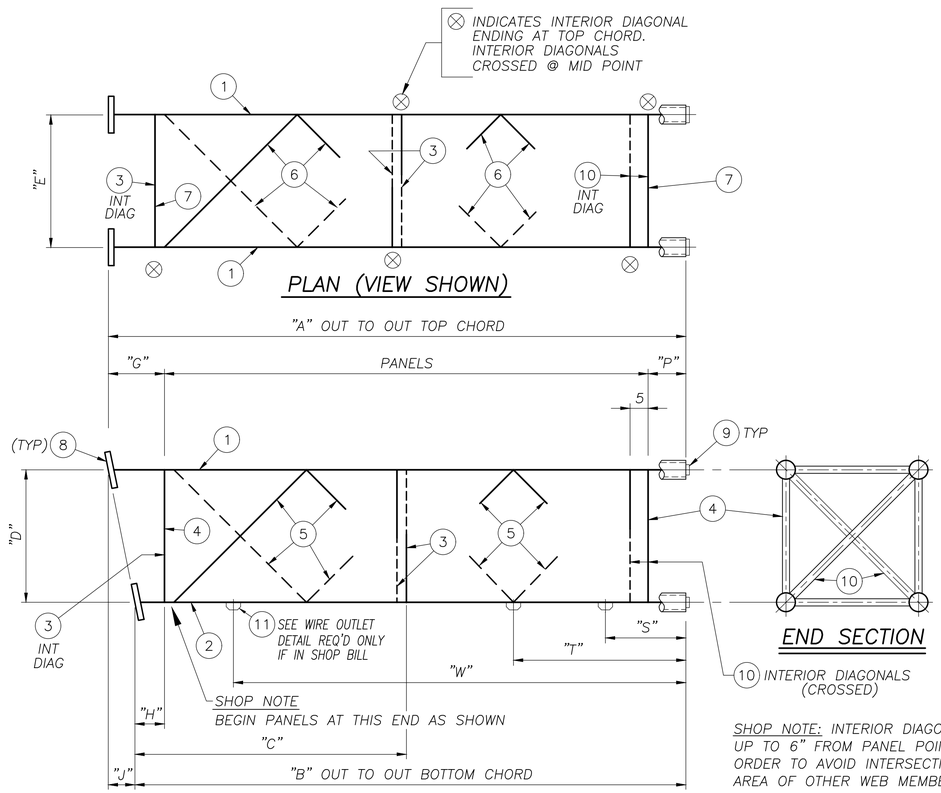
0

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD SIGN SUPPORT DETAIL OF UPRIGHT
FOR:	Archer-United Joint Venture
DRAWN BY:	DLK DATE: 8/25/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546-18

BTDPUDET



PLAN (VIEW SHOWN)

END SECTION

ELEVATION (VIEW SHOWN)

TRUSS

MARK	QTY	VIEW	"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
19T1	1	OPHAND	36'–4½	36'–4¼	16'–1⅝	9 @ 3'–10⅛(±) = 34'–7⅜	3'–9	3'–3		9⅛	8⅞
19T2	1	SHOWN	36'–4½	36'–4¼	16'–1⅝	9 @ 3'–10⅛(±) = 34'–7⅜	3'–9	3'–3		9⅛	8⅞

MARK	"J"	"K"	"L"	"M"	"N"	"P"	"R"	1	2	3	4	5	6	7	8	9	10	11	SHIM	SWEEP
19T1	¼	9½	¼	6	1⅛	1'–0	4⅝	a	b	n	d	f	h	k	m	s	n	z1	1/16	½
19T2	¼	9½	¼	6	1⅛	1'–0	4⅝	a	b	n	d	f	h	k	m	s	n	z1	1/16	½

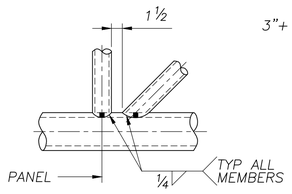
WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
19T1	35'–7⅜	------	------
19T2	1'–0	------	------

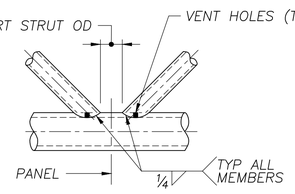
SHOP NOTE: INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

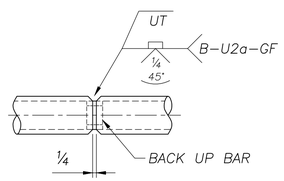
VENT HOLE SIZES	
WEB MEMBER (O.D.)	HOLE DIA. ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼



JOINT DETAIL

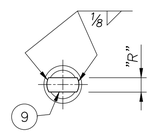


JOINT DETAIL

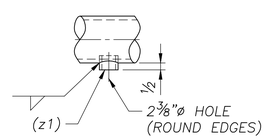


OPTIONAL CHORD SPLICE

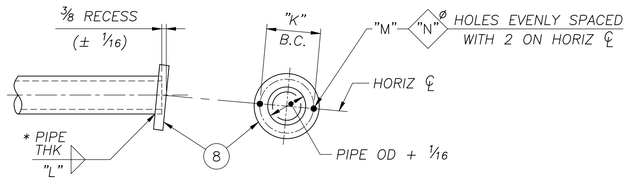
(FOR WALL THK 5/16" OR GREATER ONLY)



END CAP DETAIL



WIRE OUTLET DETAIL



* NOTE: PIPE THK –1/16" FOR PIPE WALLS > ¼"

FLANGE DETAIL

C3546–19

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	19T1	1		BOX TRUSS				
	a	2	PIPE	6.625 x .250	36	4⅛		
	b	2	PIPE	6.625 x .250	36	3⅞		
	d	4	PIPE	1.660 x .140	3	2½		
	k	4	PIPE	1.660 x .140	2	8½		
	f	18	PIPE	1.900 x .200	4	8½		
	h	18	PIPE	1.900 x .200	4	4⅝		
	n	5	PIPE	1.660 x .140	4	5 1/16		
	m	4	PL	1 x 12½ DIA.	–	–		
	s	4	PL	¼ x 4⅝	0	6⅜		
	z1	1	OP	1¼" FORGED HALF CPLG (3000#)	–	–		
	19T2	1		BOX TRUSS				
	a	2	PIPE	6.625 x .250	36	4⅛		
	b	2	PIPE	6.625 x .250	36	3⅞		
	d	4	PIPE	1.660 x .140	3	2½		
	k	4	PIPE	1.660 x .140	2	8½		
	f	18	PIPE	1.900 x .200	4	8½		
	h	18	PIPE	1.900 x .200	4	4⅝		
	n	5	PIPE	1.660 x .140	4	5 1/16		
	m	4	PL	1 x 12½ DIA.	–	–		
	s	4	PL	¼ x 4⅝	0	6⅜		
	z1	1	OP	1¼" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3

OH–11

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Sep 8 2023

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PHONE (205)–925–4990
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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF TRUSS

FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/25/23

CHECKED BY: DLJ DATE: 8/30/23

DWG NO: C3546–19

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

BTESDET

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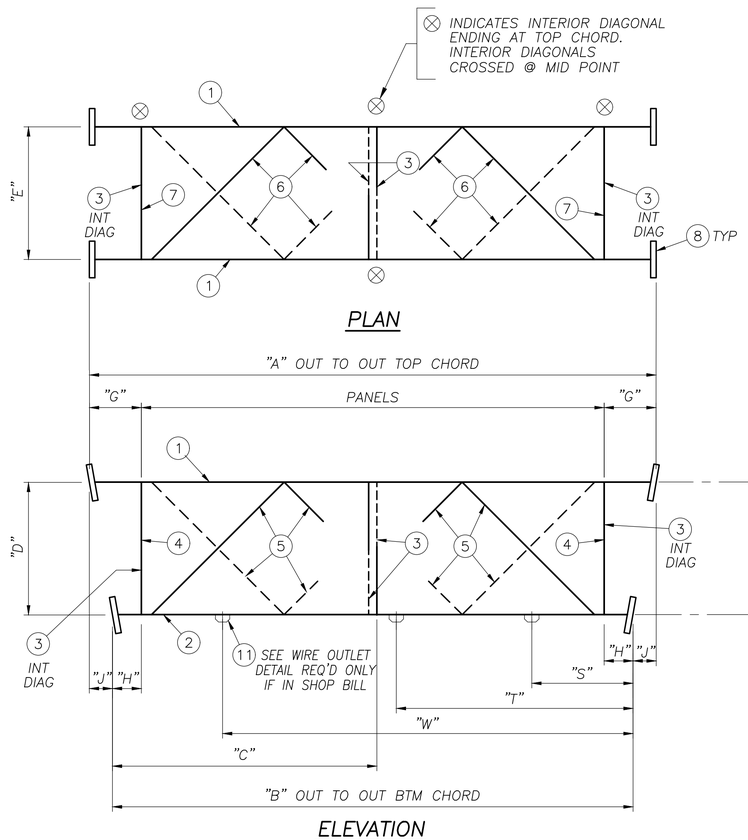


TRUSS

MARK	QTY		"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
20T1	1		32'–3½	32'–3	16'–1⅝	8 @ 3'–10 3/16(±) = 30'–9¼	3'–9	3'–3		9⅛	8⅞

MARK	"J"	"K"	"L"	"M"	"N"			1	2	3	4	5	6	7	8			11	SHIM	SWEEP
								a	b	n	d	f	h	k	m					
20T1	¼	9½	¼	6	1⅛													z1	1/16	7/16

WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
20T1	8'–5 5/16	------	------

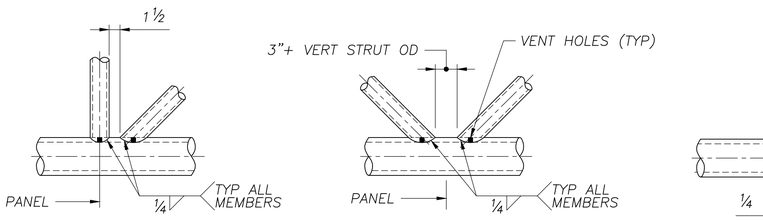
SHOP NOTE:

INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

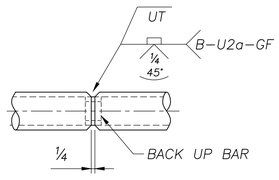
C3546–20

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	20T1	1		BOX TRUSS				
	a	2	PIPE	6.625 x .250	32	2¾		
	b	2	PIPE	6.625 x .250	32	2¼		
	d	4	PIPE	1.660 x .140	3	2½		
	k	4	PIPE	1.660 x .140	2	8½		
	f	16	PIPE	1.900 x .200	4	8½		
	h	16	PIPE	1.900 x .200	4	4⅝		
	n	4	PIPE	1.660 x .140	4	5 1/16		
	m	8	PL	1 x 12½ DIA.	–	–		
	z1	1	OP	1¼" FORGED HALF CPLG (3000#)	–	–		



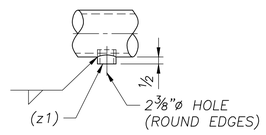
JOINT DETAIL

JOINT DETAIL



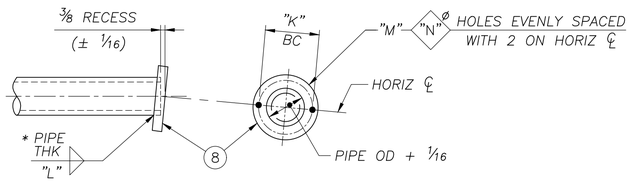
OPTIONAL CHORD SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA. ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼



FLANGE DETAIL

*NOTE: PIPE THK –1/16" FOR PIPE WALLS > ¼"

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3

OH–11

AASHTO 6th Edition Spec's

SEALED BY:

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Sep 8 2023

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BTCSDET

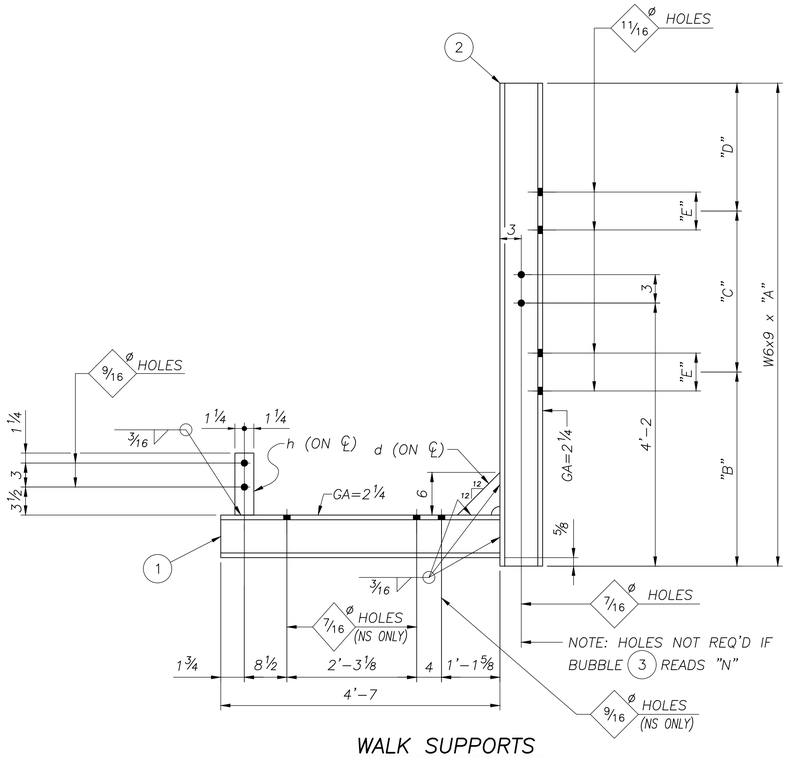
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF TRUSS

FOR: Archer–United Joint Venture

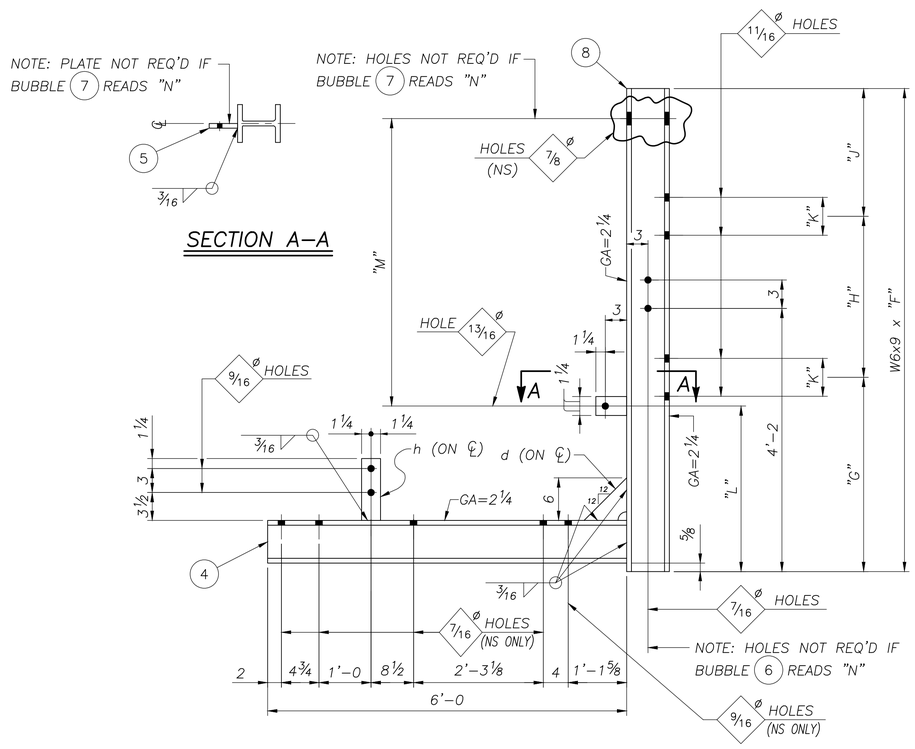
DRAWN BY: DLK DATE: 8/25/23
CHECKED BY: DLJ DATE: 8/30/23

DWG NO: C3546–20



WALK SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	1	2	3
21S1	1	10'-0 1/2	5'-9 1/2	3'-9	6	7 1/4	b	a	Y
21S2	2	10'-0 1/2	5'-9 1/2	3'-9	6	7 1/4	b	aa	N



SIGN/WALK/LIGHT SUPPORTS

MARK	QTY	"F"	"G"	"H"	"J"	"K"	"L"	"M"	4	5	6	7	8
1 21S3	4	12'-6	5'-9 1/2	3'-9	2'-11 1/2	7 1/4	2'-3 1/4	10'-0	ab	f	N	Y	ba
21S4	1	10'-0 1/2	5'-9 1/2	3'-9	6	7 1/4	2'-3 1/4	6'-2 1/2	ab	f	Y	Y	da
21S5	2	10'-0 1/2	5'-9 1/2	3'-9	6	7 1/4	2'-3 1/4	6'-2 1/2	ab	f	N	Y	fa
21S6	2	10'-0 1/2	5'-9 1/2	3'-9	6	7 1/4	----	----	ab	–	N	N	ga

C3546-21

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	21S1	1		WALK SUPPORT				
	a	1	W	6 x 9	10	0 1/2		
	b	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	21S2	2		WALK SUPPORTS				
	aa	2	W	6 x 9	10	0 1/2		
	b	2	W	6 x 9	4	7		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	21S3	4		SIGN/WALK/LIGHT SUPPORTS				
	ba	4	W	6 x 9	12	6		
	ab	4	W	6 x 9	6	0		
	d	4	PL	1/4 x 6	0	6		
	f	4	PL	3/8 x 2 1/2	0	4 1/4		
	h	4	PL	1/2 x 2 1/2	0	7 3/4		
	21S4	1		SIGN/WALK/LIGHT SUPPORTS				
	da	1	W	6 x 9	10	0 1/2		
	ab	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4 1/4		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	21S5	2		SIGN/WALK/LIGHT SUPPORTS				
	fa	2	W	6 x 9	10	0 1/2		
	ab	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	f	2	PL	3/8 x 2 1/2	0	4 1/4		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	21S6	2		WALK/LIGHT SUPPORTS				
	ga	2	W	6 x 9	10	0 1/2		
	ab	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3

OH-11

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID A LALLONE
No. 38665
Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED 21S3 "J" LENGTH	12/6/23	DLK	DLJ

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1

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: SIGN SUPPORT
WALK SUPPORT & SIGN HANGER DETAILS
FOR: Archer-United Joint Venture

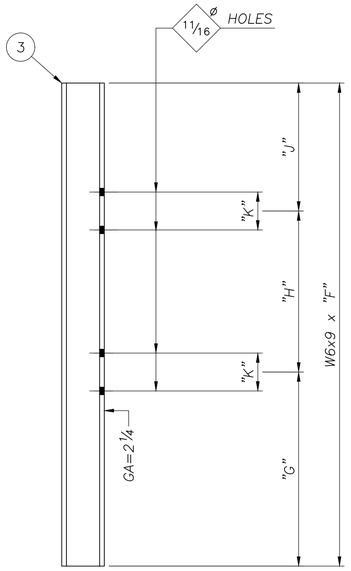
DRAWN BY: DLK DATE: 8/28/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546-21

SH-DET4

NAME: E:\acad\JobsNProg\3546\3546-21.dwg DATE: DEC 06, 2023 TIME: 3:16 PM dj706290

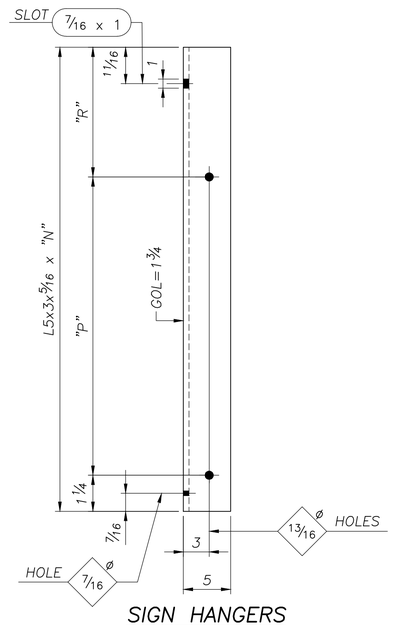
C3546-22

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	22S1	1		SIGN SUPPORT				
	a	1	W	6 x 9	7	10½		
	22H1	4		SIGN HANGERS				
	k	4	L	5 x 3 x 5/16	15	0¼		
	22H2	3		SIGN HANGERS				
	ak	3	L	5 x 3 x 5/16	10	0¼		



SIGN SUPPORT

MARK	QTY	"F"	"G"	"H"	"J"	"K"	3			
22S1	2	7'-10½	3'-7½	3'-9	6	7¼	a			



SIGN HANGERS

MARK	QTY	"N"	"P"	"R"
22H1	4	15'-0¼	10'-0	4'-11
22H2	3	10'-0¼	6'-2½	3'-8½

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E3, WE1

OH-11

AASHTO 6th Edition Spec's

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No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
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STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

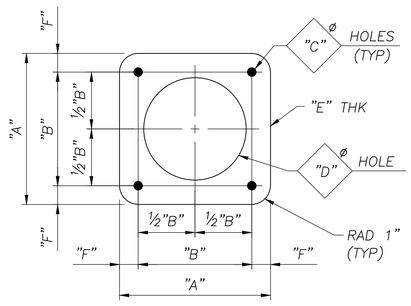
SUBJECT: SIGN SUPPORT
SIGN HANGER DETAIL
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/26/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546-22

SH-DET5

NAME: E:\acad\JobsNProg\3546\3546-22.dwg DATE: AUG 30, 2023 TIME: 8:54 AM dj706290

C3546–23
SOUTH CAROLINA



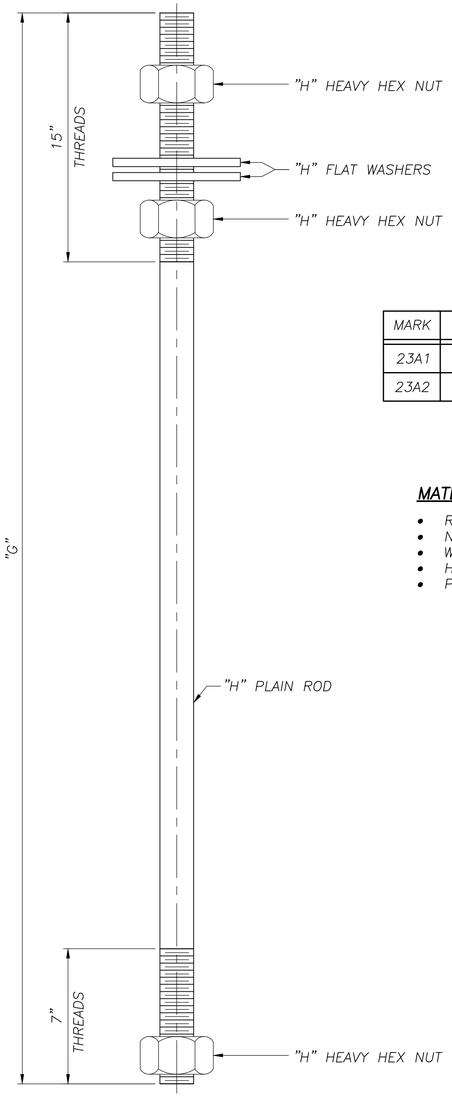
TYPE "AA"
(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
23P1	4	AA	17½	13½	1⅝	13½	¼	2
23P2	4	AA	17½	13½	1⅞	13½	¼	2

NOTE:
THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
23A1	4'–6	1½	6	8	24	16	
23A2	4'–6	1¾	5	8	24	16	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM–A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM–A153

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	23P1	4		ANCHOR TEMPLATES				
	a	4	PL	¼ x 17½	1	5½		
	23P2	4		ANCHOR TEMPLATES				
	aa	4	PL	¼ x 17½	1	5½		

C3546–23

SHIPPING LIST

QTY	MARK	DESCRIPTION
4	23P1	ANCHOR TEMPLATES
4	23P2	ANCHOR TEMPLATES
8	23A1	ANCHOR BOLTS
8	23A2	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:
DO NOT GALVANIZE TEMPLATES

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E4

OH–14

AASHTO 6th Edition Spec's

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SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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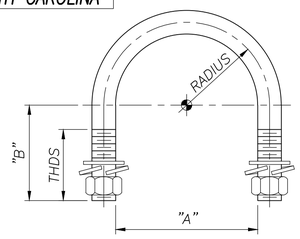
NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN STRUCTURE
ANCHOR BOLT & TEMPLATE DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/28/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546–23



NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

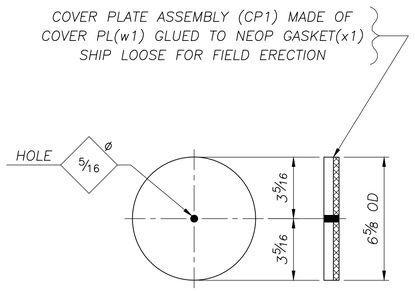
NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U–BOLTS w/(2ea) HN/LW/FW ~

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI–B18.21.1

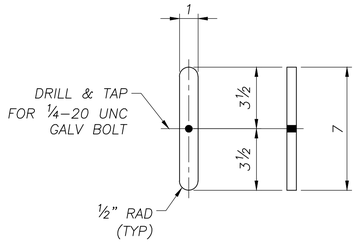
MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	20	5/16	1 1/16	1 5/8	1	1 1/4	NOTE 2
U6	40	1/2	6 3/4	5 1/4	3 5/8	2	NOTE 1
U11	8	5/8	6 3/4	5 1/2	3 1/16	2	NOTE 1

1



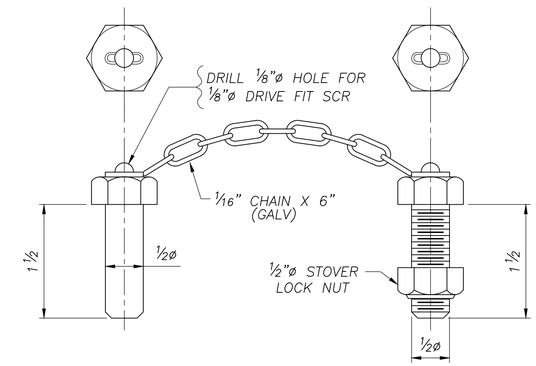
1 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO.	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	1		COVER PLATE ASSEMBLY			
w1	1	PL	1/4 x 6 5/8 DIA. (GALV A123)	–	–	1
x1	1	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	–	–	1



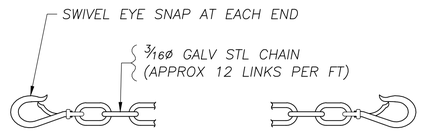
1 ~ HANDHOLE BAR ~ HB1

PART MARK NO.	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	1		HANDHOLE BAR			
w2	1	PL	1/4 x 1 (GALV A123)	0	7	1



10 ~ HINGE PIN ASSEMBLY ~ 24P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

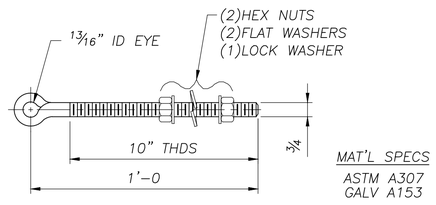
MARK	QTY	LENGTH
24S1	2	4'–6



~ POLE CAPS ~

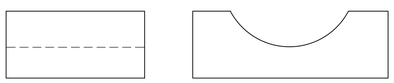
(ALUM 356–F) (ASTM B26, A356)

MARK	QTY	PART No	REMARKS
C12	4	291	12 3/4ø PIPE



8 ~ EYE BOLT ASSEMBLY ~ 24M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI–B18.21.1



~ SADDLE SHIM DETAIL ~

(ALUM 356–T6)

MARK	QTY	PART No	REMARKS
S6	4	360	FOR 6 5/8

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E4

OH–14

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED U–BOLT QUANTITY	12/6/23	DLK	DLJ

walpar
A valmont COMPANY
POST OFFICE BOX 28650
BIRMINGHAM ALABAMA 35228
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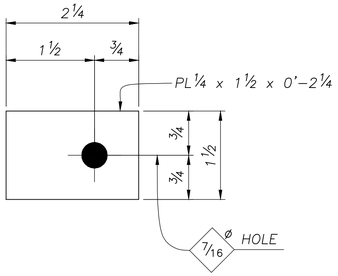
PHONE (205)–925–4990
FAX (205) 925–7273

1

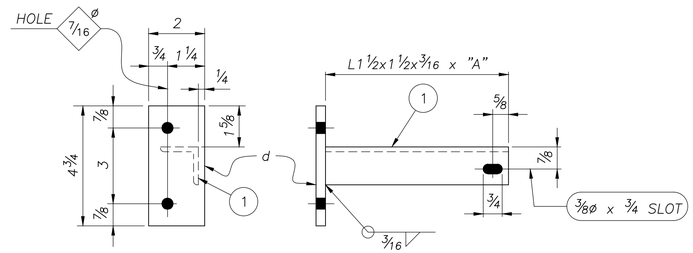
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	SIGN STRUCTURES MISC DETAILS
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546–24

KITDWG3

C3546–24



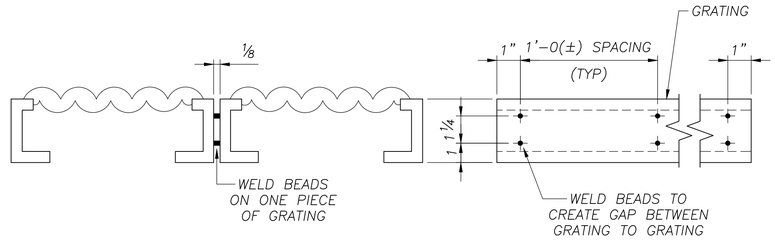
1 20 ~ CLAMP PLATES ~ 25M1



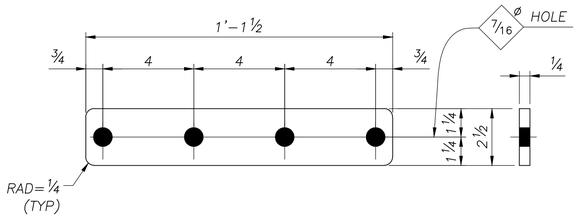
~ SAFETY CHAIN SUPPORT ~

(SEE CHART)

MARK	QTY	"A"	(1)
25M3	2	1'-6	f

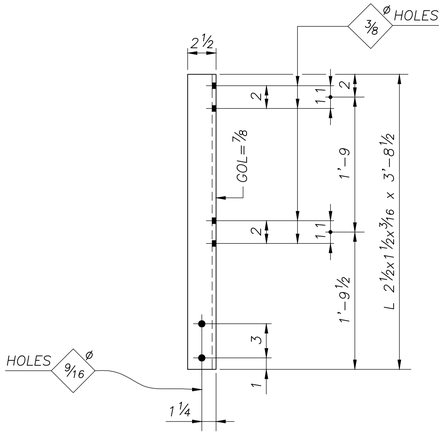


GRATING GAP DETAIL



4 ~ SPLICE PLATES ~ 25M2

(FOR GRATING)

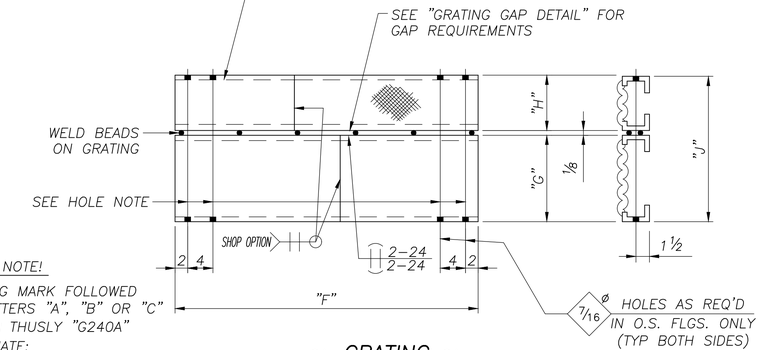


10 ~ HANDRAIL POSTS ~ 25P1

(ALUMINUM)

SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18 3/4" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11 3/4" WIDE – CAT# 53012



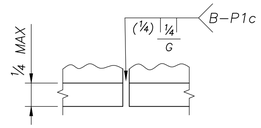
HOLE NOTE!

GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A"
DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1–END
"C" – HOLES BOTH ENDS

~ GRATING ~

(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
25G1B	2	16'-11	1'-6 3/4	11 3/4	2'-6 5/8
25G2C	1	16'-11	1'-6 3/4	11 3/4	2'-6 5/8



TOE ANGLE SPLICE

(OPTIONAL)

C3546–25

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D.	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
1	25M1	20		CLAMP PLATES				
	a	20	PL	1/4 x 1 1/2	0	2 1/4		
	25M2	4		SPLICE PLATES				
	b	4	PL	1/4 x 2 1/2	1	1 1/2		
	25M3	2		SAFETY CHAIN SUPPORT				
	d	2	PL	1/4 x 2	0	4 3/4		
	f	2	L	1 1/2 x 1 1/2 x 3/16	1	6		
	25G1B	2		GRATING				
	g	2	GRT	18 3/4 WIDE	16	11		
	n	2	GRT	11 3/4 WIDE	16	11		
	25G2C	1		GRATING				
	g	1	GRT	18 3/4 WIDE	16	11		
	n	1	GRT	11 3/4 WIDE	16	11		
	25P1	10		HANDRAIL POSTS				
	h	10	ALL	2 1/2 x 1 1/2 x 3/16 (ALUM 6061)	3	8 1/2		
	25R1	8		HANDRAIL				
	k	8	ALPI	1.660 x .140 (ALUM 6061)	10	6		
	25R2	2		HANDRAIL				
	ak	2	ALPI	1.660 x .140 (ALUM 6061)	8	9		
	25A1	2		SAFETY ANGLE				
	m	2	L	4 x 3 x 1/4	25	4 1/2		
	25L1	2		LIGHTING SUPPORTS (ALUM 6063-T6)				
	p	2	ALUN	UNISTRUT 1 5/8 x 1 5/8 x .105	48	0		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E4

OH–14

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED CLAMP PLATE QUANTITY	12/6/23	---	DLJ

walpar
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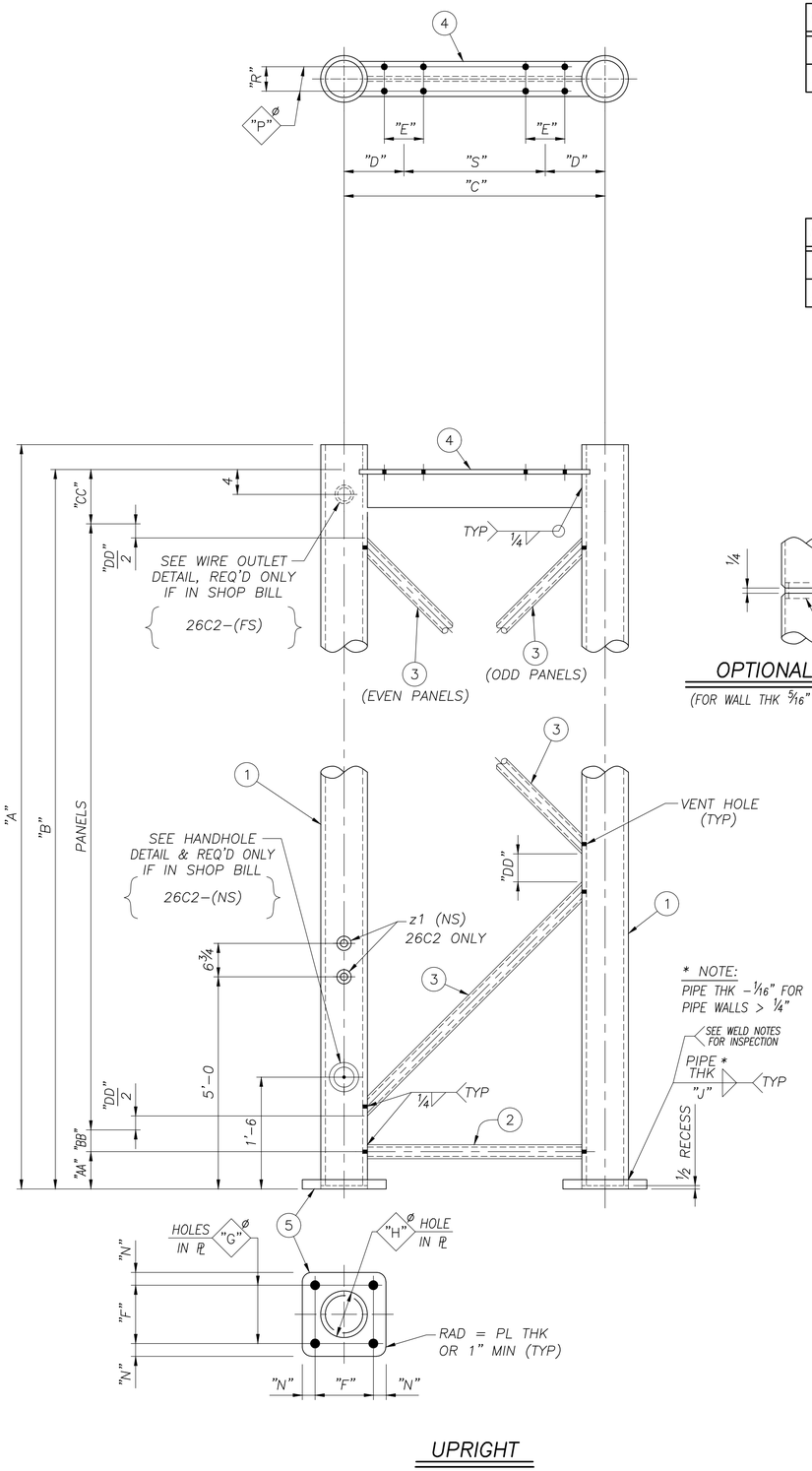
1

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	SIGN STRUCTURE MISC DETAILS
FOR:	Archer–United Joint Venture
DRAWN BY:	DLK DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546–25

WalkWayDetails

NAME: E:\acad\JobsNPrg\3546\3546-25.dwg DATE: DEC 06, 2023 TIME: 3:15 PM dj706290

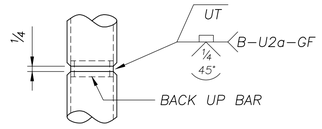


UPRIGHT

MARK	QTY	"A"	"B"	"C"	PANELS	"D"	"E"	"F"	"G"
26C1	1	22'-6 3/16	22'-2 3/16	5'-3	4 @ 5'-1 15/16(±) = 20'-7 11/16	1'-0	7 3/8	1'-1 1/2	1 3/4
26C2	1	29'-1 3/16	28'-9 3/16	5'-3	5 @ 5'-5 5/16(±) = 27'-2 7/16	1'-0	7 3/8	1'-1 1/2	2

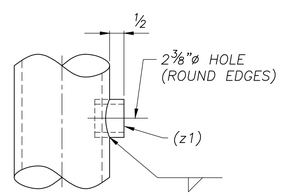
MARK	"H"	"J"				"N"	"P"	"R"	"S"		1	2	3	4	5		
26C1	1'-0 13/16	5/16				2 1/2	13/16	4 1/2	3'-3		a	b	d	f	h		
26C2	1'-0 13/16	5/16				2 1/2	13/16	4 1/2	3'-3		aa	b	ad	f	ah		

MARK	"AA"	"BB"	"CC"	"DD"
26C1	6 1/4	3 1/2	8 3/4	6 1/2
26C2	6 1/2	3 1/2	8 3/4	6 1/2

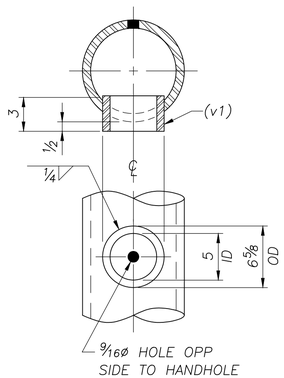


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4

					LENGTH			
PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	FEET	INCHES	PARTS FOR ONE UNIT	
	26C1	1		UPRIGHT				
	a	2	PIPE	12.750 x .250	22	5 11/16		
	b	1	PIPE	3.500 x .188	4	2 5/8		
	d	4	PIPE	3.500 x .188	6	2 13/16		
	f	1	WT	6 x 13	4	4 1/16		
	h	2	PL	1 1/2 x 18 1/2	1	6 1/2		
	26C2	1		UPRIGHT				
	aa	2	PIPE	12.750 x .250	29	0 11/16		
	b	1	PIPE	3.500 x .188	4	2 5/8		
	ad	5	PIPE	3.500 x .188	6	5 5/16		
	f	1	WT	6 x 13	4	4 1/16		
	ah	2	PL	1 3/4 x 18 1/2	1	6 1/2		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	3	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

C3546-26

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E4

OH-14

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

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0

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD SIGN SUPPORT
	DETAIL OF UPRIGHT
FOR:	Archer-United Joint Venture
DRAWN BY:	DLK DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546-26

BTDPUDET

NAME: E:\acad\JobsNPrg\3546\3546-26.dwg DATE: AUG 30, 2023 TIME: 8:40 AM dj706290

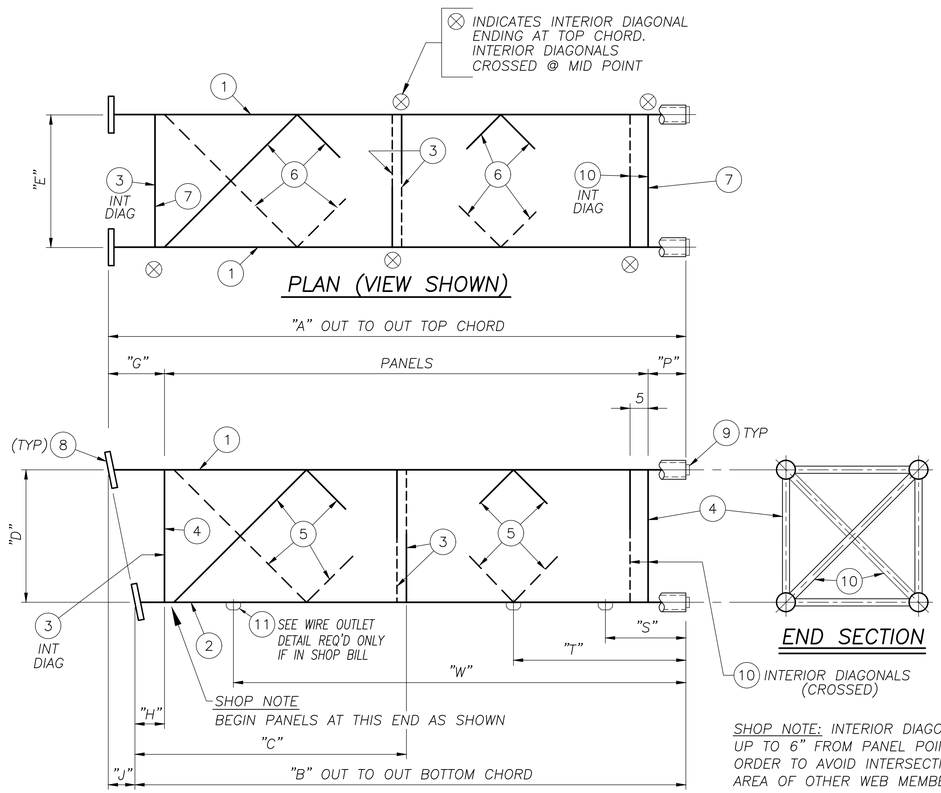
MARK	QTY	VIEW	"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
27T1	1	OPHAND	27'–8 5/8	27'–8 3/8	11'–7 15/16	7 @ 3'–7 5/8(±) = 25'–5 1/2	3'–9	3'–3		9 1/8	8 15/16
27T2	1	SHOWN	27'–8 5/8	27'–8 3/8	11'–7 15/16	7 @ 3'–7 5/8(±) = 25'–5 1/2	3'–9	3'–3		9 1/8	8 15/16

MARK	"J"	"K"	"L"	"M"	"N"	"P"	"R"	1	2	3	4	5	6	7	8	9	10	11	SHIM	SWEEP
27T1	1/4	9 1/2	1/4	6	1	1'–6	4 5/8	a	b	n	d	f	h	k	m	s	n	––	1/16	5/16
27T2	1/4	9 1/2	1/4	6	1	1'–6	4 5/8	a	b	n	d	f	h	k	m	s	n	z1	1/16	5/16

WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
27T1	------	------	------
27T2	1'–6	------	------

VENT HOLE SIZES	
WEB MEMBER (O.D.)	HOLE DIA. ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4



PLAN (VIEW SHOWN)

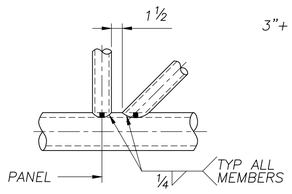
END SECTION

ELEVATION (VIEW SHOWN)

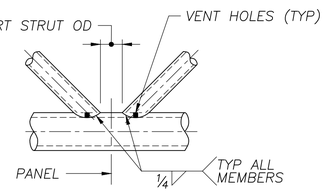
TRUSS

SHOP NOTE: INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.



JOINT DETAIL



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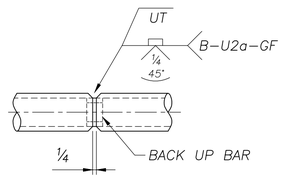
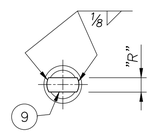
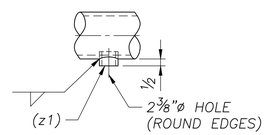


OPTIONAL CHORD SPLICE

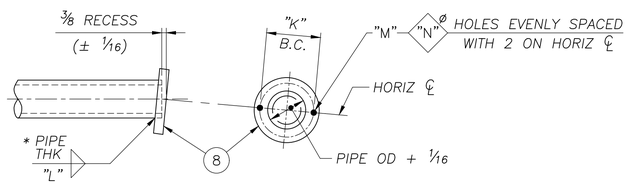
(FOR WALL THK 5/16" OR GREATER ONLY)



END CAP DETAIL



WIRE OUTLET DETAIL



FLANGE DETAIL

* NOTE: PIPE THK –1/16" FOR PIPE WALLS > 1/4"

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E4

AASHTO 6th Edition Spec's

OH–14

C3546–27

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	27T1	1		BOX TRUSS				
	a	2	PIPE	6.625 x .219	27	8 1/4		
	b	2	PIPE	6.625 x .219	27	8		
	d	4	PIPE	1.660 x .140	3	2 1/2		
	k	4	PIPE	1.660 x .140	2	8 1/2		
	f	14	PIPE	1.900 x .145	4	6 11/16		
	h	14	PIPE	1.900 x .200	4	2 11/16		
	n	5	PIPE	1.660 x .140	4	5 1/16		
	m	4	PL	1 x 12 1/2 DIA.	–	–		
	s	4	PL	1/4 x 4 5/8	0	6 3/8		
	27T2	1		BOX TRUSS				
	a	2	PIPE	6.625 x .219	27	8 1/4		
	b	2	PIPE	6.625 x .219	27	8		
	d	4	PIPE	1.660 x .140	3	2 1/2		
	k	4	PIPE	1.660 x .140	2	8 1/2		
	f	14	PIPE	1.900 x .145	4	6 11/16		
	h	14	PIPE	1.900 x .200	4	2 11/16		
	n	5	PIPE	1.660 x .140	4	5 1/16		
	m	4	PL	1 x 12 1/2 DIA.	–	–		
	s	4	PL	1/4 x 4 5/8	0	6 3/8		
	z1	1	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE
Sep 8 2023

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PHONE (205)–925–4990
FAX (205) 925–7273

0

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF TRUSS

FOR: Archer–United Joint Venture

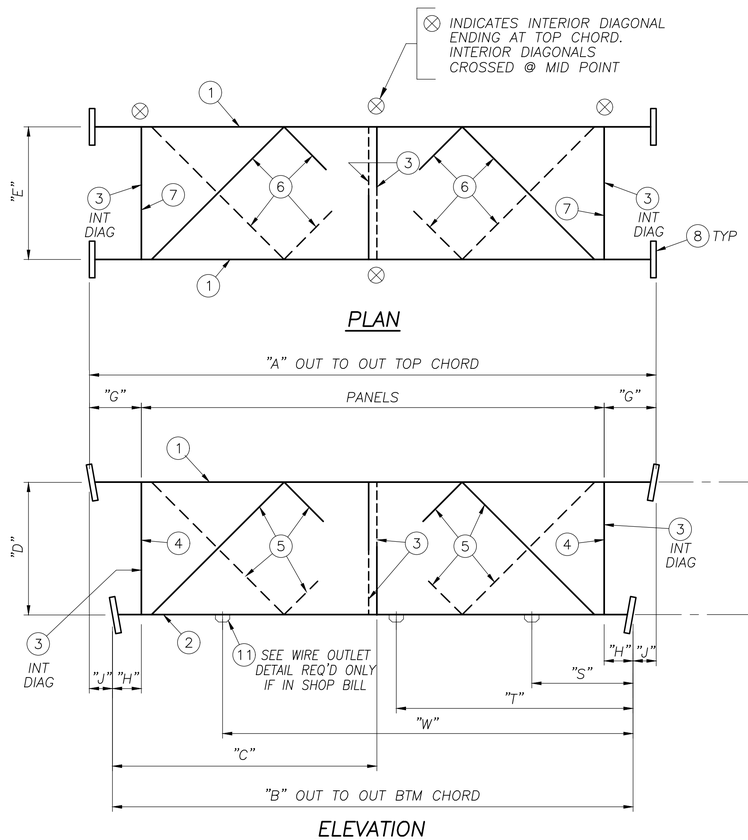
DRAWN BY: DLK DATE: 8/28/23
CHECKED BY: DLJ DATE: 8/30/23

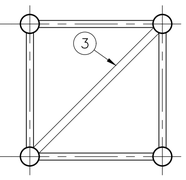
DWG NO: C3546–27

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

BTESDET

NAME: E:\acad\JobsNPrg\3546\3546–27.dwg DATE: AUG 30, 2023 TIME: 8:39 AM dj706290





TRUSS

MARK	QTY		"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
28T1	1		30'–7¼	30'–6¾	15'–3½	8 @ 3'–7⅝(±) = 29'–1	3'–9	3'–3		9⅛	8 15/16

MARK	"J"	"K"	"L"	"M"	"N"			1	2	3	4	5	6	7	8			11	SHIM	SWEEP
28T1	¼	9½	¼	6	1			a	b	n	d	f	h	k	m			z1	1/16	7/16

WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
28T1	18'–11⅛	------	------

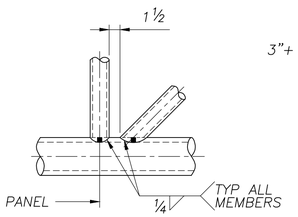
SHOP NOTE:

INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

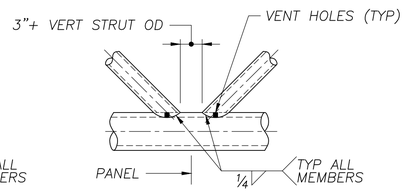
DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

C3546–28

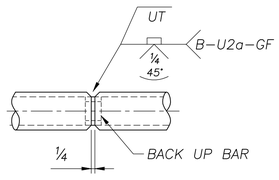
PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	28T1	1		BOX TRUSS				
	a	2	PIPE	6.625 x .219	30	6½		
	b	2	PIPE	6.625 x .219	30	6		
	d	4	PIPE	1.660 x .140	3	2½		
	k	4	PIPE	1.660 x .140	2	8½		
	f	16	PIPE	1.900 x .145	4	6 1/16		
	h	16	PIPE	1.900 x .200	4	2 1/16		
	n	4	PIPE	1.660 x .140	4	5 1/16		
	m	8	PL	1 x 12½ DIA.	–	–		
	z1	1	OP	1¼" FORGED HALF CPLG (3000#)	–	–		



JOINT DETAIL

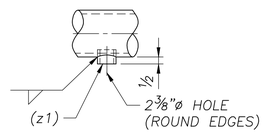


JOINT DETAIL



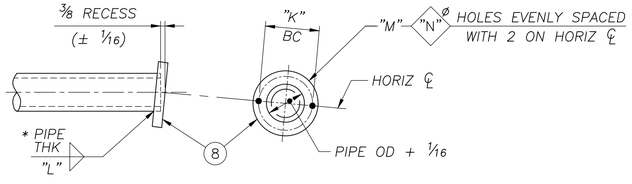
OPTIONAL CHORD SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA. ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼



*NOTE: PIPE THK –1/16" FOR PIPE WALLS > ¼"

FLANGE DETAIL

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E4

OH–14

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	DLK	DLJ

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0

BTCSDET

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

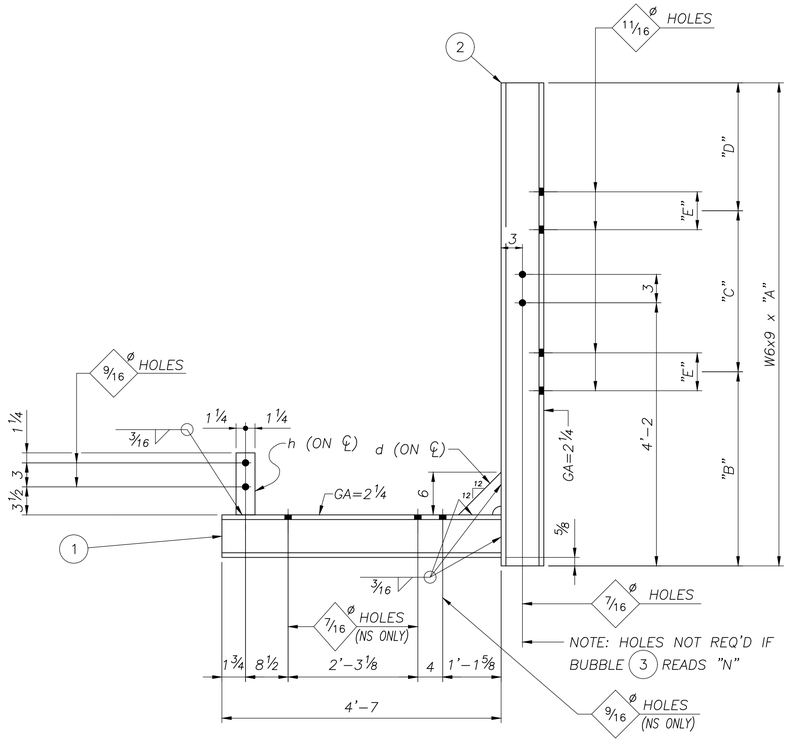
SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF TRUSS

FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/28/23
CHECKED BY: DLJ DATE: 8/30/23

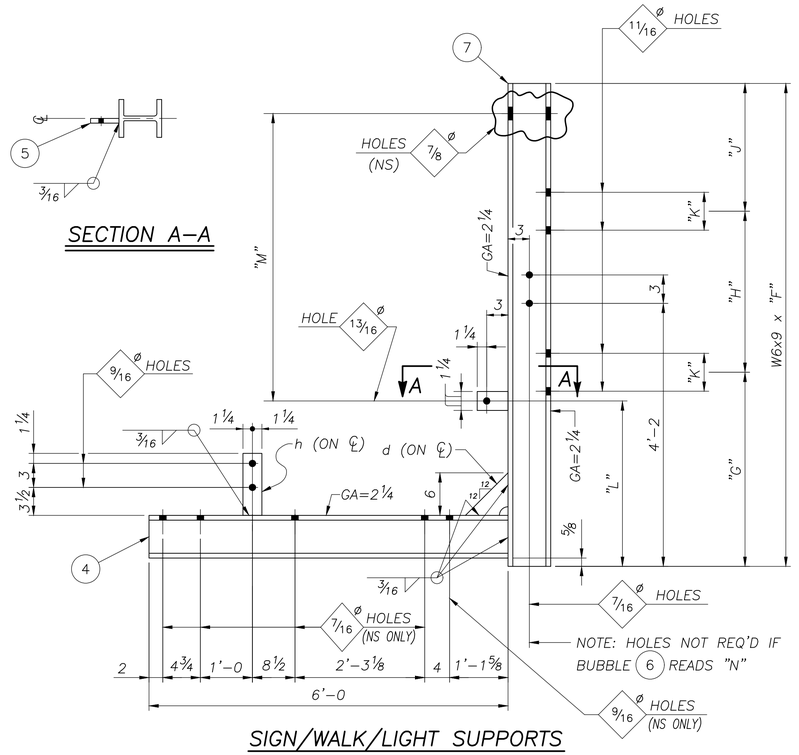
DWG NO: C3546–28

NAME: E:\acad\JobsNPrg\3546\3546–28.dwg DATE: AUG 30, 2023 TIME: 8:37 AM dj706290



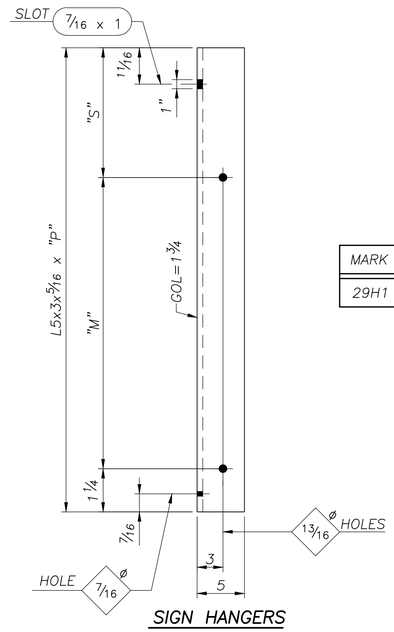
WALK SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	(1)	(2)	(3)
29S1	1	13'-3½	9'-0½	3'-9	6	7¼	b	a	Y
29S2	1	13'-3½	9'-0½	3'-9	6	7¼	b	aa	N



SIGN/WALK/LIGHT SUPPORTS

MARK	QTY	"F"	"G"	"H"	"J"	"K"	"L"	"M"	(4)	(5)	(6)	(7)
29S3	7	13'-4	9'-0½	3'-9	6½	7¼	2'-3¼	9'-11½	ab	f	N	ba
29S4	1	13'-4	9'-0½	3'-9	6½	7¼	2'-3¼	9'-11½	ab	f	Y	da



SIGN HANGERS

MARK	QTY	"P"	"M"	"S"
29H1	8	17'-6¼	9'-11½	7'-5½

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
				C3546-29				
	29S1	1		WALK SUPPORT				
	a	1	W	6 x 9	13	3½		
	b	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7¾		
	29S2	1		WALK SUPPORTS				
	aa	1	W	6 x 9	13	3½		
	b	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7¾		
	29S3	7		SIGN/WALK/LIGHT SUPPORTS				
	ba	7	W	6 x 9	13	4		
1	ab	7	W	6 x 9	6	0		
	d	7	PL	1/4 x 6	0	6		
	f	7	PL	3/8 x 2 1/2	0	4¼		
	h	7	PL	1/2 x 2 1/2	0	7¾		
	29S4	1		SIGN/WALK/LIGHT SUPPORT				
	da	1	W	6 x 9	13	4		
	b	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4¼		
	h	1	PL	1/2 x 2 1/2	0	7¾		
	29H1	8		SIGN HANGERS				
	k	8	L	5 x 3 x 5/16	17	6¼		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E4, WE1

OH-14

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Dec 7 2023

NO:	REVISIONS	DATE	MADE	CHECKED
1	REVISED SUPPORT QUANTITY	12/6/23	DLK	DLJ

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1

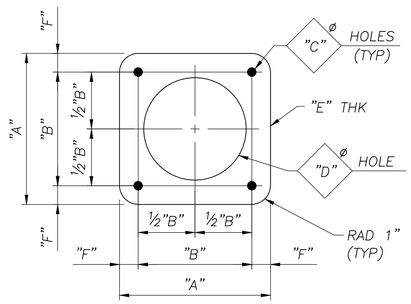
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: SIGN SUPPORT
WALK SUPPORT & SIGN HANGER DETAILS
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/28/23
CHECKED BY: DLJ DATE: 8/30/23
DWG NO: C3546-29

SH-DET4

C3546-30
SOUTH CAROLINA



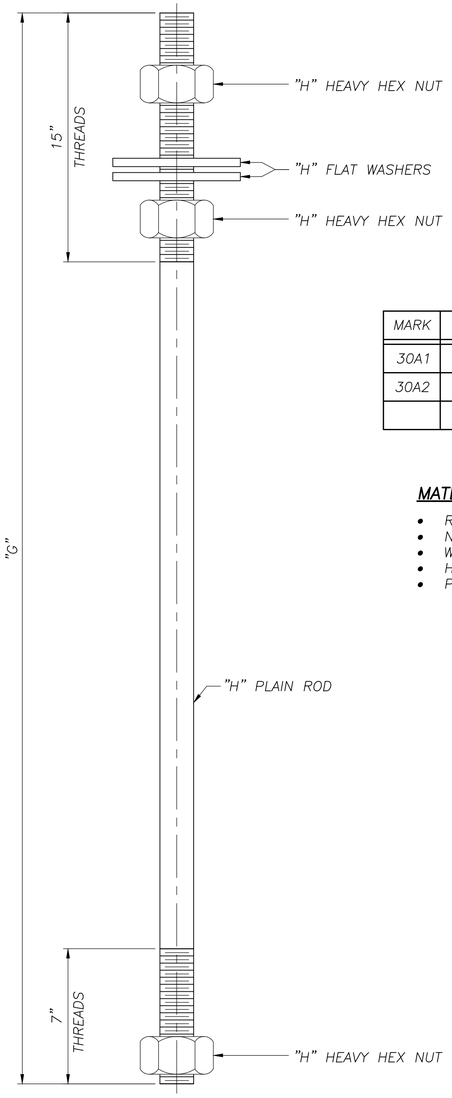
TYPE "AA"
(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
30P1	4	AA	14½	10½	1⅛	10½	¼	2
30P2	4	AA	16	12	1⅜	12	¼	2

NOTE:
THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
30A1	4'-6	1	8	8	24	16	
30A2	4'-6	1¼	7	8	24	16	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM-A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM-A153

C3546-30

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
	30P1	4		ANCHOR TEMPLATES			
	a	4	PL	¼ x 14½	1	2½	
	30P2	4		ANCHOR TEMPLATES			
	aa	4	PL	¼ x 16	1	4	

SHIPPING LIST

QTY	MARK	DESCRIPTION
4	30P1	ANCHOR TEMPLATES
4	30P2	ANCHOR TEMPLATES
8	30A1	ANCHOR BOLTS
8	30A2	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:
DO NOT GALVANIZE TEMPLATES

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

OH-16

REF DWG: E5

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Sep 8 2023

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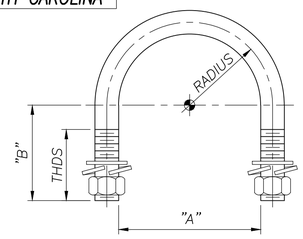
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	SIGN STRUCTURE ANCHOR BOLT & TEMPLATE DETAILS
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546-30

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

ABAT_TEMP

NAME: E:\acad\JobsNPrg\3546\3546-30.dwg DATE: AUG 30, 2023 TIME: 11:11 AM dj706290



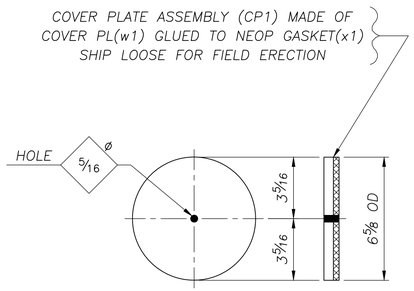
NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U-BOLTS w/(2ea) HN/LW/FW ~

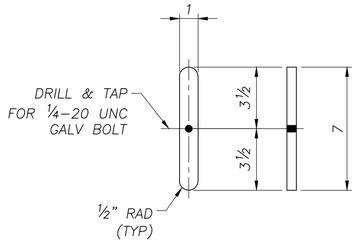
NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1

MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	24	5/16	1 1/16	1 5/8	1	1 1/4	NOTE 2
U6	56	1/2	6 3/4	5 1/4	3 5/8	2	NOTE 1



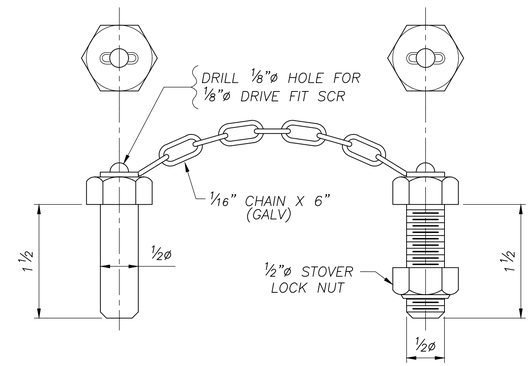
1 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	1		COVER PLATE ASSEMBLY			
w1	1	PL	1/4 x 6 5/8 DIA. (GALV A123)	-	-	1
x1	1	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	-	-	1



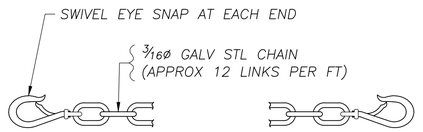
1 ~ HANDHOLE BAR ~ HB1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	1		HANDHOLE BAR			
w2	1	PL	1/4 x 1 (GALV A123)	0	7	1



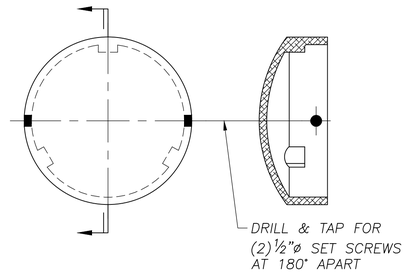
12 ~ HINGE PIN ASSEMBLY ~ 31P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

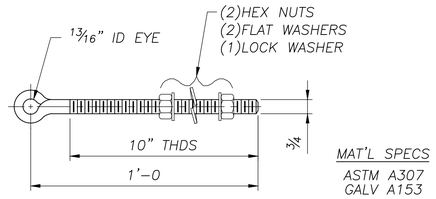
MARK	QTY	LENGTH
31S1	2	4'-6



~ POLE CAPS ~

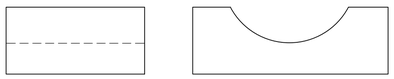
(ALUM 356-F) (ASTM B26, A356)

MARK	QTY	PART No	REMARKS
C8	2	388	8 5/8ø PIPE
C10	2	297	10 3/4ø PIPE



7 ~ EYE BOLT ASSEMBLY ~ 31M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1



~ SADDLE SHIM DETAIL ~

(ALUM 356-T6)

MARK	QTY	PART No	REMARKS
S6	4	360	FOR 6 5/8

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E5

OH-16

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

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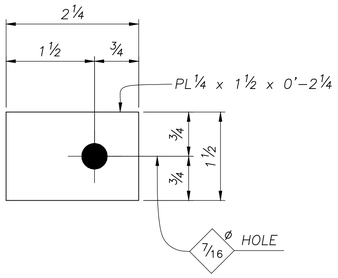
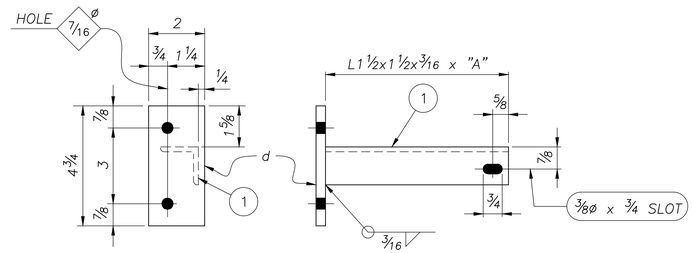
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	SIGN STRUCTURES MISC DETAILS
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546-31

KITDWG3

C3546-31



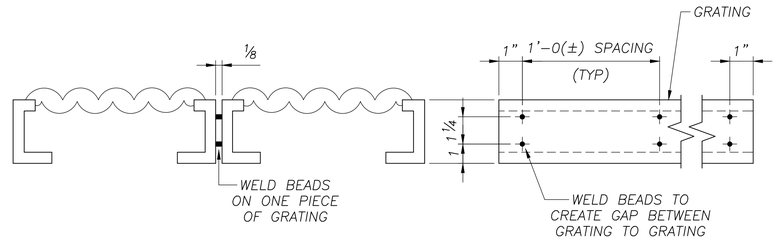
24 ~ CLAMP PLATES ~ 32M1



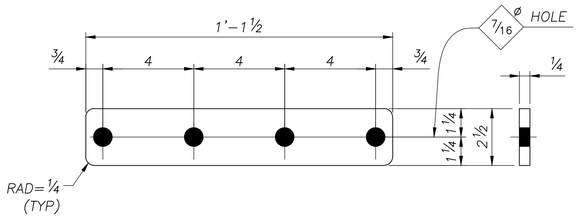
~ SAFETY CHAIN SUPPORT ~

(SEE CHART)

MARK	QTY	"A"	(1)
32M3	2	1'-6	f



GRATING GAP DETAIL

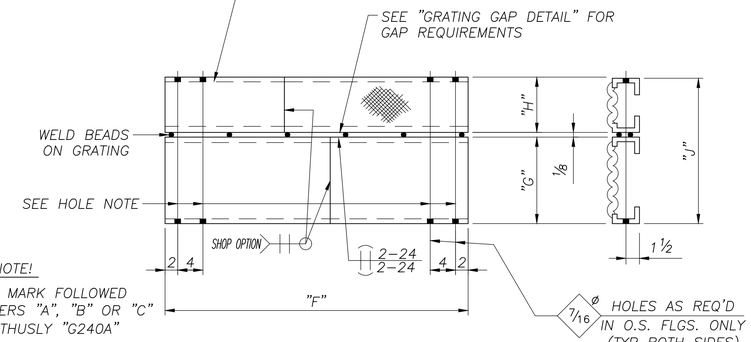


4 ~ SPLICE PLATES ~ 32M2

(FOR GRATING)

SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18 3/4" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11 3/4" WIDE – CAT# 53012



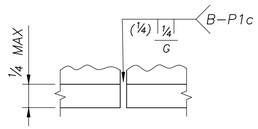
~ GRATING ~

(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
32G1B	2	20'-7	1'-6 3/4	11 3/4	2'-6 5/8
32G2C	1	20'-7	1'-6 3/4	11 3/4	2'-6 5/8

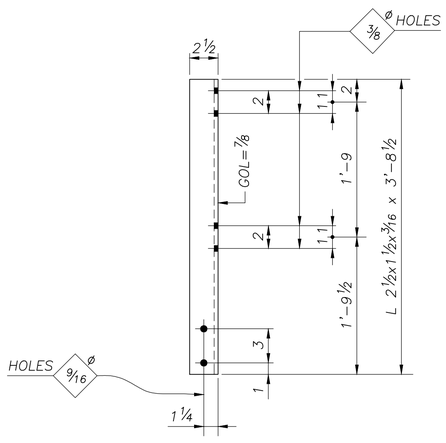
HOLE NOTE!

GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A" DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1–END
"C" – HOLES BOTH ENDS



TOE ANGLE SPLICE

(OPTIONAL)



12 ~ HANDRAIL POSTS ~ 32P1

(ALUMINUM)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E5

OH–16

AASHTO 6th Edition Spec's

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	32M1	24		CLAMP PLATES				
	a	24	PL	1/4 x 1 1/2	0	2 1/4		
	32M2	4		SPLICE PLATES				
	b	4	PL	1/4 x 2 1/2	1	1 1/2		
	32M3	2		SAFETY CHAIN SUPPORT				
	d	2	PL	1/4 x 2	0	4 3/4		
	f	2	L	1 1/2 x 1 1/2 x 3/16	1	6		
	32G1B	2		GRATING				
	g	2	GRT	18 3/4 WIDE	20	7		
	n	2	GRT	11 3/4 WIDE	20	7		
	32G2C	1		GRATING				
	g	1	GRT	18 3/4 WIDE	20	7		
	n	1	GRT	11 3/4 WIDE	20	7		
	32P1	12		HANDRAIL POSTS				
	h	12	ALL	2 1/2 x 1 1/2 x 3/16 (ALUM 6061)	3	8 1/2		
	32R1	12		HANDRAIL				
	k	12	ALPI	1.660 x .140 (ALUM 6061)	10	3 1/2		
	32A1	1		SAFETY ANGLE				
	m	1	L	4 x 3 x 1/4	40	0		
	32A2	1		SAFETY ANGLE				
	am	1	L	4 x 3 x 1/4	21	9		
	32L1	4		LIGHT SUPPORTS (ALUM 6063-T6)				
	p	4	ALUN	UNISTRUT 1 5/8 x 1 5/8 x .105	27	0		

C3546–32

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
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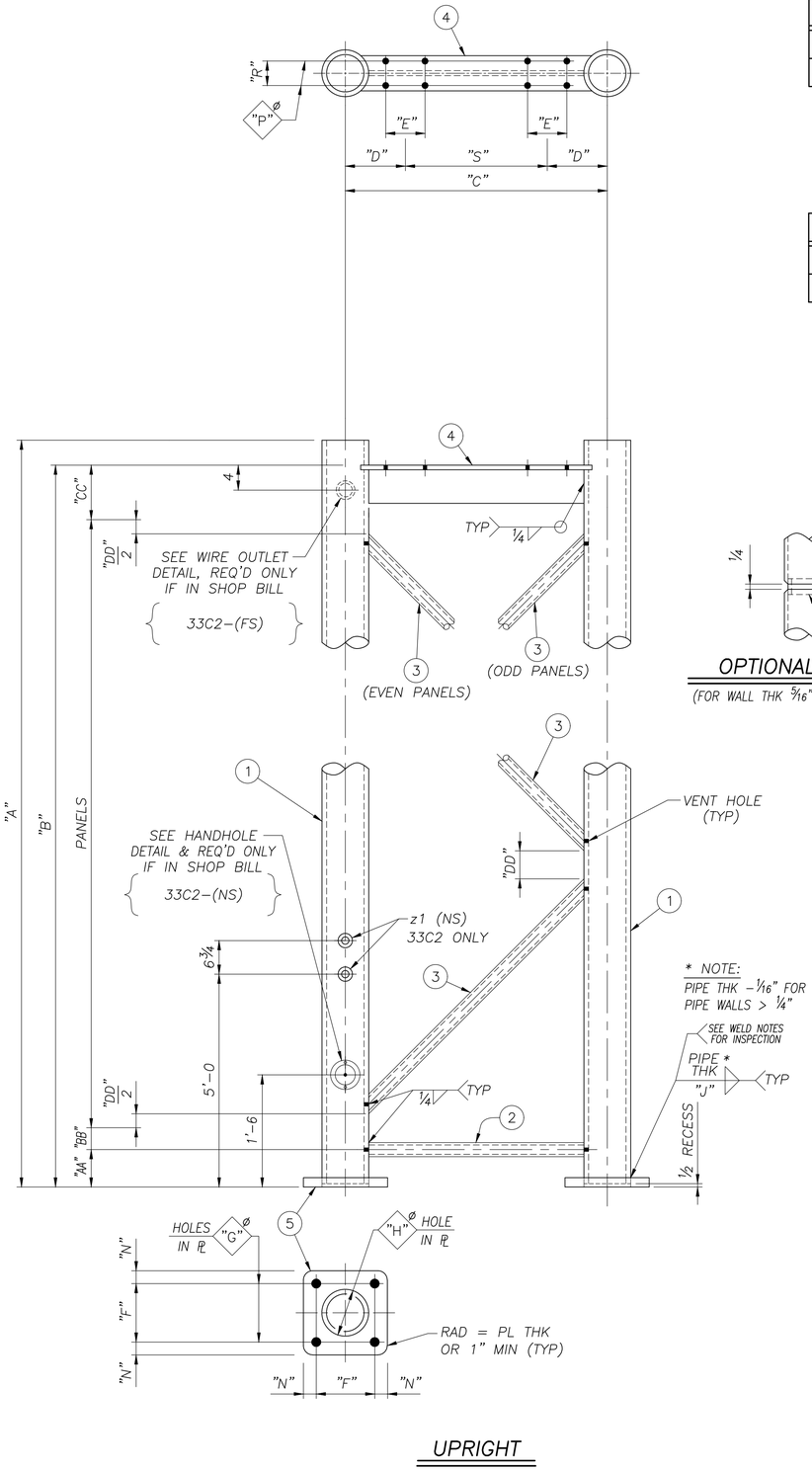
ROUTE:	I–26 & I–126
SUBJECT:	SIGN STRUCTURE
	MISC DETAILS
FOR:	Archer–United Joint Venture
DRAWN BY:	JSD DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546–32

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

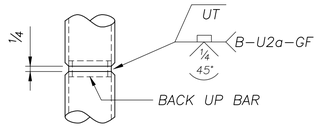


UPRIGHT

MARK	QTY	"A"	"B"	"C"	PANELS	"D"	"E"	"F"	"G"
33C1	1	19'-9 1/16	19'-5 1/16	5'-3	4 @ 4'-5 7/8(±) = 17'-11 7/16	1'-0	7 1/4	1'-0	1 1/2
33C2	1	9'-2 15/16	8'-10 13/16	5'-3	2 @ 3'-8 5/16(±) = 7'-4 1/16	1'-0	7 1/4	10 1/2	1 1/4

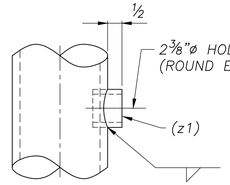
MARK	"H"	"J"				"N"	"P"	"R"	"S"		1	2	3	4	5		
33C1	10 13/16	5/16				2 1/2	1 1/16	4 1/2	3'-3		a	b	d	f	h		
33C2	8 1/16	5/16				2 1/2	1 1/16	4 1/2	3'-3		aa	ab	ad	af	ah		

MARK	"AA"	"BB"	"CC"	"DD"
33C1	6	3 1/2	8 3/4	5 7/8
33C2	6	3 1/2	8 3/4	5 3/8

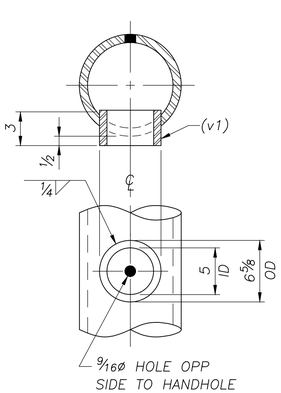


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4

					LENGTH			
PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	FEET	INCHES	PARTS FOR ONE UNIT	
	33C1	1		UPRIGHT				
	a	2	PIPE	10.750 x .250	19	9 3/16		
	b	1	PIPE	2.875 x .203	4	4 9/16		
	d	4	PIPE	2.875 x .203	5	10 15/16		
	f	1	WT	6 x 13	4	6 7/16		
	h	2	PL	1 1/2 x 17	1	5		
	33C2	1		UPRIGHT				
	aa	2	PIPE	8.625 x .188	9	2 7/16		
	ab	1	PIPE	2.375 x .218	4	6 5/8		
	ad	2	PIPE	2.375 x .218	5	6 7/8		
	af	1	WT	7 x 15	4	9 5/8		
	ah	2	PL	1 x 15 1/2	1	3 1/2		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	3	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

C3546-33

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E5

OH-16

AASHTO 6th Edition Spec's

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Sep 8 2023

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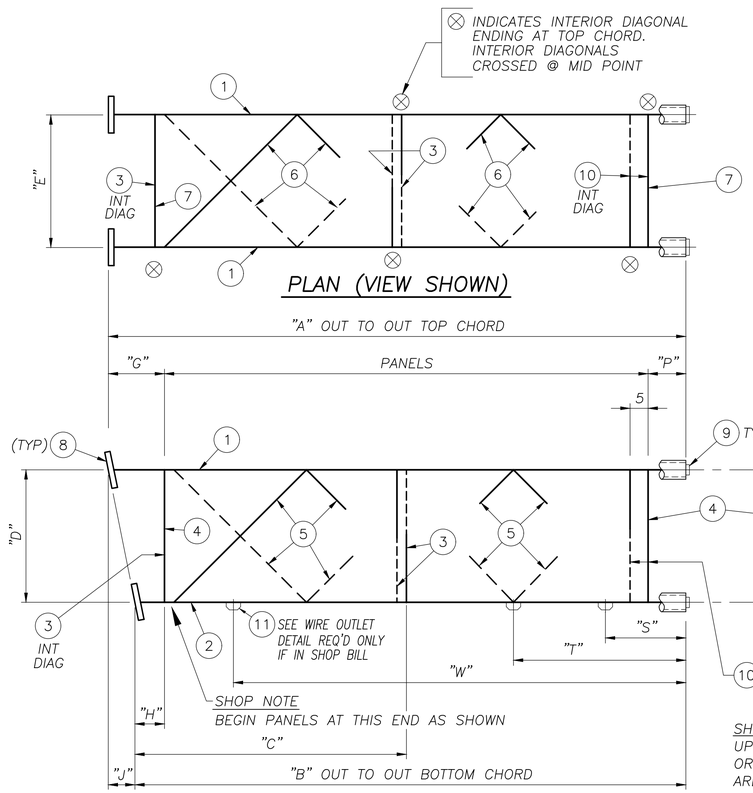
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD SIGN SUPPORT DETAIL OF UPRIGHT
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546-33

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

BTDPUDET

NAME: E:\acad\JobsNPrg\3546\3546-33.dwg DATE: AUG 30, 2023 TIME: 11:07 AM dj706290



PLAN (VIEW SHOWN)

ELEVATION (VIEW SHOWN)

TRUSS

END SECTION

MARK	QTY	VIEW	"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
34T1	1	OPHAND	28'–4 7/8	28'–4 5/8	12'–2 1/16	7 @ 3'–9 1/16(±) = 26'–7 3/4	3'–9	3'–3		9 1/8	8 7/8
34T2	1	SHOWN	28'–4 7/8	28'–4 5/8	12'–2 1/16	7 @ 3'–9 1/16(±) = 26'–7 3/4	3'–9	3'–3		9 1/8	8 7/8

MARK	"J"	"K"	"L"	"M"	"N"	"P"	"R"	1	2	3	4	5	6	7	8	9	10	11	SHIM	SWEEP
34T1	1/4	9 1/2	1/4	6	1	1'–0	4 5/8	a	b	n	d	f	h	k	m	s	n	z1	1/16	3/8
34T2	1/4	9 1/2	1/4	6	1	1'–0	4 5/8	a	b	n	d	f	h	k	m	s	n	z1	1/16	3/8

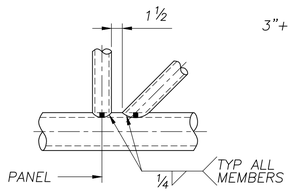
WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
34T1	23'–10 1/16	------	------
34T2	1'–0	------	------

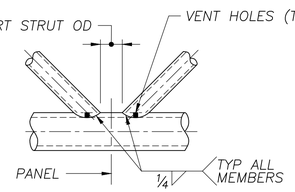
VENT HOLE SIZES	
WEB MEMBER (O.D.)	HOLE DIA. ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4

SHOP NOTE: INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.



JOINT DETAIL



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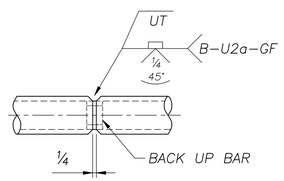
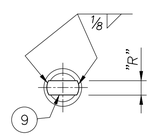
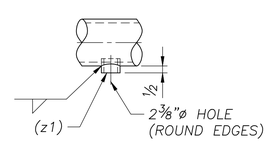


OPTIONAL CHORD SPLICE

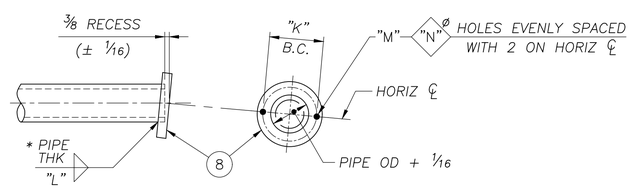
(FOR WALL THK 5/16" OR GREATER ONLY)



END CAP DETAIL



WIRE OUTLET DETAIL



FLANGE DETAIL

* NOTE: PIPE THK –1/16" FOR PIPE WALLS > 1/4"

C3546–34

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	34T1	1		BOX TRUSS				
	a	2	PIPE	6.625 x .188	28	4 1/2		
	b	2	PIPE	6.625 x .188	28	4 1/4		
	d	4	PIPE	1.660 x .140	3	2 1/2		
	k	4	PIPE	1.660 x .140	2	8 1/2		
	f	14	PIPE	1.900 x .200	4	8 3/16		
	h	14	PIPE	1.900 x .200	4	4 1/4		
	n	5	PIPE	1.660 x .140	4	5 1/16		
	m	4	PL	1 x 12 1/2 DIA.	–	–		
	s	4	PL	1/4 x 4 5/8	0	6 3/8		
	z1	1	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		
	34T2	1		BOX TRUSS				
	a	2	PIPE	6.625 x .188	28	4 1/2		
	b	2	PIPE	6.625 x .188	28	4 1/4		
	d	4	PIPE	1.660 x .140	3	2 1/2		
	k	4	PIPE	1.660 x .140	2	8 1/2		
	f	14	PIPE	1.900 x .200	4	8 3/16		
	h	14	PIPE	1.900 x .200	4	4 1/4		
	n	5	PIPE	1.660 x .140	4	5 1/16		
	m	4	PL	1 x 12 1/2 DIA.	–	–		
	s	4	PL	1/4 x 4 5/8	0	6 3/8		
	z1	1	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E5

OH–16

AASHTO 6th Edition Spec's

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Sep 8 2023

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0

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF TRUSS

FOR: Archer–United Joint Venture

DRAWN BY: JSD DATE: 8/28/23

CHECKED BY: DLJ DATE: 8/30/23

DWG NO: C3546–34

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

BTESDET

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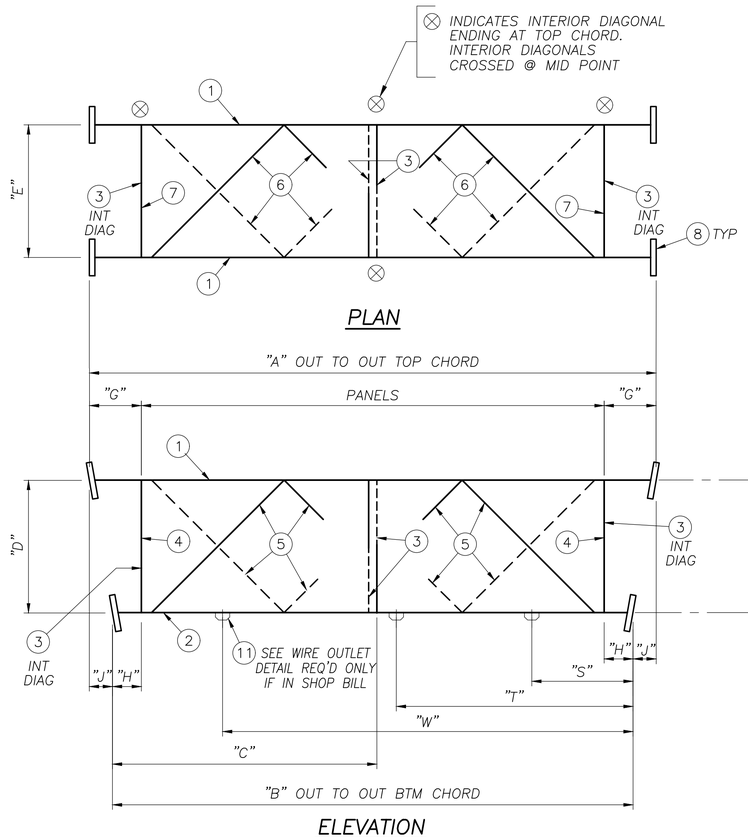


TRUSS

MARK	QTY		"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
35T1	1		31'–11¾	31'–11¼	15'–11¾	8 @ 3'–9 1⁄16(±) = 30'–5½	3'–9	3'–3		9⅛	8⅞

MARK	"J"	"K"	"L"	"M"	"N"			1	2	3	4	5	6	7	8			11	SHIM	SWEEP
35T1	¼	9½	¼	6	1			a	b	n	d	f	h	k	m			z1	1⁄16	7⁄16

WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
35T1	12'–2 1⁄16	------	------

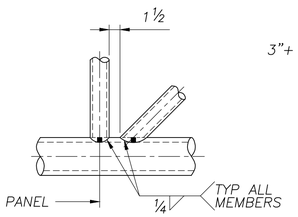
SHOP NOTE:

INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

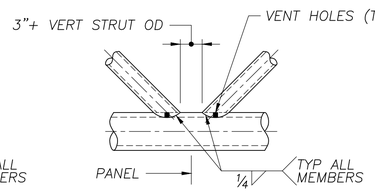
DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

C3546–35

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	35T1	1		BOX TRUSS				
	a	2	PIPE	6.625 x .188	31	11		
	b	2	PIPE	6.625 x .188	31	10½		
	d	4	PIPE	1.660 x .140	3	2½		
	k	4	PIPE	1.660 x .140	2	8½		
	f	16	PIPE	1.900 x .200	4	8 3⁄16		
	h	16	PIPE	1.900 x .200	4	4¼		
	n	4	PIPE	1.660 x .140	4	5 1⁄16		
	m	8	PL	1 x 12½ DIA.	–	–		
	z1	1	OP	1¼" FORGED HALF CPLG (3000#)	–	–		



JOINT DETAIL



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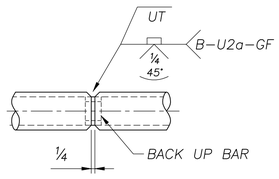
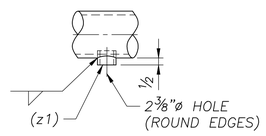


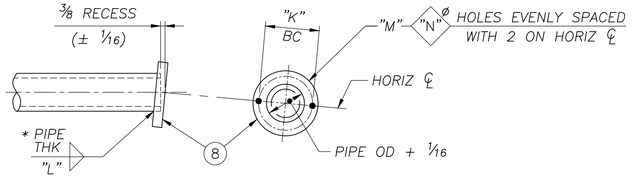
OPTIONAL CHORD SPLICE

(FOR WALL THK 5⁄16" OR GREATER ONLY)



WIRE OUTLET DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA. ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼



FLANGE DETAIL

*NOTE: PIPE THK –1⁄16" FOR PIPE WALLS > ¼"

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E5

OH–16

AASHTO 6th Edition Spec's

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Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

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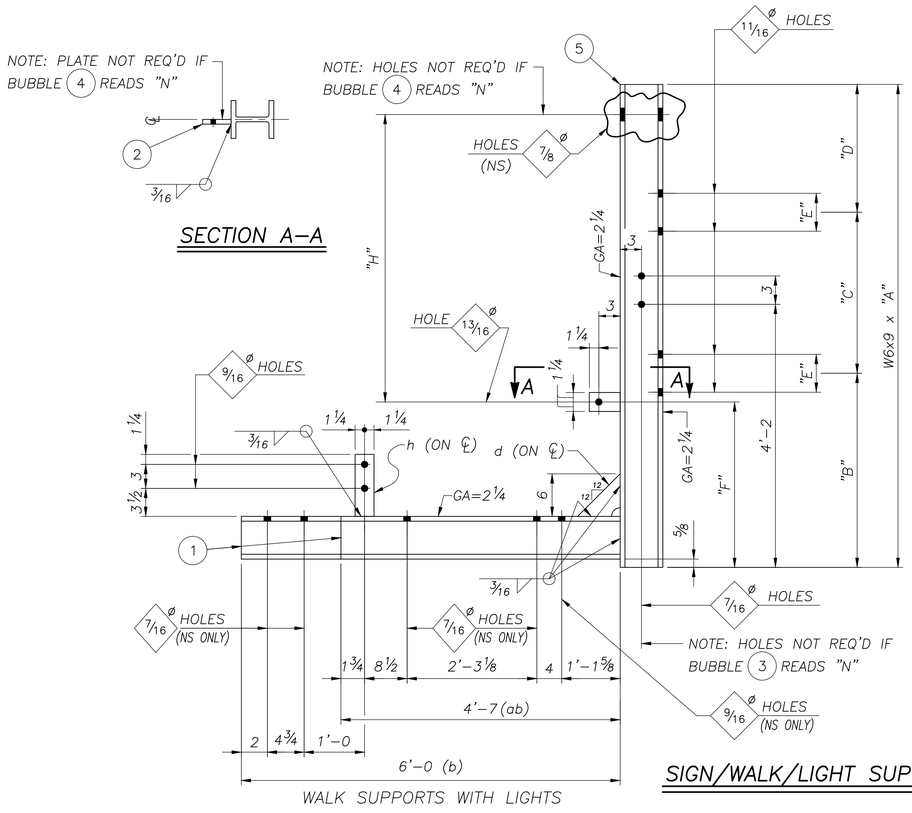
BTCSDET

STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT
	DETAIL OF TRUSS
FOR:	Archer–United Joint Venture
DRAWN BY:	JSD DATE: 8/28/23
CHECKED BY:	DLJ DATE: 8/30/23
DWG NO:	C3546–35

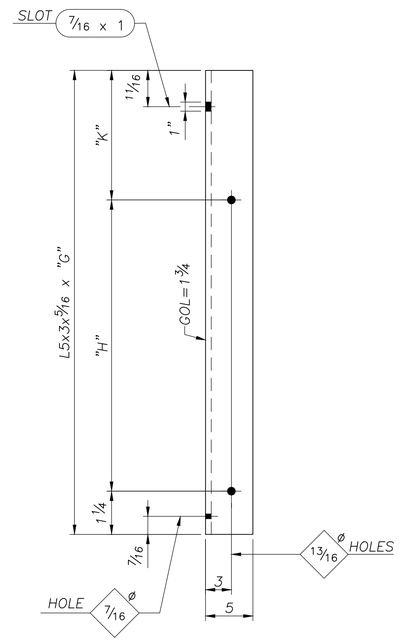
NAME: E:\acad\JobsNPrg\3546\3546–35.dwg DATE: AUG 30, 2023 TIME: 11:03 AM dj706290



WALK SUPPORTS WITH LIGHTS

SIGN/WALK/LIGHT SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	"F"	"H"	1	2	3	4	5
36S1	1	10'–1	5'–9 ½	3'–9	6 ½	7 ¼	2'–3 ¼	6'–2 ½	b	f	Y	Y	a
36S2	2	10'–1	5'–9 ½	3'–9	6 ½	7 ¼	2'–3 ¼	6'–2 ½	b	f	N	Y	aa
36S3	4	12'–6	5'–9 ½	3'–9	2'–11 ½	7 ¼	2'–3 ¼	9'–8 ½	b	f	N	Y	ba
36S4	2	10'–1	5'–9 ½	3'–9	6 ½	7 ¼	----	----	ab	–	N	N	da
36S5	2	10'–1	5'–9 ½	3'–9	6 ½	7 ¼	----	----	b	–	N	N	fa
36S6	1	10'–1	5'–9 ½	3'–9	6 ½	7 ¼	----	----	ab	–	Y	N	ga



SIGN HANGERS

MARK	QTY	"G"	"H"	"K"
36H1	3	10'–0 ¼	6'–2 ½	3'–8 ½
36H2	4	17'–0 ¼	9'–8 ½	7'–2 ½

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	36S1	1		SIGN/WALK/LIGHT SUPPORT				
	a	1	W	6 x 9	10	1		
	b	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4 ¼		
	h	1	PL	1/2 x 2 1/2	0	7 ¾		
	36S2	2		SIGN/WALK/LIGHT SUPPORT				
	aa	2	W	6 x 9	10	1		
	b	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	f	2	PL	3/8 x 2 1/2	0	4 ¼		
	h	2	PL	1/2 x 2 1/2	0	7 ¾		
	36S3	4		SIGN/WALK/LIGHT SUPPORT				
	ba	4	W	6 x 9	12	6		
	b	4	W	6 x 9	6	0		
	d	4	PL	1/4 x 6	0	6		
	f	4	PL	3/8 x 2 1/2	0	4 ¼		
	h	4	PL	1/2 x 2 1/2	0	7 ¾		
	36S4	2		WALK SUPPORTS				
	da	2	W	6 x 9	10	1		
	ab	2	W	6 x 9	4	7		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 ¾		
	36S5	2		WALK & LIGHT SUPPORTS				
	fa	2	W	6 x 9	10	1		
	b	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 ¾		
	36S6	1		WALK SUPPORTS				
	ga	1	W	6 x 9	10	1		
	ab	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7 ¾		
	36H1	3		SIGN HANGERS				
	k	3	L	5 x 3 x 5/16	10	0 ¼		
	36H2	4		SIGN HANGERS				
	ak	4	L	5 x 3 x 5/16	17	0 ¼		

C3546–36

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E5

OH–16

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID A LALLONE
No. 38665
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Sep 8 2023

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NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	8/30/23	JSD	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN SUPPORT
WALK SUPPORT & SIGN HANGER DETAILS

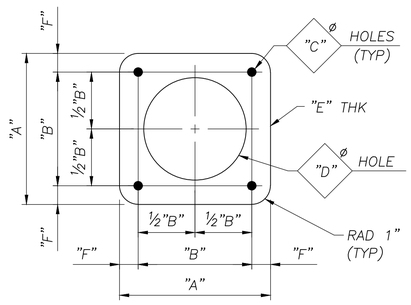
FOR: Archer–United Joint Venture

DRAWN BY: JSD DATE: 8/28/23
CHECKED BY: DLJ DATE: 8/30/23

DWG NO: C3546–36

SH–DET4

NAME: E:\acad\JobsNPrg\3546\3546–36.dwg DATE: AUG 30, 2023 TIME: 11:03 AM dj706290



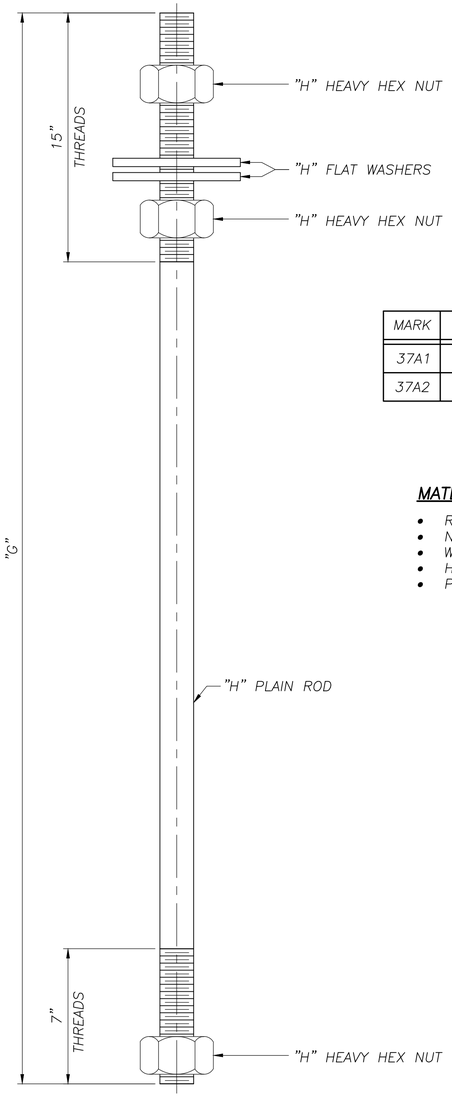
TYPE "AA"
(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
37P1	4	AA	14½	10½	1⅛	10½	¼	2
37P2	4	AA	20	16	1⅞	16	¼	2

NOTE:
THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
37A1	4'–6	1	8	8	24	16	
37A2	4'–6	1¾	5	8	24	16	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM–A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM–A153

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	37P1	4		ANCHOR TEMPLATES				
	a	4	PL	¼ x 14½	1	2½		
	37P2	4		ANCHOR TEMPLATES				
	aa	4	PL	¼ x 20	1	8		

C3546–37

SHIPPING LIST

QTY	MARK	DESCRIPTION
4	37P1	ANCHOR TEMPLATES
4	37P2	ANCHOR TEMPLATES
8	37A1	ANCHOR BOLTS
8	37A2	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:
DO NOT GALVANIZE TEMPLATES

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH–23

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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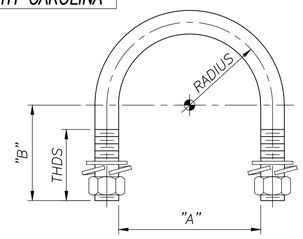
FAX (205) 925–7273

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN STRUCTURE
ANCHOR BOLT & TEMPLATE DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/29/23
CHECKED BY: DLJ DATE: 9/6/23
DWG NO: C3546–37



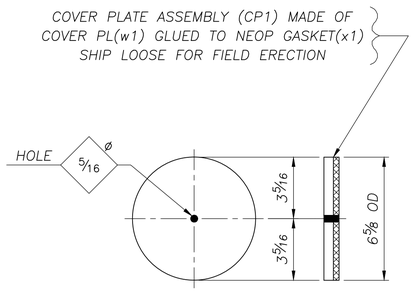
NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U-BOLTS w/(2ea) HN/LW/FW ~

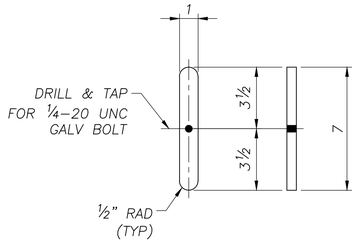
NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1

MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	16	5/16	1 11/16	1 5/8	1	1 1/4	NOTE 2
U4	44	1/2	4 5/8	4 1/4	2 3/16	2	NOTE 1



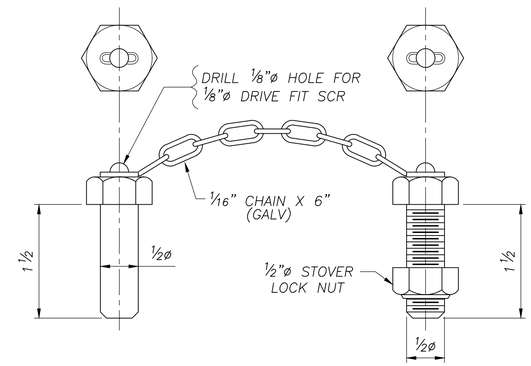
2 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	2		COVER PLATE ASSEMBLY			
w1	2	PL	1/4 x 6 5/8 DIA. (GALV A123)	–	–	1
x1	2	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	–	–	1



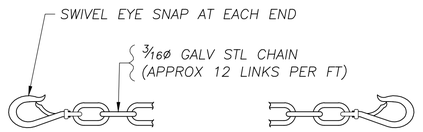
2 ~ HANDHOLE BAR ~ HB1

PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	2		HANDHOLE BAR			
w2	2	PL	1/4 x 1 (GALV A123)	0	7	1



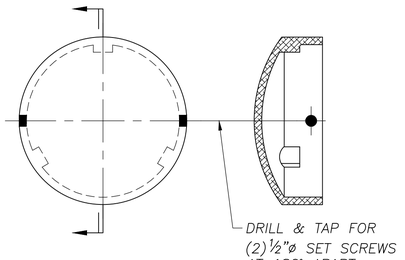
8 ~ HINGE PIN ASSEMBLY ~ 38P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

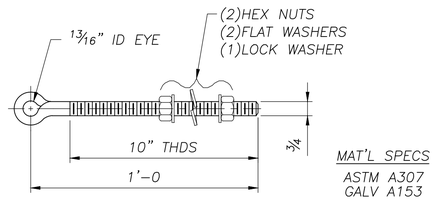
MARK	QTY	LENGTH
38S1	2	4'-6



~ POLE CAPS ~

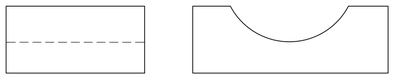
(ALUM 356-F) (ASTM B26, A356)

MARK	QTY	PART No	REMARKS
C8	2	388	8 5/8ø PIPE
C16	2	393	16ø PIPE



5 ~ EYE BOLT ASSEMBLY ~ 38M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI-B18.21.1



~ SADDLE SHIM DETAIL ~

(ALUM 356-T6)

MARK	QTY	PART No	REMARKS
S4	4	350	FOR 4 1/2

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E6

OH-23

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE
Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

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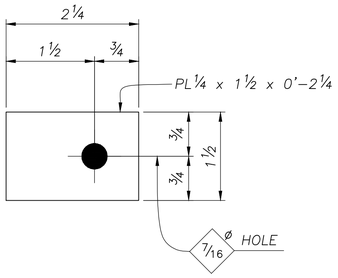
STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

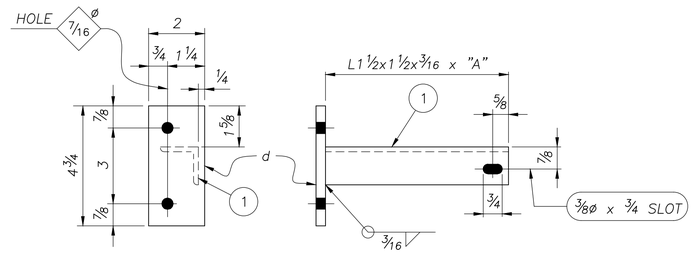
SUBJECT: SIGN STRUCTURES
MISC DETAILS
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/29/23
CHECKED BY: DLJ DATE: 9/6/23
DWG NO: C3546-38

KITDWG3



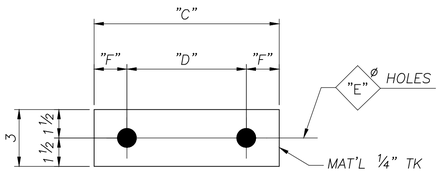
16 ~ CLAMP PLATES ~ 39M1



~ SAFETY CHAIN SUPPORT ~

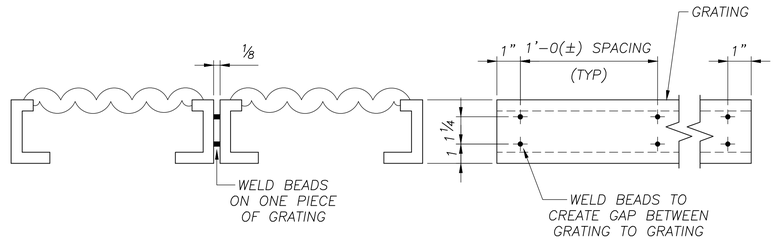
(SEE CHART)

MARK	QTY	"A"	(1)
39M3	2	2'-6	f

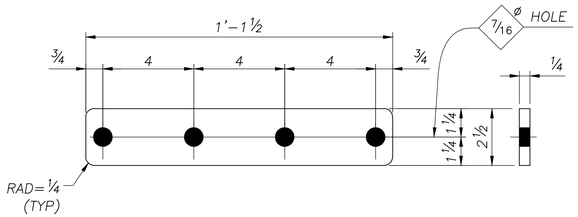


~ SHIMS ~

MARK	QTY	"C"	"D"	"E"	"F"
39S1	4	7 3/8	5 1/8	11/16	1 1/8



GRATING GAP DETAIL

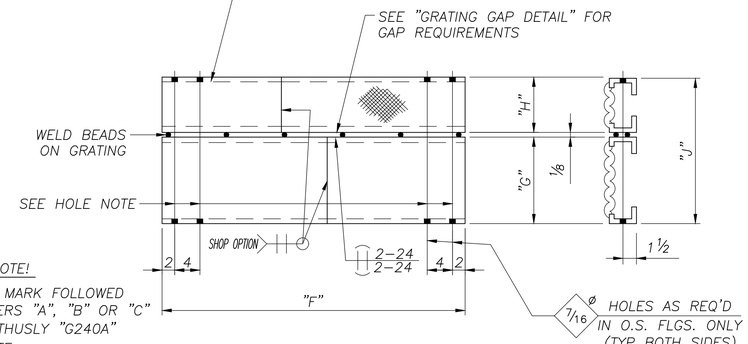


2 ~ SPLICE PLATES ~ 39M2

(FOR GRATING)

SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18 3/4" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11 3/4" WIDE – CAT# 53012



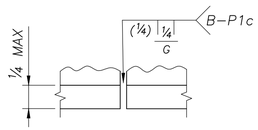
HOLE NOTE!

GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A" DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1–END
"C" – HOLES BOTH ENDS

~ GRATING ~

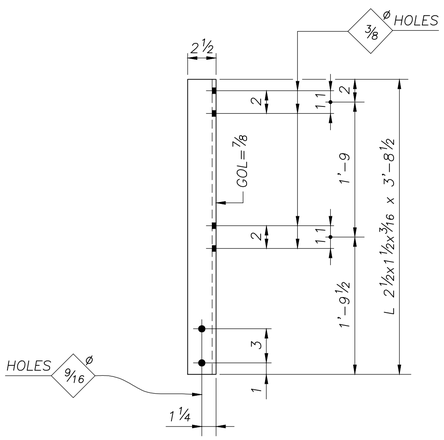
(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
39G1B	2	16'-6 1/2	1'-6 3/4	11 3/4	2'-6 5/8



TOE ANGLE SPLICE

(OPTIONAL)



8 ~ HANDRAIL POSTS ~ 39P1

(ALUMINUM)

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH–23

AASHTO 6th Edition Spec's

C3546–39

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	39M1	16		CLAMP PLATES				
	a	16	PL	1/4 x 1 1/2	0	2 1/4		
	39M2	2		SPLICE PLATES				
	b	2	PL	1/4 x 2 1/2	1	1 1/2		
	39M3	2		SAFETY CHAIN SUPPORT				
	d	2	PL	1/4 x 2	0	4 3/4		
	f	2	L	1 1/2 x 1 1/2 x 3/16	2	6		
	39G1B	2		GRATING				
	g	2	GRT	18 3/4 WIDE	16	6 1/2		
	n	2	GRT	11 3/4 WIDE	16	6 1/2		
	39P1	8		HANDRAIL POSTS				
	h	8	ALL	2 1/2 x 1 1/2 x 3/16 (ALUM 6061)	3	8 1/2		
	39R1	6		HANDRAIL				
	k	6	ALPI	1.660 x .140 (ALUM 6061)	8	3		
	39R2	2		HANDRAIL				
	ak	2	ALPI	1.660 x .140 (ALUM 6061)	8	4		
	39S1	4		SHIMS				
	p	4	PL	1/4 x 3	0	7 3/8		
	39A1	1		SAFETY ANGLE				
	m	1	L	4 x 3 x 1/4	33	1		
	39L1	2		LIGHT SUPPORTS (ALUM 6063–T6)				
	s	2	ALUN	UNISTRUT 1 5/8 x 1 5/8 x .105	15	0		
	39L2	2		LIGHT SUPPORTS (ALUM 6063–T6)				
	as	2	ALUN	UNISTRUT 1 5/8 x 1 5/8 x .105	10	6		

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No. 38665
DAVID A LALLONE
Sep 8 2023

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NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN STRUCTURE
MISC DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: DLK DATE: 8/29/23
CHECKED BY: DLJ DATE: 9/6/23
DWG NO: C3546–39

C3546-40

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	40C1	1		UPRIGHT STUB				
	a	2	PIPE	16.000 x .250	27	9¾		
	b	1	PIPE	4.500 x .188	4	2 9/16		
	d	5	PIPE	4.500 x .188	6	2 1/16		
	f	2	PL	1¾ x 21	1	9		
	h	2	PL	1¼ x 22 DIA.	–	–		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	2	OP	1¼" FORGED HALF CPLG (3000#)	–	–		

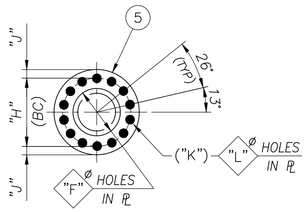
MARK	QTY	"A"	"B"	"C"	"D"	"E"	"F"	"G"
40C1	1	27'-10¾	5'-6	1'-4	2½	2	1'-4 1/16	5/16

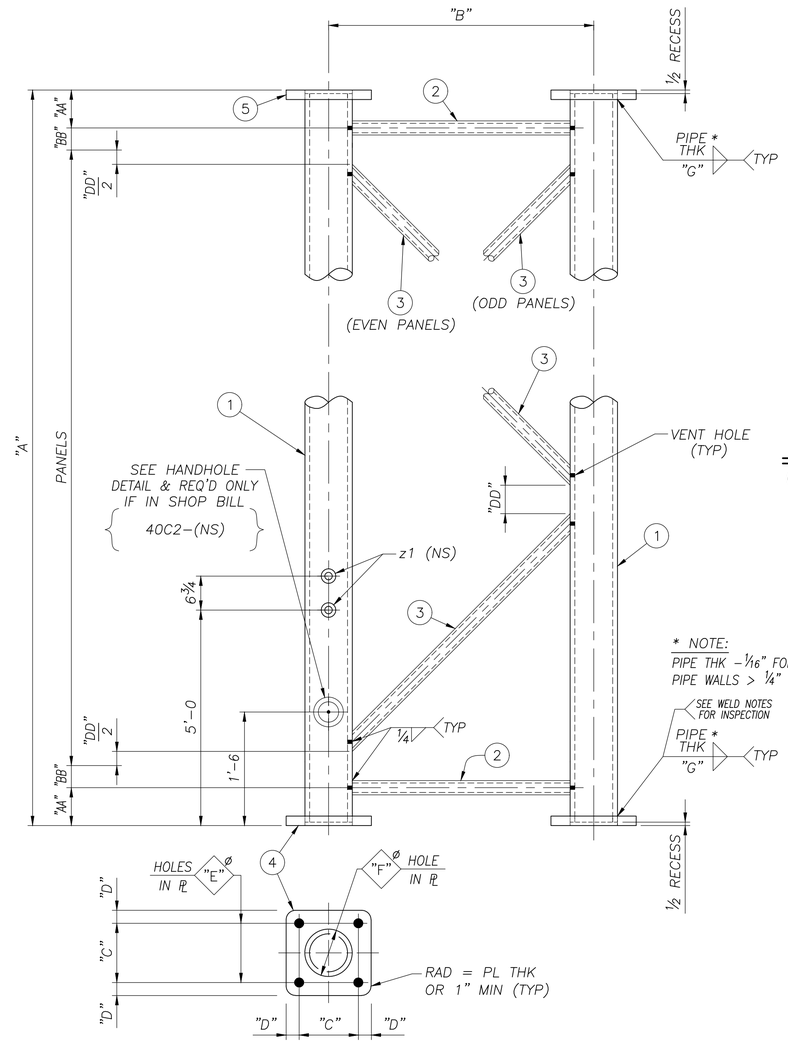
MARK	"H"	"J"	"K"	"L"		1	2	3	4	5
40C1	1'-7	1½	14	1⅛		a	b	d	f	h

MARK	"AA"	"BB"	"DD"	PANELS
40C1	*8½	3½	7½	5 @ 5'-2⅛(±) = 25'-10¾

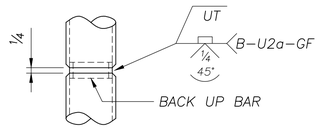
SHOP NOTE:

* NOT TYPICAL DIMENSION



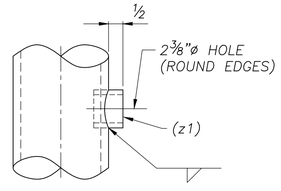


UPRIGHT

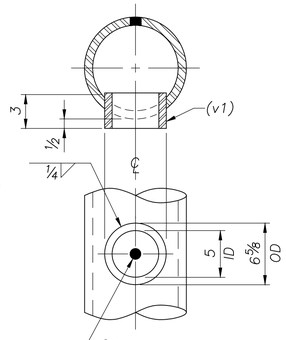


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH-23

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
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STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I-26 & I-126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF UPRIGHT STUB

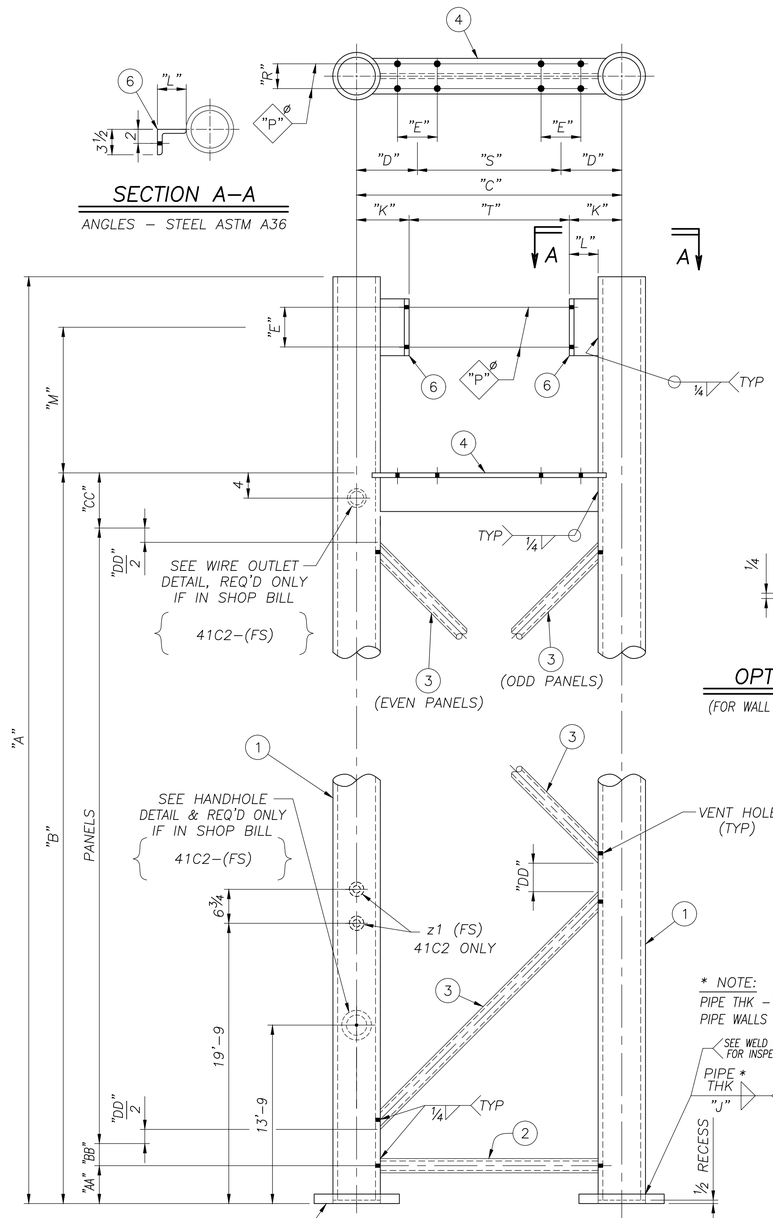
FOR: Archer-United Joint Venture

DRAWN BY: DLK DATE: 8/29/23
CHECKED BY: DLJ DATE: 9/6/23

DWG NO: C3546-40

BTDPUDET

NAME: E:\acad\JobsNProg\3546\3546-40.dwg DATE: SEP. 06, 2023 TIME: 2:16 PM dj706290



UPRIGHT

SECTION A–A

ANGLES – STEEL ASTM A36

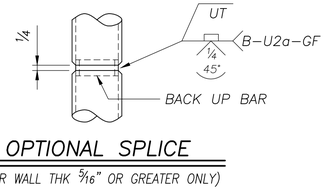
MARK	QTY	"A"	"B"	"C"	PANELS	"D"	"E"	"F"	"G"
41C1	1	22'–1¾	17'–6	5'–6	3 @ 5'–3 15/16(±) = 15'–11¾	1'–1½	5⅛	10½	1¼
41C2	1	37'–9	33'–1¼	5'–6	6 @ 5'–2⅛(±) = 31'–0¾	1'–1½	5⅛	1'–7	1⅛

MARK	"H"	"J"	"K"	"L"	"M"	"N"	"P"	"R"	"S"	"T"	1	2	3	4	5	6	
41C1	8 1/16	5/16	10⅞	6 9/16	3'–11¾	2½	1 1/16	4½	3'–3	3'–8¼	aa	ab	ad	af	ah	ak	
41C2	1'–4 1/16	5/16	10⅞	2⅞	3'–11¾	1½	1 1/16	4½	3'–3	3'–8¼	aa	ab	ad	af	ah	ak	

MARK	"AA"	"BB"	"CC"	"DD"
41C1	6	3½	8¾	5⅜
41C2	* 8½	3½	*12½	7½

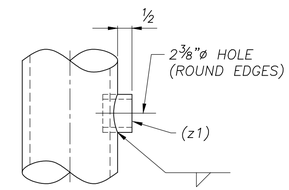
SHOP NOTE:

* NOT TYPICAL DIMENSION

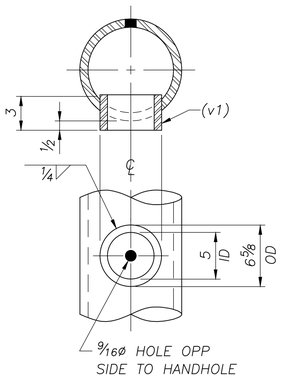


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± ¼"
< 3.500	¾
3.500	1¾
4.000	2
4.500	2¼
5.563	2¾
6.625	3¼

C3546–41

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	41C1	1		UPRIGHT				
	a	2	PIPE	8.625 x .188	22	1¼		
	b	1	PIPE	2.375 x .154	4	9⅝		
	d	3	PIPE	2.375 x .154	6	10		
	f	1	WT	6 x 13	5	0 5/16		
	h	2	PL	1 x 15½	1	3½		
	k	2	L	7 x 4 x ½	0	7⅜		
	41C2	1		UPRIGHT				
	aa	2	PIPE	16.000 x .250	37	8½		
	ab	1	PIPE	4.500 x .188	4	2 9/16		
	ad	6	PIPE	4.500 x .188	6	2 1/16		
	af	1	W	8 x 24	4	3⅜		
	ah	2	PL	1¼ x 22 DIA.	–	–		
	ak	2	L	3½ x 3 x ½	0	7⅜		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	3	OP	1¼" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH–23

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 38665 DAVID A LALLONE

Sep 8 2023

walpar A valmont COMPANY

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126

SUBJECT: OVERHEAD SIGN SUPPORT
DETAIL OF UPRIGHT

FOR: Archer–United Joint Venture

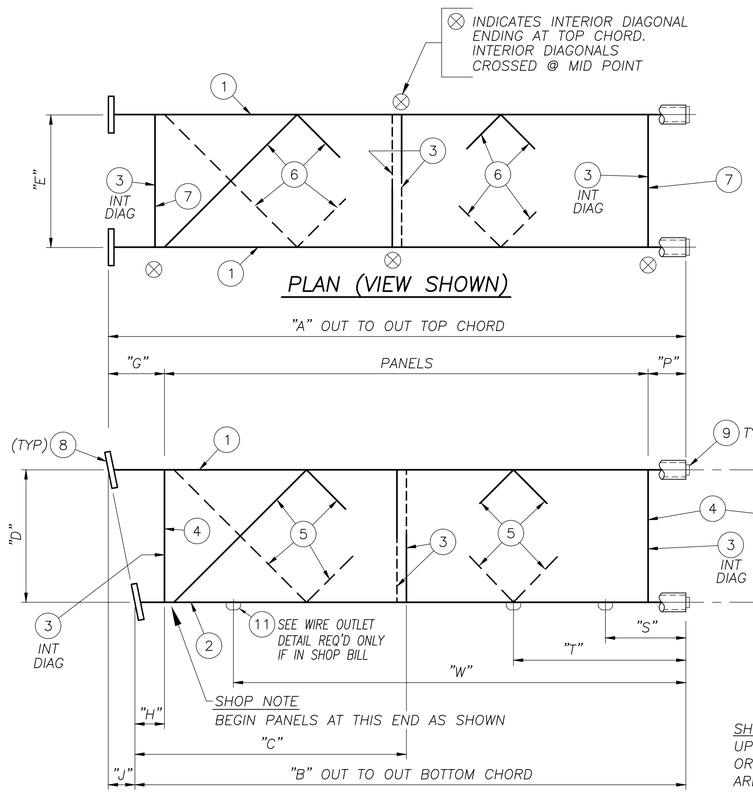
DRAWN BY: DLK DATE: 8/29/23
CHECKED BY: DLJ DATE: 9/6/23

DWG NO: C3546–41

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

BTDPUDET

NAME: E:\acad\JobsNPrg\3546\3546–41.dwg DATE: SEP 06, 2023 TIME: 2:13 PM dj706290



PLAN (VIEW SHOWN)

END SECTION

ELEVATION (VIEW SHOWN)

TRUSS

MARK	QTY	VIEW	"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
42T1	1	OPHAND	36'-0 1/8	35'-11 7/8	15'-9	9 @ 3'-9(±) = 33'-9	3'-9	3'-3		9 1/8	8 7/8
42T2	1	SHOWN	36'-0 1/8	35'-11 7/8	15'-9	9 @ 3'-9(±) = 33'-9	3'-9	3'-3		9 1/8	8 7/8

MARK	"J"	"K"	"L"	"M"	"N"	"P"	"R"	1	2	3	4	5	6	7	8	9		11	SHIM	SWEEP
42T1	1/4	7 1/2	1/4	4	1	1'-6	2 1/2	a	b	n	d	f	h	k	m	s		z1	1/16	9/16
42T2	1/4	7 1/2	1/4	4	1	1'-6	2 1/2	a	b	n	d	f	h	k	m	s		z1	1/16	9/16

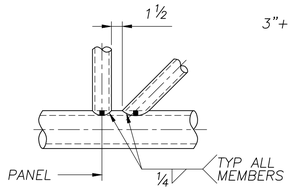
WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
42T1	27'-9	------	------
42T2	1'-6	27'-9	------

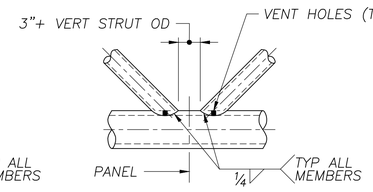
SHOP NOTE: INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

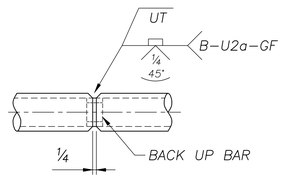
VENT HOLE SIZES	
WEB MEMBER (O.D.)	HOLE DIA. ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4



JOINT DETAIL

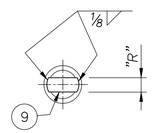


JOINT DETAIL

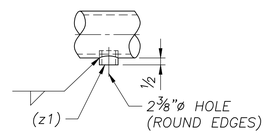


OPTIONAL CHORD SPLICE

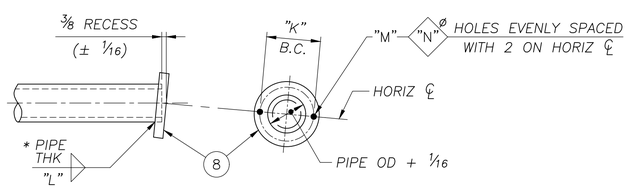
(FOR WALL THK 5/16" OR GREATER ONLY)



END CAP DETAIL



WIRE OUTLET DETAIL



* NOTE: PIPE THK -1/16" FOR PIPE WALLS > 1/4"

FLANGE DETAIL

C3546-42

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	42T1	1		BOX TRUSS				
	a	2	PIPE	4.500 x .237	35	11 3/4		
	b	2	PIPE	4.500 x .237	35	11 1/2		
	d	4	PIPE	1.315 x .133	3	4 5/8		
	k	4	PIPE	1.315 x .133	2	10 5/8		
	f	18	PIPE	1.660 x .140	4	9 7/16		
	h	18	PIPE	1.660 x .140	4	5 5/16		
	n	4	PIPE	1.315 x .133	4	7 3/16		
	m	4	PL	3/4 x 10 1/2 DIA.	–	–		
	s	4	PL	1/4 x 2 1/2	0	4 1/4		
	z1	1	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		
	42T2	1		BOX TRUSS				
	a	2	PIPE	4.500 x .237	35	11 3/4		
	b	2	PIPE	4.500 x .237	35	11 1/2		
	d	4	PIPE	1.315 x .133	3	4 5/8		
	k	4	PIPE	1.315 x .133	2	10 5/8		
	f	18	PIPE	1.660 x .140	4	9 7/16		
	h	18	PIPE	1.660 x .140	4	5 5/16		
	n	4	PIPE	1.315 x .133	4	7 3/16		
	m	4	PL	3/4 x 10 1/2 DIA.	–	–		
	s	4	PL	1/4 x 2 1/2	0	4 1/4		
	z1	2	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH-23

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

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STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD SIGN SUPPORT
	DETAIL OF TRUSS
FOR:	Archer-United Joint Venture
DRAWN BY:	DLK DATE: 8/29/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546-42

BTESDET

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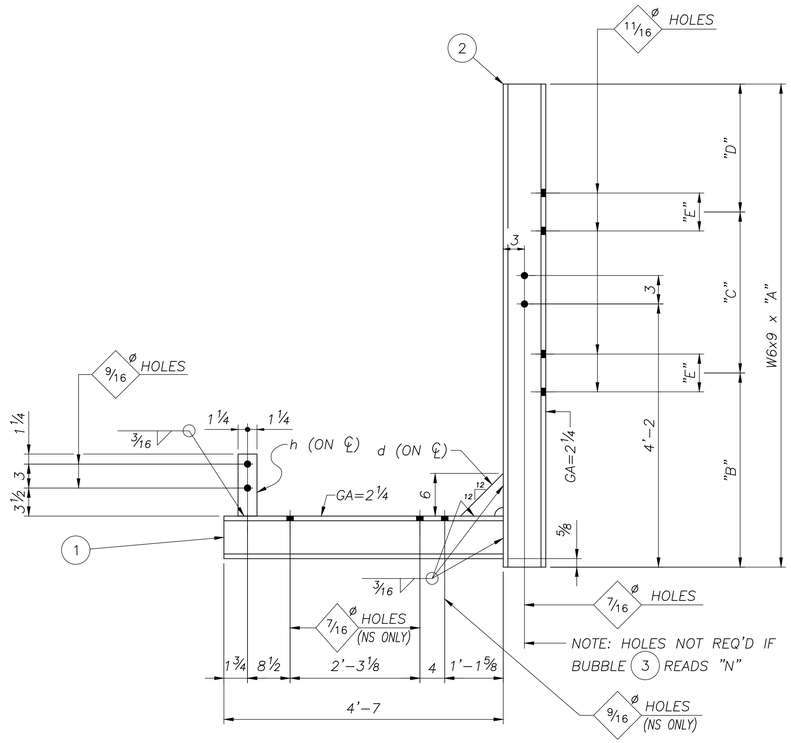
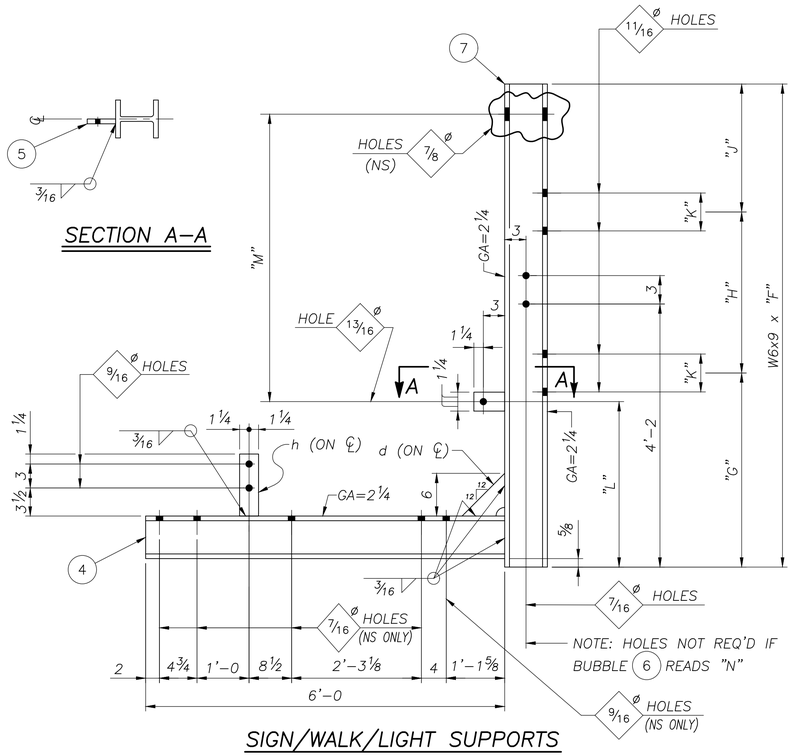


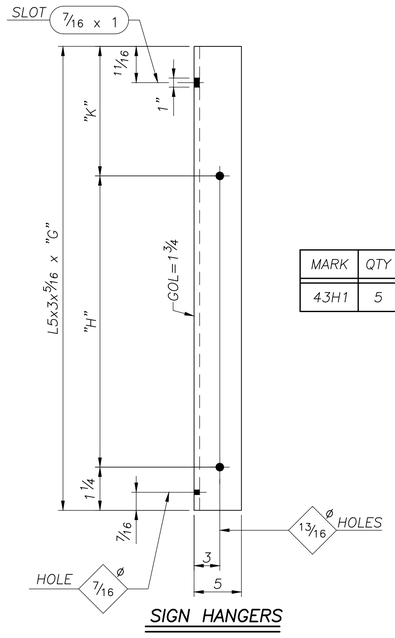
WALK SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	1	2	3
43S1	1	9'-3 1/2	5'-0 1/2	3'-9	6	5 1/8	b	a	Y
43S2	2	9'-3 1/2	5'-0 1/2	3'-9	6	5 1/8	b	aa	N



SIGN/WALK/LIGHT SUPPORTS

MARK	QTY	"F"	"G"	"H"	"J"	"K"	"L"	"M"	4	5	6	7
43S3	4	9'-3 1/2	5'-0 1/2	3'-9	6	5 1/8	2'-3 1/4	6'-0 1/2	ab	f	N	ba
43S4	1	9'-3 1/2	5'-0 1/2	3'-9	6	5 1/8	2'-3 1/4	6'-0 1/2	ab	f	Y	da



SIGN HANGERS

MARK	QTY	"G"	"H"	"K"
43H1	5	9'-6 1/4	6'-0 1/2	3'-4 1/2

					C3546-43
PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	43S1	1		WALK SUPPORT				
	a	1	W	6 x 9	9	3 1/2		
	b	1	W	6 x 9	4	7		
	d	1	PL	1/4 x 6	0	6		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	43S2	2		WALK SUPPORT				
	aa	2	W	6 x 9	9	3 1/2		
	b	2	W	6 x 9	4	7		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	43S3	4		WALK/SIGN/LIGHT SUPPORTS				
	ba	4	W	6 x 9	9	3 1/2		
	ab	4	W	6 x 9	6	0		
	d	4	PL	1/4 x 6	0	6		
	f	4	PL	3/8 x 2 1/2	0	4 1/4		
	h	4	PL	1/2 x 2 1/2	0	7 3/4		
	43S4	1		WALK/SIGN/LIGHT SUPPORT				
	da	1	W	6 x 9	9	3 1/2		
	ab	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4 1/4		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	43H1	5		SIGN HANGERS				
	k	5	L	5 x 3 x 5/16	9	6 1/4		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH-23

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	DLK	DLJ

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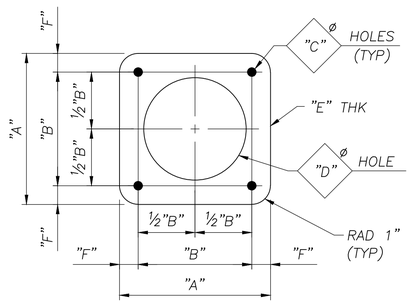
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	SIGN SUPPORT
	WALK SUPPORT & SIGN HANGER DETAILS
FOR:	Archer-United Joint Venture
DRAWN BY:	DLK DATE: 8/29/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546-43

SH-DET4

NAME: E:\acad\JobsNPrg\3546\3546-43.dwg DATE: SEP. 06, 2023 TIME: 2:09 PM dj706290



TYPE "AA"

(SEE CHART FOR INFORMATION)

ANCHOR TEMPLATE CHART

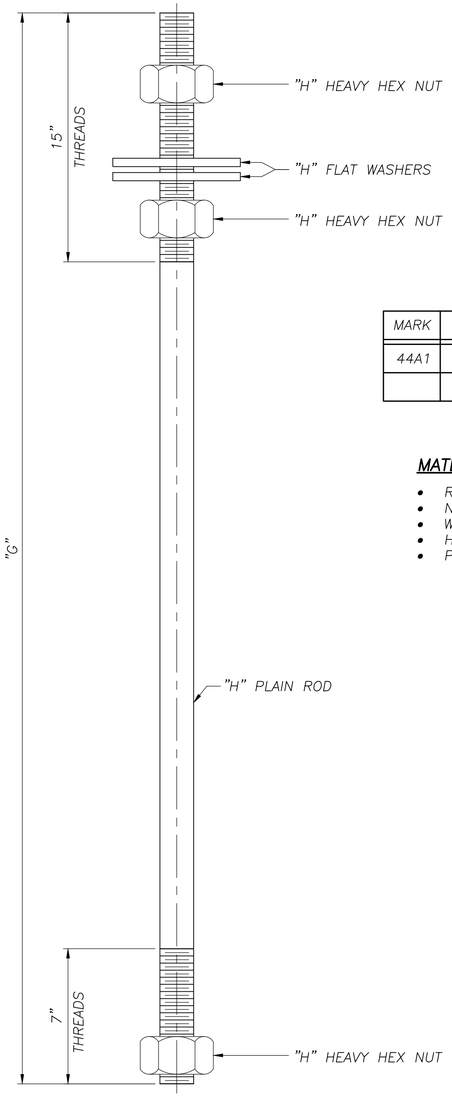
(ALL DIMENSIONS IN INCHES)

MARK	QTY	TYPE	"A"	"B"	"C"	"D"	"E"	"F"
44P1	8	AA	14½	10½	1⅜	10½	¼	2

C3546–44
SOUTH CAROLINA

NOTE:

THREADS (ROLLED OR CUT) FOR "H" NUT



~ ANCHOR BOLTS ~

MARK	"G"	"H"ø	(TPI)	ROD QTY	NUT QTY	FW QTY	
44A1	4'–6	1¼	7	16	48	32	

MATERIAL SPECS:

- RODS – ASTM F1554, GRADE 55, S1
- NUTS – ASTM A563,GR.DH OR ASTM A194,GR.2H
- WASHERS – ASTM F436
- HARDWARE – GALV PER ASTM–A153
- PLAIN ROD – GALV FULL LENGTH PER ASTM–A153

PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	44P1	8		ANCHOR TEMPLATES				
	a	8	PL	¼ x 14½	1	2½		

C3546–44

SHIPPING LIST		
QTY	MARK	DESCRIPTION
8	44P1	ANCHOR TEMPLATES
16	44A1	ANCHOR BOLTS

NOTE: SHOP SHIP FROM THIS DRAWING

NOTE:

DO NOT GALVANIZE TEMPLATES

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E7

OH–26

AASHTO 6th Edition Spec's

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DAVID A LALLONE

Sep 8 2023

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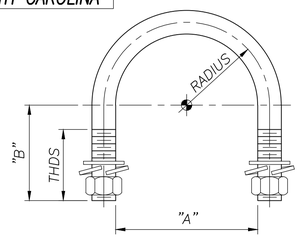
NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN STRUCTURE
ANCHOR BOLT & TEMPLATE DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: JSD DATE: 8/30/23
CHECKED BY: DLJ DATE: 9/6/23
DWG NO: C3546–44



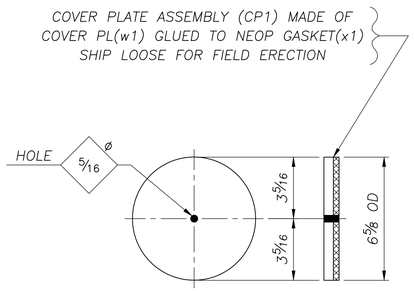
NOTE 1:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- GALV PER A153

NOTE 2:
- UBOLT MATERIAL PROPERTIES TO MEET OR EXCEED A307
- ZINC PL PER B633

~ U–BOLTS w/(2ea) HN/LW/FW ~

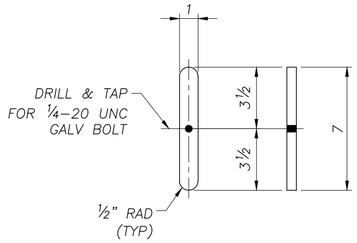
NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI–B18.21.1

MARK	QTY	DIA	"A"	"B"	RADIUS	THDS	MATERIAL
U1	20	5/16	1 11/16	1 5/8	1	1 1/4	NOTE 2
U4	48	1/2	4 5/8	4 1/4	2 9/16	2	NOTE 1



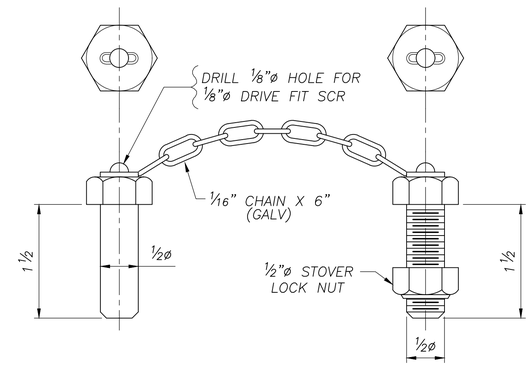
1 ~ COVER PLATE ASSEMBLY ~ CP1

PART MARK NO.	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
CP1	1		COVER PLATE ASSEMBLY			
w1	1	PL	1/4 x 6 5/8 DIA. (GALV A123)	–	–	1
x1	1	OP	1/8 x 6 5/8 DIA. (NEOP GASKET)	–	–	1



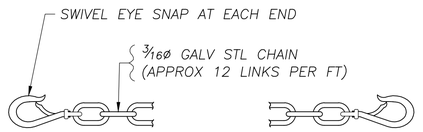
1 ~ HANDHOLE BAR ~ HB1

PART MARK NO.	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT
HB1	1		HANDHOLE BAR			
w2	1	PL	1/4 x 1 (GALV A123)	0	7	1



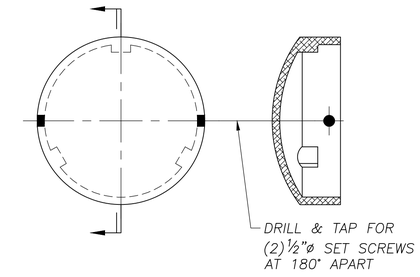
10 ~ HINGE PIN ASSEMBLY ~ 45P1

MAT'L SPECS: ASTM A307 (ZINC PL UN)



~ SAFETY CHAIN ~

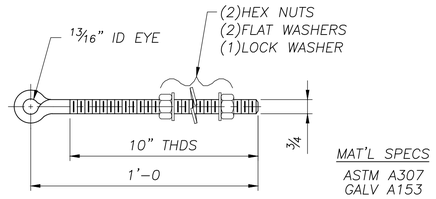
MARK	QTY	LENGTH
45S1	2	4'–6



~ POLE CAPS ~

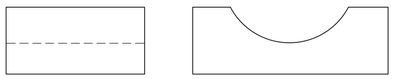
(ALUM 356–F) (ASTM B26, A356)

MARK	QTY	PART No	REMARKS
C8	4	388	8 5/8ø PIPE



6 ~ EYE BOLT ASSEMBLY ~ 45M1

NUTS: ASTM A563,GR.DH OR ASTM A194,GR.2H
WASHERS: ASTM F436 & ANSI–B18.21.1



~ SADDLE SHIM DETAIL ~

(ALUM 356–T6)

MARK	QTY	PART No	REMARKS
S4	4	350	FOR 4 1/2

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWGS: E6

OH–26

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

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FAX (205) 925–7273

0

STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

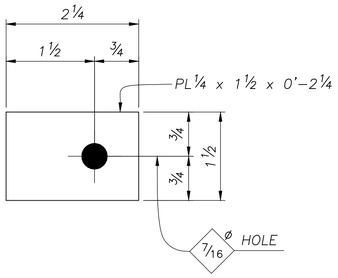
SUBJECT: SIGN STRUCTURES
MISC DETAILS
FOR: Archer–United Joint Venture

DRAWN BY: JSD DATE: 8/30/23
CHECKED BY: DLJ DATE: 9/6/23

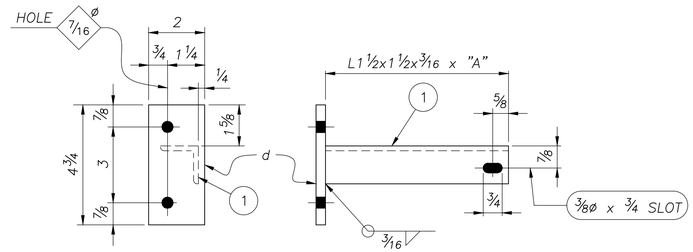
DWG NO: C3546–45

KITDWG3

C3546–45



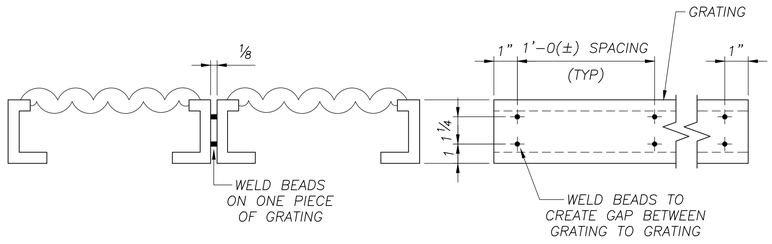
20 ~ CLAMP PLATES ~ 46M1



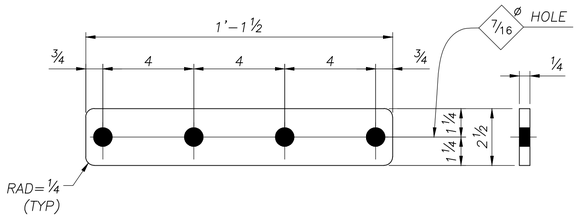
~ SAFETY CHAIN SUPPORT ~

(SEE CHART)

MARK	QTY	"A"	(1)
46M3	1	1'-3	f
46M4	1	3'-0	af

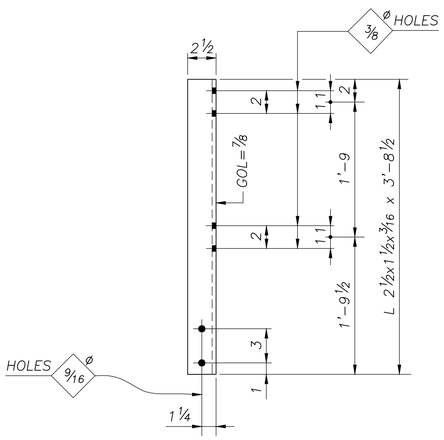


GRATING GAP DETAIL



4 ~ SPLICE PLATES ~ 46M2

(FOR GRATING)

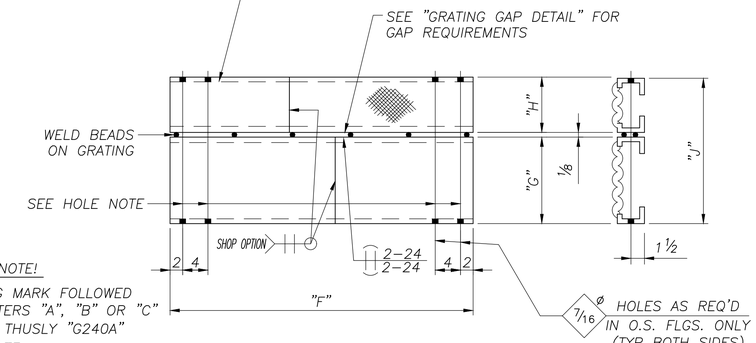


10 ~ HANDRAIL POSTS ~ 46P1

(ALUMINUM)

SHOP NOTE:

GRATING TO BE "GRIP STRUT", OR EQUAL SAFETY GRATING 3" DEEP, FORMED FROM 12 GA SHEETS GALV AFTER FAB WELDED TOGETHER IN A COMBINATION OF THESE SIZES
(1) #8 DIAMOND 18¾" WIDE – CAT# 83012 AND
(1) #5 DIAMOND 11¾" WIDE – CAT# 53012



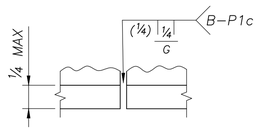
HOLE NOTE!

GRATING MARK FOLLOWED BY LETTERS "A", "B" OR "C" SHOWN THUSLY "G240A" DESIGNATE:
"A" – NO HOLES
"B" – HOLES 1–END
"C" – HOLES BOTH ENDS

~ GRATING ~

(SEE CHART)

MARK	QTY	"F"	"G"	"H"	"J"
46G1B	2	15'-3	1'-6¾	11¾	2'-6⅝
46G2C	1	15'-3	1'-6¾	11¾	2'-6⅝



TOE ANGLE SPLICE

(OPTIONAL)

C3546–46

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	46M1	20		CLAMP PLATES				
	a	20	PL	¼ x 1½	0	2¼		
	46M2	4		SPLICE PLATES				
	b	4	PL	¼ x 2½	1	1½		
	46M3	1		SAFETY CHAIN SUPPORT				
	d	1	PL	¼ x 2	0	4¾		
	f	1	L	1½ x 1½ x 3/16	1	3		
	46M4	1		SAFETY CHAIN SUPPORT				
	d	1	PL	¼ x 2	0	4¾		
	af	1	L	1½ x 1½ x 3/16	3	0		
	46G1B	2		GRATING				
	g	2	GRT	18¾ WIDE	15	3		
	n	2	GRT	11¾ WIDE	15	3		
	46G2C	1		GRATING				
	g	1	GRT	18¾ WIDE	15	3		
	n	1	GRT	11¾ WIDE	15	3		
	46P1	10		HANDRAIL POSTS				
	h	10	ALL	2½ x 1½ x 3/16 (ALUM 6061)	3	8½		
	46R1	8		HANDRAIL				
	k	8	ALPI	1.660 x .140 (ALUM 6061)	9	0		
	46R2	2		HANDRAIL				
	ak	2	ALPI	1.660 x .140 (ALUM 6061)	9	9		
	46A1	2		SAFETY ANGLE				
	m	2	L	4 x 3 x ¼	22	10½		
	46L1	4		LIGHT SUPPORTS (ALUM 6063–T6)				
	p	4	ALUN	UNISTRUT 1⅝ x 1⅝ x .105	21	6		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E6

OH–26

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38665
DAVID A LALLONE

Sep 8 2023

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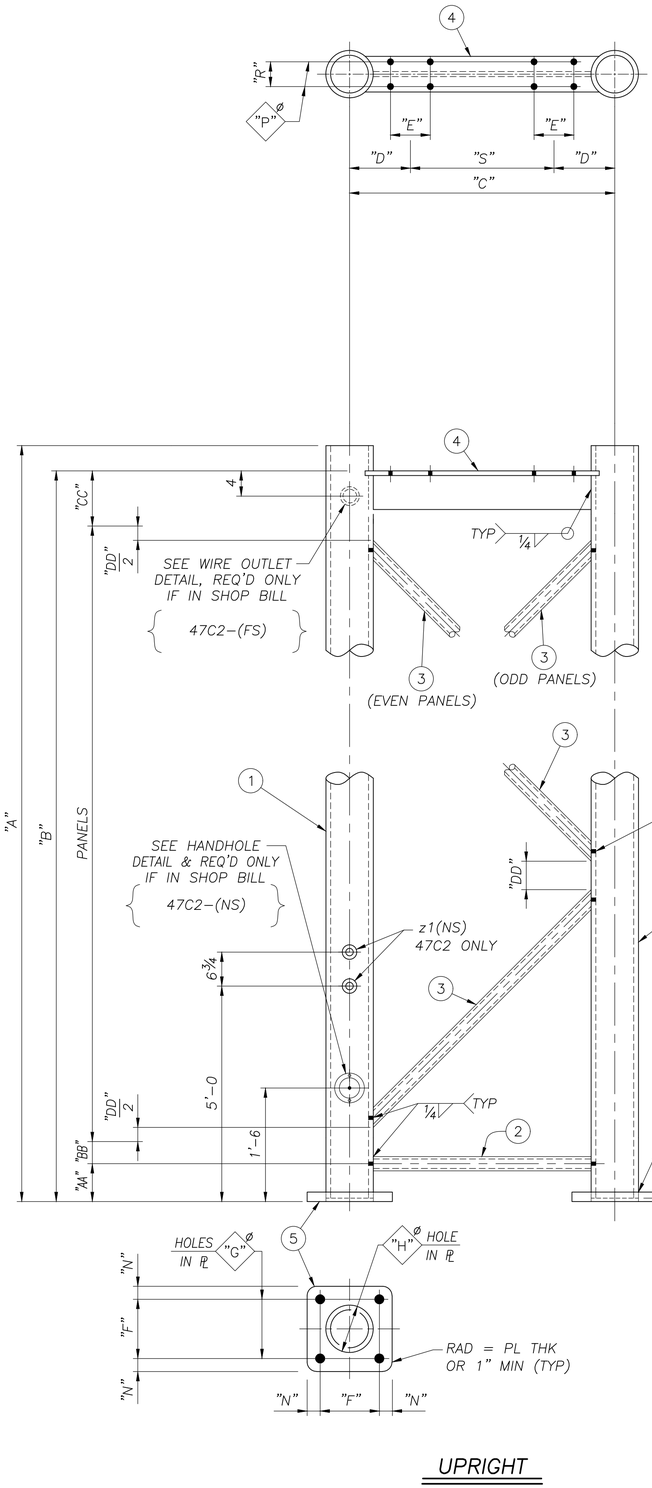
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	SIGN STRUCTURE MISC DETAILS
FOR:	Archer–United Joint Venture
DRAWN BY:	JSD DATE: 8/30/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546–46

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

WalkWayDetails

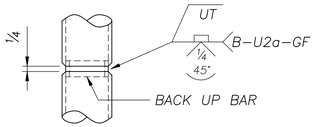


UPRIGHT

MARK	QTY	"A"	"B"	"C"	PANELS	"D"	"E"	"F"	"G"
47C1	1	18'-4 1/4	18'-0 1/4	4'-9	4 @ 4'-1 1/2(±) = 16'-6	9	5 1/8	10 1/2	1 1/2
47C2	1	15'-3	14'-11	4'-9	3 @ 4'-5 9/16(±) = 13'-4 3/4	9	5 1/8	10 1/2	1 1/2

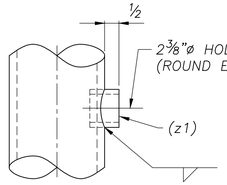
MARK	"H"	"J"				"N"	"P"	"R"	"S"		1	2	3	4	5		
47C1	8 1/16	5/16				2 1/2	1 1/16	4 1/2	3'-3		a	b	d	f	h		
47C2	8 1/16	5/16				2 1/2	1 1/16	4 1/2	3'-3		aa	b	ad	f	h		

MARK	"AA"	"BB"	"CC"	"DD"
47C1	6	3 1/2	8 3/4	5 3/8
47C2	6	3 1/2	8 3/4	5 3/8

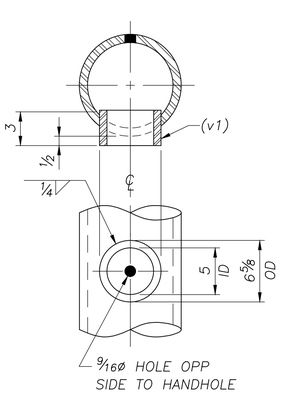


OPTIONAL SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL



HANDHOLE DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4

					C3546-47			
PARTS PER CONT	PART MARK NO	NO OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	47C1	1		UPRIGHT				
	a	2	PIPE	8.625 x .188	18	3 3/4		
	b	1	PIPE	2.375 x .154	4	0 5/8		
	d	4	PIPE	2.375 x .154	5	5 1/2		
	f	1	WT	6 x 13	4	3 5/16		
	h	2	PL	1 1/4 x 15 1/2	1	3 1/2		
	47C2	1		UPRIGHT				
	aa	2	PIPE	8.625 x .188	15	2 1/2		
	b	1	PIPE	2.375 x .154	4	0 5/8		
	ad	3	PIPE	2.375 x .154	5	8 5/16		
	f	1	WT	6 x 13	4	3 5/16		
	h	2	PL	1 1/4 x 15 1/2	1	3 1/2		
	v1	1	PIPE	6.625 x .864	0	3		
	z1	3	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E7

OH-26

AASHTO 6th Edition Spec's

SEALED BY:



Sep 8 2023

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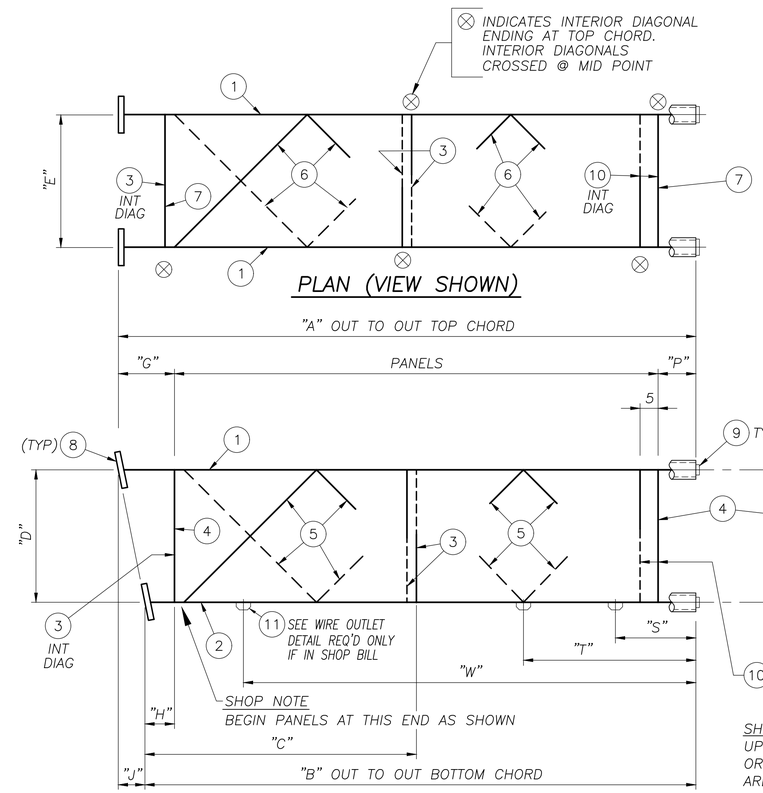
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD SIGN SUPPORT DETAIL OF UPRIGHT
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/30/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546-47

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

NAME: E:\acad\JobsNPrg\3546\3546-47.dwg DATE: SEP 06, 2023 TIME: 1:54 PM dj706290

BTDPUDET



MARK	QTY	VIEW	"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
48T1	1	OPHAND	28'–5 7/8	28'–5 11/16	12'–2 7/16	7 @ 3'–9 13/16(±) = 26'–8 3/4	3'–9	3'–3		9 1/8	8 15/16
48T2	1	SHOWN	28'–5 7/8	28'–5 11/16	12'–2 7/16	7 @ 3'–9 13/16(±) = 26'–8 3/4	3'–9	3'–3		9 1/8	8 15/16

MARK	"J"	"K"	"L"	"M"	"N"	"P"	"R"	1	2	3	4	5	6	7	8	9	10	11	SHIM	SWEEP
48T1	3/16	7 1/2	1/4	6	1	1'–0	2 1/2	a	b	n	d	f	h	k	m	s	n	––	1/16	5/16
48T2	3/16	7 1/2	1/4	6	1	1'–0	2 1/2	a	b	n	d	f	h	k	m	s	n	z1	1/16	5/16

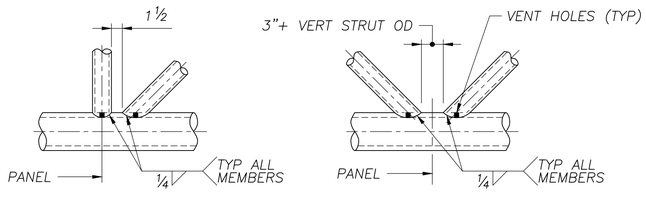
WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
48T1	------	------	------
48T2	1'–0	20'–1 1/8	------

VENT HOLE SIZES	
WEB MEMBER (O.D.)	HOLE DIA. ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4

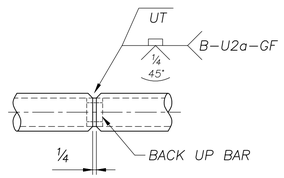
SHOP NOTE: INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.



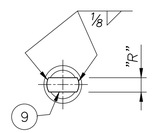
JOINT DETAIL

JOINT DETAIL

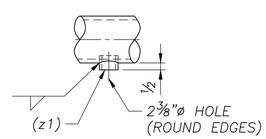


OPTIONAL CHORD SPLICE

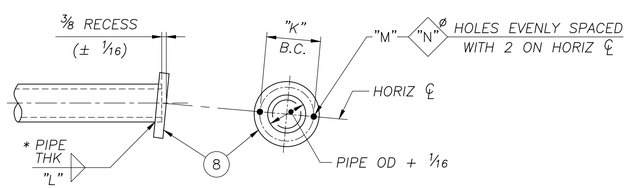
(FOR WALL THK 5/16" OR GREATER ONLY)



END CAP DETAIL



WIRE OUTLET DETAIL



FLANGE DETAIL

* NOTE: PIPE THK –1/16" FOR PIPE WALLS > 1/4"

C3546–48

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	48T1	1		BOX TRUSS				
	a	2	PIPE	4.500 x .337	28	5 1/2		
	b	2	PIPE	4.500 x .337	28	5 5/16		
	d	4	PIPE	1.315 x .133	3	4 5/8		
	k	4	PIPE	1.315 x .133	2	10 5/8		
	f	14	PIPE	1.900 x .145	4	10		
	h	14	PIPE	1.900 x .145	4	6		
	n	5	PIPE	1.315 x .133	4	7 3/16		
	m	4	PL	1 x 10 1/2 DIA.	–	–		
	s	4	PL	1/4 x 2 1/2	0	4 1/4		
	48T2	1		BOX TRUSS				
	a	2	PIPE	4.500 x .337	28	5 1/2		
	b	2	PIPE	4.500 x .337	28	5 5/16		
	d	4	PIPE	1.315 x .133	3	4 5/8		
	k	4	PIPE	1.315 x .133	2	10 5/8		
	f	14	PIPE	1.900 x .145	4	10		
	h	14	PIPE	1.900 x .145	4	6		
	n	5	PIPE	1.315 x .133	4	7 3/16		
	m	4	PL	1 x 10 1/2 DIA.	–	–		
	s	4	PL	1/4 x 2 1/2	0	4 1/4		
	z1	2	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E7

OH–26

AASHTO 6th Edition Spec's

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ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I–26 & I–126
SUBJECT:	OVERHEAD SIGN SUPPORT DETAIL OF TRUSS
FOR:	Archer–United Joint Venture
DRAWN BY:	JSD DATE: 8/30/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546–48

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

BTESDET

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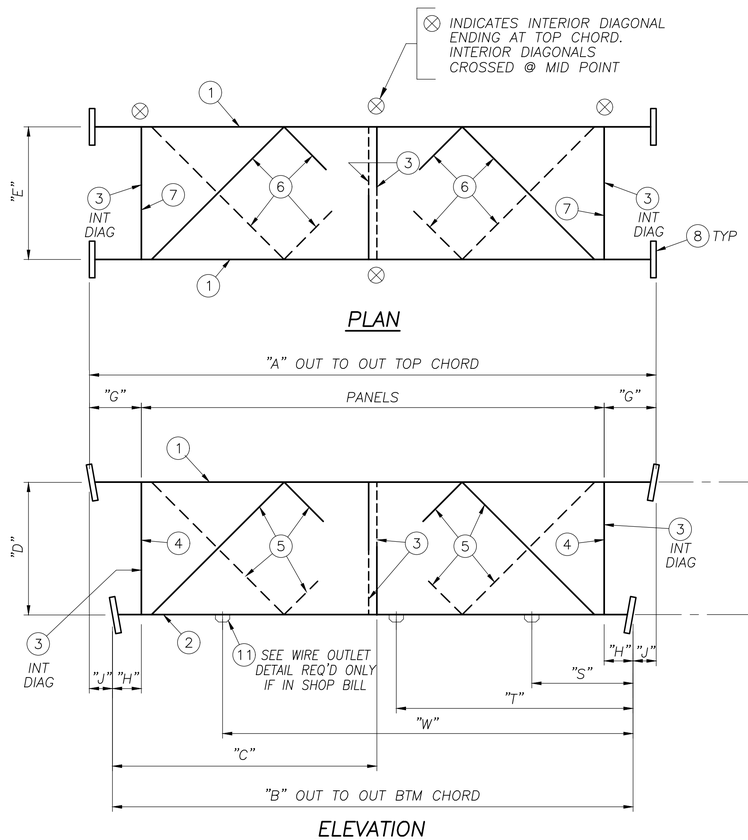
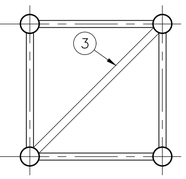




TRUSS

MARK	QTY		"A"	"B"	"C"	PANELS	"D"	"E"		"G"	"H"
49T1	1		32'-0 11/16	32'-0 5/16	16'-0 1/4	8 @ 3'-9 13/16(±) = 30'-6 1/2	3'-9	3'-3		9 1/8	8 15/16

MARK	"J"	"K"	"L"	"M"	"N"			1	2	3	4	5	6	7	8			11	SHIM	SWEEP
								a	b	n	d	f	h	k	m					
49T1	3/16	7 1/2	1/4	6	1													z1	1/16	3/8

WIRE OUTLET LOCATION CHART

MARK	"S"	"T"	"W"
49T1	12'-2 7/16	------	------

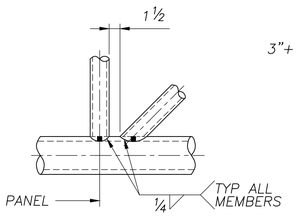
SHOP NOTE:

INTERIOR DIAGONALS MAY BE OFFSET UP TO 6" FROM PANEL POINTS ON TRUSS IN ORDER TO AVOID INTERSECTING WELDS IN THE AREA OF OTHER WEB MEMBERS.

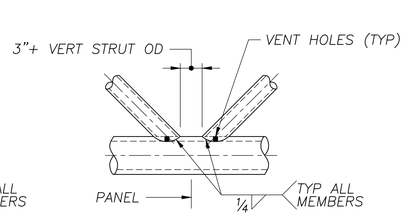
DO NOT OFFSET MEMBERS SO AS TO INTERFERE WITH BOLTED CONNECTIONS AT FIELD SPLICES.

C3546-49

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
	49T1	1		BOX TRUSS				
	a	2	PIPE	4.500 x .337	31	11 15/16		
	b	2	PIPE	4.500 x .337	31	11 9/16		
	d	4	PIPE	1.315 x .133	3	4 5/8		
	k	4	PIPE	1.315 x .133	2	10 5/8		
	f	16	PIPE	1.900 x .145	4	10		
	h	16	PIPE	1.900 x .145	4	5 15/16		
	n	4	PIPE	1.315 x .133	4	7 3/16		
	m	8	PL	1 x 10 1/2 DIA.	–	–		
	z1	1	OP	1 1/4" FORGED HALF CPLG (3000#)	–	–		



JOINT DETAIL



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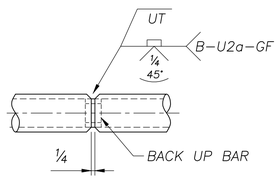
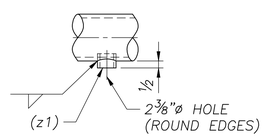


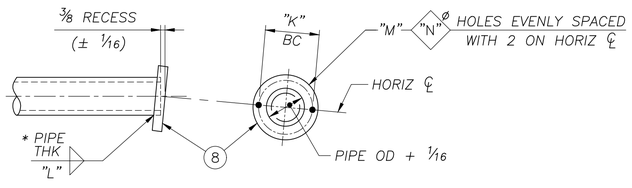
OPTIONAL CHORD SPLICE

(FOR WALL THK 5/16" OR GREATER ONLY)



WIRE OUTLET DETAIL

VENT HOLE SIZES	
WEB MEMBER OD	HOLE DIA. ± 1/4"
< 3.500	3/4
3.500	1 3/4
4.000	2
4.500	2 1/4
5.563	2 3/4
6.625	3 1/4



FLANGE DETAIL

*NOTE: PIPE THK -1/16" FOR PIPE WALLS > 1/4"

NOTE:

SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E7

OH-26

AASHTO 6th Edition Spec's

SEALED BY:

SOUTH CAROLINA PROFESSIONAL ENGINEER DAVID A LALLONE No. 38665

Sep 8 2023

NO:	REVISIONS	DATE	MADE	CHECKED
0	CHECK COMPLETE	9/6/23	JSD	DLJ

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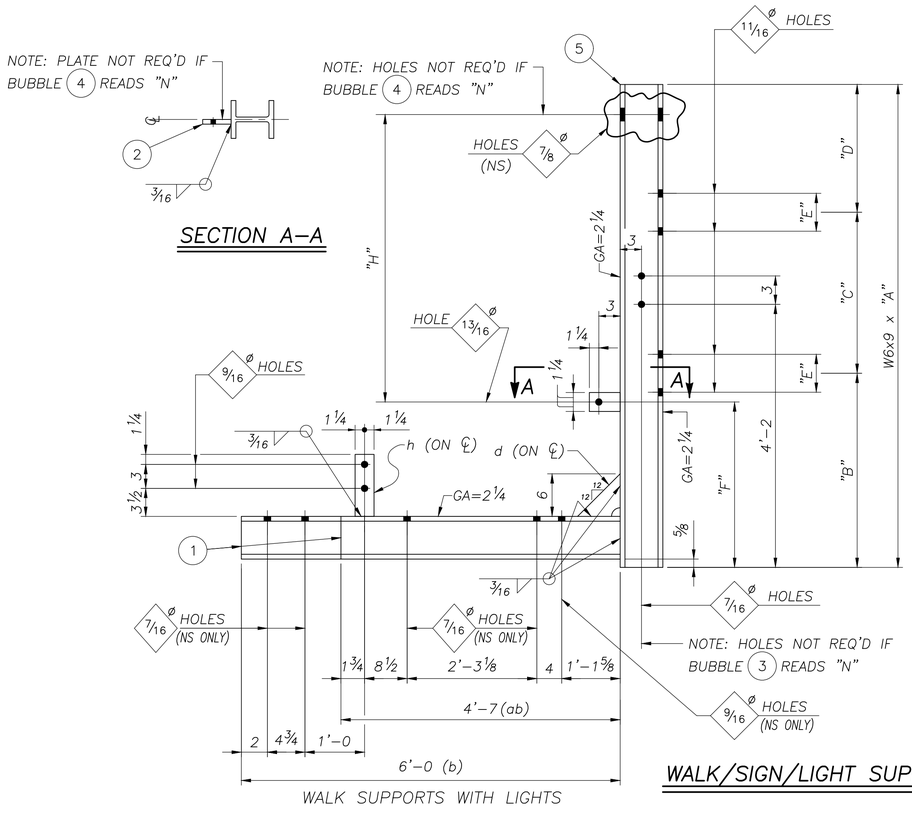
0

BTCSDET

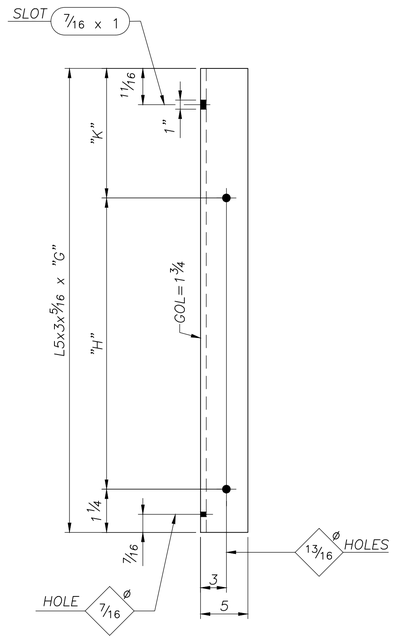
STATE:	South Carolina
FED PROJ:	Carolina Crossroads Phase 1 & 2
ST PROJ:	P039718
COUNTY:	Lexington & Richland
ROUTE:	I-26 & I-126
SUBJECT:	OVERHEAD SIGN SUPPORT
	DETAIL OF TRUSS
FOR:	Archer-United Joint Venture
DRAWN BY:	JSD DATE: 8/30/23
CHECKED BY:	DLJ DATE: 9/6/23
DWG NO:	C3546-49

NAME: E:\acad\JobsNPrg\3546\3546-49.dwg DATE: SEP 06, 2023 TIME: 1:44 PM dj706290



WALK/SIGN/LIGHT SUPPORTS

MARK	QTY	"A"	"B"	"C"	"D"	"E"	"F"	"H"	1	2	3	4	5
50S1	1	14'–2 1/4	5'–3 1/2	3'–9	5'–1 3/4	5 1/8	2'–3 1/4	11'–8	b	f	Y	Y	a
50S2	2	14'–2 1/4	5'–3 1/2	3'–9	5'–1 3/4	5 1/8	2'–3 1/4	11'–8	b	f	N	Y	aa
50S3	2	9'–6 1/2	5'–3 1/2	3'–9	6"	5 1/8	2'–3 1/4	6'–3 1/2	b	f	N	Y	ba
50S4	1	9'–6 1/2	5'–3 1/2	3'–9	6"	5 1/8	2'–3 1/4	6'–3 1/2	b	f	Y	Y	da
50S5	2	9'–6 1/2	5'–3 1/2	3'–9	6"	5 1/8	----	----	ab	–	N	N	fa
50S6	2	9'–6 1/2	5'–3 1/2	3'–9	6"	5 1/8	----	----	b	–	N	N	ga



SIGN HANGERS

MARK	QTY	"G"	"H"	"K"
50H1	3	17'–6 1/4	11'–8	5'–9
50H2	3	10'–0 1/4	6'–3 1/2	3'–7 1/2

PARTS PER CONT	PART MARK NO	NO. OF PIECES REQ'D	SECTION SYM	DESCRIPTION OF MATERIAL	LENGTH FEET	LENGTH INCHES	PARTS FOR ONE UNIT	
				C3546–50				
	50S1	1		SIGN/WALK/LIGHT SUPPORTS				
	a	1	W	6 x 9	14	2 1/4		
	b	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4 1/4		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	50S2	2		SIGN/WALK/LIGHT SUPPORTS				
	aa	2	W	6 x 9	14	2 1/4		
	b	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	f	2	PL	3/8 x 2 1/2	0	4 1/4		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	50S3	2		SIGN/WALK/LIGHT SUPPORTS				
	ba	2	W	6 x 9	9	6 1/2		
	b	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	f	2	PL	3/8 x 2 1/2	0	4 1/4		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	50S4	1		SIGN/WALK/LIGHT SUPPORTS				
	da	1	W	6 x 9	9	6 1/2		
	b	1	W	6 x 9	6	0		
	d	1	PL	1/4 x 6	0	6		
	f	1	PL	3/8 x 2 1/2	0	4 1/4		
	h	1	PL	1/2 x 2 1/2	0	7 3/4		
	50S5	2		WALK SUPPORTS				
	fa	2	W	6 x 9	9	6 1/2		
	ab	2	W	6 x 9	4	7		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	50S6	2		WALK/LIGHT SUPPORTS				
	ga	2	W	6 x 9	9	6 1/2		
	b	2	W	6 x 9	6	0		
	d	2	PL	1/4 x 6	0	6		
	h	2	PL	1/2 x 2 1/2	0	7 3/4		
	50H1	3		SIGN HANGERS				
	k	3	L	5 x 3 x 5/16	17	6 1/4		
	50H2	3		SIGN HANGERS				
	ak	3	L	5 x 3 x 5/16	10	0 1/4		

NOTE:
SEE GENERAL NOTES DRAWING FOR MATERIAL SPECIFICATIONS, FOUNDATION AND STANDARD NOTES

REF DWG: E7

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STATE: South Carolina
FED PROJ: Carolina Crossroads Phase 1 & 2
ST PROJ: P039718
COUNTY: Lexington & Richland
ROUTE: I–26 & I–126

SUBJECT: SIGN SUPPORT
WALK SUPPORT & SIGN HANGER DETAILS

FOR: Archer–United Joint Venture

DRAWN BY: JSD DATE: 8/30/23
CHECKED BY: DLJ DATE: 9/6/23

DWG NO: C3546–50

SH–DET4

NAME: E:\acad\JobsNPrg\3546\3546–50.dwg DATE: SEP 06, 2023 TIME: 1:40 PM dj706290