

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OVD SIN STR REP 17-09	ILLINOIS		20	1
CONTRACT NO. 46416				

- INDEX OF SHEETS**
- 1 COVER SHEET
  - 2 SUMMARY OF QUANTITIES
  - 3 QUANTITY SCHEDULES
  - 4-13 SIGN TRUSS DETAILS
  - 14-16 SIGN DETAILS
  - 17-20 SOIL BORING LOGS

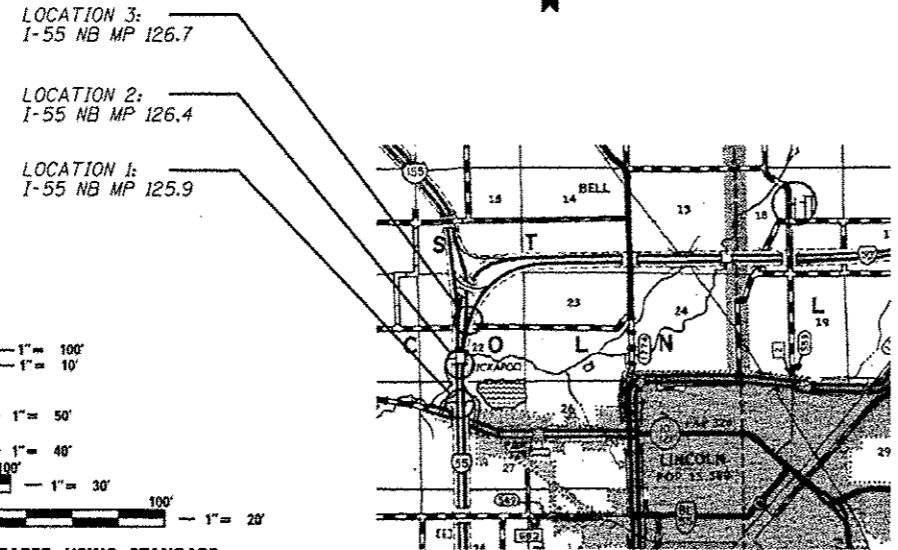
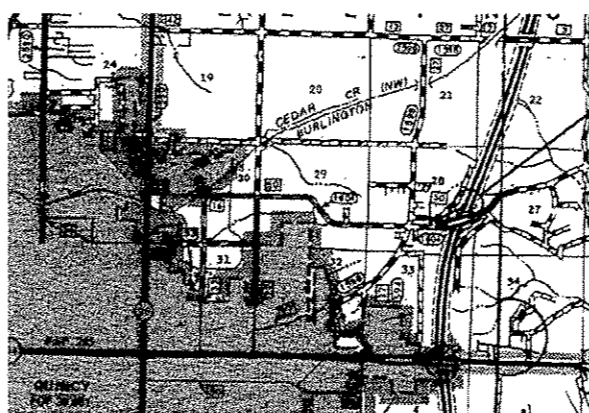
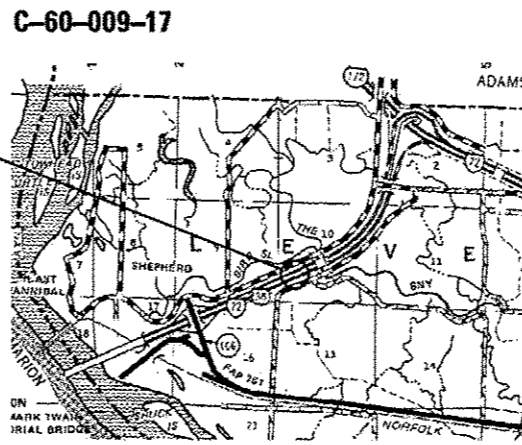
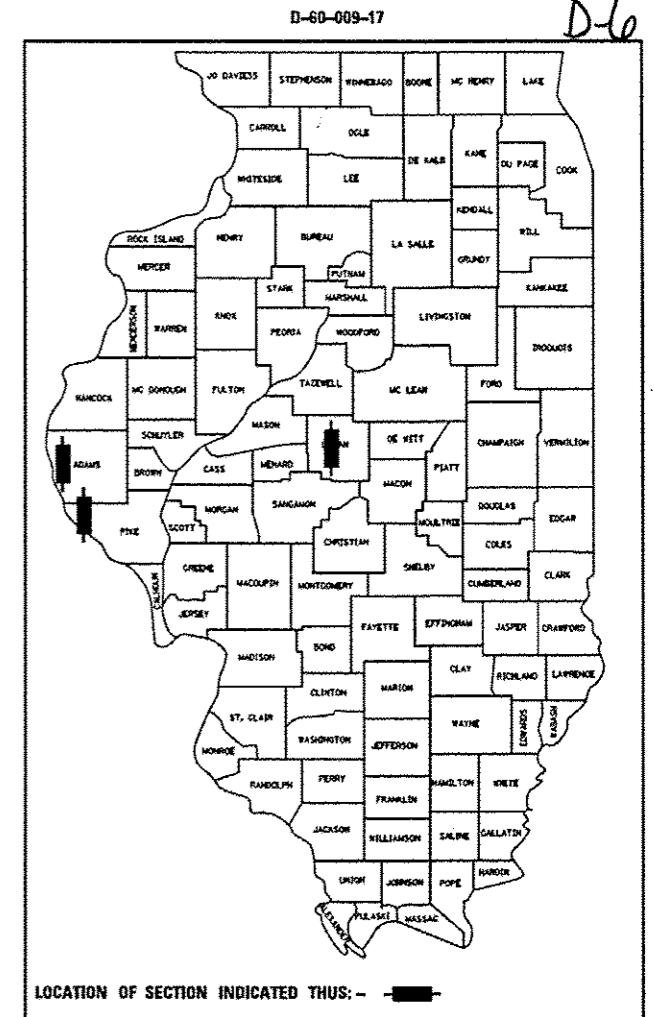
# PROPOSED SIGN TRUSS REPLACEMENT

VARIOUS ROUTES  
SECTION D-6 OVD SIN STR REPL 17-09

OVERHEAD SIGN TRUSS REPLACEMENT  
VARIOUS COUNTIES

**HIGHWAY STANDARDS**

- 630001-11
- 631011-10
- 701101-05
- 701106-02
- 701400-09
- 701406-11
- 701411-09
- 701446-08
- 701901-06
- 720021-02
- 782006



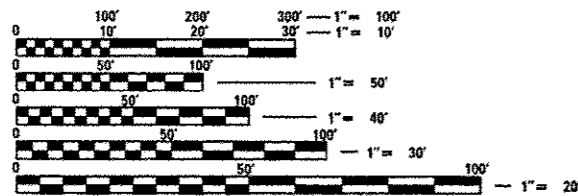
LOCATION 5:  
I-72 EB MP 3.1

LOCATION 3:  
I-55 NB MP 126.7

LOCATION 2:  
I-55 NB MP 126.4

LOCATION 1:  
I-55 NB MP 125.9

LOCATION 4:  
I-172 SB MP 15.6



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-392-0123  
OR 811

BRIDGE MAINTENANCE ENGINEER - BRANDON DUDLEY (217) 785-9290  
BRIDGE INSPECTION ENGINEER - DAVE COPENBARGER (217) 785-5306

GROSS LENGTH = NA  
NET LENGTH = NA

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED Feb. 27 20 17  
Ag. Elle KNA  
ACTING ENG. OF OPERATIONS  
May 12 20 17  
Matthew M. Addis, PE  
ENGINEER OF DESIGN AND ENVIRONMENT  
May 12 2017  
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	
				CONST. CODE	MINOR STR. 0004
				100% STATE	
X0324181	DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	5		5
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1		1
X7200075	REMOVE AND REINSTALL SIGN PANEL	SO FT	367		367
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	100		100
* 63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	4		4
67100100	MOBILIZATION	L SUM	1		1
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1		1
72000300	SIGN PANEL - TYPE 3	SO FT	1293		1293
72400330	REMOVE SIGN PANEL - TYPE 3	SO FT	1526		1526
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	79		79
73300300	OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	341		341
* 73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	96.4		96.4
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	5		5

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	
				CONST. CODE	MINOR STR. 0004
				100% STATE	
73700300	REMOVE CONCRETE FOUNDATIONS - OVERHEAD	EACH	10		10
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4		4

\* SPECIALTY ITEM

16

LOCATION #1: SN 6S0541055R125.9			
COUNTY: LOGAN	ROUTE: I-55	MP: 125.9	DIRECTION: NB
LOCATION DESCRIPTION: AT IL 10 OFF RAMP NEAR LINCOLN			
BM 054-013A: CHISELED "X" ON NW BOLT OF W LEG OF EXISTING SIGN TRUSS AT THIS LOCATION			
ELEV: 580.28			
DESCRIPTION OF WORK	UNIT	QUANTITY	
REMOVE SIGN PANEL - TYPE 3	SQ FT	434.5	
OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	125	
DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	22.5	
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1	
REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	2	
DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	1	
SIGN PANEL - TYPE 3	SQ FT	492	
MOBILIZATION	L SUM	0.2	
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.2	
NIGHTTIME WORK ZONE LIGHTING	L SUM	0.2	
CONSTRUCTION LAYOUT	L SUM	0.25	

LOCATION #2: SN 6S0541055R126.4			
COUNTY: LOGAN	ROUTE: I-55	MP: 126.4	DIRECTION: NB
LOCATION DESCRIPTION: 0.5 MILES N OF IL 10 NEAR LINCOLN			
BM CB-0111: CHISELED SQUARE ON SW PARAPET APPROACH WALL OF SN 054-0049			
JUST N OF TRUSS LOCATION			
ELEV: 566.31			
DESCRIPTION OF WORK	UNIT	QUANTITY	
REMOVE SIGN PANEL - TYPE 3	SQ FT	330.75	
OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	103	
DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	24.6	
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1	
REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	2	
DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	1	
SIGN PANEL - TYPE 3	SQ FT	355	
MOBILIZATION	L SUM	0.2	
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.2	
NIGHTTIME WORK ZONE LIGHTING	L SUM	0.2	
CONSTRUCTION LAYOUT	L SUM	0.25	

LOCATION #3: SN 6S0541055R126.7			
COUNTY: LOGAN	ROUTE: I-55	MP: 126.7	DIRECTION: NB
LOCATION DESCRIPTION: 0.8 MILES N OF IL 10 NEAR LINCOLN			
BM TEA-41A: CHISELED SQUARE AT CENTER OF 5' PIPE CULVERT HEADWALL ON E SIDE OF SB I-55 @ APPROX. STA 391+32 (+/- 200' FROM TRUSS)			
ELEV: 559.05			
DESCRIPTION OF WORK	UNIT	QUANTITY	
REMOVE SIGN PANEL - TYPE 3	SQ FT	428.75	
OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	113	
DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	27.8	
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1	
REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	2	
DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	1	
SIGN PANEL - TYPE 3	SQ FT	446	
MOBILIZATION	L SUM	0.2	
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.2	
NIGHTTIME WORK ZONE LIGHTING	L SUM	0.2	
CONSTRUCTION LAYOUT	L SUM	0.25	

LOCATION #4: SN 6S0011172L015.6			
COUNTY: ADAMS	ROUTE: I-172	MP: 15.6	DIRECTION: SB
LOCATION DESCRIPTION: AT BEGINNING OF COLUMBUS RD OFF RAMP NEAR QUINCY			
BM BA-31: CHISELED SQUARE ON E CONCRETE FOOTING OF EXISTING TRUSS AT THIS LOCATION			
ELEV: 722.67			
DESCRIPTION OF WORK	UNIT	QUANTITY	
REMOVE SIGN PANEL - TYPE 3	SQ FT	331.5	
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1	
REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	2	
DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	1	
MOBILIZATION	L SUM	0.2	
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.2	
NIGHTTIME WORK ZONE LIGHTING	L SUM	0.2	

NOTE: TRUSS 6S0011172L015.6 TO BE REPLACED WITH POST MOUNTED SIGNS BY OTHERS. TRUSS SHALL NOT BE REMOVED UNTIL NEW SIGNS ARE INSTALLED.

LOCATION #5: SN 6S0751072R003.1			
COUNTY: PIKE	ROUTE: I-72	MP: 3.1	DIRECTION: EB
LOCATION DESCRIPTION: 1.7 MI EAST OF IL 106 OVERHEAD NEAR HANNIBAL			
BM WS-78: CHISELED SQUARE ON N CONCRETE FOOTING OF EXISTING TRUSS AT THIS LOCATION			
ELEV: 465.53			
DESCRIPTION OF WORK	UNIT	QUANTITY	
REMOVE AND REINSTALL SIGN PANEL	SQ FT	367	
OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	79	
DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	21.5	
REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1	
REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	2	
DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	1	
MOBILIZATION	L SUM	0.2	
TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	0.2	
NIGHTTIME WORK ZONE LIGHTING	L SUM	0.2	
CONSTRUCTION LAYOUT	L SUM	0.25	

GUARDRAIL SCHEDULE						
TRUSS	DIRECTION	SIDE	LOCATION	SPBGR. TY A 6' POSTS (FOOT)	R&R TRAF. BAR. TERM. TY 2 (EACH)	GUARDRAIL REF. TY A (EACH)
6S0541055R125.9	NBL	OUTSIDE	N END OF EXISTING	25	1	1
6S0541055R126.7	NBL	OUTSIDE	N END OF EXISTING	25	1	1
	NBL	MEDIAN	N END OF EXISTING	25	1	1
6S0751072R003.1	EBL	MEDIAN	E END OF EXISTING	25	1	1
TOTALS:				100	4	4

NOTE: NO GUARDRAIL WORK REQUIRED AT TRUSS 6S0541055R126.4

**GENERAL NOTES**

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:  
Field Units  
F<sub>c</sub> = 3,500 p.s.i.  
f<sub>y</sub> = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W\*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.

The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

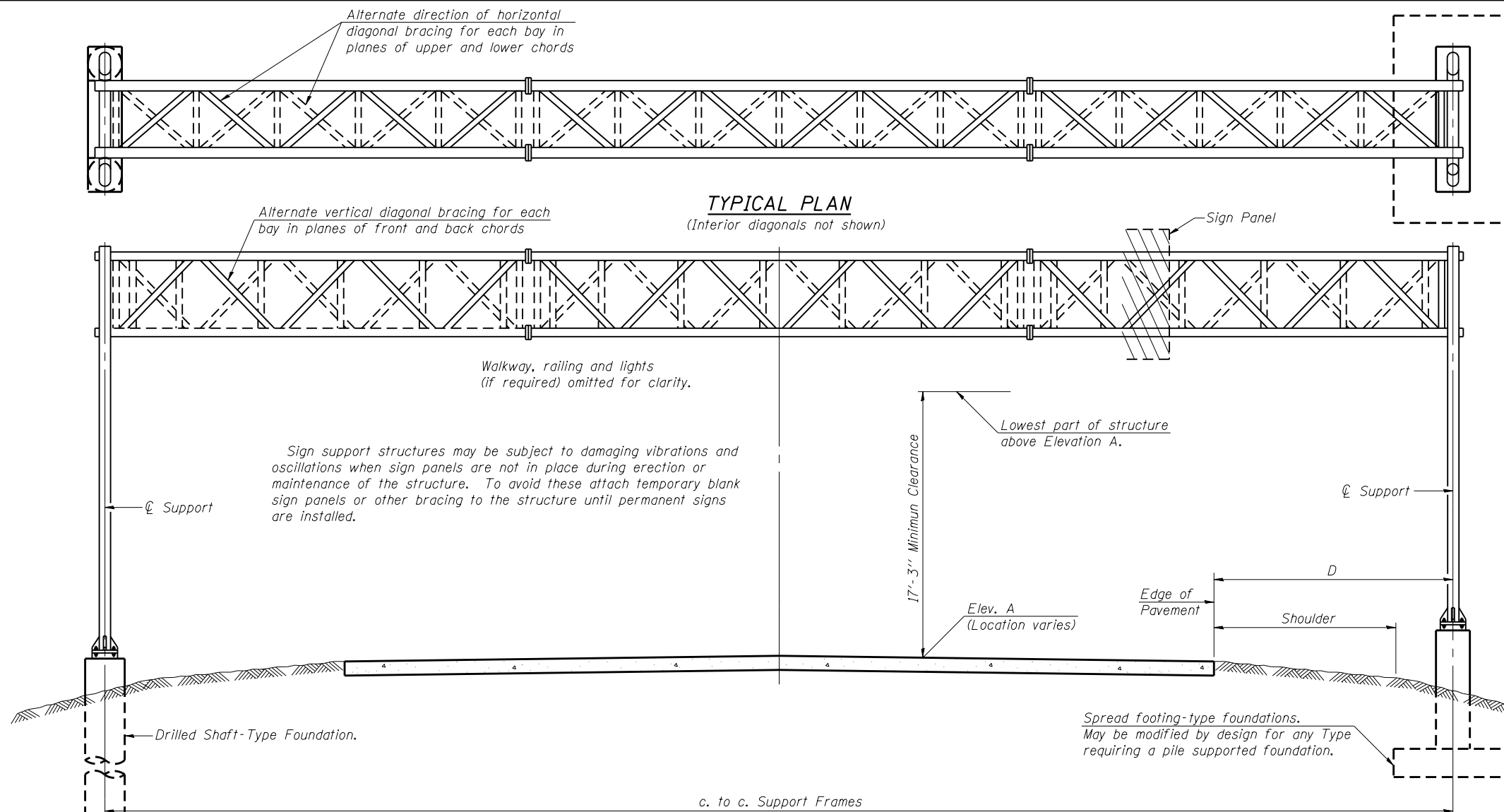
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	79
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	-
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	341
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	-
CONCRETE FOUNDATIONS	Cu. Yds.	-
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	96.4



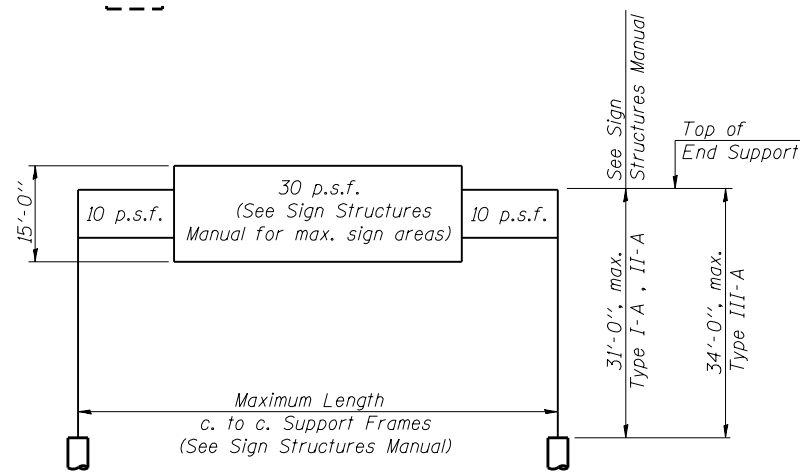
**TYPICAL ELEVATION**  
(Looking at Face of Signs)\*\*

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
6S054I055R125.9	350+20	III-A	125'	582.36	32'	16.5'	492 SF
6S054I055R126.4	373+30	III-A	103'	563.98	32'	14.5'	355 SF
6S054I055R126.7	392+20	III-A	113'	566.11	32'	17'	446 SF
6S075I072R003.1	100+20	I-A	79'	466.22	41.5'	15'	367 SF

\*\*Looking upstation for structures with signs both sides.

\* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.



**DESIGN WIND LOADING DIAGRAM**

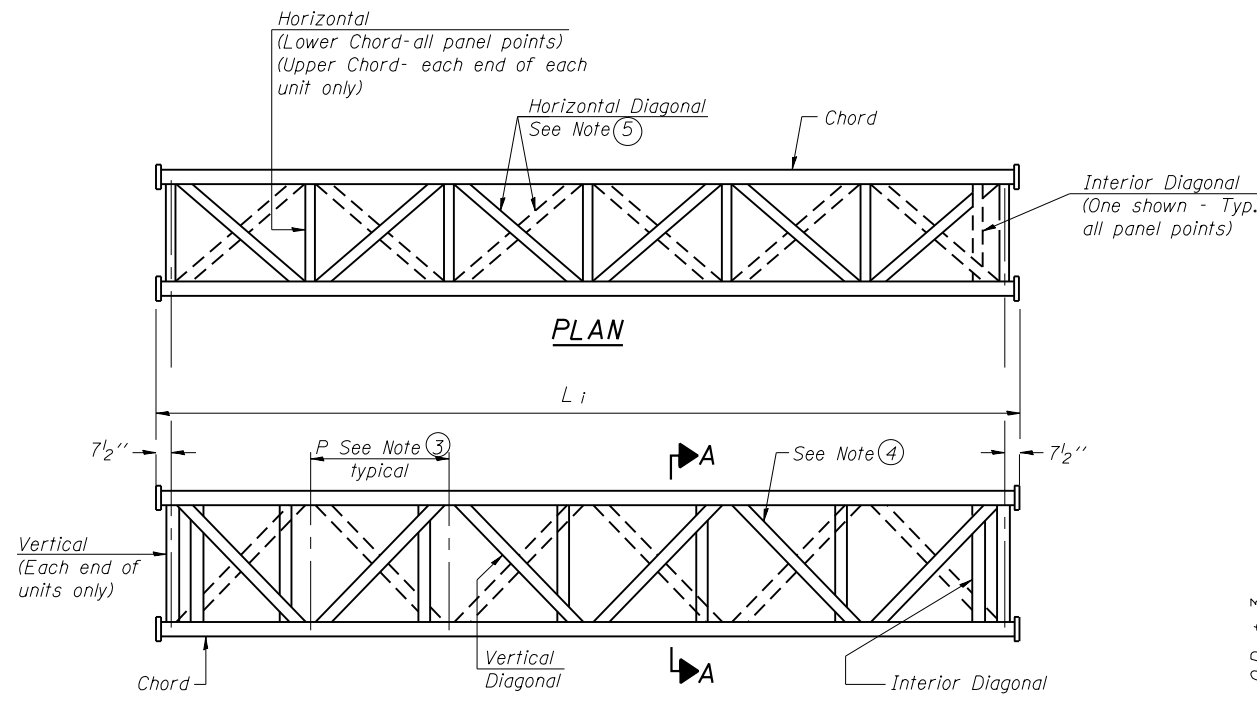
Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

OS-A-1

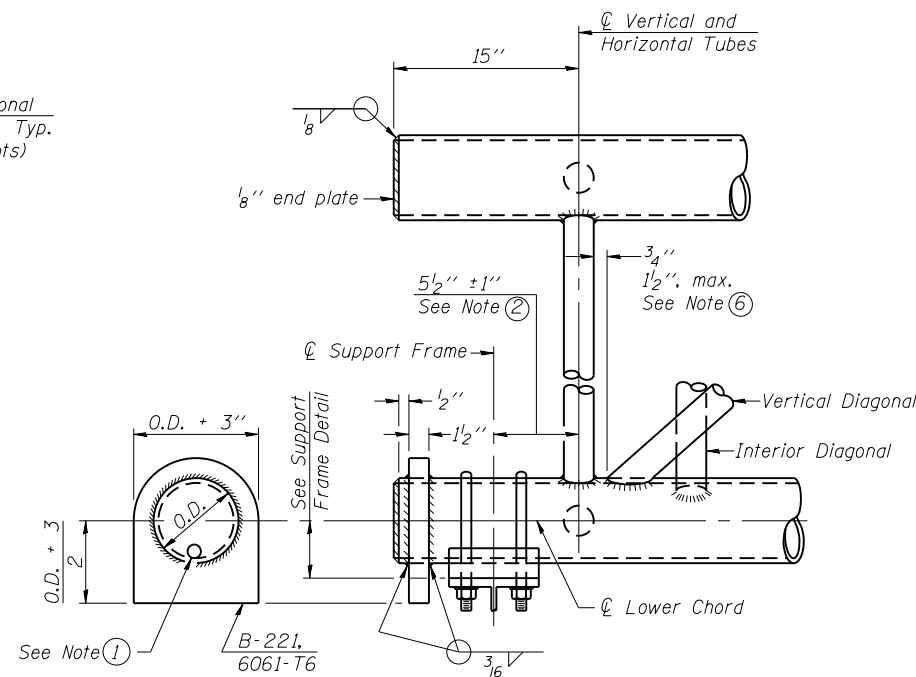
8-21-13

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>OVERHEAD SIGN STRUCTURES - GENERAL PLAN &amp; ELEVATION - ALUMINUM TRUSS &amp; STEEL SUPPORTS</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	0:\OPERATIONS\Bridges\Bridgplans.CAD\416 - sign trusses 2017\revised plansheet.dgn	DRAWN -	REVISED -			VAR.	D6 OV SIN STR REP 17-09	VAR.	20	4	
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -			CONTRACT NO. 46416					
	PLOT DATE = 2/16/2017	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

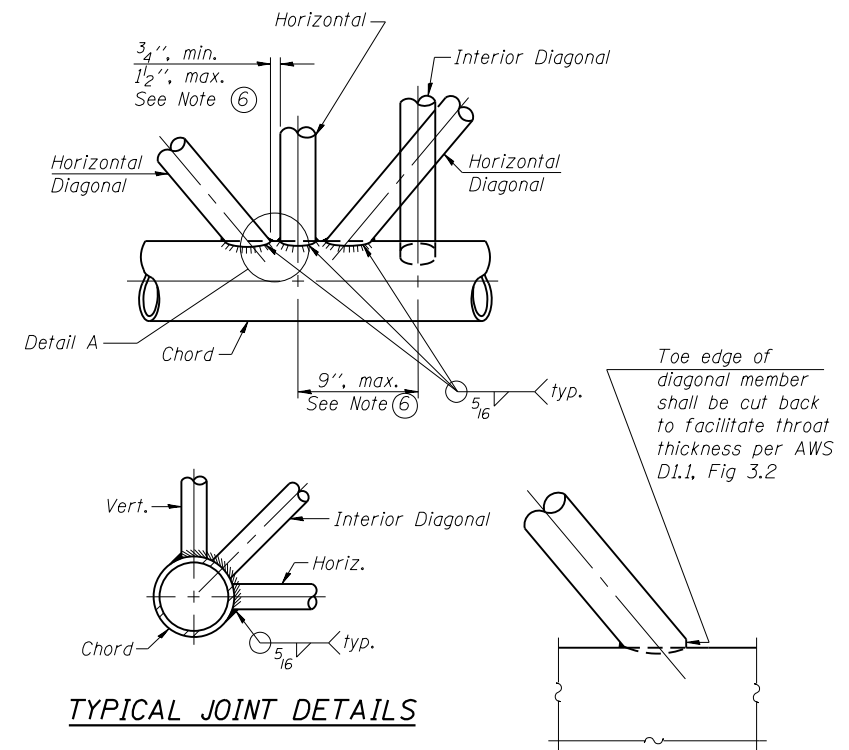




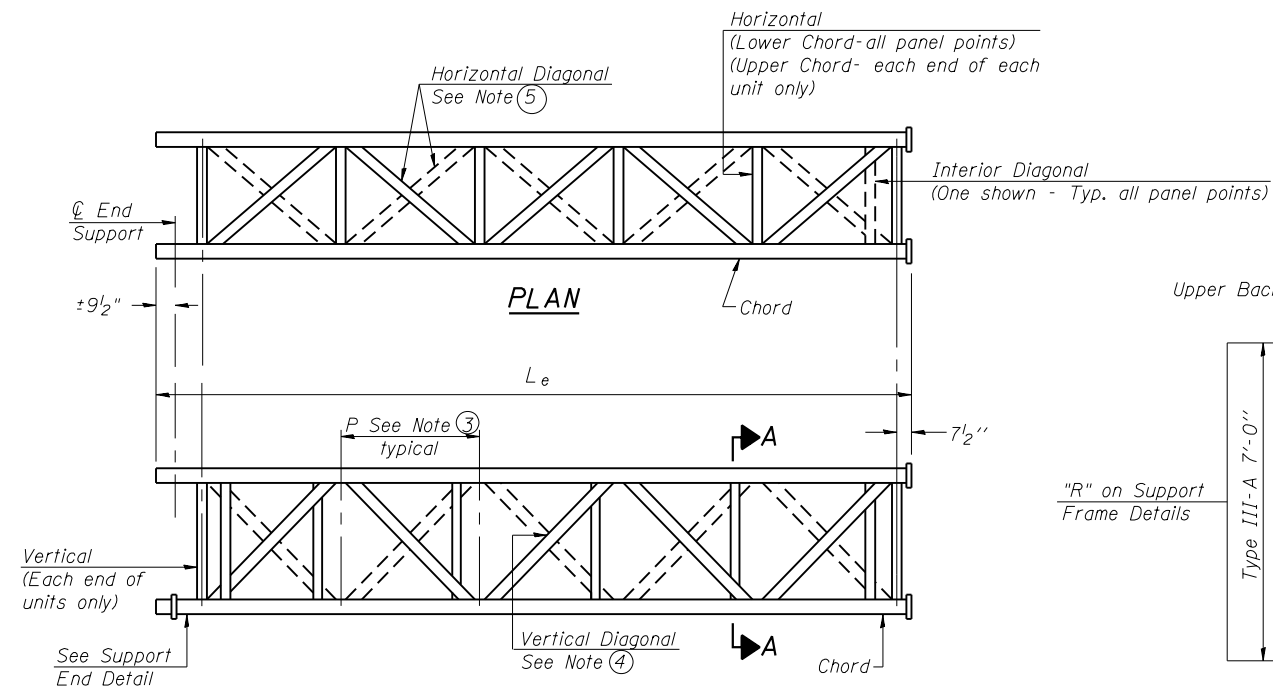
**ELEVATION  
TYPICAL INTERIOR UNIT**  
Even number of panels/interior unit required.



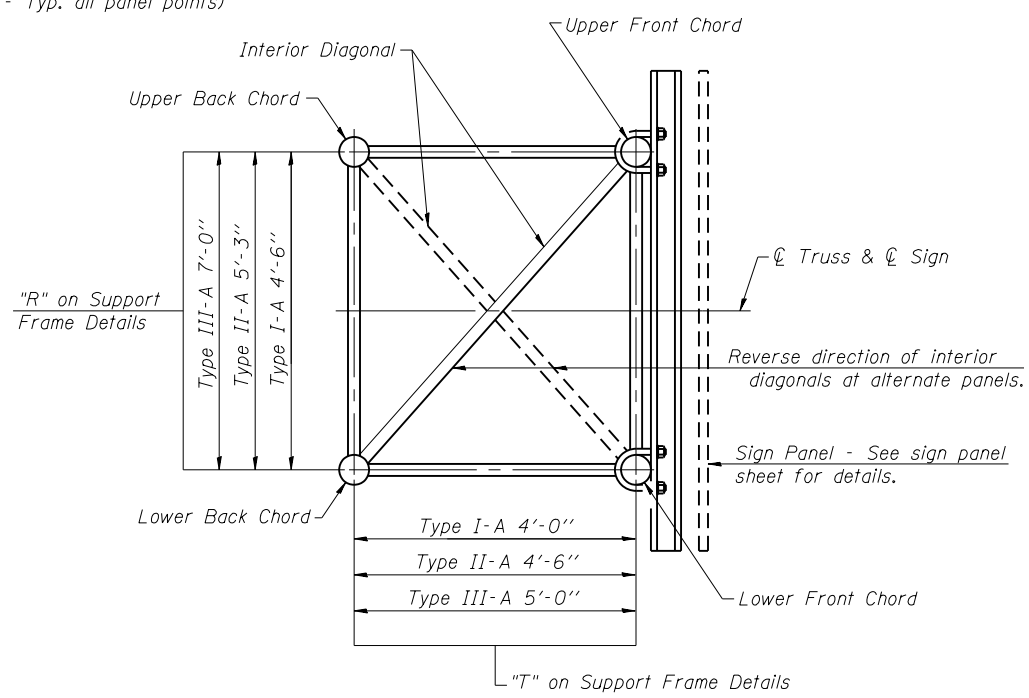
**SUPPORT END DETAIL FOR EXTERIOR UNIT**



**TYPICAL JOINT DETAILS**



**ELEVATION  
TYPICAL EXTERIOR UNIT**  
Even or odd number of panels/exterior units allowed.



**SECTION A-A**

- ① Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2"  $\phi$  drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
- ② 5 1/2" end dimension may vary by ± 1" to provide uniform panel spacing (P).
- ③ Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
- ④ Vertical Diagonals in front and back face shall alternate.
- ⑤ Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
- ⑥ All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2

6-1-12

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\4616 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

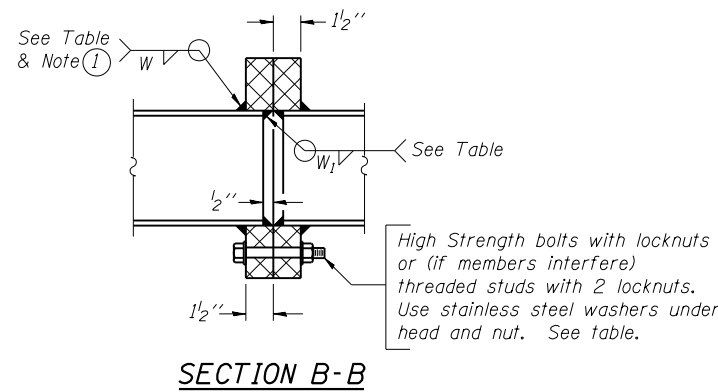
OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS  
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

SCALE: SHEET OF SHEETS STA. TO STA.

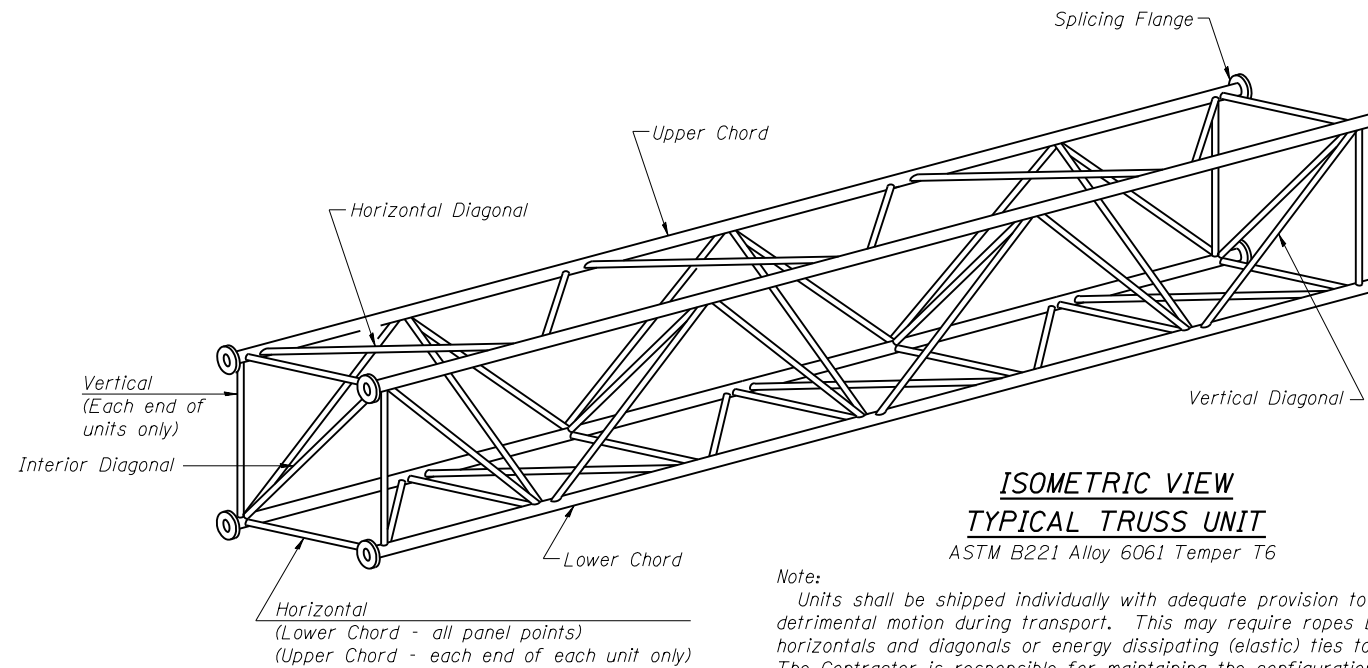
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OV SIN STR REP 17-09		VAR.	20	5
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				

**TRUSS UNIT TABLE**

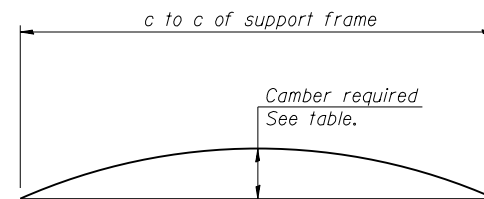
Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(L <sub>e</sub> )	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L <sub>i</sub> )	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W <sub>1</sub>		
6S0541055R125.9	350+20	III-A	6	32'-0"	5'-0 1/4"	2	6	31'-4 1/2"	5'-0 1/4"	7"	3/8"	3-1/4"	5/16"	3-1/2"	8	1"	9/16"	7/16"	11-1/2"	15"
6S0541055R126.4	373+30	III-A	7	36'-8 3/4"	4'-11 3/4"	1	6	31'-1 1/2"	4'-11 3/4"	7"	5/16"	3-1/4"	5/16"	2-1/2"	6	1"	7/16"	5/16"	11-1/2"	15"
6S0541055R126.7	392+20	III-A	8	38'-4 1/2"	4'-6 3/4"	1	8	37'-9"	4'-6 3/4"	7"	5/16"	3-1/4"	5/16"	2-7/8"	6	1"	7/16"	5/16"	11-1/2"	15"
6S0751072R003.1	100+20	I-A	5	25'-6 1/4"	4'-8 3/4"	1	6	29'-7 1/2"	4'-8 3/4"	5"	5/16"	2-1/2"	5/16"	2-1/4"	6	7/8"	5/16"	1/4"	8-3/4"	11-3/4"



① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.

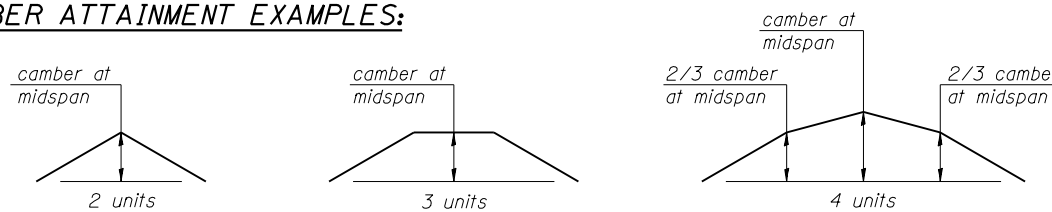


Note:  
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.

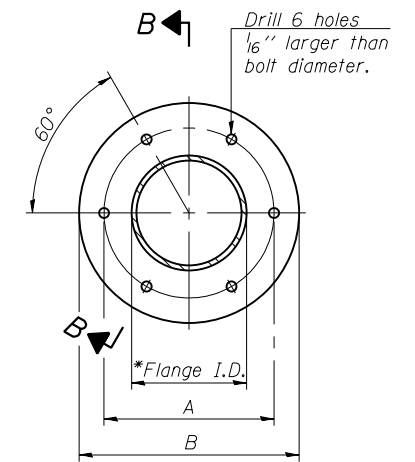


**CAMBER DIAGRAM**  
Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

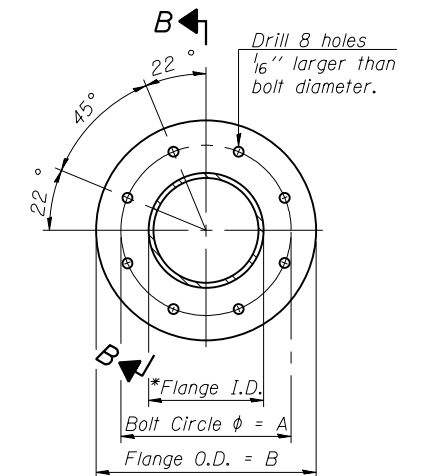
**CAMBER ATTAINMENT EXAMPLES:**



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



**TRUSS TYPES I-A, II-A, & III-A**



**TRUSS TYPES II-A & III-A  
SPLICING FLANGES**

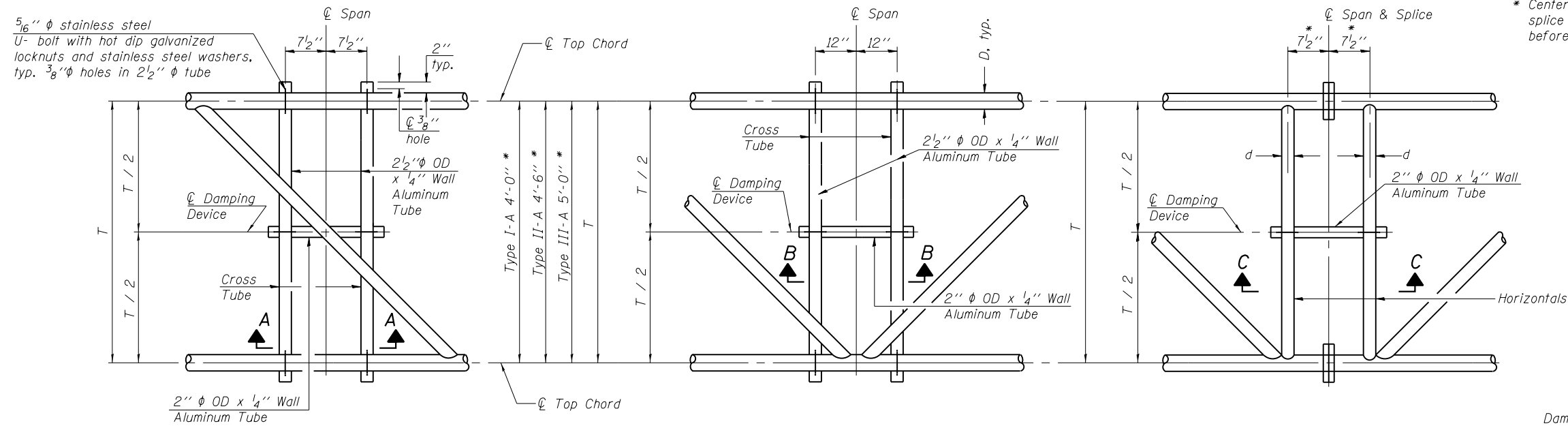
ASTM B221, Alloy 6061-T6  
or ASTM B209, Alloy 6061-T651  
\*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2

6-1-12

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A</b>	F.A.I. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
D:\OPERATIONS\Bridges\Bridgplans\CAD\46416 - sign trusses 2017\revised plansheet.dgn	DRAWN -	REVISED -	VAR.			D6 OV SIN STR REP 17-09	VAR.	20	6		
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 46416					
	PLOT DATE = 2/16/2017	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

SCALE: SHEET OF SHEETS STA. TO STA.



**PLAN DETAIL "A"**  
 ☐ Span between Panel Points

**PLAN DETAIL "B"**  
 ☐ Span at Panel Point

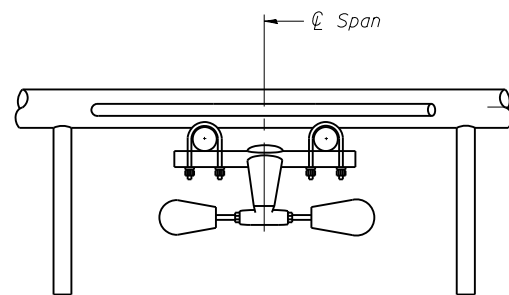
**PLAN DETAIL "C"**  
 ☐ Span at ☐ Chord Splice

\* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

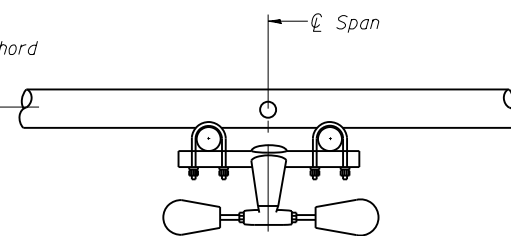
**NOTES**

**Damper:** One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

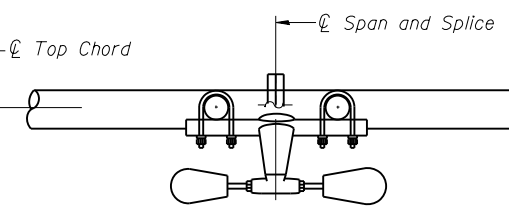
**Materials:** Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



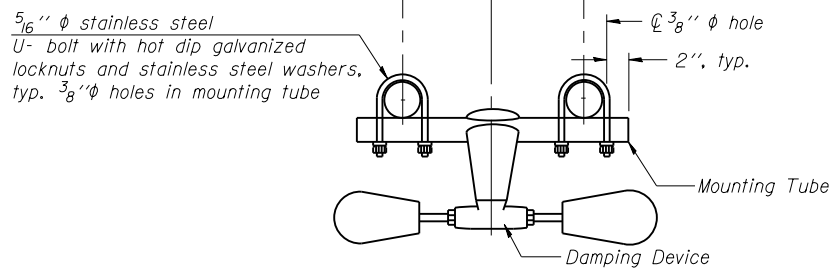
**SECTION A-A**



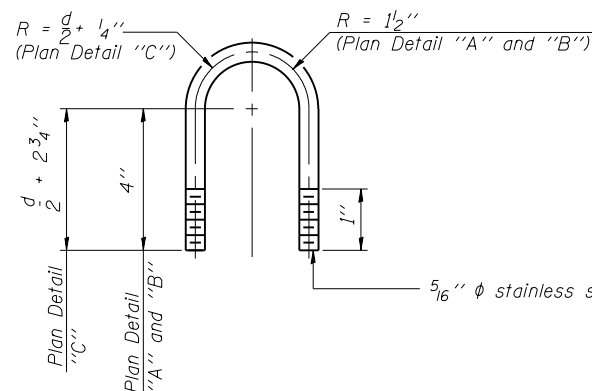
**SECTION B-B**



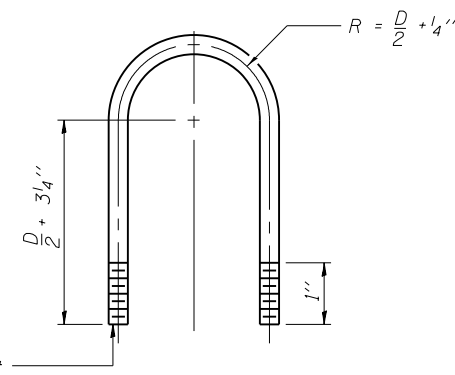
**SECTION C-C**



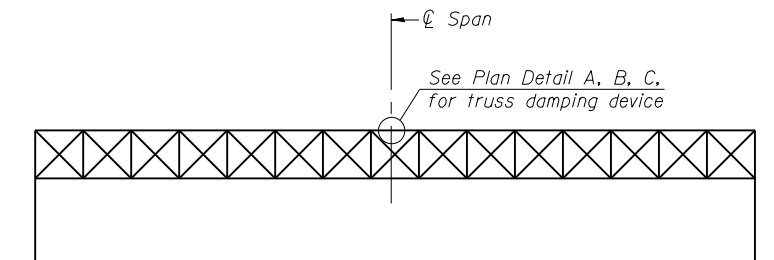
**TRUSS DAMPING DEVICE CONNECTION DETAIL**  
 (Typical)



**DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL**  
 (Typical)



**TOP CHORD TO CROSS TUBE U-BOLT DETAIL**  
 (Typical - Detail "A" and "B")



**ELEVATION**  
 Aluminum Overhead Sign Truss

OS-A-D

6-1-12

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\46416 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

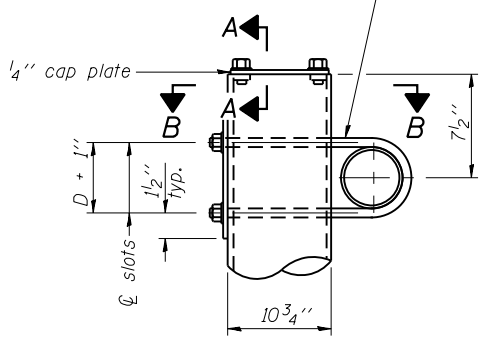
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURE  
 DAMPING DEVICE**

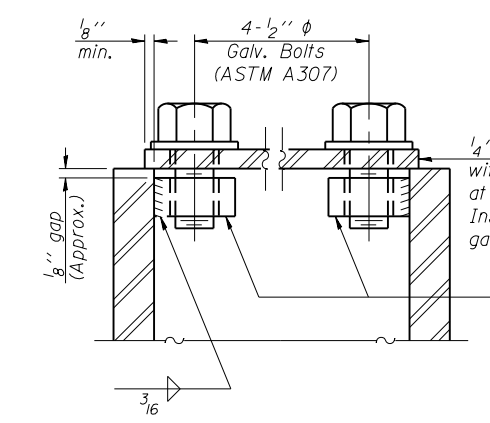
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 OV SIN STR REP 17-09	VAR.	20	7
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				

3/4" φ stainless steel U-bolt.  
Provide two washers and two hexagon locknuts. ④  
13/16" x 2" slots on 10" φ pipe.  
(4 slots required per pipe)

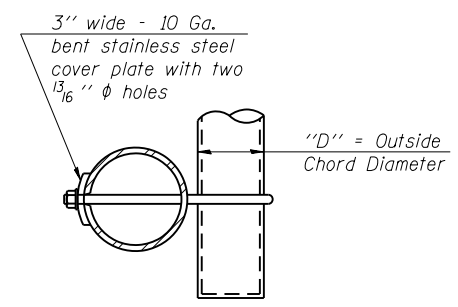


**DETAIL A**

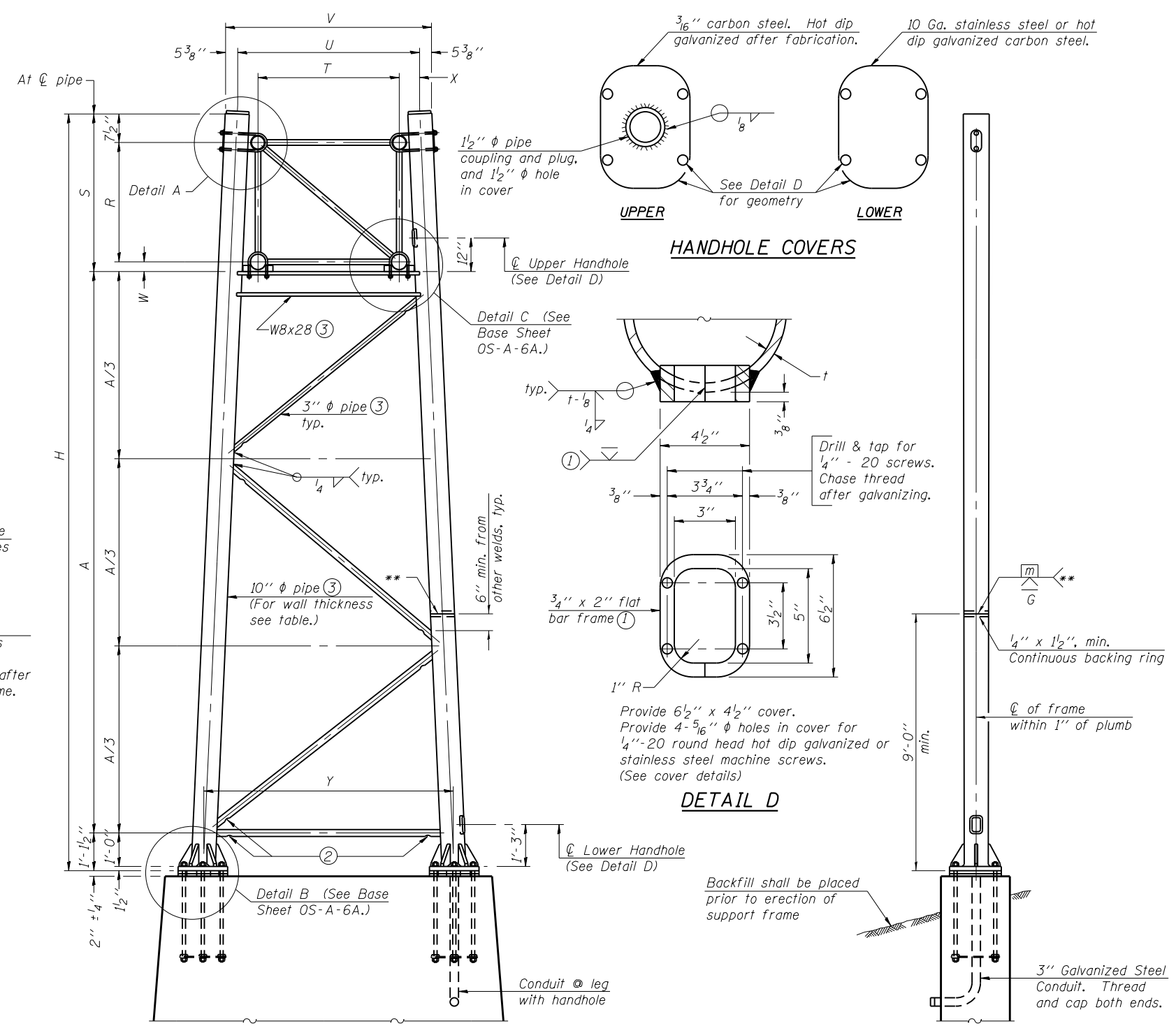


**SECTION A-A**

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



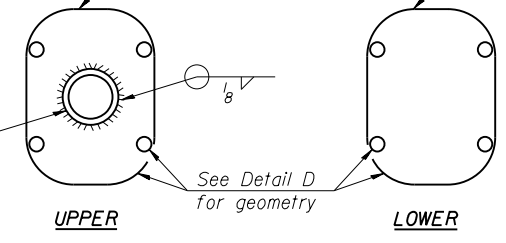
**SECTION B-B**



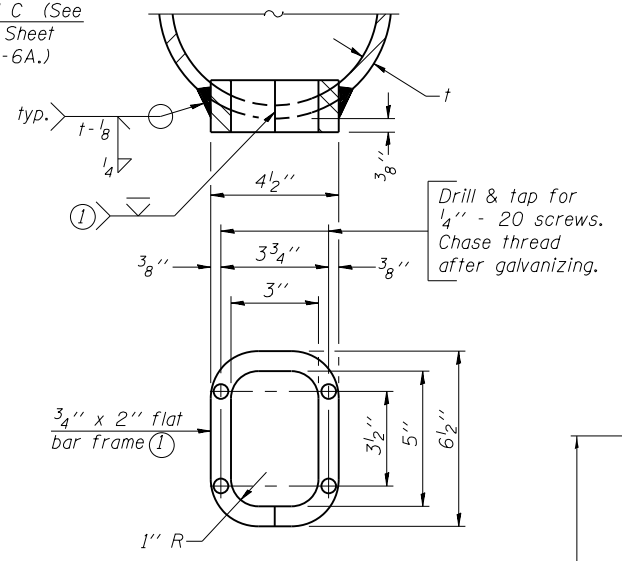
For Foundation Details, see base sheet OS-F3 (Spread Footing) or OS4-F3 (Drilled Shaft).

**SIDE ELEVATION**

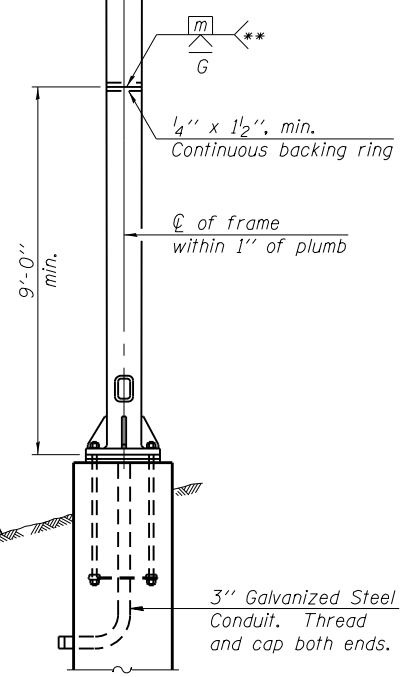
3/16" carbon steel. Hot dip galvanized after fabrication.  
10 Ga. stainless steel or hot dip galvanized carbon steel.



**HANDHOLE COVERS**



**DETAIL D**



**END ELEVATION**

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.  
Load combinations checked include deadload plus:  
a) 100% wind normal to sign, 20% parallel to sign  
b) 60% wind normal to sign, 30% parallel to sign

- ① In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.
- ② Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
- ③ Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- ④ See General Notes for fasteners.
- ⑤ Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
- ⑥ "H" based on 15'-0" or actual sign height, whichever is greater.

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6"	5'-5 1/2"	4'-0"	5'-6"	6'-4 3/4"	4"	9"	8'-3"
II-A ⑤	5'-3"	6'-3 1/4"	4'-6"	6'-1"	6'-11 3/4"	4 3/4"	9 1/2"	8'-3"

**10" φ PIPE TRUSS SUPPORT FRAME**  
\*\* One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

OS-A-6

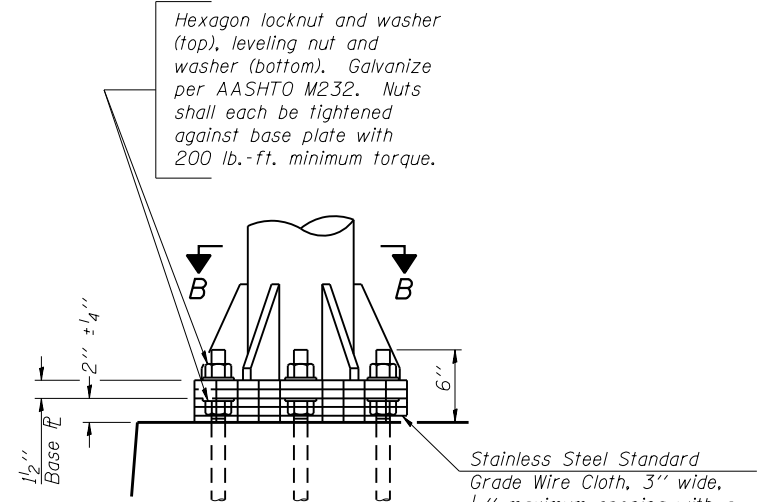
6-1-12

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans.CAD\46416 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

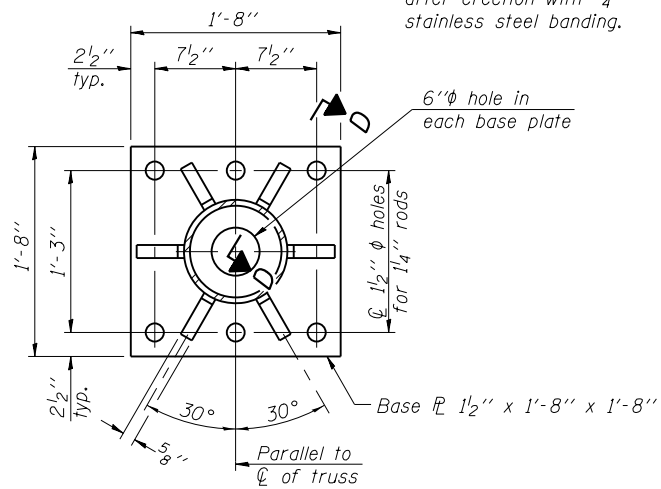
<b>OVERHEAD SIGN STRUCTURES SUPPORT FRAME FOR ALUMINUM TRUSS</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OV SIN STR REP 17-09		VAR.	20	8
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				

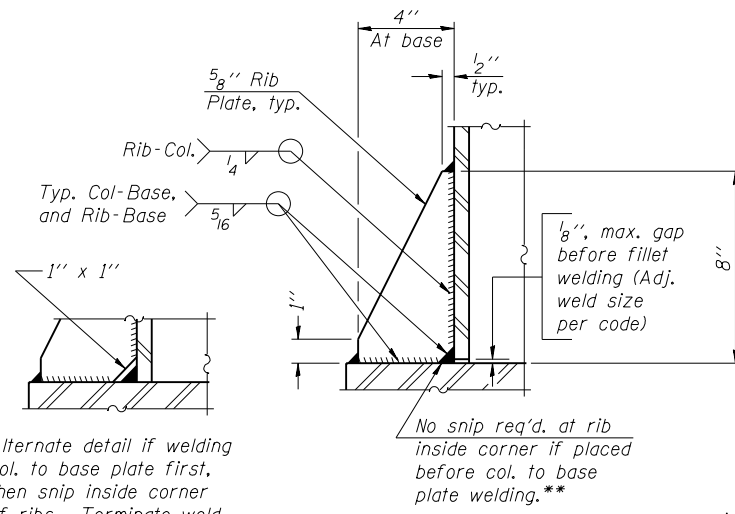


**DETAIL B**

Ribs shall be cut to fit slope of pipe.  
Stainless Steel Standard Grade Wire Cloth, 3" wide, 1/4" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with 3/4" stainless steel banding.

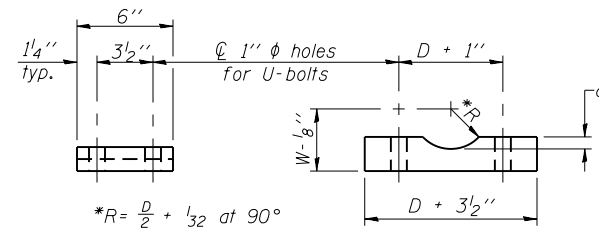


**SECTION B-B**



**SECTION D-D**

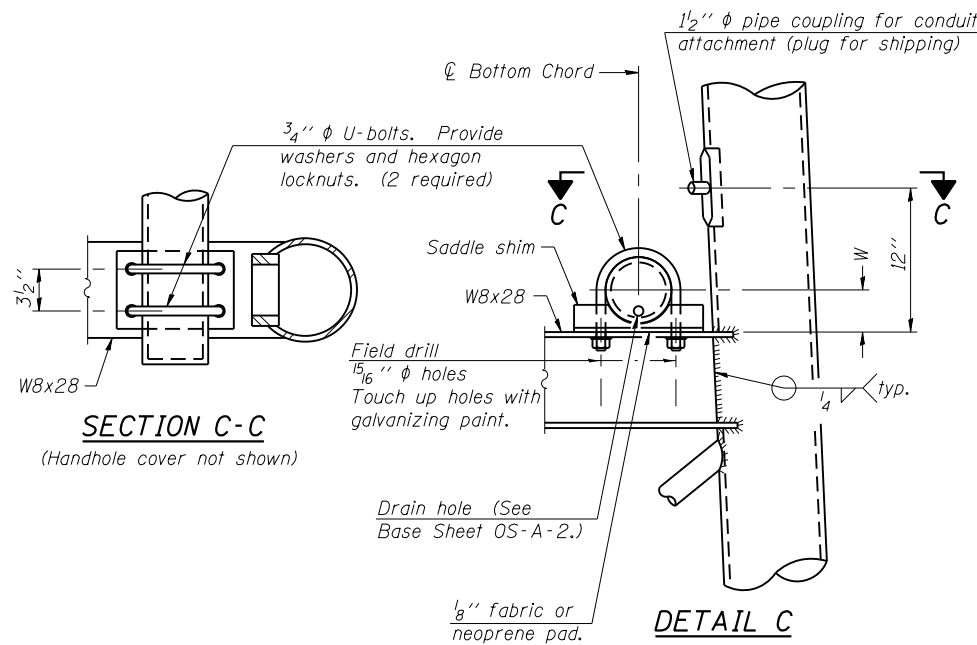
\*\* Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.



**SADDLE SHIM DETAIL**

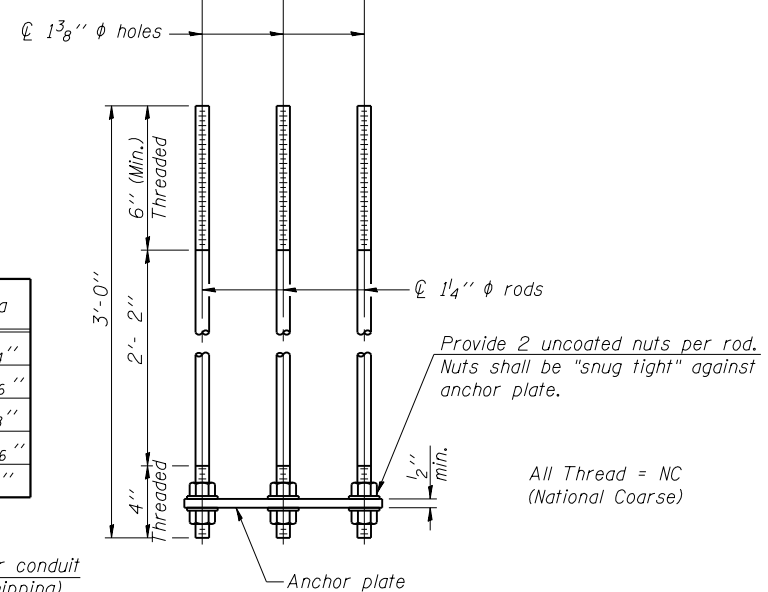
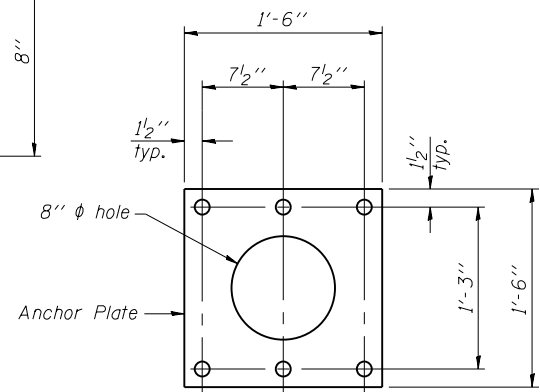
ASTM B26 Alloy 356-F  
or  
ASTM B209 Alloy 6061-T651 (4 required per sign truss)

Truss Chord Nominal Dia.	a
5"	3/4"
5 1/2"	13/16"
6"	7/8"
6 1/2"	15/16"
7"	1"

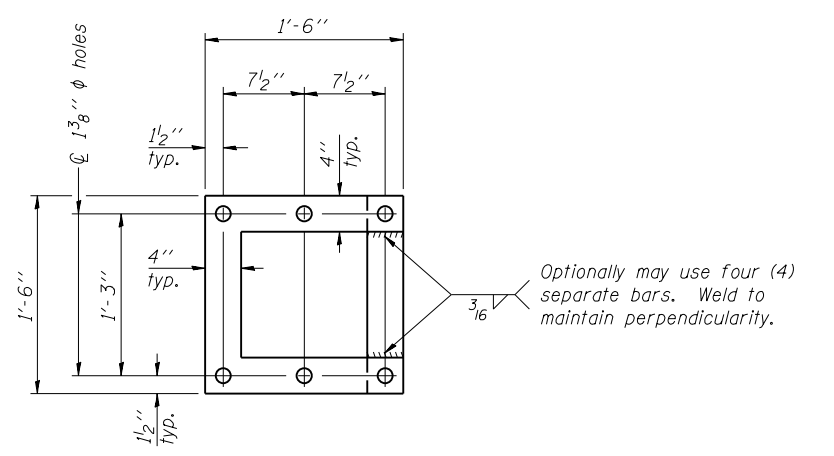


**SECTION C-C**

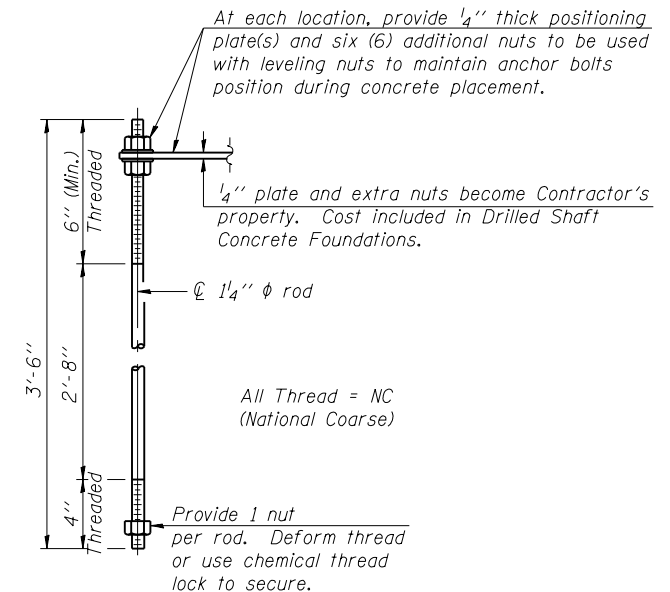
**DETAIL C**



**ANCHOR ROD DETAIL**  
Spread Footing Foundation



**POSITIONING PLATE(S)**



**ANCHOR ROD DETAIL**  
Drilled Shaft Foundation

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

**10" PH PIPE SUPPORT FRAME DETAILS**

OS-A-6A

6-1-12

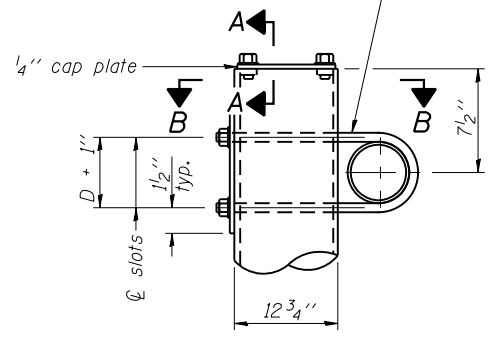
FILE NAME	USER NAME	DESIGNED	REVISED
D:\OPERATIONS\Bridges\Bridgplans.CAD\4616 - sign trusses 2017\revised plansheet.dgn	dudleybm	-	-
Default		DRAWN	REVISED
		CHECKED	REVISED
		DATE	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

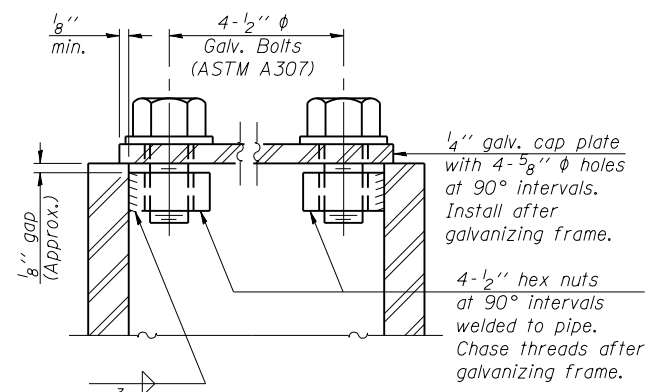
OVERHEAD SIGN STRUCTURES SUPPORT FRAME DETAILS - ALUMINUM TRUSS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 OV SIN STR REP 17-09	VAR.	20	9
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				

3/4" φ stainless steel U-bolt.  
Provide two washers and two hexagon locknuts. (4)  
1 3/16" x 2" slots on 12" φ pipe.  
(4 slots required per pipe)

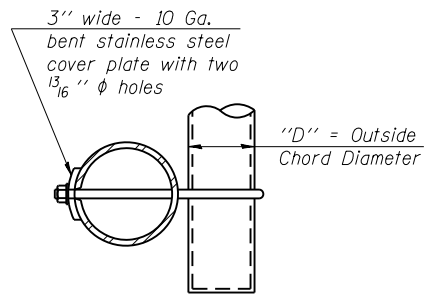


**DETAIL A**

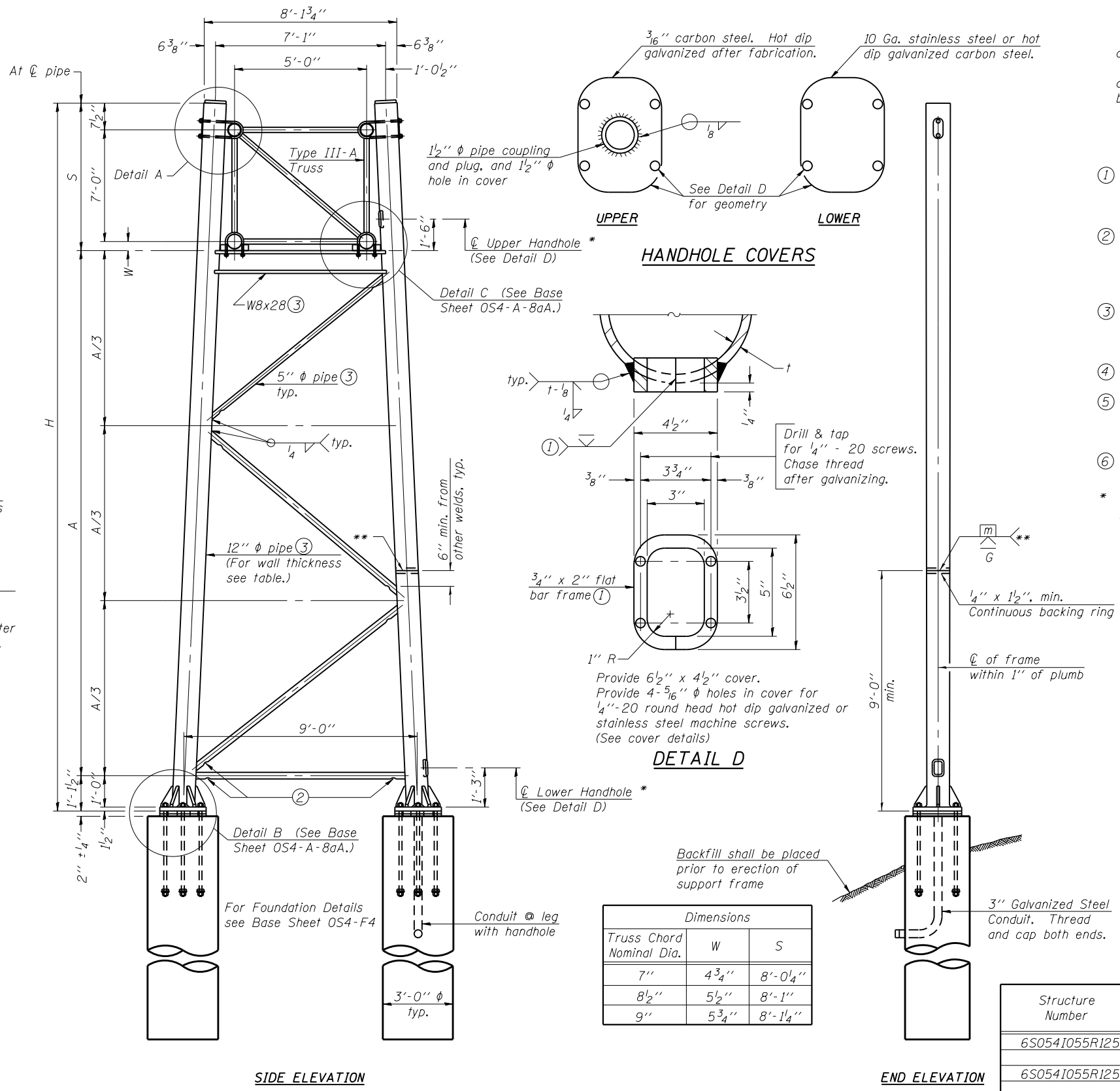


**SECTION A-A**

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



**SECTION B-B**



**SIDE ELEVATION**

**END ELEVATION**

**TRUSS SUPPORT DETAILS**

(12" φ Pipe-Type III-A Truss)  
\*\* One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.  
Load combinations checked include deadload plus:  
a) 100% wind normal to sign, 20% parallel to sign  
b) 60% wind normal to sign, 30% parallel to sign

- ① In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.
- ② Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
- ③ Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- ④ See General Notes for fasteners.
- ⑤ Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
- ⑥ "H" based on 15'-0" or actual sign height, whichever is greater.

\* For dynamic message sign installations, provide upper and lower handholes in both legs of each support frame.

Structure Number	Station	Support		Pipe Wall Thickness	H (6)	A
		West	East			
6S054I055R125.9	350+20	X		0.33"	29'-8"	20'-6"
6S054I055R125.9	350+20		X	0.33"	32'-4"	23'-2"
6S054I055R126.4	373+30	X		0.33"	27'-11"	18'-9"
6S054I055R126.4	373+30		X	0.33"	31'-11"	22'-9"
6S054I055R126.7	392+20	X		0.33"	32'-6"	23'-4"
6S054I055R126.7	392+20		X	0.33"	33'-9"	24'-7"

OS4-A-8a

6-1-12

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\416 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

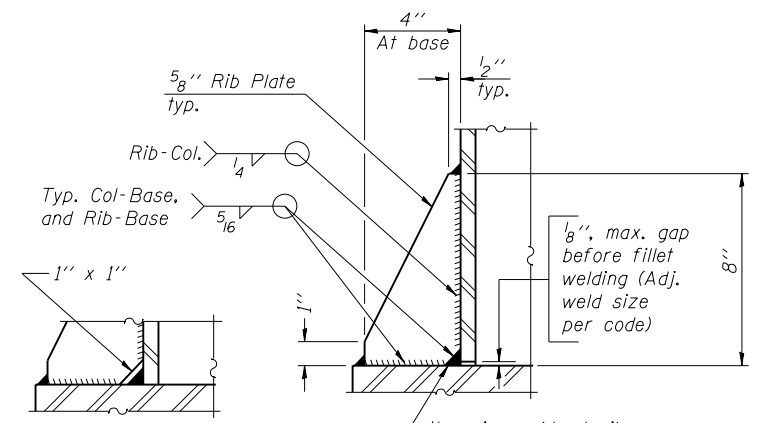
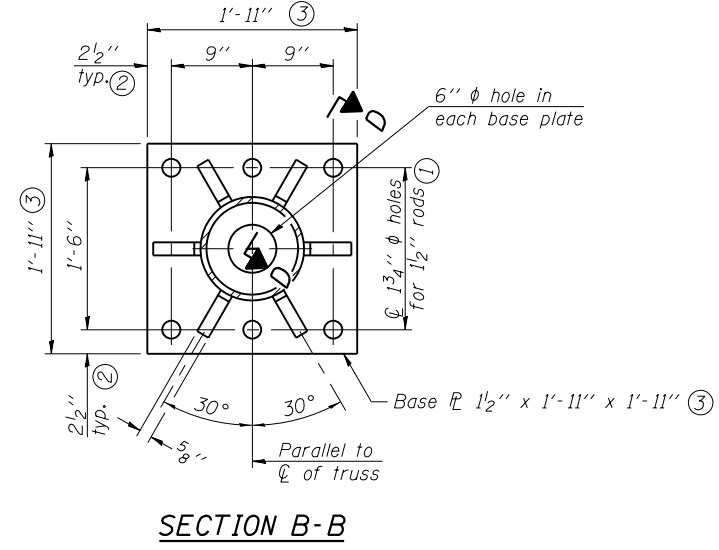
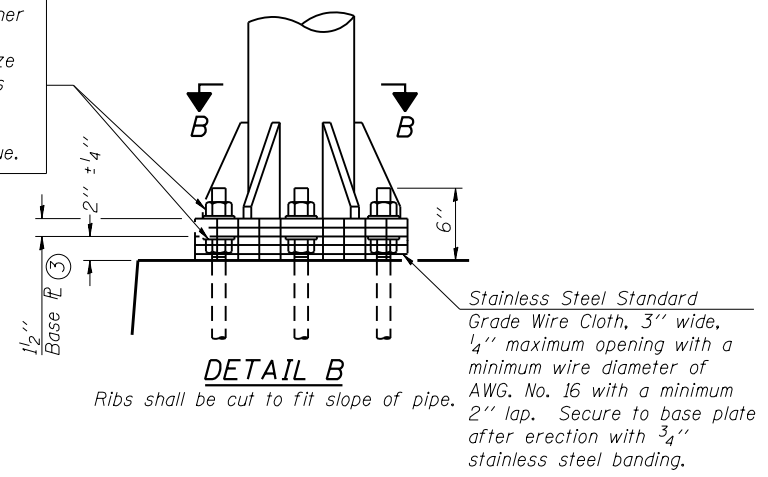
**OVERHEAD SIGN STRUCTURES - SUPPORT FRAME  
FOR TYPE III-A ALUMINUM TRUSS**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OV SIN STR REP 17-09		VAR.	20	10
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				

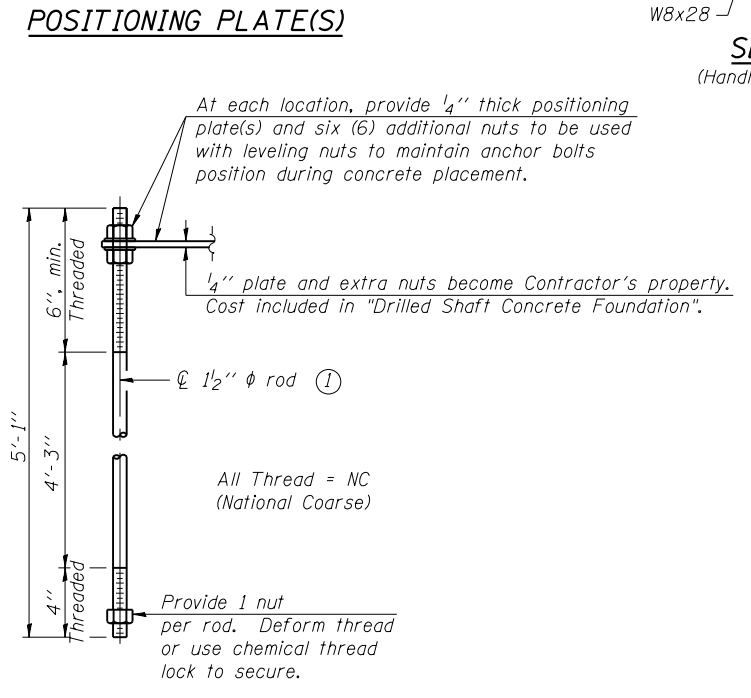
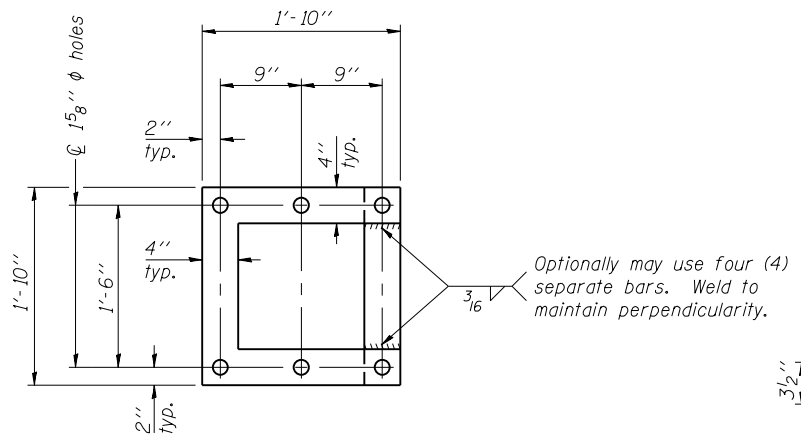
SCALE: SHEET OF SHEETS STA. TO STA.



Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



\*\* Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.



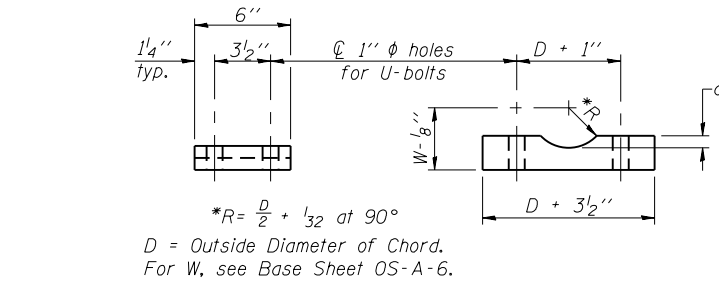
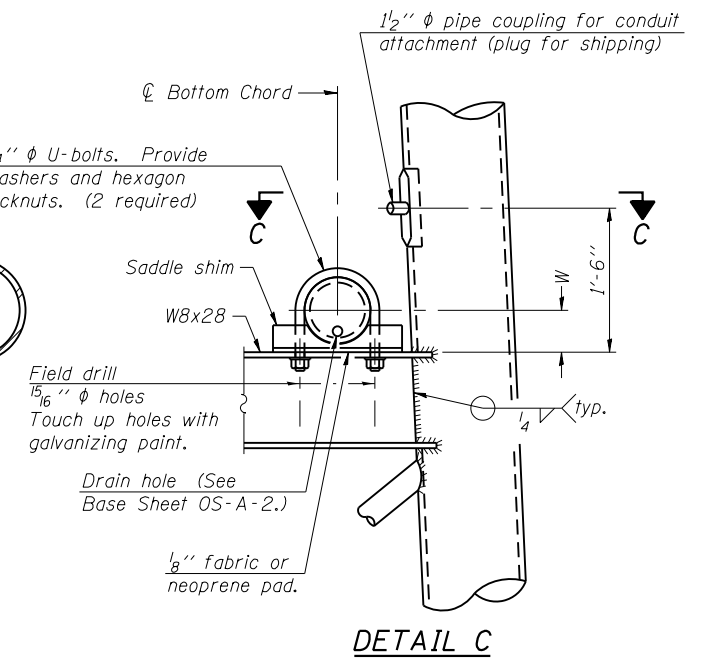
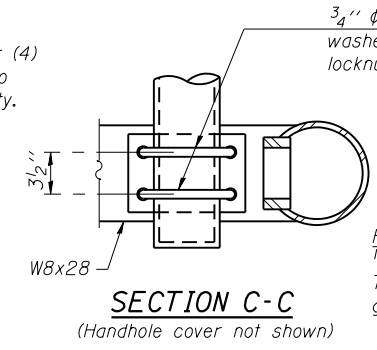
**TYPE III-A TRUSS**  
**12"  $\phi$  PIPE SUPPORT FRAME DETAILS**

Notes:  
For Type III-A Truss spans greater than 150 ft, and up to 160 ft.:

① 1 3/4"  $\phi$  rod, 2"  $\phi$  holes

② 2 3/4" edge distance

③ Base Pl 1 5/8" x 1 11 1/2" x 1 11 1/2"



Truss Chord Nominal Dia.	a
7"	1"
8 1/2"	1 1/4"
9"	1 3/8"

**SADDLE SHIM DETAIL**  
ASTM B26 Alloy 356-F  
or  
ASTM B209 Alloy 6061-T651  
(4 required per sign truss)

OS4-A-8aA

6-1-12

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgeplans\CAD\4616 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OV SIN STR REP 17-09			20	11
			CONTRACT NO. 46416	
ILLINOIS FED. AID PROJECT				

**BAR LIST - EACH FOUNDATION**

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

**NOTES:**

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

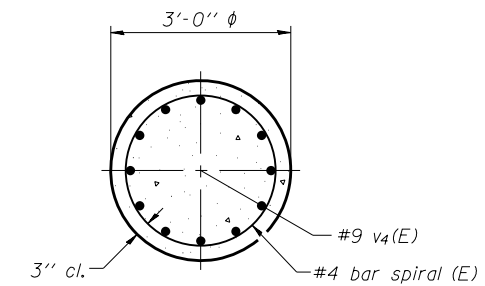
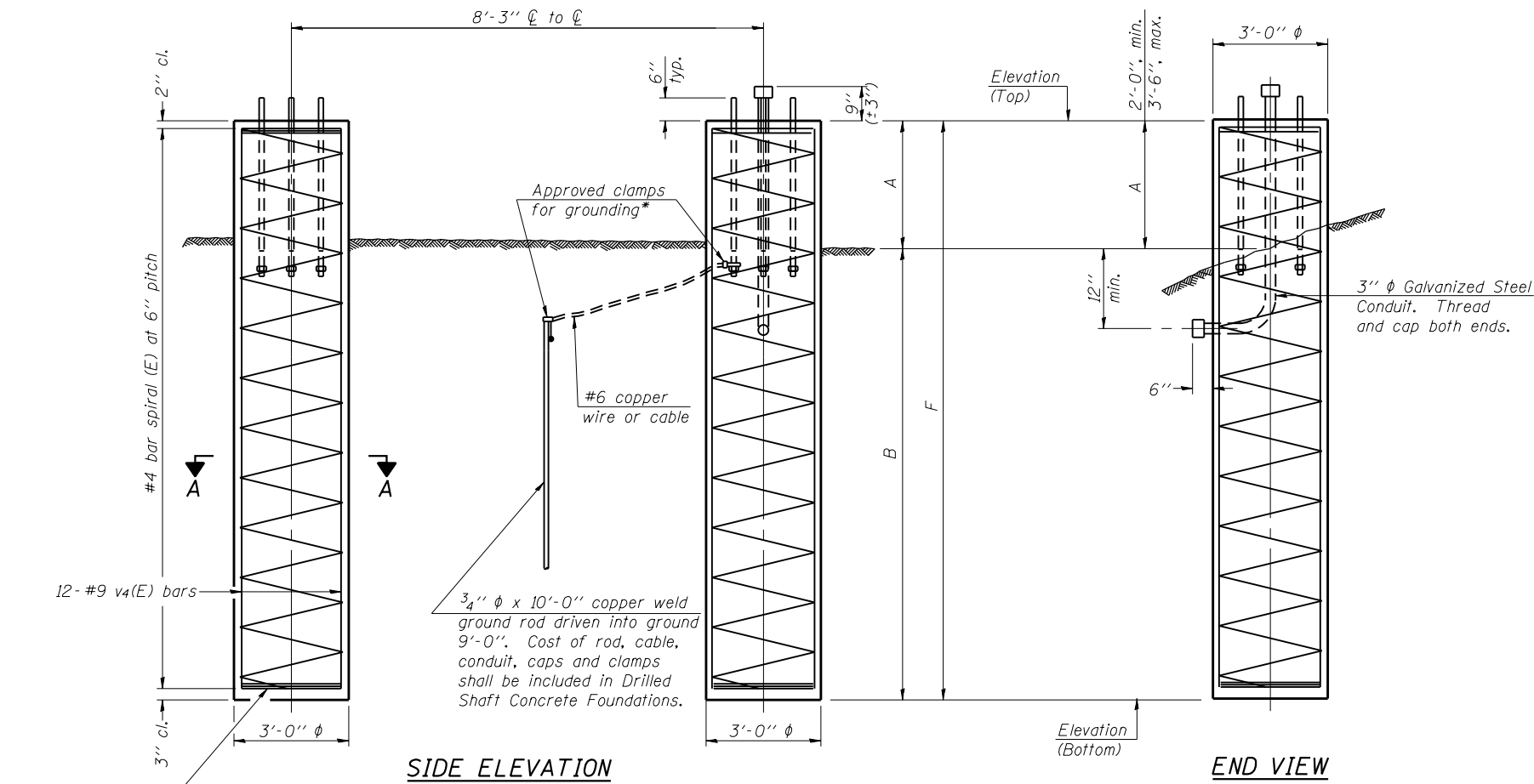
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

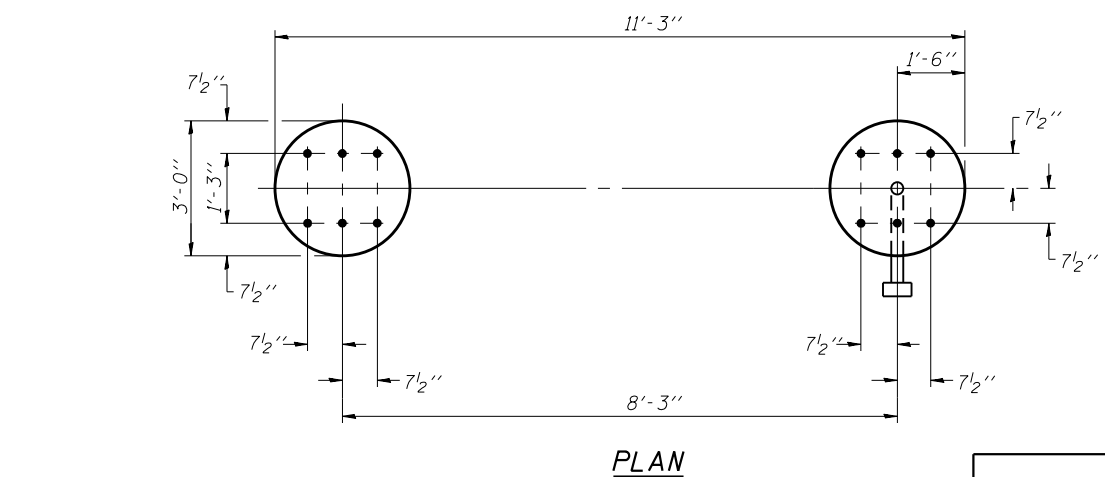
Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



**SECTION A-A**



**PLAN**

For anchor rod size and placement, see Support Frame Detail Sheet.

\* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

**DETAILS FOR 10" Ø SUPPORT FRAME  
TYPE I-A or II-A TRUSS**

Structure Number	Station	North Foundation					South Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
6S0751072R003.1	100+20	465.87	445.37	2.5'	18.0'	20.5'	463.55	443.05	2.5'	18.0'	20.5'	21.5

OS4-F3

8-21-13

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\4616 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 OV SIN STR REP 17-09	VAR.	20	12
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				

**BAR LIST - EACH FOUNDATION**

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

**NOTES:**

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

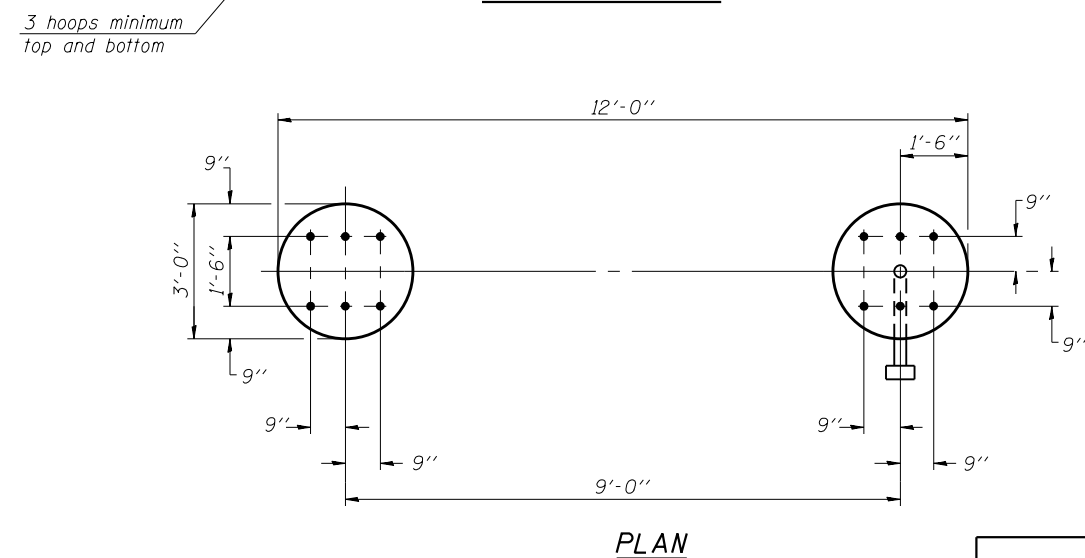
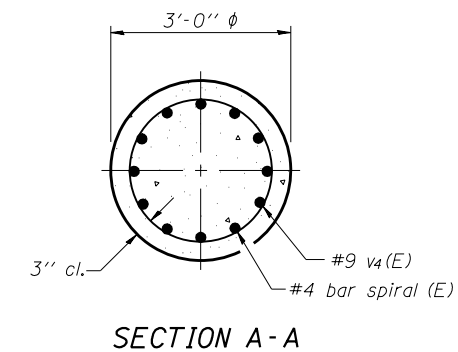
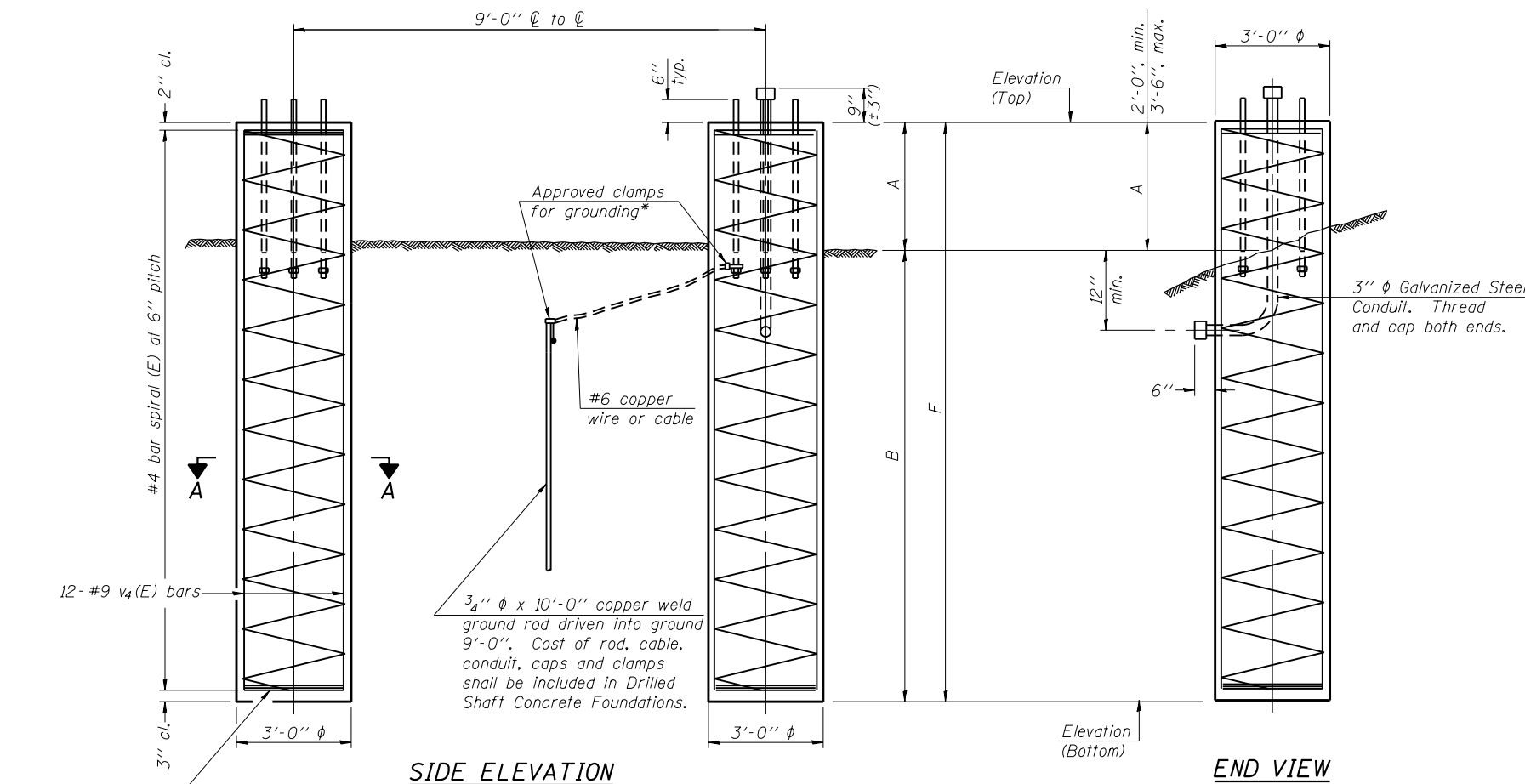
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



For anchor rod size and placement, see Support Frame Detail Sheet.

\* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

**DETAILS FOR 12" Ø SUPPORT FRAME TYPE III-A TRUSS**

Structure Number	Station	West Foundation					East Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
6S0541055R125.9	350+20	582.12	560.62	2.5'	19'	21.5'	579.51	558.01	2.5'	19'	21.5'	22.5
6S0541055R126.4	373+30	564.78	541.28	2.5'	21'	23.5'	560.78	537.28	2.5'	21'	23.5'	24.6
6S0541055R126.7	392+20	563.29	537.79	2.5'	23'	25.5'	562.03	534.53	2.5'	25'	27.5'	27.8

OS4-F4

8-21-13

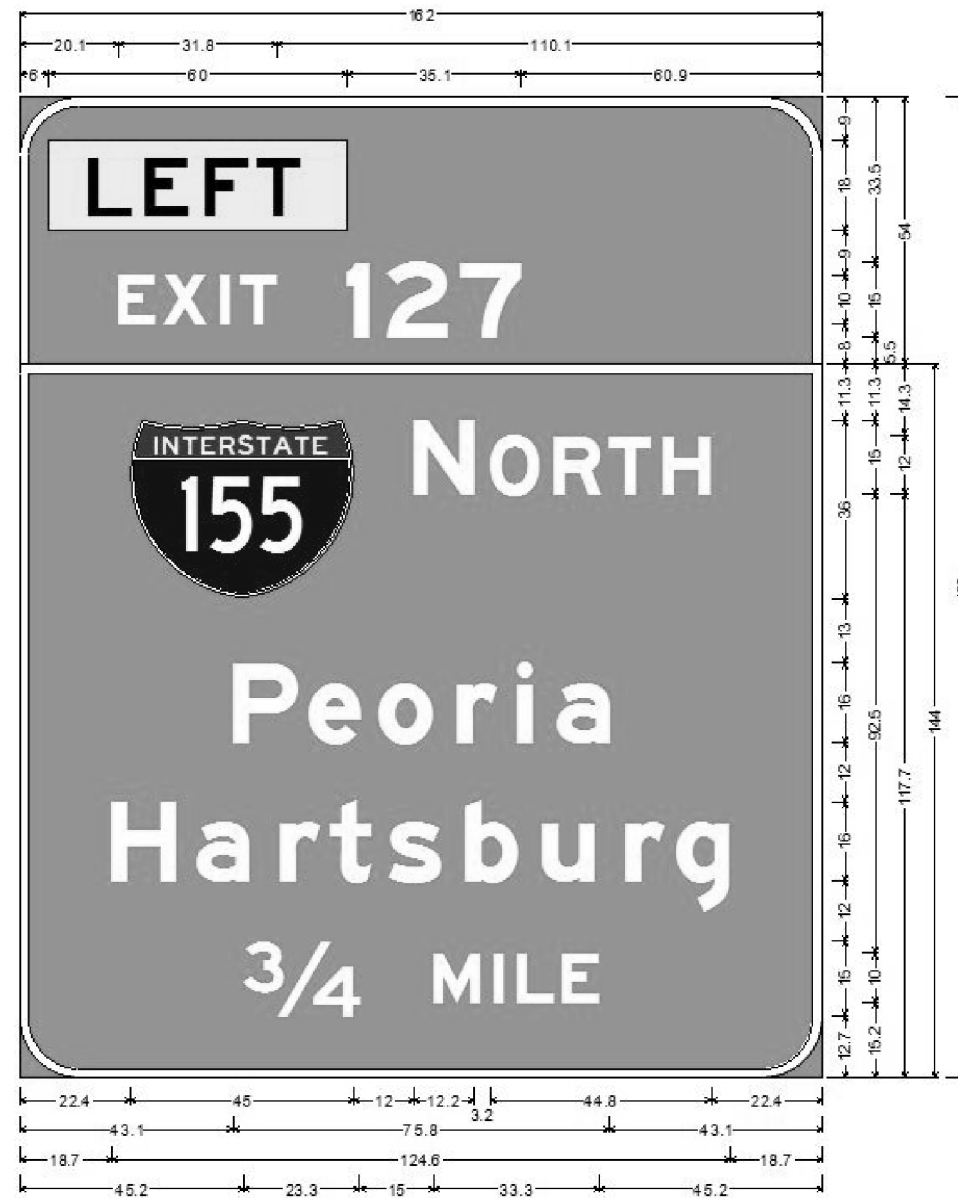
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\46416 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OV SIN STR REP 17-09		VAR.	20	13
			CONTRACT NO. 46416	
ILLINOIS FED. AID PROJECT				



12.0" Radius, 2.0" Border, White on Green;  
 Rectangle Yellow;  
 "EXIT" E Mod 2K 120% spacing; "127" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "NORTH" E Mod 2K; "Peoria" E Mod 2K; "Hartsburg" E Mod 2K; "3/4 MILE" E Mod 2K;

Table of letter and object lefts.

1	2	7						
6.0	66.0	74.3						
89.0								
E	X	I	T					
20.1	29.2	40.4	44.5					
INTERSTATE	N	O	R	T	H			
22.4	79.4	94.8	107.8	118.8	129.9			
P	e	a	r	i	a			
43.1	58.4	72.5	88.4	100.2	108.4			
H	a	r	t	s	b	u	r	g
18.7	35.6	52.6	62.7	74.4	89.9	105.4	122.4	132.8
3/4	M	I	L	E				
45.2	83.5	95.6	100.4	109.4				



12.0" Radius, 2.0" Border, White on Green;  
 "NORTH" E Mod 2K; "Chicago" E Mod 2K;

Table of letter and object lefts.

INTERSTATE	N	O	R	T	H	
11.9	59.9	75.3	88.3	99.3	110.4	
C	h	i	c	a	g	o
16.7	34.2	51.1	59.3	73.4	88.9	104.4



12.0" Radius, 2.0" Border, White on Green;  
 "EXIT" E Mod 2K 120% spacing; "126" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "Lincoln" E Mod 2K; "Mason City" E Mod 2K; Arrow 160 - 35.0" 45";

Table of letter and object lefts.

E	X	I	T	1	2	6		
88.4	97.5	108.7	112.9	135.3	143.6	158.9		
158.9								
ILLINOIS	1	2						
31.8	91.9	146.8						
L	I	N	C	A	N			
39.0	54.4	64.0	79.5	93.6	109.4	119.0		
M	a	s	o	n	c	i	t	y
13.7	32.6	47.8	61.9	77.7	104.3	121.7	129.8	141.2

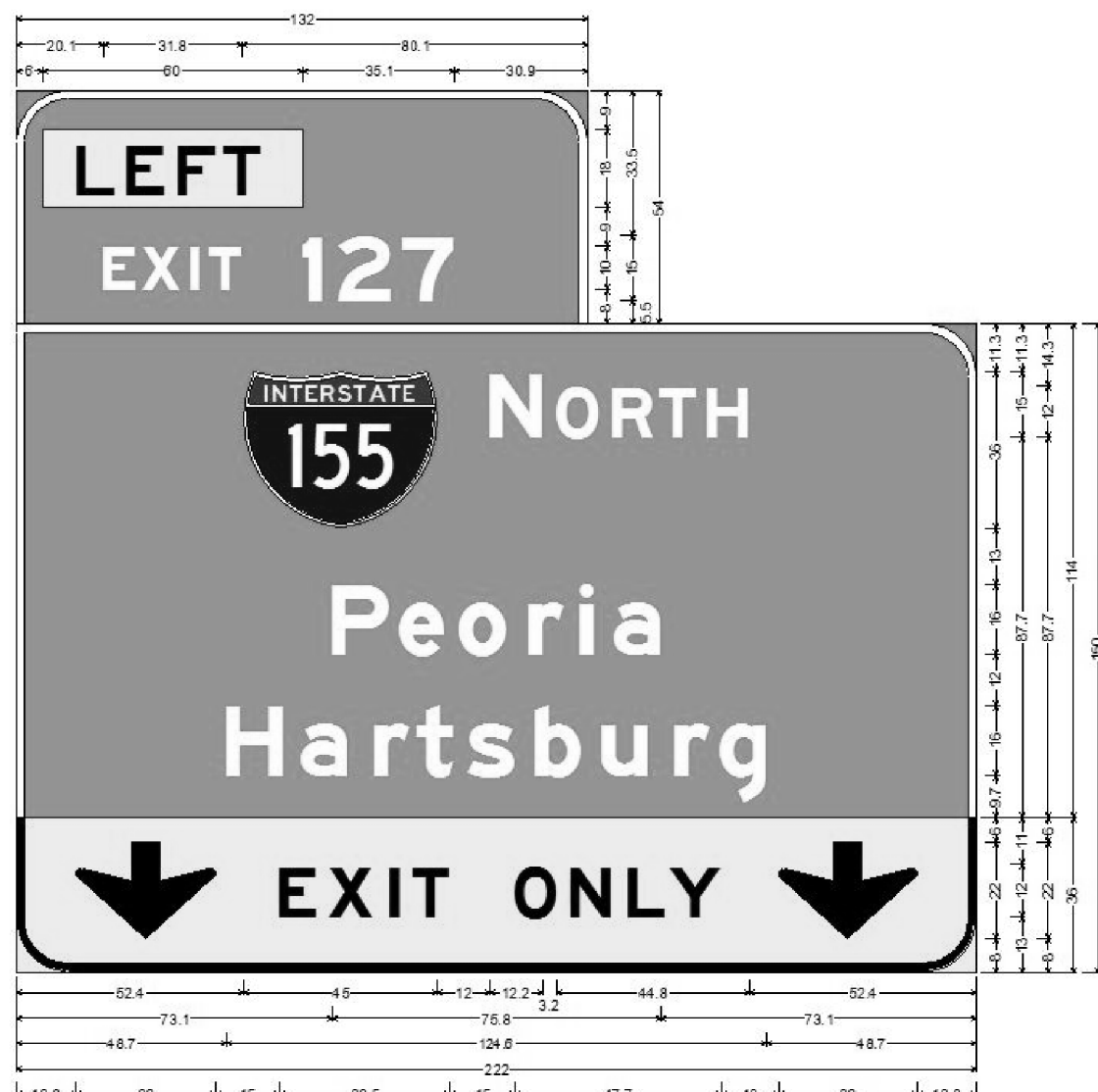
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans.CAD\4616 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SIGN DETAILS  
 6S054I055R125.9

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 OV SIN STR REP 17-09	VAR.	20	14
			CONTRACT NO. 46416	
ILLINOIS FED. AID PROJECT				



12.0" Radius, 2.0" Border, White on Green;  
 Rectangle Yellow;  
 "EXIT" E Mod 2K 120% spacing; "127" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "NORTH" E Mod 2K; "Peoria" E Mod 2K; "Hartsburg" E Mod 2K;  
 12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;  
 Down Arrow 22.0" 270°; "EXIT" E Mod 2K 140% spacing; "ONLY" E Mod 2K; Down Arrow 22.0" 270°;

Table of letter and object lefts.

1	2	7							
6.0	66.0	74.3	89.0						
E	X	I	T						
20.1	29.1	40.4	44.5						
N	O	R	T	H					
52.4	109.4	124.8	137.8	148.8	159.9				
P	e	a	r	i	a				
73.1	88.4	102.5	118.4	130.2	138.4				
H	a	r	t	s	b	u	r	g	
48.7	65.6	82.6	92.7	104.4	119.9	135.4	152.4	162.8	
↓	E	X	I	T	O	N	L	Y	↓
13.9	60.9	72.1	86.1	91.5	115.4	128.3	141.4	151.0	176.1



12.0" Radius, 2.0" Border, White on Green;  
 "NORTH" E Mod 2K; "Chicago" E Mod 2K; Down Arrow 22.0" 270°; Down Arrow 22.0" 270°;

Table of letter and object lefts.

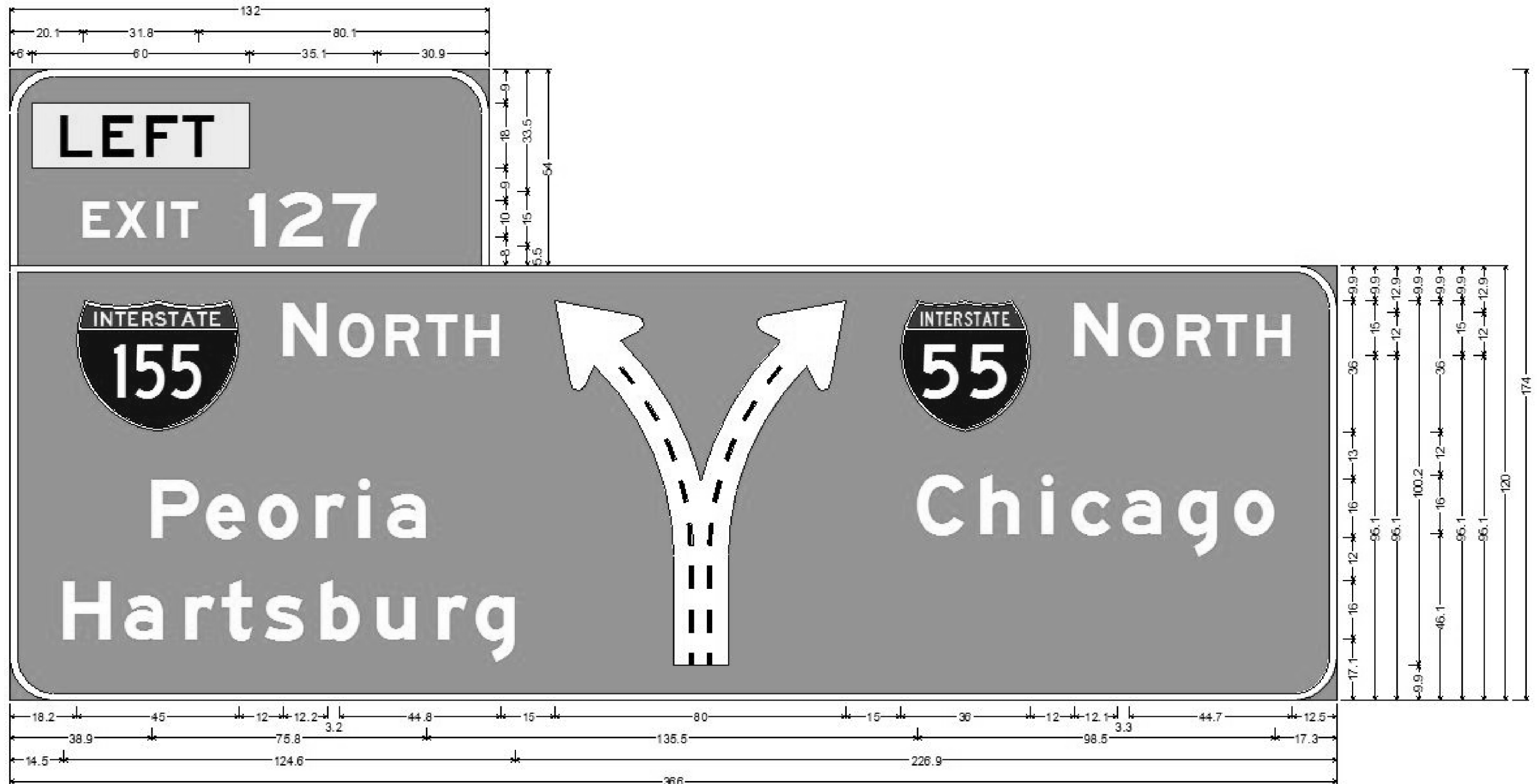
N	O	R	T	H		
44.9	92.9	108.3	121.3	132.3	143.4	
C	h	i	c	a	g	o
49.7	67.2	84.1	92.3	106.4	121.9	137.4
↓	↓					
11.0	155.0					

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
D:\OPERATIONS\Bridges\Bridgplans\CAD\416 - sign trusses 2017\revised plnsheet.dgn	dudleybm	-	-
Default	PLOT SCALE = 100.0000' / in.	CHECKED :	REVISED :
	PLOT DATE = 2/16/2017	DATE :	REVISED :

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SIGN DETAILS</b>			
<b>6S054I055R126.4</b>			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D6 OV SIN STR REP 17-09	VAR.	28	15
CONTRACT NO. 46416				
ILLINOIS FED. AID PROJECT				



12.0" Radius, 2.0" Border, White on Green;  
 Rectangle Yellow;  
 "EXIT" E Mod 2K 120% spacing; "127" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "NORTH" E Mod 2K; "Peoria" E Mod 2K; "Hartsburg" E Mod 2K; Diagrammatic Arrow lane lines Black; "NORTH" E Mod 2K; "Chicago" E Mod 2K;  
 Table of letter and object lefts.

1	2	7										
6.0	66.0	74.3										
89.0												
E	X	I	T									
20.1	29.1	40.4	44.5									
155	N	O	R	T	H	Y	55	N	O	R	T	H
18.2	75.2	90.6	103.6	114.6	125.7	150.4	245.4	293.4	308.8	321.7	332.8	343.8
P	e	a	r	i	a	C	h	i	c	a	g	o
38.9	54.2	68.3	84.2	96.0	104.2	250.2	267.6	284.6	292.7	306.8	322.3	337.8
H	a	r	t	s	b	u	r	g				
14.5	31.4	48.4	58.5	70.2	85.7	101.2	118.2	128.6				

FILE NAME -	USER NAME - dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\4616 - sign trusses 2017\revised plansheet.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 2/16/2017	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SIGN DETAILS  
 6S054I055R126.7

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR. D6 OV SIN STR REP 17-09		VAR.	20	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 46416	







# SOIL BORING LOG

ROUTE I-55 DESCRIPTION Sign Truss on I-55 NBL at MM 126.4 LOGGED BY M. Tappan  
SECTION D-6 OVD SIN STR REPL17-09 LOCATION SW 1/4, SEC. 22, TWP. 20N, RNG. 3W, 3 PM  
COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO.	D	B	U	M	Surface Water Elev.	D	B	U	M
Station	E	L	C	O	ft	E	L	C	O
	P	O	S	I	ft	P	O	S	I
	T	W	Qu	T		H	S	Qu	T
BORING NO.	H	S			Groundwater Elev.:	(ft)	/6"	(tsf)	(%)
Station					▽ First Encounter				
Offset					Upon Completion	ft			
Ground Surface Elev.					▽ After	DaysHrs.			
6S054i055R126.4					N/A				
3 W. Foundation					545.7				
373+29					557.7				
2.0ft RT									
562.2									
Olive Brown and Dark Gray Moist SILTY CLAY (Fill)					Gray Wet Medium to Coarse SAND (continued)				
Rock/Concrete in top 3'					Gray Medium to Coarse SANDY GRAVEL Washed				
					Gray Medium SAND with Some 1/2" Gravel Washed				
					Gray Fine to Medium SAND Washed				
					Gray Fine SAND Washed				
					Boring Completed				
					Sta.'s and Elev.'s Provided by Dist. 6 Surveys Ref. Stationing to I-55 Mainline				
					With Some 1/2" - 3/4" Gravel				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\SOIL\SIGINT FILES\054 LOGANS\SIGN TRUSS BORINGS\SIGN TRUSS 6S054i055R126.4.GPJ Data Template D6TEMP.LT.GDT Date Printed 8/12/16  
Latitude 40.10222N Longitude 89.29233W Datum NAD83 Job Number C60-009-17



# SOIL BORING LOG

ROUTE I-55 DESCRIPTION Sign Truss on I-55 NBL at MM 126.4 LOGGED BY M. Tappan  
SECTION D-6 OVD SIN STR REPL17-09 LOCATION SW 1/4, SEC. 22, TWP. 20N, RNG. 3W, 3 PM  
COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO.	D	B	U	M	Surface Water Elev.	D	B	U	M
Station	E	L	C	O	ft	E	L	C	O
	P	O	S	I	ft	P	O	S	I
	T	W	Qu	T		H	S	Qu	T
BORING NO.	H	S			Groundwater Elev.:	(ft)	/6"	(tsf)	(%)
Station					▽ First Encounter				
Offset					Upon Completion	ft			
Ground Surface Elev.					▽ After	DaysHrs.			
6S054i055R126.4					N/A				
4 E. Foundation					544.5				
373+34					558.5				
90.0ft RT									
561.0									
Dark Gray Moist SILTY CLAY (Fill)					Gray Fine to Medium SAND (continued)				
					Gray Medium to Coarse SANDY GRAVEL Washed				
					With 3" seam Gray Moist Clay Loam Washed				
					Poor Recovery Washed				
					Boring Completed				
					Gray Moist SILTY CLAY LOAM with Very Fine Gray Sand Seams				
					Gray Fine to Medium SAND				
					Gray Medium to Coarse SAND with Some 1/2" Pea Gravel				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\SOIL\SIGINT FILES\054 LOGANS\SIGN TRUSS BORINGS\SIGN TRUSS 6S054i055R126.4.GPJ Data Template D6TEMP.LT.GDT Date Printed 8/12/16  
Latitude 40.10222N Longitude 89.29233W Datum NAD83 Job Number C60-009-17



# SOIL BORING LOG

ROUTE I-55 DESCRIPTION Sign Truss I-55 NBL at MM 126.7 LOGGED BY M. Tappan  
SECTION D-6 OVD SIN STR REPL17-09 LOCATION SW 1/4, SEC. 22, TWP. 20N, RNG. 3W, 3 PM  
COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO.	DEPT	BLOW	UCS	MOS	Surface Water Elev.	DEPT	BLOW	UCS	MOS
Station	H	S	Qu	T	ft	H	S	Qu	T
6S054i55R126.7					N/A				
5 E. Foundation					N/A				
Station 391+84									
Offset 50.0ft RT									
Ground Surface Elev. 555.3 ft	(ft)	/6"	(tsf)	(%)		(ft)	/6"	(tsf)	(%)
Gray and Brown Moist SILTY CLAY LOAM (Fill)					Gray Moist CLAY LOAM (Till) Washed (continued)				
	1				Washed				
	3	2.0	18						
	4	B							
Grayish Brown					Gray Moist CLAY LOAM (Till)				
	2								
	4	1.0	17						
	2	S-13							
549.30									
Olive Brown and Gray Moist SILTY CLAY (Fill) Poor Recovery									
	1								
	3	.70	21						
	2	P							
546.80									
Gray and Brown Wet SAND LOAM									
	0								
	1	.0	22						
	1	Slump							
544.30					Boring Completed				
Grayish Brown Medium SAND					Sta.'s and Elev.'s Provided by Dist. 6 Surveys Ref. Stationing to I-55 Roadway				
	0								
	1								
	1								
Gray Medium SANDY GRAVEL Washed									
	1								
	2								
	2								
With 4" Seam Light Olive Gray Very Moist Silty Clay Washed									
	4								
	2								
	2								
536.80									
Gray Moist CLAY LOAM (Till) Washed									
	0								
	0	1.2	15						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\SOILS\GINT FILES\064 LOGANSIGN TRUSS BORINGS\SIGN TRUSS 6S054i055R126.7.GPJ Data Template D6TEMPLT.GDT Date Printed 8/12/16  
Latitude 40.102018N Longitude 89.249359W Datum NAD83 Job Number C60-009-17



# SOIL BORING LOG

ROUTE I-55 DESCRIPTION Sign Truss I-55 NBL at MM 126.7 LOGGED BY M. Tappan  
SECTION D-6 OVD SIN STR REPL17-09 LOCATION SW 1/4, SEC. 22, TWP. 20N, RNG. 3W, 3 PM  
COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO.	DEPT	BLOW	UCS	MOS	Surface Water Elev.	DEPT	BLOW	UCS	MOS
Station	H	S	Qu	T	ft	H	S	Qu	T
6S054i55R126.7					N/A				
6 W. Foundation					N/A				
Station 392+12									
Offset 91.0ft LT									
Ground Surface Elev. 558.9 ft	(ft)	/6"	(tsf)	(%)		(ft)	/6"	(tsf)	(%)
Gray and Brown Moist SILTY CLAY (Fill)					Gray Fine SANDY GRAVEL Washed (continued)				
	1								
	3	2.2	17						
	5	B			536.90				
Brown and Gray with Some Loam Seams					Gray Very Moist CLAY LOAM (Till)				
	2								
	2	2.4	16						
	8	B							
549.90					Light Tannish Gray Moist CLAY LOAM (Till) Washed				
Dark Gray Moist SILTY CLAY (Fill)									
	2								
	6	3.7	22						
	7	B							
549.90									
Very Dark Gray Moist SILTY CLAY					Gray Moist CLAY LOAM (Till)				
	1								
	4	1.7	26						
	4	B							
544.90									
Brown and Gray					Boring Completed				
	1								
	1	.80	28						
	2	B							
543.40									
Gray Wet LOAM with Gray Wet Medium to Coarse SAND at 15.5'									
	0								
	1	.10	24						
	2	B							
543.40									
Gray Fine SANDY GRAVEL Washed									
	1								
	1								
	3								
Washed									
	2								
	3								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated) Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name: S:\SOILS\GINT FILES\064 LOGANSIGN TRUSS BORINGS\SIGN TRUSS 6S054i055R126.7.GPJ Data Template D6TEMPLT.GDT Date Printed 8/12/16  
Latitude 40.102018N Longitude 89.251103W Datum NAD83 Job Number C60-009-17



# SOIL BORING LOG

Date 12-21/12-28-16

ROUTE I-72 DESCRIPTION Sign Truss I-72 EBL 1 Mile S. of Trumpet Interchange LOGGED BY M. Tappan

SECTION N/A LOCATION W 1/2, SEC. 2, TWP. 4S, RNG. 8W, 4 PM

COUNTY Pike DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 6S0751072R003.1  
 Station \_\_\_\_\_

BORING NO. 1 N. Foundation  
 Station 100+21  
 Offset 10.5ft LT  
 Ground Surface Elev. 464.4 ft

DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)
------------	-----------	-----------	-----------	-------------	------------	-----------	-----------	-----------

Gray and Tan Moist LOAM to CLAY LOAM (Fill)	1			Gray Wet Fine to Med SAND FREE WATER Auto Hammer Broke (continued)	3			
	1	1.0	21	Washed	3			
	3	B			3			
Light Brown	1				1			
	2	.90	14	Gray Med SAND w/ some Fine Gravel	3			
	4	B			3			
	2							
	6	1.7	22					
	5	B						
Gray and Brown Moist CLAY LOAM (Fill) with Angular Cherty Gravel to Gray Moist CLAY LOAM (Fill)	3				7			
	4	1.9	24	Gray Med to Coarse SAND w/ some 1/4" Pea Gravel washed	8			
	5	S-13			10			
Dark GRay Moist SILTY CLAY (Fill)				Boring Complete				
	1							
Dk Gray V. Moist SILTY CLAY LOAM to SILTY CLAY	2	.60	28					
	2	B						
Gray Wet SILTY CLAY w/ Loam seams and Woody Organics	0							
	1	.10	30					
	1	B						
	0							
Gray Wet Fine to Med SAND FREE WATER Auto Hammer Broke	1							
	2							
	3							
Gray Wet Fine to Med SAND 12-28-16	2							
	2							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
 Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name S:\SOIL SIGINT FILES\075 PIKE\SIGN TRUSS BORINGS\SIGN TRUSS I-72 EBL SN 6S0751072R003.1.GPJ Data Template D6TEMPLT.GDT Date Printed 2/8/17  
 Latitude 39D 44.230'N Longitude 91D 18.483'W Datum NAD83 Job Number N/A



# SOIL BORING LOG

Date 12/28/16

ROUTE I-72 DESCRIPTION Sign Truss I-72 EBL 1 Mile S. of Trumpet Interchange LOGGED BY M. Tappan

SECTION N/A LOCATION W 1/2, SEC. 2, TWP. 4S, RNG. 8W, 4 PM

COUNTY Pike DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 6S0751072R003.1  
 Station \_\_\_\_\_

BORING NO. 2 S. Foundation  
 Station 100+00  
 Offset 43.0ft RT  
 Ground Surface Elev. 464.8 ft

DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)	DESCRIPTION	DEPTH (ft)	BLOW (ft)	UCS (tsf)	MOIST (%)
------------	-----------	-----------	-----------	-------------	------------	-----------	-----------	-----------

Brown Moist SILTY CLAY (Fill) w/ Brown Clay Loam (Till) Seams	2			Tan and Gray Moist Fine SAND (continued)	3			
	4	5.2	13	washed	2			
	4	B			3			
	2				1			
Gray and Brown	4	2.6	17	Gray Dirty Med Sandy Gravel	1			
	4	B			4			
	2							
	3	1.8	21					
Gray Moist SILT LOAM (Fill)	6	S-12						
	2							
Tan and Gray Moist LOAM to SAND LOAM (sample broken)	2		21	Gray Med to Coarse SAND	4			
	2				4			
	3				6			
	1			Boring Complete				
Tan and Gray Moist Fine SAND	1							
	2							
	2							
	0							
Brown Wet Med SAND w/ Gray Silt Loam Seam	1							
	2							
	0							
Brown Med SAND FREE WATER	1							
	1							
	0							
Gray Med SAND	1							
	2							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)  
 Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name S:\SOIL SIGINT FILES\075 PIKE\SIGN TRUSS BORINGS\SIGN TRUSS I-72 EBL SN 6S0751072R003.1.GPJ Data Template D6TEMPLT.GDT Date Printed 2/8/17  
 Latitude 39D 44.22'W Longitude 91D 18.483'W Datum NAD83 Job Number N/A