

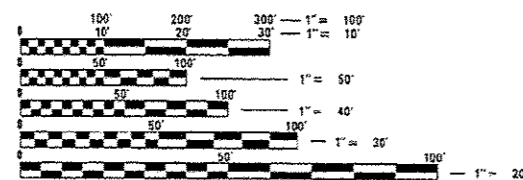
06-13-14 LETTING ITEM 003

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HIGHWAY STANDARDS

701101-04	701422-06
701106-02	701451-02
701400-07	701456-03
701401-08	701602-07
701411-08	701901-03



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  
1-800-892-0123  
OR 811

PROJECT ENGINEER ANNA GHIDINA 671-4466  
PROJECT MANAGER SUSAN DAVIS 671-4476

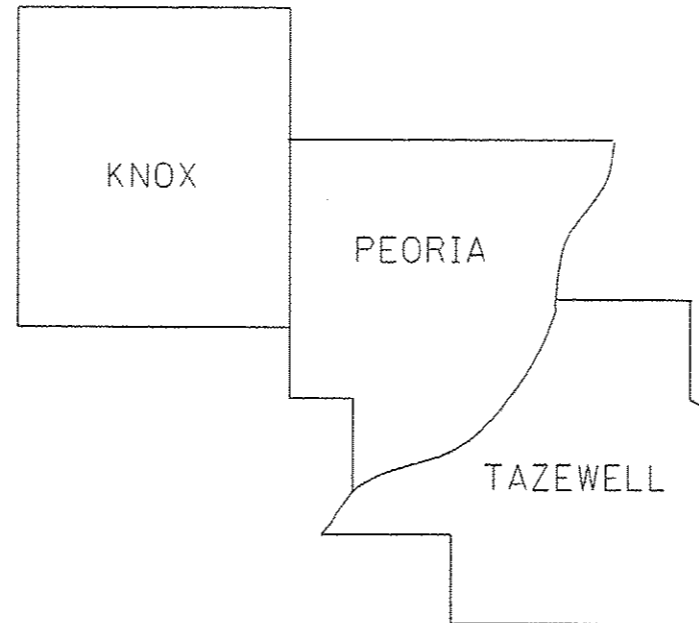
CONTRACT NO. 46314

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

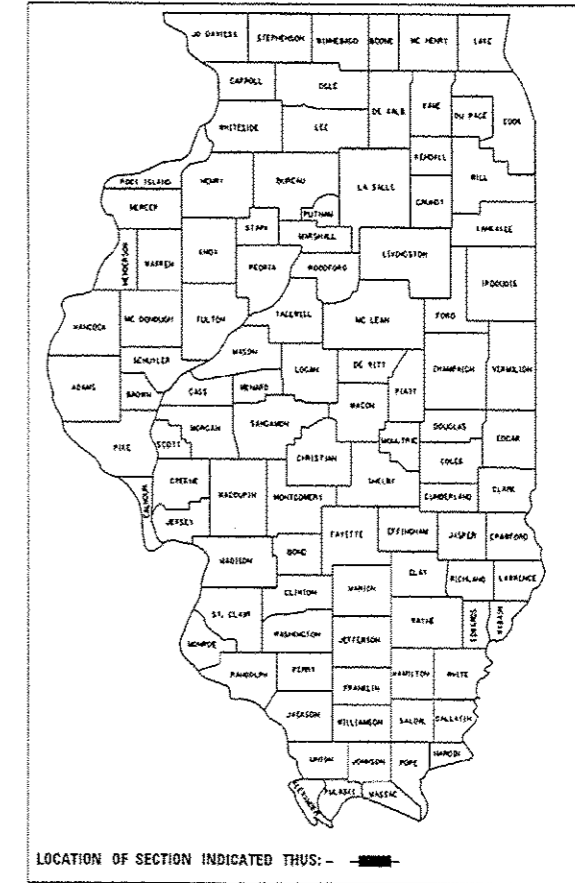
VARIOUS ROUTES  
SECTION D4-4 OVD SIN STR REPL 14-47  
PEORIA, KNOX & TAZWELL COUNTIES

C-60-052-14



OVERHEAD STRUCTURE SIGN REPAIR AND REPLACE

P.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4-4 OVD SIN STR REPL 14-47	VARIOUS	65	1
		ILLINOIS	CONTRACT NO. 46314	



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED March 25 2014  
Justin Mann  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

John P. Baranzelli, PE  
ENGINEER OF DESIGN AND ENVIRONMENT

March 9 2014  
Chris Osman, PE  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				PEORIA	KNOX	TAZEWELL
				100% STATE 0040	100% STATE 0040	100% STATE 0040
67100100	MOBILIZATION	L SUM	1	0.34	0.33	0.33
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	20	8	4	8
70100315	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	EACH	1	1		
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	19	9	3	7
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1			1
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1		1	
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1			1
72000300	SIGN PANEL - TYPE 3	SQ FT	4302.3	2760.5	173.3	1368.5
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	4795.5	3197.5	294.5	1303.5
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4' -0" X 4' -6")	FOOT	554	426		128
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4' -6" X 5' -3")	FOOT	247			247
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	441.5	238.2		203.3
73301840	OVERHEAD SIGN STRUCTURE WALKWAY, CANTILEVER, TYPE A	FOOT	51	34	17	
73302170	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE II-C-A (36" X 5' -6")	FOOT	50	50		

FILE NAME : overhead sign plans.dgn	USER NAME : davis	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLT SCALE : 3/32, 7/888 / in.	CHECKED -	REVISED -	VAR			D4-4 DVD SIN STR REPL 14-4T	VAR	65	2	
PLT DATE : 3/21/2014	DATE -	REVISED -	CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				PEORIA	KNOX	TAZEWELL
				100% STATE 0040	100% STATE 0040	100% STATE 0040
73302210	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE III-C-A (36" X 7' -0")	FOOT	32.5		32.5	
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	217.9	124.6	7.7	85.6
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	11	6		5
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	3	2	1	
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	47	26	1	20
* X0324181	DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	2	1		1
X5210005	TIGHTEN SUPPORT ANCHOR BOLT	EACH	25	25		
X7200075	REMOVE AND REINSTALL SIGN PANEL	SQ FT	560			560
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	22	10	8	4
X7330066	REPAIR HANDRAIL LOCKING PIN CONNECTION	EACH	6		6	
X7330068	TIGHTEN CANTILEVER CONNECTION	EACH	1		1	
X7330090	METAL SCREEN	EACH	7	2	1	4
X8140232	REPLACE HANDHOLE COVER BOLT	EACH	8	4	4	
X8140234	REPLACE HANDHOLE COVER	EACH	2	1	1	

14

\* SPECIALITY ITEM

FILE NAME : overhead sign plans.dgn	USER NAME : davisss	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b> CONTRACT NO. 46314	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE : 393.7888 / in.	CHECKED -	REVISED -	VAR			04-4 OVD SIN STR REPL 14-47	VAR	65	3	
PLOT DATE : 3/21/2014	DATE -	REVISED -	CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT				





Location No.	4-05
Structure No.	4C048U034L005.30
County / Route	KNOX US 34
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	150.5
72000300	SIGN PANEL TYPE 3	SQ FT	99
73301840	OVERHEAD SIGN STRUCTURE WALKWAY, CANTILEVER, TYPE A	FOOT	17
73302210	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE III-C-A (36" X 7'-0")	CU YD	32.5
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	7.7
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	1

Location No.	4-06
Structure No.	4C048U150L011.90
County / Route	KNOX US 150
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	2

Location No.	4-07
Structure No.	4C072I474L000.40
County / Route	PEORIA I 474
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	125
72000300	SIGN PANEL TYPE 3	SQ FT	130
73301840	OVERHEAD SIGN STRUCTURE WALKWAY, CANTILEVER, TYPE A	FOOT	17
73302170	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE II-C-A (36" X 5'-6")	FOOT	25
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	6.9
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	1

Location No.	4-08		
Structure No.	4C072I474R000.10		
County / Route	PEORIA I 474		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	125
72000300	SIGN PANEL TYPE 3	SQ FT	130
73301840	OVERHEAD SIGN STRUCTURE WALKWAY, CANTILEVER, TYPE A	FOOT	17
73302170	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE II-C-A (36" X 5'-6")	FOOT	25
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	6.9
73600200	REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER	EACH	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	1

Location No.	4-10		
Structure No.	4C072U150R024.70		
County / Route	PEORIA US 150		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X8140232	REPLACE HANDHOLE COVER BOLT	EACH	4
X8140234	REPLACE HANDHOLE COVER	EACH	1
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	2
X5210005	TIGHTEN SUPPORT ANCHOR BOLT	EACH	12

Location No.	4-11		
Structure No.	4C072U150R024.90		
County / Route	PEORIA US 150		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X5210005	TIGHTEN SUPPORT ANCHOR BOLT	EACH	12

Location No.	4-13
Structure No.	4S048U034L008.00
County / Route	KNOX US 34
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X8140232	REPLACE HANDHOLE COVER BOLT	EACH	4
X8140234	REPLACE HANDHOLE COVER	EACH	1
X7330066	REPAIR HANDRAIL LOCKING PIN CONNECTION	EACH	1
Z0052394	REPLACE U-BOLT	EACH	1
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	2
#4002174	REPLACE HANDRAIL ATTACH BOLTS	EACH	2

Location No.	4-14
Structure No.	4S072IO74L089.40
County / Route	PEORIA I 74
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X7330090	METAL SCREEN	EACH	1
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	3

Location No.	4-15
Structure No.	4S072IO74L089.70
County / Route	PEORIA I 74
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X7330090	METAL SCREEN	EACH	1
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	3



Location No.	4-16		
Structure No.	4S0721074R085.90		
County / Route	PEORIA I 74		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	86
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	19.6
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	510
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	120
72000300	SIGN PANEL TYPE 3	SQ FT	343.75
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	27.5

Location No.	4-17		
Structure No.	4S0721074R086.30		
County / Route	PEORIA I 74		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	85
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	20.4
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	300
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	502.75
72000300	SIGN PANEL TYPE 3	SQ FT	487.5
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	53
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

FILE NAME : overhead sign plans.dgn	USER NAME : davisso	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SCHEDULE OF OVERHEAD SIGN STRUCTURE</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/8" = 1'-0"	DRAWN -	REVISED -			VAR	04-4 OVD SIGN STR REPL 14-47	VARIOUS	65	9	
	PLOT DATE : 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

Location No.	4-18		
Structure No.	4S072I474L001.60		
County / Route	PEORIA I 474		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	65
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	19.2
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	300
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	625.75
72000300	SIGN PANEL TYPE 3	SQ FT	597.75
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	45
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

Location No.	4-19		
Structure No.	4S072I474L007.00		
County / Route	PEORIA I 474		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	70
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	20.6
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	300
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	424
72000300	SIGN PANEL TYPE 3	SQ FT	285.25
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	31
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

Location No.	4-20		
Structure No.	4S072I474R004.92		
County / Route	PEORIA I 474		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	50
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	11.4
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	100
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	191.5
72000300	SIGN PANEL TYPE 3	SQ FT	267
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	34
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

Location No.	4-21		
Structure No.	4S072S006L000.50		
County / Route	PEORIA IL 6		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	70
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	19.6
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	200
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	455.5
72000300	SIGN PANEL TYPE 3	SQ FT	417
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	47.8
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

Location No.	4-22
Structure No.	4S072U150L021.15
County / Route	PEORIA US 150
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X7330090	METAL SCREEN	EACH	1
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	2
X5210005	TIGHTEN SUPPORT ANCHOR BOLT	EACH	1
X0324181	DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE	EACH	1
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	238
72000300	SIGN PANEL TYPE 3	SQ FT	102.25

Location No.	4-23
Structure No.	4S090I074R094.80
County / Route	TAZEWELL I 74
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
Z0052394	REPLACE U-BOLT	EACH	4
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	3

Location No.	4-24
Structure No.	4S090I074R095.00
County / Route	TAZEWELL I 74
Scope of work	

Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X7330090	METAL SCREEN	EACH	2
Z0052394	REPLACE U-BOLT	EACH	28
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	3

Location No.	4-25		
Structure No.	4S0901074R095.50		
County / Route	TAZEWELL I 74		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
X7330090	METAL SCREEN	EACH	2
Z0052394	REPLACE U-BOLT	EACH	48
X7200085	REPLACE AND TIGHTEN SIGN MOUNTING CLIPS PER EACH SIGN	EACH	1

Location No.	4-26		
Structure No.	4S0901074R098.30		
County / Route	TAZEWELL I 74		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	84
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	20.4
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	100
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	324.5
72000300	SIGN PANEL TYPE 3	SQ FT	318.5
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	25
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

Location No.	4-29		
Structure No.	4S0901474R012.20		
County / Route	TAZEWELL I 474		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	68
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	12
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	150
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	426.5
72000300	SIGN PANEL TYPE 3	SQ FT	372.75
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	34
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

Location No.	4-30		
Structure No.	4S090I474R013.10		
County / Route	TAZEWELL I 474		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	79
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	20.8
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	150
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	363
72000300	SIGN PANEL TYPE 3	SQ FT	406.5
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	48.75
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

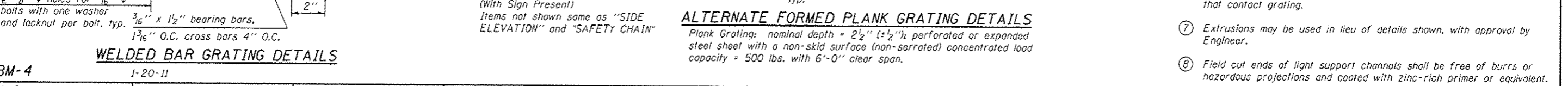
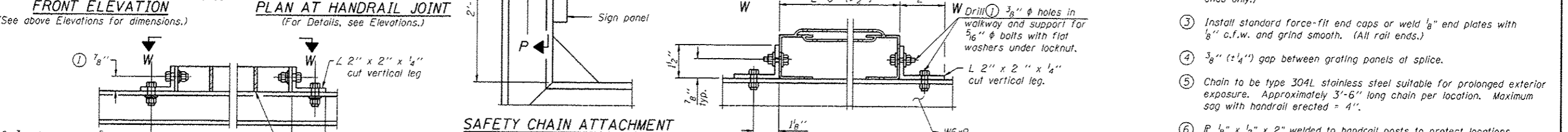
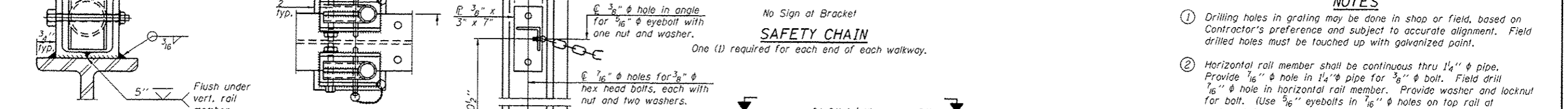
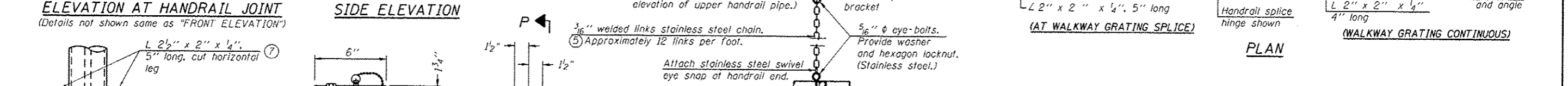
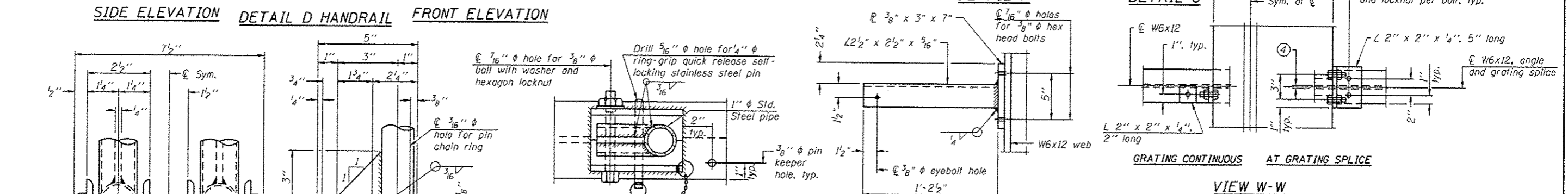
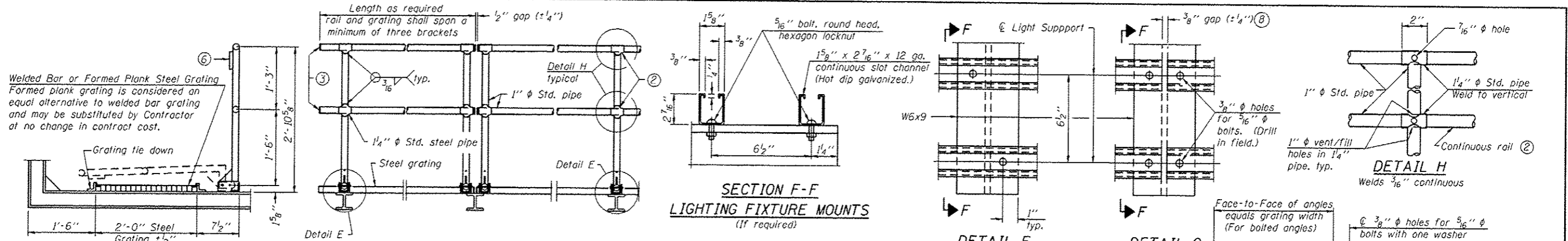
Location No.	4-31		
Structure No.	4S090S008B001.10		
County / Route	TAZEWELL IL 8		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	84
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	21.2
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	300
X7200075	REM AND REINSTALL SIGN PANEL	SQFT	560
72000300	SIGN PANEL TYPE 3	SQ FT	66
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	48
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

FILE NAME : overhead sign plans.dgn	USER NAME : davisss	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SCHEDULE OF OVERHEAD SIGN STRUCTURE</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 39.3781 / in.	CHECKED - DATE -	REVISED - REVISED -			VAR	D4-4 OVD SIGN STR REPL 14-47	VARIOUS	65	14	
	PLOT DATE : 3/21/2014					SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
											CONTRACT NO. 46314
ILLINOIS FED. AID PROJECT											

Location No.	4-32		
Structure No.	4S090U150L005.50		
County / Route	TAZEWELL US 150		
Scope of work			
Paycode	Payitem	Unit	Quantity
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	59
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	11.2
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	100
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	189.5
72000300	SIGN PANEL TYPE 3	SQ FT	204.75
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	47.5
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	4

FILE NAME : overhead sign plans.dgn	USER NAME : doviso	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SCHEDULE OF OVERHEAD SIGN STRUCTURE</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/4"=1'-0"	CHECKED -	REVISED -			VAR	B4+4 OVD SIN STR REPL 14-47	VARIOUS	65	15	
	PLOT DATE : 3/21/2014	DATE -	REVISED -			SCALE:	SHEET OF SHEETS	STA.	TO STA.	CONTRACT NO, 46314	
ILLINOIS FED. AID PROJECT											





BM-4

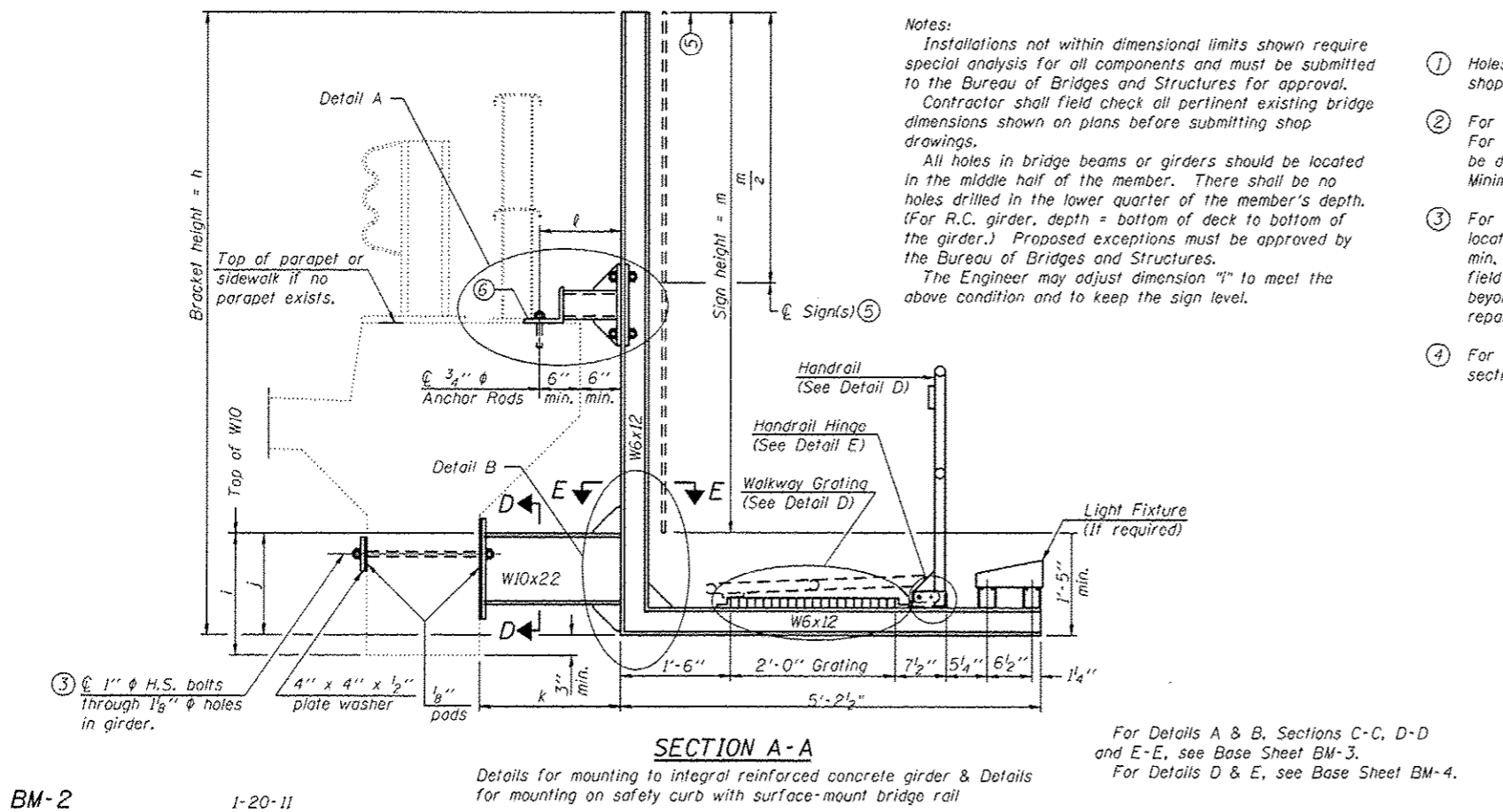
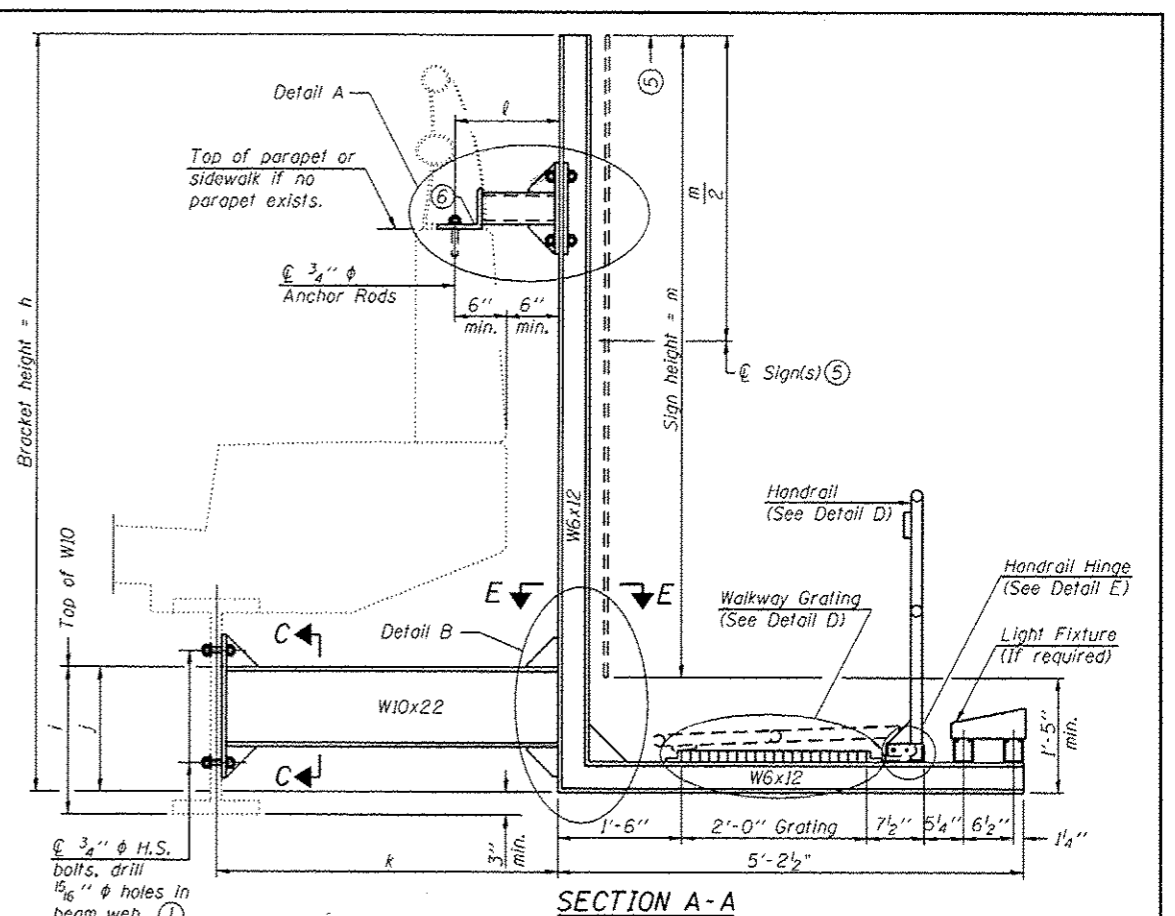
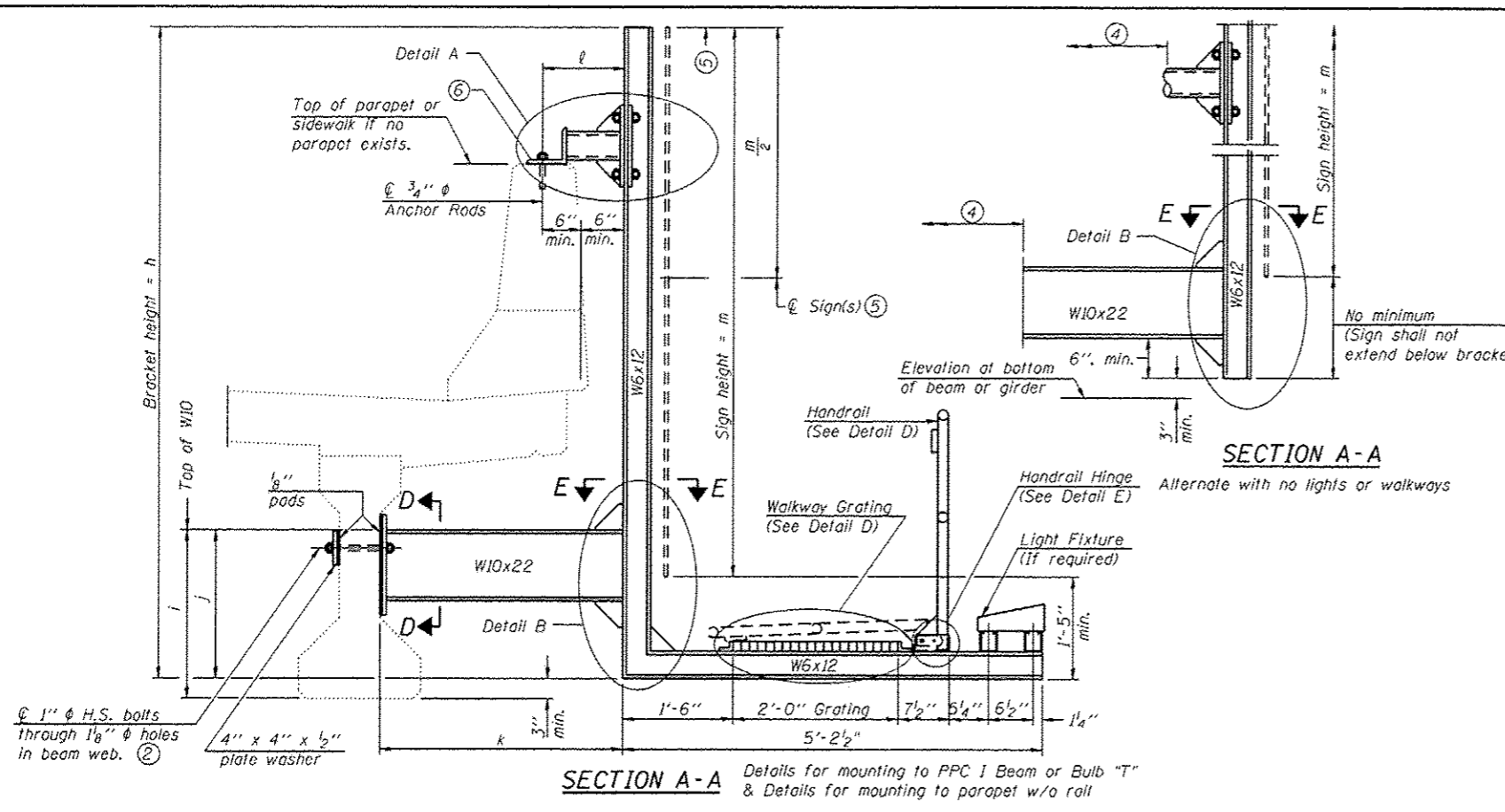
1-20-11

WELDED BAR GRATING DETAILS

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE MOUNT SIGN STRUCTURES WALKWAY DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED	REVISED			VAR	04-4 DVD STR STR REPL 14-47	VARIOUS	65	16	
PLOT SCALE	DRAWN	REVISED	REVISED			CONTRACT NO. 46314					
PLOT DATE	CHECKED	REVISED	REVISED			ILLINOIS FED. AID PROJECT					

- NOTES**
- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment. Field drilled holes must be touched up with galvanized paint.
  - Horizontal rail member shall be continuous thru 1 1/4" pipe. Provide 7/16" hole in 1 1/4" pipe for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 1/6" holes on top rail at ends only.)
  - Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends.)
  - 3/8" (±1/4") gap between grating panels at splice.
  - Chain to be type 304L stainless steel suitable for prolonged exterior exposure. Approximately 3'-6" long chain per location. Maximum sag with handrail erected = 4".
  - 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
  - Extrusions may be used in lieu of details shown, with approval by Engineer.
  - Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.





Notes:  
 Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval. Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.  
 All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.  
 The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.

- ① Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.
- ② For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.
- ③ For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over 1/4" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.
- ④ For attachment details of 3/2" pipe and W10x22, see other sections as applicable.
- ⑤ Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x12 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)
- ⑥ For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

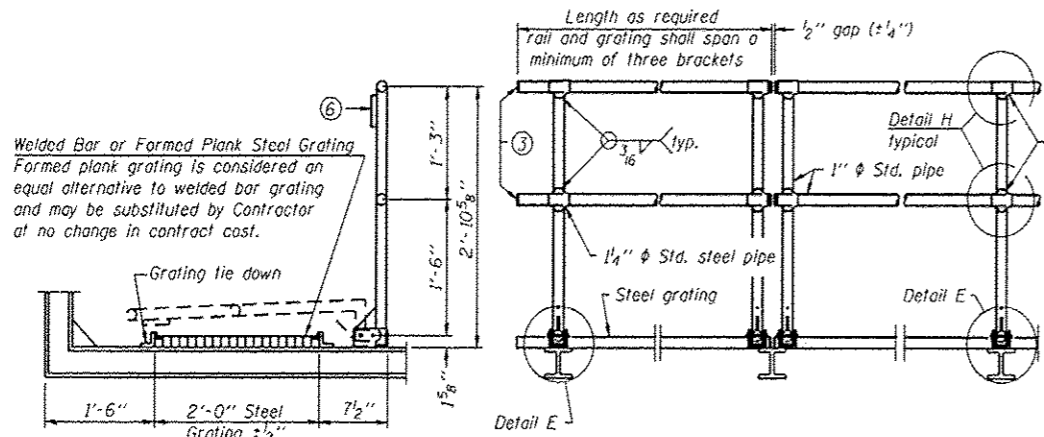
Structure Number	Station	h	i	j	k max. (10'-0" max.)	ℓ max. (8'-0" max.)	m (15'-0" max.)
4-04		6'-11"	1'-8"	1'-5"	3'-10 1/4"	1'-7"	5'-6"

BM-2

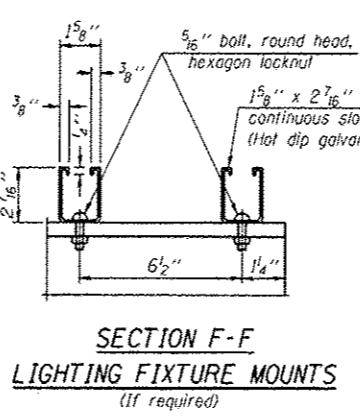
1-20-11

Details for mounting to integral reinforced concrete girder & Details for mounting on safety curb with surface-mount bridge rail

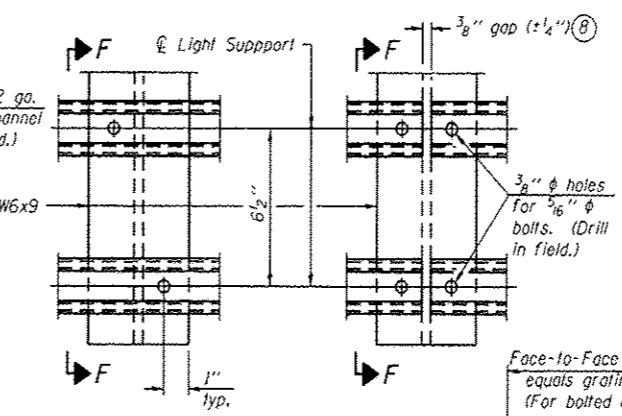
For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3. For Details D & E, see Base Sheet BM-4.



**SIDE ELEVATION DETAIL D HANDRAIL FRONT ELEVATION**



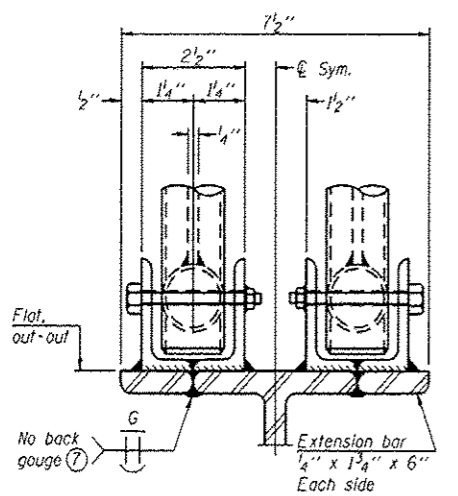
**SECTION F-F LIGHTING FIXTURE MOUNTS (if required)**



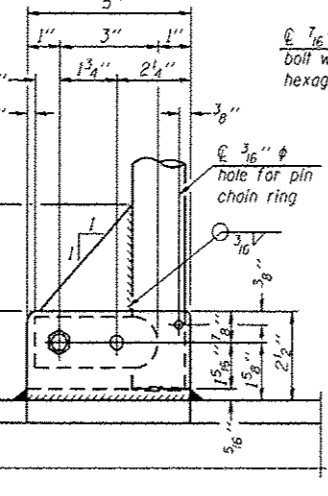
**DETAIL F**

**DETAIL G**

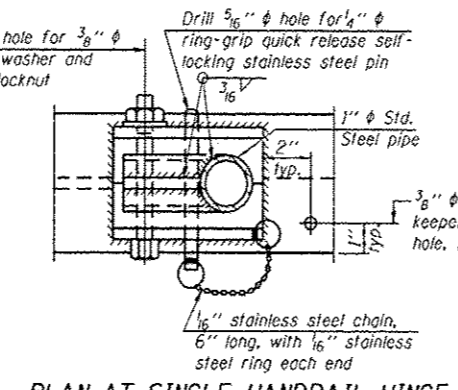
**DETAIL H**



**ELEVATION AT HANDRAIL JOINT**  
(Details not shown same as "FRONT ELEVATION")



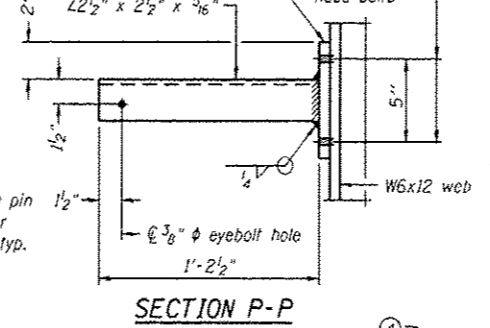
**SIDE ELEVATION**



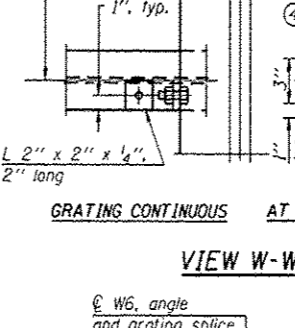
**PLAN AT SINGLE HANDRAIL HINGE**

**DETAIL E**

Field drill 3/8" hole for 5/16" eye-bolt. (At approximately elevation of upper handrail pipe.)

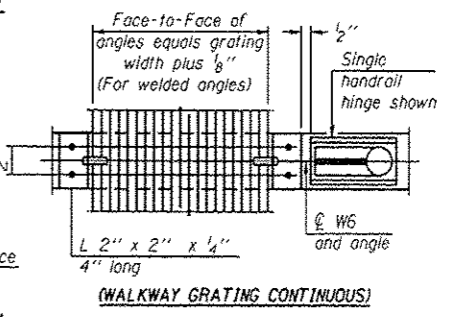


**SECTION P-P**



**GRATING CONTINUOUS AT GRATING SPLICE**

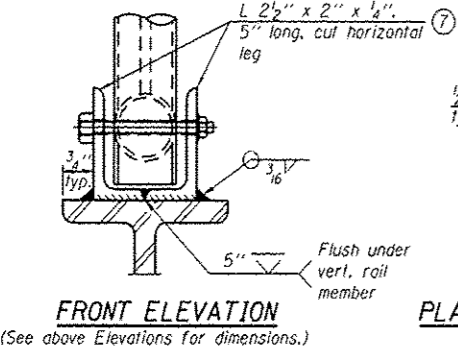
**VIEW W-W**



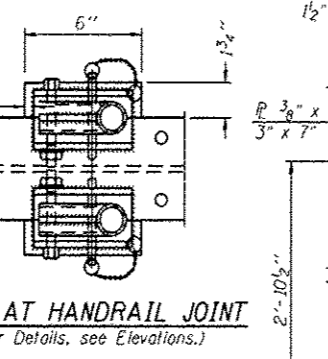
**PLAN**

**NOTES**

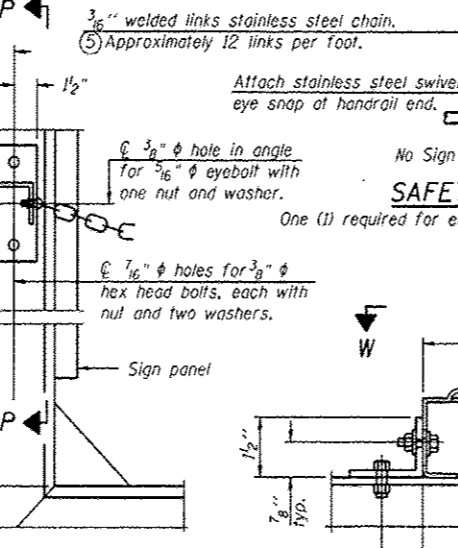
- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment. Field drilled holes must be touched up with galvanized paint.
- Horizontal rail member shall be continuous thru 1 1/4" pipe. Provide 7/16" hole in 1 1/4" pipe for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" holes on top rail at ends only.)
- Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends.)
- 3/8" (± 1/4") gap between grating panels at splice.
- Chain to be type 304L stainless steel suitable for prolonged exterior exposure. Approximately 3'-6" long chain per location. Maximum sag with handrail erected = 4".
- 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Extrusions may be used in lieu of details shown, with approval by Engineer.
- Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



**FRONT ELEVATION**  
(See above Elevations for dimensions.)

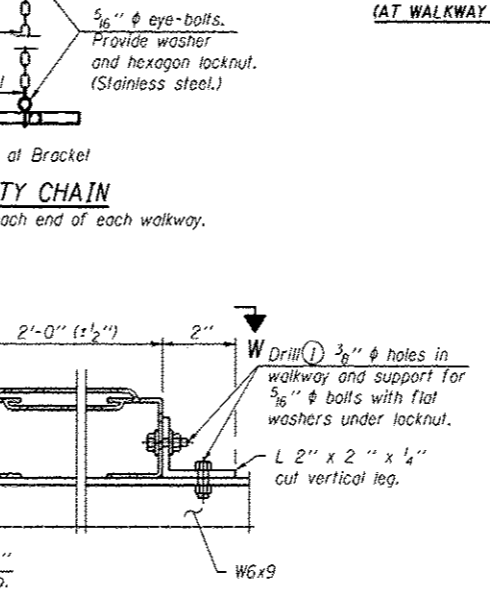


**PLAN AT HANDRAIL JOINT**  
(For Details, see Elevations.)



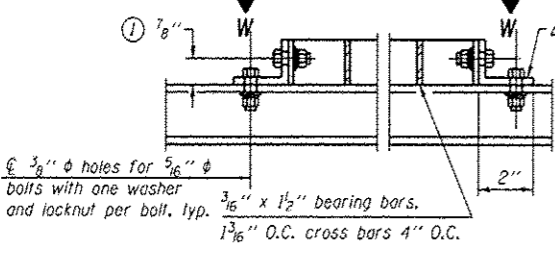
**SAFETY CHAIN ATTACHMENT**

(With Sign Present)  
Items not shown same as "SIDE ELEVATION" and "SAFETY CHAIN"



**ALTERNATE FORMED PLANK GRATING DETAILS**

Plank Grating: nominal depth = 2 1/2" (± 1/2"); perforated or expanded steel sheet with a non-skid surface (non-serrated) concentrated load capacity = 500 lbs. with 6'-0" clear span.

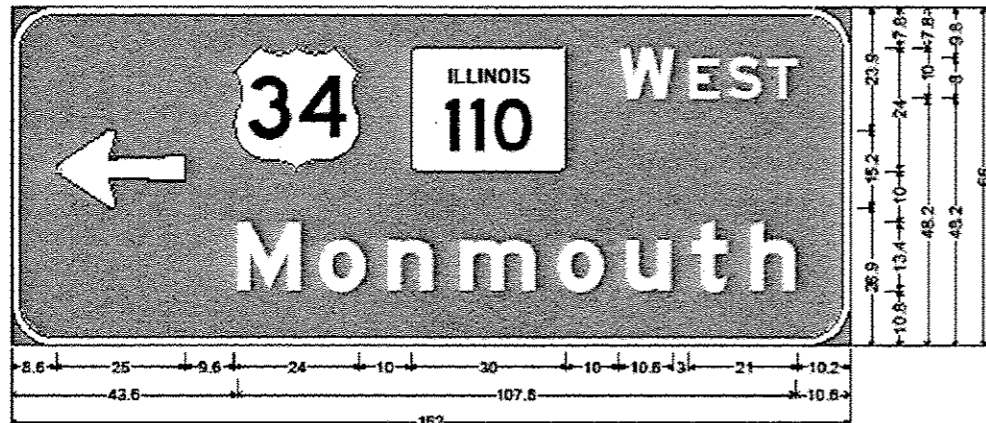


**WELDED BAR GRATING DETAILS**

BM-4

1-20-11

FILE NAME : overhead sign plans.dgn	USER NAME : davis	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE MOUNT SIGN STRUCTURES WALKWAY DETAILS	F.A. RTE. VAR	SECTION D4-4 0-V SIN STR REPL 14-47	COUNTY VARIOUS	TOTAL SHEETS 65	SHEET NO. 18
Model	PLOT SCALE : 1/8" = 1'-0"	CHECKED - DATE -	REVISED - REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 46314 ILLINOIS FED. AID PROJECT	



9.0" Radius, 1.5" Border, White on Green;  
 Arrow 80 - 25.0" 180"; "W EST" E Mod 2K; "Monmouth" E Mod 2K;  
 Table of letter and object left:

Q	3	W	E	S	T
8.6	43.2	77.2	117.2	130.8	138.2
M	o	n	m	o	u
43.6	59.4	72.6	86.7	105.5	118.7
				t	n
				131.4	142.6

**NOTE:**  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : davisso	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGN</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/4" = 1' / in.	DRAWN -	REVISED -			VAR	04-4 0VD SH STR REPL 14-47	VARIOUS	65	19	
	PLOT DATE : 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

**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' = 3,500 p.s.i.  
fy = 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 Bridge Seat Sealer in accordance with the Standard Specifications.

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

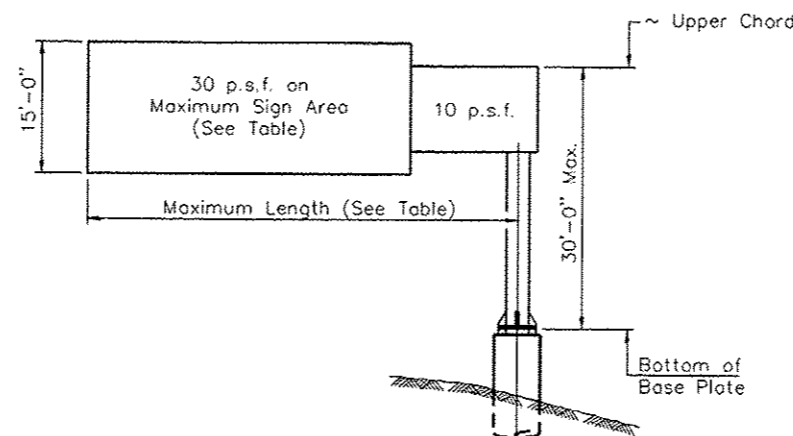
FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	50.0
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	32.5
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	441.45
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	21.46

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	Ds	Total Sign Area
4-05	494+49	III-C-A	32'-6"	805.72	15'-5"	6'-0"	99SF
4-07	416+00	II-C-A	25'-0"	564.79	17'-0"	10'-0"	130SF
4-08	501+00	II-C-A	25'-0"	607.21	13'-5"	10'-0"	130SF

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



**DESIGN WIND LOADING DIAGRAM**

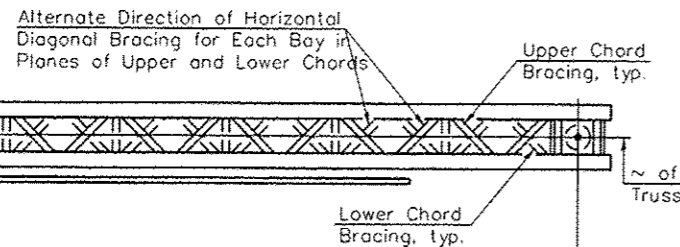
Parameters shown are basis for I.D.O.T. Standards. Installations not within dimensional limits shown require special analysis for all components.

**Note:**

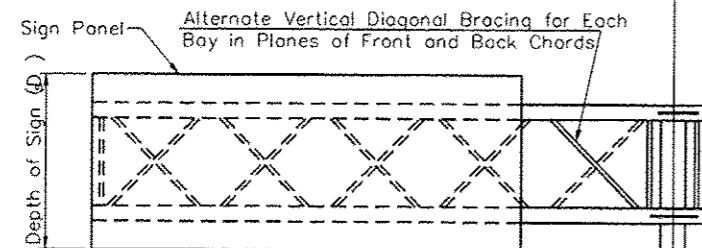
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of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

- ① After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

- \* 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.



**TYPICAL PLAN**  
(Walkway not shown)



**TYPICAL ELEVATION**

Looking in Direction of Traffic

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

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

OSC-A-1

9-15-11

FILE NAME	USER NAME	DESIGNED	REVISED
		---	---
		CHECKED	REVISED
		---	---
		DRAWN	REVISED
		---	---
		CHECKED	REVISED
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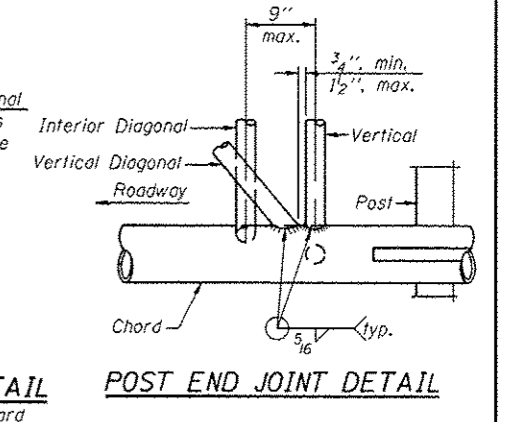
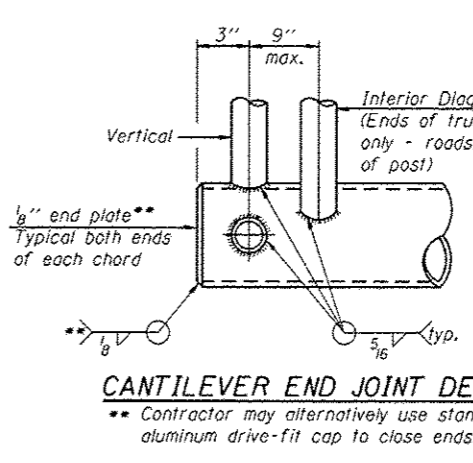
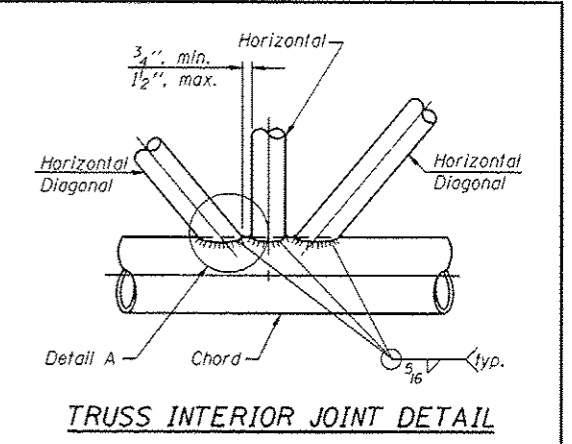
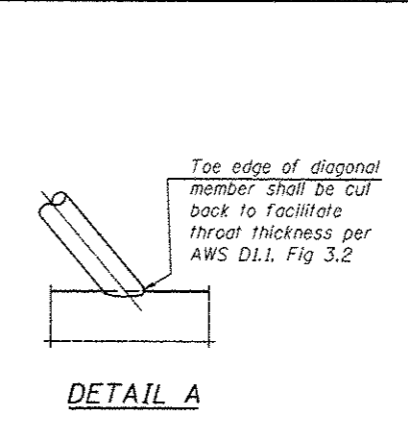
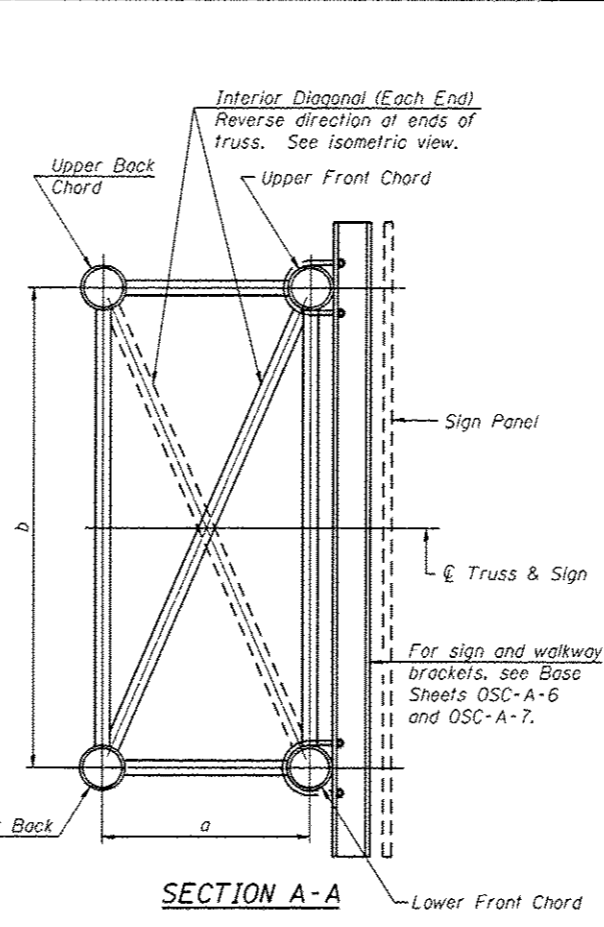
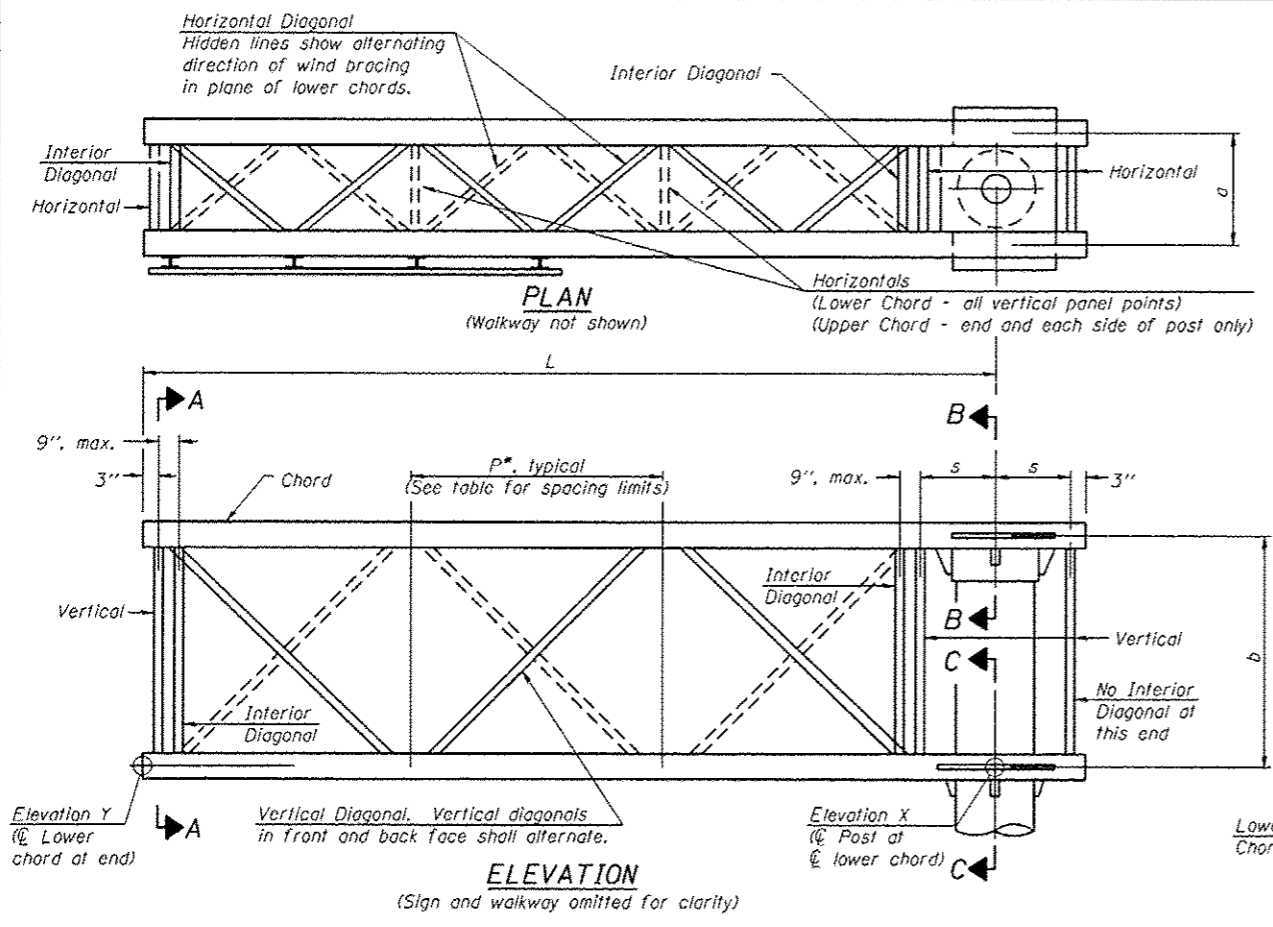
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - GENERAL PLAN &  
ELEVATION ALUMINUM TRUSS & STEEL POST

F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	DR-4 DIV. SIGN STR. REPL. 14-47	VARIOUS	65	20
			CONTRACT NO. 46314	

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

ILLINOIS FED. AID PROJECT



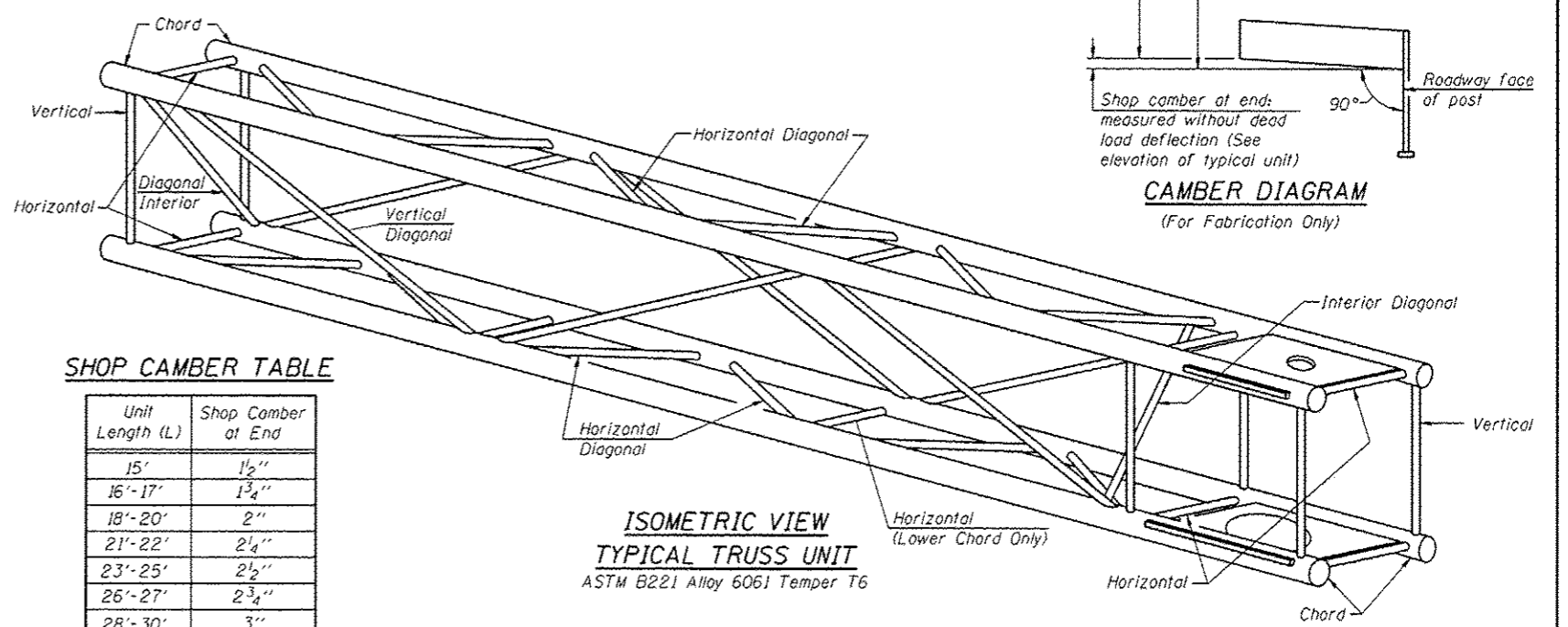
Note: For Section B-B and Section C-C, see Base Sheet OSC-A-3.  
There are twice as many horizontal diagonals as there are vertical diagonals.

**TRUSS UNIT TABLE**

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals: Horizontals: Vertical, Horizontal, and Interior Diagonals	
					O.D.	Wall	O.D.	Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

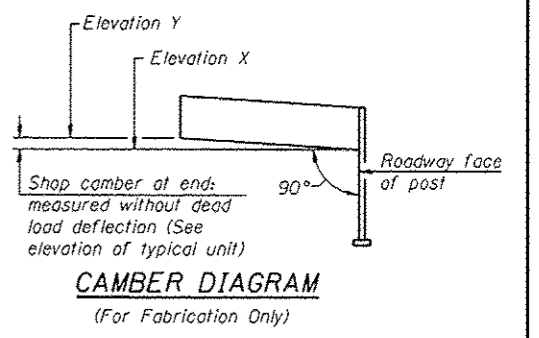
\*P =  $\frac{L - s - 3''}{\# \text{ Panels}}$

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
4-05	494+49	III-C-A	32'-6"	6	5'-1"
4-07	416+00	II-C-A	25'-0"	6	3'-9 3/4"
4-08	501+00	II-C-A	25'-0"	6	3'-9 3/4"



**SHOP CAMBER TABLE**

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"



OSC-A-2 9-15-11

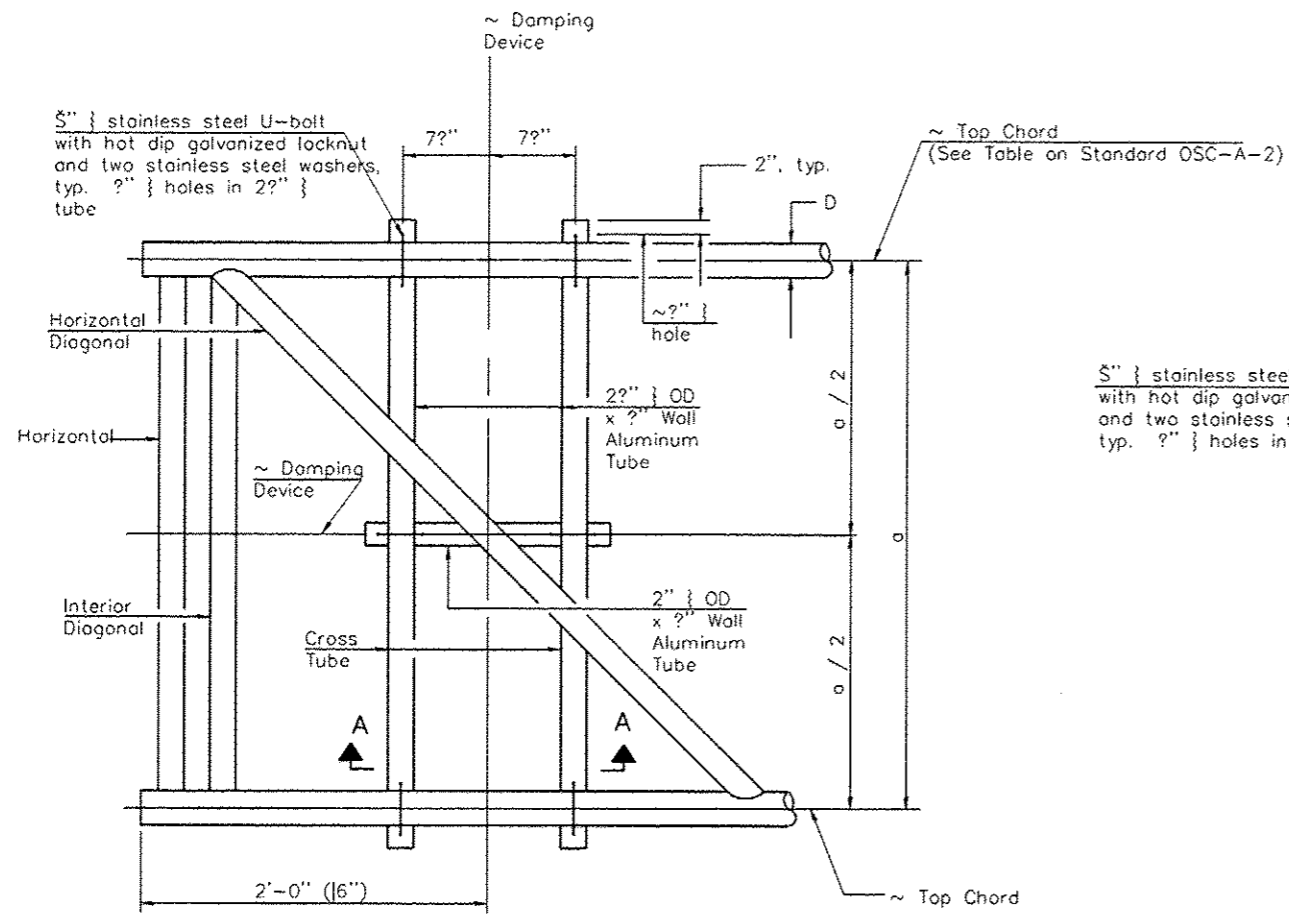
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

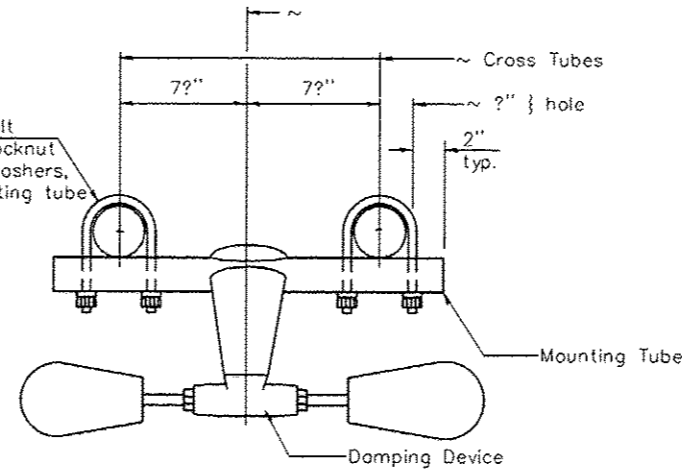
**CANTILEVER SIGN STRUCTURES - TRUSS DETAILS**  
**ALUMINUM TRUSS & STEEL POST**

F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	04-4 DVD SIGN STR REPL 14-47	VARIQUIS	65	21
CONTRACT NO. 46314				
ILLINOIS FED. AID PROJECT				

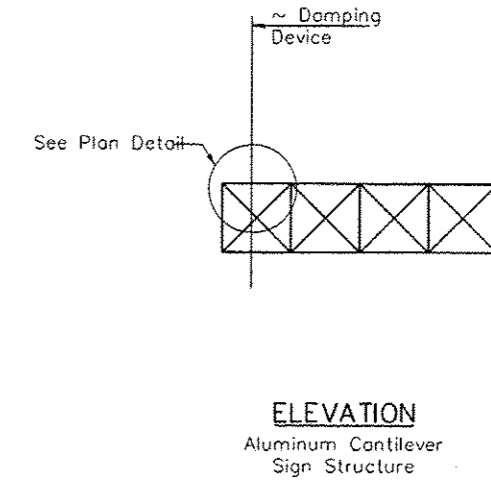




PLAN DETAIL



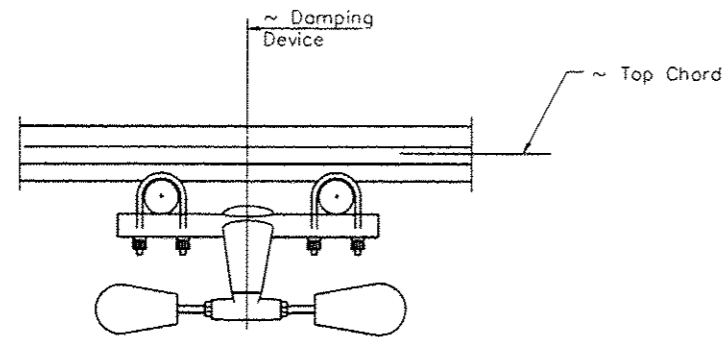
TRUSS DAMPING DEVICE CONNECTION DETAIL



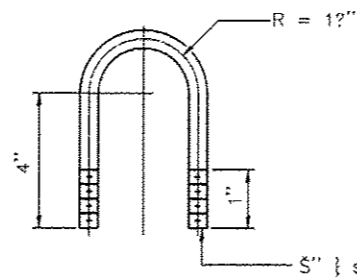
ELEVATION  
Aluminum Cantilever Sign Structure

GENERAL NOTES

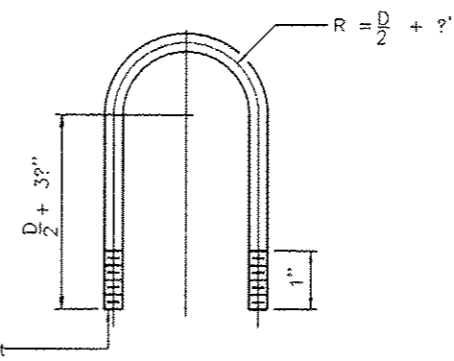
Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum-29" minimum between ends of weights)  
Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6



SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL  
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL  
(Typical)

OSC-A-D

9-15-11

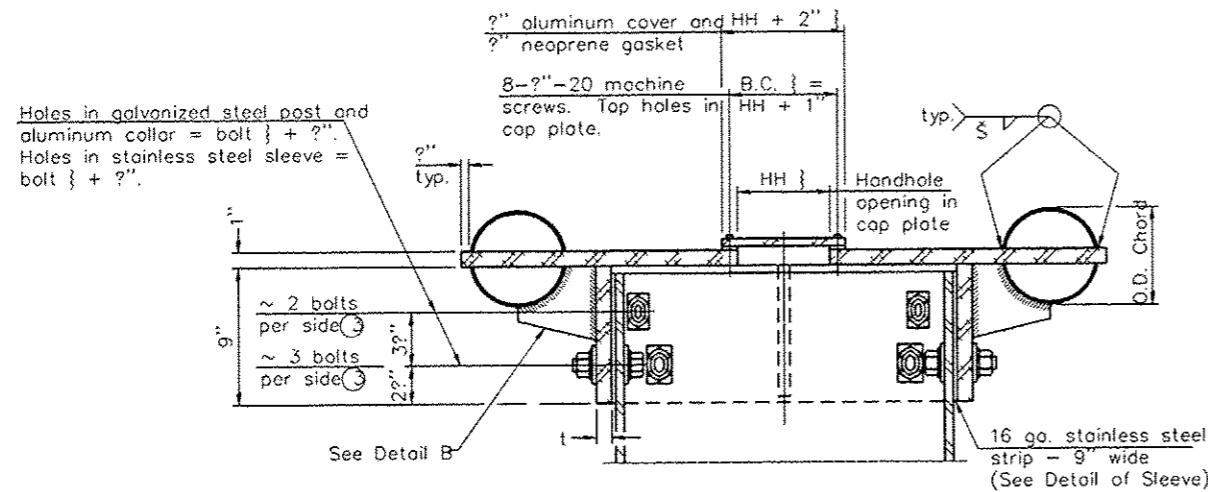
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		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURE  
DAMPING DEVICE

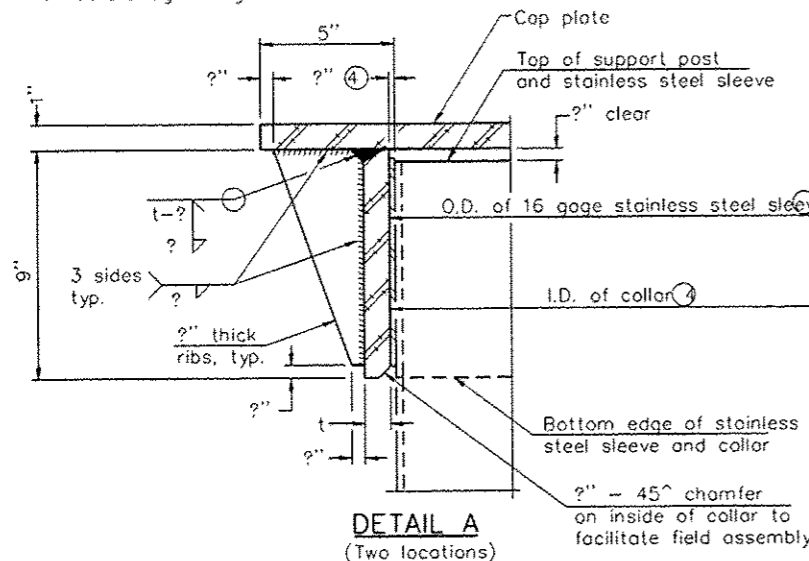
SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4-4 DVD SIGN STR REPL 14-47	VARIOUS	65	22
				CONTRACT NO. 46314
ILLINOIS FED. AID PROJECT				

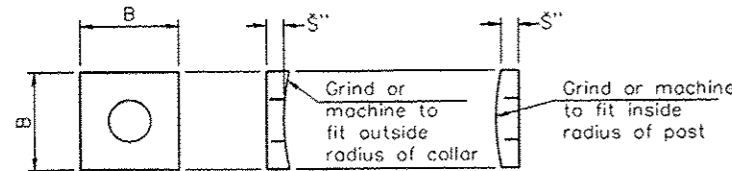


④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus  $\frac{1}{8}$ ". Maximum gap between post and collar at any location equals  $\frac{1}{8}$ " before tightening bolts.

**SECTION B-B**  
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.



**DETAIL A**  
(Two locations)

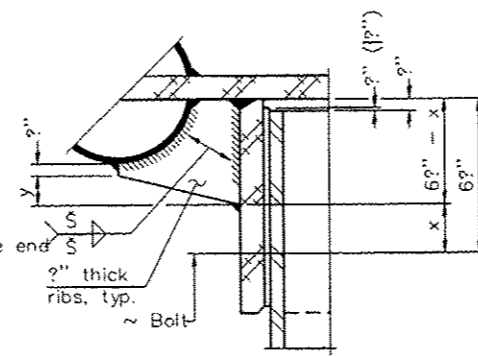
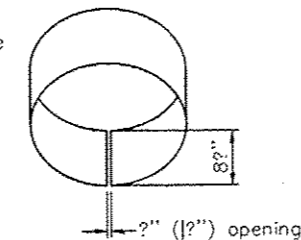


**CONTOURED WASHERS**

Bolt Size	Contoured Washers	
	Hole Dia.	B
$\frac{1}{2}$ "	1"	2 $\frac{1}{2}$ "
1"	1 $\frac{1}{2}$ "	3"
1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	3 $\frac{1}{2}$ "

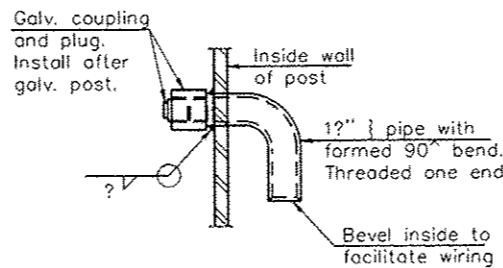
**DETAIL OF STAINLESS STEEL SLEEVE**

Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1 $\frac{1}{2}$ " long at 6" cts. along top edge and at  $\frac{1}{8}$ " opening.

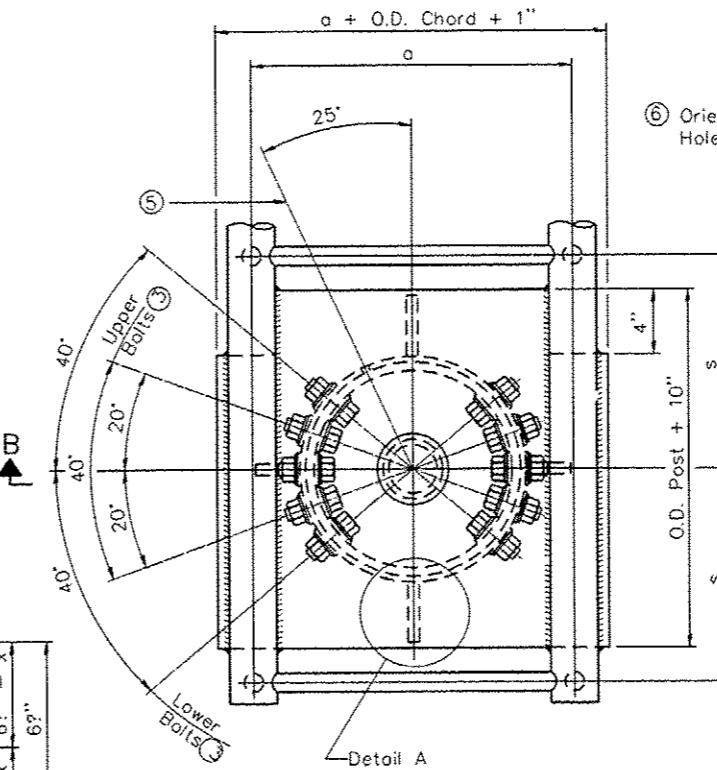


**DETAIL B**

Two locations (For details not shown, see Detail C)

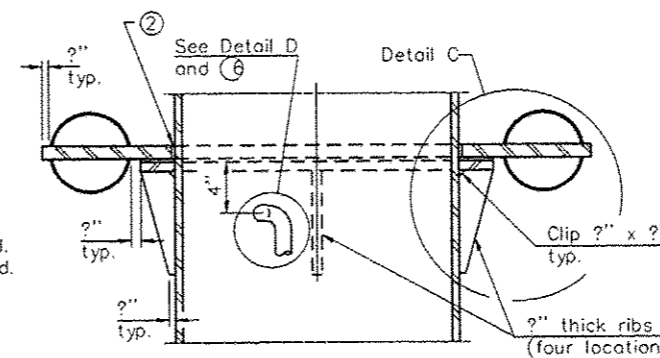


**DETAIL D**

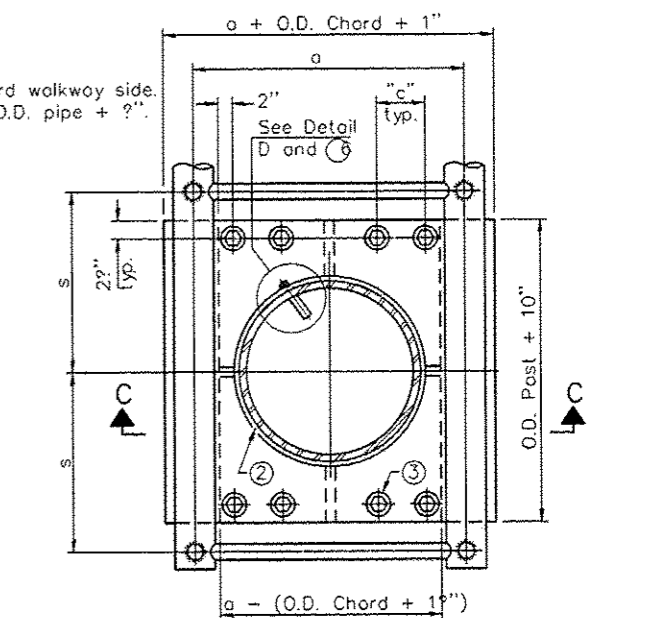


**PLAN VIEW - TOP OF COLUMN**

⑤ Optional full penetration weld in collar. (Two locations maximum... (180° apart)... X-ray or UT 100%)

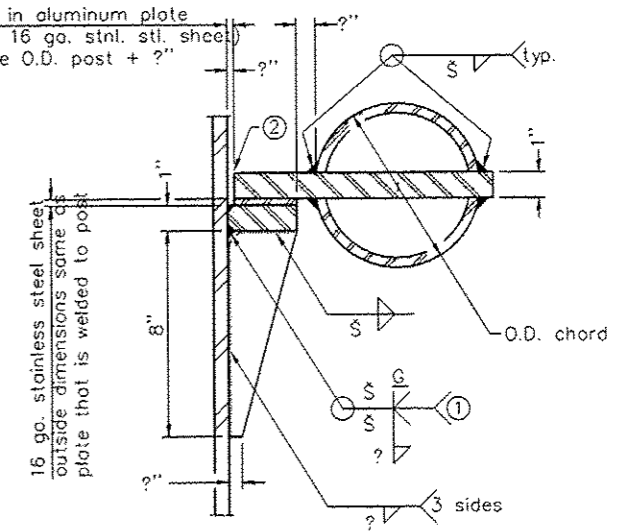


**SECTION C-C**



**SECTION THRU POST ABOVE LOWER CHORDS**

Hole in aluminum plate (and 16 ga. stnl. stl. sheet) to be O.D. post +  $\frac{1}{8}$ ".



**DETAIL C**

- ① Grind top if required to fully seat aluminum plate and stainless steel sheet.
- ② After tightening lower connection bolts, fill gap with non-hardening, silicone couk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.
- ③ Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter	Lower Juncture Bolt Spacing Dimension "c"	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16" (83#/')	$\frac{1}{2}$ "	3 $\frac{1}{2}$ "	8"	$\frac{1}{8}$ "	1 $\frac{1}{2}$ "	2 $\frac{1}{2}$ "
II-C-A	24" (125#/')	1"	3 $\frac{1}{2}$ "	12"	$\frac{1}{8}$ "	2"	1 $\frac{1}{2}$ "
III-C-A (35' max.)	24" (125#/')	1 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	12"	$\frac{1}{8}$ "	2"	1"
III-C-A (>35' to 40')	24" (171#/')	1 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	12"	$\frac{1}{8}$ "	2"	1"

OSC-A-3

9-15-11

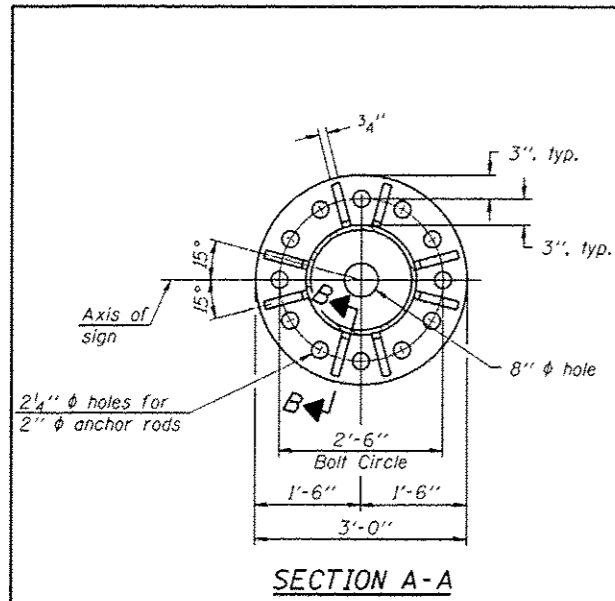
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

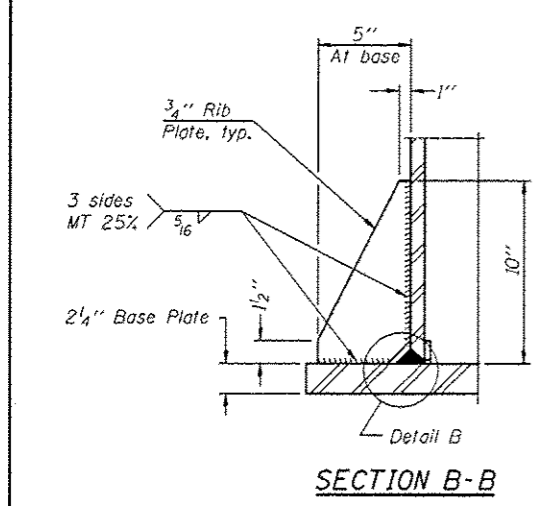
CANTILEVER SIGN STRUCTURES - JUNCTURE DETAILS  
ALUMINUM TRUSS & STEEL POST

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

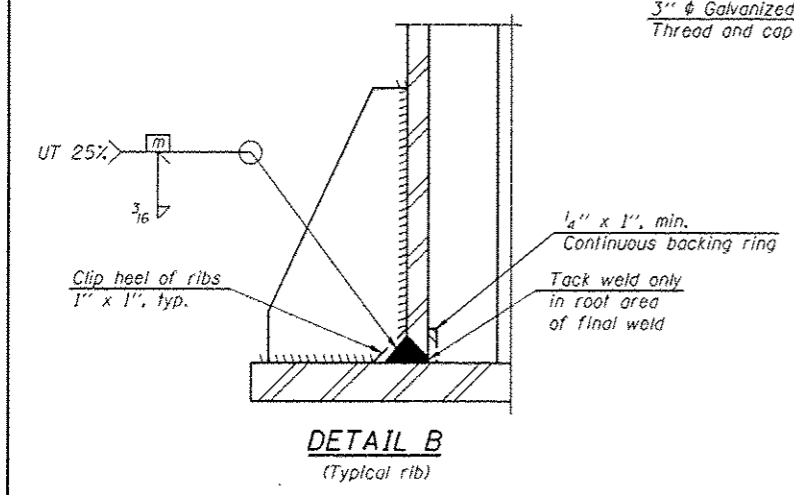
F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4-4 OVD SIGN STR REPL 14-47	VARIOUS	65	23
				CONTRACT NO. 46314
ILLINOIS FED. AID PROJECT				



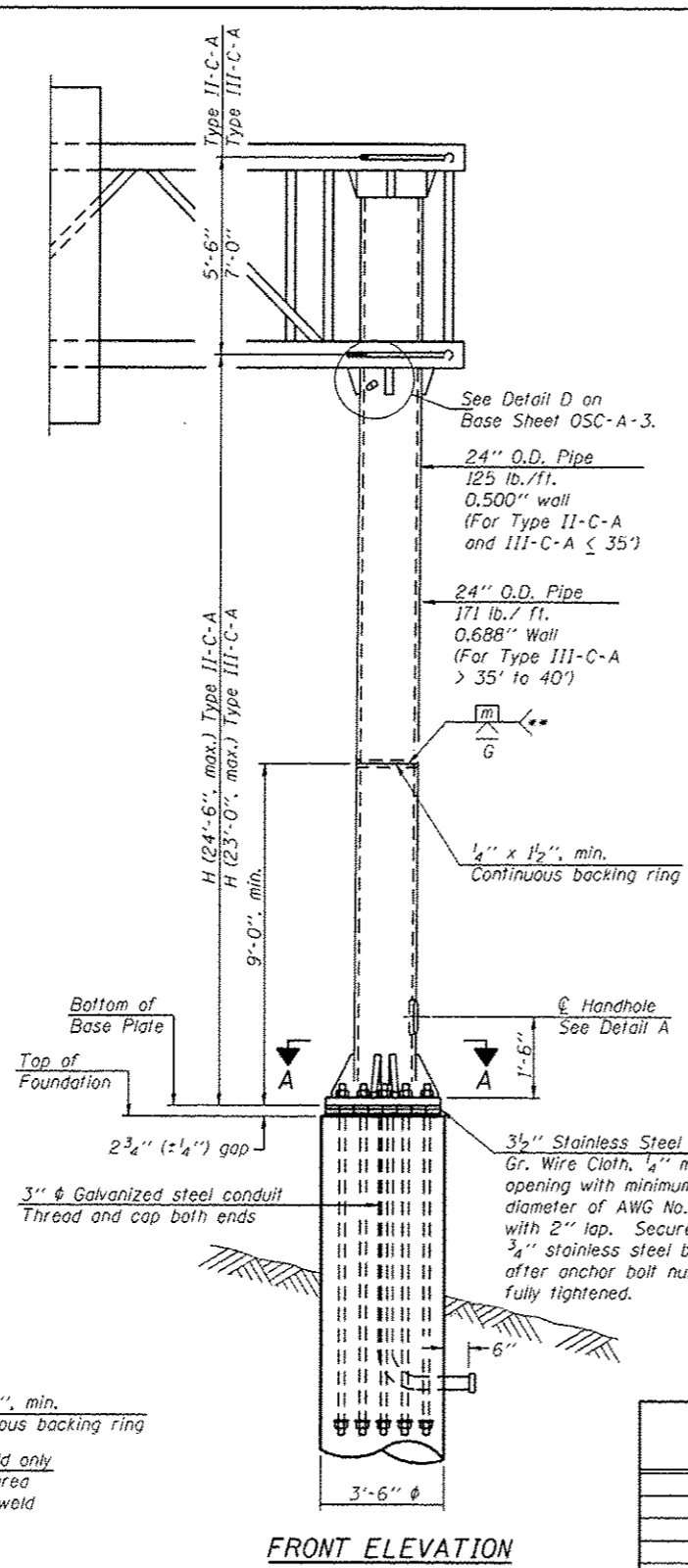
**SECTION A-A**



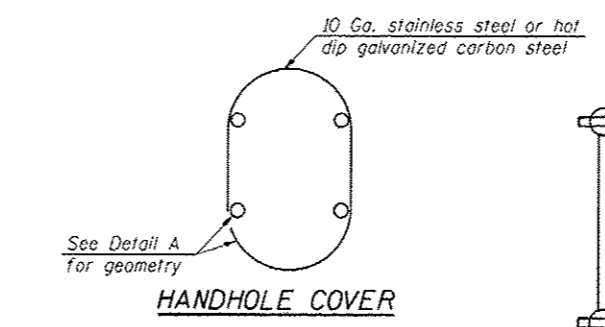
**SECTION B-B**



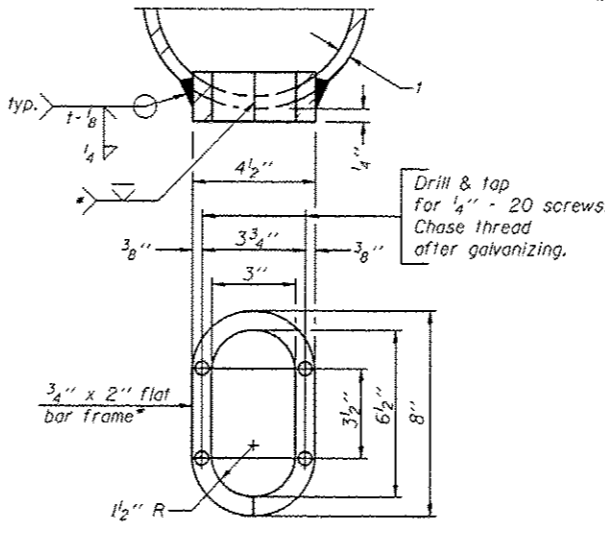
**DETAIL B**  
(Typical rib)



**FRONT ELEVATION**  
For Foundation Details see Base Sheet OSC-A-9.



**HANDHOLE COVER**

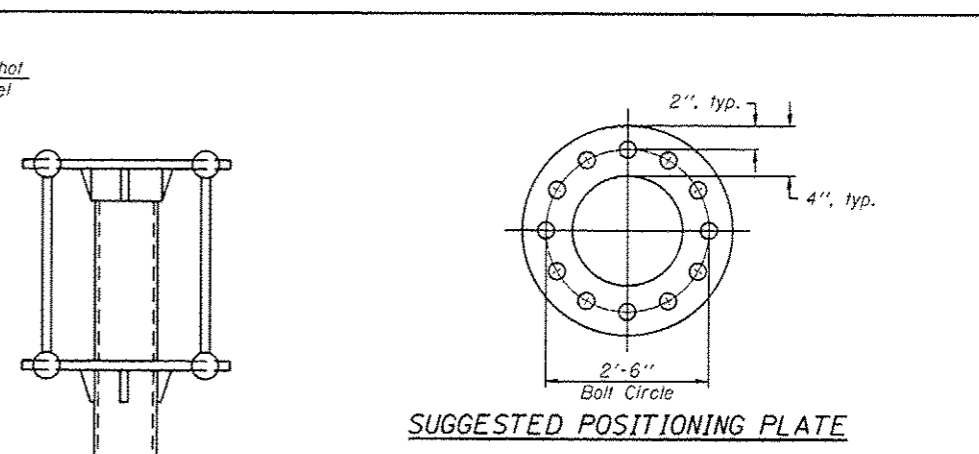


**DETAIL A**

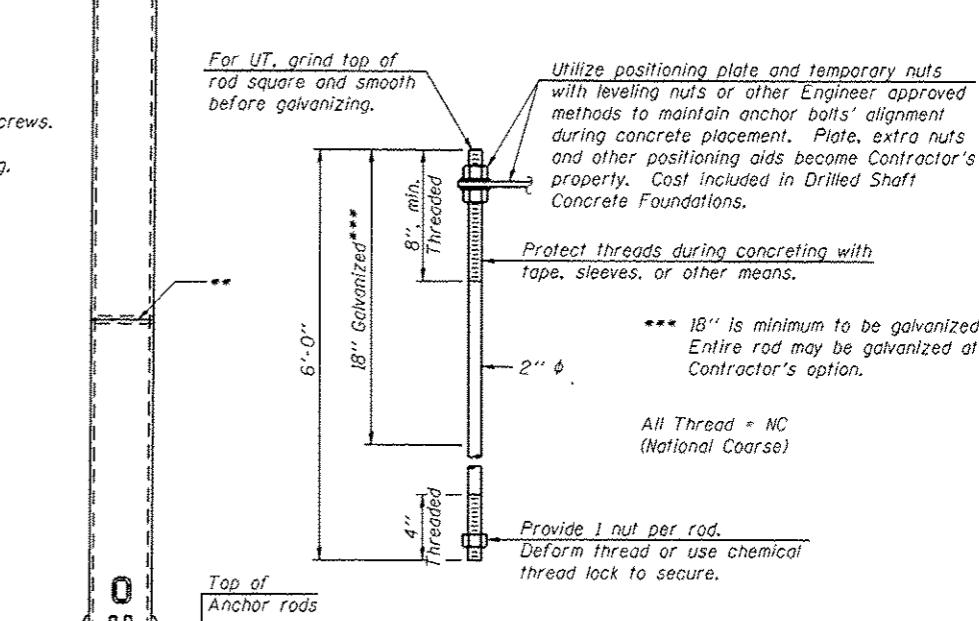
- Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.
- Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Structure Number	Station	H
4-05	494+49	21.38
4-07	416+00	20.52
4-08	501+00	20.52

Note: "H" based on 15'-0" or actual sign height, whichever is greater.

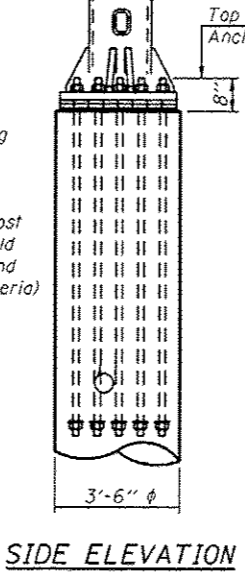


**SUGGESTED POSITIONING PLATE**



**ANCHOR ROD DETAIL**

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize the upper 18" (minimum) and associated AASHTO M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide a nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.



**SIDE ELEVATION**

OSC-A-5

9-15-11

FILE NAME	USER NAME	DESIGNED	REVISD

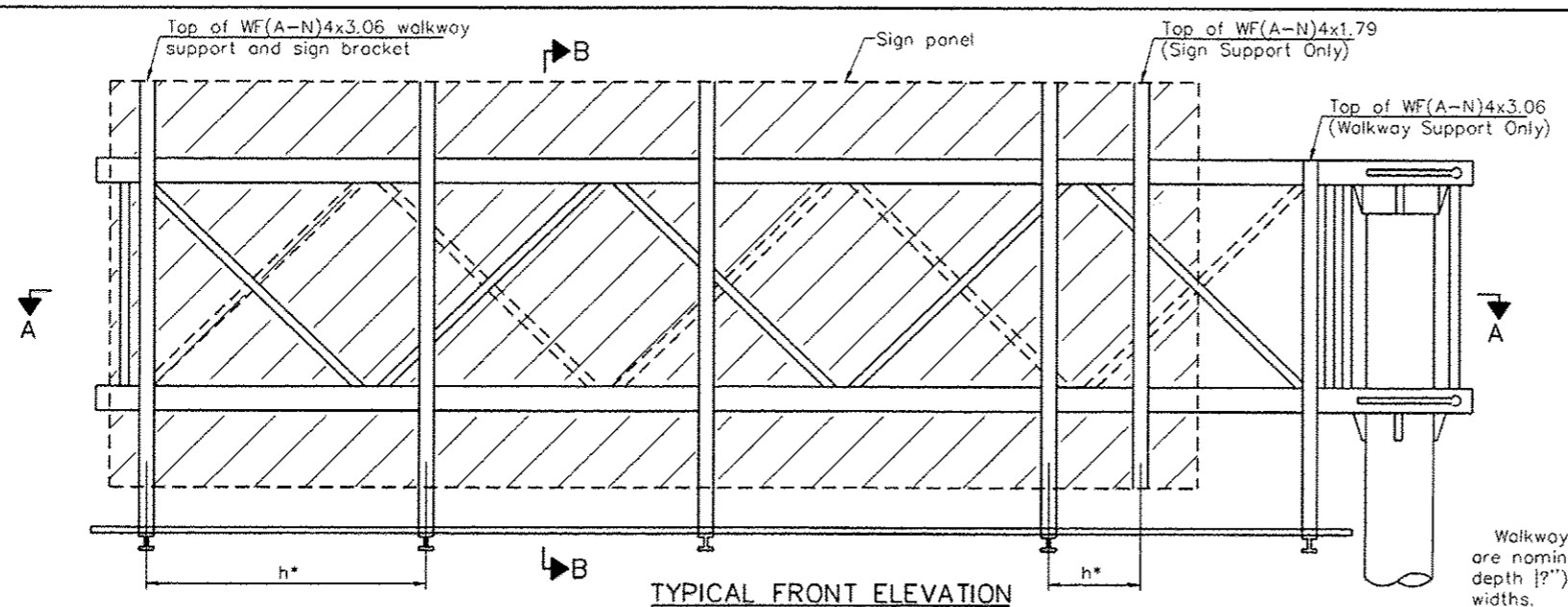
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - TYPE II-C-A & III-C-A  
TRUSS SUPPORT POST - ALUMINUM TRUSS & STEEL POST

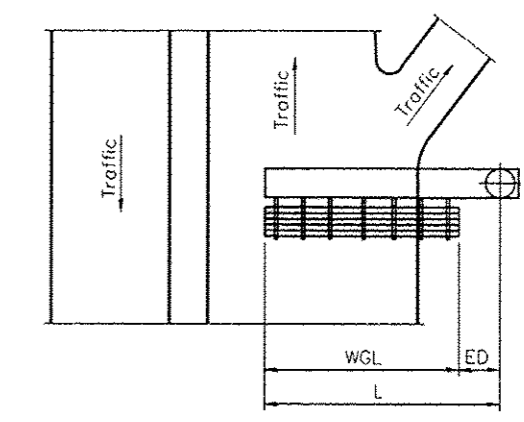
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	04-4 OVD SIN STR REPL 14-47	VARIOUS	65	24
CONTRACT NO. 46314				ILLINOIS FED. AID PROJECT

SHEET NO. \_\_\_ OF \_\_\_ SHEETS



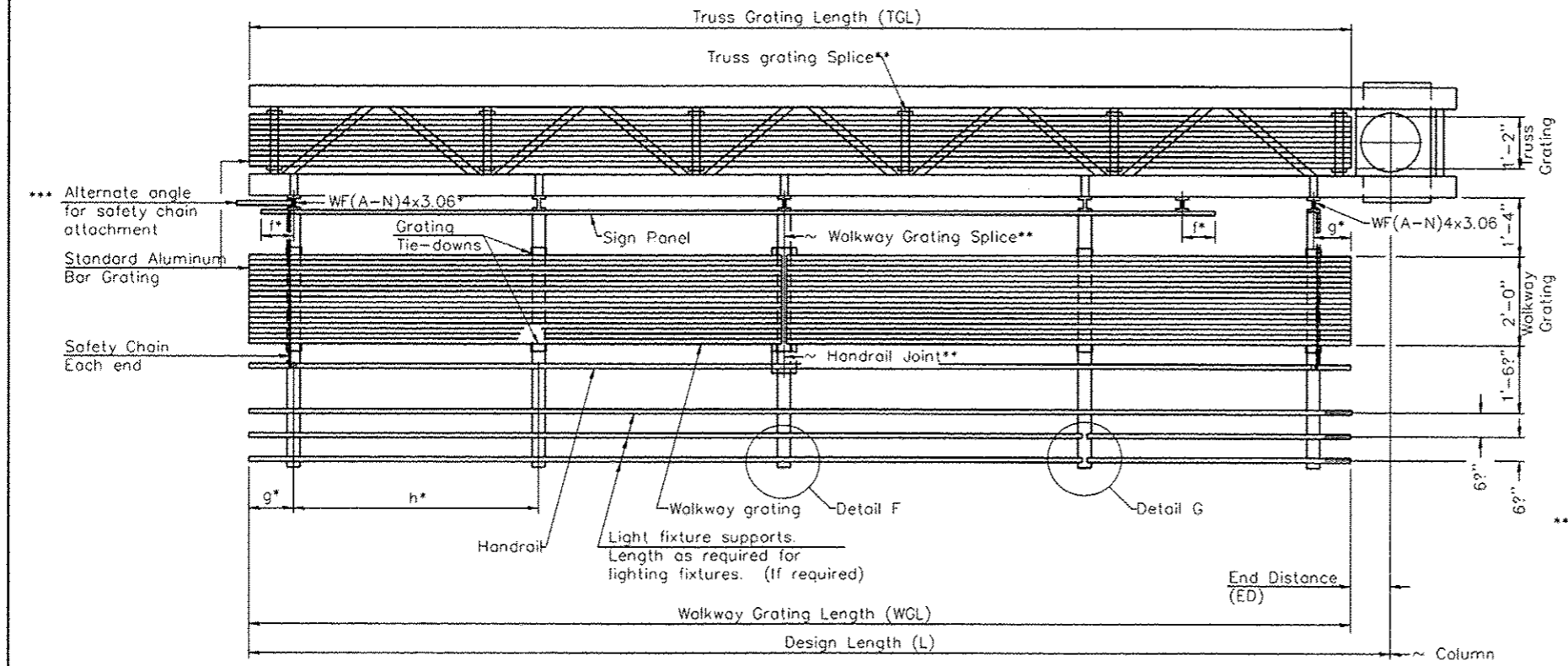


**TYPICAL FRONT ELEVATION**  
With lights and handrail omitted for clarity.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
(Road plan beneath truss varies)

Walkway and truss grating dimensions are nominal and may vary (width [?], depth [?]) based on available standard widths.



**SECTION A-A**

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.  
\*\* Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \frac{\text{Post O.D.}}{2} + 6''$$

Structure Number	Station	WGL	ED	TGL
4-05	494+49	17'-0"	10'-0"	31'-0"
4-07	416+00	17'-0"	8'-0"	23'-6"
4-08	501+00	17'-0"	8'-0"	23'-6"

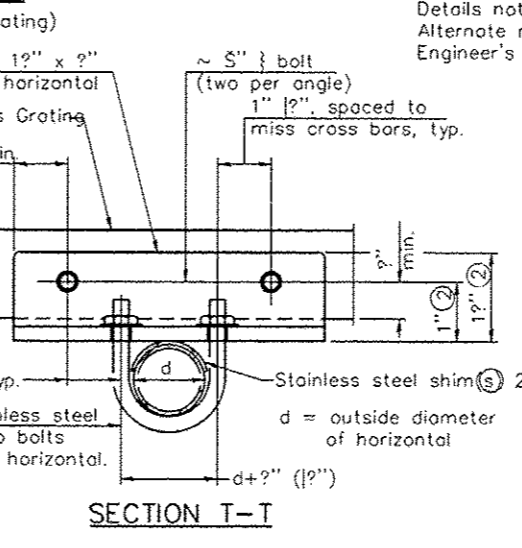
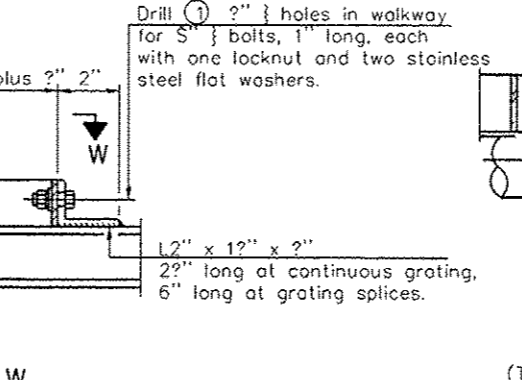
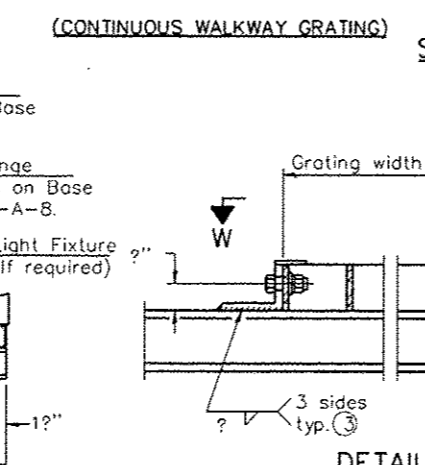
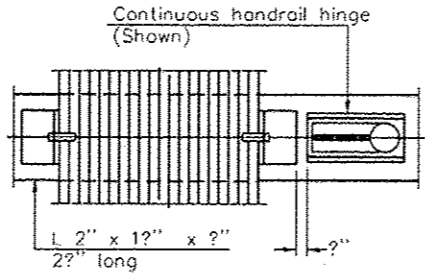
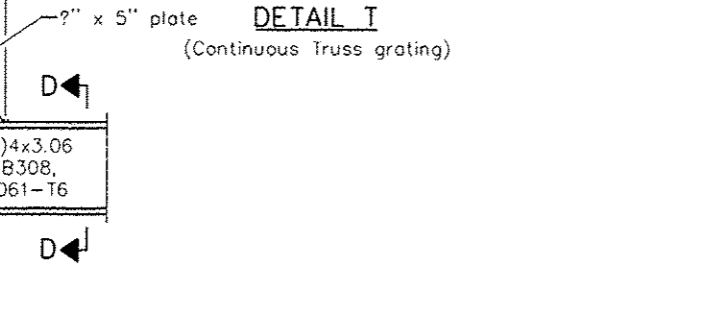
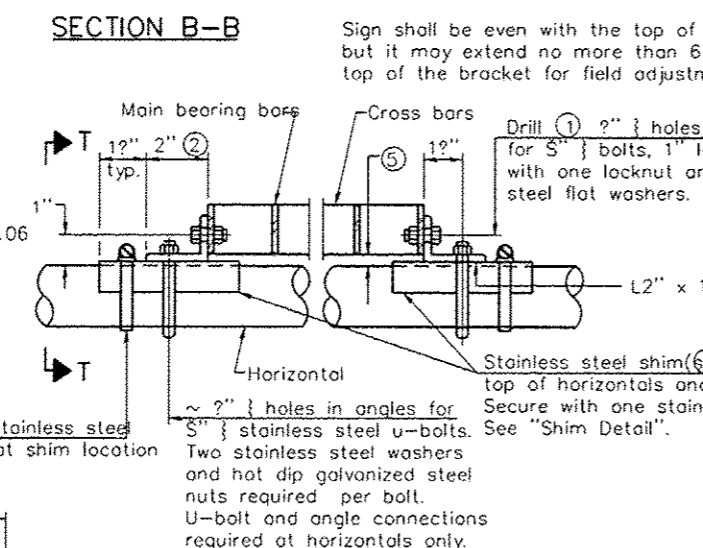
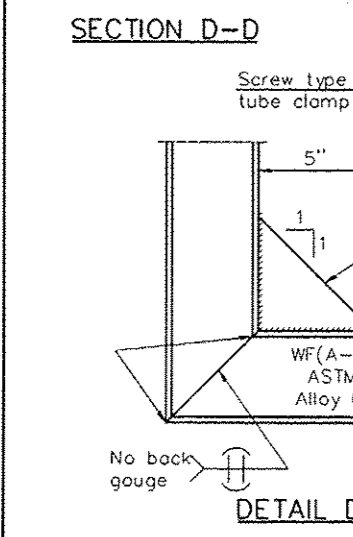
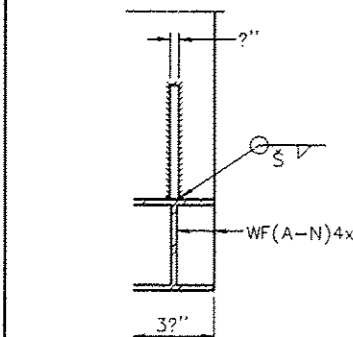
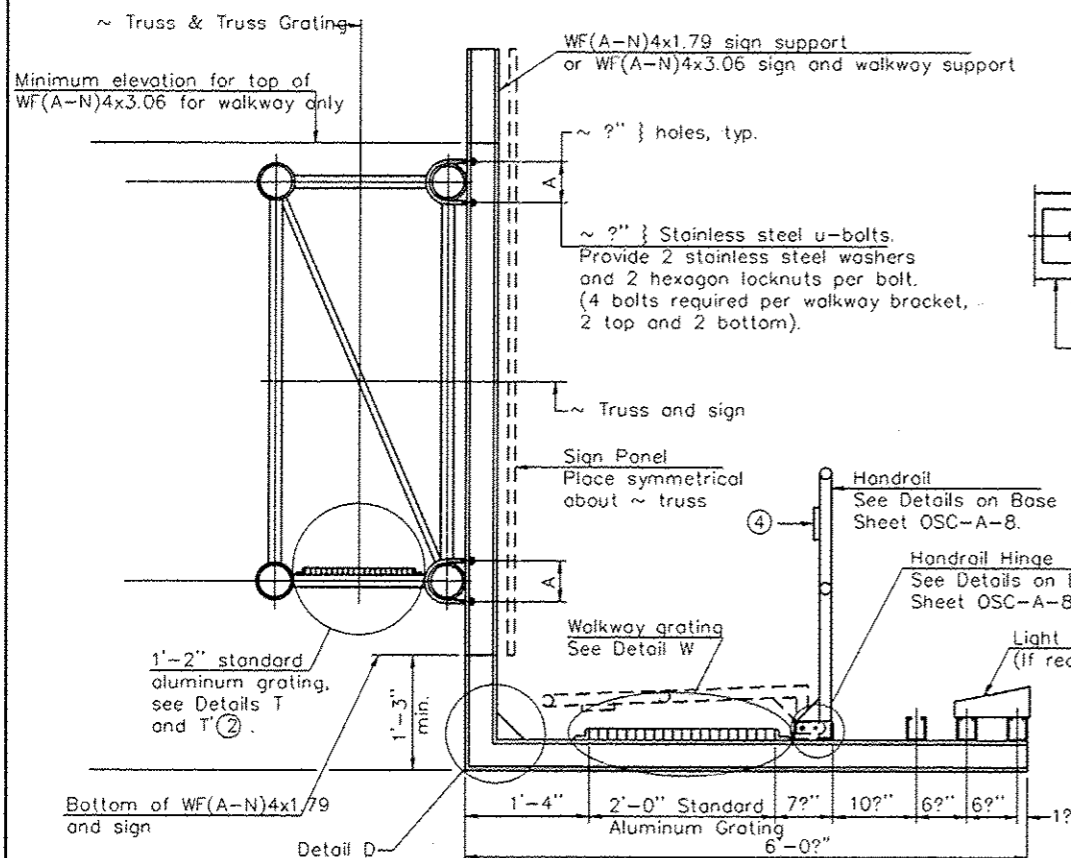
Notes:  
 \* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:  
 f = 12" maximum, 4" minimum (End of sign to ~ of nearest bracket)  
 g = 12" maximum, 4" minimum (End of walkway to ~ of nearest bracket)  
 h = 6'-0" maximum (~ to ~ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)  
 \*\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8.  
 For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.  
 For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

**BRACKET TABLE**

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

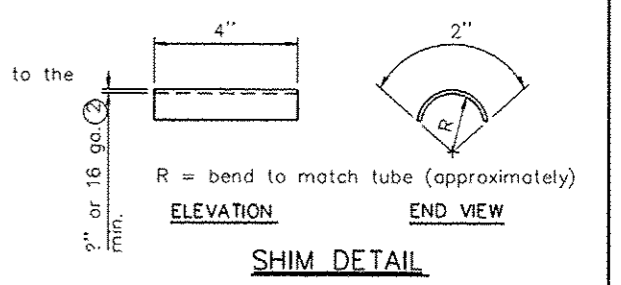
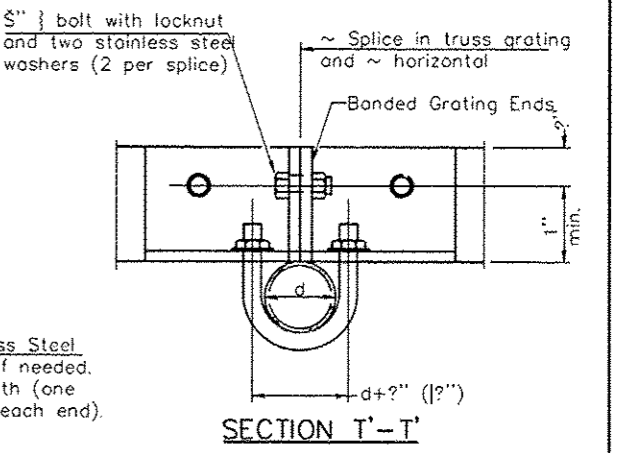
OSC-A-6

9-15-11



**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

Main Bearing Bars (MBB) shall be 1/2" x 1/2" on 1" centers and conform to ASTM B211 Alloy 6061-T6.  
 Cross bars (CB) shall be 1/2" x 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.  
 OR  
 Aluminum Grating with modified "I" sections for main bearing bars shall meet the following requirements:  
 Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in. per bar, a depth of 1 1/2", spaced on 1" centers.  
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.



- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/2" extension bars. (See Base Sheet OSC-A-8.)
- 1/2" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- Based on actual sign height, s D, given on OSC-A-1.

Structure Number	Station	A	ⓐ B	C	ⓑ D
4-05	494+49	5 5/8'	1 1/2'	7'-0"	7'-7 1/2"
4-07	416+00	5 3/4'	2'-10 1/2"	5'-6"	8'-10 1/2"
4-08	501+00	5 3/4'	2'-10 1/2"	5'-6"	8'-10 1/2"

OSC-A-7 9-15-11

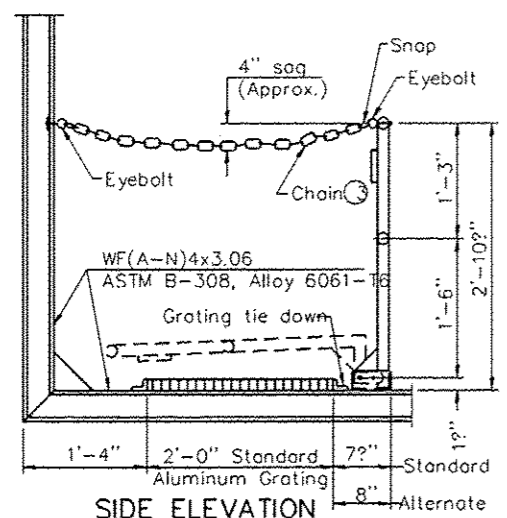
FILE NAME	USER NAME	DESIGNED	REVISD
		CHECKED	REVISD
PLOT SCALE		DRAWN	REVISD
PLOT DATE		CHECKED	REVISD

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

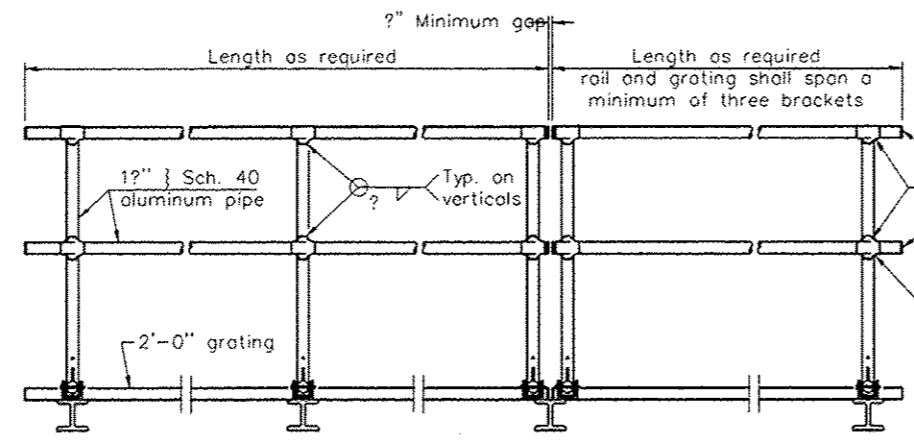
CANTILEVER SIGN STRUCTURES - WALKWAY DETAILS  
 ALUMINUM TRUSS & STEEL POST

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	DA-4 OVD SIN STR REPL 14-47	VARIOUS	65	26
CONTRACT NO. 46314				
ILLINOIS FED. AID PROJECT				

SHEET NO. \_\_\_ OF \_\_\_ SHEETS



**SIDE ELEVATION**  
(Showing Safety Chain W/O Sign)

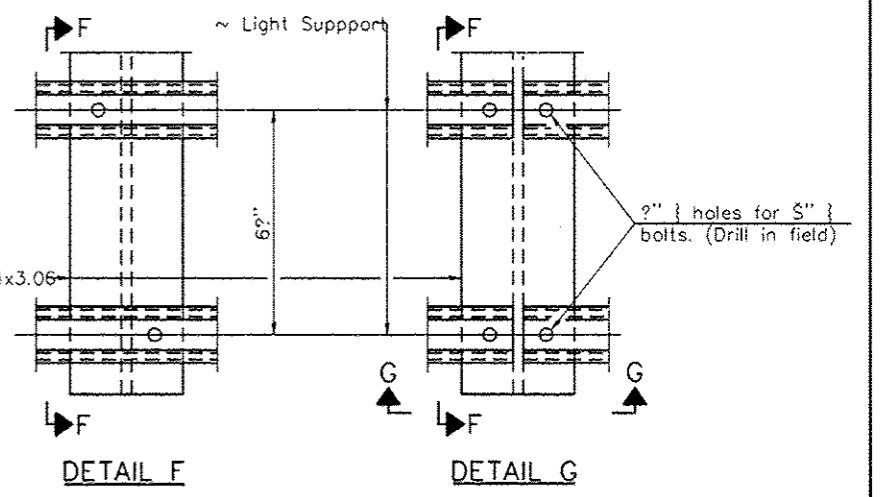


**FRONT ELEVATION**

**HANDRAIL DETAILS**

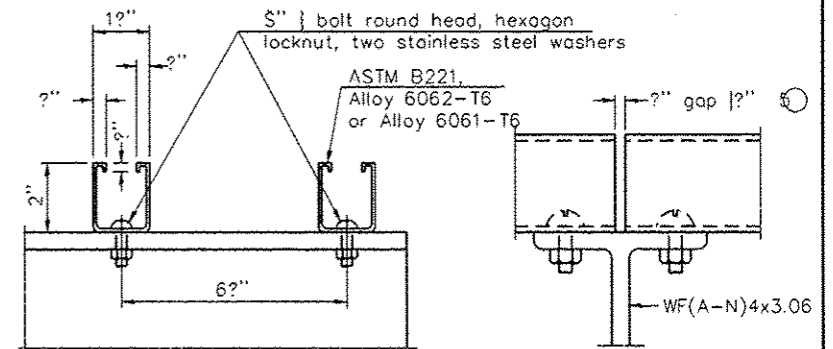
Handrail pipe shall be ASTM B241 or B429, Alloy 6053-T6 or Alloy 6061-T6.

- ① Install standard force-fit end caps or weld 2" end plates with 2" c.f.w. and grind smooth. (All rail ends)
- ② Horizontal handrail member shall be continuous thru fitting. Provide 2" hole in fitting for 2" bolt. Field drill 2" hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5" eyebolts in 2" holes on top rail at ends only.)



**DETAIL F**

**DETAIL G**

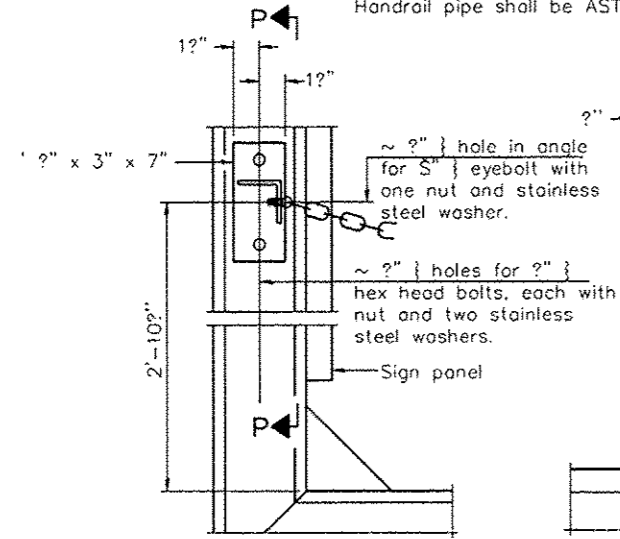


**SECTION F-F**

**SECTION G-G**

**LIGHTING FIXTURE MOUNTS (IF REQUIRED)**

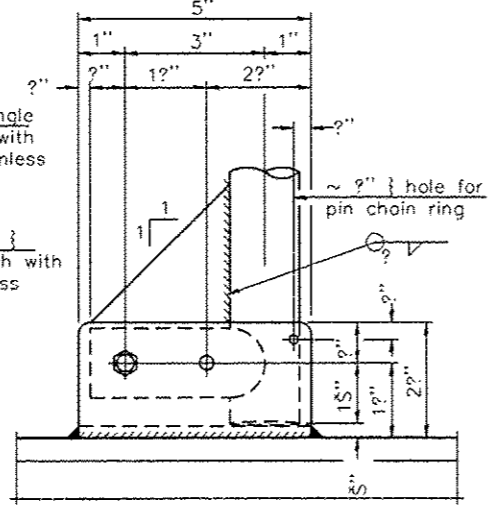
- ⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



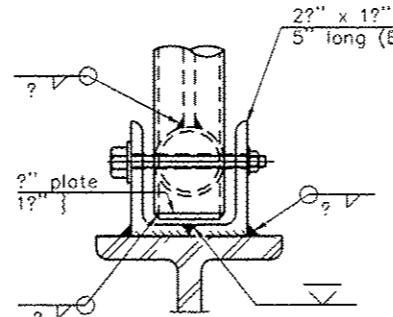
**ALTERNATE SAFETY CHAIN ATTACHMENT**

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"



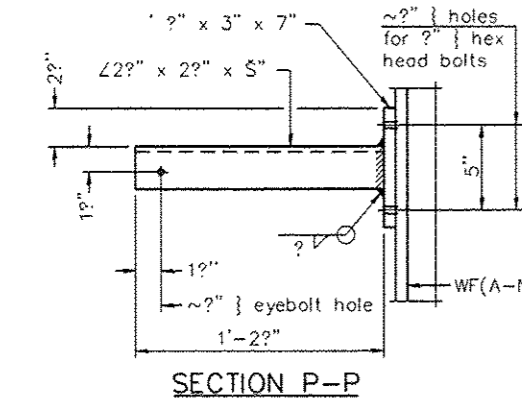
**SIDE ELEVATION**



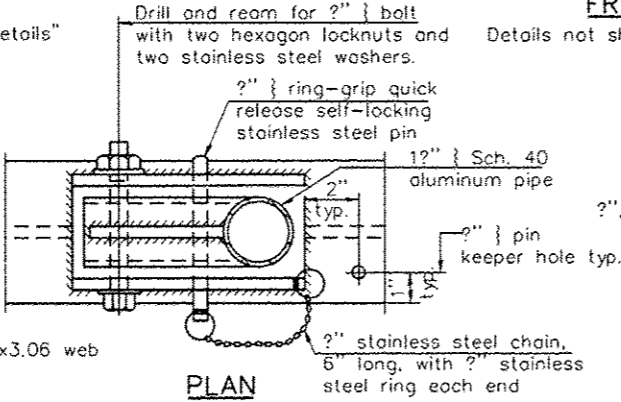
**FRONT ELEVATION**

**ELEVATION AT HANDRAIL JOINT**

Details not shown same as "FRONT ELEVATION"

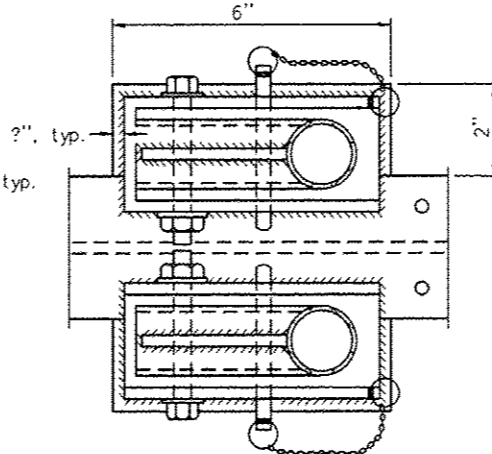


**SECTION P-P**



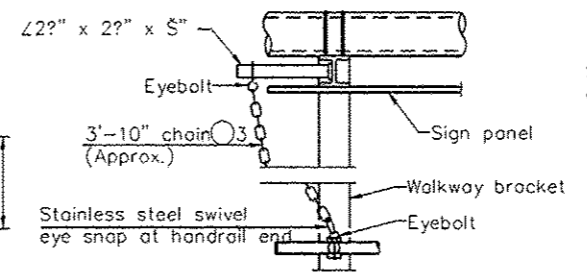
**DETAIL E HANDRAIL HINGE**

Details not shown same as "ELEVATION" at right.



**PLAN AT HANDRAIL JOINT**

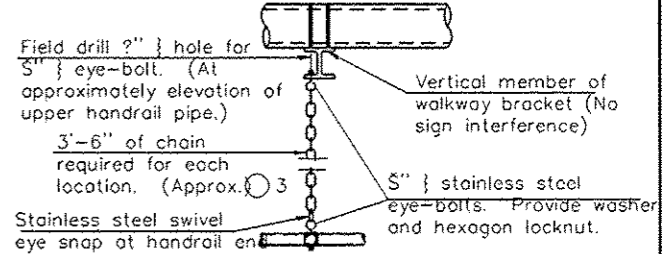
Details not shown same as "PLAN"



**ALTERNATE SAFETY CHAIN ATTACHMENT**

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

- ③ 2" Type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



**SAFETY CHAIN**

One required for each end of each walkway.

OSC-A-8

9-15-11

FILE NAME *	USER NAME *	DESIGNED ---	REVISED ---
		CHECKED ---	REVISED ---
		DRAWN ---	REVISED ---
		CHECKED ---	REVISED ---

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

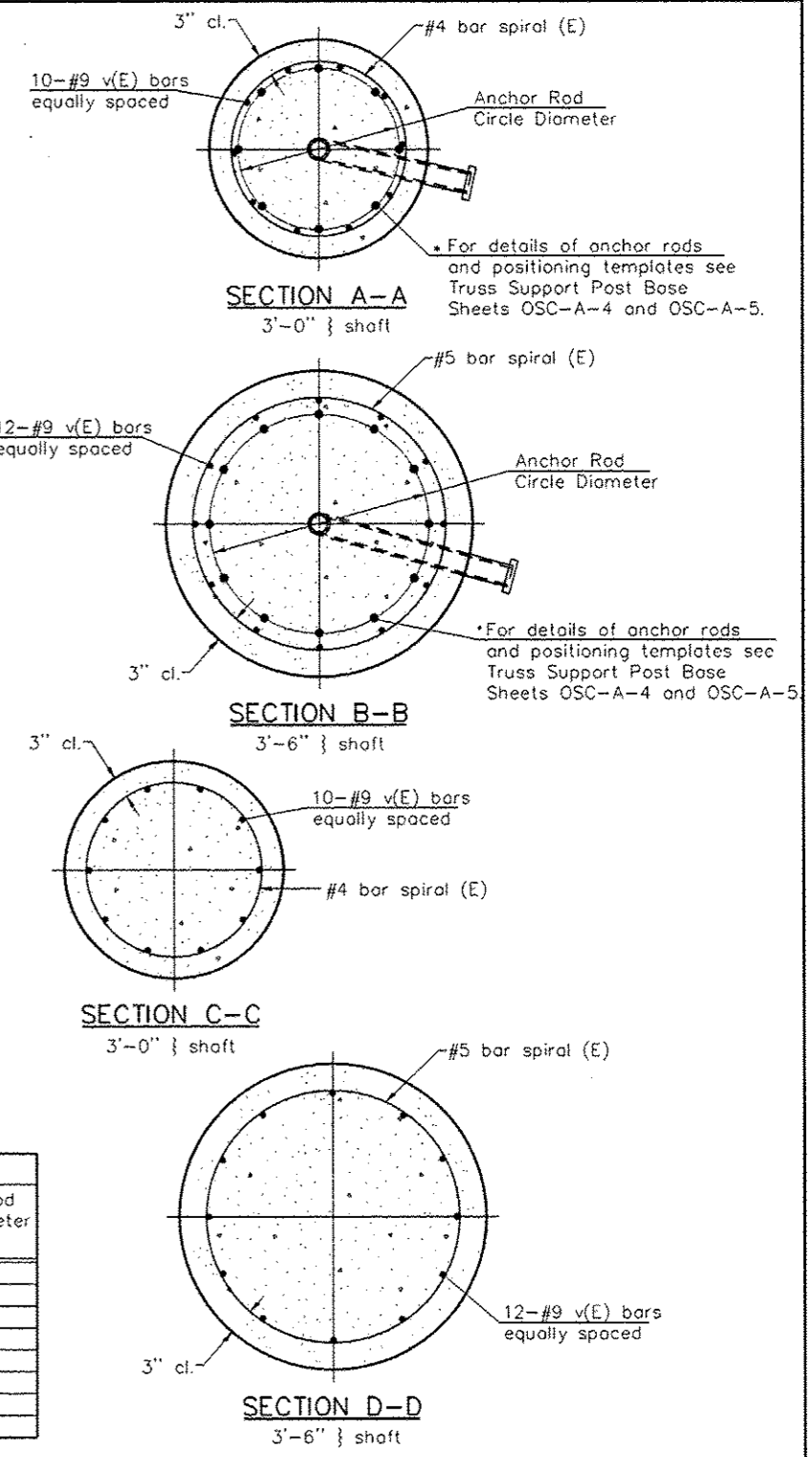
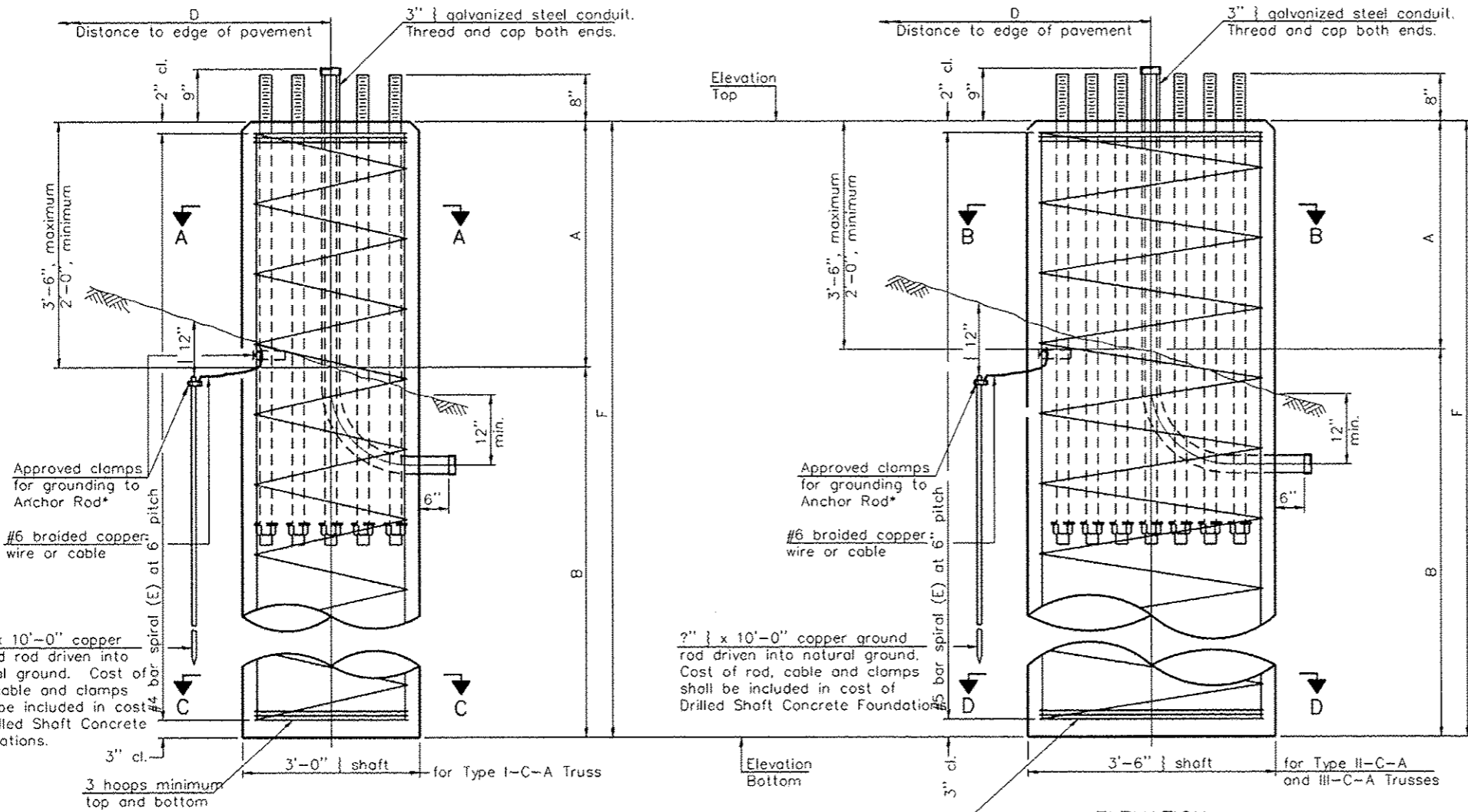
CANTILEVER SIGN STRUCTURES - HANDRAIL DETAILS  
ALUMINUM TRUSS & STEEL POST

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. R.T.E. -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	04-4 0V0 SIN STR REPL 14-47	VARIOUS	65	27
			CONTRACT NO. 46314	

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\* Grind anchor rod to bright finish at ground clamp location before installing clamp.



NOTES:

The foundation dimensions shown in the Foundation Design Table 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 in the Foundation Data Table 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.

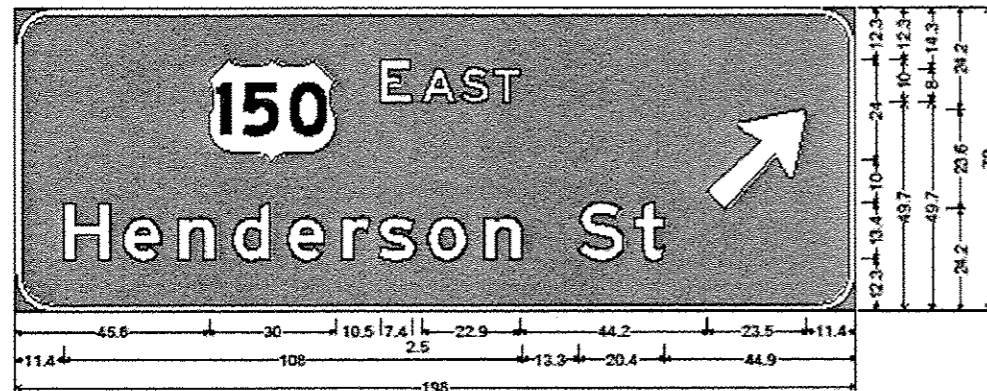
Concrete shall be placed monolithically, without construction joints.

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

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

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods		Anchor Rod Circle Diameter (in)
						No.	Diameter (in)	
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Qu	A	B	F	Class DS Concrete Cubic Yards
4-05	494+49	III-C-A	3.5	805.72	786.72	1.0	2'-6"	19'-0"	21'-6"	7.6
4-07	416+00	II-C-A	3.5	567.29	547.79	2.6	2'-6"	17'-0"	19'-6"	6.9
4-08	501+00	II-C-A	3.5	609.71	590.21	3.0	2'-6"	17'-0"	19'-6"	6.9



9.0" Radius, 1.5" Border, White on Green;  
 "E AST" E Mod 2K; "Henderson St" E Mod 2K; Arrow 133 - 20.0" 45";  
 Table of widths and spaces:

45.6	30.0	10.5	7.4	2.5	8.1	1.2	6.4	1.2	6.0	44.2	23.5	11.4										
11.4	10.8	2.3	8.8	4.1	8.8	4.2	8.8	4.1	8.8	4.1	5.7	1.7	8.8	3.0	5.0	4.2	8.8	13.3	10.8	2.7	6.9	44.9

**NOTE:**  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : dovlass	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGN</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/3201 / in.	DRAWN -	REVISED -			VAR	04-4 OVD SH STR REPL 14-47	VARIOUS	65	29	
	PLOT DATE : 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.





ROUTE I-6 DESCRIPTION I-474 WB at ramp to I-74 East LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 26, TWP. 9N, RING. 7E

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4C072474L000.40(exist)  
 Station \_\_\_\_\_  
 BORING NO. 4-07  
 Station 2+83(ramp sta)  
 Offset 17.0 ft Rt EOP  
 Ground Surface Elev. 564.79 ft

Elev. (ft)	UCS (tsf)	Failure Mode	SPT (blows)	Description	Elev. (ft)	UCS (tsf)	Failure Mode	SPT (blows)	Description
564.79				FILL: SILTY CLAY, brown and gray, stiff to hard (first sample frozen)	543.29				SILTY CLAY, brown to gray, stiff to very stiff (continued)
	6					11			
	5	4.5	10			15		8	
	4	P				16			
				Sample at 3.5 ft no recovery	541.29				SAND, brown, medium dense
	5					8			
	6					10		20	
	8					12			
558.79				CLAY, gray, stiff to very stiff					SILTY LOAM, brown, stiff to very stiff
	5					8			
	5	2.4	12			8		21	
	6	B				8			
556.29				SANDY CLAY, gray, stiff to very stiff	536.29				SAND, brown, dense
	3					16			
	8	2.8	12			22		6	
	6	B			634.79	19			End of Boring
-10									
	3								
	6	1.9	13						
552.29				SILTY CLAY, brown to gray, stiff to very stiff					
	13		22						
	15					36			
	7								
	8	1.5	21						
	7	P		turning gray					
	5								
	12	2.5							
-25									
	14	P							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)



12.0" Radius, 2.0" Border, White on Green;  
 "EXIT" E Mod 2K; "OA" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "EAST" E Mod 2K; "Peoria" Clearview/Type-5-W; Arrow 160 - 35.0" 45";  
 Table of widths and spaces.

E	X	I	T	O	A	E	A	S	T	P	E	O	R	I	A
65.3	7.5	1.4	8.7	2.1	2.0	1.8	7.4	15.0	12.6	2.1	15.1	15.0			
13.5	36.0	15.0	11.1	2.5	12.2	1.8	9.7	1.8	8.9	8.0	27.5	8.0			
21.8	11.5	4.5	11.7	4.8	12.4	5.4	7.3	4.4	3.8	4.7	11.9	51.8			

NOTE:  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : deviano	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DESIGN & SOIL BORING	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/4" = 1'	DRAWN -	REVISED -			VAR	D4-4 OVD SIN STR REPL 14-47	VARIOUS	65	30	
	PLOT DATE : 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			[ILLINOIS] FED. AID PROJECT					



# SOIL BORING LOG

ROUTE IL 6 DESCRIPTION I-474 EB at ramp to I-74 East LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 23, TWP. 9N, RNG. 7E

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. <u>4C072474R000.10(exdst)</u>	DEPTH	BULGE	UCS	M O	Surface Water Elev. _____ ft	DEPTH	BULGE	UCS	M O
Station _____	(ft)	(%)	(tsf)	(%)	Stream Bed Elev. _____ ft	(ft)	(%)	(tsf)	(%)
BORING NO. <u>4-08</u>					Groundwater Elev.: _____ ft				
Station <u>501+40(mainline)</u>					First Encounter _____ ft				
Offset <u>85.0 ft Rt Median CL</u>					Upon Completion _____ ft				
Ground Surface Elev. <u>607.21</u>					After _____ ft				

FILL: SANDY CLAY, brown, stiff (first sample frozen)	8				FILL: SILTY CLAY, brown, stiff (continued) 566.21	4			
	5	4.0	20		FILL: SILTY CLAY LOAM, brown and gray, stiff to very stiff	5	1.0	25	
	3	P			Sample at 22': with wood fragments	6	S		
604.21									
FILL: SANDY CLAY LOAM, brown and gray, stiff to hard	5					7			
	10	4.5	10			9	2.7	12	
	9	P				9	S		
	10					6			
	15	3.1	9			9	4.0	12	
	15	S				8	P		
	6					3			
	7	4.4	12		Sample at 28': with wood fragments	3	1.8	14	
	9	S			577.21	4	S		
	-10				End of Boring				
	4								
	6	3.0	11						
	7	S							
	5								
	4	2.0	12						
	-15	10	P						
	7								
Sample at 16': with rock fragments	11	2.0	11						
	11	P							
	5								
588.21	4	1.2	19						
FILL: SILTY CLAY, brown, stiff	5	S							
	-20								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BSS, form 137 (Rev. 8-99)



12.0" Radius, 2.0" Border, White on Green;  
"EXIT" E Mod 2K; "0B" E Mod 2K;  
12.0" Radius, 2.0" Border, White on Green;  
"EAST" E Mod 2K; "Peoria" Clearview/Hwy-5-W; Arrow 160 - 35.0" 45";  
Table of widths and spaces:

E	X	I	T	0	B	E	A	S	T	P	E	O	R	I	A
66.8	7.4	1.4	8.7	2.1	2.0	1.8	7.4	15.0	12.6	3.6	12.2	15.0			
13.5	36.0	15.0	11.1	2.5	12.2	1.8	9.7	1.6	8.9	8.0	27.5	8.0			
21.8	11.5	4.5	11.7	4.8	12.4	5.4	7.3	4.4	3.8	4.7	11.9	51.8			

NOTE:  
SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME: <u>overhead sign plans.dgn</u>	USER NAME: <u>doviss</u>	DESIGNED: _____	REVISED: _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGN &amp; SOIL BORING</b>	F.A. RTE. _____	SECTION _____	COUNTY _____	TOTAL SHEETS _____	SHEET NO. _____	
Model _____	PLOT SCALE: <u>3/32" = 1"</u>	DRAWN: _____	REVISED: _____			VAR. <u>04+4.0VD SIN STR REPL 14-47</u>	VARIOUS	65	31		
	PLOT DATE: <u>3/21/2014</u>	CHECKED: _____	REVISED: _____			CONTRACT NO. <u>46314</u>					
		DATE: _____	REVISED: _____			[ILLINOIS] FED. AID PROJECT					

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

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  
 $f' = 3,500$  p.s.i.  
 $f_y = 60,000$  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.

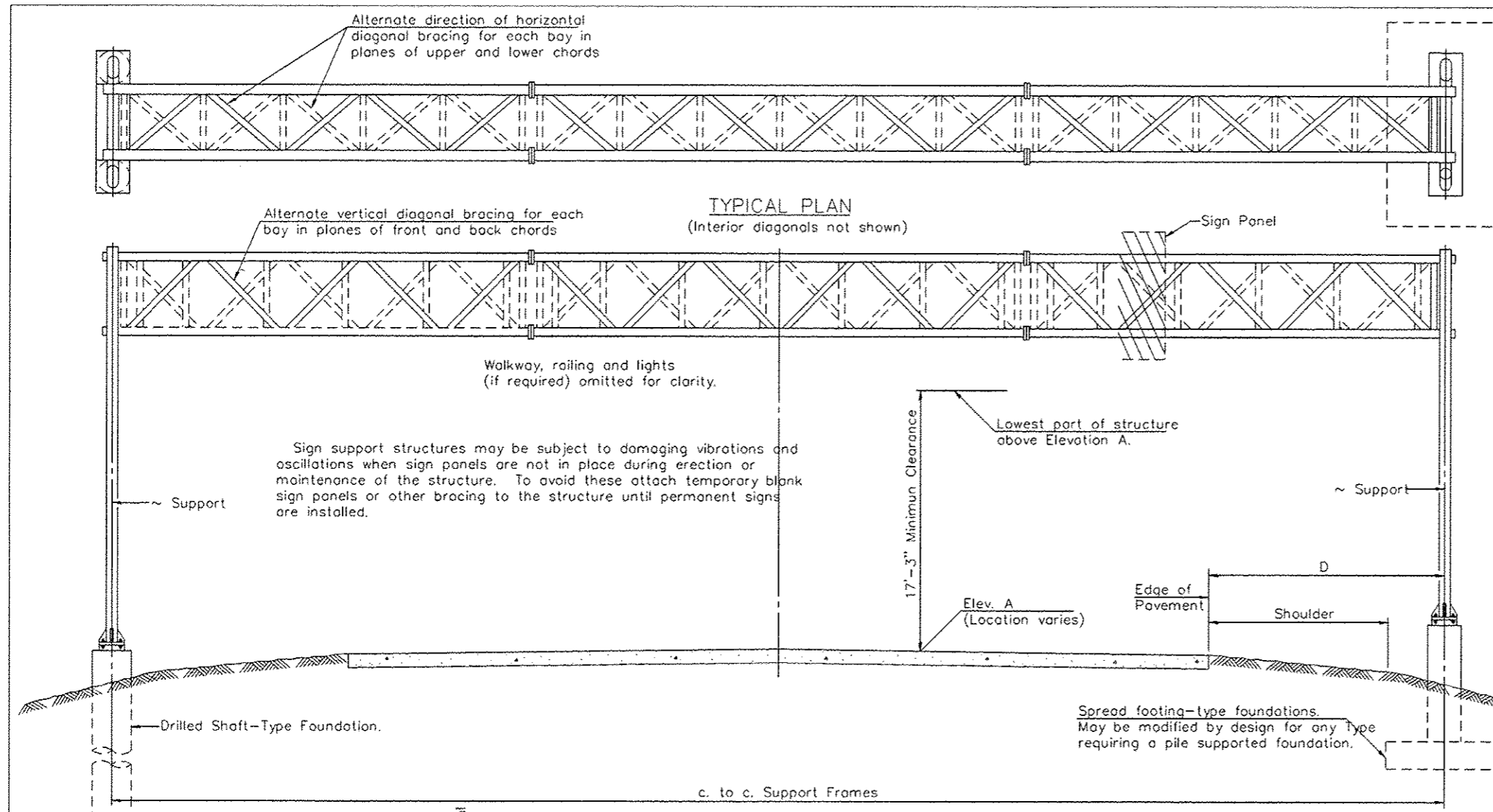
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

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.



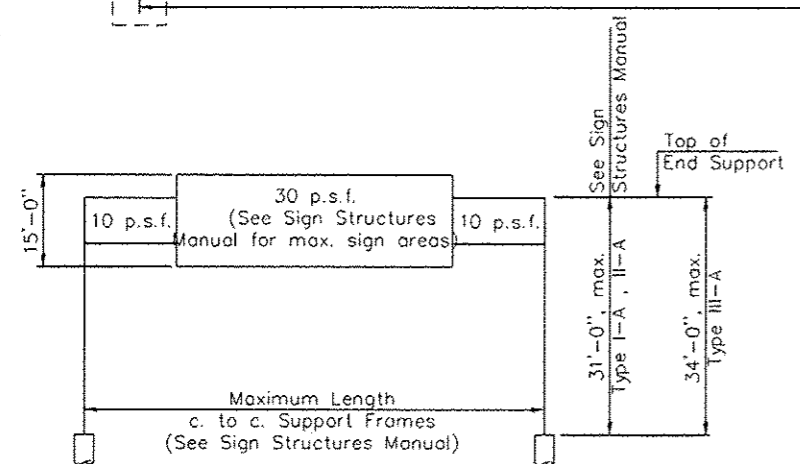
**TYPICAL ELEVATION**  
 (Looking at Face of Signs)\*\*

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
4-16	260+00	I-A	86'-0"	584.53	20'-0"RT	14'-2"	343.75SF
4-17	282+00	I-A	85'-0"	578.86	20'-0"RT	13'-0"	487.50sf
4-18	109+00	I-A	65'-0"	571.98	21'-6"RT	14'-0"	597.75sf
4-19	395+00	I-A	70'-0"	482.11	18'-0"RT	12'-6"	285.25sf
4-20	191+00	I-A	50'-0"	641.34	16'-6"LT	12'-0"	267.00sf
4-21	191+00	I-A	70'-0"	602.83	15'-0"RT	12'-6"	417.0sf
4-22	10+50	I-A	68'-0"	100.00	18'-0"RT	8'-0"	102.25sf
4-26	389+50	II-A	84'-0"	723.74	16'-0"RT	13'-0"	318.5SF
4-29	274+50	I-A	68'-0"	734.25	15'-0"RT	15'-6"	372.75SF
4-30	330+08	II-A	79'-0"	728.94	15'-0"RT	13'-6"	387.00sf
4-31	72+00	II-A	84'-0"	480.04	9'-0"RT	16'-0"	626.00SF
4-32	90+39	I-A	59'-0"	480.04	9'-0"LT	10'-6"	343.00sf

\*\*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.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	554
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	247
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	0
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	441.45
CONCRETE FOUNDATIONS	Cu. Yds.	0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	217.86

OS-A-1

8-21-13

FILE NAME	USER NAME	DESIGNED	REVISED
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		---	---
		---	---
		---	---

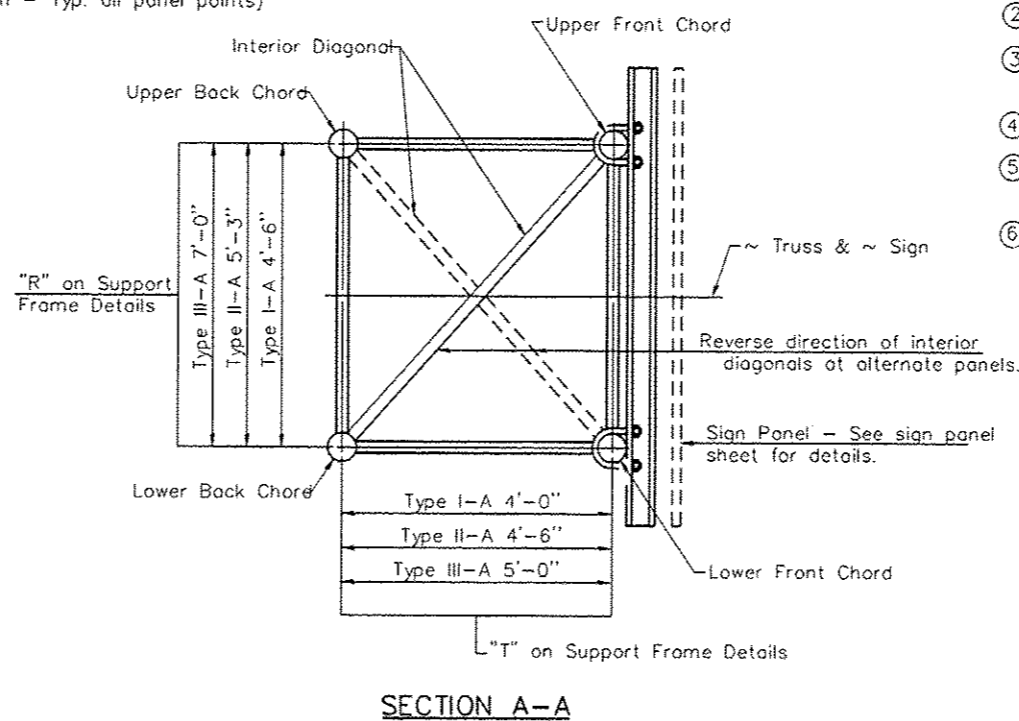
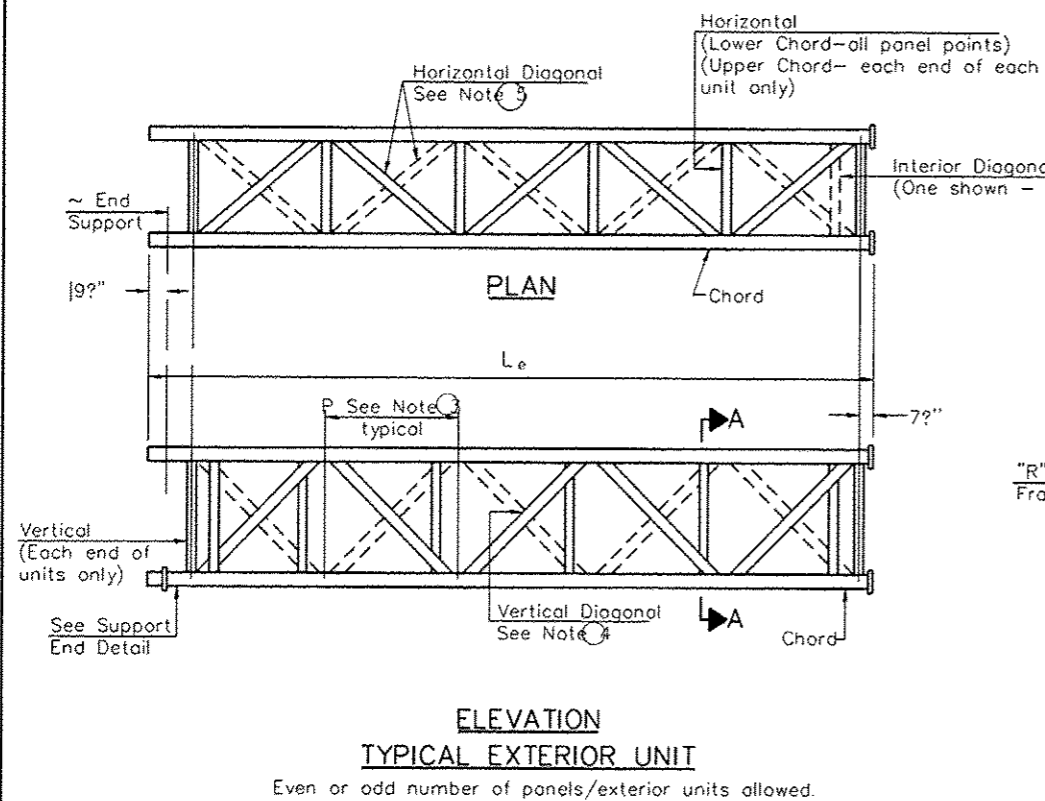
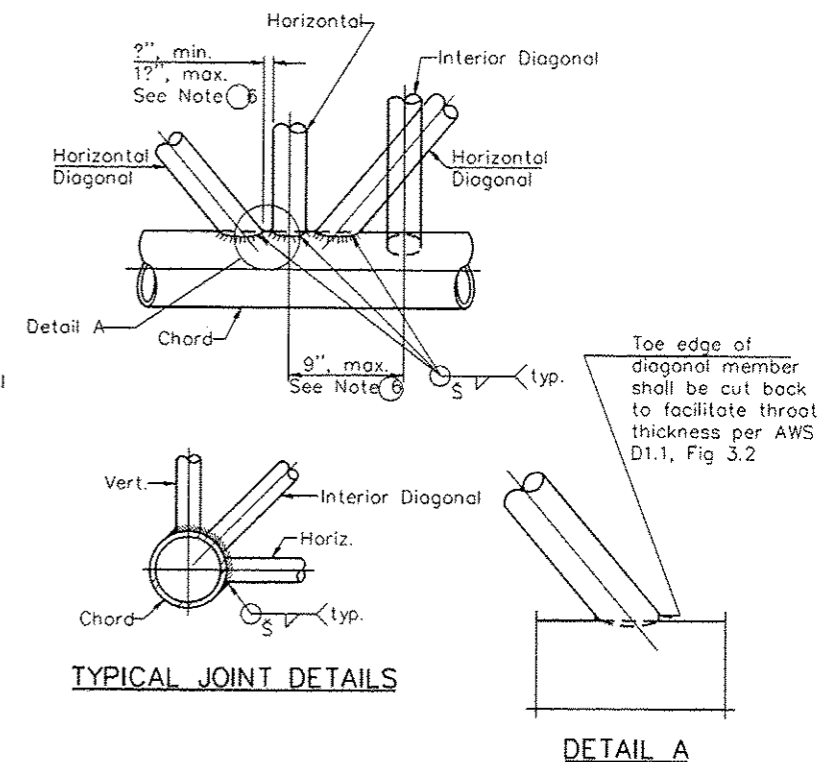
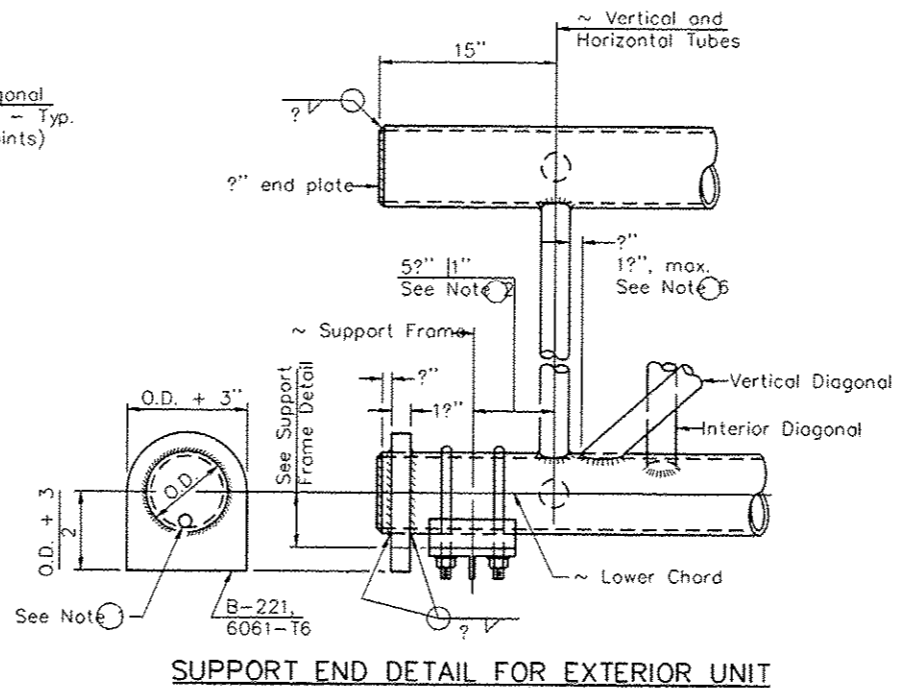
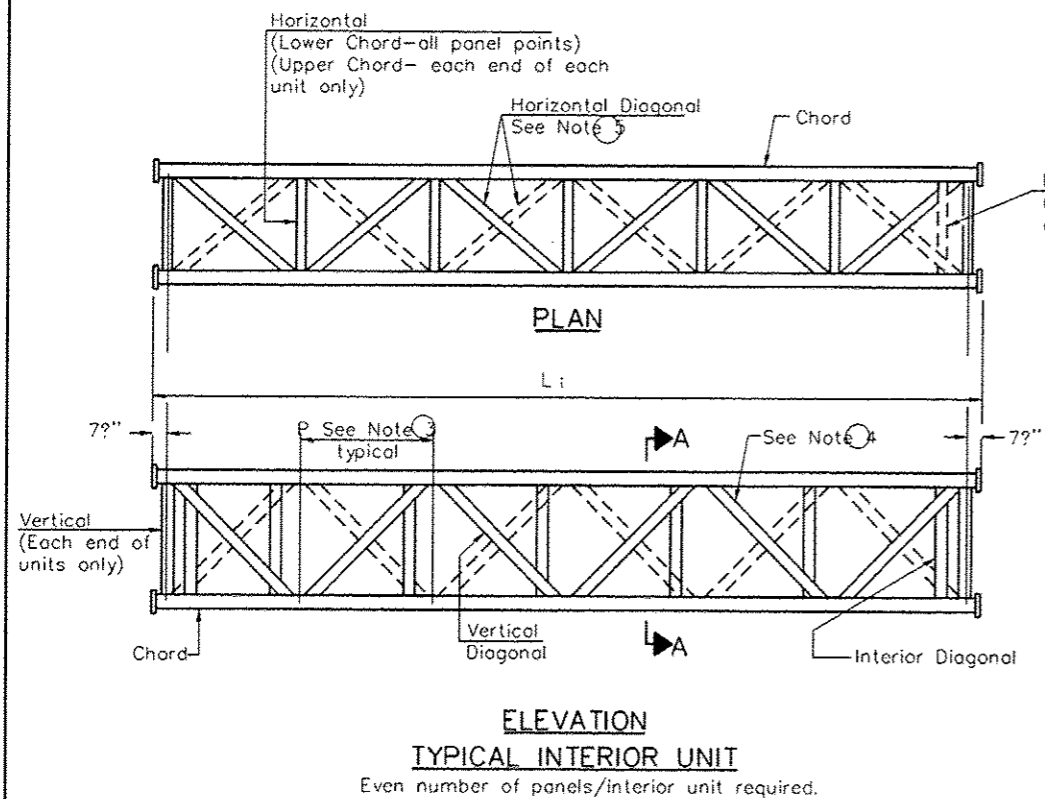
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - GENERAL PLAN &  
 ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4-4 DVD SIN STR REPL 14-47	VARIOUS	65	32
				CONTRACT NO. 46314
ILLINOIS FED. AID PROJECT				





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

OS-A-2

6-1-12

FILE NAME	USER NAME	DESIGNED	REVISED
		CHECKED	REVISED
		DRAWN	REVISED
		CHECKED	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

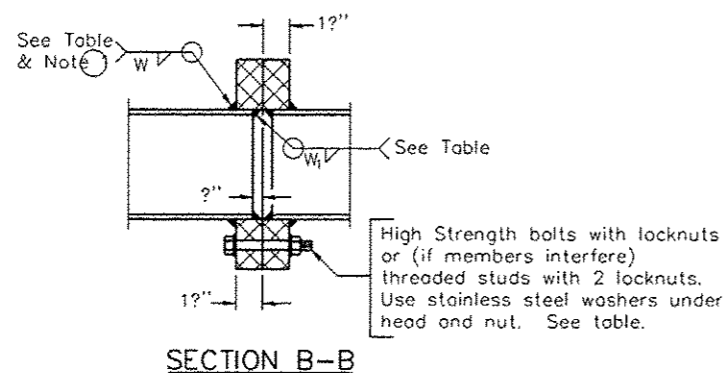
OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS  
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

F.A.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	04-A DIV. 514 STR. REPL. 14-47	VARIOUS	65	33
CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT	

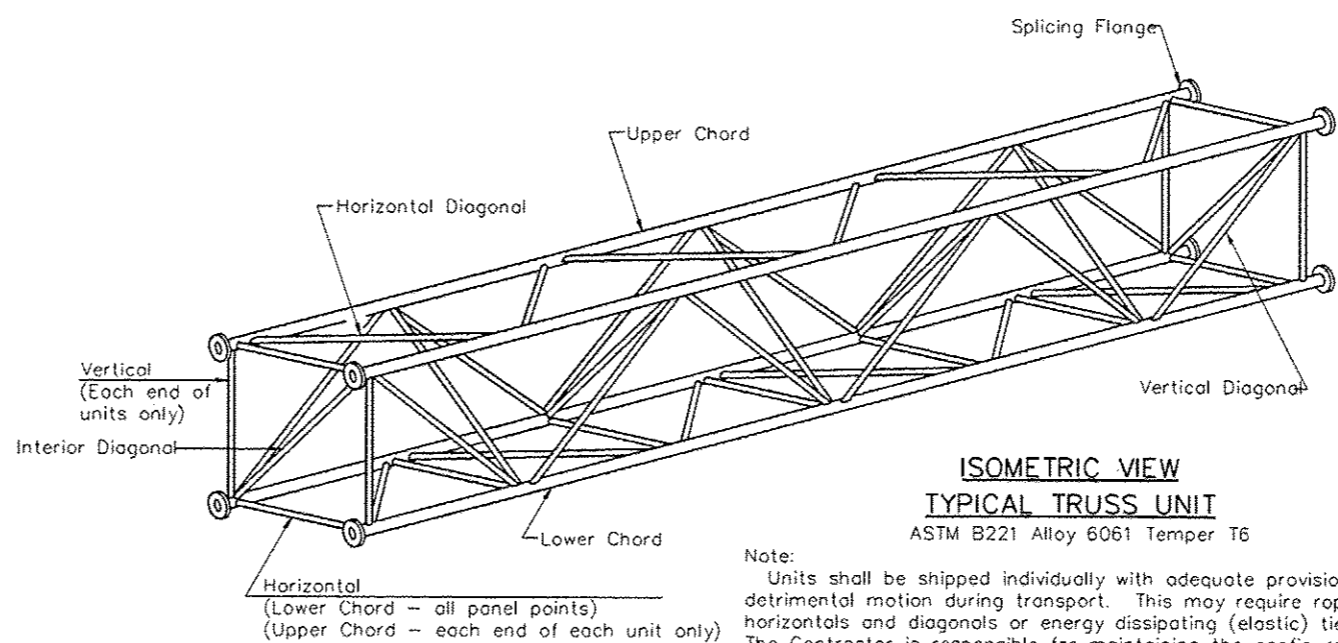
SHEET NO. \_\_\_ OF \_\_\_ SHEETS

**TRUSS UNIT TABLE**

Structure Number	Station	Design Truss Type	Exterior Units (2)				Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonal		Camber at Midspan	Splicing Flange				
			No. Panels per Unit	Unit Lgth.(L)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall	Bolts		Weld Sizes				
														No./Splice		Dia.	W	Wt	A	B
4-16	260+00	I-A	6	29'-4 1/2"	4'-7"	1	6	28'-9"	4'-7"	5"	5/16"	2 1/2"	5/16"	2 1/20"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
4-17	283+00	I-A	6	29'-1 1/2"	4'-6"	1	6	28'-6"	4'-6 1/2"	5"	5/16"	2 1/2"	5/16"	2 1/2"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
4-18	109+00	I-A	7	33'-4 1/2"	4'-6"	N/A	N/A	N/A	N/A	5"	5/16"	2 1/2"	5/16"	1 1/2"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
4-19	395+00	I-A	7	35'-8 1/2"	4'-10"	N/A	N/A	N/A	N/A	5"	5/16"	2 1/2"	5/16"	1 3/4"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
4-20	191+00	I-A	6	30'-10 1/2"	4'-10"	N/A	N/A	N/A	N/A	5"	1/4"	2 1/2"	1/4"	1 1/4"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
4-21	191+00	I-A	7	35'-8 1/2"	4'-10"	N/A	N/A	N/A	N/A	5"	5/16"	2 1/2"	5/16"	1 3/4"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"
4-26	389+50	II-A	5	27'-1"	5'-0 1/2"	1	6	31'-6"	5'-0 1/2"	5 1/2"	5/16"	3"	5/16"	2 3/16"	6	7/8"	5/8"	1/4"	9 1/4"	12 1/4"
4-30	330+08	II-A	5	25'-6 1/4"	4'-8 3/4"	1	6	29'-7 1/2"	4'-8 3/4"	5 1/2"	5/16"	3"	5/16"	1 7/8"	6	7/8"	5/8"	1/4"	9 1/4"	12 1/4"
4-31	72+00	II-A	5	27'-1"	5'-1/2"	1	6	31'-6"	5'-1/2"	5 1/2"	5/16"	3"	5/16"	2 1/4"	6	7/8"	5/8"	1/4"	9 1/4"	12 1/4"
4-32	90+39	I-A	6	30'-10 1/2"	4'-10"	N/A	N/A	N/A	N/A	5"	1/4"	2 1/2"	1/4"	1 1/4"	0	7/8"	5/16"	1/4"	8 3/4"	11 3/4"

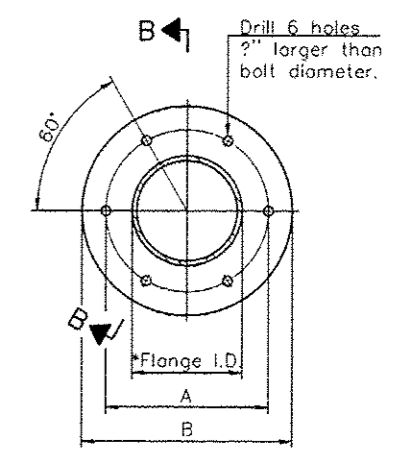


① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining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

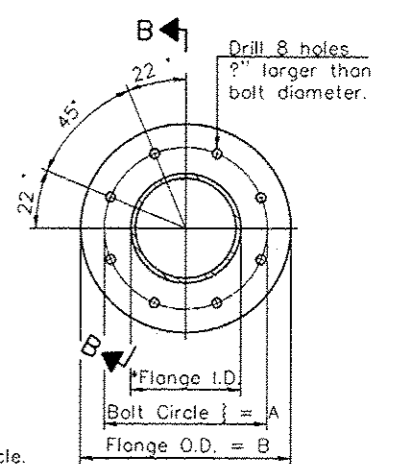


**ISOMETRIC VIEW  
TYPICAL TRUSS UNIT**  
ASTM B221 Alloy 6061 Temper T6

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.



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

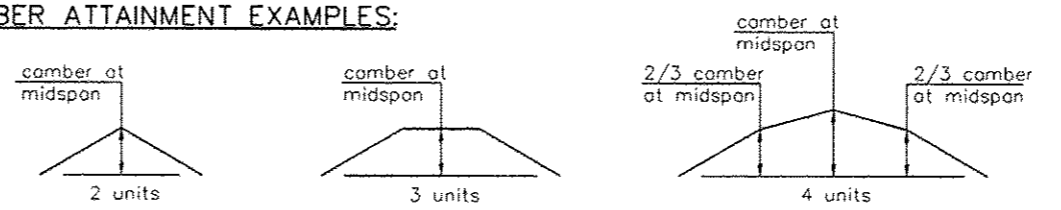


**TRUSS TYPES II-A & III-A**

**SPlicing FLANGES**  
ASTM B221, Alloy 6061-T6  
or ASTM B209, Alloy 6061-T651

\*To fit O.D. of Chord with maximum gap of 1/8"

**CAMBER ATTAINMENT EXAMPLES:**



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

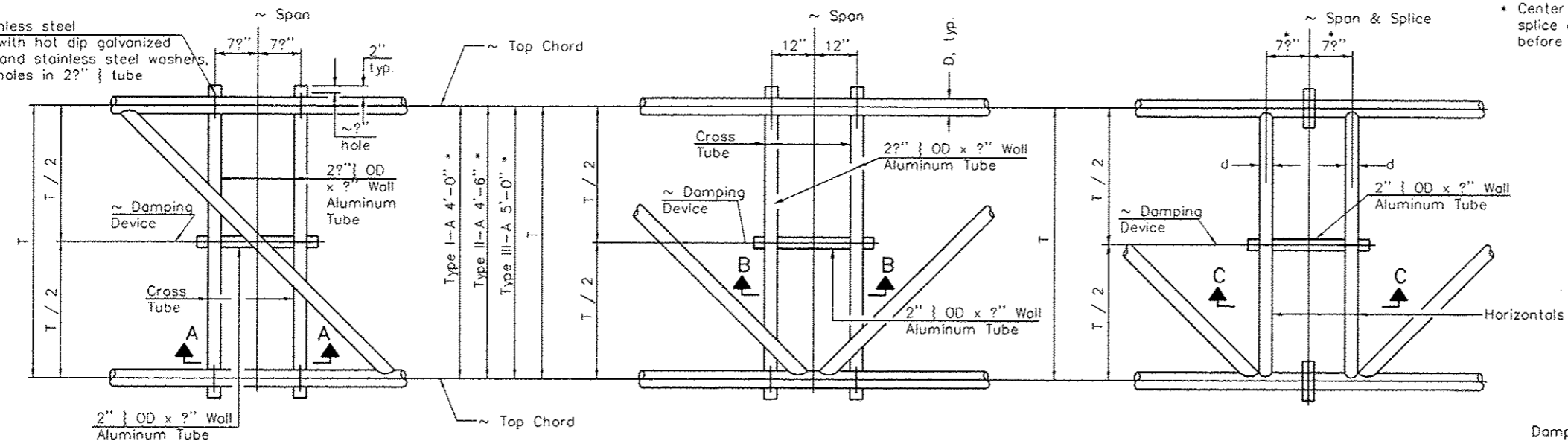
OS4-A-2

6-1-12

FILE NAME	USER NAME	DESIGNED	REVISION	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A	F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED	REVISION			VAR	04-A DVD SIN STR REPL 14-47	VARIOUS	65	34	
		DRAWN	REVISION			CONTRACT NO. 46314					
		CHECKED	REVISION			ILLINOIS FED. AID PROJECT					

5" } stainless steel  
 U-bolt with hot dip galvanized locknuts and stainless steel washers, typ. ?" } holes in 2" } tube

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



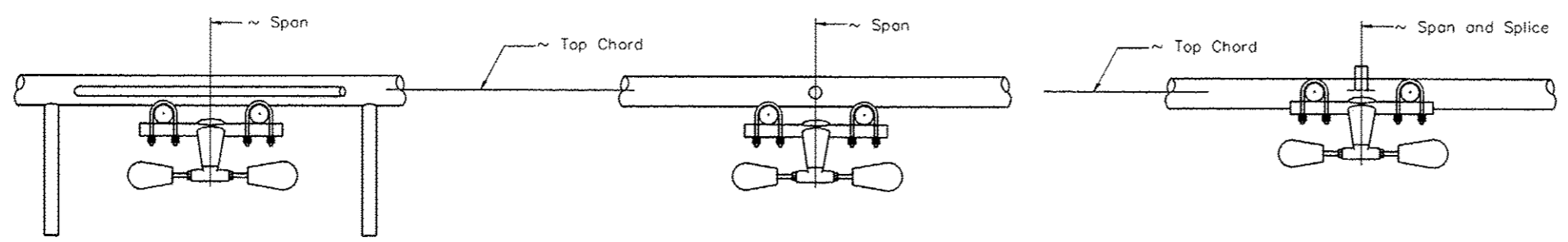
**PLAN DETAIL "A"**  
 ~ Span between Panel Points

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

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

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

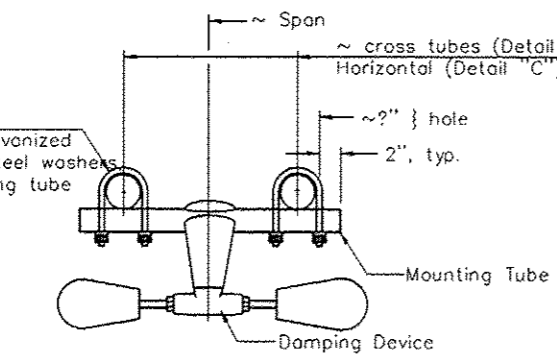


**SECTION A-A**

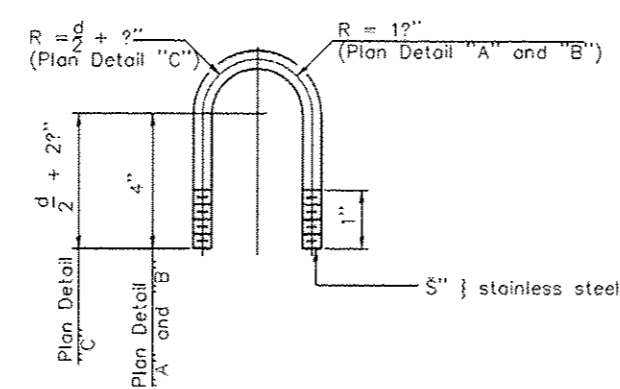
**SECTION B-B**

**SECTION C-C**

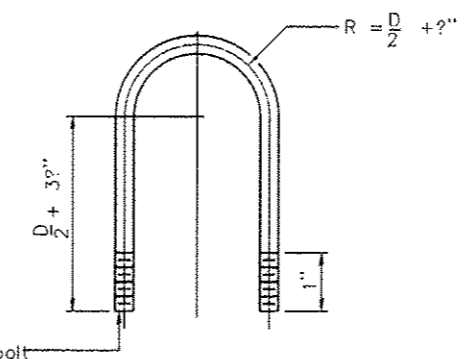
5" } stainless steel  
 U-bolt with hot dip galvanized locknuts and stainless steel washers, typ. ?" } holes in mounting tube



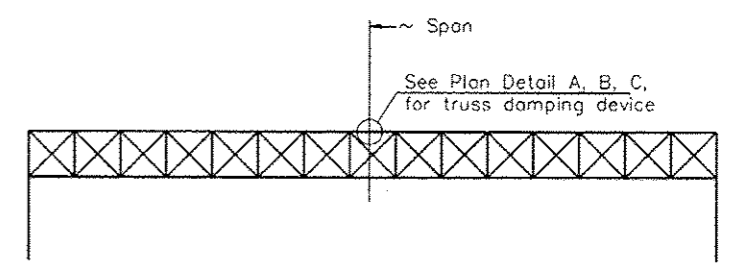
**TRUSS DAMPING DEVICE CONNECTION DETAIL**  
 (Typical)



**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

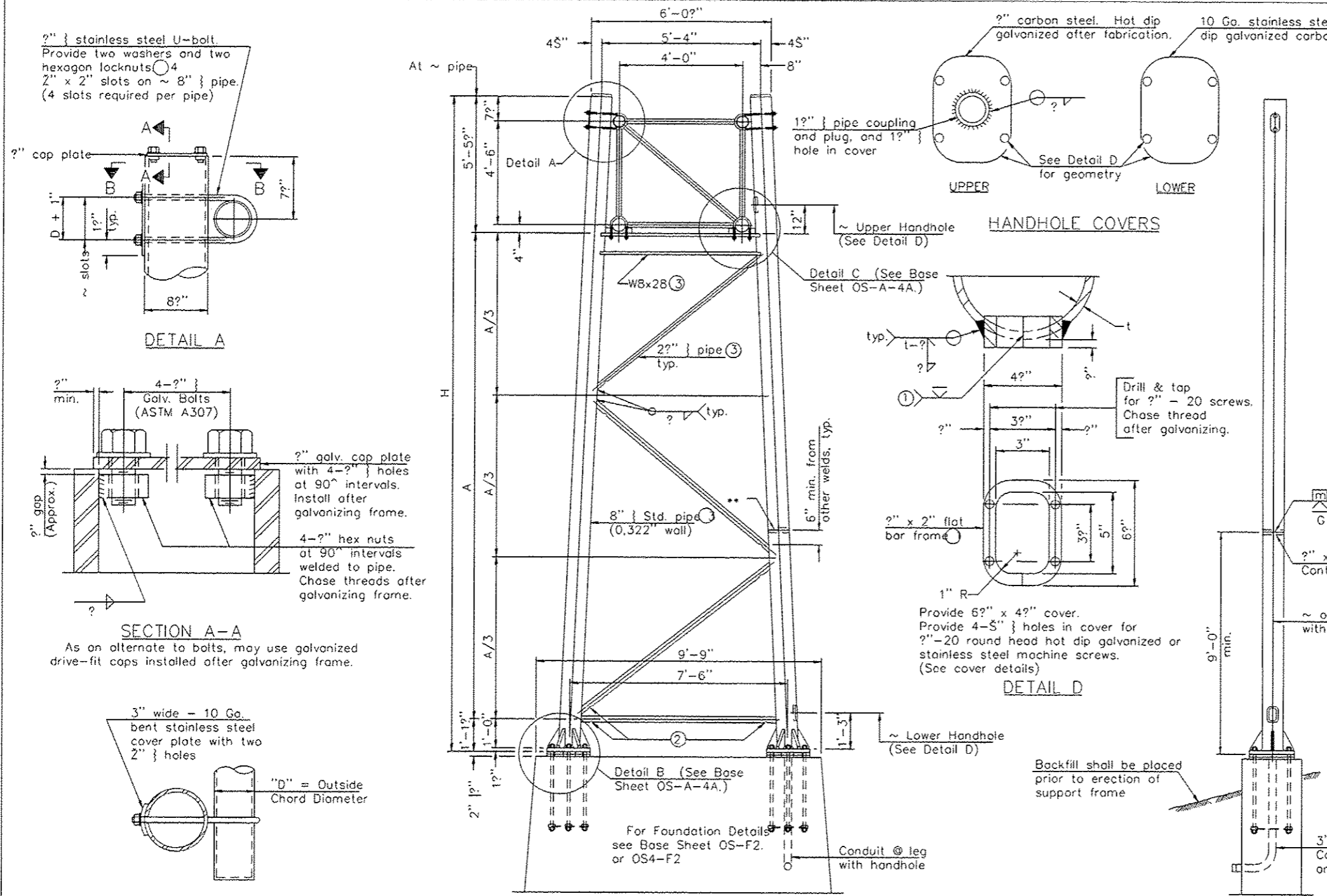
FILE NAME	USER NAME	DESIGNED	REVISED
		CHECKED	REVISED
		DRAWN	REVISED
		CHECKED	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE  
 DAMPING DEVICE

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4-4 DIV SIN STR REPL 14-47	VARIOUS	65	35
CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT	



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 in 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. Pointing is not permitted. See Base Sheet OS-A-1.
- ④ See General Notes for fasteners.
- ⑤
- ⑥ Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or checked by appropriate authority.

**8" 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.

Structure Number	Station	Support		H ⑥	A
		Left	Right		
4-20	191+00	X	X	26.98	20.49
4-29	274+50	X	X	27.56	21.07
4-32	72+00	X	X	26.70	20.21

OS-A-4 6-1-12

FILE NAME	USER NAME	DESIGNED	REVISED
		CHECKED	REVISED
		DRAWN	REVISED
		CHECKED	REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

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

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

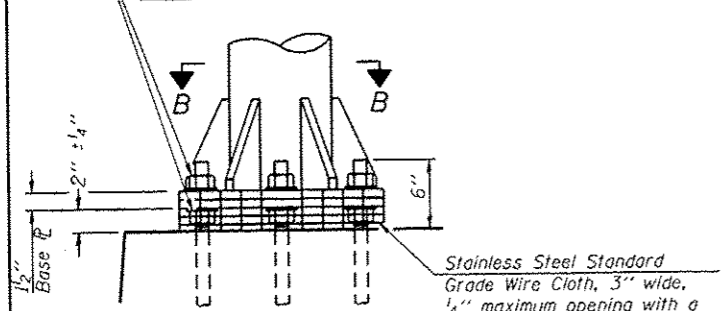
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	04-A DVD 5IN STR REPL 14-47	VARIOUS	65	36
CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT	





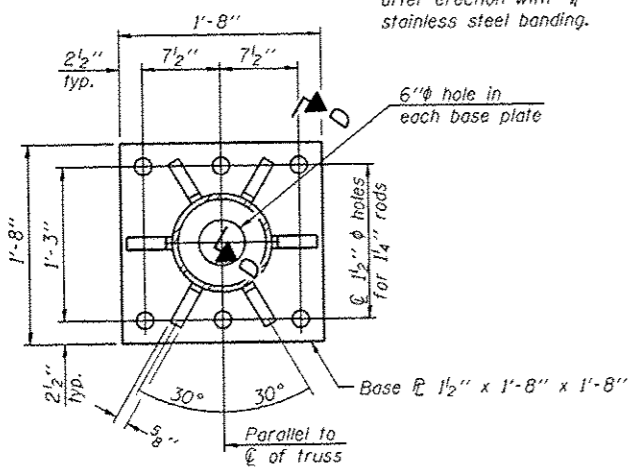


Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.

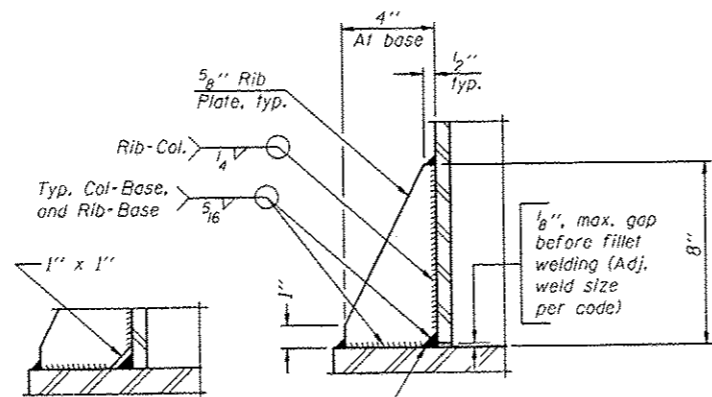


**DETAIL B**

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.



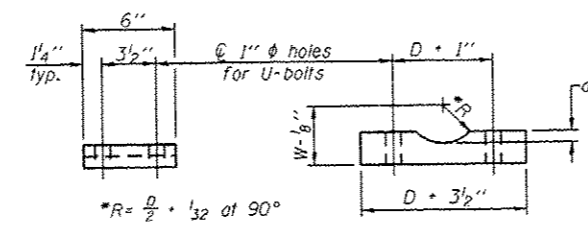
**SECTION B-B**



**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.

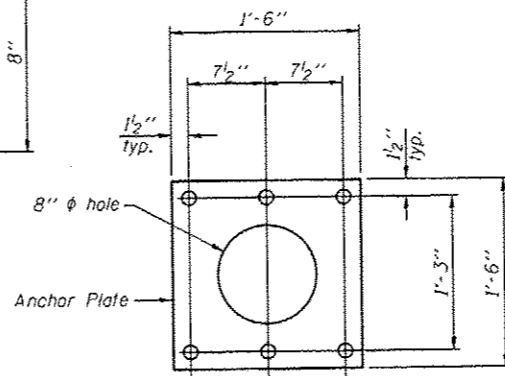
No snip req'd. at rib inside corner if placed before col. to base plate welding.



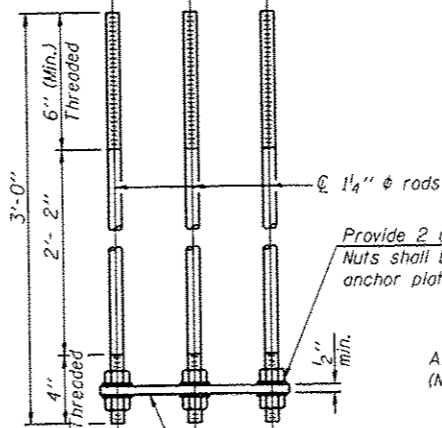
**SADDLE SHIM DETAIL**

ASTM B26 Alloy 355-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"

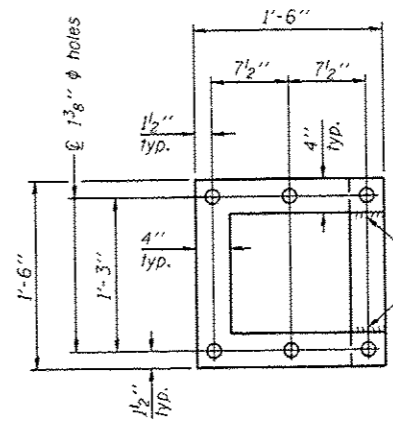


**ANCHOR ROD DETAIL**



All Thread = NC (National Coarse)

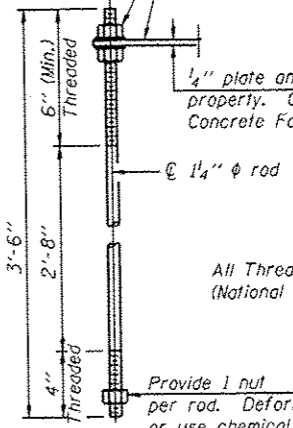
Provide 2 uncoated nuts per rod. Nuts shall be "snug tight" against anchor plate.



**POSITIONING PLATE(S)**

Optionally may use four (4) separate bars. Weld to maintain perpendicularity.

At each location, provide 1/4" thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.

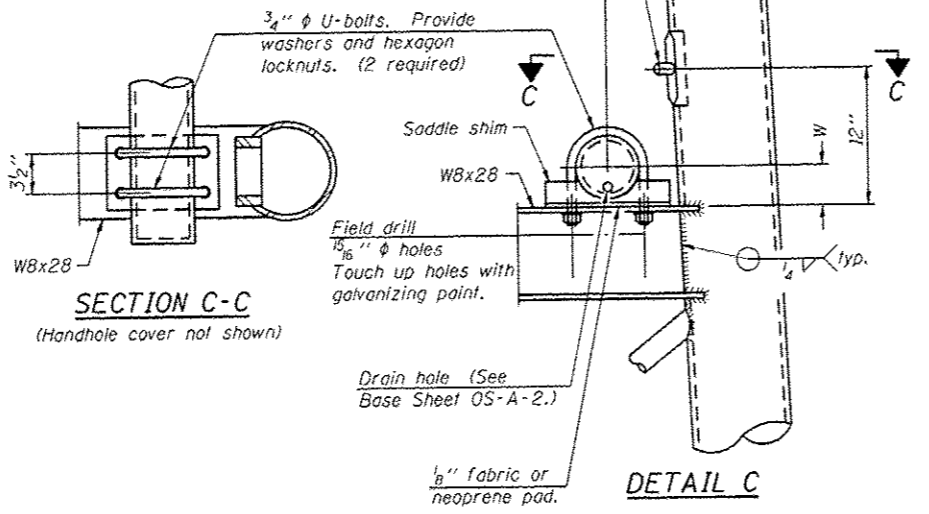


**ANCHOR ROD DETAIL**

Drilled Shaft Foundation

All Thread = NC (National Coarse)

Provide 1 nut per rod. Deform thread or use chemical thread lock to secure.



**SECTION C-C**

**DETAIL C**

**10" PIPE SUPPORT FRAME DETAILS**

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

OS-A-6A

6-1-12

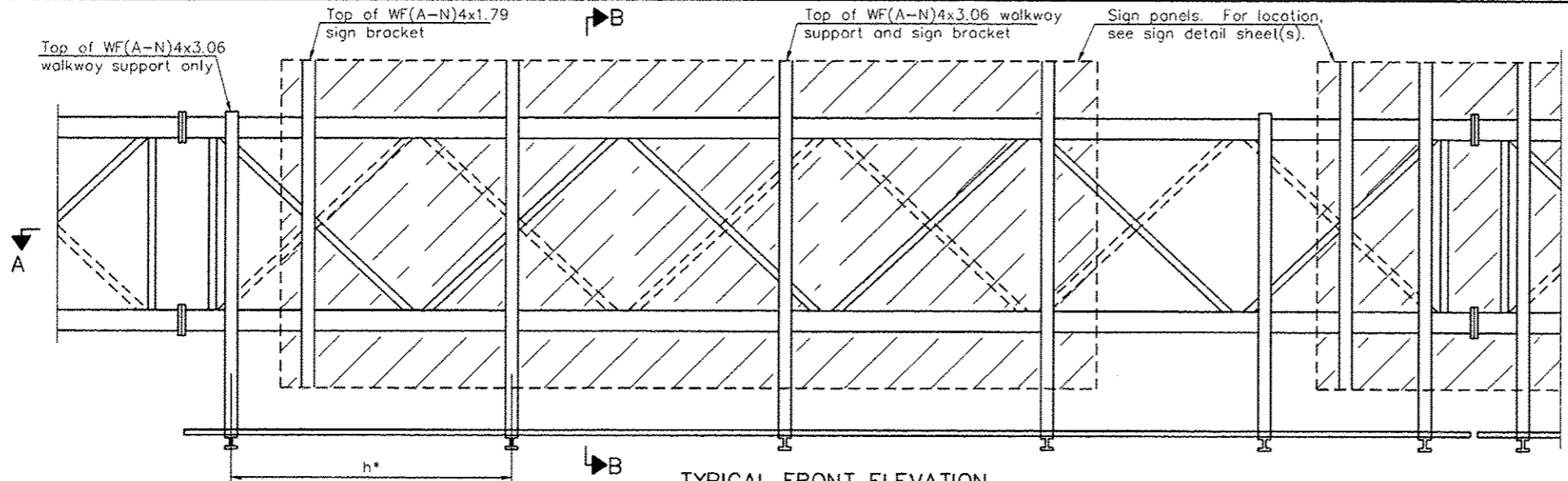
FILE NAME	USER NAME	DESIGNED	REVISIONS
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		DRAWN	REVISIONS
		CHECKED	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

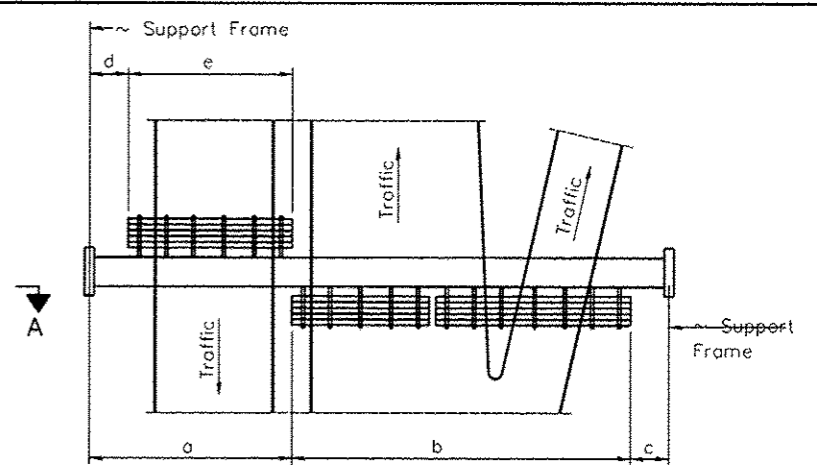
OVERHEAD SIGN STRUCTURES  
SUPPORT FRAME DETAILS - ALUMINUM TRUSS

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4-4 QVD SIGN STR REPL 14-47	VARIOUS	65	39
CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT	



**TYPICAL FRONT ELEVATION**  
 With lights and handrail omitted for clarity.  
 For Section B-B, see Base Sheet OS-A-10.



**PLAN WALKWAY AND HANDRAIL SKETCH**  
 (Road plan beneath truss varies)

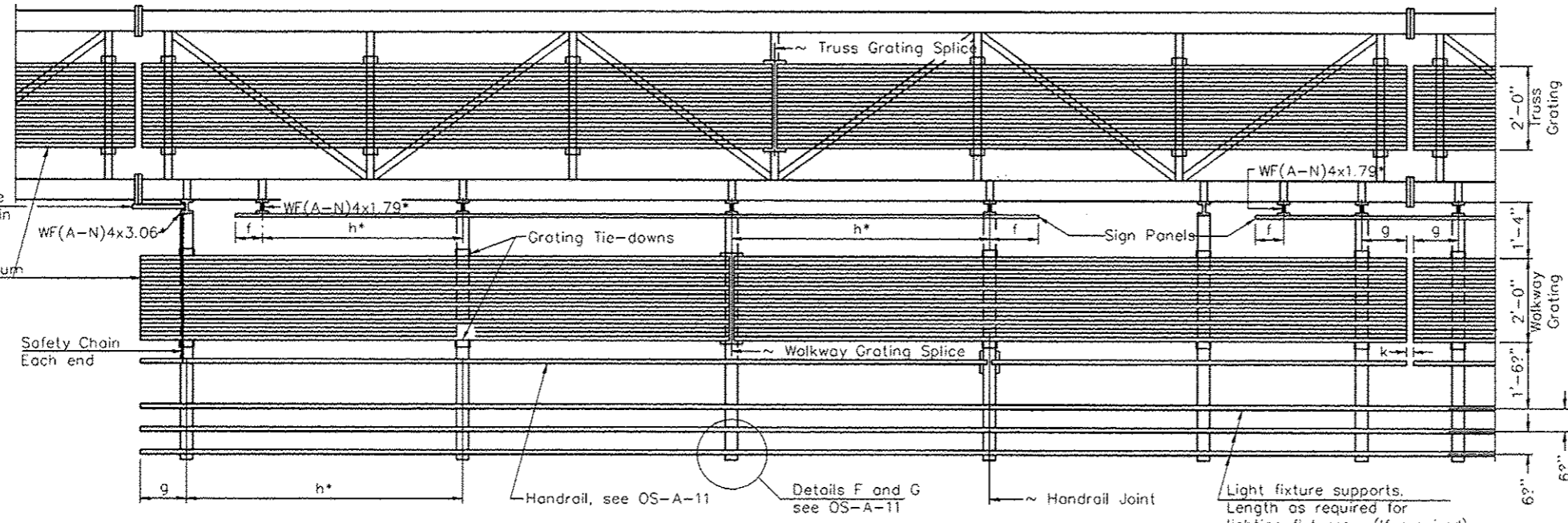
**BRACKET TABLE**

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
8'-0"	8'-0"	2
14'-0"	14'-0"	3
20'-0"	20'-0"	4
26'-0"	26'-0"	5
32'-0"	32'-0"	6

- Notes:
- Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:
  - f = 12" maximum, 4" minimum (End of sign to ~ of nearest bracket)
  - g = 12" maximum, 4" minimum (End of walkway grating to ~ of nearest support bracket)
  - h = 6'-0" maximum (~ to ~ sign and/or walkway support brackets WF(A-N)4x1.79 or WF(A-N)4x3.06)
  - k = 2" maximum gap between adjacent walkway grating sections and handrail ends

\*\* If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet OS-A-10.  
 For Handrail Details see Base Sheet OS-A-11.



**SECTION A-A**

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.  
 Place all sign and walkway brackets as close to panel points as practical.  
 Handrail joints, grating, and light support splices placed as needed.

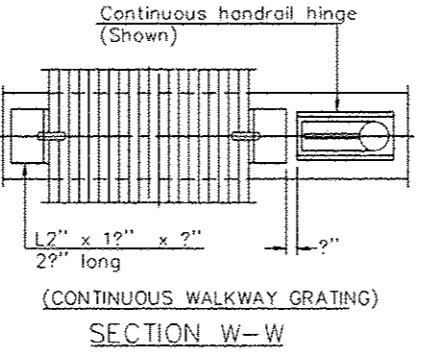
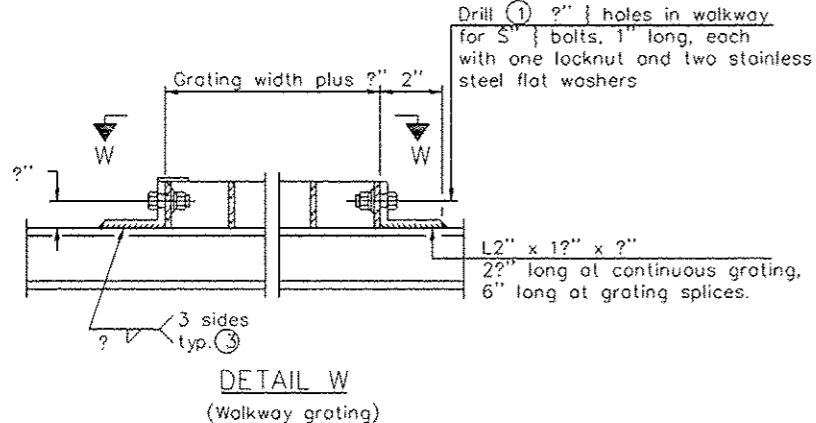
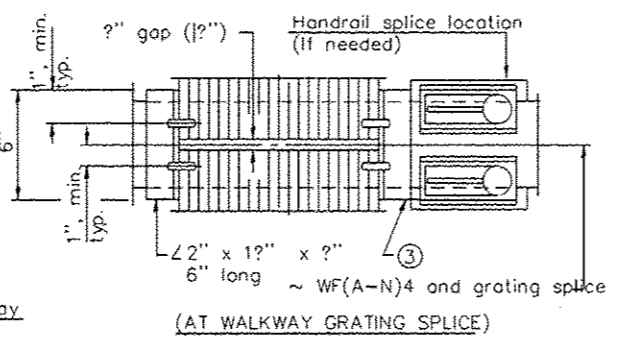
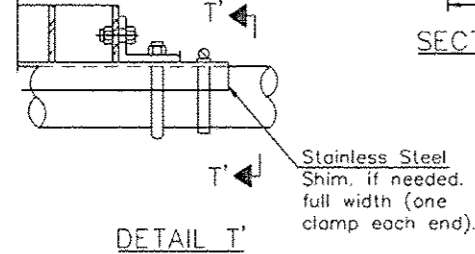
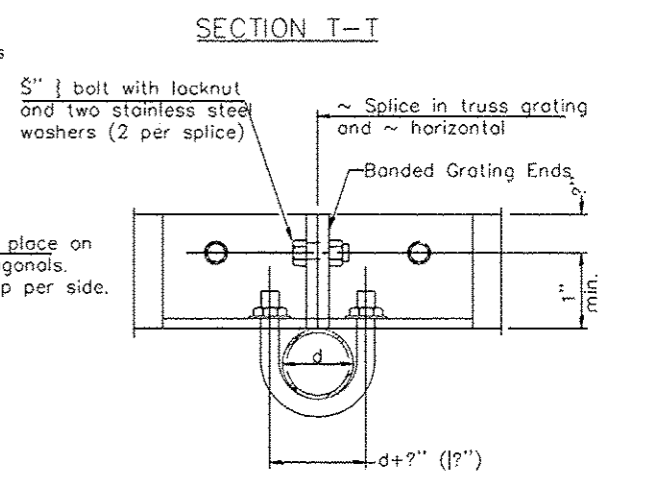
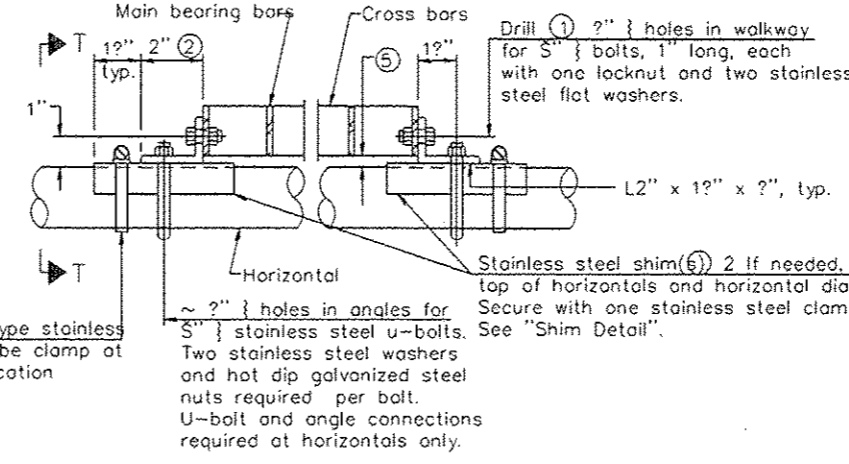
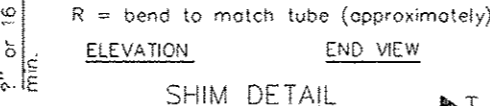
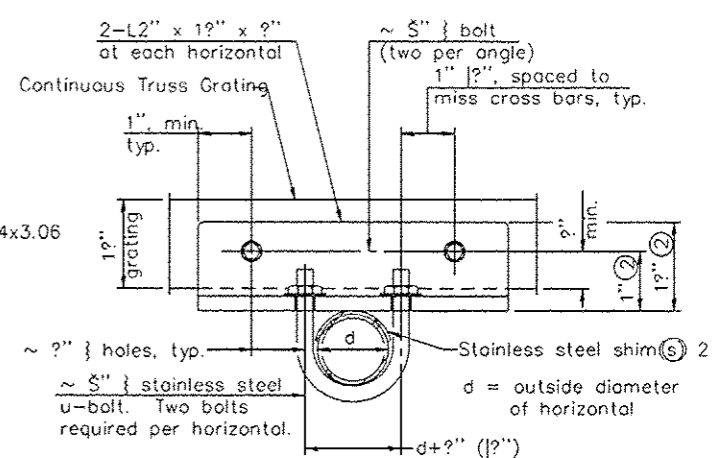
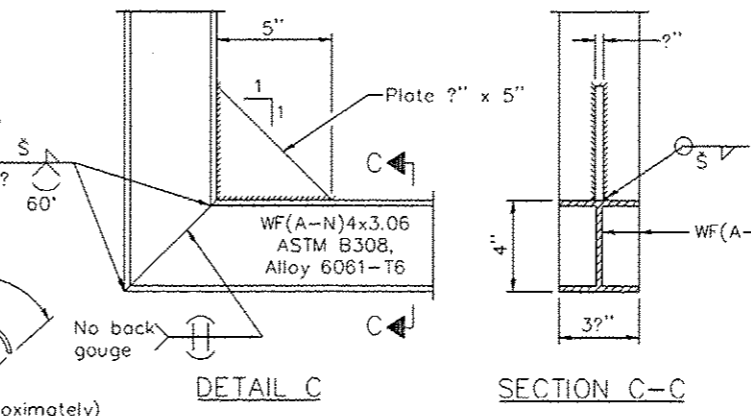
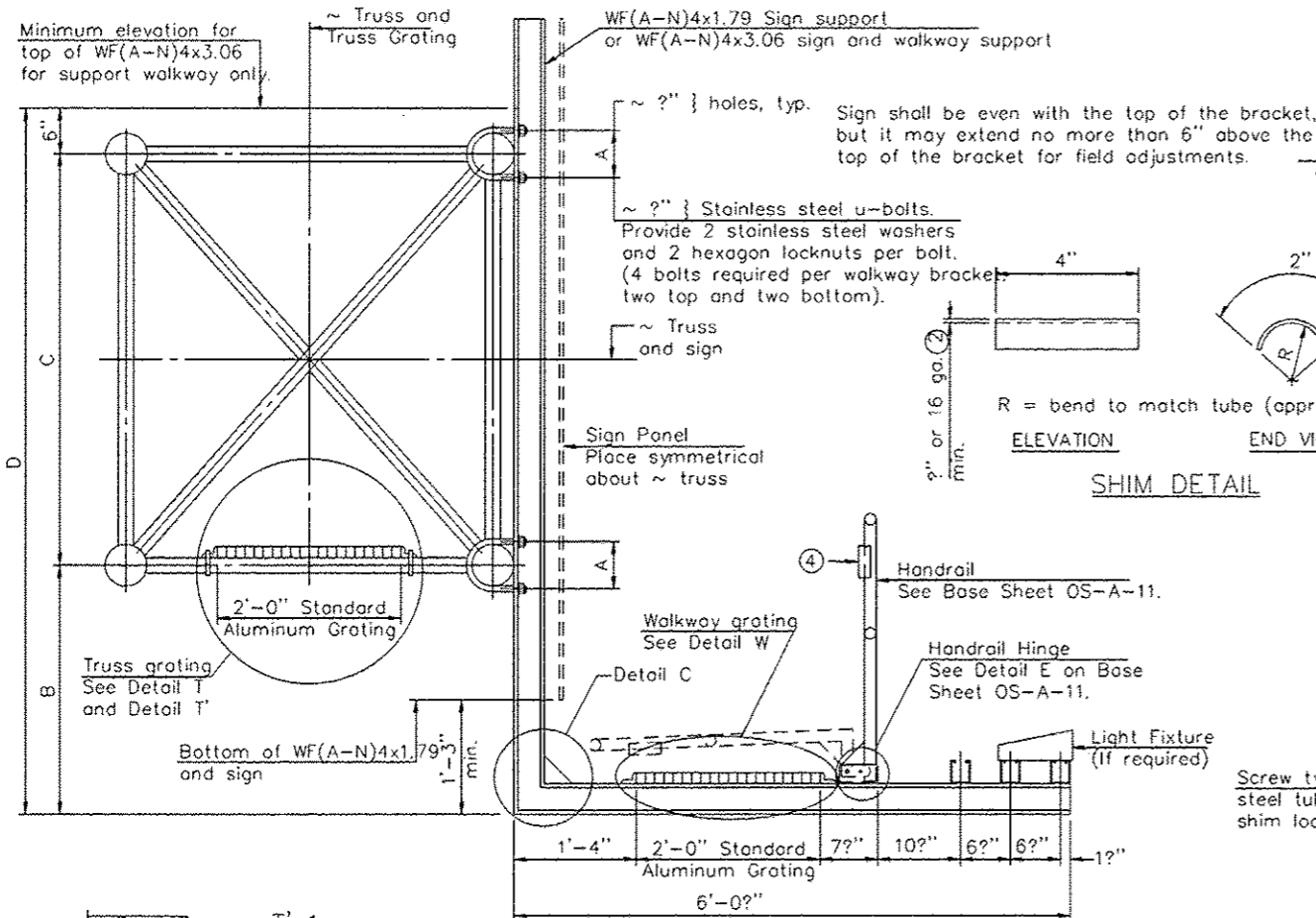
Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
4-16	260+00	32'-6"	27'-6"	26'-0"			
4-17	282+00	17'-0"	53'-0"	15'-0"	N/A	N/A	53'-0"
4-18	109+00	8'-0"	45'-0"	12'-0"	N/A	N/A	45'-0"
4-19	395+00	29'-0"	31'-0"	10'-0"	N/A	N/A	31'-0"
4-20	191+00	5'-0"	34'-0"	11'-0"	N/A	N/A	34'-0"
4-21	191+00	10'-4"	47'-8"	12'-0"	N/A	N/A	47'-8"
4-26	389+50	27'-0"	25'-0"	12'-0"	N/A	N/A	25'-0"
4-29	274+50	17'-0"	34'-0"	17'-0"	N/A	N/A	34'-0"
4-30	330+08	20'-3"	48'-9"	10'-0"	N/A	N/A	48'-9"
4-31	72+00	38'-6"	35'-6"	10'-0"	10'-0"	12'-6"	35'-6"
4-32	90+39	3'-0"	47'-6"	9'-6"	N/A	N/A	47'-6"

Truss grating to facilitate inspection shall run full length (center to center of support frames) 12" on overhead trusses.  
 Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary 1/2" based on available standard widths.

OS-A-9 6-1-12





**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

Main Bearing Bars shall be 1 1/2" x 1 1/2" on 12" centers and conform to ASTM B221 Alloy 6061-T6.  
 Cross bars shall be 1 1/2" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:  
 Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in. per bar, a depth of 1 1/2", spaced on 12" centers.  
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	ⓐ B	C	ⓑ D
4-16	260+00	5 5/8"	5'-5 1/2"	4'-6"	10'-5 1/2"
4-17	283+00	5 5/8"	12'-0"	4'-6"	17'-0"
4-18	109+00	5 5/8"	6'-6"	4'-6"	11'-6"
4-19	395+00	5 5/8"	5'-6"	4'-6"	10'-6"
4-20	191+00	5 5/8"	5'-6"	4'-6"	10'-6"
4-21	191+00	5 5/8"	5'-6"	4'-6"	10'-6"
4-26	389+50	5 5/8"	6'-5 1/2"	5'-3"	11'-10 1/2"
4-29	274+50	5 5/8"	5'-6"	4'-6"	10'-6"
4-30	330+08	5 5/8"	6'-5 1/2"	5'-3"	11'-10 1/2"
4-32	10+67	5 5/8"	3'-3"	4'-6"	8'-3"

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1 1/2" extension bars. (See Base Sheet OS-A-11.)
- 1 1/2" x 1 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- Based on actual height of tallest sign given on OS-A-1.

OS-A-10

6-1-12

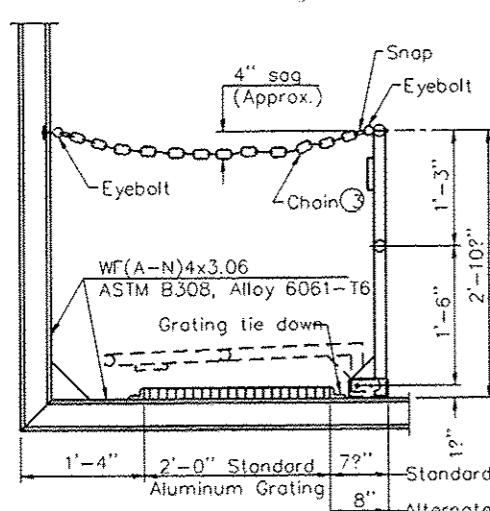
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USER NAME	CHECKED	REVISIONS
PLOT SCALE	DRAWN	REVISIONS
PLOT DATE	CHECKED	REVISIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

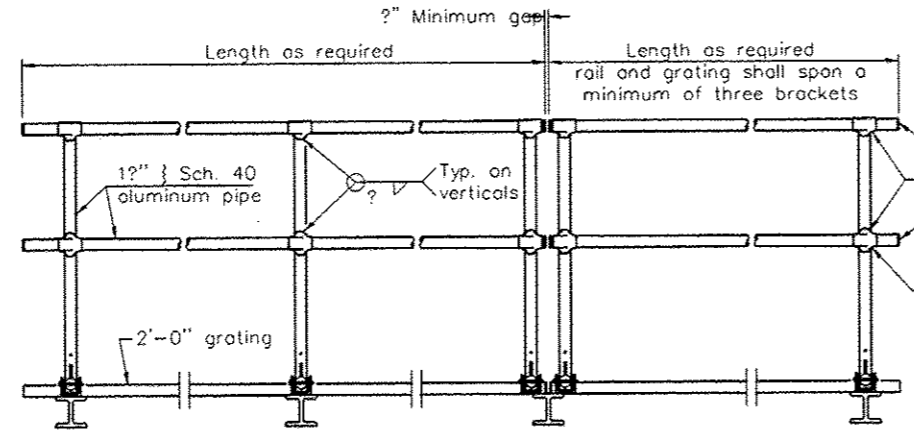
OVERHEAD SIGN STRUCTURES  
ALUMINUM WALKWAY DETAILS

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
04-2 DVD SR STR REPL 14-47	VARIOUS	VARIOUS	65	41
CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT	



**SIDE ELEVATION**  
(Showing safety chain w/o sign)



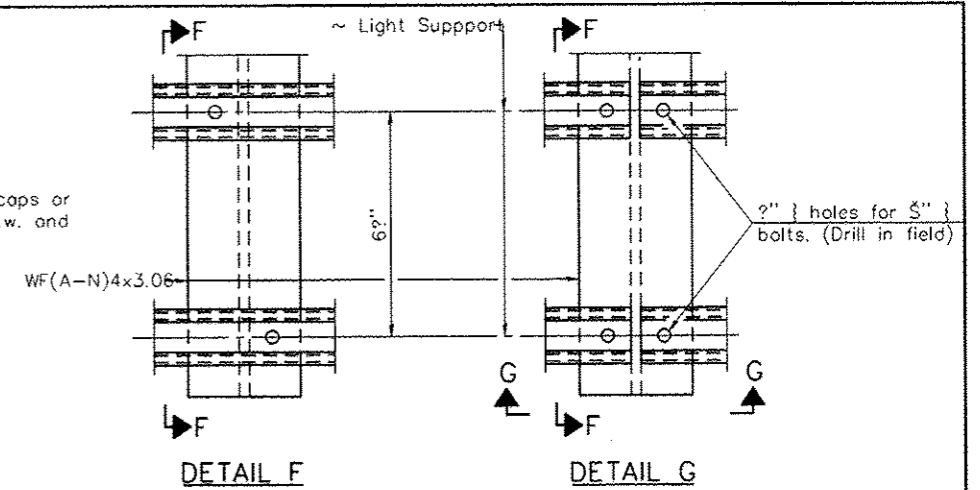
**FRONT ELEVATION**

**HANDRAIL DETAILS**

Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

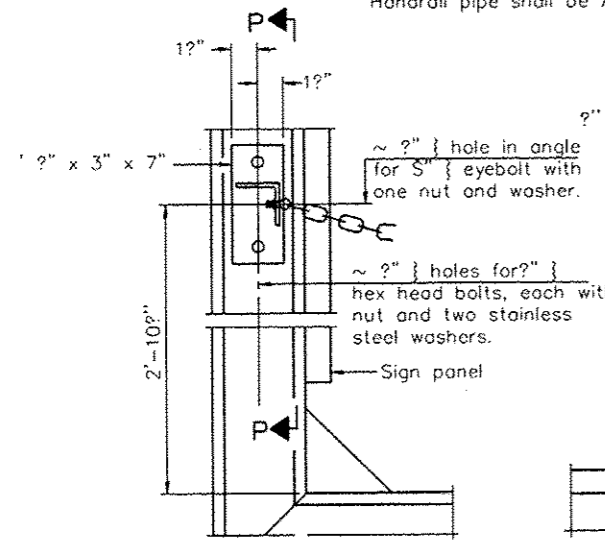
① Install standard force-fit end caps or weld 1/2" end plates with 1/2" c.f.w. and grind smooth. (All rail ends)  
Fittings—ASTM B26, Alloy 356-T7 or 1 1/2" aluminum pipe

② Horizontal handrail member shall be continuous thru fitting. Provide 1/2" hole in fitting for 1/2" bolt. Field drill 1/2" hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/8" eyebolts in 1/2" holes on top rail at ends only.)



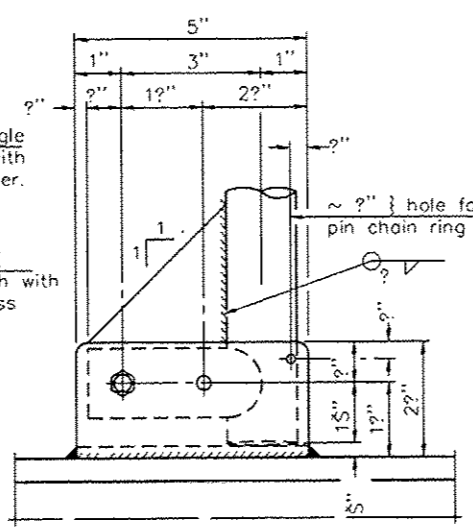
**DETAIL F**

**DETAIL G**

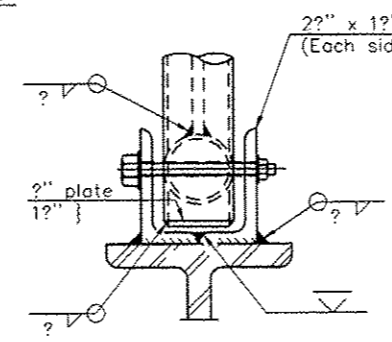


**ALTERNATE SAFETY CHAIN ATTACHMENT**  
(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

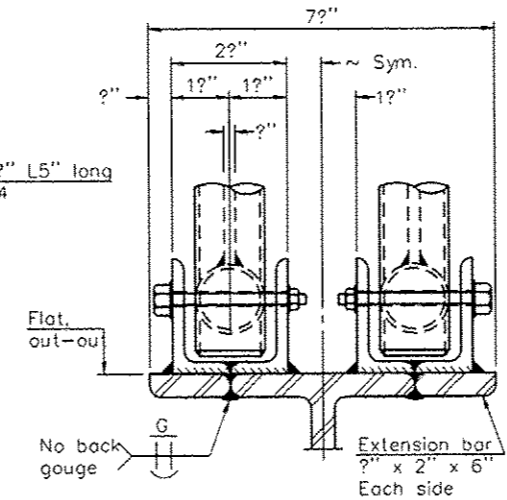


**SIDE ELEVATION**

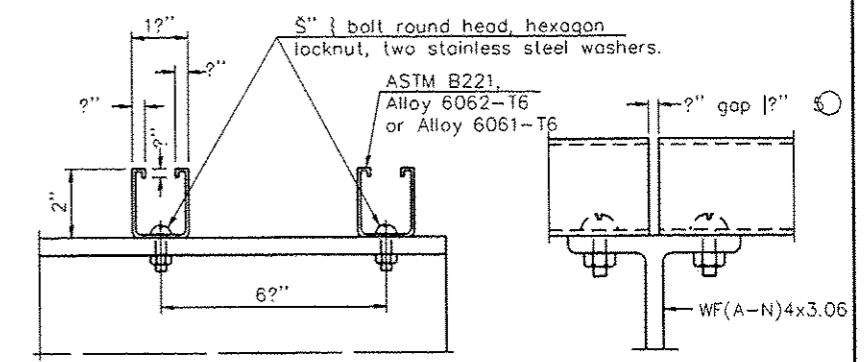


**FRONT ELEVATION**

See "Elevation" at right for dimensions.



**ELEVATION AT HANDRAIL JOINT** ④

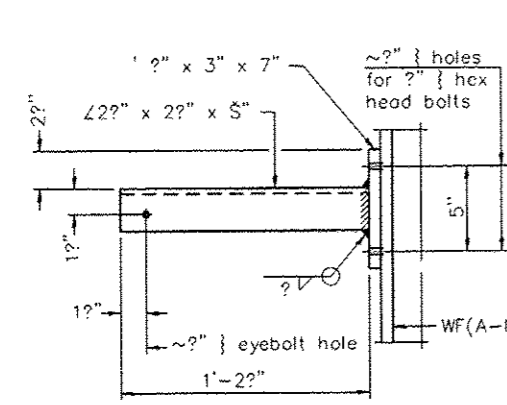


**SECTION F-F**

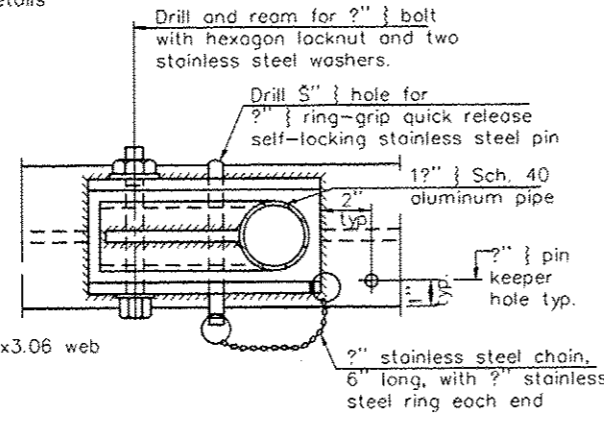
**SECTION G-G**

**LIGHTING FIXTURE MOUNTS (IF REQUIRED)**

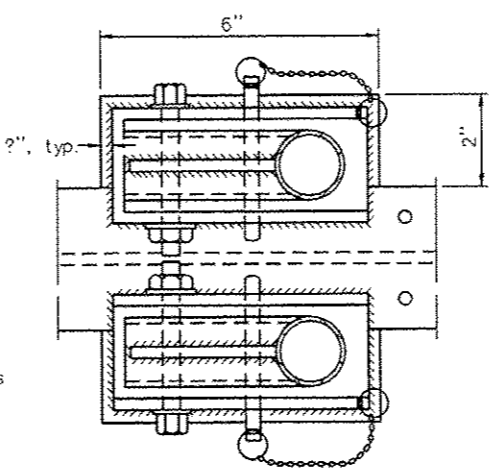
⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



**SECTION P-P**

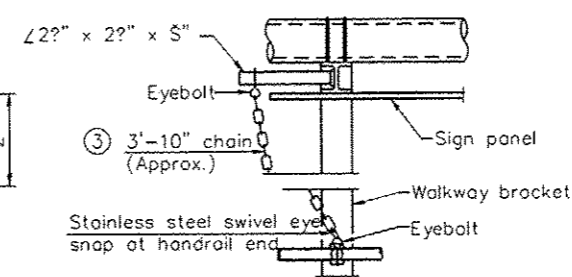


**PLAN DETAIL E HANDRAIL HINGE**



**PLAN AT HANDRAIL JOINT**

Details not shown same as "PLAN"

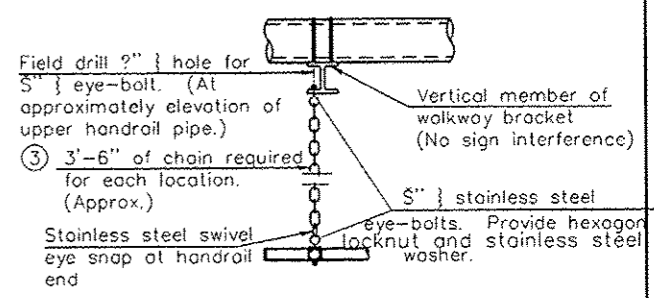


**ALTERNATE SAFETY CHAIN ATTACHMENT**

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

③ 1/2" Type 304L stainless steel chain, approximately 12 links per foot.

④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



**SAFETY CHAIN**

One required for each end of each walkway.

OS-A-11

6-1-12

FILE NAME =	USER NAME =	DESIGNED =	REVISED =
		CHECKED =	REVISED =
		DRAWN =	REVISED =
		CHECKED =	REVISED =

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
ALUMINUM HANDRAIL DETAILS

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	04-4 OVD SIN STR REPL 14-47	VARIOUS	65	42
			CONTRACT NO. 46314	
ILLINOIS FED. AID PROJECT				

**BAR LIST - EACH FOUNDATION**

Bar	Number	Size	Length	Shape
v (E)	16	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

**NOTES:**

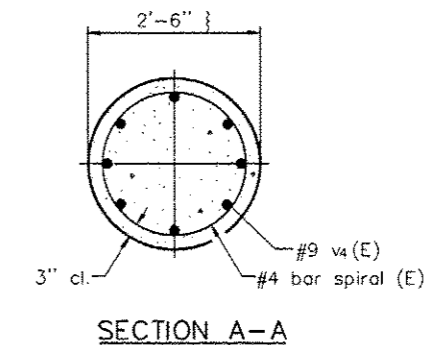
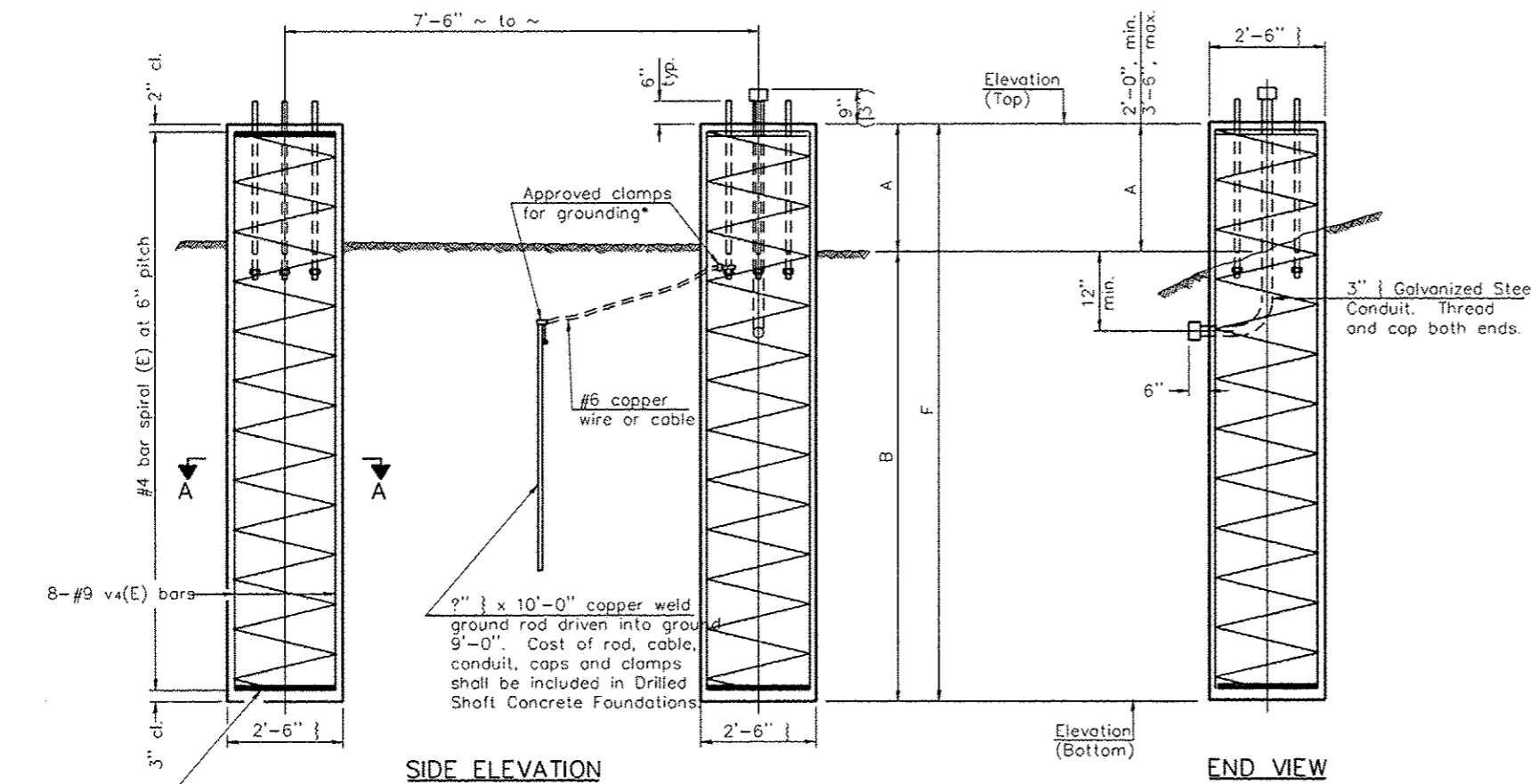
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included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

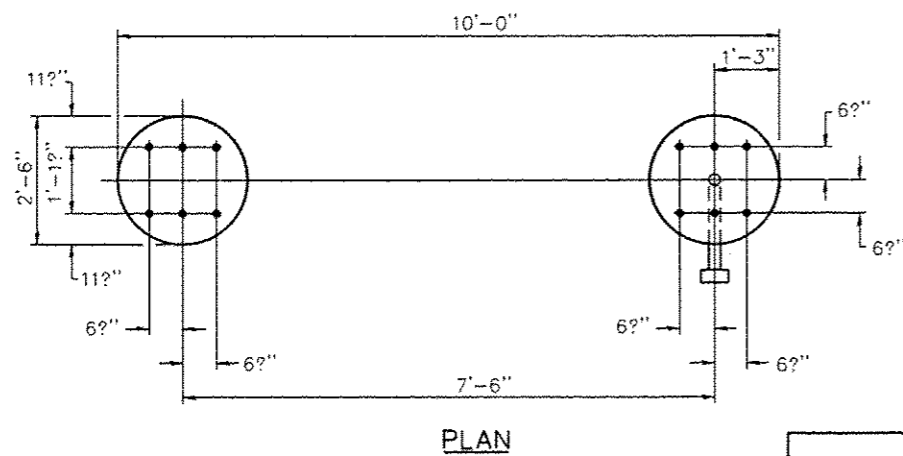
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

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.



3 hoops minimum top and bottom



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 8" } SUPPORT FRAME  
TYPE I-A TRUSS**

Structure Number	Station	Left Foundation			Right Foundation			Class DS Concrete (Cu. Yds.)				
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top		Elevation Bottom	A	B	F
4-20	191+00	643.07	626.7	2'-10 1/2"	13'-6"	16'-4"	642.07	626.57	2'-0"	13'-6"	15'-6"	11.4
4-29	274+50	735.39	718.39	2'-6"	14'-6"	17'-0"	735.39	718.39	2'-6"	14'-6"	17'-0"	12.0
4-32		102.00	86.5	2'-0"	13'-6"	15'-6"	102.00	86.5	2'-0"	13'-6"	15'-6"	11.2

OS4-F2

8-21-13

FILE NAME -	USER NAME -	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

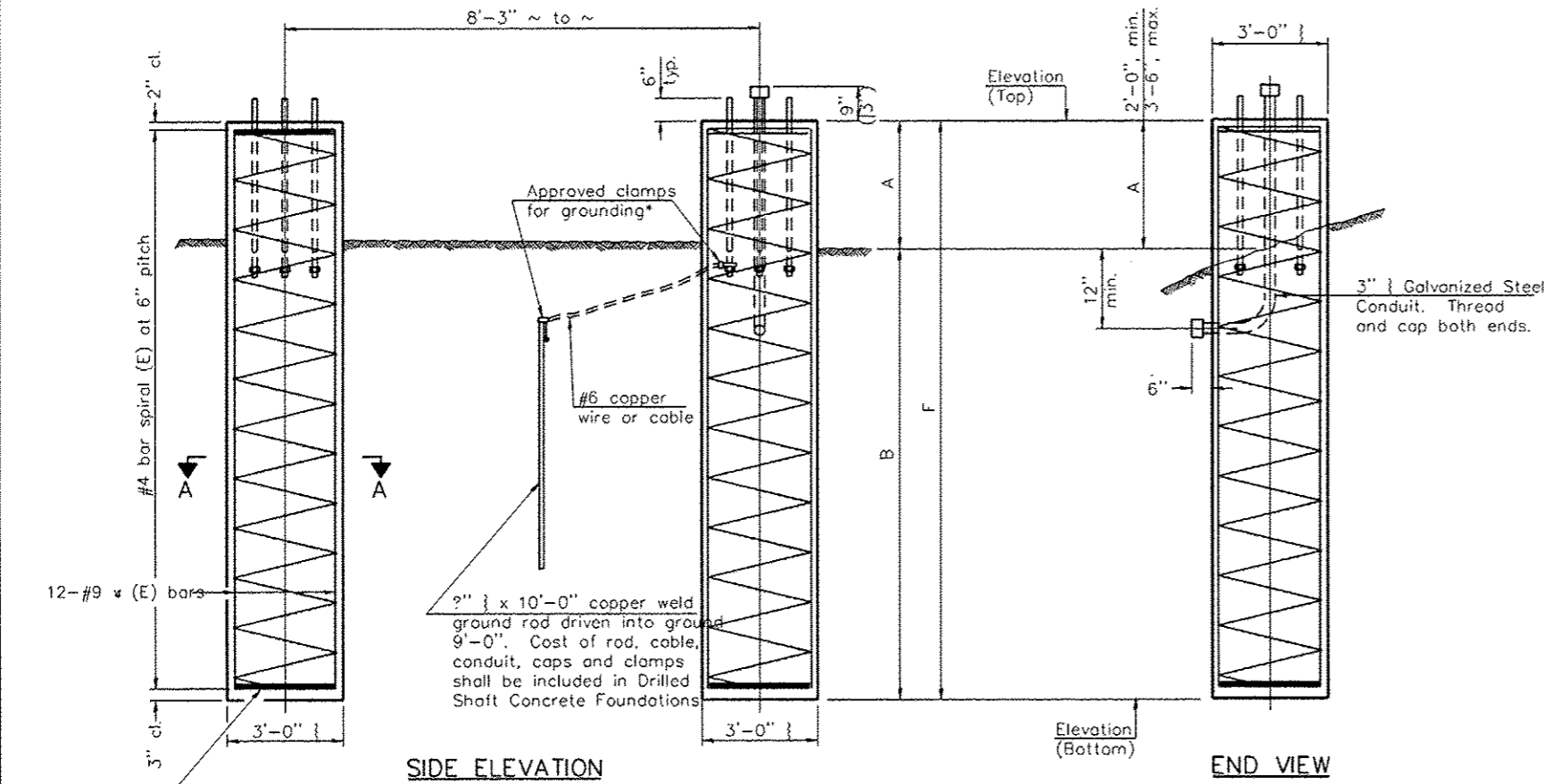
OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

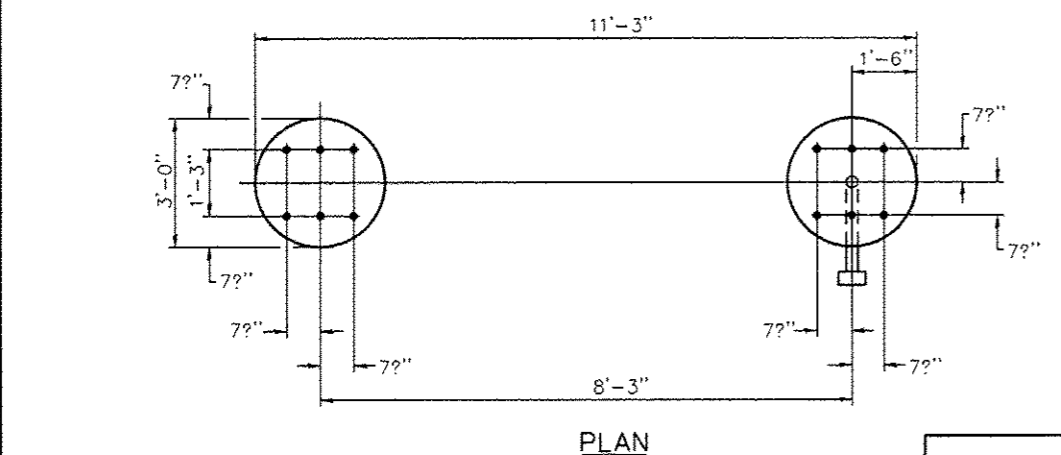
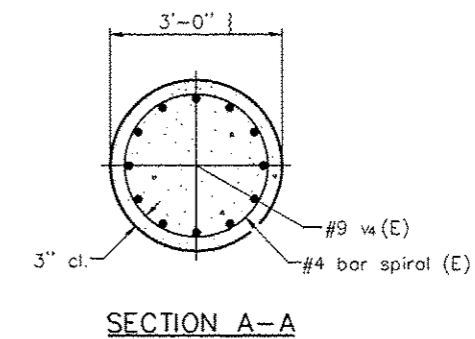
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	04+4 OVD SIGN STR REPL 14-47	VARIOUS	65	43
CONTRACT NO. 46314			ILLINOIS FED. AID PROJECT	

**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 ( $Q_u$ ) 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 10" } SUPPORT FRAME  
TYPE I-A or II-A TRUSS**

Structure Number	Station	Left Foundation			Right Foundation			Elevation Top	Elevation Bottom	A	B	F	Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top						
4-16	260+00	583.53	564.03	3'-0"	16'-6"	19'-6"	585.69	566.69	2'-0"	16'-6"	19'-0"	19.6	
4-17	282+00	579.00	562.50	2'-8"	16'-6"	19'-2"	579.00	562.50	3'-6"	16'-6"	20'-0"	20.4	
4-18	109+00	570.45	551.95	2'-0"	16'-6"	18'-6"	570.45	551.95	2'-0"	16'-6"	18'-6"	19.2	
4-19	395+00	481.00	461.25	3'-3"	16'-6"	19'-9"	481.00	461.25	3'-3"	16'-6"	19'-9"	20.6	
4-21	191+00	602.83	583.83	2'-6"	16'-6"	19'-0"	602.83	583.83	2'-6"	16'-6"	19'-0"	19.6	
4-26	389+50	723.54	704.04	2'-0"	17'-6"	19'-6"	723.54	704.04	2'-0"	17'-6"	19'-6"	20.4	
4-30	330+08	730.44	710.44	2'-6"	17'-6"	20'-0"	730.44	710.44	2'-6"	17'-6"	20'-0"	20.8	
4-31	72+00	481.20	460.70	3'-0"	17'-6"	20'-6"	481.20	460.70	3'-0"	17'-6"	20'-6"	21.2	

OS4-F3

8-21-13

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
DRILLED SHAFT DETAILS

SHEET NO. \_\_\_ OF \_\_\_ SHEETS

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	84-4 DVD SH SR REPL 14-47	VARIOUS	65	44
CONTRACT NO. 46314				
ILLINOIS FED. AID PROJECT				



ROUTE I-6 DESCRIPTION I-74 EB about 0.5 miles west of I-474 EB LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 22, TWP. 9N, RNG. 7E

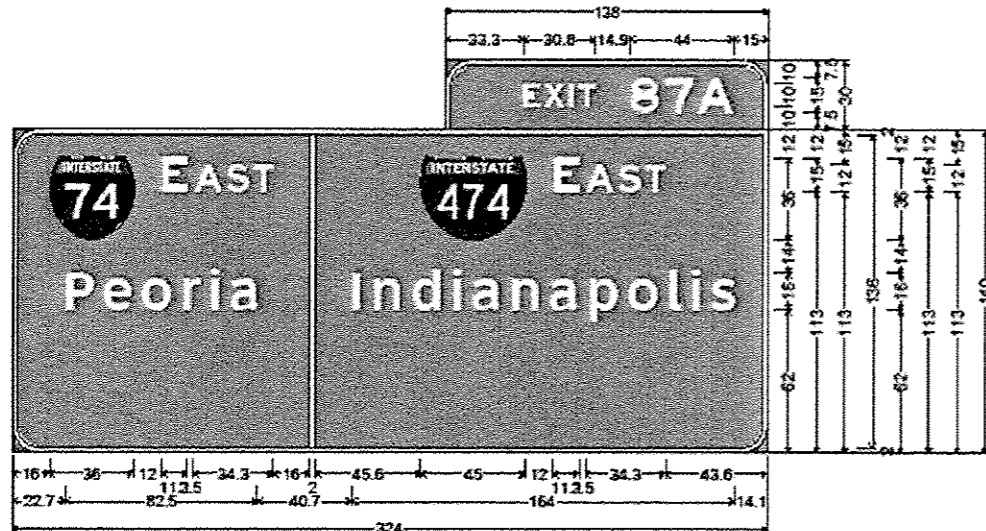
COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S0721074R085.90(eds)  
Station \_\_\_\_\_  
BORING NO. 4-16 (Median)  
Station 260+22  
Offset 9.0 ft Rt Median CL  
Ground Surface Elev. 584.53 ft

DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	SPT (blows)	DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	SPT (blows)
0	FILL: SILTY CLAY, brown, stiff to very stiff (first 2 samples frozen)			0	SILTY CLAY, brown, trace gray, stiff to very stiff (continued)		
7				19			
5				22		1.5	21
				26	SANDY CLAY, gray, stiff to very stiff	S	
2				8			
5		1.5	20	13		2.8	20
5		S		18		P	
4				12			
6		2.3	19	17		1.7	18
6		S		22		S	
5				15			
6		1.6	18	25		1.0	20
8		B		24		P	
574.53	SILTY LOAM, brown and gray, stiff			564.53	End of Boring		
4							
5			17				
8							
571.53	SILTY CLAY, brown, trace gray, stiff to very stiff with silt pockets						
5							
5		3.3	20				
5		B					
6							
10		2.5	18				
10		P					
4							
7		1.2	20				
12		B					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



12.0" Radius, 2.0" Border, White on Green;  
"EXIT 87A" E Mod 2K;  
12.0" Radius, 2.0" Border, White on Green;  
"E AST" E Mod 2K; "Peoria" Clearview Hwy-5-W; "E AST" E Mod 2K;  
"Indianapolis" Clearview Hwy-5-W;

Table of widths and spaces:

E	X	I	T	A	T	A	E
33.3	7.4	1.4	8.6	2.2	2.0	1.8	7.4
14.9	12.2	2.4	12.1	2.1	15.2	15.0	
16.0	36.0	12.0	11.1	2.5	12.1	1.8	9.7
1.8	8.9	16.0	2.0	45.6	45.0	12.0	11.1
A	S	T					
2.5	12.1	1.8	9.7	1.8	8.9	43.6	
P	e	o	r	i	a		
22.7	11.6	4.4	11.8	4.8	12.4	5.4	7.3
4.4	3.8	4.7	11.9				
i	n	d	i	a	n	a	p
40.7	3.1	6.3	11.1	5.5	11.5	5.7	3.8
4.7	12.0	5.0	11.1	5.1	11.9	5.1	11.6
4.8	12.3	5.5	5.0	4.5	3.8	4.4	10.2
14.1							

NOTE:  
SIGN ARROWS SHALL BE DESIGNED ACCORDING TO SECTION 2E-3 OF MUTCD

NOTE:  
SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME: overhead sign plans.dgn	USER NAME: davis	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DESIGN & SOIL BORING	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model:	PLOT SCALE: 3/4" = 1'-0"	DRAWN: -	REVISED: -			VAR	04-4.0VD SIGN STR REPL 14-47	VARIOUS	65	45	
	PLOT DATE: 3/21/2014	CHECKED: -	REVISED: -			CONTRACT NO. 46314					
		DATE: -	REVISED: -			SCALE:	SHEET	OF	SHEETS	STA.	TO



# SOIL BORING LOG

ROUTE IL 6 DESCRIPTION I-74 EB about 0.5 miles west of I-474 EB LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 22, TWP. 9N, RNG. 7E,  
Latitude, Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

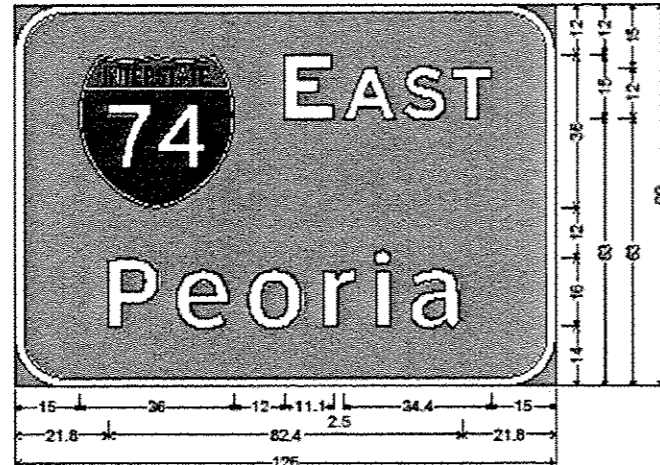
STRUCT. NO. 4S0721074R065.90(exist)  
Station \_\_\_\_\_  
BORING NO. 4-16 (Shoulder)  
Station 261+75  
Offset 85.0 ft Rt Median CL  
Ground Surface Elev. 589.03 ft

DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
7	5	4.5	23	FILL: SILTY CLAY, brown to gray, stiff (first sample frozen)	19			
5					22			18
586.03					26			
2	5	4.5	21	FILL: SANDY CLAY, gray, trace organics, stiff (frozen sample)	9			
5					13	4.5		11
583.03					18	P		
4	6	1.7	16	SANDY CLAY, gray, stiff	12			
6					17	5.6		12
8					22	S		
581.03								
5				SILTY LOAM, brown and gray to grayish-brown, stiff to very stiff	15			
6	6	3.0	20		25	6.1		10
8					24	S		
569.03				End of Boring				
4								
5	5	1.3	15					
8								
5								
5	5	3.0	23					
570.53								
6								
10	10		15	with sand pockets				
10								
4				SANDY CLAY, gray, very stiff to hard				
7	7	4.5	16					
570.53								
12								
	12	P						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)

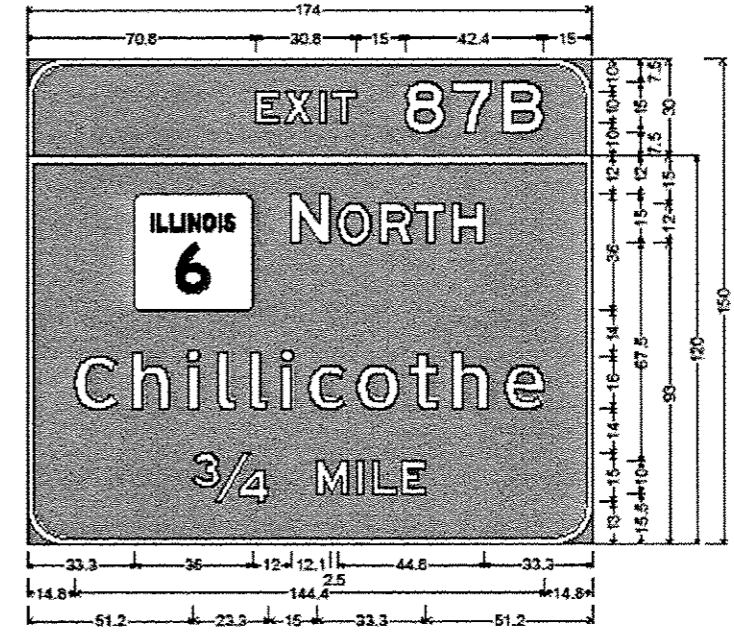
FILE NAME : overhead sign plans.dgn	USER NAME : doviss	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 39,3701 / in.	CHECKED - DATE -	REVISED - REVISED -			VAR	D-4 OVD SIGN STR REPL 14-07	VARIOUS	65	46	
	PLOT DATE : 3/24/2014					SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 46314			
						ILLINOIS FED. AID PROJECT					





12.0" Radius, 2.0" Border, White on Green;  
 Interstate 74 15.0" D 2K; "E AST" E Mod 2K;  
 "Peoria" Clearview/Hwy-5-W;  
 Table of widths and spaces:

15.0	36.0	12.0	11.1	2.5	12.2	1.8	9.7	1.8	8.9	15.0		
21.8	11.6	4.4	11.7	4.8	12.4	5.4	7.4	4.3	3.8	4.7	11.9	21.8



12.0" Radius, 2.0" Border, White on Green;  
 "EXIT 87B" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "N ORTH" E Mod 2K; "Chillicothe" Clearview/Hwy-5-W;  
 "3/4 MILE" E Mod 2K;  
 Table of widths and spaces:

70.8	7.4	1.4	8.7	2.1	2.0	1.6	7.4	15.0	12.1	2.4	12.2	3.6	12.1	15.0								
33.3	36.0	12.0	12.1	2.5	10.1	2.9	9.7	1.3	8.9	2.2	9.7	33.3										
14.8	13.0	4.9	11.1	5.7	3.8	5.7	5.1	4.8	5.0	4.5	3.8	5.0	10.9	4.0	12.3	2.8	7.9	4.8	11.1	5.4	11.8	14.8
51.2	23.3	15.0	9.3	2.8	2.0	2.8	7.4	1.6	7.4	51.2												

**NOTE:**  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : davisso	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGNS</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE : 3/8" = 1'-0"	DRAWN -	REVISED -			VAR	04-4 0VD SIN STR REPL 14-47	VARIOUS	65	47	
Model	CHECKED -	REVISED -	CONTRACT NO. 46314								
PLOT DATE : 3/21/2014	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								
SCALE: SHEET OF SHEETS STA. TO STA.											



ROUTE IL 6 DESCRIPTION I-74 EB at the ramp to I-474 EB LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 23, TWP. 9N, RNG. 7E

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S0721074R086.30(exist)  
Station \_\_\_\_\_  
BORING NO. 4-17 (Shoulder)  
Station 282+40  
Offset 29.0 ft Rt. CL. EB  
Ground Surface Elev. 578.36 ft (ft) (ft) (tsf) (%)

DEPTH (ft)	SOIL DESCRIPTION	DEPTH (ft)	BL (ft)	UCS (tsf)	MOISTURE (%)	DEPTH (ft)	BL (ft)	UCS (tsf)	MOISTURE (%)
0	ASPHALT, approximately 21"	0				0			
576.61		576.61				6			
575.96	CRUSHED STONE AGGREGATE, approximately 8"	575.96				11	2.5	19	
	SILTY LOAM, gray, stiff to very stiff (possible fill)					11		P	
			3			5			
			4	2.5	20	8			16
			5			8			
			5			8			
			2			652.36			
	brown at 6.5'		3	0.9	23	4			
			5			5	1.9	23	
			5			8			
			3			6			
	SILTY CLAY, brown and gray, stiff to very stiff		5	2.3	22	8	2.8	21	
			7			8			
			7			656.36			
	SILTY LOAM, brown, stiff to very stiff		5			8			
			7	3.0	15	8			
			7			38			
			9	1.9	23				
			9						
			3			559.36			
	SILTY CLAY, brown and gray, stiff to very stiff		5	1.7	16				
			8			40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)



12.6" Radius, 2.0" Border, White on Green;  
"EXIT" E Mod 2K; "87A" E Mod 2K;  
12.0" Radius, 2.0" Border, White on Green;  
"EAST" E Mod 2K; "Indianapolis" Clearviewfwy-5-W;  
12.0" Radius, 2.0" Border, Black on Yellow;  
Down Arrow 22.0" 270"; "EXIT ONLY" E Mod 2K; Down Arrow 22.0" 270";  
Table of widths and spaces:

E	X	I	T	A	8	7	A	4	7	4	I	N	D	I	A	N	A	P	O	L	I	S		
103.3	7.3	1.4	8.7	2.1	2.0	1.8	7.4	15.0	12.2	2.4	12.1	2.1	15.2	17.0										
E	X	I	T	A	8	7	A	4	7	4	I	N	D	I	A	N	A	P	O	L	I	S		
62.5	45.0	12.0	11.1	2.5	12.2	1.8	9.7	1.8	8.9	52.5														
E	X	I	T	A	8	7	A	4	7	4	I	N	D	I	A	N	A	P	O	L	I	S		
23.0	3.0	6.4	11.1	5.4	11.6	6.7	3.8	4.7	11.9	5.1	11.1	5.0	12.0	5.0	11.6	4.8	12.4	5.4	5.1	4.4	3.8	4.4	10.2	23.1
E	X	I	T	A	8	7	A	4	7	4	I	N	D	I	A	N	A	P	O	L	I	S		
12.6	32.0	12.0	8.9	1.7	10.4	2.6	2.4	2.1	8.9	12.0	10.1	2.9	9.7	3.3	8.9	0.7	12.2	12.0	32.0	12.6				

NOTE: SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : davis	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DESIGN & SOIL BORING	F.A. R.I.E. VAR	SECTION D4-4 OVD SIN STR REPL 14-47	COUNTY VARIOUS	TOTAL SHEETS 65	SHEET NO. 48
Model	PLOT SCALE : 3/8" = 1' / in.	CHECKED -	REVISED -			SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____	CONTRACT NO. 46314	ILLINOIS FED. AID PROJECT		
	PLOT DATE : 3/24/2014	DATE -	REVISED -							





**Illinois Department of Transportation**  
Division of Highways  
Trenton, P.O. Box 100, MO 2

**SOIL BORING LOG**

Date 2/13/14

ROUTE IL 6 DESCRIPTION I-74 WB, 1 mile east of I-74/IL-6 LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 35, TWP. 9N, RNG. 7E

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S072474L001.6(exist)  
Station \_\_\_\_\_  
BORING NO. 4-16 (Shoulder)  
Station 109+32  
Offset 96.0 ft Lt Median CL  
Ground Surface Elev. 566.00 ft

DEPTH (ft)	BLOW COUNT (6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (6")	UCS (tsf)	MOISTURE (%)
0				FILL: SAND, brown, medium dense (first sample frozen)	0			
4					8	18	4.5	10
6		14			30	P		
8				542.50				
3				SILT, gray, very dense	24			
6		18			33			15
4				540.50	26	46		
7				SILTY CLAY, gray, very stiff to hard	9			
50/4"		22		559.50	10	2.2		19
19				Rock obstruction was encountered at about 6.5 ft, boring was offset 5 ft. to east	16	S		
27				Sample at 8.5' : no recovery	5			
18				536.00	10	4.5		23
16				End of Boring	15	P		
16				Sample at 11' : no recovery				
13		17						
13				563.00				
7				SILT with rock fragments, gray, dense				
14		14						
17				550.00				
7				SANDY CLAY, gray, very stiff to hard				
11		5.2	11					
13		S						
5				with silt seams				
8		4.5	11					
12		P						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BSS, form 137 (Rev. 8-99)

FILE NAME : overhead sign plans.dgn	USER NAME : doviss	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING</b>	F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
Model	PLOT SCALE : 39,3781 / in.	CHECKED -	REVISED -			VAR	04-4 DVD SIGN STR REPL 14-4T	VARIOUS	65	50	
	PLOT DATE : 3/21/2014	DATE -	REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		
						CONTRACT NO. 46314					





Illinois Department of Transportation  
Division of Highways  
Tennison, P.O. Box 602, Wood Dale, IL 60190

# SOIL BORING LOG

Page 1 of 1

Date 2/12/14

ROUTE IL 6 DESCRIPTION I-474 WB at the ramp to Adams St LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC. TWP. RNG. Latitude Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S0721474L007.00(exist)  
Station \_\_\_\_\_  
BORING NO. 4-19 (Median)  
Station 395+34  
Offset 0.0 ft. On Median CL  
Ground Surface Elev. 479.91 ft

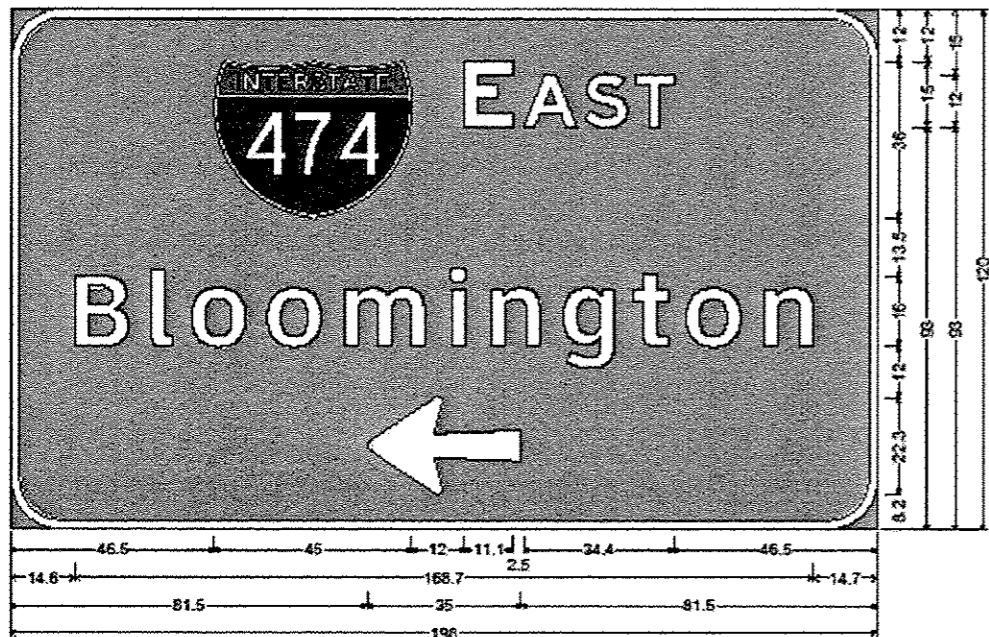
DEPTH (ft)	BULGE (ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	ELEVATION (ft)	DEPTH (ft)	BULGE (ft)	UCS (tsf)	MOISTURE (%)
0				Surface Water Elev. _____ ft					
				Stream Bed Elev. _____ ft					
				Groundwater Elev.: _____ ft					
				First Encounter _____ ft					
				Upon Completion _____ ft					
				After _____ Hrs. _____ ft					
3				FILL: SILTY CLAY, brown and gray, stiff to hard (first sample frozen)	458.91	8			
7	1.7	21		SANDY CLAY LOAM, brown and gray, stiff to very stiff (possible fill) (continued)		9	4.5	17	
	S			SILTY CLAY LOAM, with shale fragments, brown and gray, very stiff to hard	458.41	11	P		
3				CLAY (shaley clay), gray, stiff to hard		9			
5	4.5	16				10	4.5	14	
7	P					12	P		
3						3			
4	1.6	23		SANDY CLAY, gray, stiff	452.41	4	2.0	9	
6	S					7	P		
2					450.91	14			
4	1.4	22		SAND, grayish-brown, medium dense	449.91	16		6	
5	S			End of Boring		18			
3						10			
5	3.0	22							
7	P								
3									
6	2.6	18							
8	S								
4				SANDY CLAY LOAM, brown and gray, stiff to very stiff (possible fill)	483.91				
6	3.5	15							
8	P								
6									
8	1.9	21							
10	S								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

FILE NAME: overhead sign plans.dgn	USER NAME: davis	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING				F.A. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
Model:	PLOT SCALE: 3/4" = 1'-0"	DRAWN: -	REVISED: -		SCALE:	SHEET OF SHEETS:	STA. TO STA.:	VAR:	D4-4 DIV 518 REPL 14-07	VARIOUS	65	52	
	PLOT DATE: 3/21/2014	CHECKED: -	REVISED: -		CONTRACT NO. 46314								
		DATE: -	REVISED: -		ILLINOIS FED. AID PROJECT								





12.0" Radius, 2.0" Border, White on Green;  
 "E AST" E Mod 2K; "Bloomington" ClearviewHwy-S-W; Arrow 160 - 35.0" 160";  
 Table of widths and spaces:

45.5	45.0	12.0	11.1	2.5	12.2	1.8	9.7	1.8	8.9	46.5												
B	I	G	D	N	I	N	G	E	G	N												
14.6	12.2	5.4	5.1	4.2	12.3	4.8	12.4	6.4	18.1	5.7	3.8	5.7	11.1	5.5	11.6	4.4	7.9	4.2	12.4	5.4	11.1	14.7
81.5	35.0	81.5																				



12.0" Radius, 2.0" Border, White on Green;  
 Up Airplane: "Peoria" ClearviewHwy-S-W; "Intl" ClearviewHwy-S-W;  
 "Airport" ClearviewHwy-S-W; Arrow 133 - 30.0" 0";  
 Table of widths and spaces:

41.3	19.4	41.3																						
P	A	I	A	I	P	A	I	A	I	P	A	I	A	I	P	A	I	A	I	P	A	I	A	I
16.6	9.7	3.7	9.8	4.0	10.3	4.5	6.1	3.6	3.2	3.9	10.0	16.6												
33.2	2.5	5.3	9.3	3.7	6.5	4.0	4.2	33.3																
A	I	r	p	A	r	A	I	A	I	P	A	I	A	I	P	A	I	A	I	P	A	I	A	I
12.2	12.5	2.5	2.1	4.8	6.1	3.9	9.6	4.0	10.4	4.5	6.1	2.5	6.6	12.2										
26.0	30.0	26.0																						

NOTE:  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : davisso	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGNS</b>	F.A. RTE. VAR	SECTION D4-4 OVD SIN STR REPL 14-47	COUNTY VARIOUS	TOTAL SHEETS 65	SHEET NO. 53		
Model	PLOT SCALE : 3/32" = 1"	CHECKED - DATE -	REVISED - REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 46314
	PLOT DATE : 3/21/2014											ILLINOIS FED. AID PROJECT



# SOIL BORING LOG

Date 2/5/14

ROUTE IL 6 DESCRIPTION Airport Rd at Exit I-474 E LOGGED BY AB

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 14, TWP. 8N, R9G. 7E

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S072H74L004.92(exist)  
 Station \_\_\_\_\_  
 BORING NO. 4-20 (Median)  
 Station 191+47  
 Offset 0.0 ft on Median CL  
 Ground Surface Elev. 642.00 ft

DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	Failure Mode	SPT (blows)
0-2	CLAY, brown, stiff (first sample frozen)			
2-3				3
3-5		2.0	S	1.0
5-8		S		3
8-10				3
10-12	CLAY, brown and gray, stiff			3
12-14		2.0	S	1.4
14-15		P		7
15-16				20
16-18	SILTY CLAY LOAM, brown and gray, stiff to medium stiff			10
18-19				18
19-20				26
20-21				20
21-22		1.0	S	1.0
22-24		P		6
24-26				3
26-28				4
28-30				5
30-32		0.5	P	23
32-34				6
34-36				3
36-38		0.6	B	25
38-40				4
40-42		0.5	S	25
42-44				2
44-46				2

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)



# SOIL BORING LOG

Date 2/4/14

ROUTE IL 6 DESCRIPTION Airport Rd at Exit I-474 E LOGGED BY AB

SECTION D-4 Sign Truss LOCATION Peoria, SEC. 14, TWP. 8N, R9G. 7E

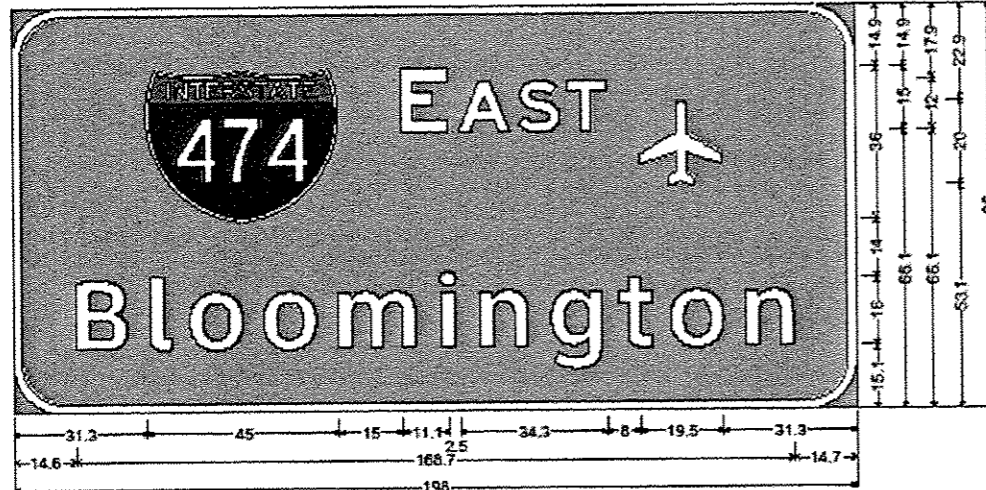
COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S072H74L004.92(exist)  
 Station \_\_\_\_\_  
 BORING NO. 4-20 (Shoulder)  
 Station 190+93  
 Offset 49.0 ft Lt Median CL  
 Ground Surface Elev. 639.74 ft

DEPTH (ft)	SOIL DESCRIPTION	UCS (tsf)	Failure Mode	SPT (blows)
0-2	CLAY, brown, very soft to medium stiff (first sample frozen)			
2-3				5
3-4		<0.5	P	27
4-5				4
5-6				4
6-8				2
8-10		<0.5	P	22
10-12				3
12-14				5
14-16		1.5	P	17
16-18				5
18-20				3
20-22				5
22-24				5
24-26				3
26-28				5
28-30				3
30-32				3
32-34		0.3	P	25
34-36				4
36-38				2
38-40		1.0	B	25
40-42				3
42-44				5

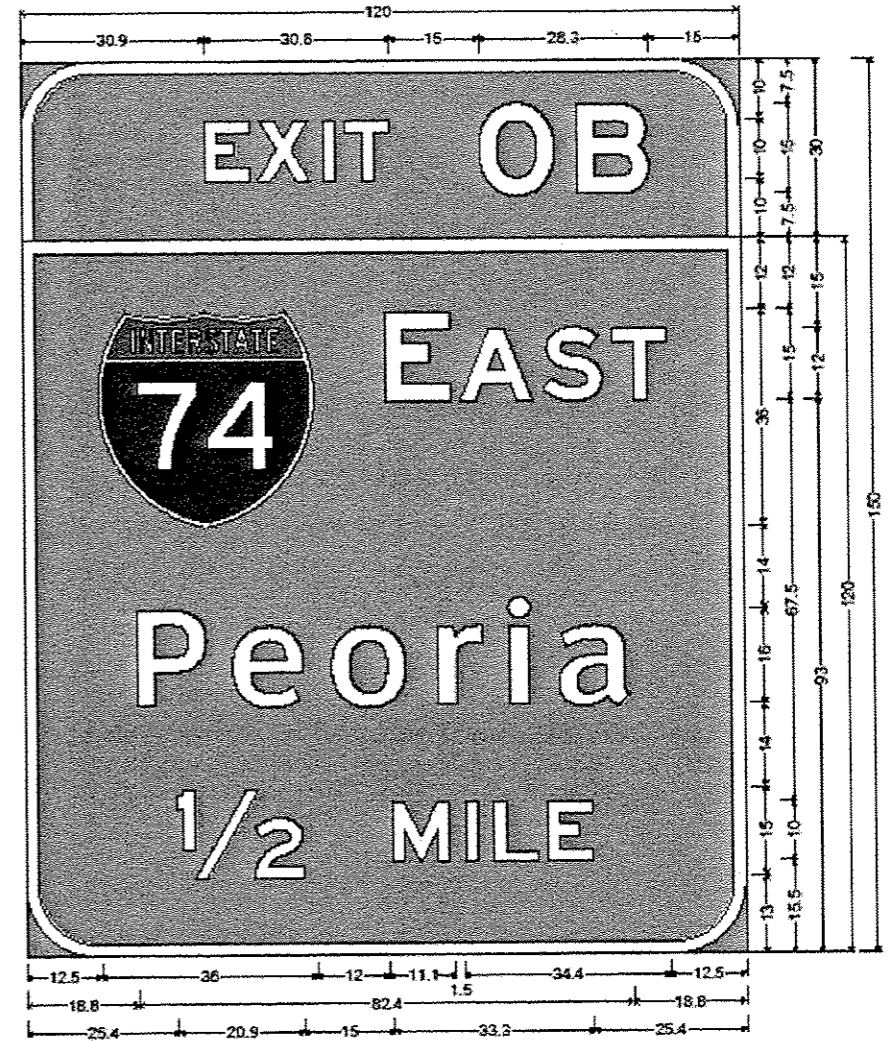
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
 BBS, form 137 (Rev. 8-99)

FILE NAME : overhead sign plans.dgn	USER NAME : davis	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORINGS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/4" = 1'	DRAWN -	REVISED -			VAR	D-4 OVD SIGN STR REPL 14-47	VARIOUS	65	54	
	PLOT DATE : 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO



12.0" Radius, 2.0" Border, White on Green;  
 "E AST" E Mod 2K; Up Airplane; "Bloomington" Clearview/htwy-5-W;  
 Table of widths and spaces:

31.3	45.0	15.0	11.1	2.5	12.1	1.8	9.8	1.8	8.8	8.0	19.5	31.3										
14.6	12.2	5.4	5.1	4.2	12.3	4.8	12.4	5.4	18.1	5.7	3.8	5.7	11.1	5.5	11.6	4.4	7.9	4.2	12.4	5.4	11.1	14.7



12.0" Radius, 2.0" Border, White on Green;  
 "EXIT 0B" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "EAST" E Mod 2K; "Peoria" Clearview/htwy-5-W; "1/2" E Mod 2K; "MILE" E Mod 2K;  
 Table of widths and spaces:

30.9	7.4	1.4	8.7	2.1	2.0	1.8	7.4	15.0	12.6	3.6	12.1	15.0
12.5	26.0	12.0	11.1	1.5	12.2	1.8	9.7	1.8	8.9	12.5		
18.8	11.6	4.4	11.7	4.8	12.4	5.4	7.4	4.3	3.8	4.7	11.9	18.8
25.4	20.9	15.0	9.3	2.8	2.0	2.8	7.4	1.6	7.4	25.4		

NOTE:  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : davis	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGNS</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Model	PLOT SCALE : 39.3781 / in.	CHECKED - DATE -	REVISED - REVISED -			SCALE:	SHEET OF SHEETS	STA. TO STA.	VAR	04-4 0VD SIV STR REPL 14-47
						CONTRACT NO. 46314 ILLINOIS FED. AID PROJECT				





# SOIL BORING LOG

ROUTE IL 6 DESCRIPTION IL-6 SB at ramp to I-74 West LOGGED BY AF

SECTION D-4 Sign Truss LOCATION Peoria, SEC., TWP., RNG.

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 45072S006L000.50(exist) Station \_\_\_\_\_  
BORING NO. 4-21 (Shoulder) Station 190+85  
Offset 87.0 ft Rt Median CL  
Ground Surface Elev. 601.23

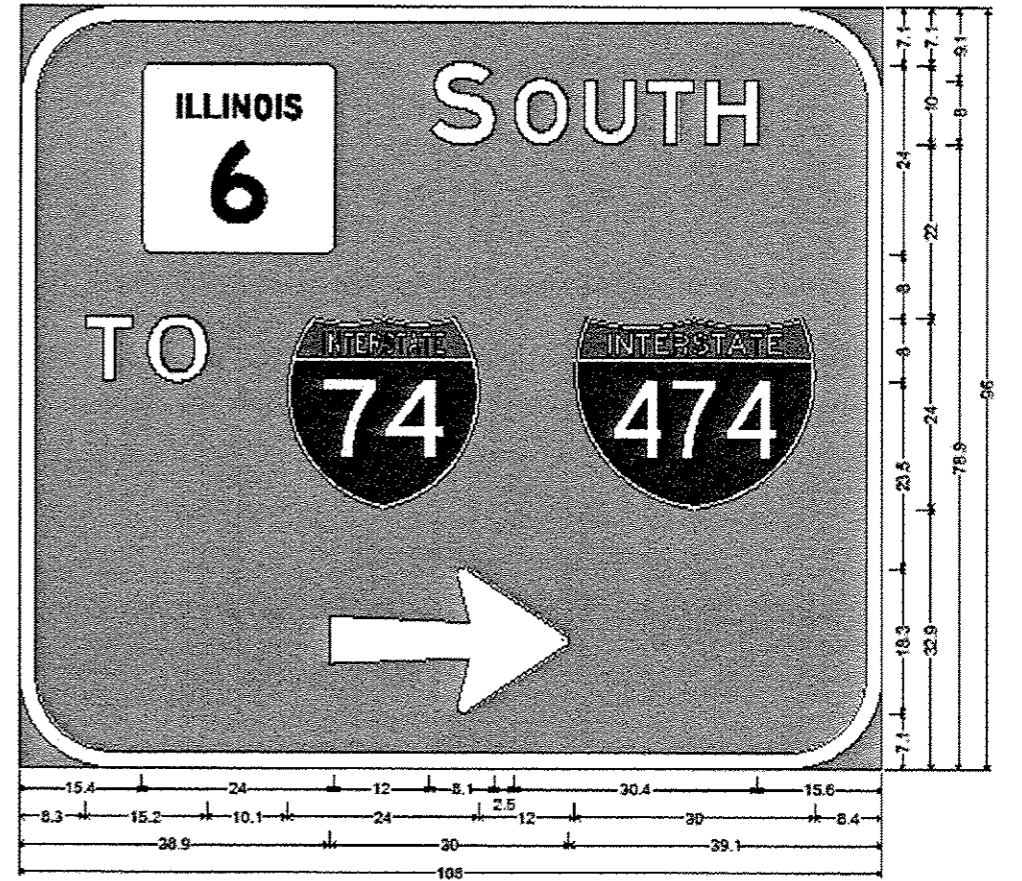
DEPTH (ft)	BLOW COUNT (6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (6")	UCS (tsf)	MOISTURE (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After
									ft	ft	ft	ft	ft	Hrs.
				<b>SILTY CLAY</b> , brown, stiff to hard (first 2 samples frozen)										
	5				580.23									
	10	2.1	19	<b>SANDY CLAY</b> , brown, hard	12									
	13	S			23	4.5	10							
				with rock fragments	23	P								
	3				12									
	7	4.5	18		24	4.5	9							
	7	P			30	P								
					17									
	3				23	4.5	9							
	4	1.1	21		50/3*	P								
	5	S												
	3				30									
	4	1.5	17		35									
	6	P			35									
691.23	-10				571.23	-30								
				<b>SANDY CLAY</b> , brown, stiff to very stiff										
	2			End of Boring										
	3	1.0	10											
	5	B												
	7													
	11	3.0	17											
	13	P												
685.23														
	4			<b>CLAY</b> , gray, very stiff										
	9	3.5	17											
	11	B												
	12													
	14	5.3	10											
	15	S												

The Unclassified Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-06)





9.0" Radius, 1.5" Border, White on Green;  
 "TO" E Mod; Down Arrow 22.0" 270";



12.0" Radius, 2.0" Border, White on Green;  
 "SOUTH" E Mod 2K; "TO" Clearview/Hwy-5-W; Arrow 133 - 30.0" 0";  
 Table of widths and spaces:

D	S	S	U	F	H							
15.4	24.0	12.0	8.1	2.5	6.7	2.0	6.4	1.5	5.9	1.4	6.5	15.6
T	D	S	U	F	H							
8.3	5.7	2.1	7.4	10.1	24.0	12.0	30.0	8.4				
T	D	S	U	F	H							
38.9	30.0	39.1										

**NOTE:**  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME overhead sign plans.dgn	USER NAME davisso	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DESIGNS	F.A. RTE. VAR	SECTION 04-4 DIV 514 STR REPL 14-47	COUNTY VARIOUS	TOTAL SHEETS 65	SHEET NO. 58
	PLOT SCALE 1/31.3701 in.	CHECKED -	REVISED -			SCALE:	SHEET OF	SHEETS	STA. TO STA.	CONTRACT NO. 46314 [ILLINOIS] FED. AID PROJECT
Model	PLOT DATE 3/21/2014	DATE -	REVISED -							



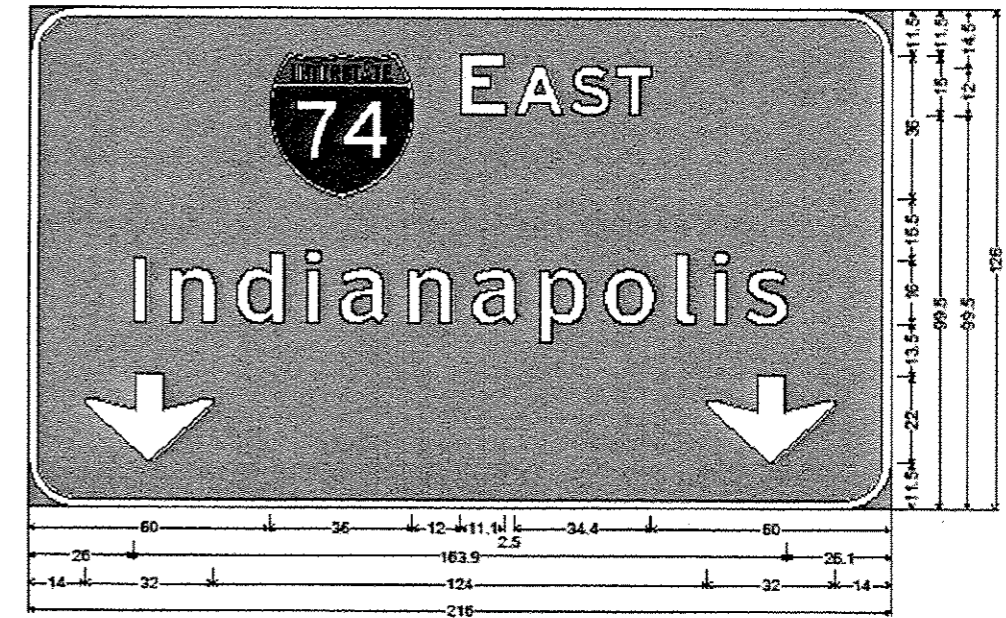






12.0" Radius, 2.0" Border, White on Green;  
 Rectangle Yellow;  
 "EXIT" E Mod 2K; "15" E Mod 2K;  
 12.0" Radius, 2.0" Border, White on Green;  
 "WEST" E Mod 2K; "Peoria" Clearview/ty-5-W;  
 12.0" Radius, 2.0" Border, Black on Yellow;  
 "EXIT" E Mod 2K; Down Arrow 22.0" 270"; "ONLY" E Mod 2K;  
 Table of widths and spaces:

14.0	60.0	1.0	4.5	3.8	12.1	78.6												
28.6	7.4	1.4	8.7	2.1	2.0	1.8	7.4	114.6										
36.6	36.0	15.0	15.9	2.5	6.9	2.1	9.7	1.8	6.9	36.6								
45.8	11.6	4.4	11.7	4.8	12.4	5.4	7.4	4.3	3.8	4.7	11.9	45.8						
16.6	8.9	1.7	10.4	2.6	2.4	2.1	8.9	12.0	32.0	12.0	10.1	2.9	9.7	3.3	6.9	0.7	12.2	16.6



12.0" Radius, 2.0" Border, White on Green;  
 "EAST" E Mod 2K; "Indianapolis" Clearview/ty-5-W; Down Arrow 22.0" 270"; Down Arrow 22.0" 270";  
 Table of widths and spaces:

60.0	36.0	12.0	11.1	2.5	12.2	1.8	9.7	1.8	8.9	60.0														
26.0	3.0	6.4	11.1	5.4	11.6	5.7	3.8	4.7	11.9	5.1	11.1	5.0	12.0	5.0	11.6	4.8	12.4	5.4	5.1	4.4	3.8	4.4	10.2	26.1
14.0	32.0	124.0	32.0	14.0																				

NOTE:  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME * overhead sign plans.dgn	USER NAME * davis	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGNS</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE * 39.3701 / in.	DRAWN -	REVISED -			VAR	04-A DVD SIN STR REPL 14-47	VARIOUS	65	61	
	PLOT DATE * 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	



# SOIL BORING LOG

ROUTE 174 DESCRIPTION I-474 EB at I-74 interchange LOGGED BY AF

SECTION D-4 Sign Trusses LOCATION Tazewell SEC. TWP. RNG.

COUNTY Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 430901474R013.10(exist)  
Station

BORING NO. 4-30 Median

Station 2+222

Offset 23.0 ft Lt Median CL

Ground Surface Elev. 725.84 ft

DEPTH ft	BLOW COUNT	UNCONSOLIDATED COMPRESSION STRENGTH Qu (tsf)	MOISTURE CONTENT (%)	DEPTH ft	BLOW COUNT	UNCONSOLIDATED COMPRESSION STRENGTH Qu (tsf)	MOISTURE CONTENT (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After Hrs.
								ft	ft	ft	ft	ft	ft
3				2									
3	1.6	26		4	1.6	15							
4	S			5	B								
2				3									
3	1.5	27		4	2.0	15							
4	B			5	B								
2				4									
3	1.4	17		7	1.9	15							
4	B			7	B								
2				4									
4	1.8	17		6	2.4	14							
5	B			8	B								
-10				8	B			695.84	-30				
								End of Boring					
4													
6	2.1	14											
7	S												
2													
4	1.3	15											
5	B												
3													
5	2.4	14											
6	B												
3													
4	1.0	16											
6	P												

CLAY, brown and gray, medium stiff to very stiff (first sample frozen)

CLAY, brown and gray, medium stiff to very stiff (first sample frozen) (continued)

turning gray

disturbed sample at 18.5'

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Gulgo, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

FILE NAME : overhead sign plans.dgn	USER NAME : davisso	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING</b>	F.A. RTE. YAR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Model	PLOT SCALE * 39.3701 / in.	CHECKED -	REVISED -			04-4 DVD SIGN STR REPL 14-47	VARIOUS	65	62	
	PLOT DATE * 3/21/2014	DATE -	REVISED -			CONTRACT NO. 46314				
						SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	



# SOIL BORING LOG

ROUTE 174 DESCRIPTION Cedar St between Edmund and Main LOGGED BY AF

SECTION D-4 Skn Trusses LOCATION Tazewell, SEC., TWP., RING. Latitude, Longitude

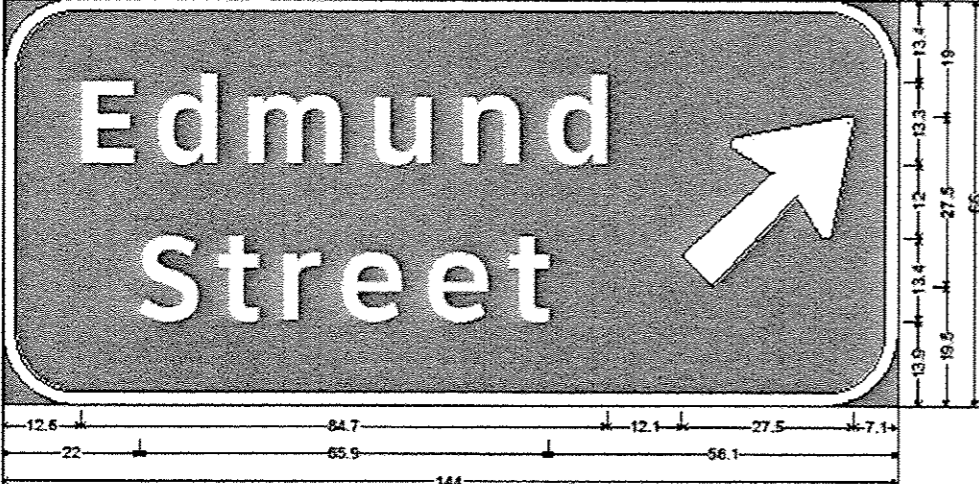
COUNTY Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S090S0088001.10(exist)  
 Station \_\_\_\_\_  
 BORING NO. 4-31 Shoulder  
 Station 72+12  
 Offset 29.0 ft Rt Median CL  
 Ground Surface Elev. 480.04 ft

DEPTH (ft)	SOIL TYPE	TESTS	REMARKS
0	ASPHALT, approximately 9"		479.29
12	FILL: SANDY CLAY LOAM, brown and gray, very stiff		
13		15	
16			
478.54	FILL: SANDY CLAY, with rock fragments, brown to gray, stiff to hard		
5			
6		3.3	11
8	S		
2			
4	1.0	12	
9	S		
4			
8	1.5	11	
12	S		
8			
7	4.5	13	
5	P		
9			
9	4.0	10	
9	P		
6			
9	4.5	10	
12	p		
6			
8	3.3	11	
11	S		

DEPTH (ft)	SOIL TYPE	TESTS	REMARKS
	Surface Water Elev.		ft
	Stream Bed Elev.		ft
	Groundwater Elev.:		
	First Encounter		ft
	Upon Completion		ft
	After	Hrs.	ft

DEPTH (ft)	SOIL TYPE	TESTS	REMARKS
12	FILL: SANDY CLAY LOAM, brown and gray, very stiff		
13		15	
16			
478.54	FILL: SANDY CLAY, with rock fragments, brown to gray, stiff to hard		
5			
6		3.3	11
8	S		
2			
4	1.0	12	
9	S		
4			
8	1.5	11	
12	S		
8			
7	4.5	13	
5	P		
9			
9	4.0	10	
9	P		
6			
9	4.5	10	
12	p		
6			
8	3.3	11	
11	S		



12.0" Radius, 2.0" Border, White on Green; "Edmund" Clearview Hwy-5-W; "Street" Clearview Hwy-5-W; Arrow 180 - 35.0" 45";

Table of widths and spaces:

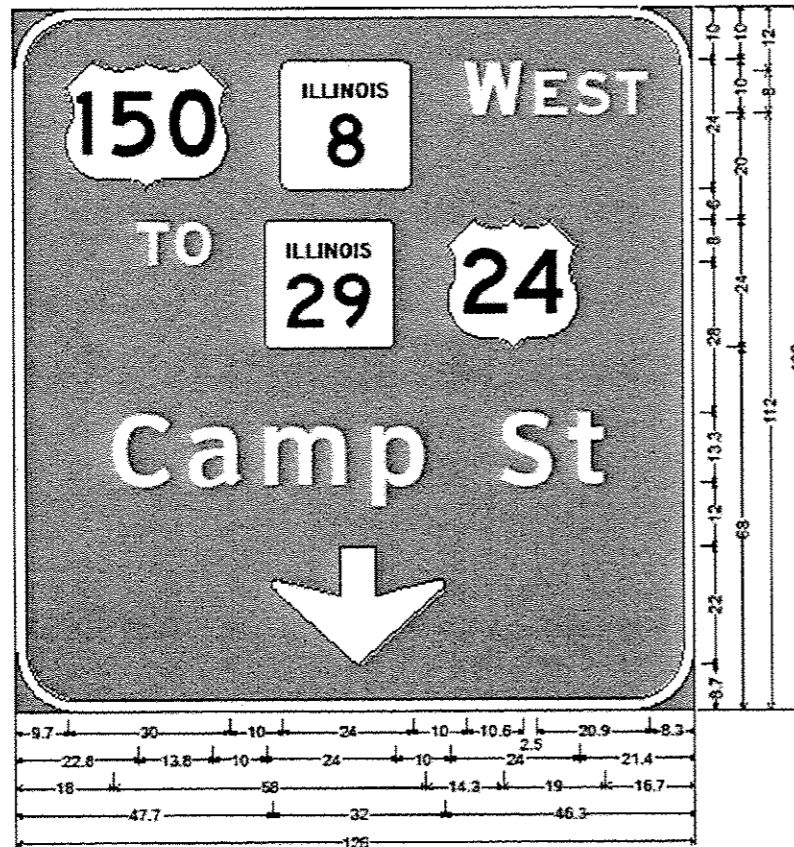
12.6	E	8.4	3.9	9.7	5.0	15.1	5.0	9.2	5.0	9.3	4.5	9.6	12.1	27.5	7.1
22.0	S	9.7	2.8	6.6	4.0	6.1	3.4	9.8	4.0	9.8	3.1	6.6	56.1		

NOTE: EXISTING SIGN WALKWAY SHALL BE 35.5' EDMUND STREET SIGN WALKWAY SHALL BE 12.5'

NOTE: SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, form 137 (Rev. 8-99)





12.0" Radius, 2.0" Border, White on Green;  
 "W EST" E Mod 2K; "TO" E Mod 2K; "Camp St" Clearview Hwy-S-W;  
 Down Arrow 22.0" 270°;

Table of widths and spaces:

9.7	30.0	10.0	24.0	10.0	10.6	2.5	5.9	1.4	6.5	1.2	5.9	8.3
22.8	5.9	1.2	6.7	10.0	24.0	10.0	24.0	21.4				
18.0	10.9	3.2	10.0	4.2	15.1	5.0	9.5	14.3	9.6	2.9	5.5	16.7
47.7	32.0	46.3										



12.0" Radius, 2.0" Border, White on Green;  
 "W EST" E Mod 2K; "N ORTH" E Mod 2K; Arrow 133 - 30.0° 45°; "Peoria" Clearview Hwy-S-W;  
 Table of widths and spaces:

15.2	24.0	10.0	10.6	2.5	5.9	1.5	6.4	1.2	6.0	13.1	23.6	6.0
12.0	24.0	10.0	6.1	2.5	6.7	1.9	6.5	0.9	5.9	1.5	6.4	39.6
31.6	9.7	3.7	9.6	4.0	10.3	4.5	6.1	3.6	3.2	3.9	10.0	25.6

NOTE:  
 SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION

FILE NAME : overhead sign plans.dgn	USER NAME : doviso	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGNS</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Model	PLOT SCALE : 3/32" = 1"	DRAWN -	REVISED -			VAR	04-4 OVD SIN STR REPL 14-47	VARIOUS	65	64	
	PLOT DATE : 3/21/2014	CHECKED -	REVISED -			CONTRACT NO. 46314					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
						SCALE:	SHEET	OF	SHEETS	STA.	TO STA.





# SOIL BORING LOG

Date 2/19/14

ROUTE 174 DESCRIPTION WB Camp St at I-74 WB LOGGED BY AF

SECTION D-4 Sign Trusses LOCATION Tazewell, SEC. TWP., RNG. Latitude Longitude

COUNTY Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S090U150L005.50(exist)	DEPTH (ft)	DIAMETER (in)	SOIL TYPE	DEPTH (ft)	DIAMETER (in)	SOIL TYPE
Station						
BORING NO. 4-32 Median						
Station 90+39 (camp st sta)						
Offset 15.0 ft Rt CL						
Ground Surface Elev. 99.21						
ASPHALT, approximately 6"	98.71					
CONCRETE, approximately 16"		12				
	97.41	6	2.5	21		
CRUSHED STONE		2	P			
AGGREGATE, approximately 6"	96.91					
FILL: SANDY CLAY LOAM, with gravel, gray, stiff		1				
	96.21					
FILL: SANDY LOAM, brown, loose		2		12		
		4				
		1				
		2		20		
		3				
		1				
		2		19		
		3				
	90.71					
FILL: SANDY CLAY, gray, soft to medium stiff		1				
		2	0.4	17		
		2	B			
		-10				
	87.71	4				
FILL: SAND, with clay seams, brown, loose to medium dense		5		12		
		3				
		5				
		6		24		
		13				
		-15				
	83.21					
SANDY CLAY LOAM, brown, stiff		5				
		6		20		
		6				
	81.71					
SHALEY CLAY (highly weathered shale), gray, hard		33				
		50/3"		16		
		-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)

NOTE: SHOP DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO FABRICATION



# SOIL BORING LOG

Date 2/19/14

ROUTE 174 DESCRIPTION WB Camp St at I-74 WB LOGGED BY AF

SECTION D-4 Sign Trusses LOCATION Tazewell, SEC. TWP., RNG. Latitude Longitude

COUNTY Tazewell DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 4S090U150L005.50(exist)	DEPTH (ft)	DIAMETER (in)	SOIL TYPE	DEPTH (ft)	DIAMETER (in)	SOIL TYPE
Station						
BORING NO. 4-32 Ramp						
Station 10+67 (ramp sta)						
Offset 6.5 ft Rt BL						
Ground Surface Elev. 99.41						
FILL: SAND, brown, loose to medium dense (first sample frozen)		2				
		3		8		
		3				
		3				
		3				
		6		7		
		8				
		-5				
		6				
		8		7		
		9				
		6				
		9		19		
		9				
		-10				
		5				
		6		23		
		8				
		2				
		10		16		
		-15				
		15				
		12		17		
		12				
	82.41					
SANDY LOAM, with rock fragments, brown, medium dense (possible fill)		7				
		7				
	80.41					
SILTY CLAY LOAM, gray, very stiff		7	2.5	21		
		10	P			
		-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)

FILE NAME: overhead sign plans.dgn	USER NAME: davis	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORINGS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Model	PLDT SCALE: 3/4" = 1'-0"	CHECKED: -	REVISED: -			VAR	D4+4 OVD SIN STR REPL 14-47	VARIOUS	65	65
	PLDT DATE: 3/21/2014	DATE: -	REVISED: -			SCALE:	SHEET OF SHEETS	STA.	TO STA.	CONTRACT NO. 46314
										ILLINOIS FED. AID PROJECT