

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D3 OVD SIN STR REPL 13-08	KANKAKEE	19	1
		ILLINOIS	CONTRACT NO. 46221	

STATE OF ILLINOIS 11-9-12 LETTING ITEM 072

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES
SECTION D3 OVD SIN STR REPL 13-08

**OVERHEAD SIGN TRUSS PAINTING, AND MINOR REPAIRS.
KANKAKEE COUNTY**

C-60-008-13

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- 15.-19. SIGN PANEL DETAILS

STANDARDS

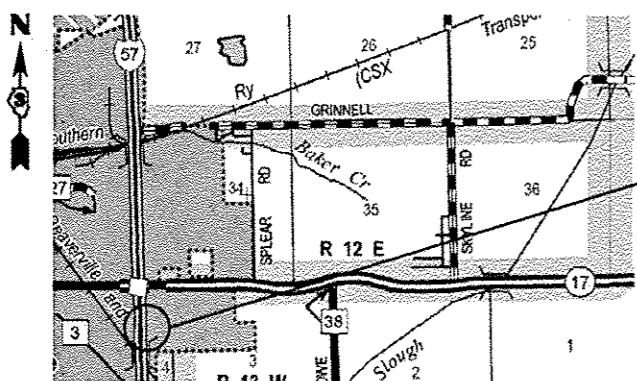
- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 701001-02 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' (4.5 m) AWAY PAVEMENT EDGE
- 701006-03 OFF-ROAD OPERATIONS 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701101-02 OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
- 701601-07 URBAN LANE CLOSURE MULTILANE 1W, OR 2W, WITH NONTRAVERSABLE MEDIAN
- 701602-05 URBAN LANE CLOSURE MULTILANE 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701901-02 TRAFFIC CONTROL DEVICES



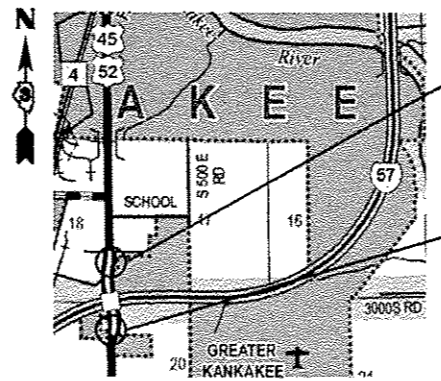
LOCATION OF SECTION INDICATED THUS: - ■ -

FUNCTIONAL CLASSIFICATION

URBAN - PRINCIPAL ARTERIAL		URBAN - INTERSTATE	
FAP 330	FAP 332	FAP 840	FAL ROUTE 57
2011 ADT = 15100	2011 ADT = 9950	2011 ADT = 12900	2011 ADT = 18100
P.V. = 75.64%	P.V. = 87.69%	P.V. = 93.99%	P.V. = 77.66%
M.U. = 15.81%	M.U. = 4.52%	M.U. = 3.10%	M.U. = 17.26%
S.U. = 8.55%	S.U. = 7.79%	S.U. = 2.91%	S.U. = 5.08%

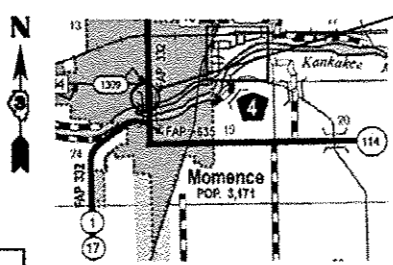


LOCATION 1 - FAI ROUTE 57
CANTILEVER SIGN STRUCTURE
S.N.# 3C0461057R311.5
I-57
(EXISTING STA. 208 + 43 NBL)

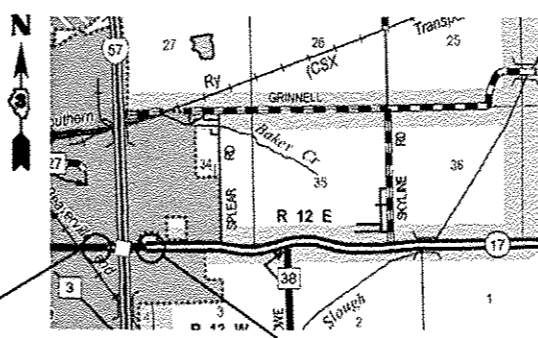


LOCATION 2 - FAP 840 US 45 /52 AT I- 57
CANTILEVER SIGN STRUCTURE
S.N.# 3C046U045L004.9
US 45 /52 - NB
(EXISTING STA. 136 + 42 RT)

LOCATION 3 - FAP 840 US 45 /52 AT I- 57
CANTILEVER SIGN STRUCTURE
S.N.# 3C046U045R005.1
US 45 /52 - SB
(EXISTING STA. 127 + 21 LT)



LOCATION 4 - FAP 332 IL 1 /17
CANTILEVER SIGN STRUCTURE
S.N.# 3C046S017L011.2
IL 1 /17 - SB
(EXISTING STA. 19 + 93)



LOCATION 5 - FAP 330 IL 17 AT I- 57
CANTILEVER SIGN STRUCTURE
S.N.# 3C046S017R014.1
IL 17 - EB
(EXISTING STA. 130 + 84)

LOCATION 6 - FAP 330 IL 17 AT I- 57
CANTILEVER SIGN STRUCTURE
S.N.# 3C046S017L014.3
IL 17 - WB
(EXISTING STA. 135 + 90)

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: JOE KANNEL, P.E.
UNIT CHIEF: RON WOODSHANK
CONTRACT NO. 46221

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *May 23 2012*
PASSED *Justin Murray*
ENGINEER OF OPERATIONS

August 17 2012
John D. Baranzelli, PE
ACTING ENGINEER OF DESIGN AND ENVIRONMENT

APPROVED *August 17 2012*
William R. Taylor
ACTING DIRECTOR DIVISION OF HIGHWAYS

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

GENERAL NOTES

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE CONTRACTOR SHALL BE REQUIRED TO SECURE WASTE CONTAINERS THAT REMAIN ON THE JOB SITE. THESE CONTAINERS CANNOT BE MOVED OR OPENED DURING NON-WORKING HOURS.

THE CONTRACTOR / SUBCONTRACTOR LICENSED TO DISPOSE OF LEAD PAINT RESIDUE MUST REMOVE THE WASTE MATERIAL FROM THE JOB SITE ACCORDING TO ALL FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES BY THE COMPLETION DATE.

THE SSPC-OP1 AND SSPC-OP2 PAINTING CONTRACTOR CERTIFICATIONS WILL BE REQUIRED FOR THIS PROJECT.

A MINIMUM OF 2 AIR MONITORS WILL BE REQUIRED TO MONITOR ABRASIVE BLASTING AT ALL SITE LOCATIONS. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

LOCATIONS 2 THROUGH 6:

THE EXISTING STRUCTURAL STEEL CONTAINS LEAD. THE CONTRACTOR SHOULD TAKE NECESSARY PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD PAINT ON THIS PROJECT. SEE THE SPECIAL PROVISION FOR "CONTAINMENT AND DISPOSAL OF LEAD BASED CLEANING RESIDUES."

LOCATIONS 2 THROUGH 4:

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL EXPOSED STEEL SURFACES OF THE SUPPORTS AND ASSOCIATED STEEL COMPONENTS SHALL BE CLEANED PER "NEAR WHITE BLAST CLEANING SSPC-SP10". ALL EXISTING STEEL SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF "PAINT SYSTEM OZ/E/U". THE COLOR OF THE FINAL FINISH COAT SHALL BE "LIGHT GREY 10Y 7/1".

LOCATIONS 5 & 6:

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL STEEL COMPONENTS ADJACENT TO EXISTING TRAFFIC SIGNAL HEADS AND TRAFFIC MONITORING CAMERAS SHALL BE CLEANED PER POWER TOOL CLEANING - METHOD SP3. ALL EXPOSED STEEL SURFACES OF THE SUPPORT, TRUSS, WALKWAY AND ALL OTHER ASSOCIATED STEEL COMPONENTS SHALL BE CLEANED PER "NEAR WHITE BLAST CLEANING SSPC-SP10". ALL EXISTING STEEL SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF "PAINT SYSTEM OZ/E/U". THE COLOR OF THE FINAL FINISH COAT FOR ALL STEEL SURFACES SHALL BE "REDDISH BROWN, 2.5YR 3/4".

COMMITMENTS

NONE

DATE: _____

PREPARED BY: _____
DISTRICT STUDIES & PLANS ENGINEER

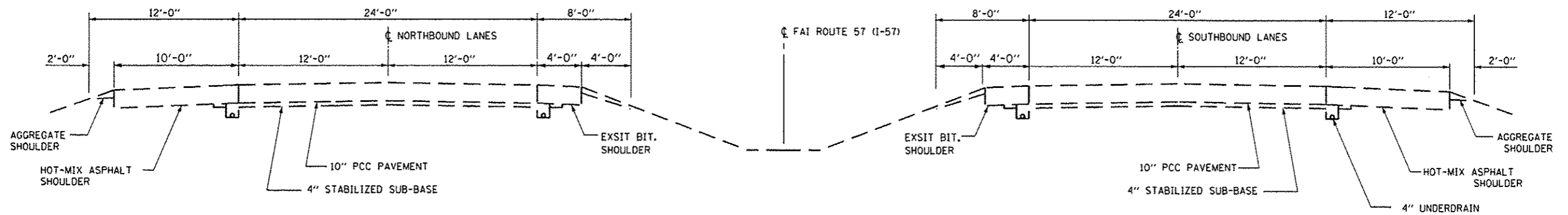
EXAMINED BY: _____
DISTRICT CONSTRUCTION ENGINEER

DISTRICT MATERIALS ENGINEER

DISTRICT OPERATIONS ENGINEER

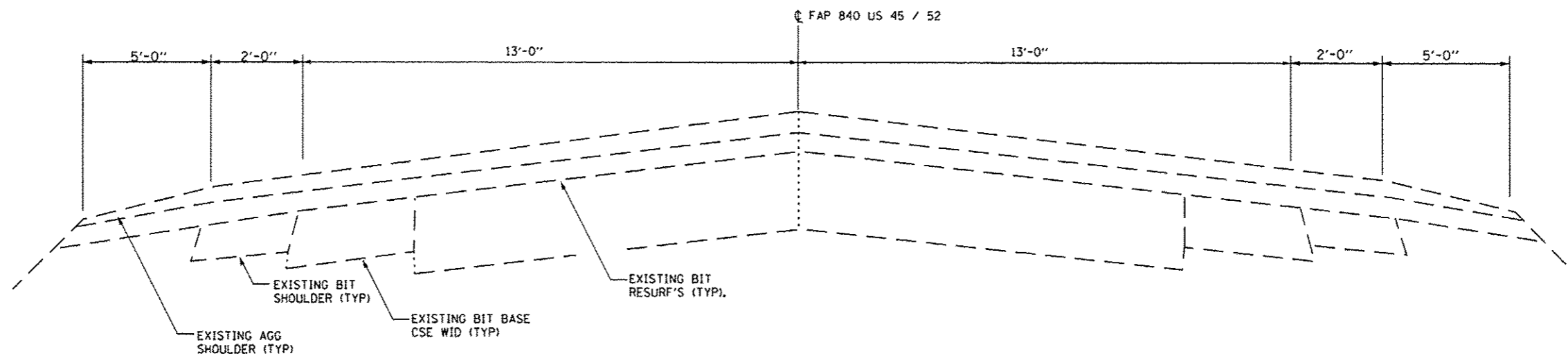
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		DRAWN - YOGESH PATEL	REVISED -			VAR	D3 OVD SIN STR REPL 13-08	KANKAKEE	19	2	
	PLOT SCALE * 99.9999 1/ in.	CHECKED - RON WOODSHANK	REVISED -			CONTRACT NO. 46221					
	PLOT DATE * 5/17/2012	DATE -	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	[ILLINOIS]	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				STATE FUNDS 100% STATE SIGN TRUSS 0040 URBAN
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1
72000300	SIGN PANEL - TYPE 3	SQ FT	330	330
X7240195	REMOVE EXISTING SIGN PANEL	EACH	4	4
X7330070	OVERHEAD SIGN SUPPORT GROUT REPAIR	EACH	6	6
X7330100	PAINT OVERHEAD SIGN SUPPORT	EACH	3	3
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1	1
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1	1
Z0007104	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1	1
Z0007105	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 5	L SUM	1	1
Z0007106	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 6	L SUM	1	1
Z0010382	SIGN STRUCTURE CLEANING AND PAINTING WARRANTY NO. 2	L SUM	1	1
Z0010383	SIGN STRUCTURE CLEANING AND PAINTING WARRANTY NO. 3	L SUM	1	1
Z0010384	SIGN STRUCTURE CLEANING AND PAINTING WARRANTY NO. 4	L SUM	1	1
Z0010385	SIGN STRUCTURE CLEANING AND PAINTING WARRANTY NO. 5	L SUM	1	1
Z0010386	SIGN STRUCTURE CLEANING AND PAINTING WARRANTY NO. 6	L SUM	1	1
Z0010480	CLEANING AND PAINTING SIGN STRUCTURE NO. 1	L SUM	1	1
Z0010481	CLEANING AND PAINTING SIGN STRUCTURE NO. 2	L SUM	1	1
Z0029602	TEMPORARY SIGNING	EACH	4	4



TYPICAL SECTION

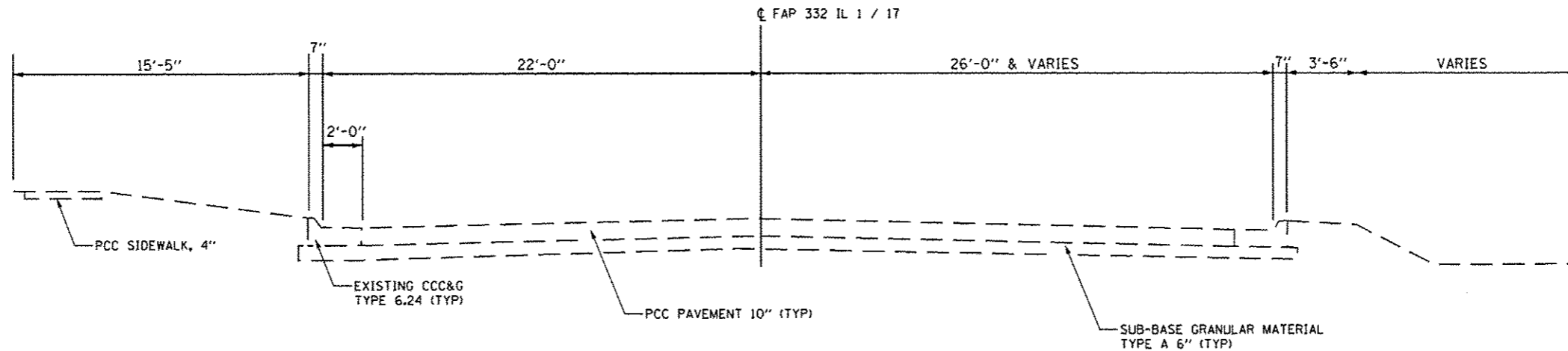
FAI ROUTE 57 - (I-57)
LOCATION 1



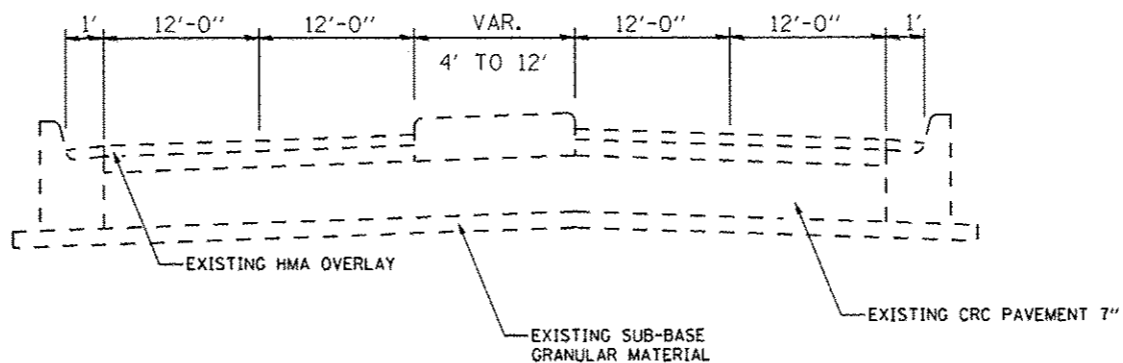
TYPICAL SECTION

FAP 840 - US 45 / 52
LOCATION 2 & LOCATION 3

FILE NAME *	USER NAME * woodshankr1	DESIGNED - YOGESH PATEL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - YOGESH PATEL	REVISED -			VAR	D3 OVD SIN STR REPL 13-08	KANKAKEE	19	4	
		CHECKED - RON WOODSHANK	REVISED -			SCALE:	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS	CONTRACT NO. 46221
		DATE -	REVISED -								



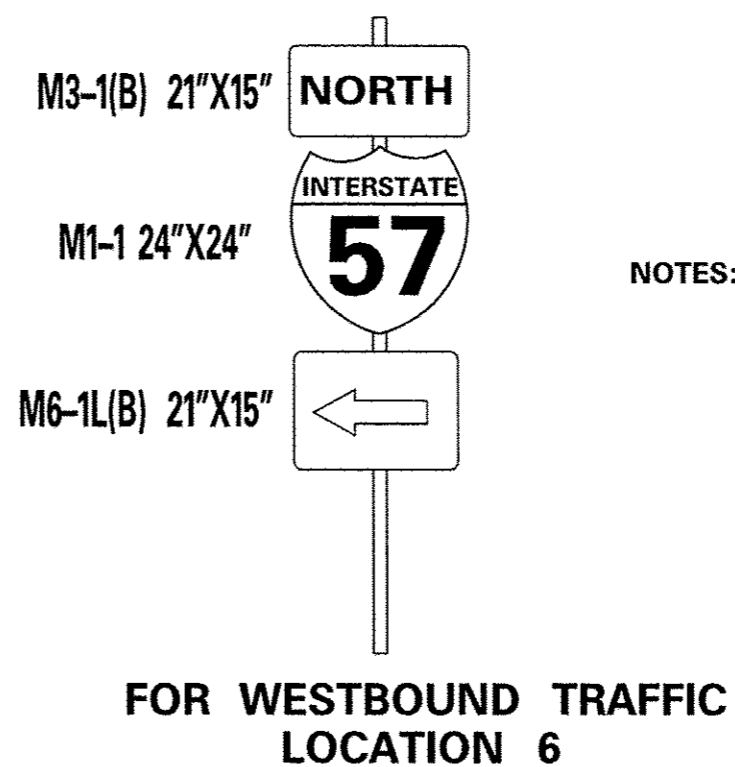
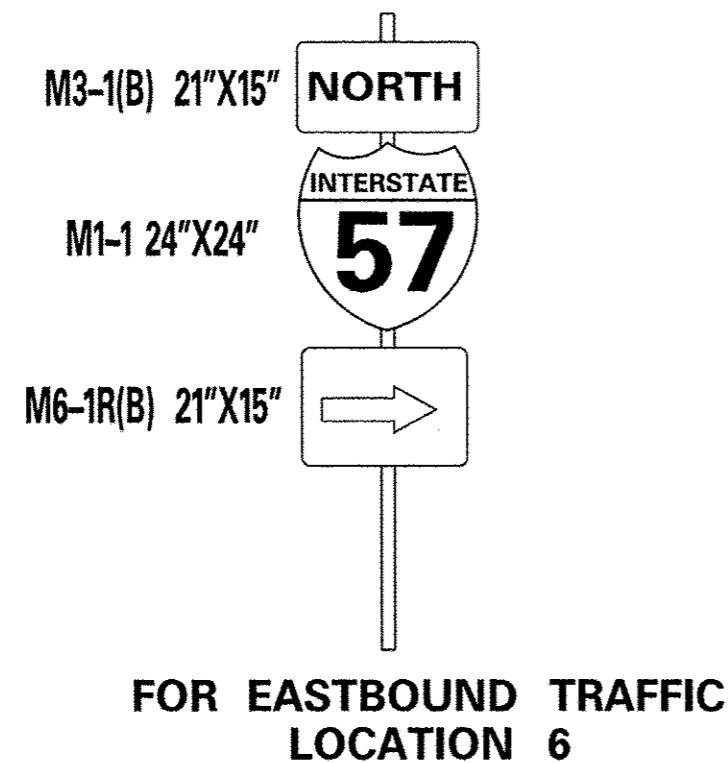
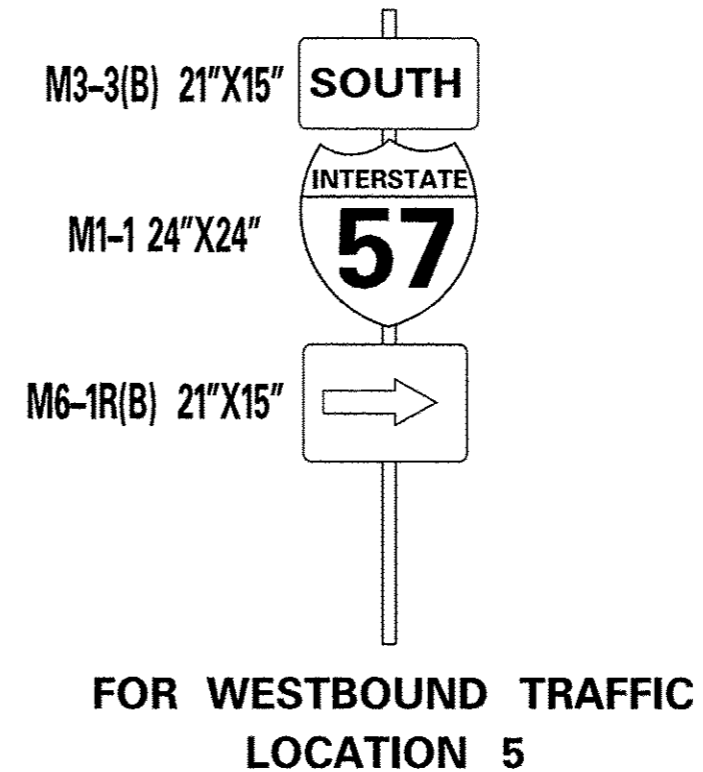
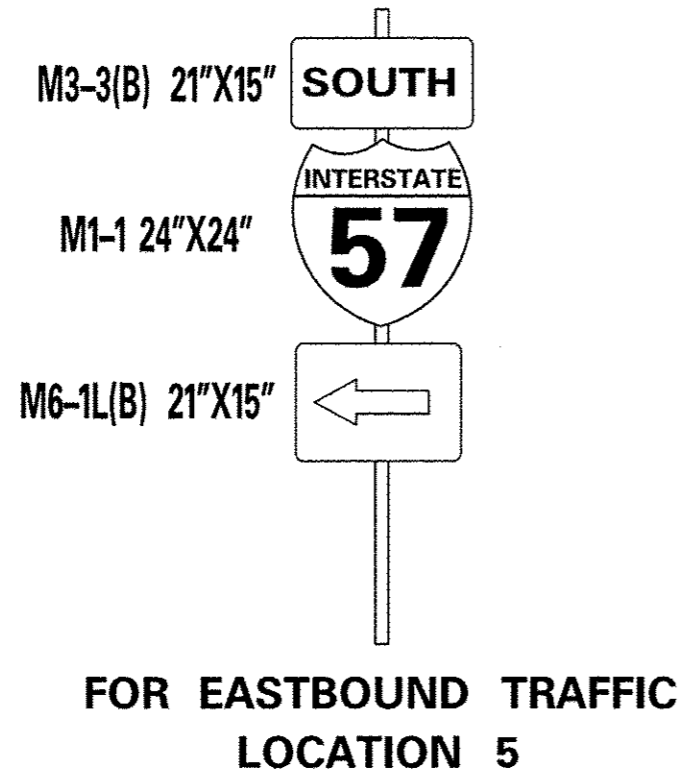
TYPICAL SECTION
FAP 332 - IL 1/17
LOCATION 4



TYPICAL SECTION
FAP 330 - IL 17
LOCATION 5 & 6

FILE NAME :	USER NAME : woodshankr1	DESIGNED - YOGESH PATEL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
02/17/2012 10:00:00 AM	03/12/2012 10:00:00 AM	DRAWN - YOGESH PATEL	REVISED -			VAR	D3 OVD SIN STR REPL 13-08	KANKAKEE	19	5
PLOT SCALE : 1/8" = 1'-0"	CHECKED - RON WOODSHANK	REVISED -								
PLOT DATE : 5/17/2012	DATE -	REVISED -								
					SCALE:	SHEET NO. 2 OF 2 SHEETS		STA.	TO STA.	
[ILLINOIS]										

TEMPORARY SIGNAGE AT LOCATIONS 5 & 6



NOTES: ENGINEER SHALL FIELD DETERMINE EXACT LOCATION OF TEMPORARY SIGNAGE PLACEMENT PRIOR TO SIGN PANEL REMOVAL.

EACH COMPLETE SIGN POST SHALL INCLUDE THE SIGN PANELS AS SHOWN. PAYMENT FOR TEMPORARY SIGNAGE SHALL BE FOR EACH COMPLETE SIGN POST.

FILE NAME *	USER NAME * woodshankr1	DESIGNED - YOGESH PATEL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY SIGNAGE	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr\pvc\work\pvidot\woodshankr1\0302012	346221-shr+details.dgn	DRAWN - YOGESH PATEL	REVISED -			VAR	D3 OVD SIN STR REPL 13-08	KANKAKEE	19	7
	PLDT SCALE * 94.9999' / in.	CHECKED - RON WOODSHANK	REVISED -							
	PLDT DATE * 5/17/2012	DATE -	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS

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
 $f'_c = 3,500$ 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 slims, 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 of 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 (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.

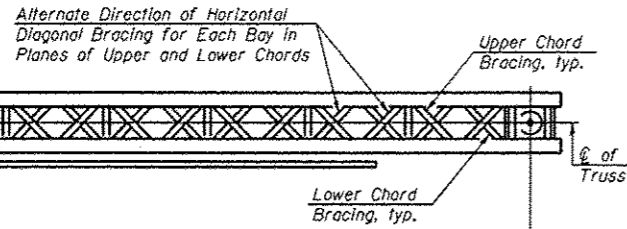
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to AASHTO M314 Gr. 105 with a minimum Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F.

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.

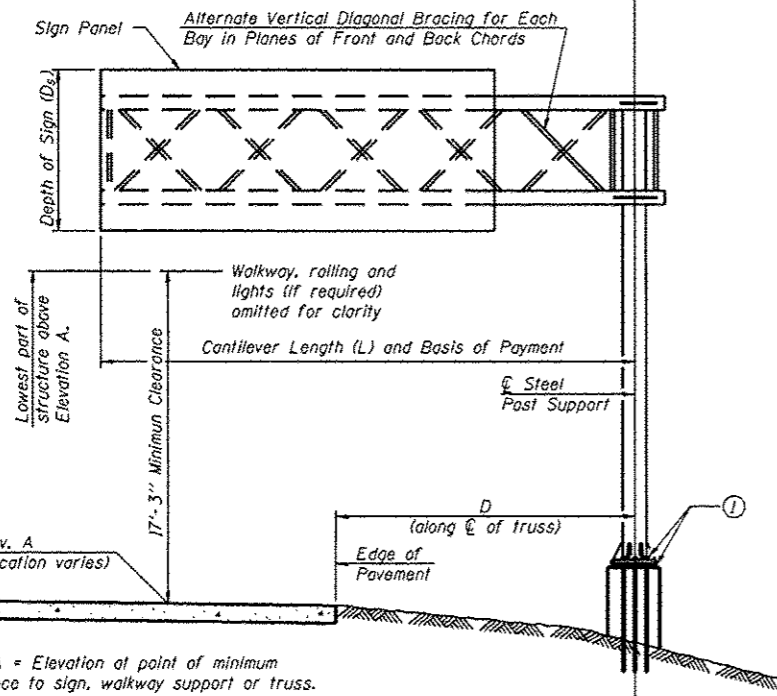
FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.



TYPICAL PLAN
(Walkway not shown)

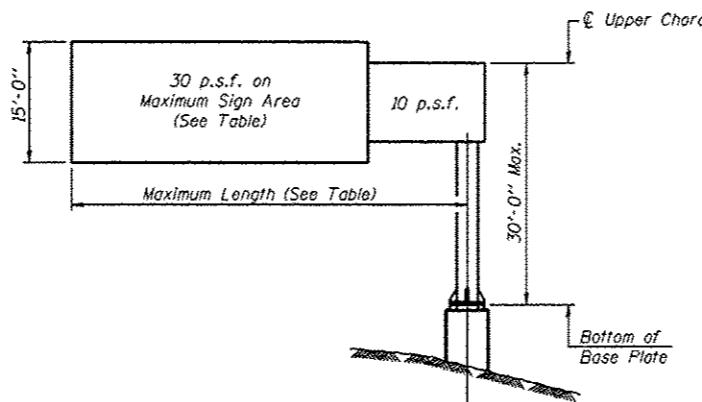
Structure Number	Station	Design Truss Type	Cantilever Length (L)	Total Sign Area
3C0461057R311.5	208+43 NB	III-C-A	35'	150 SQ. FT.
3C046U045L004.9	136+42 RT	III-C-A	35'	72 SQ. FT.
3C046U045R005.1	127+21 LT	III-C-A	35'	90 SQ. FT.
3C046S017L011.2	19+93 LT	III-C-A	35'	220 SQ. FT.

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.



TYPICAL ELEVATION
Looking in Direction of Traffic

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.



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:

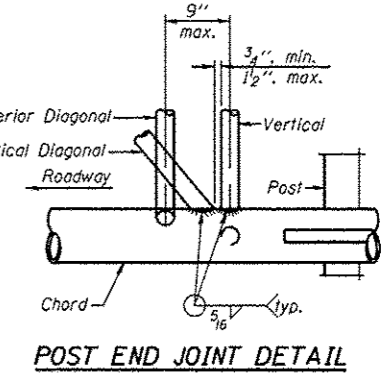
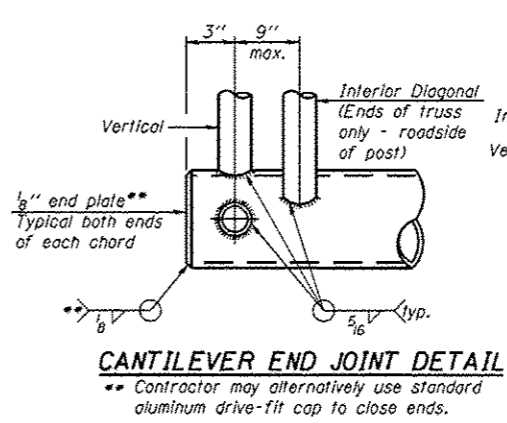
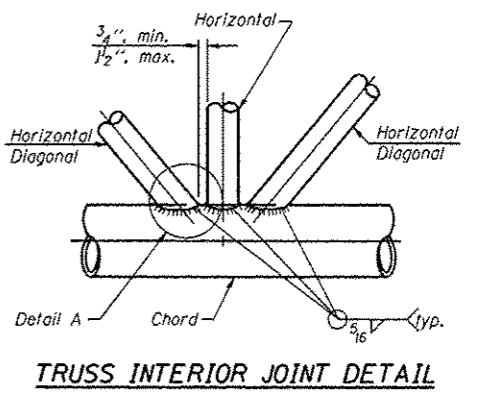
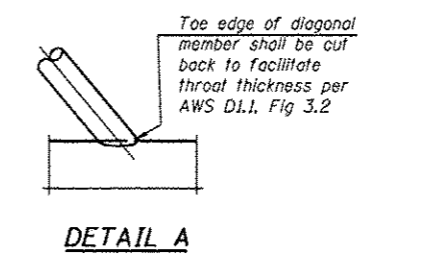
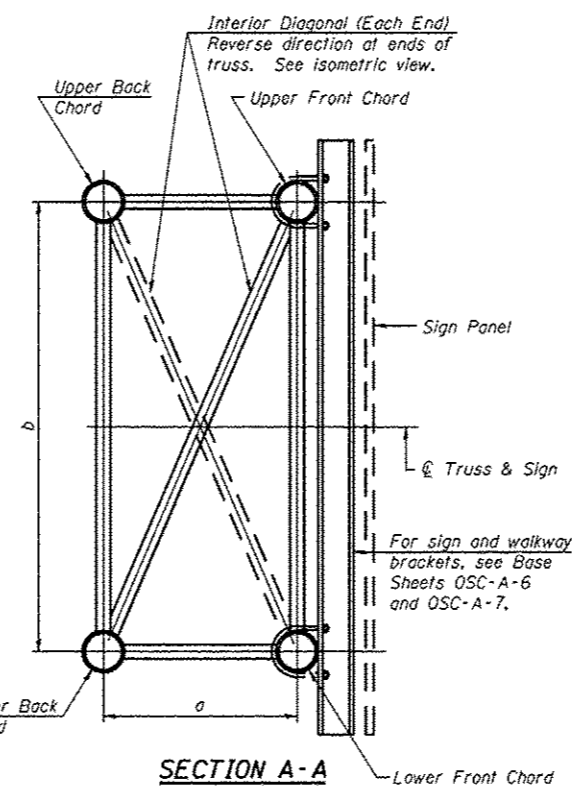
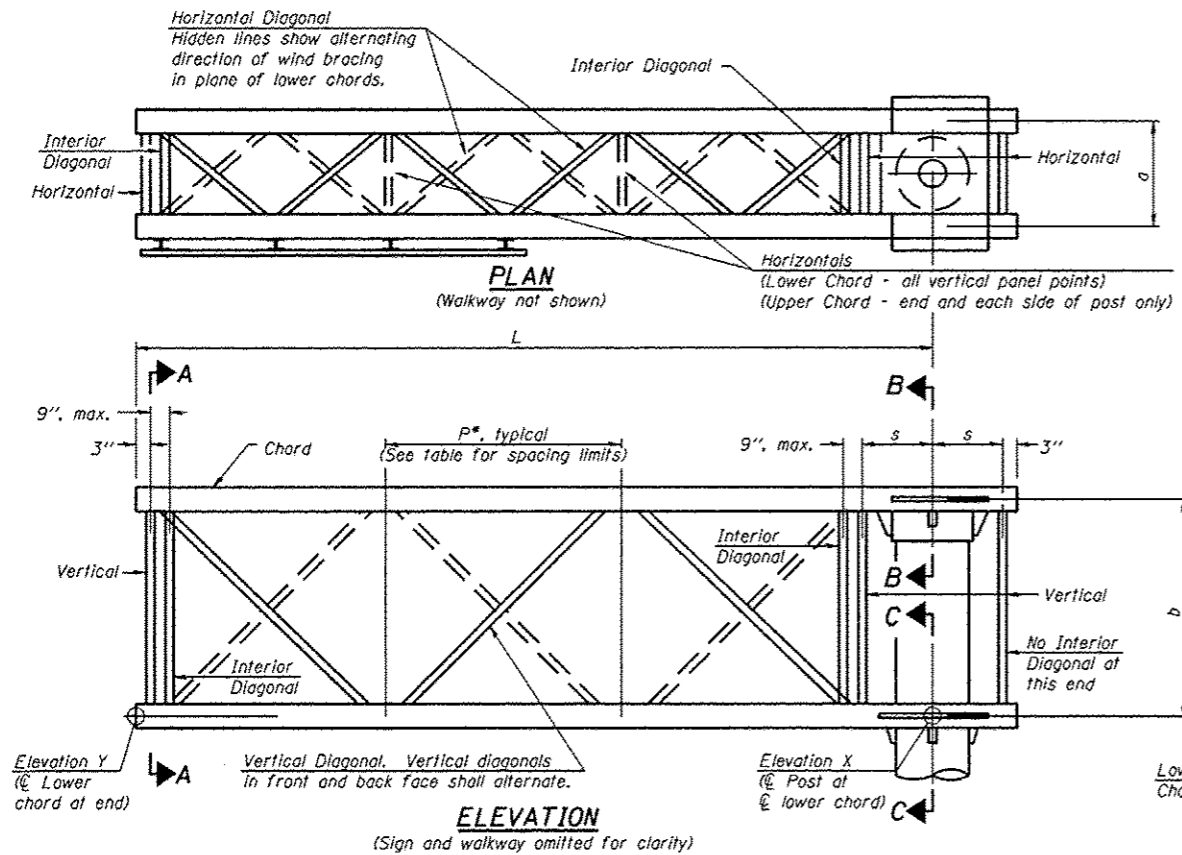
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of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

**THIS SHEET FOR INFORMATION ONLY
LOCATION 1 THROUGH 4**

FILE NAME: c:\pwwork\pwwork\woodshankr\100382812	USER NAME: woodshankr	DESIGNED: YOGESH PATEL	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CANTILEVER TRUSS DETAIL	F.A.I. RTE. VAR.	SECTION: D3 OVD SIGN STR REPL 13-08	COUNTY: KANKAKEE	TOTAL SHEETS: 19	SHEET NO.: 8
PLOT SCALE: 99.9999' / in.	CHECKED: RON WOODSHANK	REVISED: -	SCALE: 1" = 10'-0"			SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	ILLINOIS	CONTRACT NO. 46221	
PLOT DATE: 5/17/2012	DATE: -	REVISED: -								



TYPICAL TRUSS UNIT

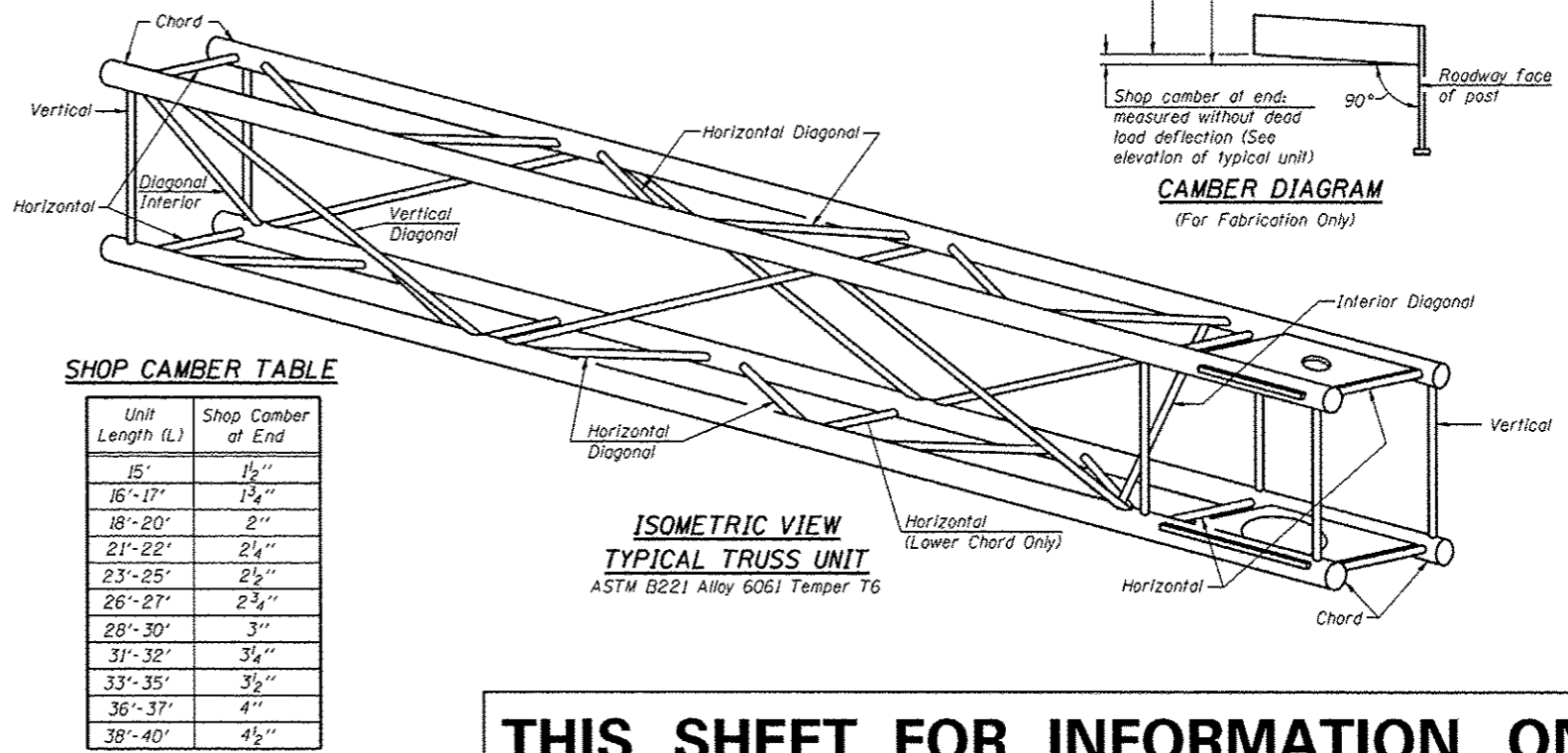
Note: For Section B-B and Section C-C, see Base Sheet OSC-A-3.
There are twice as many horizontal diagonals as there are vertical diagonals.

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 = $\frac{L-s-3"}{\# \text{ Panels}}$

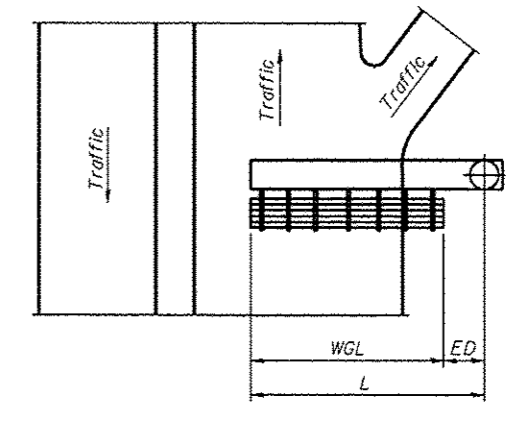
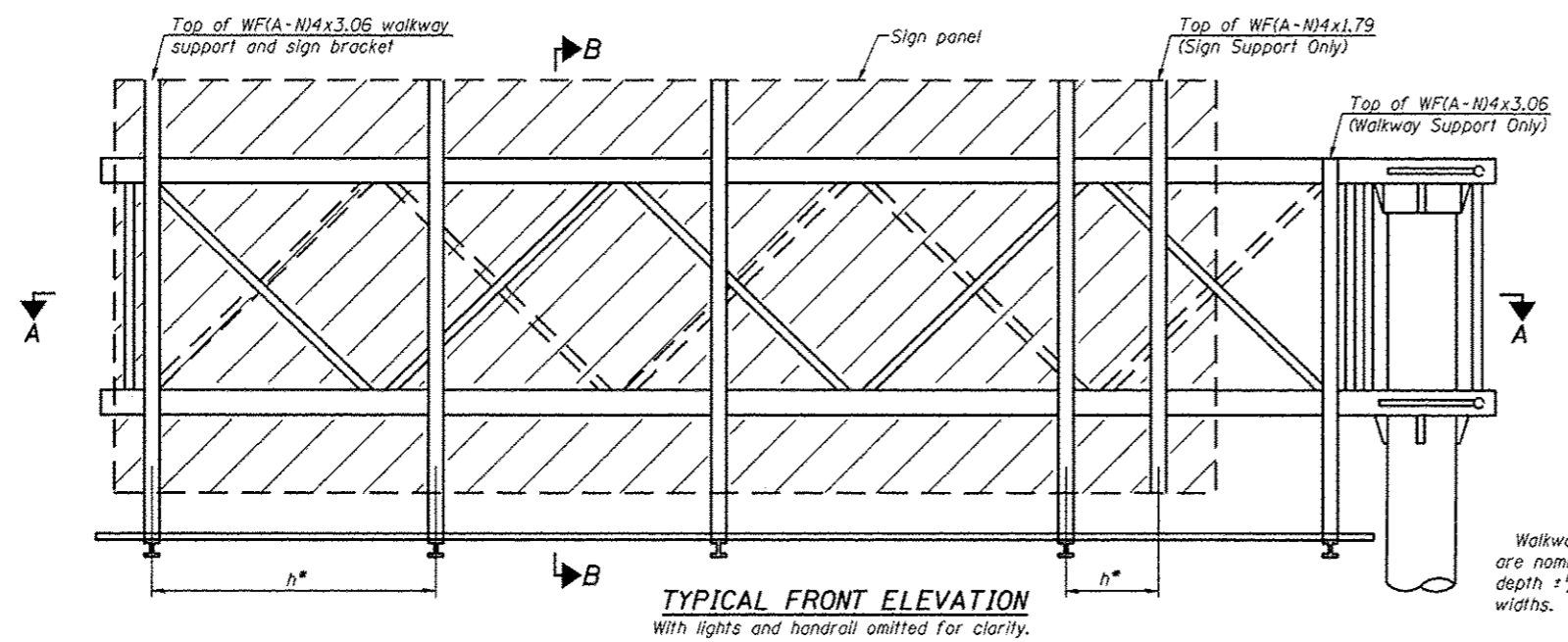
Structure Number	Station	Truss Type	Design Length (L)
3C0461057R311.5	208+43 NB	III-C-A	35'
3C0461045L004.9	136+42 RT	III-C-A	35'
3C0461045R005.1	127+21 LT	III-C-A	35'
3C04650171.011.2	19+93 LT	III-C-A	35'



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"

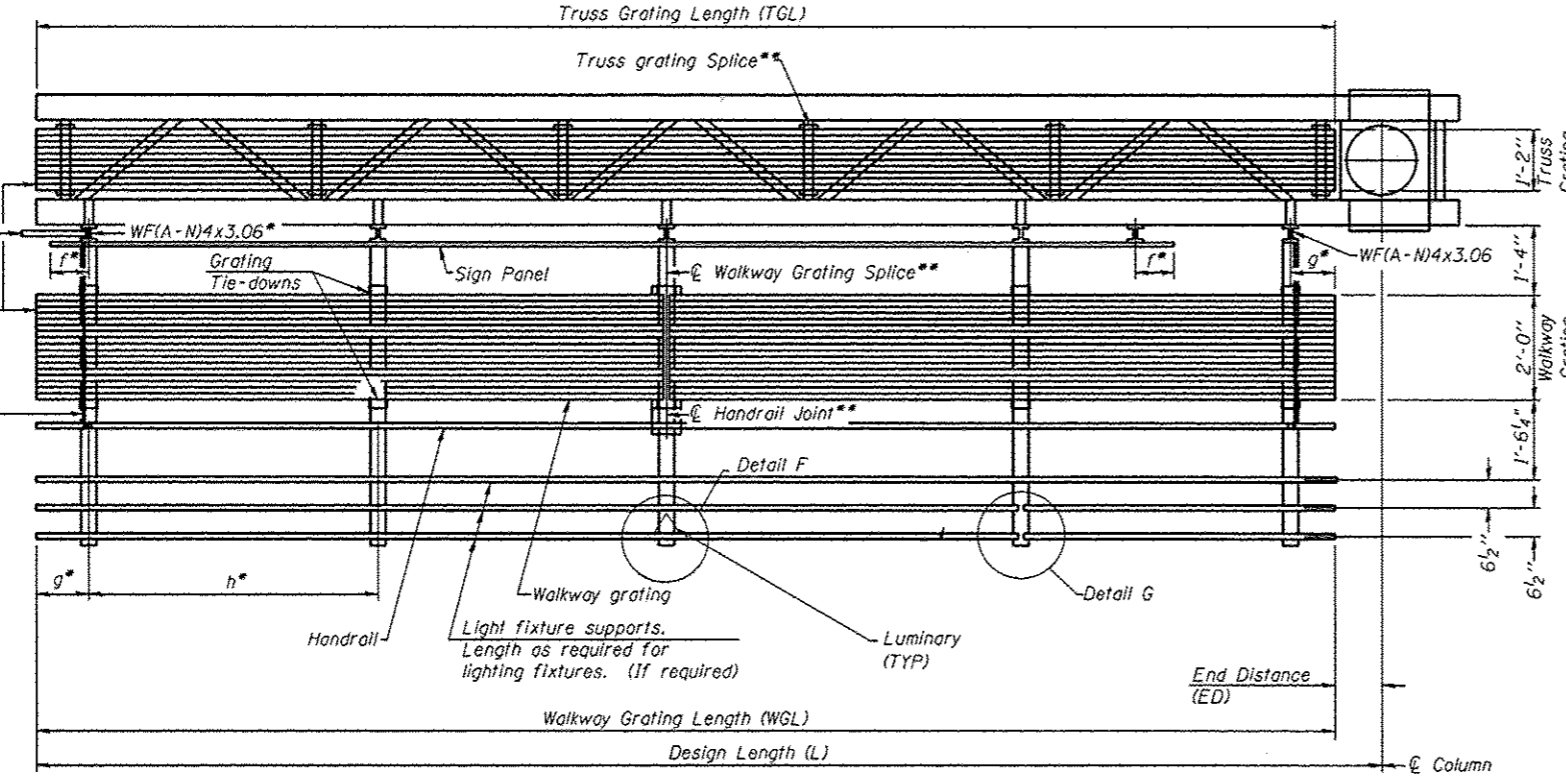
**THIS SHEET FOR INFORMATION ONLY
LOCATION 1 THROUGH 4**



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

Walkway and truss grating dimensions are nominal and may vary (width ± 1/2", depth ± 1/2") based on available standard widths.

TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



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.

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

△ Luminary - One, placed at center of walkway.

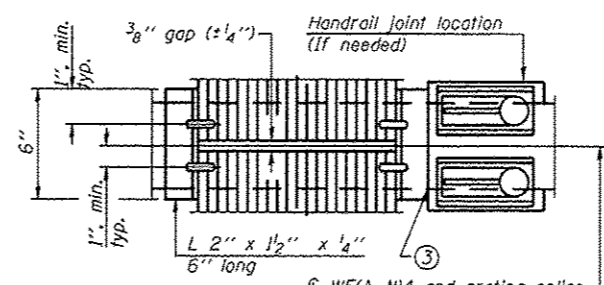
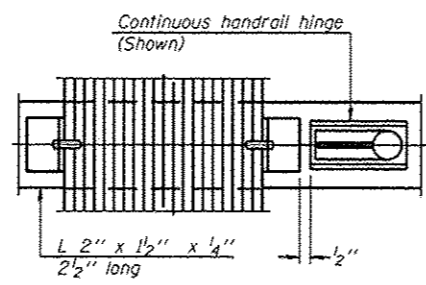
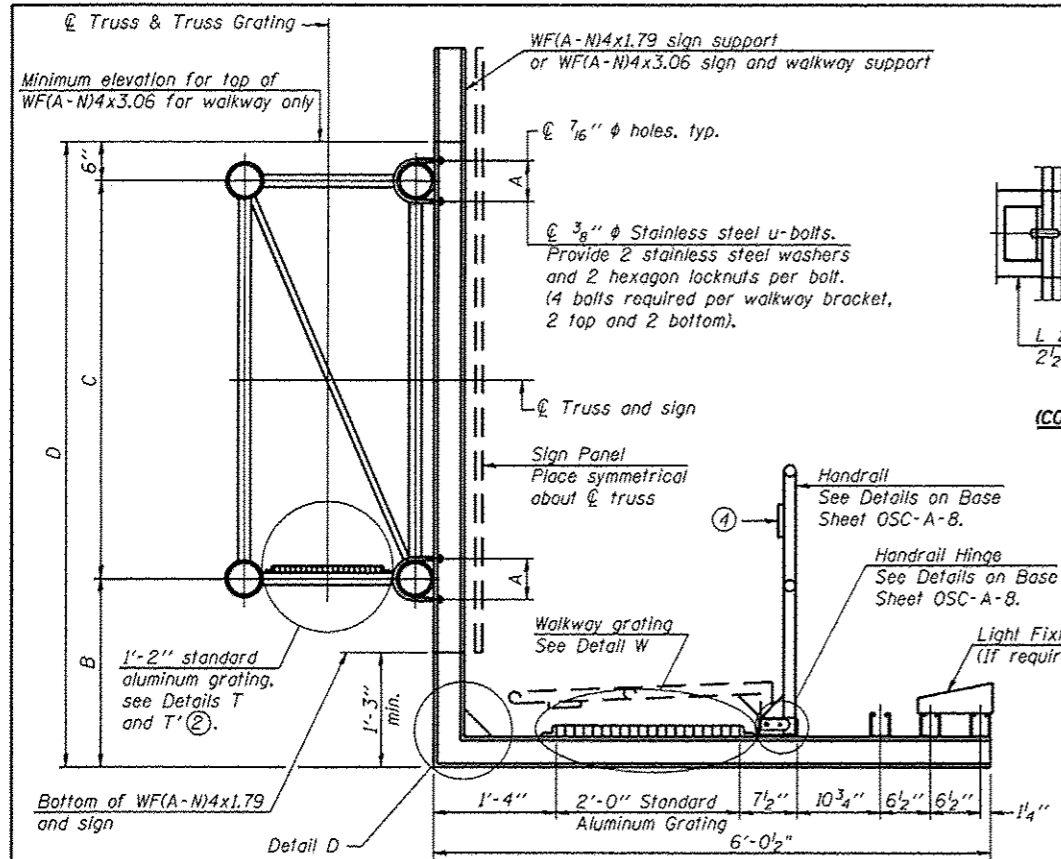
Structure Number	Station
3C0461057R3JL5	208+43 NB
3C046U045L004.9	136+42 RT
3C046U045R005.1	127+21 LT
3C046S017L011.2	19+93 LT

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 center of nearest bracket)
 g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)
 h = 6'-0" maximum (center to center 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-B.
 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

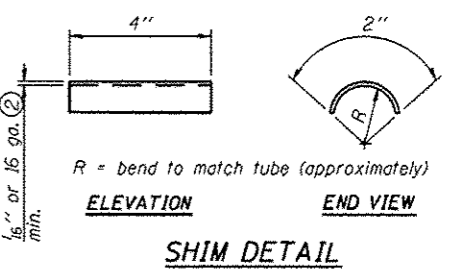
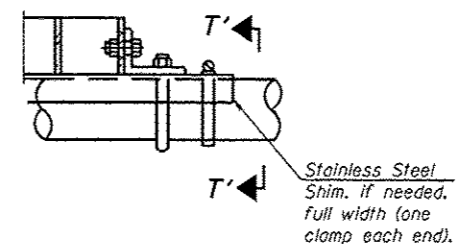
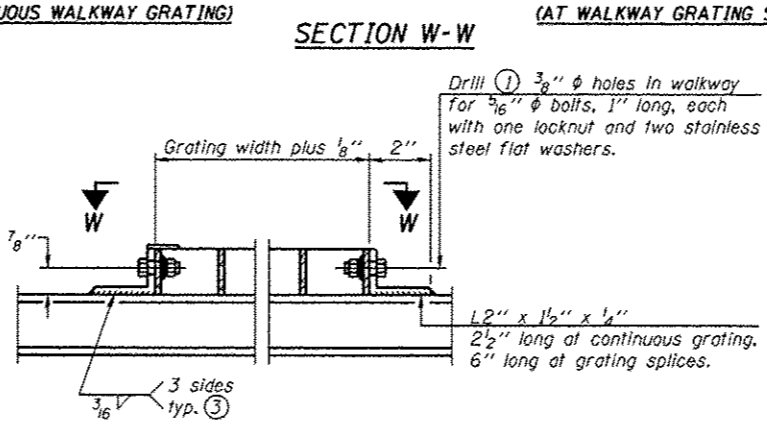
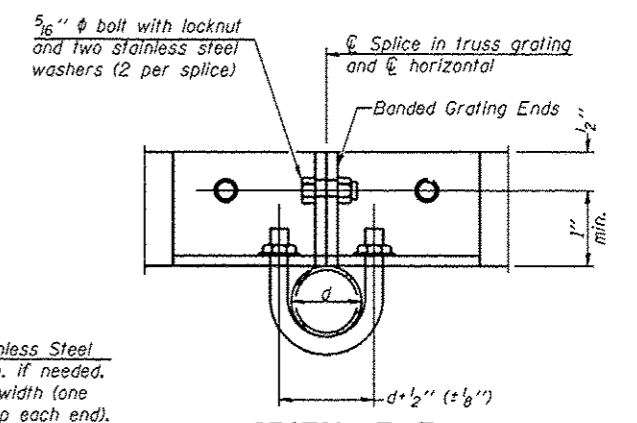
WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

THIS SHEET FOR INFORMATION ONLY
LOCATION 1 THROUGH 4

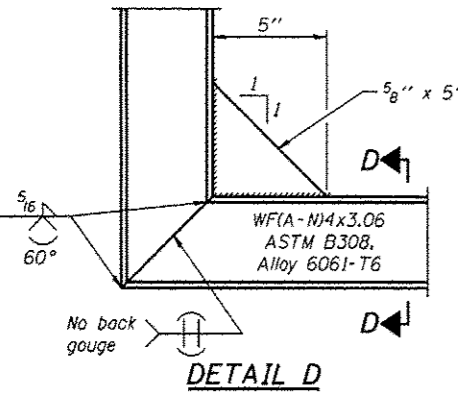
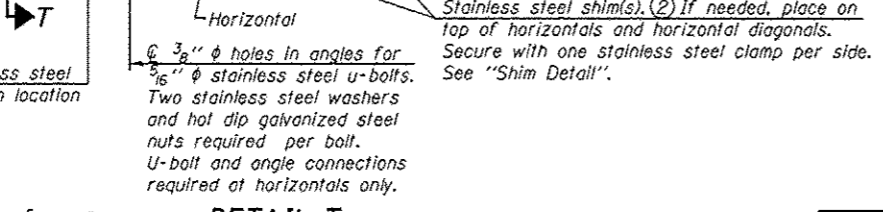
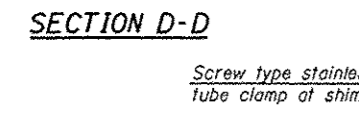
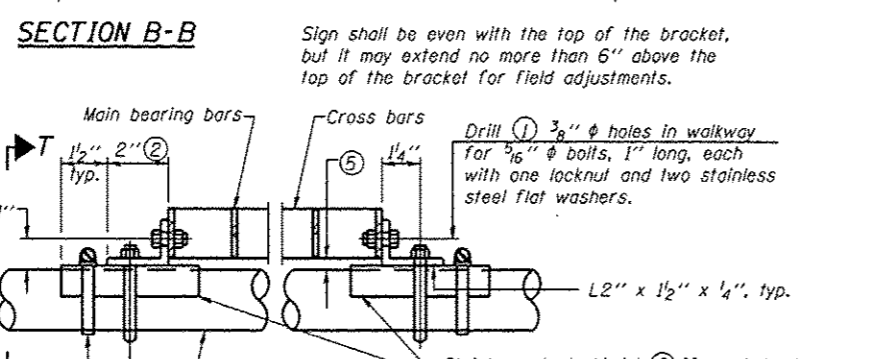
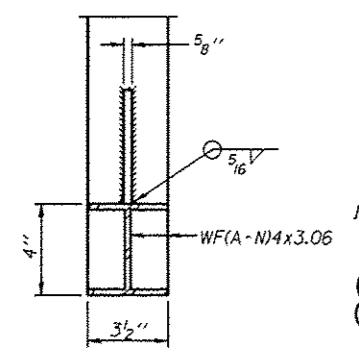


SPECIFICATIONS FOR STANDARD ALUMINUM GRATING
 Main Bearing Bars (MBB) shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.
 Cross bars (CB) shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

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.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

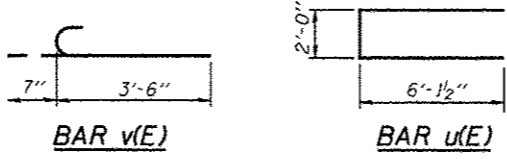
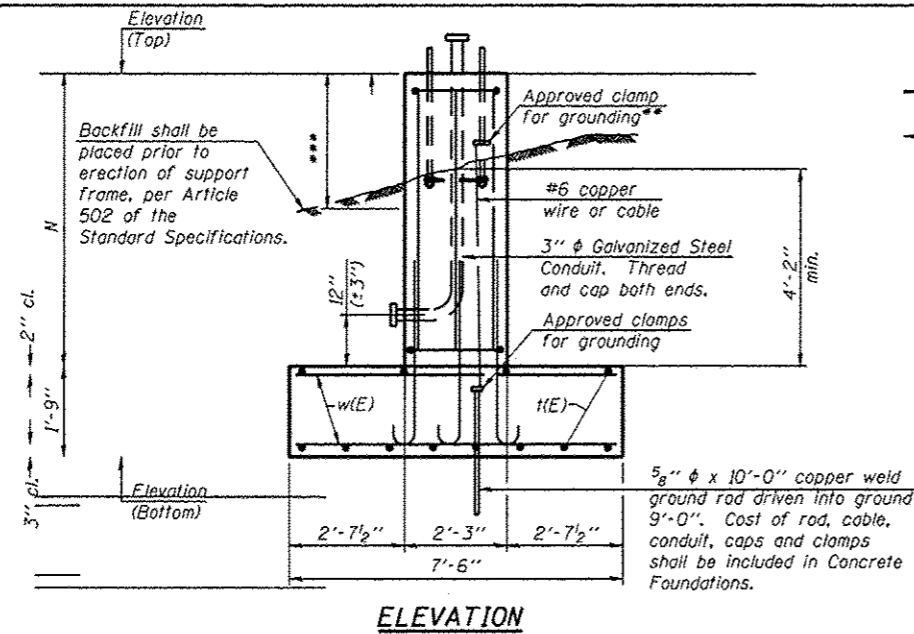


- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)
- ④ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑤ Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- ⑥ Based on actual sign height, D_s, given on OSC-A-1.



Structure Number	Station
3C0461057R311.5	208+43 MB
3C046U045L004.9	136+42 RT
3C046U045R005.1	127+21 LT
3C046S017L011.2	19+93 LT

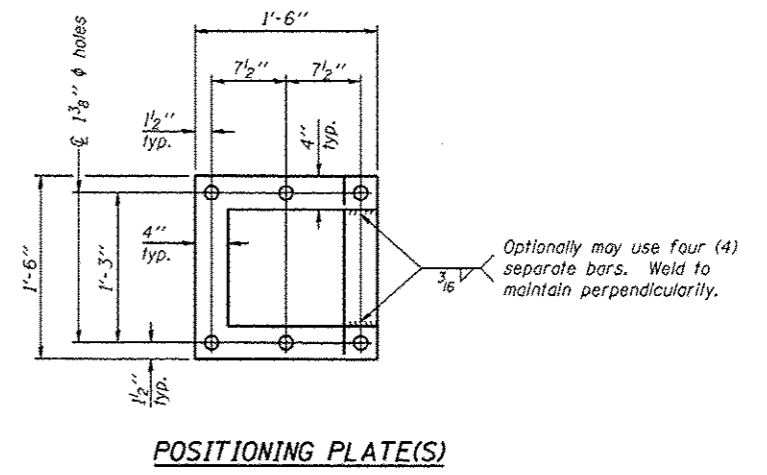
**THIS SHEET FOR INFORMATION ONLY
 LOCATION 1 THROUGH 4**



BAR LIST - EACH FOUNDATION

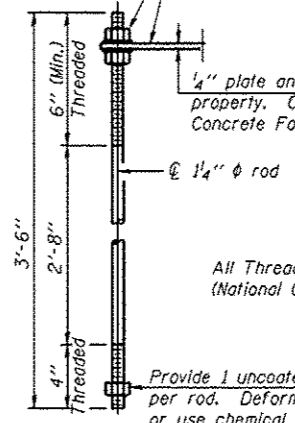
Bar	Number	Size	Length	Shape
1(E)	12	#5	*	—
u(E)	18	#4	14'-3"	—
v(E)	28	#5	4'-1"	—
v ₁ (E)	28	#5	*	—
w(E)	39	#5	7'-3"	—

*Length of 1(E) bar = (Dim. M) - 6"
 v₁(E) bar = (Dim. N) - 3"



POSITIONING PLATE(S)

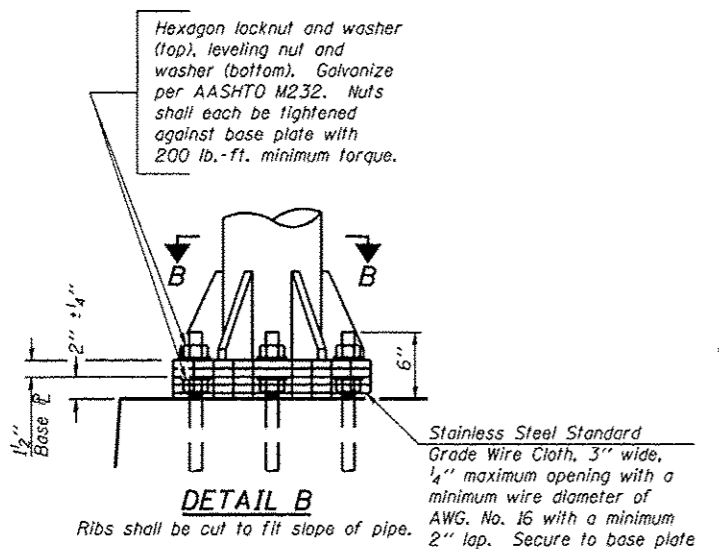
At each location, provide 1/4" thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.



ANCHOR ROD DETAIL
 Drilled Shaft Foundation

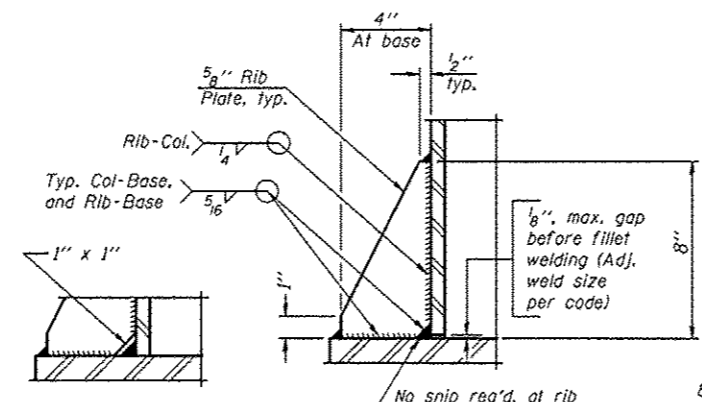
All Thread = NC (National Coarse)

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



DETAIL B

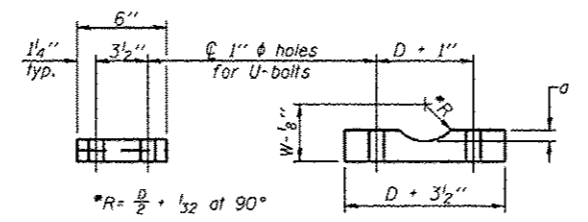
Ribs shall be cut to fit slope of pipe.



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.

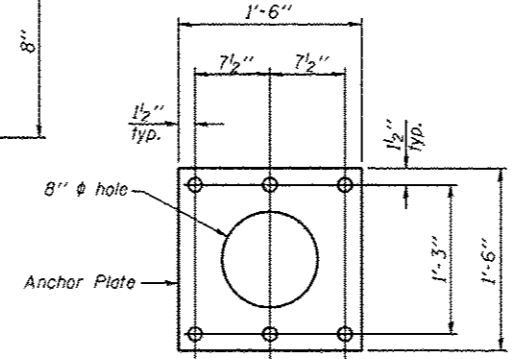
No snip req'd. of rib inside corner if placed before col. to base plate welding.



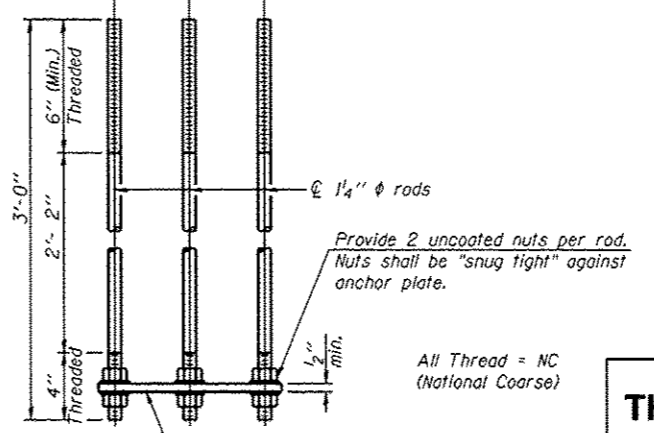
SADDLE SHIM DETAIL

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

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



Anchor Plate



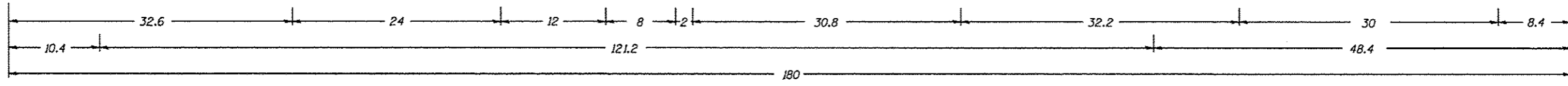
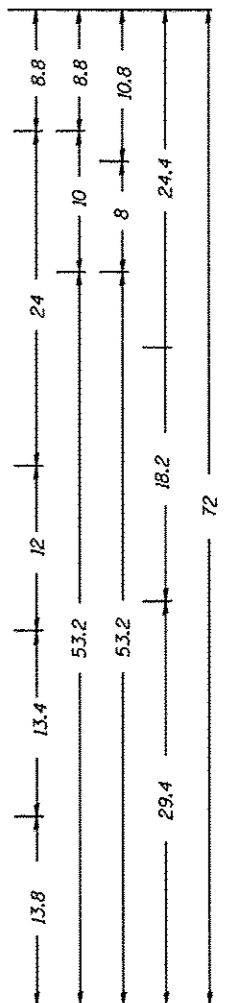
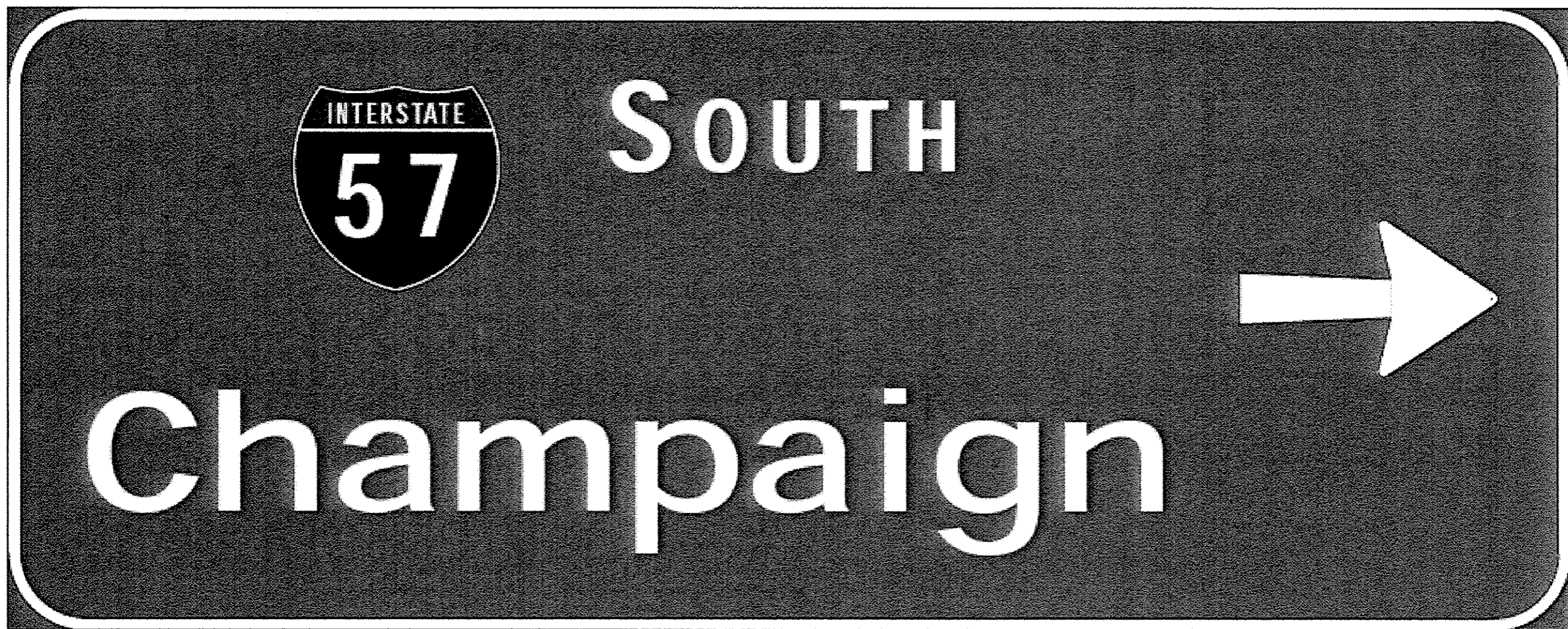
ANCHOR ROD DETAIL
 Spread Footing Foundation

All Thread = NC (National Coarse)

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

Structure Number	Station
3C0461057R311.5	208+43 NB
3C046U045L004.9	136+42 RT
3C046U045R005.1	127+21 LT
3C046S017L011.2	19+93 LT
3C046S017R014.1	130+84 RT
3C046S017L014.3	135+90 LT

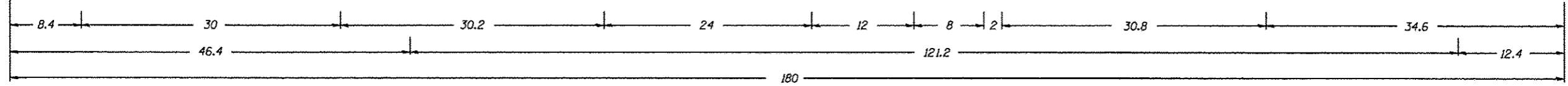
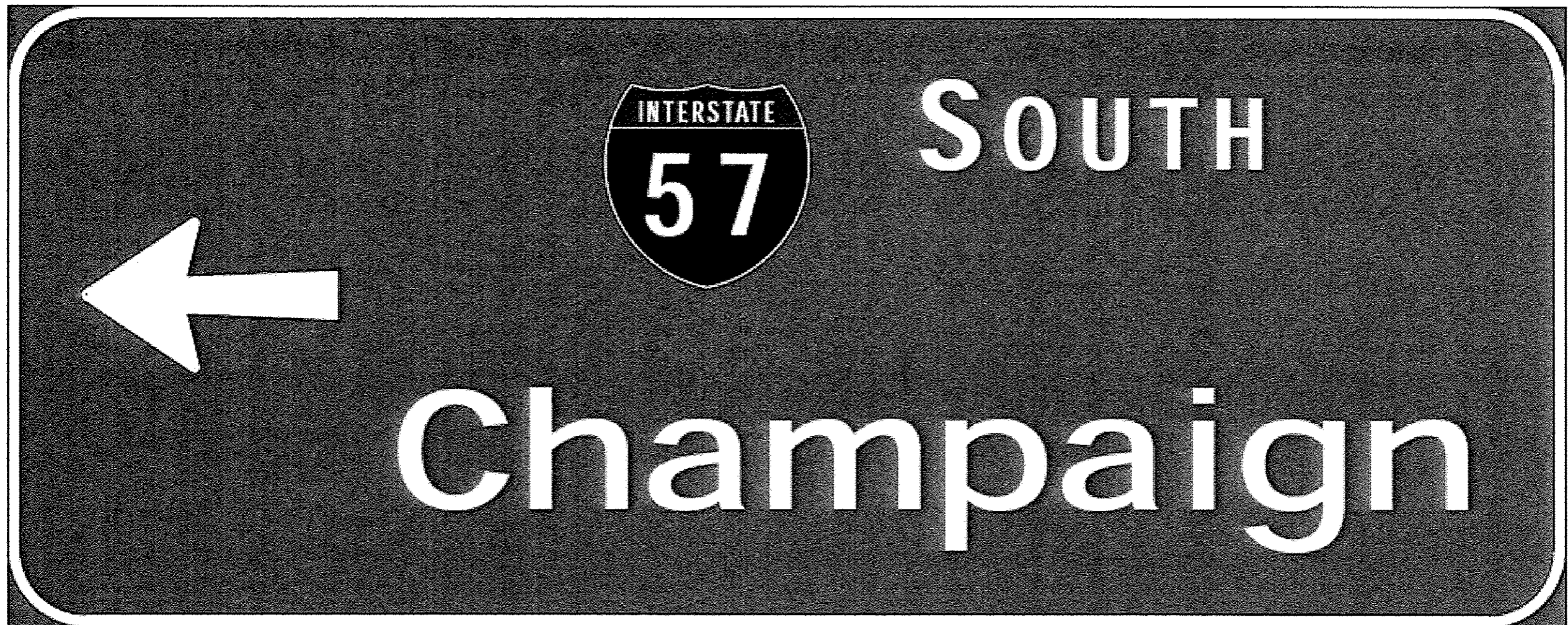
THIS SHEET FOR INFORMATION ONLY
LOCATION 1 THROUGH 6



9.0" Radius, 1.5" Border, White on Green.
 "SOUTH" E Mod; "Champaign" ClearviewHwy-5-W; Arrow 133 - 30.0" 0 ;

SIGN PANEL
3C046S017R014.1 - LOCATION 5
STA: 130+84 RT
LOOKING WEST

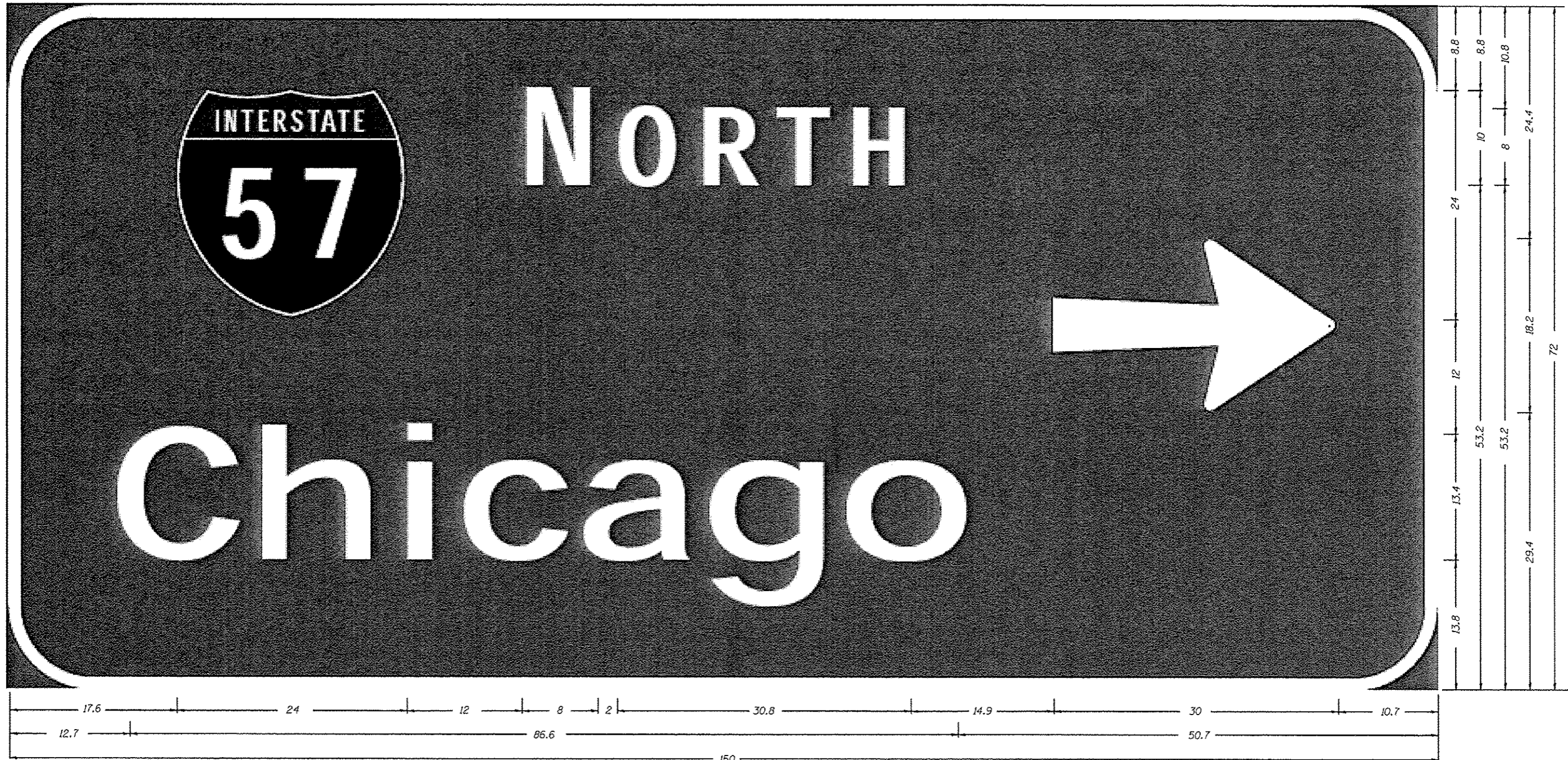
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	11/16/2011	DRAWN - YOGESH PATEL	REVISED -			VAR	D3 OVD SIN STR REPL 13-08	KANKAKEE	19	16
	PLOT SCALE = 99.9999' / in.	CHECKED - RON WOODSHANK	REVISED -							
	PLOT DATE = 5/17/2012	DATE -	REVISED -							CONTRACT NO. 46221
				SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS		



9.0" Radius, 1.5" Border, White on Green.
 "SOUTH" E Mod; "Champaign" ClearviewHwy-5-W; Arrow 133 - 30.0" 180°;

SIGN PANEL
3C046S017R014.1 - LOCATION 5
STA: 130+84 RT
LOOKING EAST

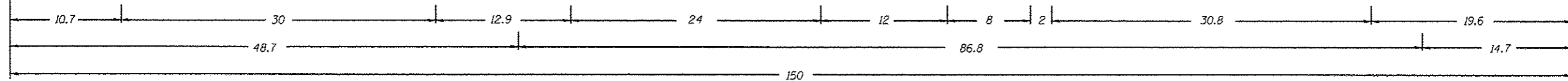
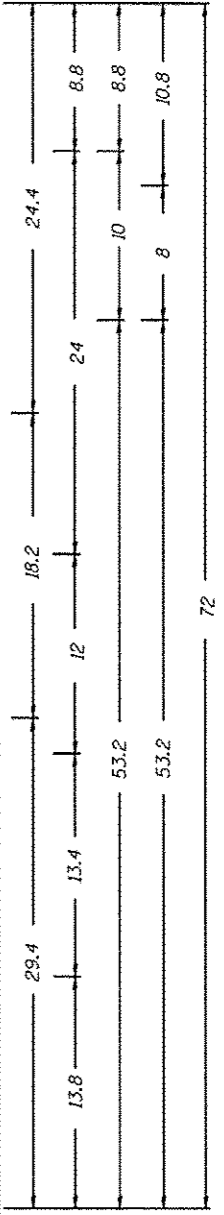
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	PLOT DATE : 5/17/2012	DATE -	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	ILLINOIS CONTRACT NO. 46221		



9" Radius, 1.5" Border, White on Green.
 "NORTH" E Mod; "Chicago" ClearviewHwy-5-W; Arrow 133 - 30.0" 0°;

SIGN PANEL
 3C046S017L014.3 - LOCATION 6
 STA: 135+90 LT
 LOOKING EAST

FILE NAME *	USER NAME * woodshankr1	DESIGNED - YOGESH PATEL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN PANEL DETAIL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE * 5/17/2012	DATE -	REVISED -							CONTRACT NO. 46221	
					SCALE:	SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	
					[ILLINOIS]					



9" Radius, 1.5" Border, White on Green.
 "NORTH" E Mod; "Chicago" ClearviewHwy-5-W; Arrow 133 - 30.0" 180° ;

SIGN PANEL
3C046S017L014.3 - LOCATION 6
STA: 135+90 LT
LOOKING WEST

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PLOT DATE : 5/17/2012	DATE -	REVISED -	SCALE:			SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	ILLINOIS	CONTRACT NO. 46221	