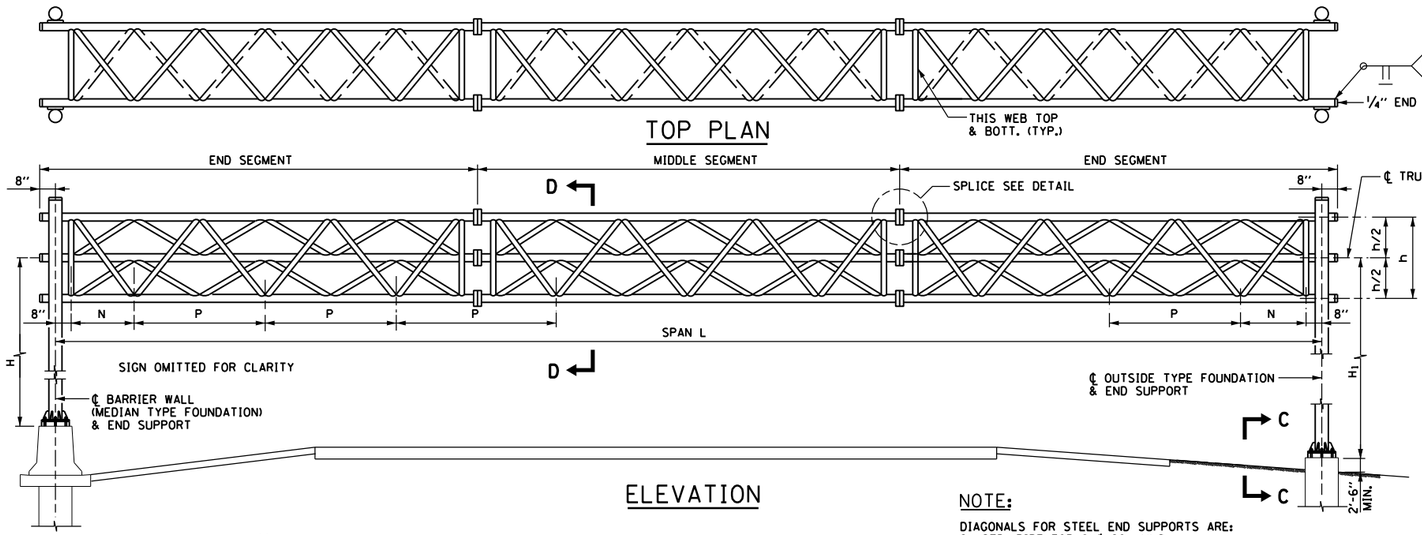
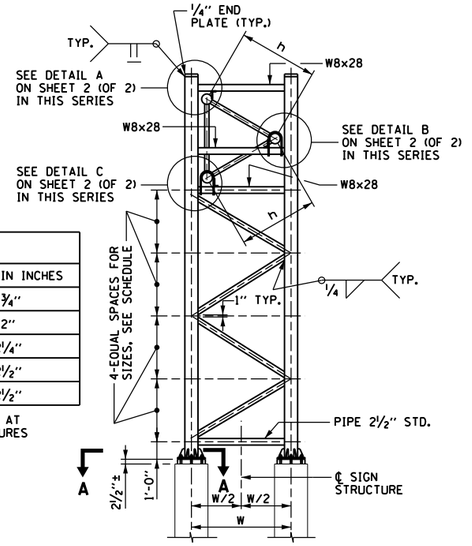
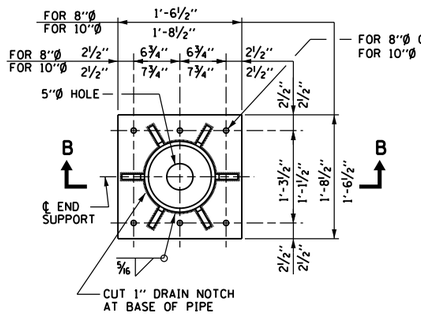


CAMBER	
SPAN IN FEET	CAMBER IN INCHES
60 THRU 70	1¾"
71 THRU 80	2"
81 THRU 100	2¼"
101 THRU 110	2½"
111 THRU 120	2½"

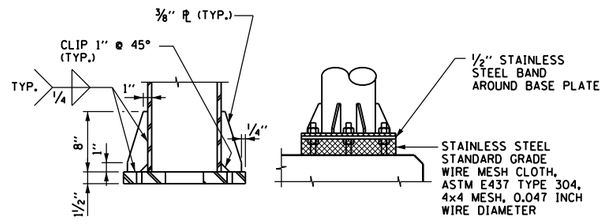
PROVIDE THE ABOVE CAMBER AT MIDDLE OF SPAN OF STRUCTURES



TYPICAL END SUPPORT ELEVATION

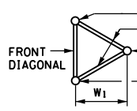


SECTION A-A

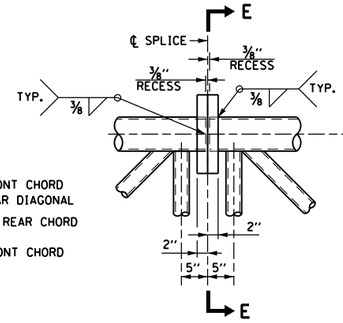


SECTION B-B

VIEW C-C



SECTION D-D



SPLICE DETAIL

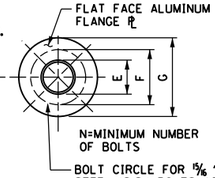


TABLE A			
CHORD SIZE E	F	G	N
3½"Ø & 3¾"Ø	8½"	11½"	6
4¼"Ø, 4¾"Ø, 5"Ø	9¼"	12¼"	8
6"Ø & 6½"Ø	11"	14"	10

BOLT CIRCLE FOR ⅝"Ø HOLES AND ⅞"Ø STAINLESS STEEL (S.S.) BOLTS WITH HEX LOCKNUTS & S.S WASHERS UNDER HEAD & NUT. FOR E, F, G & N, SEE TABLE A. REQUIRED MIN. BOLT TENSION IS 12,500#. ⅞"Ø STUDS SHALL BE SUBSTITUTED WHEN DIAGONALS INTERFERE WITH BOLT LOCATION.

SECTION E-E

SIGN STRUCTURE SCHEDULE

TRUSS NO.	DIMENSIONS						ALUMINUM TRUSS					STEEL END SUPPORT			FOUNDATION TYPE
	TRUSS SPAN L	P	N	h	W_1	W	DL (TRUSS) DEFLECTION	MIDDLE SEGMENT OR END SEGMENT				PIPE COLUMN (NOMINAL DIAMETER)			
								CHORD (O.D.)		DIAGONAL (O.D.)		H OR H_1	H OR H_1	H OR H_1	
								FRONT	REAR	FRONT	REAR	22'-0" TO 24'-0" (MAX.)	25'-0" TO 27'-0" (MAX.)	28'-0" TO 29'-0" (MAX.)	
T-60	60'-0"	6'-8"	2'-8"	3'-4"	2'-10⅝"	4'-4½"	1 1/16"	3½"ø x¼"	3¾"ø x¼"	2"ø x⅜"	2"ø x⅜"	8" STD. (28.55#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-65	65'-0"	7'-4"	2'-6"	3'-8"	3'-2⅛"	4'-8"	1⅝"	3½"ø x¼"	3¾"ø x¼"	2"ø x⅜"	2"ø x⅜"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-70	70'-0"	8'-0"	2'-4"	4'-0"	3'-5⅝"	5'-0"	1 11/16"	3¾"ø x¼"	3¾"ø x¼"	2"ø x⅜"	2"ø x⅜"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-75	75'-0"	8'-6"	2'-10"	4'-3"	3'-8¼"	5'-3"	1 7/16"	4¼"ø x¼"	4¾"ø x⅜"	2"ø x⅜"	2"ø x⅜"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-80	80'-0"	9'-0"	3'-4"	4'-6"	3'-10¾"	5'-6"	2"	4¾"ø x⅜"	5"ø x¼"	2¼"ø x⅜"	2"ø x⅜"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	80
T-85	85'-0"	9'-6"	3'-10"	4'-9"	4'-1⅜"	5'-9"	2 1/16"	5"ø x¼"	5"ø x5/16"	2¼"ø x⅜"	2¼"ø x⅜"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	100
T-90	90'-0"	10'-0"	4'-4"	5'-0"	4'-4"	5'-11½"	2⅛"	5"ø x5/16"	5"ø x5/16"	2½"ø x⅜"	2¼"ø x⅜"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	100
T-95	95'-0"	10'-6"	4'-10"	5'-3"	4'-6⅝"	6'-2"	2 3/16"	5"ø x5/16"	5"ø x5/16"	2½"ø x⅜"	2½"ø x⅜"	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	100
T-100	100'-0"	11'-4"	4'-0"	5'-8"	4'-10⅞"	6'-7½"	2¼"	6"ø x¼"	6"ø x¼"	2¾"ø x⅜"	2½"ø x⅜"	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	100
T-105	105'-0"	12'-0"	3'-10"	6'-0"	5'-2⅜"	6'-11"	2 5/16"	6"ø x5/16"	6"ø x5/16"	3"ø x⅜"	2¾"ø x⅜"	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	120
T-110	110'-0"	12'-6"	4'-4"	6'-3"	5'-5"	7'-1½"	2⅜"	6"ø x5/16"	6"ø x5/16"	3"ø x⅜"	2¾"ø x⅜"	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	120
T-115	115'-0"	13'-0"	4'-10"	6'-6"	5'-7⅝"	7'-4½"	2⅛"	6½"ø x⅜"	6"ø x5/16"	3¼"ø x¼"	3"ø x⅜"	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	10" X.X.S. (104.13#/FT.)	120
T-120	120'-0"	13'-8"	4'-8"	6'-10"	5'-11"	7'-8"	2⅝"	6½"ø x⅜"	6½"ø x⅜"	3½"ø x⅜"	3"ø x⅜"	10" X.S. (54.74#/FT.)	10" X.X.S. (104.13#/FT.)	10" X.X.S. (104.13#/FT.)	120

NOTE:

DIAGONALS FOR STEEL END SUPPORTS ARE:
2" STD. PIPE FOR 8"Ø COLUMNS
2½" STD. PIPE FOR 10"Ø COLUMNS

NOTES:

DESIGN SPECIFICATIONS:

1. 2009 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 5TH EDITION WITH 2010 INTERIMS.

LOADING:

1. TRUSSES ARE DESIGNED FOR A NINE FOOT DEEP SIGN PANEL OVER 75% OF SPAN LENGTH, BOTH END SUPPORTS ARE DESIGNED FOR 60% OF THE TOTAL LOAD.
2. WIND LOADING SHALL BE A MINIMUM OF 35 PSF ON SIGN PANELS AND 10 PSF ON GROSS AREAS DEFINED BY THE PERIMETER OF TRUSS MEMBERS NOT COVERED BY SIGN PANEL AREAS.
3. THE AASHTO GROUP II AND III ALLOWABLE STRESS SHALL BE 133% (ALLOWABLE STRESS DESIGN).

CONSTRUCTION SPECIFICATIONS:

1. ALL MATERIALS, EXCEPT AS SHOWN, FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 733 OF THE LATEST IDOT STANDARD SPECIFICATIONS.

Illinois Tollway
Open Roads for a Faster Future

APPROVED Paul Kovacs CHIEF ENGINEER DATE 2-7-2012

DATE	REVISIONS
2-7-2012	REVISED FOUNDATIONS AND REVISED NOTES.

OVERHEAD SIGN STRUCTURE
SPAN TYPE, ALUMINUM

STANDARD F1-01