



December 12, 2022

Document Change Announcement

2016 Standard Supplementary Specifications

Vierendeel Sign Structure Details

DCA2022SD-04

Subject: Revisions to

Drawing SI-29 Vierendeel Span Type Sign Structure (Spans From 60 To 90 Feet) Sections And Details - 1

Drawing SI-37 Vierendeel Cantilever Type Sign Structure (Spans From 20 To 42 Feet) Details - 2

Description of Change:

This DCA provides additional bolt edge distance at the sides of a vierendeel span type sign structure tubular member to accommodate a larger fabricated corner radius on Standard Drawing SI-29, and corrects a discrepancy in the dimensional call-out within the elevation view for the fabricated chord sleeve details on Standard Drawing SI-37.

Notice to New Jersey Turnpike Authority Staff and Design Consultants

Effective immediately, all contracts currently in the design phase shall incorporate the revisions herein. For advertised contracts awaiting the opening of bids this revision shall be incorporated via addendum. Contact your New Jersey Turnpike Authority Project Manager for instruction.

The revisions may be accessed on the Authority's webpage: <https://www.njta.com/doing-business/professional-services>

Recommended By:

Handwritten signature of Lamis T. Malak in blue ink.

Lamis T. Malak, P.E.
Deputy Chief Engineer - Design

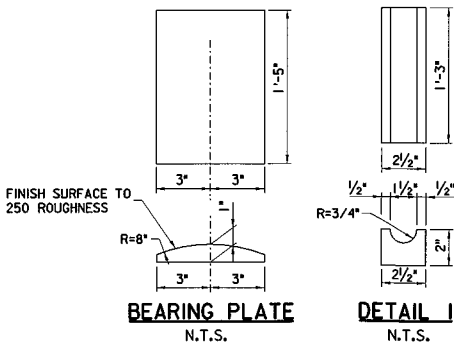
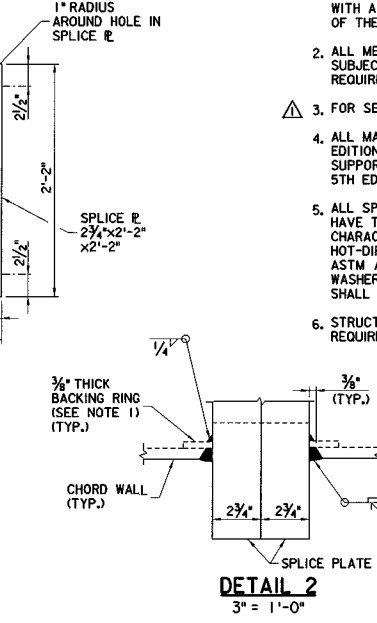
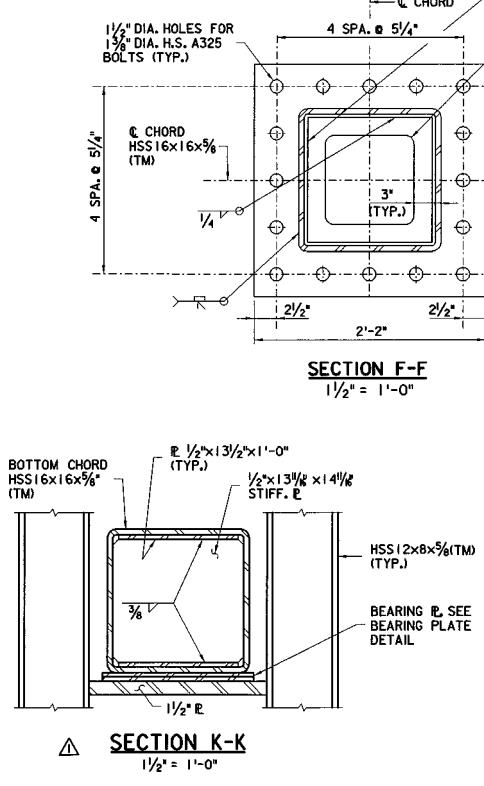
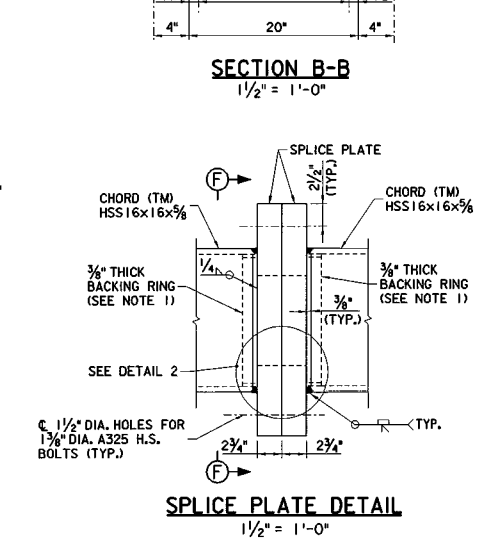
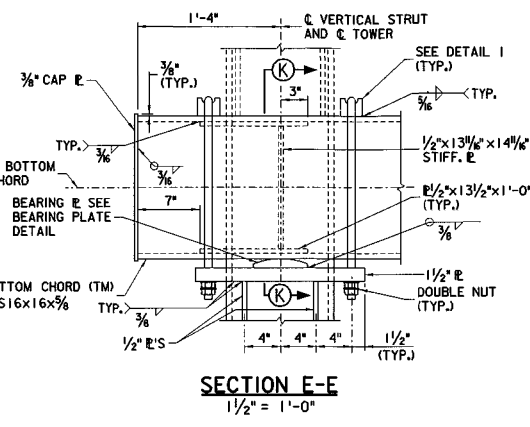
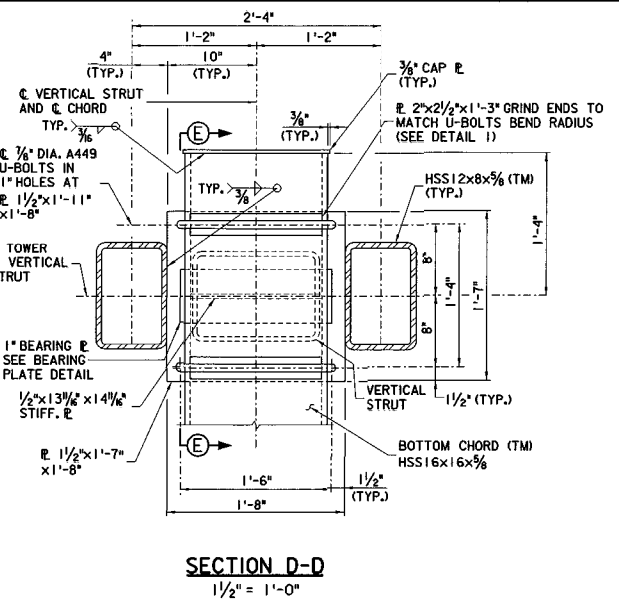
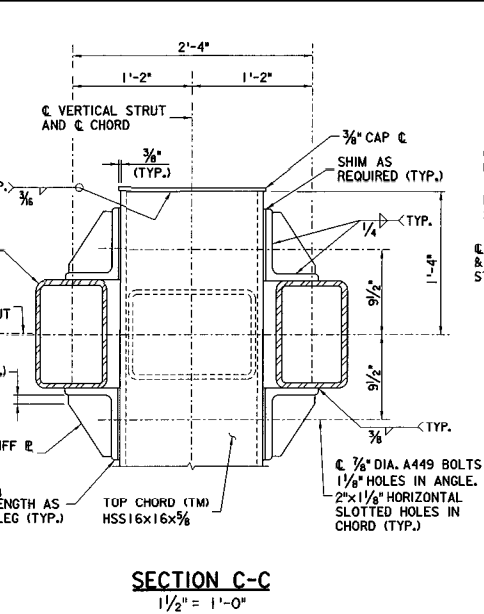
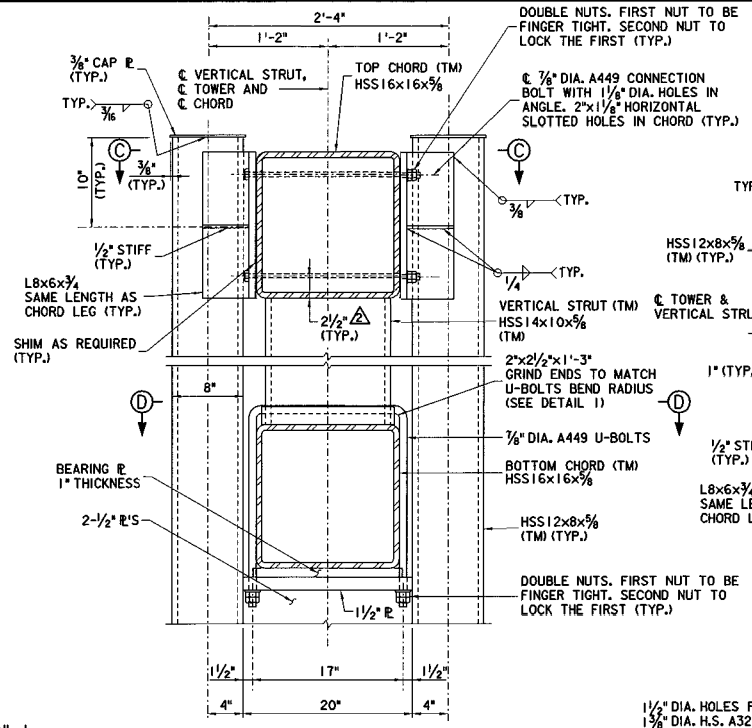
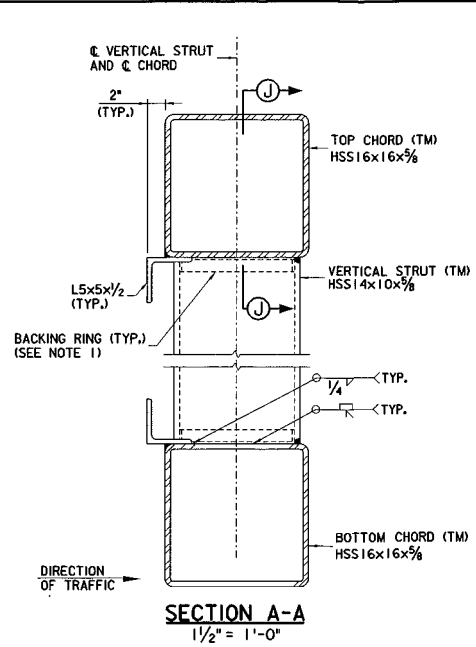
Handwritten signature of Daniel L. Hesslein in blue ink.

Daniel L. Hesslein, P.E.
Deputy Chief Engineer - Construction

Approved By:

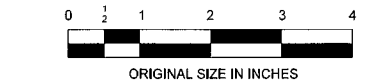
Handwritten signature of Michael Garofalo in blue ink.

Michael Garofalo, P.E.
Chief Engineer



GENERAL NOTES FOR OVERHEAD SIGN STRUCTURES:

1. FULL-PENETRATION WELDED CHORD TO FLANGE SPLICE PLATE CONNECTION WITH THE BACKING RING ATTACHED TO THE PLATE WITH A CONTINUOUS FILLET WELD AROUND THE INTERIOR FACE OF THE BACKING RING. THE BACKING RING SHALL BE 3/8"x2".
2. ALL MEMBERS MARKED (TM) ARE MAIN LOAD CARRYING MEMBERS SUBJECT TO TENSILE STRESS AND SHALL MEET SUPPLEMENTARY REQUIREMENTS FOR TOUGHNESS.
3. FOR SECTION J-J, SEE STANDARD DRAWING SI-30.
4. ALL MATERIALS AND FABRICATION SHALL CONFORM TO THE 2009 EDITION OF THE AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 5TH EDITION WITH ALL CURRENT INTERIMS.
5. ALL SPLICE BOLTS SHALL BE ASTM A325, TYPE 3 WHICH IS TO HAVE THE SAME CORROSION RESISTANT AND WEATHERING CHARACTERISTICS AS THE CONNECTED MATERIAL OR SHALL BE HOT-DIP GALVANIZED. CONNECTION BOLTS AND U-BOLTS SHALL BE ASTM A449 AND SHALL BE HOT-DIP GALVANIZED. ALL NUTS AND WASHERS SHALL ALSO BE HOT-DIP GALVANIZED. HOT-DIP GALVANIZED SHALL BE AS PER ASTM A153, CLASS C.
6. STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709, GRADE 50W UNLESS OTHERWISE NOTED.



APP	NO	DATE	REVISION
2	09/22		REVISED BOLT EDGE DISTANCE
1	09/12		MOVED SECTION TO SHEET
0	10/10		ORIGINAL DRAWING

NEW JERSEY TURNPIKE AUTHORITY

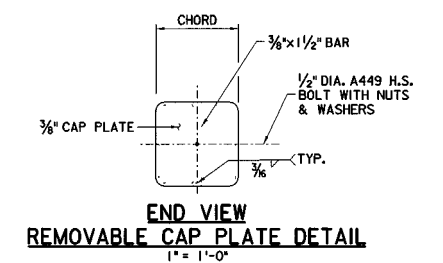
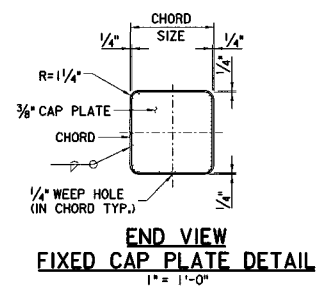
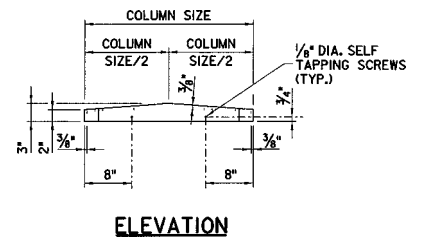
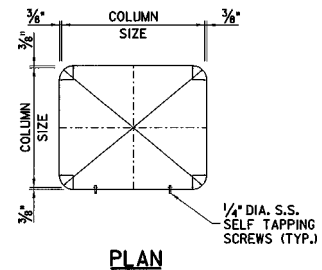
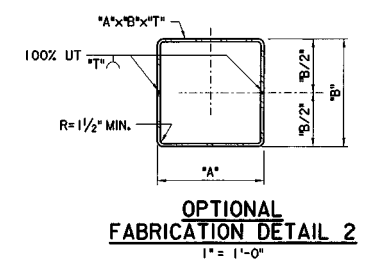
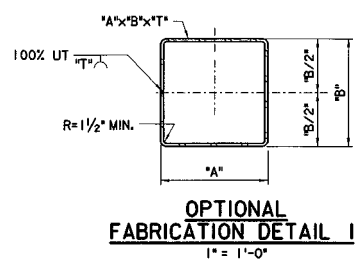
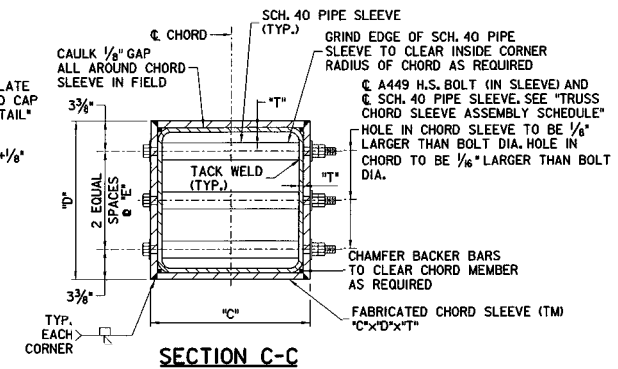
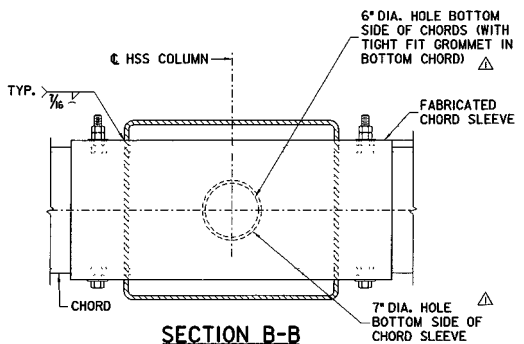
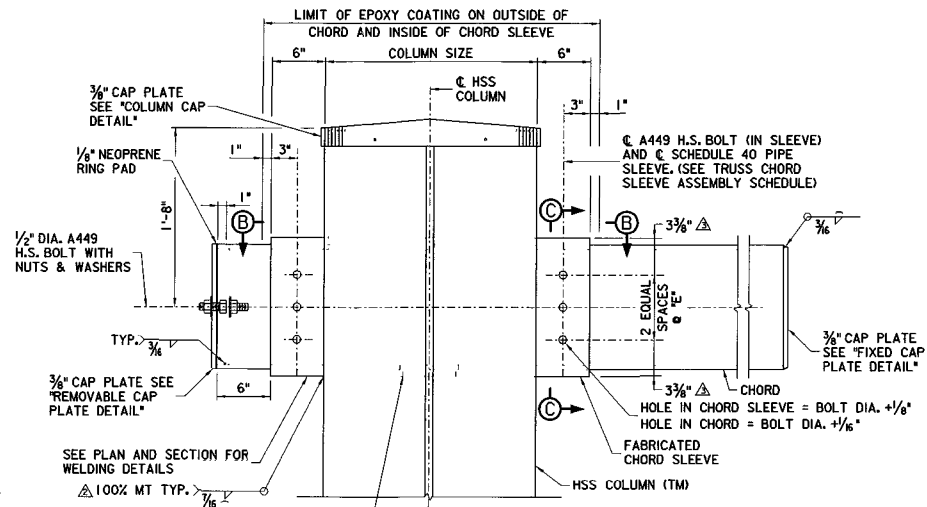
GARDEN STATE PARKWAY

VIERENDEEL SPAN TYPE SIGN STRUCTURE
(SPANS FROM 60 TO 90 FEET)

SECTIONS AND DETAILS - 1

OFFICE OF THE CHIEF ENGINEER NEW JERSEY TURNPIKE AUTHORITY	2010 STANDARD
WOODBRIDGE NEW JERSEY	DRAWING SI-29

CONTRACT NO. SHEET NO. OF



COLUMN SLEEVE CONNECTION DETAIL
1/2" = 1'-0"

COLUMN CAP DETAIL
1" = 1'-0"

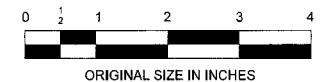
END VIEW FIXED CAP PLATE DETAIL
1" = 1'-0"

END VIEW REMOVABLE CAP PLATE DETAIL
1" = 1'-0"

TRUSS CHORD SLEEVE ASSEMBLY SCHEDULE						
SPAN LENGTH (FT)	*MAX. PROVISIONAL SIGN PANEL AREA	CHORD SIZE (IN) HSS"A"x"B"x"T"	CHORD SLEEVE SIZE "C"x"D"x"T" (IN)	"E" (IN)	BOLT DIAMETER (IN)	SCH. 40 PIPE SLEEVE DIA. (IN)
20 ≤ TO ≤ 32	300	14x14x1/2	15 3/4 x 15 3/4 x 3/4	4 1/2	1 1/8	1 1/4
20 ≤ TO ≤ 32	540	14x14x1/2	15 3/4 x 15 3/4 x 3/4	4 1/2	1 1/8	1 1/4
< 32 TO ≤ 38	445	14x14x3/8	15 3/4 x 15 3/4 x 3/4	4 1/2	1 1/4	1 1/4
< 32 TO ≤ 38	648	14x14x5/8	16x16x7/8	4 5/8	1 3/8	1 1/2
< 38 TO 42 MAX.	445	16x16x3/8	17 3/4 x 17 3/4 x 3/4	5 1/2	1 3/8	1 1/2

* FOR PROVISIONAL SIGN AREA LIMITATIONS SEE STANDARD DRAWING SI-35.

NOTES:
 1. S.S. GROMMET SHALL BE McMASTER-CARR ITEM NO. 4911K12, OR APPROVED EQUAL.



APP	NO	DATE	REVISION
3	08/22		REVISED FABRICATED CHORD SLEEVE DIMENSIONS
2	08/15		REVISED WELD TESTING
1	09/12		ADDED ELECTRICAL PROVISIONS
0	10/10		ORIGINAL DRAWING

NEW JERSEY TURNPIKE AUTHORITY

GARDEN STATE PARKWAY

VIERENDEEL CANTILEVER TYPE SIGN STRUCTURE (SPANS FROM 20 TO 42 FEET)

DETAILS - 2

OFFICE OF THE CHIEF ENGINEER
NEW JERSEY TURNPIKE AUTHORITY

2010 STANDARD

DRAWING SI-37

WOODBRIDGE NEW JERSEY