

Diagram illustrating the Plan view of a Bridge Truss structure. Key components and dimensions are labeled:

- Bridge Truss Span "S"** (see Project Plans) at 50° F (see Dwg.# TM616 for "Bridge Truss Length Temperature Adjustment Table")
- Maximum length may be limited to 31'-0". Verify with Galvanizer**
- Braced panel point for lifting, typ.**
- "D"** (see table)
- Bridge truss chords**
- Truss field splice, typ.**
- Vertical sign mounts shall avoid truss field splice locations, typ.**
- Use chord end connection. See Dwg.#TM616 for details. (typ. each post)**
- Bridge truss horiz. diagonals (top face)**
- Bridge truss horiz. diagonals (btm. face)**
- Panel lengths "P" shall be constant throughout span and shall not exceed dimension "D".**
- "P"**
- See Dwg.# TM616 for Bridge Truss details**
- Typical panel point. Line up centerlines at common workpoint, typ.**
- PLAN**
- No Scale**
- Luminaires and luminaire support arms, when specified (see Project Plans)**

Provide one 4" x 4" x 1/4" sq. HSS interior diagonal at each truss field splice as shown, see "TRUSS FIELD SPLICE" on Dwg.#TM616. The diagonals shall connect chords where horizontal and vertical diagonals connect. Use 3/8" spacer between truss units at locations without interior diagonals. Verify chord splices are positioned to avoid vertical sign mount connections prior to sign bridge truss fabrication

Technical drawing showing the side elevation and cross-section of a sign support structure, likely a bridge or overpass, with dimensions and labels for various components.

Side Elevation Labels:

- Struts at ends, typ. (See Dwg.# TM612) C 8 X 11.5 for all spans
- Line up bottom of signs
- 5'-0"
- 1/4"
- See Dwg.# TM618 and Project Plans for sign mounting details
- € truss
- Bridge truss chords
- Bridge truss vertical diagonals (near side)
- Bridge truss vertical diagonals (far side)
- End truss
- Clear zone distance See ODOT Highway Design Guide
- Shoulder

Table: SPAN "S" vs. CAMBER Δ

SPAN "S"	CAMBER Δ
50'-59'	1 1/4"
> 59'-69'	1 1/2"
> 69'-79'	1 5/8"
> 79'-89'	1 3/4"
> 89'-98'	2"
> 98'-108'	2 1/4"
> 108'-118'	2 1/2"
> 118'-128'	2 3/4"
> 128'-138'	3"
> 138'-148'	3 1/2"
> 148'-157'	3 3/4"
> 157'-167'	4"

Dimensions and Notes:

- 5'-1" min. w/shoulder barrier or guard rail
- At point of minimum clearance 18'-0" min., 19'-0" max.
- 5'-0"
- 1/4"
- 5'-1" min. w/shoulder barrier or guard rail
- Shoulder

Applicable foundation design Dwg. is listed on Project Data Sheet for Truss Type Sign Bridge (spread footing shown) ~

See Dwg.#
TM619
for ground
cover details

– If guard rail is required,
see note on Dwg.# TM615

<i>SPAN</i> <i>"S"</i>	<i>CAMBER</i> <i>Δ</i>
50'-59'	1¼"
> 59'-69'	1½"
> 69'-79'	1⅝"
> 79'-89'	1¾"
> 89'-98'	2"
> 98'-108'	2¼"
> 108'-118'	2½"
> 118'-128'	2¾"
> 128'-138'	3"
> 138'-148'	3½"
> 148'-157'	3¾"
> 157'-167'	4"

point of minimum clearance
18'-0" min. ; 19'-0" max.

ELEVATION
No Scale

End truss diagonal and top strut to meet in same corners where bridge truss diagonals meet bridge truss chords

End truss post

"D"

End truss diagonals

See Dwg.# TM617 for End Truss details

"Q"

Panel lengths "Q" shall be constant and shall not exceed "D"
Number of panels varies

Equal panel point spacings "Q"

"HP" = Post height, see Project Plans and Sign Bridge Table
Field varies by post length prior to fabrication

12"

SECTION A-A

No Scale

CAMBER

Camber: Fabricate truss with chords curved smoothly to provide camber. Do not camber by shimming at truss field splices or cutting and rewelding chord. Camber listed in the table includes both dead load and permanent camber. Camber may be obtained in sections keeping the flanges in the same vertical plane and lifting one end by the required amount of vertical distance to achieve the required camber distance for that section. This last method requires a minimum of 3 sections.

Accompanied by dwqs. TM615, TM616, TM617, TM618, TM619, TM620

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

STANDARD TRUSS TYPE SIGN BRIDGE 50' TO 167' SPAN RANGE TYPICAL PLAN AND ELEVATION

2024

DATE		REVISION DESCRIPTION	

CALC. BOOK NO. -- 5071/6134 --	SDR DATE 08-JAN-2016	TM614
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Effective Date: June 1, 2026 – November 30, 2026

STANDARD SIGN BRIDGE TABLE							
ALL MEMBERS ARE SQUARE HOLLOW STRUCTURAL SECTIONS (HSS)							
SPAN "S"	"D"	BRIDGE TRUSS CHORDS (SQ. HSS) (in.)	BRIDGE TRUSS DIAGONALS (SQ. HSS) (in.)	END TRUSS DIAGONALS (SQ. HSS) (in.)	END TRUSS POSTS (SQUARE HSS)		MAX SIGN AREA ft ²
					"HP" = 31' (MAX.) (in.)	"HP" > 31' - 36' (in.)	
50' - 69'	4'-0"	6 x 6 x $\frac{3}{16}$	3 x 3 x $\frac{3}{16}$	5 x 5 x $\frac{3}{16}$	12 x 12 x $\frac{1}{2}$	14 x 14 x $\frac{1}{2}$	500-775
> 69' - 89'	5'-0"	6 x 6 x $\frac{3}{16}$	3 x 3 x $\frac{1}{4}$	5 x 5 x $\frac{3}{16}$	12 x 12 x $\frac{1}{2}$	14 x 14 x $\frac{1}{2}$	775-1054
> 89' - 108'	6'-0"	6 x 6 x $\frac{3}{16}$	3.5 x 3.5 x $\frac{1}{4}$	6 x 6 x $\frac{3}{16}$	14 x 14 x $\frac{1}{2}$	14 x 14 x $\frac{1}{2}$	1054-1334
> 108' - 128'	7'-0"	8 x 8 x $\frac{3}{16}$	4 x 4 x $\frac{1}{4}$	6 x 6 x $\frac{3}{16}$	14 x 14 x $\frac{1}{2}$	16 x 16 x $\frac{1}{2}$	1334-1603
> 128' - 148'	7'-0"	8 x 8 x $\frac{3}{16}$	4 x 4 x $\frac{1}{4}$	6 x 6 x $\frac{1}{4}$	16 x 16 x $\frac{1}{2}$	16 x 16 x $\frac{3}{8}$	1603-1883
> 148' - 167'	7'-0"	8 x 8 x $\frac{3}{8}$	4 x 4 x $\frac{1}{4}$	6 x 6 x $\frac{1}{4}$	18 x 18 x $\frac{3}{8}$	18 x 18 x $\frac{3}{8}$	1883-2162