

Notes: Detail A dimensions shown on plans before submitting shop (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by Top of parapet or sidewalk if no above condition and to keep the sign level. parapet exists. -  $\mathbb{Q}$  Sign(s) $\overline{(5)}$ Handrail (See Detail D) Anchor Rods W10 <u>Handrail Hinge</u> (See Detail E) of Detail B <u>Walkway Gra</u>ting (See Detail D) Light Fixture (If required) W10x22 --5-W6x12 )•! 2'-0'' Grating , 4'' x 4'' <u>x ½''</u> 3 € 1" \$\phi\$ H.S. bolts 5'-212" through  $1_8^{\prime\prime}$   $\phi$  holes plate washer

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

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.

the Bureau of Bridges and Structures.

The Engineer may adjust dimension "i" to meet the

15<sub>16</sub> " ∮ holes in beam web. (1) Details for mounting to steel beam or girder & Details for mounting with existing parapet mounted rail (1) Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.

of

€ 34" Ø H.S.

bolts, drill

Detail A —

 $\frac{\mathcal{Q}}{Anchor} \frac{3_4^{\prime\prime}}{Rods}$ 

 $C \blacktriangleleft$ 

Detail B

W10x22

Top of parapet or

sidewalk if no parapet exists.

- 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  $^{l_4}{}^{\prime\prime}$  deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.
- (4) For attachment details of  $3^{l}_{2}$ " pipe and W10x22, see other sections as applicable.

SCALE: NONE

(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

-  $\bigcirc$  Sign(s)  $\bigcirc$   $\bigcirc$ 

Handrail

Walkway Grating

(See Detail D)

\_5\_

W6x12

2′-0′′ Gratina

5'-212"

SECTION A-A

(See Detail D)

Handrail Hinge

(See Detail E)

Light Fixture

(If required)

(D)

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.)
1B0161290L029.7A	3704+57	8′-0 <sup>7</sup> 8"	1'-10 <sup>3</sup> 16"	1'-4 <sup>1</sup> 8"	4'-0"	1'-6"	8′-6"
1B0161290L029.7B	3705+12	7'-8 <sup>15</sup> 16 "	1'-9 <sup>15</sup> 16"	1'-4 <sup>1</sup> 8"	4'-0"	1′-6"	7′-6"

SECTION A-A 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.

**Tran** Systems

in girder.

	D160W29-Sht-Sign-Det-03.dgn	DESIGNED - WJC	REVISED -
	USER NAME = BAWitort	DRAWN - WJC	REVISED -
⊢	PLOT SCALE = 2.0000 '/ in.	CHECKED - KAM	REVISED -
	PLOT DATE = 10/28/2013	DATE - 10/30/2013	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

BRIDGE MOUNT SIGN STRUCTURES		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
WALKWAY AND CONNECTION DETAILS	90/94/290	2013-011R	соок	356	104
VVALKVVAT AND CONNECTION DETAILS	CONTRACT NO. 6			OW29	
SHEET 2 OF 5 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				