



Drill 1 3/8"  $\phi$  holes in walkway for 5/16"  $\phi$  bolts, 1" long, each with one locknut and two stainless steel flat washers.

Drill 1 3/8"  $\phi$  holes in angles for 5/16"  $\phi$  stainless steel u-bolts. Two stainless steel washers and hot dip galvanized steel nuts required per bolt. U-bolt and angle connections required at horizontals only.

Stainless steel shim(s) 2 If needed, place on top of horizontals and horizontal diagonals. Secure with one stainless steel clamp per side. See "Shim Detail".

**SPECIFICATIONS FOR STANDARD ALUMINUM GRATING**

Main Bearing Bars shall be 3/16" x 1/2" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.  
 Cross bars shall be 3/16" x 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.<sup>3</sup> 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.

Structure Number	Station	A	⑥ B	C	⑥ D
BS0601270R002.3	1217+50	5'-5 5/16"	5'-1 1/2"	5'-3"	10'-10 1/2"

- 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 OS-A-11.)
- ④ 1/2" 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 height of tallest sign given on OS-A-1.

OS-A-10

1-20-11

FILE NAME =	USER NAME = .MML.	DESIGNED - MCB	REVISED -
... \D876A91-008-sign-os-a-10.dgn		CHECKED - GJB	REVISED -
		DRAWN - CFC	REVISED -
		CHECKED - MCB	REVISED -

PLOT SCALE = 0:1.000000 1' / IN.	
PLOT DATE = 3/16/2011	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES  
ALUMINUM WALKWAY DETAILS  
SHEET NO. 8 OF 11 SHEETS

**CB** Coombe-Bloxdorf P.C.  
 - CIVIL ENGINEERS -  
 - STRUCTURAL ENGINEERS -  
 - LAND SURVEYORS -  
 Design Firm License No. 184-002703

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
270	60-1B-1	MADISON	712	374
				CONTRACT NO. T6A91
ILLINOIS FED. AID PROJECT				