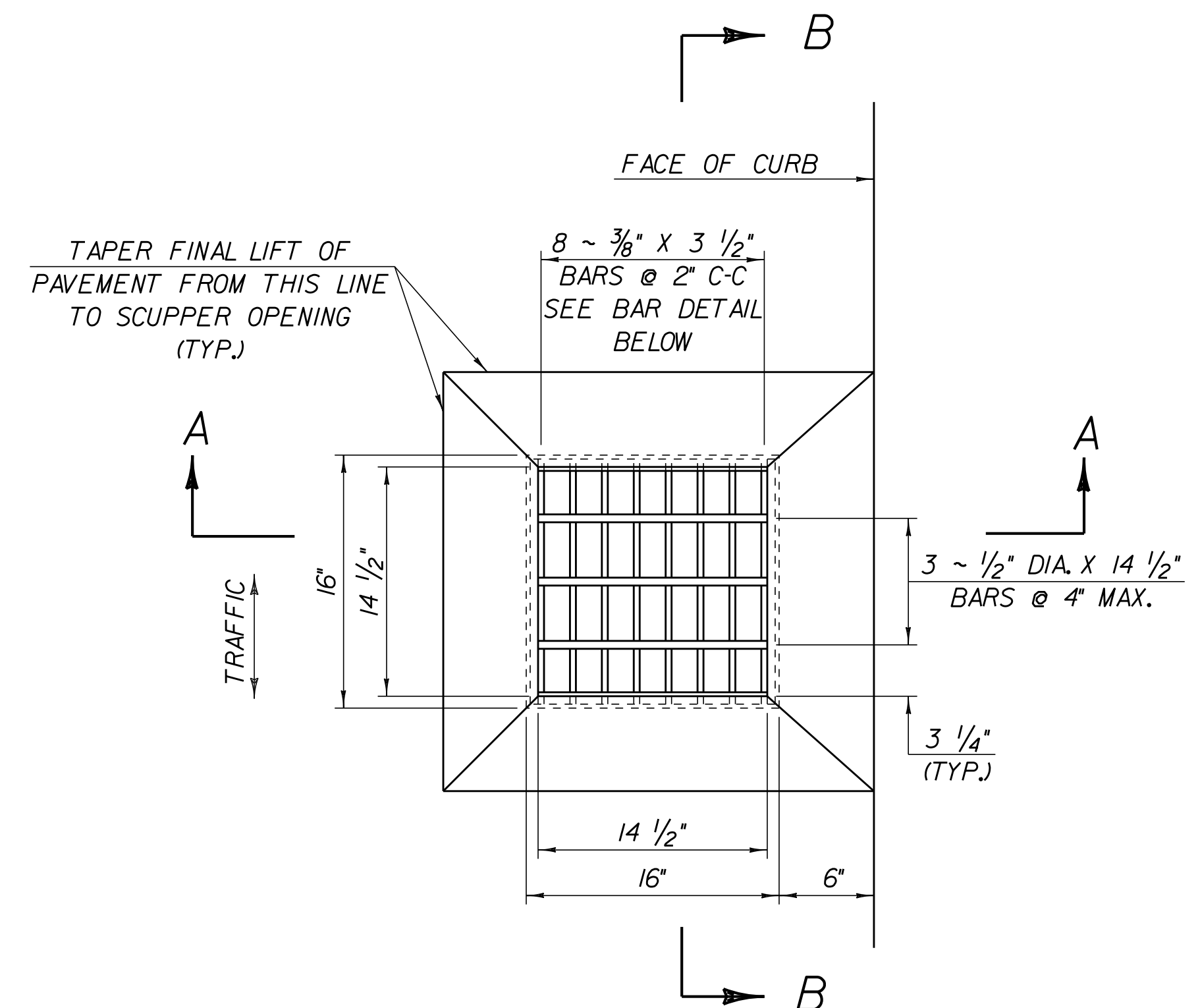
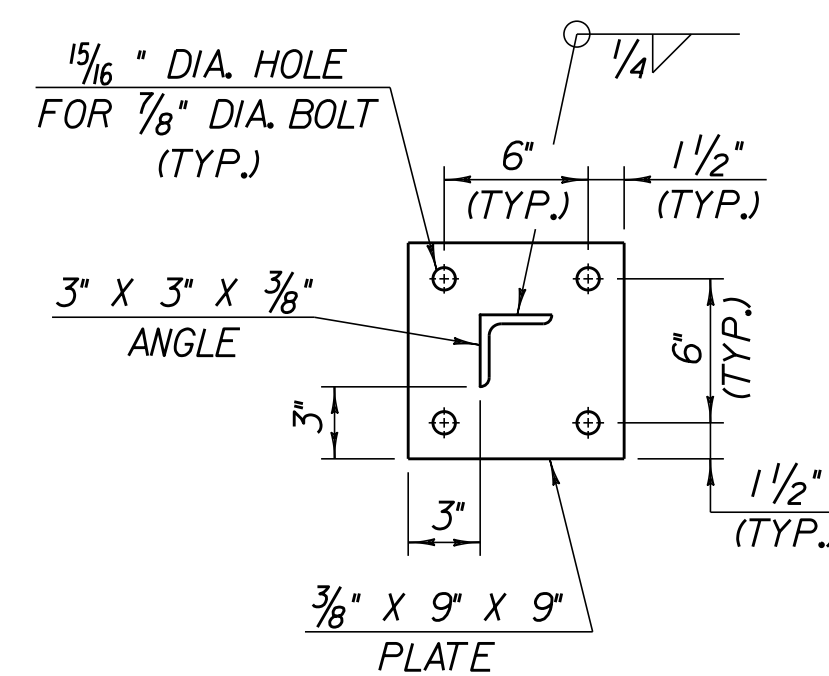


SECTION A - A (AT CURB)
SCALE: 1" = 1'-0"



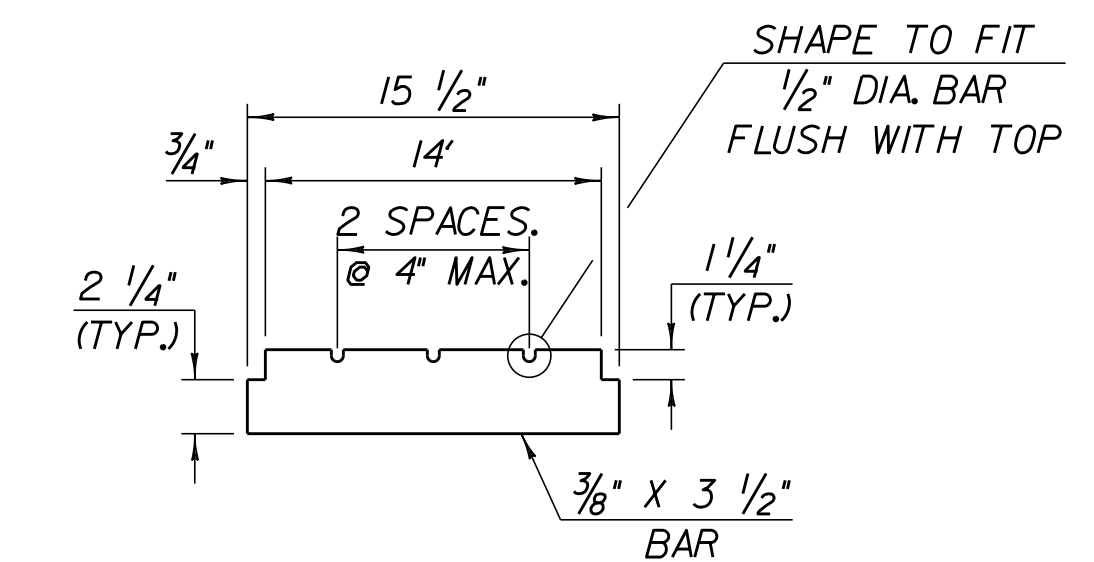
SCUPPER PLAN

SCALE 1 1/2" = 1'-0"



SECTION C - C

SCALE 1 1/2" = 1'-0"

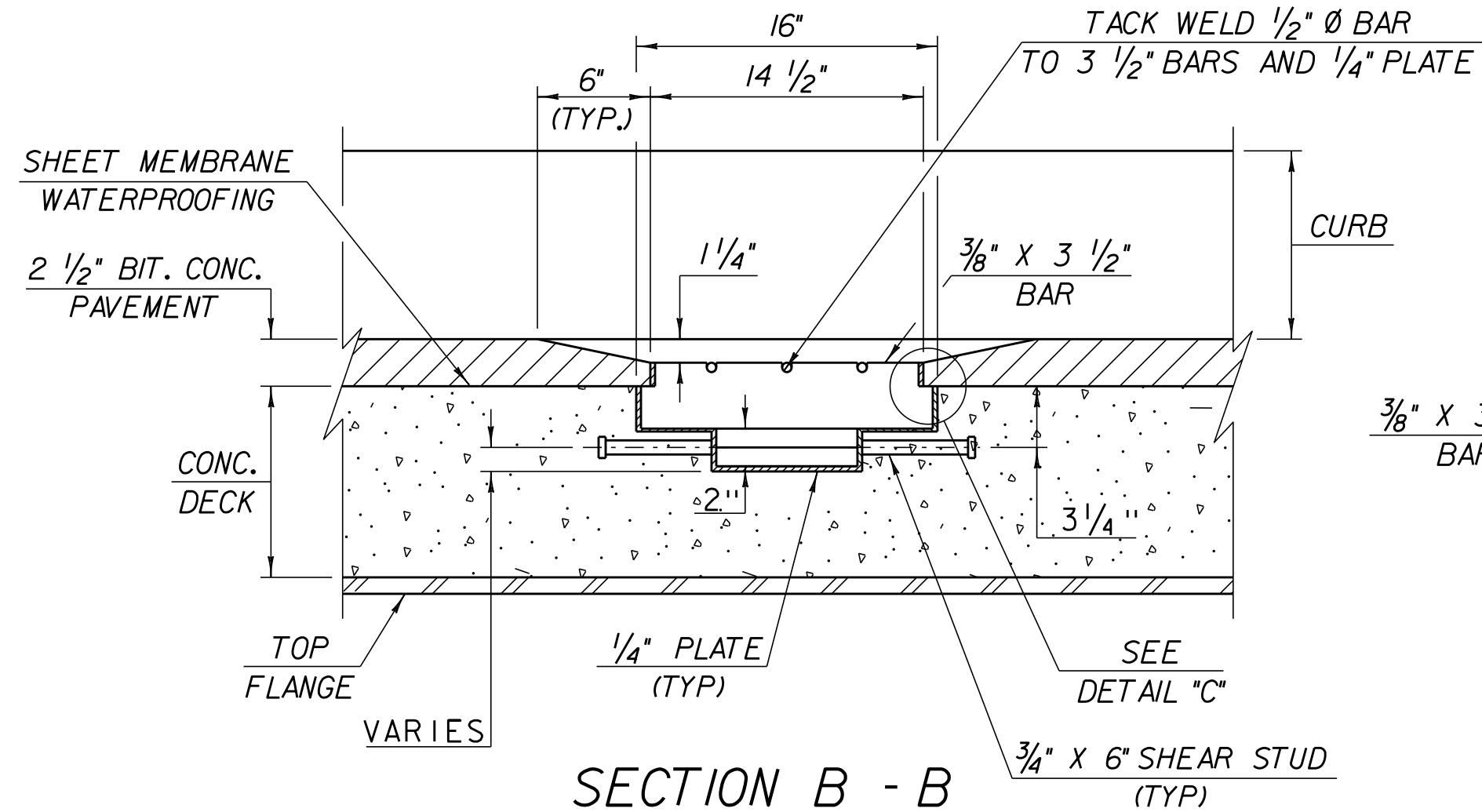


BAR DETAIL FOR GRATE

SCALE 1 1/2" = 1'-0"

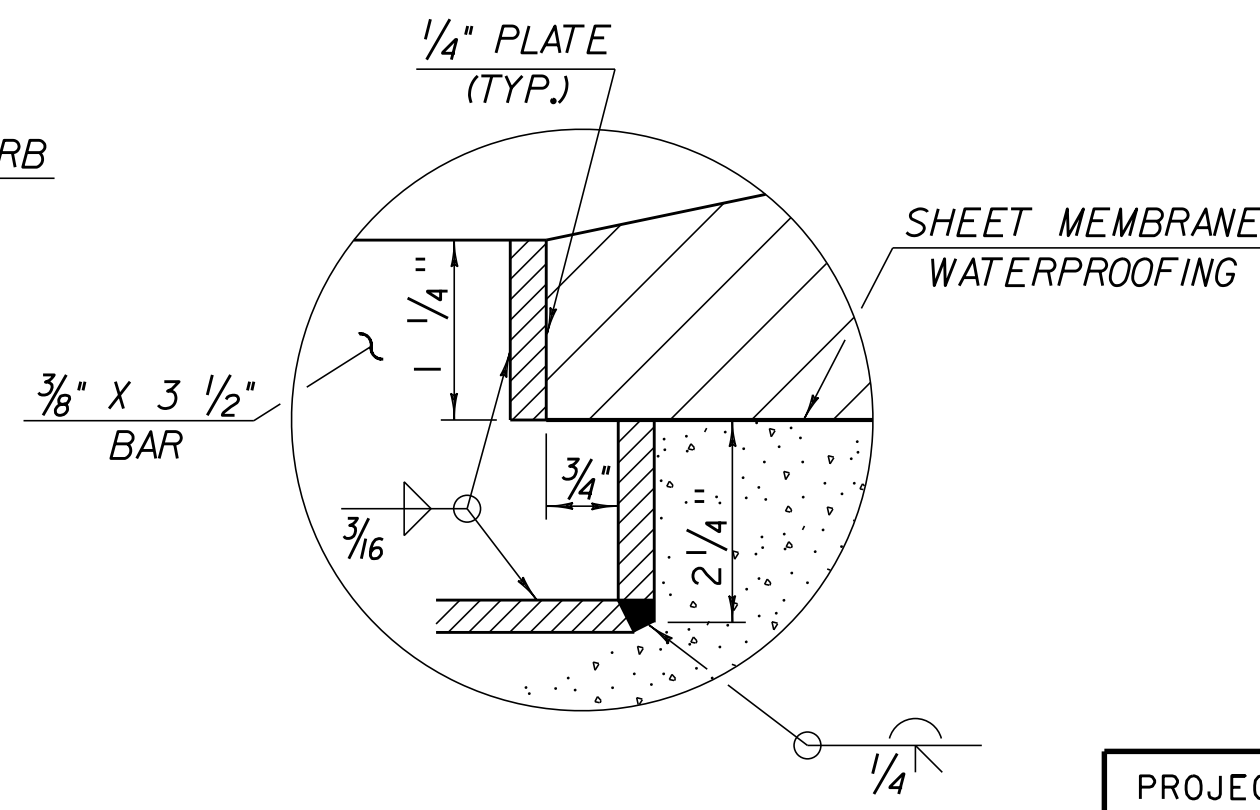
SCUPPER AND DOWNSPOUT NOTES

- HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A-500 GR. B.
- ALL PLATES, BARS, AND ANGLES SHALL CONFORM TO AASHTO M 270/M 270M GR. 36.
- ALL SCUPPERS, DOWNSPOUTS & SUBSTRUCTURE DRAINS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111M/M III AFTER FABRICATION.
- THE TOP SURFACE OF SCUPPER SHALL BE SLOPED TO MATCH ROADWAY SLOPE AND GRADE.
- THE BAR AND GRATE SECTION MAY BE PREFABRICATED PROVIDING THE GEOMETRY AND SECTION PROPERTIES ARE EQUIVALENT TO THE DETAILS SHOWN.
- SCUPPERS & DOWNSPOUTS SHALL BE PAID FOR AS EXTRA WORK.
- ALL REQUIRED WELDS FOR SCUPPERS & DOWNSPOUTS SHALL BE DETAILED ON SHOP DRAWINGS WHICH SHALL ALSO INCLUDE ALL APPLICABLE WELDING PROCEDURES.
- AFTER ALL PAVING AND CONCRETING OPERATIONS THE SCUPPERS & DOWNSPOUTS SHALL BE CLEANED OF ALL CONTAMINATION BY FLUSHING.
- SCUPPER CONNECTION BOLTS SHALL BE 7/8" Ø AASHTO M 164/M 164M, TYPE 111.



SECTION B - B

SCALE 1 1/2" = 1'-0"



DETAIL "C"

NTS

ENTIRE SHEET ADDED TO PLANS

SCUPPER LOCATION

STA. 3+085 RT
STA. 3+110 RT

PROJECT NAME:	HARTLAND BRS 0113 (22)		
PROJECT NUMBER:			
FILE NAME:	781204/structures/scupper.dgn	PLOT DATE:	11-SEP-2012 13:44
IPARM NAME:	scupper.i	DRAWN BY:	STR
PROJECT LEADER:	W. SYMONDS	CHECKED BY:	STR
DESIGNED BY:	STR	SHEET	45A OF 86
SCUPPER DETAILS			