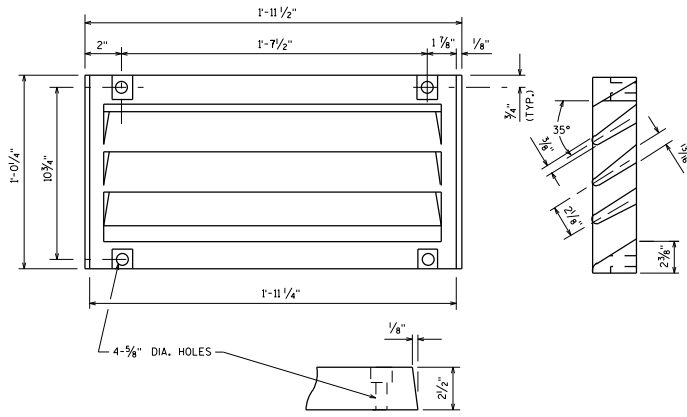


PLAN

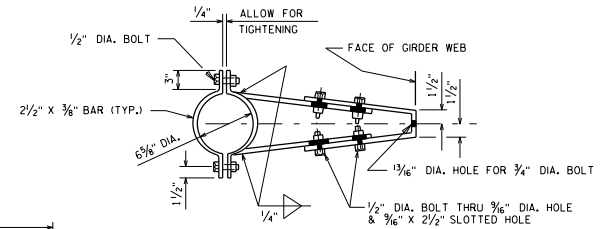
TRANS. AND LONGIT. SLAB BAR REINF. TO BE CUT A MAX. OF 1" CL. FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.



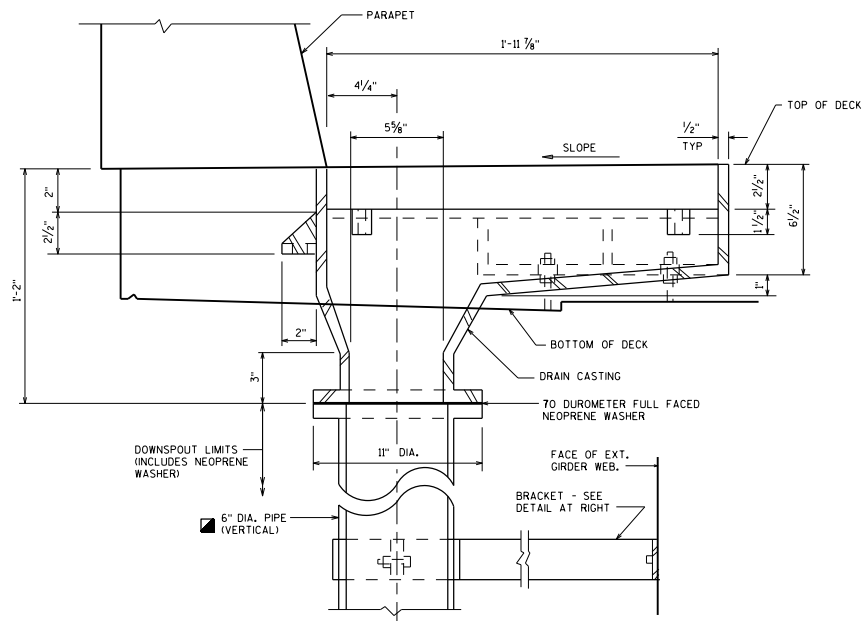
GRATE CASTING DETAIL
ATTACH GRATE TO FRAME FOR SHIPMENT

- NOTES**
- ALL MATERIAL FOR TYPE "GC" CASTING, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30. (APPROXIMATE WEIGHT = 225#)
 - MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.
 - ALL MATERIAL FOR FLOOR DRAINS TO BE INCLUDED IN THE BID ITEM "FLOOR DRAINS TYPE GC".
 - ALL MATERIAL FOR DOWNSPOUTS, DOWNSPOUT CONNECTIONS, AND BRACKETS TO BE INCLUDED IN THE BID ITEM "DOWNSPOUT 6-INCH".
 - ALTERNATE BRACKETS ARE NOT ALLOWED.
 - FLANGED 6" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (TRRP) OR GALVANIZED STANDARD PIPE CONFORMING TO ASTM A53.

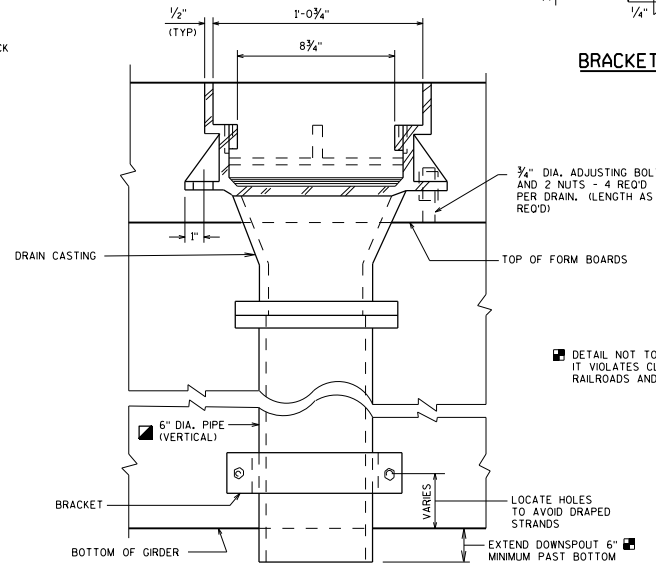
DESIGNER NOTE
ON THE PRESTRESSED GIRDER SHEET, SHOW LOCATION OF HOLES FOR BRACKET ANCHORAGE FROM TOP/BOTTOM AND END OF GIRDER.



BRACKET DETAIL




SECTION A1



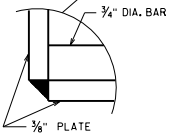
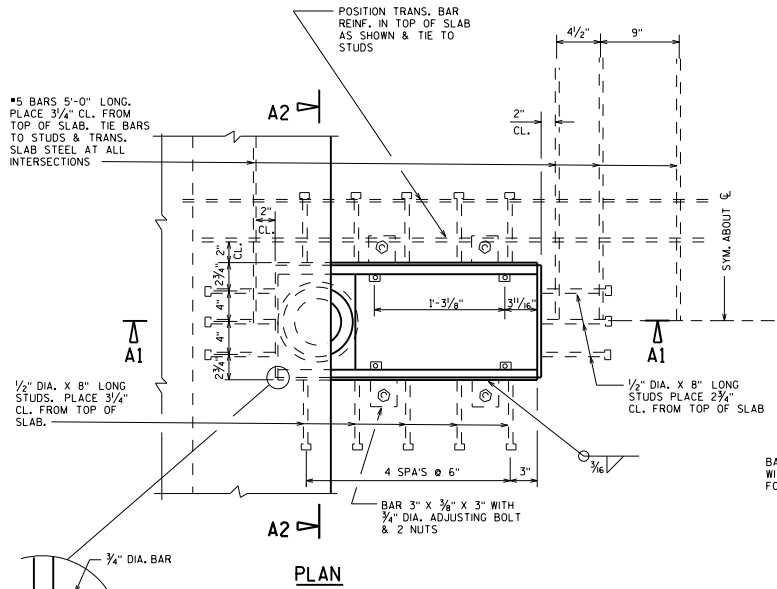
SECTION A2

DETAIL NOT TO BE USED OVER RAILROADS BECAUSE IT VIOLATES CLEARANCE REQUIREMENTS; CONTACT RAILROADS AND HARBORS SECTION FOR GUIDANCE.

FLOOR DRAIN TYPE 'GC'

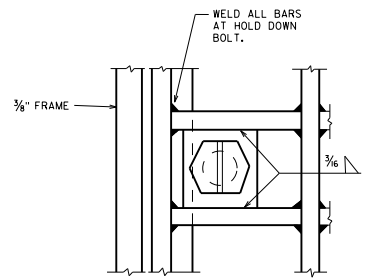

BUREAU OF STRUCTURES
 UNIVERSITY OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED: Bill Oliva DATE: 1-20
 STANDARD 29.01

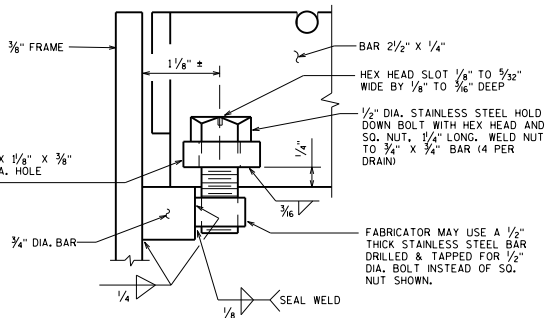


PLAN

TRANS. & LONGIT. SLAB BAR REINFORCEMENT TO BE CUT A MAX. OF 1" CL. FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.



PART PLAN



SECTION AT HOLD DOWN BOLT

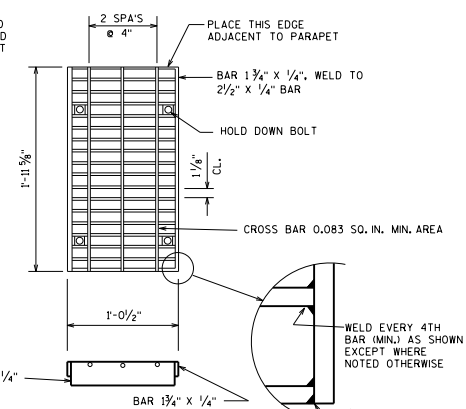
NOTES

- ALL DRAIN MATERIAL INCLUDING GRATE, EXCLUDING PIPE & GRATE HOLD DOWN BOLTS, SHALL BE ASTM A36 STEEL.
- MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36. ALTERNATE BRACKETS ARE NOT ALLOWED.
- ALL STEEL SHALL BE GALVANIZED. WELDS SHALL BE MADE WITH LOW HYDROGEN ELECTRODES.
- ALL MATERIAL FOR FLOOR DRAINS TO BE INCLUDED IN THE BID ITEM "FLOOR DRAINS TYPE 'H'".
- ALL MATERIAL FOR DOWNSPOUTS, DOWNSPOUT CONNECTIONS, AND BRACKETS TO BE INCLUDED IN THE BID ITEM "DOWNSPOUT 6-INCH".
- SEAL WELD INSIDE OF DRAIN.
- PRIOR TO GALVANIZING A NO. 6 BLAST CLEANING IS REQ'D.

DESIGNER NOTE

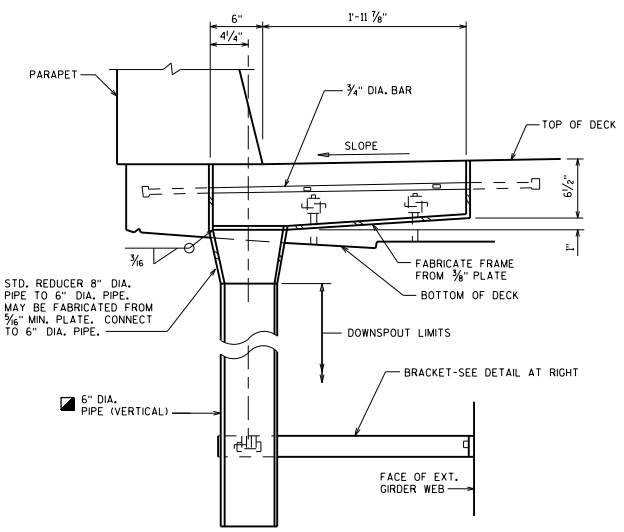
ON THE PRESTRESSED GIRDER SHEET, SHOW LOCATION OF HOLES FOR BRACKET ANCHORAGE FROM TOP/BOTTOM AND END OF GIRDER.

FLANGED 6" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (RTRP) OR GALVANIZED STANDARD PIPE CONFORMING TO ASTM A53.

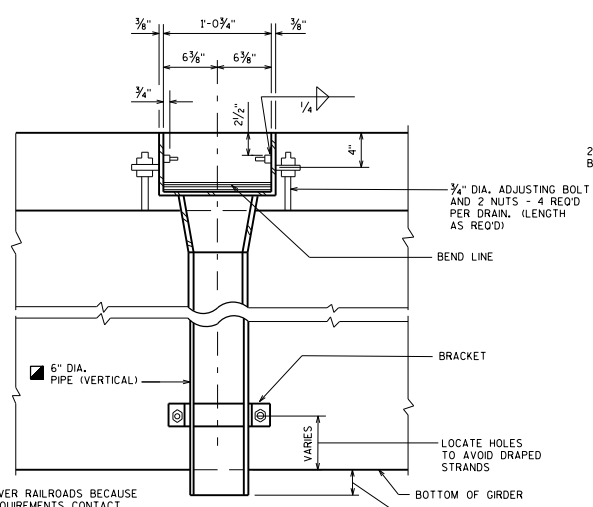


GRATE DETAIL

ATTACH GRATE TO FRAME FOR SHIPMENT

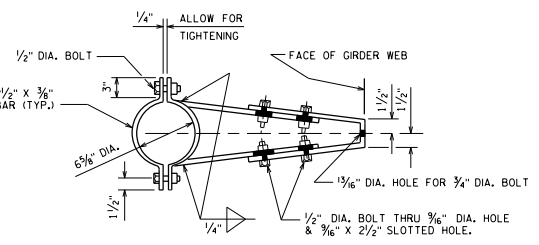


SECTION A1



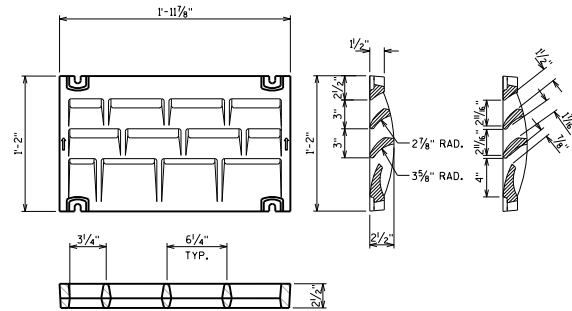
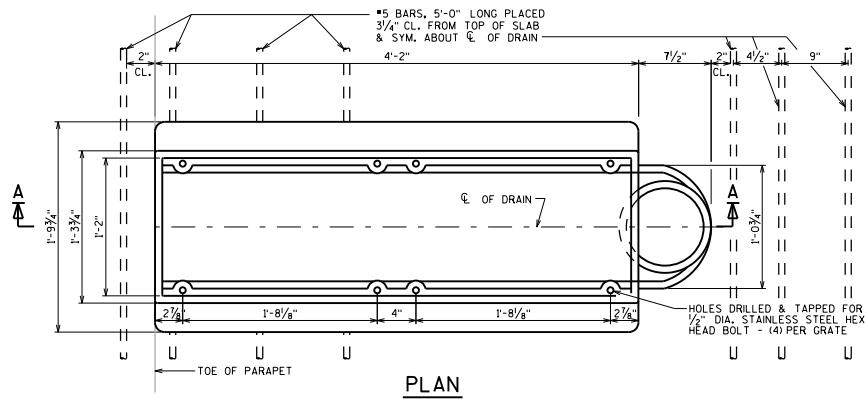
SECTION A2

DETAIL NOT TO BE USED OVER RAILROADS BECAUSE IT VIOLATES CLEARANCE REQUIREMENTS. CONTACT RAILROADS AND HARBORS SECTION FOR GUIDANCE.



BRACKET DETAIL

FLOOR DRAIN TYPE 'H'	
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APPROVED: <u>Bill Oliva</u>	DATE: 1-20

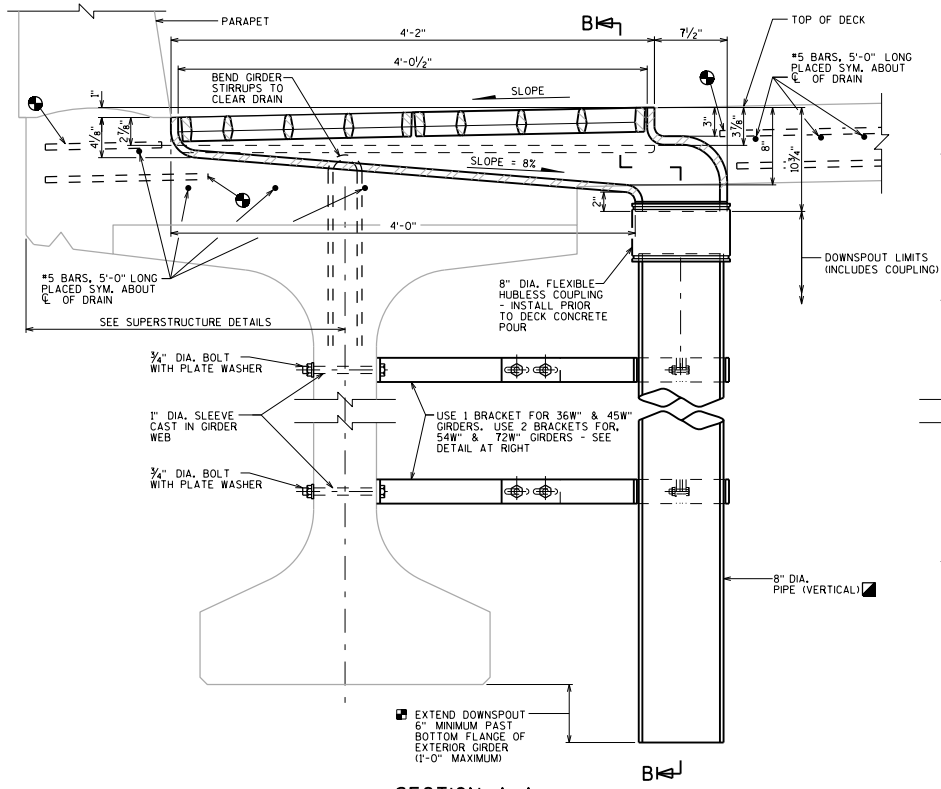


ATTACH GRATES TO FRAME FOR SHIPMENT

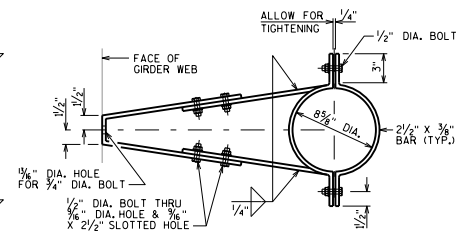
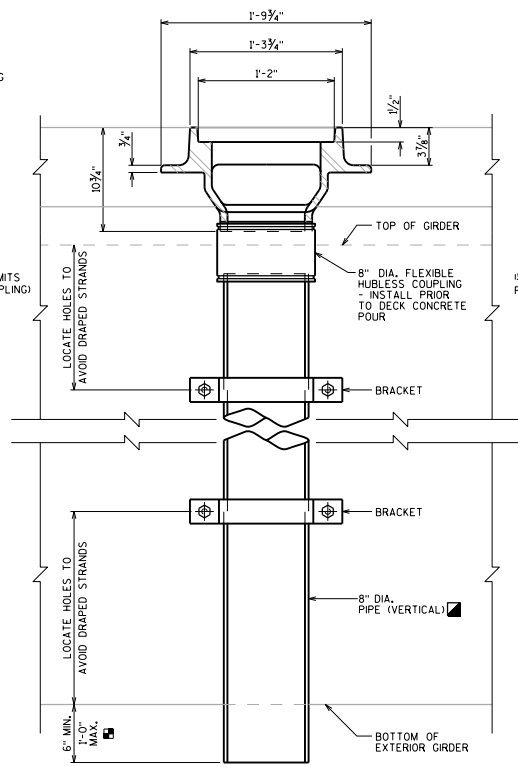
- NOTES**
- ALL MATERIAL FOR TYPE "WF" CASTING AND 8" DIA. CONNECTION PIPE, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30.
 - MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.
 - ALTERNATE BRACKETS ARE NOT ALLOWED.
 - ALL MATERIAL FOR FLOOR DRAINS TO BE INCLUDED IN THE BID ITEM "FLOOR DRAINS TYPE WF".
 - ALL MATERIAL FOR DOWNSPOUTS, DOWNSPOUT CONNECTIONS, AND BRACKETS TO BE INCLUDED IN THE BID ITEM "DOWNSPOUT 8-INCH".
 - 8" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (RTRP).
 - TRANSVERSE & LONGITUDINAL SLAB BAR REINFORCEMENT TO BE CUT A MAXIMUM OF 1" CLEAR FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.

DESIGNER NOTE

ON THE PRESTRESSED GIRDER SHEET, SHOW LOCATION OF HOLES FOR BRACKET ANCHORAGE FROM TOP/BOTTOM AND END OF GIRDER.



DETAIL NOT TO BE USED OVER RAILROADS BECAUSE IT VIOLATES CLEARANCE REQUIREMENTS. CONTACT RAILROADS AND HARBORS SECTION FOR GUIDANCE.



FLOOR DRAIN TYPE 'WF'

WISCONSIN DEPARTMENT OF TRANSPORTATION BUREAU OF STRUCTURES

APPROVED: Bill Oliva DATE: 1-20

STANDARD 29.03