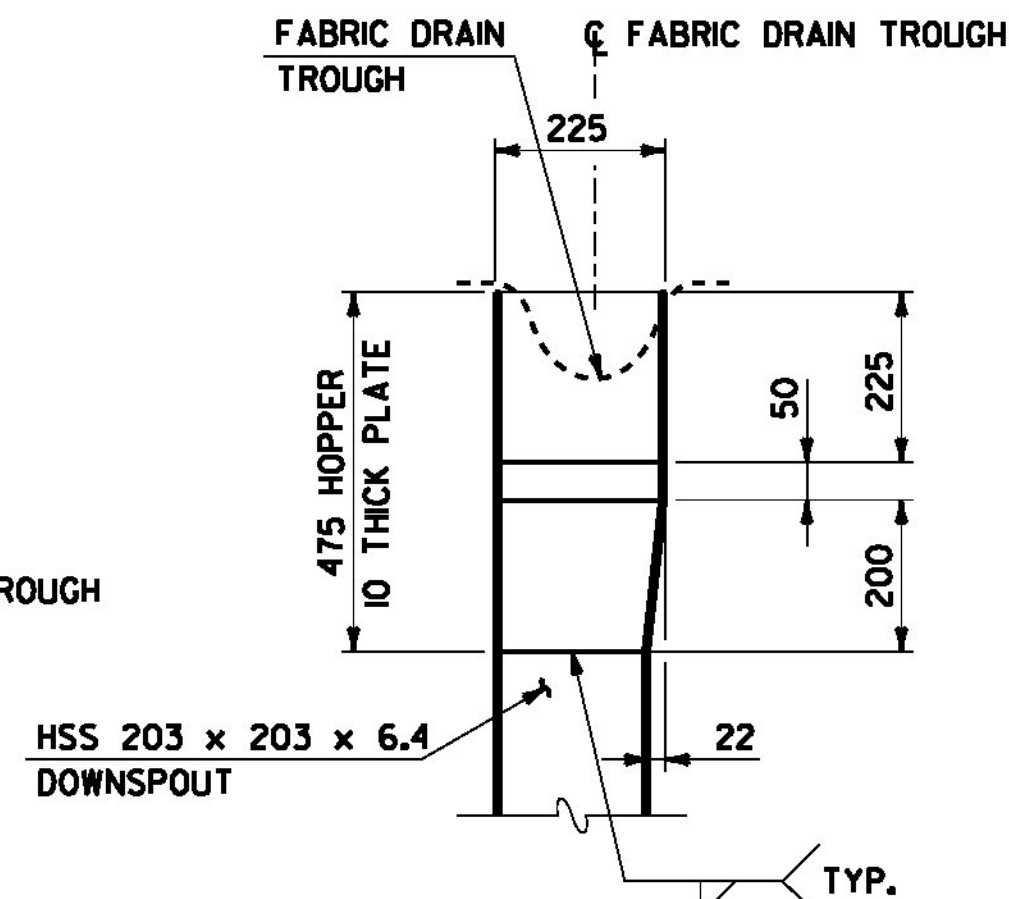
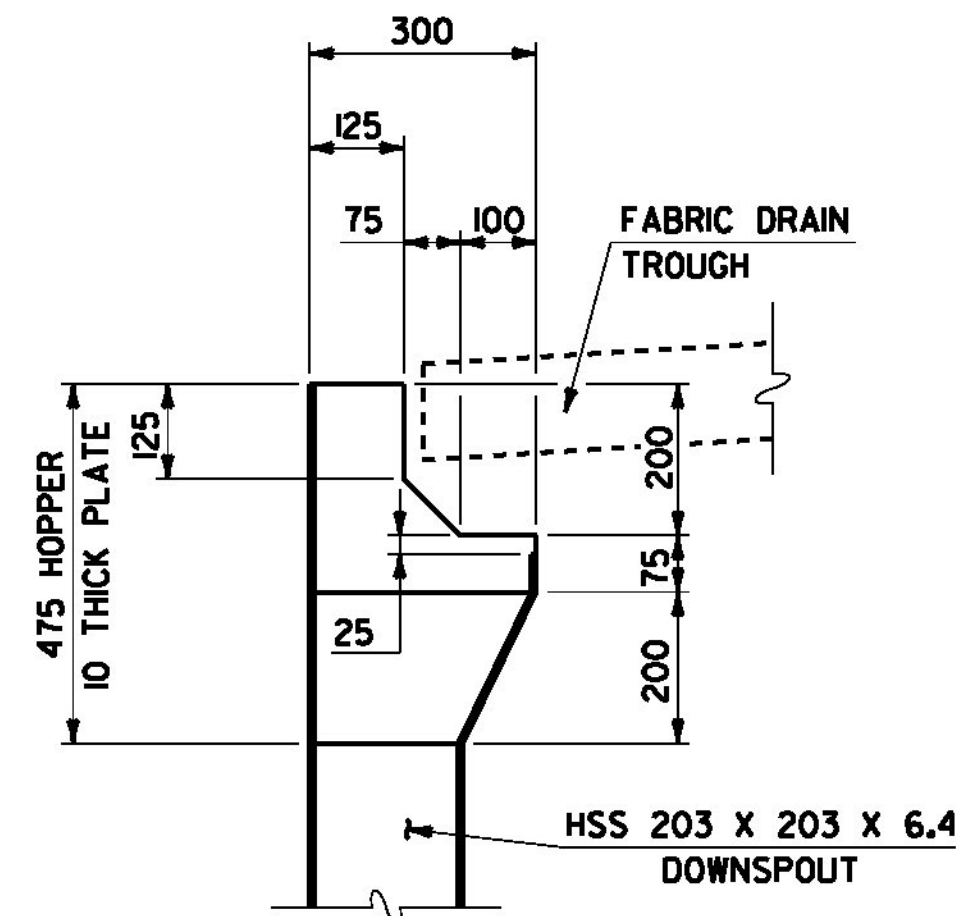


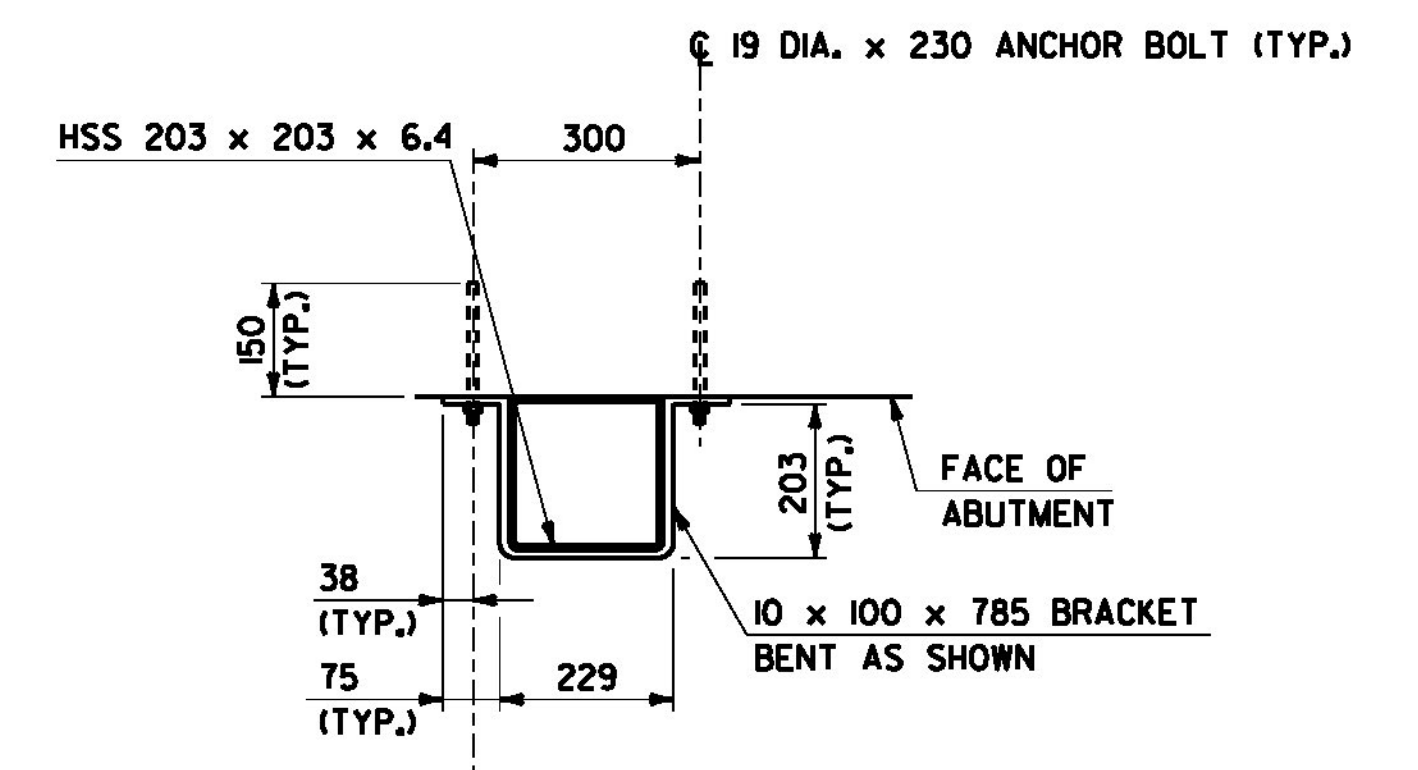
TYPICAL HOPPER PLAN
SCALE: 1/4" = 10



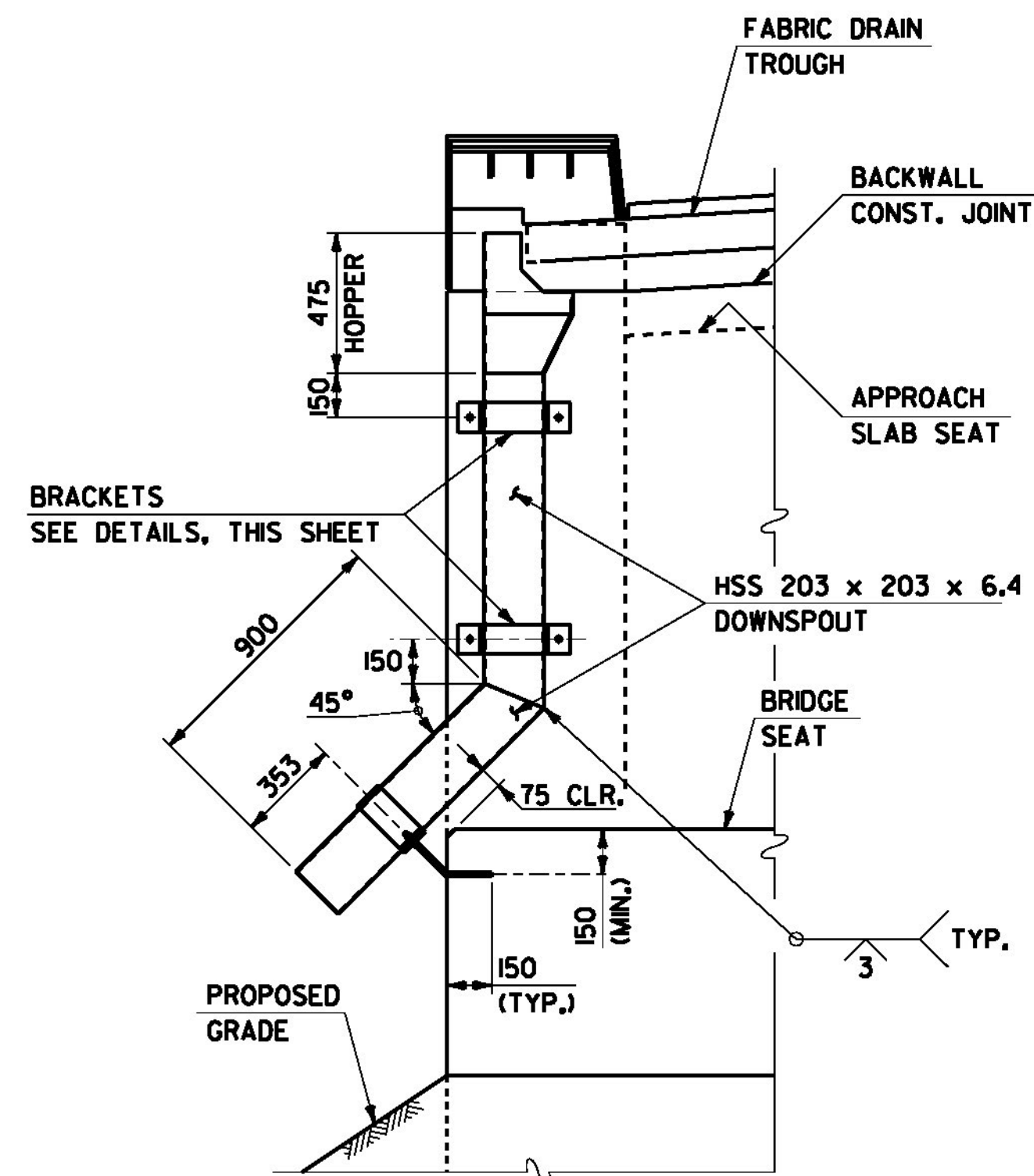
SECTION A-A
SCALE: 1/4" = 10



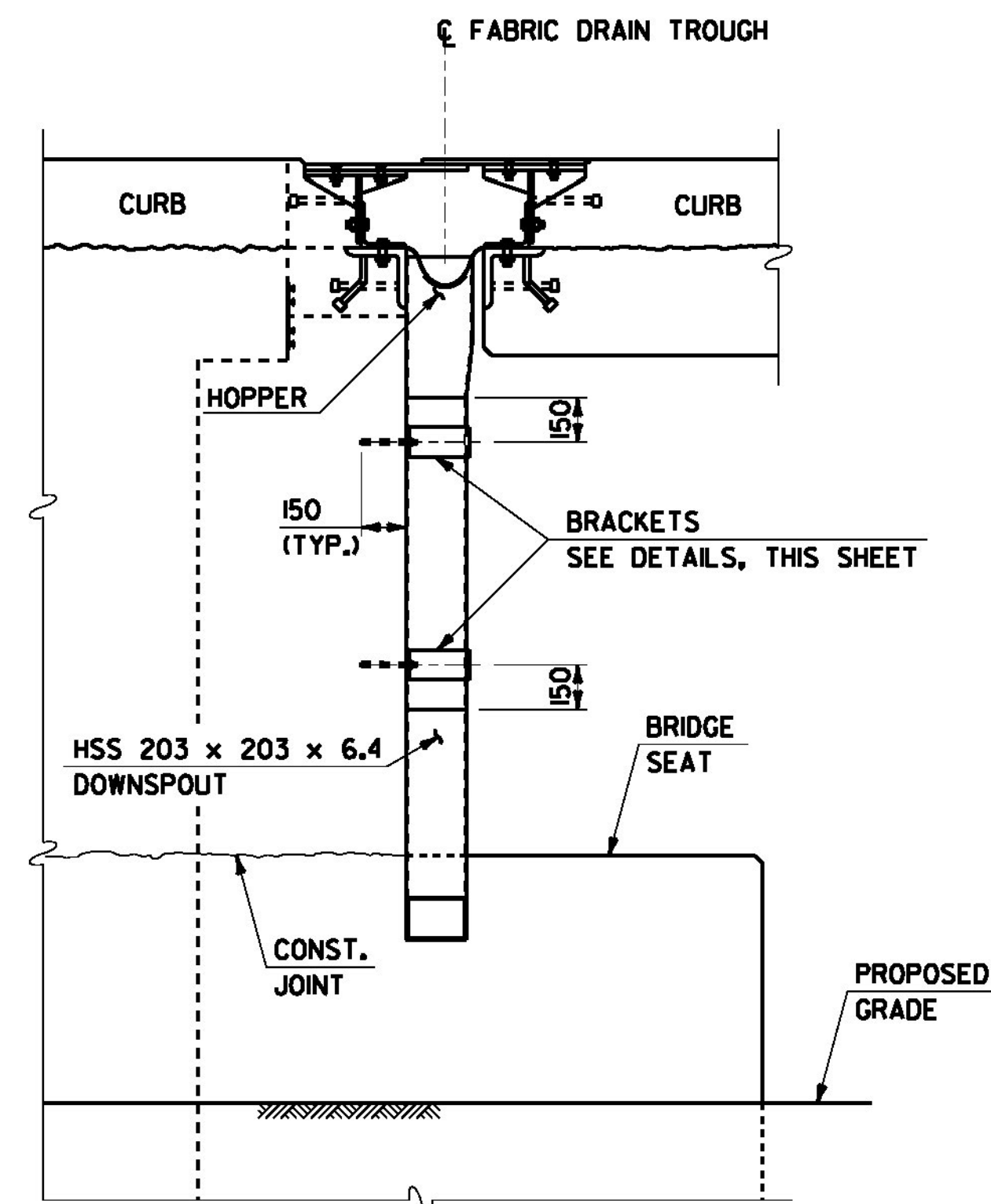
SECTION B-B
SCALE: 1/4" = 10



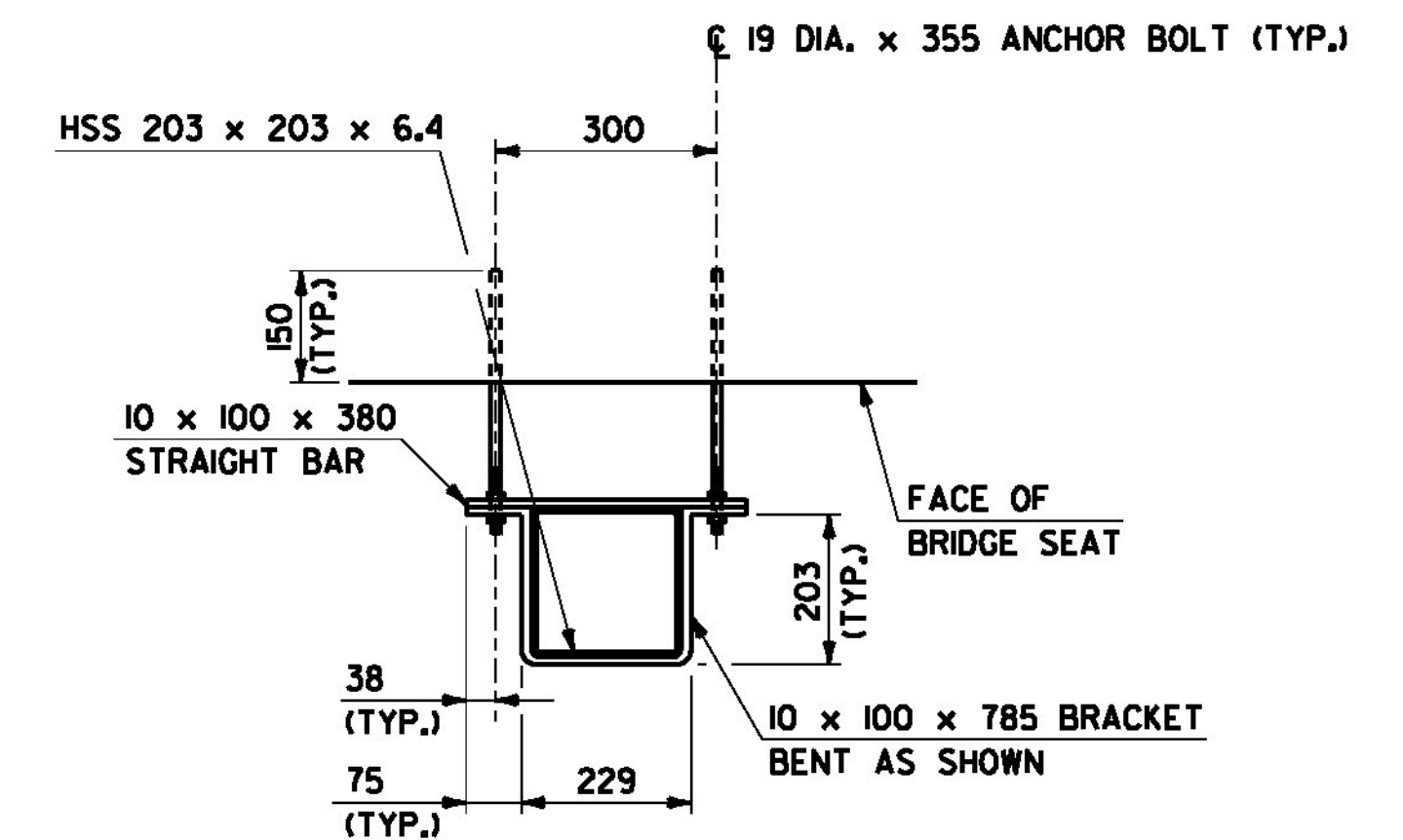
DETAIL FOR ATTACHING DOWNSPOUT TO BACKWALL
SCALE: 1/4" = 10



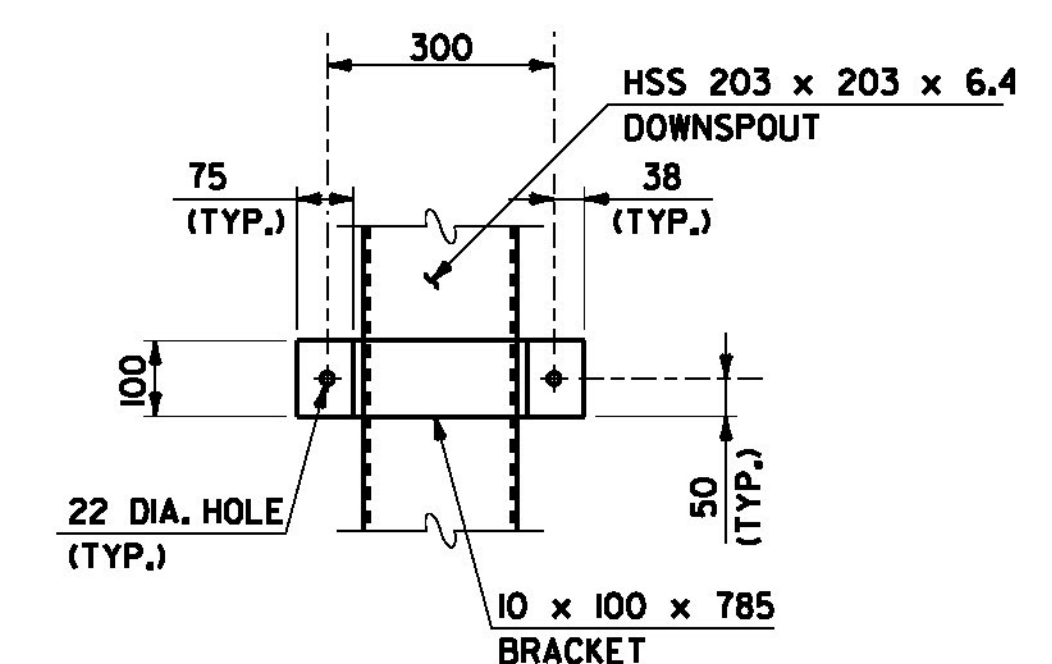
ELEVATION C-C
SCALE: 1/2" = 20



ELEVATION D-D
SCALE: 1/2" = 20



DETAIL FOR ATTACHING DOWNSPOUT TO BRIDGE SEAT
SCALE: 1/4" = 10



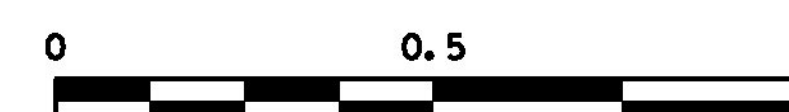
BRACKET ELEVATION
SCALE: 1/4" = 10
BRACKETS SHALL NOT BE BENT IN THE FIELD

NOTES

1. FOR ADDITIONAL DOWNSPOUT NOTES, SEE SHEET 4.
2. PAYMENT FOR ALL MATERIALS AND LABOR RELATED TO THE HOPPER AND DOWNSPOUT ASSEMBLY SHALL BE INCLUDED IN ITEM 506.55, STRUCTURAL STEEL (PLATE GIRDER).
3. THE HOPPER AND DOWNSPOUT ASSEMBLY SHALL BE INSTALLED AFTER THE BRIDGE EXPANSION JOINT IS IN PLACE.
4. ALL HOPPER AND DOWNSPOUT COMPONENTS AND HARDWARE SHALL BE GALVANIZED UNLESS OTHERWISE NOTED.
5. HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A-500M OR A-501M.
6. ANY PLACE WHERE THE GALVANIZING HAS BEEN REMOVED FROM THE DOWNSPOUT EITHER BY CUTTING, BURNING, WELDING, PLACING, OR ANY OTHER MEANS, IT SHALL BE PREPARED BY THOROUGHLY CLEANING THE DAMAGED AREAS WITH A WIRE BRUSH AND PAINTING THE DAMAGED AREAS WITH AN APPROVED SEALANT AS DETERMINED BY THE ENGINEER AT NO ADDITIONAL COST.



SCALE = 1/2" = 20



SCALE = 1/4" = 10

NOTE: ALL DIMENSIONS IN MILLIMETERS (mm) EXCEPT WHERE NOTED.

PROJECT NAME: MORRISTOWN
PROJECT NUMBER: STP F 029-1(2)C/1

FILE NAME: z10b194add.dgn PLOT DATE: 11-APR-2012
PROJECT LEADER: DMB DRAWN BY: S. Merkwon
DESIGNED BY: D. Kull / P. Dustin CHECKED BY: R. Joy
DOWNSPOUT AND HOPPER DETAILS SHEET 86 OF 123