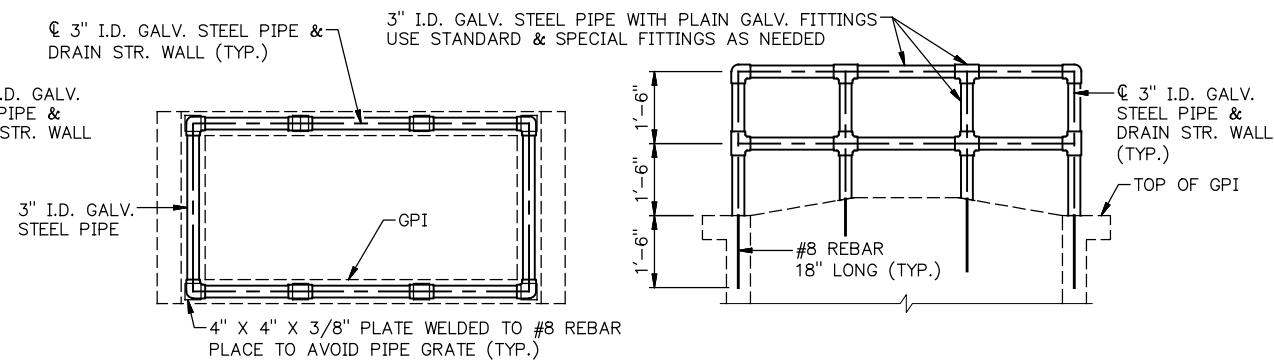
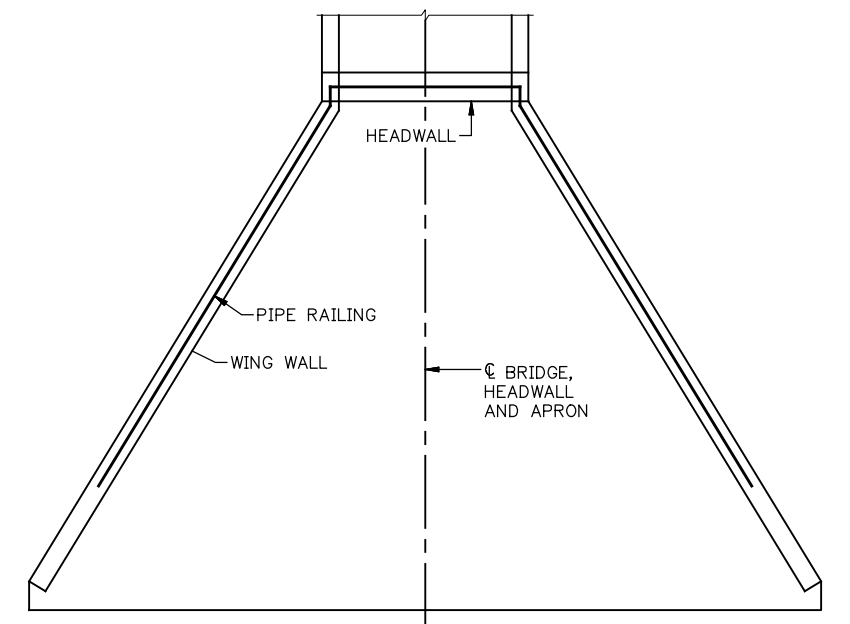


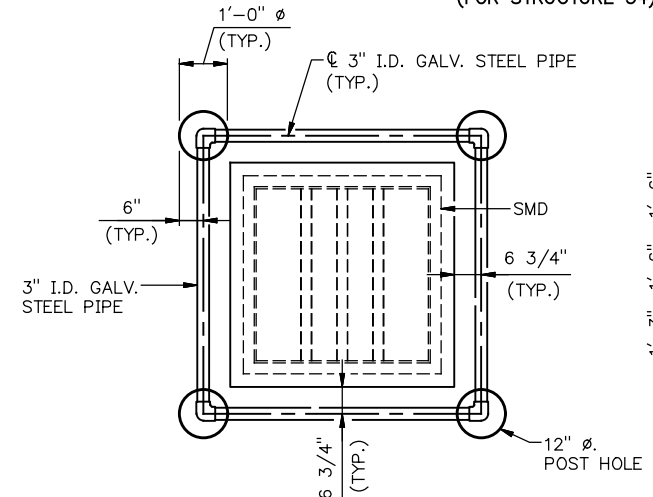
TYPICAL PIPE RAIL GPI TYPE 1 PLAN
TYPICAL PIPE RAIL GPI TYPE 1 ELEVATION
 (SEE ALTERNATE DETAIL FOR WELDED CONNECTIONS ON PIPE RAILS)
 (FOR STRUCTURE 34)



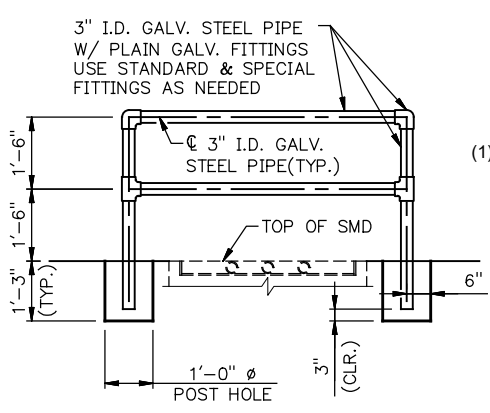
TYPICAL PIPE RAIL GPI TYPE 2 PLAN
TYPICAL PIPE RAIL GPI TYPE 2 ELEVATION
 (SEE ALTERNATE DETAIL FOR WELDED CONNECTIONS ON PIPE RAILS)
 (FOR STRUCTURES 12 AND 20)



PIPE RAIL PLAN FOR STANDARD END SECTION
 (SEE ALTERNATE DETAIL FOR WELDED CONNECTIONS ON PIPE RAILS)
 (FOR STRUCTURE 16)



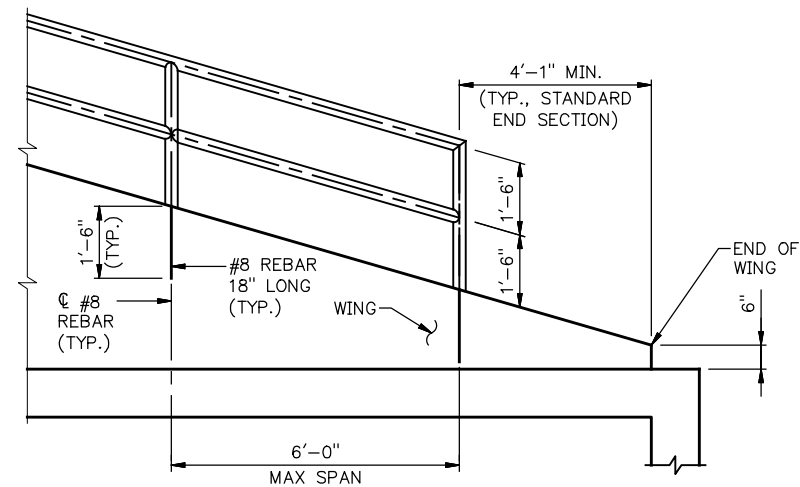
TYPICAL PIPE RAIL SMD PLAN
 (SEE ALTERNATE DETAIL FOR WELDED CONNECTIONS ON PIPE RAILS)
 (FOR STRUCTURE 15)



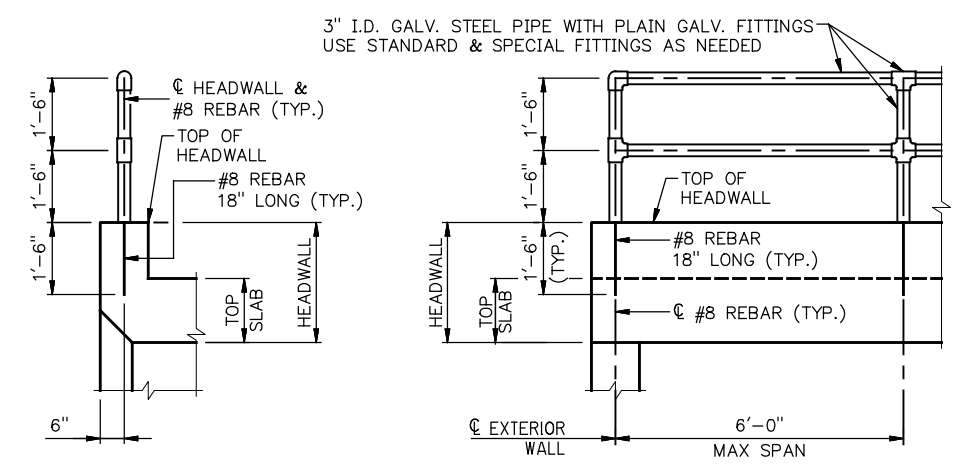
TYPICAL PIPE RAIL SMD ELEVATION

PIPE RAILING QUANTITIES								
DESCRIPTION	UNIT	STR. 12	STR. 15	STR. 16 (1)	STR. 20	STR. 25	STR. 28	STR. 34
PIPE RAILING	LF	21.00	20.00	78.00	21.00	28.00	24.00	17.00

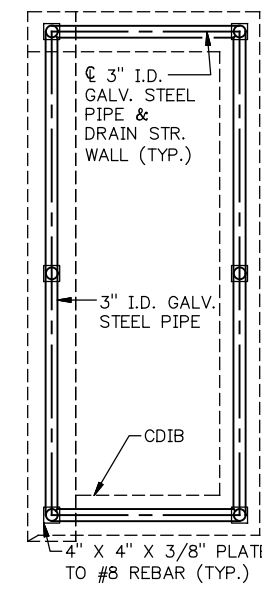
(1) QUANTITY INCLUDES BOTH END SECTIONS.



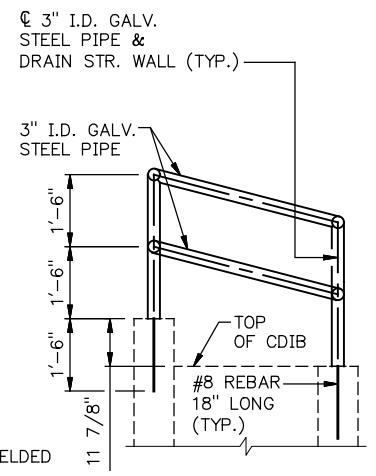
TYPICAL PIPE RAIL ON WING ELEVATION
 (MINIMUM PIPE RAIL OFFSET FROM END OF WING)
 (FOR STRUCTURE 16)



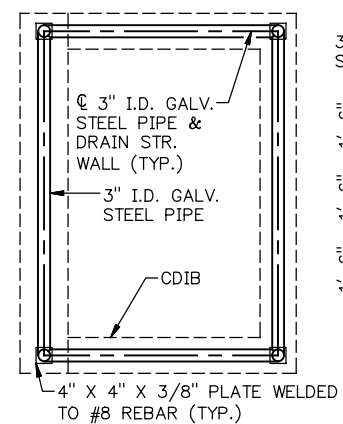
TYPICAL PIPE RAIL ON HEADWALL ELEVATION



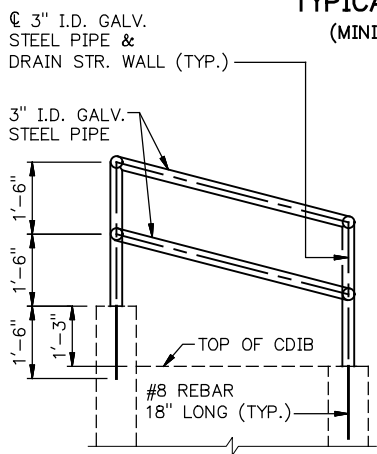
TYPICAL PIPE RAIL CDIB PLAN
 (USE WELDED CONNECTIONS ON PIPE RAILS)
 (FOR STRUCTURE 25)



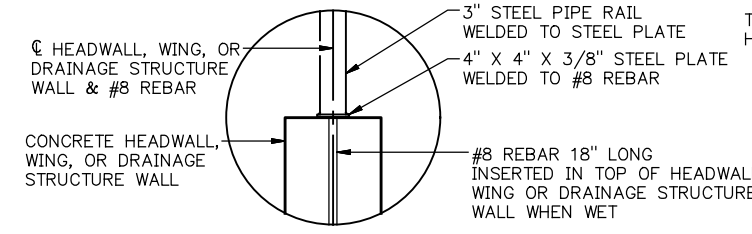
TYPICAL PIPE RAIL CDIB ELEVATION



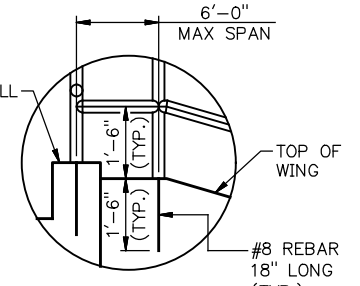
TYPICAL PIPE RAIL CDIB PLAN
 (USE WELDED CONNECTIONS ON PIPE RAILS)
 (FOR STRUCTURE 28)



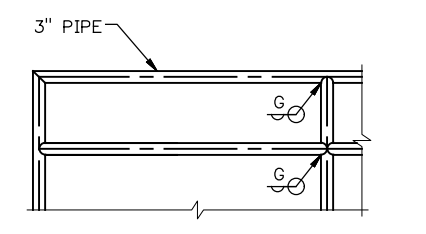
TYPICAL PIPE RAIL CDIB ELEVATION



PIPE RAIL ATTACHMENT DETAIL 1



PIPE RAIL ATTACHMENT DETAIL 2



ALTERNATE DETAIL
 (USING WELDED CONNECTIONS ON PIPE RAILS)

PIPE RAIL NOTES
 PIPE RAIL SHALL BE PLACED ON HEADWALLS AND WINGS, AND AROUND DRAINAGE STRUCTURES ONLY WHEN CALLED FOR ON THE PLANS.
 WELDED CONNECTIONS MAY BE USED FOR PIPE RAILS. WELDED CONNECTIONS SHALL BE THOROUGHLY CLEANED OF ALL LOOSE SCALE, GROUND SMOOTH AND SPOT PAINTED WITH TWO COATS OF ALUMINUM PAINT.
 SHOP DETAILS FOR ALL PIPE RAILS SHALL BE SUBMITTED FOR APPROVAL.