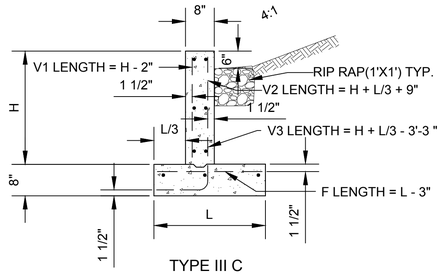
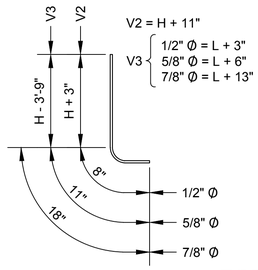
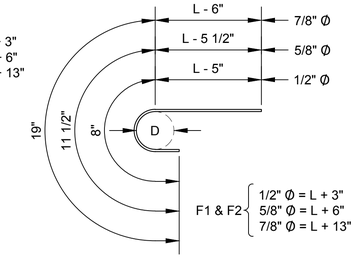


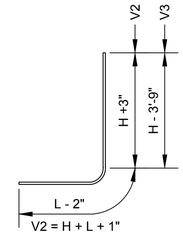
TYPE III C

H	L	F BAR	C BAR	V1 BAR	V2 BAR	V3 BAR	QUANTITIES	
		SIZE SPC.	# REQ'D	SIZE SPC.	SIZE SPC.	SIZE SPC.	REINF STEEL LBS. PER L.F.	CONC. C.Y. PER LF.
7' - 0"	4' - 5"	3/4" Ø @ 12"	14	1/2" Ø @ 18"	1/2" Ø @ 12"	5/8" Ø @ 12"	36.83	0.335

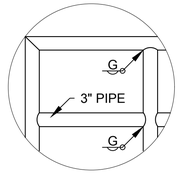


TYPES I A, I B & I C



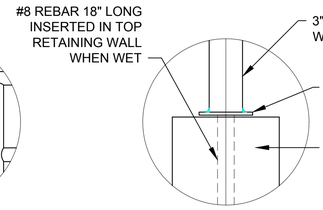


TYPES II A, II B & II C

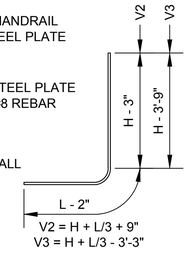


ALTERNATE DETAIL

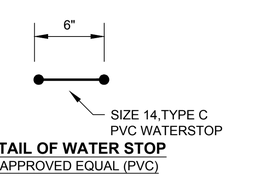
(USING WELDED CONNECTIONS ON PIPE HANDRAIL)



HANDRAIL ATTACHMENT DETAIL



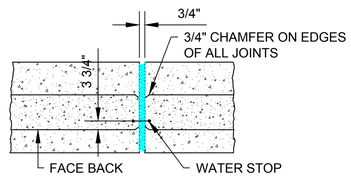
TYPES III A, III B & III C



DETAIL OF WATER STOP

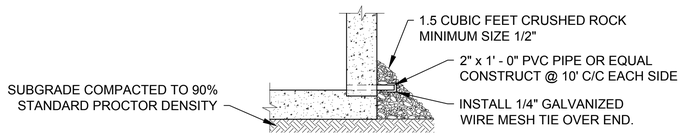
OR APPROVED EQUAL (PVC)

NOTE: WATER STOP SHALL BE INSTALLED FULL HEIGHT OF WALL IN ALL VERTICAL EXPANSION JOINTS. ALL COSTS INCLUDING PREMOULDED EXPANSION MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR RETAINING WALL.



DETAIL OF EXPANSION & CONSTRUCTION JOINT

PLACE JOINTS @ 30' INTERVALS "MAXIMUM" AS REQUIRED



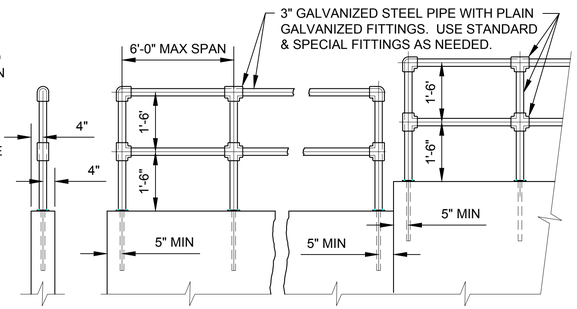
DETAIL OF WEEP HOLES & CONSTRUCTION JOINT

HANDRAIL NOTES:

PIPE HANDRAIL SHALL BE PLACED ON RETAINING WALLS ONLY WHEN CALLED FOR ON THE PLANS.

WELDED CONNECTIONS MAY BE USED FOR PIPE HANDRAILS. 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 HANDRAILS SHALL BE SUBMITTED FOR APPROVAL.



TYPICAL ELEVATION OF HANDRAIL

GENERAL NOTES:
ALL CONSTRUCTION AND MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS
ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER.
ALL CONCRETE SHALL BE 5000 PSI.
EXPANSION JOINTS SHALL BE AT A MAXIMUM OF 30'-0" INTERVALS.
ALL REINFORCING STEEL BARS SHALL BE DEFORMED BARS COLD BENT, NO WELDS PERMITTED.
ALL EXPOSED CONCRETE SURFACES SHALL HAVE A CARBORUNDUM FINISH.
THIS DETAIL ADAPTED FROM O.D.O.T RETAINING WALL RW-1.

HUB Engineers
Time of Plot: 2/20/2017 6:15 PM Plot Style: --HUB--HALF.CTB
O:\2017\17MISC\vamc\RTW.dwg

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

Holloway, Updike and Bellen, Inc.
818 EAST SIDE BOULEVARD – MUSKOGEE, OKLAHOMA (918) 682-7811

SCALE: HORZ. 1"=50' VERT. 1"=5'

MRI RETAINING WALL

DETAILS
PROJECT NO: 17VAMCWALL

Detail: GA
Check:

Date FEBRUARY 2017
Sheet 2 of 2