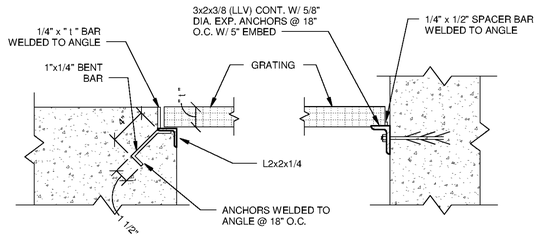
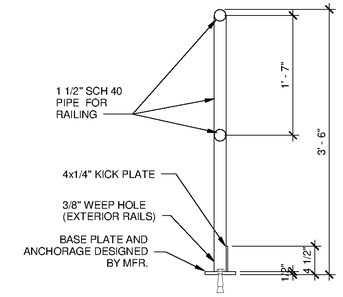


NOTES:

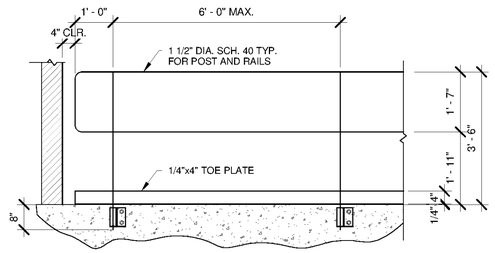
1. GRATING MATERIAL AND THICKNESS "t" TO BE AS SPECIFIED ON PLANS.
2. ALL FRAME MATERIALS AND ACCESSORIES TO MATCH GRATING.
3. ALUM. SURFACES IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH A BITUMINOUS COATING.
4. PROVIDE GRATING FRAMES ON ALL SIDES OF OPENINGS.
5. ALL HARDWARE SHALL BE 316 STAINLESS STEEL, U.N.O.

1 GRATING DETAIL
SCALE: 1 1/2" = 1'-0"



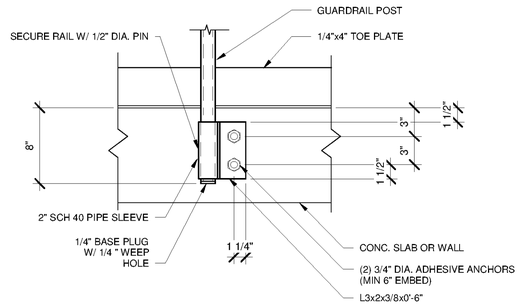
NOTE: REFER TO SPECIFICATIONS FOR ADDT'L INFO.

2 STANDARD GUARDRAIL
SCALE: 1" = 1'-0"



NOTE: REFER TO SPECIFICATIONS FOR ADDT'L INFO.

3 TYP. GUARDRAIL DETAIL
SCALE: 1/2" = 1'-0"



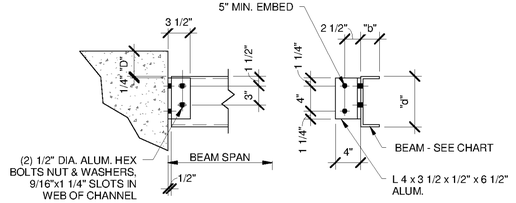
4 TYP. REMOVABLE GUARDRAIL CONNECTION
SCALE: 1 1/2" = 1'-0"

TETRA TECH
www.tetratech.com
101 QUALITY CIRCLE, SUITE 140
HUNTSVILLE, ALABAMA 35806
PHONE: (256) 424-4077 FAX: (256) 424-4097

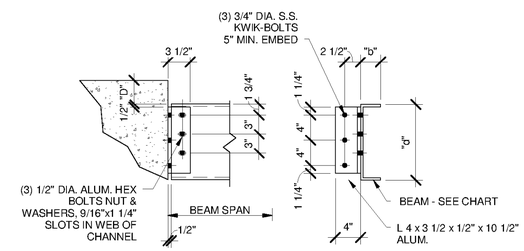
BID SET

ALABAMA LICENSED No. 30159-E PROFESSIONAL ENGINEER CHRISTOPHER D. COLEMAN
10/31/14

GRATING SUPPORT BEAM CHART					
BEAM SPAN (FEET)	6	8	10	12	14
BEAM SIZE *	CS6x4.03	CS8x5.79	CS10x8.36	CS12x11.82	CS14x13.9
WEIGHT (LB/FT.)	4.030	5.789	8.360	11.822	13.900
END CONNECTION TYPE	1	1	2	2	2

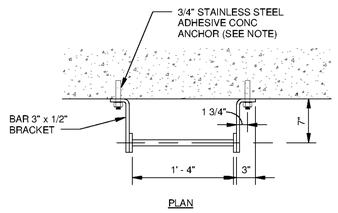


GRATING SUPPORT BEAM CONN - TYPE 1



GRATING SUPPORT BEAM CONN - TYPE 2

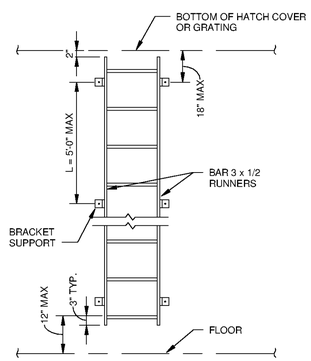
5 ALUM. GRTG SUPPORT BEAMS
SCALE: 1" = 1'-0"

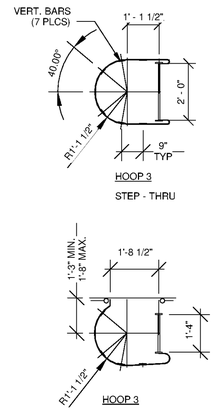


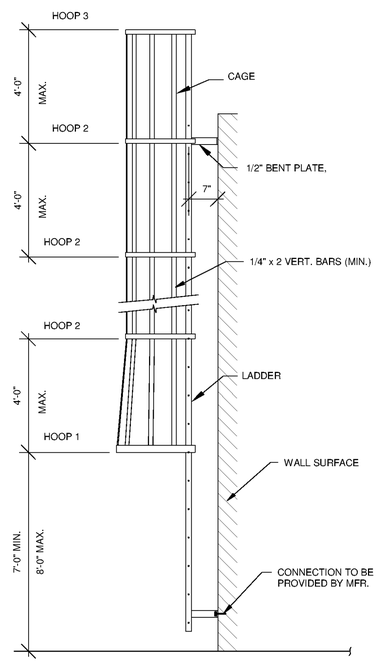
PLAN

NOTES:

1. LADDERS SHALL BE ALUMINUM UNLESS INDICATED OTHERWISE.
2. ANCHORS AND FASTENERS SHALL BE STAINLESS STEEL.
3. LADDERS SHALL BE OSHA AND ANSI APPROVED.
4. FRP LADDER MEMBERS AND ANCHORAGE SHALL BE SIZED BY THE MANUFACTURER PER THE SPECIFICATIONS.
5. PROVIDE PROTECTIVE COATING BETWEEN ALUM. AND CONC OR DISSIMILAR METALS.





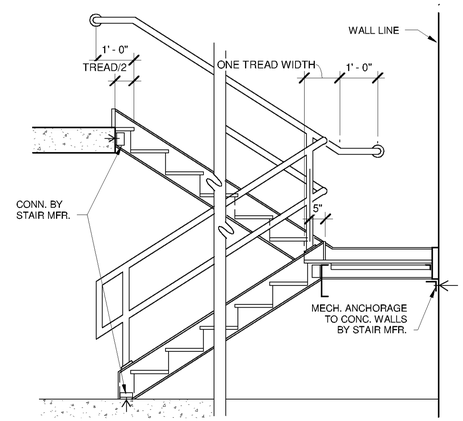


CAGE LADDER NOTES NOTES

1. LADDERS EXTENDING MORE THAN 30'-0" IN LENGTH SHALL BE OFFSET WITH INTERMEDIATE LANDING.
2. SAFETY CAGE SHALL BE ALL WELDED CONSTRUCTION AND SHALL BE SHOP WELDED TO LADDER. ALL WELDS TO BE 3/16" FILLET WELDS (MIN)

LADDER CAGE DETAILS

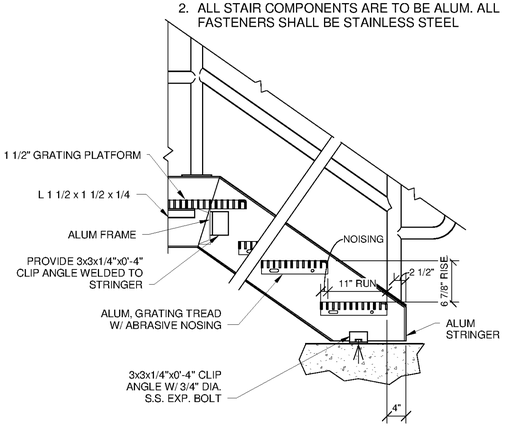
6 TYPICAL FIXED LADDER DETAILS
SCALE: 1/2" = 1'-0"



7 TYP. STAIRWELL SECTION
SCALE: 1/2" = 1'-0"

NOTES:

1. STAIR FRAMING AND TREADS SHALL BE ALUM. UNLESS NOTED OTHERWISE IN THE DWG'S
2. ALL STAIR COMPONENTS ARE TO BE ALUM. ALL FASTENERS SHALL BE STAINLESS STEEL



8 TYP. STAIR DETAIL
SCALE: 3/4" = 1'-0"

MARK	DATE	DESCRIPTION	BY

HUNTSVILLE UTILITIES
SOUTHEAST WATER TREATMENT PLANT

STANDARD STRUCTURAL DTLS-GRATING, HANDRAIL, LADDERS, & STAIRS

Project No.:	200-11740-10003
Designed By:	JLB
Drawn By:	BRF
Checked By:	CDC

S-9508

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10/1/2014 3:36:55 PM C:\Users\brent.fox\Documents\WTP-11740-S-STDDTL_brent.fox.rvt

Bar Measures 1 inch