SIZING WEIR FOR 100-YEAR STORM

$Q = C \times L \times h^{1.5}$

GIVEN:

$Q = 44.22$ CFS

$C = 3.3$

$h = 536.21 - 531.00 = 5.21'$

SOLVE:

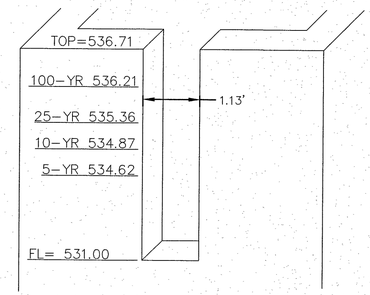
$L = 1.13'$

WEIR DISCHARGE CALCULATIONS

$Q = C \times L \times h^{1.5}$

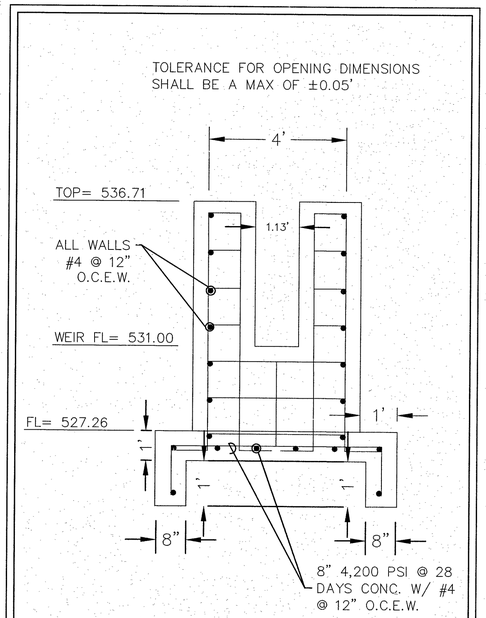
$L = 1.13'$, $C = 3.3$

INVERT= 531.00		FLOW RATES BASED ON STORAGE DEPTHS		STORAGE DEPTHS BASED ON WEIR DIMENSIONS	
STORM EVENT	ALLOWABLE DISCHARGE (CFS)	STAGE (FT)	WEIR DISCHARGE (CFS)	SOLVE FOR h (FT)	STAGE (FT)
5-YR	27.61	534.62	27.65	3.78	534.78
10-YR	32.00	534.87	32.03	4.17	535.17
25-YR	36.72	535.36	36.75	4.57	535.57
100-YR	44.22	536.21	44.22	5.21	536.21



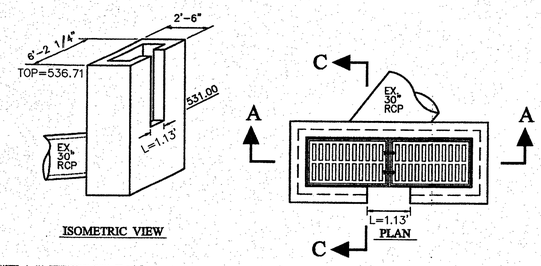
4' SQ. SDMH OUTLET CONTROL DEVICE

NOT TO SCALE



OUTLET STRUCTURE

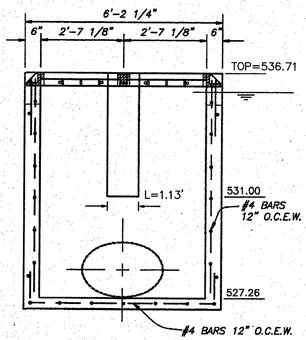
NOT TO SCALE



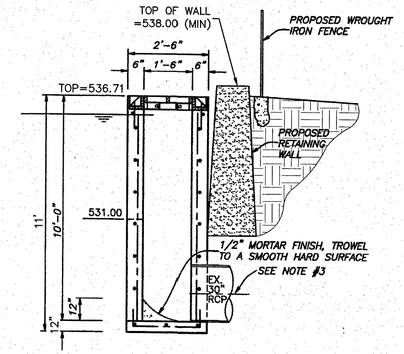
ISOMETRIC VIEW

NOTES: 1. ALL REINFORCING SHALL BE w/ #4 BARS @ 12" CENTERS.

2. ALL LAPS AND EXTENSIONS OF REINFORCING BARS SHALL BE 36 BAR DIAMETERS UNLESS NOTED OTHERWISE.



SECTION A-A



SECTION C-C

NOTES:

1. *ALL LAPS AND EXTENSIONS OF REINFORCING BARS SHALL BE 36 BAR DIAMETERS UNLESS NOTED OTHERWISE.*
2. *TACK WELD GRATES IN PLACE.*
3. *PIPE MAY BE PLACED IN ANY WALL, BUT SHALL NOT ENTER ANY CORNER, OR BOTTOM.*

MODIFIED 2 GRATE INLET / OUTFALL STRUCTURE DETAIL

N.T.S.

NOTES:

1. CITY OF ROCKWALL CONSTRUCTION STANDARDS & NCTCOG 3RD EDITION APPLY WHETHER INDICATED ON THESE PLANS OR NOT.
2. ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

RECORD DRAWING

TO THE BEST OF OUR KNOWLEDGE, HOMEYER ENGINEERING, INC., HEREBY STATES THAT THIS PLAN IS A RECORD DRAWING. THE INFORMATION PROVIDED IS BASED ON ON-SITE SURVEYING, SITE OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR.

STEVEN R. HOMEYER, P.E. #86942

DATE: 12-2-13

STATE OF TEXAS
STEVEN R. HOMEYER
86942
LICENSED
PROFESSIONAL ENGINEER
11-27-12

HOMEYER ENGINEERING, INC.
TBPE FIRM REGISTRATION NO. F-8440
P.O. BOX 294527 • LEWISVILLE • TEXAS • 75029
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ROCK RIDGE ASSISTED LIVING AND MEMORY CARE
LOT 1R, BLOCK A,
FLAGSTONE CORNERS
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

OUTLET STRUCTURE

DRAWN: SRH

DATE: 11/27/12

HEI #: 12-112

SHEET NO: C8.2

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