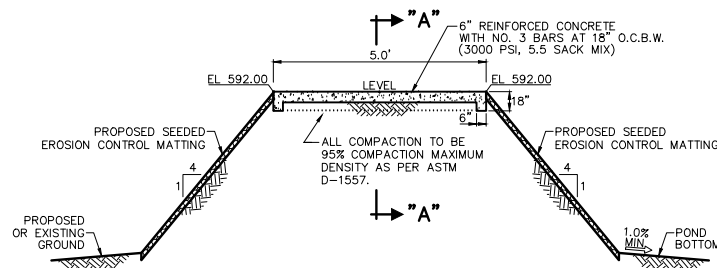


VIEW "A-A"



VIEW "B-B"

**EMERGENCY OVERFLOW
TRAPEZOIDAL WEIR DETAIL**

(NOT TO SCALE)

TRAPEZOIDAL WEIR CALCULATIONS	
100 YR. STORM EVENT	
$Q = CLH^{3/2}$	
WHERE:	$Q_{100} = 125.75$ cfs
	C = WEIR COEFFICIENT = 3.0
	L = BREADTH OF WEIR = 5'
	H = LENGTH OF WEIR
	H = MEASURED HEAD IN FT = 1.25'
THENCE:	
	$125.75 = 3.00(L)(1.25)^{3/2}$
	$L = \frac{125.75}{3.00(1.25)^{3/2}}$
	L = 30.0 FT

- NOTE:
 1. DESIGN BASIS DRAINAGE AREAS & CRITERIA TAKEN FROM PLANS PREPARED BY: WIER & ASSOCIATES, DATED: 02/02/2015
 * 2. DA 3 WILL CONTAIN AN ONSITE DETENTION BASIN AND RELEASE AT UNDEVELOPED CONDITIONS

DESIGN BASIS DRAINAGE CRITERIA:

$Q=(C)(I)(A)$

DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY	I ₁₀₀ (inch/hour)	Q ₁₀₀ (cfs)	STORM FREQUENCY	I ₅ (inch/hour)	Q ₅ (cfs)	STORM FREQUENCY	I ₁ (inch/hour)	Q ₁ (cfs)	REMARKS
DA 1	2.50	0.90	10.00	100 YEAR	9.80	22.05	25 YEAR	8.30	18.68	10 YEAR	7.10	15.98	DRAINS TO EXISTING DA 2
DA 2	16.25	0.90	10.00	100 YEAR	9.80	143.33	25 YEAR	8.30	121.39	10 YEAR	7.10	103.84	DRAINS TO EXISTING 7x3' RCB
DA 3	12.53	0.35	20.00	100 YEAR	8.30	36.40	25 YEAR	6.70	29.38	10 YEAR	5.90	25.87	DRAINS TO EXISTING DA 4
DA 4	29.37	0.35	20.00	100 YEAR	8.30	85.32	25 YEAR	8.30	85.32	10 YEAR	7.10	72.98	DRAINS TO EXISTING 2-6x4' MBC

PROPOSED DRAINAGE CRITERIA:

$Q=(C)(I)(A)$

DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY	I ₁₀₀ (inch/hour)	Q ₁₀₀ (cfs)	STORM FREQUENCY	I ₅ (inch/hour)	Q ₅ (cfs)	STORM FREQUENCY	I ₁ (inch/hour)	Q ₁ (cfs)	REMARKS
DA 1	2.50	0.90	10.00	100 YEAR	9.80	22.05	10 YEAR	8.30	18.68	5 YEAR	6.20	13.95	STUB-OUT FOR FUTURE DEVELOPMENT
DA 2	1.71	0.90	10.00	100 YEAR	9.80	15.08	25 YEAR	8.30	12.77	10 YEAR	7.10	10.93	DRAINS TO PROP CURB INLET
DA 3	0.93	0.90	10.00	100 YEAR	9.80	8.20	25 YEAR	8.30	6.95	10 YEAR	7.10	5.94	DRAINS TO PROP CURB INLET
DA 4	0.79	0.90	10.00	100 YEAR	9.80	6.97	25 YEAR	8.30	5.90	10 YEAR	7.10	5.05	DRAINS TO PROP CURB INLET
DA 5	0.44	0.90	10.00	100 YEAR	9.80	3.88	25 YEAR	8.30	3.29	10 YEAR	7.10	2.81	DRAINS TO PROP ROOF DRAIN
DA 6	0.58	0.90	10.00	100 YEAR	9.80	5.12	25 YEAR	8.30	4.33	10 YEAR	7.10	3.71	DRAINS TO PROP ROOF DRAIN
DA 7	0.93	0.90	10.00	100 YEAR	9.80	8.20	25 YEAR	8.30	6.95	10 YEAR	7.10	5.94	DRAINS TO PROP CURB INLET
DA 8	0.44	0.90	10.00	100 YEAR	9.80	3.88	25 YEAR	8.30	3.29	10 YEAR	7.10	2.81	DRAINS TO PROP ROOF DRAIN
DA 9	0.58	0.90	10.00	100 YEAR	9.80	5.12	25 YEAR	8.30	4.33	10 YEAR	7.10	3.71	DRAINS TO PROP ROOF DRAIN
DA 10	1.30	0.90	10.00	100 YEAR	9.80	11.47	25 YEAR	8.30	9.71	10 YEAR	7.10	8.31	DRAINS TO PROP CURB INLET
DA 11	0.44	0.90	10.00	100 YEAR	9.80	3.88	25 YEAR	8.30	3.29	10 YEAR	7.10	2.81	DRAINS TO PROP ROOF DRAIN
DA 12	0.58	0.90	10.00	100 YEAR	9.80	5.12	25 YEAR	8.30	4.33	10 YEAR	7.10	3.71	DRAINS TO PROP ROOF DRAIN
DA 13	0.55	0.90	10.00	100 YEAR	9.80	4.85	25 YEAR	8.30	4.11	10 YEAR	7.10	3.51	DRAINS TO PROP ROOF DRAIN
DA 14	0.58	0.90	10.00	100 YEAR	9.80	5.12	25 YEAR	8.30	4.33	10 YEAR	7.10	3.71	DRAINS TO PROP ROOF DRAIN
DA 15	0.59	0.90	10.00	100 YEAR	9.80	5.20	25 YEAR	8.30	4.41	10 YEAR	7.10	3.77	DRAINS TO PROP CURB INLET
DA 16	0.55	0.90	10.00	100 YEAR	9.80	4.85	25 YEAR	8.30	4.11	10 YEAR	7.10	3.51	DRAINS TO PROP ROOF DRAIN
DA 17	0.58	0.90	10.00	100 YEAR	9.80	5.12	25 YEAR	8.30	4.33	10 YEAR	7.10	3.71	DRAINS TO PROP ROOF DRAIN
DA 18	0.55	0.90	10.00	100 YEAR	9.80	4.85	25 YEAR	8.30	4.11	10 YEAR	7.10	3.51	DRAINS TO PROP ROOF DRAIN
DA 19	0.58	0.90	10.00	100 YEAR	9.80	5.12	25 YEAR	8.30	4.33	10 YEAR	7.10	3.71	DRAINS TO PROP ROOF DRAIN
DA 20	0.59	0.90	10.00	100 YEAR	9.80	5.20	25 YEAR	8.30	4.41	10 YEAR	7.10	3.77	DRAINS TO PROP CURB INLET
DA 21	0.60	0.90	10.00	100 YEAR	9.80	5.29	25 YEAR	8.30	4.48	10 YEAR	7.10	3.83	DRAINS TO PROP ROOF DRAIN
DA 22	0.69	0.90	10.00	100 YEAR	9.80	6.09	25 YEAR	8.30	5.15	10 YEAR	7.10	4.41	DRAINS TO PROP ROOF DRAIN
DA 23	0.59	0.90	10.00	100 YEAR	9.80	5.20	25 YEAR	8.30	4.41	10 YEAR	7.10	3.77	DRAINS TO PROP CURB INLET
DA 24	1.87	0.90	10.00	100 YEAR	9.80	16.49	25 YEAR	8.30	13.97	10 YEAR	7.10	11.95	DRAINS TO PROP CURB INLET
DA 25	0.53	0.90	10.00	100 YEAR	9.80	4.67	25 YEAR	8.30	3.96	10 YEAR	7.10	3.39	DRAINS TO PROP ROOF DRAIN
DA 26	0.69	0.90	10.00	100 YEAR	9.80	6.09	25 YEAR	8.30	5.15	10 YEAR	7.10	4.41	DRAINS TO PROP ROOF DRAIN
DA 27	1.09	0.90	10.00	100 YEAR	9.80	9.61	25 YEAR	8.30	8.14	10 YEAR	7.10	6.97	DRAINS TO PROP CURB INLET
DA 28	1.54	0.90	10.00	100 YEAR	9.80	13.58	25 YEAR	8.30	11.50	10 YEAR	7.10	9.84	DRAINS TO PROP CURB INLET
DA 29	0.82	0.90	10.00	100 YEAR	9.80	7.23	25 YEAR	8.30	6.13	10 YEAR	7.10	5.24	DRAINS TO PROP CURB INLET
DA 30	4.53	0.90	10.00	100 YEAR	9.80	39.95	25 YEAR	8.30	33.94	10 YEAR	7.10	28.95	DRAINS TO PROP CURB INLET
DA 31	0.21	0.90	10.00	100 YEAR	9.80	1.85	25 YEAR	8.30	1.57	10 YEAR	7.10	1.34	DRAINS TO ALW, IN TEMPORARY DITCH
DA 32	0.69	0.90	10.00	100 YEAR	9.80	6.09	25 YEAR	8.30	5.15	10 YEAR	7.10	4.41	DRAINS TO PROP CURB INLET
DA 33	29.34	0.35	20.00	100 YEAR	8.30	85.23	25 YEAR	6.70	68.80	10 YEAR	5.90	60.59	DRAINS TO EXISTING 2-6x4' MBC
DA 34	0.93	0.90	10.00	100 YEAR	9.80	8.20	25 YEAR	8.30	6.95	10 YEAR	7.10	5.94	DRAINS TO PROP "Y" INLET
DA 35	1.12	0.90	10.00	100 YEAR	9.80	9.88	25 YEAR	8.30	8.37	10 YEAR	7.10	7.16	DRAINS TO PROP "Y" INLET
DA 36	0.86	0.90	10.00	100 YEAR	9.80	7.59	25 YEAR	8.30	6.42	10 YEAR	7.10	5.50	DRAINS TO PROP CURB INLET

RECORD DRAWING
 THE SIGNED AND SEALED CONSTRUCTION DOCUMENT HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE INFORMATION SHOWN ON THIS RECORD DRAWING, WHICH WAS PROVIDED BY THE CONTRACTOR, OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. PACHECO KOCH SHALL ASSUME NO LIABILITY FOR ANY CHANGES MADE DURING CONSTRUCTION THAT WERE NOT SPECIFICALLY APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE SEALED CONSTRUCTION DRAWINGS ARE ON FILE AT THE OFFICES OF PACHECO KOCH.
 ATTESTED BY:
 SIGNATURE: *[Signature]*
 ENGINEER OF RECORD: CHET LEUGERS, P.E.
 CONTRACTOR: MILLER-VALENTE CONSTRUCTION
 DATE REVISED: 06/08/2017

NO.	DATE	REVISION
	06/09/2017	RECORD DRAWINGS

Pacheco Koch
 7557 RAMBLER ROAD, SUITE 1400
 DALLAS, TX 75231 972.235.3031
 TX REG. ENGINEERING FIRM F-14439
 TX REG. SURVEYING FIRM LS-10193805

DRAINAGE CRITERIA SHEET
ROCKWALL MANUFACTURING FACILITY
LOT 1, BLOCK A, ROCKWALL
TECHNOLOGY PARK, PHASE IV
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
CTL	RHB	JULY 2016	N.T.S.			C3.2