

**BMP NOTES:**

- (1) EXISTING VEGETATION CONSISTS OF NATIVE GRASSES AND SCATTERED SHRUBS.
- (2) EXISTING SANITARY SEWER MAINLINE IS LOCATED WITHIN THE LIMITS OF ON-SITE GRADING.
- (3) CONCRETE WASHOUT LOCATION PER FILING TO BE DETERMINED BY DEVELOPER/CONTRACTOR.
- (4) DIVERSION SWALES AND EARTH DIKES TO BE INSTALLED BY DEVELOPER / CONTRACTOR IN LOCATIONS THAT WON'T CONFLICT WITH SEWER, WATER AND STORM SEWER MAINLINE INSTALLATIONS.
- (5) IF DISTURBANCE TO ROADWAY BMP'S OCCUR DURING UTILITY CONSTRUCTION, THE CONTRACTOR WILL IMMEDIATELY REPAIR / REPLACE BMP'S.

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COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
WATER QUALITY CONTROL DIVISION  
WOOD - PERMITS  
4300 CHERRY CREEK DRIVE SOUTH  
DENVER, CO 80246-1530  
ATTN: PERMITS UNIT

NO PORTION OF THIS SITE IS LOCATED WITHIN A FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAPS (F.I.R.M.) MAP NUMBER 08041C0752F AND EFFECTIVE DATE, MARCH 17, 1997.

THE AVERAGE SOIL CONDITION REFLECTS PRING COURSE SANDY LOAM AS DETERMINED BY THE "SOIL SURVEY OF EL PASO COUNTY AREA" PREPARED BY THE U.S. SOIL CONSERVATION SERVICE.

EXISTING VEGETATION CONSISTS OF TALL NATIVE GRASSES AND WEEDS WITH SPORADIC CACTI AND YUCCAS THROUGH-OUT THE SITE.

EMERGENCY OVERFLOW SWALES FOR INLETS IN THE INTERIM UNTIL CURB AND ASPHALT IS INSTALLED WILL BE THE LOTS, FINAL WILL BE TO OVERTOP THE HIGH POINT IN ROADWAY TO THE NEXT AVAILABLE INLET OR TO PROPOSED POND.

STOCKPILE LOCATIONS FOR HOMEBUILDING TO BE ON EACH INDIVIDUAL LOT THAT IS BEING BUILT UPON.

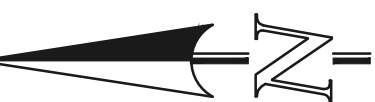
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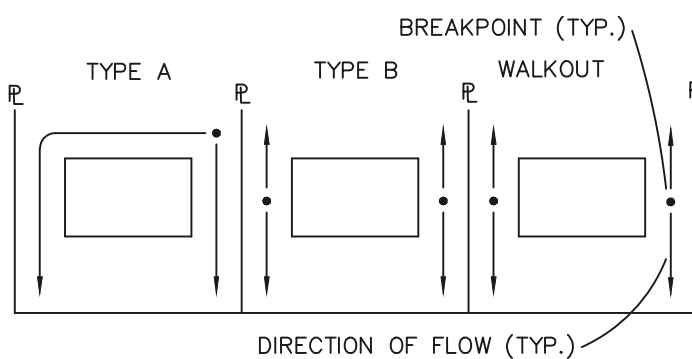
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ALL RETAINING WALLS TO BE STACKED BLOCK WALLS.  
BUILDING PERMIT REQUIRED FOR WALLS 4' OR TALLER.



50 25 0 50 100

SCALE: 1" = 50'



**LOT DRAINAGE TYPES**

LOCATION OF STAGING AREAS, STORAGE FOR MAINTENANCE EQUIPMENT, CONCRETE WASHOUT AREAS AND TEMPORARY DISPOSAL AREAS WILL BE ADDED TO THIS PLAN BY SWMP ADMINISTRATOR UPON COORDINATION WITH SELECTED CONTRACTOR AND SHALL BE WITHIN CONSTRUCTION SITE BOUNDARIES AS SHOWN.

**NOTE:**  
SIDE LOT LINE SWALES ARE REQUIRED FOR ALL LOTS.

48 HOURS BEFORE YOU DIG,  
CALL UTILITY LOCATORS

**811**

UTILITY NOTIFICATION CENTER OF COLORADO  
IT'S THE LAW

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NO. REVISION

DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF  
CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

KYLE R. CAMPBELL, COLORADO P.E. #29794

DATE

**CLASSIC**  
CONSULTING  
ENGINEERS & SURVEYORS

619 N. Cascade Avenue, Suite 200  
Colorado Springs, Colorado 80903  
(719)785-0790  
(719)785-0799(Fax)

**LEGEND**

- (6770) EXISTING CONTOUR
- 6770 PROPOSED CONTOUR
- FILING LINE
- BOUNDARY/R.O.W. LINE
- EXISTING FLOW DIRECTION
- PROPOSED FLOW
- "A" A LOT
- "B" B LOT
- "W/O" WALKOUT LOT
- "T" TRANSITION LOT
- "G" GARDEN LOT
- PROPOSED INLET
- PROPOSED STORM SEWER PIPE
- HP PROPOSED HIGH POINT
- LP PROPOSED LOW POINT

- PROPOSED RETAINING WALL
- TSB TEMPORARY SEDIMENT BASIN
- SF SILT FENCE
- IP INLET PROTECTION
- VTC VEHICLE TRACKING CONTROL

**NOTE:**  
SEE SHEET 5 FOR LOT TEMPLATES  
SEE SHEET 5 FOR EROSION CONTROL DETAILS

**SF-18-038, 039, 040**

**HANNAH RIDGE AT FEATHERGRASS  
FILING NO. 5, 6 & 7**

OVERLOT GRADING AND EROSION CONTROL PLAN

DESIGNED BY	KRC	SCALE	DATE	10/12/18
DRAWN BY	KC	(H) 1"= 50'	SHEET	2 OF 11
CHECKED BY		(V) 1"= NA	JOB NO.	1116.05



SEE SHEET 2

SEE SHEET 4

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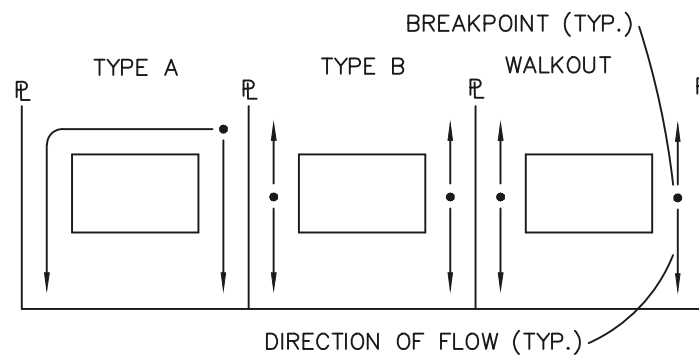
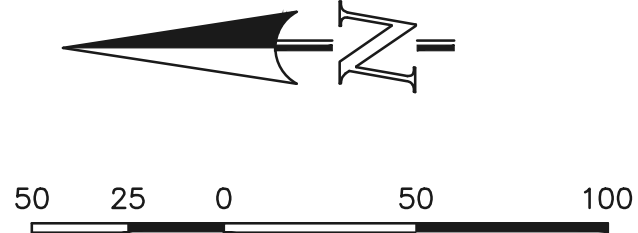
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						KYLE R. CAMPBELL, COLORADO P.E. #29794	
						DATE	
<b>CLASSIC</b> CONSULTING ENGINEERS & SURVEYORS 619 N. Cascade Avenue, Suite 200 Colorado Springs, Colorado 80903 (719)785-0790 (719)785-0799(Fax)		DESIGNED BY		KRC	SCALE	DATE	10/12/18
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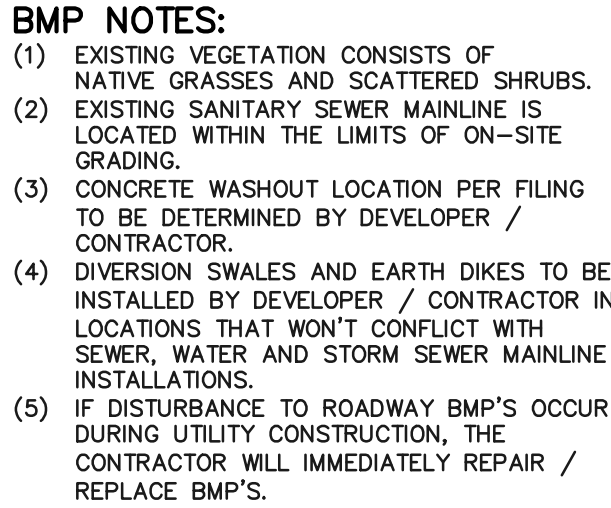
- |            |                           |       |                          |
|------------|---------------------------|-------|--------------------------|
| — (6770) — | EXISTING CONTOUR          | — x — | PROPOSED RETAINING WALL  |
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| — — — — —  | FILING LINE               | (SF)  | SILT FENCE               |
| — — — — —  | BOUNDARY/R.O.W. LINE      | (IP)  | INLET PROTECTION         |
| →          | EXISTING FLOW DIRECTION   | (VTC) | VEHICLE TRACKING CONTROL |
| →          | PROPOSED FLOW             | (SBB) | STRAW BALE BARRIER       |
| "A"        | A LOT                     |       |                          |
| "B"        | B LOT                     |       |                          |
| "W/O"      | WALKOUT LOT               |       |                          |
| "T"        | TRANSITION LOT            |       |                          |
| "G"        | GARDEN LOT                |       |                          |
| □          | PROPOSED INLET            |       |                          |
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The diagram shows three scenarios for a vehicle's path relative to a rectangular obstacle:

- TYPE A:** The vehicle's path (indicated by a red line) enters from the left, turns 180 degrees to go back the way it came, and then turns 90 degrees to go straight through the obstacle.
- TYPE B:** The vehicle's path enters from the left, stops at the obstacle, and then reverses back the way it came.
- WALKOUT:** The vehicle's path enters from the left, stops at the obstacle, and then turns 90 degrees to exit the area to the right.

Labels include "BREAKPOINT (TYP.)" with arrows pointing to the start of the maneuver, "TYPE A", "TYPE B", "WALKOUT", and "DIRECTION OF FLOW (TYP.)" with arrows indicating the initial flow direction.

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KYLE R. CAMPBELL, COLORADO P.E. #29794

619 N. Cascade Avenue, Suite 200  
Colorado Springs, Colorado 80903

$$\frac{TW}{BW} = \frac{XX.XX}{XX.XX} (X')$$

**(SBB)** STRAW BALE BARRIER

SF-18-038, 039, 040

OVERLOT GRADING AND EROSION CONTROL PLAN

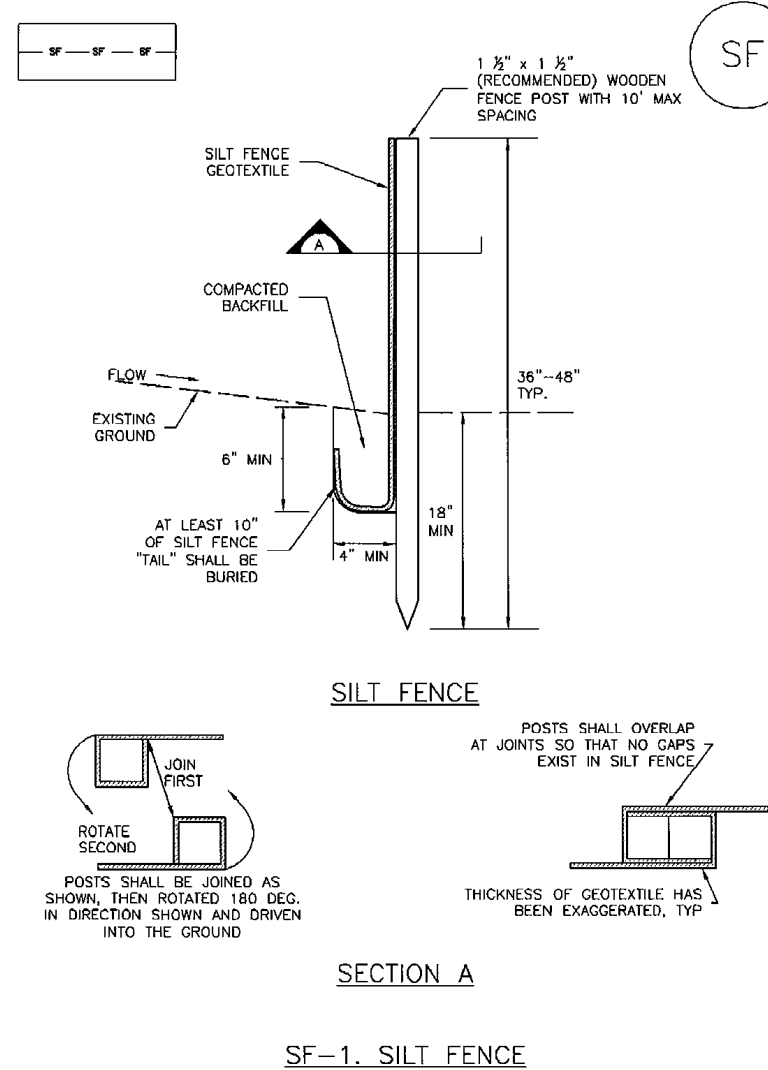
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**CLASSIC**<sup>SM</sup>  
CONSULTING  
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## Silt Fence (SF)

## SC-1

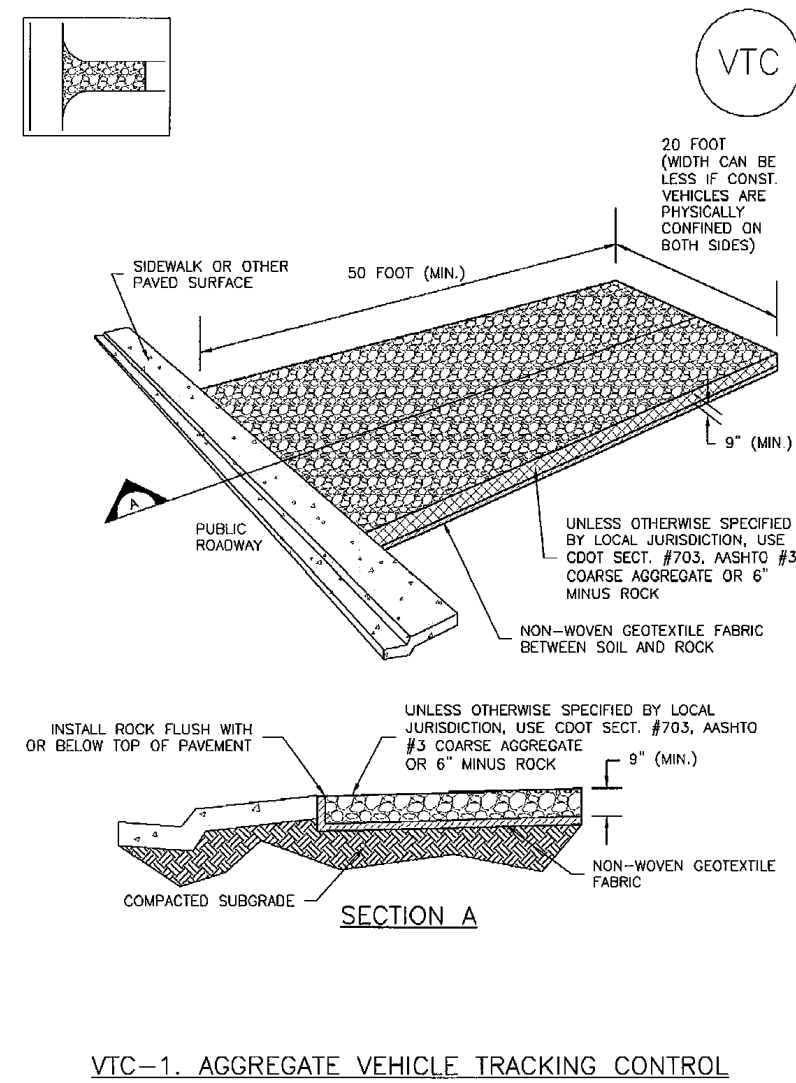


November 2010 Urban Drainage and Flood Control District  
Urban Storm Drainage Criteria Manual Volume 3

SF-3

## Vehicle Tracking Control (VTC)

## SM-4

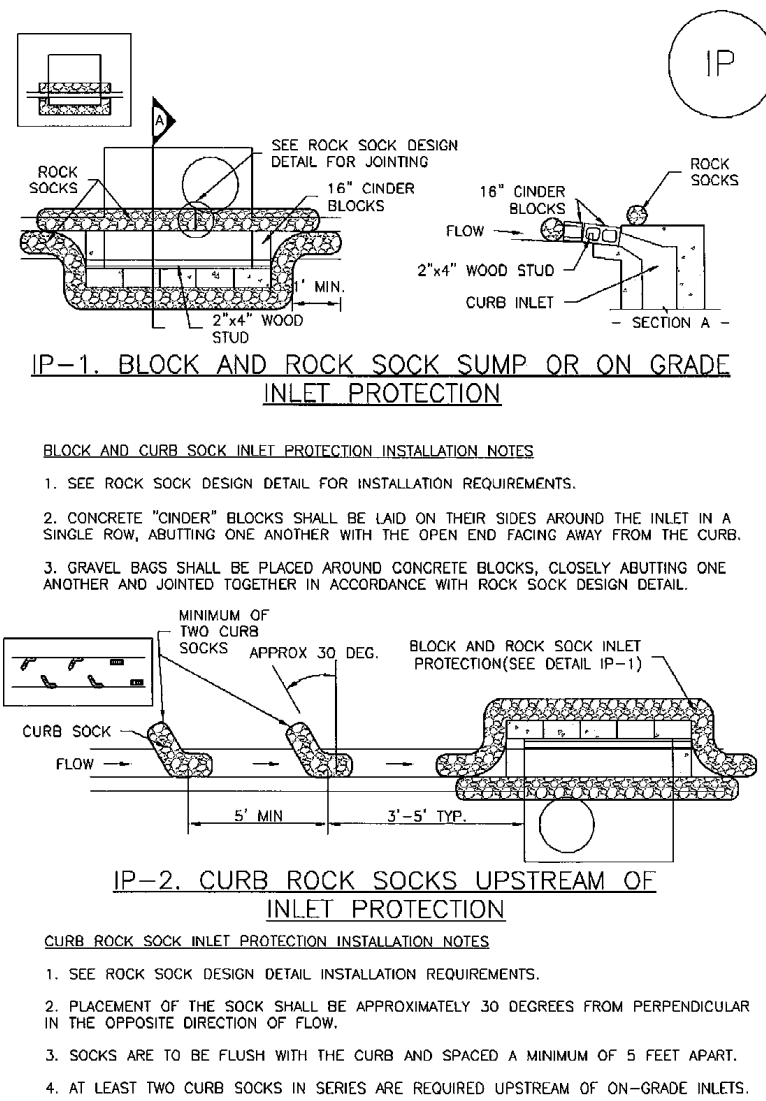


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VTC-3

## SC-6

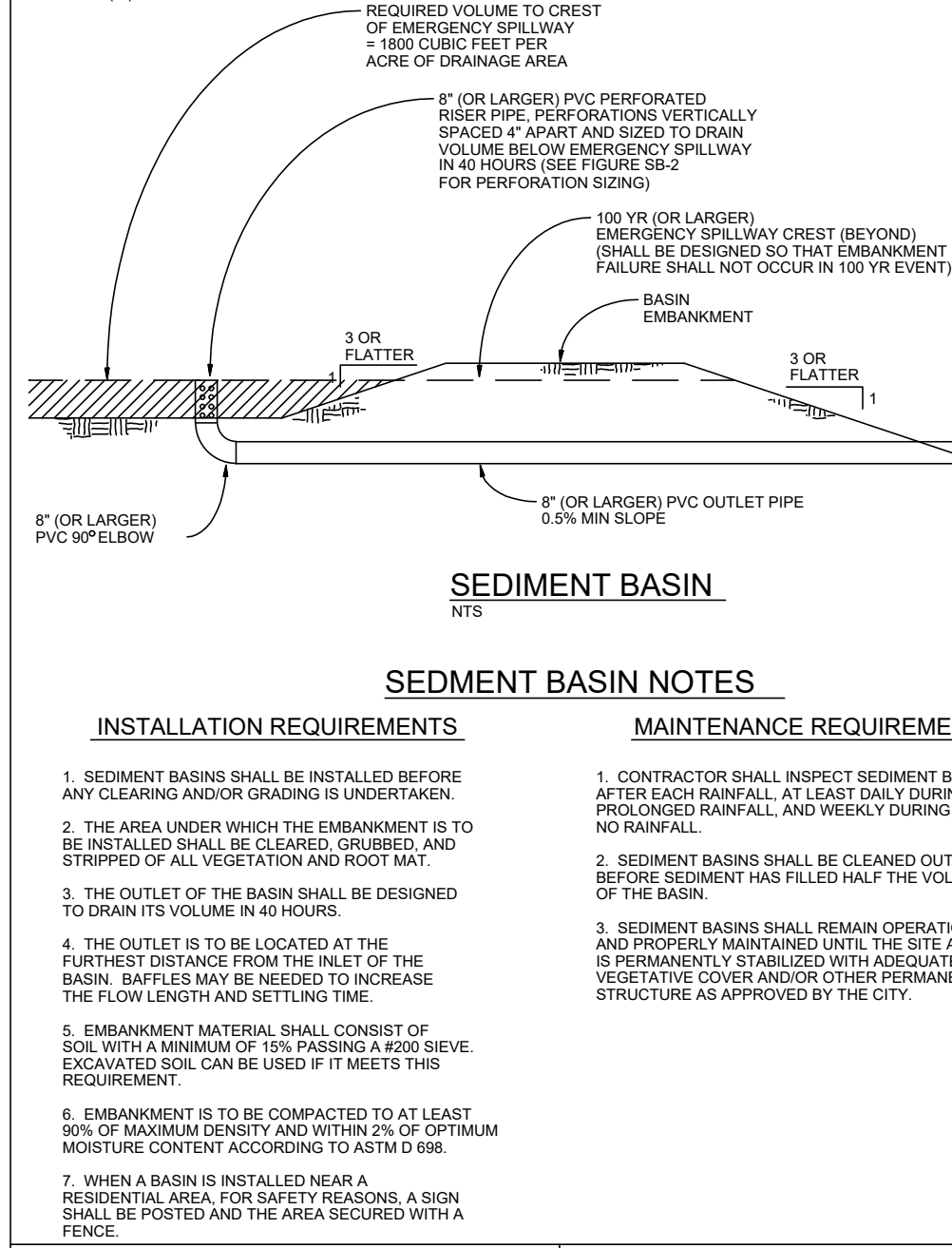
## Inlet Protection (IP)



November 2010 Urban Drainage and Flood Control District  
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August 2013

BASIN GEOMETRY:  
LENGTH (L)  
WIDTH (W) 2:2



City of Colorado Springs  
Stormwater Quality

Figure SB-1  
Sediment Basin  
Construction Detail and Maintenance Requirements

Required Area per Row (in <sup>2</sup> )	Depth at Outlet (ft)									
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5
1	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
2	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
3	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
4	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
5	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
6	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
7	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
8	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
9	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31
10	15.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73	1.51	1.31

TABLE SB-1

Circular Perforation Sizing	Area per Row (in <sup>2</sup> )									
	Hole Diameter (in)	Hole Diameter (in)	n = 1	n = 2	n = 3	n = 4	n = 5	n = 6	n = 8	n = 10
1	14	0.250	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
2	16	0.313	0.08	0.15	0.23	0.30	0.38	0.45	0.53	0.61
3	18	0.375	0.11	0.22	0.33	0.42	0.52	0.62	0.73	0.83
4	20	0.438	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20
5	22	0.500	0.20	0.39	0.59	0.79	0.99	1.19	1.39	1.59
6	24	0.563	0.25	0.48	0.72	0.96	1.20	1.44	1.68	1.92
7	26	0.625	0.31	0.61	0.91	1.21	1.51	1.81	2.11	2.41
8	28	0.688	0.37	0.74	1.11	1.51	1.91	2.31	2.71	3.11
9	30	0.750	0.44	0.88	1.33	1.83	2.33	2.83	3.33	3.83
10	32	0.813	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00
11	34	0.875	0.56	1.10	1.65	2.20	2.75	3.30	3.85	4.40
12	36	0.938	0.63	1.20	1.80	2.40	3.00	3.60	4.20	4.80
13	38	1.000	0.69	1.30	1.95	2.60	3.20	3.80	4.40	5.00
14	40	1.063	0.75	1.40	2.10	2.80	3.40	4.00	4.60	5.20
15	42	1.125	0.81	1.50	2.25	3.00	3.60	4.20	4.80	5.40
16	44	1.188	0.88	1.60	2.40	3.20	3.80	4.40	5.00	5.60
17	46	1.250	0.94	1.70	2.55	3.40	4.00	4.60	5.20	5.80
18	48	1.313	1.00	1.80	2.70	3.60	4.20	4.80	5.40	6.00
19	50	1.375	1.06	1.90	2.85	3.80	4.40	5.00	5.60	6.20
20	52	1.438	1.12	2.00	3.00	4.00	4.60	5.20	5.80	6.40
21	54	1.500	1.19	2.10	3.15	4.20	4.80	5.40	6.00	6.60
22	56	1.563	1.25	2.20	3.30	4.40	5.00	5.60	6.20	6.80
23	58	1.625	1.31	2.30	3.45	4.60	5.20	5.80	6.40	7.00
24	60	1.688	1.37	2.40	3.60	4.80	5.40	6.00	6.60	7.20
25	62	1.750	1.44	2.50	3.75	5.00	5.60	6.20	6.80	7.40
26	64	1.813	1.50	2.60	3.90	5.20	5.80	6.40	7.00	7.60
27	66	1.875	1.56	2.70	4.05	5.40	6.00	6.60	7.20	7.80
28	68	1.938	1.62	2.80	4.20	5.60	6.20	6.80	7.40	8.00
29	70	2.000	1.69	2.90	4.35	5.80	6.40	7.00	7.60	8.20
30	72	2.063	1.75	3.00	4.50	6.00	6.60	7.20	7.80	8.40
31	74	2.125	1.81	3.10	4.65	6.20	6.80	7.40	8.00	8.60
32	76	2.188	1.88	3.20	4.80	6.40	7.00	7.60	8.20	8.80
33	78	2.250	1.94	3.30	4.95	6.60	7.20	7.80	8.40	9.00
34	80	2.313	2.00	3.40	5.10	6.80	7.40	8.00	8.60	9.20
35	82	2.375	2.06	3.50	5.25	7.00	7.60	8.20	8.80	9.40
36	84	2.438	2.12	3.60	5.40	7.20	7.80	8.40	9.00	9.60
37	86	2.500	2.19	3.70	5.55	7.40	8.00	8.60	9.20	9.80
38	88	2.563	2.25	3.80	5.70	7.60	8.20	8.80	9.40	10.00
39	90	2.625	2.31	3.90	5.85	7.80	8.40	9.00	9.60	10.20
40	92	2.688	2.37	4.00	6.00	8.00	8.60	9.20	9.80	10.40
41	94	2.750	2.44	4.10	6.15	8.20	8.80	9.40	10.00	10.60
42	96	2.813	2.50	4.20	6.30	8.40	9.00	9.60	10.20	10.80
43	98	2.875	2.56	4.30	6.45	8.60	9.20	9.80	10.40	11.00
44	100	2.938	2.62	4.40	6.60	8.80	9.40	10.00	10.60	11.20
45	102	3.000	2.69	4.50	6.75	9.00	9.60	10.20	10.80	11.40
46	104	3.063	2.75	4.60	6.90	9.20	9.80	10.40	11.00	11.60
47	106	3.125	2.81	4.70	7.05	9.40	10.00	10.60	11.20	11.80
48	108	3.188	2.88	4.80	7.20	9.60	10.20	10.80	11.40	12.00
49	110	3.250	2.94	4.90	7.35	9.80	10.40	11.00	11.60	12.20
50	112	3.313	3.00	5.00	7.50	10.00	10.60	11.20	11.80	12.40
51	114	3.375	3.06	5.10	7.65	10.20	10.80	11.40	12.00	12.60
52	116	3.438	3.12	5.20	7.80	10.40	11.00	11.60	12.20	12.80
53	118	3.500	3.19	5.30	7.95	10.60	11.20	11.80	12.40	13.00
54	120	3.563	3.25	5.40	8.10	10.80	11.40	12.00	12.60	13.20
55	122	3.625	3.31	5.50	8.25	11.00	11.60	12.20	12.80	13.40
56	124	3.688	3.37	5.60	8.40	11.20	11.80	12.40	13.00	13.60
57	126	3.750	3.44	5.70	8.55	11.40	12.00	12.60	13.20	13.80
58	128	3.813	3.50	5.80	8.70	11.60	12.20	12.80	13.40	14.00
59	130	3.875	3.56	5.90	8.85	11.80	12.40	13.00	13.60	14.20
60	132	3.938	3.62	6.00	9.00	12.00	12.60	13.20	13.80	14.40
61	134	4.000	3.69	6.10	9.15	12.20	12.80	13.40	14.00	14.60
62	136	4.063	3.75	6.20	9.30	12.40	13.00	13.60	14.20	14.80
63	138	4.125	3.81	6.30	9.45	12.60	13.20	13.80	14.40	15.00
64	140	4.188	3.88	6.40	9.60	12.80	13.40	14.00	14.60	15.20
65	142	4.250	3.94	6.50	9.75	13.00	13.60	14.20	14.80	15.40
66	144	4.313	4.00	6.60	9.90	13.20	13.80	14.40	15.00	15.60
67	146	4.375	4.06	6.70	10.05	13.40	14.00	14.60	15.20	15.80
68	148	4.438	4.12	6.80	10.20	13.60	14.20	14.80	15.40	16.00
69	150	4.500	4.19	6.90	10.35	13.80	14.40	15.00	15.60	16.20
70	152	4.563	4.25	7.00	10.50	14.00	14.60	15.20	15.80	16.40
71	154	4.625	4.31	7.10	10.65	14.20	14.80	15.40	16.00	16.60
72	156	4.688	4.37	7.20	10.80	14.40	15.00	15.60	16.20	16.80
73	158	4.750	4.44	7.30	10.95	14.60	15.20	15.80	16.40	17.00
74	160	4.813	4.50	7.40	11.10	14.80	15.40	16.00	16.60	17.20
75	162	4.875	4.56	7.50	11.25	15.00	15.60	16.20	16.80	17.40
76	164	4.938	4.62	7.60	11.40	15.20	15.80	16.40	17.00	17.60
77	166	5.000	4.69	7.70	11.55	15.40	16.00	16.60	17.20	17.80
78	168	5.063	4.75	7.80	11.70	15.60	16.20	16.80	17.40	18.00
79	170	5.125	4.81	7.90	11.85	15.80	16.40	17.00	17.60	18.20
80	172	5.188	4.88	8.00	12.00	16.00	16.60	17.20	17.80	18.40
81	174	5.250	4.94	8.10	12.15	16.20	16.80	17.40	18.00	18.60
82	176	5.313	5.00	8.20	12.30	16.40	17.00	17.60	18.20	18.80
83	178	5.375	5.06	8.30	12.45	16.60	17.20	17.80	18.40	19.00
84	180	5.438	5.12	8.40	12.60	16.80	17.40	18.00	18.60	19.20
85	182	5.500	5.19	8.50	12.75	17.00	17.60	18.20	18.80	19.40
86	184	5.563	5.25	8.60	12.90	17.20	17.80	18.40	19.00	19.60
87	186	5.625	5.31	8.70	13.05	17.40	18.00	18.60	19.20	19.80
88	188	5.688	5.37	8.80	13.20	17.60	18.20	18.80	19.40	20.00
89	190	5.750	5.44	8.90	13.35	17.80	18.40	19.00	19.60	20.20
90	192	5.813	5.50	9.00	13.50	18.00	18.60	19.20	19.80	2