Appendix C

Historic Plans

C-1 – Excerpts from Final Drainage Report for the Parker 234 Subdivision
C-2 – Chambers and Hess Filing No. 1 Drainage Map
C-3 – Design Flows for EX-1 (A-12)

The developed site can be divided into four (4) major basins, being Basins A, B, C and D. Each of these major basins contains a proposed water quality/ detention pond area.

Basin A

Basin A is comprised of most of the eastern portion of the project, including the proposed commercial site, and contributes runoff to Pond A. This facility if located in the northeasterly corner of the site, adjacent to and immediately west of the southerly extension of Jordan Rd. Pond A will discharge easterly, under Jordan Road, to the existing drainageway to Cherry Creek. Basin A is subdivided into thirteen sub-basins, and generally corresponds to historic basins C-3, C-4, C-5 and a portion of historic basin C-2. Runoff within Basin A flows overland to the internal storm drainage system, and ultimately in Pond A.

The proposed detention pond for Basin A serves only the residential portion. At such time that the commercial lot is developed, a separate detention and water quality facility will need to be provided to service that area.

Pond A is located in Tract B. Storm water will be directed to this pond via overland flow and Storm Drain Line B. The pond is sized to hold the required volume for 100-year detention and water quality per the Town of Parker and UDFCD requirements. This needed 100 year volume is 2.72. The water quality volume required is 0.68 Ac.ft. The total volume, including 100-year detention and WQCV, is accumulated by elevation 5992.1. The weir structure will have a top elevation at 5995.0 and a bottom equal to the 100-year water surface elevation, 5992.1. A 1.42' diameter orifice plate will be installed on the outlet pipe to control to pond's allowable release rate, 36.39 cfs. An outlet pipe is sized to convey 100% of the tributary developed 100-year flow, $Q_{100yr.}$ = 191.70 cfs. Storm events that exceed the volume provided in Pond A will be routed through the pond by the emergency overflow spillway. Both pond exits, the spillway and the storm drain, will be protected by riprap.

During initial and interim construction phases, Pond A will have a temporary riser pipe, rather than the permanent outlet structure to allow it to function as a sediment control pond. Also, the spillway will not be cut out of the earth berm that surrounds the pond, so that the pond can have additional volume, which may be needed during the construction operations that typically produce additional sediment. During the final stages of construction, the pond will be modified to include the earth-weir. The perforated outlet pipe will be replaced by the concrete outlet structure.

Basin B

Basin B includes the north-central portion of the project, and directs runoff to detention Pond B. This facility is located adjacent to and immediately southwesterly of the proposed alignment of Chambers Road. Discharge of the computed release rate from Pond B will travel under Chambers Road via a 42" RCP (Storm Line U), into the existing natural drainage-way at that location. The Antelope Heights project, immediately downstream from this discharge point, is coordinating engineering design to accommodate this historic runoff rate. Eventually, this pipe will be connected to the

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Project Name/Number Parker 234 / 01804102
Prepared By MEF Date 2-3-03
Sheet 1 of 5

- ☐ Telephone Log
- ☐ Meeting Record
- ☒ Calculations
- ☐ Other

Divide Basin A into Commercial & Residential

Commercial Property

developed

12.56 Ac. 95% impervious

↳ detention vol. $_{100}$ = 1.852 Ac. ft

WQCV = 0.562 Ac. ft.

2.414 Ac. ft.

Residential Property

30.25 Ac. 56% impervious

↳ detention vol. $_{100}$ = 2.718 Ac. ft.

WQCV = 0.676 Ac. ft.

3.394 Ac. ft. = 147,843 ft^3

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Project Name/Number Parker 234 / 01804102
Date: 2-3-03
Sheet 2 of 5

Telephone Log ☐
Meeting Record ☐
Calculations ☒
Other ☐

POND A

Area = 30.25 Ac.

# of homes = 130 avg. sq. footage = 1660 ft², 2 story

Area (park) = 1.71 Ac.

Area (lots) = 15.46 Ac.

Area (roads) = 11.19 Ac.

Area (open space) = 4.05 Ac.

130/15.46 = 8.41 dwellings/Ac. → 36% impervious per RO-5

$$\frac{1.71(5\%) + 15.46(36\%) + 11.19(100\%) + 4.05(0\%)}{30.25\,Ac.} = 56\%$$

DETENTION REQUIREMENTS - ONSITE BASINS

Subdivision: Parker 234
Location: Parker

Project Name: Parker 234
Project No. 1804102
By: MEF
Checked By: KAL
Date: 01/24/03

SOIL GROUPS B/C **Q10R= 0.23** **Q100R= 0.85**

Note: Allowable release rates for type C soil groups is greater than type B soils, however, rates for type B soil was used for conservatism.

BASIN/LAND USE	DRAINAGE AREA (AC.)	% IMPERV.	V_{10} (AC. FT.)	V_{100} (AC. FT.)	Q_{10R} (CFS)	Q_{100R} (CFS)
Basin A	30.25	56	1.552	2.718	6.96	25.71
Basin B	59.88	54	2.958	5.193	13.77	50.90
Basin C	8.50	25	0.186	0.337	1.96	7.23
Basin D	34.41	26	0.785	1.423	7.91	29.25
Commerical Property	12.6	95	1.110	1.852	2.89	10.68
SUM			6.590	11.524	33.5	123.8

DETENTION PONDING FORMULAS:

$V_{100} = K_{100} \times A$ $K_{100} = (1.78I-0.002I^2-3.56)/1000$ $Q_{100R} = Q100R \times A$

$V_{10} = K_{10} \times A$ $K_{10} = (0.95I-1.90)/1000$ $Q_{10R} = Q10R \times A$

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: MEF
Company: CVL Consultants
Date: January 31, 2003
Project: Parker 234
Location: Pond A

1. Basin Storage Volume	
A) Tributary Area's Imperviousness Ratio (i = I_a / 100)	I_a = 56.00 % i = 0.56
B) Contributing Watershed Area (Area)	Area = 30.25 acres
C) Water Quality Capture Volume (WQCV) (WQCV =1.0 * (0.91 * i^3 - 1.19 * i^2 + 0.78 * i))	WQCV = 0.22 watershed inches
D) Design Volume: Vol = (WQCV / 12) * Area * 1.2	Vol = 0.676 acre-feet
2. Outlet Works	
A) Outlet Type (Check One)	X Orifice Plate Perforated Riser Pipe Other:
B) Depth at Outlet Above Lowest Perforation (H)	H = 4.27 feet
C) Required Maximum Outlet Area per Row, (A_o)	A_o = 0.52 square inches
D) Perforation Dimensions **(enter one only)**: i) Circular Perforation Diameter **OR** ii) 2" Height Rectangular Perforation Width	D = 0.813 inches, **OR** W = inches
E) Number of Columns (nc, See Table 6a-1 For Maximum)	nc = 1 number
F) Actual Design Outlet Area per Row (A_o)	A_o = 0.52 square inches
G) Number of Rows (nr)	nr = 13 number
H) Total Outlet Area (A_{ot})	A_{ot} = 6.65 square inches
3. Trash Rack	
A) Needed Open Area: A_t = 0.5 * (Figure 7 Value) * A_{ot}	A_t = 231 square inches
B) Type of Outlet Opening (Check One)	X ≤ 2" Diameter **Round** 2" High **Rectangular** Other:
C) For 2", or Smaller, **Round Opening** (Ref.: Figure 6a):	
i) Width of Trash Rack and Concrete Opening (W_{conc}) from Table 6a-1	W_{conc} = 6 inches
ii) Height of Trash Rack Screen (H_{TR})	H_{TR} = 81 inches

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: MEF
Company: CVL Consultants
Date: January 31, 2003
Project: Parker 234
Location: Pond A

iii) Type of Screen (Based on Depth H), Describe if "Other"	x S.S. #93 VEE Wire (US Filter) ___ Other: ___
iv) Screen Opening Slot Dimension, Describe if "Other"	X 0.139" (US Filter) ___ Other: ___
v) Spacing of Support Rod (O.C.) Type and Size of Support Rod (Ref.: Table 6a-2)	0.75 inches #156 VEE
vi) Type and Size of Holding Frame (Ref.: Table 6a-2)	3/8 in. x 1.0 in. flat bar
D) For 2" High **Rectangular Opening** (Refer to Figure 6b):	
I) Width of Rectangular Opening (W)	W = ___ inches
ii) Width of Perforated Plate Opening (W_{conc} = W + 12")	W_{conc} = ___ inches
iii) Width of Trashrack Opening ($W_{opening}$) from Table 6b-1	$W_{opening}$ = ___ inches
iv) Height of Trash Rack Screen (H_{TR})	H_{TR} = ___ inches
v) Type of Screen (based on depth H) (Describe if "Other")	___ Klemp™ KPP Series Aluminum ___ Other: ___
vi) Cross-bar Spacing (Based on Table 6b-1, Klemp™ KPP Grating). Describe if "Other"	___ inches ___ Other: ___
vii) Minimum Bearing Bar Size (Klemp™ Series, Table 6b-2) (Based on depth of WQCV surcharge)	
4. Detention Basin length to width ratio	1.00 (L/W)
5 Pre-sedimentation Forebay Basin - Enter design values	
A) Volume (no less than 5% of Design Volume from 1D)	0.062 acre-feet
B) Surface Area	0.067 acres
C) Connector Pipe Diameter (Size to drain this volume in 5-minutes under inlet control)	6 inches
D) Paved/Hard Bottom and Sides	y yes/no

Design Procedure Form: Extended Detention Basin (EDB) - Sedimentation Facility

Designer: MEF
Company: CVL Consultants
Date: January 31, 2003
Project: Parker 234
Location: Pond A

6. Two-Stage Design - See Figure EDB-1	
A) Top Stage (Depth D_{WQ} = 2' Minimum)	D_{WQ} = 2.60 feet Storage= 0.645 acre-feet
B) Bottom Stage Depth (D_{BS} = 1.0' Minimum, 2.0' Maximum) Bottom Stage Storage (no less than 3% of Design Volume (0.02027596032 acre-feet.)	D_{BS} = 1.50 feet Storage= 0.031 acre-feet Surf. Area= 0.021 acres
C) Micro Pool (Minimum Depth = the Larger of 0.5 * Top Stage Depth (1.3 ') or 2.5 '	Depth= 2.50 feet Storage= 0.024 acre-feet Surf. Area= 0.010 acres
D) Total Volume: Vol_{tot} = Storage from 5A + 6A + 6B (Must be > Design Volume in 1D, or 0.675865344 acre-feet.)	Vol_{tot} = 0.738 acre-feet
7. Basin Side Slopes (Z, horizontal distance per unit vertical) Minimum Z = 4, Flatter Preferred	Z = 4.00 (horizontal/vertical)
8. Dam Embankment Side Slopes (Z, horizontal distance) per unit vertical) Minimum Z = 3, Flatter Preferred	Z = 4.00 (horizontal/vertical)
9. Vegetation (Check the method or describe "Other")	x Native Grass Irrigated Turf Grass Other:

Notes:

Pond Volume
(FAA Method)

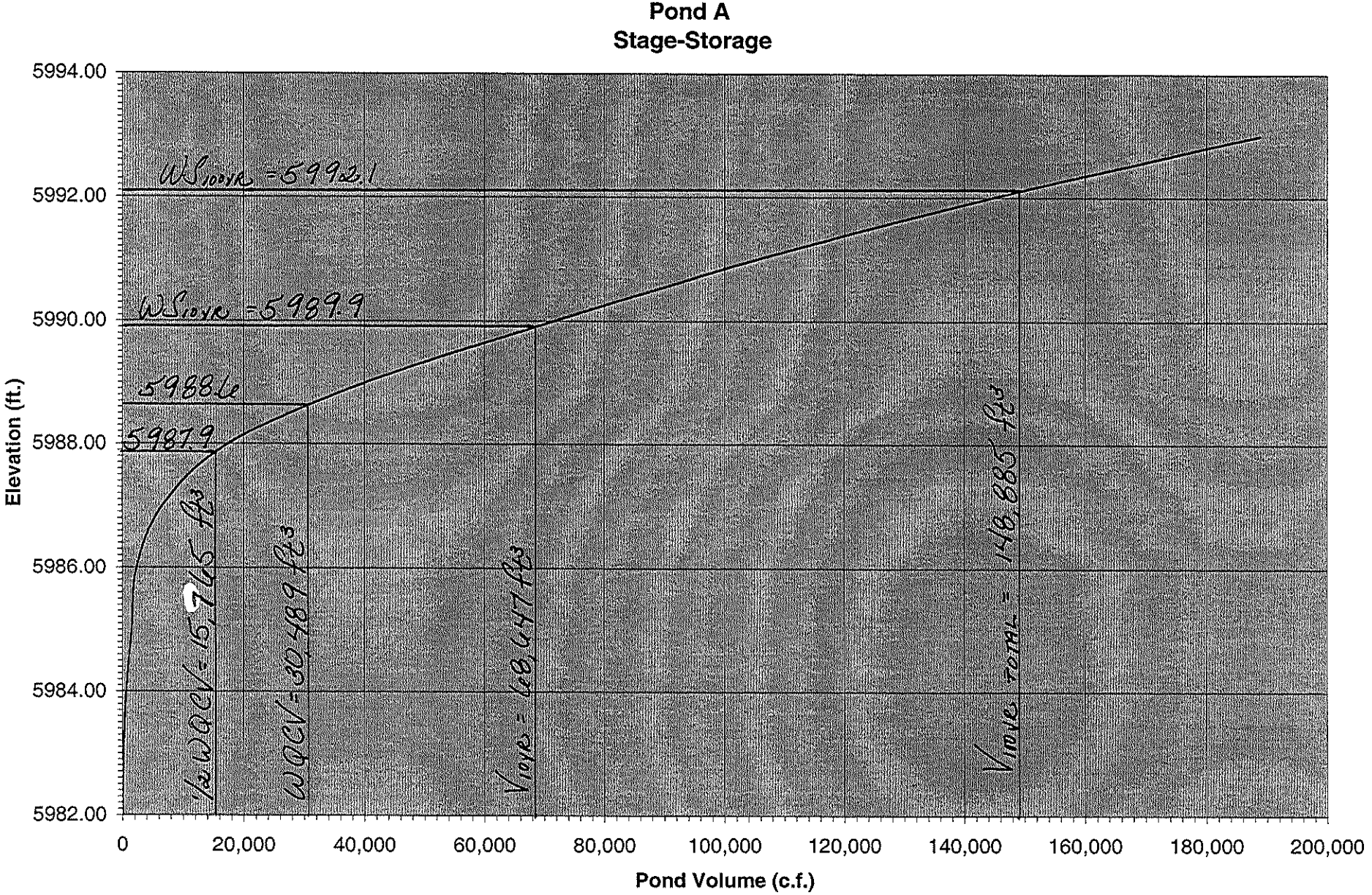
Subdivision Parker 234
Location Parker

Project Name: Parker 234
Project No. 1804102
By: MEF
Checked By: KAL
Date: 1/31/03

Volume=1/3 x Depth x (A+B+(A*B)^0.5)
A - Upper Surface
B - Lower Surface

Pond A

Elevation	Surface Area (square feet)	A+B+(A*B)^0.5	1/3	Depth (feet)	Volume (cubic feet)	CumulativeVolume (cubic feet)
5982.00	0	0.0	0.0	0.00	0	0
5983.00	301	301.0	100.3	1.00	100	100
5984.00	751	1527.4	509.1	1.00	509	609
5984.50	984	2594.6	864.9	0.50	432	1,042
5985.00	1,332	3083.2	1027.7	0.50	514	1,556
5986.00	2,485	2485.0	828.3	1.00	828	2,384
5987.00	6,297	12737.8	4245.9	1.00	4,246	6,630
5988.00	16,152	32534.1	10844.7	1.00	10,845	17,475
5989.00	29,981	68138.8	22712.9	1.00	22,713	40,188
5990.00	32,693	93981.6	31327.2	1.00	31,327	71,515
5991.00	35,507	102271.0	34090.3	1.00	34,090	105,605
5992.00	42,544	116917.6	38972.5	1.00	38,973	144,578
5993.00	46,080	132900.7	44300.2	1.00	44,300	188,878



Parker 234-Pond A
Project No. 01804102
1/31/03
Drainage.xls

Emergency Spillway Weir Calculations

Project Name: Parker 234
Project No. 1804102
Calculated By: MEF
Checked By: KAL
Date: 1/31/03

Weir Equation:

$Q = C*L*(H)^{3/2}$

$C_d =$ 3.37 (trapezoidal weirs)

Note: Weirs are designed to pass 2x the 100yr. tributary flow.
(Refer to SF-3 form)

Pond A Emergency Spillway

Flow Rate ($2*Q_{100}$) =	**383.4**	**cfs**
Top of Berm Elevation =	**5995.00**	**feet**
Emergency Spillway Elevation =	**5994.00**	**feet**
100 yr. Water Surface Elevation =	**5992.10**	**feet**
Height (H)=	**1.90**	feet
Length (D) =	43.48	feet

Freeboard = 1.00

Pond B Emergency Spillway

Flow Rate ($2*Q_{100}$) =	**353.1**	**cfs**
Top of Berm Elevation =	**6089.00**	**feet**
Emergency Spillway Elevation =	**6088.00**	**feet**
Bottom of Berm Elevation* =	**6086.00**	**feet**
Height (H)=	**2.00**	feet
Length (D) =	37.08	feet

Freeboard = 1.00

**100 yr. W.S. Elevation = 6083.8 feet*

Pond C Emergency Spillway

Flow Rate ($2*Q_{100}$) =	**58.1**	**cfs**
Top of Berm Elevation =	**6118.00**	**feet**
Emergency Spillway Elevation =	**6117.00**	**feet**
100 yr. Water Surface Elevation =	**6116.20**	**feet**
Height (H)=	**0.80**	feet
Length (D) =	24.13	feet

Freeboard = 1.00

Pond D Emergency Spillway

Flow Rate ($2*Q_{100}$) =	**160.0**	**cfs**
Top of Berm Elevation =	**6050.50**	**feet**
Emergency Spillway Elevation =	**6049.50**	**feet**
100 yr. Water Surface Elevation =	**6048.50**	**feet**
Height (H)=	**1.00**	feet
Length (D) =	47.53	feet

Freeboard = 1.00

Circular Orifice Sizing

Pond A

DATA:

Flow Rate (Q) =	**25.71**	**cfs**
Water Surface Elevation =	**5992.10**	**feet**
Invert of Orifice =	**5981.80**	**feet**
Height of water surface = to invert of orifice (Y)	10.30	feet
Diameter of Orifice (D) =	1.42	feet
Height of water surface = to centroid of orifice (h)	10.30	feet
C_d =	0.65	for circular orifices
g =	32.20	ft/s^2

Project Name: Parker 234
Project No. 1804102
Calculated By: MEF
Checked By: KAL
Date: 01/31/03

Orifice Equation:

$$Q = C_d*A*(2gh)^{1/2}$$

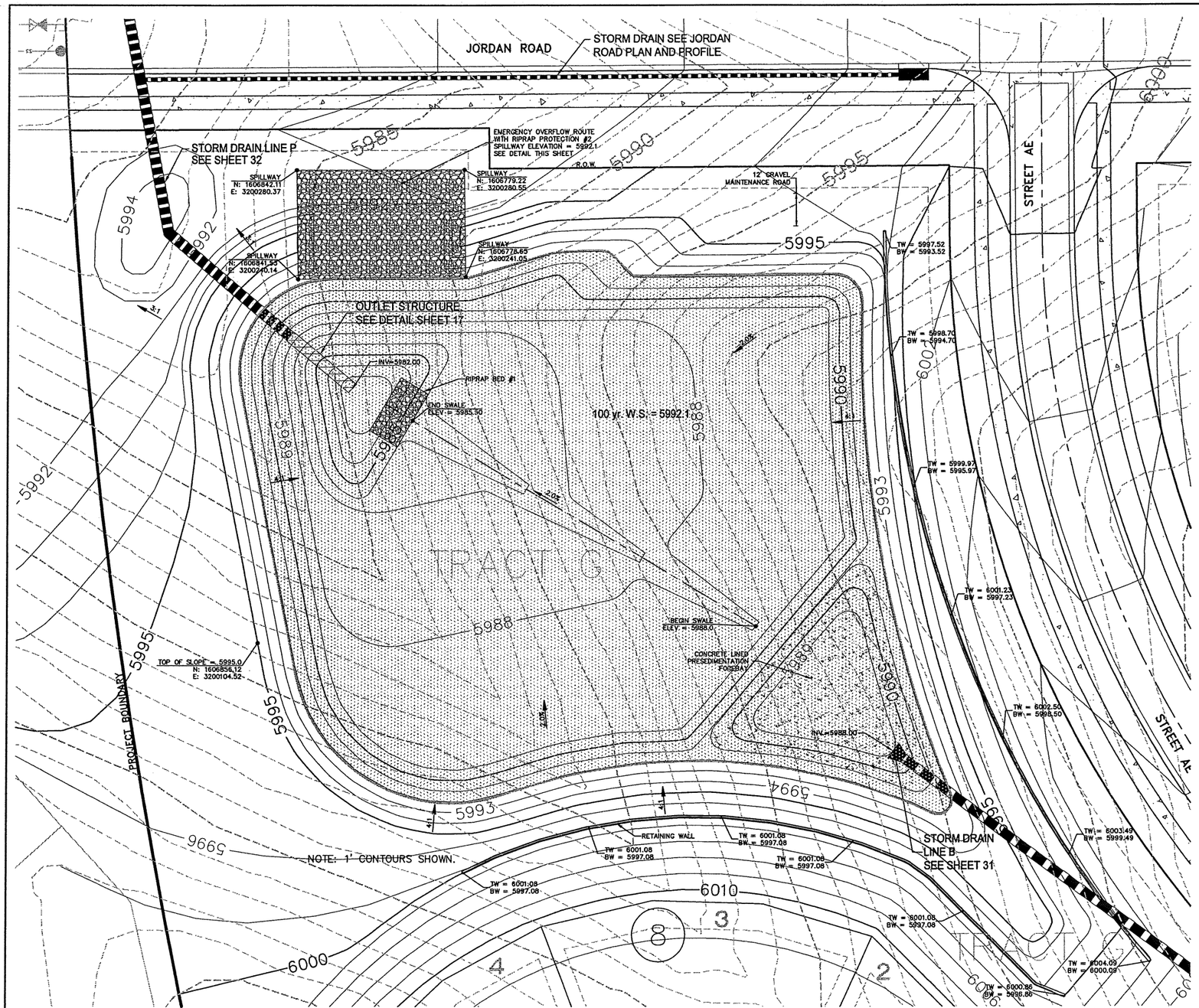
$$Q = C_d*3.1415*D^2/4*(2gh)^{1/2}$$

$$Q = 0.65*3.1415*D^2/4*(2*32.2*h)^{1/2}$$

$$D = (Q/(.5105*(64.4*h)^{1/2}))^{1/2}$$

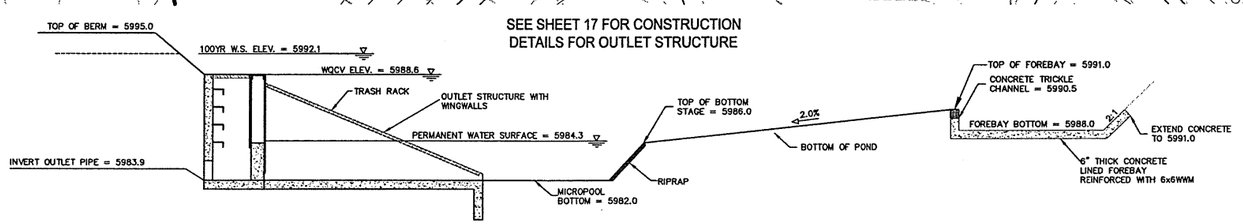
Calculation Table for Orifice Size

%	h = %*Y	Diam. (D)	Actual h	h/Y
98%	10.09	1.41	9.60	93%
97%	9.99	1.41	9.60	93%
96%	9.89	1.41	9.59	93%
95%	9.79	1.42	9.59	93%
94%	9.68	1.42	9.59	93%
93%	9.58	1.42	9.59	93%
92%	9.48	1.43	9.59	93%
91%	9.37	1.43	9.58	93%
90%	9.27	1.44	9.58	93%
89%	9.17	1.44	9.58	93%
88%	9.06	1.44	9.58	93%
87%	8.96	1.45	9.58	93%
86%	8.86	1.45	9.57	93%
85%	8.76	1.46	9.57	93%
84%	8.65	1.46	9.57	93%
83%	8.55	1.47	9.57	93%
82%	8.45	1.47	9.57	93%
81%	8.34	1.47	9.56	93%
80%	8.24	1.48	9.56	93%
79%	8.14	1.48	9.56	93%
78%	8.03	1.49	9.56	93%



SEE SHEET 17 FOR CONSTRUCTION DETAILS FOR OUTLET STRUCTURE

POND A: PLAN
HORIZONTAL SCALE: 1" = 20'



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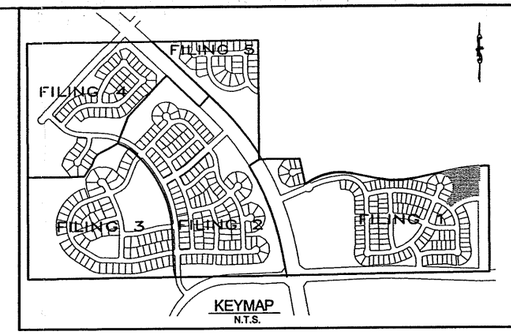
NOT TO SCALE



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SCALE: 1" = 20'

100 YR. WATER SURFACE

RIRAP SUMMARY TABLE

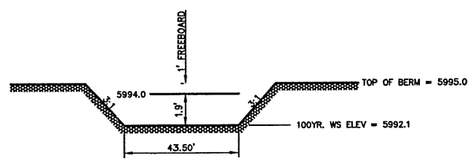
	RR#1	RR#2
LENGTH	23	61'
WIDTH	12	40'
DEPTH	2.5'	1.5'
SIZE, d50	9"	12"
TYPE	L	M

* SEE DETAIL

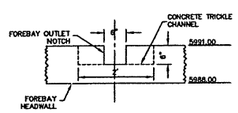
BURY TYPE L RIPRAP WITH 4" NATIVE TOPSOIL AND RESEED OR RESOD.

POND SUMMARY TABLE

	Q 10yr.	Q 100yr.
PEAK INFLOW (cfs)	127.4	191.7
PEAK OUTFLOW (cfs)	7.0	50.9
WQCV (Ac.Ft.)	0.68	
10 yr. REQUIRED VOL. (Ac.Ft.)	1.55	
100 yr. REQUIRED VOL. (Ac.Ft.)	2.72	
DETENTION CAPACITY (Ac.Ft.)	3.42	
AVAILABLE FREEBOARD (ft.)	1.0	



EMERGENCY SPILLWAY DETAIL



FOREBAY OUTLET NOTCH

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1-800-922-1987
534-6700 METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

No.	Revisions	Date	Appr.	Init.	Date
-					
-					
-					
-					

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Fax: (720) 482-3546

Continental Homes
7600 East Orchard Road, Ste. 165-S
Greenwood Village, CO 80111

DOUGLAS 234
FILING 1
STREET AND DRAINAGE IMPROVEMENTS
POND A

SCALE: AS SHOWN
FILE NO: 01804102
DRAWN BY: JAM
CHECKED BY: KAL
DATE: FEBRUARY 2003
SHEET NUMBER 16
DRAWING: 16-PondA

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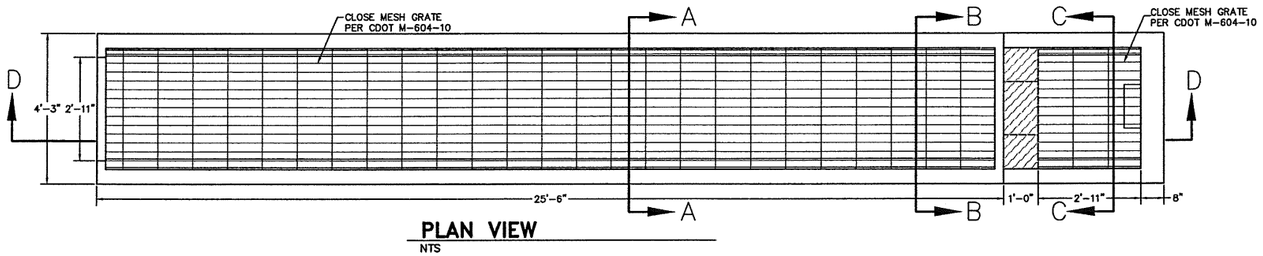
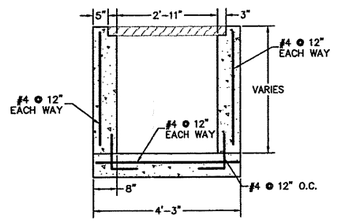
POND A DETAILS



PLAN VIEW
NTS



SECTION A-A
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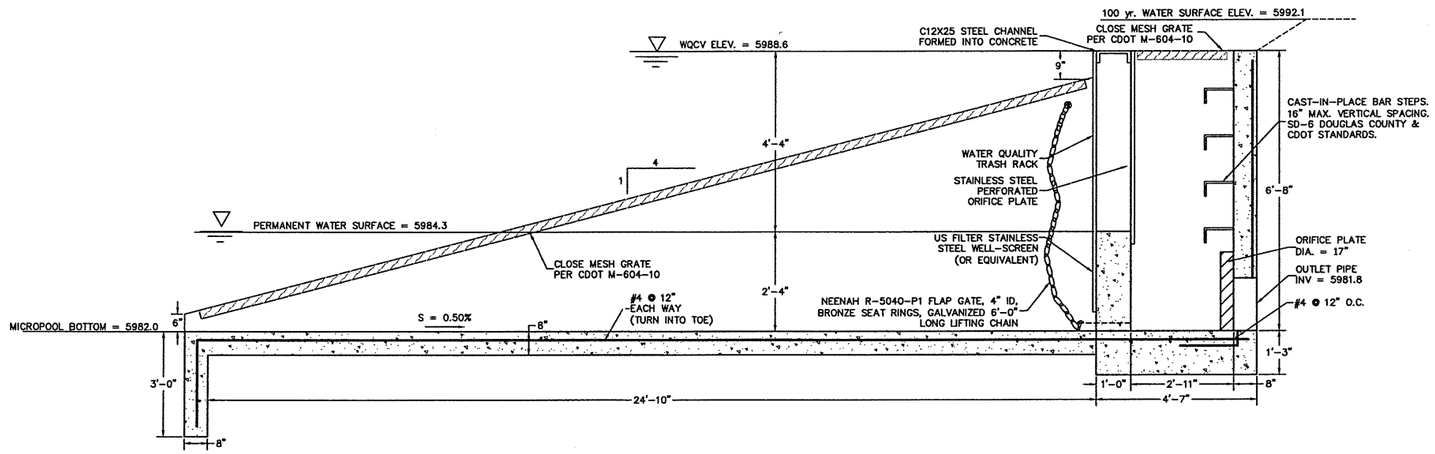

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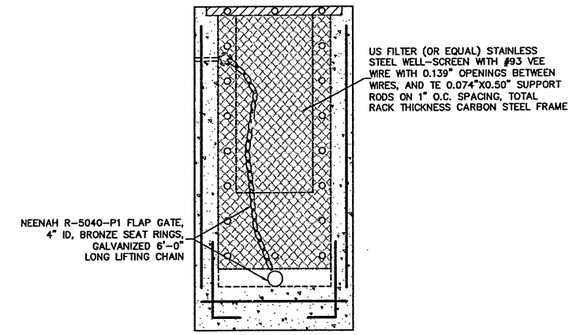

SECTION B-B
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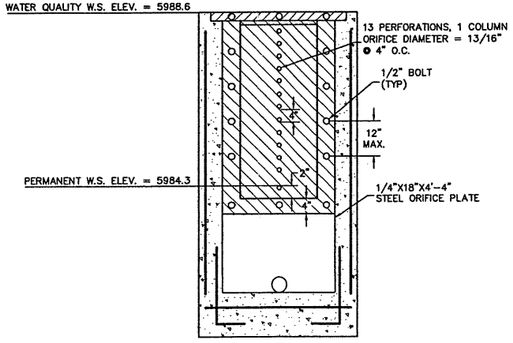

SECTION C-C
NTS

No.	Revisions	Date	Init.	Appr.	Date
-					
-					
-					

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Greenwood Village, CO 80111

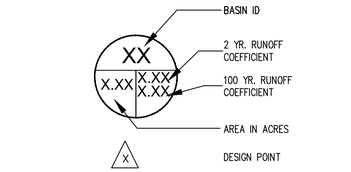
DOUGLAS 234
FILING 1
STREET AND DRAINAGE IMPROVEMENTS
POND A OUTLET DETAILS

SHEET NUMBER	17	SCALE:	AS SHOWN
DRAWN BY:	MEF	FILE NO:	01804102
CHECKED BY:	KAL		
DATE:	FEBRUARY 2003		

DRAWING: 17-PONDA-DET

N:\Projects\01804102\dwg\Preliminary\Filing1\Town-of-Parker\17-PONDA-DET.dwg, 02/07/2003 09:53:51 AM, \\C_VLHP8000, JAM

LEGEND



DESIGN POINT SUMMARY

DESIGN POINT	PEAK RUNOFF 2YR (CFS)	PEAK RUNOFF 100YR (CFS)
1	1.9	6.5
2	3.8	13.2
3	5.5	19.4
4	7.3	25.7
5	8.7	30.7
6	3.1	10.7
7	4.6	16.0
8	5.8	20.1
9	1.1	7.2
10	1.0	4.3
11	6.9	27.6
12	13.8	52.6
13	14.6	55.6
14	2.6	9.0
15	19.0	71.1
16	19.0	72.5
17	2.3	9.1

BASIN SUMMARY

BASIN	Q2 CFS	Q100 CFS
A1	1.9	6.5
A2	2.0	6.9
A3	1.9	6.6
A4	2.0	6.8
A5	1.6	5.7
A6	3.1	10.7
A7	1.6	5.5
A8	1.2	4.2
A9	1.0	4.7
A10	1.0	4.3
A11	1.5	5.0
A12	2.6	9.0
A13	3.4	11.8
A14	0.0	1.8
HESS1	2.3	7.8
HESS2	0.1	0.5
OS1	0.0	1.4

POST-DEVELOPMENT DRAINAGE MAP FOR CHAMBERS & HESS FILING NO. 1

SHEET 2 OF 2

D-1173
DATE: MAY 5, 2020

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NOT FOR CONSTRUCTION – EXHIBIT FOR DRAINAGE STUDY REPORT ONLY

STANDARD FORM SF-3
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

CALCULATED BY: BHE
DATE: 5/4/20
CHECKED BY:
P1= 2.60
JOB NO: D01173
PROJECT: CHAMBERS AND HESS FILING NO. 1
DESIGN STORM: 100 YEAR

BASIN	DESIGN POINT	DIRECT RUNOFF							TOTAL RUNOFF				STREET		PIPE			TRAVEL TIME			REMARKS
		AREA DESIG.	AREA (Acres)	RUNOFF COEFF	Tc (min)	C A (Acres)	I (in/hour)	Q (cfs)	Tc (min)	(C A) (Acres)	I (in/hour)	Q (cfs)	SLOPE (%)	STREET FLOW (cfs)	DESIGN FLOW (cfs)	SLOPE (%)	PIPE SIZE (in)	LENGTH (ft)	VELOCITY (fps)	Tt (min)	
A1	1	A1	0.94	0.79	5.0	0.74	8.82	**6.5**							6.5	1.2	18	147	6.7	0.4	INL-09 TO INL-08
A2	2		0.99	0.79	5.0	0.78	8.82	**6.9**													
	2	A1+A2							5.4	1.53	8.65	**13.2**			13.2	1.8	18	141	9.0	0.3	INL-08 TO INL-07
A3	3		0.94	0.79	5.0	0.75	8.82	**6.6**													
	3	A1-A3							5.6	2.27	8.54	**19.4**			19.4	3.2	24	137	12.6	0.2	INL-07 TO INL-06
A4	4		0.97	0.79	5.0	0.77	8.82	**6.8**													
	4	A1-A4							5.8	3.04	8.46	**25.7**			25.7	1.8	24	218	10.8	0.3	INL-06 TO INL-05
A5	5		0.81	0.79	5.0	0.64	8.82	**5.7**													
	5	A1-A5							6.1	3.68	8.32	**30.7**			30.7	10.5	24	136	22.3	0.1	INL-05 TO SDMH-01
A6	6	A6	1.54	0.79	5.0	1.22	8.82	**10.7**							10.7	3.0	18	146	10.6	0.2	INL-14 TO INL-13
A7	7	A6-A7	0.79	0.79	5.0	0.62	8.82	**5.5**	5.2	1.84	8.71	**16.0**			16.0	6.3	24	115	15.4	0.1	INL-13 TO INL-12
A8	8	A6-A8	0.61	0.79	5.0	0.48	8.82	**4.2**	5.4	2.32	8.66	**20.1**			20.1	5.0	24	76	15.0	0.1	INL-12 TO INL-11
OS1			0.33	0.49	5.0	0.16	8.82	**1.4**													
HESS1	17	HESS1	1.30	0.80	8.4	1.04	7.52	**7.8**	8.4	1.21	7.52	**9.1**									
									8.4	0.84	7.52	**6.3**									CAPTURED BY INLET INL-15
									8.4	0.37	7.52	**2.8**									BYPASSED INLET 15 TO INLET A11
HESS2			0.06	0.83	5.0	0.05	8.82	**0.5**													
A9	9	A9+HESS1+HESS2	0.93	0.70	9.1	0.65	7.29	**4.7**	9.1	1.07	7.29	**7.8**									INL-11 INLET DESIGN
		A6-A9+HESS1+ HESS2							9.1	3.39	7.29	**24.7**			24.7	0.5	24	11	7.9	0.0	DP9: RUNOFF LEAVING INL-11
A10	10	A10	0.83	0.72	9.8	0.60	7.10	**4.3**							4.3	0.5	18	21	4.4	0.1	INL-10 TO SDMH-02
	11	A6-A10							9.9	3.99	7.07	**28.2**			28.2	0.5	24	294	9.0	0.5	SDMH-02 TO SDMH-01
	12	A1-A10							10.4	7.67	6.92	**53.1**			53.1	0.5	36	199	7.5	0.4	SDMH-01 TO INL-04
A11	13	A1-A11	0.72	0.79	5.0	0.57	8.82	**5.0**	10.8	8.24	6.81	**56.1**			56.1	0.5	36	88	7.9	0.2	INL-04 TO INL-02
A12	14	A12	1.29	0.79	5.0	1.02	8.82	**9.0**							9.0	8.1	18	179	14.6	0.2	INL-03 TO INL-02

Proposed flow is 8.8 cfs

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