



FINAL DRAINAGE REPORT - SURFACE ROUTING SUMMARY

Design Point(s)	Contributing Basins	Intensity			Flow		COMMENT		
		Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	I(5)	I(100)		Q(5)	Q(100)
1	BASIN A & B	19.14	21.04	10.5	4.05	6.80	78	143	SPRINGS @FF APTS AND FUTURE PARCEL
2	BASIN C	6.01	6.71	12.7	3.78	6.34	23	43	EX. FED DRIVE
3	BASINS D, E	3.57	3.92	5.0	5.17	8.68	10	34	FF CAMPUS FIL. 1 AND FUTURE
4	BASIN Q	1.63	1.78	5.1	5.13	8.61	8	15	FUTURE COMMERCIAL
5	BASIN K, L	1.91	2.06	5.6	5.01	8.41	10	17	FUTURE COMMERCIAL
6	BASIN M	2.39	2.67	6.3	4.83	8.10	12	22	FUTURE COMMERCIAL
7	BASIN N, 1/2 BASIN O, P3, P4	2.68	2.93	8.6	4.36	7.31	12	21	PROP. # PRIV. INLET
8	BASIN P5, 1/2 BASIN O	1.16	1.25	8.6	4.36	7.31	5	9	PROP. # PRIV. INLET
9	BASIN P1	0.69	0.77	5.0	5.17	8.68	4	7	PROP. # PRIV. INLET
10	BASIN P2	0.51	0.57	5.0	5.17	8.68	3	5	PROP. # PRIV. INLET
11	BASIN P6	0.80	0.89	5.0	5.17	8.68	4	8	PROP. # PRIV. INLET
12	BASIN S1	0.53	0.60	5.0	5.17	8.68	3	5	PROP. # PRIV. INLET
13	BASIN S2	0.35	0.39	7.1	4.65	7.80	2	3	PROP. # PRIV. INLET
14	BASIN U1	0.63	1.37	16.4	3.39	5.69	2	8	PROP. # PRIV. INLET
15	BASIN U2	0.59	0.79	5.0	5.17	8.68	3	7	PROP. # PRIV. INLET
16	BASIN W, X, Y	7.33	8.10	7.3	4.59	7.71	34	62	FUTURE COMMERCIAL
17	BASIN Z	1.04	1.81	5.1	5.13	8.61	8	16	FUTURE COMMERCIAL

FINAL DRAINAGE REPORT - BASIN RUNOFF SUMMARY

BASIN	CA(2)	CA(5)	CA(100)	C(5)	OVERLAND		STREET / CHANNEL FLOW		TOTAL FLOWS									
					Length (ft)	Height (ft)	Length (ft)	Height (ft)	TOTAL (cfs)	Q(5) (cfs)	Q(100) (cfs)							
A	12.83	13.07	14.32	0.08	25	1	5.8	800	2.6%	2.8	4.7	19.5	323	4.05	6.80	41	53	98
B	5.96	6.07	6.67	0.08	25	1	5.8	800	2.6%	2.8	3.5	9.4	337	4.23	7.10	20	26	47
C	5.87	6.01	6.71	0.08	15	2	3.0	2000	3.0%	3.5	9.6	12.7	351	3.76	6.34	19	23	43
D	2.50	2.60	2.88	0.08	42	2	2.5	200	3.0%	3.0	1.0	9.0	4.42	5.17	8.68	11	13	25
E	0.95	0.97	1.06	0.08	80	2	2.2	200	3.0%	3.5	0.0	5.0	4.42	5.17	8.68	4	5	9
F	10.70	10.82	11.54	0.08	15	2	3.0	1200	2.6%	2.8	7.1	16.1	325	4.11	6.81	35	44	80
G	2.14	2.16	2.30	0.08	60	1	12.1	600	1.6%	2.0	5.0	17.1	266	3.33	5.56	6	7	13
H	6.27	6.34	6.78	0.08	5	1	1.5	200	4.0%	4.0	0.8	5.0	4.42	5.17	8.68	26	33	50
I	3.12	3.19	3.57	0.08	20	1	4.8	300	1.6%	2.0	2.5	7.3	366	4.56	7.71	11	15	28
J	4.36	4.37	7.00	0.08	25	4	3.7	600	2.6%	2.8	3.5	7.3	365	4.62	7.75	73	26	54
K	0.88	0.80	1.91	0.08	20	1	4.8	100	3.0%	3.5	0.7	5.0	3.99	5.01	6.41	4	5	8
L	0.92	0.94	1.05	0.08	20	1	4.8	100	3.0%	3.5	0.7	5.0	3.99	5.01	6.41	4	5	8
M	2.33	2.38	2.67	0.08	20	1	4.8	300	3.0%	3.5	1.4	6.3	3.85	4.63	6.10	8	12	22
N	0.89	1.01	1.11	0.08	10	0.5	2.4	100	2.6%	2.8	0.9	5.0	4.42	5.17	8.68	4	5	10
O	1.70	1.72	1.83	0.08	15	0.3	5.7	500	2.6%	2.8	2.9	8.6	3.47	4.35	5.71	6	7	13
P1	0.67	0.69	0.77	0.08	10	1	2.7	200	2.6%	2.8	1.2	5.0	4.42	5.17	8.68	3	4	7
P2	0.50	0.51	0.57	0.08	10	1	2.7	100	2.6%	2.8	0.6	5.0	4.42	5.17	8.68	2	3	5
P3	0.55	0.56	0.65	0.08	20	1	4.8	100	1.5%	2.4	0.7	5.5	4.00	5.02	6.45	2	3	5
P4	0.24	0.25	0.28	0.08	20	1	4.8	100	3.0%	3.5	0.5	5.3	4.05	5.07	6.52	1	1.3	2.4
P5	0.29	0.30	0.34	0.08	10	1	2.7	100	2.6%	2.8	0.6	5.0	4.42	5.17	8.68	1	1.6	2.9
P6	0.78	0.80	0.89	0.08	10	1	2.7	100	3.0%	3.5	0.5	5.0	4.42	5.17	8.68	3	4	8
Q	1.60	1.63	1.79	0.08	20	1	4.8	50	2.6%	2.8	0.3	5.1	4.09	5.13	6.51	7	8	15
R	1.10	1.21	1.29	0.08	0	0	0.0	50	1.6%	2.0	0.4	5.0	4.42	5.17	8.68	0	6	11
S1	0.52	0.53	0.60	0.08	40	6	4.8	220	3.0%	3.5	0.0	5.0	4.42	5.17	8.68	2	3	5
S2	0.34	0.35	0.39	0.08	20	0.5	6.1	220	3.0%	3.5	1.0	7.1	3.70	4.65	7.80	1	2	3
T	2.69	2.76	3.14	0.08	100	1	18.4	500	1.6%	2.0	4.2	22.6	233	2.81	4.88	6	8	15
U1	0.47	0.63	1.37	0.08	100	7	9.7	800	1.6%	2.0	6.7	16.4	2.71	3.39	5.69	1	2	3
U2	0.55	0.58	0.79	0.08	15	10	1.8	300	1.6%	2.0	2.5	5.0	4.42	5.17	8.68	2	3	7
V	1.10	1.12	1.19	0.08	0	0	0.0	50	1.6%	2.0	0.4	5.0	4.42	5.17	8.68	0	6	10
W	5.35	5.47	6.11	0.08	20	1	4.8	300	1.6%	2.0	2.5	7.3	3.66	4.59	7.71	25	25	47
X	0.81	0.82	0.87	0.08	20	1	4.8	100	1.6%	2.0	0.8	5.7	3.97	4.98	6.36	3	4	7
Y	1.03	1.04	1.11	0.08	20	1	4.8	100	1.6%	2.0	0.8	5.7	3.97	4.98	6.36	4	5	9
Z	1.61	1.64	1.81	0.08	20	1	4.8	50	2.6%	2.8	0.3	5.1	4.09	5.13	6.51	7	8	16
AA	0.23	0.34	0.67	0.08	80	6	1.5	300	1.6%	2.0	2.9	5.0	4.42	5.17	8.68	1	2	8
BB	0.20	0.44	1.13	0.08	12	0	1.6	600	1.6%	2.0	5.4	7.0	3.72	4.66	7.83	1	2	9

FINAL DRAINAGE REPORT - PIPE ROUTING SUMMARY

Pipe Run	Contributing Basins	Equivalent CA(5)	Equivalent CA(100)	Maximum Tc	Intensity		Flow		Pipe Size*
					I(5)	I(100)	Q(5)	Q(100)	
1	DP 1+ DP2	25.15	27.75	14.1	3.62	6.07	91	169	SPRINGS @FF APTS AND FUTURE PARCEL
2	DP 3	3.57	3.92	5.0	5.17	8.68	18	34	FF Camp. Fil. 1 and Fut. commercial
3	PIPE 1+2	28.71	31.67	14.1	3.62	6.07	104	192	TOTAL FLOW AT FEDERAL OUTFALL
4	DP 4 + PIPE 3	30.34	33.46	14.1	3.62	6.07	110	203	OUTFALL TO POND D
5	BASINS F, G, H	19.31	20.60	15.8	3.44	5.78	66	119	Marketplace IQ Scheels, Fut. Commercial, and ex. commercial
6	BASIN I	3.19	3.57	7.3	4.59	7.71	15	28	Future GWL expansion commercial parcel / ex. stub
7	BASIN J	6.37	7.00	7.2	4.62	7.75	29	54	Ex. GWL. building/parking lot
8	PIPES 5, 6, 7	28.88	31.17	18.5	3.21	5.38	93	168	TOTAL FLOW AT GWL OUTFALL
9	DP 5	1.91	2.06	5.6	5.01	8.41	10	17	24" @ 0.5% PRIV.
10	PIPE 8+9	30.79	33.23	18.5	3.21	5.38	99	179	60" @ 0.5% PUBLIC
11	DP 6	2.39	2.67	6.29	4.83	8.10	12	22	30" @ 0.5% PRIV.
12	PIPE 10 + 11 + BASIN AA	33.52	36.77	20.5	3.05	5.12	102	188	66" @ 0.5% PUBLIC
13	DP 9 + BASIN T (12)	2.07	2.34	5.00	5.17	8.68	11	20	24" @ 1% PRIV.
14	DP 10	0.51	0.57	5.00	5.17	8.68	3	5	18" @ 0.5% PRIV.
15	PIPE 13 + 14	2.58	2.91	5.0	5.17	8.68	13	25	30" @ 0.5% PRIV.
16	DP 7 + PIPE 15	5.26	5.84	8.6	4.35	7.31	23	43	30" @ 1.0% PRIV.
17	DP 8 + PIPE 16	6.42	7.09	8.6	4.35	7.31	28	52	36" @ 1.0% PRIV.
18	DP 11	0.80	0.89	5.00	5.17	8.68	4	8	18" @ 0.5% PRIV.
19	PIPE 17 + 18 + BASIN R	8.42	9.28	8.6	4.35	7.31	37	68	36" @ 1.0% PRIV.
20	PIPE 19 + 12	41.94	46.04	23.6	2.84	4.77	119	220	66" @ 0.5% PUBLIC
21	DP 12	0.53	0.60	5.00	5.17	8.68	3	5	18" @ 1.0% PRIVATE
22	DP 13 + PIPE 21	0.88	1.00	7.1	4.65	7.80	4	8	18" @ 1.0% PRIVATE
23	PIPE 20 + 22 + BASIN BB	43.26	47.49	24.3	2.80	4.69	121	223	TOTAL FLOW TO POND G - 66" OUTFALL
24	BASIN T 1/2	1.38	1.57	22.6	2.91	4.88	4	8	24" @ 0.5% PRIV.
25	DP 14 + PIPE 24	2.01	2.94	22.6	2.91	4.88	6	14	24" @ 1.0% PRIV.
26	BASIN V + DP 15	1.71	1.98	5.0	5.17	8.68	9	17	24" @ 1.0% PRIV.
27	PIPE 25 + 26	3.72	4.93	22.6	2.91	4.88	11	24	30" @ 0.5% PRIV.
28	PIPE 25 + 27	5.73	7.87	22.6	2.91	4.88	17	38	36" @ 0.5% PRIV.
29	DP 16 + PIPE 28	13.06	15.97	22.6	2.91	4.88	38	78	TOTAL POND G - 36" @ 1.5% PRIV. OUTFALL
30	PIPE 23 + 29	56.32	63.46	23.1	2.87	4.82	162	306	TOTAL POND G INFLOW

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FOOTHILLS FARM CAMPUS FIL 2
FINAL DRAINAGE REPORT
DEVELOPED CONDITIONS

DESIGNED BY: CMT SCALE: (H) 1" = 100' DATE: 12/13/18
DRAWN BY: CMT (V) 1" = SHEET 2 OF 2
CHECKED BY: JOB NO. 2399.80

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