PERFORMANCE SPEC FOR THE CHAMISA/UNSER DETENTION BASINS

1. LOW FLOW (LESS THAN THE 5 YEAR STORM) TO DISCHARGE TO THE CALABACILLAS STORM DRAIN OUTLET.

2. STORMS GREATER THAN THE 5 YEAR WILL OVERFLOW TO THE UNSER DETENTION BASIN AND DISCHARGE AT A CONTROLLED RATE OF 120 CFS (MAX) TO THE PIEDRAS MERCADAS ARROYO.

THE INTENT OF THE BASINS IS TO SIMULATE EXISTING CONDITIONS WHEN THE CALABACILLAS REALIZES STORM WATER DURING 5 YEAR OR GREATER EVENTS.

Table 1: Basin Summary

BASIN	AREA (SQ MI)	AREA (ACRE)	LAND TREATMENT (%) A	B	C	D	Q_{100} (CFS)	VOL_{100} (AC-FT)
BASINS DRAINING TO THE CHAMISA BASIN THROUGH POND 11[1]								
E2.1	0.0124	7.93	0	15	35	50	26	0.91
K1	0.0238	15.23	0	10	10	80	55	2.17
K2	0.0059	3.78	0	10	10	80	14	0.54
K3	0.0148	9.47	0	10	10	80	34	1.35
K4	0.0196	12.54	0	10	10	80	46	1.78
ST11	0.0068	4.33	0	10	0	90	14	0.65
BASINS DRAINING TO THE UNSER DETENTION BASIN								
1	0.0132	8.47	0	10	15	75	27	0.97
2	0.0113	7.23	0	10	15	75	26	1.00
3	0.0151	9.66	0	10	15	75	35	1.33
11A	0.0066	4.20	0	10	10	80	15	0.60
E1	0.0118	7.52	0	15	35	50	24	0.86
E2	0.0453	28.97	0	15	35	50	85	0.94
F	0.0043	2.77	0	15	35	50	9	0.26
PDN1	0.0196	12.51	0	10	0	90	37	1.89
U1	0.0158	10.11	0	10	0	90	38	1.53
U2	0.0259	16.60	0	10	0	90	49	2.34
BASINS DRAINING INTO POND 2								
5	0.0298	19.07	0	10	10	80	69	2.71
6	0.0355	22.70	0	10	10	80	83	3.23
8	0.0198	12.67	0	10	10	80	46	1.80
9	0.0316	20.20	0	10	10	80	74	2.87
10	0.0567	36.29	0	10	10	80	122	5.16
13	0.0626	40.06	0	10	10	80	140	5.70
11B	0.0553	35.37	0	10	0	90	116	5.03
11C	0.0332	21.23	0	10	10	80	77	3.02
12A	0.0308	19.71	0	10	10	80	72	2.80
6A	0.0153	9.77	0	10	10	80	33	1.39
ST1	0.0141	9.04	0	10	0	90	31	1.37
ST2	0.0109	7.00	0	10	0	90	24	1.06
ST3	0.0069	4.39	0	10	0	90	15	0.66
ST4	0.0077	4.94	0	10	0	90	17	0.75
BASINS DRAINING INTO PASEO DEL NORTE STORM DRIAN SYSTEM								
4A[4]	0.0388	24.83	0	10	10	80	90	3.53
4B[4]	0.0080	5.12	0	10	10	80	19	0.73
PDN2[4]	0.0126	8.06	0	10	0	90	30	1.22
7	0.0354	22.66	0	10	10	80	77	3.22
12B	0.0144	9.22	0	10	10	80	34	1.31
PDN3	0.0151	9.66	0	10	0	90	30	1.46
PDN4	0.0111	7.13	0	10	0	90	25	1.08
A	0.0275	17.60	0	5	10	85	66	2.60
BASINS DRAINING INTO PIEDRAS MARCADAS								
B	0.0211	13.53	100	0	0	0	16	0.46
F1	0.0204	13.08	0	60	40	0	28	0.78
G	0.1032	66.05	100	0	0	0	80	2.22
H	0.3826	244.84	100	0	0	0	288	8.24
PDN5	0.0198	12.66	0	10	0	90	48	1.91
PDN6	0.0185	11.82	0	10	0	90	45	1.79
BASINS DRAINING INTO BOCA NEGRA DAM								
UNIVERSE BLVD								
P1	0.0313	20.00	25	26	27	22	44	1.52
P2	0.1094	70.02	0	25	25	50	153	7.85
P3	0.0515	32.96	0	25	25	50	63	3.70
UNSER BLVD								
M1	0.1381	88.38	0	10	40	50	234	10.25
M2-B	0.0201	21.79	0	10	40	50	41	1.49
*N1[2]	0.0814	52.10	0	10	40	50	146	6.05
N2	0.0246	15.74	0	10	40	50	51	1.83
T1	0.0890	56.96	0	10	40	50	149	6.61
*U0[3]	0.0319	20.42	0	10	40	50	49	2.37
BASIN DRAINING INTO ATRISCO STORM DRAIN								
M2-A	0.1145	64.35	5	30	35	30	142	6.52
M3	0.1793	114.75	0	10	40	50	303	13.32
BASIN DRAINING INTO POND-6								
M3-1	0.0534	34.17	0	10	40	50	108	3.97
BASIN DRAINING INTO POND-7								
M4	0.0172	11.01	0	10	40	50	36	1.28
BASIN DRAINING INTO POND-8								
M5	0.0707	45.25	0	10	40	50	137	5.25
BASIN M6 DRAINING INTO POND-9 AND ESCARPMENT								
M6-1[5]	0.0003	1.01	0	10	40	50	3	0.02
M6-2[6]	0.0075	4.01	0	10	40	50	13	0.56

NOTES:

* DIVIDED FLOW

1- 45 CFS FROM BASIN E2 DRAINS INTO CHAMISA STORM DRAIN (5 CFS/LOT)

2- 90 CFS DRAINS INTO LA CUENTISTA SUBDIVISION

3 - 19 CFS DRAINS INTO THE 48" OUTLET FROM BOCA NEGRA DAM

4- ROUTED THROUGH POND 10

5- FREE DISCAHRGE.

6- DRAINS INTO POND 9.

ANALYSIS POINT	FLOW (CFS)
AP1	620
AP2	644
AP3	288
AP4	941
AP5	227
AP6	330
AP7	439
AP8	176

LEGEND

- G — BASIN ID
- BASIN BOUNDARY
- STORM DRAIN
- FLOW DIRECTION
- AP3 — ANALYSIS POINT ID

GRAPHIC SCALE

(IN FEET)
1 inch = 600 ft.

ENLARGED VIEW
SCALE: 1"=400'

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

VOLCANO HEIGHTS
CONCEPTUAL DRAINAGE COMPILATION PLAN

PLATE 1

WCI #X3210022
OCTOBER 2011

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