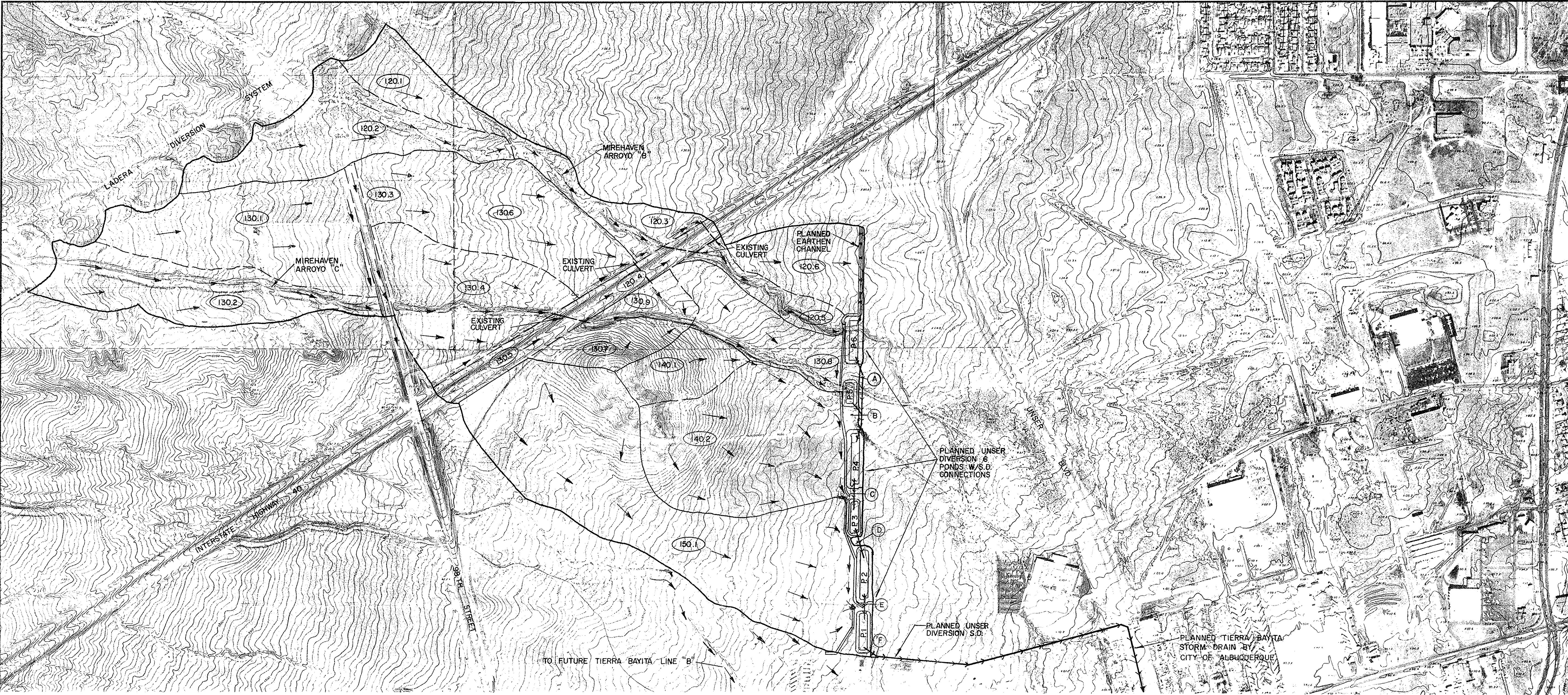




LEGEND

PROJECT WATERSHED BOUNDARY

DRAINAGE BASIN BOUNDARY

DRAINAGE SUB-BASIN BOUNDARY

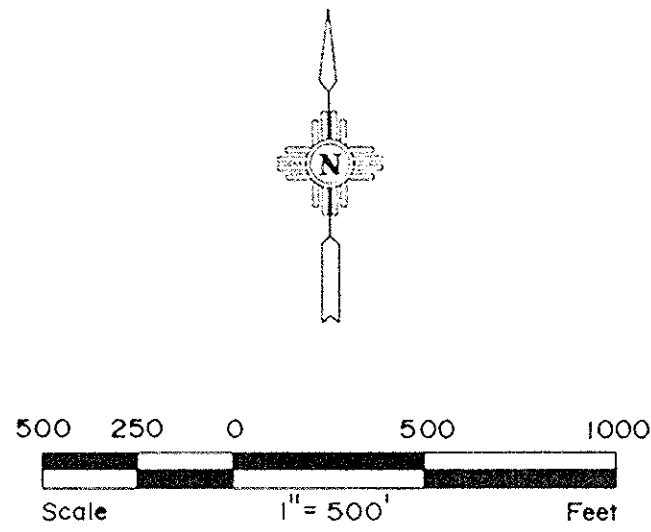
PROPOSED POND

PROPOSED STORM DRAIN

DRAINAGE SUB-BASIN I.D.

ANALYSIS POINT

THIS BASE MAP WAS PRODUCED BY COMPOSITING THE CONTOURS GENERATED BY BOHANNAN-HUSTON, INC., ALBUQUERQUE, NEW MEXICO, FOR THE 1983 FEMA FLOODWAY MAPS AND 1991 RECTIFIED AERIAL PHOTOGRAPHY.



BASIN RUNOFF AND WASHLLOAD CONCENTRATION SUMMARY

Basin/ Sub-Basin ID	Basin/ Sub-Basin Area (AC)			Storm Return Frequency (Years)					
				2	5	10	25	50	100
120.1	16.58	V	0	0.013	0.114	0.294	0.448	0.607	
		Q _p	0	0.47	4.08	10.57	16.09	21.50	
		C _w	0	17.406	22.346	25.031	26.280	27.024	
120.2	34.88	V	0	0.028	0.240	0.619	0.943	1.277	
		Q _p	0	0.68	5.92	15.50	23.87	32.45	
		C _w	0	20.061	26.028	29.310	30.963	32.141	
120.3	12.74	V	0	0.010	0.088	0.226	0.344	0.466	
		Q _p	0	0.36	3.13	8.12	12.36	16.52	
		C _w	0	10.743	13.809	15.525	16.315	16.785	
120.4	5.82	V	0.210	0.294	0.374	0.487	0.576	0.664	
		Q _p	4.85	6.93	8.95	11.86	14.12	16.25	
		C _w	39.235	41.206	42.737	44.467	45.491	46.313	
120.5	10.36	V	0	0.008	0.071	0.184	0.280	0.380	
		Q _p	0	0.29	2.55	6.61	10.06	13.45	
		C _w	0	15.671	20.166	22.555	23.695	24.385	
Total @ Arroyo "B" Inlet to Pond 6	80.37	C _w		39.235	37.299	31.036	30.381	30.741	31.090
120.6 Flows directly to Pond 6 through earthen channel	20.03	V	0	0.056	0.185	0.409	0.601	0.8350	
		Q _p	0	1.49	5.94	13.86	20.56	28.47	
		C _w	0	17.467	22.287	25.190	26.486	27.473	
130.1	47.55	V	0	0.038	0.327	0.844	1.286	1.741	
		Q _p	0	0.76	6.60	17.46	27.03	36.94	
		C _w	0	22.549	28.860	32.853	34.679	36.126	
130.2	31.30	V	0	0.025	0.216	0.556	0.847	1.146	
		Q _p	0	0.63	5.51	14.50	22.34	30.31	
		C _w	0	30.257	42.974	48.731	51.464	53.462	
130.3	3.01	V	0.221	0.307	0.372	0.457	0.523	0.586	
		Q _p	5.12	7.22	8.71	10.56	11.92	13.15	
		C _w	5.176	5.398	5.551	5.622	5.695	5.709	
130.4	39.16	V	0	0.031	0.270	0.695	1.059	1.434	
		Q _p	0	1.01	8.79	23.04	35.21	47.31	
		C _w	0	25.495	32.359	36.295	38.295	39.515	

BASIN RUNOFF AND WASHLLOAD CONCENTRATION SUMMARY (Continued)

Basin/ Sub-Basin ID	Basin/ Sub-Basin Area (AC)			Storm Return Frequency (Years)					
				2	5	10	25	50	100
130.5	6.66	V	0	0.240	0.335	0.427	0.556	0.659	0.759
		Q _p	5.55	7.92	10.23	13.55	16.13	18.57	
		C _w	40.064	41.609	46.224	45.118	46.084	46.901	
130.6	45.44	V	0	0.036	0.313	0.807	1.229	1.663	
		Q _p	0	0.90	7.84	20.62	31.74	43.13	
		C _w	0	19.333	26.132	29.402	31.090	32.309	
130.7	10.85	V	0	0.020	0.093	0.215	0.319	0.426	
		Q _p	0	0.74	3.37	7.90	11.57	15.24	
		C _w	0	109.068	132.730	142.072	148.308	151.744	
130.8	20.98	V	0	0.017	0.144	0.372	0.566	0.766	
		Q _p	0	0.56	4.86	12.69	19.36	25.97	
		C _w	0	21.981	31.163	39.589	36.123	37.300	
130.9	6.11	V	0	0.011	0.052	0.121	0.179	0.240	
		Q _p	0	0.42	1.90	4.44	6.51	8.58	
		C _w	0	15.270	17.950	19.609	20.294	20.877	
Total @ Arroyo "C" Inlet to Pond 5	190.08	C _w		23.689	26.571	33.971	39.193	41.581	43.252
140.1	12.54	V	0	0.036	0.126	0.272	0.395	0.523	
		Q _p	0	1.35	4.66	10.17	14.48	18.85	
		C _w	0	75.233	88.751	97.831	101.426	103.433	
140.2	56.63	V	0	0.090	0.455	1.084	1.615	2.2014	
		Q _p	0	3.26	16.57	39.92	59.11	79.63	
		C _w	0	54.179	65.005	72.302	75.236	77.500	
Total @ Basin 140 Inlet to Pond 3	69.17	C _w	0	60.759	70.343	77.538	80.436	80.436	
150.1 Flows directly to Pond 1	97.17	V	0	0.077	0.669	1.725	2.628	3.6995	
		Q _p	0	1.62	14.24	38.17	59.44	85.38	
		C _w	0	15.194	19.806	23.096	24.498	25.800	

V = Estimated 24 hour clear water runoff volume from AHYMO model, Type 2 rainfall (ac-ft).

Q_p = Estimated 24 hour peak clear water flow rate from AHYMO model, Type 2 rainfall (cfs).

C_w = Estimated sediment concentration in runoff. Estimation with M.U.S.L.E. (PPM by weight).

POND DATA SUMMARY

WATERSHED CONDITION: EXISTING, MOSTLY UNDEVELOPED
STORM: 100-YEAR, 10-DAY

POND ID	POND BOTTOM ELEV. @ OUTLET	OUTLET STRUCTURE WEIR ELEV.	EMERGENCY SPILLWAY ELEV.	MAXIMUM WATER SURFACE ELEV.	FREEBOARD TO EMERGENCY SPILLWAY (FT)	POND VOLUME BELOW OUTLET WEIR ELEV. (AC-FT)	POND VOLUME BELOW EMERGENCY SPILLWAY ELEV. (AC-FT)	FREQUENT STORM SEDIMENT STORAGE VOLUME (AC-FT)	TOTAL INFLOW VOLUME (AC-FT)	MAXIMUM STORED 100-YEAR STORM (AC-FT)	INFLOW VOLUME FROM WATERSHED (AC-FT)	VOLUME RETAINED (AC-FT)	PEAK INFLOW RATE (CFS)	PEAK OUTFLOW RATE (CFS)
1	5133.5	5141.0	5143.9	5140.5	3.4	4.87	7.96	0.07	4.43	4.43	3.88	4.62	89.6	0.0
2	5137.9	5144.8	5147.9	5144.9	3.0	5.88	9.83	0.00	6.43	5.93	—	5.88	68.5	3.2
3	5143.0	5147.5	5151.2	5148.6	2.6	1.97	4.79	0.10	8.40	2.73	2.94	1.97	100.0	68.6
4	5147.0	5151.9	5155.1	5153.0	2.1	3.26	7.18	0.00	8.73	4.52	—	3.26	142.3	75.6
5	5160.0	5164.0	5168.8	5166.8	2.0	1.19	3.87	0.29	9.91	2.59	9.91	1.19	211.5	142.7
6	5170.0	5176.0	5177.9	5175.7	2.2	5.04	7.46	0.09	4.67	4.67	4.67	4.78	93.7	0.0
TOTAL							41.09				21.70	21.70		

NOTES:

1. POND ROUTING DATA FROM AHYMO VERSION 392 MODEL OUTPUT.
2. REPORTED POND VOLUMES EXCLUDE VOLUME PROVIDED FOR FREQUENT STORM SEDIMENT STORAGE.
3. INFLOW DATA INCLUDES CLEAR WATER AND SEDIMENT VOLUMES AND RATES.
4. FREQUENT STORM SEDIMENT STORAGE IS BASED ON 5 X THE ESTIMATED AVERAGE ANNUAL YIELD.

STORM DRAIN DATA SUMMARY

ANALYSIS POINT	PIPE DIAMETER (FT)	PIPE SLOPE (FT/FT)	FULL PIPE CAPACITY (CFS)	FULL PIPE VELOCITY (FPS)	¼ FULL PIPE CAPACITY (CFS)	¼ FULL PIPE VELOCITY (FPS)	PEAK FLOW RATE 100-YEAR (CFS)
A	36"	0.0270	109.6	15.5	15.0	10.9	0
B	48"	0.0260	231.6	18.4	31.7	12.9	142.7
C	42"	0.0130	114.7	11.9	15.7	8.4	75.6
D	42"	0.0100	100.6	10.5	13.9	7.4	68.6
E	48"	0.0125	160.6	12.8	22.0	9.0	3.2
F	42"	0.0165	129.2	13.4	17.7	9.4	0

NO.	REVISIONS	BY	DATE
DESIGN ANALYSIS FOR ALBUQUERQUE METROPOLITAN FLOOD CONTROL AUTHORITY UNSER DIVERSION WATERSHED MAP, RUNOFF AND ROUTING DATA EXISTING CONDITION			
EASTERLING & ASSOCIATES, INC. CONSULTING ENGINEERS 10131 COORS RD., NW, SUITE H-718 ALBUQUERQUE, N.M. 87114 (505) 898-8021 FAX (505) 898-8501			
Designed: VSF	Drawn: JMM	Checked: CME	PLATE 1
Job No: 3324.2	Date: 9-93		