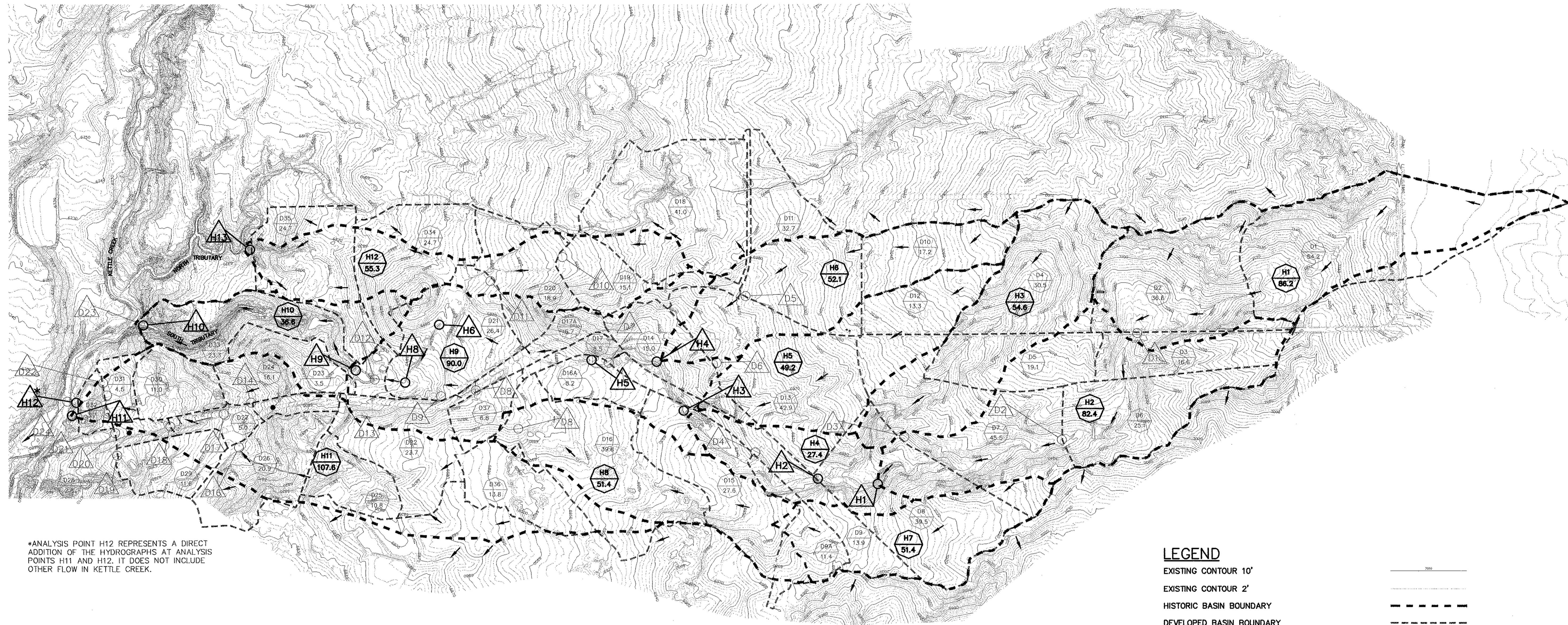


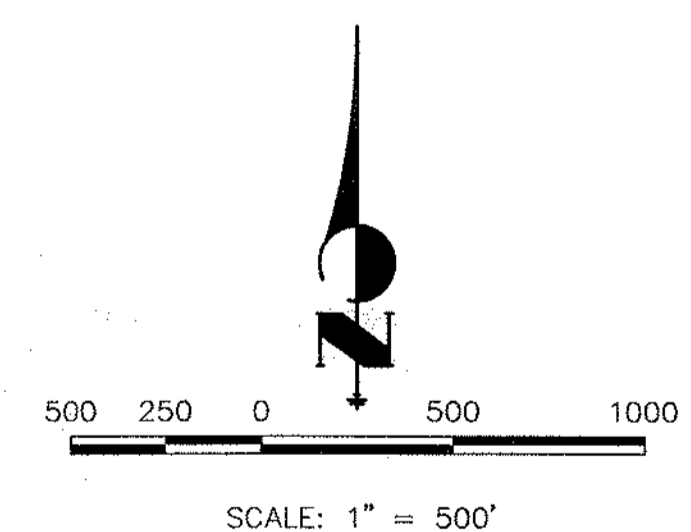
# KETTLE CREEK DRAINAGE BASIN OLD RANCH ROAD TRIBUTARY DRAINAGE BASIN PLANNING STUDY AND MASTER DEVELOPMENT DRAINAGE PLAN HISTORIC CONDITION DRAINAGE BASIN MAP



\*ANALYSIS POINT H12 REPRESENTS A DIRECT ADDITION OF THE HYDROGRAPHS AT ANALYSIS POINTS H11 AND H12. IT DOES NOT INCLUDE OTHER FLOW IN KETTLE CREEK.

### LEGEND

- EXISTING CONTOUR 10'
- EXISTING CONTOUR 2'
- HISTORIC BASIN BOUNDARY
- DEVELOPED BASIN BOUNDARY
- DRAINAGE FLOW ARROW
- DEVELOPED BASIN IDENTIFIER AREA IN ACRES
- HISTORIC BASIN IDENTIFIER AREA IN ACRES
- HISTORIC ANALYSIS POINT
- DEVELOPED ANALYSIS POINT



(HISTORIC) UNDEVELOPED CONDITION BASIN DATA AND FLOW RATE SUMMARY								
SUBBASIN ID	AREA (acres)	AREA (sq mi)	CN	LAG (hrs)	Q10 (cfs)	q10 (cfs/ac)	Q100 (cfs)	q100 (cfs/ac)
H1	86.2	0.135	66	0.420	35	0.4	99	1.1
H2	82.4	0.129	66	0.303	43	0.5	118	1.4
H3	54.6	0.085	66	0.314	27	0.5	76	1.4
H4	27.4	0.043	66	0.188	19	0.7	51	1.9
H5	49.2	0.077	66	0.286	27	0.5	72	1.5
H6	52.1	0.081	66	0.392	22	0.4	62	1.2
H7	37.8	0.059	66	0.359	17	0.4	48	1.3
H8	51.4	0.080	66	0.346	24	0.5	67	1.3
H9	90.0	0.141	66	0.359	47	0.5	130	1.4
H10	36.6	0.057	66	0.215	24	0.7	63	1.7
H11	107.6	0.168	66	0.411	45	0.4	125	1.2
H12	55.3	0.086	66	0.397	23	0.4	65	1.2

(HISTORIC) UNDEVELOPED CONDITION ANALYSIS POINT WATERSHED AREA AND FLOW RATE SUMMARY								
ANALYSIS POINT	AREA (acres)	AREA (sq mi)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Q25 (cfs)	Q50 (cfs)	Q100 (cfs)
H1	166	0.26	11	36	60	105	140	179
H2	224	0.35	14	48	81	144	193	247
H3	301	0.47	18	60	99	181	246	317
H4	352	0.55	22	73	121	217	294	376
H5	352	0.55	22	72	121	216	291	376
H6	352	0.55	22	73	120	215	291	374
H7	90	0.14	7	23	35	60	81	103
H8	442	0.69	27	94	155	274	371	477
H9	531	0.83	31	107	178	320	432	557
H10	570	0.89	32	110	184	331	448	577
H11	109	0.17	9	28	45	76	99	125
H12	678	1.06	37	129	219	398	535	693
H13	58	0.09	5	14	23	40	52	65

### NOTES:

- PEAK FLOW RATES WERE ESTIMATED WITH HEC-1 COMPUTER MODEL USING THE SCS UNIT HYDROGRAPH METHOD.
- HISTORIC FLOW RATES WERE ESTIMATED BASED ON AN ASSUMED CONDITION PRIOR TO ANY DEVELOPMENT IN THE WATERSHED. TOPO SHOWN ON THIS MAP REFLECTS SOME CHANGES CAUSED BY DEVELOPMENT. HOWEVER, FLOW PATHS UTILIZED IN THIS ANALYSIS WERE ESTIMATED BASED ON PRE-DEVELOPMENT CONDITIONS TO THE EXTENT POSSIBLE.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING OFFICIALS, THEIR USE APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR

**J-R ENGINEERING**  
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BY DATE

No. REVISION

H-SCALE 1" = 500'

V-SCALE N/A

DATE 04/18/01

DESIGNED BY VSF

DRAWN BY SDG

CHECKED BY

KETTLE CREEK DRAINAGE BASIN  
OLD RANCH ROAD TRIBUTARY  
DRAINAGE BASIN PLANNING STUDY AND  
MASTER DEVELOPMENT DRAINAGE PLAN  
HISTORIC DRAINAGE BASIN MAP