

ATTACHMENT D-2

Developed Conditions HEC-1 Input File and Output Summary

ID SOLANO COUNTY WATER AGENCY HEC 1 EXAMPLE
 ID BASED ON AN AREA AROUND BROWNS VALLEY SCHOOL IN VACAVILLE
 ID DRAINAGE CONDITIONS/FACILITIES MODIFIED FOR ILLUSTRATION PURPOSES
 ID DEVELOPED CONDITIONS
 ID 100-YEAR, 24-HOUR STORM EVENT
 *
 *FREE
 *DIAGRAM
 IT 5, 01JAN99, 0000, , 03JAN99, 0000
 IO 1
 *
 KK OPEN1
 KM HILLS WEST OF WRENTHAM DRIVE (MAP=28 IN)
 KM AREA TO BE DEVELOPED
 BA 0.20
 PH 100, , 0.59, 0.95, 1.72, 2.32, 2.76, 3.72, 5.01, 6.74
 PH 9.17
 LU 0.40, 0.10, 3
 US 0.88, 0.45
 *
 KK H1
 RD 700, 0.060, 0.040, , TRAP, 4, 2.5
 *
 KK BRN2
 KM RESIDENTIAL AREA AROUND WRENTHAM DRIVE (MAP=28 IN)
 BA 0.16
 LU 0.30, 0.04, 34
 US 0.23, 0.45
 *
 KK CO1B2
 KM COMBINE OPEN1 AND BRN2
 HC2
 *
 KK H2
 KM ROUTE TO LOCATION HB2
 RD 3240, 0.010, 0.015, , CIRC, 4.0
 *
 KK OPEN3
 KM HILLS WEST OF WRENTHAM DRIVE (MAP=28 IN)
 KM AREA TO BE DEVELOPED
 BA 0.07
 LU 0.40, 0.08, 18
 US 0.55, 0.45
 *
 KK OPEN4
 KM HILLS WEST OF WRENTHAM DRIVE (MAP=28 IN)
 KM AREA TO BE DEVELOPED (HYDROGRAPH HB4)
 BA 0.1
 LU 0.40, 0.10, 3
 US 0.77, 0.45
 *
 KK CO3O4
 KM COMBINE OPEN3 AND OPEN4
 HC 2
 *
 KK H5
 RD 600, 0.010, 0.015, , CIRC, 3.0
 *
 KK H6
 KM COMBINE OPEN3/OPEN4 WITH OPEN1/BRN2
 HC 2
 *
 KK ROUTE
 RD 1680, 0.010, 0.015, , CIRC, 4.5
 *
 KK BRN5
 KM RUNOFF FROM URBAN AREA BRN5 (MAP = 28 IN)
 BA 0.09
 LU 0.3, 0.06, 45
 US 0.21, 0.45
 *
 KK H7
 KM COMBINE HYDROGRAPH H6 WITH BRN5
 HC 2
 *
 KK RH7

RD 1200,0.005,0.015,,CIRC,5.0
*
KK BRN6
KM URBAN AREA BETWEEN BROWNS VALLEY ROAD AND RR TRACKS (MAP = 28 IN)
BA 0.06
LU 0.30,0.04,40
US 0.22,0.45
*
KK H8
KM COMBINE HYDROGRAPH H7 WITH BRN6
HC 2
*
KK OPEN7
KM RUNOFF FROM RURAL AREA EAST OF RXR (MAP = 28 IN)
BA 0.09
LU 0.30,0.05,39
US 0.26,0.45
*
KK CO7H8
KM COMBINE HYDROGRAPH H8 WITH OPEN7
HC 2
*
KK H9
RD 1920,0.006,0.030,,TRAP,6,2.0
*
KK BRN8
KM RUNOFF FROM URBAN AREA WEST OF BROWN'S VALLEY ROAD (MAP = 28 IN)
BA 0.10
LU 0.30,0.10,37
US 0.22,0.45
*
KK H10
KM ROUTE TO LOCATION H10
RD 1200,0.008,0.015,,CIRC,3.0
*
KK BRN9
KM RUNOFF FROM URBAN AREA BROWNS VALLEY ROAD AND RR TRACKS (MAP = 28 IN)
BA 0.13
LU 0.30,0.09,40
US 0.25,0.45
*
KK CB9H10
KM COMBINE BRN 9 WITH HYDROGRAPH H10
HC 2
*
KK H11
RD 1680,0.008,0.015,,CIRC,3.0
RD 720,0.008,0.015,,CIRC,4.0
*
KK OPEN10
KM RUNOFF FROM RURAL AREA EAST OF RR TRACKS (MAP = 28 IN)
BA 0.07
LU 0.22,0.09,10
US 0.77,0.45
*
KK CH11O10
KM COMBINE HYDROGRAPH HB11 AND OPEN10
HC 2
*
KK H12
KM ROUTE TO PLANNED DETENTION BASIN
RD 1800,0.005,0.030,,TRAP,6,2.0
*
KK CH9H12
KM COMBINE HYDROGRAPH H9 AND HYDROGRAPH H12 FOR FLOW INTO DETENTION BASIN
HC 2
*
ZZ

RUNOFF SUMMARY

FLOW IN CUBIC FEET PER SECOND
 TIME IN HOURS, AREA IN SQUARE MILES

+	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD			BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
					6-HOUR	24-HOUR	72-HOUR			
+	HYDROGRAPH AT	OPEN1	125.	13.33	64.	23.	22.	.20		
+	ROUTED TO	H1	125.	13.33	64.	23.	22.	.20		
+	HYDROGRAPH AT	BRN2	231.	12.67	61.	26.	25.	.16		
+	2 COMBINED AT	CO1B2	299.	12.75	123.	49.	47.	.36		
+	ROUTED TO	H2	295.	12.75	123.	49.	47.	.36		
+	HYDROGRAPH AT	OPEN3	60.	13.00	25.	9.	9.	.07		
+	HYDROGRAPH AT	OPEN4	68.	13.25	32.	12.	11.	.10		
+	2 COMBINED AT	CO3O4	125.	13.17	57.	21.	20.	.17		
+	ROUTED TO	H5	125.	13.17	57.	21.	20.	.17		
+	2 COMBINED AT	H6	395.	12.83	180.	70.	67.	.53		
+	ROUTED TO	ROUTE	395.	12.92	180.	69.	67.	.53		
+	HYDROGRAPH AT	BRN5	136.	12.67	34.	14.	14.	.09		
+	2 COMBINED AT	H7	505.	12.83	214.	84.	81.	.62		
+	ROUTED TO	RH7	502.	12.83	214.	84.	81.	.62		
+	HYDROGRAPH AT	BRN6	88.	12.67	23.	10.	9.	.06		
+	2 COMBINED AT	H8	578.	12.83	236.	93.	90.	.68		
+	HYDROGRAPH AT	OPEN7	122.	12.75	34.	14.	14.	.09		
+	2 COMBINED AT	CO7H8	693.	12.83	270.	108.	104.	.77		
+	ROUTED TO	H9	690.	12.83	270.	107.	104.	.77		
+	HYDROGRAPH AT	BRN8	145.	12.67	36.	14.	13.	.10		
+	ROUTED TO	H10	141.	12.75	36.	14.	13.	.10		
+	HYDROGRAPH AT	BRN9	179.	12.75	47.	19.	18.	.13		
+	2 COMBINED AT	CB9H10	320.	12.75	83.	33.	32.	.23		
+	ROUTED TO	H11	318.	12.75	83.	33.	32.	.23		
+	HYDROGRAPH AT	OPEN10	49.	13.25	23.	9.	8.	.07		
+	2 COMBINED AT	CH11O10	349.	12.75	106.	42.	40.	.30		
+	ROUTED TO	H12	340.	12.83	106.	41.	40.	.30		
+	2 COMBINED AT	CH9H12	1031.	12.83	375.	149.	144.	1.07		