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 HFC2 RELEASE DATED NOV 76 UPDATED FEB1978  
 ERRCK CORR - 01,02  
 MODIFICATION - 50,51,52,53,54  
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*Final*

T1 HENDERSONVILLE, NC FIA STUDY BEC 9-25-79  
 T2 10 YEAR FLOOD  
 T3 SHEPHERD CREEK FLOOD PROFILES

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	2.	0.	0.	J.J0453	0.	0.0	0.	0.0	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	0.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.
J3	VARIABLE CODES FOR SUMMARY PRINTOUT									
	150.00	0.0	160.00	201.00	0.0	0.0	0.0	0.0	0.0	0.0
DT	5.	920.	1590.	1940.	2530.	1940.	0.	0.	0.	0.
NC	0.070	0.100	0.060	0.1	0.5					

X1	0.16	38.	501.	550.	0.	0.	0.	0.0	0.0	0.
GR	2111.4	0.	2110.3	12.	2109.7	23.	2109.3	25.	2109.3	34.
GR	2110.1	43.	2109.0	56.	2108.7	89.	2107.9	118.	2106.2	146.
GR	2102.9	157.	2102.9	171.	2103.6	178.	2103.6	234.	2101.2	243.
GR	2100.4	275.	2099.8	293.	2098.1	298.	2097.0	323.	2095.0	339.
GR	2094.2	365.	2093.9	386.	2091.6	501.	2088.4	511.	2086.5	523.
GR	2085.7	528.	2085.7	535.	2085.4	541.	2086.6	548.	2091.5	550.
GR	2093.7	562.	2094.9	718.	2097.5	730.	2100.0	744.	2103.5	768.
GR	2110.1	796.	2110.4	814.	2113.7	840.	0.0	0.	0.0	0.

X1	0.16	0.	0.	0.	40.	40.	40.	0.0	0.0	0.
SB	1.25	1.60	3.00	0.	17.00	2.00	309.00	2.68	2085.3	2085.3

X1	0.16	44.	519.	553.	30.	30.	30.	0.0	0.0	0.
X2	0.	0.0	1.	2093.6	2094.0	0.0	0.	0.0	0.0	0.
BT	39.0	0.0	2111.4	0.0	12.0	2110.3	0.0	23.0	2109.7	0.0
BT	25.0	2109.3	0.0	34.0	2109.3	0.0	43.0	2110.1	0.0	56.0
BT	2109.0	0.0	89.0	2108.7	0.0	118.0	2107.9	0.0	146.0	2106.2
BT	0.0	157.0	2102.9	0.0	171.0	2102.9	0.0	178.0	2103.6	0.0
BT	234.0	2103.6	0.0	243.0	2101.2	0.0	275.0	2100.4	0.0	293.0
BT	2099.8	0.0	298.0	2098.1	0.0	323.0	2097.0	0.0	339.0	2095.0
BT	0.0	365.0	2094.2	0.0	386.0	2093.9	0.0	419.0	2095.1	0.0
BT	452.0	2095.3	0.0	470.0	2094.8	0.0	478.0	2094.7	0.0	500.0
BT	2094.9	0.0	500.0	2096.5	0.0	562.0	2096.5	0.0	562.0	2095.3
BT	0.0	600.0	2095.4	0.0	650.0	2095.6	0.0	697.0	2096.7	0.0
BT	730.0	2097.5	0.0	744.0	2100.0	0.0	768.0	2103.5	0.0	796.0
BT	2110.1	0.0	814.0	2110.4	0.0	840.0	2113.7	0.0	0.0	0.0
GR	2111.4	0.	2110.3	12.	2109.7	23.	2109.3	25.	2109.3	34.
GR	2110.1	43.	2109.0	56.	2108.7	89.	2107.9	118.	2106.2	146.



SHEPHERD CREEK

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TCPWID	XLCH
0.160	920.	2091.6	0.0	0.0	0.0	51.71	0.0
0.160	1590.	2093.2	1.5	0.0	0.0	135.79	0.0
0.160	1940.	2093.7	0.6	0.0	0.0	172.89	0.0
0.160	2530.	2094.4	0.7	0.0	0.0	298.74	0.0
0.160	920.	2091.8	0.0	0.2	0.0	61.96	40.00
0.160	1590.	2093.4	1.5	0.2	0.0	147.80	40.00
0.160	1940.	2094.0	0.6	0.2	0.0	214.72	40.00
0.160	2530.	2094.7	0.7	0.2	0.0	339.00	40.00
0.160	920.	2091.9	0.0	0.0	0.0	34.69	30.00
* 0.160	1590.	2093.3	1.4	-0.1	0.0	45.82	30.00
0.160	1940.	2094.0	0.7	0.0	0.0	95.06	30.00
0.160	2530.	2094.6	0.6	-0.1	0.0	172.35	30.00
0.160	920.	2091.9	0.0	0.1	0.0	35.10	10.00
0.160	1590.	2093.4	1.5	0.1	0.0	46.60	10.00
0.160	1940.	2094.1	0.7	0.1	0.0	114.77	10.00
0.160	2530.	2094.9	0.7	0.3	0.0	199.85	10.00
0.250	890.	2094.0	0.0	2.1	0.0	84.67	435.00
0.250	1540.	2095.7	1.7	2.3	0.0	350.84	435.00
0.250	1900.	2096.3	0.6	2.2	0.0	383.84	435.00
0.250	2465.	2097.1	0.3	2.2	0.0	412.73	435.00
0.390	890.	2097.4	0.0	3.3	0.0	50.42	645.00
0.390	1540.	2098.3	0.9	2.6	0.0	106.06	645.00
* 0.390	1900.	2098.8	0.6	2.5	0.0	333.30	645.00
* 0.390	2465.	2099.4	0.6	2.3	0.0	345.66	645.00
0.470	390.	2099.2	0.0	1.8	0.0	294.72	422.00
0.470	1540.	2100.5	1.3	2.2	0.0	378.84	422.00
0.470	1900.	2101.0	0.5	2.2	0.0	388.19	422.00
0.470	2465.	2101.4	0.5	2.1	0.0	408.36	422.00
0.550	885.	2100.2	0.0	1.0	0.0	43.90	350.00
0.550	1520.	2101.2	1.0	0.7	0.0	48.94	350.00
0.550	1875.	2101.6	0.4	0.6	0.0	50.75	350.00
0.550	2420.	2102.0	0.4	0.6	0.0	114.81	350.00
0.630	885.	2101.1	0.0	0.9	0.0	44.17	170.00
0.630	1520.	2102.5	1.4	1.3	0.0	51.37	170.00
0.630	1875.	2103.1	0.6	1.6	0.0	175.27	170.00
0.630	2420.	2104.0	0.9	2.1	0.0	247.37	170.00

SEARCH OF ERRORS

CAUTION SECNO= 0.160 PROFILE= 2  
20 TRIALS OF EG NOT ENOUGH

CAUTION SECNO= 0.390 PROFILE= 3 CRITICAL DEPTH ASSUMED

THIS RUN EXECUTED 12/06/79 9:09:20

REC2 RELEASE DATED NOV 76 UPDATED FEB1978  
 ERRCR CORR - 01,02  
 MODIFICATION - 50,51,52,53,54

NOTE- ASTERISK (\*) AT LEFT OF CROSS-SECTION NUMBER  
 INDICATES MESSAGE IN SUMMARY OF ERRORS LIST.

HELPERC CREEK

PRIMARY PRINTOUT TABLE 150

SEGN	XLCH	ELTRD	ELLC	ELMIN	Q	CKSEL	GRINS	EG	10K*S	VCH	AREA	•OJK
0.160	J.	0.0	0.0	2085.4	920.0	2091.64	0.0	2091.92	44.78	4.24	217.21	137.48
0.160	J.	0.0	0.0	2085.4	1590.0	2093.16	0.0	2093.55	45.26	5.18	359.35	236.34
0.160	J.	0.0	0.0	2085.4	1940.0	2093.74	0.0	2094.16	44.77	5.49	448.03	289.94
0.160	J.	0.0	0.0	2085.4	2530.0	2094.43	0.0	2094.88	45.25	5.90	611.34	376.09
0.160	J.	0.0	0.0	2085.4	920.0	2091.83	0.0	2092.09	39.04	4.07	227.71	147.24
0.160	J.	0.0	0.0	2085.4	1590.0	2093.37	0.0	2093.72	38.87	4.92	390.06	255.02
0.160	J.	0.0	0.0	2085.4	1940.0	2093.96	0.0	2094.33	38.05	5.17	491.60	314.48
0.160	J.	0.0	0.0	2085.4	2530.0	2094.67	0.0	2095.05	37.24	5.47	690.33	414.57
0.160	J.	2094.0	2093.6	2084.9	920.0	2091.87	0.0	2092.27	53.38	5.09	181.19	125.92
0.160	J.	2094.0	2093.6	2084.9	1590.0	2093.29	0.0	2094.03	77.91	6.93	238.52	180.14
0.160	J.	2094.0	2093.6	2084.9	1940.0	2093.55	0.0	2094.86	82.99	7.57	280.97	212.95
0.160	J.	2094.0	2093.6	2084.9	2530.0	2094.60	0.0	2095.72	99.77	8.75	364.79	253.29
0.160	J.	0.0	0.0	2084.9	920.0	2091.93	0.0	2092.32	51.87	5.04	183.04	127.75
0.160	J.	0.0	0.0	2084.9	1590.0	2093.39	0.0	2094.11	74.38	6.82	243.13	184.36
0.160	J.	0.0	0.0	2084.9	1940.0	2094.12	0.0	2094.55	77.44	7.39	294.73	220.45
0.160	J.	0.0	0.0	2084.9	2530.0	2094.87	0.0	2095.83	84.28	8.22	414.66	275.59
0.250	435.	0.0	0.0	2086.9	890.0	2094.02	0.0	2094.39	43.26	4.89	202.17	135.32
0.250	435.	0.0	0.0	2086.9	1540.0	2095.70	0.0	2095.93	25.27	4.54	625.99	336.32
0.250	435.	0.0	0.0	2086.9	1900.0	2096.34	0.0	2096.51	19.14	4.21	867.93	434.32
0.250	435.	0.0	0.0	2086.9	2465.0	2097.11	0.0	2097.25	15.45	4.04	1174.26	627.10
0.390	645.	0.0	0.0	2090.8	890.0	2097.37	0.0	2097.85	65.75	5.58	165.46	109.76
0.390	645.	0.0	0.0	2090.8	1540.0	2098.25	0.0	2099.16	100.76	7.80	233.62	153.42
0.390	645.	0.0	0.0	2090.8	1900.0	2098.80	2098.80	2099.71	94.50	8.07	354.44	195.45
0.390	645.	0.0	0.0	2090.8	2465.0	2099.36	2099.36	2100.15	84.40	8.11	544.32	268.31
0.470	422.	0.0	0.0	2091.3	890.0	2099.19	0.0	2099.41	23.15	3.94	320.00	184.98
0.470	422.	0.0	0.0	2091.3	1540.0	2100.49	0.0	2100.64	16.40	3.80	771.31	380.31
0.470	422.	0.0	0.0	2091.3	1900.0	2100.96	0.0	2101.10	15.35	3.84	952.93	484.96
0.470	422.	0.0	0.0	2091.3	2465.0	2101.42	0.0	2101.57	16.81	4.18	1135.38	601.27
0.550	350.	0.0	0.0	2094.5	885.0	2100.22	0.0	2100.69	50.76	5.46	162.10	124.22
0.550	350.	0.0	0.0	2094.5	1520.0	2101.22	0.0	2102.04	75.38	7.30	208.28	175.07
0.550	350.	0.0	0.0	2094.5	1975.0	2101.57	0.0	2102.64	91.80	8.30	226.00	195.69
0.550	350.	0.0	0.0	2094.5	2420.0	2101.98	2101.17	2103.46	119.30	9.77	255.98	221.56

S/CNO	ALCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRWS	EG	IOK*5	VCH	AREA	.01K
J.630	170.	0.0	0.0	2095.3	885.0	2101.08	0.0	2101.53	48.81	5.38	164.42	126.67
J.630	170.	0.0	0.0	2095.3	1520.0	2102.49	0.0	2103.16	56.02	6.54	232.24	203.08
J.630	170.	0.0	0.0	2095.3	1875.0	2103.13	0.0	2103.88	56.47	6.98	306.04	249.51
J.630	170.	0.0	0.0	2095.3	2420.0	2104.04	0.0	2104.77	48.60	7.12	505.86	347.13

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 REC 2 RELEASE DATED NOV 76 UPDATED FEB1978  
 ERROR CORR - 01,02  
 MODIFICATION - 50,51,52,53,54  
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T1 HENDERSONVILLE, NC FIA STUDY REC 9-25-79 *Final*  
 T2 100 YEAR FLOOD  
 T3 SHEPHERD CREEK FLOOD PROFILES

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0.	4.	0.	0.	0.00453	0.	0.0	0.	2093.70	0.0

J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	0.	0.	-1.	0.	0.	0.0	0.0	0.	0.	0.

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

	110.00	0.0	200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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OT	5.	920.	1590.	1940.	2530.	1940.	0.	0.	0.	0.
NC	0.077	0.100	0.160	0.1	0.5					
ET	0.	0.0	0.0	0.0	0.0	7.11	490.00	560.00	0.0	0.0

X1	0.16	38.	501.	500.	0.	0.	0.	0.0	0.0	0.
GR	2111.4	0.	2110.3	12.	2109.7	23.	2109.3	25.	2109.3	34.
GP	2110.1	43.	2109.0	06.	2108.7	89.	2107.9	118.	2106.2	146.
GR	2102.9	157.	2102.9	171.	2103.6	178.	2103.6	234.	2101.2	243.
GR	2100.4	275.	2099.8	293.	2098.1	298.	2097.0	323.	2095.0	339.
GR	2094.2	365.	2093.9	386.	2091.6	501.	2088.4	511.	2086.5	523.
GR	2085.7	528.	2085.7	535.	2085.4	541.	2086.6	548.	2091.5	550.
GR	2093.7	562.	2094.9	718.	2097.5	730.	2100.0	744.	2103.5	768.
GP	2110.1	796.	2110.4	814.	2113.7	840.	0.0	0.	0.0	0.
ET	0.	0.0	0.0	0.0	0.0	7.11	490.00	560.00	0.0	0.0

X1	0.16	0.	0.	0.	40.	40.	40.	0.0	0.0	0.
SB	1.25	1.60	3.00	0.	17.00	2.00	309.00	2.68	2085.3	2085.3
ET	0.	0.0	0.0	0.0	0.0	7.11	490.00	560.00	0.0	0.0

X1	0.16	44.	519.	553.	30.	30.	30.	0.0	0.0	0.
X2	0.	0.0	1.	2093.6	2094.0	0.0	0.	0.0	0.0	0.
BT	39.0	0.0	2111.4	0.0	12.0	2110.3	0.0	23.0	2109.7	0.0
BT	25.0	2109.3	0.0	34.0	2109.3	0.0	43.0	2110.1	0.0	56.0
BT	2109.0	0.0	89.0	2103.7	0.0	118.0	2107.9	0.0	146.0	2106.2
BT	0.0	157.0	2102.9	0.0	171.0	2102.9	0.0	178.0	2103.6	0.0
BT	234.0	2103.6	0.0	243.0	2101.2	0.0	275.0	2100.4	0.0	293.0
BT	2090.8	0.0	298.0	2098.1	0.0	323.0	2097.0	0.0	339.0	2095.0
BT	0.0	365.0	2094.2	0.0	386.0	2093.9	0.0	419.0	2095.1	0.0
BT	462.0	2095.8	0.0	470.0	2094.8	0.0	478.0	2094.7	0.0	500.0
BT	2094.9	0.0	500.0	2096.5	0.0	562.0	2096.5	0.0	562.0	2095.0
BT	0.0	600.0	2095.4	0.0	650.0	2095.6	0.0	697.0	2096.7	0.0
BT	730.0	2097.5	0.0	740.0	2100.0	0.0	768.0	2103.5	0.0	796.0
BT	2110.1	0.0	814.0	2110.4	0.0	840.0	2113.7	0.0	0.0	0.0



THIS RUN EXECUTED 04/14/80 15:04:54

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 RELEASE DATED NOV 76 UPDATED FEB 1978  
 ERROR CORR 11,92  
 MODIFICATION - 57,511,52,57,54  
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STE - ASTERISK (\*) AT LEFT OF CROSS-SECTION NUMBER  
 INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

EPHERD CREEK

PRIMARY PRINTOUT TABLE 110

SECR#	CMSL	DIFK#S	EG	TOPWD	PERENC	STENCL	STENCR	STCHL	STCHR	QLOB	QCH	QROB
0.160	2092.70	0.0	2094.14	166.	0.	0.	0.	501.	550.	164.	1762.	14.
0.160	2092.96	0.26	2094.44	76.	70.	490.	560.	501.	550.	54.	1866.	20.
0.160	2092.93	0.0	2094.31	208.	0.	0.	0.	501.	550.	201.	1721.	18.
0.160	2094.17	0.24	2094.62	78.	70.	490.	560.	501.	550.	59.	1859.	23.
0.160	2093.95	0.0	2094.84	89.	0.	0.	0.	519.	553.	1.	1903.	36.
0.160	2094.35	0.39	2095.14	70.	70.	490.	560.	519.	553.	8.	1901.	31.
0.160	2094.38	0.0	2094.92	109.	0.	0.	0.	519.	553.	3.	1893.	44.
0.160	2094.44	0.36	2095.21	77.	70.	490.	550.	519.	553.	12.	1896.	32.
0.250	2096.33	0.0	2096.57	384.	0.	0.	0.	364.	400.	674.	1103.	123.
0.250	2096.80	0.47	2097.24	80.	80.	340.	420.	364.	400.	174.	1594.	132.
0.350	2098.80	0.0	2099.71	333.	0.	0.	0.	364.	400.	137.	1693.	70.
0.390	2099.53	0.73	2100.24	80.	80.	340.	420.	364.	400.	112.	1688.	100.
0.470	2100.96	0.0	2101.10	388.	0.	0.	0.	364.	400.	731.	1036.	132.
0.470	2101.57	0.61	2101.96	80.	80.	340.	420.	364.	400.	190.	1570.	140.
0.550	2101.57	0.0	2102.64	51.	0.	0.	0.	198.	253.	0.	1875.	2.
0.550	2102.66	1.09	2103.33	62.	80.	190.	270.	198.	253.	3.	1872.	0.
0.630	2103.13	0.0	2103.88	175.	0.	0.	0.	198.	253.	2.	1855.	18.
0.630	2103.46	0.33	2104.14	62.	80.	190.	270.	198.	253.	3.	1872.	0.

SUMMARY OF ERRORS

SECTION = 0.390 PROFILE = 1 CRITICAL DEPTH ASSUMED  
 SECTION = 0.390 PROFILE = 1 MINIMUM SPECIFIC ENERGY



ROADWAY DATA, SHEPHERD CREEK  
 FILE NO. 2

STATION	WIDTH (FT)	FLOODWAY		MEAN VELOCITY	WATER SURFACE ELEVATION		DIFFERENCE
		SECTION AREA	SECTION AREA		WITH FLOODWAY	WITHOUT FLOODWAY	
0+160	70	371	371	5.2	2094.0	2093.7	0.3
0+160	70	386	386	5.7	2094.2	2093.9	0.3
0+160	70	289	289	6.7	2094.3	2094.0	0.3
0+160	70	266	266	6.6	2094.4	2094.1	0.3
0+250	80	423	423	4.5	2096.8	2096.3	0.5
0+390	80	337	337	5.8	2099.5	2098.8	0.7
0+470	80	453	453	4.2	2101.6	2101.0	0.6
0+550	80	288	288	6.5	2102.7	2101.6	1.1
0+630	80	289	289	6.5	2103.5	2103.1	0.4

SHEPHERD CREEK

12-6-79

HENDERSONVILLE, NC FIA ST

MILE	500 YEAR FLOOD		100 YEAR FLOOD		50 YEAR FLOOD		10 YEAR FLOOD	
	Q	ELEV	Q	ELEV	Q	ELEV	Q	ELEV
0.160	2530.	2094.4	1940.	2093.7	1590.	2093.2	920.	2091.6
0.160	2530.	2094.9	1940.	2094.1	1590.	2093.4	920.	2091.9
0.250	2465.	2097.1	1900.	2096.3	1540.	2095.7	890.	2094.0
0.390	2465.	2099.4	1900.	2098.8	1540.	2098.3	890.	2097.4
0.470	2465.	2101.4	1900.	2101.0	1540.	2100.5	890.	2099.2
0.550	2420.	2102.0	1875.	2101.6	1520.	2101.2	885.	2100.2
0.630	2420.	2104.0	1875.	2103.1	1520.	2102.5	885.	2101.1

These elevations were computed on the later vers of the HEC-2 Backwater Program

MILE	Q	ELEV
0.0		2092.9
0.160	1,590	2093.2
0.160	1,590	2094.6
0.25	1,540	2096.0
0.39	1,540	2098.0
0.47	1,540	2100.5
0.55	1,520	2101.2
0.63	1,520	2102.5

These elevations were NOT used on F

6-20-84