



//RMAKS7 JOB RTI.A25.P03078,MAK,V=1,T=2,P=100,PTY=0

\*\*\*PROCLIB=RTI.MG.PROCLIB

// EXEC HEC2

XXG EXEC PGM=HEC2,R=500K	00000010
XXSTEPLIB DD DSN=RTI.A25.P03078.JCW.LIB.LOAD,DISP=SHR	00000020
XXFT03F001 DD SYSOUT=A	00000030
XXFT01F001 DD DDNAME=SYSIN	00000040
XXFT91F001 DD DSN=8I91,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000050
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000060
XXFT92F001 DD DSN=8I92,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000070
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000080
XXFT93F001 DD DSN=8I93,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000090
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000100
XXFT94F001 DD DSN=8I94,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000110
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000120
XXFT95F001 DD DSN=8I95,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000130
XX DCB=(BUFNO=1,RECFM=VPS,LRECL=1000,BLKSIZE=6400)	00000140
XXFT96F001 DD DSN=8I96,UNIT=DISK,DISP=(,DELETE),SPACE=(TRK,(20,20)),	00000150
XX DCB=(BUFNO=1,RECFM=FB,LRECL=133,BLKSIZE=6384)	00000160

//SYSIN DD \*

//

IEF236I ALLOC. FOR RMAKS7 G

IEF237I 177 ALLOCATED TO STEPLIB

IEF237I 563 ALLOCATED TO FT03F001

IEF237I 503 ALLOCATED TO FT01F001

IEF237I 15C ALLOCATED TO FT91F001

IEF237I 15C ALLOCATED TO FT92F001

IEF237I 15C ALLOCATED TO FT93F001

IEF237I 15C ALLOCATED TO FT94F001

IEF237I 15C ALLOCATED TO FT95F001

IEF237I 15C ALLOCATED TO FT96F001

IEF142I - STEP WAS EXECUTED - COND CODE 0000

IEF285I RTI.A25.P03078.JCW.LIB.LOAD KEPT

IEF285I VOL SER NOS= RTI444.

IEF285I SYS77279.T185023.RV001.RMAKS7.I91 DELETED

IEF285I VOL SER NOS= SPARE7.

IEF285I SYS77279.T185023.RV001.RMAKS7.I92 DELETED

IEF285I VOL SER NOS= SPARE7.

IEF285I SYS77279.T185023.RV001.RMAKS7.I93 DELETED

IEF285I VOL SER NOS= SPARE7.

IEF285I SYS77279.T185023.RV001.RMAKS7.I94 DELETED

IEF285I VOL SER NOS= SPARE7.

IEF285I SYS77279.T185023.RV001.RMAKS7.I95 DELETED

IEF285I VOL SER NOS= SPARE7.

IEF285I SYS77279.T185023.RV001.RMAKS7.I96 DELETED

IEF285I VOL SER NOS= SPARE7.

G CORE=500K TIME---0:16.6 UR---837 RD/WR---0:00.0 RC-----0

S USED=234K CPU---0:05.5 DISK---442 REWD---0:00.0

G I/O---0:11.1 TAPE-----0 FL SR---0:00.0

RMAKS7 TIME---0:16.6

\*\*\*\*\*  
 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977  
 ERROR CORR = 01  
 MODIFICATION = 50,51,52  
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T1 SPENCER-ROWAN CO. BASIN E STRM 5-7S ROCKY BRANCH  
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES N-G JOB NO. 6918  
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INQ NINV IOIR STRT METRIC HVINS Q WSEL FQ  
 -1. 2. 0. 0. 0.008000 0.0 0.0 0. 636,000 0.0

J2 NPROF IPLOT PRFVS XSE V XSECH FN ALLOC IBW CHNIM ITRACE  
 0.0 0.0 -1.000 0.0 0.0 0.0 0.0 0.0 0.0 0.0

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38,000 39,000 40,000 41,000 43,000 42,000 1,000 2,000 25,000 53,000

54,000 25,000 50,000 0.0 201,000 0.0 0.0 0.0 0.0 0.0

J5 LPRNT NUMSEC \*\*\*\*\*REQUESTED SECTION NUMBERS\*\*\*\*\*

-10,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

NC 0.055 0.055 0.055 0.100 0.300 0.0 0.0 0.0 0.0 0.0  
 QT 5,000 504,000 876,000 1060,000 1495,000 1060,000 0.0 0.0 0.0  
 ET 5,000 0.0 0.0 0.0 0.0 -10,400 0.0 0.0 0.0

X1 550,000 11,000 1106,000 1136,000 550,000 550,000 550,000 0.0 0.0 0.0  
 GR 655,500 1000,000 638,000 1054,000 637,300 1106,000 631,600 1118,000 631,400 1126,000  
 GR 631,700 1134,000 637,100 1136,000 637,300 1200,000 640,300 1266,000 644,900 1300,000  
 GR 655,500 1394,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
 QT 5,000 503,000 865,000 1045,000 1456,000 1045,000 0.0 0.0 0.0

X1 1940,000 14,000 1304,000 1318,000 1390,000 1390,000 1390,000 0.0 0.0 0.0  
 GR 665,600 1000,000 654,900 1100,000 651,000 1132,000 648,200 1200,000 648,400 1207,000  
 GR 647,900 1226,000 648,400 1304,000 642,800 1308,000 642,800 1314,000 649,700 1518,000  
 GR 652,800 1380,000 657,700 1400,000 664,300 1500,000 665,600 1518,000 0.0 0.0

X1 1990,000 0.0 0.0 0.0 50,000 50,000 50,000 0.0 0.400 0.0  
 NC 0.025 0.025 0.025 0.100 0.300 0.0 0.0 0.0 0.0 0.0

X1 2040,000 26,000 1950,500 1956,000 50,000 50,000 50,000 0.0 0.0 0.0  
 GR 664,300 1000,000 651,000 1100,000 659,300 1200,000 656,900 1300,000 655,300 1400,000  
 GR 654,000 1500,000 651,000 1600,000 649,800 1700,000 649,400 1800,000 648,900 1900,000  
 GR 649,500 1946,000 644,500 1950,500 643,800 1951,000 643,400 1952,000 643,800 1953,000  
 GR 644,900 1953,500 644,500 1954,000 643,900 1954,500 643,500 1955,000 643,900 1955,500  
 GR 644,200 1956,000 649,700 1960,000 650,800 2000,000 653,700 2050,000 657,500 2100,000  
 GR 655,900 2183,000 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
 SB 0.900 1.500 2.500 0.0 5.000 0.010 10,200 0.0 0.0 0.0

GR	649,500	1946,000	644,900	1950,500	643,800	1951,000	643,400	1952,000	643,800	1953,000
GR	644,900	1953,500	644,600	1954,000	643,900	1954,500	643,800	1955,000	643,900	1955,500
GR	640,800	1956,000	649,700	1960,000	650,600	2000,000	653,700	2050,000	657,500	2100,000
GR	655,900	2183,000	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
SB	0,900	1,500	2,500	0,0	5,000	0,010	10,200	0,0	0,0	0,0
X1	2080,000	0,0	0,0	0,0	40,000	40,000	40,000	0,0	0,0	0,0
X2	0,0	0,0	1,000	646,400	648,900	0,0	0,0	0,0	0,0	0,0
BT	24,000	1000,000	664,300	0,0	1100,000	661,400	0,0	1200,000	659,300	0,0
BT	1300,000	655,900	0,0	1400,000	655,300	0,0	1500,000	654,000	0,0	1600,000
BT	661,500	0,0	1700,000	649,800	0,0	1800,000	649,300	0,0	1900,000	648,900
BT	0,0	1950,500	649,500	644,900	1951,000	649,500	646,000	1952,000	649,500	646,400
BT	1953,000	649,500	646,000	1953,500	649,500	644,900	1954,000	649,600	644,800	1954,500
BT	649,500	645,700	1955,000	649,600	645,800	1955,500	649,600	645,700	1956,000	649,600
BT	644,800	2000,000	650,800	0,0	2050,000	653,700	0,0	2100,000	657,500	0,0
BT	2183,000	665,900	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NC	0,055	0,055	0,055	0,100	0,300	0,0	0,0	0,0	0,0	0,0
X1	2130,000	14,000	1304,000	1318,000	50,000	50,000	50,000	0,0	1,800	0,0
GR	665,600	1000,000	654,900	1100,000	661,000	1132,000	648,200	1200,000	648,400	1207,000
GR	647,900	1226,000	648,400	1304,000	642,800	1308,000	642,800	1314,000	649,700	1318,000
GR	652,800	1380,000	657,700	1400,000	664,300	1500,000	665,600	1518,000	0,0	0,0
X1	2180,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	0,400	0,0
BT	5,000	231,000	433,000	542,000	815,000	542,000	0,0	0,0	0,0	0,0
X1	3105,000	9,000	1135,000	1164,000	925,000	925,000	925,000	0,0	-6,600	0,0
GR	686,000	1000,000	671,300	1100,000	663,600	1135,000	665,100	1141,000	664,400	1150,000
GR	664,800	1159,000	667,900	1164,000	674,800	1200,000	686,000	1273,000	0,0	0,0
X1	3155,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	1,200	0,0
NC	0,025	0,025	0,025	0,100	0,300	0,0	0,0	0,0	0,0	0,0
X1	3205,000	15,000	1385,000	1389,000	50,000	50,000	50,000	0,0	0,0	0,0
GR	683,600	1000,000	675,500	1100,000	668,700	1200,000	666,200	1300,000	666,800	1340,000
GR	662,400	1372,000	662,200	1385,000	660,500	1386,000	660,200	1387,000	660,500	1388,000
GR	662,200	1389,000	663,700	1401,000	674,700	1464,000	678,700	1500,000	683,600	1537,000
SB	0,900	1,500	2,500	0,0	4,000	0,010	12,600	0,0	0,0	0,0
X1	3255,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	0,0	0,0
X2	0,0	0,0	1,000	664,200	666,200	0,0	0,0	0,0	0,0	0,0
BT	12,000	1000,000	683,600	0,0	1100,000	675,500	0,0	1200,000	668,700	0,0
BT	1300,000	665,200	0,0	1385,000	667,400	652,200	1386,000	667,400	663,900	1387,000
BT	667,400	664,200	1386,000	667,400	663,900	1389,000	667,400	662,200	1400,000	668,100
BT	0,0	1500,000	678,700	0,0	1537,000	683,600	0,0	0,0	0,0	0,0
NC	0,055	0,055	0,055	0,100	0,300	0,0	0,0	0,0	0,0	0,0
X1	3305,000	9,000	1135,000	1164,000	50,000	50,000	50,000	0,0	-1,200	0,0
GR	635,600	1000,000	671,300	1100,000	666,500	1135,000	665,100	1141,000	664,400	1151,000
GR	664,800	1159,000	667,900	1164,000	674,800	1200,000	686,000	1273,000	0,0	0,0
X1	3355,000	0,0	0,0	0,0	50,000	50,000	50,000	0,0	1,200	0,0
BT	5,000	202,000	368,000	483,000	733,000	483,000	0,0	0,0	0,0	0,0
X1	3492,000	12,000	1125,000	1154,000	137,000	137,000	137,000	0,0	-2,300	0,0
GR	696,100	1000,000	690,200	1060,000	680,400	1100,000	677,900	1125,000	675,700	1127,000
GR	675,500	1130,000	675,800	1132,000	678,200	1134,000	681,000	1183,000	691,000	1242,000
GR	695,600	1300,000	696,100	1308,000	0,0	0,0	0,0	0,0	0,0	0,0



X1 4284.000 0.0 0.0 0.0 50.000 50.000 50.000 0.0 0.600 0.0  
E0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

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HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977  
ERROR CORR - 01  
MODIFICATION - 50,51,52  
\*\*\*\*\*

T1 SPENCER-ROWAN CO. BASIN E. STRM 5-7S ROCKY BRANCH  
T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-6 JOB NO. 6918  
T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INQ NINV LDIR STRI METRIC HVIMS Q WSEL FQ

-10. 3. 0. 0. 0.008000 0.0 0.0 0. 637.000 0.0

J2 NPROF I PLOT PRFVS XSECV XSECH FN ALLOC IBW CHNIM ITRACE

2.000 0.0 -1.000 0.0 0.0 0.0 0.0 0.0 0.0 0.0

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HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977

ERROR CORR - 01

MODIFICATION - 50,51,52  
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T1 SPENCER-ROWAN CO. BASIN E STRM 5-7S ROCKY BRANCH  
T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-6 JOB NO. 6918  
T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.008000	0.0	0.0	0.	638,000	0.0

J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHNIM	ITRACE
	3,000	0.0	-1,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977  
 ERROR CORR - 01  
 MODIFICATION - 50,51,52.  
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NOTE- ASTERISK (\*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

10 YEAR FLOOD WATER SURF

SUMMARY PRINTOUT

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
A 550.000	550.00	0.0	0.0	504.00	631.40	636.06	0.0	5.19	1108.60	1135.62	97.11	0.0
550.000	550.00	0.0	0.0	876.00	631.40	637.54	0.0	6.08	1088.12	1205.30	164.23	1.48
550.000	550.00	0.0	0.0	1060.00	631.40	637.89	0.0	6.39	1062.25	1212.97	210.91	0.35
550.000	550.00	0.0	0.0	1495.00	631.40	638.46	0.0	6.90	1052.41	1225.44	304.47	0.57
B 1940.000	1390.00	0.0	0.0	503.00	642.80	648.84	0.0	5.77	1184.44	1317.50	135.55	0.0
1940.000	1390.00	0.0	0.0	865.00	642.80	649.51	0.0	5.68	1168.26	1317.89	229.77	0.67
1940.000	1390.00	0.0	0.0	1045.00	642.80	649.75	0.0	5.75	1162.28	1319.07	267.39	0.25
1940.000	1390.00	0.0	0.0	1466.00	642.80	650.23	0.0	6.01	1150.76	1328.56	346.75	0.47
1990.000	50.00	0.0	0.0	503.00	643.20	649.41	0.0	4.94	1180.22	1317.60	159.04	0.0
1990.000	50.00	0.0	0.0	865.00	643.20	649.96	0.0	5.46	1167.01	1317.92	237.47	0.55
1990.000	50.00	0.0	0.0	1045.00	643.20	650.19	0.0	5.65	1161.65	1319.59	271.49	0.23
1990.000	50.00	0.0	0.0	1466.00	643.20	650.65	0.0	5.97	1150.48	1328.78	348.75	0.46
* 2040.000	50.00	0.0	0.0	503.00	643.40	649.79	649.79	6.78	1701.59	1963.40	164.71	0.0
2040.000	50.00	0.0	0.0	865.00	643.40	650.11	0.0	7.61	1684.43	1974.96	252.67	0.32
2040.000	50.00	0.0	0.0	1045.00	643.40	650.43	0.0	6.30	1668.24	1986.73	351.27	0.32
2040.000	50.00	0.0	0.0	1456.00	643.40	650.95	0.0	5.41	1642.53	2002.58	526.26	0.52
2080.000	40.00	648.90	646.40	503.00	643.40	649.94	0.0	5.49	1692.69	1968.95	205.83	0.0
2080.000	40.00	648.90	646.40	865.00	643.40	650.29	0.0	6.14	1675.54	1981.42	305.69	0.34
2080.000	40.00	648.90	646.40	1045.00	643.40	650.58	0.0	5.40	1660.85	1992.11	399.28	0.29
2080.000	40.00	648.90	646.40	1466.00	643.40	651.10	0.0	4.75	1634.69	2005.28	583.50	0.53
* 2130.000	50.00	0.0	0.0	503.00	644.60	650.56	650.56	6.22	1186.44	1317.45	124.68	0.0
* 2130.000	50.00	0.0	0.0	865.00	644.60	650.98	650.98	7.30	1176.27	1317.70	181.72	0.42
* 2130.000	50.00	0.0	0.0	1045.00	644.60	651.14	651.14	7.81	1172.36	1317.79	204.86	0.16
* 2130.000	50.00	0.0	0.0	1466.00	644.60	651.44	651.44	8.71	1164.99	1317.97	250.14	0.30
C 2180.000	50.00	0.0	0.0	503.00	645.00	651.25	0.0	4.78	1179.31	1317.62	164.21	0.0
2180.000	50.00	0.0	0.0	865.00	645.00	651.82	0.0	5.23	1165.57	1317.95	246.45	0.57
2180.000	50.00	0.0	0.0	1045.00	645.00	652.03	0.0	5.45	1160.34	1320.67	280.07	0.22
2180.000	50.00	0.0	0.0	1466.00	645.00	652.47	0.0	5.90	1149.94	1329.23	352.77	0.43
D 3105.000	925.00	0.0	0.0	231.00	657.80	659.95	0.0	5.71	1135.20	1161.82	40.43	0.0
3105.000	925.00	0.0	0.0	433.00	657.80	660.77	0.0	6.81	1129.27	1163.14	65.13	0.82
3105.000	925.00	0.0	0.0	542.00	657.80	661.13	0.0	7.22	1126.56	1163.73	70.08	0.37
3105.000	925.00	0.0	0.0	815.00	657.80	661.84	0.0	8.20	1121.32	1166.80	106.98	0.70

3105.000	925.00	0.0	0.0	542.00	657.80	661.13	0.0	7.22	1126.98	1163.75	78.08	0.37
3105.000	925.00	0.0	0.0	815.00	657.80	661.84	0.0	8.20	1121.32	1166.80	106.98	0.70

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
3155.000	50.00	0.0	0.0	231.00	659.00	661.23	0.0	5.44	1134.81	1161.94	42.43	0.0
3155.000	50.00	0.0	0.0	433.00	659.00	661.92	0.0	6.95	1129.61	1163.07	63.61	0.68
3155.000	50.00	0.0	0.0	542.00	659.00	662.23	0.0	7.56	1127.33	1163.56	74.26	0.31
3155.000	50.00	0.0	0.0	815.00	659.00	662.85	662.76	8.78	1122.67	1165.85	98.95	0.63
* 3205.000	50.00	0.0	0.0	231.00	660.20	663.61	663.61	7.34	1363.17	1400.31	41.46	0.0
* 3205.000	50.00	0.0	0.0	433.00	660.20	664.18	664.18	8.40	1359.06	1403.74	64.65	0.57
* 3205.000	50.00	0.0	0.0	542.00	660.20	664.47	664.47	8.50	1356.91	1405.44	78.45	0.30
* 3205.000	50.00	0.0	0.0	815.00	660.20	664.98	664.98	9.36	1353.24	1408.33	104.62	0.51
3255.000	50.00	666.20	664.20	231.00	660.20	663.62	0.0	7.30	1363.14	1400.35	41.66	0.0
3255.000	50.00	666.20	664.20	433.00	660.20	667.68	0.0	1.45	1240.55	1423.83	390.09	4.06
3255.000	50.00	666.20	664.20	542.00	660.20	667.88	0.0	1.67	1232.68	1424.96	427.07	0.21
3255.000	50.00	666.20	664.20	815.00	660.20	668.30	0.0	2.11	1216.10	1427.33	510.69	0.41
* 3305.000	50.00	0.0	0.0	231.00	663.20	665.14	665.14	6.65	1136.05	1161.48	34.75	0.0
3305.000	50.00	0.0	0.0	433.00	663.20	667.55	0.0	3.90	1118.99	1168.43	121.56	2.41
3305.000	50.00	0.0	0.0	542.00	663.20	667.70	0.0	4.63	1117.85	1169.23	129.43	0.15
3305.000	50.00	0.0	0.0	815.00	663.20	667.93	0.0	6.45	1116.13	1170.44	141.63	0.23
3355.000	50.00	0.0	0.0	231.00	664.40	666.76	0.0	5.03	1133.81	1162.16	46.02	0.0
3355.000	50.00	0.0	0.0	433.00	664.40	667.68	0.0	5.92	1126.96	1163.64	75.93	0.92
E 3355.000	50.00	0.0	0.0	542.00	664.40	667.88	0.0	6.80	1125.48	1163.97	83.43	0.20
3355.000	50.00	0.0	0.0	815.00	664.40	668.29	668.15	8.67	1122.38	1165.06	100.48	0.41
* 3492.000	137.00	0.0	0.0	202.00	673.20	676.70	676.70	6.88	1114.02	1147.97	36.89	0.0
* 3492.000	137.00	0.0	0.0	368.00	673.20	677.42	677.42	7.69	1106.80	1160.60	68.57	0.72
* 3492.000	137.00	0.0	0.0	483.00	673.20	677.74	677.74	8.21	1103.63	1165.14	86.99	0.32
* 3492.000	137.00	0.0	0.0	733.00	673.20	678.27	678.27	8.91	1099.31	1175.45	124.05	0.53
3542.000	50.00	0.0	0.0	202.00	673.60	677.72	0.0	4.50	1107.76	1158.92	63.54	0.0
3542.000	50.00	0.0	0.0	368.00	673.60	678.43	0.0	5.21	1100.72	1171.23	106.33	0.71
3542.000	50.00	0.0	0.0	483.00	673.60	678.78	0.0	5.49	1098.86	1177.38	132.56	0.34
3542.000	50.00	0.0	0.0	733.00	673.60	679.33	0.0	6.02	1096.63	1184.33	178.42	0.55
3592.000	50.00	0.0	0.0	202.00	674.00	677.87	0.0	6.74	1320.23	1364.60	44.02	0.0
3592.000	50.00	0.0	0.0	368.00	674.00	678.61	0.0	6.48	1312.84	1371.53	84.34	0.74
3592.000	50.00	0.0	0.0	483.00	674.00	678.95	0.0	6.62	1309.79	1383.39	107.53	0.34
3592.000	50.00	0.0	0.0	733.00	674.00	679.49	0.0	6.93	1307.61	1392.75	149.98	0.54
3658.000	66.00	688.80	678.00	202.00	674.00	683.86	0.0	0.35	1289.75	1420.82	623.19	0.0
3658.000	66.00	688.80	678.00	368.00	674.00	689.53	0.0	0.25	1261.95	1457.02	1536.90	5.67
3658.000	66.00	688.80	678.00	483.00	674.00	689.83	0.0	0.32	1259.05	1458.93	1596.15	0.30
3658.000	66.00	688.80	678.00	733.00	674.00	690.26	0.0	0.46	1254.93	1477.23	1684.77	0.42
3708.000	50.00	0.0	0.0	202.00	675.10	683.86	0.0	0.52	1084.25	1202.22	490.25	0.0
3708.000	50.00	0.0	0.0	368.00	675.10	689.53	0.0	0.33	1061.10	1235.69	1320.17	5.67
3708.000	50.00	0.0	0.0	483.00	675.10	689.83	0.0	0.42	1059.68	1237.46	1372.92	0.30
3708.000	50.00	0.0	0.0	733.00	675.10	690.25	0.0	0.61	1055.37	1239.96	1449.76	0.42
3758.000	50.00	0.0	0.0	202.00	675.50	683.86	0.0	0.58	1085.88	1199.86	443.93	0.0
3758.000	50.00	0.0	0.0	368.00	675.50	689.53	0.0	0.35	1062.73	1233.33	1251.14	5.67
3758.000	50.00	0.0	0.0	483.00	675.50	689.83	0.0	0.45	1061.50	1235.10	1302.74	0.30
3758.000	50.00	0.0	0.0	733.00	675.50	690.26	0.0	0.64	1059.43	1237.61	1377.31	0.42

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
4036.000	278.00	0.0	0.0	143.00	679.30	683.77	0.0	3.38	1110.47	1137.54	44.92	0.0
N 4036.000	278.00	0.0	0.0	280.00	679.30	689.53	0.0	0.59	1074.62	1232.66	633.71	5.77
4038.000	278.00	0.0	0.0	358.00	679.30	689.83	0.0	0.70	1072.62	1235.70	682.00	0.30
4036.000	278.00	0.0	0.0	559.00	679.30	690.26	0.0	0.98	1069.79	1240.01	753.20	0.43
4086.000	50.00	0.0	0.0	143.00	680.00	684.00	0.0	4.02	1112.98	1126.09	35.60	0.0
4086.000	50.00	0.0	0.0	280.00	680.00	689.53	0.0	0.72	1079.24	1225.60	527.36	5.53
4086.000	50.00	0.0	0.0	358.00	680.00	689.84	0.0	0.85	1077.25	1228.64	572.21	0.30
4086.000	50.00	0.0	0.0	559.00	680.00	690.26	0.0	1.17	1074.41	1232.98	638.73	0.43
* 4136.000	50.00	0.0	0.0	143.00	680.60	684.60	684.60	7.79	1198.00	1211.00	22.38	0.0
4136.000	50.00	0.0	0.0	280.00	680.60	689.53	0.0	0.87	1167.62	1304.64	434.87	4.94
4136.000	50.00	0.0	0.0	358.00	680.60	689.84	0.0	1.00	1165.33	1307.70	477.01	0.30
4136.000	50.00	0.0	0.0	559.00	680.60	690.27	0.0	1.35	1157.84	1312.07	540.98	0.43
4184.000	48.00	687.90	684.60	143.00	680.60	687.59	0.0	1.12	1179.55	1284.97	199.96	0.0
4184.000	48.00	687.90	684.60	280.00	680.60	689.95	0.0	0.75	1163.24	1308.92	494.34	2.36
4184.000	48.00	687.90	684.60	358.00	680.60	690.25	0.0	0.86	1157.97	1312.00	539.78	0.30
4184.000	48.00	687.90	684.60	559.00	680.60	690.79	0.0	1.14	1148.75	1317.38	625.49	0.53
4234.000	50.00	0.0	0.0	143.00	682.20	687.55	0.0	2.28	1105.66	1159.42	80.79	0.0
4234.000	50.00	0.0	0.0	280.00	682.20	689.95	0.0	1.38	1091.03	1207.62	293.36	2.39
4234.000	50.00	0.0	0.0	358.00	682.20	690.25	0.0	1.55	1089.03	1210.67	329.28	0.30
4234.000	50.00	0.0	0.0	559.00	682.20	690.77	0.0	1.98	1085.55	1215.98	395.54	0.53
4284.000	50.00	0.0	0.0	143.00	682.80	687.61	0.0	2.93	1108.59	1146.10	56.13	0.0
I 4284.000	50.00	0.0	0.0	280.00	682.80	689.96	0.0	1.84	1095.00	1201.56	226.41	2.34
4284.000	50.00	0.0	0.0	358.00	682.80	690.26	0.0	2.03	1093.01	1204.61	259.30	0.30
4284.000	50.00	0.0	0.0	559.00	682.80	690.79	0.0	2.50	1089.48	1209.98	321.03	0.53

SUMMARY OF ERRORS

CAUTION SECNO= 2040.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2040.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2040.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 2130.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2130.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2130.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 2130.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2130.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2130.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 2130.000 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2130.000 PROFILE= 3 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2130.000 PROFILE= 3 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 2130.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 2130.000 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 2130.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3205.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3205.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3205.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3205.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3205.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3205.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3205.000 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 3205.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3205.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3205.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3205.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3205.000 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3205.000 PROFILE= 3 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3205.000 PROFILE= 3 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3205.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3205.000 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3205.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3305.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3305.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3305.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3492.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3492.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3492.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3492.000 PROFILE= 2 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3492.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3492.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3492.000 PROFILE= 3 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3492.000 PROFILE= 3 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3492.000 PROFILE= 3 20 TRIALS ATTEMPTED TO BALANCE WSEL  
CAUTION SECNO= 3492.000 PROFILE= 4 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 3492.000 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 3492.000 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 4136.000 PROFILE= 1 CRITICAL DEPTH ASSUMED  
CAUTION SECNO= 4136.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY  
CAUTION SECNO= 4136.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL

11

FLOOD INSURANCE ZONE DATA FOR 10 YEAR FLOOD WATER SURF

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND		
		10c	2c	0.2c
550,000	0.	-1.8	-3.3	0.6
1940,000	1390.	-0.9	-0.2	0.5
1990,000	1440.	-0.8	-0.2	0.5
2040,000	1490.	-0.6	-0.3	0.5
2080,000	1530.	-0.6	-0.3	0.5
2130,000	1580.	-0.6	-0.2	0.3
2180,000	1630.	-0.8	-0.2	0.4
3105,000	2555.	-1.2	-0.4	0.7
3155,000	2605.	-1.0	-0.3	0.6
3205,000	2655.	-0.9	-0.3	0.5
3255,000	2705.	-4.3	-0.2	0.4
3305,000	2755.	-2.6	-0.2	0.2
3355,000	2805.	-1.1	-0.2	0.4
3492,000	2942.	-1.0	-0.3	0.5
3542,000	2992.	-1.1	-0.3	0.5
3592,000	3042.	-1.1	-0.3	0.5
3650,000	3108.	-6.0	-0.3	0.4
3708,000	3158.	-6.0	-0.3	0.4
3758,000	3208.	-6.0	-0.3	0.4
4036,000	3486.	-6.1	-0.3	0.4
4086,000	3536.	-5.8	-0.3	0.4
4136,000	3586.	-5.2	-0.3	0.4
4184,000	3634.	-2.7	-0.3	0.5
4234,000	3684.	-2.7	-0.3	0.5
4284,000	3734.	-2.6	-0.3	0.5
WEIGHTED AVG FOR REACH		-1.9	-0.3	0.5

FHF FOR THE REACH = 020 WITH 1.3c OF THE REACH WITHIN 0.5 FEET ZONE FOR THE REACH = A 4

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

SEC. NO.	TOTAL LENGTH	AVG ELEVATION DATA			WTD. AVG.	FHF	PERCENT WITHIN
		10c	1c	DIFF.			
	0.						550,000
1	100.	636.5	638.3	-1.8	-1.8	020	100.
2	200.	637.4	639.2	-1.7	-1.8	020	100.
3	300.	638.4	640.0	-1.7	-1.7	015	100.
4	400.	639.3	640.9	-1.6	-1.7	015	100.
5	500.	640.2	641.7	-1.5	-1.7	015	100.
6	500.	641.1	642.6	-1.5	-1.6	015	100.
7	700.	642.0	643.4	-1.4	-1.6	015	100.

4	400.	639.3	640.9	-1.6	-1.7	015	100.
5	500.	640.2	641.7	-1.5	-1.7	015	100.
6	600.	641.1	642.6	-1.5	-1.6	015	100.
7	700.	642.0	643.4	-1.4	-1.6	015	100.
8	800.	643.0	644.3	-1.3	-1.6	015	100.
9	900.	643.9	645.1	-1.3	-1.5	015	100.
10	1000.	644.8	645.0	-1.2	-1.5	015	100.
11	1100.	645.7	646.9	-1.1	-1.5	015	100.
12	1200.	646.6	647.7	-1.1	-1.4	015	100.
13	1300.	647.6	648.6	-1.0	-1.4	015	100.
	1390.					SEC.	1940.000
14	1400.	648.5	649.4	-0.9	-1.4	015	100.
	1440.					SEC.	1990.000
	1490.					SEC.	2040.000
15	1500.	649.8	650.4	-0.6	-1.3	015	93.
	1530.					SEC.	2080.000
	1580.					SEC.	2130.000
16	1600.	650.7	651.3	-0.6	-1.3	015	81.
	1630.					SEC.	2180.000
17	1700.	651.4	652.1	-0.7	-1.2	010	76.
18	1800.	652.4	653.2	-0.8	-1.2	010	78.
19	1900.	653.3	654.2	-0.9	-1.2	010	79.
20	2000.	654.3	655.2	-0.9	-1.2	010	80.
21	2100.	655.2	656.2	-1.0	-1.2	010	81.
22	2200.	656.1	657.1	-1.0	-1.2	010	82.
23	2300.	657.1	658.1	-1.1	-1.2	010	83.
24	2400.	658.0	659.1	-1.1	-1.2	010	79.
25	2500.	659.0	660.1	-1.1	-1.2	010	80.
	2555.					SEC.	3105.000
26	2600.	660.3	661.4	-1.1	-1.2	010	81.
	2605.					SEC.	3155.000
	2655.					SEC.	3205.000
27	2700.	663.6	666.0	-2.4	-1.2	010	81.
	2705.					SEC.	3255.000
	2755.					SEC.	3305.000
28	2800.	665.9	667.8	-1.9	-1.2	010	82.
	2805.					SEC.	3355.000
29	2900.	670.1	671.5	-1.2	-1.2	010	79.
	2942.					SEC.	3492.000
	2992.					SEC.	3542.000
30	3000.	677.7	678.8	-1.1	-1.2	010	80.
	3042.					SEC.	3592.000
31	3100.	680.4	683.7	-3.2	-1.3	015	77.
	3108.					SEC.	3658.000
	3158.					SEC.	3708.000
32	3200.	683.9	689.8	-6.0	-1.4	015	69.
	3208.					SEC.	3750.000
33	3300.	683.8	689.8	-6.0	-1.6	015	52.
34	3400.	683.8	689.8	-6.0	-1.7	015	32.
	3486.					SEC.	4036.000
35	3500.	683.8	689.8	-6.0	-1.8	020	26.
	3536.					SEC.	4086.000
	3586.					SEC.	4136.000
36	3600.	685.0	689.9	-4.9	-1.9	020	22.
	3634.					SEC.	4184.000
	3684.					SEC.	4234.000
37	3700.	687.6	690.2	-2.7	-1.9	020	22.
	3734.					SEC.	4284.000

THIS REACH CAN BE SUBDIVIDED BY INC NO. TO MEET FIA REQUIREMENTS  
INPUT 200 WHERE N IS THE NUMBER OF REACHES AND THEN INPUT THE END  
OF EACH REACH BY INC NO. FOR EXAMPLE 202 30 37  
A NEGATIVE INC NO. WILL SUPPRESS INTERMEDIATE INC OUTPUT.

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HEG2 RELEASE DATED NOV 76 UPDATED FEB 1977  
ERROR CORR - 01  
MODIFICATION - 50,51,52  
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