

FLW OK

THIS RUN EXECUTED 29 APR 77 10.04

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

C  
 T1 FPHS BR FAYETTEVILLE NC FIS  
 T2 100 YR NATURAL  
 T3 CROSS CR LANGDON ST TO ROSES LAKE

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-1.	5.	0.	0.	0.000000	0.00	0.0	0.	117.100	0.000
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	*1.000	0.000	*1.000	0.000	0.000	0.000	0.000	0.000	0.000	15.000
J3	VARIABLE CODES FOR SUMMARY PRINTOUT									
	38.000	1.000	3.000	41.000	42.000	5.000	43.000	0.000	38.000	1.000
	53.000	21.000	22.000	54.000	4.000	0.000	200.000	0.000	0.000	0.000
NC	.100	.100	.000	.200	.400	0.000	0.000	0.000	0.000	0.000
QT	7.000	2560.000	2560.000	2560.000	2560.000	2560.000	1100.000	2000.000	4420.000	0.000
EY	0.000	0.000	9.400	300.200	300.200	0.000	0.000	0.000	0.000	0.000

\*\*\*\* CHANGE OVERBANKS #NW TO .10 FOR FLOODWAY ONLY \*\*\*\*

X1	4.800	30.000	593.000	634.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	140.000	50.000	137.300	90.000	123.200	208.000	114.900	403.000	109.500	503.000
GR	107.200	969.000	102.200	505.000	106.300	593.000	105.400	594.000	104.400	596.000
GR	100.000	600.000	99.500	605.000	100.300	600.000	101.600	600.000	109.900	634.000
GR	109.400	650.000	110.400	700.000	110.900	750.000	112.600	800.000	114.600	850.000
GR	119.700	900.000	110.000	950.000	119.500	1000.000	122.500	1050.000	130.000	1100.000
GR	132.000	1200.000	134.000	1200.000	136.000	1370.000	130.000	1400.000	140.000	1430.000

X1	4.810	0.000	0.000	0.000	2.000	2.000	2.000	1.000	1.000	0.000
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X1	4.820	29.000	600.000	632.000	5.000	5.000	5.000	0.000	0.000	0.000
GR	140.000	39.000	130.000	90.000	136.000	60.000	134.000	105.000	130.000	100.000
GR	129.500	250.000	122.000	300.000	119.300	350.000	116.300	400.000	114.400	450.000
GR	112.000	500.000	111.600	550.000	111.200	600.000	99.700	600.000	99.700	632.000
GR	110.700	632.000	110.500	650.000	110.900	700.000	111.200	750.000	111.900	800.000
GR	113.300	050.000	114.900	900.000	116.900	934.000	119.200	985.000	121.500	1039.000
GR	124.300	1090.000	130.000	1155.000	138.000	1270.000	140.000	1340.000	0.000	0.000

X1	4.830	0.000	0.000	0.000	5.000	5.000	5.000	1.000	1.000	0.000
SB	1.250	2.040	2.500	0.000	32.000	2.000	270.000	0.000	0.000	0.000

X2	0.000	0.000	1.000	108.700	110.900	0.000	0.000	0.000	0.000	0.000
BT	10.000	35.000	140.000	108.700	400.000	116.300	108.700	550.000	111.600	108.700
BT	650.000	110.900	108.700	800.000	111.900	108.700	900.000	114.900	108.700	1090.000
BT	124.300	108.700	1155.000	130.000	108.700	1270.000	130.000	108.700	1340.000	140.000
BT	108.700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
GR	140.000	35.000	130.000	90.000	136.000	60.000	134.000	105.000	130.000	100.000
GR	129.500	250.000	122.000	300.000	119.300	350.000	116.300	400.000	114.400	490.000
GR	112.000	500.000	111.600	550.000	111.200	600.000	99.700	600.000	99.700	632.000
GR	110.700	632.000	110.500	690.000	110.900	700.000	111.200	750.000	111.900	800.000
GR	113.300	850.000	114.900	900.000	116.900	934.000	119.200	905.000	121.500	1039.000
GR	124.300	1090.000	130.000	1155.000	130.000	1270.000	140.000	1340.000	0.000	0.000

X1	4.850	35.000	597.000	640.000	30.000	30.000	30.000	0.000	0.000	0.000
GR	140.000	50.000	130.000	60.000	136.000	70.000	134.000	120.000	130.000	170.000
GR	124.600	240.000	117.400	374.000	114.300	420.000	109.000	550.000	102.900	597.000
GR	100.500	600.000	100.000	600.000	100.200	612.000	100.600	623.000	100.700	632.000
GR	100.000	640.000	107.400	692.000	100.400	729.000	100.400	740.000	110.000	820.000
GR	112.000	850.000	114.000	870.000	116.000	895.000	110.000	910.000	120.000	955.000
GR	122.000	1060.000	124.000	1090.000	126.000	1110.000	120.000	1135.000	130.000	1145.000
GR	132.000	1175.000	134.000	1210.000	136.000	1250.000	130.000	1255.000	140.000	1265.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	139.000	539.000

X1	4.900	20.000	370.000	400.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	120.000	20.000	110.000	40.000	116.000	70.000	114.000	120.000	112.000	190.000
GR	110.000	220.000	100.000	240.000	106.000	290.000	104.000	370.000	100.500	303.000
GR	100.500	395.000	104.000	400.000	106.000	440.000	100.000	400.000	110.000	520.000
GR	112.000	600.000	114.000	770.000	116.000	830.000	110.000	865.000	120.000	930.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	324.000	874.000

X1	5.000	12.000	665.000	603.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	130.000	0.000	120.000	65.000	110.000	250.000	100.000	520.000	105.100	665.000
GR	99.900	660.000	99.900	600.000	105.100	603.000	100.000	820.000	110.000	800.000
GR	120.000	1140.000	130.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	613.000	1163.000

X1	5.200	24.000	896.000	929.000	700.000	700.000	700.000	0.000	0.000	0.000
GR	130.000	125.000	120.000	300.000	110.000	340.000	116.000	370.000	114.000	440.000
GR	112.000	400.000	110.000	500.000	100.400	643.000	100.900	804.000	105.400	892.000
GR	100.000	896.000	103.700	900.000	102.400	902.000	102.900	906.000	103.000	913.000
GR	100.300	915.000	100.000	929.000	110.000	1235.000	112.000	1295.000	114.000	1340.000
GR	110.000	1305.000	110.000	1420.000	120.000	1440.000	130.000	1510.000	0.000	0.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	730.000	1030.000

X1	5.400	20.000	993.000	1010.000	1275.000	1275.000	1275.000	0.000	0.000	0.000
GR	130.000	360.000	120.000	400.000	126.000	550.000	124.000	640.000	122.000	690.000
GR	120.000	700.000	110.000	700.000	116.000	700.000	114.000	800.000	112.000	890.000
GR	110.000	900.000	110.000	993.000	106.700	996.000	106.300	1000.000	104.700	1002.000
GR	106.400	1004.000	110.000	1010.000	110.000	1050.000	112.000	1000.000	114.000	1100.000
GR	116.000	1120.000	110.000	1140.000	120.000	1100.000	122.000	1100.000	124.000	1190.000
GR	126.000	1210.000	120.000	1230.000	130.000	1240.000	0.000	0.000	0.000	0.000
NC	.100	.100	.065	.200	.400	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	560.000	960.000

\*\*\* CHANGE OVERBANKS #N# TO .10 FOR FLOODWAY ONLY \*\*\*

X1	5.500	14.000	890.000	900.000	500.000	500.000	500.000	0.000	0.000	0.000
GR	135.000	0.000	130.000	170.000	120.000	370.000	112.000	510.000	110.100	890.000
GR	106.000	893.000	106.000	905.000	110.100	900.000	110.900	920.000	111.000	930.000
GR	110.000	1000.000	120.000	1070.000	122.000	1100.000	130.000	1300.000	0.000	0.000

ET 0.000 0.000 0.000 9.100 0.000 0.000 9.000 0.000 349.000 799.000

\*\*\*\* CHANGE OVERBANKS #NO TO .1 ON REST OF NC CARDS \*\*\*\*

\*\*\*\* FOR FLOODWAY RUNS ONLY \*\*\*\*

X1	5.600	12.000	540.000	558.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	135.000	0.000	130.000	25.000	120.000	110.000	114.000	200.000	112.800	540.000
GR	108.200	543.000	108.200	555.000	112.800	558.000	114.000	900.000	120.000	1000.000
GR	130.000	1130.000	135.000	1200.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.100	.100	.000	.200	.400	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	300.200	0.000	0.000	0.000	0.000	319.000	719.000

X1	5.700	13.000	510.000	528.000	400.000	400.000	0.000	0.000	0.000	0.000
GR	135.000	0.000	130.000	50.000	120.000	180.000	116.000	220.000	115.000	240.000
GR	113.800	510.000	109.500	513.000	109.500	525.000	113.800	528.000	115.000	650.000
GR	120.000	700.000	130.000	800.000	135.000	850.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	300.200	0.000	0.000	0.000	0.000	0.000	0.000

X1	5.800	22.000	570.000	588.000	400.000	400.000	400.000	0.000	0.000	0.000
GR	130.000	140.000	128.000	165.000	126.000	215.000	124.000	290.000	122.000	330.000
GR	120.000	400.000	110.000	420.000	116.000	450.000	114.000	480.000	114.000	570.000
GR	111.000	573.000	111.000	585.000	114.000	588.000	114.000	820.000	116.000	890.000
GR	118.000	910.000	120.000	930.000	122.000	960.000	124.000	980.000	126.000	1010.000
GR	128.000	1030.000	130.000	1040.000	0.000	0.000	0.000	0.000	0.000	0.000
NC	.100	.100	.000	.200	.400	0.000	0.000	0.000	0.000	0.000
OT	7.000	1900.000	1900.000	1900.000	1900.000	800.000	1490.000	3300.000	0.000	0.000

X1	5.900	9.000	600.000	618.000	900.000	900.000	900.000	0.000	0.000	0.000
GR	140.000	0.000	130.000	150.000	120.000	200.000	117.000	600.000	114.100	603.000
GR	114.100	615.000	117.000	618.000	130.000	1080.000	140.000	1230.000	0.000	0.000

X1	6.000	10.000	570.000	588.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	140.000	0.000	130.000	100.000	120.000	300.000	118.500	570.000	116.200	573.000
GR	116.200	585.000	118.500	588.000	120.000	750.000	130.000	930.000	140.000	1070.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	299.000	649.000

X1	6.100	10.000	490.000	508.000	500.000	500.000	500.000	0.000	0.000	0.000
GR	140.000	88.000	120.000	305.000	119.900	490.000	118.000	493.000	118.000	505.000
GR	119.900	508.000	120.000	660.000	126.000	750.000	128.000	860.000	140.000	1110.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	359.000	709.000

X1	6.200	10.000	550.000	568.000	600.000	600.000	600.000	0.000	0.000	0.000
GR	140.000	0.000	130.000	70.000	122.000	150.000	121.400	550.000	120.000	553.000
GR	120.000	565.000	121.400	568.000	122.000	795.000	130.000	855.000	140.000	1000.000
ET	0.000	0.000	0.000	9.100	0.000	0.000	0.000	0.000	1098.000	1398.000

X1	6.300	14.000	1275.000	1320.000	400.000	400.000	400.000	0.000	0.000	0.000
GR	140.000	900.000	130.000	1030.000	124.000	1140.000	122.600	1275.000	122.400	1295.000
GR	121.800	1304.000	122.300	1310.000	122.500	1320.000	122.400	1363.000	122.800	1391.000
GR	124.000	1630.000	126.000	1710.000	134.000	1810.000	140.000	1920.000	0.000	0.000
NC	.100	.100	.060	.200	.400	0.000	0.000	0.000	0.000	0.000
ET	0.000	0.000	0.000	300.200	0.000	0.000	0.000	0.000	0.000	0.000

X1	6.600	21.000	632.000	657.000	1500.000	1500.000	1500.000	0.000	0.000	0.000
GR	144.000	10.000	142.000	55.000	140.000	95.000	138.000	135.000	137.300	162.000



X1	988.000	30.000	298.000	268.000	988.000	988.000	988.000	0.000	2.988	0.000
GR	148.700	0.000	137.500	25.000	134.700	96.000	132.200	75.000	131.300	100.000
GR	138.400	125.000	129.900	150.000	129.000	175.000	128.500	200.000	129.400	225.000
GR	129.100	250.000	128.600	251.000	127.500	258.000	128.400	265.000	129.200	268.000
GR	129.300	275.000	129.700	300.000	131.000	325.000	133.900	350.000	132.000	362.000
GR	129.200	375.000	129.000	400.000	129.000	425.000	129.600	450.000	130.700	475.000
GR	132.300	500.000	134.600	525.000	136.500	550.000	137.800	575.000	138.200	582.000

X1	1000.000	30.000	150.000	161.000	500.000	500.000	500.000	0.000	5.000	0.000
GR	148.700	0.000	137.500	15.000	134.700	30.000	132.200	45.000	131.300	60.000
GR	138.400	75.000	129.900	90.000	129.000	107.000	128.500	120.000	129.400	135.000
GR	129.100	150.000	128.600	151.000	127.500	195.000	128.400	159.000	129.200	161.000
GR	129.300	165.000	129.700	180.000	131.000	195.000	133.900	210.000	132.000	217.000
GR	129.200	225.000	129.000	240.000	129.000	255.000	129.600	270.000	130.700	285.000
GR	132.300	300.000	134.600	315.000	136.500	330.000	137.800	345.000	138.200	349.000
ET	0.000	0.000	4000.200	4000.200	0.000	0.000	0.000	0.000	0.000	0.000

X1	1200.000	12.000	150.000	150.000	200.000	200.000	200.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	137.800	137.800	0.000
GR	143.000	0.000	138.000	50.000	134.900	180.000	135.000	150.000	132.800	152.000
GR	132.700	155.000	132.000	157.000	135.200	158.000	136.600	200.000	138.000	250.000
GR	140.300	300.000	142.500	350.000	0.000	0.000	0.000	0.000	0.000	0.000
SB	0.000	2.070	2.500	0.000	4.000	0.000	20.000	0.000	0.000	0.000

X1	1300.000	0.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000	0.000
X2	0.000	0.000	1.000	137.800	147.600	0.000	0.000	0.000	0.000	0.000
X3	10.000	0.000	0.000	0.000	0.000	0.000	0.000	147.600	147.600	0.000
BT	22.000	65.000	132.700	0.000	100.000	150.100	0.000	150.000	149.400	0.000
BT	200.000	148.600	0.000	250.000	148.200	0.000	300.000	147.600	0.000	350.000
BT	148.300	0.000	400.000	148.000	0.000	490.000	148.500	0.000	500.000	148.900
BT	0.000	550.000	151.200	0.000	600.000	151.700	0.000	0.000	0.000	0.000
NC	.100	.100	.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
QT	7.000	2300.000	2300.000	2300.000	2300.000	800.000	1490.000	3980.000	0.000	0.000

X1	1350.000	13.000	200.000	208.000	50.000	50.000	50.000	0.000	0.000	0.000
GR	157.000	0.000	143.000	50.000	138.000	100.000	134.900	150.000	135.000	200.000
GR	132.800	202.000	132.700	205.000	132.800	207.000	135.200	208.000	136.600	250.000
GR	138.000	300.000	140.300	350.000	142.500	400.000	0.000	0.000	0.000	0.000

X1	2300.000	4.000	50.000	400.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
GR	160.000	0.000	143.000	50.000	143.000	400.000	160.000	600.000	0.000	0.000

X1	3300.000	0.000	0.000	0.000	1000.000	1000.000	1000.000	0.000	0.000	0.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

WETBTD1001  
M. F. B. 10/20/50  
Sales Support Dept. Inc.



SECNO	CHSEL	EG	ELLC	ELMIN	10K+S	0
0.000	131.92	131.90	0.00	125.10	10.25	1900.00
7.000	133.46	133.55	0.00	127.20	15.09	1900.00
7.000	133.32	133.70	0.00	126.30	49.41	1900.00
7.000	133.41	133.85	134.30	126.30	47.56	1900.00
1.000	133.89	133.93	0.00	127.50	9.47	1900.00
500.000	134.80	134.94	0.00	130.00	59.30	1900.00
1000.000	137.81	137.94	0.00	132.50	60.90	1900.00
1200.000	139.14	139.32	0.00	132.70	75.95	1900.00
1300.000	149.75	149.76	137.80	132.70	.39	1900.00
1350.000	149.74	149.77	0.00	132.70	.46	2300.00
2300.000	149.77	149.79	0.00	143.00	.19	2300.00
3300.000	149.79	149.81	0.00	143.00	.19	2300.00

CROSS OR LANGDON ST TO R

SUMMARY PRINTOUT

SECNO	CWSEL	SSTA	STCHL	STCHR	ENDST	TOPWID
4.800	117.10	463.50	593.00	634.00	763.50	300.00
4.810	117.10	463.50	593.00	634.00	763.50	300.00
4.820	117.09	466.00	600.00	632.00	766.00	300.00
4.830	117.08	466.00	600.00	632.00	766.00	300.00
4.840	117.13	466.00	600.00	632.00	766.00	300.00
4.850	117.16	468.50	597.00	640.00	768.50	300.00
4.900	117.23	235.00	370.00	400.00	535.00	300.00
5.000	117.29	524.00	665.00	683.00	824.00	300.00
5.200	117.37	762.50	896.00	929.00	1062.50	300.00
5.400	117.70	851.50	993.00	1010.00	1136.97	285.47
5.500	118.00	749.00	890.00	908.00	1000.03	251.03
5.600	118.51	399.00	540.00	558.00	699.00	300.00
5.700	118.91	369.00	510.00	528.00	669.00	300.00
5.800	119.48	429.00	570.00	588.00	729.00	300.00
5.900	121.06	459.00	600.00	618.00	759.00	300.00
6.000	122.71	429.00	570.00	588.00	729.00	300.00
6.100	123.70	349.00	490.00	508.00	649.00	300.00
6.200	125.04	409.00	550.00	568.00	709.00	300.00
6.300	126.17	1147.50	1275.00	1320.00	1447.50	300.00
6.400	130.59	494.50	632.00	657.00	794.50	300.00
6.800	131.92	750.00	882.00	918.00	1042.60	292.60
7.000	133.46	868.00	984.00	1052.00	1163.49	295.49
7.000	133.32	1000.00	1000.00	1050.00	1050.00	50.00
7.000	133.41	1000.00	1000.00	1050.00	1050.00	50.00
1.000	133.89	367.50	500.00	535.00	667.50	300.00
500.000	134.80	109.00	250.00	268.00	409.00	276.14
1000.000	137.81	41.36	150.00	161.00	303.30	252.25

BY THE ENGINEER IN CHARGE



SECNO	CWSEL	SSTA	STCHL	STCHR	ENDST	TOPWID
1200.000	139.14	38.64	150.00	150.00	274.69	230.04
1300.000	149.75	4.00	150.00	150.00	304.00	300.00
1350.000	149.74	54.00	200.00	200.00	354.00	300.00
2300.000	149.77	75.00	50.00	400.00	375.00	300.00
3300.000	149.79	75.00	50.00	400.00	375.00	300.00

SUMMARY OF ERRORS

Small vertical text on the right margin, possibly a reference or page number.

FLW  
OK  
7/29/26

SUMMARY PRINTOUT  
CROSS CR. GREEN ST TO CO

SECNO	CWSEL	Q	ELMIN	EG	HV	10K*S	DIFWSP	TOPWID	SSTA	ENDST	VCH
68.00	83.40	4250.00	75.70	86.19	2.79	108.61	0	56.38	74.92	131.30	13.4
68.00	84.40	4250.00	75.70	86.39	1.99	68.01	1.00	60.32	73.35	133.67	11.3
118.00	85.42	4250.00	75.00	87.24	1.83	62.59	0	270.41	315.84	586.26	11.5
118.00	85.18	4250.00	75.00	87.61	2.44	80.26	-.24	143.92	442.00	585.92	12.9
200.00	86.22	4250.00	75.00	87.74	1.52	46.15	0	215.34	562.06	777.40	10.5
200.00	87.10	4250.00	75.00	88.26	1.16	32.28	.88	146.62	632.00	778.62	9.2
300.00	87.32	4250.00	75.00	88.21	.89	25.72	0	252.13	501.81	753.94	8.3
300.00	87.62	4250.00	75.00	88.59	.97	25.61	.30	147.37	607.00	754.37	8.5
400.00	88.28	4250.00	76.20	88.51	.23	12.12	0	395.20	479.97	875.18	4.5
400.00	88.64	4250.00	76.20	88.91	.27	12.65	.35	250.00	595.50	845.50	4.8
450.00	88.33	4250.00	76.50	88.58	.25	13.72	0	384.39	484.43	868.82	4.7
450.00	88.69	4250.00	76.50	88.98	.29	14.06	.36	250.00	595.50	845.50	4.9
500.00	88.39	4250.00	76.80	88.67	.28	15.41	0	372.15	487.74	859.89	5.0
500.00	88.75	4250.00	76.80	89.07	.31	15.54	.36	250.00	595.50	845.50	5.1
550.00	88.45	4250.00	77.10	88.76	.31	17.34	0	359.60	490.90	850.50	5.2
550.00	88.82	4250.00	77.10	89.16	.34	17.22	.36	250.00	595.50	845.50	5.3
555.00	88.46	4250.00	77.10	88.77	.30	17.27	0	360.04	490.79	850.83	5.2
555.00	88.83	4250.00	77.10	89.17	.34	17.15	.36	250.00	595.50	845.50	5.3
556.00	88.47	4250.00	77.10	88.77	.30	17.25	0	360.13	490.77	850.90	5.2
556.00	88.83	4250.00	77.10	89.17	.34	17.14	.36	250.00	595.50	845.50	5.3
557.00	88.47	4250.00	77.10	88.77	.30	17.24	0	360.22	490.75	850.97	5.2
557.00	88.83	4250.00	77.10	89.17	.34	17.13	.36	250.00	595.50	845.50	5.3
570.00	87.71	4250.00	77.00	89.34	1.63	67.99	0	135.16	664.35	799.51	10.3
570.00	88.23	4250.00	77.00	89.63	1.41	55.52	.51	149.71	650.00	799.71	9.6
580.00	87.75	4250.00	77.00	89.43	1.68	71.40	0	59.52	739.62	799.14	10.4
580.00	88.21	4250.00	77.00	89.74	1.53	61.01	.46	100.42	698.89	799.31	9.9
600.00	90.65	4250.00	77.00	90.69	.04	2.50	0	738.10	83.52	821.62	2.4
600.00	90.67	4250.00	77.00	90.81	.13	5.37	.03	251.69	570.00	821.69	3.5
605.00	90.65	4250.00	77.00	90.69	.04	2.49	0	738.22	83.42	821.64	2.4
605.00	90.68	4250.00	77.00	90.81	.13	5.35	.03	251.71	570.00	821.71	3.5
610.00	90.65	4250.00	77.10	90.69	.04	2.60	0	736.99	84.41	821.40	2.4
610.00	90.68	4250.00	77.10	90.81	.13	5.53	.03	251.47	570.00	821.47	3.6
620.00	90.65	4250.00	77.20	90.70	.05	2.72	0	735.70	85.44	821.14	2.5
620.00	90.68	4250.00	77.20	90.82	.14	5.71	.03	251.22	570.00	821.22	3.6
800.00	90.71	4250.00	75.30	90.75	.04	3.08	0	847.69	50.37	898.06	2.7
800.00	90.84	4250.00	75.30	90.93	.08	5.18	.13	342.27	556.00	898.27	3.5

U.S. GEOLOGICAL SURVEY

SECNO	CWSEL	Q	ELMIN	EG	HV	10K*S	DIFWSP	TOPWID	SSTA	ENDST	VCH
1000.00	90.72	4250.00	78.20	90.93	.21	11.35	0	424.72	92.69	517.41	4.8
1000.00	90.92	4250.00	78.20	91.12	.20	10.70	.20	373.87	144.50	518.37	4.7
1200.00	91.06	4250.00	78.90	91.13	.08	7.37	0	417.56	64.24	481.80	3.6
1200.00	91.19	4250.00	78.90	91.36	.17	12.98	.13	223.48	258.50	481.98	4.8
1330.00	91.15	4250.00	79.20	91.24	.08	8.07	0	416.37	65.16	481.52	3.7
1330.00	91.35	4250.00	79.20	91.54	.18	13.68	.20	223.29	258.50	481.79	4.9
1440.00	91.23	4250.00	79.60	91.32	.09	7.06	0	572.24	97.15	669.39	2.9
1440.00	91.54	4250.00	79.60	91.66	.12	7.67	.31	386.32	289.50	675.82	3.1
1441.00	91.23	4250.00	79.60	91.32	.09	7.06	0	572.27	97.14	669.41	2.9
1441.00	91.54	4250.00	79.60	91.66	.12	7.66	.31	386.34	289.50	675.84	3.1
1442.00	91.23	4250.00	79.60	91.32	.09	7.05	0	572.30	97.12	669.42	2.9
1442.00	91.54	4250.00	79.60	91.66	.12	7.66	.31	386.36	289.50	675.86	3.1
1460.00	91.24	4250.00	79.60	91.34	.09	7.00	0	572.79	96.91	669.69	2.8
1460.00	91.56	4250.00	79.60	91.67	.12	7.61	.31	386.65	289.50	676.15	3.0
1470.00	91.23	4250.00	79.60	91.36	.14	13.77	0	737.77	92.38	830.14	4.2
1470.00	91.42	4250.00	79.60	91.78	.36	25.63	.20	339.66	495.00	834.66	5.9
1500.00	91.23	4250.00	79.60	91.37	.14	13.72	0	738.00	92.28	830.28	4.2
1500.00	91.53	4250.00	79.60	91.78	.25	19.79	.30	392.01	445.00	837.01	5.2
1501.00	91.35	4250.00	79.10	91.39	.04	4.63	0	757.11	83.08	840.19	2.8
1501.00	91.72	4250.00	79.10	91.82	.10	7.66	.37	401.25	444.50	845.75	3.8
1505.00	91.35	4250.00	79.10	91.39	.04	4.62	0	757.24	83.00	840.25	2.8
1505.00	91.72	4250.00	79.10	91.82	.10	7.64	.37	401.33	444.50	845.83	3.8
1515.00	91.35	4250.00	79.10	91.40	.04	4.61	0	757.40	82.91	840.32	2.8
1515.00	91.73	4250.00	79.10	91.83	.10	7.62	.37	401.45	444.50	845.95	3.8
1530.00	91.37	4250.00	79.10	91.40	.05	4.28	0	750.87	16.15	767.02	2.6
1530.00	91.76	4250.00	79.10	91.84	.08	7.48	.39	402.36	369.50	771.86	3.5
1800.00	91.48	4250.00	79.70	91.66	.18	14.93	0	644.03	48.19	692.22	5.2
1800.00	91.97	4250.00	79.70	92.14	.18	13.61	.49	500.00	64.00	564.00	5.1
2000.00	91.79	4250.00	79.90	91.94	.16	13.14	0	660.69	21.50	728.93	4.9
2000.00	92.26	4250.00	79.90	92.40	.14	10.99	.47	498.79	18.71	517.50	4.6
2200.00	92.07	4250.00	80.10	92.10	.03	4.23	0	741.40	11.87	753.27	2.6
2200.00	92.51	4250.00	80.10	92.56	.05	5.01	.44	500.00	160.50	660.50	2.9
2400.00	92.06	4250.00	80.80	92.33	.27	11.06	0	478.11	34.41	512.53	6.1
2400.00	92.54	4250.00	80.80	92.75	.21	8.54	.48	464.34	52.50	516.84	5.5
2440.00	90.74	4250.00	80.80	93.42	2.68	71.32	0	133.84	114.61	248.45	14.0
2440.00	91.55	4250.00	80.80	93.52	1.96	48.14	.82	170.28	98.64	268.92	12.3
2445.00	91.08	4250.00	80.90	93.50	2.43	74.40	0	38.00	200.00	238.00	12.5
2445.00	91.40	4250.00	80.90	93.67	2.26	67.26	.33	38.00	200.00	238.00	12.0

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
2510.00	94,33	4250.00	80,90	95,63	1,31	30,88	0	38.00	200,00	238,00	9,1
2510.00	94,74	4250.00	80,90	95,96	1,22	28,15	.41	38.00	200,00	238,00	8,8
2511.00	94,33	4250.00	80,90	95,64	1,31	30,85	0	38.00	200,00	238,00	9,1
2511.00	94,74	4250.00	80,90	95,96	1,22	28,12	.41	38.00	200,00	238,00	8,8
2515.00	95,85	4250.00	82,20	95,89	.04	1,57	0	684,30	15,70	700,00	2,8
2515.00	96,01	4250.00	82,20	96,18	.17	4,19	.16	240,57	14,93	255,50	4,7
2540.00	95,82	4250.00	82,20	95,92	.10	2,30	0	498,72	29,06	527,78	3,5
2540.00	96,01	4250.00	82,20	96,20	.19	3,50	.18	233,54	27,96	261,50	4,3
2560.00	95,75	4250.00	82,60	95,98	.22	4,13	0	412,12	29,47	441,59	4,7
2560.00	95,96	4250.00	82,60	96,25	.29	4,74	.20	231,75	28,25	260,00	5,1
2565.00	95,33	4250.00	82,60	96,26	.93	20,89	0	44,00	1200,00	1244,00	7,7
2565.00	95,60	4250.00	82,60	96,49	.89	19,68	.27	44,00	1200,00	1244,00	7,5
2615.00	95,77	4250.00	82,60	96,64	.87	18,93	0	44,00	1200,00	1244,00	7,4
2615.00	96,08	4250.00	82,60	96,90	.83	17,72	.31	44,00	1200,00	1244,00	7,3
2616.00	95,77	4250.00	82,60	96,64	.87	18,92	0	44,00	1200,00	1244,00	7,4
2616.00	96,08	4250.00	82,60	96,91	.83	17,71	.31	44,00	1200,00	1244,00	7,3
2620.00	96,78	4250.00	82,50	96,81	.03	.97	0	939,12	570,32	1545,54	2,2
2620.00	96,93	4250.00	82,50	97,05	.12	2,43	.15	300,00	1043,00	1343,00	3,5
2630.00	96,78	4250.00	82,50	96,81	.03	.97	0	939,28	570,25	1545,60	2,2
2630.00	96,93	4250.00	82,50	97,05	.12	2,43	.15	300,00	1043,00	1343,00	3,5
2800.00	96,81	4250.00	82,50	96,83	.02	.73	0	1012,19	518,72	1561,05	1,9
2800.00	97,01	4250.00	82,50	97,10	.09	1,92	.20	300,00	910,00	1210,00	3,1
2920.00	96,81	4250.00	82,50	96,84	.03	.88	0	1044,53	942,97	2044,35	2,1
2920.00	97,02	4250.00	82,50	97,13	.11	2,34	.21	300,00	1283,00	1583,00	3,4
2950.00	96,82	4250.00	83,00	96,84	.02	.91	0	1044,64	942,96	2044,43	2,2
2950.00	97,03	4250.00	83,00	97,14	.11	2,47	.21	300,00	1276,50	1576,50	3,6
2951.00	96,77	4250.00	83,00	96,88	.11	4,20	0	1020,17	1232,99	2253,17	3,8
2951.00	96,89	4250.00	83,00	97,24	.35	9,35	.12	300,00	1418,50	1718,50	5,7
3010.00	96,77	4250.00	83,00	96,88	.11	4,20	0	1020,19	1232,99	2253,18	3,8
3010.00	97,05	4250.00	83,00	97,24	.19	5,97	.28	500,00	1318,50	1818,50	4,6
3011.00	96,77	4250.00	83,00	96,88	.11	4,20	0	1020,25	1232,97	2253,22	3,8
3011.00	97,05	4250.00	83,00	97,24	.19	5,97	.28	500,00	1318,50	1818,50	4,6
3015.00	96,78	4250.00	82,80	96,88	.10	2,78	0	1044,64	1118,31	2162,95	3,9
3015.00	97,10	4250.00	82,80	97,25	.15	3,43	.32	500,00	1212,00	1712,00	4,4
3025.00	96,76	4250.00	82,80	96,90	.14	3,53	0	909,57	1118,55	2185,27	4,4
3025.00	97,10	4250.00	82,80	97,26	.16	3,62	.34	500,00	1205,00	1705,00	4,6
3100.00	96,79	4250.00	82,80	96,92	.14	3,48	0	915,26	1117,42	2186,82	4,4
3100.00	97,13	4250.00	82,80	97,28	.15	3,58	.34	500,00	1205,00	1705,00	4,5

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
3200.00	96.87	4250.00	82.80	96.96	.09	2.37	0	760.33	1001.33	1903.36	3.6
3200.00	97.22	4250.00	82.80	97.32	.11	2.51	.35	499.94	1197.06	1697.00	3.8
3400.00	96.91	4250.00	82.80	97.02	.11	3.07	0	769.40	954.16	1071.01	3.3
3400.00	97.23	4250.00	82.80	97.43	.20	4.31	.31	416.01	1240.99	1657.00	4.0
3600.00	96.97	4250.00	83.60	97.12	.15	5.07	0	648.04	886.93	1682.47	4.0
3600.00	97.30	4250.00	83.60	97.56	.26	6.99	.33	428.77	1219.69	1682.94	4.8
3730.00	97.35	4250.00	83.60	97.49	.14	5.48	0	688.22	879.99	1683.03	4.1
3730.00	97.45	4250.00	83.60	97.75	.29	9.15	.10	442.52	1198.50	1683.18	5.4
3731.00	97.43	4250.00	83.60	97.50	.07	2.17	0	830.52	847.12	1677.63	3.0
3731.00	97.69	4250.00	83.60	97.79	.09	2.49	.26	467.09	1211.50	1678.59	3.3
3735.00	97.43	4250.00	83.60	97.50	.07	2.17	0	830.54	847.10	1677.64	3.0
3735.00	97.70	4250.00	83.60	97.79	.09	2.49	.26	467.10	1211.50	1678.60	3.3
3745.00	97.43	4250.00	83.60	97.50	.07	2.17	0	830.58	847.07	1677.65	3.0
3745.00	97.70	4250.00	83.60	97.79	.09	2.48	.26	467.11	1211.50	1678.61	3.3
3765.00	97.44	4250.00	83.60	97.51	.07	2.16	0	830.64	847.02	1677.66	3.0
3765.00	97.70	4250.00	83.60	97.80	.09	2.48	.27	467.13	1211.50	1678.63	3.3
3800.00	97.45	4250.00	83.60	97.52	.07	2.16	0	830.77	846.92	1677.69	3.0
3800.00	97.71	4250.00	83.60	97.81	.09	2.47	.27	467.16	1211.50	1678.66	3.2
4000.00	97.53	4250.00	83.80	97.58	.05	3.67	0	1016.64	300.99	1317.23	2.7
4000.00	97.81	4250.00	83.80	97.87	.06	4.14	.28	500.00	787.00	1287.00	2.9
4225.00	97.62	4250.00	84.60	97.66	.03	3.04	0	1124.12	379.57	1503.69	2.4
4225.00	97.91	4250.00	84.60	98.00	.10	6.64	.28	500.00	776.50	1276.50	3.6
4230.00	97.60	4250.00	84.00	97.68	.08	7.72	0	1046.16	379.81	1425.97	3.4
4230.00	97.84	4250.00	84.00	98.05	.21	15.00	.24	500.00	751.50	1251.50	4.8
4300.00	97.63	4250.00	84.00	97.70	.08	7.57	0	1047.42	379.54	1426.96	3.4
4300.00	97.84	4250.00	84.00	98.05	.21	15.00	.22	500.00	751.50	1251.50	4.8
4301.00	97.66	4250.00	84.60	97.71	.05	6.62	0	995.78	228.56	1224.33	3.1
4301.00	97.96	4250.00	84.60	98.07	.12	11.32	.30	500.00	689.50	1189.50	4.2
4305.00	97.66	4250.00	84.60	97.71	.05	6.61	0	996.06	228.48	1224.55	3.1
4305.00	97.96	4250.00	84.60	98.08	.12	11.29	.30	500.00	689.50	1189.50	4.2
4310.00	97.66	4250.00	84.70	97.72	.05	7.02	0	986.39	230.90	1217.29	3.2
4310.00	97.96	4250.00	84.70	98.09	.12	11.85	.30	500.00	689.50	1189.50	4.2
4320.00	97.67	4250.00	84.80	97.72	.06	7.46	0	977.07	233.23	1210.31	3.3
4320.00	97.97	4250.00	84.80	98.10	.13	12.40	.30	500.00	689.50	1189.50	4.3
4340.00	97.68	4250.00	84.90	97.74	.06	7.88	0	968.52	235.37	1203.89	3.3
4340.00	97.99	4250.00	84.90	98.13	.13	12.90	.31	500.00	689.50	1189.50	4.4
4600.00	97.84	4250.00	84.80	97.86	.02	2.90	0	982.56	187.81	1170.37	2.4
4600.00	98.28	4250.00	84.80	98.35	.07	5.47	.45	500.00	571.50	1071.50	3.3

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SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
4750.00	97.88	4250.00	85.10	97.91	.03	3.29	0	786.14	202.67	988.81	2.4
4750.00	98.36	4250.00	85.10	98.44	.09	6.09	.48	409.79	582.00	991.79	3.4
5000.00	97.96	4250.00	85.30	98.04	.08	6.06	0	638.76	290.41	929.17	3.1
5000.00	98.51	4250.00	85.30	98.62	.11	7.07	.54	381.52	551.00	932.52	3.5
5200.00	98.01	4250.00	86.00	98.38	.37	28.08	0	495.16	194.97	690.13	6.7
5200.00	98.63	4250.00	86.00	98.91	.28	20.50	.62	382.85	313.50	696.35	6.0
5400.00	98.60	4250.00	85.80	98.83	.22	15.76	0	658.70	205.83	864.53	5.2
5400.00	99.06	4250.00	85.80	99.25	.19	12.78	.46	500.00	340.00	840.00	4.8
5430.00	98.32	4250.00	81.10	99.09	.77	14.63	0	35.00	570.00	605.00	7.0
5430.00	98.77	4250.00	81.10	99.51	.73	13.50	.46	35.00	570.00	605.00	6.8
5570.00	99.40	4250.00	81.10	100.08	.68	12.15	0	35.00	570.00	605.00	6.6
5570.00	99.89	4250.00	81.10	100.53	.65	11.21	.49	35.00	570.00	605.00	6.4
5600.00	100.13	4250.00	84.50	100.22	.09	5.90	0	792.40	317.94	1110.34	3.7
5600.00	100.57	4250.00	84.50	100.67	.10	5.77	.44	500.00	588.50	1088.50	3.7
5800.00	100.25	4250.00	84.70	100.34	.10	6.19	0	790.84	319.28	1110.12	3.7
5800.00	100.68	4250.00	84.70	100.79	.10	6.00	.44	500.00	588.50	1088.50	3.8
5875.00	100.27	4250.00	86.10	100.43	.16	10.66	0	1268.70	184.30	1453.00	4.8
5875.00	100.69	4250.00	86.10	100.88	.20	11.52	.42	500.00	931.50	1431.50	5.1
5928.00	100.34	4250.00	86.10	100.48	.14	8.74	0	1273.42	181.21	1454.63	4.3
5928.00	100.76	4250.00	86.10	100.94	.18	9.40	.43	500.00	931.50	1431.50	4.5
5993.00	100.34	4250.00	86.10	100.48	.14	8.74	0	1273.44	181.19	1454.63	4.3
5993.00	100.72	4250.00	86.10	100.94	.23	11.08	.38	300.00	1031.50	1331.50	4.9
6050.00	100.39	4250.00	86.10	100.54	.14	9.78	0	1276.96	178.89	1455.85	4.6
6050.00	100.78	4250.00	86.10	101.02	.24	12.94	.38	300.00	1031.50	1331.50	5.4
6200.00	100.47	4250.00	87.20	100.81	.34	18.30	0	439.56	470.54	910.10	5.7
6200.00	100.96	4250.00	87.20	101.25	.29	15.12	.48	300.00	552.00	852.00	5.3
6600.00	101.27	4250.00	88.00	101.41	.14	11.13	0	456.35	364.56	820.90	4.4
6600.00	101.64	4250.00	88.00	101.82	.18	12.57	.37	300.00	501.00	801.00	4.8

FLOODWAY DATA, CROSS CR, GREEN ST TO CO  
 PROFILE NO. 2

STATION	----- WIDTH (FT)	FLOODWAY SECTION AREA	----- MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
68,000	60.	375.	11.3	84.4	83.4	1.0
118,000	144.	473.	9.0	85.2	85.4	.2
200,000	147.	746.	5.7	87.1	86.2	.9
F 300,000	147.	826.	5.1	87.6	87.3	.3
400,000	250.	1515.	2.8	88.6	88.3	.4
450,000	250.	1451.	2.9	88.7	88.3	.4
500,000	250.	1393.	3.1	88.8	88.4	.4
550,000	250.	1335.	3.2	88.8	88.5	.4
555,000	250.	1337.	3.2	88.8	88.5	.4
556,000	250.	1337.	3.2	88.8	88.5	.4
557,000	250.	1338.	3.2	88.8	88.5	.4
570,000	150.	548.	7.8	88.2	87.7	.5
580,000	100.	457.	9.3	88.2	87.8	.5
600,000	252.	2183.	1.9	90.7	90.6	.0
605,000	252.	2185.	1.9	90.7	90.6	.0
610,000	251.	2161.	2.0	90.7	90.6	.0
620,000	251.	2136.	2.0	90.7	90.7	.0
800,000	342.	2840.	1.5	90.8	90.7	.1
G 1000,000	342.	2084.	2.0	90.9	90.7	.2
1200,000	223.	1822.	2.3	91.2	91.1	.1
1330,000	223.	1791.	2.4	91.4	91.2	.2
1440,000	386.	2072.	2.1	91.5	91.2	.3
1441,000	386.	2073.	2.1	91.5	91.2	.3
1442,000	386.	2073.	2.1	91.5	91.2	.3
1460,000	387.	2078.	2.0	91.6	91.2	.3
1470,000	340.	1478.	2.9	91.4	91.2	.2
1500,000	392.	1769.	2.4	91.5	91.2	.3

88.5

90.7

91.0

1501.000	401.	2588.	1.6	91.7	91.3	.4
1505.000	401.	2588.	1.6	91.7	91.3	.4
1515.000	401.	2591.	1.6	91.7	91.4	.4
1530.000	402.	2632.	1.6	91.8	91.4	.4
<del>1580.000</del>	500.	2098.	2.0	92.0	91.5	.5
2000.000	499.	2301.	1.8	92.3	91.8	.5
2200.000	500.	3180.	1.3	92.5	92.1	.4
2400.000	464.	2312.	1.8	92.5	92.1	.5
<del>2440.000</del>	170.	599.	7.1	91.6	90.7	.8
2445.000	38.	352.	12.1	91.4	91.1	.3
2510.000	38.	479.	8.9	94.7	94.3	.4
2511.000	38.	479.	8.9	94.7	94.3	.4
2515.000	241.	2185.	1.9	96.0	95.9	.2
2540.000	234.	2034.	2.1	96.0	95.8	.2
2560.000	232.	1727.	2.5	96.0	95.8	.2
2565.000	44.	561.	7.6	95.6	95.3	.3
2615.000	44.	582.	7.3	96.1	95.8	.3
2616.000	44.	582.	7.3	96.1	95.8	.3
2620.000	300.	2600.	1.6	96.9	96.8	.2
2630.000	300.	2601.	1.6	96.9	96.8	.2
<del>2800.000</del>	300.	2966.	1.4	97.0	96.8	.2
2920.000	300.	2735.	1.6	97.0	96.8	.2
2950.000	300.	2814.	1.5	97.0	96.8	.2
2951.000	300.	1655.	2.6	96.9	96.8	.1
3010.000	500.	2498.	1.7	97.1	96.8	.3
3011.000	500.	2499.	1.7	97.1	96.8	.3
3015.000	500.	3074.	1.4	97.1	96.8	.3
3025.000	500.	2974.	1.4	97.1	96.8	.3
3100.000	500.	2987.	1.4	97.1	96.8	.3
3200.000	500.	3401.	1.2	97.2	96.9	.3
3400.000	416.	2088.	2.0	97.2	96.9	.3
3600.000	429.	1848.	2.3	97.3	97.0	.3
3730.000	443.	1858.	2.3	97.5	97.4	.1

92.1

92.0

96.5

97.0



3731,000	467.	3184.	1.3	97.7	97.4	.3
3735,000	467.	3185.	1.3	97.7	97.4	.3
3745,000	467.	3186.	1.3	97.7	97.4	.3
3765,000	467.	3189.	1.3	97.7	97.4	.3
3800,000	467.	3193.	1.3	97.7	97.4	.3
4000,000	500.	3168.	1.3	97.8	97.5	.3
4225,000	500.	2722.	1.6	97.9	97.6	.3
4230,000	500.	2171.	2.0	97.8	97.6	.2
4300,000	500.	2171.	2.0	97.8	97.6	.2
4301,000	500.	2443.	1.7	98.0	97.7	.3
4305,000	500.	2445.	1.7	98.0	97.7	.3
4310,000	500.	2398.	1.8	98.0	97.7	.3
4320,000	500.	2354.	1.8	98.0	97.7	.3
4340,000	500.	2316.	1.8	98.0	97.7	.3
J 4600,000	500.	3310.	1.3	98.3	97.8	.4
4750,000	410.	2823.	1.5	98.4	97.9	.5
5000,000	382.	2443.	1.7	98.5	98.0	.5
5200,000	383.	1796.	2.4	98.6	98.0	.6
5400,000	500.	2295.	1.9	99.1	98.6	.5
5430,000	35.	619.	6.9	98.8	98.3	.5
5570,000	35.	658.	6.5	99.9	99.4	.5
5600,000	500.	3062.	1.4	100.6	100.1	.4
5800,000	500.	3017.	1.4	100.7	100.2	.4
5875,000	500.	2274.	1.9	100.7	100.3	.4
5928,000	500.	2337.	1.8	100.8	100.3	.4
5993,000	300.	1891.	2.2	100.7	100.3	.4
6050,000	300.	1883.	2.3	100.8	100.4	.4
6200,000	300.	1634.	2.6	101.0	100.5	.5
K 6800,000	300.	2013.	2.1	101.6	101.3	.4

W B. AL

CBD  
COP

BLUE  
GT

WHITE  
COP

98.7

100.6

100.5

102.0

SUMMARY PRINTOUT

CROSS CR. GREEN ST TO CO

SECNO	CWSEL	EG	KSELK	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR
68.00	83.40	86.19	83.40	56.38	0	4250.00	0	0	0	70.00	137.0
68.00	84.40	86.39	83.40	60.32	0	4250.00	0	250.00	.01	70.00	137.0
* 118.00	85.42	87.24	0	270.41	534.70	3715.30	0	0	0	541.00	593.0
* 118.00	85.18	87.61	85.42	143.92	251.96	3998.04	0	250.00	442.00	541.00	593.0
200.00	86.22	87.74	0	215.34	488.53	3761.47	0	0	0	731.00	783.0
200.00	87.10	88.26	86.22	146.62	556.76	3693.24	0	250.00	632.00	731.00	783.0
300.00	87.32	88.21	0	252.13	820.24	3429.76	0	0	0	706.00	758.0
300.00	87.62	88.59	87.32	147.37	631.34	3618.66	0	250.00	607.00	706.00	758.0
400.00	88.28	88.51	1560.00	395.20	1171.77	2859.09	219.14	0	0	688.00	753.0
400.00	88.64	88.91	1560.00	250.00	877.31	3104.13	268.55	250.00	595.50	688.00	753.0
450.00	88.33	88.58	1560.00	384.39	1142.84	2908.85	198.31	0	0	688.00	753.0
450.00	88.69	88.98	1560.00	250.00	866.65	3135.15	248.19	250.00	595.50	688.00	753.0
500.00	88.39	88.67	1560.00	372.15	1114.31	2954.24	181.45	0	0	688.00	753.0
500.00	88.75	89.07	1560.00	250.00	855.93	3164.99	229.07	250.00	595.50	688.00	753.0
550.00	88.45	88.76	1560.00	359.60	1084.06	3000.38	165.57	0	0	688.00	753.0
550.00	88.82	89.16	1560.00	250.00	844.29	3195.92	209.79	250.00	595.50	688.00	753.0
555.00	88.46	88.77	1560.00	360.04	1085.14	2998.75	166.11	0	0	688.00	753.0
555.00	88.83	89.17	1560.00	250.00	844.72	3194.81	210.47	250.00	595.50	688.00	753.0
556.00	88.47	88.77	1560.00	360.13	1085.37	2998.40	166.23	0	0	688.00	753.0
556.00	88.83	89.17	1560.00	250.00	844.80	3194.58	210.61	250.00	595.50	688.00	753.0
557.00	88.47	88.77	1560.00	360.22	1085.60	2998.06	166.34	0	0	688.00	753.0
557.00	88.83	89.17	1560.00	250.00	844.89	3194.35	210.76	250.00	595.50	688.00	753.0
570.00	87.71	89.34	1560.00	135.16	34.70	4190.88	24.42	0	0	754.00	796.0
570.00	88.23	89.63	1560.00	149.71	93.56	4130.46	25.97	250.00	650.00	754.00	796.0
580.00	87.75	89.43	1560.00	59.52	.22	4229.88	19.89	0	0	754.00	796.0
580.00	88.21	89.74	1560.00	100.42	7.44	4221.12	21.44	250.00	650.00	754.00	796.0
600.00	90.65	90.69	1560.00	738.10	2418.54	1804.87	26.59	0	0	740.00	800.0
600.00	90.67	90.81	1560.00	251.69	1556.58	2653.97	39.45	400.00	570.00	740.00	800.0
605.00	90.65	90.69	1560.00	738.22	2419.90	1803.44	26.66	0	0	740.00	800.0
605.00	90.68	90.81	1560.00	251.71	1557.18	2653.25	39.57	400.00	570.00	740.00	800.0
610.00	90.65	90.69	1560.00	736.99	2406.42	1817.60	25.98	0	0	740.00	800.0
610.00	90.68	90.81	1560.00	251.47	1551.22	2660.39	38.39	400.00	570.00	740.00	800.0
620.00	90.65	90.70	1560.00	735.70	2392.08	1832.65	25.27	0	0	740.00	800.0
620.00	90.68	90.82	1560.00	251.22	1544.97	2667.84	37.19	400.00	570.00	740.00	800.0
800.00	90.71	90.75	1560.00	847.69	2206.93	1159.65	883.42	0	0	740.00	772.0
800.00	90.84	90.93	1560.00	342.27	1542.65	1530.26	1177.09	400.00	556.00	740.00	772.0

100  
 200  
 300  
 400  
 500  
 600  
 700  
 800  
 900  
 1000

SECNO	CWSEL	EG	WSELK	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR
1000.00	90.72	90.93	1540.00	424.72	1012.73	2280.86	956.42	0	0	324.00	365.0
1000.00	90.92	91.12	1540.00	373.87	982.62	2279.23	988.15	400.00	144.50	324.00	365.0
1200.00	91.06	91.13	1540.00	417.56	2994.04	1246.95	9.01	0	0	442.00	475.0
1200.00	91.19	91.36	1540.00	223.48	2548.42	1688.78	12.80	400.00	258.50	442.00	475.0
1330.00	91.15	91.24	1540.00	416.37	2979.05	1262.52	8.43	0	0	442.00	475.0
1330.00	91.35	91.54	1540.00	223.29	2541.76	1696.03	12.21	400.00	258.50	442.00	475.0
1440.00	91.23	91.32	1540.00	572.24	1233.45	2895.46	121.09	0	0	420.00	559.0
1440.00	91.54	91.66	1540.00	386.32	863.45	3231.57	154.97	400.00	289.50	420.00	559.0
1441.00	91.23	91.32	1540.00	572.27	1233.52	2895.35	121.13	0	0	420.00	559.0
1441.00	91.54	91.66	1540.00	386.34	863.48	3231.48	155.04	400.00	289.50	420.00	559.0
1442.00	91.23	91.32	1540.00	572.30	1233.59	2895.24	121.17	0	0	420.00	559.0
1442.00	91.54	91.66	1540.00	386.36	863.49	3231.42	155.09	400.00	289.50	420.00	559.0
1460.00	91.24	91.34	1540.00	572.79	1234.81	2893.36	121.83	0	0	420.00	559.0
1460.00	91.56	91.67	1540.00	386.65	863.80	3230.26	155.94	400.00	289.50	420.00	559.0
1470.00	91.23	91.36	1540.00	737.77	2208.27	1902.12	139.60	0	0	675.00	715.0
1470.00	91.42	91.78	1540.00	339.66	1353.26	2673.28	223.45	400.00	495.00	675.00	715.0
1500.00	91.23	91.37	1540.00	738.00	2209.85	1900.11	140.03	0	0	675.00	715.0
1500.00	91.53	91.78	1540.00	392.01	1652.66	2384.93	212.42	500.00	445.00	675.00	715.0
1501.00	91.35	91.39	1540.00	757.11	2941.99	1136.94	171.07	0	0	675.00	714.0
1501.00	91.72	91.82	1540.00	401.25	2427.09	1553.11	269.80	500.00	444.50	675.00	714.0
1505.00	91.35	91.39	1540.00	757.24	2942.16	1136.57	171.27	0	0	675.00	714.0
1505.00	91.72	91.82	1540.00	401.33	2427.06	1552.68	270.26	500.00	444.50	675.00	714.0
1515.00	91.35	91.40	1540.00	757.40	2942.39	1136.09	171.53	0	0	675.00	714.0
1515.00	91.73	91.83	1540.00	401.45	2427.02	1552.07	270.91	500.00	444.50	675.00	714.0
1530.00	91.37	91.40	1540.00	750.87	3168.44	984.37	97.19	0	0	600.00	639.0
1530.00	91.76	91.84	1540.00	402.36	2685.75	1391.10	173.16	500.00	369.50	600.00	639.0
1800.00	91.48	91.66	1530.00	644.03	1815.03	1553.38	881.59	0	0	300.00	328.0
1800.00	91.97	92.14	1530.00	500.00	2022.87	1596.12	631.01	500.00	64.00	300.00	328.0
2000.00	91.79	91.94	1530.00	660.69	1790.01	1536.14	923.85	0	0	253.00	282.0
2000.00	92.26	92.40	1530.00	498.79	1897.58	1508.56	843.86	500.00	17.50	253.00	282.0
2200.00	92.07	92.10	1530.00	741.40	2294.45	957.80	997.75	0	0	391.00	430.0
2200.00	92.51	92.56	1530.00	500.00	1968.63	1124.36	1157.02	500.00	160.50	391.00	430.0
2400.00	92.06	92.33	1530.00	478.11	1483.47	1846.71	919.82	0	0	287.00	318.0
2400.00	92.54	92.75	1530.00	464.34	1515.56	1757.93	976.51	500.00	52.50	287.00	318.0
2440.00	90.74	93.42	1530.00	133.84	375.57	3679.31	195.12	0	0	170.00	201.0
2440.00	91.55	93.52	1530.00	170.28	455.38	3527.65	266.97	500.00	.01	170.00	201.0
2445.00	91.08	93.50	1530.00	38.00	0	4250.00	0	0	0	200.00	238.0
2445.00	91.40	93.67	1530.00	38.00	0	4250.00	0	500.00	.01	200.00	238.0

SECNO	CWSEL	EO	WSELK	TOPWID	QLOB	OCH	QROB	PERENC	STENCL	STCHL	STCHR
2510.00	94,33	95,63	1530.00	38.00	0	4250.00	0	0	0	200.00	238.0
2510.00	94,74	95,96	1530.00	38.00	0	4250.00	0	300.00	69.00	200.00	238.0
2511.00	94,33	95,64	1530.00	38.00	0	4250.00	0	0	0	200.00	238.0
2511.00	94,74	95,96	1530.00	38.00	0	4250.00	0	300.00	69.00	200.00	238.0
2515.00	95,85	95,89	1530.00	684.30	416.03	1132.37	2701.60	0	0	90.00	121.0
2515.00	96,01	96,18	1530.00	240.57	700.89	1889.59	1659.52	300.00	.01	90.00	121.0
2540.00	95,82	95,92	1530.00	498.72	192.30	2107.13	1950.57	0	0	88.00	135.0
2540.00	96,01	96,20	1530.00	233.54	250.03	2663.06	1336.92	300.00	.01	88.00	135.0
2560.00	95,75	95,98	1530.00	412.12	245.44	2673.01	1331.55	0	0	88.00	132.0
2560.00	95,96	96,25	1530.00	231.75	278.86	2938.90	1032.24	300.00	.01	88.00	132.0
2565.00	95,33	96,26	1530.00	44.00	0	4250.00	0	0	0	1200.00	1244.0
2565.00	95,60	96,49	1530.00	44.00	0	4250.00	0	300.00	1072.00	1200.00	1244.0
2615.00	95,77	96,64	1530.00	44.00	0	4250.00	0	0	0	1200.00	1244.0
2615.00	96,08	96,90	1530.00	44.00	0	4250.00	0	300.00	1072.00	1200.00	1244.0
2616.00	95,77	96,64	1530.00	44.00	0	4250.00	0	0	0	1200.00	1244.0
2616.00	96,08	96,91	1530.00	44.00	0	4250.00	0	300.00	1072.00	1200.00	1244.0
2620.00	96,78	96,81	1530.00	939.12	1799.81	1566.93	883.26	0	0	1165.00	1221.0
2620.00	96,93	97,05	1530.00	300.00	932.84	2526.57	790.59	300.00	1043.00	1165.00	1221.0
2630.00	96,78	96,81	1530.00	939.28	1800.10	1566.40	883.50	0	0	1165.00	1221.0
2630.00	96,93	97,05	1530.00	300.00	933.01	2526.19	790.81	300.00	1043.00	1165.00	1221.0
2800.00	96,81	96,83	1530.00	1012.19	1621.62	1356.20	1272.18	0	0	1032.00	1088.0
2800.00	97,01	97,10	1530.00	300.00	1251.17	2266.61	732.22	300.00	910.00	1032.00	1088.0
2920.00	96,81	96,84	1530.00	1044.53	1378.11	1426.13	1445.77	0	0	1406.00	1460.0
2920.00	97,02	97,13	1530.00	300.00	994.83	2388.37	866.80	300.00	1283.00	1406.00	1460.0
2950.00	96,82	96,84	1520.00	1044.64	1332.77	1206.52	1710.71	0	0	1406.00	1447.0
2950.00	97,03	97,14	1520.00	300.00	948.93	2042.71	1258.36	300.00	1276.50	1406.00	1447.0
2951.00	96,77	96,88	1520.00	1020.17	625.25	1899.06	1725.69	0	0	1550.00	1587.0
2951.00	96,89	97,24	1520.00	300.00	632.23	2874.95	742.82	300.00	1418.50	1550.00	1587.0
3010.00	96,77	96,88	1520.00	1020.19	625.26	1899.01	1725.73	0	0	1550.00	1587.0
3010.00	97,05	97,24	1520.00	500.00	810.22	2343.63	1096.15	500.00	1318.50	1550.00	1587.0
3011.00	96,77	96,88	1520.00	1020.25	625.31	1898.87	1725.82	0	0	1550.00	1587.0
3011.00	97,05	97,24	1520.00	500.00	810.33	2343.42	1096.25	500.00	1318.50	1550.00	1587.0
3015.00	96,78	96,88	1520.00	1044.64	1217.97	1626.75	1405.29	0	0	1447.00	1477.0
3015.00	97,10	97,25	1520.00	500.00	1370.42	1878.73	1000.85	500.00	1212.00	1447.00	1477.0
3025.00	96,76	96,90	1520.00	909.57	1484.26	1821.77	943.97	0	0	1440.00	1470.0
3025.00	97,10	97,26	1520.00	500.00	1502.02	1923.65	824.33	500.00	1205.00	1440.00	1470.0
3100.00	96,79	96,92	1520.00	915.26	1485.11	1816.00	948.89	0	0	1440.00	1470.0
3100.00	97,13	97,28	1520.00	500.00	1503.46	1919.08	827.46	500.00	1205.00	1440.00	1470.0

SECNO	CWSEL	EG	WSELK	TOPWID	OLOR	OCH	OROB	PERENC	STENCL	STCHL	STCHR
3200.00	96.87	96.96	1520.00	760.33	1215.96	1702.15	1331.88	0	0	1430.00	1464.0
3200.00	97.22	97.32	1520.00	499.94	1298.93	1824.65	1126.42	500.00	1197.00	1430.00	1464.0
3400.00	96.91	97.02	1520.00	769.40	1065.63	2601.38	582.99	0	0	1370.00	1444.0
3400.00	97.23	97.43	1520.00	416.01	530.23	3234.91	484.86	500.00	1157.00	1370.00	1444.0
3600.00	96.97	97.12	1520.00	648.04	1053.75	2468.39	727.86	0	0	1430.00	1488.0
3600.00	97.30	97.56	1520.00	428.77	243.34	3044.74	961.92	500.00	1209.00	1430.00	1488.0
3730.00	97.35	97.49	1520.00	688.22	1264.22	2041.73	944.05	0	0	1430.00	1467.0
3730.00	97.45	97.75	1520.00	442.52	310.13	2673.67	1266.20	500.00	1198.50	1430.00	1467.0
3731.00	97.43	97.50	1520.00	830.52	1621.78	2006.88	621.34	0	0	1432.00	1491.0
3731.00	97.69	97.79	1520.00	467.09	1293.68	2234.12	722.19	500.00	1211.50	1432.00	1491.0
3735.00	97.43	97.50	1520.00	830.54	1621.99	2006.60	621.41	0	0	1432.00	1491.0
3735.00	97.70	97.79	1520.00	467.10	1293.79	2233.84	722.37	500.00	1211.50	1432.00	1491.0
3745.00	97.43	97.50	1520.00	830.58	1622.28	2006.20	621.52	0	0	1432.00	1491.0
3745.00	97.70	97.79	1520.00	467.11	1293.91	2233.53	722.55	500.00	1211.50	1432.00	1491.0
3765.00	97.44	97.51	1520.00	830.64	1622.86	2005.41	621.73	0	0	1432.00	1491.0
3765.00	97.70	97.80	1520.00	467.13	1294.15	2232.93	722.92	500.00	1211.50	1432.00	1491.0
3800.00	97.45	97.52	1520.00	830.77	1623.87	2004.04	622.09	0	0	1432.00	1491.0
3800.00	97.71	97.81	1520.00	467.16	1294.57	2231.86	723.56	500.00	1211.50	1432.00	1491.0
4000.00	97.53	97.58	1500.00	1016.64	1742.17	1548.07	959.75	0	0	1014.00	1060.0
4000.00	97.81	97.87	1500.00	500.00	1520.07	1708.05	1021.88	500.00	787.00	1014.00	1060.0
4225.00	97.62	97.66	1500.00	1124.12	1860.90	1186.32	1202.78	0	0	1006.00	1047.0
4225.00	97.91	98.00	1500.00	500.00	1341.16	1822.57	1086.27	500.00	776.50	1006.00	1047.0
4230.00	97.60	97.68	1500.00	1046.16	1642.59	1638.17	969.24	0	0	983.00	1020.0
4230.00	97.84	98.05	1500.00	500.00	858.19	2356.26	1035.55	500.00	751.50	983.00	1020.0
4300.00	97.63	97.70	1500.00	1047.42	1648.44	1628.22	973.34	0	0	983.00	1020.0
4300.00	97.84	98.05	1500.00	500.00	858.23	2356.19	1035.58	500.00	751.50	983.00	1020.0
4301.00	97.66	97.71	1500.00	995.78	2931.38	1114.30	204.32	0	0	922.00	957.0
4301.00	97.96	98.07	1500.00	500.00	2376.25	1529.83	343.92	500.00	689.50	922.00	957.0
4305.00	97.66	97.71	1500.00	996.06	2931.53	1113.83	204.64	0	0	922.00	957.0
4305.00	97.96	98.08	1500.00	500.00	2376.09	1529.08	344.83	500.00	689.50	922.00	957.0
4310.00	97.66	97.72	1500.00	986.39	2926.11	1130.10	193.80	0	0	922.00	957.0
4310.00	97.96	98.09	1500.00	500.00	2378.92	1542.62	328.46	500.00	689.50	922.00	957.0
4320.00	97.67	97.72	1500.00	977.07	2920.39	1146.23	183.38	0	0	922.00	957.0
4320.00	97.97	98.10	1500.00	500.00	2381.42	1555.57	313.02	500.00	689.50	922.00	957.0
4340.00	97.68	97.74	1500.00	968.52	2914.71	1161.44	173.85	0	0	922.00	957.0
4340.00	97.99	98.13	1500.00	500.00	2383.43	1566.86	299.71	500.00	689.50	922.00	957.0
4600.00	97.84	97.86	1500.00	982.56	2693.91	883.55	672.54	0	0	806.00	837.0
4600.00	98.28	98.35	1500.00	500.00	1917.80	1289.46	1042.74	500.00	571.50	806.00	837.0

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SECNO	CWSEL	EG	WSELK	TOPWID	QLOB	QCH	QROR	PERENC	STENCL	STCHL	STCHR
4750.00	97.88	97.91	1500.00	786.14	2834.64	1143.52	271.85	0	0	810.00	854.0
4750.00	98.36	98.44	1500.00	409.79	2125.59	1676.02	448.38	500.00	582.00	810.00	854.0
5000.00	97.96	98.04	1480.00	638.76	2265.03	1847.60	137.37	0	0	770.00	832.0
5000.00	98.51	98.62	1480.00	381.52	1856.54	2191.87	201.59	500.00	551.00	770.00	832.0
5200.00	98.01	98.38	1480.00	495.16	1655.29	2106.89	487.82	0	0	548.00	579.0
5200.00	98.63	98.91	1480.00	382.85	1706.03	1989.88	554.09	500.00	313.50	548.00	579.0
5400.00	98.60	98.83	1480.00	658.70	1029.00	2113.59	1107.41	0	0	570.00	610.0
5400.00	99.06	99.25	1480.00	500.00	1020.96	2049.34	1179.70	500.00	340.00	570.00	610.0
5430.00	98.32	99.09	0	35.00	0	4250.00	0	0	0	570.00	605.0
5430.00	98.77	99.51	98.32	35.00	0	4250.00	0	500.00	337.50	570.00	605.0
5570.00	99.40	100.08	0	35.00	0	4250.00	0	0	0	570.00	605.0
5570.00	99.89	100.53	99.40	35.00	0	4250.00	0	500.00	337.50	570.00	605.0
5600.00	100.13	100.22	1480.00	792.40	1416.26	1711.41	1122.32	0	0	821.00	856.0
5600.00	100.57	100.67	1480.00	500.00	1259.58	1786.98	1203.44	500.00	588.50	821.00	856.0
5800.00	100.25	100.34	1480.00	790.84	1399.62	1733.72	1116.66	0	0	821.00	856.0
5800.00	100.68	100.79	1480.00	500.00	1252.32	1802.27	1195.41	500.00	588.50	821.00	856.0
5875.00	100.27	100.43	0	1268.70	1250.08	1752.90	1247.02	0	0	1167.00	1196.0
5875.00	100.69	100.88	100.27	500.00	843.65	1923.77	1482.57	500.00	931.50	1167.00	1196.0
5928.00	100.34	100.48	0	1273.42	1152.75	2003.43	1093.82	0	0	1162.00	1201.0
5928.00	100.76	100.94	100.34	500.00	744.39	2203.37	1302.24	500.00	931.50	1162.00	1201.0
5993.00	100.34	100.48	0	1273.44	1152.87	2003.32	1093.82	0	0	1162.00	1201.0
5993.00	100.72	100.94	100.34	300.00	728.85	2376.79	1144.36	300.00	1031.50	1162.00	1201.0
6050.00	100.39	100.54	0	1276.96	1302.95	1705.21	1241.83	0	0	1167.00	1196.0
6050.00	100.78	101.02	100.39	300.00	851.82	2062.01	1336.18	300.00	1031.50	1167.00	1196.0
6200.00	100.47	100.81	1480.00	439.56	551.82	2692.00	1006.17	0	0	680.00	724.0
6200.00	100.96	101.25	1480.00	300.00	578.65	2634.45	1036.90	300.00	552.00	680.00	724.0
6600.00	101.27	101.41	1480.00	456.35	1473.72	1657.12	1119.15	0	0	634.00	668.0
6600.00	101.64	101.82	1480.00	300.00	1089.13	1861.62	1299.24	300.00	501.00	634.00	668.0

POSSIBLE ERROR SECNO= 118.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 118.00 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO= 118.00 PROFILE= 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO= 118.00 PROFILE= 2 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO= 2440.00 PROFILE= 1 CRITICAL DEPTH ASSUMED

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INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF  
\* ICATION 59 IS TO

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, L  
\* INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIM  
\* OF CONVEYANCE VERSUS DISTANCE,

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY  $n$  VALUES IN THE CHANNEL. T  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN  $n$  VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO  $n$   
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW CO  
\* TATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY,

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING.

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STA  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CH  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SH  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID  
\* ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE A

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIE

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW,

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE,

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE,

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE P  
\* CHANGES CAN BE DIRECTED TO ALLAN OTO (FTS 448-2105 OR 448-3292),  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 100 YR NATURAL  
 T3 CROSS CR, GREEN ST TO CONFL. W/ LITTLE CROSS CR.

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FQ	
	-1.	2.	-0	-0	-0	-0	-0	-0	83,400	-0	
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	
	1.000	-0	-1.000	-0	-0	-0	-0	-0	-0	15.000	
J3	-2,000	1,000	43,000	42,000	3,000	10,000	5,000	50,000	4,000	53,000	
J3	54,000	26,000	0	200,000	110,000	-0	-0	-0	-0	-0	
OT	7,000	4250,000	4250,000	4250,000	4250,000	1800,000	3350,000	7300,000	-0	-0	
ET	-0	-0	250,200	-0	-0	-0	-0	-0	-0	-0	
NC	.120	.120	.035	.200	.400	-0	-0	-0	-0	-0	
X1	68,000	10,000	70,000	137,000	0	0	0	0	0	-0	
GR	93,000	0	88,600	7,000	88,500	50,000	89,900	70,000	85,900	71,000	
GR	75,700	87,000	75,700	113,000	89,800	137,000	85,700	169,000	93,700	450,000	
X1	118,000	18,000	541,000	593,000	50,000	50,000	50,000	0	0	-0	
GR	94,000	0	92,000	40,000	90,000	105,000	88,000	240,000	88,000	305,000	
GR	86,000	310,000	84,000	330,000	83,500	463,000	83,800	513,000	82,800	541,000	
GR	75,600	558,000	75,000	565,000	75,300	572,000	90,200	593,000	88,900	613,000	
GR	89,100	663,000	92,000	675,000	94,000	679,000	-0	-0	-0	-0	
X1	200,000	19,000	731,000	783,000	82,000	82,000	82,000	0	0	-0	
GR	94,000	0	92,000	118,000	90,000	240,000	90,000	290,000	92,000	405,000	
GR	92,000	475,000	90,000	520,000	88,000	547,000	86,000	564,000	83,500	653,000	
GR	83,800	703,000	82,800	731,000	75,600	748,000	75,000	755,000	75,300	762,000	
GR	90,200	783,000	88,900	803,000	89,100	853,000	94,000	880,000	-0	-0	
X1	300,000	19,000	706,000	758,000	100,000	100,000	100,000	0	0	-0	
GR	94,000	0	92,000	90,000	90,000	220,000	90,000	480,000	88,000	495,000	
GR	86,000	515,000	84,000	600,000	83,500	628,000	83,800	678,000	82,800	706,000	
GR	75,600	723,000	75,000	730,000	75,300	737,000	90,200	758,000	88,900	778,000	
GR	89,100	828,000	90,000	865,000	92,000	878,000	94,000	910,000	-0	-0	
NC	.120	.120	.050	.200	.400	-0	-0	-0	-0	-0	
X1	400,000	18,000	688,000	753,000	100,000	100,000	100,000	0	0	-0	
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0	
GR	94,500	0	92,000	60,000	90,000	125,000	90,000	450,000	88,000	485,000	
GR	86,000	512,000	84,000	562,000	81,800	646,000	82,000	688,000	76,200	710,000	
GR	76,700	724,000	78,100	726,000	80,000	746,000	82,600	753,000	86,200	796,000	
GR	88,000	868,000	90,000	918,000	94,500	925,000	-0	-0	-0	-0	
X1	450,000	0	0	0	50,000	50,000	50,000	1,000	.300	-0	
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0	
X1	500,000	0	0	0	50,000	50,000	50,000	1,000	.300	-0	
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0	

MEMPHIS...



X1	550,000	0	0	0	50,000	50,000	50,000	1,000	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	555,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	556,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	557,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	570,000	10,000	754,000	796,000	13,000	13,000	13,000	0	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
GR	96,000	0	86,600	754,000	78,100	759,000	77,500	763,000	77,000	776,000
GR	77,600	790,000	78,600	796,000	86,400	799,000	89,000	800,000	96,000	850,000
X1	580,000	10,000	754,000	796,000	10,000	10,000	10,000	0	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
GR	96,000	0	87,600	754,000	78,100	759,000	77,500	763,000	77,000	776,000
GR	77,600	790,000	78,600	796,000	87,400	799,000	90,000	800,000	96,000	850,000
SB	0	1,520	2,600	0	39,000	0	229,000	0	0	-0
ET	-0	-0	400,200	-0	-0	-0	-0	-0	-0	-0
X1	600,000	23,000	740,000	800,000	0	0	0	0	0	-0
X2	0	1560,000	1,000	83,300	87,600	-0	-0	-0	-0	-0
BT	4,000	0	96,000	83,300	754,000	87,600	83,300	800,000	90,000	83,300
BT	850,000	96,000	83,300	-0	-0	-0	-0	-0	-0	-0
GR	98,000	0	96,000	5,000	94,000	20,000	92,000	70,000	90,000	90,000
GR	88,000	160,000	86,000	360,000	84,000	430,000	82,000	740,000	80,000	745,000
GR	78,000	752,000	77,000	760,000	77,000	780,000	78,000	790,000	80,000	795,000
GR	82,000	797,000	84,000	800,000	86,000	805,000	88,000	808,000	90,000	820,000
GR	92,000	825,000	94,000	840,000	90,000	850,000	-0	-0	-0	-0
X1	605,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	610,000	0	0	0	5,000	5,000	5,000	1,000	.100	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	620,000	0	0	0	10,000	10,000	10,000	1,000	.100	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
X1	800,000	24,000	740,000	772,000	180,000	180,000	180,000	0	0	-0
X2	0	1560,000	0	0	0	-0	-0	-0	-0	-0
GR	96,100	0	94,000	22,000	92,000	40,000	90,000	56,000	88,000	140,000
GR	86,000	475,000	84,000	542,000	83,500	650,000	82,400	700,000	81,400	740,000
GR	77,500	743,000	75,300	752,000	77,500	765,000	81,900	772,000	82,100	800,000
GR	79,300	850,000	82,000	853,000	84,000	864,000	86,000	871,000	88,000	884,000
GR	90,000	897,000	92,000	900,000	94,000	913,000	96,100	921,000	-0	-0
NC	.120	.120	.050	.200	.400	-0	-0	-0	-0	-0
X1	1000,000	19,000	324,000	365,000	200,000	200,000	200,000	0	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
GR	96,100	0	94,000	43,000	92,000	85,000	90,000	97,000	88,000	133,000

GR	88,000	220,000	85,500	250,000	85,300	300,000	82,800	324,000	78,200	333,000
GR	78,300	345,000	78,500	358,000	83,700	365,000	85,200	400,000	85,400	450,000
GR	86,000	490,000	88,000	500,000	90,000	514,000	96,100	543,000	-0	-0
X1	1200,000	14,000	442,000	475,000	200,000	200,000	200,000	0	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
GR	96,100	0	94,000	25,000	92,000	60,000	90,000	69,000	88,000	90,000
GR	86,000	100,000	84,000	280,000	83,000	350,000	82,700	442,000	79,100	447,000
GR	78,900	455,000	78,900	462,000	86,100	475,000	101,400	496,000	-0	-0
X1	1330,000	0	0	0	130,000	130,000	130,000	1,000	.300	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
X1	1440,000	15,000	420,000	559,000	110,000	110,000	110,000	0	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
GR	97,000	0	94,000	50,000	89,900	120,000	87,000	220,000	86,400	320,000
GR	85,200	360,000	84,800	420,000	84,700	520,000	80,500	531,000	79,600	541,000
GR	80,300	546,000	88,700	559,000	88,400	609,000	93,100	709,000	97,000	809,000
X1	1441,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
X1	1442,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
X1	1460,000	0	0	0	18,000	18,000	18,000	1,000	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
X1	1470,000	15,000	675,000	715,000	10,000	10,000	10,000	0	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
GR	97,000	0	90,000	112,000	88,900	275,000	86,800	375,000	86,000	575,000
GR	89,200	675,000	80,500	675,000	80,500	686,000	79,600	696,000	80,300	712,000
GR	80,300	715,000	89,200	715,000	88,800	775,000	93,200	875,000	97,000	970,000
SB	1,050	1,060	2,600	0	40,300	2,000	230,000	0	0	0
ET	-0	-0	500,200	-0	-0	-0	-0	-0	-0	-0
X1	1500,000	15,000	675,000	715,000	0	0	0	0	0	-0
X2	0	1540,000	1,000	85,100	86,000	-0	-0	-0	-0	-0
BT	10,000	0	97,000	85,100	112,000	90,000	85,100	275,000	88,900	85,100
BT	375,000	86,800	85,100	575,000	86,000	85,100	675,000	89,200	85,100	715,000
BT	89,200	85,100	775,000	88,800	85,100	875,000	93,200	85,100	970,000	97,000
BT	85,100	-0	-0	-0	-0	-0	-0	-0	-0	-0
GR	97,000	0	90,000	112,000	88,900	275,000	86,800	375,000	86,000	575,000
GR	89,200	675,000	80,500	675,000	80,500	686,000	79,600	696,000	80,300	712,000
GR	80,300	715,000	89,200	715,000	88,800	775,000	93,200	875,000	97,000	970,000
X1	1501,000	19,000	675,000	714,000	1,000	1,000	1,000	0	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
GR	98,000	0	96,000	10,000	94,000	40,000	92,000	70,000	90,000	110,000
GR	88,000	200,000	86,000	295,000	84,000	540,000	82,900	675,000	79,700	680,000
GR	79,100	689,000	80,300	698,000	86,000	714,000	88,000	740,000	90,000	820,000
GR	92,000	850,000	94,000	880,000	96,000	935,000	98,000	970,000	-0	-0
X1	1505,000	0	0	0	4,000	4,000	4,000	1,000	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0

PORT AND MOON PACIFIC MARINE, INC.  
 1000 10th Street, San Francisco, CA 94103  
 Tel: 415.774.1000 Fax: 415.774.1001

X1	1515,000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
X1	1530,000	18,000	600,000	639,000	15,000	15,000	15,000	0	0	-0
X2	0	1540,000	0	0	0	-0	-0	-0	-0	-0
GR	98,000	0	96,000	5,000	94,000	10,000	92,000	12,000	90,000	25,000
GR	88,000	200,000	86,000	230,000	84,000	265,000	82,900	600,000	79,700	605,000
GR	79,100	614,000	80,300	623,000	88,600	639,000	90,000	750,000	92,000	775,000
GR	94,000	810,000	92,000	860,000	98,000	920,000	-0	-0	-0	-0
NC	,100	,100	,050	,200	,400	-0	-0	-0	-0	-0
X1	1800,000	20,000	300,000	328,000	270,000	270,000	270,000	0	0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0
GR	97,000	0	96,000	15,000	94,000	30,000	92,000	36,000	90,000	83,000
GR	88,000	98,000	86,500	200,000	84,600	300,000	80,200	305,000	79,700	313,000
GR	80,600	323,000	83,800	328,000	88,600	343,000	90,000	400,000	90,000	535,000
GR	80,000	560,000	88,000	620,000	90,000	670,000	92,000	700,000	97,000	730,000
X1	2000,000	22,000	253,000	262,000	200,000	200,000	200,000	0	0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0
GR	97,000	0	96,000	5,000	94,000	10,000	92,000	20,000	90,000	34,000
GR	88,000	53,000	86,500	150,000	86,100	280,000	84,800	253,000	80,400	257,000
GR	79,900	265,000	80,500	276,000	84,500	282,000	88,500	300,000	88,400	350,000
GR	90,000	485,000	92,000	520,000	92,000	560,000	90,000	588,000	90,000	720,000
GR	92,000	730,000	97,000	744,000	0	-0	-0	-0	-0	-0
X1	2200,000	20,000	391,000	430,000	200,000	200,000	200,000	0	0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0
GR	97,500	0	96,000	3,000	94,000	8,000	92,000	12,000	90,000	15,000
GR	88,000	32,000	86,000	150,000	85,200	300,000	85,000	350,000	85,600	391,000
GR	80,100	399,000	80,200	407,000	80,400	408,000	86,800	430,000	86,500	450,000
GR	86,000	500,000	88,000	570,000	90,000	708,000	92,000	753,000	97,500	775,000
NC	,100	,100	,035	,200	,400	-0	-0	-0	-0	-0
X1	2400,000	20,000	287,000	318,000	200,000	200,000	200,000	0	0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0
GR	97,500	0	96,000	5,000	94,000	15,000	92,000	35,000	90,000	50,000
GR	88,000	100,000	88,000	190,000	86,000	250,000	85,100	287,000	80,800	294,000
GR	81,200	301,000	81,200	309,000	86,400	318,000	87,400	370,000	88,200	420,000
GR	90,000	500,000	92,000	512,000	94,000	530,000	96,000	550,000	97,500	570,000
X1	2440,000	18,000	170,000	201,000	40,000	40,000	40,000	0	0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0
GR	97,500	0	96,000	20,000	94,000	60,000	92,000	90,000	90,000	129,000
GR	88,000	150,000	86,000	160,000	85,100	170,000	80,800	177,000	81,200	184,000
GR	81,200	192,000	86,400	201,000	88,000	215,000	90,000	230,000	92,000	280,000
GR	94,000	300,000	96,000	330,000	97,500	350,000	-0	-0	-0	-0
X1	2445,000	10,000	200,000	238,000	5,000	5,000	5,000	0	0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0
GR	101,000	0	99,400	200,000	85,200	200,000	81,200	218,000	81,500	220,000
GR	81,000	223,000	80,900	228,000	81,600	238,000	99,400	238,000	101,000	438,000
SB	1,250	1,150	2,600	860,000	38,000	6,000	266,000	0	0	0
ET	-0	0	300,200	0	0	-0	-0	-0	-0	-0
X1	2510,000	10,000	200,000	238,000	0	0	0	0	0	-0
X2	0	1530,000	1,000	88,010	101,000	-0	-0	-0	-0	-0

SECTION 06 MONTH ACCOUNT STATEMENT, P. 2

GR	101.000	0	101.000	200.000	81.200	200.000	81.200	210.000	81.900	220.000
GR	81.000	223.000	80.900	220.000	81.600	230.000	101.000	230.000	101.000	430.000
X1	2511.000	0	0	0	1.000	1.000	1.000	1.000	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
X1	2515.000	19.000	90.000	121.000	4.000	4.000	4.000	0	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
GR	102.000	0	98.000	8.000	96.000	15.000	94.000	25.000	92.000	38.000
GR	90.000	47.000	88.000	53.000	86.000	60.000	84.000	85.000	84.400	90.000
GR	82.900	97.000	82.600	105.000	82.200	113.000	85.100	121.000	86.000	150.000
GR	88.000	250.000	90.000	550.000	92.000	675.000	94.000	700.000	-0	-0
X1	2540.000	21.000	88.000	135.000	30.000	30.000	30.000	0	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
GR	102.000	0	98.000	16.000	96.000	28.000	94.000	40.000	92.000	60.000
GR	90.000	72.000	88.000	79.000	86.000	82.000	84.400	88.000	82.900	95.000
GR	82.600	112.000	82.200	124.000	89.100	135.000	86.000	140.000	88.000	265.000
GR	90.000	335.000	92.000	460.000	94.000	505.000	96.000	530.000	98.000	570.000
GR	102.000	600.000	-0	-0	-0	-0	-0	-0	-0	-0
X1	2560.000	23.000	88.000	132.000	20.000	20.000	20.000	0	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
GR	102.000	0	98.000	16.000	96.000	28.000	94.000	40.000	92.000	60.000
GR	90.000	72.000	88.000	79.000	86.000	84.000	83.500	88.000	83.000	97.000
GR	83.100	104.000	82.600	116.000	82.700	123.000	82.800	132.000	84.000	135.000
GR	86.000	140.000	88.000	145.000	90.000	220.000	92.000	340.000	94.000	403.000
GR	96.000	447.000	98.000	473.000	102.000	520.000	-0	-0	-0	-0
X1	2565.000	10.000	1200.000	1244.000	5.000	5.000	5.000	0	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
GR	102.100	0	101.700	1200.000	83.000	1200.000	83.000	1209.000	83.100	1216.000
GR	82.600	1228.000	82.700	1235.000	82.800	1244.000	101.700	1244.000	102.100	2130.000
SB	1.250	1.050	2.600	1065.000	45.100	1.000	475.000	0	0	0
X1	2615.000	10.000	1200.000	1244.000	0	0	0	0	0	-0
X2	0	1530.000	1.000	93.900	101.700	-0	-0	-0	-0	-0
GR	102.100	0	101.700	1200.000	83.000	1200.000	83.000	1209.000	83.100	1216.000
GR	82.600	1228.000	82.700	1235.000	82.800	1244.000	101.700	1244.000	102.100	2130.000
X1	2616.000	0	0	0	1.000	1.000	1.000	1.000	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
X1	2620.000	30.000	1165.000	1221.000	4.000	4.000	4.000	0	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
GR	104.000	0	102.000	250.000	100.000	400.000	98.000	550.000	92.000	650.000
GR	90.000	670.000	90.000	980.000	100.000	1000.000	100.000	1015.000	98.000	1026.000
GR	96.000	1032.000	94.000	1045.000	92.000	1062.000	90.000	1079.000	88.000	1120.000
GR	86.000	1140.000	86.300	1165.000	82.500	1174.000	83.100	1189.000	83.300	1203.000
GR	88.800	1221.000	89.100	1233.000	90.000	1380.000	92.000	1452.000	94.000	1470.000
GR	96.000	1535.000	98.000	1562.000	100.000	1600.000	102.000	2180.000	104.000	2300.000
X1	2630.000	0	0	0	10.000	10.000	10.000	1.000	0	-0
X2	0	1530.000	0	0	0	-0	-0	-0	-0	-0
X1	2800.000	27.000	1032.000	1088.000	170.000	170.000	170.000	0	0	-0

X2	0	1530,000	0	0	0	0	0	0	0	0
GR	104,000	0	102,000	100,000	102,000	190,000	100,000	330,000	98,000	500,000
GR	90,000	625,000	90,000	760,000	98,000	790,000	98,000	811,000	90,000	842,000
GR	86,000	950,000	86,100	1000,000	86,300	1032,000	82,500	1041,000	83,100	1056,000
GR	83,300	1070,000	88,800	1088,000	89,100	1100,000	90,000	1350,000	92,000	1492,000
GR	94,000	1508,000	96,000	1535,000	98,000	1600,000	100,000	1620,000	100,000	2050,000
GR	102,000	2105,000	104,000	2330,000	0	0	0	0	0	0

X1	2920,000	31,000	1406,000	1460,000	120,000	120,000	120,000	0	0	0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	545,000	100,000	845,000	98,000	940,000	96,000	945,000
GR	96,000	965,000	98,000	978,000	98,000	1020,000	90,000	1068,000	90,000	1300,000
GR	86,300	1406,000	82,500	1415,000	83,000	1420,000	83,100	1425,000	83,000	1430,000
GR	83,200	1434,000	83,300	1438,000	83,300	1442,000	88,800	1460,000	88,600	1510,000
GR	90,300	1610,000	90,100	1710,000	92,100	1810,000	92,100	1910,000	94,000	1935,000
GR	96,000	2020,000	98,000	2080,000	100,000	2100,000	100,000	2430,000	102,000	2530,000
GR	105,000	2800,000	0	0	0	0	0	0	0	0
NC	.100	.100	.035	.200	.400	0	0	0	0	0

X1	2950,000	30,000	1406,000	1447,000	30,000	30,000	30,000	0	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	545,000	100,000	845,000	98,000	940,000	96,000	945,000
GR	96,000	965,000	98,000	978,000	98,000	1020,000	90,000	1068,000	90,000	1300,000
GR	87,600	1406,000	83,500	1410,000	83,500	1415,000	83,200	1423,000	83,200	1429,000
GR	83,000	1436,000	83,400	1441,000	83,300	1447,000	88,600	1510,000	90,300	1610,000
GR	90,100	1710,000	92,100	1810,000	92,100	1910,000	94,000	1935,000	96,000	2020,000
GR	98,000	2080,000	100,000	2100,000	100,000	2430,000	102,000	2530,000	105,000	2800,000

X1	2951,000	24,000	1550,000	1587,000	11,000	11,000	11,000	0	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	100,000	102,000	515,000	100,400	1050,000	100,000	1140,000
GR	97,100	1220,000	93,800	1350,000	92,200	1550,000	83,500	1550,000	83,500	1555,000
GR	83,200	1563,000	83,200	1569,000	83,000	1576,000	83,400	1581,000	83,300	1587,000
GR	92,200	1587,000	92,300	1650,000	92,500	1850,000	93,000	2050,000	94,000	2086,000
GR	96,000	2180,000	98,000	2370,000	100,000	2660,000	105,000	3000,000	0	0
SB	1,250	1,200	2,600	0	37,000	1,000	196,000	0	0	0
ET	0	0	500,200	0	0	0	0	0	0	0

X1	3010,000	24,000	1550,000	1587,000	0	0	0	0	0	0
X2	0	1520,000	1,000	90,100	92,200	0	0	0	0	0
BT	12,000	0	105,000	90,100	100,000	104,000	90,100	1050,000	100,400	90,100
BT	1220,000	97,100	90,100	1350,000	93,800	90,100	1550,000	92,200	90,100	1587,000
BT	92,200	90,100	2050,000	93,000	90,100	2086,000	94,000	90,100	2180,000	96,000
BT	90,100	2660,000	100,000	90,100	3000,000	105,000	90,100	0	0	0
GR	105,000	0	104,000	100,000	102,000	515,000	100,400	1050,000	100,000	1140,000
GR	97,100	1220,000	93,800	1350,000	92,200	1550,000	83,500	1550,000	83,500	1555,000
GR	83,200	1563,000	83,200	1569,000	83,000	1576,000	83,400	1581,000	83,300	1587,000
GR	92,200	1587,000	92,300	1650,000	92,500	1850,000	93,000	2050,000	94,000	2086,000
GR	96,000	2180,000	98,000	2370,000	100,000	2660,000	105,000	3000,000	0	0

X1	3011,000	0	0	0	1,000	1,000	1,000	1,000	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0

X1	3015,000	28,000	1447,000	1477,000	4,000	4,000	4,000	0	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	70,000	104,000	350,000	102,000	620,000	102,000	770,000
GR	100,000	1030,000	98,000	1060,000	96,000	1155,000	94,000	1172,000	92,000	1260,000
GR	90,000	1423,000	88,000	1430,000	86,000	1442,000	84,000	1447,000	83,400	1453,000
GR	82,800	1463,000	82,800	1475,000	84,600	1477,000	86,000	1481,000	88,000	1487,000
GR	90,000	1494,000	92,000	1506,000	94,000	1995,000	96,000	2100,000	98,000	2263,000

GR 100.000 2550.000 102.000 2600.000 105.000 3000.000 0 0 0 0

X1 3025,000 32,000 1440,000 1470,000 10,000 10,000 10,000 0 0 -0  
X2 0 1520,000 0 0 0 0 0 0 0 0  
GR 105,000 0 104,000 70,000 104,000 350,000 102,000 620,000 102,000 770,000  
GR 100,000 1030,000 98,000 1060,000 96,000 1155,000 94,000 1170,000 92,000 1200,000  
GR 90,000 1245,000 92,000 1353,000 93,300 1355,000 93,100 1366,000 93,400 1379,000  
GR 89,600 1406,000 84,300 1440,000 83,400 1446,000 82,800 1456,000 82,800 1468,000  
GR 84,600 1470,000 92,400 1491,000 92,800 1540,000 94,000 1794,000 96,000 1885,000  
GR 98,000 2000,000 96,000 2135,000 98,000 2266,000 100,000 2354,000 102,000 2425,000  
GR 104,000 2500,000 105,000 2510,000 0 0 0 0 0 0

X1 3100,000 0 0 0 75,000 75,000 75,000 1,000 0 0  
X2 0 1520,000 0 0 0 0 0 0 0 0

X1 3200,000 38,000 1430,000 1464,000 100,000 100,000 100,000 0 0 -0  
X2 0 1520,000 0 0 0 0 0 0 0 0  
GR 105,000 0 104,000 70,000 104,000 350,000 102,000 620,000 102,000 770,000  
GR 100,000 982,000 98,000 994,000 96,000 1007,000 94,000 1014,000 94,000 1050,000  
GR 96,000 1055,000 115,000 1081,000 114,000 1122,000 113,000 1159,000 96,000 1200,000  
GR 94,000 1210,000 92,000 1220,000 90,000 1234,000 90,000 1350,000 92,900 1360,000  
GR 92,900 1390,000 89,200 1408,000 84,600 1430,000 83,100 1438,000 82,800 1447,000  
GR 82,900 1458,000 84,900 1464,000 89,000 1483,000 91,400 1530,000 91,900 1555,000  
GR 92,000 1692,000 94,000 1838,000 96,000 1875,000 98,000 1940,000 100,000 2100,000  
GR 102,000 2170,000 104,000 2253,000 105,000 2370,000 0 0 0 0

X1 3400,000 38,000 1370,000 1444,000 200,000 200,000 200,000 0 0 -0  
X2 0 1520,000 0 0 0 0 0 0 0 0  
GR 105,000 0 104,000 70,000 104,000 350,000 102,000 625,000 100,000 654,000  
GR 98,000 822,000 98,000 890,000 98,000 952,000 96,000 956,000 94,000 965,000  
GR 92,000 986,000 90,000 1005,000 90,000 1070,000 92,000 1084,000 105,000 1110,000  
GR 105,000 1170,000 103,000 1220,000 92,000 1260,000 90,000 1310,000 95,400 1355,000  
GR 96,600 1367,000 96,300 1370,000 91,700 1377,000 85,200 1389,000 85,000 1404,000  
GR 83,100 1409,000 83,200 1418,000 82,800 1428,000 92,800 1444,000 93,800 1459,000  
GR 94,000 1580,000 94,000 1785,000 96,000 1822,000 98,000 1930,000 100,000 1944,000  
GR 102,000 1955,000 104,000 1973,000 105,000 1978,000 0 0 0 0

X1 3600,000 40,000 1430,000 1488,000 200,000 200,000 200,000 0 0 -0  
X2 0 1520,000 0 0 0 0 0 0 0 0  
GR 105,000 0 104,000 70,000 104,000 350,000 102,000 620,000 102,000 665,000  
GR 102,000 718,000 100,000 738,000 98,000 868,000 96,000 905,000 96,000 945,000  
GR 98,000 952,000 98,000 1010,000 92,000 1050,000 90,000 1090,000 90,000 1120,000  
GR 92,000 1162,000 96,000 1175,000 98,000 1213,000 96,000 1232,000 94,000 1237,000  
GR 94,000 1300,000 96,000 1304,000 98,000 1318,000 97,000 1360,000 94,900 1430,000  
GR 83,800 1430,000 83,900 1436,000 83,900 1442,000 83,900 1448,000 83,600 1455,000  
GR 84,400 1461,000 86,000 1467,000 94,900 1488,000 91,700 1580,000 92,000 1662,000  
GR 94,000 1671,000 96,000 1681,000 98,000 1684,000 100,000 1691,000 105,000 1718,000  
SB 1,250 1,200 2,600 0 37,000 1,000 272,000 0 0 0

X1 3730,000 40,000 1430,000 1467,000 0 0 0 0 0 -0  
X2 0 1520,000 1,000 91,600 91,700 0 0 0 0 0  
BT 7,000 0 105,000 91,600 985,000 100,000 91,600 1200,000 98,000 91,600  
BT 1360,000 98,000 91,600 1450,000 94,900 91,600 1580,000 91,700 91,600 1700,000  
BT 105,000 91,600 0 0 0 0 0 0 0 0  
GR 105,000 0 104,000 70,000 104,000 350,000 102,000 620,000 102,000 665,000  
GR 102,000 718,000 100,000 738,000 98,000 868,000 96,000 905,000 96,000 945,000  
GR 98,000 952,000 98,000 1010,000 92,000 1050,000 90,000 1090,000 90,000 1120,000  
GR 92,000 1162,000 96,000 1175,000 98,000 1213,000 96,000 1232,000 94,000 1237,000  
GR 94,000 1300,000 96,000 1304,000 98,000 1318,000 97,000 1360,000 94,900 1430,000  
GR 83,800 1430,000 83,900 1436,000 83,900 1442,000 83,900 1448,000 83,600 1455,000

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GR	84,400	1461,000	88,000	1467,000	94,900	1467,000	91,700	1580,000	92,000	1662,000
GR	94,000	1671,000	96,000	1661,000	98,000	1664,000	100,000	1691,000	105,000	1718,000
X1	3731,000	27,000	1432,000	1491,000	1,000	1,000	1,000	0	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	70,000	104,000	350,000	102,000	620,000	100,000	730,000
GR	98,000	840,000	96,000	865,000	96,000	985,000	96,000	1063,000	94,000	1070,000
GR	92,000	1100,000	92,000	1172,000	94,000	1177,000	95,000	1200,000	94,000	1222,000
GR	92,000	1233,000	90,000	1365,000	89,500	1415,000	89,200	1432,000	85,000	1443,000
GR	83,900	1445,000	83,600	1457,000	84,100	1469,000	93,100	1491,000	92,000	1515,000
GR	92,000	1658,000	105,000	1705,000	-0	-0	-0	-0	-0	-0
X1	3735,000	0	0	0	4,000	4,000	4,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
X1	3745,000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
X1	3765,000	0	0	0	20,000	20,000	20,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
X1	3800,000	0	0	0	35,000	35,000	35,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
NC	,100	,100	,050	,200	,400	-0	-0	-0	-0	-0
X1	4000,000	24,000	1014,000	1060,000	200,000	200,000	200,000	0	0	-0
X2	0	1500,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	96,000	464,000	94,600	750,000	94,000	825,000	92,000	833,000	90,900	900,000
GR	90,300	1000,000	89,200	1014,000	85,600	1025,000	84,100	1027,000	83,800	1037,000
GR	84,000	1048,000	84,900	1056,000	93,400	1060,000	93,200	1100,000	93,000	1150,000
GR	93,000	1200,000	92,000	1210,000	92,000	1293,000	105,000	1350,000	-0	-0
X1	4225,000	32,000	1006,000	1047,000	225,000	225,000	225,000	0	0	-0
X2	0	1500,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	98,000	376,000	96,000	395,000	94,000	547,000	92,500	690,000	92,000	740,000
GR	92,000	908,000	94,000	914,000	94,500	960,000	94,000	994,000	92,000	998,000
GR	91,000	1000,000	90,000	1006,000	85,300	1012,000	85,000	1018,000	85,000	1024,000
GR	84,600	1024,000	84,700	1033,000	84,800	1037,000	84,700	1043,000	93,400	1047,000
GR	93,300	1130,000	93,300	1195,000	94,000	1485,000	96,000	1498,000	98,000	1505,000
GR	100,000	1522,000	105,000	1550,000	-0	-0	-0	-0	-0	-0
NC	,120	,120	,050	,200	,400	-0	-0	-0	-0	-0
X1	4230,000	25,000	983,000	1020,000	5,000	5,000	5,000	0	0	-0
X2	0	1500,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	98,000	376,000	96,000	395,000	94,000	547,000	92,500	690,000	94,500	800,000
GR	94,500	983,000	85,300	983,000	85,000	989,000	85,000	995,000	84,000	1001,000
GR	84,700	1010,000	84,800	1014,000	84,700	1020,000	94,500	1020,000	93,600	1220,000
GR	94,000	1310,000	96,000	1370,000	98,000	1440,000	100,000	1525,000	105,000	1570,000
SB	1,250	1,200	2,600	0	37,000	1,000	261,000	0	0	0
X1	4300,000	25,000	983,000	1020,000	0	0	0	0	0	-0
X2	0	1500,000	1,000	92,900	93,600	-0	-0	-0	-0	-0
BT	12,000	0	105,000	92,900	210,000	102,000	92,900	250,000	98,000	92,900
BT	376,000	98,000	92,900	690,000	93,000	92,900	800,000	94,500	92,900	983,000

BT	94.500	92.900	1310.000	94.000	92.900	1370.000	96.000	92.900	1440.000	98.000
BT	92.900	1525.000	100.000	92.900	1570.000	105.000	92.900	-0	-0	-0
GR	105.000	0	104.000	163.000	102.000	210.000	100.000	228.000	98.000	250.000
GR	98.000	376.000	96.000	395.000	94.000	547.000	92.500	690.000	94.500	800.000
GR	94.500	983.000	85.300	983.000	85.000	989.000	85.000	995.000	84.000	1001.000
GR	84.700	1010.000	84.800	1014.000	84.700	1020.000	94.500	1020.000	93.600	1220.000
GR	94.000	1310.000	96.000	1370.000	98.000	1440.000	100.000	1525.000	105.000	1570.000
X1	4301.000	25.000	922.000	957.000	1.000	1.000	1.000	0	0	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
GR	106.000	0	104.000	115.000	102.000	150.000	100.000	155.000	98.000	220.000
GR	96.000	270.000	94.000	465.000	92.000	710.000	90.000	915.000	91.900	922.000
GR	86.800	926.000	85.500	929.000	84.800	937.000	84.600	945.000	90.400	949.000
GR	94.800	957.000	95.600	990.000	95.400	1015.000	95.200	1050.000	96.000	1100.000
GR	98.000	1250.000	100.000	1300.000	102.000	1330.000	104.000	1355.000	106.000	1375.000
X1	4305.000	0	0	0	4.000	4.000	4.000	1.000	0	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
X1	4310.000	0	0	0	5.000	5.000	5.000	1.000	.100	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
X1	4320.000	0	0	0	10.000	10.000	10.000	1.000	.100	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
X1	4340.000	0	0	0	20.000	20.000	20.000	1.000	.100	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
X1	4600.000	27.000	806.000	837.000	260.000	260.000	260.000	0	0	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
GR	106.000	0	104.000	40.000	102.000	85.000	102.000	120.000	100.000	160.000
GR	98.000	185.000	96.000	220.000	94.000	255.000	92.000	290.000	90.800	700.000
GR	90.900	750.000	89.600	806.000	85.600	811.000	85.200	820.000	84.800	832.000
GR	91.000	837.000	91.500	850.000	94.200	859.000	91.000	877.000	91.400	920.000
GR	94.000	980.000	96.000	1060.000	98.000	1180.000	100.000	1200.000	102.000	1250.000
GR	104.000	1270.000	106.000	1320.000	-0	-0	-0	-0	-0	-0
X1	4750.000	20.000	810.000	854.000	150.000	150.000	150.000	0	0	-0
X2	0	1500.000	0	0	0	-0	-0	-0	-0	-0
GR	106.000	0	104.000	50.000	102.000	85.000	100.000	110.000	98.000	200.000
GR	96.000	245.000	94.000	300.000	92.000	340.000	90.000	810.000	86.100	815.000
GR	85.100	828.000	86.400	837.000	92.600	854.000	94.000	930.000	96.000	970.000
GR	98.000	990.000	100.000	1000.000	102.000	1050.000	104.000	1160.000	106.000	1170.000
NC	.120	.120	.050	.200	.400	-0	-0	-0	-0	-0
X1	5000.000	21.000	770.000	832.000	250.000	250.000	250.000	0	0	-0
X2	0	1480.000	0	0	0	-0	-0	-0	-0	-0
GR	106.000	0	104.000	80.000	102.000	200.000	100.000	270.000	98.000	290.000
GR	96.000	310.000	94.000	410.000	92.000	620.000	90.000	760.000	92.900	770.000
GR	92.300	777.000	86.300	785.000	85.300	792.000	86.000	804.000	89.800	820.000
GR	92.300	832.000	94.000	840.000	96.000	890.000	98.000	930.000	100.000	940.000
GR	110.000	965.000	-0	-0	-0	-0	-0	-0	-0	-0
X1	5200.000	20.000	548.000	579.000	200.000	200.000	200.000	0	0	-0
X2	0	1480.000	0	0	0	-0	-0	-0	-0	-0
GR	106.000	0	104.000	100.000	102.000	180.000	100.000	190.000	98.000	195.000
GR	96.000	320.000	94.000	440.000	92.000	530.000	92.300	540.000	93.100	548.000



GR	88,000	981,000	86,200	567,000	88,100	574,000	91,200	579,000	92,000	583,000
GR	94,000	600,000	96,000	660,000	98,000	690,000	100,000	710,000	110,000	740,000
X1	5400,000	21,000	570,000	610,000	200,000	200,000	200,000	0	0	-0
X2	0	1480,000	0	0	0	-0	-0	-0	-0	-0
GR	106,000	0	104,000	50,000	102,000	105,000	100,000	150,000	98,000	230,000
GR	96,000	360,000	94,000	565,000	93,700	570,000	93,200	573,000	86,300	584,000
GR	85,800	589,000	86,100	595,000	91,000	610,000	92,000	630,000	94,000	670,000
GR	96,000	740,000	96,000	800,000	98,000	860,000	100,000	875,000	102,000	890,000
GR	110,000	935,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	5430,000	18,000	570,000	605,000	30,000	30,000	30,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	115,000	115,000	-0
GR	106,000	0	104,000	50,000	102,000	105,000	100,000	150,000	98,000	230,000
GR	96,000	360,000	94,000	565,000	81,100	570,000	81,100	605,000	91,000	610,000
GR	92,000	630,000	94,000	670,000	98,000	740,000	96,000	800,000	98,000	860,000
GR	100,000	875,000	102,000	890,000	110,000	935,000	-0	-0	-0	-0
SB	1,250	1,710	2,500	1000,000	38,000	2,000	522,000	0	81,100	81,100
X1	5570,000	-0	-0	-0	140,000	140,000	140,000	-0	-0	-0
X2	-0	-0	1,000	95,600	115,000	-0	-0	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	115,000	115,000	-0
X1	5600,000	25,000	821,000	856,000	30,000	30,000	30,000	-0	-0	-0
X2	0	1480,000	0	0	0	-0	-0	-0	-0	-0
GR	108,000	0	106,000	5,000	104,000	270,000	102,000	290,000	100,000	320,000
GR	98,000	345,000	98,000	550,000	96,000	610,000	96,000	730,000	94,000	750,000
GR	92,000	810,000	91,600	821,000	84,800	828,000	84,500	835,000	84,700	842,000
GR	92,500	856,000	94,000	905,000	96,000	990,000	96,000	1020,000	96,000	1100,000
GR	98,000	1105,000	100,000	1110,000	104,000	1120,000	106,000	1140,000	110,000	1220,000
X1	5800,000	0	0	0	200,000	200,000	200,000	1,000	.200	-0
X2	0	1480,000	0	0	0	-0	-0	-0	-0	-0
X1	5875,000	24,000	1167,000	1196,000	75,000	75,000	75,000	-0	-0	-0
GR	110,000	0	104,000	20,000	103,500	35,000	99,500	220,000	99,500	480,000
GR	97,500	740,000	99,700	1000,000	96,600	1100,000	92,200	1167,000	86,400	1174,000
GR	86,100	1182,000	86,700	1190,000	92,100	1196,000	92,200	1201,000	95,500	1300,000
GR	96,300	1303,000	98,100	1400,000	100,600	1461,000	100,900	1488,000	102,000	1522,000
GR	104,000	1550,000	106,000	1595,000	108,000	1620,000	110,000	1660,000	-0	-0
X1	5928,000	24,000	1162,000	1201,000	53,000	53,000	53,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	96,900	96,900	-0
GR	110,000	0	104,000	20,000	103,500	35,000	99,500	220,000	99,500	480,000
GR	97,500	740,000	99,700	1000,000	96,600	1100,000	92,200	1162,000	86,400	1174,000
GR	86,100	1182,000	86,700	1190,000	92,100	1196,000	92,200	1201,000	95,500	1300,000
GR	96,300	1303,000	98,100	1400,000	100,600	1461,000	100,900	1488,000	102,000	1522,000
GR	104,000	1550,000	106,000	1595,000	108,000	1620,000	110,000	1660,000	-0	-0
SB	1,250	1,630	2,500	-0	39,000	2,000	475,000	-0	82,700	82,700
ET	-0	-0	300,200	-0	-0	-0	-0	-0	-0	-0
X1	5993,000	-0	-0	-0	65,000	65,000	65,000	-0	-0	-0
X2	-0	-0	1,000	95,600	96,900	-0	-0	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	96,900	96,900	-0
BT	17,000	0	110,000	-0	20,000	104,000	-0	35,000	103,500	-0
BT	220,000	99,500	-0	480,000	99,500	-0	740,000	97,500	-0	1000,000
BT	99,700	-0	1100,000	98,900	-0	1162,000	96,900	-0	1201,000	96,900
BT	-0	1300,000	96,900	-0	1400,000	97,200	-0	1500,000	98,600	-0

	1543,000	100,500	-0	1590,000	100,500	-0	1620,000	100,000	-0	1620,000
BT	110,000	0	-0	-0	0	-0	0	-0	-0	-0
X1	6050,000	24,000	1167,000	1196,000	57,000	57,000	57,000	-0	-0	-0
GR	110,000	0	104,000	20,000	103,500	35,000	99,500	220,000	99,500	480,000
GR	97,500	740,000	99,700	1000,000	96,600	1100,000	92,200	1167,000	86,400	1174,000
GR	86,100	1182,000	86,700	1190,000	92,100	1196,000	92,200	1201,000	95,500	1300,000
GR	96,300	1303,000	98,100	1400,000	100,600	1461,000	100,900	1488,000	102,000	1522,000
GR	104,000	1550,000	106,000	1595,000	108,000	1620,000	110,000	1660,000	-0	-0
NC	,120	,120	,050	,200	,400	-0	-0	-0	-0	-0
X1	6200,000	21,000	680,000	724,000	150,000	150,000	150,000	-0	-0	-0
X2	0	1480,000	0	0	0	-0	-0	-0	-0	-0
GR	110,000	0	102,000	30,000	102,000	190,000	102,000	440,000	100,000	480,000
GR	98,000	600,000	96,000	655,000	94,800	680,000	87,600	705,000	87,800	709,000
GR	87,200	721,000	93,400	724,000	94,000	780,000	96,000	790,000	98,000	820,000
GR	100,000	890,000	102,000	975,000	104,000	1030,000	106,000	1090,000	108,000	1110,000
GR	110,000	1150,000	-0	-0	-0	-0	-0	-0	-0	-0
NC	,120	,120	,050	,200	,400	-0	-0	-0	-0	-0
X1	6600,000	25,000	634,000	668,000	400,000	400,000	400,000	0	0	-0
X2	0	1480,000	0	0	0	-0	-0	-0	-0	-0
GR	110,000	0	104,000	70,000	104,000	220,000	102,000	350,000	100,000	390,000
GR	98,000	420,000	96,000	450,000	96,000	605,000	94,900	610,000	94,800	632,000
GR	94,800	634,000	93,600	640,000	88,100	647,000	88,000	653,000	88,300	651,000
GR	94,400	668,000	94,000	680,000	96,000	785,000	98,000	795,000	100,000	805,000
GR	102,000	830,000	104,000	840,000	106,000	855,000	108,000	915,000	110,000	990,000
EJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 FLOODWAY STUDY FLOODWAYS  
 T3 CROSS CR, GREEN ST TO CONFL. W/ LITTLE CROSS CR.

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FQ
	-10.	3.	-0	-0	-0	-0	-0	-0	84.400	-0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIN	ITRACE
	15.000	-0	-1.000	-0	-0	-0	-0	-0	-0	15.000

\*PROF 2

CCHV= .200 CEHV= .400  
 \*SECNO 68,000

SECNO	DEPTH	CWSEL	CRIS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CDRAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS*	.0	228.5	TYPE*	2	TARGET*	250.000			
68.00	8.70	84.40	0	83.40	86.39	1.99	0	0	89.90
4250.	0	4250.	0	0	375.	0	0	0	85.80
0	0	11.32	0	.120	.035	.120	0	75.70	73.35
.006801	0	0	0	0	0	1	0	60.32	133.67

FLOW DISTRIBUTION

STA# 73, 137,  
 PER 0# 100.0  
 AREA# 375.5  
 VEL# 11.3

\*SECNO 118,000  
 3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIS	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CDRAR	TOPWID	ENDST

F/W  
10/6/86

SUMMARY PRINTOUT

EUTAW CR FAYETTEVILLE N

SECNO	CWSEL	O	ELMIN	EG	HV	10K*S
300.00	123.30	670.00	117.00	123.55	.25	68.19
300.00	124.30	670.00	117.00	124.57	.27	50.71
301.00	123.31	670.00	117.00	123.56	.25	67.64
301.00	124.31	670.00	117.00	124.57	.26	50.28
305.00	123.35	670.00	117.00	123.58	.24	65.04
305.00	124.34	670.00	117.00	124.59	.26	48.83
310.00	123.37	670.00	117.10	123.62	.26	70.49
310.00	124.35	670.00	117.10	124.63	.28	53.00
325.00	123.46	670.00	117.30	123.75	.29	80.12
325.00	124.41	670.00	117.30	124.73	.32	61.81
350.00	123.65	670.00	117.60	123.98	.33	92.21
350.00	124.54	670.00	117.60	124.92	.39	74.50
400.00	124.11	670.00	118.10	124.46	.35	97.47
400.00	124.91	670.00	118.10	125.34	.44	84.71
500.00	125.12	670.00	119.20	125.52	.40	109.90
600.00	125.79	670.00	119.20	126.32	.53	105.23
700.00	126.18	670.00	120.00	126.47	.29	79.98
700.00	126.86	670.00	120.00	127.24	.38	75.46
760.00	125.99	670.00	120.30	126.60	.61	134.67
760.00	126.56	670.00	120.30	127.44	.88	139.99
820.00	130.51	670.00	120.70	130.59	.08	12.28
820.00	131.08	670.00	120.70	131.18	.10	12.28
870.00	130.57	670.00	120.70	130.65	.08	11.73
870.00	131.14	670.00	120.70	131.24	.10	11.78
1200.00	131.23	670.00	122.80	131.42	.18	54.35
1200.00	131.80	670.00	122.80	132.04	.24	60.08
1550.00	133.37	650.00	124.50	133.67	.31	74.25
1550.00	134.14	650.00	124.50	134.43	.29	77.10
2150.00	137.22	650.00	129.00	137.41	.19	52.52
2150.00	137.83	650.00	129.00	138.05	.22	48.01
2220.00	137.61	650.00	129.70	137.83	.23	64.76
2220.00	138.17	650.00	129.70	138.44	.26	59.77
* 2225.00	143.85	650.00	139.60	146.00	2.15	622.66
* 2225.00	143.86	650.00	139.60	146.00	2.14	1442.74
* 2275.00	147.27	650.00	140.20	147.40	.13	35.50
* 2275.00	147.27	650.00	140.20	147.43	.16	72.38

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S
2325.00	147.46	650.00	140.40	147.49	.03	7.71
2325.00	147.50	650.00	140.40	147.59	.09	15.34
• 2770.00	149.89	650.00	143.50	150.75	.86	201.32
• 2770.00	149.85	650.00	143.50	150.79	.94	215.66
3400.00	157.14	650.00	152.10	157.26	.11	60.41
3400.00	157.66	650.00	152.10	157.82	.16	65.73
3480.00	157.68	600.00	153.00	157.82	.13	81.53
3480.00	158.23	600.00	153.00	158.40	.17	77.92
3560.00	163.06	600.00	153.00	164.93	1.88	639.72
3560.00	163.90	600.00	153.00	165.47	1.57	521.02
• 3568.00	167.58	600.00	164.90	168.93	1.35	385.22
• 3568.00	167.57	600.00	164.90	168.93	1.36	389.65
3600.00	169.20	600.00	161.00	169.20	.00	.09
3600.00	169.20	600.00	161.00	169.20	.00	.09
3700.00	169.20	600.00	161.00	169.20	.00	.09
3700.00	169.20	600.00	161.00	169.21	.00	.09

SUMMARY PRINTOUT

EUTAW CR. FAYETTEVILLE N

SECNO	WSELK	DIFKWS	SSTA	STCHL	STCHR	ENDST
300.00	123.30	0	135.00	192.00	206.00	260.00
300.00	123.30	1.00	171.77	192.00	206.00	225.14
301.00	0	0	134.93	192.00	206.00	260.07
301.00	123.31	1.00	171.73	192.00	206.00	225.17
305.00	0	0	134.61	192.00	206.00	260.39
305.00	123.35	.99	171.37	192.00	206.00	225.47
310.00	0	0	135.27	192.00	206.00	259.73
310.00	123.37	.98	172.10	192.00	206.00	224.87
325.00	0	0	136.32	192.00	206.00	258.68
325.00	123.46	.95	173.69	192.00	206.00	223.56
350.00	0	0	137.44	192.00	206.00	237.56
350.00	123.65	.89	175.65	192.00	206.00	221.98
400.00	0	0	137.87	192.00	206.00	257.13
400.00	124.11	.79	176.61	192.00	206.00	221.21
600.00	0	0	138.79	192.00	206.00	256.21
600.00	125.12	.67	178.37	192.00	206.00	219.84
700.00	0	0	136.30	192.00	206.00	258.70
700.00	126.18	.68	174.12	192.00	206.00	223.18
760.00	0	0	141.05	192.00	205.00	253.95
760.00	125.99	.57	183.67	192.00	205.00	215.88
820.00	0	0	318.31	408.00	421.00	465.58
820.00	130.51	.57	376.97	408.00	421.00	431.22
870.00	0	0	316.58	408.00	421.00	466.84
870.00	130.57	.57	376.13	408.00	421.00	431.60
1200.00	0	0	196.91	289.00	310.00	313.09
1200.00	131.23	.57	265.09	289.00	310.00	310.00
1550.00	0	0	190.66	190.00	211.00	240.28
1550.00	133.37	.78	190.25	190.00	211.00	211.00
2150.00	0	0	227.83	243.00	252.00	284.84
2150.00	137.22	.61	234.48	243.00	252.00	265.76
2220.00	0	0	228.33	243.00	252.00	283.12
2220.00	137.61	.57	234.84	243.00	252.00	264.62
* 2225.00	0	0	255.00	255.00	268.00	268.00
* 2225.00	143.85	.01	255.00	255.00	268.00	268.00
* 2275.00	0	0	213.94	255.00	268.00	268.00
* 2275.00	147.27	.01	227.01	255.00	268.00	268.00

SERIALS SECTION

SECNO	WSELK	DIFKWS	SSTA	STCHL	STCHR	ENDST
2325.00	0	0	213.96	255.00	268.00	345.78
2325.00	0	0	230.00	255.00	268.00	295.00
* 2770.00	0	0	161.75	194.00	206.00	247.37
* 2770.00	0	0	180.00	194.00	206.00	240.00
3400.00	0	0	335.63	368.00	374.00	444.22
3400.00	0	0	363.00	368.00	374.00	429.00
3480.00	0	0	337.74	368.00	374.00	443.47
3480.00	0	0	363.00	368.00	374.00	429.00
3560.00	0	0	368.00	368.00	374.00	374.00
3560.00	163.06	.85	368.00	368.00	374.00	374.00
* 3568.00	0	0	359.00	359.00	383.00	383.00
* 3568.00	167.58	-.01	359.00	359.00	383.00	383.00
3600.00	0	0	216.99	280.00	510.00	537.01
3600.00	169.20	.00	216.99	280.00	510.00	537.01
3700.00	0	0	216.98	280.00	510.00	537.01
3700.00	169.20	.00	216.98	280.00	510.00	537.01

FORM 1000 (REV. 10-6-65)

FLOODWAY DATA, EUTAW CR FAYETTEVILLE N  
 PROFILE NO. 2

STATION	----- WIDTH (FT)	FLOODWAY SECTION AREA	----- MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
300.000	53.	204.	3.3	124.3	123.3	1.0
301.000	53.	206.	3.2	124.3	123.3	1.0
305.000	54.	210.	3.2	124.3	123.3	1.0
310.000	53.	201.	3.3	124.3	123.4	1.0
325.000	50.	186.	3.6	124.4	123.5	.9
A 350.000	46.50	169.	4.0	124.5	123.7	.9
400.000	45.	159.	4.2	124.9	124.1	.8
600.000	41.	142.	4.7	125.8	125.1	.7
700.000	49.	172.	3.9	126.9	126.2	.7
760.000	32.	111.	6.0	126.6	126.0	.6
820.000	54.	324.	2.1	131.1	130.5	.6
870.000	55.	332.	2.0	131.1	130.6	.6
1200.000	45.	192.	3.5	131.8	131.2	.6
B 1550.000	21.50	150.	4.3	134.1	133.4	.8
2150.000	31.	195.	3.3	137.8	137.2	.6
2220.000	30.	178.	3.7	138.2	137.6	.6
2225.000	13.	55.	11.7	143.9	143.9	.0
2275.000	41.	209.	3.1	147.3	147.3	.0
2325.000	65.	339.	1.9	147.5	147.5	.0
2770.000	60.	115.	5.6	149.9	149.9	.0
C 3400.000	66.	230.	2.8	157.7	157.1	.5
3480.000	66.	207.	2.9	158.2	157.7	.5
3560.000	6.	60.	10.0	163.9	163.1	.8
3568.000	24.	64.	9.4	167.6	167.6	.0
3600.000	320.	2205.	.3	169.2	169.2	.0
3700.000	320.	2206.	.3	169.2	169.2	.0

POSSIBLE ERROR SECNO= 2225.00 PROFILE= 1 CRITICAL DEPTH ASSUMED



POSSIBLE ERROR	SECNO#	PROFILE#	REMARKS
POSSIBLE ERROR	2225,00	PROFILE#	1 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	2225,00	PROFILE#	2 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	2225,00	PROFILE#	2 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	2225,00	PROFILE#	2 SLOPE TOO STEEP
POSSIBLE ERROR	2770,00	PROFILE#	1 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	2770,00	PROFILE#	1 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	2770,00	PROFILE#	2 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	2770,00	PROFILE#	2 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	3568,00	PROFILE#	1 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	3568,00	PROFILE#	1 20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	3568,00	PROFILE#	2 CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	3568,00	PROFILE#	2 20 TRIALS REQUIRED TO BALANCE WSEL

11/20/02 10:00 AM 11/20/02 10:00 AM

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INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIFICATION 59 IS TO

(1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION OF CONVEYANCE VERSUS DISTANCE.

(2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY  $n$  VALUES IN THE CHANNEL. THE PROGRAM WILL NOW ALLOW BOTH A CHANGE IN  $n$  VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO  $n$  VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPUTATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY.

(3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING.

(4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STATEMENTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CHANNEL AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA.  $\text{TRAPEZOID}/\text{AREA}$  IS THE AREA OF THE TRAPEZOID DIVIDED BY CHANNEL AREA.  $\text{TRAPEZOID}/\text{AREA}$  SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE A

(5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD)

THE PURPOSE OF ERROR CORRECTION 10 IS TO

(1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW.

(2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE.

(3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE.

A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE CHANGES CAN BE DIRECTED TO ALLAN OTD (FTS 448-2105 OR 448-3292).

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F/W  
 'OK  
 9/29/76 SUMMARY PRINTOUT  
 CROSS CR FROM CNFL TO

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
1.00	99.70	2700.00	88.80	100.12	.42	9.91	0	187.80	156.75	344.55	5.2
1.00	100.70	2700.00	88.80	101.04	.34	6.82	1.00	150.00	235.00	385.00	4.7
1.10	99.70	2700.00	88.80	100.12	.42	9.90	0	187.82	156.73	344.55	5.2
1.10	100.70	2700.00	88.80	101.04	.34	6.82	1.00	150.00	235.00	385.00	4.7
2.00	99.70	2700.00	88.80	100.12	.42	9.90	0	187.85	156.71	344.55	5.2
2.00	100.70	2700.00	88.80	101.04	.34	6.82	1.00	150.00	235.00	385.00	4.7
4.00	99.70	2700.00	88.80	100.12	.42	9.89	0	187.90	156.66	344.56	5.2
4.00	100.70	2700.00	88.80	101.04	.34	6.81	1.00	150.00	235.00	385.00	4.7
7.00	99.71	2700.00	88.80	100.13	.42	9.88	0	187.97	156.59	344.56	5.2
7.00	100.71	2700.00	88.80	101.04	.34	6.81	1.00	150.00	235.00	385.00	4.7
12.00	99.71	2700.00	88.80	100.13	.42	9.85	0	188.08	156.48	344.57	5.2
12.00	100.71	2700.00	88.80	101.05	.34	6.80	1.00	150.00	235.00	385.00	4.7
22.00	99.72	2700.00	88.80	100.14	.42	9.81	0	188.32	156.26	344.58	5.2
22.00	100.72	2700.00	88.80	101.05	.34	6.78	.99	150.00	235.00	385.00	4.7
42.00	99.75	2700.00	88.80	100.16	.41	9.72	0	188.79	155.82	344.61	5.2
42.00	100.73	2700.00	88.80	101.07	.34	6.75	.98	150.00	235.00	385.00	4.7
82.00	99.79	2700.00	88.80	100.20	.41	9.53	0	189.86	154.82	344.68	5.2
82.00	100.76	2700.00	88.80	101.09	.33	6.68	.97	150.00	235.00	385.00	4.6
90.00	99.80	2700.00	88.80	100.21	.41	9.50	0	190.05	154.65	344.69	5.2
90.00	100.77	2700.00	88.80	101.10	.33	6.66	.97	150.00	235.00	385.00	4.6
90.00	99.80	2700.00	88.80	100.21	.41	3.13	0	190.05	154.65	344.69	5.2
90.00	100.76	2700.00	88.80	101.10	.34	2.19	.97	150.00	235.00	385.00	4.7
100.00	98.99	2700.00	88.80	100.57	1.58	23.75	0	39.01	295.65	334.66	10.0
100.00	100.25	2700.00	88.80	101.32	1.07	15.99	1.27	50.81	289.96	340.76	8.3
100.00	98.99	2700.00	88.80	100.57	1.58	13.36	0	39.01	295.65	334.66	10.0
100.00	100.25	2700.00	88.80	101.32	1.07	9.00	1.27	50.81	289.96	340.76	8.3
100.00	99.00	2700.00	88.80	100.57	1.57	13.30	0	39.16	295.58	334.74	10.0
100.00	100.25	2700.00	88.80	101.32	1.07	9.02	1.26	50.74	289.99	340.73	8.3
100.00	99.00	2700.00	88.80	100.57	1.57	23.64	0	39.16	295.58	334.74	10.0
100.00	100.25	2700.00	88.80	101.32	1.07	16.03	1.26	50.74	289.99	340.73	8.3
110.00	99.04	2700.00	88.80	100.59	1.55	23.34	0	51.34	295.37	670.76	9.9
110.00	100.27	2700.00	88.80	101.34	1.07	15.96	1.23	50.86	289.93	340.79	8.2
111.00	100.71	2700.00	89.00	100.74	.03	4.42	0	652.03	66.51	718.54	2.4
111.00	101.27	2700.00	89.00	101.43	.17	13.46	.55	150.00	233.50	383.50	4.3
112.00	100.71	2700.00	89.00	100.75	.03	4.42	0	652.14	66.43	718.57	2.4
112.00	101.27	2700.00	89.00	101.43	.17	13.46	.55	150.00	233.50	383.50	4.3

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
113.00	100.71	2700.00	89.00	100.75	.03	4.41	0	652.18	66.41	718.58	2.4
113.00	101.27	2700.00	89.00	101.44	.17	13.45	.55	150.00	233.50	383.50	4.3
115.00	100.71	2700.00	89.00	100.75	.03	4.41	0	652.25	66.35	718.60	2.3
115.00	101.27	2700.00	89.00	101.44	.17	13.44	.56	150.00	233.50	383.50	4.3
117.00	100.72	2700.00	89.00	100.75	.03	4.41	0	652.32	66.30	718.62	2.3
117.00	101.27	2700.00	59.00	101.44	.17	13.42	.56	150.00	233.50	383.50	4.3
120.00	100.72	2700.00	89.00	100.75	.03	4.41	0	652.42	66.23	718.65	2.3
120.00	101.28	2700.00	89.00	101.44	.17	13.40	.56	150.00	233.50	383.50	4.3
125.00	100.72	2700.00	89.00	100.75	.03	4.40	0	652.60	66.10	718.70	2.3
125.00	101.28	2700.00	89.00	101.45	.17	13.37	.57	150.00	233.50	383.50	4.3
135.00	100.72	2700.00	89.20	100.76	.04	4.95	0	636.95	77.35	714.30	2.5
135.00	101.29	2700.00	89.20	101.47	.18	14.37	.57	150.00	233.50	383.50	4.4
150.00	100.73	2700.00	89.40	100.77	.04	5.57	0	621.51	88.44	709.96	2.6
150.00	101.31	2700.00	89.40	101.49	.19	15.43	.58	150.00	233.50	383.50	4.5
200.00	100.75	2700.00	90.00	100.80	.06	8.06	0	575.61	121.43	697.05	3.0
200.00	101.37	2700.00	90.00	101.59	.22	19.12	.62	150.00	233.50	383.50	4.8
300.00	100.83	2700.00	90.50	100.90	.07	10.85	0	541.06	146.27	687.33	3.4
300.00	101.56	2700.00	90.50	101.80	.24	21.95	.73	150.00	233.50	383.50	5.1
400.00	100.93	2700.00	91.50	101.07	.14	21.52	0	484.57	172.25	656.81	4.5
400.00	101.76	2700.00	91.50	102.09	.32	31.52	.83	150.00	233.50	383.50	5.8
500.00	101.14	2700.00	92.50	101.28	.14	20.14	0	304.21	168.60	472.81	4.2
500.00	102.14	2700.00	92.50	102.37	.23	23.57	.99	150.00	210.00	360.00	5.0
600.00	101.35	2700.00	93.20	101.53	.18	27.68	0	289.46	173.51	462.97	4.8
600.00	102.37	2700.00	93.20	102.64	.27	29.28	1.02	150.00	210.00	360.00	5.3
700.00	101.63	2700.00	93.70	101.83	.21	32.21	0	282.81	175.73	458.54	5.1
700.00	102.66	2700.00	93.70	102.95	.29	32.40	1.04	150.00	210.00	360.00	5.5
800.00	101.97	2700.00	94.00	102.23	.27	46.39	0	291.87	157.97	449.83	5.6
800.00	102.87	2700.00	94.00	103.51	.64	66.06	.90	150.00	338.00	488.00	7.3
850.00	102.15	2700.00	95.00	102.60	.45	86.74	0	276.65	169.12	445.77	7.1
850.00	103.11	2700.00	95.00	103.98	.87	100.62	.96	119.42	338.00	457.42	8.4
860.00	108.35	2700.00	95.50	112.79	4.44	84.61	0	17.95	410.51	428.46	16.9
860.00	108.35	2700.00	95.50	112.79	4.44	84.58	.00	17.96	410.51	428.47	16.9
860.00	108.36	2700.00	95.50	112.79	4.43	68.31	0	18.00	410.49	428.48	16.8
860.00	108.35	2700.00	95.50	112.79	4.44	68.51	-.01	17.96	410.51	428.47	16.9
860.00	115.50	2700.00	95.50	116.33	.82	8.14	0	41.04	396.98	438.02	7.2
860.00	115.50	2700.00	95.50	116.32	.82	8.15	-.00	41.02	396.99	438.01	7.2
860.00	115.50	2700.00	95.50	116.33	.82	10.04	0	41.04	396.98	438.02	7.2
860.00	115.50	2700.00	95.50	116.32	.82	10.06	-.00	41.02	396.99	438.01	7.2

SECNO	CWSEL	Q	ELMIN	EG	HV	10K*S	DIFWSP	TOPWID	SSTA	ENDST	VCH
870.00	116.40	2700.00	95.50	116.41	.01	.07	0	720.00	0	720.00	1.3
870.00	116.31	2700.00	95.50	116.40	.09	.30	-.09	150.00	338.00	488.00	2.8
871.00	116.41	2700.00	95.50	116.41	.00	.22	0	720.00	0	720.00	.8
871.00	116.36	2700.00	95.50	116.40	.05	1.64	-.05	150.00	338.00	488.00	2.1
872.00	116.41	2700.00	95.50	116.41	.00	.22	0	720.00	0	720.00	.8
872.00	116.36	2700.00	95.50	116.40	.05	1.64	-.05	150.00	338.00	488.00	2.1
874.00	116.41	2700.00	95.50	116.41	.00	.22	0	720.00	0	720.00	.8
874.00	116.36	2700.00	95.50	116.40	.05	1.64	-.05	150.00	338.00	488.00	2.1
877.00	116.41	2700.00	95.50	116.41	.00	.22	0	720.00	0	720.00	.8
877.00	116.36	2700.00	95.50	116.40	.05	1.64	-.05	150.00	338.00	488.00	2.1
882.00	116.41	2700.00	95.50	116.41	.00	.22	0	720.00	0	720.00	.8
882.00	116.36	2700.00	95.50	116.40	.05	1.64	-.05	150.00	338.00	488.00	2.1
892.00	116.41	2700.00	95.50	116.41	.00	.22	0	720.00	0	720.00	.8
892.00	116.36	2700.00	95.50	116.40	.05	1.64	-.05	150.00	338.00	488.00	2.1
900.00	116.41	2700.00	95.50	116.41	.00	.24	0	600.00	0	600.00	.8
900.00	116.37	2700.00	95.50	116.41	.04	1.44	-.04	150.00	305.00	455.00	2.1
1000.00	116.41	2700.00	95.50	116.41	.00	.24	0	600.00	0	600.00	.8
1000.00	116.38	2700.00	95.50	116.42	.04	1.43	-.03	150.00	305.00	455.00	2.1
1100.00	116.41	2700.00	95.70	116.41	.00	.25	0	600.00	0	600.00	.8
1100.00	116.40	2700.00	95.70	116.44	.04	1.48	-.01	150.00	305.00	455.00	2.1
1200.00	116.41	2700.00	95.70	116.42	.00	.40	0	585.00	0	585.00	1.1
1200.00	116.42	2700.00	95.70	116.45	.04	1.86	.00	150.00	210.00	360.00	2.3
1400.00	116.42	2700.00	95.90	116.43	.00	.42	0	585.00	0	585.00	1.1
1400.00	116.45	2700.00	95.90	116.49	.04	1.92	.03	150.00	210.00	360.00	2.3
1600.00	116.43	2700.00	96.20	116.43	.01	.45	0	585.00	0	585.00	1.1
1600.00	116.49	2700.00	96.20	116.53	.04	2.01	.06	150.00	210.00	360.00	2.4
1900.00	116.44	2700.00	96.50	116.45	.01	.48	0	585.00	0	585.00	1.1
1900.00	116.55	2700.00	96.50	116.59	.04	2.09	.11	150.00	210.00	360.00	2.4
2100.00	116.45	2700.00	96.50	116.46	.00	.30	0	834.64	119.79	954.43	.9
2100.00	116.59	2700.00	96.50	116.63	.04	1.65	.13	150.00	600.50	750.50	2.2
2200.00	116.46	2700.00	96.60	116.46	.00	.31	0	828.76	124.71	953.47	.9
2200.00	116.60	2700.00	96.60	116.65	.04	1.67	.15	150.00	600.50	750.50	2.2
2400.00	116.46	2700.00	97.00	116.47	.00	.34	0	804.87	144.90	949.77	1.0
2400.00	116.64	2700.00	97.00	116.68	.05	1.79	.17	150.00	600.50	750.50	2.3
2600.00	116.47	2700.00	97.20	116.47	.00	.36	0	793.99	154.81	948.80	1.0
2600.00	116.67	2700.00	97.20	116.72	.05	1.85	.20	150.00	600.50	750.50	2.3
2700.00	116.47	2700.00	97.00	116.48	.00	.23	0	1179.88	41.20	1221.08	.8
2700.00	116.69	2700.00	97.00	116.74	.05	1.67	.22	150.00	477.50	627.50	2.2

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
2900.00	116.48	2700.00	97.50	116.48	.00	.26	0	1151.18	46.97	1198.14	.8
2900.00	116.72	2700.00	97.50	116.77	.05	1.82	.25	150.00	477.50	627.50	2.2
3100.00	116.48	2700.00	97.80	116.49	.00	.29	0	1126.34	50.41	1176.75	.8
3100.00	116.76	2700.00	97.80	116.81	.05	1.92	.28	150.00	477.50	627.50	2.3
3300.00	116.49	2700.00	98.00	116.49	.01	.43	0	795.91	35.15	831.06	1.1
3300.00	116.80	2700.00	98.00	116.85	.05	1.97	.31	150.00	272.50	422.50	2.3
3500.00	116.50	2700.00	98.20	116.50	.01	.46	0	791.57	37.08	828.65	1.1
3500.00	116.83	2700.00	98.20	116.89	.06	2.03	.34	150.00	272.50	422.50	2.4
3800.00	116.51	2700.00	98.60	116.52	.01	.51	0	780.74	40.95	821.69	1.1
3800.00	116.90	2700.00	98.60	116.95	.06	2.17	.38	150.00	272.50	422.50	2.4
4000.00	116.52	2700.00	98.90	116.53	.01	.56	0	767.68	43.85	811.53	1.2
4000.00	116.94	2700.00	98.90	117.00	.06	2.29	.42	150.00	272.50	422.50	2.5
4500.00	116.55	2700.00	99.50	116.56	.01	.67	0	741.88	49.58	791.47	1.3
4500.00	117.06	2700.00	99.50	117.12	.06	2.54	.51	150.00	272.50	422.50	2.5

PRINTED ON 3000 SERIES PAPER

FLOODWAY DATA, CROSS CR FROM CONFL TO  
 PROFILE NO. 2

STATION	----- WIDTH (FT)	FLOODWAY SECTION AREA	----- MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
1.000	150.	714.	3.8	100.7	99.7	1.0
1.100	150.	715.	3.8	100.7	99.7	1.0
2.000	150.	715.	3.8	100.7	99.7	1.0
4.000	150.	715.	3.8	100.7	99.7	1.0
7.000	150.	715.	3.8	100.7	99.7	1.0
12.000	150.	716.	3.8	100.7	99.7	1.0
22.000	150.	717.	3.8	100.7	99.7	1.0
42.000	150.	719.	3.8	100.7	99.7	1.0
82.000	150.	723.	3.7	100.8	99.8	1.0
90.000	150.	724.	3.7	100.8	99.8	1.0
90.000	150.	724.	3.7	100.8	99.8	1.0
100.000	51.	325.	8.3	100.3	99.0	1.3
100.000	51.	325.	8.3	100.3	99.0	1.3
100.000	51.	325.	8.3	100.3	99.0	1.3
100.000	51.	325.	8.3	100.3	99.0	1.3
110.000	51.	326.	8.3	100.3	99.0	1.2
111.000	150.	1156.	2.3	101.3	100.7	.6
112.000	150.	1156.	2.3	101.3	100.7	.6
113.000	150.	1157.	2.3	101.3	100.7	.6
115.000	150.	1157.	2.3	101.3	100.7	.6
117.000	150.	1157.	2.3	101.3	100.7	.6
120.000	150.	1158.	2.3	101.3	100.7	.6
125.000	150.	1159.	2.3	101.3	100.7	.6
135.000	150.	1130.	2.4	101.3	100.7	.6
150.000	150.	1102.	2.4	101.3	100.7	.6
200.000	150.	1022.	2.6	101.4	100.7	.6
300.000	150.	973.	2.8	101.6	100.8	.7

400,000	150.	854.	3.2	101.8	100.9	.8
500,000	150.	974.	2.6	102.1	101.1	1.0
600,000	150.	905.	3.0	102.4	101.3	1.0
L 700,000	150.	874.	3.1	102.7	101.6	1.0
800,000	150.	623.	4.3	102.9	102.0	.9
850,000	119.	517.	5.2	103.1	102.1	1.0
860,000	18.	160.	16.9	108.3	108.3	.0
860,000	18.	160.	16.9	108.3	108.4	-.0
860,000	41.	371.	7.3	115.5	115.5	-.0
860,000	41.	371.	7.3	115.5	115.5	-.0
870,000	150.	2414.	1.1	116.3	116.4	-.1
871,000	150.	2421.	1.1	116.4	116.4	-.0
872,000	150.	2421.	1.1	116.4	116.4	-.0
874,000	150.	2421.	1.1	116.4	116.4	-.0
877,000	150.	2421.	1.1	116.4	116.4	-.0
882,000	150.	2422.	1.1	116.4	116.4	-.0
892,000	150.	2422.	1.1	116.4	116.4	-.0
900,000	150.	2659.	1.0	116.4	116.4	-.0
1000,000	150.	2662.	1.0	116.4	116.4	-.0
1100,000	150.	2634.	1.0	116.4	116.4	-.0
1200,000	150.	2637.	1.0	116.4	116.4	.0
1400,000	150.	2612.	1.0	116.5	116.4	.0
1600,000	150.	2573.	1.0	116.5	116.4	.1
1900,000	150.	2537.	1.1	116.6	116.4	.1
2100,000	150.	2525.	1.1	116.6	116.5	.1
2200,000	150.	2513.	1.1	116.6	116.5	.1
2400,000	150.	2458.	1.1	116.6	116.5	.2
2600,000	150.	2433.	1.1	116.7	116.5	.2
2700,000	150.	2413.	1.1	116.7	116.5	.2
2900,000	150.	2343.	1.2	116.7	116.5	.2
3100,000	150.	2304.	1.2	116.8	116.5	.3
3300,000	150.	2255.	1.2	116.8	116.5	.3
M 3500,000	150.	2231.	1.2	116.8	116.5	.3

116.0

116.5



3000,000 150. 2181. 1.2 116.9 116.5 .4

4000,000 150. 2141. 1.3 116.9 116.5 .4

4500,000 150. 2068. 1.3 117.1 116.6 .5

SUMMARY PRINTOUT

CROSS CR FROM CONFL TO

SECNO	CWSEL	EG	WSELK	TOPWID	QLOB	QCH	QROH	PERENC	STENCL	STCHL	STCHR
1.00	99.70	100.12	99.70	187.80	73.27	2623.60	3.13	0	0	280.00	340.0
1.00	100.70	101.04	99.70	150.00	58.63	2631.96	9.40	150.00	235.00	280.00	340.0
1.10	99.70	100.12	0	187.82	73.33	2623.54	3.13	0	0	280.00	340.0
1.10	100.70	101.04	99.70	150.00	58.65	2631.94	9.41	150.00	235.00	280.00	340.0
2.00	99.70	100.12	0	187.85	73.39	2623.48	3.13	0	0	280.00	340.0
2.00	100.70	101.04	99.70	150.00	58.66	2631.91	9.42	150.00	235.00	280.00	340.0
4.00	99.70	100.12	0	187.90	73.51	2623.35	3.13	0	0	280.00	340.0
4.00	100.70	101.04	99.70	150.00	58.70	2631.86	9.44	150.00	235.00	280.00	340.0
7.00	99.71	100.13	0	187.97	73.69	2623.17	3.14	0	0	280.00	340.0
7.00	100.71	101.04	99.71	150.00	58.75	2631.79	9.47	150.00	235.00	280.00	340.0
12.00	99.71	100.13	0	188.08	73.99	2622.86	3.15	0	0	280.00	340.0
12.00	100.71	101.05	99.71	150.00	58.83	2631.66	9.51	150.00	235.00	280.00	340.0
22.00	99.72	100.14	0	188.32	74.59	2622.24	3.17	0	0	280.00	340.0
22.00	100.72	101.05	99.72	150.00	58.99	2631.40	9.60	150.00	235.00	280.00	340.0
42.00	99.75	100.16	0	188.79	75.79	2621.01	3.20	0	0	280.00	340.0
42.00	100.73	101.07	99.75	150.00	59.32	2630.90	9.79	150.00	235.00	280.00	340.0
82.00	99.79	100.20	0	189.86	78.51	2618.21	3.28	0	0	280.00	340.0
82.00	100.76	101.09	99.79	150.00	59.96	2629.88	10.15	150.00	235.00	280.00	340.0
90.00	99.80	100.21	0	190.05	78.99	2617.72	3.29	0	0	280.00	340.0
90.00	100.77	101.10	99.80	150.00	60.09	2629.68	10.23	150.00	235.00	280.00	340.0
90.00	99.80	100.21	2700.00	190.05	68.00	2629.17	2.83	0	0	280.00	340.0
90.00	100.76	101.10	2700.00	150.00	51.70	2639.50	8.80	150.00	235.00	280.00	340.0
100.00	98.99	100.57	2700.00	39.01	0	2700.00	0	0	0	280.00	350.0
100.00	100.25	101.32	2700.00	50.81	0	2700.00	0	150.00	240.00	280.00	350.0
100.00	98.99	100.57	2700.00	39.01	0	2700.00	0	0	0	280.00	350.0
100.00	100.25	101.32	2700.00	50.81	0	2700.00	0	150.00	240.00	280.00	350.0
100.00	99.00	100.57	2700.00	39.16	0	2700.00	0	0	0	280.00	350.0
100.00	100.25	101.32	2700.00	50.74	0	2700.00	0	150.00	240.00	280.00	350.0
100.00	99.00	100.57	2700.00	39.16	0	2700.00	0	0	0	280.00	350.0
100.00	100.25	101.32	2700.00	50.74	0	2700.00	0	150.00	240.00	280.00	350.0
110.00	99.04	100.59	2700.00	51.34	0	2699.99	.01	0	0	280.00	350.0
110.00	100.27	101.34	2700.00	50.86	0	2700.00	0	150.00	240.00	280.00	350.0
111.00	100.71	100.74	2700.00	652.03	365.73	700.31	1633.96	0	0	295.00	322.0
111.00	101.27	101.43	2700.00	150.00	439.02	1329.60	931.37	150.00	233.50	295.00	322.0
112.00	100.71	100.75	2700.00	652.14	365.78	700.17	1634.04	0	0	295.00	322.0
112.00	101.27	101.43	2700.00	150.00	439.07	1329.53	931.40	150.00	233.50	295.00	322.0

SECNO	CWSEL	EG	WSELK	TOPWID	QLOH	QCH	QROB	PERENC	STENCL	STCHL	STCHR
113.00	100.71	100.75	2700.00	652.18	365.80	700.13	1634.07	0	0	295.00	322.0
113.00	101.27	101.44	2700.00	150.00	439.11	1329.46	931.43	150.00	233.50	295.00	322.0
115.00	100.71	100.75	2700.00	652.25	365.84	700.04	1634.12	0	0	295.00	322.0
115.00	101.27	101.44	2700.00	150.00	439.20	1329.31	931.48	150.00	233.50	295.00	322.0
117.00	100.72	100.75	2700.00	652.32	365.87	699.96	1634.17	0	0	295.00	322.0
117.00	101.27	101.44	2700.00	150.00	439.29	1329.17	931.54	150.00	233.50	295.00	322.0
120.00	100.72	100.75	2700.00	652.42	365.92	699.82	1634.25	0	0	295.00	322.0
120.00	101.28	101.44	2700.00	150.00	439.42	1328.96	931.62	150.00	233.50	295.00	322.0
125.00	100.72	100.75	2700.00	652.60	366.01	699.61	1634.38	0	0	295.00	322.0
125.00	101.28	101.45	2700.00	150.00	439.64	1328.61	931.75	150.00	233.50	295.00	322.0
135.00	100.72	100.76	2700.00	636.95	358.26	719.53	1622.20	0	0	295.00	322.0
135.00	101.29	101.47	2700.00	150.00	433.21	1338.98	927.82	150.00	233.50	295.00	322.0
150.00	100.73	100.77	2700.00	621.51	350.62	740.40	1608.99	0	0	295.00	322.0
150.00	101.31	101.49	2700.00	150.00	426.77	1349.41	923.82	150.00	233.50	295.00	322.0
200.00	100.75	100.80	2700.00	575.61	327.76	810.60	1561.64	0	0	295.00	322.0
200.00	101.37	101.59	2700.00	150.00	406.59	1382.52	910.89	150.00	233.50	295.00	322.0
300.00	100.83	100.90	2700.00	541.06	310.03	873.29	1516.69	0	0	295.00	322.0
300.00	101.56	101.80	2700.00	150.00	392.92	1405.29	901.79	150.00	233.50	295.00	322.0
400.00	100.93	101.07	2700.00	484.57	266.66	1039.44	1393.90	0	0	295.00	322.0
400.00	101.76	102.09	2700.00	150.00	354.79	1470.22	874.98	150.00	233.50	295.00	322.0
500.00	101.14	101.28	2700.00	304.21	381.47	1046.24	1272.29	0	0	270.00	300.0
500.00	102.14	102.37	2700.00	150.00	447.79	1371.92	880.29	150.00	210.00	270.00	300.0
600.00	101.35	101.53	2700.00	289.46	356.38	1105.48	1238.15	0	0	270.00	300.0
600.00	102.37	102.64	2700.00	150.00	430.67	1401.30	868.03	150.00	210.00	270.00	300.0
700.00	101.63	101.83	2700.00	282.81	343.72	1135.33	1220.95	0	0	270.00	300.0
700.00	102.66	102.95	2700.00	150.00	422.30	1415.79	861.91	150.00	210.00	270.00	300.0
800.00	101.97	102.23	2650.00	291.87	1309.96	1347.09	42.96	0	0	395.00	431.0
800.00	102.87	103.51	2650.00	150.00	607.65	1989.72	102.62	150.00	338.00	395.00	431.0
850.00	102.15	102.60	2650.00	276.65	1188.06	1480.46	31.48	0	0	395.00	431.0
850.00	103.11	103.98	2650.00	119.42	571.20	2058.54	70.26	150.00	338.00	395.00	431.0
860.00	108.35	112.79	2650.00	17.95	0	2700.00	0	0	0	380.00	450.0
860.00	108.35	112.79	2650.00	17.96	0	2700.00	0	150.00	340.00	380.00	450.0
860.00	108.36	112.79	2650.00	18.00	0	2700.00	0	0	0	380.00	450.0
860.00	108.35	112.79	2650.00	17.96	0	2700.00	0	150.00	340.00	380.00	450.0
860.00	115.50	116.33	2650.00	41.04	0	2700.00	0	0	0	380.00	450.0
860.00	115.50	116.32	2650.00	41.02	0	2700.00	0	150.00	340.00	380.00	450.0
860.00	115.50	116.33	2650.00	41.04	0	2700.00	0	0	0	380.00	450.0
860.00	115.50	116.32	2650.00	41.02	0	2700.00	0	150.00	340.00	380.00	450.0

SECNO	CWSEL	EG	WSELK	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR
870.00	116.40	116.41	2650.00	720.00	1225.12	943.55	531.32	0	0	395.00	431.0
870.00	116.31	116.40	2650.00	150.00	429.89	1961.82	308.29	150.00	338.00	395.00	431.0
871.00	116.41	116.41	2650.00	720.00	1484.52	571.66	643.83	0	0	395.00	431.0
871.00	116.36	116.40	2650.00	150.00	675.11	1540.12	484.76	150.00	338.00	395.00	431.0
872.00	116.41	116.41	2650.00	720.00	1484.52	571.65	643.83	0	0	395.00	431.0
872.00	116.36	116.40	2650.00	150.00	675.11	1540.12	484.77	150.00	338.00	395.00	431.0
874.00	116.41	116.41	2650.00	720.00	1484.51	571.65	643.83	0	0	395.00	431.0
874.00	116.36	116.40	2650.00	150.00	675.11	1540.12	484.77	150.00	338.00	395.00	431.0
877.00	116.41	116.41	2650.00	720.00	1484.51	571.65	643.83	0	0	395.00	431.0
877.00	116.36	116.40	2650.00	150.00	675.11	1540.12	484.78	150.00	338.00	395.00	431.0
882.00	116.41	116.41	2650.00	720.00	1484.51	571.65	643.84	0	0	395.00	431.0
882.00	116.36	116.40	2650.00	150.00	675.11	1540.11	484.79	150.00	338.00	395.00	431.0
892.00	116.41	116.41	2650.00	720.00	1484.51	571.65	643.84	0	0	395.00	431.0
892.00	116.36	116.40	2650.00	150.00	675.11	1540.09	484.80	150.00	338.00	395.00	431.0
900.00	116.41	116.41	2650.00	600.00	1497.45	544.18	658.37	0	0	365.00	395.0
900.00	116.37	116.41	2650.00	150.00	738.58	1322.72	638.71	150.00	305.00	365.00	395.0
1000.00	116.41	116.41	2650.00	600.00	1497.46	544.15	658.40	0	0	365.00	395.0
1000.00	116.38	116.42	2650.00	150.00	738.56	1322.63	638.80	150.00	305.00	365.00	395.0
1100.00	116.41	116.41	2600.00	600.00	1496.64	547.36	656.00	0	0	365.00	395.0
1100.00	116.40	116.44	2600.00	150.00	738.71	1323.71	637.59	150.00	305.00	365.00	395.0
1200.00	116.41	116.42	2600.00	585.00	839.84	448.99	1411.17	0	0	275.00	295.0
1200.00	116.42	116.45	2600.00	150.00	810.44	969.80	919.76	150.00	210.00	275.00	295.0
1400.00	116.42	116.43	2600.00	585.00	835.08	452.45	1412.47	0	0	275.00	295.0
1400.00	116.45	116.49	2600.00	150.00	809.45	970.60	919.95	150.00	210.00	275.00	295.0
1600.00	116.43	116.43	2600.00	585.00	827.71	457.84	1414.45	0	0	275.00	295.0
1600.00	116.49	116.53	2600.00	150.00	807.83	971.92	920.25	150.00	210.00	275.00	295.0
1900.00	116.44	116.45	2600.00	585.00	820.24	463.34	1416.41	0	0	275.00	295.0
1900.00	116.55	116.59	2600.00	150.00	806.33	973.16	920.51	150.00	210.00	275.00	295.0
2100.00	116.45	116.46	2600.00	834.64	1307.76	574.43	817.81	0	0	660.00	691.0
2100.00	116.59	116.63	2600.00	150.00	666.94	1358.81	674.26	150.00	600.50	660.00	691.0
2200.00	116.46	116.46	2600.00	828.76	1305.79	576.92	817.29	0	0	660.00	691.0
2200.00	116.60	116.65	2600.00	150.00	666.69	1359.33	673.98	150.00	600.50	660.00	691.0
2400.00	116.46	116.47	2500.00	804.87	1297.68	587.37	814.95	0	0	660.00	691.0
2400.00	116.64	116.68	2500.00	150.00	665.52	1361.78	672.70	150.00	600.50	660.00	691.0
2600.00	116.47	116.47	2500.00	793.99	1293.66	592.64	813.69	0	0	660.00	691.0
2600.00	116.67	116.72	2500.00	150.00	664.97	1362.94	672.09	150.00	600.50	660.00	691.0
2700.00	116.47	116.48	2500.00	1179.88	1436.29	537.24	726.46	0	0	535.00	570.0
2700.00	116.69	116.74	2500.00	150.00	661.88	1485.27	552.85	150.00	477.50	535.00	570.0

REPRODUCTION OF THIS DOCUMENT IS PROHIBITED

SECNO	CWSEL	EG	WSELK	TOPWID	QLOB	QCH	QROB	PERENC	STENCL	STCHL	STCHR
2900.00	116.48	116.48	2500.00	1151.18	1446.45	552.61	700.93	0	0	535.00	570.0
2900.00	116.72	116.77	2500.00	150.00	662.33	1489.94	547.72	150.00	477.50	535.00	570.0
3100.00	116.48	116.49	2500.00	1126.34	1452.01	562.04	685.96	0	0	535.00	570.0
3100.00	116.76	116.81	2500.00	150.00	662.56	1492.77	544.67	150.00	477.50	535.00	570.0
3300.00	116.49	116.49	2500.00	795.91	1231.14	709.97	759.89	0	0	330.00	365.0
3300.00	116.80	116.85	2500.00	150.00	717.60	1554.68	427.72	150.00	272.50	330.00	365.0
3500.00	116.50	116.50	2500.00	791.57	1234.95	716.28	748.77	0	0	330.00	365.0
3500.00	116.83	116.89	2500.00	150.00	718.18	1556.68	425.15	150.00	272.50	330.00	365.0
3800.00	116.51	116.52	2500.00	780.74	1242.61	731.41	725.98	0	0	330.00	365.0
3800.00	116.90	116.95	2500.00	150.00	719.39	1561.07	419.54	150.00	272.50	330.00	365.0
4000.00	116.52	116.53	2500.00	767.68	1248.24	743.13	708.63	0	0	330.00	365.0
4000.00	116.94	117.00	2500.00	150.00	720.31	1564.56	415.13	150.00	272.50	330.00	365.0
4500.00	116.55	116.56	2500.00	741.88	1259.38	767.50	673.12	0	0	330.00	365.0
4500.00	117.06	117.12	2500.00	150.00	722.05	1571.59	406.36	150.00	272.50	330.00	365.0

POSSIBLE ERROR SECNO# 860.00 PROFILE# 1 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO# 860.00 PROFILE# 1 20 TRIALS REQUIRED TO BALANCE WSEL

POSSIBLE ERROR SECNO# 860.00 PROFILE# 2 CRITICAL DEPTH ASSUMED

POSSIBLE ERROR SECNO# 860.00 PROFILE# 2 20 TRIALS REQUIRED TO BALANCE WSEL

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INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF MODIFICATION 59 IS TO

- (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, LINEAR INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIMATION OF CONVEYANCE VERSUS DISTANCE.
- (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY  $n$  VALUES IN THE CHANNEL. THE PROGRAM WILL NOW ALLOW BOTH A CHANGE IN  $n$  VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO  $n$  VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW COMPUTATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY.
- (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING.
- (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STA TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CHANNEL AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SHOULD BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA.  $\text{TRAPEZOID/AREA}$  IS THE AREA OF THE TRAPEZOID.  $\text{ELLIPSE/AREA}$  SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE AFFECTED.
- (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIELD)

THE PURPOSE OF ERROR CORRECTION 10 IS TO

- (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW.
- (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE.
- (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE.

A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE PAGES CAN BE DIRECTED TO ALLAN OTO (FTS 448-2105 OR 448-3292).

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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 100 YR NATURAL  
 T3 CROSS CR FROM CONFL TO LANGDON ST

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-1.	2.	-0	-0	-0	-0	-0	-0	99,700	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1,000	-0	-1,000	-0	-0	-0	-0	-0	-0	15,000
J3	-2,000	1,000	43,000	42,000	3,000	10,000	5,000	50,000	4,000	53,000
J3	54,000	26,000	0	200,000	110,000	-0	-0	-0	-0	-0
OT	7,000	2700,000	2700,000	2700,000	2700,000	1150,000	2100,000	4150,000	-0	-0
ET	-0	-0	150,200	-0	-0	-0	-0	-0	-0	-0
NC	.150	.150	.035	.100	.300	-0	-0	-0	-0	-0
X1	1,000	17,000	280,000	340,000	0	0	0	0	0	-0
GR	106,000	0	102,000	100,000	100,000	150,000	98,000	195,000	98,000	280,000
GR	96,000	285,000	94,000	289,000	92,000	293,000	88,800	305,000	88,800	325,000
GR	92,000	332,000	94,000	335,000	96,000	340,000	98,000	342,000	100,000	345,000
GR	102,000	670,000	106,000	870,000	-0	-0	-0	-0	-0	-0
X1	1,100	0	0	0	1,000	1,000	1,000	1,000	0	-0
X1	2,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X1	4,000	0	0	0	2,000	2,000	2,000	1,000	0	-0
X1	7,000	0	0	0	3,000	3,000	3,000	1,000	0	-0
X1	12,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X1	22,000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X1	42,000	0	0	0	20,000	20,000	20,000	1,000	0	-0
X1	82,000	0	0	0	40,000	40,000	40,000	1,000	0	-0
X1	90,000	0	0	0	8,000	8,000	8,000	1,000	0	-0
NC	.100	.100	.020	.100	.300	-0	-0	-0	-0	-0
X1	90,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	100,000	14,000	280,000	350,000	10,000	10,000	10,000	0	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	102,500	155,000	102,500	280,000	98,000	300,000	88,800	300,000
GR	88,800	320,000	93,000	320,000	93,000	330,000	98,000	330,000	102,200	350,000

GR	100.000	525.000	99.000	665.000	100.000	800.000	102.000	925.000	-0	-0
NC	.100	.100	.015	.100	.300	-0	-0	-0	-0	-0
X1	100.000	0	0	0	0	0	0	1.000	0	-0
X2	0	2700.000	0	0	0	0	0	-0	-0	-0
SB	1.250	1.150	2.700	0	31.500	1.500	240.000	0	0	0
X1	100.000	0	0	0	0	0	0	1.000	0	-0
X2	0	2700.000	1.000	0	0	-0	0	-0	-0	-0
BT	9.000	0	106.000	97.800	50.000	104.000	97.800	155.000	102.500	97.800
BT	330.000	102.500	97.800	525.000	100.000	97.800	665.000	99.000	97.800	800.000
BT	100.000	97.800	925.000	102.000	97.800	1000.000	106.000	97.800	-0	-0
NC	.100	.100	.020	.100	.300	-0	-0	-0	-0	-0
X1	100.000	0	0	0	0	0	0	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	110.000	14.000	280.000	350.000	10.000	10.000	10.000	0	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
GR	105.000	0	102.500	155.000	102.500	280.000	98.000	300.000	88.800	300.000
GR	88.800	320.000	93.000	320.000	93.000	330.000	98.000	330.000	102.200	350.000
GR	100.000	525.000	99.000	665.000	100.000	800.000	102.000	925.000	-0	-0
NC	.150	.100	.060	.100	.300	-0	-0	-0	-0	-0
X1	111.000	15.000	295.000	322.000	1.000	1.000	1.000	0	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
GR	105.000	0	101.000	50.000	99.000	165.000	97.000	190.000	95.000	280.000
GR	93.000	295.000	89.000	303.000	89.000	318.000	93.000	322.000	95.000	425.000
GR	97.000	600.000	99.000	680.000	101.000	725.000	103.000	810.000	105.000	850.000
X1	112.000	0	0	0	1.000	1.000	1.000	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	113.000	0	0	0	1.000	1.000	1.000	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	115.000	0	0	0	2.000	2.000	2.000	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	117.000	0	0	0	2.000	2.000	2.000	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	120.000	0	0	0	3.000	3.000	3.000	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	125.000	0	0	0	5.000	5.000	5.000	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	135.000	0	0	0	10.000	10.000	10.000	1.000	.200	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	150.000	0	0	0	15.000	15.000	15.000	1.000	.200	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0



X1	200,000	0	0	0	50,000	50,000	50,000	1,000	,600	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	300,000	0	0	0	100,000	100,000	100,000	1,000	,500	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	400,000	0	0	0	100,000	100,000	100,000	1,000	1,000	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	500,000	16,000	270,000	300,000	100,000	100,000	100,000	0	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
GR	108,000	0	106,000	30,000	104,000	115,000	102,000	160,000	100,000	180,000
GR	98,000	195,000	96,000	270,000	92,500	275,000	92,500	296,000	95,700	300,000
GR	96,000	395,000	98,000	420,000	100,000	450,000	102,000	490,000	104,000	525,000
GR	106,000	550,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	600,000	0	0	0	100,000	100,000	100,000	1,000	,700	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	700,000	0	0	0	100,000	100,000	100,000	1,000	,500	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
NC	,150	,150	,060	,100	,300	-0	-0	-0	-0	-0
X1	800,000	15,000	395,000	431,000	100,000	100,000	100,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	110,000	0	106,000	50,000	104,000	130,000	100,000	185,000	98,000	230,000
GR	98,000	395,000	96,000	408,000	94,000	410,000	94,000	427,000	98,000	431,000
GR	100,000	440,000	102,000	450,000	104,000	580,000	108,000	650,000	110,000	720,000
X1	850,000	0	0	0	50,000	50,000	50,000	1,000	1,000	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
NC	,100	,100	,020	,100	,300	-0	-0	-0	-0	-0
X1	860,000	8,000	380,000	450,000	10,000	10,000	10,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	124,500	0	124,500	380,000	106,500	414,000	95,500	414,000	95,500	426,000
GR	106,500	426,000	124,500	450,000	124,500	800,000	-0	-0	-0	-0
NC	,100	,100	,018	,100	,300	-0	-0	-0	-0	-0
X1	860,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
SB	0	1,140	2,700	0	12,000	0	116,000	0	0	-0
X1	860,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2650,000	1,000	0	0	-0	-0	-0	-0	-0
BT	5,000	0	130,000	106,500	100,000	115,000	106,500	720,000	120,000	106,500
BT	1180,000	124,000	106,500	1850,000	130,000	106,500	-0	-0	-0	-0
NC	,100	,100	,020	,100	,300	-0	-0	-0	-0	-0
X1	860,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0

X1	870,000	19,000	395,000	431,000	10,000	10,000	10,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	111,500	0	107,500	50,000	105,500	130,000	101,500	185,000	99,500	230,000
GR	99,500	395,000	97,500	408,000	95,500	410,000	95,500	427,000	99,500	431,000
GR	101,500	440,000	103,500	450,000	105,500	580,000	109,500	650,000	111,500	720,000
NC	.150	.150	.060	.100	.300	-0	-0	-0	-0	-0
X1	871,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	872,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	874,000	0	0	0	2,000	2,000	2,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	877,000	0	0	0	3,000	3,000	3,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	882,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	892,000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	900,000	16,000	365,000	395,000	8,000	8,000	8,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	110,000	0	108,000	40,000	106,000	60,000	104,000	100,000	102,000	190,000
GR	100,000	220,000	98,000	365,000	95,500	367,000	95,500	390,000	98,000	395,000
GR	100,000	410,000	102,000	475,000	104,000	500,000	106,000	520,000	108,000	550,000
GR	110,000	600,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	1000,000	0	0	0	100,000	100,000	100,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
NC	.150	.150	.060	.100	.300	-0	-0	-0	-0	-0
X1	1100,000	0	0	0	100,000	100,000	100,000	1,000	.200	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
X1	1200,000	12,000	275,000	295,000	100,000	100,000	100,000	0	0	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
GR	112,500	0	112,000	20,000	110,000	120,000	104,000	180,000	98,000	275,000
GR	95,700	277,000	95,700	293,000	98,000	295,000	100,000	425,000	106,000	490,000
GR	108,000	525,000	114,000	585,000	-0	-0	-0	-0	-0	-0
X1	1400,000	0	0	0	200,000	200,000	200,000	1,000	.200	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
X1	1600,000	0	0	0	200,000	200,000	200,000	1,000	.300	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
X1	1900,000	0	0	0	300,000	300,000	300,000	1,000	.300	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0

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X1	2100,000	21,000	660,000	691,000	200,000	200,000	200,000	0	0	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
GR	120,000	0	118,000	40,000	114,000	245,000	112,000	270,000	110,000	340,000
GR	106,000	415,000	104,000	490,000	102,000	530,000	100,000	660,000	96,500	668,000
GR	96,500	688,000	98,500	691,000	100,000	700,000	102,000	775,000	108,000	870,000
GR	110,000	895,000	112,000	920,000	114,000	940,000	116,000	950,000	118,000	970,000
GR	120,000	1000,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	2200,000	0	0	0	100,000	100,000	100,000	1,000	.100	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
NC	.150	.150	.060	.100	.300	-0	-0	-0	-0	-0
X1	2400,000	0	0	0	200,000	200,000	200,000	1,000	.400	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	2600,000	0	0	0	200,000	200,000	200,000	1,000	.200	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	2700,000	19,000	535,000	570,000	100,000	100,000	100,000	0	0	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
GR	120,000	0	114,000	70,000	112,000	105,000	110,000	175,000	106,000	220,000
GR	102,000	320,000	100,000	535,000	97,000	540,000	97,000	560,000	100,000	570,000
GR	104,000	610,000	106,000	650,000	108,000	765,000	110,000	825,000	112,000	930,000
GR	114,000	1055,000	116,000	1200,000	118,000	1290,000	120,000	1400,000	-0	-0
X1	2900,000	0	0	0	200,000	200,000	200,000	1,000	.500	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	3100,000	0	0	0	200,000	200,000	200,000	1,000	.300	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	3300,000	18,000	330,000	365,000	200,000	200,000	200,000	0	0	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
GR	120,000	0	114,000	60,000	110,000	90,000	102,000	190,000	100,000	330,000
GR	98,000	333,000	98,000	360,000	100,000	365,000	104,000	375,000	106,000	385,000
GR	108,000	555,000	110,000	580,000	112,000	620,000	112,000	720,000	114,000	755,000
GR	116,000	825,000	118,000	850,000	120,000	865,000	-0	-0	-0	-0
X1	3500,000	0	0	0	200,000	200,000	200,000	1,000	.200	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	3800,000	0	0	0	300,000	300,000	300,000	1,000	.400	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	4000,000	0	0	0	200,000	200,000	200,000	1,000	.300	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
X1	4500,000	0	0	0	500,000	500,000	500,000	1,000	.600	-0
X2	0	2500,000	0	0	0	-0	-0	-0	-0	-0
EJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 FLOODWAY STUDY FLOODWAYS  
 T3 CROSS CR FROM CONFL TO LANGDON SY

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FQ
	.10.	3.	-0	-0	-0	-0	-0	-0	100.700	.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	-0	-1.000	-0	-0	-0	-0	-0	-0	15.000

\*PROF 2

CCHV= .100 CEHV= .300  
 \*SECNO 1.000

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	LOSS	BANK ELEV
0	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS=	235.0	385.0	TYPE=	2	TARGET=	150.000		
1.00	11.90	100.70	0	99.70	101.04	.34	0	98.00
2700.	59.	2632.	9.	122.	557.	36.	0	96.00
0	.48	4.72	.26	.150	.035	.150	0	68.80
.000682	0	0	0	0	0	1	0	150.00
								235.00
								385.00

FLOW DISTRIBUTION

STA=	235.	280.	340.	342.	345.	385.
PER Q=	2.2	97.5	.1	.1	.2	
AREA=	121.5	557.4	7.4	5.1	23.1	
VEL=	.5	4.7	.5	.3	.2	

\*SECNO 1.100

3470 ENCROACHMENT STATIONS=	235.0	385.0	TYPE=	2	TARGET=	150.000		
1.10	11.90	100.70	0	99.70	101.04	.34	.00	98.00
2700.	59.	2632.	9.	122.	557.	36.	0.	96.00
.00	.48	4.72	.26	.150	.035	.150	.017	88.80
.000682	1.	1.	1.	0	0	1	0	150.00
								235.00
								385.00

FLOW DISTRIBUTION

STA=	235.	280.	340.	342.	345.	385.
PER Q=	2.2	97.5	.1	.1	.2	
AREA=	121.5	557.4	7.4	5.1	23.1	
VEL=	.5	4.7	.5	.3	.2	

HEC ENGINEERING CORPORATION

NATURALS

OK  
9/29/76

SUMMARY PRINTOUT

CROSS CR FROM CONFL TO

SECNO	CWSEL	Q	ELMIN	EG	HV	10K*S	DIFWSP	TOPWID	SSTA	ENDST	VCH
1.00	96.20	1150.00	88.80	96.44	.24	10.17	0	55.70	284.50	340.20	3.9
1.00	98.60	2100.00	88.80	98.96	.36	10.07	2.40	161.40	181.50	342.90	4.8
1.00	99.60	2700.00	88.80	100.03	.43	10.36	1.00	185.40	159.00	344.40	5.3
1.00	101.60	4150.00	88.80	102.14	.54	10.31	2.00	495.00	110.00	605.00	6.1
1.10	96.20	1150.00	88.80	96.44	.24	10.16	0	55.70	284.50	340.20	3.9
1.10	98.60	2100.00	88.80	98.96	.36	10.07	2.40	161.42	181.48	342.90	4.8
1.10	99.60	2700.00	88.80	100.03	.43	10.36	1.00	185.42	158.98	344.40	5.3
1.10	101.60	4150.00	88.80	102.14	.54	10.30	2.00	495.19	109.97	605.17	6.1
2.00	96.20	1150.00	88.80	96.44	.24	10.16	0	55.71	284.49	340.20	3.9
2.00	98.60	2100.00	88.80	98.96	.36	10.06	2.40	161.45	181.45	342.90	4.8
2.00	99.60	2700.00	88.80	100.04	.43	10.35	1.00	185.45	158.95	344.40	5.3
2.00	101.60	4150.00	88.80	102.14	.54	10.30	2.00	495.39	109.95	605.33	6.1
4.00	96.20	1150.00	88.80	96.45	.24	10.15	0	55.71	284.49	340.20	3.9
4.00	98.60	2100.00	88.80	98.97	.36	10.05	2.40	161.50	181.41	342.91	4.8
4.00	99.60	2700.00	88.80	100.04	.43	10.35	1.00	185.50	158.91	344.41	5.3
4.00	101.60	4150.00	88.80	102.14	.54	10.29	2.00	495.77	109.90	605.67	6.1
7.00	96.21	1150.00	88.80	96.45	.24	10.13	0	55.72	284.48	340.21	3.9
7.00	98.61	2100.00	88.80	98.97	.36	10.04	2.40	161.57	181.34	342.91	4.8
7.00	99.61	2700.00	88.80	100.04	.43	10.33	1.00	185.57	158.84	344.41	5.3
7.00	101.61	4150.00	88.80	102.15	.54	10.28	2.00	496.35	109.82	606.17	6.1
12.00	96.21	1150.00	88.80	96.45	.24	10.10	0	55.74	284.47	340.21	3.9
12.00	98.61	2100.00	88.80	98.97	.36	10.01	2.40	161.69	181.23	342.92	4.8
12.00	99.61	2700.00	88.80	100.05	.43	10.31	1.00	185.70	158.72	344.42	5.3
12.00	101.61	4150.00	88.80	102.15	.54	10.25	2.00	497.32	109.69	607.01	6.1
22.00	96.22	1150.00	88.80	96.46	.24	10.04	0	55.78	284.44	340.22	3.9
22.00	98.62	2100.00	88.80	98.98	.36	9.97	2.40	161.93	181.00	342.93	4.8
22.00	99.63	2700.00	88.80	100.06	.43	10.26	1.00	185.95	158.49	344.43	5.3
22.00	101.63	4150.00	88.80	102.16	.53	10.21	2.00	499.24	109.43	608.67	6.1
42.00	96.25	1150.00	88.80	96.48	.24	9.93	0	55.85	284.39	340.24	3.9
42.00	98.65	2100.00	88.80	99.00	.36	9.87	2.40	162.41	180.55	342.96	4.8
42.00	99.65	2700.00	88.80	100.08	.43	10.16	1.00	186.44	158.03	344.46	5.3
42.00	101.65	4150.00	88.80	102.18	.53	10.12	2.00	503.08	108.92	612.00	6.1
82.00	96.29	1150.00	88.80	96.52	.23	9.70	0	55.99	284.29	340.28	3.8
82.00	98.69	2100.00	88.80	99.04	.35	9.68	2.40	163.36	179.66	343.02	4.7
82.00	99.70	2700.00	88.80	100.12	.42	9.95	1.01	187.56	156.98	344.53	5.2
82.00	101.70	4150.00	88.80	102.22	.52	9.91	2.00	512.21	107.70	619.92	6.0
90.00	96.30	1150.00	88.80	96.53	.23	9.66	0	56.02	284.27	340.29	3.8
90.00	98.70	2100.00	88.80	99.05	.35	9.61	2.40	163.68	179.37	343.04	4.7
90.00	99.71	2700.00	88.80	100.13	.42	9.92	1.00	187.75	156.79	344.55	5.2
90.00	101.71	4150.00	88.80	102.23	.52	9.86	2.01	514.76	107.37	622.12	6.0
90.00	96.30	1150.00	88.80	96.53	.23	3.15	0	56.02	284.27	340.29	3.8
90.00	98.70	2100.00	88.80	99.05	.35	3.15	2.40	163.68	179.37	343.04	4.7
90.00	99.70	2700.00	88.80	100.13	.43	3.26	1.00	187.75	156.79	344.55	5.3
90.00	101.70	4150.00	88.80	102.24	.54	3.31	1.99	514.76	107.37	622.12	6.1

20170

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
100.00	95.99	1150.00	88.80	96.67	.68	12.85	0	30.00	300.00	330.00	6.6
100.00	98.10	2100.00	88.80	99.32	1.22	17.53	2.11	30.95	299.54	330.49	8.8
100.00	98.86	2700.00	88.80	100.50	1.64	24.54	.76	37.85	296.21	334.06	10.2
100.00	101.17	4150.00	88.80	102.47	1.30	21.19	2.31	501.59	285.88	873.62	9.7
100.00	95.99	1150.00	88.80	96.67	.68	7.23	0	30.00	300.00	330.00	6.6
100.00	98.10	2100.00	88.80	99.32	1.22	9.86	2.11	30.95	299.54	330.49	8.8
100.00	98.86	2700.00	88.80	100.50	1.64	13.81	.76	37.85	296.21	334.06	10.2
100.00	100.97	4150.00	88.80	102.56	1.60	14.14	2.11	470.18	286.80	860.65	10.5
100.00	96.12	1150.00	88.80	96.77	.65	6.77	0	30.00	300.00	330.00	6.4
100.00	98.10	2100.00	88.80	99.32	1.22	9.87	1.98	30.91	299.56	330.47	8.8
100.00	98.87	2700.00	88.80	100.50	1.63	13.76	.77	37.98	296.15	334.13	10.2
100.00	100.96	4150.00	88.80	102.56	1.60	14.21	2.09	468.68	286.84	860.03	10.5
100.00	96.12	1150.00	88.80	96.77	.65	12.04	0	30.00	300.00	330.00	6.4
100.00	98.10	2100.00	88.80	99.32	1.22	17.54	1.98	30.91	299.56	330.47	8.8
100.00	98.87	2700.00	88.80	100.50	1.63	24.46	.77	37.98	296.15	334.13	10.2
100.00	101.73	4150.00	88.80	102.63	.90	15.25	2.86	584.56	283.44	907.91	8.3
110.00	96.14	1150.00	88.80	96.78	.65	11.99	0	30.00	300.00	330.00	6.4
110.00	98.12	2100.00	88.80	99.34	1.21	17.50	1.99	31.03	299.50	330.53	8.8
110.00	98.92	2700.00	88.80	100.52	1.61	24.13	.80	38.45	295.92	334.37	10.1
110.00	101.76	4150.00	88.80	102.65	.89	15.06	2.84	587.64	283.35	909.18	8.3
111.00	96.71	1150.00	89.00	96.84	.12	18.69	0	371.90	202.94	574.84	3.6
111.00	99.41	2100.00	89.00	99.45	.04	6.18	2.70	547.93	141.33	689.26	2.6
111.00	100.65	2700.00	89.00	100.68	.03	4.59	1.24	646.99	70.13	717.12	2.4
111.00	102.71	4150.00	89.00	102.73	.03	3.60	2.06	768.94	28.65	797.59	2.4
112.00	96.72	1150.00	89.00	96.84	.12	18.66	0	372.10	202.87	574.97	3.6
112.00	99.41	2100.00	89.00	99.45	.04	6.17	2.70	548.02	141.27	689.29	2.6
112.00	100.65	2700.00	89.00	100.68	.03	4.58	1.24	647.10	70.05	717.15	2.4
112.00	102.71	4150.00	89.00	102.73	.03	3.60	2.06	768.99	28.64	797.63	2.4
113.00	96.72	1150.00	89.00	96.84	.12	18.63	0	372.35	202.79	575.13	3.6
113.00	99.41	2100.00	89.00	99.45	.04	6.17	2.70	548.07	141.23	689.30	2.6
113.00	100.65	2700.00	89.00	100.68	.03	4.58	1.24	647.14	70.02	717.16	2.4
113.00	102.71	4150.00	89.00	102.74	.03	3.59	2.06	769.01	28.63	797.64	2.4
115.00	96.72	1150.00	89.00	96.85	.12	18.56	0	372.84	202.62	575.46	3.6
115.00	99.41	2100.00	89.00	99.46	.04	6.17	2.69	548.17	141.16	689.33	2.6
115.00	100.65	2700.00	89.00	100.68	.03	4.58	1.24	647.21	69.97	717.19	2.4
115.00	102.71	4150.00	89.00	102.74	.03	3.59	2.06	769.05	28.63	797.67	2.4
117.00	96.73	1150.00	89.00	96.85	.12	18.50	0	373.33	202.45	575.79	3.6
117.00	99.42	2100.00	89.00	99.46	.04	6.16	2.69	548.27	141.09	689.36	2.6
117.00	100.65	2700.00	89.00	100.69	.03	4.58	1.24	647.29	69.92	717.21	2.4
117.00	102.71	4150.00	89.00	102.74	.03	3.59	2.05	769.09	28.62	797.70	2.4
120.00	96.73	1150.00	89.00	96.85	.12	18.40	0	374.07	202.20	576.27	3.6
120.00	99.42	2100.00	89.00	99.46	.04	6.15	2.69	548.42	140.98	689.40	2.6
120.00	100.65	2700.00	89.00	100.69	.03	4.57	1.24	647.40	69.84	717.24	2.4
120.00	102.71	4150.00	89.00	102.74	.03	3.59	2.05	769.14	28.60	797.75	2.4

SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH
125.00	96.74	1150.00	89.00	96.86	.12	18.23	0	375.29	201.79	577.08	3.5
125.00	99.42	2100.00	89.00	99.46	.04	6.14	2.68	548.66	140.81	689.47	2.5
125.00	100.66	2700.00	89.00	100.69	.03	4.57	1.24	647.58	69.71	717.29	2.4
125.00	102.71	4150.00	89.00	102.74	.03	3.59	2.05	769.24	28.58	797.82	2.4
135.00	96.75	1150.00	89.20	96.89	.15	21.85	0	350.51	210.20	560.71	3.8
135.00	99.42	2100.00	89.20	99.47	.05	7.05	2.68	533.15	151.95	685.11	2.7
135.00	100.66	2700.00	89.20	100.70	.04	5.14	1.24	631.95	80.94	712.89	2.5
135.00	102.71	4150.00	89.20	102.74	.03	3.94	2.05	758.44	31.04	789.48	2.5
150.00	96.76	1150.00	89.40	96.94	.18	26.35	0	325.21	218.80	544.01	4.1
150.00	99.43	2100.00	89.40	99.48	.05	8.10	2.67	517.94	162.88	680.83	2.9
150.00	100.66	2700.00	89.40	100.70	.04	5.79	1.23	616.53	92.03	708.56	2.6
150.00	102.72	4150.00	89.40	102.75	.03	4.34	2.05	747.75	33.47	781.22	2.6
200.00	96.85	1150.00	90.00	97.14	.29	44.05	0	257.11	241.92	499.04	5.0
200.00	99.46	2100.00	90.00	99.54	.06	12.54	2.61	487.04	171.66	658.69	3.4
200.00	100.69	2700.00	90.00	100.74	.06	8.39	1.23	570.71	124.96	695.67	3.0
200.00	102.73	4150.00	90.00	102.78	.04	5.85	2.05	715.89	40.71	756.60	2.9
300.00	97.29	1150.00	90.50	97.60	.31	46.73	0	249.39	244.55	493.93	5.2
300.00	99.58	2100.00	90.50	99.70	.11	17.31	2.30	466.57	176.53	643.10	3.9
300.00	100.77	2700.00	90.50	100.85	.08	11.32	1.19	536.39	149.63	686.01	3.4
300.00	102.79	4150.00	90.50	102.85	.06	7.47	2.02	691.19	46.32	737.51	3.2
400.00	97.74	1150.00	91.50	98.27	.53	81.72	0	177.02	269.13	446.14	6.4
400.00	99.74	2100.00	91.50	99.98	.25	37.78	2.00	421.90	187.17	609.07	5.4
400.00	100.88	2700.00	91.50	101.02	.15	22.50	1.14	481.71	172.93	654.64	4.5
400.00	102.86	4150.00	91.50	102.96	.09	12.91	1.99	623.88	86.74	710.62	4.0
500.00	98.60	1150.00	92.50	98.73	.14	26.02	0	238.44	190.52	428.96	3.8
500.00	100.14	2100.00	92.50	100.29	.15	23.83	1.55	274.32	178.56	452.88	4.2
500.00	101.10	2700.00	92.50	101.24	.14	20.68	.95	302.94	169.02	471.96	4.3
500.00	102.98	4150.00	92.50	103.12	.14	17.13	1.88	368.82	138.17	506.98	4.5
600.00	98.87	1150.00	93.20	99.07	.20	40.15	0	228.89	193.70	422.59	4.4
600.00	100.39	2100.00	93.20	100.59	.20	33.53	1.52	263.01	182.33	445.34	4.8
600.00	101.31	2700.00	93.20	101.49	.18	28.34	.92	288.41	173.86	462.28	4.8
600.00	103.15	4150.00	93.20	103.32	.18	22.44	1.84	347.94	149.91	497.85	5.0
700.00	99.28	1150.00	93.70	99.50	.22	44.40	0	226.80	194.40	421.20	4.6
700.00	100.73	2100.00	93.70	100.95	.22	38.03	1.45	259.43	183.52	442.96	5.0
700.00	101.60	2700.00	93.70	101.81	.21	32.91	.87	281.88	176.04	457.92	5.1
700.00	103.37	4150.00	93.70	103.57	.20	26.04	1.78	336.96	156.09	493.04	5.2
800.00	99.76	1150.00	94.00	100.03	.27	61.57	0	248.64	190.30	438.94	4.9
800.00	101.14	2100.00	94.00	101.41	.28	53.27	1.37	276.31	169.37	445.68	5.5
800.00	101.94	2700.00	94.00	102.22	.27	47.17	.81	291.43	158.29	449.71	5.7
800.00	103.64	4150.00	94.00	103.90	.26	37.78	1.70	421.67	134.95	556.62	5.9
850.00	99.97	1150.00	95.00	100.63	.67	169.52	0	227.10	208.25	435.35	7.2
850.00	101.34	2100.00	95.00	101.86	.52	111.09	1.37	261.31	180.38	441.68	7.2
850.00	102.13	2700.00	95.00	102.59	.46	88.19	.79	276.28	169.40	445.67	7.1
850.00	103.78	4150.00	95.00	104.18	.40	63.02	1.66	354.85	146.61	501.46	7.1

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SECNO	CWSEL	Q	ELMIN	EG	HV	10K*S	DIFWSP	TOPWID	SSTA	ENDST	VCH
860.00	102.06	1150.00	95.50	105.37	3.31	84.13	0	12.00	414.00	426.00	14.6
860.00	105.30	2100.00	95.50	110.25	4.95	100.16	3.23	12.00	414.00	426.00	17.8
860.00	108.35	2700.00	95.50	112.79	4.44	84.61	3.05	17.95	410.51	428.46	16.9
860.00	112.22	4150.00	95.50	116.39	4.17	64.62	3.87	30.42	403.20	433.62	16.3
860.00	102.06	1150.00	95.50	105.37	3.31	68.15	0	12.00	414.00	426.00	14.6
860.00	105.32	2100.00	95.50	110.25	4.93	80.75	3.26	12.00	414.00	426.00	17.8
860.00	108.36	2700.00	95.50	112.79	4.43	68.31	3.04	18.00	410.49	428.48	16.8
860.00	112.22	4150.00	95.50	116.39	4.17	52.34	3.86	30.42	403.20	433.62	16.3
860.00	102.06	1150.00	95.50	105.37	3.31	68.15	0	12.00	414.00	426.00	14.6
860.00	108.57	2100.00	95.50	111.12	2.56	39.20	6.50	18.66	410.10	428.76	12.8
860.00	115.50	2700.00	95.50	116.33	.82	8.14	6.94	41.04	396.98	438.02	7.2
860.00	116.49	4150.00	95.50	118.06	1.57	14.44	.99	44.21	395.12	439.33	10.0
860.00	102.07	1150.00	95.50	105.37	3.30	83.91	0	12.00	414.00	426.00	14.5
860.00	108.57	2100.00	95.50	111.12	2.56	48.40	6.49	18.66	410.10	428.76	12.8
860.00	115.50	2700.00	95.50	116.33	.82	10.04	6.94	41.04	396.98	438.02	7.2
860.00	116.49	4150.00	95.50	118.06	1.57	17.83	.99	44.21	395.12	439.33	10.0
870.00	105.66	1150.00	95.50	105.70	.04	.48	0	459.24	123.57	582.81	2.1
870.00	111.36	2100.00	95.50	111.38	.02	.16	5.69	713.50	1.71	715.21	1.6
870.00	116.40	2700.00	95.50	116.41	.01	.07	5.04	720.00	0	720.00	1.3
870.00	118.20	4150.00	95.50	118.22	.02	.11	1.80	720.00	0	720.00	1.8
871.00	105.69	1150.00	95.50	105.70	.02	2.13	0	460.90	122.42	583.32	1.4
871.00	111.37	2100.00	95.50	111.38	.01	.58	5.68	713.62	1.68	715.30	1.0
871.00	116.41	2700.00	95.50	116.41	.00	.22	5.03	720.00	0	720.00	.8
871.00	118.21	4150.00	95.50	118.22	.01	.35	1.81	720.00	0	720.00	1.0
872.00	105.69	1150.00	95.50	105.71	.02	2.12	0	460.90	122.41	583.32	1.4
872.00	111.37	2100.00	95.50	111.38	.01	.58	5.68	713.62	1.68	715.30	1.0
872.00	116.41	2700.00	95.50	116.41	.00	.22	5.03	720.00	0	720.00	.8
872.00	118.21	4150.00	95.50	118.22	.01	.35	1.81	720.00	0	720.00	1.0
874.00	105.69	1150.00	95.50	105.71	.02	2.12	0	460.93	122.40	583.33	1.4
874.00	111.37	2100.00	95.50	111.38	.01	.58	5.68	713.62	1.68	715.30	1.0
874.00	116.41	2700.00	95.50	116.41	.00	.22	5.03	720.00	0	720.00	.8
874.00	118.21	4150.00	95.50	118.22	.01	.35	1.81	720.00	0	720.00	1.0
877.00	105.69	1150.00	95.50	105.71	.02	2.12	0	460.97	122.37	583.34	1.4
877.00	111.37	2100.00	95.50	111.38	.01	.58	5.68	713.63	1.68	715.31	1.0
877.00	116.41	2700.00	95.50	116.41	.00	.22	5.03	720.00	0	720.00	.8
877.00	118.21	4150.00	95.50	118.22	.01	.35	1.81	720.00	0	720.00	1.0
882.00	105.69	1150.00	95.50	105.71	.02	2.12	0	461.03	122.33	583.36	1.4
882.00	111.37	2100.00	95.50	111.38	.01	.58	5.68	713.65	1.67	715.32	1.0
882.00	116.41	2700.00	95.50	116.41	.00	.22	5.03	720.00	0	720.00	.8
882.00	118.21	4150.00	95.50	118.22	.01	.35	1.81	720.00	0	720.00	1.0
892.00	105.69	1150.00	95.50	105.71	.02	2.12	0	461.15	122.24	583.39	1.4
892.00	111.37	2100.00	95.50	111.38	.01	.58	5.68	713.67	1.66	715.34	1.0
892.00	116.41	2700.00	95.50	116.41	.00	.22	5.03	720.00	0	720.00	.8
892.00	118.21	4150.00	95.50	118.22	.01	.35	1.81	720.00	0	720.00	1.0

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All data for this report is from the...



SECNO	CWSEL	Q	ELMIN	EG	HV	10K+S	DIFWSP	TOPWID	SSTA	ENDST	VCH	
21570	900.00	105.70	1150.00	95.50	105.71	.01	1.67	0	450.87	66.09	516.96	1.4
	900.00	111.37	2100.00	95.50	111.38	.01	.55	5.67	600.00	0	600.00	1.1
	900.00	116.41	2700.00	95.50	116.41	.00	.24	5.03	600.00	0	600.00	.8
	900.00	118.21	4150.00	95.50	118.22	.01	.39	1.81	600.00	0	600.00	1.1
	1000.00	105.71	1150.00	95.50	105.73	.01	1.65	0	451.44	65.71	517.15	1.4
21670	1000.00	111.38	2100.00	95.50	111.38	.01	.55	5.66	600.00	0	600.00	1.1
	1000.00	116.41	2700.00	95.50	116.41	.00	.24	5.03	600.00	0	600.00	.8
	1000.00	118.22	4150.00	95.50	118.22	.01	.39	1.81	600.00	0	600.00	1.1
	1100.00	105.73	1150.00	95.70	105.75	.01	1.82	0	445.93	69.38	515.31	1.4
21770	1100.00	111.38	2100.00	95.70	111.39	.01	.59	5.65	600.00	0	600.00	1.1
	1100.00	116.41	2700.00	95.70	116.41	.00	.25	5.03	600.00	0	600.00	.8
	1100.00	118.22	4150.00	95.70	118.23	.01	.41	1.81	600.00	0	600.00	1.2
	1200.00	105.75	1150.00	95.70	105.77	.02	2.84	0	324.76	162.52	487.28	1.7
21870	1200.00	111.39	2100.00	95.70	111.40	.01	.99	5.64	508.05	50.79	558.84	1.4
	1200.00	116.41	2700.00	95.70	116.42	.00	.40	5.02	585.00	0	585.00	1.1
	1200.00	118.23	4150.00	95.70	118.23	.01	.62	1.81	585.00	0	585.00	1.4
	1400.00	105.81	1150.00	95.90	105.83	.02	3.06	0	321.71	163.98	485.69	1.8
22070	1400.00	111.41	2100.00	95.90	111.42	.01	1.05	5.60	497.00	60.00	557.00	1.4
	1400.00	116.42	2700.00	95.90	116.43	.00	.42	5.01	585.00	0	585.00	1.1
	1400.00	118.24	4150.00	95.90	118.25	.01	.65	1.82	585.00	0	585.00	1.4
	1600.00	105.87	1150.00	96.20	105.89	.02	3.47	0	316.81	166.33	483.14	1.9
22270	1600.00	111.43	2100.00	96.20	111.44	.01	1.15	5.56	480.54	73.71	554.26	1.5
	1600.00	116.43	2700.00	96.20	116.43	.01	.45	5.00	585.00	0	585.00	1.1
	1600.00	118.25	4150.00	96.20	118.26	.01	.69	1.82	585.00	0	585.00	1.5
	1900.00	105.98	1150.00	96.50	106.00	.02	3.86	0	312.77	168.27	481.04	2.0
22570	1900.00	111.47	2100.00	96.50	111.48	.01	1.26	5.49	464.53	87.06	551.59	1.5
	1900.00	116.44	2700.00	96.50	116.45	.01	.48	4.98	585.00	0	585.00	1.1
	1900.00	118.27	4150.00	96.50	118.28	.01	.74	1.83	585.00	0	585.00	1.5
	2100.00	106.05	1150.00	96.50	106.07	.02	2.97	0	424.94	414.13	839.07	1.7
22770	2100.00	111.49	2100.00	96.50	111.50	.01	.83	5.44	625.44	288.10	913.54	1.3
	2100.00	116.45	2700.00	96.50	116.46	.00	.30	4.96	834.64	119.79	954.43	.9
	2100.00	118.29	4150.00	96.50	118.29	.01	.45	1.83	939.72	34.45	974.16	1.2
	2200.00	106.08	1150.00	96.60	106.10	.02	3.09	0	422.30	415.73	838.03	1.8
22870	2200.00	111.50	2100.00	96.60	111.51	.01	.85	5.42	621.18	291.23	912.42	1.3
	2200.00	116.46	2700.00	96.60	116.46	.00	.31	4.96	828.76	124.71	953.47	.9
	2200.00	118.29	4150.00	96.60	118.30	.01	.46	1.84	936.42	36.33	972.75	1.2
	2400.00	106.14	1150.00	97.00	106.17	.03	3.79	0	404.19	428.46	832.65	1.9
23070	2400.00	111.52	2100.00	97.00	111.53	.01	.98	5.37	602.98	304.64	907.63	1.3
	2400.00	116.46	2700.00	97.00	116.47	.00	.34	4.95	804.87	144.90	949.77	1.0
	2400.00	118.30	4150.00	97.00	118.31	.01	.51	1.84	917.30	50.63	967.93	1.2
	2600.00	106.22	1150.00	97.20	106.25	.03	4.10	0	397.47	433.18	830.66	2.0
23270	2600.00	111.53	2100.00	97.20	111.55	.01	1.05	5.31	594.35	311.00	905.36	1.4
	2600.00	116.47	2700.00	97.20	116.47	.00	.36	4.93	793.99	154.81	948.80	1.0
	2600.00	118.31	4150.00	97.20	118.32	.01	.53	1.84	905.64	60.38	966.02	1.3

SECNO	CWSEL	Q	ELMIN	EG	HV	10K*S	DIFWSP	TOPWID	SSTA	ENDST	VCH
2700.00	106.27	1150.00	97.00	106.28	.02	2.45	0	447.91	217.07	664.98	1.5
2700.00	111.55	2100.00	97.00	111.55	.01	.69	5.28	784.63	121.15	905.78	1.1
2700.00	116.47	2700.00	97.00	116.48	.00	.23	4.93	1179.88	41.20	1221.08	.8
2700.00	118.32	4150.00	97.00	118.32	.00	.32	1.84	1287.52	19.68	1307.21	1.0
2900.00	106.32	1150.00	97.50	106.34	.02	3.20	0	422.17	224.35	646.52	1.7
2900.00	111.56	2100.00	97.50	111.57	.01	.83	5.24	742.41	138.04	880.45	1.2
2900.00	116.48	2700.00	97.50	116.48	.00	.26	4.92	1151.18	46.97	1198.14	.8
2900.00	118.32	4150.00	97.50	118.33	.00	.37	1.85	1256.55	25.42	1281.96	1.0
3100.00	106.39	1150.00	97.80	106.41	.03	3.73	0	411.21	230.44	641.65	1.8
3100.00	111.58	2100.00	97.80	111.59	.01	.93	5.19	717.50	148.00	865.50	1.3
3100.00	116.48	2700.00	97.80	116.49	.00	.29	4.90	1126.34	50.41	1176.75	.8
3100.00	118.33	4150.00	97.80	118.34	.01	.40	1.85	1239.94	28.84	1268.77	1.1
3300.00	106.46	1150.00	98.00	106.49	.04	4.31	0	289.05	134.35	423.41	2.0
3300.00	111.60	2100.00	98.00	111.61	.02	1.34	5.14	533.70	78.08	611.78	1.5
3300.00	116.49	2700.00	98.00	116.49	.01	.43	4.89	795.91	35.15	831.06	1.1
3300.00	118.34	4150.00	98.00	118.35	.01	.62	1.85	835.88	16.64	852.52	1.4
3500.00	106.55	1150.00	98.20	106.58	.04	4.59	0	278.07	135.76	413.83	2.1
3500.00	111.62	2100.00	98.20	111.64	.02	1.43	5.08	528.98	79.37	608.35	1.6
3500.00	116.50	2700.00	98.20	116.50	.01	.46	4.87	757.57	37.08	828.65	1.1
3500.00	118.35	4150.00	98.20	118.36	.01	.65	1.85	832.56	18.54	851.10	1.4
3800.00	106.69	1150.00	98.60	106.73	.04	5.29	0	252.97	138.98	391.95	2.2
3800.00	111.67	2100.00	98.60	111.69	.02	1.65	4.98	519.13	82.06	601.18	1.7
3800.00	116.51	2700.00	98.60	116.52	.01	.51	4.84	780.74	40.95	821.69	1.1
3800.00	118.37	4150.00	98.60	118.38	.01	.72	1.86	824.71	22.35	847.06	1.4
4000.00	106.80	1150.00	98.90	106.85	.05	5.91	0	243.08	141.37	384.45	2.3
4000.00	111.70	2100.00	98.90	111.72	.02	1.83	4.90	511.88	84.03	595.91	1.7
4000.00	116.52	2700.00	98.90	116.53	.01	.56	4.82	767.68	43.85	811.53	1.2
4000.00	118.39	4150.00	98.90	118.40	.01	.77	1.86	818.27	25.21	843.48	1.5
4500.00	107.11	1150.00	99.50	107.17	.05	6.95	0	238.26	144.82	383.07	2.4
4500.00	111.80	2100.00	99.50	111.83	.03	2.26	4.69	498.01	87.82	585.83	1.9
4500.00	116.55	2700.00	99.50	116.56	.01	.67	4.75	741.88	49.58	791.47	1.3
4500.00	118.43	4150.00	99.50	118.44	.01	.91	1.87	805.61	30.84	836.45	1.6

23370

23570

23770

23770

24170M

24470

24670

25170

FLOOD INSURANCE ZONE DATA FOR CROSS CR FROM CONFL TO

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND		
		10'	20'	0.2'
1.000	0	-3.4	-1.0	2.0
1.100	1.	-3.4	-1.0	2.0
2.000	2.	-3.4	-1.0	2.0
4.000	4.	-3.4	-1.0	2.0
7.000	7.	-3.4	-1.0	2.0
12.000	12.	-3.4	-1.0	2.0
22.000	22.	-3.4	-1.0	2.0
42.000	42.	-3.4	-1.0	2.0
82.000	82.	-3.4	-1.0	2.0
90.000	90.	-3.4	-1.0	2.0
90.000	91.	-3.4	-1.0	2.0
100.000	101.	-2.9	-.8	2.3
100.000	102.	-2.9	-.8	2.1
100.000	103.	-2.7	-.8	2.1
100.000	104.	-2.7	-.8	2.9
110.000	114.	-2.8	-.8	2.8
111.000	115.	-3.9	-1.2	2.1
112.000	116.	-3.9	-1.2	2.1
113.000	117.	-3.9	-1.2	2.1
115.000	119.	-3.9	-1.2	2.1
117.000	121.	-3.9	-1.2	2.1
120.000	124.	-3.9	-1.2	2.1
125.000	129.	-3.9	-1.2	2.1
135.000	139.	-3.9	-1.2	2.1
150.000	154.	-3.9	-1.2	2.1
200.000	204.	-3.8	-1.2	2.0
300.000	304.	-3.5	-1.2	2.0
400.000	404.	-3.1	-1.1	2.0
500.000	504.	-2.5	-1.0	1.9
600.000	604.	-2.4	-.9	1.8
700.000	704.	-2.3	-.9	1.8
800.000	804.	-2.2	-.8	1.7
850.000	854.	-2.2	-.8	1.7
860.000	864.	-6.3	-3.0	3.9
860.000	865.	-6.3	-3.0	3.9
860.000	866.	-13.4	-6.9	1.0
860.000	867.	-13.4	-6.9	1.0
870.000	877.	-10.7	-5.0	1.8
871.000	878.	-10.7	-5.0	1.8
872.000	879.	-10.7	-5.0	1.8
874.000	881.	-10.7	-5.0	1.8
877.000	884.	-10.7	-5.0	1.8
882.000	889.	-10.7	-5.0	1.8
892.000	899.	-10.7	-5.0	1.8
900.000	907.	-10.7	-5.0	1.8
1000.000	1007.	-10.7	-5.0	1.8
1100.000	1107.	-10.7	-5.0	1.8
1200.000	1207.	-10.7	-5.0	1.8
1400.000	1407.	-10.6	-5.0	1.8
1600.000	1607.	-10.6	-5.0	1.8
1900.000	1907.	-10.5	-5.0	1.8
2100.000	2107.	-10.4	-5.0	1.8

2200.000	2207.	-10.4	-4.9	1.8
2400.000	2407.	-10.3	-4.9	1.8
2600.000	2607.	-10.2	-4.9	1.8
2700.000	2707.	-10.2	-4.9	1.8
2900.000	2907.	-10.2	-4.9	1.8
3100.000	3107.	-10.1	-4.9	1.8
3300.000	3307.	-10.0	-4.9	1.9
3500.000	3507.	-10.0	-4.9	1.9
3800.000	3807.	-9.8	-4.8	1.9
4000.000	4007.	-9.7	-4.8	1.9
4500.000	4507.	-9.4	-4.8	1.9
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WEIGHTED AVG FOR REACH		-8.8	-4.2	1.9

FHF FOR THE REACH = 090 WITH 80.6% OF THE REACH WITHIN 2.0 FEET  
 ZONE FOR THE REACH = A13

POSSIBLE ERROR	SECNO#	860.00	PROFILE#	1	CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	1	20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	2	CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	2	20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	3	CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	3	20 TRIALS REQUIRED TO BALANCE WSEL
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	4	CRITICAL DEPTH ASSUMED
POSSIBLE ERROR	SECNO#	860.00	PROFILE#	4	20 TRIALS REQUIRED TO BALANCE WSEL

\*\*\*\*\*  
INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF  
\* ICATION 59 IS TO

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, L  
\* INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIM  
\* OF CONVEYANCE VERSUS DISTANCE.

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY #N# VALUES IN THE CHANNEL. T  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN #N# VALUES IN THE CHANNEL (MOD, 54 AS PRESENTLY USED) AND, IF NO #N  
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW CO  
\* TATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY.

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING.

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STA  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CH  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SH  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID  
\* ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE A

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIE

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW.

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE.

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE.

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE P  
\* CHANGES CAN BE DIRECTED TO ALLAN OTO (FTS 4/8-2105 OR 448-3292).

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FORM 2000 (REV. 10-6-76)

T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 10 YR NATURAL  
 T3 CROSS CR FROM CONFL TO LANGDON ST

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-1.	6.	-0	-0	-0	-0	-0	-0	96.200	-0
J2	NPROF	IPLDT	PRFVS	XSECV	XSECH	EN	ALLDC	IBW	CHNIM	ITRACE
	1.000	*0	-1.000	*0	-0	-0	-0	*0	-0	15.000
J3	-2.000	1.000	43.000	42.000	5.000	10.000	5.000	50.000	4.000	53.000
J3	54.000	26.000	0	201.000	0	-0	-0	-0	-0	-0
QT	7.000	2700.000	2700.000	2700.000	2700.000	1150.000	2100.000	4150.000	-0	-0
ET	-0	-0	150.200	-0	-0	-0	-0	-0	-0	-0
NC	.150	.150	.035	.100	.300	-0	-0	-0	-0	-0
X1	1.000	17.000	280.000	340.000	0	0	0	0	0	-0
GR	106.000	0	102.000	100.000	100.000	150.000	98.000	195.000	98.000	280.000
GR	96.000	285.000	94.000	289.000	92.000	293.000	88.800	305.000	88.800	325.000
GR	92.000	332.000	94.000	335.000	96.000	340.000	98.000	342.000	100.000	345.000
GR	102.000	670.000	106.000	870.000	-0	-0	-0	-0	-0	-0
X1	1.100	0	0	0	1.000	1.000	1.000	1.000	0	-0
X1	2.000	0	0	0	1.000	1.000	1.000	1.000	0	-0
X1	4.000	0	0	0	2.000	2.000	2.000	1.000	0	-0
X1	7.000	0	0	0	3.000	3.000	3.000	1.000	0	-0
X1	12.000	0	0	0	5.000	5.000	5.000	1.000	0	-0
X1	22.000	0	0	0	10.000	10.000	10.000	1.000	0	-0
X1	42.000	0	0	0	20.000	20.000	20.000	1.000	0	-0
X1	82.000	0	0	0	40.000	40.000	40.000	1.000	0	-0
X1	90.000	0	0	0	8.000	8.000	8.000	1.000	0	-0
NC	.100	.100	.020	.100	.300	-0	-0	-0	-0	-0
X1	90.000	0	0	0	0	0	0	1.000	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
X1	100.000	14.000	280.000	350.000	10.000	10.000	10.000	0	0	-0
X2	0	2700.000	0	0	0	-0	-0	-0	-0	-0
GR	105.000	0	102.500	155.000	102.500	280.000	98.000	300.000	88.800	300.000
GR	88.800	320.000	93.000	320.000	93.000	330.000	98.000	330.000	102.200	350.000

GR	100,000	525,000	99,000	665,000	100,000	800,000	102,000	925,000	-0	-0
NC	.100	.100	.015	.100	.300	-0	-0	-0	-0	-0
X1	100,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
SB	1.250	1,150	2,700	0	31,500	1,500	240,000	0	0	0
X1	100,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2700,000	1,000	0	0	-0	-0	-0	-0	-0
BT	9,000	0	106,000	97,800	50,000	104,000	97,800	155,000	102,500	97,800
BT	330,000	102,500	97,800	525,000	100,000	97,800	665,000	99,000	97,800	800,000
BY	100,000	97,800	925,000	102,000	97,800	1000,000	106,000	97,800	-0	-0
NC	.100	.100	.020	.100	.300	-0	-0	-0	-0	-0
X1	100,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	110,000	14,000	280,000	350,000	10,000	10,000	10,000	0	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	102,500	155,000	102,500	280,000	98,000	300,000	88,800	300,000
GR	88,800	320,000	93,000	320,000	93,000	330,000	98,000	330,000	102,200	350,000
GR	100,000	525,000	99,000	665,000	100,000	800,000	102,000	925,000	-0	-0
NC	.150	.100	.060	.100	.300	-0	-0	-0	-0	-0
X1	111,000	15,000	295,000	322,000	1,000	1,000	1,000	0	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	101,000	50,000	99,000	165,000	97,000	190,000	95,000	280,000
GR	93,000	295,000	89,000	303,000	89,000	318,000	93,000	322,000	95,000	425,000
GR	97,000	600,000	99,000	680,000	101,000	725,000	103,000	810,000	105,000	850,000
X1	112,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	113,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	115,000	0	0	0	2,000	2,000	2,000	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	117,000	0	0	0	2,000	2,000	2,000	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	120,000	0	0	0	3,000	3,000	3,000	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	125,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	135,000	0	0	0	10,000	10,000	10,000	1,000	.200	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	150,000	0	0	0	15,000	15,000	15,000	1,000	.200	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0

FORM 10-60 (REV. 1-61)

X1	200,000	0	0	0	50,000	50,000	50,000	1,000	.600	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	300,000	0	0	0	100,000	100,000	100,000	1,000	.500	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	400,000	0	0	0	100,000	100,000	100,000	1,000	1,000	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	500,000	16,000	270,000	300,000	100,000	100,000	100,000	0	0	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
GR	108,000	0	106,000	30,000	104,000	115,000	102,000	160,000	100,000	180,000
GR	98,000	195,000	96,000	270,000	92,500	275,000	92,500	296,000	95,700	300,000
GR	96,000	395,000	98,000	420,000	100,000	450,000	102,000	490,000	104,000	525,000
GR	106,000	550,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	600,000	0	0	0	100,000	100,000	100,000	1,000	.700	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
X1	700,000	0	0	0	100,000	100,000	100,000	1,000	.500	-0
X2	0	2700,000	0	0	0	-0	-0	-0	-0	-0
NC	.150	.150	.060	.100	.300	-0	.0	-0	-0	-0
X1	800,000	15,000	395,000	431,000	100,000	100,000	100,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	110,000	0	106,000	50,000	104,000	130,000	100,000	185,000	98,000	230,000
GR	98,000	395,000	96,000	408,000	94,000	410,000	94,000	427,000	98,000	431,000
GR	100,000	440,000	102,000	450,000	104,000	580,000	108,000	650,000	110,000	720,000
X1	850,000	0	0	0	50,000	50,000	50,000	1,000	1,000	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
NC	.100	.100	.020	.100	.300	-0	-0	-0	-0	-0
X1	860,000	8,000	380,000	450,000	10,000	10,000	10,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	124,500	0	124,500	380,000	106,500	414,000	95,500	414,000	95,500	426,000
GR	106,500	426,000	124,500	450,000	124,500	800,000	-0	-0	-0	-0
NC	.100	.100	.018	.100	.300	-0	-0	-0	-0	-0
X1	860,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
SB	0	1,140	2,700	0	12,000	0	116,000	0	0	-0
X1	860,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2650,000	1,000	0	0	-0	-0	-0	-0	-0
BT	5,000	0	130,000	106,500	100,000	115,000	106,500	720,000	120,000	106,500
BT	1180,000	124,000	106,500	1850,000	130,000	106,500	-0	-0	-0	-0
NC	.100	.100	.020	.100	.300	-0	-0	-0	-0	-0
X1	860,000	0	0	0	0	0	0	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0



X1	870,000	15,000	395,000	431,000	10,000	10,000	10,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	111,500	0	107,500	50,000	105,500	130,000	101,500	185,000	99,500	230,000
GR	99,500	395,000	97,500	408,000	95,500	410,000	95,500	427,000	99,500	431,000
GR	101,500	440,000	103,500	450,000	105,500	580,000	109,500	650,000	111,500	720,000
NC	,150	,150	,060	,100	,300	-0	-0	-0	-0	-0
X1	871,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	872,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	874,000	0	0	0	2,000	2,000	2,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	877,000	0	0	0	3,000	3,000	3,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	882,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	892,000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
X1	900,000	16,000	365,000	395,000	8,000	8,000	8,000	0	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
GR	110,000	0	108,000	40,000	106,000	60,000	104,000	100,000	102,000	190,000
GR	100,000	220,000	98,000	365,000	95,500	367,000	95,500	390,000	98,000	395,000
GR	100,000	410,000	102,000	475,000	104,000	500,000	106,000	520,000	108,000	550,000
GR	110,000	600,000	-0	-0	0	-0	-0	-0	-0	-0
X1	1000,000	0	0	0	100,000	100,000	100,000	1,000	0	-0
X2	0	2650,000	0	0	0	-0	-0	-0	-0	-0
NC	,150	,150	,060	,100	,300	-0	-0	-0	-0	-0
X1	1100,000	0	0	0	100,000	100,000	100,000	1,000	,200	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
X1	1200,000	12,000	275,000	295,000	100,000	100,000	100,000	0	0	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
GR	112,500	0	112,000	20,000	110,000	120,000	104,000	180,000	98,000	275,000
GR	95,700	277,000	95,700	293,000	98,000	295,000	100,000	425,000	106,000	490,000
GR	108,000	525,000	114,000	585,000	0	-0	-0	-0	-0	-0
X1	1400,000	0	0	0	200,000	200,000	200,000	1,000	,200	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
X1	1600,000	0	0	0	200,000	200,000	200,000	1,000	,300	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0
X1	1900,000	0	0	0	300,000	300,000	300,000	1,000	,300	-0
X2	0	2600,000	0	0	0	-0	-0	-0	-0	-0

7-76 TRISTAR RECORD SYSTEMS



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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 50 YR NATURAL  
 T3 CROSS CR FROM CONFL TO LANGDON ST

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10,	7,	-0	-0	-0	-0	-0	-0	98.600	-0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	-0	-1.000	-0	-0	-0	-0	-0	-0	15,000

\*PROF 2

CCHV= .100 CEHV= .300

\*SECNO 1.000

SECNO	DEPTH	CHSEL	CRHS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	QLOB	QCH	OROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1.00	9.80	98.60	0	98.60	98.96	.36	0	0	98.00
2100.	12.	2087.	1.	55.	431.	3.	0	0	96.00
0	.22	4.84	.32	.150	.035	.150	0	88.80	181.50
.001007	0	0	0	0	0	1	0	161.40	342.90

FLOW DISTRIBUTION

STA#	182.	195.	280.	340.	342.	343.
PER O#	.0	.5	99.4	.1	.0	.0
AREA#	4.0	51.0	431.4	3.2	.3	.3
VEL#	.1	.2	4.8	.3	.1	.1

\*SECNO 1.100

1.10	9.80	98.60	0	0	93.96	.36	.00	.00	98.00
2100.	12.	2087.	1.	55.	431.	3.	0.	0.	96.00
.00	.22	4.84	.32	.150	.035	.150	.017	88.80	181.48
.001007	1.	1.	1.	0	0	1	0	161.42	342.90

FLOW DISTRIBUTION

STA#	181.	195.	280.	340.	342.	343.
PER O#	.0	.5	99.4	.1	.0	.0
AREA#	4.1	51.1	431.5	3.2	.3	.3
VEL#	.1	.2	4.8	.3	.1	.1

\*SECNO 2.000

2.00	9.80	98.60	0	0	98.96	.36	.00	.00	98.00
2100.	12.	2087.	1.	55.	432.	3.	0.	0.	96.00

UNIVERSITY OF MISSISSIPPI

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
 \*\*\*\*\*

T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 100 YR NATURAL  
 T3 CROSS CR FROM CONFL TO LANGDON ST

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10.	2.	-0	-0	0 -0	-0	-0	-0	99,600	-0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	EN	ALLDC	IBW	CHNIM	ITRACE
	3,000	-0	-1,000	-0	-0	-0	-0	-0	-0	0

\*PROF 3

CCHV= .100 CEHV= .300  
 \*SECNO 1,000

SECNO	DEPTH	CHSEL	CRISW	WSELK	EG	HV	HL	GLOSS	BANK ELEV
Q	QLCB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLCB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1,00	10,80	99,60	0	99,60	100,03	.43	0	0	98,00
2700,	67,	2630,	3,	165,	491,	7,	0	0	96,00
0	.41	5,35	.42	.150	.035	.150	0	88,80	159,00
.001036	0	0	0	0	0	1	0	185,40	344,40

\*SECNO 1,100

1,10	10,80	99,60	0	0	100,03	.43	.00	.00	98,00
2700,	67,	2630,	3,	165,	491,	7,	0,	0,	96,00
.00	.41	5,35	.42	.150	.035	.150	.017	88,80	158,98
.001036	1,	1,	1,	0	3	1	0	185,42	344,40

\*SECNO 2,000

2,00	10,80	99,60	0	0	100,04	.43	.00	.00	98,00
2700,	67,	2630,	3,	165,	492,	7,	0,	0,	96,00
.00	.41	5,35	.42	.150	.035	.150	.017	88,80	158,95
.001035	1,	1,	1,	0	0	1	0	185,45	344,40

\*SECNO 4,000

4,00	10,80	99,60	0	0	100,04	.43	.00	.00	98,00
2700,	67,	2630,	3,	165,	492,	7,	0,	0,	96,00
.00	.41	5,35	.42	.150	.035	.150	.020	88,80	150,91
.001035	2,	2,	2,	0	0	1	0	185,50	344,41

\*SECNO 7,000

SECNO	DEPTH	CHSEL	CRISW	WSELK	EG	HV	HL	GLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
 \*\*\*\*\*

T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 500 YR NATURAL  
 T3 CROSS CR FROM CONFL TO LANGDON ST

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10,	8,	-0	-0	-0	-0	-0	-0	101,600	-0
J2	NPROF	IPLCT	PRFVS	XSECV	XSECH	EN	ALLDC	IBW	CHNIM	ITRACE
	15,000	-0	-1,000	-0	-0	-0	-0	-0	-0	-0

\*PROF 4

CCHV= .100 CEHV= .300

\*SECNO 1,000

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	OROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
1,00	12,80	101,60	0	101,60	102,14	.54	0	0	98,00
4150,	308,	3775,	68,	455,	611,	225,	0	0	96,00
0	.68	6,17	.30	.150	.035	.150	0	88,80	110,00
.001031	0	0	0	0	0	1	0	495,00	605,00

\*SECNO 1,100

1,10	12,80	101,60	0	0	102,14	.54	.00	.00	98,00
4150,	308,	3775,	68,	455,	611,	225,	0,	0,	96,00
.00	.68	6,17	.30	.150	.035	.150	.017	88,80	109,97
.001030	1,	1,	1,	0	0	1	0	495,19	605,17

\*SFCNO 2,000

2,00	12,80	101,60	0	0	102,14	.54	.00	.00	98,00
4150,	308,	3774,	68,	455,	612,	226,	0,	0,	96,00
.00	.68	6,17	.30	.150	.035	.150	.017	88,80	109,95
.001030	1,	1,	1,	0	0	1	0	495,39	605,33

\*SECNO 4,000

4,00	12,80	101,60	0	0	102,14	.54	.00	.00	98,00
4150,	308,	3774,	68,	456,	612,	226,	0,	0,	96,00
.00	.68	6,17	.30	.150	.035	.150	.020	88,80	109,90
.001029	2,	2,	2,	0	0	1	0	495,77	605,67

\*SECNO 7,000

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	OROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT

SUMMARY PRINTOUT \*\*\*\*\* FINAL FLOODWAY RUN \_SAVE\_ \*\*\*\*\*

CROSS CR LANGDON ST TO

SECNO	CWSEL	Q	ELKIN	EG	HV	DIFWSP
4.60	119.00	2560.00	99.50	119.01	.01	0
4.80	119.00	2560.00	100.50	119.01	.02	0
4.80	119.00	2560.00	99.70	119.02	.02	0
4.80	118.99	2560.00	100.70	119.02	.03	0
4.80	119.05	2560.00	99.70	119.07	.02	0
4.80	119.06	2560.00	100.00	119.07	.01	0
4.90	119.09	2560.00	100.50	119.10	.01	0
5.00	119.12	2560.00	99.90	119.12	.01	0
5.20	119.15	2560.00	102.40	119.16	.01	0
5.40	119.28	2560.00	104.70	119.30	.02	0
5.50	119.39	2560.00	106.00	119.41	.03	0
5.60	119.61	2560.00	108.20	119.64	.03	0
5.70	119.85	2560.00	109.50	119.88	.04	0
5.80	120.20	2560.00	111.00	120.23	.03	0
5.90	121.30	1900.00	114.10	121.38	.08	0
6.00	122.75	1900.00	116.20	122.80	.05	0
6.10	123.72	1900.00	118.00	123.76	.04	0
6.20	125.04	1900.00	120.00	125.09	.05	0
6.30	126.17	1900.00	121.80	126.23	.06	0
6.60	130.59	1900.00	122.60	130.69	.09	0
6.80	131.92	1900.00	125.10	131.96	.04	0
7.00	133.46	1900.00	127.20	133.55	.09	0
7.00	133.32	1900.00	126.30	133.78	.45	0
7.00	133.41	1900.00	126.30	133.85	.44	0
1.00	133.89	1900.00	127.50	133.93	.04	0
500.00	134.80	1900.00	130.00	134.94	.13	0
1000.00	137.81	1900.00	132.50	137.94	.14	0

*Langdon*

SECNO	CWSEL	Q	ELMIN	EG	HV	DIFWSP
1200.00	139.14	1900.00	132.70	139.32	.18	0
1300.00	149.75	1900.00	132.70	149.76	.00	0
1350.00	149.74	2300.00	132.70	149.77	.02	0
2300.00	149.77	2300.00	143.00	149.79	.02	0
3300.00	149.79	2300.00	143.00	149.81	.02	0

SUMMARY PRINTOUT

CROSS CR LANGDON ST TO

SECNO	DIFWSP	SSTA	STCHL	STCHR	ENDST	TOPWID
4.80	0	463.50	593.00	634.00	763.50	300.00
4.80	0	463.50	593.00	634.00	763.50	300.00
4.80	0	466.00	600.00	632.00	766.00	300.00
4.80	0	466.00	600.00	632.00	766.00	300.00
4.80	0	466.00	600.00	632.00	766.00	300.00
4.90	0	468.50	597.00	640.00	768.50	300.00
4.90	0	235.00	370.00	400.00	535.00	300.00
5.00	0	524.00	665.00	683.00	824.00	300.00
5.20	0	762.50	896.00	929.00	1062.50	300.00
5.40	0	851.50	993.00	1010.00	1151.50	300.00
5.50	0	749.00	890.00	908.00	1048.50	299.50
5.60	0	399.00	540.00	558.00	699.00	300.00
5.70	0	369.00	510.00	528.00	669.00	300.00
5.80	0	429.00	570.00	588.00	729.00	300.00
5.90	0	459.00	600.00	618.00	759.00	300.00
6.00	0	429.00	570.00	588.00	729.00	300.00
6.10	0	349.00	490.00	508.00	649.00	300.00
6.20	0	409.00	550.00	568.00	709.00	300.00
6.30	0	1147.50	1275.00	1320.00	1447.50	300.00
6.60	0	494.50	632.00	657.00	794.50	300.00
6.80	0	750.00	882.00	918.00	1042.60	292.60
7.00	0	868.00	984.00	1052.00	1163.49	295.49
7.00	0	1000.00	1000.00	1050.00	1050.00	50.00
7.00	0	1000.00	1000.00	1050.00	1050.00	50.00
1.00	0	367.50	500.00	535.00	667.50	300.00
500.00	0	109.00	250.00	268.00	409.00	276.14
1000.00	0	41.36	150.00	161.00	303.30	252.25



SECNO	DIFWSP	SSTA	STCHL	STGHR	ENDST	TOPWID
1200.00	0	38.64	150.00	158.00	274.69	236.04
1300.00	0	4.00	150.00	158.00	304.00	300.00
1350.00	0	54.00	200.00	208.00	354.00	300.00
2300.00	0	75.00	50.00	400.00	375.00	300.00
3300.00	0	75.00	50.00	400.00	375.00	300.00

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INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF  
\* [ICATION 59 IS TO

\* (1) PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCRoACHMENT STATIONS BY METHODS 3 AND 4. PREVIOUSLY, L  
\* INTERPOLATION WAS USED TO CALCULATE ENCRoACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIM  
\* OF CONVEYANCE VERSUS DISTANCE.

\* (2) FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY #N# VALUES IN THE CHANNEL. T  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN #N# VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO #N  
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW CO  
\* TATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY.

\* (3) COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING.

\* (4) EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STA  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CH  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION. CALCULATED CHANNEL AREA SH  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION#S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID  
\* ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE A

\* (5) THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIE

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO

\* (1) ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW.

\* (2) CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE.

\* (3) ACCOUNT FOR THE VERTICAL WALL AT THE ENCRoACHMENT STATION WHEN CALCULATING CONVEYANCE.

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE P  
\* CHANGES CAN BE DIRECTED TO ALLAN OTO (FTS 448-2105 OR 448-3292).

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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 FLOODWAY  
 T3 CROSS CR LANGDON ST TO ROSES LAKE

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FQ
	-1,	5,	-0	-0	-0	-0	-0	-0	119,000	-0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	-1.000	-0	-1.000	-0	-0	-0	-0	-0	-0	0
J3	-2,000	1,000	43,000	42,000	3,000	10,000	50,000	0	38,000	50,000
J3	53,000	21,000	22,000	54,000	4,000	0	0	-0	-0	-0
NC	,080	,080	,060	,200	,400	-0	-0	-0	-0	-0
QT	7,000	2560,000	2560,000	2560,000	2560,000	1100,000	2000,000	4420,000	-0	-0
ET	-0	-0	9,400	300,200	300,200	-0	-0	-0	-0	-0
X1	4,800	30,000	593,000	634,000	0	0	0	0	0	-0
GR	140,000	50,000	137,300	58,000	123,200	288,000	114,900	403,000	109,500	503,000
GR	107,200	565,000	102,200	585,000	106,300	593,000	105,400	594,000	104,400	596,000
GR	100,000	600,000	99,500	605,000	100,300	608,000	101,600	608,000	109,900	634,000
GR	109,400	658,000	110,400	708,000	110,900	758,000	112,600	808,000	114,600	858,000
GR	115,700	908,000	118,000	958,000	119,500	1008,000	122,500	1058,000	130,000	1180,000
GR	132,000	1200,000	134,000	1280,000	136,000	1370,000	138,000	1400,000	140,000	1430,000
X1	4,800	0	0	0	2,000	2,000	2,000	1,000	1,000	-0
X1	4,800	29,000	600,000	632,000	5,000	5,000	5,000	0	0	-0
GR	140,000	35,000	138,000	50,000	136,000	60,000	134,000	105,000	130,000	160,000
GR	125,500	250,000	122,000	300,000	119,300	350,000	116,300	400,000	114,400	450,000
GR	112,800	500,000	111,600	550,000	111,200	600,000	99,700	600,000	99,700	632,000
GR	110,700	632,000	110,500	650,000	110,900	700,000	111,200	750,000	111,900	800,000
GR	113,300	850,000	114,900	900,000	116,900	934,000	119,200	985,000	121,500	1039,000
GR	124,300	1090,000	130,000	1155,000	138,000	1270,000	140,000	1340,000	-0	-0
X1	4,800	0	0	0	5,000	5,000	5,000	1,000	1,000	-0
SB	1,250	2,040	2,500	0	32,000	2,000	270,000	0	0	0
X1	4,800	29,000	600,000	632,000	30,000	30,000	30,000	0	0	-0
X2	0	0	1,000	108,700	110,500	-0	-0	-0	-0	-0
BT	10,000	35,000	140,000	108,700	400,000	116,300	108,700	550,000	111,600	108,700
BT	650,000	110,500	108,700	800,000	111,900	108,700	900,000	114,900	109,700	1090,000
BT	124,300	108,700	1155,000	130,000	108,700	1270,000	138,000	108,700	1340,000	140,000
BT	108,700	-0	-0	-0	-0	-0	-0	-0	-0	-0
GR	140,000	35,000	138,000	50,000	136,000	60,000	134,000	105,000	130,000	160,000
GR	125,500	250,000	122,000	300,000	119,300	350,000	116,300	400,000	114,400	450,000
GR	112,800	500,000	111,600	550,000	111,200	600,000	99,700	600,000	99,700	632,000
GR	110,700	632,000	110,500	650,000	110,900	700,000	111,200	750,000	111,900	800,000
GR	113,300	850,000	114,900	900,000	116,900	934,000	119,200	985,000	121,500	1039,000
GR	124,300	1090,000	130,000	1155,000	138,000	1270,000	140,000	1340,000	-0	-0
X1	4,800	35,000	597,000	640,000	30,000	30,000	30,000	0	0	-0
GR	140,000	50,000	138,000	60,000	136,000	70,000	134,000	120,000	130,000	170,000
GR	124,600	240,000	117,400	374,000	114,300	428,000	109,000	558,000	102,900	597,000
GR	100,500	600,000	100,000	608,000	100,200	612,000	100,600	623,000	100,700	632,000

GR	106,800	640,000	107,400	692,000	108,400	729,000	108,400	748,000	110,000	820,000
GR	112,000	850,000	114,000	870,000	116,000	895,000	118,000	910,000	120,000	955,000
GR	122,000	1060,000	124,000	1090,000	126,000	1110,000	128,000	1135,000	130,000	1145,000
GR	132,000	1175,000	134,000	1210,000	136,000	1250,000	138,000	1255,000	140,000	1265,000
ET	-0	-0	-0	9,100	-0	-0	-0	-0	139,000	539,000
X1	4,900	20,000	370,000	400,000	600,000	600,000	600,000	-0	-0	-0
GR	120,000	20,000	118,000	40,000	116,000	70,000	114,000	120,000	112,000	190,000
GR	110,000	220,000	108,000	240,000	106,000	290,000	104,000	370,000	100,500	383,000
GR	100,500	395,000	104,000	400,000	106,000	440,000	108,000	480,000	110,000	520,000
GR	112,000	600,000	114,000	770,000	116,000	830,000	118,000	865,000	120,000	930,000
ET	-0	-0	-0	9,100	-0	-0	-0	-0	324,000	874,000
X1	5,000	12,000	665,000	683,000	600,000	600,000	600,000	0	0	-0
GR	130,000	0	120,000	65,000	110,000	250,000	108,000	520,000	105,100	665,000
GR	99,900	668,000	99,900	680,000	105,100	683,000	108,000	820,000	110,000	880,000
GR	120,000	1140,000	130,000	1200,000	-0	-0	-0	-0	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	613,000	1163,000
X1	5,200	24,000	896,000	929,000	700,000	700,000	700,000	0	0	-0
GR	130,000	125,000	120,000	300,000	118,000	340,000	116,000	370,000	114,000	440,000
GR	112,000	480,000	110,000	500,000	108,400	843,000	106,900	864,000	105,400	892,000
GR	106,000	896,000	103,700	900,000	102,400	902,000	102,900	906,000	103,800	913,000
GR	106,300	915,000	108,000	929,000	110,000	1235,000	112,000	1295,000	114,000	1340,000
GR	116,000	1385,000	118,000	1420,000	120,000	1440,000	130,000	1510,000	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	738,000	1038,000
X1	5,400	28,000	993,000	1010,000	1275,000	1275,000	1275,000	0	0	-0
GR	130,000	360,000	128,000	400,000	126,000	550,000	124,000	640,000	122,000	690,000
GR	120,000	700,000	118,000	760,000	116,000	780,000	114,000	800,000	112,000	850,000
GR	110,000	900,000	110,000	993,000	106,700	996,000	106,300	1000,000	104,700	1002,000
GR	106,400	1004,000	110,000	1010,000	110,000	1050,000	112,000	1060,000	114,000	1100,000
GR	116,000	1120,000	118,000	1140,000	120,000	1160,000	122,000	1180,000	124,000	1190,000
GR	126,000	1210,000	128,000	1230,000	130,000	1240,000	-0	-0	-0	-0
NC	,080	,080	,065	,200	,400	-0	-0	-0	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	560,000	960,000
X1	5,500	14,000	890,000	908,000	500,000	500,000	500,000	0	0	-0
GR	135,000	0	130,000	170,000	120,000	370,000	112,000	510,000	110,100	890,000
GR	106,000	893,000	105,000	905,000	110,100	908,000	110,900	920,000	111,800	930,000
GR	118,000	1000,000	120,000	1070,000	122,000	1100,000	130,000	1300,000	-0	-0
NC	,100	,100	,070	,200	,400	-0	-0	-0	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	349,000	799,000
X1	5,600	12,000	540,000	558,000	600,000	600,000	600,000	0	0	-0
GR	135,000	0	130,000	25,000	120,000	110,000	114,000	200,000	112,800	540,000
GR	108,200	543,000	108,200	555,000	112,800	558,000	114,000	900,000	120,000	1000,000
GR	130,000	1130,000	135,000	1200,000	-0	-0	-0	-0	-0	-0
NC	,100	,100	,080	,200	,400	-0	-0	-0	-0	-0
ET	-0	-0	-0	300,200	-0	-0	-0	-0	319,000	719,000
X1	5,700	13,000	510,000	528,000	400,000	400,000	0	0	0	-0
GR	135,000	0	130,000	50,000	120,000	180,000	116,000	220,000	115,000	240,000
GR	113,800	510,000	109,500	513,000	109,500	525,000	113,800	528,000	115,000	650,000
GR	120,000	700,000	130,000	800,000	135,000	850,000	-0	-0	-0	-0
ET	-0	-0	-0	300,200	-0	-0	-0	-0	-0	-0
X1	5,800	22,000	570,000	588,000	400,000	400,000	400,000	0	0	-0

GR	130,000	140,000	128,000	165,000	126,000	215,000	124,000	290,000	122,000	330,000
GR	120,000	400,000	118,000	420,000	116,000	450,000	114,000	480,000	114,000	570,000
GR	111,000	573,000	111,000	585,000	114,000	588,000	114,000	820,000	116,000	890,000
GR	118,000	910,000	120,000	930,000	122,000	960,000	124,000	980,000	126,000	1010,000
GR	128,000	1030,000	130,000	1040,000	=0	=0	=0	=0	=0	=0
NC	.100	.100	.080	.200	.400	=0	=0	=0	=0	=0
QT	7,000	1900,000	1900,000	1900,000	1900,000	800,000	1490,000	3300,000	=0	=0
X1	5,900	9,000	600,000	618,000	900,000	900,000	900,000	0	0	=0
GR	140,000	0	130,000	150,000	120,000	200,000	117,000	600,000	114,100	603,000
GR	114,100	615,000	117,000	618,000	130,000	1080,000	140,000	1230,000	=0	=0
X1	6,000	10,000	570,000	588,000	600,000	600,000	600,000	0	0	=0
GR	140,000	0	130,000	100,000	120,000	300,000	118,500	570,000	116,200	573,000
GR	116,200	585,000	118,500	588,000	120,000	750,000	130,000	930,000	140,000	1070,000
ET	=0	=0	=0	9,100	=0	=0	=0	=0	299,000	649,000
X1	6,100	10,000	490,000	508,000	500,000	500,000	500,000	0	0	=0
GR	140,000	80,000	120,000	305,000	119,900	490,000	118,000	493,000	118,000	505,000
GR	119,900	508,000	120,000	660,000	126,000	750,000	128,000	860,000	140,000	1110,000
ET	=0	=0	=0	9,100	=0	=0	=0	=0	359,000	709,000
X1	6,200	10,000	550,000	568,000	600,000	600,000	600,000	0	0	=0
GR	140,000	0	130,000	70,000	122,000	150,000	121,400	550,000	120,000	553,000
GR	120,000	565,000	121,400	568,000	122,000	795,000	130,000	855,000	140,000	1000,000
ET	=0	=0	=0	9,100	=0	=0	=0	=0	1098,000	1398,000
X1	6,300	14,000	1275,000	1320,000	400,000	400,000	400,000	0	0	=0
GR	140,000	900,000	130,000	1030,000	124,000	1140,000	122,600	1275,000	122,400	1295,000
GR	121,800	1304,000	122,300	1310,000	122,500	1320,000	122,400	1363,000	122,800	1391,000
GR	124,000	1630,000	126,000	1710,000	134,000	1810,000	140,000	1920,000	=0	=0
NC	.100	.100	.060	.200	.400	=0	=0	=0	=0	=0
ET	=0	=0	=0	300,200	=0	=0	=0	=0	=0	=0
X1	6,600	21,000	632,000	657,000	1500,000	1500,000	1500,000	0	0	=0
GR	144,000	10,000	142,000	55,000	140,000	95,000	138,000	135,000	137,300	162,000
GR	131,600	282,000	128,300	419,000	128,800	632,000	124,200	642,000	122,600	646,000
GR	122,800	649,000	124,100	650,000	127,900	657,000	126,000	732,000	126,500	892,000
GR	129,700	971,000	133,100	1072,000	138,800	1204,000	138,900	1302,000	142,000	1370,000
GR	144,000	1420,000	=0	=0	=0	=0	=0	=0	=0	=0
X1	6,800	38,000	882,000	918,000	800,000	800,000	800,000	0	0	=0
GR	170,000	45,000	166,000	70,000	164,000	85,000	164,000	155,000	162,000	300,000
GR	160,000	355,000	150,000	475,000	146,000	525,000	144,000	555,000	142,000	620,000
GR	140,000	640,000	134,000	710,000	132,000	740,000	130,000	755,000	128,000	770,000
GR	127,000	864,000	127,000	882,000	126,400	900,000	125,900	908,000	125,100	912,000
GR	126,800	917,000	127,200	918,000	127,400	929,000	126,900	937,000	126,800	956,000
GR	126,600	956,000	126,800	960,000	127,100	975,000	127,200	1013,000	130,000	1032,000
GR	143,600	1107,000	150,800	1180,000	152,700	1193,000	156,000	1215,000	160,000	1260,000
GR	162,000	1290,000	164,000	1330,000	170,000	1430,000	=0	=0	=0	=0
ET	=0	=0	=0	9,100	=0	=0	=0	=0	768,000	1268,000
X1	7,000	35,000	984,000	1052,000	1275,000	1275,000	1275,000	0	0	=0
GR	160,000	100,000	150,000	190,000	146,000	235,000	144,000	340,000	140,000	460,000
GR	135,100	587,000	131,400	693,000	129,200	828,000	130,800	920,000	131,000	971,000
GR	128,800	984,000	128,000	1000,000	127,400	1002,000	127,600	1006,000	128,000	1016,000
GR	128,200	1018,000	128,000	1023,000	127,400	1027,000	127,600	1035,000	127,200	1041,000
GR	128,000	1042,000	128,000	1043,000	128,500	1052,000	130,300	1081,000	131,000	1129,000

GR	134,000	1171,000	134,800	1201,000	130,800	1227,000	129,100	1350,000	132,200	1511,000
GR	140,000	1780,000	140,000	1980,000	142,000	2020,000	150,000	2085,000	160,000	2265,000
ET	-0	-0	-0	300,200	-0	-0	-0	-0	-0	-0
X1	7,000	34,000	1000,000	1050,000	30,000	30,000	30,000	0	0	-0
GR	160,000	60,000	150,000	135,000	148,000	150,000	146,000	295,000	144,000	400,000
GR	141,500	550,000	140,300	600,000	139,200	650,000	137,900	700,000	137,000	750,000
GR	136,600	800,000	136,300	850,000	136,200	900,000	136,400	950,000	136,700	1000,000
GR	126,300	1000,000	126,300	1050,000	136,400	1050,000	136,400	1100,000	136,300	1150,000
GR	136,200	1200,000	136,300	1250,000	136,200	1300,000	136,100	1350,000	136,100	1400,000
GR	136,000	1450,000	136,200	1500,000	136,400	1550,000	136,500	1600,000	138,000	1825,000
GR	140,000	1935,000	142,000	2030,000	150,000	2265,000	160,000	2490,000	-0	-0
SE	1,250	2,040	2,500	0	50,000	3,000	376,000	0	0	0
X1	7,000	34,000	1000,000	1050,000	30,000	30,000	30,000	0	0	-0
X2	0	0	1,000	134,300	136,200	-0	-0	-0	-0	-0
BT	10,000	60,000	160,000	134,300	150,000	148,000	134,300	550,000	141,500	134,300
BT	700,000	137,900	134,300	900,000	136,200	134,300	1000,000	136,700	134,300	1500,000
BT	136,200	134,300	1825,000	138,000	134,300	2030,000	142,000	134,300	2490,000	160,000
RT	134,300	-0	-0	-0	-0	-0	-0	-0	-0	-0
GR	160,000	60,000	150,000	135,000	148,000	150,000	146,000	295,000	144,000	400,000
GR	141,500	550,000	140,300	600,000	139,200	650,000	137,900	700,000	137,000	750,000
GR	136,600	800,000	136,300	850,000	136,200	900,000	136,400	950,000	136,700	1000,000
GR	126,300	1000,000	126,300	1050,000	136,400	1050,000	136,400	1100,000	136,300	1150,000
GR	136,200	1200,000	136,300	1250,000	136,200	1300,000	136,100	1350,000	136,100	1400,000
GR	136,000	1450,000	136,200	1500,000	136,400	1550,000	136,500	1600,000	138,000	1825,000
GR	140,000	1935,000	142,000	2030,000	150,000	2265,000	160,000	2490,000	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	-0	-0
X1	1,000	30,000	500,000	535,000	0	0	0	-0	-0	-0
GR	140,700	0	137,500	50,000	134,700	100,000	132,200	150,000	131,300	200,000
GR	130,400	250,000	129,900	300,000	129,000	350,000	128,500	400,000	129,400	450,000
GR	129,100	500,000	128,600	503,000	127,500	515,000	128,400	530,000	129,200	535,000
GR	129,300	550,000	129,700	600,000	131,000	650,000	133,900	700,000	132,000	725,000
GR	129,200	750,000	129,000	800,000	129,000	850,000	129,600	900,000	130,700	950,000
GR	132,300	1000,000	134,600	1050,000	136,500	1100,000	137,800	1150,000	138,200	1165,000
ET	-0	-0	-0	300,200	-0	-0	-0	-0	-0	-0
X1	500,000	30,000	250,000	268,000	500,000	500,000	500,000	-0	2,500	-0
GR	140,700	0	137,500	25,000	134,700	50,000	132,200	75,000	131,300	100,000
GR	130,400	125,000	129,900	150,000	129,000	175,000	128,500	200,000	129,400	225,000
GR	129,100	250,000	128,600	251,000	127,500	258,000	128,400	265,000	129,200	268,000
GR	129,300	275,000	129,700	300,000	131,000	325,000	133,900	350,000	132,000	362,000
GR	129,200	375,000	129,000	400,000	129,000	425,000	129,600	450,000	130,700	475,000
GR	132,300	500,000	134,600	525,000	136,500	550,000	137,800	575,000	138,200	582,000
X1	1000,000	30,000	150,000	161,000	500,000	500,000	500,000	-0	5,000	-0
GR	140,700	0	137,500	15,000	134,700	30,000	132,200	45,000	131,300	60,000
GR	130,400	75,000	129,900	90,000	129,000	105,000	128,500	120,000	129,400	135,000
GR	129,100	150,000	128,600	151,000	127,500	155,000	128,400	159,000	129,200	161,000
GR	129,300	165,000	129,700	180,000	131,000	195,000	133,900	210,000	132,000	217,000
GR	129,200	225,000	129,000	240,000	129,000	255,000	129,600	270,000	130,700	285,000
GR	132,300	300,000	134,600	315,000	136,500	330,000	137,800	345,000	138,200	349,000
ET	-0	-0	4000,200	4000,200	-0	-0	-0	-0	-0	-0
X1	1200,000	12,000	150,000	158,000	200,000	200,000	200,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	-0	-0	-0
GR	143,000	0	138,000	50,000	134,900	100,000	135,000	150,000	132,800	152,000
GR	132,700	155,000	132,800	157,000	135,200	158,000	136,600	200,000	138,000	250,000
GR	140,300	300,000	142,500	350,000	-0	-0	-0	-0	-0	-0







X1	555,000	0	0	0	5,000	5,000	2,000	1,000	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
X1	556,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
X1	557,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
X1	570,000	10,000	754,000	796,000	13,000	13,000	13,000	0	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
GR	96,000	0	86,600	754,000	78,100	759,000	77,500	763,000	77,000	776,000
GR	77,600	790,000	78,600	796,000	86,400	799,000	89,000	800,000	96,000	850,000
X1	580,000	10,000	754,000	796,000	10,000	10,000	10,000	0	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
GR	96,000	0	87,600	754,000	78,100	759,000	77,500	763,000	77,000	776,000
GR	77,600	790,000	78,600	796,000	87,400	799,000	90,000	800,000	96,000	850,000
SB	0	1,520	2,600	0	39,000	0	229,000	0	0	0
ET	-0	-0	400,200	-0	-0	-0	-0	-0	-0	-0
X1	600,000	23,000	740,000	800,000	0	0	0	0	0	-0
X2	0	1560,000	1,000	83,300	87,600	0	0	0	0	-0
BT	4,000	0	96,000	83,300	754,000	87,600	83,300	800,000	90,000	83,300
RT	850,000	96,000	83,300	0	0	0	0	0	0	-0
GR	98,000	0	96,000	5,000	94,000	20,000	92,000	70,000	90,000	90,000
GR	88,000	160,000	86,000	360,000	84,000	430,000	82,000	740,000	80,000	745,000
GR	78,000	752,000	77,000	760,000	77,000	780,000	78,000	790,000	80,000	795,000
GR	82,000	797,000	84,000	800,000	86,000	805,000	88,000	808,000	90,000	820,000
GR	92,000	825,000	94,000	840,000	96,000	850,000	0	0	0	-0
X1	605,000	0	0	0	5,000	5,000	5,000	1,000	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
X1	610,000	0	0	0	5,000	5,000	5,000	1,000	100	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
X1	620,000	0	0	0	10,000	10,000	10,000	1,000	100	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
X1	800,000	24,000	740,000	772,000	180,000	180,000	180,000	0	0	-0
X2	0	1560,000	0	0	0	0	0	0	0	-0
GR	96,100	0	94,000	22,000	92,000	40,000	90,000	56,000	88,000	140,000
GR	86,000	475,000	84,000	542,000	83,500	650,000	82,400	700,000	81,400	740,000
GR	77,500	743,000	75,300	752,000	77,500	765,000	81,900	772,000	82,100	800,000
GR	79,300	850,000	82,000	853,000	84,000	864,000	86,000	871,000	88,000	884,000
GR	90,000	897,000	92,000	900,000	94,000	913,000	96,100	921,000	0	0
NC	.120	.120	.050	.200	.400	0	0	0	0	-0
X1	1000,000	19,000	324,000	365,000	200,000	200,000	200,000	0	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	-0
GR	96,100	0	94,000	43,000	92,000	85,000	90,000	97,000	88,000	133,000

GR	78,300	345,000	78,500	358,000	83,700	365,000	85,200	400,000	85,400	450,000
GR	86,000	490,000	88,000	500,000	90,000	514,000	96,100	543,000	-0	-0
X1	1200,000	14,000	442,000	475,000	200,000	200,000	200,000	0	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
GR	96,100	0	94,000	25,000	92,000	60,000	90,000	69,000	88,000	90,000
GR	86,000	100,000	84,000	280,000	83,000	350,000	82,700	442,000	79,100	447,000
GR	78,900	455,000	78,900	462,000	86,100	475,000	101,400	496,000	-0	-0
X1	1330,000	0	0	0	130,000	130,000	130,000	1,000	300	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
X1	1440,000	15,000	420,000	559,000	110,000	110,000	110,000	0	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
GR	97,000	0	94,000	50,000	89,900	120,000	87,000	220,000	86,400	320,000
GR	85,200	360,000	84,800	420,000	84,700	520,000	80,500	931,000	79,600	541,000
GR	80,300	546,000	80,700	559,000	88,400	609,000	93,100	709,000	97,000	809,000
X1	1441,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
X1	1442,000	0	0	0	1,000	1,000	1,000	1,000	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
X1	1460,000	0	0	0	18,000	18,000	18,000	1,000	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
X1	1470,000	15,000	675,000	715,000	10,000	10,000	10,000	0	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
GR	97,000	0	90,000	112,000	88,900	275,000	86,800	375,000	86,000	575,000
GR	89,200	675,000	80,500	675,000	80,500	686,000	79,600	696,000	80,300	712,000
GR	80,300	715,000	89,200	715,000	88,800	775,000	93,200	875,000	97,000	970,000
SB	1,050	1,060	2,600	0	40,300	2,000	230,000	0	0	0
ET	-0	0	500,200	-0	0	0	0	0	0	0
X1	1500,000	15,000	675,000	715,000	0	0	0	0	0	-0
X2	0	1540,000	1,000	85,100	86,000	0	0	0	0	0
BT	10,000	0	97,000	85,100	112,000	90,000	85,100	275,000	88,900	85,100
BT	375,000	86,800	85,100	575,000	86,000	85,100	675,000	89,200	85,100	715,000
BT	89,200	85,100	775,000	88,800	85,100	875,000	93,200	85,100	970,000	97,000
BT	85,100	0	0	0	0	0	0	0	0	0
GR	97,000	0	90,000	112,000	88,900	275,000	86,800	375,000	86,000	575,000
GR	89,200	675,000	80,500	675,000	80,500	686,000	79,600	696,000	80,300	712,000
GR	80,300	715,000	89,200	715,000	88,800	775,000	93,200	875,000	97,000	970,000
X1	1501,000	19,000	675,000	714,000	1,000	1,000	1,000	0	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
GR	98,000	0	96,000	10,000	94,000	40,000	92,000	70,000	90,000	110,000
GR	88,000	200,000	86,000	295,000	84,000	540,000	82,900	675,000	79,700	680,000
GR	79,100	689,000	80,300	698,000	86,000	714,000	88,000	740,000	90,000	820,000
GR	92,000	850,000	94,000	880,000	96,000	935,000	98,000	970,000	0	0
X1	1505,000	0	0	0	4,000	4,000	4,000	1,000	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0

THE WESTERN BANKING & TRADING CO.

X1	1515.000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
X1	1530.000	18,000	600,000	639,000	15,000	15,000	15,000	0	0	-0
X2	0	1540,000	0	0	0	0	0	0	0	0
GR	98,000	0	96,000	5,000	94,000	10,000	92,000	12,000	90,000	25,000
GR	88,000	200,000	86,000	230,000	84,000	265,000	82,900	600,000	79,700	605,000
GR	79,100	614,000	80,300	623,000	88,600	639,000	90,000	750,000	92,000	775,000
GR	94,000	810,000	92,000	860,000	98,000	920,000	0	0	0	0
NC	.100	.100	.050	.200	.400	0	0	0	0	0
X1	1800.000	20,000	300,000	320,000	270,000	270,000	270,000	0	0	-0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	97,000	0	96,000	15,000	94,000	30,000	92,000	36,000	90,000	83,000
GR	88,000	98,000	86,500	200,000	84,600	300,000	80,200	305,000	79,700	313,000
GR	80,600	323,000	83,800	328,000	88,600	343,000	90,000	400,000	90,000	535,000
GR	88,000	560,000	88,000	620,000	90,000	670,000	92,000	700,000	97,000	730,000
X1	2000.000	22,000	253,000	282,000	200,000	200,000	200,000	0	0	-0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	97,000	0	96,000	5,000	94,000	10,000	92,000	20,000	90,000	34,000
GR	88,000	53,000	86,500	150,000	86,100	200,000	84,800	250,000	80,400	257,000
GR	79,900	265,000	80,500	276,000	84,500	282,000	88,500	300,000	88,400	350,000
GR	90,000	485,000	92,000	520,000	92,000	560,000	90,000	588,000	90,000	720,000
GR	92,000	730,000	97,000	744,000	0	0	0	0	0	0
X1	2200.000	20,000	391,000	430,000	200,000	200,000	200,000	0	0	-0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	97,500	0	96,000	3,000	94,000	8,000	92,000	12,000	90,000	15,000
GR	88,000	32,000	86,000	150,000	85,200	300,000	85,000	350,000	85,600	391,000
GR	80,100	399,000	80,200	407,000	80,400	408,000	86,800	430,000	86,500	450,000
GR	86,000	500,000	88,000	570,000	90,000	708,000	92,000	753,000	97,500	775,000
NC	.100	.100	.035	.200	.400	0	0	0	0	0
X1	2400.000	20,000	287,000	318,000	200,000	200,000	200,000	0	0	-0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	97,500	0	96,000	5,000	94,000	15,000	92,000	35,000	90,000	50,000
GR	88,000	100,000	88,000	190,000	86,000	250,000	85,100	287,000	80,800	294,000
GR	81,200	301,000	81,200	309,000	86,400	318,000	87,400	370,000	88,200	420,000
GR	90,000	500,000	92,000	512,000	94,000	530,000	96,000	550,000	97,500	570,000
X1	2440.000	10,000	170,000	201,000	40,000	40,000	40,000	0	0	-0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	97,500	0	96,000	20,000	94,000	60,000	92,000	90,000	90,000	129,000
GR	88,000	150,000	86,000	160,000	85,100	170,000	80,800	177,000	81,200	184,000
GR	81,200	192,000	86,400	201,000	88,000	215,000	90,000	230,000	92,000	280,000
GR	94,000	300,000	96,000	330,000	97,500	350,000	0	0	0	0
X1	2445.000	10,000	200,000	238,000	5,000	5,000	5,000	0	0	-0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	101,000	0	99,400	200,000	85,200	200,000	81,200	218,000	81,500	220,000
GR	81,000	223,000	80,900	228,000	81,600	238,000	99,400	238,000	101,000	438,000
SB	1.250	1.150	2,600	860,000	38,000	6,000	266,000	0	0	0
ET	0	0	300,200	0	0	0	0	0	0	0
X1	2510.000	10,000	200,000	238,000	0	0	0	0	0	-0
X2	0	1530,000	1,000	88,010	101,000	0	0	0	0	0

	GR	101,000	0	101,000	200,000	85,200	200,000	81,200	210,000	81,900	220,000
	GR	81,000	223,000	80,000	228,000	81,400	238,000	101,000	230,000	101,000	230,000
X1	2511,000	0	0	0	1,000	1,000	1,000	1,000	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
X1	2515,000	19,000	90,000	121,000	4,000	4,000	4,000	0	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
GR	102,000	0	98,000	8,000	96,000	15,000	94,000	25,000	92,000	38,000	
GR	90,000	47,000	88,000	53,000	86,000	60,000	84,000	85,000	84,400	90,000	
GR	82,900	97,000	82,600	105,000	82,200	113,000	85,100	121,000	86,000	150,000	
GR	88,000	250,000	90,000	550,000	92,000	675,000	94,000	700,000	-0	-0	
X1	2540,000	21,000	88,000	135,000	30,000	30,000	30,000	0	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
GR	102,000	0	98,000	16,000	96,000	28,000	94,000	40,000	92,000	60,000	
GR	90,000	72,000	88,000	79,000	86,000	82,000	84,400	88,000	82,900	95,000	
GR	82,600	112,000	82,200	124,000	85,100	135,000	86,000	140,000	88,000	265,000	
GR	90,000	335,000	92,000	460,000	94,000	505,000	96,000	530,000	98,000	570,000	
GR	102,000	600,000	-0	-0	-0	-0	-0	-0	-0	-0	
X1	2560,000	23,000	88,000	132,000	20,000	20,000	20,000	0	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
GR	102,000	0	98,000	16,000	96,000	28,000	94,000	40,000	92,000	60,000	
GR	90,000	72,000	88,000	79,000	86,000	84,000	83,500	88,000	83,000	97,000	
GR	83,100	104,000	82,600	116,000	82,700	123,000	82,800	132,000	84,000	135,000	
GR	86,000	140,000	88,000	145,000	90,000	220,000	92,000	340,000	94,000	403,000	
GR	96,000	447,000	98,000	473,000	102,000	520,000	-0	-0	-0	-0	
X1	2565,000	10,000	1200,000	1244,000	5,000	5,000	5,000	0	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
GR	102,100	0	101,700	1200,000	83,000	1200,000	83,000	1209,000	83,100	1216,000	
GR	82,600	1228,000	82,700	1235,000	82,800	1244,000	101,700	1244,000	102,100	2130,000	
SB	1,250	1,050	2,600	1065,000	45,100	1,000	475,000	0	0	0	
X1	2615,000	10,000	1200,000	1244,000	0	0	0	0	0	-0	-0
X2	0	1530,000	1,000	93,900	101,700	-0	-0	-0	-0	-0	-0
GR	102,100	0	101,700	1200,000	83,000	1200,000	83,000	1209,000	83,100	1216,000	
GR	82,600	1228,000	82,700	1235,000	82,800	1244,000	101,700	1244,000	102,100	2130,000	
X1	2616,000	0	0	0	1,000	1,000	1,000	1,000	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
X1	2620,000	30,000	1165,000	1221,000	4,000	4,000	4,000	0	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
GR	104,000	0	102,000	250,000	100,000	400,000	98,000	550,000	92,000	650,000	
GR	90,000	670,000	90,000	980,000	100,000	1000,000	100,000	1015,000	98,000	1026,000	
GR	96,000	1032,000	94,000	1045,000	92,000	1062,000	90,000	1079,000	88,000	1120,000	
GR	86,000	1140,000	86,300	1165,000	82,500	1174,000	83,100	1189,000	83,300	1203,000	
GR	88,800	1221,000	89,100	1233,000	90,000	1380,000	92,000	1452,000	94,000	1470,000	
GR	96,000	1535,000	98,000	1562,000	100,000	1600,000	102,000	2180,000	104,000	2300,000	
X1	2630,000	0	0	0	10,000	10,000	10,000	1,000	0	-0	-0
X2	0	1530,000	0	0	0	-0	-0	-0	-0	-0	-0
X1	2800,000	27,000	1032,000	1088,000	170,000	170,000	170,000	0	0	-0	-0

GR	104,000	0	102,000	100,000	104,000	190,000	100,000	330,000	98,000	500,000
GR	90,000	625,000	90,000	760,000	98,000	790,000	98,000	811,000	90,000	842,000
GR	86,000	950,000	86,100	1,000,000	86,300	1,032,000	82,500	1,041,000	83,100	1,056,000
GR	83,300	1,070,000	88,800	1,088,000	89,100	1,100,000	90,000	1,350,000	92,000	1,492,000
GR	94,000	1,508,000	96,000	1,535,000	98,000	1,600,000	100,000	1,620,000	100,000	2,050,000
GR	102,000	2,105,000	104,000	2,330,000	0	0	0	0	0	0

X1	2920,000	31,000	1406,000	1460,000	120,000	120,000	120,000	0	0	0
X2	0	1530,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	545,000	100,000	845,000	98,000	940,000	96,000	945,000
GR	96,000	965,000	98,000	978,000	98,000	1,020,000	90,000	1,068,000	90,000	1,300,000
GR	86,300	1,406,000	82,500	1,415,000	83,000	1,420,000	83,100	1,425,000	83,000	1,430,000
GR	83,200	1,434,000	83,300	1,438,000	83,300	1,442,000	88,800	1,460,000	88,600	1,510,000
GR	90,300	1,610,000	90,100	1,710,000	92,100	1,810,000	92,100	1,910,000	94,000	1,935,000
GR	96,000	2,020,000	98,000	2,080,000	100,000	2,100,000	100,000	2,430,000	102,000	2,530,000
GR	105,000	2,800,000	0	0	0	0	0	0	0	0
NC	.100	.100	.035	.200	.400	0	0	0	0	0

X1	2950,000	30,000	1406,000	1447,000	30,000	30,000	30,000	0	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	545,000	100,000	845,000	98,000	940,000	96,000	945,000
GR	96,000	965,000	98,000	978,000	98,000	1,020,000	90,000	1,068,000	90,000	1,300,000
GR	87,600	1,406,000	83,500	1,410,000	83,500	1,415,000	83,200	1,423,000	83,200	1,429,000
GR	83,000	1,436,000	83,400	1,441,000	83,300	1,447,000	88,600	1,510,000	90,300	1,610,000
GR	90,100	1,710,000	92,100	1,810,000	92,100	1,910,000	94,000	1,935,000	96,000	2,020,000
GR	98,000	2,080,000	100,000	2,100,000	100,000	2,430,000	102,000	2,530,000	105,000	2,800,000

X1	2951,000	24,000	1550,000	1587,000	11,000	11,000	11,000	0	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	100,000	102,000	515,000	100,400	1,050,000	100,000	1,140,000
GR	97,100	1,220,000	93,800	1,390,000	92,200	1,550,000	83,500	1,550,000	83,500	1,555,000
GR	93,200	1,563,000	83,200	1,569,000	83,000	1,576,000	83,400	1,581,000	83,300	1,587,000
GR	92,200	1,587,000	92,300	1,650,000	92,500	1,850,000	93,000	2,050,000	94,000	2,086,000
GR	96,000	2,180,000	98,000	2,370,000	100,000	2,660,000	105,000	3,000,000	105,000	3,000,000
SB	1,250	1,200	2,600	0	37,000	1,000	196,000	0	0	0
ET	0	0	500,200	0	0	0	0	0	0	0

X1	3010,000	24,000	1550,000	1587,000	0	0	0	0	0	0
X2	0	1520,000	1,000	90,100	92,200	0	0	0	0	0
BT	12,000	0	105,000	90,100	100,000	104,000	90,100	1,050,000	100,400	90,100
BT	1220,000	97,100	90,100	1,350,000	93,800	90,100	1,550,000	92,200	90,100	1,587,000
BT	92,200	90,100	2050,000	93,000	90,100	2086,000	94,000	90,100	90,100	96,000
BT	90,100	2660,000	100,000	90,100	3000,000	105,000	90,100	0	0	0
GR	105,000	0	104,000	100,000	102,000	515,000	100,400	1,050,000	100,000	1,140,000
GR	97,100	1,220,000	93,800	1,390,000	92,200	1,550,000	83,500	1,550,000	83,500	1,555,000
GR	83,200	1,563,000	83,200	1,569,000	83,000	1,576,000	83,400	1,581,000	83,300	1,587,000
GR	92,200	1,587,000	92,300	1,650,000	92,500	1,850,000	93,000	2,050,000	94,000	2,086,000
GR	96,000	2,180,000	98,000	2,370,000	100,000	2,660,000	105,000	3,000,000	105,000	3,000,000

X1	3011,000	0	0	0	1,000	1,000	1,000	1,000	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0

X1	3015,000	28,000	1447,000	1477,000	4,000	4,000	4,000	0	0	0
X2	0	1520,000	0	0	0	0	0	0	0	0
GR	105,000	0	104,000	70,000	104,000	350,000	102,000	620,000	102,000	770,000
GR	100,000	1,030,000	98,000	1,060,000	96,000	1,155,000	94,000	1,172,000	92,000	1,260,000
GR	90,000	1,423,000	88,000	1,430,000	86,000	1,442,000	84,000	1,447,000	83,400	1,453,000
GR	82,800	1,463,000	82,800	1,475,000	84,600	1,477,000	86,000	1,481,000	88,000	1,487,000
GR	90,000	1,494,000	92,000	1,506,000	94,000	1,995,000	96,000	2,100,000	98,000	2,263,000

Table with 2 columns: Description (X1, X2, GR) and Values (10,000, 32,000, 1440,000, etc.)

Table with 2 columns: Description (X1, X2) and Values (75,000, 1,000, etc.)

Table with 2 columns: Description (X1, X2, GR) and Values (100,000, 38,000, 1430,000, etc.)

Table with 2 columns: Description (X1, X2, GR) and Values (200,000, 38,000, 1370,000, etc.)

Table with 2 columns: Description (X1, X2, GR) and Values (200,000, 40,000, 1430,000, etc.)

Table with 2 columns: Description (X1, X2, BT, GR) and Values (3730,000, 40,000, 1430,000, etc.)

GR	84,400	1481,000	86,600	1467,000	94,900	1467,000	91,700	1500,000	92,000	1662,000
GR	94,000	1671,000	96,000	1681,000	98,000	1684,000	100,000	1691,000	105,000	1718,000
X1	3731,000	27,000	1432,000	1491,000	1,000	1,000	1,000	0	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	70,000	104,000	350,000	102,000	620,000	100,000	730,000
GR	98,000	840,000	96,000	865,000	96,000	985,000	96,000	1063,000	94,000	1070,000
GR	92,000	1100,000	92,000	1172,000	94,000	1177,000	95,000	1200,000	94,000	1222,000
GR	92,000	1233,000	90,000	1365,000	89,500	1415,000	89,200	1432,000	85,000	1443,000
GR	83,900	1445,000	83,600	1457,000	84,100	1469,000	93,100	1491,000	92,000	1515,000
GR	92,000	1658,000	105,000	1705,000	0	-0	-0	-0	-0	-0
X1	3735,000	0	0	0	4,000	4,000	4,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
X1	3745,000	0	0	0	10,000	10,000	10,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
X1	3765,000	0	0	0	20,000	20,000	20,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
X1	3800,000	0	0	0	35,000	35,000	35,000	1,000	0	-0
X2	0	1520,000	0	0	0	-0	-0	-0	-0	-0
NC	,100	,100	,050	,200	,400	-0	-0	-0	-0	-0
X1	4000,000	24,000	1014,000	1060,000	200,000	200,000	200,000	0	0	-0
X2	0	1500,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	96,000	464,000	94,600	750,000	94,000	825,000	92,000	833,000	90,900	900,000
GR	90,300	1000,000	89,200	1014,000	85,600	1025,000	84,100	1027,000	83,800	1037,000
GR	84,000	1048,000	84,900	1056,000	93,400	1060,000	93,200	1100,000	93,000	1150,000
GR	93,000	1200,000	92,000	1210,000	92,000	1293,000	105,000	1350,000	-0	-0
X1	4225,000	32,000	1006,000	1047,000	225,000	225,000	225,000	0	0	-0
X2	0	1500,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	98,000	376,000	96,000	395,000	94,000	547,000	92,500	690,000	92,000	740,000
GR	92,000	908,000	94,000	914,000	94,500	960,000	94,000	994,000	92,000	998,000
GR	91,000	1000,000	90,000	1006,000	85,300	1012,000	85,000	1018,000	85,000	1024,000
GR	84,600	1024,000	84,700	1033,000	84,800	1037,000	84,700	1043,000	93,400	1047,000
GR	93,300	1130,000	93,300	1195,000	94,000	1485,000	96,000	1498,000	98,000	1505,000
GR	100,000	1522,000	105,000	1550,000	0	-0	-0	-0	-0	-0
NC	,120	,120	,050	,200	,400	-0	-0	-0	-0	-0
X1	4230,000	25,000	983,000	1020,000	5,000	5,000	5,000	0	0	-0
X2	0	1500,000	0	0	0	-0	-0	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	98,000	376,000	96,000	395,000	94,000	547,000	92,500	690,000	94,500	800,000
GR	94,500	983,000	85,300	983,000	85,000	989,000	85,000	995,000	84,000	1001,000
GR	84,700	1010,000	84,800	1014,000	84,700	1020,000	84,500	1020,000	93,600	1220,000
GR	94,000	1310,000	96,000	1370,000	98,000	1440,000	100,000	1525,000	105,000	1570,000
SB	1,250	1,200	2,600	0	37,000	1,000	261,000	0	0	0
X1	4300,000	25,000	983,000	1020,000	0	0	0	0	0	-0
X2	0	1500,000	1,000	92,900	93,600	-0	-0	-0	-0	-0
BT	12,000	0	105,000	92,900	210,000	102,000	92,900	250,000	98,000	92,900
BT	376,000	98,000	92,900	690,000	93,000	92,900	800,000	94,500	92,900	983,000

BT	94,900	92,900	1310,000	94,000	92,900	1370,000	98,000	92,900	1440,000	98,000
BT	92,900	1525,000	100,000	92,900	1570,000	105,000	92,900	-0	-0	-0
GR	105,000	0	104,000	163,000	102,000	210,000	100,000	228,000	98,000	250,000
GR	98,000	376,000	96,000	395,000	94,000	547,000	92,500	690,000	94,500	800,000
GR	94,500	983,000	85,300	983,000	85,000	989,000	85,000	995,000	84,000	1001,000
GR	84,700	1010,000	84,800	1014,000	84,700	1020,000	94,500	1020,000	93,600	1220,000
GR	94,000	1310,000	96,000	1370,000	98,000	1440,000	100,000	1525,000	105,000	1570,000

X1	4301,000	25,000	922,000	957,000	1,000	1,000	1,000	0	0	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0
GR	106,000	0	104,000	115,000	102,000	150,000	100,000	155,000	98,000	220,000
GR	96,000	270,000	94,000	465,000	92,000	710,000	90,000	915,000	91,900	922,000
GR	86,800	926,000	85,500	929,000	84,800	937,000	84,600	945,000	90,400	949,000
GR	94,800	957,000	95,600	990,000	95,400	1015,000	95,200	1050,000	96,000	1100,000
GR	98,000	1250,000	100,000	1300,000	102,000	1330,000	104,000	1355,000	106,000	1375,000

X1	4305,000	0	0	0	4,000	4,000	4,000	1,000	0	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0

X1	4310,000	0	0	0	5,000	5,000	5,000	1,000	.100	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0

X1	4320,000	0	0	0	10,000	10,000	10,000	1,000	.100	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0

X1	4340,000	0	0	0	20,000	20,000	20,000	1,000	.100	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0

X1	4600,000	27,000	806,000	837,000	260,000	260,000	260,000	0	0	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0
GR	106,000	0	104,000	40,000	102,000	65,000	102,000	120,000	100,000	160,000
GR	98,000	185,000	96,000	220,000	94,000	255,000	92,000	290,000	90,800	700,000
GR	90,900	750,000	89,600	806,000	89,600	811,000	85,200	820,000	84,800	832,000
GR	91,000	837,000	91,500	850,000	94,200	859,000	91,000	877,000	91,400	920,000
GR	94,000	980,000	96,000	1060,000	98,000	1180,000	100,000	1200,000	102,000	1250,000
GR	104,000	1270,000	106,000	1320,000	0	0	0	0	0	-0

X1	4750,000	20,000	810,000	854,000	150,000	150,000	150,000	0	0	-0
X2	0	1500,000	0	0	0	0	0	0	0	-0
GR	106,000	0	104,000	50,000	102,000	65,000	100,000	110,000	98,000	200,000
GR	96,000	245,000	94,000	300,000	92,000	340,000	90,000	810,000	86,100	815,000
GR	85,100	828,000	86,400	837,000	92,600	854,000	94,000	930,000	96,000	970,000
GR	98,000	990,000	100,000	1000,000	102,000	1050,000	104,000	1160,000	106,000	1170,000
NC	.120	.120	.050	.200	.400	0	0	0	0	-0

X1	5000,000	21,000	770,000	832,000	250,000	250,000	250,000	0	0	-0
X2	0	1480,000	0	0	0	0	0	0	0	-0
GR	106,000	0	104,000	80,000	102,000	200,000	100,000	270,000	98,000	290,000
GR	96,000	310,000	94,000	410,000	92,000	620,000	90,000	760,000	92,900	770,000
GR	92,300	777,000	86,300	785,000	85,300	792,000	86,000	804,000	89,800	820,000
GR	92,300	832,000	94,000	840,000	96,000	890,000	98,000	930,000	100,000	940,000
GR	110,000	965,000	0	0	0	0	0	0	0	-0

X1	5200,000	20,000	548,000	579,000	200,000	200,000	200,000	0	0	-0
X2	0	1480,000	0	0	0	0	0	0	0	-0
GR	106,000	0	104,000	100,000	102,000	180,000	100,000	190,000	98,000	195,000
GR	96,000	320,000	94,000	440,000	92,000	530,000	92,300	540,000	93,100	548,000

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GR	88,000	581,000	86,200	587,000	88,100	574,000	91,200	579,000	92,000	583,000
GR	94,000	600,000	96,000	660,000	98,000	690,000	100,000	710,000	110,000	740,000
X1	5400,000	21,000	570,000	610,000	200,000	200,000	200,000	0	0	-0
X2	0	1480,000	0	0	0	0	0	0	0	0
GR	106,000	0	104,000	50,000	102,000	105,000	100,000	150,000	98,000	230,000
GR	96,000	360,000	94,000	565,000	93,700	570,000	93,200	573,000	86,300	584,000
GR	85,800	589,000	86,100	595,000	91,000	610,000	92,000	630,000	94,000	670,000
GR	96,000	740,000	96,000	800,000	98,000	860,000	100,000	875,000	102,000	890,000
GR	110,000	935,000	-0	-0	-0	-0	-0	-0	-0	-0
X1	5430,000	18,000	570,000	605,000	30,000	30,000	30,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	115,000	115,000	-0
GR	106,000	0	104,000	50,000	102,000	105,000	100,000	150,000	98,000	230,000
GR	96,000	360,000	94,000	565,000	81,100	570,000	81,100	605,000	91,000	610,000
GR	92,000	630,000	94,000	670,000	96,000	740,000	96,000	800,000	98,000	860,000
GR	100,000	875,000	102,000	890,000	110,000	935,000	-0	-0	-0	-0
SB	1.250	1.710	2,500	1000,000	38,000	2,000	522,000	0	81,100	81,100
X1	5570,000	-0	-0	-0	140,000	140,000	140,000	-0	-0	-0
X2	-0	-0	1,000	95,600	115,000	-0	-0	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	115,000	115,000	-0
X1	5600,000	25,000	821,000	856,000	30,000	30,000	30,000	-0	-0	-0
X2	0	1480,000	0	0	0	0	0	0	0	0
GR	108,000	0	106,000	5,000	104,000	270,000	102,000	290,000	100,000	320,000
GR	98,000	345,000	98,000	550,000	96,000	610,000	96,000	730,000	94,000	750,000
GR	92,000	810,000	91,600	821,000	84,800	828,000	84,500	835,000	84,700	842,000
GR	92,500	856,000	94,000	905,000	96,000	990,000	96,700	1020,000	96,000	1100,000
GR	98,000	1105,000	100,000	1110,000	104,000	1120,000	106,000	1140,000	110,000	1220,000
X1	5800,000	0	0	0	200,000	200,000	200,000	1,000	.200	-0
X2	0	1480,000	0	0	0	-0	-0	-0	-0	-0
X1	5875,000	24,000	1167,000	1196,000	75,000	75,000	75,000	-0	-0	-0
GR	110,000	0	104,000	20,000	103,500	35,000	99,500	220,000	99,500	480,000
GR	97,500	740,000	99,700	1000,000	96,600	1100,000	92,200	1167,000	86,400	1174,000
GR	86,100	1182,000	86,700	1190,000	92,100	1196,000	92,200	1201,000	95,500	1300,000
GR	96,300	1303,000	98,100	1400,000	100,600	1461,000	100,900	1488,000	102,000	1522,000
GR	104,000	1550,000	106,000	1595,000	108,000	1620,000	110,000	1660,000	-0	-0
X1	5928,000	24,000	1162,000	1201,000	53,000	53,000	53,000	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	96,900	96,900	-0
GR	110,000	0	104,000	20,000	103,500	35,000	99,500	220,000	99,500	480,000
GR	97,500	740,000	99,700	1000,000	96,600	1100,000	92,200	1162,000	86,400	1174,000
GR	86,100	1182,000	86,700	1190,000	92,100	1196,000	92,200	1201,000	95,500	1300,000
GR	96,300	1303,000	98,100	1400,000	100,600	1461,000	100,900	1488,000	102,000	1522,000
GR	104,000	1550,000	106,000	1595,000	108,000	1620,000	110,000	1660,000	-0	-0
SB	1.250	1,630	2,500	-0	39,000	2,000	475,000	-0	82,700	82,700
ET	-0	-0	300,200	-0	-0	-0	-0	-0	-0	-0
X1	5993,000	-0	-0	-0	65,000	65,000	65,000	-0	-0	-0
X2	-0	-0	1,000	95,600	96,900	-0	-0	-0	-0	-0
X3	10,000	-0	-0	-0	-0	-0	-0	96,900	96,900	-0
BT	17,000	0	110,000	0	20,000	104,000	0	35,000	103,500	0
BT	220,000	99,500	-0	480,000	99,500	-0	740,000	97,500	-0	1000,000
BT	99,700	-0	1100,000	98,900	-0	1162,000	96,900	-0	1201,000	96,900
BT	-0	1300,000	96,900	-0	1400,000	97,200	-0	1500,000	96,600	-0

BT	1543.000	100.500	-0	1590.000	100.500	-0	1620.000	100.000	-0	1620.000
BT	110.000	-0	-0	-0	-0	-0	-0	-0	-0	-0
X1	6050.000	24.000	1167.000	1196.000	57.000	57.000	57.000	-0	-0	-0
GR	110.000	0	104.000	20.000	103.500	35.000	99.500	220.000	99.500	480.000
GR	97.500	740.000	99.700	1000.000	96.600	1100.000	92.200	1167.000	86.400	1174.000
GR	86.100	1182.000	86.700	1190.000	92.100	1196.000	92.200	1201.000	95.500	1300.000
GR	96.300	1303.000	96.100	1400.000	100.600	1461.000	100.900	1408.000	102.000	1522.000
GR	104.000	1550.000	106.000	1595.000	108.000	1620.000	110.000	1660.000	-0	-0
NC	.120	.120	.050	.200	.400	-0	-0	-0	-0	-0

X1	6200.000	21.000	680.000	724.000	150.000	150.000	150.000	-0	-0	-0
X2	0	1480.000	0	0	0	-0	-0	-0	-0	-0
GR	110.000	0	102.000	30.000	102.000	190.000	102.000	440.000	100.000	480.000
GR	98.000	600.000	96.000	655.000	94.800	680.000	87.600	705.000	87.800	709.000
GR	87.200	721.000	93.400	724.000	94.000	780.000	96.000	790.000	98.000	820.000
GR	100.000	890.000	102.000	975.000	104.000	1030.000	106.000	1090.000	108.000	1110.000
GR	110.000	1150.000	-0	-0	-0	-0	-0	-0	-0	-0
NC	.120	.120	.050	.200	.400	-0	-0	-0	-0	-0

X1	6600.000	25.000	634.000	668.000	400.000	400.000	400.000	0	0	-0
X2	0	1480.000	0	0	0	-0	-0	-0	-0	-0
GR	110.000	0	104.000	70.000	104.000	220.000	102.000	350.000	100.000	390.000
GR	98.000	420.000	96.000	450.000	96.000	605.000	94.900	610.000	94.800	632.000
GR	94.800	634.000	93.600	640.000	88.100	647.000	88.000	653.000	88.300	661.000
GR	94.400	668.000	94.000	680.000	96.000	785.000	98.000	795.000	100.000	805.000
GR	102.000	830.000	104.000	840.000	106.000	855.000	108.000	915.000	110.000	990.000
EJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

HARRIS & WOOD RIVERS ROAD, INC.

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
 \*\*\*\*\*

T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 50 YR NATURAL  
 T3 CROSS CR, GREEN ST TO CONFL, W/ LITTLE CROSS CR,

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10,	7,	-0	-0	-0	-0	-0	-0	82,400	-0
J2	NPROF	IPL0T	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2.000	-0	-1.000	-0	-0	-0	-0	-0	-0	15.000

\*PROF 2

CCHV\* .200 CEHV\* .400  
 \*SECNO 68,000

SECNO	DEPTH	CHSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
68,00	6,70	82,40	82,39	82,40	84,92	2,52	0	0	89,90
3350,	0	3350,	0	0	263,	0	0	0	85,80
0	0	12,75	0	.120	.035	.120	0	75,70	76,49
.011409	0	0	0	0	4	1	0	52,43	128,92

FLOW DISTRIBUTION

STA# 76, 137.  
 PER 0# 100,0  
 AREA# 262,7  
 VEL# 12,8

\*SECNO 118,000  
 3685 20 TRIALS USED WSEL,CHSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CHSEL	CRISW	WSELK	EG	HV	HL	OLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
118,00	9,64	84,64	84,64	0	86,41	1,77	.42	0	82,80
3350,	202,	3148,	0	207,	266,	0	0,	0,	90,20
.00	.98	11,02	0	.120	.035	.120	.034	75,00	323,82

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 100 YR NATURAL  
 T3 CROSS CR. GREEN ST TO CONFL WITH LITTLE CROSS CR.

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	2.	-0	-0	-0	-0	-0	-0	83,400	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	EN	ALLDC	IBW	CHNIM	ITRACE
	3,000	-0	-1,000	-0	-0	-0	-0	-0	-0	-0

\*PROF 3

CCHV\* .200 CEHV= .400  
 \*SECNO 68,000

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
68,00	7,70	83,40	83,35	83,40	86,19	2,79	0	0	89,90
4250,	0	4250,	0	0	317,	0	0	0	85,80
0	0	13,40	0	.120	.035	.120	0	75,70	74,92
.010861	0	0	0	0	4	1	0	56,38	131,30

\*SECNO 118,000  
 3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRISW	WSELK	EG	HV	HL	QLOSS	BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
118,00	10,42	85,42	85,42	0	87,24	1,83	.40	0	82,80
4250,	535,	3715,	0	379,	320,	0	1.	0,	90,20
.00	1,41	11,59	0	.120	.035	.120	.034	75,00	315,84
.006259	50,	50,	50,	30	11	1	0	270,41	586,26

\*SECNO 200,000

200,00	11,22	86,22	0	0	87,74	1,52	.44	.06	82,80
4250,	489,	3761,	0	343,	358,	0	2.	1,	90,20
.00	1,43	10,52	0	.120	.035	.120	.034	75,00	562,06

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
 \*\*\*\*\*

T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 500 YR NATURAL  
 T3 CROSS CR. GREEN ST TO CONFL W/ LITTLE CROSS CR.

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-10.	8.	-0	-0	-0	-0	-0	-0	87,000	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNH	ITRACE
	15.000	-0	-1.000	-0	-0	-0	-0	-0	-0	-0

\*PROF 4

CCHV= .200 CEHV= .400  
 \*SECNO 68,000

SECNO	DEPTH	CHSEL	CRIMS	WSELK	EG	HV	HL	OLOSS	BANK ELEV
0	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	LEFT/RIGHT
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
68.00	11.30	87.00	86.13	87.00	89.73	2.73	0	0	89.90
7300.	0	7231.	69.	0	543.	70.	0	0	85.80
0	0	13.31	1.00	.120	.035	.120	0	75.70	70.72
.006662	0	0	0	0	10	1	0	143.94	214.66

\*SECNO 118,000

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

118.00	14.49	89.49	0	0	90.29	.81	.19	.38	82.80
7300.	2663.	4628.	10.	1501.	516.	27.	2.	0.	90.20
.00	1.77	8.96	.36	.120	.035	.120	.034	75.00	139.70
.002360	50.	50.	50.	6	0	1	0	512.90	664.60

\*SECNO 200,000

3265 DIVIDED FLOW

200.00	14.45	89.45	0	0	90.69	1.25	.22	.18	82.80
7300.	1940.	5350.	10.	936.	515.	25.	5.	1.	90.20
.00	2.07	10.40	.40	.120	.035	.120	.034	75.00	527.42
.003187	82.	82.	82.	2	0	1	0	314.92	854.93

\*SECNO 300,000

SUMMARY PRINTOUT \*\*\*\*\* FINAL NATURAL RUNS \_SAVE\_ \*\*\*\*\*

CROSS CR LANGDON ST TO

SECNO	CWSEL	Q	ELMIN	EG	HV	DIFWSP
4.80	114.15	1100.00	99.50	114.17	.02	0
4.80	116.67	2000.00	99.50	116.69	.02	2.51
4.80	118.00	2560.00	99.50	118.02	.02	1.33
4.80	121.08	4420.00	99.50	121.11	.02	3.08
4.80	114.15	1100.00	100.50	114.18	.03	0
4.80	116.66	2000.00	100.50	116.69	.03	2.51
4.80	118.00	2560.00	100.50	118.02	.03	1.33
4.80	121.08	4420.00	100.50	121.11	.03	3.08
4.80	114.14	1100.00	99.70	114.18	.04	0
4.80	116.66	2000.00	99.70	116.69	.03	2.52
4.80	118.00	2560.00	99.70	118.02	.03	1.33
4.80	121.08	4420.00	99.70	121.11	.03	3.09
4.80	114.13	1100.00	100.70	114.19	.06	0
4.80	116.65	2000.00	100.70	116.70	.05	2.52
4.80	117.99	2560.00	100.70	118.03	.05	1.34
4.80	121.08	4420.00	100.70	121.12	.04	3.09
4.80	114.16	1100.00	99.70	114.19	.04	0
4.80	116.70	2000.00	99.70	116.73	.03	2.54
4.80	118.04	2560.00	99.70	118.07	.03	1.35
6.10	125.27	3300.00	116.00	125.31	.04	1.47
6.20	123.47	800.00	120.00	123.48	.01	0
6.20	124.44	1490.00	120.00	124.45	.01	.97
6.20	124.92	1900.00	120.00	124.94	.02	.49
6.20	126.34	3300.00	120.00	126.36	.02	1.42
6.30	124.62	800.00	121.80	124.65	.03	0
6.30	125.42	1490.00	121.80	125.46	.04	.80
6.30	125.84	1900.00	121.80	125.88	.04	.42
6.30	127.12	3300.00	121.80	127.17	.05	1.28
6.60	129.05	800.00	122.60	129.09	.03	0
6.60	129.92	1490.00	122.60	129.97	.04	.87
6.60	130.32	1900.00	122.60	130.37	.05	.40
6.60	131.39	3300.00	122.60	131.45	.06	1.07
6.80	130.28	800.00	125.10	130.32	.03	0
6.80	131.41	1490.00	125.10	131.46	.06	1.12
6.80	131.92	1900.00	125.10	131.99	.07	.52
6.80	133.29	3300.00	125.10	133.41	.12	1.37
7.00	131.64	800.00	127.20	131.67	.03	0
7.00	132.80	1490.00	127.20	132.82	.03	1.15
7.00	133.34	1900.00	127.20	133.37	.03	.54
7.00	134.82	3300.00	127.20	134.85	.03	1.48

SUMMARY PRINTOUT \*\*\*\*\* FINAL NATURAL RUNS \_SAVE\_ \*\*\*\*\*

CROSS CR LANGDON ST TO

SFCNO	CWSEL	O	ELMIN	EG	HV	DIFWSP
4.80	114.15	1100.00	99.50	114.17	.02	0
4.80	116.67	2000.00	99.50	116.69	.02	2.51
4.80	118.00	2560.00	99.50	118.02	.02	1.33
4.80	121.08	4420.00	99.50	121.11	.02	3.08
4.80	114.15	1100.00	100.50	114.18	.03	0
4.80	116.66	2000.00	100.50	116.69	.03	2.51
4.80	118.00	2560.00	100.50	118.02	.03	1.33
4.80	121.08	4420.00	100.50	121.11	.03	3.08
4.80	114.14	1100.00	99.70	114.18	.04	0
4.80	116.66	2000.00	99.70	116.69	.03	2.52
4.80	118.00	2560.00	99.70	118.02	.03	1.33
4.80	121.08	4420.00	99.70	121.11	.03	3.09
4.80	114.13	1100.00	100.70	114.19	.06	0
4.80	116.65	2000.00	100.70	116.70	.05	2.52
4.80	117.99	2560.00	100.70	118.03	.05	1.34
4.80	121.08	4420.00	100.70	121.12	.04	3.09
4.80	114.16	1100.00	99.70	114.19	.04	0
4.80	116.70	2000.00	99.70	116.73	.03	2.54
4.80	118.04	2560.00	99.70	118.07	.03	1.35
4.80	121.16	4420.00	99.70	121.19	.03	3.12
4.80	114.19	1100.00	100.00	114.20	.01	0
4.80	116.72	2000.00	100.00	116.74	.02	2.53
4.80	118.06	2560.00	100.00	118.08	.02	1.34
4.80	121.17	4420.00	100.00	121.19	.02	3.11
4.90	114.24	1100.00	100.50	114.24	.01	0
4.90	116.78	2000.00	100.50	116.78	.01	2.54
4.90	118.12	2560.00	100.50	118.13	.01	1.35
4.90	121.24	4420.00	100.50	121.25	.01	3.12
5.00	114.27	1100.00	99.90	114.27	.00	0
5.00	116.82	2000.00	99.90	116.82	.00	2.55
5.00	118.16	2560.00	99.90	118.16	.00	1.35
5.00	121.29	4420.00	99.90	121.29	.00	3.13
5.20	114.30	1100.00	102.40	114.30	.00	0
5.20	116.85	2000.00	102.40	116.85	.00	2.55
5.20	118.19	2560.00	102.40	118.20	.00	1.35
5.20	121.32	4420.00	102.40	121.33	.00	3.13
5.40	114.45	1100.00	104.70	114.49	.04	0
5.40	116.98	2000.00	104.70	117.01	.03	2.53
5.40	118.31	2560.00	104.70	118.35	.03	1.34
5.40	121.45	4420.00	104.70	121.48	.04	3.13
5.50	114.83	1100.00	106.00	114.85	.01	0
5.50	117.24	2000.00	106.00	117.26	.01	2.41
5.50	118.55	2560.00	106.00	118.56	.01	1.30
5.50	121.65	4420.00	106.00	121.66	.01	3.11

SECNO	CWSEL	O	ELMIN	EQ	HV	DIFWSP
5.60	115.31	1100.00	108.20	115.34	.03	0
5.60	117.50	2000.00	108.20	117.51	.01	2.19
5.60	118.75	2560.00	108.20	118.76	.01	1.25
5.60	121.80	4420.00	108.20	121.81	.01	3.06
5.70	116.04	1100.00	109.50	116.14	.10	0
5.70	117.81	2000.00	109.50	117.86	.05	1.78
5.70	118.97	2560.00	109.50	119.01	.03	1.16
5.70	121.94	4420.00	109.50	121.97	.03	2.97
5.80	117.11	1100.00	111.00	117.13	.02	0
5.80	118.53	2000.00	111.00	118.55	.02	1.42
5.80	119.51	2560.00	111.00	119.53	.02	.97
5.80	122.28	4420.00	111.00	122.30	.02	2.78
5.90	119.22	800.00	114.10	119.38	.16	0
5.90	120.37	1490.00	114.10	120.46	.09	1.15
5.90	120.99	1900.00	114.10	121.06	.07	.63
5.90	123.19	3300.00	114.10	123.23	.04	2.20
6.00	121.36	800.00	116.20	121.38	.02	0
6.00	122.28	1490.00	116.20	122.31	.03	.92
6.00	122.73	1900.00	116.20	122.76	.03	.44
6.00	124.27	3300.00	116.20	124.30	.03	1.54
6.10	122.29	800.00	118.00	122.31	.02	0
6.10	123.31	1490.00	118.00	123.33	.03	1.02
6.10	123.80	1900.00	118.00	123.83	.03	.49
6.10	125.27	3300.00	118.00	125.31	.04	1.47
6.20	123.47	800.00	120.00	123.48	.01	0
6.20	124.44	1490.00	120.00	124.45	.01	.97
6.20	124.92	1900.00	120.00	124.94	.02	.49
6.20	126.34	3300.00	120.00	126.36	.02	1.42
6.30	124.62	800.00	121.80	124.65	.03	0
6.30	125.42	1490.00	121.80	125.46	.04	.80
6.30	125.84	1900.00	121.80	125.88	.04	.42
6.30	127.12	3300.00	121.80	127.17	.05	1.28
6.60	129.05	800.00	122.60	129.09	.03	0
6.60	129.92	1490.00	122.60	129.97	.04	.87
6.60	130.32	1900.00	122.60	130.37	.05	.40
6.60	131.39	3300.00	122.60	131.45	.06	1.07
6.80	130.28	800.00	125.10	130.32	.03	0
6.80	131.41	1490.00	125.10	131.46	.06	1.12
6.80	131.92	1900.00	125.10	131.99	.07	.52
6.80	133.29	3300.00	125.10	133.41	.12	1.37
7.00	131.64	800.00	127.20	131.67	.03	0
7.00	132.80	1490.00	127.20	132.82	.03	1.15
7.00	133.34	1900.00	127.20	133.37	.03	.54
7.00	134.82	3300.00	127.20	134.85	.03	1.48



SECNO	CWSEL	Q	ELMIN	EG	HV	DIFWSP
7.00	131.62	800.00	126.30	131.76	.14	0
7.00	132.65	1490.00	126.30	132.99	.34	1.04
7.00	133.11	1900.00	126.30	133.60	.48	.46
7.00	134.25	3300.00	126.30	135.32	1.07	1.13
7.00	131.64	800.00	126.30	131.78	.14	0
7.00	132.71	1490.00	126.30	133.05	.34	1.08
7.00	133.21	1900.00	126.30	133.68	.47	.50
7.00	135.80	3300.00	126.30	136.55	.75	2.59
1.00	131.79	800.00	127.50	131.80	.01	0
1.00	133.10	1490.00	127.50	133.11	.01	1.31
1.00	133.76	1900.00	127.50	133.77	.01	.66
1.00	136.69	3300.00	127.50	136.70	.01	2.93
500.00	132.75	800.00	130.00	133.17	.42	0
500.00	133.69	1490.00	130.00	133.96	.28	.94
500.00	134.29	1900.00	130.00	134.50	.22	.60
500.00	136.91	3300.00	130.00	137.00	.09	2.62
1000.00	137.35	800.00	132.50	137.41	.06	0
1000.00	138.27	1490.00	132.50	138.36	.10	.91
1000.00	138.62	1900.00	132.50	138.75	.13	.36
1000.00	139.41	3300.00	132.50	139.65	.24	.79
1200.00	138.26	800.00	132.70	138.39	.13	0
1200.00	139.39	1490.00	132.70	139.54	.15	1.13
1200.00	139.89	1900.00	132.70	140.05	.16	.50
1200.00	141.20	3300.00	132.70	141.41	.21	1.31
1300.00	148.90	800.00	132.70	148.90	.00	0
1300.00	149.49	1490.00	132.70	149.49	.00	.59
1300.00	149.77	1900.00	132.70	149.77	.00	.28
1300.00	150.49	3300.00	132.70	150.50	.01	.72
1350.00	148.90	800.00	132.70	148.90	.00	0
1350.00	149.49	1490.00	132.70	149.49	.01	.59
1350.00	149.76	2300.00	132.70	149.78	.02	.27
1350.00	150.48	3980.00	132.70	150.52	.04	.71
2300.00	148.90	800.00	143.00	148.90	.00	0
2300.00	149.50	1490.00	143.00	149.50	.01	.60
2300.00	149.79	2300.00	143.00	149.80	.01	.29
2300.00	150.53	3980.00	143.00	150.57	.03	.75
3300.00	148.90	800.00	143.00	148.90	.00	0
3300.00	149.50	1490.00	143.00	149.51	.01	.60
3300.00	149.80	2300.00	143.00	149.81	.01	.29
3300.00	150.56	3980.00	143.00	150.59	.03	.76

SUMMARY PRINTOUT

CROSS CR LANGDON ST TO

SECNO	DIFWSP	SSTA	STCHL	STCHR	ENDST	TOPWID
4.80	0	416.80	593.00	634.00	846.87	430.08
4.80	2.51	378.51	593.00	634.00	929.04	550.53
4.80	1.33	360.85	593.00	634.00	958.80	597.95
4.80	3.08	317.33	593.00	634.00	1034.38	717.85
4.80	0	435.31	593.00	634.00	821.88	386.57
4.80	2.51	392.36	593.00	634.00	906.55	514.19
4.80	1.33	373.90	593.00	634.00	936.27	562.37
4.80	3.08	331.18	593.00	634.00	1017.72	686.54
4.80	0	457.79	600.00	632.00	876.58	418.79
4.80	2.52	393.85	600.00	632.00	938.08	536.23
4.80	1.33	371.64	600.00	632.00	958.42	586.78
4.80	3.09	316.96	600.00	632.00	1029.24	712.28
4.80	0	489.65	600.00	632.00	843.97	354.32
4.80	2.52	417.11	600.00	632.00	912.75	495.64
4.80	1.34	388.42	600.00	632.00	936.10	547.68
4.80	3.09	335.45	600.00	632.00	1005.79	670.34
4.80	0	457.59	600.00	632.00	876.78	419.19
4.80	2.54	393.42	600.00	632.00	938.92	537.10
4.80	1.35	378.94	600.00	632.00	959.36	588.43
4.80	3.12	315.53	600.00	632.00	1031.05	715.53
4.80	0	430.68	597.00	640.00	872.38	441.70
4.80	2.53	385.97	597.00	640.00	900.35	514.38
4.80	1.34	361.83	597.00	640.00	911.21	549.38
4.80	3.11	303.82	597.00	640.00	1016.46	712.64
4.90	0	114.11	370.00	400.00	777.07	662.97
4.90	2.54	58.36	370.00	400.00	843.59	785.23
4.90	1.35	38.78	370.00	400.00	868.96	838.18
4.90	3.12	28.00	370.00	400.00	938.80	918.80
5.00	0	170.91	665.00	683.00	991.15	820.23
5.00	2.55	123.76	665.00	683.00	1057.42	933.66
5.00	1.35	98.84	665.00	683.00	1092.45	993.61
5.00	3.13	56.58	665.00	683.00	1147.77	1091.19
5.20	0	429.14	896.00	929.00	1346.98	917.83
5.20	2.55	357.17	896.00	929.00	1399.97	1042.80
5.20	1.35	335.97	896.00	929.00	1422.02	1086.05
5.20	3.13	276.70	896.00	929.00	1449.32	1172.61
5.40	0	795.46	993.00	1010.00	1104.54	309.88
5.40	2.53	778.21	993.00	1010.00	1129.79	359.59
5.40	1.34	750.55	993.00	1010.00	1143.15	392.60
5.40	3.13	692.77	993.00	1010.00	1174.46	481.69
5.50	0	460.46	890.00	908.00	964.22	503.76
5.50	2.41	418.23	890.00	908.00	991.46	573.23
5.50	1.30	395.45	890.00	908.00	1019.10	623.65
5.50	3.11	336.98	890.00	908.00	1094.76	757.78

SECNO	DIFWSP	SSTA	STCHL	STCHR	ENDST	TOPMID
5.60	0	160.42	540.00	550.00	921.76	741.34
5.60	2.19	147.52	540.00	550.00	950.31	810.79
5.60	1.25	120.00	540.00	550.00	979.11	850.32
5.60	3.06	99.60	540.00	550.00	1023.44	920.76
5.70	0	219.05	510.00	520.00	660.35	440.70
5.70	1.78	201.05	510.00	520.00	670.15	476.30
5.70	1.16	190.30	510.00	520.00	689.70	499.40
5.70	2.97	159.73	510.00	520.00	719.44	564.71
5.80	0	433.28	570.00	580.00	901.15	467.07
5.80	1.42	414.70	570.00	580.00	915.30	500.60
5.80	.97	404.95	570.00	580.00	925.05	520.10
5.80	2.78	324.40	570.00	580.00	962.80	630.41
5.90	0	304.63	600.00	610.00	696.73	392.10
5.90	1.15	190.16	600.00	610.00	737.67	539.51
5.90	.63	195.03	600.00	610.00	759.92	564.89
5.90	2.20	184.05	600.00	610.00	830.02	653.97
6.00	0	272.67	570.00	580.00	774.60	501.93
6.00	.92	254.31	570.00	580.00	791.13	536.02
6.00	.44	245.64	570.00	580.00	798.93	553.29
6.00	1.54	214.66	570.00	580.00	826.80	612.14
6.10	0	279.25	490.00	500.00	694.34	415.09
6.10	1.02	267.79	490.00	500.00	709.62	441.03
6.10	.49	262.34	490.00	500.00	716.00	454.54
6.10	1.47	245.72	490.00	500.00	739.04	493.32
6.20	0	135.29	550.00	560.00	806.03	670.74
6.20	.97	125.65	550.00	560.00	813.27	687.62
6.20	.49	120.00	550.00	560.00	816.90	696.10
6.20	1.42	106.64	550.00	560.00	827.52	720.07
6.30	0	1120.06	1275.00	1320.00	1654.31	525.45
6.30	.80	1114.07	1275.00	1320.00	1686.59	572.52
6.30	.42	1106.27	1275.00	1320.00	1703.60	597.34
6.30	1.20	1062.79	1275.00	1320.00	1724.00	641.21
6.60	0	387.66	632.00	657.00	955.08	567.42
6.60	.87	351.61	632.00	657.00	977.64	626.03
6.60	.40	335.25	632.00	657.00	989.34	654.09
6.60	1.07	290.70	632.00	657.00	1021.21	730.51
6.80	0	752.02	882.00	910.00	1033.61	280.79
6.80	1.12	744.45	882.00	910.00	1039.76	295.30
6.80	.52	740.58	882.00	910.00	1042.60	302.02
6.80	1.37	720.67	882.00	910.00	1050.13	329.46
7.00	0	686.00	984.00	1052.00	1482.15	712.66
7.00	1.15	652.97	984.00	1052.00	1531.60	818.78
7.00	.54	637.35	984.00	1052.00	1550.40	864.37
7.00	1.48	594.95	984.00	1052.00	1601.45	1006.50

SECNO	DIFWSP	SSTA	STCHL	STCHR	ENDST	TOPWID
7.00	0	1000.00	1000.00	1050.00	1050.00	50.00
7.00	1.04	1000.00	1000.00	1050.00	1050.00	50.00
7.00	.46	1000.00	1000.00	1050.00	1050.00	50.00
7.00	1.13	1000.00	1000.00	1050.00	1050.00	50.00
7.00	0	1000.00	1000.00	1050.00	1050.00	50.00
7.00	1.08	1000.00	1000.00	1050.00	1050.00	50.00
7.00	.50	1000.00	1000.00	1050.00	1050.00	50.00
7.00	2.59	1000.00	1000.00	1050.00	1050.00	50.00
1.00	0	172.68	500.00	535.00	984.12	748.22
1.00	1.31	131.94	500.00	535.00	1017.45	861.28
1.00	.66	118.74	500.00	535.00	1031.80	908.88
1.00	2.93	64.46	500.00	535.00	1107.32	1042.86
500.00	0	132.63	250.00	268.00	464.71	272.47
500.00	.94	103.13	250.00	268.00	482.61	340.32
500.00	.60	86.39	250.00	268.00	492.03	374.47
500.00	2.62	52.86	250.00	268.00	522.98	470.12
1000.00	0	44.09	150.00	161.00	300.34	242.55
1000.00	.91	38.61	150.00	161.00	306.30	262.07
1000.00	.36	36.47	150.00	161.00	308.62	269.70
1000.00	.79	31.76	150.00	161.00	313.74	281.98
1200.00	0	47.40	150.00	158.00	255.66	208.26
1200.00	1.13	36.10	150.00	158.00	280.23	244.13
1200.00	.50	31.08	150.00	158.00	291.12	260.04
1200.00	1.31	18.02	150.00	158.00	320.40	302.38
1300.00	0	0	150.00	158.00	350.00	350.00
1300.00	.59	0	150.00	158.00	350.00	350.00
1300.00	.28	0	150.00	158.00	350.00	350.00
1300.00	.72	0	150.00	158.00	350.00	350.00
1350.00	0	28.94	200.00	208.00	400.00	371.06
1350.00	.59	26.83	200.00	208.00	400.00	373.17
1350.00	.27	25.85	200.00	208.00	400.00	374.15
1350.00	.71	23.30	200.00	208.00	400.00	376.70
2300.00	0	32.63	50.00	400.00	469.49	436.87
2300.00	.60	30.89	50.00	400.00	476.45	445.56
2300.00	.29	30.04	50.00	400.00	479.83	449.79
2300.00	.75	27.84	50.00	400.00	488.63	460.79
3300.00	0	32.61	50.00	400.00	469.54	436.93
3300.00	.60	30.85	50.00	400.00	476.59	445.74
3300.00	.29	29.99	50.00	400.00	480.06	450.07
3300.00	.76	27.76	50.00	400.00	488.95	461.19

FLOOD INSURANCE ZONE DATA FOR CROSS CR LANGDON ST TO

FLOOD HAZARD FACTOR FOR ENTIRE REACH USING SECTIONS

SECTION NUMBER	CUMULATIVE DISTANCE	ELEVATION DIFFERENCE BETWEEN BASE FLOOD AND		
		10'	20'	0.2'
4,800	0	-3.8	-1.3	3.1
4,800	2.	-3.8	-1.3	3.1
4,800	7.	-3.9	-1.3	3.1
4,800	12.	-3.9	-1.3	3.1
4,800	42.	-3.9	-1.3	3.1
4,800	72.	-3.9	-1.3	3.1
4,900	672.	-3.9	-1.3	3.1
5,000	1272.	-3.9	-1.3	3.1
5,200	1972.	-3.9	-1.3	3.1
5,400	3247.	-3.9	-1.3	3.1
5,500	3747.	-3.7	-1.3	3.1
5,600	4347.	-3.4	-1.2	3.1
5,700	4348.	-2.9	-1.2	3.0
5,800	4748.	-2.4	-1.0	2.8
5,900	5648.	-1.8	-.6	2.2
6,000	6248.	-1.4	-.4	1.5
6,100	6748.	-1.5	-.5	1.5
6,200	7348.	-1.5	-.5	1.4
6,300	7748.	-1.2	-.4	1.3
6,600	9248.	-1.3	-.4	1.1
6,800	10048.	-1.6	-.5	1.4
7,000	11323.	-1.7	-.5	1.5
7,000	11353.	-1.5	-.5	1.1
7,000	11383.	-1.6	-.5	2.6
1,000	11384.	-2.0	-.7	2.9
500,000	11884.	-1.5	-.6	2.6
1000,000	12384.	-1.3	-.4	.8
1200,000	12584.	-1.6	-.5	1.3
1300,000	12684.	-.9	-.3	.7
1350,000	12734.	-.9	-.3	.7
2300,000	13734.	-.9	-.3	.7
3300,000	14734.	-.9	-.3	.8
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WEIGHTED AVG FOR REACH		-2.2	-.7	2.0

FHF FOR THE REACH = 020 WITH 56.6% OF THE REACH WITHIN 1.0 FEET ZONE FOR THE REACH = A 4

CONTINUOUS FLOOD HAZARD FACTORS BY EVEN INCREMENTS

INC NO.	TOTAL LENGTH	AVG ELEVATION DATA			WTD. AVG.	FHR	PERCENT WITHIN
		10'	10'	DIFF.			
1	100.	114.0	117.9	-3.9	-3.9	040	4,800
	2.						100.
							4,800

	7.								
	12.								
	42.								
	72.								
2	200.	114.2	118.1	-3.9	-3.9	040	4,800	100.	
3	300.	114.2	118.1	-3.9	-3.9	040	4,800	100.	
4	400.	114.2	118.1	-3.9	-3.9	040	4,800	100.	
5	500.	114.2	118.1	-3.9	-3.9	040	4,800	100.	
6	600.	114.2	118.1	-3.9	-3.9	040	4,800	100.	
	672.								
7	700.	114.2	118.1	-3.9	-3.9	040	4,900	100.	
8	800.	114.2	118.1	-3.9	-3.9	040	4,900	100.	
9	900.	114.2	118.1	-3.9	-3.9	040	4,900	100.	
10	1000.	114.3	118.1	-3.9	-3.9	040	4,900	100.	
11	1100.	114.3	118.1	-3.9	-3.9	040	4,900	100.	
12	1200.	114.3	118.2	-3.9	-3.9	040	4,900	100.	
	1272.								
13	1300.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
14	1400.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
15	1500.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
16	1600.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
17	1700.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
18	1800.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
19	1900.	114.3	118.2	-3.9	-3.9	040	5,000	100.	
	1972.								
20	2000.	114.3	118.2	-3.9	-3.9	040	5,200	100.	
21	2100.	114.3	118.2	-3.9	-3.9	040	5,200	100.	
22	2200.	114.3	118.2	-3.9	-3.9	040	5,200	100.	
23	2300.	114.3	118.2	-3.9	-3.9	040	5,200	100.	
24	2400.	114.3	118.2	-3.9	-3.9	040	5,200	100.	
25	2500.	114.4	118.2	-3.9	-3.9	040	5,200	100.	
26	2600.	114.4	118.2	-3.9	-3.9	040	5,200	100.	
27	2700.	114.4	118.3	-3.9	-3.9	040	5,200	100.	
28	2800.	114.4	118.3	-3.9	-3.9	040	5,200	100.	
29	2900.	114.4	118.3	-3.9	-3.9	040	5,200	100.	
30	3000.	114.4	118.3	-3.9	-3.9	040	5,200	100.	
31	3100.	114.4	118.3	-3.9	-3.9	040	5,200	100.	
32	3200.	114.4	118.3	-3.9	-3.9	040	5,200	100.	
	3247.								
33	3300.	114.5	118.3	-3.9	-3.9	040	5,400	100.	
34	3400.	114.5	118.4	-3.8	-3.9	040	5,400	100.	
35	3500.	114.6	118.4	-3.8	-3.9	040	5,400	100.	
36	3600.	114.7	118.5	-3.8	-3.9	040	5,400	100.	
37	3700.	114.8	118.5	-3.7	-3.9	040	5,400	100.	
	3747.								
38	3800.	114.8	118.5	-3.7	-3.9	040	5,500	100.	
39	3900.	114.9	118.6	-3.7	-3.9	040	5,500	100.	
40	4000.	115.0	118.6	-3.6	-3.9	040	5,500	100.	
41	4100.	115.1	118.6	-3.6	-3.8	040	5,500	100.	
42	4200.	115.2	118.7	-3.5	-3.8	040	5,500	100.	
43	4300.	115.2	118.7	-3.5	-3.8	040	5,500	100.	
	4347.								
	4348.								
44	4400.	116.1	119.0	-2.9	-3.8	040	5,600	100.	
45	4500.	116.3	119.1	-2.8	-3.8	040	5,700	100.	
46	4600.	116.6	119.2	-2.7	-3.8	040	5,700	98.	
47	4700.	116.9	119.4	-2.5	-3.7	035	5,700	96.	
	4748.								
48	4800.	117.1	119.5	-2.4	-3.7	035	5,800	94.	
49	4900.	117.4	119.7	-2.3	-3.7	035	5,800	92.	
50	5000.	117.6	119.8	-2.3	-3.7	035	5,800	92.	
51	5100.	117.8	120.0	-2.2	-3.6	035	5,800	90.	
52	5200.	118.1	120.2	-2.1	-3.6	035	5,800	88.	
53	5300.	118.3	120.3	-2.0	-3.6	035	5,800	87.	
54	5400.	118.5	120.5	-2.0	-3.5	035	5,800	85.	
55	5500.	118.8	120.7	-1.9	-3.5	035	5,800	85.	

56	5600.	119.0	120.0	-1.0	-3.9	035	84.
	5640.				SEC.	5.900	
57	5700.	119.3	121.0	-1.8	-3.4	035	82.
58	5800.	119.6	121.3	-1.7	-3.4	035	81.
59	5900.	119.9	121.6	-1.6	-3.4	035	81.
60	6000.	120.3	121.9	-1.6	-3.4	035	80.
61	6100.	120.7	122.2	-1.5	-3.3	035	79.
62	6200.	121.0	122.4	-1.4	-3.3	035	79.
	6240.				SEC.	6.000	
63	6300.	121.3	122.7	-1.4	-3.3	035	78.
64	6400.	121.6	122.9	-1.4	-3.2	030	78.
65	6500.	121.7	123.2	-1.4	-3.2	030	77.
66	6600.	121.9	123.4	-1.5	-3.2	030	77.
67	6700.	122.1	123.6	-1.5	-3.2	030	76.
	6740.				SEC.	6.100	
68	6800.	122.3	123.8	-1.5	-3.1	030	75.
69	6900.	122.5	124.0	-1.5	-3.1	030	75.
70	7000.	122.7	124.2	-1.5	-3.1	030	74.
71	7100.	122.9	124.4	-1.5	-3.1	030	73.
72	7200.	123.1	124.6	-1.5	-3.0	030	74.
73	7300.	123.3	124.7	-1.5	-3.0	030	73.
	7340.				SEC.	6.200	
74	7400.	123.5	124.9	-1.4	-3.0	030	72.
75	7500.	123.8	125.2	-1.4	-3.0	030	72.
76	7600.	124.0	125.4	-1.3	-3.0	030	71.
77	7700.	124.3	125.6	-1.3	-2.9	030	70.
	7740.				SEC.	6.300	
78	7800.	124.6	125.9	-1.2	-2.9	030	71.
79	7900.	124.9	126.1	-1.2	-2.9	030	61.
80	8000.	125.2	126.4	-1.2	-2.9	030	33.
81	8100.	125.5	126.7	-1.2	-2.8	030	27.
82	8200.	125.8	127.0	-1.2	-2.8	030	27.
83	8300.	126.1	127.3	-1.2	-2.8	030	27.
84	8400.	126.4	127.6	-1.2	-2.8	030	25.
85	8500.	126.7	127.9	-1.2	-2.8	030	26.
86	8600.	127.0	128.2	-1.2	-2.8	030	24.
87	8700.	127.3	128.5	-1.2	-2.7	025	23.
88	8800.	127.6	128.8	-1.3	-2.7	025	23.
89	8900.	127.9	129.1	-1.3	-2.7	025	22.
90	9000.	128.2	129.4	-1.3	-2.7	025	22.
91	9100.	128.5	129.7	-1.3	-2.7	025	22.
92	9200.	128.8	130.0	-1.3	-2.7	025	21.
	9240.				SEC.	6.600	
93	9300.	129.0	130.3	-1.3	-2.6	025	20.
94	9400.	129.2	130.5	-1.3	-2.6	025	21.
95	9500.	129.4	130.7	-1.4	-2.6	025	20.
96	9600.	129.5	130.9	-1.4	-2.6	025	20.
97	9700.	129.7	131.1	-1.5	-2.6	025	20.
98	9800.	129.8	131.3	-1.5	-2.6	025	19.
99	9900.	130.0	131.5	-1.5	-2.6	025	18.
100	10000.	130.1	131.7	-1.6	-2.6	025	20.
	10040.				SEC.	6.800	
101	10100.	130.3	131.9	-1.6	-2.6	025	21.
102	10200.	130.4	132.0	-1.6	-2.5	025	23.
103	10300.	130.5	132.1	-1.6	-2.5	025	23.
104	10400.	130.6	132.3	-1.7	-2.5	025	23.
105	10500.	130.7	132.4	-1.7	-2.5	025	24.
106	10600.	130.8	132.5	-1.7	-2.5	025	25.
107	10700.	130.9	132.6	-1.7	-2.5	025	25.
108	10800.	131.0	132.7	-1.7	-2.5	025	30.
109	10900.	131.1	132.8	-1.7	-2.5	025	31.
110	11000.	131.2	132.9	-1.7	-2.5	025	33.
111	11100.	131.4	133.0	-1.7	-2.5	025	34.
112	11200.	131.5	133.1	-1.7	-2.5	025	36.
113	11300.	131.6	133.3	-1.7	-2.5	025	36.
	11320.				SEC.	7.000	

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INC NO.	SEC.	7.000
114	11400.	131.8 133.8 =2.0 -2.5 025 38.
115	11500.	131.9 133.8 -1.9 -2.4 025 39.
116	11600.	132.1 133.9 -1.8 -2.4 025 40.
117	11700.	132.3 134.0 =1.7 -2.4 025 41.
118	11800.	132.5 134.1 -1.7 -2.4 025 42.
	11884.	
119	11900.	132.7 134.3 -1.6 -2.4 025 43.
120	12000.	133.4 134.9 -1.5 -2.4 025 44.
121	12100.	134.3 135.7 -1.5 -2.4 025 45.
122	12200.	135.2 136.6 -1.4 -2.4 025 45.
123	12300.	136.1 137.5 -1.3 -2.4 025 47.
	12384.	
124	12400.	137.0 138.3 -1.3 -2.4 025 48.
125	12500.	137.7 139.0 -1.4 -2.4 025 48.
	12584.	
126	12600.	138.9 140.4 -1.5 -2.4 025 48.
	12684.	
127	12700.	144.4 145.6 -1.2 -2.4 025 49.
	12734.	
128	12800.	148.9 149.8 =.9 -2.3 025 48.
129	12900.	148.9 149.8 =.9 -2.3 025 50.
130	13000.	148.9 149.8 =.9 -2.3 025 49.
131	13100.	148.9 149.8 =.9 -2.3 025 50.
132	13200.	148.9 149.8 =.9 -2.3 025 50.
133	13300.	148.9 149.8 =.9 -2.3 025 50.
134	13400.	148.9 149.8 =.9 -2.3 025 50.
135	13500.	148.9 149.8 =.9 -2.3 025 50.
136	13600.	148.9 149.8 =.9 -2.3 025 51.
137	13700.	148.9 149.8 =.9 -2.2 020 54.
	13734.	
138	13800.	148.9 149.8 =.9 -2.2 020 56.
139	13900.	148.9 149.8 =.9 -2.2 020 58.
140	14000.	148.9 149.8 =.9 -2.2 020 59.
141	14100.	148.9 149.8 =.9 -2.2 020 59.
142	14200.	148.9 149.8 =.9 -2.2 020 58.
143	14300.	148.9 149.8 =.9 -2.2 020 58.
144	14400.	148.9 149.8 =.9 -2.2 020 58.
145	14500.	148.9 149.8 =.9 -2.2 020 58.
146	14600.	148.9 149.8 =.9 -2.2 020 58.
147	14700.	148.9 149.8 =.9 -2.2 020 57.
	14734.	

THIS REACH CAN BE SUBDIVIDED BY INC NO. TO MEET FIA REQUIREMENTS  
INPUT 20N WHERE N IS THE NUMBER OF REACHES AND THEN INPUT THE END  
OF EACH REACH BY INC NO. FOR EXAMPLE, 202 60 147  
A NEGATIVE INC NO. WILL SUPPRESS INTERMEDIATE INC OUTPUT.

POSSIBLE ERROR SECNO= 500.00 PROFILE= 1 CRITICAL DEPTH ASSUMED  
POSSIBLE ERROR SECNO= 500.00 PROFILE= 1 20 TRIALS REQUIRED TO BALANCE WSEL



\*\*\*\*\*  
INTERACTIVE NEC2 VERSION UPDATED SEPT 1976  
ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
\*\*\*\*\*

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\* AS OF 2 SEPT 1976, THE PROGRAM HAS BEEN UPDATED TO INCLUDE MODIFICATION 59 AND ERROR CORRECTION 10. THE PURPOSE OF  
\* ICATION 59 IS TO

\* [1] PROVIDE A NEW INTERPOLATION SCHEME FOR CALCULATING ENCROACHMENT STATIONS BY METHODS 3 AND 4, PREVIOUSLY, L  
\* INTERPOLATION WAS USED TO CALCULATE ENCROACHMENTS. NOW, THE INTERPOLATION IS BASED ON A PARABOLIC APPROXIM  
\* OF CONVEYANCE VERSUS DISTANCE,

\* [2] FURTHER DEVELOPMENT OF MODIFICATION 54 WHICH PROVIDES FOR THE NH CARD TO VARY #N# VALUES IN THE CHANNEL. T  
\* PROGRAM WILL NOW ALLOW BOTH A CHANGE IN #N# VALUES IN THE CHANNEL (MOD. 54 AS PRESENTLY USED) AND, IF NO #N  
\* VARIATION IS DEFINED IN THE CHANNEL WHEN THE NH CARD IS USED, THE CHANNEL WILL NOT BE SEGMENTED FOR FLOW CO  
\* TATION. THIS MODIFICATION ALLOWS MORE FLEXIBILITY,

\* [3] COMMENT CARDS (C CARDS) ARE NOW PRINTED IN THE DATA LISTING,

\* [4] EXPANDS PRINTOUT OF THE SPECIAL BRIDGE ROUTINE TO INCLUDE TRAPEZOIDAL CALCULATIONS FOR OUTPUT ANALYSIS. STA  
\* TESTS RELATING TO THE SPECIAL BRIDGE ROUTINE WILL BE AFFECTED BY THIS CHANGE. THE PRINTOUT OF CALCULATED CH  
\* AREA IS BASED ON THE DEFINED TRAPEZOID UP TO THE BRIDGE WATER SURFACE ELEVATION, CALCULATED CHANNEL AREA SH  
\* BE CLOSE TO THE VALUE OF THE PREVIOUS SECTION'S CHANNEL AREA. TRAPEZOID/AREA IS THE AREA OF THE TRAPEZOID  
\* ELLC. TRAPEZOID/AREA SHOULD BE CLOSE TO INPUT ITEM BAREA. PLEASE NOTE THAT NUMERICAL RESULTS WILL NOT BE A

\* [5] THE FLOW DISTRIBUTION PRINTOUT MAY NOW BE REQUESTED FOR ANY PARTICULAR SECTION (X2 CARD WITH 15 IN 10TH FIE

\* THE PURPOSE OF ERROR CORRECTION 10 IS TO

\* [1] ALLOW THE USE OF THE EFFECTIVE AREA OPTION WHEN FLOW IS PRESSURE AND WEIR FLOW,

\* [2] CORRECT THE WETTED PERIMETER CALCULATION IN THE NORMAL BRIDGE ROUTINE,

\* [3] ACCOUNT FOR THE VERTICAL WALL AT THE ENCROACHMENT STATION WHEN CALCULATING CONVEYANCE,

\* A FORMAL CHANGE NOTICE CONCERNING THE ABOVE WILL BE MAILED IN APPROXIMATELY ONE MONTH. ANY QUESTIONS ABOUT THESE P  
\* CHANGES CAN BE DIRECTED TO ALLAN OTO (FTS 448-2105 OR 448-3292),  
\*\*\*\*\*

T1 FPMS BR FAYETTEVILLE NC FIS  
T2 10 YR NATURAL  
T3 CROSS CR LANGDON ST TO ROSES LAKE

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	0	WSEL	FO
	-1.	6.	-0	-0	0,000170	-0	-0	-0	115,000	0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1,000	-0	-1,000	-0	-0	-0	-0	-0	-0	0
J3	-2,000	1,000	43,000	42,000	3,000	10,000	50,000	0	38,000	50,000
J3	53,000	21,000	22,000	54,000	4,000	0	201,000	0	-0	-0
NC	,150	,150	,060	,200	,400	-0	-0	-0	-0	-0
OT	7,000	2560,000	2560,000	2560,000	2560,000	1100,000	2000,000	4420,000	-0	-0
ET	-0	0	9,400	300,200	300,200	-0	-0	-0	-0	-0
X1	4,800	30,000	593,000	634,000	0	0	0	0	0	-0
GR	140,000	50,000	137,300	58,000	124,200	208,000	114,900	403,000	109,500	503,000
GR	107,200	565,000	102,200	585,000	100,300	593,000	105,400	594,000	104,400	596,000
GR	100,000	600,000	99,500	605,000	100,300	608,000	101,600	608,000	109,900	634,000
GR	109,400	658,000	110,400	708,000	110,900	758,000	112,600	808,000	114,600	858,000
GR	115,700	908,000	118,000	958,000	119,500	1008,000	122,500	1058,000	130,000	1180,000
GR	132,000	1200,000	134,000	1280,000	136,000	1370,000	138,000	1400,000	140,000	1430,000
X1	4,800	0	0	0	2,000	2,000	2,000	1,000	1,000	-0
X1	4,800	29,000	600,000	632,000	5,000	5,000	5,000	0	0	-0
GR	140,000	35,000	138,000	50,000	136,000	60,000	134,000	105,000	130,000	160,000
GR	125,500	250,000	122,000	300,000	119,300	350,000	116,300	400,000	114,400	450,000
GR	112,800	500,000	111,600	550,000	111,200	600,000	99,700	600,000	99,700	632,000
GR	110,700	632,000	110,500	650,000	110,900	700,000	111,200	750,000	111,900	800,000
GR	113,300	850,000	114,900	900,000	116,900	934,000	119,200	985,000	121,500	1039,000
GR	124,300	1090,000	130,000	1155,000	138,000	1270,000	140,000	1340,000	-0	-0
X1	4,800	0	0	0	5,000	5,000	5,000	1,000	1,000	-0
SB	1,250	2,040	2,500	0	32,000	2,000	270,000	0	0	0
X1	4,800	29,000	600,000	632,000	30,000	30,000	30,000	0	0	-0
X2	0	0	1,000	108,700	110,500	-0	-0	-0	-0	-0
BT	10,000	35,000	140,000	108,700	400,000	116,300	108,700	550,000	111,600	108,700
BT	650,000	110,500	108,700	800,000	111,900	108,700	900,000	114,900	108,700	1090,000
BT	124,300	108,700	1155,000	130,000	108,700	1270,000	138,000	108,700	1340,000	140,000
BT	108,700	0	0	0	0	0	0	0	0	0
GR	140,000	35,000	138,000	50,000	136,000	60,000	134,000	105,000	130,000	160,000
GR	125,500	250,000	122,000	300,000	119,300	350,000	116,300	400,000	114,400	450,000
GR	112,800	500,000	111,600	550,000	111,200	600,000	99,700	600,000	99,700	632,000
GR	110,700	632,000	110,500	650,000	110,900	700,000	111,200	750,000	111,900	800,000
GR	113,300	850,000	114,900	900,000	116,900	934,000	119,200	985,000	121,500	1039,000
GR	124,300	1090,000	130,000	1155,000	138,000	1270,000	140,000	1340,000	-0	-0
X1	4,800	35,000	597,000	640,000	30,000	30,000	30,000	0	0	-0
GR	140,000	50,000	138,000	60,000	136,000	70,000	134,000	120,000	130,000	170,000
GR	124,600	240,000	117,400	374,000	114,300	429,000	109,000	558,000	102,900	597,000
GR	100,500	600,000	100,000	608,000	100,200	612,000	100,600	623,000	100,700	632,000

GR	188,000	648,000	187,400	802,000	180,400	729,000	180,400	740,000	118,000	828,000
GR	112,000	850,000	114,000	870,000	116,000	895,000	118,000	910,000	120,000	955,000
GR	122,000	1860,000	124,000	1090,000	126,000	1110,000	128,000	1135,000	130,000	1145,000
GR	132,000	1175,000	134,000	1210,000	136,000	1250,000	138,000	1255,000	140,000	1265,000
ET	-0	-0	-0	9,100	-0	-0	-0	-0	139,000	539,000
X1	4,900	20,000	370,000	400,000	600,000	600,000	600,000	-0	-0	-0
GR	120,000	20,000	118,000	40,000	116,000	70,000	114,000	120,000	112,000	190,000
GR	110,000	220,000	108,000	240,000	106,000	290,000	104,000	370,000	100,500	383,000
GR	100,500	395,000	104,000	400,000	106,000	440,000	108,000	480,000	110,000	520,000
GR	112,000	600,000	114,000	770,000	116,000	830,000	118,000	865,000	120,000	930,000
ET	-0	-0	-0	9,100	-0	-0	-0	-0	324,000	874,000
X1	5,000	12,000	665,000	683,000	600,000	600,000	600,000	0	0	-0
GR	130,000	0	120,000	65,000	110,000	250,000	108,000	520,000	105,100	665,000
GR	99,900	668,000	99,900	680,000	105,100	683,000	108,000	820,000	110,000	880,000
GR	120,000	1140,000	130,000	1200,000	-0	-0	-0	-0	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	613,000	1163,000
X1	5,200	24,000	896,000	929,000	700,000	700,000	700,000	0	0	-0
GR	130,000	125,000	120,000	300,000	118,000	340,000	116,000	370,000	114,000	440,000
GR	112,000	480,000	110,000	500,000	108,400	843,000	106,900	864,000	105,400	892,000
GR	106,000	896,000	103,700	900,000	102,400	902,000	102,900	906,000	103,800	913,000
GR	106,300	915,000	108,000	929,000	110,000	1235,000	112,000	1295,000	114,000	1340,000
GR	116,000	1385,000	118,000	1420,000	128,000	1440,000	130,000	1510,000	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	738,000	1038,000
X1	5,400	28,000	993,000	1010,000	1275,000	1275,000	1275,000	0	0	-0
GR	130,000	360,000	128,000	400,000	126,000	550,000	124,000	640,000	122,000	690,000
GR	120,000	700,000	118,000	760,000	116,000	780,000	114,000	800,000	112,000	850,000
GR	110,000	900,000	110,000	993,000	108,700	996,000	106,300	1000,000	104,700	1002,000
GR	106,400	1004,000	110,000	1010,000	110,000	1050,000	112,000	1080,000	114,000	1100,000
GR	116,000	1120,000	118,000	1140,000	120,000	1160,000	122,000	1180,000	124,000	1190,000
GR	126,000	1210,000	128,000	1230,000	130,000	1240,000	-0	-0	-0	-0
NC	.150	.150	.065	.200	.400	-0	-0	-0	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	560,000	960,000
X1	5,500	14,000	890,000	908,000	500,000	500,000	500,000	0	0	-0
GR	135,000	0	130,000	170,000	120,000	370,000	112,000	510,000	110,100	890,000
GR	106,000	893,000	106,000	905,000	110,100	908,000	110,900	920,000	111,800	930,000
GR	118,000	1000,000	120,000	1070,000	122,000	1100,000	130,000	1300,000	-0	-0
NC	.150	.150	.070	.200	.400	-0	-0	-0	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	349,000	799,000
X1	5,600	12,000	540,000	558,000	600,000	600,000	600,000	0	0	-0
GR	135,000	0	130,000	25,000	120,000	110,000	114,000	200,000	112,800	540,000
GR	108,200	543,000	108,200	555,000	112,800	558,000	114,000	900,000	120,000	1000,000
GR	130,000	1130,000	135,000	1200,000	-0	-0	-0	-0	-0	-0
NC	.150	.150	.080	.200	.400	-0	-0	-0	-0	-0
ET	-0	-0	-0	300,200	-0	-0	-0	-0	319,000	719,000
X1	5,700	13,000	510,000	528,000	400,000	400,000	0	0	0	-0
GR	135,000	0	130,000	50,000	120,000	180,000	116,000	220,000	115,000	240,000
GR	113,800	510,000	109,500	513,000	109,500	525,000	113,800	528,000	115,000	650,000
GR	120,000	700,000	130,000	800,000	130,000	850,000	-0	-0	-0	-0
ET	-0	-0	-0	300,200	-0	-0	-0	-0	-0	-0
X1	5,800	22,000	570,000	588,000	400,000	400,000	400,000	0	0	-0

GR	130,000	140,000	120,000	100,000	120,000	210,000	124,000	200,000	122,000	300,000
GR	120,000	400,000	110,000	420,000	110,000	450,000	114,000	400,000	114,000	570,000
GR	111,000	573,000	111,000	505,000	114,000	500,000	114,000	820,000	116,000	890,000
GR	110,000	910,000	120,000	930,000	122,000	960,000	124,000	980,000	126,000	1010,000
GR	120,000	1030,000	130,000	1040,000	=0	=0	=0	=0	=0	=0
NC	.150	.150	.000	.200	.400	=0	=0	=0	=0	=0
DT	7,000	1900,000	1900,000	1900,000	1900,000	800,000	1490,000	3300,000	=0	=0
X1	5,900	9,000	600,000	618,000	900,000	900,000	900,000	0	0	=0
GR	140,000	0	130,000	150,000	120,000	200,000	117,000	600,000	114,100	603,000
GR	114,100	615,000	117,000	618,000	130,000	1000,000	140,000	1230,000	=0	=0
X1	6,000	10,000	570,000	588,000	600,000	600,000	600,000	0	0	=0
GR	140,000	0	130,000	100,000	120,000	300,000	118,500	570,000	116,200	573,000
GR	116,200	505,000	118,500	588,000	120,000	750,000	130,000	930,000	140,000	1070,000
ET	=0	=0	=0	9,100	=0	=0	=0	=0	299,000	649,000
X1	6,100	10,000	490,000	500,000	500,000	500,000	500,000	0	0	=0
GR	140,000	80,000	120,000	305,000	119,900	490,000	118,000	493,000	118,000	505,000
GR	119,900	500,000	120,000	660,000	126,000	750,000	128,000	860,000	140,000	1110,000
ET	=0	=0	=0	9,100	=0	=0	=0	=0	359,000	709,000
X1	6,200	10,000	550,000	568,000	600,000	600,000	600,000	0	0	=0
GR	140,000	0	130,000	70,000	122,000	150,000	121,400	550,000	120,000	553,000
GR	120,000	565,000	121,400	568,000	122,000	795,000	130,000	855,000	140,000	1000,000
ET	=0	=0	=0	9,100	=0	=0	=0	=0	1098,000	1398,000
X1	6,300	14,000	1275,000	1320,000	400,000	400,000	400,000	0	0	=0
GR	140,000	900,000	130,000	1030,000	124,000	1140,000	122,600	1275,000	122,400	1295,000
GR	121,800	1304,000	122,300	1310,000	122,500	1320,000	122,400	1363,000	122,800	1391,000
GR	124,000	1630,000	126,000	1710,000	134,000	1810,000	140,000	1920,000	=0	=0
NC	.150	.150	.060	.200	.400	=0	=0	=0	=0	=0
ET	=0	=0	=0	300,200	=0	=0	=0	=0	=0	=0
X1	6,600	21,000	632,000	657,000	1500,000	1500,000	1500,000	0	0	=0
GR	144,000	10,000	142,000	55,000	140,000	95,000	138,000	135,000	137,300	162,000
GR	131,600	282,000	128,300	419,000	128,800	632,000	124,200	642,000	122,600	646,000
GR	122,800	649,000	124,100	650,000	127,900	657,000	126,000	732,000	126,500	892,000
GR	129,700	971,000	133,100	1072,000	138,800	1204,000	138,900	1302,000	142,000	1370,000
GR	144,000	1420,000	=0	=0	=0	=0	=0	=0	=0	=0
X1	6,800	30,000	882,000	918,000	800,000	800,000	800,000	0	0	=0
GR	170,000	45,000	166,000	70,000	164,000	85,000	164,000	155,000	162,000	300,000
GR	160,000	355,000	150,000	475,000	146,000	525,000	144,000	555,000	142,000	620,000
GR	140,000	640,000	134,000	710,000	132,000	740,000	130,000	755,000	128,000	770,000
GR	127,000	864,000	127,000	882,000	126,400	900,000	125,900	908,000	125,100	912,000
GR	126,800	917,000	127,200	918,000	127,400	929,000	126,900	937,000	126,800	956,000
GR	126,600	956,000	126,800	960,000	127,100	975,000	127,200	1013,000	130,000	1032,000
GR	143,600	1107,000	150,800	1180,000	152,700	1193,000	156,000	1215,000	160,000	1260,000
GR	162,000	1290,000	164,000	1330,000	170,000	1430,000	=0	=0	=0	=0
ET	=0	=0	=0	9,100	=0	=0	=0	=0	768,000	1268,000
X1	7,000	35,000	984,000	1052,000	1275,000	1275,000	1275,000	0	0	=0
GR	160,000	100,000	150,000	190,000	146,000	235,000	144,000	340,000	140,000	460,000
GR	135,100	587,000	131,400	693,000	129,200	820,000	130,600	920,000	131,000	971,000
GR	128,800	984,000	128,000	1000,000	127,400	1002,000	127,600	1006,000	128,000	1016,000
GR	128,200	1018,000	128,000	1023,000	127,400	1027,000	127,600	1035,000	127,200	1041,000
GR	120,000	1042,000	128,000	1043,000	128,500	1052,000	130,300	1001,000	131,000	1129,000

GR	134.000	1171.000	134.000	1201.000	139.000	1227.000	129.100	1390.000	132.200	1511.000
GR	140.000	1780.000	140.000	1900.000	142.000	2020.000	150.000	2085.000	160.000	2265.000
ET	-0	-0	-0	300,200	-0	-0	-0	-0	-0	-0
X1	7.000	34.000	1000.000	1050.000	30.000	30.000	30.000	0	0	-0
GR	160.000	60.000	150.000	135.000	148.000	150.000	146.000	295.000	144.000	400.000
GR	141.500	550.000	140.300	600.000	139.200	650.000	137.900	700.000	137.000	750.000
GR	136.600	800.000	136.300	850.000	136.200	900.000	136.400	950.000	136.700	1000.000
GR	126.300	1000.000	126.300	1050.000	136.400	1050.000	136.400	1100.000	136.300	1150.000
GR	136.200	1200.000	136.300	1250.000	136.200	1300.000	136.100	1350.000	136.100	1400.000
GR	136.000	1450.000	136.200	1500.000	136.400	1550.000	136.500	1600.000	138.000	1825.000
GR	140.000	1935.000	142.000	2030.000	150.000	2265.000	160.000	2490.000	-0	-0
SB	1.230	2.040	2.500	0	50.000	3.000	376.000	0	0	0
X1	7.000	34.000	1000.000	1050.000	30.000	30.000	30.000	0	0	-0
X2	0	0	1.000	134.300	136.200	-0	-0	-0	-0	-0
BT	10.000	60.000	160.000	134.300	150.000	148.000	134.300	550.000	141.500	134.300
BT	700.000	137.900	134.300	900.000	136.200	134.300	1000.000	136.700	134.300	1500.000
BT	136.200	134.300	1825.000	138.000	134.300	2030.000	142.000	134.300	2490.000	160.000
BT	134.300	-0	-0	-0	-0	-0	-0	-0	-0	-0
GR	160.000	60.000	150.000	135.000	148.000	150.000	146.000	295.000	144.000	400.000
GR	141.500	550.000	140.300	600.000	139.200	650.000	137.900	700.000	137.000	750.000
GR	136.600	800.000	136.300	850.000	136.200	900.000	136.400	950.000	136.700	1000.000
GR	126.300	1000.000	126.300	1050.000	136.400	1050.000	136.400	1100.000	136.300	1150.000
GR	136.200	1200.000	136.300	1250.000	136.200	1300.000	136.100	1350.000	136.100	1400.000
GR	136.000	1450.000	136.200	1500.000	136.400	1550.000	136.500	1600.000	138.000	1825.000
GR	140.000	1935.000	142.000	2030.000	150.000	2265.000	160.000	2490.000	-0	-0
ET	-0	-0	-0	9,100	-0	-0	-0	-0	267.000	767.000
X1	1.000	30.000	500.000	535.000	0	0	0	-0	-0	-0
GR	140.700	0	137.500	50.000	134.700	100.000	132.200	150.000	131.300	200.000
GR	130.400	250.000	129.900	300.000	129.000	350.000	128.500	400.000	129.400	450.000
GR	129.100	500.000	128.600	503.000	127.500	515.000	128.400	530.000	129.200	535.000
GR	129.300	550.000	129.700	600.000	131.000	650.000	133.900	700.000	132.000	725.000
GR	129.200	750.000	129.800	800.000	129.000	850.000	129.600	900.000	130.700	950.000
GR	132.300	1000.000	134.600	1050.000	136.500	1100.000	137.800	1150.000	138.200	1165.000
ET	-0	-0	-0	300,200	-0	-0	-0	-0	-0	-0
X1	500.000	30.000	250.000	268.000	500.000	500.000	500.000	-0	2,500	-0
GR	140.700	0	137.500	25.000	134.700	50.000	132.200	75.000	131.300	100.000
GR	130.400	125.000	129.900	150.000	129.000	175.000	128.500	200.000	129.400	225.000
GR	129.100	250.000	128.600	251.000	127.500	258.000	128.400	265.000	129.200	268.000
GR	129.300	275.000	129.700	300.000	131.000	325.000	133.900	350.000	132.000	362.000
GR	129.200	375.000	129.800	400.000	129.000	425.000	129.600	450.000	130.700	475.000
GR	132.300	500.000	134.600	525.000	136.500	550.000	137.800	575.000	138.200	582.000
X1	1000.000	30.000	150.000	161.000	500.000	500.000	500.000	-0	5.000	-0
GR	140.700	0	137.500	15.000	134.700	30.000	132.200	45.000	131.300	60.000
GR	130.400	75.000	129.900	90.000	129.000	105.000	128.500	120.000	129.400	135.000
GR	129.100	150.000	128.600	151.000	127.500	155.000	128.400	159.000	129.200	161.000
GR	129.300	165.000	129.700	180.000	131.000	195.000	133.900	210.000	132.000	217.000
GR	129.200	225.000	129.800	240.000	129.000	255.000	129.600	270.000	130.700	285.000
GR	132.300	300.000	134.600	315.000	136.500	330.000	137.800	345.000	138.200	349.000
ET	-0	-0	4000,200	4000,200	-0	-0	-0	-0	-0	-0
X1	1200.000	12.000	150.000	158.000	200.000	200.000	200.000	-0	-0	-0
X3	10.000	-0	-0	-0	-0	-0	-0	137.800	137.800	-0
GR	143.000	0	138.000	50.000	134.900	100.000	135.000	150.000	132.800	152.000
GR	132.700	155.000	132.800	157.000	135.200	158.000	136.600	200.000	138.000	250.000
GR	140.300	300.000	142.500	350.000	-0	-0	-0	-0	-0	-0

X1	1300.000	-0	-0	-0	100.000	100.000	100.000	-0	-0	-0
X2	-0	-0	1.000	137.600	147.600	-0	-0	-0	-0	-0
X3	10.000	-0	-0	-0	-0	-0	-0	147.600	147.600	-0
BT	12.000	65.000	152.700	-0	100.000	150.100	-0	150.000	149.400	-0
BT	200.000	140.600	-0	250.000	148.200	-0	300.000	147.600	-0	350.000
BT	140.300	-0	400.000	148.000	-0	450.000	148.500	-0	500.000	148.900
BT	-0	550.000	151.200	-0	600.000	151.700	-0	-0	-0	-0
NC	.100	.100	.020	-0	-0	-0	-0	-0	-0	-0
OT	7.000	2300.000	2300.000	2300.000	2300.000	800.000	1490.000	3980.000	-0	-0

X1	1350.000	13.000	200.000	208.000	50.000	50.000	50.000	-0	-0	-0
GR	157.000	0	143.000	50.000	138.000	100.000	134.900	150.000	135.000	200.000
GR	132.800	202.000	132.700	205.000	132.800	207.000	135.200	208.000	136.600	250.000
GR	138.000	300.000	140.300	350.000	142.500	400.000	-0	-0	-0	-0

X1	2300.000	4.000	50.000	400.000	1000.000	1000.000	1000.000	-0	-0	-0
GR	160.000	0	143.000	50.000	143.000	400.000	160.000	600.000	-0	-0

X1	3300.000	-0	-0	-0	1000.000	1000.000	1000.000	-0	-0	-0
EJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0

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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 50 YR NATURAL  
 T3 CROSS CR LANGDON ST TO ROSES LAKE

J1	ICHECK	ING	NINV	IDIR	STRT	NETRIC	HVINS	Q	WSEL	FO
	-0	7.	-0	00	,000170	00	-0	-0	117.000	-0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IRW	CHNIM	ITRACE
	2.000	-0	1.000	00	-0	00	-0	-0	-0	00

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 INTERACTIVE MEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1 FPMS BR FAYETTEVILLE NC FIS  
 T2 100 YR NATURAL  
 T3 CROSS CR LANGDON ST TO ROSES LAKE

J1	ICHECK	INO	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-0	2.	-0	-0	-0	-0	-0	-0	118,000	-0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBM	CHNIM	ITRACE
	3.000	-0	-1.000	-0	-0	-0	-0	-0	-0	-0



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 INTERACTIVE HEC2 VERSION UPDATED SEPT 1976  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08,09,10  
 MODIFICATIONS 50,51,52,53,54,55,56,57,58,59  
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T1      FPHS DR FAYETTEVILLE NC FIS  
 T2      500 YR NATURAL  
 T3      CROSS CR LANGDON ST TO ROSES LAKE

J1	ICHECK	IND	NINV	IDIR	STRT	METRIC	HVINS	O	WSEL	FQ
	.0	0.	.0	.0	.000170	.0	.0	.0	120.000	.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	.0	.1.000	.0	.0	.0	.0	.0	.0	.0

H 21 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th 16th 17th 18th 19th 20th 21st 22nd 23rd 24th 25th 26th 27th 28th 29th 30th 31st 32nd 33rd 34th 35th 36th 37th 38th 39th 40th 41st 42nd 43rd 44th 45th 46th 47th 48th 49th 50th 51st 52nd 53rd 54th 55th 56th 57th 58th 59th 60th 61st 62nd 63rd 64th 65th 66th 67th 68th 69th 70th 71st 72nd 73rd 74th 75th 76th 77th 78th 79th 80th 81st 82nd 83rd 84th 85th 86th 87th 88th 89th 90th 91st 92nd 93rd 94th 95th 96th 97th 98th 99th 100th