
 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIB. GARDNER 10 BASIN 15
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-1.	2.	0.	0.	0.003000	0.0	0.0	0.	210.000	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	-1.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
J3	1.000	34.000	3.000	4.000	27.000	28.000	26.000	0.0	0.0	0.0
NC	0.085	0.085	0.060	0.100	0.300	0.0	0.0	0.0	0.0	0.0
WT	5.000	1200.000	2200.000	3800.000	5150.000	3800.000	0.0	0.0	0.0	0.0
ET	5.000	0.0	0.0	0.0	0.0	10.400	0.0	0.0	0.0	0.0
X1	10000.000	23.000	1419.000	1459.000	10000.000	10000.000	10000.000	0.0	0.0	0.0
GR	234.700	1000.000	229.100	1050.000	223.900	1100.000	218.700	1150.000	215.700	1172.000
GR	214.400	1200.000	215.600	1250.000	214.900	1300.000	215.000	1350.000	214.800	1400.000
GR	213.600	1419.000	207.300	1438.000	206.900	1438.000	206.400	1443.000	206.600	1448.000
GR	206.700	1452.000	207.300	1452.000	215.300	1459.000	215.700	1500.000	217.700	1534.000
GR	220.900	1550.000	229.400	1600.000	234.300	1630.000	0.0	0.0	0.0	0.0
WT	5.000	900.000	1450.000	1750.000	3200.000	1750.000	0.0	0.0	0.0	0.0
X1	11800.000	12.000	1282.000	1360.000	1800.000	1800.000	1800.000	0.0	-1.800	0.0
GR	236.500	1200.000	224.300	1262.000	224.300	1232.000	216.100	1319.000	215.800	1322.000
GR	216.100	1325.000	217.700	1340.000	224.800	1360.000	224.400	1400.000	228.700	1462.000
GR	234.900	1478.000	237.500	1500.000	0.0	0.0	0.0	0.0	0.0	0.0
X1	11850.000	15.000	1100.000	1160.000	50.000	50.000	50.000	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	231.100	231.100	0.0
GR	235.900	1000.000	233.400	1050.000	232.900	1100.000	228.800	1100.000	226.800	1111.000
GR	223.000	1120.000	215.800	1127.000	215.000	1130.000	214.900	1133.000	215.800	1137.000
GR	225.400	1152.000	227.500	1160.000	232.800	1160.000	233.600	1200.000	239.200	1300.000
SB	0.900	1.500	2.500	0.0	60.000	1.250	507.000	0.0	0.0	0.0
X1	11873.000	0.0	0.0	0.0	23.000	23.000	23.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	231.100	232.800	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	232.900	232.800	0.0
BT	6.000	1000.000	235.900	0.0	1050.000	233.400	0.0	1100.000	232.900	231.100
BT	1160.000	232.800	231.100	1200.000	233.600	0.0	1300.000	239.200	0.0	0.0
X1	11923.000	12.000	1282.000	1360.000	50.000	50.000	50.000	0.0	0.0	0.0
GR	236.500	1200.000	224.300	1262.000	224.300	1282.000	216.100	1319.000	215.800	1322.000
GR	216.100	1325.000	217.700	1340.000	224.800	1360.000	224.400	1400.000	228.700	1462.000
GR	234.900	1478.000	237.500	1500.000	0.0	0.0	0.0	0.0	0.0	0.0
WT	5.000	850.000	1400.000	1700.000	3175.000	1700.000	0.0	0.0	0.0	0.0
X1	14923.000	27.000	1232.000	1258.000	3000.000	3000.000	3000.000	0.0	0.0	0.0
GR	272.100	1000.000	268.700	1031.000	264.000	1050.000	256.500	1079.000	254.500	1098.000

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

10 YEAR FLOOD WATER SURF

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH
10000.00	10000.00	0.0	0.0	206.40	1200.00	215.58	217.34	215.83	309.89	0.0	0.0	4.28
11800.00	1800.00	0.0	0.0	214.00	900.00	221.03	167.61	221.20	65.78	0.0	0.0	3.34
11850.00	50.00	0.0	0.0	214.90	900.00	220.55	43.77	222.44	22.04	0.0	0.0	11.02
11873.00	23.00	232.80	231.10	214.90	900.00	220.81	48.00	222.45	22.69	0.0	0.0	10.30
11923.00	50.00	0.0	0.0	215.80	900.00	222.78	165.11	222.96	65.45	0.0	0.0	3.38
14923.00	3000.00	0.0	0.0	246.30	850.00	250.89	37.42	252.40	30.25	0.0	0.0	10.62

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH @	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
10000.000	1200.000	215.576	0.0	0.0	0.0	309.893	0.0	10000.000
11800.000	900.000	221.025	0.0	5.449	0.0	65.782	0.0	1800.000
11850.000	900.000	220.550	0.0	-0.475	0.0	22.041	0.0	50.000
11873.000	900.000	220.808	0.0	0.257	0.0	22.693	0.0	23.000
11923.000	900.000	222.780	0.0	1.972	0.0	65.451	0.0	50.000
14923.000	850.000	250.891	0.0	28.111	0.0	30.250	0.0	3000.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	11.170	0.0

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T1 TRIB. GARDNER 10 BASIN 15
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	4.	0.	0.	0.003000	0.0	0.0	0.	215.000	0.0

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	3.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300

SECNO	DEPTH	CWSEL	CRIWS	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	ENUST

10000.00	11.73	218.13	0.0	215.00	218.38	0.25	0.0	0.0	215.60
3800.	1647.	1897.	256.	803.	355.	157.	0.	0.	215.30
0.0	2.05	5.34	1.64	0.085	0.060	0.085	0.0	206.40	1154.19
0.003019	10000.	10000.	10000.	0	0	5	0.0	381.95	1536.14

11800.00	9.33	223.33	0.0	0.0	223.57	0.24	5.19	0.00	222.50
1750.	14.	1722.	14.	18.	438.	25.	37.	11.	223.00
0.13	0.76	3.93	0.56	0.085	0.060	0.085	0.060	214.00	1257.79
0.002614	1800.	1800.	1800.	1	0	1	0.0	152.71	1410.50

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

5720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	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	ENUST

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 231.10 ELREA= 231.10

11850.00	7.87	222.77	222.77	0.0	225.31	2.54	0.33	0.0	232.90
1750.	0.	1750.	0.	0.	137.	0.	37.	11.	232.80
0.13	0.0	12.78	0.0	0.085	0.060	0.085	0.060	214.90	1120.22

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T1 TRIB. GARDNER 10 BASIN 15
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INQ NINV IDIR STRT METRIC HVINS Q WSEL FQ
 -10. 5. 0. 0. 0.003000 0.0 0.0 0. 217.000 0.0

J2 NPROF IPLIT PRFVS XSECV XSECH FN ALLDC IBW CHNIM ITRACE
 4.000 0.0 -1.000 0.0 0.0 0.0 0.0 0.0 0.0 0.0

CCHV= 0.100 CEHV= 0.300

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	XLN	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENUST

10000.00	12.60	219.00	0.0	217.00	219.26	0.26	0.0	0.0	213.60
5150.	2485.	2214.	451.	1037.	390.	226.	0.	0.	215.30
0.0	2.40	5.68	2.00	0.085	0.060	0.085	0.0	206.40	1147.12
0.003011	10000.	10000.	10000.	0	0	2	0.0	393.38	1540.50

11800.00	10.72	224.72	0.0	0.0	225.14	0.42	5.83	0.05	222.50
3200.	94.	2945.	161.	57.	547.	109.	49.	12.	223.00
0.10	1.65	5.39	1.47	0.085	0.060	0.085	0.060	214.00	1250.72
0.003658	1800.	1800.	1800.	2	0	1	0.0	179.84	1430.56

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

5720 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	XLN	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENUST

OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= 231.10 ELREA= 231.10

11850.00	10.72	225.62	225.62	0.0	228.60	2.98	0.42	0.0	232.90
3200.	0.	3200.	0.	0.	231.	0.	49.	12.	232.80
0.0	0.	0.	0.	0.	0.060	0.060	0.060	214.90	1113.79

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T1 TRIB. GARDNER 10 BASIN 15
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100 YEAR FLOODWAY

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	-10.	6.	0.	0.	0.0	0.0	0.0	0.	0.0	0.0
J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300
 2800 NAT Q1= 217.34 WSEL= 215.58 ENC Q1= 250.59 WSEL= 216.58 RATIO= -0.1530
 NAT Q1= 357. RATIOS LOB,CH,ROB= 0.2726 0.7029 0.0246 WSEL= 216.58
 2096 WSEL NOT GIVEN,AVG. OF MAX,MIN USED
 3280 CROSS SECTION 10000.00 EXTENDED 49868.89 FEET

SECNO	DEPTH	CWSEL	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

4470 ENCROACHMENT STATIONS= 1419.0 1459.0 TYPE= 4 TARGET= 0.297
 10000.00 49896.79 50103.19 0.0 215.58 50103.19 0.00 0.0 0.0 215.60
 3800. 0. 3800. 0. 18. 1995756. 49. 0. 0. 215.30
 0.0 0.00 0.00 0.00 0.085 0.060 0.085 0.0 206.40 1419.00
 0.000000 10000. 10000. 10000. 0 0 1 0.0 40.00 1459.00

2800 NAT Q1= 167.61 WSEL= 221.03 ENC Q1= 228.83 WSEL= 222.03 RATIO= -0.3652
 NAT Q1= 229. RATIOS LOB,CH,ROB= 0.0 1.0000 0.0 WSEL= 222.03
 3685 20 TRIALS USED WSEL,CWSEL
 3280 CROSS SECTION 11800.00 EXTENDED 49868.49 FEET

3470 ENCROACHMENT STATIONS= 1282.0 1360.0 TYPE= 4 TARGET= 0.0
 11800.00 49889.19 50103.19 0.0 221.03 50103.19 0.00 0.00 0.00 222.50
 1750. 0. 1750. 0. 18. 3891064. 49. 121631. 2. 223.00
 1111.74 0.00 0.00 0.00 0.085 0.060 0.085 0.060 214.00 1282.00
 0.000000 1800. 1800. 1800. 21 0 1 0.0 78.00 1360.00

2800 NAT Q1= 43.77 WSEL= 220.55 ENC Q1= 61.43 WSEL= 221.55 RATIO= -0.4035
 NAT Q1= 61. RATIOS LOB,CH,ROB= 0.0 1.0000 0.0 WSEL= 221.55
 3685 20 TRIALS USED WSEL,CWSEL

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

Stream Bed
W.S. profiles

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	TQ	EG	TOPWID	STENCL	STENCR	VCH	
A	10000.00	10000.00	0.0	0.0	206.40	1200.00	215.58	217.34	215.83	309.89	0.0	0.0	4.28
A	10000.00	10000.00	0.0	0.0	206.40	2200.00	216.83	400.99	217.07	355.38	0.0	0.0	4.80
A	10000.00	10000.00	0.0	0.0	206.40	3800.00	218.13	691.59	218.38	381.95	0.0	0.0	5.34
A	10000.00	10000.00	0.0	0.0	206.40	5150.00	219.00	938.47	219.26	393.38	0.0	0.0	5.68
A	10000.00	10000.00	0.0	0.0	206.40	3800.00	50103.18*****	50103.18	40.00	1419.00	1459.00	0.00	
B	11800.00	1800.00	0.0	0.0	214.00	900.00	221.03	167.61	221.20	65.78	0.0	0.0	3.34
B	11800.00	1800.00	0.0	0.0	214.00	1450.00	222.40	254.97	222.65	75.38	0.0	0.0	3.95
B	11800.00	1800.00	0.0	0.0	214.00	1750.00	223.33	342.31	223.57	152.71	0.0	0.0	3.93
B	11800.00	1800.00	0.0	0.0	214.00	3200.00	224.72	529.12	225.14	179.84	0.0	0.0	5.39
B	11800.00	1800.00	0.0	0.0	214.00	1750.00	50103.18*****	50103.18	78.00	1282.00	1360.00	0.00	
	11850.00	50.00	0.0	0.0	214.90	900.00	220.55	43.77	222.44	22.04	0.0	0.0	11.02
	11850.00	50.00	0.0	0.0	214.90	1450.00	222.08	72.26	224.41	25.93	0.0	0.0	12.24
	11850.00	50.00	0.0	0.0	214.90	1750.00	222.77	87.80	225.31	27.68	0.0	0.0	12.78
	11850.00	50.00	0.0	0.0	214.90	3200.00	225.62	168.41	228.60	39.05	0.0	0.0	13.86
	11850.00	50.00	0.0	0.0	214.90	1750.00	50103.18*****	50103.18	60.00	1100.00	1160.00	0.00	
	11873.00	23.00	232.80	231.10	214.90	900.00	220.81	48.00	222.45	22.69	0.0	0.0	10.30
	11873.00	23.00	232.80	231.10	214.90	1450.00	222.39	79.01	224.43	26.71	0.0	0.0	11.46
	11873.00	23.00	232.80	231.10	214.90	1750.00	223.11	95.75	225.33	28.68	0.0	0.0	11.96
	11873.00	23.00	232.80	231.10	214.90	3200.00	225.97	179.73	228.62	41.18	0.0	0.0	13.08
	11873.00	23.00	232.80	231.10	214.90	1750.00	221.81	66.53	50103.18	25.23	0.0	0.0	15.71
C	11923.00	50.00	0.0	0.0	215.80	900.00	222.78	165.11	222.96	65.45	0.0	0.0	3.38
C	11923.00	50.00	0.0	0.0	215.80	1450.00	224.71	298.22	224.91	135.74	0.0	0.0	3.56
C	11923.00	50.00	0.0	0.0	215.80	1750.00	225.59	398.25	225.78	161.71	0.0	0.0	3.56
C	11923.00	50.00	0.0	0.0	215.80	3200.00	228.86	969.10	229.03	223.60	0.0	0.0	3.56
C	11923.00	50.00	0.0	0.0	215.80	1750.00	50103.57*****	50103.57	78.00	1282.00	1360.00	0.00	
D	14923.00	3000.00	0.0	0.0	246.30	850.00	250.89	37.42	252.40	30.25	0.0	0.0	10.62
D	14923.00	3000.00	0.0	0.0	246.30	1400.00	252.19	62.88	254.05	36.17	0.0	0.0	11.87
D	14923.00	3000.00	0.0	0.0	246.30	1700.00	252.73	75.76	254.80	38.62	0.0	0.0	12.53
D	14923.00	3000.00	0.0	0.0	246.30	3175.00	255.18	215.25	256.26	212.88	0.0	0.0	10.59
D	14923.00	3000.00	0.0	0.0	246.30	1700.00	50103.57*****	50103.57	26.00	1232.00	1258.00	0.00	

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH G	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
10000.000	1200.000	215.576	0.0	0.0	0.0	309.893	0.0	10000.000
10000.000	2200.000	216.825	1.249	0.0	0.0	355.380	-45.487	10000.000
10000.000	3800.000	218.128	1.303	0.0	0.0	381.951	-72.058	10000.000
10000.000	5150.000	219.000	0.872	0.0	0.0	393.385	-83.491	10000.000
10000.000	3800.000	50103.180	49884.180	0.0	0.0	40.002	269.891	10000.000
11800.000	900.000	221.025	0.0	5.449	0.0	65.782	0.0	1800.000
11800.000	1450.000	222.403	1.378	5.578	0.0	75.883	-10.101	1800.000
11800.000	1750.000	223.333	0.930	5.205	0.0	152.708	-86.925	1800.000
11800.000	3200.000	224.719	1.386	5.719	0.0	179.839	-114.057	1800.000
11800.000	1750.000	50103.180	49878.460	0.0	0.0	78.002	-12.219	1800.000
11850.000	900.000	220.550	0.0	-0.475	0.0	22.041	0.0	50.000
11850.000	1450.000	222.084	1.534	-0.319	0.0	25.928	-3.887	50.000

11873.000	1750.000	222.774	0.690	-0.889	0.0	27.677	-5.656	50.000
11873.000	3200.000	225.621	2.847	0.902	0.0	39.048	-17.008	50.000
11873.000	1750.000	50103.180	49877.550	0.0	0.0	60.002	-37.961	50.000
11873.000	900.000	220.808	0.0	0.257	0.0	22.693	0.0	23.000
11873.000	1450.000	222.393	1.585	0.309	0.0	26.711	-4.018	23.000
11873.000	1750.000	223.109	0.716	0.335	0.0	27.678	-5.984	23.000
11873.000	3200.000	225.966	2.857	0.345	0.0	41.180	-18.487	23.000
11873.000	1750.000	221.808	-4.158	-49881.370	0.0	25.228	-2.535	23.000
11923.000	900.000	222.780	0.0	1.972	0.0	65.451	0.0	50.000
11923.000	1450.000	224.715	1.935	2.322	0.0	135.739	-70.288	50.000
11923.000	1750.000	225.593	0.878	2.484	0.0	161.714	-96.263	50.000
11923.000	3200.000	228.861	3.268	2.895	0.0	223.601	-158.150	50.000
11923.000	1750.000	50103.566	49874.700	49881.760	0.0	78.002	-12.551	50.000
14923.000	850.000	250.891	0.0	28.111	0.0	30.250	0.0	3000.000
14923.000	1400.000	252.187	1.296	27.472	0.0	36.166	-5.916	3000.000
14923.000	1700.000	252.725	0.538	27.132	0.0	38.622	-6.372	3000.000
14923.000	3175.000	255.183	2.458	26.323	0.0	212.884	-182.634	3000.000
14923.000	1700.000	50103.566	49848.380	0.0	0.0	26.002	4.248	3000.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	11.170	0.0
2	0.0	0.0	14.996	3.825
3	0.0	0.0	18.173	7.003
4	0.0	0.0	27.173	16.003
5	4.000	0.267	6.180	-4.990

1	*****											1
2	HEC2 VERSION UPDATED JAN 1975											2
3	ERROR CORRECTIONS 01,02,03,04,05,06,07,08											3
4	MODIFICATIONS 52,53,54,55,56,57,58											4
5	*****											5
6												6
7												7
8												8
9												9
10	T1 TRIB. GARDNER 10 BASIN 15											10
11	T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855											11
12	T3 100 YEAR FLOOD WATER SURFACE PROFILE											12
13												13
14	J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG	14
15												15
16		0.	4.	0.	0.	0.003000	0.0	0.0	0.	215.000	0.0	16
17												17
18	J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE	18
19												19
20		0.0	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20
21												21
22	J3	1.000	34.000	3.000	4.000	27.000	28.000	26.000	0.0	0.0	0.0	22
23	NC	0.085	0.085	0.060	0.100	0.300	0.0	0.0	0.0	0.0	0.0	23
24	QT	5.000	1200.000	2200.000	3800.000	5150.000	3800.000	0.0	0.0	0.0	0.0	24
25	ET	5.000	0.0	0.0	0.0	0.0	10.400	0.0	0.0	0.0	0.0	25
26												26
27	X1	10000.000	23.000	1419.000	1459.000	10000.000	10000.000	10000.000	0.0	0.0	0.0	27
28	GR	234.700	1000.000	229.100	1050.000	223.900	1100.000	218.700	1150.000	215.700	1172.000	28
29	GR	214.400	1200.000	215.600	1250.000	214.900	1300.000	215.000	1350.000	214.800	1400.000	29
30	GR	213.600	1419.000	207.300	1438.000	206.900	1438.000	206.400	1443.000	206.600	1448.000	30
31	GR	206.700	1452.000	207.300	1452.000	215.300	1459.000	215.700	1500.000	217.700	1534.000	31
32	GR	220.900	1550.000	229.400	1600.000	234.300	1630.000	0.0	0.0	0.0	0.0	32
33	QT	5.000	900.000	1450.000	1750.000	3200.000	1750.000	0.0	0.0	0.0	0.0	33
34												34
35	X1	11800.000	12.000	1282.000	1360.000	1800.000	1800.000	1800.000	0.0	-1.800	0.0	35
36	GR	236.500	1200.000	224.300	1262.000	224.300	1282.000	216.100	1319.000	215.800	1322.000	36
37	GR	216.100	1325.000	217.700	1340.000	224.800	1360.000	224.400	1400.000	228.700	1462.000	37
38	GR	234.900	1478.000	237.500	1500.000	0.0	0.0	0.0	0.0	0.0	0.0	38
39												39
40	X1	11850.000	15.000	1100.000	1160.000	50.000	50.000	50.000	0.0	0.0	0.0	40
41	X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	231.100	231.100	0.0	41
42	GR	235.900	1000.000	233.400	1050.000	232.900	1100.000	228.800	1100.000	226.800	1111.000	42
43	GR	223.000	1120.000	215.800	1127.000	215.000	1130.000	214.900	1133.000	215.800	1137.000	43
44	GR	225.400	1152.000	227.500	1160.000	232.800	1160.000	233.600	1200.000	239.200	1300.000	44
45	SB	0.900	1.500	2.500	0.0	60.000	1.250	507.000	0.0	0.0	0.0	45
46												46
47	X1	11873.000	0.0	0.0	0.0	23.000	23.000	23.000	0.0	0.0	0.0	47
48	X2	0.0	0.0	1.000	231.100	232.800	0.0	0.0	0.0	0.0	0.0	48
49	X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	232.900	232.800	0.0	49
50	BT	6.000	1000.000	235.900	0.0	1050.000	233.400	0.0	1100.000	232.900	231.100	50
51	BT	1160.000	232.800	231.100	1200.000	233.600	0.0	1300.000	239.200	0.0	0.0	51
52												52
53	X1	11923.000	12.000	1282.000	1360.000	50.000	50.000	50.000	0.0	0.0	0.0	53
54	GR	236.500	1200.000	224.300	1262.000	224.300	1282.000	216.100	1319.000	215.800	1322.000	54
55	GR	216.100	1325.000	217.700	1340.000	224.800	1360.000	224.400	1400.000	228.700	1462.000	55
56	GR	234.900	1478.000	237.500	1500.000	0.0	0.0	0.0	0.0	0.0	0.0	56
57	QT	5.000	850.000	1400.000	1700.000	3175.000	1700.000	0.0	0.0	0.0	0.0	57
	X1	14923.000	27.000	1200.000	1300.000	3000.000	3000.000	3000.000	0.0	0.0	0.0	
	GR	272.100	1000.000	268.700	1031.000	264.000	1050.000	256.500	1079.000	254.500	1098.000	

 HEC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 TRIB. GARDNER 10 BASIN 15
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855
 T3 100 YEAR FLOODWAY

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-10.	6.	0.	0.	0.0	0.0	0.0	0.	219.130	0.0

J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CCHV= 0.100 CEHV= 0.300
 2800 NAT Q1= 691.59 WSEL= 218.13 ENC Q1= 691.59 WSEL= 219.13 RATIO= 0.0

NAT Q1= 978. RATIOS LOB,CH,ROB= 0.4883 0.4216 0.0901 WSEL= 219.13										
SECNO	DEPTH	CWSEL	CRINS	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	

3470 ENCROACHMENT STATIONS= 1275.9 1459.0 TYPE= 4 TARGET= 0.293										
10000.00	12.73	219.13	0.0	218.13	219.47	0.34	0.0	0.0	215.60	
3800.	1545.	2255.	0.	612.	395.	0.	0.	0.	215.30	
0.0	2.52	5.71	0.01	0.085	0.060	0.085	0.0	206.40	1275.86	
0.002989	10000.	10000.	10000.	0	0	1	0.0	183.14	1459.00	

2800 NAT Q1= 342.31 WSEL= 223.33 ENC Q1= 443.10 WSEL= 224.33 RATIO= -0.2944
 NAT Q1= 472. RATIOS LOB,CH,ROB= 0.0233 0.9392 0.0375 WSEL= 224.33

3470 ENCROACHMENT STATIONS= 1282.0 1360.0 TYPE= 4 TARGET= 0.061										
11800.00	9.94	223.94	0.0	223.33	224.14	0.20	4.66	0.01	222.50	
1750.	0.	1750.	0.	0.	486.	0.	31.	5.	223.00	
0.14	0.0	3.60	0.01	0.085	0.060	0.085	0.060	214.00	1282.00	
0.001955	1800.	1800.	1800.	4	0	1	0.0	78.00	1360.00	

2800 NAT Q1= 87.80 WSEL= 222.77 ENC Q1= 112.10 WSEL= 223.77 RATIO= -0.2768
 NAT Q1= 112. RATIOS LOB,CH,ROB= 0.0 1.0000 0.0 WSEL= 223.77

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

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

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL GROUND	DISCHARGE (CFS)	CWSEL	TQ	ES	TOPWID	STENCL	STENCR	VCH
10000.00	10000.00	0.0	0.0	206.40	3800.00	218.13	691.59	218.38	381.95	0.0	0.0	5.34
10000.00	10000.00	0.0	0.0	206.40	3800.00	219.13	695.06	219.47	183.14	1275.86	1459.00	5.71
11800.00	1800.00	0.0	0.0	214.00	1750.00	223.33	342.31	223.57	152.71	0.0	0.0	3.93
11800.00	1800.00	0.0	0.0	214.00	1750.00	223.94	395.74	224.14	78.00	1282.00	1360.00	3.60
11850.00	50.00	0.0	0.0	214.90	1750.00	222.77	87.80	225.31	27.68	0.0	0.0	12.78
11850.00	50.00	0.0	0.0	214.90	1750.00	222.77	87.80	225.31	27.68	1100.00	1160.00	12.78
11873.00	23.00	232.80	231.10	214.90	1750.00	223.11	95.75	225.33	28.68	0.0	0.0	11.96
11873.00	23.00	232.80	231.10	214.90	1750.00	224.11	121.17	225.63	32.61	0.0	0.0	9.89
11923.00	50.00	0.0	0.0	215.80	1750.00	225.59	398.25	225.78	161.71	0.0	0.0	3.56
11923.00	50.00	0.0	0.0	215.80	1750.00	225.79	399.77	225.98	78.00	1282.00	1360.00	3.56
14923.00	3000.00	0.0	0.0	246.30	1700.00	252.69	74.97	254.80	38.48	0.0	0.0	12.63
14923.00	3000.00	0.0	0.0	246.30	1700.00	252.82	75.10	255.06	34.05	1104.70	1300.00	12.74

SECTION NUMBER	DISCHARGE CFS	CWSEL	CWSEL DIFF EACH Q	CWSEL DIFF EACH SECTION	CWSEL-WSELK	TOPWID	T.W. DIFF	LENGTH
A 10000.000	3800.000	218.128	0.0	0.0	0.0	381.951	0.0	10000.000
A 10000.000	3800.000	219.130	1.001	0.0	0.0	183.141	198.810	10000.000
B 11800.000	1750.000	223.333	0.0	5.205	0.0	152.708	0.0	1800.000
B 11800.000	1750.000	223.943	0.610	4.813	0.0	78.001	74.707	1800.000
11850.000	1750.000	222.774	0.0	-0.559	0.0	27.677	0.0	50.000
11850.000	1750.000	222.774	-0.000	-1.169	0.0	27.676	0.000	50.000
11873.000	1750.000	223.109	0.0	0.335	0.0	28.678	0.0	23.000
11873.000	1750.000	224.109	1.000	1.335	0.0	32.609	-3.931	23.000
C 11923.000	1750.000	225.593	0.0	2.484	0.0	161.714	0.0	50.000
11923.000	1750.000	225.786	0.193	1.677	0.0	78.001	83.713	50.000
D 14923.000	1700.000	252.694	0.0	27.101	0.0	38.478	0.0	3000.000
14923.000	1700.000	252.818	0.124	27.032	0.0	34.048	4.429	3000.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
1	0.0	0.0	18.168	0.0
2	4.000	0.066	9.394	-8.774