
HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977

ERROR CORR - 01

MODIFICATION - 50,51,52

C

T1 ROWAN COUNTY BASIN E STREAM 14
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 10 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FR
	-1.	2.	0.	0.	0.022000	0.0	0.0	0.	782.000	0.0
J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	0.0	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
J3	VARIABLE CODES FOR SUMMARY PRINTOUT									
	38.000	39.000	40.000	41.000	43.000	42.000	1.000	2.000	26.000	53.000
	54.000	25.000	50.000	0.0	201.000	0.0	0.0	0.0	0.0	0.0
NC	0.055	0.055	0.035	0.100	0.300	0.0	0.0	0.0	0.0	0.0
QT	5.000	112.000	232.000	303.000	489.000	303.000	0.0	0.0	0.0	0.0
ET	5.000	0.0	0.0	0.0	0.0	0.0	-10.400	0.0	0.0	0.0
X1	850.000	10.000	1268.000	1277.000	850.000	850.000	850.000	0.0	0.0	0.0
GR	798.100	1000.000	792.200	1100.000	789.900	1167.000	780.100	1252.000	779.200	1268.000
GR	777.100	1271.000	777.100	1274.000	779.500	1277.000	781.600	1296.000	795.700	1339.000
QT	5.000	112.000	232.000	303.000	489.000	303.000	0.0	0.0	0.0	0.0
X1	1650.000	8.000	1114.000	1119.000	800.000	800.000	800.000	0.0	0.0	0.0
GR	818.600	1000.000	799.700	1100.000	796.700	1114.000	795.000	1115.000	795.000	1116.000
GR	796.200	1119.000	808.900	1200.000	818.500	1300.000	0.0	0.0	0.0	0.0
QT	5.000	74.000	154.000	204.000	337.000	204.000	0.0	0.0	0.0	0.0
X1	3050.000	15.000	1405.000	1412.000	1400.000	1400.000	1400.000	0.0	-4.800	0.0
GR	858.200	1015.000	852.700	1100.000	847.400	1200.000	844.200	1300.000	843.500	1400.000
GR	843.700	1405.000	843.300	1408.000	843.600	1412.000	848.300	1500.000	853.800	1600.000
GR	855.500	1627.000	855.400	1645.000	854.700	1654.000	858.000	1674.000	859.400	1700.000
X1	3100.000	0.0	0.0	0.0	50.000	50.000	50.000	0.0	1.600	0.0
NC	0.025	0.025	0.025	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	3150.000	17.000	1404.000	1406.000	50.000	50.000	50.000	0.0	0.0	0.0
GR	854.300	1000.000	852.500	1080.000	851.400	1097.000	846.100	1197.000	842.900	1297.000
GR	843.000	1404.000	842.000	1404.000	842.000	1406.000	843.000	1406.000	847.000	1497.000
GR	852.500	1597.000	854.200	1624.000	854.100	1642.000	853.400	1651.000	856.700	1671.000

MADE IN U.S.A.

GR 858.100 1697.000 858.800 1700.000 0.0 0.0 0.0 0.0 0.0 0.0
 SB 0.900 1.500 2.500 0.0 2.000 0.010 2.000 0.0 0.0 0.0

RONO PRIVATE DR. MXLCEL 843.0 RDELV 844.4

X1	3168.000	0.0	0.0	0.0	18.000	18.000	18.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	843.000	0.0	0.0	0.0	0.0	0.0	0.0
BT	14.000	1000.000	854.300	0.0	1100.000	852.000	0.0	1200.000	847.500	0.0
BT	1300.000	844.400	0.0	1400.000	844.200	0.0	1404.000	844.400	843.000	1406.000
BT	844.400	843.000	1500.600	847.600	0.0	1600.000	853.500	0.0	1628.000	855.400
BT	0.0	1647.000	855.200	0.0	1657.000	854.400	0.0	1677.000	857.600	0.0
BT	1700.000	858.800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.055	0.055	0.035	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	3218.000	15.000	1405.000	1412.000	50.000	50.000	50.000	0.0	0.0	0.0
GR	858.200	1015.000	852.700	1100.000	847.400	1200.000	844.200	1300.000	843.500	1400.000
GR	843.700	1405.000	843.300	1408.000	843.600	1412.000	848.300	1500.000	853.800	1600.000
GR	855.500	1627.000	855.400	1645.000	854.700	1654.000	858.000	1674.000	859.400	1700.000
X1	3268.000	0.0	0.0	0.0	50.000	50.000	50.000	0.0	1.300	0.0
EJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MADE IN U.S.A.

HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977

ERROR CORR - 01

MODIFICATION - 50,51,52

T1 ROWAN COUNTY BASIN E STREAM 14
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FR
	-10.	3.	0.	0.	0.022000	0.0	0.0	0.	783.000	0.0

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNAM	ITRACE
	2.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*PROF 2

CCHV= 0.100 CEHV= 0.300

*SECNO 850.000

SECNO	DEPTH	CWSEL	CRWS	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

3720 CRITICAL DEPTH ASSUMED

850.00	3.53	780.63	780.63	783.00	781.28	0.65	0.0	0.0	779.20
232.	41.	181.	10.	17.	25.	6.	0.	0.	779.50
0.0	2.43	7.22	1.75	0.055	0.035	0.055	0.0	777.10	1247.40
0.009094	850.	850.	850.	0	11	0	0.0	39.83	1287.23

*SECNO 1650.000

SECNO	DEPTH	CWSEL	CRWS	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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL

3693 PROBABLE MINIMUM SPECIFIC ENERGY

3720 CRITICAL DEPTH ASSUMED

1650.00	4.01	722.01	722.01	0.0	799.77	0.76	8.22	0.03	796.70
232.	40.	142.	51.	12.	17.	16.	1.	1.	796.80
0.03	3.17	8.58	3.10	0.055	0.035	0.055	0.035	795.00	1103.21
0.011701	800.	800.	800.	20	8	0	0.0	30.60	1135.81

*SECNO 3050.000

3301 HV CHANGED MORE THAN HVINS

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

 HEC2 RELEASE DATED NOV 76 UPDATED FEB 1977
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T1 ROWAN COUNTY BASIN E STREAM 14
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INO NINV IDIR STRT METRIC HVINS Q WSEL FQ
 -10. 4. 0. 0. 0.022000 0.0 0.0 0. 785.000 0.0

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

*PROF 3

CCHV= 0.100 CEHV= 0.300
 *SECNO 850.000

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	DLOSS	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	IUC	ICONT	CORAR	TOPWID	ENDST

3720 CRITICAL DEPTH ASSUMED
 850.00 3.84 780.94 780.94 785.00 781.64 0.70 0.0 0.0 779.20
 303. 68. 216. 19. 24. 28. 9. 0. 0. 779.50
 0.0 2.85 7.77 2.07 0.055 0.035 0.055 0.0 777.10 1244.72
 0.009150 850. 850. 850. 0 11 0 0.0 45.31 1290.02

*SECNO 1650.000

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	DLOSS	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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

1650.00 4.37 799.37 799.37 0.0 800.19 0.82 8.30 0.04 796.70
 303. 58. 169. 76. 17. 18. 22. 1. 1. 796.80
 0.03 3.51 9.24 3.45 0.055 0.035 0.055 0.035 795.00 1101.56
 0.011848 800. 800. 800. 20 8 0 0.0 34.62 1136.18

*SECNO 3050.000

3301 HV CHANGED MORE THAN HVINS

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

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

T1 ROWAN COUNTY BASIN E STREAM 14
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-10.	5.	0.	0.	0.022000	0.0	0.0	0.	786.000	0.0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLOC	IBW	CHVIN	ITRACE
	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*PROF 4
 CCHV= 0.100 CEHV= 0.300
 *SECNO 850.000

SECNO	DEPTH	CWSEL	CRWS	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

3720 CRITICAL DEPTH ASSUMED

850.00	4.46	781.56	781.56	786.00	782.37	0.81	0.0	0.0	779.20
489.	142.	296.	51.	40.	33.	19.	0.	0.	779.50
0.0	3.57	8.86	2.65	0.055	0.035	0.055	0.0	777.10	1239.32
0.009307	850.	850.	850.	0	8	0	0.0	56.33	1295.65

*SECNO 1650.000

SECNO	DEPTH	CWSEL	CRWS	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

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
 3693 PROBABLE MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

1650.00	5.07	800.07	800.07	0.0	801.00	0.93	8.42	0.04	796.70
489.	116.	228.	146.	27.	22.	36.	2.	1.	796.80
0.03	4.37	10.44	4.07	0.055	0.035	0.055	0.035	795.00	1098.05
0.011985	800.	800.	800.	20	8	0	0.0	42.82	1140.88

*SECNO 3050.000

5301 HV CHANGED MORE THAN HVINS

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

 REC2 VERSION UPDATED JAN 1975
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08
 MODIFICATIONS 52,53,54,55,56,57,58

T1 ROWAN COUNTY BASIN F STREAM 4
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-6 JOB NO. 6910
 T3 50 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FO
	-10.	3.	0.	0.	0.004000	0.0	0.0	0.	714.100	0.0
J2	NPROF	IPL0T	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	2,000	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	GLOSS	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
1300.00	6.50	715.00	0.0	714.10	715.32	0.32	0.0	0.0	715.10
1450.	851.	540.	58.	369.	79.	37.	0.	0.	713.20
0.0	2.31	6.81	1.59	0.055	0.035	0.055	0.0	708.10	1316.07
0.003956	1300.	1300.	1300.	0	0	5	0.0	349.70	1665.77

3600.00	5.91	722.21	0.0	0.0	722.55	0.35	7.22	0.01	719.40
1150.	324.	826.	0.	174.	152.	0.	21.	13.	724.00
0.14	1.87	5.45	0.0	0.055	0.035	0.055	0.035	716.50	1263.58
0.002426	2300.	2300.	2300.	5	0	1	0.0	158.45	1421.63

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	GLOSS	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
4525.00	6.02	726.12	726.12	0.0	727.30	1.18	3.26	0.0	723.00
855.	76.	671.	109.	19.	69.	49.	26.	16.	721.90
0.18	3.91	9.72	2.24	0.055	0.035	0.055	0.035	720.10	1290.35
0.006694	925.	925.	925.	30	5	1	0.0	82.76	1373.11

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

T1 ROWAN COUNTY BASIN F STREAM 4
 T2 FLOODPLAIN STUDY AT ROWAN & DAVIDSON COUNTIES M-G JOB NO. 6918
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

J1 ICHECK INQ NINV IOIR STRT METRIC HVINS Q WSEL FQ
 -10. 5. 0. 0. 0.004000 0.0 0.0 0. 717.100 0.0

J2 NPROF IPILOT PRFVS XSECV XSECH FN ALLOC IBW CHNAM 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

SECNO	DEPTH	CWSEL	CRWS	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

1300.00	7.61	715.71	0.0	717.10	716.02	0.32	0.0	0.0	715.10
2480.	1663.	669.	148.	597.	90.	71.	0.	0.	713.20
0.0	2.78	7.44	2.09	0.055	0.035	0.055	0.0	708.10	1262.12
0.004005	1300.	1300.	1300.	0	0	5	0.0	415.83	1677.95

3600.00	6.99	723.29	0.0	0.0	723.70	0.41	7.65	0.03	719.40
2040.	834.	1206.	0.	335.	190.	0.	34.	17.	724.00
0.13	2.49	6.36	0.0	0.055	0.035	0.055	0.035	716.30	1214.21
0.002710	2300.	2300.	2300.	4	0	1	0.0	210.13	1424.34

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

3720 ASSUMED CRITICAL DEPTH

SECNO	DEPTH	CWSEL	CRWS	WSELK	EG	HV	HL	OLOSS	HANK 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

4525.00	7.40	727.50	727.50	0.0	728.55	1.05	3.39	0.0	723.00
1580.	152.	899.	529.	36.	86.	172.	43.	20.	721.90
0.17	4.19	10.50	3.07	0.055	0.035	0.055	0.035	720.10	1275.66
0.005877	925.	925.	925.	30	8	1	0.0	148.95	1422.61

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

500 YEAR FLOOD WATER SUR

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
1300.00	1300.00	0.0	0.0	708.10	810.00	714.32	128.02	714.66	240.06	0.0	0.0	6.24
1300.00	1300.00	0.0	0.0	708.10	1450.00	715.00	230.54	715.32	349.70	0.0	0.0	6.81
1300.00	1300.00	0.0	0.0	708.10	1750.00	715.22	274.40	715.55	378.46	0.0	0.0	7.09
1300.00	1300.00	0.0	0.0	708.10	2480.00	715.70	391.86	716.02	415.83	0.0	0.0	7.44
3600.00	2300.00	0.0	0.0	716.30	640.00	721.24	137.52	721.52	112.21	0.0	0.0	4.61
3600.00	2300.00	0.0	0.0	716.30	1150.00	722.20	233.46	722.55	158.45	0.0	0.0	5.45
3600.00	2300.00	0.0	0.0	716.30	1420.00	722.60	284.32	722.96	177.21	0.0	0.0	5.74
3600.00	2300.00	0.0	0.0	716.30	2040.00	723.29	391.90	723.70	210.13	0.0	0.0	6.36
4525.00	925.00	0.0	0.0	720.10	470.00	724.11	42.45	725.55	21.25	0.0	0.0	9.87
4525.00	925.00	0.0	0.0	720.10	855.00	726.12	104.50	727.30	82.76	0.0	0.0	9.72
4525.00	925.00	0.0	0.0	720.10	1070.00	726.80	144.67	727.79	113.66	0.0	0.0	9.46
4525.00	925.00	0.0	0.0	720.10	1580.00	727.50	206.10	728.55	148.95	0.0	0.0	10.50
4550.00	25.00	0.0	0.0	720.20	470.00	724.90	58.46	725.82	23.45	0.0	0.0	8.02
4550.00	25.00	0.0	0.0	720.20	855.00	726.70	130.52	727.48	105.63	0.0	0.0	8.20
4550.00	25.00	0.0	0.0	720.20	1070.00	727.22	169.66	727.94	126.18	0.0	0.0	8.33
4550.00	25.00	0.0	0.0	720.20	1580.00	727.99	248.84	728.70	171.67	0.0	0.0	9.01
4600.00	50.00	0.0	0.0	720.40	470.00	725.36	102.60	726.01	31.90	0.0	0.0	6.79
4600.00	50.00	0.0	0.0	720.40	855.00	727.21	265.36	727.61	116.90	0.0	0.0	6.04
4600.00	50.00	0.0	0.0	720.40	1070.00	727.71	352.62	728.06	143.54	0.0	0.0	5.99
4600.00	50.00	0.0	0.0	720.40	1580.00	728.49	535.72	728.82	189.40	0.0	0.0	6.26
4648.00	48.00	729.90	728.90	720.40	470.00	725.36	102.60	726.02	31.58	0.0	0.0	6.80
4648.00	48.00	729.90	728.90	720.40	855.00	727.21	265.67	727.61	116.96	0.0	0.0	6.03
4648.00	48.00	729.90	728.90	720.40	1070.00	727.71	352.91	728.06	143.63	0.0	0.0	5.98
4648.00	48.00	729.90	728.90	720.40	1580.00	728.49	535.95	728.82	189.45	0.0	0.0	6.26
4698.00	50.00	0.0	0.0	720.60	470.00	725.38	60.37	726.25	23.69	0.0	0.0	7.85
4698.00	50.00	0.0	0.0	720.60	855.00	726.98	123.63	727.84	100.10	0.0	0.0	8.55
4698.00	50.00	0.0	0.0	720.60	1070.00	727.44	155.68	728.30	117.88	0.0	0.0	8.92
4698.00	50.00	0.0	0.0	720.60	1580.00	728.22	229.81	729.06	162.00	0.0	0.0	9.61
4723.00	25.00	0.0	0.0	720.70	470.00	725.58	63.15	726.40	27.63	0.0	0.0	7.63
4723.00	25.00	0.0	0.0	720.70	855.00	727.16	128.38	727.97	103.95	0.0	0.0	8.31
4723.00	25.00	0.0	0.0	720.70	1070.00	727.65	164.31	728.42	122.50	0.0	0.0	8.54
4723.00	25.00	0.0	0.0	720.70	1580.00	728.40	238.95	729.18	166.72	0.0	0.0	9.31
7270.00	2547.00	0.0	0.0	741.10	267.00	744.26	23.78	744.74	33.84	0.0	0.0	6.66
7270.00	2547.00	0.0	0.0	741.10	528.00	744.82	38.00	745.78	35.52	0.0	0.0	9.42
7270.00	2547.00	0.0	0.0	741.10	670.00	745.14	47.43	746.28	36.48	0.0	0.0	10.20
7270.00	2547.00	0.0	0.0	741.10	1027.00	745.91	73.76	747.34	38.78	0.0	0.0	11.40
7320.00	50.00	0.0	0.0	741.50	267.00	744.91	29.67	745.25	34.58	0.0	0.0	5.69
7320.00	50.00	0.0	0.0	741.50	528.00	745.90	59.14	746.42	37.56	0.0	0.0	6.86
7320.00	50.00	0.0	0.0	741.50	670.00	746.33	74.70	746.93	38.85	0.0	0.0	7.37
7320.00	50.00	0.0	0.0	741.50	1027.00	747.21	111.77	748.02	44.49	0.0	0.0	8.51

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LIMIT OF DETAILED STUDY

LIMIT OF DETAILED STUDY

SECTION NUMBER	CHANNEL LENGTH	MIN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE (CFS)	CWSEL	TA	EG	TOPWID	STENCIL	STENCER	VCH
7370.00	50.00	0.0	0.0	741.90	267.00	745.22	82.75	745.38	35.47	0.0	0.0	3.43
7370.00	50.00	0.0	0.0	741.90	528.00	746.27	150.66	746.57	38.39	0.0	0.0	4.47
7370.00	50.00	0.0	0.0	741.90	670.00	746.73	185.36	747.09	39.65	0.0	0.0	4.93
7370.00	50.00	0.0	0.0	741.90	1027.00	747.67	268.81	748.19	48.43	0.0	0.0	5.86
7630.00	260.00	751.60	748.90	741.90	267.00	745.22	82.72	745.38	35.47	0.0	0.0	3.43
7630.00	260.00	751.60	748.90	741.90	528.00	746.28	150.50	746.57	38.39	0.0	0.0	4.48
7630.00	260.00	751.60	748.90	741.90	670.00	746.96	204.34	747.28	40.29	0.0	0.0	4.61
7630.00	260.00	751.60	748.90	741.90	1027.00	747.67	268.79	748.19	48.42	0.0	0.0	5.86
7680.00	50.00	0.0	0.0	741.50	267.00	745.27	39.47	745.50	35.67	0.0	0.0	4.54
7680.00	50.00	0.0	0.0	741.50	528.00	746.33	74.84	746.70	38.86	0.0	0.0	5.80
7680.00	50.00	0.0	0.0	741.50	670.00	747.01	102.65	747.39	40.90	0.0	0.0	5.85
7680.00	50.00	0.0	0.0	741.50	1027.00	747.74	140.32	748.34	61.15	0.0	0.0	7.42
7730.00	50.00	0.0	0.0	741.10	267.00	745.55	59.94	745.66	37.63	0.0	0.0	3.44
7730.00	50.00	0.0	0.0	741.10	528.00	746.65	104.58	746.89	41.03	0.0	0.0	4.56
7730.00	50.00	0.0	0.0	741.10	670.00	747.29	137.53	747.56	59.63	0.0	0.0	4.90
7730.00	50.00	0.0	0.0	741.10	1027.00	748.17	194.63	748.56	86.89	0.0	0.0	6.03
9600.00	1870.00	0.0	0.0	755.50	230.00	759.32	16.56	760.54	11.62	0.0	0.0	8.86
9600.00	1870.00	0.0	0.0	755.50	455.00	760.98	51.06	761.80	71.45	0.0	0.0	8.11
9600.00	1870.00	0.0	0.0	755.50	579.00	761.39	67.79	762.17	88.96	0.0	0.0	8.30
9600.00	1870.00	0.0	0.0	755.50	894.00	762.09	106.23	762.85	118.13	0.0	0.0	9.01
1300.000	810.000	714.316	715.003	0.0	0.0	0.0	240.060	0.0	0.0	1300.000	0.0	1300.000
1300.000	1450.000	715.003	715.223	0.687	0.0	0.0	349.700	-109.640	0.0	1300.000	0.0	1300.000
1300.000	1750.000	715.223	715.705	0.220	0.0	0.0	378.463	-138.403	0.0	1300.000	0.0	1300.000
1300.000	2480.000	715.705	721.236	0.482	0.0	0.0	415.826	-175.766	0.0	1300.000	0.0	1300.000
3600.000	640.000	721.236	722.205	0.0	6.920	0.0	112.210	0.0	0.0	2300.000	0.0	2300.000
3600.000	1150.000	722.205	722.597	0.969	7.202	0.0	158.448	-46.239	0.0	2300.000	0.0	2300.000
3600.000	1420.000	722.597	723.289	0.393	7.374	0.0	177.211	-65.002	0.0	2300.000	0.0	2300.000
3600.000	2040.000	723.289	724.114	0.691	7.584	0.0	210.132	-97.922	0.0	2300.000	0.0	2300.000
4525.000	470.000	724.114	726.699	0.0	2.878	0.0	21.252	0.0	0.0	925.000	0.0	925.000
4525.000	855.000	726.699	727.499	2.009	3.918	0.0	82.757	-61.506	0.0	925.000	0.0	925.000
4525.000	1070.000	727.499	727.990	0.681	4.206	0.0	113.661	-92.409	0.0	925.000	0.0	925.000
4525.000	1580.000	727.990	728.486	0.695	4.210	0.0	148.949	-127.698	0.0	925.000	0.0	925.000
4550.000	470.000	724.901	726.699	0.0	0.788	0.0	23.451	0.0	0.0	25.000	0.0	25.000
4550.000	855.000	726.699	727.220	1.798	0.576	0.0	105.629	-82.178	0.0	25.000	0.0	25.000
4550.000	1070.000	727.220	727.990	0.521	0.417	0.0	126.184	-102.732	0.0	25.000	0.0	25.000
4550.000	1580.000	727.990	728.486	0.770	0.492	0.0	171.671	-148.219	0.0	25.000	0.0	25.000
4600.000	470.000	725.360	727.215	0.0	0.459	0.0	31.896	0.0	0.0	50.000	0.0	50.000
4600.000	855.000	727.215	727.709	1.855	0.516	0.0	116.902	-85.006	0.0	50.000	0.0	50.000
4600.000	1070.000	727.709	728.486	0.494	0.488	0.0	143.542	-111.646	0.0	50.000	0.0	50.000
4600.000	1580.000	728.486	728.982	0.777	0.495	0.0	189.403	-157.507	0.0	50.000	0.0	50.000
4648.000	470.000	725.361	727.215	0.0	0.001	0.0	31.583	0.0	0.0	48.000	0.0	48.000
4648.000	855.000	727.215	727.709	1.854	0.0	0.0	116.960	-85.377	0.0	48.000	0.0	48.000
4648.000	1070.000	727.709	728.486	0.494	0.0	0.0	143.628	-112.046	0.0	48.000	0.0	48.000
4648.000	1580.000	728.486	728.982	0.778	0.001	0.0	189.452	-157.669	0.0	48.000	0.0	48.000
4698.000	470.000	725.375	725.375	0.0	0.014	0.0	23.694	0.0	0.0	50.000	0.0	50.000

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4698.000	855.000	726.982	1.607	-0.233	0.0	100.097	-76.404	50.000
4698.000	1070.000	727.444	0.461	-0.265	0.0	117.881	-94.188	50.000
4698.000	1580.000	728.219	0.775	-0.268	0.0	141.996	-138.302	50.000
4723.000	470.000	725.580	0.0	0.204	0.0	27.630	0.0	25.000
4723.000	855.000	727.164	1.584	0.181	0.0	103.946	-76.315	25.000
4723.000	1070.000	727.652	0.489	0.209	0.0	122.499	-94.869	25.000
4723.000	1580.000	728.403	0.751	0.184	0.0	166.724	-139.094	25.000
7270.000	267.000	744.264	0.0	18.684	0.0	33.835	0.0	2547.000
7270.000	528.000	744.824	0.560	17.661	0.0	35.518	-1.683	2547.000
7270.000	670.000	745.144	0.319	17.491	0.0	36.480	-2.645	2547.000
7270.000	1027.000	745.909	0.765	17.506	0.0	38.780	-4.945	2547.000
7320.000	267.000	744.906	0.0	0.641	0.0	34.575	0.0	50.000
7320.000	528.000	745.902	0.997	1.078	0.0	37.560	-2.985	50.000
7320.000	670.000	746.330	0.428	1.186	0.0	38.854	-4.279	50.000
7320.000	1027.000	747.207	0.878	1.299	0.0	44.485	-9.910	50.000
7370.000	267.000	745.224	0.0	0.318	0.0	35.468	0.0	50.000
7370.000	528.000	746.275	1.051	0.373	0.0	38.394	-2.926	50.000
7370.000	670.000	746.726	0.451	0.396	0.0	39.646	-4.179	50.000
7370.000	1027.000	747.669	0.944	0.462	0.0	48.429	-12.961	50.000
7630.000	267.000	745.224	0.0	0.0	0.0	35.466	0.0	260.000
7630.000	528.000	746.275	1.052	0.001	0.0	38.387	-2.921	260.000
7630.000	670.000	746.958	0.683	0.233	0.0	40.285	-4.819	260.000
7630.000	1027.000	747.670	0.712	0.001	0.0	48.421	-12.955	260.000
7680.000	267.000	745.269	0.0	0.045	0.0	35.675	0.0	50.000
7680.000	528.000	746.329	1.061	0.054	0.0	38.865	-3.190	50.000
7680.000	670.000	747.006	0.677	0.048	0.0	40.896	-5.221	50.000
7680.000	1027.000	747.737	0.731	0.067	0.0	61.150	-25.475	50.000
7730.000	267.000	745.526	0.0	0.258	0.0	37.630	0.0	50.000
7730.000	528.000	746.655	1.129	0.326	0.0	41.027	-3.397	50.000
7730.000	670.000	747.293	0.638	0.287	0.0	59.626	-21.997	50.000
7730.000	1027.000	748.170	0.878	0.434	0.0	86.890	-49.260	50.000
9600.000	230.000	759.322	0.0	13.796	0.0	11.616	0.0	1870.000
9600.000	455.000	760.979	1.657	14.324	0.0	71.449	-59.833	1870.000
9600.000	579.000	761.394	0.416	14.101	0.0	88.962	-77.346	1870.000
9600.000	894.000	762.087	0.693	13.916	0.0	118.126	-106.510	1870.000

DATA FOR LAST CROSS SECTION

PROFILE	TYPE ENC	TARGET	TOP WIDTH AREA-ACRES	TOP WIDTH AREA-DIFF
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1	0.0	0.0	14.071	0.0
2	0.0	0.0	23.366	9.295
3	0.0	0.0	26.628	12.556
4	0.0	0.0	32.089	18.017