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

RECEIVED
 JAN 23 1979
 DAMES AND MOORE

C
 T1 SHINN BRANCH CABARRUS CO
 T2 FIS CABARRUS CO. JOB NO. 207022
 T3 100 YEAR FLOOD WATER SURFACE PROFILE

J1	ICHECK	ING	NINV	IOIR	STRT	METRIC	HVINS	Q	WSEL	FG
	-1.	4.	0.	0.	0.0	0.0	0.0	0.	499.240	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	200.000	0.0	0.0	0.0	0.0	0.0
NC	0.120	0.080	0.050	0.100	0.300	0.0	0.0	0.0	0.0	0.0
QT	5.000	90.000	190.000	260.000	440.000	260.000	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
ET	0.0	0.0	0.0	0.0	0.0	7.100	1686.000	1736.000	0.0	0.0
X1	1294.000	21.000	1719.000	1736.000	1294.000	1294.000	1294.000	1294.000	0.0	-3.110
GR	517.300	1000.000	511.000	1100.000	509.600	1200.000	507.500	1300.000	505.400	1400.000
GR	504.000	1500.000	501.700	1600.000	501.700	1700.000	502.300	1719.000	499.600	1723.000
GR	499.300	1726.000	499.800	1727.000	502.200	1736.000	505.700	1747.000	507.900	1756.000
GR	509.300	1787.000	509.500	1808.000	511.600	1850.000	513.400	1900.000	514.200	1950.000
GR	516.200	1975.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	7.100	1686.000	1736.000	0.0	0.0
X1	1320.000	0.0	0.0	0.0	25.500	25.500	25.500	0.0	0.600	0.0
NC	0.060	0.060	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	-10.400	0.0	0.0	0.0	0.0

X1	1320.000	0.0	0.0	0.0	25.500	25.500	25.500	0.0	0.600	0.0
NC	0.060	0.060	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	-10.400	0.0	0.0	0.0	0.0

X1	1345.000	25.000	1351.000	1357.000	25.500	25.500	25.500	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	504.290	504.290	0.0
GR	506.500	1000.000	503.400	1028.000	503.100	1050.000	502.400	1100.000	502.000	1128.000
GR	501.800	1150.000	501.400	1200.000	501.000	1250.000	500.600	1300.000	500.300	1350.000
GR	500.300	1350.900	500.300	1351.000	498.100	1351.900	497.300	1354.000	498.100	1356.100
GR	500.300	1357.000	500.300	1357.100	503.700	1375.000	505.900	1384.000	506.600	1400.000
GR	507.300	1415.000	507.500	1436.000	508.200	1450.000	509.600	1478.000	510.800	1500.000
SB	0.0	3.000	3.000	0.0	4.700	0.0	28.200	0.0	498.300	497.200

REED MINE ROAD NCSR 1100

ELRD 505.91 ELLC 504.29

X1	1404.000	22.000	1351.000	1357.000	59.000	59.000	59.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	504.290	503.780	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	503.780	505.910	0.0
BT	18.000	1000.000	506.500	0.0	1050.000	505.400	0.0	1100.000	504.500	0.0
BT	1150.000	503.900	0.0	1200.000	503.800	0.0	1250.000	504.000	0.0	1300.000
BT	504.700	0.0	1350.000	505.800	0.0	1350.900	505.800	0.0	1351.000	505.800
BT	501.300	1351.900	505.800	503.400	1354.000	505.900	504.300	1356.100	506.000	503.400
BT	1357.000	506.000	501.300	1357.100	506.000	0.0	1400.000	507.900	0.0	1450.000
BT	508.500	0.0	1500.000	510.800	0.0	0.0	0.0	0.0	0.0	0.0
GR	506.500	1000.000	504.400	1028.000	504.100	1050.000	503.400	1100.000	503.000	1128.000
GR	502.800	1150.000	502.500	1200.000	502.100	1250.000	501.700	1300.000	501.300	1350.000
GR	501.300	1350.900	501.300	1351.000	499.200	1351.900	498.300	1354.000	499.200	1356.100
GR	501.300	1357.000	501.300	1357.100	504.700	1375.000	506.900	1384.000	507.900	1400.000
GR	508.500	1450.000	510.800	1500.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.100	0.080	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

X1	1430.000	21.000	1719.000	1736.000	25.500	25.500	25.500	0.0	-0.510	0.0
GR	517.300	1000.000	511.800	1100.000	509.600	1200.000	507.500	1300.000	505.400	1400.000
GR	504.000	1500.000	501.700	1600.000	501.700	1700.000	502.300	1719.000	499.600	1723.000
GR	499.300	1726.000	499.800	1727.000	502.200	1736.000	505.700	1747.000	507.900	1756.000
GR	509.300	1787.000	509.500	1808.000	511.600	1850.000	513.400	1900.000	514.200	1950.000
GR	516.200	1975.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	7.100	1690.000	1740.000	0.0	0.0

X1	1455.000	0.0	0.0	0.0	25.500	25.500	25.500	0.0	0.510	0.0
NC	0.100	0.100	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	0.0	0.0	0.0	7.100	1272.000	1368.000	0.0	0.0

X1	3648.000	12.000	1268.000	1288.000	3123.000	3127.000	3127.000	0.0	0.0	0.0
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100 YEAR FLOOD WATER SUR
 SUMMARY PRINTOUT

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	UFWSP
1294.000	1294.00	0.0	0.0	260.00	496.19	499.24	499.19	5.60	1571.73	1736.47	110.19	0.0
1294.000	1294.00	0.0	0.0	260.00	496.19	500.24	0.0	4.29	1686.00	1736.00	95.02	1.00
* 1320.000	25.50	0.0	0.0	260.00	496.79	499.79	499.79	5.93	1573.70	1736.33	102.75	0.0
1320.000	25.50	0.0	0.0	260.00	496.79	500.35	0.0	5.63	1686.00	1736.00	70.44	0.55
* 1345.000	25.50	0.0	0.0	260.00	497.30	502.01	502.01	11.24	1351.00	1357.00	23.14	0.0
* 1345.000	25.50	0.0	0.0	260.00	497.30	502.01	502.01	11.22	1351.00	1357.00	23.18	0.01
1404.000	59.00	503.78	504.29	260.00	498.30	504.74	0.0	2.95	1023.39	1357.00	166.65	0.0
1404.000	59.00	999999.00	0.0	260.00	498.30	504.75	0.0	6.54	1348.21	1357.00	42.92	0.01
1430.000	25.50	0.0	0.0	260.00	498.79	504.81	0.0	0.71	1405.69	1745.81	829.44	0.0
1430.000	25.50	0.0	0.0	260.00	498.79	505.41	0.0	1.63	1680.00	1740.00	261.33	0.60
1455.000	25.50	0.0	0.0	260.00	499.30	504.81	0.0	0.88	1441.98	1744.21	666.27	0.0
1455.000	25.50	0.0	0.0	260.00	499.30	505.41	0.0	2.08	1690.00	1740.00	193.48	0.60
* 3648.000	2193.00	0.0	0.0	260.00	554.90	557.50	557.50	6.98	1271.11	1368.90	52.56	0.0
* 3648.000	2193.00	0.0	0.0	260.00	554.90	557.49	557.49	7.06	1272.00	1368.00	51.97	-0.01
3660.000	12.50	0.0	0.0	260.00	554.69	558.16	0.0	4.05	1269.77	1373.89	106.39	0.0
3660.000	12.50	0.0	0.0	260.00	554.69	557.80	0.0	6.38	1270.32	1287.10	40.77	-0.36
3673.000	12.50	0.0	0.0	260.00	554.50	558.28	0.0	2.83	1238.50	1277.50	91.81	0.0
3673.000	12.50	0.0	0.0	260.00	554.50	558.45	0.0	2.64	1238.50	1277.50	98.42	0.16

3660.000	12.50	0.0	0.0	260.00	554.69	558.16	0.0	4.05	1269.77	1373.89	106.39	0.0
3660.000	12.50	0.0	0.0	260.00	554.69	557.80	0.0	6.38	1270.32	1287.10	40.77	-0.36
3673.000	12.50	0.0	0.0	260.00	554.50	558.28	0.0	2.83	1238.50	1277.50	91.81	0.0
3673.000	12.50	0.0	0.0	260.00	554.50	558.45	0.0	2.64	1238.50	1277.50	98.42	0.16
3674.000	1.00	0.0	0.0	260.00	554.52	558.40	0.0	1.31	1222.27	1399.19	261.02	0.0
3674.000	1.00	999999.00	0.0	260.00	554.52	558.57	0.0	2.18	1237.44	1286.59	126.84	0.16
* 3727.000	53.00	558.39	558.68	260.00	555.38	559.24	559.24	5.66	1238.50	1400.00	35.13	0.0
* 3727.000	53.00	558.39	558.68	260.00	555.38	560.55	560.55	3.06	1230.50	1376.55	48.99	1.31
3739.000	12.50	0.0	0.0	260.00	555.40	560.28	0.0	2.08	1261.97	1382.01	244.95	0.0
3739.000	12.50	0.0	0.0	260.00	555.40	561.07	0.0	2.58	1266.54	1316.66	138.65	0.79
3752.000	12.50	0.0	0.0	260.00	555.40	560.29	0.0	2.06	1261.55	1382.12	247.26	0.0
3752.000	12.50	0.0	0.0	260.00	555.40	561.09	0.0	2.56	1266.44 ¹²⁷²	1317.53	141.21	0.80

SUMMARY OF ERRORS

CAUTION SECNO= 1320.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1320.000 PROFILE= 1 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1345.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1345.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1345.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 1345.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 1345.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 1345.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3648.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3648.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3648.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 3648.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3648.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3648.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 3727.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3727.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3727.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 3727.000 PROFILE= 1 SLOPE TOO STEEP
CAUTION SECNO= 3727.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
CAUTION SECNO= 3727.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO= 3727.000 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO= 3727.000 PROFILE= 2 SLOPE TOO STEEP

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10 YEAR FLOOD WATER SURF
 SUMMARY PRINTOUT

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRWS	VCH	SSTA	ENDST	AREA	DIFWSP
1294.000	1294.00	0.0	0.0	90.00	496.19	498.46	0.0	5.24	1720.08	1733.65	17.17	0.0
* 1294.000	1294.00	0.0	0.0	190.00	496.19	499.06	499.06	5.20	1579.48	1735.89	81.80	0.60
* 1294.000	1294.00	0.0	0.0	260.00	496.19	499.24	499.24	5.62	1571.90	1736.46	109.54	0.17
1294.000	1294.00	0.0	0.0	440.00	496.19	499.50	499.49	7.05	1560.60	1737.28	153.86	0.26
1320.000	25.50	0.0	0.0	90.00	496.79	499.10	0.0	5.10	1720.02	1733.78	17.65	0.0
* 1320.000	25.50	0.0	0.0	190.00	496.79	499.66	499.66	5.19	1579.39	1735.90	82.13	0.56
* 1320.000	25.50	0.0	0.0	260.00	496.79	499.80	499.80	5.91	1573.56	1736.34	103.27	0.13
1320.000	25.50	0.0	0.0	440.00	496.79	500.14	0.0	6.75	1558.78	1737.41	161.32	0.35
* 1345.000	25.50	0.0	0.0	90.00	497.30	500.02	500.02	8.00	1351.11	1356.89	11.25	0.0
* 1345.000	25.50	0.0	0.0	190.00	497.30	501.29	501.29	10.09	1351.00	1357.00	18.83	1.27
* 1345.000	25.50	0.0	0.0	260.00	497.30	502.01	502.01	11.24	1351.00	1357.00	23.14	0.72
* 1345.000	25.50	0.0	0.0	440.00	497.30	503.66	503.66	13.31	1351.00	1357.00	33.06	1.65
1404.000	59.00	503.78	504.29	90.00	498.30	502.13	0.0	5.24	1351.00	1357.00	17.19	0.0
1404.000	59.00	503.78	504.29	190.00	498.30	504.10	502.33	6.43	1049.95	1357.00	52.05	1.98
1404.000	59.00	503.78	504.29	260.00	498.30	504.74	0.0	2.95	1023.39	1357.00	166.64	0.64
1404.000	59.00	503.78	504.29	440.00	498.30	506.41	0.0	0.44	1001.20	1382.00	1355.13	1.66
1430.000	25.50	0.0	0.0	90.00	498.79	502.61	0.0	0.82	1536.35	1738.89	250.41	0.0
1430.000	25.50	0.0	0.0	190.00	498.79	504.70	0.0	0.55	1413.45	1745.47	792.93	2.09
1430.000	25.50	0.0	0.0	260.00	498.79	504.81	0.0	0.71	1405.69	1745.81	829.44	0.11
1430.000	25.50	0.0	0.0	440.00	498.79	506.00	0.0	0.70	1327.69	1751.99	1441.50	1.60

✓	1404.000	59.00	502.76	504.29	190.00	498.30	504.10	502.33	6.43	1049.95	1357.00	52.05	1.98
	1404.000	59.00	503.78	504.29	260.00	498.30	504.74	0.0	2.95	1023.39	1357.00	166.64	0.64
	1404.000	59.00	503.78	504.29	440.00	498.30	506.41	0.0	0.44	1001.20	1382.00	1355.13	1.66
	1430.000	25.50	0.0	0.0	90.00	498.79	502.61	0.0	0.82	1530.35	1738.89	250.41	0.0
	1430.000	25.50	0.0	0.0	190.00	498.79	504.70	0.0	0.55	1413.45	1745.47	792.93	2.09
	1430.000	25.50	0.0	0.0	260.00	498.79	504.81	0.0	0.71	1405.69	1745.81	829.44	0.11
	1430.000	25.50	0.0	0.0	440.00	498.79	506.41	0.0	0.70	1327.69	1751.99	1441.58	1.60
✓	1455.000	25.50	0.0	0.0	90.00	499.30	502.61	0.0	1.31	1560.27	1737.30	155.20	0.0
	1455.000	25.50	0.0	0.0	190.00	499.30	504.70	0.0	0.68	1449.78	1743.87	633.73	2.09
	1455.000	25.50	0.0	0.0	260.00	499.30	504.81	0.0	0.88	1441.93	1744.21	666.27	0.11
	1455.000	25.50	0.0	0.0	440.00	499.30	506.41	0.0	0.82	1351.91	1749.90	1232.40	1.60
*	3648.000	2193.00	0.0	0.0	90.00	554.90	556.25	556.25	6.12	1273.06	1285.87	14.71	0.0
✓	3648.000	2193.00	0.0	0.0	190.00	554.90	557.12	557.12	6.64	1271.70	1366.71	36.10	0.87
*	3648.000	2193.00	0.0	0.0	260.00	554.90	557.50	557.50	6.98	1271.11	1368.90	52.56	0.38
*	3648.000	2193.00	0.0	0.0	440.00	554.90	558.15	558.15	7.79	1270.10	1372.64	90.72	0.65
	3660.000	12.50	0.0	0.0	90.00	554.69	556.88	0.0	3.21	1271.70	1366.55	35.02	0.0
	3660.000	12.50	0.0	0.0	190.00	554.69	557.77	0.0	3.74	1270.37	1371.66	79.51	0.89
	3660.000	12.50	0.0	0.0	260.00	554.69	558.16	0.0	4.05	1269.77	1373.89	106.39	0.39
	3660.000	12.50	0.0	0.0	440.00	554.69	558.85	0.0	4.69	1268.69	1377.88	165.83	0.69

SECNO	XLCH	ELTRD	ELLC	Q	ELMIN	CWSEL	CRINS	VCH	SSTA	ENOST	AREA	DIFWSP
3673.000	12.50	0.0	0.0	90.00	554.50	557.04	0.0	2.08	1238.50	1277.50	43.22	0.0
3673.000	12.50	0.0	0.0	190.00	554.50	557.91	0.0	2.46	1238.50	1277.50	77.17	0.87
3673.000	12.50	0.0	0.0	260.00	554.50	558.28	0.0	2.83	1238.50	1277.50	91.81	0.38
3673.000	12.50	0.0	0.0	440.00	554.50	559.10	0.0	1.48	1217.02	1400.00	389.43	0.81
3674.000	1.00	0.0	0.0	90.00	554.52	557.09	0.0	1.40	1231.98	1333.49	78.11	0.0
3674.000	1.00	0.0	0.0	190.00	554.52	557.99	0.0	1.26	1225.29	1378.75	193.50	0.91
3674.000	1.00	0.0	0.0	260.00	554.52	558.40	0.0	1.31	1222.27	1399.19	261.02	0.41
3674.000	1.00	0.0	0.0	440.00	554.52	559.10	0.0	1.49	1217.14	1400.00	386.44	0.69
* 3727.000	53.00	558.39	558.68	90.00	555.38	557.76	557.76	8.05	1238.50	1277.50	11.18	0.0
* 3727.000	53.00	558.39	558.68	190.00	555.38	558.99	558.99	6.01	1238.50	1400.00	28.74	1.23
* 3727.000	53.00	558.39	558.68	260.00	555.38	559.24	559.24	5.66	1238.50	1400.00	35.13	0.25
* 3727.000	53.00	558.39	558.68	440.00	555.38	560.43	560.43	2.26	1238.50	1400.00	81.27	1.18
3739.000	12.50	0.0	0.0	90.00	555.40	558.87	0.0	1.46	1269.76	1373.91	106.60	0.0
3739.000	12.50	0.0	0.0	190.00	555.40	559.76	0.0	1.95	1268.39	1378.98	185.16	0.88
3739.000	12.50	0.0	0.0	260.00	555.40	560.28	0.0	2.08	1261.97	1382.01	244.95	0.52
3739.000	12.50	0.0	0.0	440.00	555.40	561.00	0.0	2.64	1246.04	1386.19	339.47	0.72
3752.000	12.50	0.0	0.0	90.00	555.40	558.88	0.0	1.45	1269.73	1374.01	107.93	0.0
3752.000	12.50	0.0	0.0	190.00	555.40	559.77	0.0	1.92	1268.35	1379.12	187.78	0.89
3752.000	12.50	0.0	0.0	260.00	555.40	560.29	0.0	2.06	1261.55	1382.12	247.26	0.52
3752.000	12.50	0.0	0.0	440.00	555.40	561.02	0.0	2.62	1245.62	1386.30	342.11	0.72

SUMMARY OF ERRORS

CAUTION SECNO: 1294.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 1294.000 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 1320.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 1320.000 PROFILE= 2 MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 1320.000 PROFILE= 3 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 1320.000 PROFILE= 3 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 1345.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 1345.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
 CAUTION SECNO= 1345.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
 CAUTION SECNO= 1345.000 PROFILE= 2 CRITICAL DEPTH ASSUMED
 CAUTION SECNO= 1345.000 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY