

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

| 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   |
|----------------|----------------|-------------------|---------------------|------------------|-----------------|---------|--------|--------|--------|--------|--------|-------|
| 1              | 1200.00        | 1200.00           | 0.0                 | 0.0              | 209.00          | 2820.00 | 216.92 | 511.87 | 217.05 | 305.62 | 0.0    | 4.52  |
| 2              | 1200.00        | 1200.00           | 0.0                 | 0.0              | 209.00          | 2820.00 | 217.92 | 522.46 | 218.10 | 150.95 | 309.53 | 4.83  |
| 3              | 2750.00        | 1550.00           | 0.0                 | 0.0              | 213.90          | 2820.00 | 221.51 | 520.61 | 221.69 | 292.21 | 0.0    | 4.85  |
| 4              | 2750.00        | 1550.00           | 0.0                 | 0.0              | 213.90          | 2820.00 | 222.34 | 527.77 | 222.60 | 123.61 | 152.77 | 5.16  |
| 5              | 2800.00        | 50.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 220.36 | 152.36 | 222.68 | 46.00  | 0.0    | 12.22 |
| 6              | 2800.00        | 50.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 221.83 | 225.13 | 223.22 | 46.00  | 150.00 | 9.46  |
| 7              | 2825.00        | 25.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 220.81 | 174.18 | 222.76 | 46.00  | 0.0    | 11.20 |
| 8              | 2825.00        | 25.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 222.28 | 249.14 | 223.49 | 46.00  | 150.00 | 8.85  |
| 9              | 2875.00        | 50.00             | 0.0                 | 0.0              | 214.30          | 2820.00 | 223.03 | 769.19 | 223.13 | 326.97 | 0.0    | 3.63  |
| 10             | 2875.00        | 50.00             | 0.0                 | 0.0              | 214.30          | 2820.00 | 223.62 | 711.29 | 223.77 | 145.15 | 149.40 | 4.11  |
| 11             | 4995.00        | 2120.00           | 0.0                 | 0.0              | 219.60          | 2820.00 | 228.86 | 284.10 | 229.31 | 299.94 | 0.0    | 7.96  |
| 12             | 4995.00        | 2120.00           | 0.0                 | 0.0              | 219.60          | 2820.00 | 229.83 | 308.57 | 230.37 | 136.90 | 232.19 | 7.97  |
| 13             | 7595.00        | 2600.00           | 0.0                 | 0.0              | 228.30          | 2370.00 | 236.65 | 692.49 | 236.70 | 388.36 | 0.0    | 2.83  |
| 14             | 7595.00        | 2600.00           | 0.0                 | 0.0              | 228.30          | 2370.00 | 237.54 | 678.27 | 237.61 | 221.16 | 167.50 | 3.14  |

| SECTION NUMBER | DISCHARGE CFS | CWSEL    | CWSEL DIFF EACH Q | CWSEL DIFF EACH SECTION | CWSEL-WSELK | TOPWID  | T.W. DIFF | LENGTH   |
|----------------|---------------|----------|-------------------|-------------------------|-------------|---------|-----------|----------|
| A              | 1200.000      | 2820.000 | 216.923           | 0.0                     | 0.0         | 305.616 | 0.0       | 1200.000 |
|                | 1200.000      | 2820.000 | 217.920           | 0.997                   | 0.0         | 150.955 | 154.662   | 1200.000 |
| B              | 2750.000      | 2820.000 | 221.507           | 0.0                     | 4.583       | 292.207 | 0.0       | 1550.000 |
|                | 2750.000      | 2820.000 | 222.338           | 0.831                   | 4.418       | 123.611 | 168.595   | 1550.000 |
|                | 2800.000      | 2820.000 | 220.364           | 0.0                     | -1.143      | 46.000  | 0.0       | 50.000   |
|                | 2800.000      | 2820.000 | 221.826           | 1.463                   | -0.511      | 46.000  | 0.0       | 50.000   |
|                | 2825.000      | 2820.000 | 220.814           | 0.0                     | 0.450       | 46.000  | 0.0       | 25.000   |
|                | 2825.000      | 2820.000 | 222.277           | 1.463                   | 0.450       | 46.000  | 0.0       | 25.000   |
| C              | 2875.000      | 2820.000 | 223.029           | 0.0                     | 2.215       | 326.972 | 0.0       | 50.000   |
|                | 2875.000      | 2820.000 | 223.615           | 0.586                   | 1.339       | 145.155 | 181.817   | 50.000   |
| D              | 4995.000      | 2820.000 | 228.859           | 0.0                     | 5.830       | 299.944 | 0.0       | 2120.000 |
|                | 4995.000      | 2820.000 | 229.827           | 0.968                   | 6.212       | 136.905 | 163.039   | 2120.000 |
| E              | 7595.000      | 2370.000 | 236.650           | 0.0                     | 7.791       | 388.356 | 0.0       | 2600.000 |
|                | 7595.000      | 2370.000 | 237.542           | 0.893                   | 7.716       | 221.164 | 167.192   | 2600.000 |

DATA FOR LAST CROSS SECTION

| PROFILE | TYPE ENC | TARGET | TOP WIDTH AREA-ACRES | TOP WIDTH AREA-DIFF |
|---------|----------|--------|----------------------|---------------------|
| 1       | 0.0      | 0.0    | 46.868               | 0.0                 |
| 2       | 4.000    | 0.301  | 22.668               | -24.200             |

\*\*\*\*\*  
 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. 7 BASIN 6 NEUSE RIVER TRIB.  
 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    | FG     |
|----|--------|------|--------|-------|-------|--------|-------|-----|---------|--------|
|    | -10.   | 6.   | 0.     | 0.    | 0.0   | 0.0    | 0.0   | 0.  | 217.920 | 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= 511.87 WSEL= 216.92 ENC Q1= 511.87 WSEL= 217.92 RATIO= 0.0

| SECNO        | DEPTH  | QWSEL | CRIWS | 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      |
| NAT Q1= 741. | RATIOS LOB,CH,ROB= 0.5350 0.1473 0.3178 WSEL= 217.92 |       |       |        |      |       |       |        |            |

| 3470 ENCROACHMENT STATIONS= |       |        |       |        |        |       |         |        |        |  |
|-----------------------------|-------|--------|-------|--------|--------|-------|---------|--------|--------|--|
|                             |       |        | 309.5 | 460.5  | TYPE=  | 4     | TARGET= | 0.309  |        |  |
| 1200.00                     | 8.92  | 217.92 | 0.0   | 216.92 | 218.10 | 0.18  | 0.0     | 0.0    | 212.90 |  |
| 2820.                       | 1352. | 588.   | 879.  | 475.   | 122.   | 278.  | 0.      | 0.     | 211.90 |  |
| 0.0                         | 2.85  | 4.83   | 3.16  | 0.085  | 0.060  | 0.085 | 0.0     | 209.00 | 309.53 |  |
| 0.002913                    | 1200. | 1200.  | 1200. | 0      | 0      | 1     | 0.0     | 150.95 | 460.48 |  |

2800 NAT Q1= 520.61 WSEL= 221.51 ENC Q1= 520.61 WSEL= 222.51 RATIO= 0.0  
 NAT Q1= 740. RATIOS LOB,CH,ROB= 0.1206 0.3262 0.5532 WSEL= 222.51

| 3470 ENCROACHMENT STATIONS= |       |        |       |        |        |       |         |        |        |  |
|-----------------------------|-------|--------|-------|--------|--------|-------|---------|--------|--------|--|
|                             |       |        | 152.8 | 276.4  | TYPE=  | 4     | TARGET= | 0.296  |        |  |
| 2750.00                     | 8.44  | 222.34 | 0.0   | 221.51 | 222.60 | 0.26  | 4.47    | 0.02   | 215.50 |  |
| 2820.                       | 290.  | 1244.  | 1286. | 96.    | 241.   | 433.  | 29.     | 5.     | 215.60 |  |
| 0.11                        | 3.03  | 5.16   | 2.97  | 0.085  | 0.060  | 0.085 | 0.060   | 213.90 | 152.77 |  |
| 0.002855                    | 1550. | 1550.  | 1550. | 4      | 0      | 1     | 0.0     | 123.61 | 276.39 |  |

IHC209I IBCOM - PROGRAM INTERRUPT (P) - DIVIDE CHECK OLD PSW IS FFB500F4207CA7C . REGISTER CONTAINED 0000000000000000

TRACEBACK ROUTINE CALLED FROM ISN REG. 14 REG. 15 REG. 0 REG. 1

MAIN 00012962 01075BC0 FD000008 000F1FF8

ENTRY POINT= 01075BC0

STANDARD FIXUP TAKEN , EXECUTION CONTINUING  
 2800 NAT Q1= 152.36 WSEL= 220.36 ENC Q1= 201.18 WSEL= 221.36 RATIO= -0.3204





SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

| SECTION NUMBER | CHANNEL LENGTH | MIN EL OF ROADWAY | MAX FL OF LOW CHORD | MIN EL OF GROUND | DISCHARGE (CFS) | CWSEL   | TQ     | EG     | TOPWID | STENCL | STENCR                | VCH                   |       |
|----------------|----------------|-------------------|---------------------|------------------|-----------------|---------|--------|--------|--------|--------|-----------------------|-----------------------|-------|
| A              | 1200.00        | 1200.00           | 0.0                 | 0.0              | 209.00          | 2820.00 | 216.92 | 511.87 | 217.05 | 305.62 | 0.0 <sup>408</sup>    | 0.0                   | 4.52  |
|                | 1200.00        | 1200.00           | 0.0                 | 0.0              | 209.00          | 2820.00 | 217.92 | 522.46 | 218.10 | 150.95 | 309.53 <sup>98</sup>  | 460.48 <sup>53</sup>  | 4.83  |
| B              | 2750.00        | 1550.00           | 0.0                 | 0.0              | 213.90          | 2820.00 | 221.51 | 520.61 | 221.69 | 292.21 | 0.0 <sup>30</sup>     | 0.0 <sup>182</sup>    | 4.85  |
|                | 2750.00        | 1550.00           | 0.0                 | 0.0              | 213.90          | 2820.00 | 222.34 | 527.77 | 222.60 | 123.61 | 152.77 <sup>29</sup>  | 276.39 <sup>94</sup>  | 5.16  |
|                | 2800.00        | 50.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 220.36 | 152.36 | 222.68 | 46.00  | 0.0                   | 0.0                   | 12.22 |
|                | 2800.00        | 50.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 221.83 | 225.13 | 223.22 | 46.00  | 150.00                | 196.00                | 9.46  |
|                | 2825.00        | 25.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 220.81 | 174.18 | 222.76 | 46.00  | 0.0                   | 0.0                   | 11.20 |
|                | 2825.00        | 25.00             | 0.0                 | 0.0              | 213.60          | 2820.00 | 222.28 | 249.14 | 223.49 | 46.00  | 150.00                | 196.00                | 8.85  |
| C              | 2875.00        | 50.00             | 0.0                 | 0.0              | 214.30          | 2820.00 | 223.03 | 769.19 | 223.13 | 326.97 | 330.0 <sup>182</sup>  | 0.0 <sup>112</sup>    | 3.63  |
|                | 2875.00        | 50.00             | 0.0                 | 0.0              | 214.30          | 2820.00 | 223.62 | 711.29 | 223.77 | 145.15 | 149.40 <sup>33</sup>  | 294.55 <sup>113</sup> | 4.11  |
| D              | 4995.00        | 2120.00           | 0.0                 | 0.0              | 219.60          | 2820.00 | 228.86 | 284.10 | 229.31 | 299.94 | 0.0 <sup>281</sup>    | 0.0                   | 7.96  |
|                | 4995.00        | 2120.00           | 0.0                 | 0.0              | 219.60          | 2820.00 | 229.83 | 308.57 | 230.37 | 136.90 | 232.19 <sup>49</sup>  | 369.09 <sup>48</sup>  | 7.97  |
| E              | 7595.00        | 2600.00           | 0.0                 | 0.0              | 228.30          | 2370.00 | 236.65 | 692.49 | 236.70 | 388.36 | 0.0 <sup>270</sup>    | 0.0                   | 2.83  |
|                | 7595.00        | 2600.00           | 0.0                 | 0.0              | 228.30          | 2370.00 | 237.54 | 678.27 | 237.61 | 221.16 | 167.50 <sup>182</sup> | 388.67 <sup>119</sup> | 3.14  |

| SECTION NUMBER | DISCHARGE CFS | CWSEL   | CWSEL DIFF EACH Q | CWSEL DIFF EACH SECTION | CWSEL-WSELK | TOPWID  | T.W. DIFF | LENGTH   |
|----------------|---------------|---------|-------------------|-------------------------|-------------|---------|-----------|----------|
| 1200.000       | 2820.000      | 216.923 | 0.0               | 0.0                     | 0.0         | 305.616 | 0.0       | 1200.000 |
| 1200.000       | 2820.000      | 217.920 | 0.997 ✓           | 0.0                     | 0.0         | 150.955 | 154.662   | 1200.000 |
| 2750.000       | 2820.000      | 221.507 | 0.0               | 4.583                   | 0.0         | 292.207 | 0.0       | 1550.000 |
| 2750.000       | 2820.000      | 222.338 | 0.831 ✓           | 4.418                   | 0.0         | 123.611 | 168.595   | 1550.000 |
| 2800.000       | 2820.000      | 220.364 | 0.0               | -1.143                  | 0.0         | 46.000  | 0.0       | 50.000   |
| 2800.000       | 2820.000      | 221.826 | 1.462 ✓           | -0.511                  | 0.0         | 46.000  | 0.0       | 50.000   |
| 2825.000       | 2820.000      | 220.814 | 0.0               | 0.450                   | 0.0         | 46.000  | 0.0       | 25.000   |
| 2825.000       | 2820.000      | 222.277 | 1.463 ✓           | 0.450                   | 0.0         | 46.000  | 0.0       | 25.000   |
| 2875.000       | 2820.000      | 223.029 | 0.0               | 2.215                   | 0.0         | 326.972 | 0.0       | 50.000   |
| 2875.000       | 2820.000      | 223.615 | 0.586 ✓           | 1.339                   | 0.0         | 145.155 | 181.817   | 50.000   |
| 4995.000       | 2820.000      | 228.859 | 0.0               | 5.830                   | 0.0         | 299.944 | 0.0       | 2120.000 |
| 4995.000       | 2820.000      | 229.827 | 0.968 ✓           | 6.212                   | 0.0         | 136.905 | 163.039   | 2120.000 |
| 7595.000       | 2370.000      | 236.650 | 0.0               | 7.791                   | 0.0         | 388.356 | 0.0       | 2600.000 |
| 7595.000       | 2370.000      | 237.542 | 0.893 ✓           | 7.716                   | 0.0         | 221.164 | 167.192   | 2600.000 |

DATA FOR LAST CROSS SECTION

| PROFILE | TYPE ENC | TARGET | TOP WIDTH AREA-ACRES | TOP WIDTH AREA-DIFF |
|---------|----------|--------|----------------------|---------------------|
| 1       | 0.0      | 0.0    | 46.868               | 0.0                 |
| 2       | 4.000    | 0.301  | 22.668               | -24.200             |

\*\*\*\*\*  
 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. 7 BASIN 6 NEUSE RIVER TRIB.  
 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    | FQ     |
|----|--------|-------|--------|-------|-------|--------|-------|-----|---------|--------|
|    | -10.   | 6.    | 0.     | 0.    | 0.0   | 0.0    | 0.0   | 0.  | 217.920 | 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= 511.87 WSEL= 216.92 ENC Q1= 511.87 WSEL= 217.92 RATIO= 0.0  
 NAT Q1= 741. RATIOS LOB,CH,ROB= 0.5350 0.1473 0.3178 WSEL= 217.92  

| SECNO | DEPTH | CWSEL | CRWS  | WSELK  | EG   | HV    | HL    | LOSS   | 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= 309.5 460.5 TYPE= 4 TARGET= 0.309  

|          |       |        |       |        |        |       |     |        |        |
|----------|-------|--------|-------|--------|--------|-------|-----|--------|--------|
| 1200.00  | 8.92  | 217.92 | 0.0   | 216.92 | 218.10 | 0.18  | 0.0 | 0.0    | 212.90 |
| 2820.    | 1352. | 588.   | 879.  | 475.   | 122.   | 278.  | 0.  | 0.     | 211.90 |
| 0.0      | 2.85  | 4.83   | 3.16  | 0.085  | 0.060  | 0.085 | 0.0 | 209.00 | 309.53 |
| 0.002913 | 1200. | 1200.  | 1200. | 0      | 0      | 1     | 0.0 | 150.95 | 460.48 |

2800 NAT Q1= 520.61 WSEL= 221.51 ENC Q1= 520.61 WSEL= 222.51 RATIO= 0.0  
 NAT Q1= 740. RATIOS LOB,CH,ROB= 0.1206 0.3262 0.5532 WSEL= 222.51

3470 ENCROACHMENT STATIONS= 152.8 276.4 TYPE= 4 TARGET= 0.296  

|          |       |        |       |        |        |       |       |        |        |
|----------|-------|--------|-------|--------|--------|-------|-------|--------|--------|
| 2750.00  | 8.44  | 222.54 | 0.0   | 221.51 | 222.60 | 0.26  | 4.47  | 0.02   | 215.50 |
| 2320.    | 290.  | 1244.  | 1286. | 96.    | 241.   | 433.  | 29.   | 5.     | 215.60 |
| 0.11     | 3.03  | 5.16   | 2.97  | 0.085  | 0.060  | 0.085 | 0.060 | 213.90 | 152.77 |
| 0.002855 | 1550. | 1550.  | 1550. | 4      | 0      | 1     | 0.0   | 123.61 | 276.39 |

IHC209I IBCOM - PROGRAM INTERRUPT (P) - DIVIDE CHECK OLD PSW IS FF75000F4205D27C . REGISTER CONTAINED 0000000000000000

TRACEBACK ROUTINE CALLED FROM ISN REG. 14 REG. 15 REG. 0 REG. 1

MAIN 0001BEEA 010563C0 FD000008 000D27F8

ENTRY POINT= 010563C0

STANDARD FIXUP TAKEN , EXECUTION CONTINUING  
 2800 NAT Q1= 152.36 WSEL= 220.36 ENC Q1= 201.18 WSEL= 221.36 RATIO= -0.3204

|    | QT | 5,000    | 900,000 | 1800,000 | 2370,000 | 4550,000 | 2370,000 | 0,0      | 0,0     | 0,0     | 0,0     |
|----|----|----------|---------|----------|----------|----------|----------|----------|---------|---------|---------|
| E  | X1 | 7595,000 | 20,000  | 265,000  | 279,000  | 2600,000 | 2600,000 | 2600,000 | 0,0     | 0,0     | 0,0     |
|    | GR | 243,900  | 0,0     | 237,200  | 100,000  | 233,700  | 108,000  | 233,200  | 158,000 | 229,800 | 160,000 |
|    | GR | 228,300  | 163,000 | 229,000  | 166,000  | 229,800  | 170,000  | 232,800  | 171,000 | 232,400 | 200,000 |
|    | GR | 231,400  | 265,000 | 229,000  | 268,000  | 228,500  | 270,000  | 229,000  | 272,000 | 231,800 | 279,000 |
| 1  | GR | 231,800  | 300,000 | 233,600  | 400,000  | 234,600  | 478,000  | 238,500  | 500,000 | 247,400 | 592,000 |
| 2  | EJ | 0,0      | 0,0     | 0,0      | 0,0      | 0,0      | 0,0      | 0,0      | 0,0     | 0,0     | 0,0     |
| 3  |    |          |         |          |          |          |          |          |         |         |         |
| 4  |    |          |         |          |          |          |          |          |         |         |         |
| 5  |    |          |         |          |          |          |          |          |         |         |         |
| 6  |    |          |         |          |          |          |          |          |         |         |         |
| 7  |    |          |         |          |          |          |          |          |         |         |         |
| 8  |    |          |         |          |          |          |          |          |         |         |         |
| 9  |    |          |         |          |          |          |          |          |         |         |         |
| 10 |    |          |         |          |          |          |          |          |         |         |         |
| 11 |    |          |         |          |          |          |          |          |         |         |         |
| 12 |    |          |         |          |          |          |          |          |         |         |         |
| 13 |    |          |         |          |          |          |          |          |         |         |         |
| 14 |    |          |         |          |          |          |          |          |         |         |         |
| 15 |    |          |         |          |          |          |          |          |         |         |         |
| 16 |    |          |         |          |          |          |          |          |         |         |         |
| 17 |    |          |         |          |          |          |          |          |         |         |         |
| 18 |    |          |         |          |          |          |          |          |         |         |         |
| 19 |    |          |         |          |          |          |          |          |         |         |         |
| 20 |    |          |         |          |          |          |          |          |         |         |         |
| 21 |    |          |         |          |          |          |          |          |         |         |         |
| 22 |    |          |         |          |          |          |          |          |         |         |         |
| 23 |    |          |         |          |          |          |          |          |         |         |         |
| 24 |    |          |         |          |          |          |          |          |         |         |         |
| 25 |    |          |         |          |          |          |          |          |         |         |         |
| 26 |    |          |         |          |          |          |          |          |         |         |         |
| 27 |    |          |         |          |          |          |          |          |         |         |         |
| 28 |    |          |         |          |          |          |          |          |         |         |         |
| 29 |    |          |         |          |          |          |          |          |         |         |         |
| 30 |    |          |         |          |          |          |          |          |         |         |         |
| 31 |    |          |         |          |          |          |          |          |         |         |         |
| 32 |    |          |         |          |          |          |          |          |         |         |         |
| 33 |    |          |         |          |          |          |          |          |         |         |         |
| 34 |    |          |         |          |          |          |          |          |         |         |         |
| 35 |    |          |         |          |          |          |          |          |         |         |         |
| 36 |    |          |         |          |          |          |          |          |         |         |         |
| 37 |    |          |         |          |          |          |          |          |         |         |         |
| 38 |    |          |         |          |          |          |          |          |         |         |         |
| 39 |    |          |         |          |          |          |          |          |         |         |         |
| 40 |    |          |         |          |          |          |          |          |         |         |         |
| 41 |    |          |         |          |          |          |          |          |         |         |         |
| 42 |    |          |         |          |          |          |          |          |         |         |         |
| 43 |    |          |         |          |          |          |          |          |         |         |         |
| 44 |    |          |         |          |          |          |          |          |         |         |         |
| 45 |    |          |         |          |          |          |          |          |         |         |         |
| 46 |    |          |         |          |          |          |          |          |         |         |         |
| 47 |    |          |         |          |          |          |          |          |         |         |         |
| 48 |    |          |         |          |          |          |          |          |         |         |         |
| 49 |    |          |         |          |          |          |          |          |         |         |         |
| 50 |    |          |         |          |          |          |          |          |         |         |         |
| 51 |    |          |         |          |          |          |          |          |         |         |         |
| 52 |    |          |         |          |          |          |          |          |         |         |         |
| 53 |    |          |         |          |          |          |          |          |         |         |         |
| 54 |    |          |         |          |          |          |          |          |         |         |         |
| 55 |    |          |         |          |          |          |          |          |         |         |         |
| 56 |    |          |         |          |          |          |          |          |         |         |         |
| 57 |    |          |         |          |          |          |          |          |         |         |         |

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76

12 500

|    |   |   |          |          |          |          |          |          |         |         |         |    |
|----|---|---|----------|----------|----------|----------|----------|----------|---------|---------|---------|----|
| 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. 7 BASIN 6 NEUSE RIVER TRIB.               |          |          |          |          |          |          |         |         |         | 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    | FQ      | 14 |
| 15 |   |   |          |          |          |          |          |          |         |         |         | 15 |
| 16 |   | 0.  | 4.       | 0.       | 0.       | 0.003000 | 0.0      | 0.0      | 0.      | 216.000 | 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   | 1080.000 | 2150.000 | 2820.000 | 5240.000 | 2820.000 | 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  | 1200.000  | 14.000   | 400.000  | 415.000  | 1200.000 | 1200.000 | 1200.000 | 0.0     | 0.0     | 0.0     | 27 |
| 28 | GR  | 227.200   | 0.0      | 223.500  | 100.000  | 217.200  | 200.000  | 212.400  | 300.000 | 212.900 | 400.000 | 28 |
| 29 | A GR                                      | 209.600   | 403.000  | 209.000  | 404.000  | 209.000  | 408.000  | 209.600  | 413.000 | 211.900 | 415.000 | 29 |
| 30 | GR  | 211.600   | 451.000  | 215.500  | 500.000  | 218.000  | 520.000  | 227.000  | 610.000 | 0.0     | 0.0     | 30 |
| 31 |   |   |          |          |          |          |          |          |         |         |         | 31 |
| 32 | X1  | 2750.000  | 13.000   | 169.000  | 200.000  | 1550.300 | 1550.000 | 1550.000 | 0.0     | -0.400  | 0.0     | 32 |
| 33 | GR  | 231.600   | 40.000   | 226.100  | 100.000  | 218.700  | 145.000  | 215.900  | 169.000 | 214.800 | 171.000 | 33 |
| 34 | B GR                                      | 214.500   | 177.000  | 214.300  | 182.000  | 214.800  | 187.000  | 216.000  | 200.000 | 218.800 | 300.000 | 34 |
| 35 | GR  | 221.200   | 400.000  | 225.200  | 500.000  | 230.000  | 600.000  | 0.0      | 0.0     | 0.0     | 0.0     | 35 |
| 36 |   |   |          |          |          |          |          |          |         |         |         | 36 |
| 37 | X1  | 2800.000  | 16.000   | 150.000  | 196.000  | 50.000   | 50.000   | 50.000   | 0.0     | 0.0     | 0.0     | 37 |
| 38 | X3  | 10.000  | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 222.900 | 221.600 | 0.0     | 38 |
| 39 | GR  | 230.700   | 0.0      | 226.300  | 100.000  | 224.400  | 150.000  | 218.200  | 150.000 | 215.300 | 165.000 | 39 |
| 40 | GR  | 214.600   | 169.000  | 213.600  | 175.000  | 214.000  | 180.000  | 214.600  | 184.000 | 216.100 | 196.000 | 40 |
| 41 | GR  | 223.000   | 196.000  | 222.800  | 200.000  | 222.700  | 300.000  | 224.500  | 400.000 | 227.500 | 500.000 | 41 |
| 42 | GR  | 231.100   | 600.000  | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0     | 0.0     | 0.0     | 42 |
| 43 | SB  | 0.900   | 1.500    | 2.600    | 0.0      | 46.000   | 2.000    | 317.500  | 0.0     | 0.0     | 0.0     | 43 |
| 44 |   |   |          |          |          |          |          |          |         |         |         | 44 |
| 45 | X1  | 2825.000  | 0.0      | 0.0      | 0.0      | 25.000   | 25.000   | 25.000   | 0.0     | 0.0     | 0.0     | 45 |
| 46 | X2  | 0.0   | 0.0      | 1.000    | 222.900  | 222.700  | 0.0      | 0.0      | 0.0     | 0.0     | 0.0     | 46 |
| 47 | X3  | 10.000  | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 224.400 | 223.000 | 0.0     | 47 |
| 48 | BT  | 9.000   | 0.0      | 230.700  | 0.0      | 100.000  | 226.300  | 0.0      | 150.000 | 224.400 | 222.900 | 48 |
| 49 | BT  | 196.000   | 223.000  | 221.600  | 200.000  | 222.800  | 0.0      | 300.000  | 222.700 | 0.0     | 400.000 | 49 |
| 50 | BT  | 224.500   | 0.0      | 500.000  | 227.500  | 0.0      | 600.000  | 231.100  | 0.0     | 0.0     | 0.0     | 50 |
| 51 |   |   |          |          |          |          |          |          |         |         |         | 51 |
| 52 | X1  | 2875.000  | 13.000   | 169.000  | 200.000  | 50.000   | 50.000   | 50.000   | 0.0     | 0.0     | 0.0     | 52 |
| 53 | GR  | 231.600   | 40.000   | 226.100  | 100.000  | 218.700  | 145.000  | 215.900  | 169.000 | 214.800 | 171.000 | 53 |
| 54 | GR  | 214.500   | 177.000  | 214.300  | 182.000  | 214.800  | 187.000  | 216.000  | 200.000 | 218.800 | 300.000 | 54 |
| 55 | GR  | 221.200   | 400.000  | 225.200  | 500.000  | 230.000  | 600.000  | 0.0      | 0.0     | 0.0     | 0.0     | 55 |
| 56 |   |   |          |          |          |          |          |          |         |         |         | 56 |
| 57 | X1  | 4995.000  | 12.000   | 270.000  | 288.000  | 2120.000 | 2120.000 | 2120.000 | 0.0     | 0.0     | 0.0     | 57 |
| 58 | GR  | 240.000   | 0.0      | 225.500  | 270.000  | 220.700  | 275.000  | 219.800  | 278.000 | 219.600 | 281.000 | 58 |
| 59 | GR  | 220.700   | 284.000  | 225.500  | 288.000  | 226.000  | 300.000  | 226.300  | 400.000 | 227.800 | 500.000 | 59 |
| 60 | GR  | 238.000   | 572.000  | 241.000  | 608.000  | 0.0      | 0.0      | 0.0      | 0.0     | 0.0     | 0.0     | 60 |



|          |          |           |           |            |     |         |          |          |
|----------|----------|-----------|-----------|------------|-----|---------|----------|----------|
| 2750,000 | 2820,000 | 221.507   | 0.666     | 4.583      | 0.0 | 292,207 | -88,216  | 1550,000 |
| 2750,000 | 5240,000 | 223.336   | 1.829     | 4.610      | 0.0 | 348,781 | -144,791 | 1550,000 |
| 2750,000 | 2820,000 | 50104.500 | 49881.160 | 0.0        | 0.0 | 74,822  | 129,169  | 1550,000 |
| 2800,000 | 1080,000 | 219.374   | 0.0       | -0.039     | 0.0 | 46,000  | 0.0      | 50,000   |
| 2800,000 | 2150,000 | 220.298   | 0.924     | -0.543     | 0.0 | 46,000  | 0.0      | 50,000   |
| 2800,000 | 2820,000 | 220.364   | 0.066     | -1.143     | 0.0 | 46,000  | 0.0      | 50,000   |
| 2800,000 | 5240,000 | 224.316   | 3.952     | 0.780      | 0.0 | 239,765 | -193,765 | 50,000   |
| 2800,000 | 2820,000 | 50104.500 | 49880.180 | 0.0        | 0.0 | 46,002  | -0.002   | 50,000   |
| 2825,000 | 1080,000 | 219.424   | 0.0       | 0.050      | 0.0 | 46,000  | 0.0      | 25,000   |
| 2825,000 | 2150,000 | 220.554   | 1.131     | 0.257      | 0.0 | 46,000  | 0.0      | 25,000   |
| 2825,000 | 2820,000 | 220.814   | 0.260     | 0.450      | 0.0 | 46,000  | 0.0      | 25,000   |
| 2825,000 | 5240,000 | 224.454   | 3.640     | 0.158      | 0.0 | 249,396 | -203,396 | 25,000   |
| 2825,000 | 2820,000 | 220.424   | -4.030    | -49884.070 | 0.0 | 46,000  | 0.0      | 25,000   |
| 2875,000 | 1080,000 | 220.073   | 0.0       | 0.649      | 0.0 | 216,400 | 0.0      | 50,000   |
| 2875,000 | 2150,000 | 222.008   | 1.935     | 1.454      | 0.0 | 295,296 | -78,896  | 50,000   |
| 2875,000 | 2820,000 | 223.029   | 1.021     | 2.215      | 0.0 | 326,972 | -110,572 | 50,000   |
| 2875,000 | 5240,000 | 226.228   | 3.199     | 1.774      | 0.0 | 422,800 | -206,399 | 50,000   |
| 2875,000 | 2820,000 | 50104.719 | 49878.490 | 49884.290  | 0.0 | 81,962  | 134,439  | 50,000   |
| 4995,000 | 1080,000 | 227.550   | 0.0       | 7.477      | 0.0 | 251,531 | 0.0      | 2120,000 |
| 4995,000 | 2150,000 | 228.455   | 0.905     | 6.447      | 0.0 | 289,638 | -38,106  | 2120,000 |
| 4995,000 | 2820,000 | 228.859   | 0.404     | 5.830      | 0.0 | 299,944 | -48,412  | 2120,000 |
| 4995,000 | 5240,000 | 230,206   | 1,347     | 3,979      | 0.0 | 334,602 | -83,071  | 2120,000 |
| 4995,000 | 2820,000 | 50104.719 | 49874.510 | 0.0        | 0.0 | 51,176  | 200,355  | 2120,000 |
| 7595,000 | 900,000  | 234,744   | 0.0       | 7,194      | 0.0 | 373,198 | 0.0      | 2600,000 |
| 7595,000 | 1800,000 | 236,018   | 1,274     | 7,563      | 0.0 | 383,300 | -10,102  | 2600,000 |
| 7595,000 | 2370,000 | 236,650   | 0,632     | 7,791      | 0.0 | 388,356 | -15,158  | 2600,000 |
| 7595,000 | 4550,000 | 238,431   | 1,781     | 8,225      | 0.0 | 417,987 | -44,790  | 2600,000 |
| 7595,000 | 2370,000 | 50104.719 | 49866.280 | 0.0        | 0.0 | 149,271 | 223,927  | 2600,000 |

DATA FOR LAST CROSS SECTION

| PROFILE | TYPE ENC | TARGET | TOP WIDTH<br>AREA-ACRES | TOP WIDTH<br>AREA-DIFF |
|---------|----------|--------|-------------------------|------------------------|
| 1       | 0.0      | 0.0    | 38.367                  | 0.0                    |
| 2       | 0.0      | 0.0    | 44.659                  | 6.292                  |
| 3       | 0.0      | 0.0    | 46.868                  | 8.501                  |
| 4       | 0.0      | 0.0    | 54.214                  | 15.847                 |
| 5       | 4.000    | 0.435  | 12.602                  | -25.765                |

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

100 YEAR FLOODWAY

*Sta. No.*

*Stream Bed*

*W.S. profiles*

| SECTION NUMBER | CHANNEL LENGTH | MIN EL OF ROADWAY | MAX EL OF LOW CHORD | MIN EL GROUND | DISCHARGE (CFS) | CWSEL    | TW      | EG       | TOPWID | STENCL | STENCR | VCH   |
|----------------|----------------|-------------------|---------------------|---------------|-----------------|----------|---------|----------|--------|--------|--------|-------|
| 1200.00        | 1200.00        | 0.0               | 0.0                 | 209.00        | 1080.00         | 214.96   | 197.17  | 215.04   | 246.52 | 0.0    | 0.0    | 3.62  |
| 1200.00        | 1200.00        | 0.0               | 0.0                 | 209.00        | 2150.00         | 216.28   | 390.98  | 216.39   | 287.03 | 0.0    | 0.0    | 4.24  |
| 1200.00        | 1200.00        | 0.0               | 0.0                 | 209.00        | 2820.00         | 216.92   | 511.87  | 217.05   | 305.62 | 0.0    | 0.0    | 4.52  |
| 1200.00        | 1200.00        | 0.0               | 0.0                 | 209.00        | 5240.00         | 218.73   | 958.62  | 218.90   | 351.49 | 0.0    | 0.0    | 5.21  |
| 1200.00        | 1200.00        | 0.0               | 0.0                 | 209.00        | 2820.00         | 50104.50 | *****   | 50104.50 | 105.66 | 328.16 | 433.82 | 0.00  |
| 2750.00        | 1550.00        | 0.0               | 0.0                 | 213.90        | 1080.00         | 219.41   | 204.33  | 219.54   | 203.99 | 0.0    | 0.0    | 3.73  |
| 2750.00        | 1550.00        | 0.0               | 0.0                 | 213.90        | 2150.00         | 220.84   | 398.15  | 221.01   | 271.52 | 0.0    | 0.0    | 4.52  |
| 2750.00        | 1550.00        | 0.0               | 0.0                 | 213.90        | 2820.00         | 221.51   | 520.61  | 221.69   | 292.21 | 0.0    | 0.0    | 4.85  |
| 2750.00        | 1550.00        | 0.0               | 0.0                 | 213.90        | 5240.00         | 223.34   | 953.25  | 223.57   | 348.78 | 0.0    | 0.0    | 5.75  |
| 2750.00        | 1550.00        | 0.0               | 0.0                 | 213.90        | 2820.00         | 50104.50 | *****   | 50104.50 | 74.82  | 169.00 | 243.82 | 0.00  |
| 2800.00        | 50.00          | 0.0               | 0.0                 | 213.60        | 1080.00         | 219.37   | 108.31  | 219.90   | 46.00  | 0.0    | 0.0    | 5.83  |
| 2800.00        | 50.00          | 0.0               | 0.0                 | 213.60        | 2150.00         | 220.30   | 149.29  | 221.68   | 46.00  | 0.0    | 0.0    | 9.44  |
| 2800.00        | 50.00          | 0.0               | 0.0                 | 213.60        | 2820.00         | 220.36   | 152.36  | 222.68   | 46.00  | 0.0    | 0.0    | 12.22 |
| 2800.00        | 50.00          | 0.0               | 0.0                 | 213.60        | 5240.00         | 224.32   | 420.21  | 226.05   | 239.76 | 0.0    | 0.0    | 11.22 |
| 2800.00        | 50.00          | 0.0               | 0.0                 | 213.60        | 2820.00         | 50104.50 | *****   | 50104.50 | 46.00  | 150.00 | 196.00 | 0.00  |
| 2825.00        | 25.00          | 222.70            | 222.90              | 213.60        | 1080.00         | 20219.42 | 110.39  | 219.94   | 46.00  | 0.0    | 0.0    | 5.76  |
| 2825.00        | 25.00          | 222.70            | 222.90              | 213.60        | 2150.00         | 220.55   | 161.31  | 221.81   | 46.00  | 0.0    | 0.0    | 8.98  |
| 2825.00        | 25.00          | 222.70            | 222.90              | 213.60        | 2820.00         | 220.81   | 174.18  | 222.76   | 46.00  | 0.0    | 0.0    | 11.20 |
| 2825.00        | 25.00          | 222.70            | 222.90              | 213.60        | 5240.00         | 224.45   | 438.79  | 226.05   | 249.40 | 0.0    | 0.0    | 10.85 |
| 2825.00        | 25.00          | 222.70            | 222.90              | 213.60        | 2820.00         | 220.42   | 155.12  | 50104.50 | 46.00  | 0.0    | 0.0    | 12.08 |
| 2875.00        | 50.00          | 0.0               | 0.0                 | 214.30        | 1080.00         | 220.07   | 233.85  | 220.18   | 216.40 | 0.0    | 0.0    | 3.37  |
| 2875.00        | 50.00          | 0.0               | 0.0                 | 214.30        | 2150.00         | 222.01   | 540.51  | 222.11   | 295.30 | 0.0    | 0.0    | 3.59  |
| 2875.00        | 50.00          | 0.0               | 0.0                 | 214.30        | 2820.00         | 223.03   | 769.19  | 223.13   | 326.97 | 0.0    | 0.0    | 3.63  |
| 2875.00        | 50.00          | 0.0               | 0.0                 | 214.30        | 5240.00         | 226.23   | 1804.79 | 226.31   | 422.80 | 0.0    | 0.0    | 3.59  |
| 2875.00        | 50.00          | 0.0               | 0.0                 | 214.30        | 2820.00         | 50104.72 | *****   | 50104.72 | 81.96  | 169.00 | 250.96 | 0.00  |
| 4995.00        | 2120.00        | 0.0               | 0.0                 | 219.60        | 1080.00         | 227.55   | 125.58  | 227.91   | 251.53 | 0.0    | 0.0    | 6.05  |
| 4995.00        | 2120.00        | 0.0               | 0.0                 | 219.60        | 2150.00         | 228.45   | 226.40  | 228.87   | 289.64 | 0.0    | 0.0    | 7.33  |
| 4995.00        | 2120.00        | 0.0               | 0.0                 | 219.60        | 2820.00         | 228.86   | 284.10  | 229.31   | 299.94 | 0.0    | 0.0    | 7.96  |
| 4995.00        | 2120.00        | 0.0               | 0.0                 | 219.60        | 5240.00         | 230.21   | 531.70  | 230.70   | 334.60 | 0.0    | 0.0    | 8.85  |
| 4995.00        | 2120.00        | 0.0               | 0.0                 | 219.60        | 2820.00         | 50104.72 | *****   | 50104.72 | 51.18  | 270.00 | 321.18 | 0.00  |
| 7595.00        | 2600.00        | 0.0               | 0.0                 | 228.30        | 900.00          | 234.74   | 260.75  | 234.77   | 373.20 | 0.0    | 0.0    | 2.29  |
| 7595.00        | 2600.00        | 0.0               | 0.0                 | 228.30        | 1800.00         | 236.02   | 526.69  | 236.06   | 383.30 | 0.0    | 0.0    | 2.65  |
| 7595.00        | 2600.00        | 0.0               | 0.0                 | 228.30        | 2370.00         | 236.65   | 672.49  | 236.70   | 388.36 | 0.0    | 0.0    | 2.83  |
| 7595.00        | 2600.00        | 0.0               | 0.0                 | 228.30        | 4550.00         | 238.45   | 1260.30 | 238.50   | 417.99 | 0.0    | 0.0    | 3.49  |
| 7595.00        | 2600.00        | 0.0               | 0.0                 | 228.30        | 2370.00         | 50104.72 | *****   | 50104.72 | 149.27 | 189.10 | 338.37 | 0.00  |

| SECTION NUMBER | DISCHARGE CFS | CWSEL     | CWSEL DIFF EACH Q | CWSEL DIFF EACH SECTION | CWSEL-WSELK | TOPWID  | T.W. DIFF | LENGTH   |
|----------------|---------------|-----------|-------------------|-------------------------|-------------|---------|-----------|----------|
| 1200.000       | 1080.000      | 214.959   | 0.0               | 0.0                     | 0.0         | 246.520 | 0.0       | 1200.000 |
| 1200.000       | 2150.000      | 216.279   | 1.319             | 0.0                     | 0.0         | 287.032 | -40.513   | 1200.000 |
| 1200.000       | 2820.000      | 216.923   | 0.645             | 0.0                     | 0.0         | 305.616 | -59.097   | 1200.000 |
| 1200.000       | 5240.000      | 218.726   | 1.803             | 0.0                     | 0.0         | 351.491 | -104.972  | 1200.000 |
| 1200.000       | 2820.000      | 50104.500 | 49885.770         | 0.0                     | 0.0         | 105.665 | 140.855   | 1200.000 |
| 2750.000       | 1080.000      | 219.413   | 0.0               | 4.454                   | 0.0         | 203.991 | 0.0       | 1550.000 |
| 2750.000       | 2150.000      | 220.840   | 1.428             | 4.562                   | 0.0         | 271.517 | -67.526   | 1550.000 |

\*\*\*\*\*  
 HEL2 VERSION UPDATED JAN 1975  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08  
 MODIFICATIONS 52,53,54,55,56,57,58  
 \*\*\*\*\*

T1 TRIB. 7 BASIN 6 NEUSE RIVER TRIB.  
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-6 JOB NO.6855  
 T3 100 YEAR FLOODWAY

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

CCMV= 0.100 CEHV= 0.300  
 2800 NAT Q1= 197.17 WSEL= 214.96 ENC Q1= 197.17 WSEL= 215.96 RATIO= 0.0  
 NAT Q1= 337. RATIOS LOB,CH,ROB= 0.4814 0.2039 0.3147 WSEL= 215.96  
 2096 WSEL NOT GIVEN,AVG OF MAX,MIN USED  
 3280 CROSS SECTION 1200.00 EXTENDED 49877.50 FEET

| SECNO | DEPTH | CWSEL | CRWS  | WSELK  | EG   | HV    | HL    | LOSS   | 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 ENCKROACHMENT STATIONS= 328.2 433.8 TYPE= 4 TARGET= 0.415  
 1200.00 49895.50 50104.50 0.0 214.96 50104.50 0.00 0.0 0.0 212.90  
 2820. 1847. 489. 484. 3584452. 748420. 938947. 0. 0. 211.90  
 0.0 0.00 0.00 0.00 0.085 0.060 0.085 0.0 209.00 328.16  
 0.000000 1200. 1200. 1200. 0 0 1 0.0 105.66 433.82

2800 NAT Q1= 204.33 WSEL= 219.41 ENC Q1= 204.33 WSEL= 220.41 RATIO= 0.0  
 NAT Q1= 331. RATIOS LOB,CH,ROB= 0.1097 0.4377 0.4527 WSEL= 220.41  
 3685 20 TRIALS USED WSEL,CWSEL  
 3280 CROSS SECTION 2750.00 EXTENDED 49874.90 FEET

3470 ENCKROACHMENT STATIONS= 169.0 243.8 TYPE= 4 TARGET= 0.384  
 2750.00 49890.60 50104.50 0.0 219.41 50104.50 0.00 0.00 0.00 215.50  
 2820. 0. 1406. 1414. 13. 1546587. 2186172. 160206. 3. 215.60  
 553.70 0.00 0.00 0.00 0.085 0.060 0.085 0.060 213.90 169.00  
 0.000000 1550. 1550. 1550. 21 0 1 0.0 74.82 243.82

2800 NAT Q1= 108.31 WSEL= 219.37 ENC Q1= 152.76 WSEL= 220.37 RATIO= -0.4103  
 NAT Q1= 153. RATIOS LOB,CH,ROB= 0.0 1.0000 0.0 WSEL= 220.37  
 3685 20 TRIALS USED WSEL,CWSEL

\*\*\*\*\*  
 MEC2 VERSION UPDATED JAN 1975  
 ERROR CORRECTIONS 01,02,03,04,05,06,07,08  
 MODIFICATIONS 52,53,54,55,56,57,58  
 \*\*\*\*\*

T1 TRIB. 7 BASIN 6 NEUSE RIVER TRIB.  
 T2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855  
 T3 500 YEAR FLOOD WATER SURFACE PROFILE

| J1 | ICHECK | ING  | NINV   | IDIR  | STRT     | METRIC | HVINS | Q   | WSEL    | FQ     |
|----|--------|------|--------|-------|----------|--------|-------|-----|---------|--------|
|    | -10.   | 5.   | 0.     | 0.    | 0.003000 | 0.0    | 0.0   | 0.  | 219.000 | 0.0    |
| J2 | NPROF  | IPLT | 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    | 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      |
| 1200.00  | 9.73  | 218.73 | 0.0   | 219.00 | 218.90 | 0.17  | 0.0   | 0.0    | 212.90     |
| 5240.    | 2882. | 698.   | 1661. | 1019.  | 134.   | 547.  | 0.    | 0.     | 211.90     |
| 0.0      | 2.83  | 5.21   | 3.04  | 0.085  | 0.060  | 0.085 | 0.0   | 209.00 | 175.77     |
| 0.002988 | 1200. | 1200.  | 1200. | 0      | 0      | 4     | 0.0   | 351.49 | 527.26     |
| 2750.00  | 9.44  | 223.34 | 0.0   | 0.0    | 223.57 | 0.24  | 4.66  | 0.02   | 215.50     |
| 5240.    | 646.  | 1563.  | 3031. | 231.   | 272.   | 1086. | 59.   | 12.    | 215.60     |
| 0.12     | 2.79  | 5.75   | 2.79  | 0.085  | 0.060  | 0.085 | 0.060 | 213.90 | 114.42     |
| 0.003022 | 1550. | 1550.  | 1550. | 1      | 0      | 1     | 0.0   | 348.78 | 463.20     |

3685 20 TRIALS USED WSEL,CWSEL

7185 MIN SPECIFIC ENERGY

5720 ASSUMED CRITICAL DEPTH

| SECNO    | DEPTH | CWSEL  | CRISW  | 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      |
| 2800.00  | 10.72 | 224.32 | 224.32 | 0.0    | 226.05 | 1.74  | 0.29  | 0.0    | 224.40     |
| 5240.    | 0.    | 4627.  | 613.   | 0.     | 412.   | 235.  | 60.   | 13.    | 223.00     |
| 0.12     | 0.0   | 11.22  | 2.61   | 0.085  | 0.060  | 0.085 | 0.060 | 213.60 | 150.00     |
| 0.015550 | 50.   | 50.    | 50.    | 30     | 11     | 1     | 0.0   | 239.76 | 389.76     |

\*\*\*\*\*  
 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. 7 BASIN 6 NEUSE RIVER TRIB.  
 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 | G   | WSEL    | FQ     |
|----|--------|------|--------|-------|----------|--------|-------|-----|---------|--------|
|    | -10.   | 4.   | 0.     | 0.    | 0.003000 | 0.0    | 0.0   | 0.  | 216.000 | 0.0    |
| J2 | NPROF  | IPLT | 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  | CRISW | WSELK  | EG     | HV    | HL    | ULOSS  | BANK ELEV  |  |
| Q        | QLOB  | QCH    | QROB  | ALOB   | ACH    | AROB  | VOL   | TWA    | LEFT/RIGHT |  |
| TIME     | VLOB  | VCH    | VROB  | XNL    | XNCH   | XNR   | WTN   | ELMIN  | SSIA       |  |
| SLOPE    | XLOBL | XLCH   | XLOBR | ITRIAL | IDC    | ICONT | CORAR | TOPWID | ENUST      |  |
| 1200.00  | 7.92  | 216.92 | 0.0   | 216.00 | 217.05 | 0.13  | 0.0   | 0.0    | 212.90     |  |
| 2820.    | 1437. | 483.   | 900.  | 640.   | 107.   | 360.  | 0.    | 0.     | 211.90     |  |
| 0.0      | 2.24  | 4.52   | 2.50  | 0.085  | 0.060  | 0.085 | 0.0   | 209.00 | 205.77     |  |
| 0.003035 | 1200. | 1200.  | 1200. | 0      | 0      | 4     | 0.0   | 305.62 | 511.58     |  |
| 2750.00  | 7.61  | 221.51 | 0.0   | 0.0    | 221.69 | 0.18  | 4.63  | 0.02   | 215.50     |  |
| 2820.    | 329.  | 1045.  | 1446. | 142.   | 216.   | 648.  | 38.   | 11.    | 215.60     |  |
| 0.13     | 2.32  | 4.85   | 2.23  | 0.085  | 0.060  | 0.085 | 0.060 | 213.90 | 125.49     |  |
| 0.002934 | 1550. | 1550.  | 1550. | 2      | 0      | 1     | 0.0   | 292.21 | 417.70     |  |

3301 HV CHANGED MORE THAN HVINS

| OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= | 222.90 | ELREA= | 221.60 |       |        |       |       |        |        |  |
|--|--------|--------|--------|-------|--------|-------|-------|--------|--------|--|
| 2800.00                                    | 6.76   | 220.36 | 0.0    | 0.0   | 222.68 | 2.32  | 0.35  | 0.64   | 224.40 |  |
| 2820.                                      | 0.     | 2820.  | 0.     | 0.    | 231.   | 0.    | 38.   | 11.    | 223.00 |  |
| 0.14                                       | 0.0    | 12.22  | 0.0    | 0.085 | 0.060  | 0.085 | 0.060 | 213.60 | 150.00 |  |
| 0.034256                                   | 50.    | 50.    | 50.    | 4     | 0      | 1     | 0.0   | 46.00  | 196.00 |  |

SPECIAL BRIDGE

| 5070,VARIABLE | ELCHU OR | ELCHD ON | CARD SB | NOT  | SPECIFIED |      |        |     |        |        |
|---------------|----------|----------|---------|------|-----------|------|--------|-----|--------|--------|
| SB            | XK       | XKOR     | COFQ    | RDLN | BWC       | BWP  | BAREA  | SS  | ELCHU  | ELCHD  |
|               | 0.90     | 1.50     | 2.60    | 0.0  | 46.00     | 2.00 | 317.50 | 0.0 | 213.60 | 213.60 |

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

I1 TRIB. 7 BASIN 6 NEUSE RIVER TRIB.  
 I2 FLOODPLAIN STUDY AT WAKE COUNTY M-G JOB NO.6855  
 I3 50 YEAR FLOOD WATER SURFACE PROFILE

| J1 | ICHECK | INQ   | NINV   | IDIR  | STRT     | METRIC | HVINS | Q   | WSEL    | FG     |
|----|--------|-------|--------|-------|----------|--------|-------|-----|---------|--------|
|    | -10.   | 3.    | 0.     | 0.    | 0.003000 | 0.0    | 0.0   | 0.  | 215.000 | 0.0    |
| J2 | NPROF  | IPLOT | 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    |

| SECNO    | DEPTH | CWSEL  | CRWS  | WSELK  | EG     | HV    | HL    | OLUSS  | 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      |
| 1200.00  | 7.28  | 216.28 | 0.0   | 215.00 | 216.39 | 0.11  | 0.0   | 0.0    | 212.90     |
| 2150.    | 1058. | 411.   | 681.  | 520.   | 97.    | 299.  | 0.    | 0.     | 211.90     |
| 0.0      | 2.04  | 4.24   | 2.28  | 0.085  | 0.060  | 0.085 | 0.0   | 209.00 | 219.20     |
| 0.003024 | 1200. | 1200.  | 1200. | 0      | 0      | 4     | 0.0   | 287.03 | 506.23     |
| 2750.00  | 6.94  | 220.84 | 0.0   | 0.0    | 221.01 | 0.17  | 4.60  | 0.02   | 215.50     |
| 2150.    | 243.  | 881.   | 1025. | 114.   | 195.   | 508.  | 31.   | 10.    | 215.60     |
| 0.14     | 2.13  | 4.52   | 2.02  | 0.085  | 0.060  | 0.085 | 0.060 | 213.90 | 129.54     |
| 0.002916 | 1550. | 1550.  | 1550. | 2      | 0      | 1     | 0.0   | 271.52 | 401.06     |

5301 HV CHANGED MORE THAN HVINS

| OVERBANK AREA ASSUMED NON-EFFECTIVE,ELLEA= | 222.90 | ELREA= | 221.60 |       |        |       |       |        |        |
|--|--------|--------|--------|-------|--------|-------|-------|--------|--------|
| 2800.00                                    | 6.70   | 220.30 | 0.0    | 0.0   | 221.68 | 1.38  | 0.31  | 0.36   | 224.40 |
| 2150.                                      | 0.     | 2150.  | 0.     | 0.    | 228.   | 0.    | 31.   | 10.    | 223.00 |
| 0.14                                       | 0.0    | 9.44   | 0.0    | 0.085 | 0.060  | 0.085 | 0.060 | 213.60 | 150.00 |
| 0.020740                                   | 50.    | 50.    | 50.    | 3     | 0      | 1     | 0.0   | 46.00  | 196.00 |

SPECIAL BRIDGE

| SB   | XK   | XKOR | COFQ | RDLN  | BWC  | BWP    | BAREA | SS     | ELCHU  | ELCHD |
|------|------|------|------|-------|------|--------|-------|--------|--------|-------|
| 0.90 | 1.50 | 2.60 | 0.0  | 46.00 | 2.00 | 317.50 | 0.0   | 213.60 | 213.60 |       |

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  |
|----------------|----------------|-------------------|---------------------|---------------|-----------------|--------|--------|--------|--------|--------|--------|------|
| 1200.00        | 1200.00        | 0.0               | 0.0                 | 209.00        | 1080.00         | 214.96 | 197.17 | 215.04 | 246.52 | 0.0    | 0.0    | 3.62 |
| 2750.00        | 1550.00        | 0.0               | 0.0                 | 213.90        | 1080.00         | 219.41 | 204.33 | 219.54 | 203.99 | 0.0    | 0.0    | 3.73 |
| 2800.00        | 50.00          | 0.0               | 0.0                 | 213.60        | 1080.00         | 219.37 | 108.31 | 219.90 | 46.00  | 0.0    | 0.0    | 5.83 |
| 2825.00        | 25.00          | 222.70            | 222.90              | 213.60        | 1080.00         | 219.42 | 110.39 | 219.94 | 46.00  | 0.0    | 0.0    | 5.76 |
| 2875.00        | 50.00          | 0.0               | 0.0                 | 214.30        | 1080.00         | 220.07 | 233.85 | 220.18 | 216.40 | 0.0    | 0.0    | 3.37 |
| 4995.00        | 2120.00        | 0.0               | 0.0                 | 219.60        | 1080.00         | 227.55 | 125.58 | 227.91 | 251.53 | 0.0    | 0.0    | 6.05 |
| 7595.00        | 2600.00        | 0.0               | 0.0                 | 228.30        | 900.00          | 234.74 | 260.75 | 234.77 | 373.20 | 0.0    | 0.0    | 2.29 |

| SECTION NUMBER | DISCHARGE CFS | CWSEL   | CWSEL DIFF EACH Q | CWSEL DIFF EACH SECTION | CWSEL-WSELK | TOPWID  | T.W. DIFF | LENGTH   |
|----------------|---------------|---------|-------------------|-------------------------|-------------|---------|-----------|----------|
| 1200.000       | 1080.000      | 214.959 | 0.0               | 0.0                     | 0.0         | 246.520 | 0.0       | 1200.000 |
| 2750.000       | 1080.000      | 219.413 | 0.0               | 4.454                   | 0.0         | 203.991 | 0.0       | 1550.000 |
| 2800.000       | 1080.000      | 219.374 | 0.0               | -0.039                  | 0.0         | 46.000  | 0.0       | 50.000   |
| 2825.000       | 1080.000      | 219.424 | 0.0               | 0.050                   | 0.0         | 46.000  | 0.0       | 25.000   |
| 2875.000       | 1080.000      | 220.073 | 0.0               | 0.649                   | 0.0         | 216.400 | 0.0       | 50.000   |
| 4995.000       | 1080.000      | 227.550 | 0.0               | 7.477                   | 0.0         | 251.531 | 0.0       | 2120.000 |
| 7595.000       | 900.000       | 234.744 | 0.0               | 7.194                   | 0.0         | 373.198 | 0.0       | 2600.000 |

DATA FOR LAST CROSS SECTION PROFILE

| TYPE | ENC | TARGET | TOP WIDTH AREA-ACRES | TOP WIDTH AREA-DIFF |
|------|-----|--------|----------------------|---------------------|
| 1    | 0.0 | 0.0    | 38.367               | 0.0                 |

|           |          |         |       |        |     |         |          |          |
|-----------|----------|---------|-------|--------|-----|---------|----------|----------|
| 12914.000 | 1200.000 | 436.464 | 2.037 | 84.692 | 0.0 | 63.586  | -33.971  | 3864.000 |
| 12914.000 | 1630.000 | 437.282 | 0.818 | 85.270 | 0.0 | 94.014  | -64.399  | 3864.000 |
| 12914.000 | 3100.000 | 439.002 | 1.720 | 86.259 | 0.0 | 156.951 | -127.336 | 3864.000 |
| 12964.000 | 570.000  | 437.440 | 0.0   | 3.013  | 0.0 | 85.328  | 0.0      | 50.000   |
| 12964.000 | 1200.000 | 437.783 | 0.343 | 1.319  | 0.0 | 95.751  | -10.423  | 50.000   |
| 12964.000 | 1630.000 | 438.658 | 0.876 | 1.376  | 0.0 | 121.646 | -36.318  | 50.000   |
| 12964.000 | 3100.000 | 440.579 | 1.920 | 1.576  | 0.0 | 178.745 | -93.417  | 50.000   |
| 13000.000 | 570.000  | 438.649 | 0.0   | 1.208  | 0.0 | 121.197 | 0.0      | 36.000   |
| 13000.000 | 1200.000 | 439.338 | 0.689 | 1.555  | 0.0 | 141.664 | -20.467  | 36.000   |
| 13000.000 | 1630.000 | 439.739 | 0.402 | 1.081  | 0.0 | 153.629 | -32.433  | 36.000   |
| 13000.000 | 3100.000 | 440.891 | 1.152 | 0.312  | 0.0 | 188.190 | -66.993  | 36.000   |
| 13050.000 | 570.000  | 438.709 | 0.0   | 0.061  | 0.0 | 131.635 | 0.0      | 50.000   |
| 13050.000 | 1200.000 | 439.486 | 0.777 | 0.149  | 0.0 | 159.979 | -28.343  | 50.000   |
| 13050.000 | 1630.000 | 439.940 | 0.454 | 0.201  | 0.0 | 177.250 | -45.614  | 50.000   |
| 13050.000 | 3100.000 | 441.218 | 1.278 | 0.327  | 0.0 | 230.391 | -98.755  | 50.000   |
| 13250.000 | 570.000  | 447.657 | 0.0   | 8.948  | 0.0 | 214.021 | 0.0      | 200.000  |
| 13250.000 | 1200.000 | 447.966 | 0.309 | 8.479  | 0.0 | 404.604 | -190.583 | 200.000  |
| 13250.000 | 1630.000 | 448.131 | 0.165 | 8.191  | 0.0 | 409.049 | -195.028 | 200.000  |
| 13250.000 | 3100.000 | 448.574 | 0.443 | 7.356  | 0.0 | 420.972 | -206.951 | 200.000  |
| 13300.000 | 570.000  | 447.904 | 0.0   | 0.248  | 0.0 | 403.056 | 0.0      | 50.000   |
| 13300.000 | 1200.000 | 448.346 | 0.442 | 0.381  | 0.0 | 414.927 | -11.871  | 50.000   |
| 13300.000 | 1630.000 | 448.593 | 0.247 | 0.462  | 0.0 | 421.587 | -18.531  | 50.000   |
| 13300.000 | 3100.000 | 449.261 | 0.668 | 0.687  | 0.0 | 439.579 | -36.523  | 50.000   |
| 14050.000 | 570.000  | 449.898 | 0.0   | 1.994  | 0.0 | 143.000 | 0.0      | 750.000  |
| 14050.000 | 1200.000 | 451.167 | 1.268 | 2.820  | 0.0 | 260.375 | -117.374 | 750.000  |
| 14050.000 | 1630.000 | 451.734 | 0.567 | 3.141  | 0.0 | 283.678 | -140.678 | 750.000  |
| 14050.000 | 3100.000 | 453.084 | 1.350 | 3.823  | 0.0 | 321.396 | -178.396 | 750.000  |

DATA FOR LAST CROSS SECTION

| PROFILE | TYPE ENC | TARGET | TOP WIDTH<br>AREA-ACRES | TOP WIDTH<br>AREA-DIFF |
|---------|----------|--------|-------------------------|------------------------|
| 1       | 0.0      | 0.0    | 49.291                  | 0.0                    |
| 2       | 0.0      | 0.0    | 57.096                  | 7.805                  |
| 3       | 0.0      | 0.0    | 60.778                  | 11.487                 |
| 4       | 0.0      | 0.0    | 68.164                  | 18.873                 |



| 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   |
|----------------|----------------|-------------------|---------------------|---------------|-----------------|--------|--------|--------|--------|--------|--------|-------|
| 13050.00       | 50.00          | 0.0               | 0.0                 | 428.80        | 570.00          | 438.71 | 177.36 | 438.79 | 131.64 | 0.0    | 0.0    | 2.59  |
| 13050.00       | 50.00          | 0.0               | 0.0                 | 428.80        | 1200.00         | 439.49 | 235.51 | 439.69 | 159.98 | 0.0    | 0.0    | 4.41  |
| 13050.00       | 50.00          | 0.0               | 0.0                 | 428.80        | 1630.00         | 439.94 | 277.55 | 440.22 | 177.25 | 0.0    | 0.0    | 5.27  |
| 13050.00       | 50.00          | 0.0               | 0.0                 | 428.80        | 3100.00         | 441.22 | 437.24 | 441.65 | 230.39 | 0.0    | 0.0    | 7.01  |
| 13250.00       | 200.00         | 0.0               | 0.0                 | 445.10        | 570.00          | 447.66 | 25.33  | 447.89 | 214.02 | 0.0    | 0.0    | 7.22  |
| 13250.00       | 200.00         | 0.0               | 0.0                 | 445.10        | 1200.00         | 447.97 | 43.71  | 448.33 | 404.60 | 0.0    | 0.0    | 9.63  |
| 13250.00       | 200.00         | 0.0               | 0.0                 | 445.10        | 1630.00         | 448.13 | 58.26  | 448.55 | 409.05 | 0.0    | 0.0    | 10.25 |
| 13250.00       | 200.00         | 0.0               | 0.0                 | 445.10        | 3100.00         | 448.57 | 109.41 | 449.17 | 420.97 | 0.0    | 0.0    | 11.52 |
| 13300.00       | 50.00          | 446.30            | 446.60              | 445.10        | 570.00          | 447.90 | 39.30  | 448.00 | 403.06 | 0.0    | 0.0    | 5.01  |
| 13300.00       | 50.00          | 446.30            | 446.60              | 445.10        | 1200.00         | 448.35 | 81.39  | 448.48 | 414.93 | 0.0    | 0.0    | 5.70  |
| 13300.00       | 50.00          | 446.30            | 446.60              | 445.10        | 1630.00         | 448.59 | 112.49 | 448.75 | 421.59 | 0.0    | 0.0    | 5.92  |
| 13300.00       | 50.00          | 446.30            | 446.60              | 445.10        | 3100.00         | 449.26 | 220.11 | 449.50 | 439.58 | 0.0    | 0.0    | 6.55  |
| 14050.00       | 750.00         | 0.0               | 0.0                 | 442.90        | 570.00          | 449.90 | 184.87 | 449.95 | 143.00 | 0.0    | 0.0    | 2.14  |
| 14050.00       | 750.00         | 0.0               | 0.0                 | 442.90        | 1200.00         | 451.17 | 313.03 | 451.26 | 260.37 | 0.0    | 0.0    | 3.11  |
| 14050.00       | 750.00         | 0.0               | 0.0                 | 442.90        | 1630.00         | 451.73 | 394.94 | 451.85 | 283.68 | 0.0    | 0.0    | 3.56  |
| 14050.00       | 750.00         | 0.0               | 0.0                 | 442.90        | 3100.00         | 453.08 | 655.79 | 453.26 | 321.40 | 0.0    | 0.0    | 4.61  |

| SECTION NUMBER | DISCHARGE CFS | CWSEL   | CWSEL DIFF EACH Q | CWSEL DIFF EACH SECTION | CWSEL-WSELK | TOPWID  | T.W. DIFF | LENGTH   |
|----------------|---------------|---------|-------------------|-------------------------|-------------|---------|-----------|----------|
| 800,000        | 570.000       | 262.972 | 0.0               | 0.0                     | 0.0         | 67.927  | 0.0       | 800,000  |
| 800,000        | 1200.000      | 264.364 | 1.392             | 0.0                     | 0.0         | 92.036  | -24.110   | 800,000  |
| 800,000        | 1630.000      | 265.058 | 0.694             | 0.0                     | 0.0         | 99.305  | -31.379   | 800,000  |
| 800,000        | 3100.000      | 266.797 | 1.739             | 0.0                     | 0.0         | 117.515 | -49.589   | 800,000  |
| 4000,000       | 570.000       | 299.318 | 0.0               | 36.346                  | 0.0         | 93.100  | 0.0       | 3200,000 |
| 4000,000       | 1200.000      | 300.466 | 1.148             | 36.103                  | 0.0         | 113.094 | -19.994   | 3200,000 |
| 4000,000       | 1630.000      | 301.041 | 0.575             | 35.983                  | 0.0         | 123.039 | -29.918   | 3200,000 |
| 4000,000       | 3100.000      | 302.566 | 1.525             | 35.769                  | 0.0         | 146.235 | -53.135   | 3200,000 |
| 5900,000       | 570.000       | 325.679 | 0.0               | 26.361                  | 0.0         | 203.550 | 0.0       | 1900,000 |
| 5900,000       | 1200.000      | 326.365 | 0.687             | 25.899                  | 0.0         | 232.719 | -29.169   | 1900,000 |
| 5900,000       | 1630.000      | 326.738 | 0.372             | 25.697                  | 0.0         | 244.072 | -40.522   | 1900,000 |
| 5900,000       | 3100.000      | 327.698 | 0.960             | 25.131                  | 0.0         | 253.442 | -49.892   | 1900,000 |
| 5950,000       | 570.000       | 326.270 | 0.0               | 0.592                   | 0.0         | 228.659 | 0.0       | 50,000   |
| 5950,000       | 1200.000      | 327.014 | 0.744             | 0.648                   | 0.0         | 246.773 | -18.114   | 50,000   |
| 5950,000       | 1630.000      | 327.401 | 0.388             | 0.664                   | 0.0         | 250.552 | -21.893   | 50,000   |
| 5950,000       | 3100.000      | 328.420 | 1.019             | 0.722                   | 0.0         | 260.480 | -31.821   | 50,000   |
| 6000,000       | 570.000       | 340.511 | 0.0               | 14.241                  | 0.0         | 370.876 | 0.0       | 50,000   |
| 6000,000       | 1200.000      | 341.243 | 0.731             | 14.229                  | 0.0         | 373.272 | -2.396    | 50,000   |
| 6000,000       | 1630.000      | 341.582 | 0.339             | 14.180                  | 0.0         | 374.384 | -3.508    | 50,000   |
| 6000,000       | 3100.000      | 342.444 | 0.862             | 14.024                  | 0.0         | 377.216 | -6.340    | 50,000   |
| 6050,000       | 570.000       | 340.511 | 0.0               | 0.0                     | 0.0         | 370.548 | 0.0       | 50,000   |
| 6050,000       | 1200.000      | 341.243 | 0.732             | 0.000                   | 0.0         | 372.943 | -2.345    | 50,000   |
| 6050,000       | 1630.000      | 341.582 | 0.339             | 0.000                   | 0.0         | 374.052 | -3.604    | 50,000   |
| 6050,000       | 3100.000      | 342.445 | 0.863             | 0.001                   | 0.0         | 376.876 | -6.328    | 50,000   |
| 9050,000       | 570.000       | 351.269 | 0.0               | 10.758                  | 0.0         | 198.895 | 0.0       | 3000,000 |
| 9050,000       | 1200.000      | 351.771 | 0.502             | 10.529                  | 0.0         | 220.275 | -21.381   | 3000,000 |
| 9050,000       | 1630.000      | 352.012 | 0.241             | 10.430                  | 0.0         | 230.519 | -31.624   | 3000,000 |
| 9050,000       | 3100.000      | 352.743 | 0.731             | 10.299                  | 0.0         | 248.795 | -49.901   | 3000,000 |
| 12914,000      | 570,000       | 434,427 | 0.0               | 83,158                  | 0.0         | 29,615  | 0.0       | 3864,000 |

SUMMARY PRINTOUT FOR MULTIPLE PROFILES

500 YEAR FLOOD WATER SUR

| SECTION NUMBER | CHANNEL LENGTH | MI EL OF ROADWAY | EL OF  | MAX EL OF LOW CHORD | MIN EL GROUND | DISCHARGE (CFS) | CWSEL  | TQ      | EG     | TOPWID | STENCL | STENCR | VCH   |
|----------------|----------------|------------------|--------|---------------------|---------------|-----------------|--------|---------|--------|--------|--------|--------|-------|
| A              | 800.00         | 800.00           | 0.0    | 0.0                 | 257.00        | 570.00          | 262.97 | 51.95   | 263.50 | 67.93  | 0.0    | 0.0    | 5.91  |
|                | 800.00         | 800.00           | 0.0    | 0.0                 | 257.00        | 1200.00         | 264.36 | 108.53  | 265.07 | 92.04  | 0.0    | 0.0    | 7.41  |
|                | 800.00         | 800.00           | 0.0    | 0.0                 | 257.00        | 1630.00         | 265.06 | 148.74  | 265.83 | 99.31  | 0.0    | 0.0    | 8.02  |
|                | 800.00         | 800.00           | 0.0    | 0.0                 | 257.00        | 3100.00         | 266.80 | 282.62  | 267.77 | 117.52 | 0.0    | 0.0    | 9.59  |
| B              | 4500.00        | 3200.00          | 0.0    | 0.0                 | 293.50        | 570.00          | 299.32 | 55.38   | 299.62 | 93.10  | 0.0    | 0.0    | 4.46  |
|                | 4000.00        | 3200.00          | 0.0    | 0.0                 | 293.50        | 1200.00         | 300.47 | 118.30  | 300.92 | 113.09 | 0.0    | 0.0    | 5.69  |
|                | 4000.00        | 3200.00          | 0.0    | 0.0                 | 293.50        | 1630.00         | 301.04 | 159.78  | 301.58 | 123.02 | 0.0    | 0.0    | 6.32  |
|                | 4000.00        | 3200.00          | 0.0    | 0.0                 | 293.50        | 3100.00         | 302.57 | 305.94  | 303.30 | 146.24 | 0.0    | 0.0    | 7.74  |
| C              | 5900.00        | 1900.00          | 0.0    | 0.0                 | 320.60        | 570.00          | 325.68 | 41.61   | 325.88 | 203.55 | 0.0    | 0.0    | 7.43  |
|                | 5900.00        | 1900.00          | 0.0    | 0.0                 | 320.60        | 1200.00         | 326.37 | 88.21   | 326.60 | 232.72 | 0.0    | 0.0    | 8.09  |
|                | 5900.00        | 1900.00          | 0.0    | 0.0                 | 320.60        | 1630.00         | 326.74 | 122.20  | 327.00 | 244.07 | 0.0    | 0.0    | 8.31  |
|                | 5900.00        | 1900.00          | 0.0    | 0.0                 | 320.60        | 3100.00         | 327.70 | 237.65  | 328.06 | 253.44 | 0.0    | 0.0    | 9.02  |
|                | 5950.00        | 50.00            | 0.0    | 0.0                 | 320.60        | 570.00          | 326.27 | 80.55   | 326.33 | 228.66 | 0.0    | 0.0    | 4.16  |
|                | 5950.00        | 50.00            | 0.0    | 0.0                 | 320.60        | 1200.00         | 327.01 | 151.83  | 327.12 | 246.77 | 0.0    | 0.0    | 5.08  |
|                | 5950.00        | 50.00            | 0.0    | 0.0                 | 320.60        | 1630.00         | 327.40 | 198.31  | 327.53 | 250.55 | 0.0    | 0.0    | 5.51  |
|                | 5950.00        | 50.00            | 0.0    | 0.0                 | 320.60        | 3100.00         | 328.42 | 346.76  | 328.64 | 260.48 | 0.0    | 0.0    | 6.63  |
|                | 6000.00        | 50.00            | 336.30 | 322.70              | 320.60        | 570.00          | 340.51 | 4718.11 | 340.51 | 370.88 | 0.0    | 0.0    | 0.17  |
|                | 6000.00        | 50.00            | 336.30 | 322.70              | 320.60        | 1200.00         | 341.24 | 5145.52 | 341.24 | 373.27 | 0.0    | 0.0    | 0.34  |
|                | 6000.00        | 50.00            | 336.30 | 322.70              | 320.60        | 1630.00         | 341.58 | 5349.24 | 341.58 | 374.38 | 0.0    | 0.0    | 0.45  |
|                | 6000.00        | 50.00            | 336.30 | 322.70              | 320.60        | 3100.00         | 342.44 | 5883.92 | 342.45 | 377.22 | 0.0    | 0.0    | 0.80  |
| D              | 6550.00        | 50.00            | 0.0    | 0.0                 | 320.70        | 570.00          | 340.51 | 4660.93 | 340.51 | 370.55 | 0.0    | 0.0    | 0.17  |
|                | 6050.00        | 50.00            | 0.0    | 0.0                 | 320.70        | 1200.00         | 341.24 | 5085.84 | 341.24 | 372.94 | 0.0    | 0.0    | 0.34  |
|                | 6050.00        | 50.00            | 0.0    | 0.0                 | 320.70        | 1630.00         | 341.58 | 5288.10 | 341.58 | 374.05 | 0.0    | 0.0    | 0.45  |
|                | 6050.00        | 50.00            | 0.0    | 0.0                 | 320.70        | 3100.00         | 342.44 | 5818.65 | 342.45 | 376.88 | 0.0    | 0.0    | 0.80  |
| E              | 9280.00        | 3000.00          | 0.0    | 0.0                 | 346.20        | 570.00          | 351.27 | 45.10   | 351.67 | 198.89 | 0.0    | 0.0    | 6.11  |
|                | 9050.00        | 3000.00          | 0.0    | 0.0                 | 346.20        | 1200.00         | 351.77 | 77.80   | 352.37 | 220.28 | 0.0    | 0.0    | 8.28  |
|                | 9050.00        | 3000.00          | 0.0    | 0.0                 | 346.20        | 1630.00         | 352.01 | 97.28   | 352.74 | 230.52 | 0.0    | 0.0    | 9.40  |
|                | 9050.00        | 3000.00          | 0.0    | 0.0                 | 346.20        | 3100.00         | 352.74 | 173.10  | 353.68 | 248.80 | 0.0    | 0.0    | 11.34 |
| F              | 13730.00       | 3864.00          | 0.0    | 0.0                 | 428.40        | 570.00          | 434.43 | 32.45   | 435.31 | 29.61  | 0.0    | 0.0    | 7.53  |
|                | 12914.00       | 3864.00          | 0.0    | 0.0                 | 428.40        | 1200.00         | 436.46 | 84.06   | 437.44 | 63.59  | 0.0    | 0.0    | 7.94  |
|                | 12914.00       | 3864.00          | 0.0    | 0.0                 | 428.40        | 1630.00         | 437.28 | 121.86  | 438.35 | 94.01  | 0.0    | 0.0    | 8.49  |
|                | 12914.00       | 3864.00          | 0.0    | 0.0                 | 428.40        | 3100.00         | 439.00 | 241.22  | 440.32 | 156.95 | 0.0    | 0.0    | 10.08 |
|                | 12964.00       | 50.00            | 0.0    | 0.0                 | 429.50        | 570.00          | 437.44 | 76.74   | 437.64 | 85.33  | 0.0    | 0.0    | 5.17  |
|                | 12964.00       | 50.00            | 0.0    | 0.0                 | 429.50        | 1200.00         | 437.78 | 90.73   | 438.41 | 95.75  | 0.0    | 0.0    | 9.50  |
|                | 12964.00       | 50.00            | 0.0    | 0.0                 | 429.50        | 1630.00         | 438.66 | 134.76  | 439.21 | 121.65 | 0.0    | 0.0    | 9.33  |
|                | 12964.00       | 50.00            | 0.0    | 0.0                 | 429.50        | 3100.00         | 440.58 | 287.09  | 441.09 | 178.75 | 0.0    | 0.0    | 9.53  |
|                | 13000.00       | 36.00            | 437.30 | 433.50              | 429.50        | 570.00          | 438.65 | 133.87  | 438.72 | 121.20 | 0.0    | 0.0    | 3.28  |
|                | 13000.00       | 36.00            | 437.30 | 433.50              | 429.50        | 1200.00         | 439.34 | 178.89  | 439.52 | 141.66 | 0.0    | 0.0    | 5.44  |
|                | 13000.00       | 36.00            | 437.30 | 433.50              | 429.50        | 1630.00         | 439.74 | 209.88  | 439.99 | 153.63 | 0.0    | 0.0    | 6.48  |
|                | 13000.00       | 36.00            | 437.30 | 433.50              | 429.50        | 3100.00         | 440.89 | 321.66  | 441.31 | 188.19 | 0.0    | 0.0    | 8.67  |