

**FOUNTAIN CREEK DRAINAGE BASIN
PLANNING STUDY**

VOLUME III

SUPPORTING INFORMATION/TECHNICAL ADDENDUM

BOOK 2 OF 2

Prepared For:

THE CITY OF COLORADO SPRINGS
P.O. Box 1575
Colorado Springs, Colorado 80901

Prepared By:

MULLER ENGINEERING COMPANY, INC.
Irongate 2, Suite 100
777 South Wadsworth Boulevard
Lakewood, Colorado 80226
MEC Project No. 9117

July, 1994

APPENDIX B

HYDRAULICS

**HEC-2 INPUT AND SUMMARY OUTPUT
10- AND 100-YEAR FUTURE CONDITIONS**

HEC2 S/N: 1126460211 HMVersion: 6.40 Data File: fc-fut.hc2

```
*****
* HEC-2 WATER SURFACE PROFILES      *
*                                   *
* Version  4.6.2; May 1991          *
*                                   *
* RUN DATE   6JUL94   TIME  15:21:08 *
*****
```

```
*****
* U.S. ARMY CORPS OF ENGINEERS      *
* HYDROLOGIC ENGINEERING CENTER      *
* 609 SECOND STREET, SUITE D         *
* DAVIS, CALIFORNIA 95616-4687      *
* (916) 756-1104                    *
*****
```

```

X   X  XXXXXXX  XXXXX           XXXXX
X   X  X      X   X           X   X
X   X  X      X               X
XXXXXXX XXXX  X               XXXXX XXXXX
X   X  X      X               X
X   X  X      X   X           X
X   X  XXXXXXX  XXXXX           XXXXXXX
```

```

::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::
:::                                     :::
:::  FULL MICRO-COMPUTER IMPLEMENTATION  :::
:::                                     :::
::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::
```

```

=====
H A E S T A D   M E T H O D S
=====
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

(FUTURE CONDITIONS)

INPUT / OUTPUT

THIS RUN EXECUTED 6JUL94 15:21:08

HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991

T1 FOUNTAIN CREEK DRAINAGE BASIN PLANNING STUDY
T2 MULLER ENGINEERING CO.
T3 FOUNTAIN CREEK 100-YEAR FLOOD W/ FUTURE IMPROVEMENTS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	-1	0	0	0	5804	

J2	NPROF	IPLT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1	0	-1							

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

150

NC	.12	.12	.045	.15	.3					
QT	2	39167	19067							
X1	0	22	1660.0	1775.0	0	0	0			
GR	5830.0	1000.0	5828.0	1045.0	5826.0	1235.0	5824.0	1395.0	5820.0	1420.0
GR	5810.0	1460.0	5802.0	1490.0	5800.0	1610.0	5798.0	1660.0	5790.0	1690.0
GR	5792.0	1750.0	5798.0	1775.0	5800.0	1800.0	5802.0	1880.0	5800.0	2100.0
GR	5800.0	2230.0	5802.0	2250.0	5802.0	2280.0	5804.0	2590.0	5804.0	2740.0
GR	5806.0	2800.0	5808.0	2900.0						
NC	.12	.12	.045							
X1	900	17	1140.0	1275.0	900	900	900			
GR	5826.0	1000.0	5820.0	1020.0	5810.0	1050.0	5808.0	1080.0	5806.0	1140.0
GR	5800.0	1160.0	5798.0	1170.0	5796.0	1200.0	5796.0	1245.0	5802.0	1275.0
GR	5802.0	1300.0	5804.0	1350.0	5806.0	1370.0	5807.0	1735.0	5808.0	1910.0
GR	5810.0	2015.0	5814.0	2560.0						
NC	.08	.12	.045							
X1	1200	13	1350.0	1450.0	295	275	300			
GR	5842.0	1000.0	5840.0	1090.0	5838.0	1180.0	5830.0	1290.0	5820.0	1320.0
GR	5810.0	1350.0	5798.0	1375.0	5798.0	1430.0	5804.0	1450.0	5806.0	1670.0
GR	5810.0	2360.0	5814.0	2810.0	5816.0	3310.0				
NC	.095	.12	.045							
X1	1850	15	1200	1305	650	380	625			
GR	5820.0	1000.0	5814.0	1025.0	5812.0	1045.0	5812.0	1110.0	5808.0	1130.0
GR	5806.0	1200.0	5800.0	1230.0	5800.0	1290.0	5806.0	1305.0	5808.0	1415.0
GR	5810.0	1440.0	5812.0	2225.0	5814.0	2395.0	5814.0	2625.0	5820.0	3465.0

NC	.095	.12	.045	.15	.3					
X1	2450	21	1270	1390	590	700	610			
GR	5830.0	1000.0	5820.0	1045.0	5816.0	1070.0	5814.0	1085.0	5812.0	1115.0
GR	5810.0	1210.0	5808.0	1270.0	5802.0	1290.0	5802.0	1340.0	5804.0	1350.0
GR	5810.0	1370.0	5814.0	1390.0	5815.0	1440.0	5814.0	1510.0	5814.0	1590.0
GR	5816.0	1910.0	5818.0	1930.0	5818.0	2300.0	5818	2860	5820	3060
GR	5830	3400								

NC	.08	.08	.045	.3	.5					
QT	2	39075	18134							
X1	3455	8	1050	1320	980	1100	1020			
GR	5850	1050	5840	1072	5812.0	1130.0	5810.0	1170.0	5810.0	1220.0
GR	5814.0	1230.0	5816.0	1280.0	5840.0	1320.0				

CIRCLE DRIVE BRIDGE

NC	.08	.08	.045	.15	.30					
X1	3545	0	0	0	90	90	90			
NC	.08	.15	.045	.3	.5					
X1	4125	16	1080.0	1190.0	580	650	560			
X3	10									
GR	5850.0	1000.0	5830.0	1040.0	5826.0	1055.0	5824.0	1080.0	5814.0	1100.0
GR	5814.0	1180.0	5816.0	1190.0	5818.0	1290.0	5826	1315.0	5826.0	1335.0
GR	5825.0	1540.0	5824	1740	5824	2030	5826	2410	5830	2620
GR	5836	2660								

NC	.10	.15	.045	.15	.3					
X1	5125	20	1570.0	1770.0	1000	850	1000			
X3	10									
GR	5840	360	5840	1000	5838	1020	5834	1090	5832	1140
GR	5830	1260	5828	1445	5826	1540	5824	1570	5820	1600
GR	5820	1730	5822	1770	5832	1790	5832	1800	5832	1810
GR	5834	1849	5832	2040	5832	2230	5832	2920	5838	2930

NC	.1	.1	.045							
X1	6125	24	1830.0	1995.0	1000	1150	1000			
GR	5848	1079	5848.0	1080.0	5846.0	1140.0	5844.0	1210.0	5842.0	1265.0
GR	5840.0	1340.0	5838.0	1475.0	5836.0	1680.0	5836.0	1780.0	5834.0	1830.0
GR	5824.0	1860.0	5824.0	1940.0	5826.0	1975.0	5830.0	1995.0	5832.0	2020.0
GR	5834.0	2120.0	5836.0	2150.0	5840.0	2190.0	5842.0	2210.0	5844.0	2240.0
GR	5846.0	2280.0	5848.0	2340.0	5852.0	2380.0	5854.0	2460.0		

NC	.1	.1	.045	.3	.5					
X1	6625	25	1700	2130	750	350	550			
X3	10									
GR	5850	1000	5848	1160	5848	1220	5848	5848.2	5847.7	
GR	5846	1470	5844	1675	5842	1700	5848	1300	5846	1380
GR	5836	1720	5834	1745	5832	1795	5840	1710	5838	1715
GR	5824	1880	5826	1948	5832	2035	5830	1835	5826	1865
GR	5840	2195	5842	2265	5844	2300	5834	2105	5838	2130
							5848	2410	5850	2480

JANITELL ROAD BRIDGE

NC	.045	.045	.045	.3	.5					
X1	6635	26	1000.1	1453	10	10	10			
GR	5852.4	1000	5844	1000.1	5834	1034	5833.7	1088.5	5853.7	1088.6
GR	5853.7	1091.5	5833.7	1091.6	5830.3	1159.6	5828.3	1179.5	5854.3	1179.6
GR	5854.3	1182.5	5828.3	1182.6	5825	1203	5825	1265	5828.3	1270.5
GR	5854.3	1270.6	5854.3	1273.5	5828.3	1273.6	5831.3	1294	5832.6	1361.5
GR	5853.6	1361.6	5853.6	1364.5	5832.6	1364.6	5835	1423	5844	1453
GR	5852.3	1453.1								

NC	.045	.045	.045	.1	.3					
X1	6690	26	1000.1	1453	55	55	55			
GR	5852.4	1000	5844	1000.1	5834	1034	5833.7	1088.5	5853.7	1088.6
GR	5853.7	1091.5	5833.7	1091.6	5830.3	1159.6	5828.3	1179.5	5854.3	1179.6
GR	5854.3	1182.5	5828.3	1182.6	5825	1203	5825	1265	5828.3	1270.5
GR	5854.3	1270.6	5854.3	1273.5	5828.3	1273.6	5831.3	1294	5832.6	1361.5
GR	5853.6	1361.6	5853.6	1364.5	5832.6	1364.6	5835	1423	5844	1453
GR	5852.3	1453.1								

NC	.045	.045	.045	.3	.5					
X1	6700	27	1825	2265	45	45	45			
X3	10									
GR	5852	1000	5850	1190	5846	1250	5840	5848.2	5847.7	
GR	5840	1585	5840	1665	5844	1705	5844	1290	5840	1370
GR	5834	1870	5832	1930	5830	1995	5826	1740	5844	1825
GR	5830	2115	5832	2160	5834	2225	5840	2025	5826	2095
GR	5848	2380	5848	2415	5842	2475	5844	2265	5842	2370
GR	5852	2720	5854	2825				2505	5850	2660

NC	.10	.11	.045	.3	.5					
X1	7430	27	1680.0	1775.0	530	750	720			
GR	5858	340	5852	790	5850	1000	5848	1130	5846	1180
GR	5844	1270	5842	1360	5840	1400	5840	1525	5842	1550
GR	5842	1580	5840	1600	5838	1630	5836	1680	5830	1705
GR	5830	1755	5832	1765	5838	1775	5840	1790	5840	1820
GR	5844	1840	5846	1865	5858	1890	5860	1915	5858	1925
GR	5856	1980	5856	2400						

SPRING CREEK OUTFALL

QT	2	38426	18134							
NC	.11	.11	.045	.1	.3					
X1	8420	22	2480.0	2580.0	850	1050	1000			
GR	5860.0	1000.0	5858.0	1180.0	5856.0	1470.0	5854.0	1500.0	5852.0	1700.0
GR	5852.0	2115.0	5851.0	2300.0	5850.0	2320.0	5850.0	2370.0	5846.0	2390.0
GR	5844.0	2460.0	5842.0	2480.0	5838.0	2490.0	5838.0	2560.0	5840.0	2570.0
GR	5844.0	2580.0	5846.0	2605.0	5848.0	2610.0	5850.0	2645.0	5858.0	2665.0
GR	5860.0	2750.0	5862.0	2825.0						

NC	.11	.11	.045							
X1	9070	18	1305.0	1435.0	637	637	637			
GR	5868	140	5858	255	5856	480	5856.0	1175.0	5854.0	1240.0
GR	5850.0	1250.0	5848.0	1305.0	5842.0	1340.0	5842.0	1390.0	5844.0	1420.0
GR	5848.0	1435.0	5850.0	1460.0	5852.0	1500.0	5854.0	1570.0	5850.0	1610.0
GR	5850.0	1645.0	5860.0	1710.0	5874	1755				

NC	.08	.08	.045	.3	.5					
X1	9340	21	1210.0	1335.0	500	300	320			
GR	5870.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5850.0	1140.0	5850.0	1195.0	5848.0	1210.0	5846.0	1225.0	5844.0	1260.0
GR	5842.0	1270.0	5842.0	1315.0	5846.0	1335.0	5850.0	1370.0	5852.0	1410.0
GR	5854.0	1480.0	5850.0	1530.0	5850.0	1590.0	5852.0	1630.0	5860.0	1650.0
GR	5870.0	1670.0								

U.S. 24 BYPASS BRIDGE ON-RAMP

NC	.08	.08	.045	.3	.5					
X1	9341	36	1212.1	1333.0	1	1	1			
GR	5871.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5867.0	1083.0	5867.0	1087.0	5852.0	1087.1	5850.0	1140.0	5850.0	1195.0
GR	5848.0	1208.0	5868.0	1208.1	5868.0	1212.0	5848.0	1212.1	5846.0	1225.0
GR	5844.0	1260.0	5842.0	1270.0	5842.0	1315.0	5846.0	1333.0	5868.0	1333.1
GR	5868.0	1337.0	5846.0	1337.1	5850.0	1370.0	5852.0	1410.0	5853.0	1458.0
GR	5869.0	1458.1	5869.0	1462.0	5853.0	1462.1	5850.0	1530.0	5850.0	1583.0
GR	5870.0	1583.1	5870.0	1587.0	5850.0	1587.1	5852.0	1630.0	5860.0	1650.0
GR	5874.0	1670.0								

NC	.08	.08	.045	.1	.3					
X1	9370	36	1212.1	1333.0	30	30	30			
GR	5871.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5867.0	1083.0	5867.0	1087.0	5852.0	1087.1	5850.0	1140.0	5850.0	1195.0
GR	5848.0	1208.0	5868.0	1208.1	5868.0	1212.0	5848.0	1212.1	5846.0	1225.0
GR	5844.0	1260.0	5842.0	1270.0	5842.0	1315.0	5846.0	1333.0	5868.0	1333.1
GR	5868.0	1337.0	5846.0	1337.1	5850.0	1370.0	5852.0	1410.0	5853.0	1458.0
GR	5869.0	1458.1	5869.0	1462.0	5853.0	1462.1	5850.0	1530.0	5850.0	1583.0
GR	5870.0	1583.1	5870.0	1587.0	5850.0	1587.1	5852.0	1630.0	5860.0	1650.0
GR	5874.0	1670.0								

NC	.08	.08	.045	.3	.5					
X1	9371	21	1210.0	1335.0	1	1	1			
GR	5870.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5850.0	1140.0	5850.0	1195.0	5848.0	1210.0	5846.0	1225.0	5844.0	1260.0
GR	5842.0	1270.0	5842.0	1315.0	5846.0	1335.0	5850.0	1370.0	5852.0	1410.0
GR	5854.0	1480.0	5850.0	1530.0	5850.0	1590.0	5852.0	1630.0	5860.0	1650.0
GR	5870.0	1670.0								

NC	.10	.1	.045	.1	.3					
X1	10150	23	1480.0	1670	700	720	710			
GR	5874.0	1000.0	5858.0	1040.0	5856.0	1080.0	5854.0	1155.0	5852.0	1170.0
GR	5852.0	1197.0	5854.0	1210.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0
GR	5850.0	1565.0	5852.0	1600.0	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0
GR	5862.0	1720.0	5862.0	1840.0	5864.0	1900.0	5866.0	1970.0	5866.0	2060.0
GR	5868.0	2110.0	5870.0	2130.0	5872.0	2150.0				

U.S. 24 BRIDGE BYPASS

NC	.085	.085	.045	.3	.5					
X1	10151	56	1480.0	1690	1	1	1			
GR	5872.0	1000.0	5858.0	1040.0	5856.0	1078.0	5873.0	1078.0	5873.0	1082.0
GR	5856.0	1082.0	5854.0	1155.0	5852.0	1170.0	5852.0	1197.0	5854.0	1206.0
GR	5873.0	1206.0	5873.0	1210.0	5854.0	1210.0	5854.0	1334.0	5873.0	1334.0
GR	5873.0	1338.0	5856.0	1338.0	5856.0	1462.0	5873.0	1462.0	5873.0	1466.0
GR	5856.0	1466.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0	5850.0	1565.0
GR	5850.0	1590.0	5873.0	1590.0	5873.0	1594.0	5850.0	1594.0	5852.0	1600.0
GR	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0	5858.0	1718.0	5873.0	1718.0
GR	5873.0	1722.0	5858.0	1722.0	5862.0	1840.0	5862.0	1846.0	5873.0	1846.0
GR	5873.0	1850.0	5862.0	1850.0	5864.0	1900.0	5866.0	1970.0	5866.0	1973.0
GR	5873.0	1974.0	5873.0	1978.0	5866.0	1978.0	5866.0	2060.0	5867.0	2102.0
GR	5873.0	2102.0	5873.0	2106.0	5867.0	2106.0	5868.0	2110.0	5870.0	2130.0
GR	5872.0	2150.0								

NC	.085	.085	.045	.1	.3					
X1	10249	56	1480.0	1690	100	100	100			
GR	5872.0	1000.0	5858.0	1040.0	5856.0	1078.0	5873.0	1078.0	5873.0	1082.0
GR	5856.0	1082.0	5854.0	1155.0	5852.0	1170.0	5852.0	1197.0	5854.0	1206.0
GR	5873.0	1206.0	5873.0	1210.0	5854.0	1210.0	5854.0	1334.0	5873.0	1334.0
GR	5873.0	1338.0	5856.0	1338.0	5856.0	1462.0	5873.0	1462.0	5873.0	1466.0
GR	5856.0	1466.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0	5850.0	1565.0
GR	5850.0	1590.0	5873.0	1590.0	5873.0	1594.0	5850.0	1594.0	5852.0	1600.0
GR	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0	5858.0	1718.0	5873.0	1718.0
GR	5873.0	1722.0	5858.0	1722.0	5862.0	1840.0	5862.0	1846.0	5873.0	1846.0
GR	5873.0	1850.0	5862.0	1850.0	5864.0	1900.0	5866.0	1970.0	5866.0	1974.0
GR	5873.0	1974.0	5873.0	1978.0	5866.0	1978.0	5866.0	2060.0	5867.0	2102.0
GR	5873.0	2102.0	5873.0	2106.0	5867.0	2106.0	5868.0	2110.0	5870.0	2130.0
GR	5872.0	2150.0								

NC	.10	.10	.045	.3	.5					
X1	10250	23	1480.0	1720.0	1	1	1			
GR	5874.0	1000.0	5858.0	1040.0	5856.0	1080.0	5854.0	1155.0	5852.0	1170.0
GR	5852.0	1197.0	5854.0	1210.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0
GR	5850.0	1565.0	5852.0	1600.0	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0
GR	5862.0	1720.0	5862.0	1840.0	5864.0	1900.0	5866.0	1970.0	5866.0	2060.0
GR	5868.0	2110.0	5870.0	2130.0	5872.0	2150.0				

NC	.12	.12	.045	.1	.3					
X1	11173	18	1250	1390	950	900	925			
GR	5876	170	5872	265	5872	450	5876	515	5876	675
GR	5882	705	5882	1120	5862	1180	5860	1250	5854	1310
GR	5854	1370	5866	1390	5868	1440	5868	1490	5873	1530
GR	5873	1630	5866	1710	5876	1970				

NC	.12	.12	.045	.1	.3					
X1	11763	29	1590.0	1700	580	600	590			
X4	1	5876	1800							
GR	5880	305	5876	515	5874	540	5874	605	5874	915
GR	5878.0	1000.0	5880.0	1070.0	5880.0	1360.0	5878.0	1415.0	5876.0	1450.0
GR	5868.0	1475.0	5866.0	1500.0	5864.0	1590.0	5860.0	1600.0	5858.0	1620.0
GR	5858.0	1635.0	5860.0	1650.0	5870.0	1675.0	5876.0	1700.0	5870.0	1830.0
GR	5868.0	1850.0	5868.0	1880.0	5872.0	1900.0	5874.0	1995.0	5874.0	2140.0

GR	5874.0	2180.0	5880.0	2220.0	5886.0	2260.0	5888.0	2315.0		
NC	.135	.12	.045	.1	.3					
X1	12638	28	1760	2105	820	950	860			
GR	5890	890	5882	930	5880.0	1000.0	5880.0	1250.0	5878	1380
GR	5878	1430	5878	1465	5878	1485	5880	1540	5880	1600
GR	5880.0	1690.0	5880.0	1760.0	5878.0	1800.0	5868.0	1825.0	5868.0	1840.0
GR	5870.0	1910.0	5872.0	1960.0	5872.0	1990.0	5876.0	2020.0	5878.0	2080.0
GR	5882.0	2105.0	5882.0	2240.0	5880	2660	5882	2870	5884	3000
GR	5884	3100	5888	3130	5890	3150				
NC	.135	.12	.045							
X1	12788	20	1790	2300	100	250	155			
GR	5890	875	5880	930	5880	1050	5880	1245	5880	1295
GR	5880	1790	5876	1800	5876	1960	5877	2120	5878	2130
GR	5880	2200	5884	2300	5884	2400	5882	2410	5880	2440
GR	5880	2660	5882	3020	5884	3200	5886	3220	5900	3300
NC	.135	.12	.045							
X1	13303	22	1650.0	2140	700	180	515			
GR	5900.0	1000.0	5892.0	1030.0	5890.0	1070.0	5888.0	1150.0	5886.0	1230.0
GR	5886.0	1610.0	5884.0	1650.0	5876.0	1675.0	5876.0	1760.0	5878.0	1770.0
GR	5878.0	1970.0	5880.0	2110.0	5884.0	2130.0	5886.0	2140.0	5886.0	2230.0
GR	5882.0	2260.0	5882.0	2340.0	5882.0	2720.0	5884.0	2970.0	5886.0	3010.0
GR	5888.0	3050.0	5900.0	3110.0						
NC	.135	.125	.045							
X1	13933	26	1670.0	2000	690	550	630			
GR	5910	1000	5900	1190	5898	1240	5896	1280	5894.0	1330.0
GR	5892.0	1360.0	5890.0	1420.0	5890.0	1630.0	5888.0	1670.0	5882.0	1685.0
GR	5880.0	1700.0	5880.0	1740.0	5882.0	1750.0	5884.0	1920.0	5886.0	2000.0
GR	5886	2070	5888	2080	5888	2170	5886	2200	5884	2215
GR	5884	2290	5884	2470	5886	2700	5888	2980	5890	3000
GR	5898	3060								
NC	.135	.2	.045							
X1	15020	30	1720	1800	1070	1010	1050			
GR	5910	1000	5908	1085	5906	1170	5904	1260	5902	1304
GR	5900	1345	5898	1410	5896	1480	5896	1695	5894	1720
GR	5890	1730	5884	1740	5884	1790	5888	1800	5888	1900
GR	5888	1980	5892	2005	5892	2070	5894	2090	5894	2125
GR	5892	2140	5892	2200	5894	2230	5894	2270	5896	2500
GR	5898	2625	5898	2720	5900	2810	5900	2870	5902	2930
NC	.15	.2	.045							
X1	15030	30	1720	1800	10	10	10			
GR	5910	1000	5908	1085	5906	1170	5904	1260	5902	1304
GR	5900	1345	5898	1410	5896	1480	5896	1695	5894	1720
GR	5890	1730	5886	1740	5886	1790	5888	1800	5888	1900
GR	5888	1980	5892	2005	5892	2070	5894	2090	5894	2125
GR	5892	2140	5892	2200	5894	2230	5894	2270	5896	2500
GR	5898	2625	5898	2720	5900	2810	5900	2870	5902	2930

NC	.15	.2	.045							
X1	15155	22	1665.0	1740.0	120	120	120			
GR	5910	1000	5908	1045	5906	1150	5904	1190	5902	1270
GR	5902.0	1350.0	5898.0	1390.0	5896.0	1665.0	5886.0	1680.0	5886.0	1725.0
GR	5890.0	1740.0	5891.0	1785.0	5892.0	1940.0	5894.0	1955.0	5894.0	2040.0
GR	5894.0	2130.0	5896	2260	5898	2510	5900	2680	5902	2740
GR	5904	2980	5906	3040						

QT	2	36371	16697							
NC	.155	.2	.045	.1	.3					
X1	15843	20	2150	2260	800	530	690			
GR	5912	1000.0	5906.0	1050.0	5902.0	1110.0	5900.0	1270.0	5900.0	1535.0
GR	5898.0	1750.0	5898.0	2120.0	5899	2150.0	5898.0	2160.0	5892.0	2180.0
GR	5892.0	2220.0	5900.0	2240.0	5908.0	2260.0	5910	2530	5910	2650
GR	5900	2680	5900	2840	5904	3110	5908	3420	5910	3700

NC	.155	.2	.045	.3	.5					
X1	16540	19	1650	1955	700	680	660			
GR	5916	450	5914	560	5912	680	5910	830	5908	1000
GR	5908	1320	5909.5	1480	5910	1650	5900	1665	5898	1705
GR	5896	1740	5896	1820	5900	1930	5910	1955	5910	2045
GR	5908	2235	5907.5	2590	5908	2760	5912	3000		

NEVADA STREET BRIDGE

SB	1.05	1.56	3	0	300	6	2600			
X1	16620	0			80	80	80			
X2			1	5907	5907.5					
BT	-19	450	5916	5916	560	5914	5914	680	5912	5912
BT		830	5910	5910	1000	5908	5908	1320	5908	5908
BT		1480	5909.5	5909.5	1650	5910	5910	1665	5910.8	5907
BT		1705	5910.8	5907	1740	5910.8	5907	1820	5910.8	5907
BT		1930	5910.8	5907	1955	5910	5910	2045	5910	5910
BT		2235	5908	5908	2590	5907.5	5907.5	2760	5908	5908
BT		3000	5912	5912						

NC	.155	.2	.045	.3	.5					
X1	16900	25	1345.0	1640.0	250	320	270			
GR	5916	200	5910	450	5908	630	5908	880	5908	900
GR	5908.0	1000.0	5908.0	1185.0	5908.0	1320.0	5910.0	1340.0	5910.0	1345.0
GR	5902.0	1370.0	5900.0	1380.0	5900.0	1440.0	5898.0	1460.0	5898.0	1535.0
GR	5900.0	1545.0	5900.0	1620.0	5910.0	1640.0	5914.0	1905.0	5930.0	1950.0
GR	5930	2060	5912	2105	5910	2260	5910	2360	5911	2450

NC	.155	.2	.045	.3	.5					
X1	17150	22	1400	1750	240	230	220			
GR	5920	50	5916	300	5914	520	5912	610	5910	760
GR	5914	1115	5916.3	1330	5914	1400	5912	1410	5904	1435
GR	5902	1465	5900	1550	5900	1620	5902	1645	5904	1720
GR	5910	1733	5912	1740	5914	1750	5916	1780	5914	1980
GR	5912	2100	5910.5	2400						

TEJON STREET BRIDGE

NC	.155	.2	.045	.3	.5					
SB	1.05	1.56	2.6	0	322.5	6	3500			
X1	17210	0			60	60	60			
X2			1	5912	5910					
BT	-22	50	5920	5920	300	5916	5916	520	5914	5914
BT		610	5912	5912	760	5910	5910	1115	5914	5914
BT		1330	5916.3	5916.3	1400	5917	5917	1410	5917	5912
BT		1435	5917	5910.5	1465	5917.5	5911	1550	5918.5	5912
BT		1620	5918.5	5912	1645	5918	5911.5	1720	5917	5910.5
BT		1733	5917	5910.5	1740	5917	5912	1750	5917	5914
BT		1780	5916	5916	1980	5914	5914	2100	5912	5912
BT		2400	5910.5	5910.5						
NC	.155	.12	.045	.1	.3					
X1	18240	15	1700.0	2041.0	800	1100	1030			
GR	5920.0	1000.0	5916.0	1055.0	5914.0	1215.0	5914.0	1300.0	5916	1400.0
GR	5918.0	1665.0	5918.0	1700.0	5910.0	1720.0	5908.0	1780.0	5908.0	1940.0
GR	5906.0	1960.0	5904.0	1970.0	5904.0	2040.0	5920.0	2041.0	5920.0	2100.0
NC	.15	.12	.045	.1	.3					
X1	19250	18	1340.0	1665	950	1100	1000			
GR	5934.0	1000.0	5932.0	1030.0	5930.0	1060.0	5926.0	1105.0	5924.0	1130.0
GR	5924.0	1240.0	5922.0	1260.0	5920.0	1340.0	5914.0	1365.0	5914.0	1435.0
GR	5909.0	1460.0	5909.0	1515.0	5912.0	1535.0	5914.0	1620.0	5920.0	1650.0
GR	5924.0	1665.0	5924.0	1700.0	5926.0	1725.0				
NC	.11	.12	.045	.1	.3					
X1	20240	13	1070.0	1255.0	1000	1000	1000			
GR	5948.0	1000.0	5940.0	1020.0	5920.0	1070.0	5918.0	1135.0	5914.0	1155.0
GR	5914.0	1195.0	5914.0	1220.0	5920.0	1255.0	5930.0	1305.0	5930.0	1355.0
GR	5930.0	1435.0	5934.0	1450.0	5934.0	1480.0				
NC	.11	.12	.045	.1	.3					
X1	21250	12	1120.0	1245.0	975	1025	1000			
GR	5950.0	1000.0	5928.0	1050.0	5926.0	1120.0	5922.0	1150.0	5920.0	1170.0
GR	5920.0	1220.0	5926.0	1245.0	5930.0	1275.0	5940.0	1310.0	5940.0	1420.0
GR	5948.0	1470.0	5950.0	1540.0						
QT	2	35860	16473							
NC	.11	.11	.045	.1	.3					
X1	22250	12	1160.0	1310.0	930	1050	1000			
GR	5950.0	1000.0	5950.0	1080.0	5948.0	1110.0	5934.0	1160.0	5932.0	1180.0
GR	5930.0	1210.0	5928.0	1220.0	5928.0	1280.0	5936.0	1310.0	5940.0	1340.0
GR	5950.0	1380.0	5950.0	1460.0						
NC	.11	.11	.045							
X1	22980	14	1330.0	1550.0	700	700	700			
GR	5952.0	1000.0	5952.0	1290.0	5950.0	1305.0	5948.0	1320.0	5946.0	1330.0
GR	5936.0	1360.0	5932.0	1380.0	5932.0	1445.0	5936.0	1460.0	5940.0	1500.0
GR	5942.0	1510.0	5946.0	1550.0	5948.0	1600.0	5960.0	1635.0		

NC	.11	.11	.045	.3	.5					
X1	23315	17	1180.0	1365.0	320	340	330			
GR	5970.0	1000.0	5968.0	1038.0	5966.0	1090.0	5964.0	1125.0	5959.8	1135
GR	5940.0	1200.0	5936.0	1230.0	5934.0	1240.0	5934.0	1260.0	5936.0	1280.0
GR	5938.0	1300.0	5940.0	1335.0	5942.0	1345.0	5946	1390	5953.5	1405
GR	5956.0	1410.0	5957.0	1510						

CIMMARON STREET BRIDGE

NC	.08	.08	.045	.3	.5					
SB	1.25	1.56	2.6	0	169	7.5	4200	3	0	0
X1	23405	0			90	90	90			
X2	0	0	1	5959.8	5957					
BT	-17	1000	5970	5970	1038	5968	5968	1090	5966	5966
BT		1125	5964	5964	1135	5964.8	5959.8	1200	5963.2	5958.2
BT		1230	5962.5	5957.5	1240	5962.3	5957.3	1260	5962	5957
BT		1280	5961.5	5956.5	1300	5961	5956	1335	5960	5955
BT		1345	5959.8	5954.8	1390	5959	5954	1405	5958.5	5953.5
BT		1410	5958.4	5958.4	1510	5957	5957			

CONFLUENCE WITH MONUMENT CREEK

QT	2	12934	4264							
NC	.08	.02	.045	.3	.5					
X1	23635	9	1270	1370	450	60	230			
GR	5970	1000	5956	1070	5954	1140	5952	1255	5950	1270
GR	5939	1295	5939	1320	5956	1370	5957	1420		

NC	.08	.02	.045	.3	.5					
X1	23670	9	1245	1330	35	35	35			
GR	5970	1000	5962	1125	5958	1205	5956	1225	5952	1245
GR	5940	1265	5940	1290	5956	1330	5957	1400		

NC	.08	.08	.045	.3	.5					
X1	23791	15	1280.0	1380.0	120	120	120			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5942.0	1305.0	5942.0	1340.0	5950.0	1365.0	5954.0	1380.0	5956.0	1390.0
GR	5956.0	1480.0	5960.0	1490.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0

NC	.08	.08	.05	.3	.5					
X1	23792	35	1282.1	1380.0	1	1	1			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5980.0	1280.0	5980.0	1282.0	5953.0	1282.1	5942.0	1300.0	5942.0	1335.0
GR	5979.0	1335.0	5979.0	1337.0	5942.0	1337.0	5942.0	1340.0	5950.0	1365.0
GR	5954.0	1380.0	5956.0	1390.0	5977.0	1390.0	5977.0	1392.0	5956.0	1392.0
GR	5956.0	1400.0	5956.0	1445.0	5976.0	1445.0	5976.0	1447.0	5956.0	1447.0
GR	5956.0	1480.0	5960.0	1490.0	5964.0	1500.0	5974.0	1500.0	5974.0	1502.0
GR	5964.0	1502.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0	5970.0	1650.0

NC	.08	.08	.05	.3	.5					
X1	23892	35	1282.1	1380.0	100	100	100			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5980.0	1280.0	5980.0	1282.0	5953.0	1282.1	5942.0	1300.0	5942.0	1335.0
GR	5979.0	1335.0	5979.0	1337.0	5942.0	1337.0	5942.0	1340.0	5950.0	1365.0
GR	5954.0	1380.0	5956.0	1390.0	5977.0	1390.0	5977.0	1392.0	5956.0	1392.0

GR	5956.0	1400.0	5956.0	1445.0	5976.0	1445.0	5976.0	1447.0	5956.0	1447.0
GR	5956.0	1480.0	5960.0	1490.0	5964.0	1500.0	5974.0	1500.0	5974.0	1502.0
GR	5964.0	1502.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0	5970.0	1650.0

NC	.11	.11	.055	.3	.5					
X1	23893	15	1280.0	1380.0	1	1	1			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5942.0	1305.0	5942.0	1340.0	5950.0	1365.0	5954.0	1380.0	5956.0	1390.0
GR	5956.0	1480.0	5960.0	1490.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0

NC	.15	.12	.055	.1	.3					
X1	24360	12	1630.0	1675.0	440	460	450			
GR	5962	910	5960	1000	5958	1170	5956	1320	5954.0	1600.0
GR	5950.0	1630.0	5946.0	1650.0	5946.0	1660.0	5950.0	1675.0	5952.0	1730.0
GR	5960.0	1760.0	5961	1820						

NC	.12	.12	.055	.3	.5					
X1	24780	12	1235	1330.0	600	300	375			
GR	5968.0	1000.0	5966.0	1140.0	5964.0	1220.0	5960.0	1235.0	5954.0	1250
GR	5952.0	1260	5952.0	1290	5954.0	1295	5956.0	1330.0	5964.0	1350.0
GR	5964.0	1410	5964.0	1580						

U.S. 24 BRIDGE NEAR 8TH STREET

NC	.12	.12	.055	.3	.5					
SB	1.05	1.56	2.6	0	65	4	700	2	0	0
X1	24861	10	1235	1330	65	65	65			
X2	0	0	1	5960	5964	0	0	0	0	0
BT	-7	1000	5968	5968	1140	5966	5966	1220	5965	5964
BT		1235	5965	5960	1270	5965	5960	1340	5964.8	5960
BT		1350	5964.7	5964.7						
GR	5968.0	1000.0	5966.0	1140.0	5964.0	1220.0	5960.0	1235.0	5954.0	1250
GR	5952.0	1260	5952.0	1290	5954.0	1295	5956.0	1330.0	5964.0	1350.0

NC	.15	.12	.057	.1	.3					
X1	25268	11	1590.0	1670.0	345	415	380			
GR	5976.0	1000.0	5970.0	1050.0	5970.0	1270.0	5968.0	1510.0	5966.0	1590.0
GR	5955	1610.0	5955	1630.0	5958.0	1640.0	5960.0	1650.0	5968.0	1670.0
GR	5969	1680								

NC	.15	.12	.06	.3	.5					
X1	25625	17	1470.0	1550.0	360	375	367			
GR	5980	600	5978	640	5978	720	5976	760	5974	840
GR	5974.0	1000.0	5972.0	1110.0	5970.0	1260.0	5968.0	1450.0	5966.0	1470.0
GR	5960.0	1495.0	5960.0	1520.0	5974.0	1550.0	5976.0	1710.0	5978.0	1755.0
GR	5980.0	1770.0	5982.0	1840.0						

8TH STREET BRIDGE

NC	.15	.12	.06	.3	.5					
SB	0	1.56	2.6	0	61.5	0	662	0	0	0
X1	25725	15	1170	1315.0	65	65	65			
X2	0	0	1	5970	5974	0	0	0	0	0
BT	-15	300	5984	5984	355	5980	5980	430	5978	5978
BT		530	5974	5974	780	5974	5974	1000	5974	5974
BT		1170	5974	5974	1205	5974	5972	1210	5974	5970

BT		1305	5974	5970	1315	5974	5974	1380	5976	5976
BT		1485	5978	5978	1560	5980	5980	1600	5982	5982
GR	5984	300	5980	355	5978	430	5974	530	5974	780
GR	5974.0	1000.0	5974.0	1170.0	5972.0	1205.0	5960.5	1235.0	5960.5	1280.0
GR	5974.0	1315.0	5976.0	1380.0	5978.0	1485.0	5980.0	1560.0	5982.0	1600.0
NC	.15	.12	.065	.1	.3					
X1	26265	20	1280.0	1420.0	150	700	563			
GR	5988	540	5978	570	5976	620	5976	780	5978	860
GR	5980.0	1000.0	5980.0	1120.0	5980	1190	5994	1191	5994	1249
GR	5980	1250	5980	1270	5978	1280	5964	1295	5964	1310
GR	5974	1330	5976	1420	5976	1530	5990	1575	5994	1610
NC	.145	.12	.065	.1	.3					
X1	26780	19	1570	1615	430	510	505			
GR	5998	980	5984	1020	5982	1035	5980	1080	5978	1150
GR	5978	1280	5980	1350	5978	1460	5976	1570	5972	1585
GR	5972	1600	5980	1615	5982	1790	5982	1820	5984	1840
GR	5986	1870	5988	1950	5990	1990	5992	2005		
NC	.140	.145	.065	.1	.3					
X1	27180	13	1365.0	1420.0	400	400	400			
GR	6000.0	1000.0	5984.0	1040.0	5982.0	1125.0	5982.0	1210.0	5982.0	1320.0
GR	5980.0	1340.0	5978.0	1365.0	5976.0	1385.0	5976.0	1400.0	5982.0	1420.0
GR	5982.0	1630.0	5984.0	1690.0	6000.0	1750.0				
NC	.12	.150	.065							
X1	28100	19	1325.0	1373.0	920	920	920			
GR	6008.0	1000.0	6000.0	1025.0	5998.0	1060.0	5996.0	1070.0	5990.0	1090.0
GR	5990.0	1180.0	5992.0	1210.0	5992.0	1260.0	5990.0	1300.0	5988.0	1325.0
GR	5980.0	1350.0	5980.0	1360.0	5986.0	1373.0	5988.0	1385.0	5990.0	1510.0
GR	5992.0	1590.0	5996.0	1630.0	6000.0	1665.0	6004.0	1730.0		
NC	.12	.12	.065							
X1	29100	16	1430	1490.0	1000	1000	1000			
GR	6012.0	1000.0	6012.0	1140.0	6010.0	1170.0	6008.0	1200.0	6006.0	1370.0
GR	6000.0	1390.0	5996.0	1415.0	5994.0	1430.0	5990.0	1435.0	5990.0	1480.0
GR	5994.0	1490.0	5996.0	1500.0	5998.0	1550.0	6000.0	1590.0	6010.0	1630.0
GR	6020.0	1700.0								
NC	.12	.12	.065							
X1	30125	15	1205.0	1235.0	1025	1025	1025			
X4	1	6014	1060							
GR	6030.0	1000.0	6020.0	1025.0	6018.0	1040.0	6014.0	1130.0	6012.0	1160.0
GR	6010.0	1170.0	6000.0	1205.0	5996.0	1210.0	5996.0	1230.0	6000.0	1235.0
GR	6010.0	1270.0	6012.0	1280.0	6014.0	1310.0	6020.0	1335.0	6030.0	1370.0
NC	.125	.12	.065							
X1	31115	20	1220.0	1280.0	990	990	990			
GR	6036.0	1000.0	6034.0	1045.0	6030.0	1055.0	6024.0	1080.0	6024.0	1100.0
GR	6024.0	1185.0	6022.0	1200.0	6020.0	1220.0	6010.0	1240.0	6006.0	1250.0
GR	6006.0	1265.0	6010.0	1280.0	6014.0	1310.0	6018.0	1345.0	6020.0	1370.0
GR	6024.0	1410.0	6026.0	1470.0	6028.0	1500.0	6030.0	1540.0	6040.0	1590.0

NC	.130	.12	.065	.1	.3					
X1	31400	16	1310	1415	340	270	285			
GR	6038.0	1000.0	6036.0	1040	6030.0	1050.0	6028	1060	6028.0	1110.0
GR	6030.0	1180.0	6030.0	1215.0	6024.0	1255.0	6020.0	1310.0	6010.0	1340
GR	6010.0	1360.0	6016.0	1405.0	6018.0	1415.0	6020.0	1470.0	6030.0	1555.0
GR	6040.0	1600.0								

NC	.125	.12	.065	.1	.3					
X1	31640	14	1450	1490.0	90	280	240			
GR	6038.0	1000.0	6036.0	1040.0	6030.0	1050.0	6028.0	1060.0	6028.0	1110.0
GR	6030.0	1180.0	6030.0	1230.0	6024.0	1250.0	6022.0	1300.0	6018.0	1315.0
GR	6018.0	1450.0	6016.0	1490.0	6016.0	1570.0	6050	1630		

QT	2	12546	4079							
NC	.125	.12	.065	.3	.5					
X1	31940	11	1525.0	1575.0	170	300	300			
GR	6033	1240	6032	1280	6026	1330	6022	1370	6022	1465
GR	6020	1525	6016	1540	6016	1560	6024	1575	6030	1610
GR	6040	1640								

NC	.09	.09	.065	.3	.5					
X1	32080	4	1000	1160	60	170	140			
X3	10									
GR	6038	1000	6018	1040	6018	1120	6038	1160		

U.S. 24 BRIDGE NEAR 21ST STREET BRIDGE (ENLARGED)

NC	.09	.09	.065	.3	.5					
X1	32160	0	0	0	80	80	80		2	
X3	10									
NC	.140	.12	.065	.3	.5					
X1	32500	13	1500	1560.0	680	220	340			
GR	6050.0	1000.0	6040.0	1040.0	6036.0	1055.0	6034.0	1310.0	6032.0	1490.0
GR	6030.0	1500.0	6024.0	1510.0	6024.0	1530.0	6030.0	1540.0	6040.0	1560.0
GR	6046.0	1580.0	6044.0	1630.0	6046.0	1735.0				

NC	.130	.120	.065	.3	.5					
X1	32840	13	1350.0	1470.0	400	250	340			
GR	6050.0	1000.0	6048.0	1035.0	6046.0	1070.0	6044.0	1110.0	6042.0	1180.0
GR	6040.0	1300.0	6040.0	1350.0	6028.0	1385.0	6028.0	1415.0	6032.0	1440.0
GR	6040.0	1470.0	6042.0	1560.0	6044.0	1630.0				

21ST STREET BRIDGE

NC	.13	.12	.065	.3	.5					
SB	0.95	1.56	2.6	0	47	4.0	665	1.7	0	0
X1	32890	16	1280.0	1395.0	50	50	50			
X2	0	0	1	6038.8	6040	0	0	0	0	0
BT	-14	1000	6050	6050	1040	6042	6042	1090	6040	6040
BT		1230	6040	6040	1280	6040.8	6038	1284	6040.9	6037
BT		1315	6041.4	6037.5	1360	6042.1	6038.1	1392	6042.8	6038.8
BT		1395	6042.9	6040	1420	6043.2	6042	1460	6044	6044
BT		1590	6044	6044	1640	6046	6046			
GR	6050	1000	6042	1040	6040	1090	6040	1230	6038	1280

GR	6037	1284	6028	1315	6028	1360	6038.8	1392	6040	1395
GR	6042	1420	6044	1460	6044	1590	6046	1640	6046	1760
GR	6048	1980								

NC	.135	.130	.065	.3	.5					
X1	33213	20	1340.0	1390.0	300	325	323			
GR	6056.0	1000.0	6050.0	1020.0	6042.0	1040.0	6040.0	1080.0	6038.0	1150.0
GR	6038.0	1280.0	6038.0	1340.0	6032.0	1355.0	6032.0	1370.0	6038.0	1390.0
GR	6038.0	1450.0	6040.0	1540.0	6042.0	1580.0	6044.0	1620.0	6046.0	1670.0
GR	6048.0	1700.0	6048.0	1790.0	6048.0	1880.0	6050.0	2060.0	6060.0	2170.0

NC	.08	.15	.065	.1	.3					
X1	33700	12	1110	1160.0	487	487	487			
GR	6064.0	1000.0	6060.0	1080.0	6040.0	1110.0	6036	1120.0	6036	1140.0
GR	6040.0	1150.0	6044.0	1160.0	6046.0	1305.0	6048.0	1550.0	6050.0	1575.0
GR	6052.0	1630.0	6052.0	1660.0						

NC	.08	.15	.065	.1	.3					
X1	34176	17	1185.0	1310.0	485	450	476			
GR	6070.0	1000.0	6068.0	1140.0	6050.0	1185.0	6046.0	1205.0	6044.0	1225.0
GR	6042.0	1245.0	6040.0	1260.0	6040.0	1270.0	6050.0	1310.0	6052.0	1440.0
GR	6052.0	1630.0	6054.0	1650.0	6056.0	1690.0	6056.0	1740.0	6056.0	1840.0
GR	6058.0	1960.0	6060.0	2020.0						

NC	.08	.15	.065	.1	.3					
X1	34700	12	1055.0	1135	480	540	524			
GR	6074.0	1055.0	6058.0	1070.0	6048.0	1090.0	6048.0	1110.0	6058.0	1135.0
GR	6058.0	1280.0	6060.0	1320.0	6062.0	1340.0	6062.0	1440.0	6062.0	1520.0
GR	6064.0	1790.0	6070.0	1860.0						

NC	.12	.135	.065	.3	.5					
X1	35128	15	1390.0	1470.0	430	380	428			
GR	6076.0	1105.0	6074.0	1150.0	6072.0	1195.0	6070.0	1230.0	6068.0	1310.0
GR	6066.0	1390.0	6052.0	1400.0	6052.0	1460.0	6064.0	1470.0	6066.0	1540.0
GR	6066.0	1640.0	6068	1785	6068	1950	6070	1995	6072	2040

25TH STREET BRIDGE (REMOVED)

NC	.12	.135	.065	.3	.5					
X1	35153	0	0	0	25	25	25			
NC	.11	.11	.065	.3	.5					
X1	35420	14	1125.0	1220.0	250	270	267			
X3	10									
GR	6080.0	1000.0	6070.0	1125.0	6056.0	1150.0	6056.0	1170.0	6060.0	1180.0
GR	6068.0	1220.0	6070.0	1285.0	6070.0	1395.0	6070.0	1480.0	6072.0	1610.0
GR	6074.0	1680.0	6080.0	1720.0	6082.0	1730.0	6084.0	1820.0		

NC	.11	.11	.065	.3	.5					
X1	35699	18	1510	1577	290	270	279			
GR	6090	1000	6088	1050	6080	1200	6078	1280	6076	1420
GR	6074	1510	6058	1530	6058	1560	6070	1577	6072	1630
GR	6074	1785	6076	1955	6078	2015	6080	2080	6082	2150
GR	6084	2215	6086	2290	6088	2400				

26TH STREET BRIDGE

NC	.11	.11	.065	.3	.5					
X1	35700	23	1510	1580	1	1	1			
BT	-20	1200	6080	6080	1280	6078	6078	1420	6076	6076
BT		1510	6075.3	6075.3	1513	6075.3	6072	1529	6075.3	6072
BT		1529.1	6075.3	6072	1530.4	6075.3	6072	1530.5	6075.3	6072
BT		1559.5	6075.3	6072	1559.6	6075.3	6072	1560.9	6075.3	6072
BT		1561	6075.3	6072	1577	6075.3	6072	1580	6075.3	6075.3
BT		1680	6074	6074	1765	6074	6074	1910	6076	6076
BT		2015	6078	6078	2080	6080	6080			
GR	6090	1000	6088	1050	6080	1200	6078	1280	6076	1420
GR	6075.3	1510	6072	1513	6059	1529	6072	1529.1	6072	1530.4
GR	6059	1530.5	6059	1559.5	6072	1559.6	6072	1560.9	6059	1561
GR	6072	1577	6075.3	1580	6074	1680	6074	1765	6076	1910
GR	6078	2015	6080	2080	6090	2480				
NC	.11	.11	.065	.3	.5					
X1	35735	0	0	0	35	35	35			
X2							1			
NC	.11	.11	.065	.3	.5					
X1	35736	17	1510	1580	1	1	1			
GR	6090	1000	6088	1050	6080	1200	6078	1280	6076	1420
GR	6075.3	1510	6072	1513	6059	1530	6059	1560	6072	1577
GR	6075.3	1580	6074	1680	6074	1765	6076	1910	6078	2015
GR	6080	2080	6090	2480						
NC	.11	.11	.065	.3	.5					
X1	35970	19	1370.0	1470.0	250	225	235			
GR	6090.0	1000.0	6080.0	1050.0	6078.0	1065.0	6076.0	1240.0	6074.0	1350.0
GR	6070.0	1370.0	6060.0	1400.0	6060.0	1420.0	6070.0	1470.0	6072.0	1485.0
GR	6074.0	1570.0	6074.0	1610.0	6078.0	1650.0	6080.0	1690.0	6082	1750
GR	6084	1930	6086	2020	6088	2090	6090	2180		
NC	.12	.11	.065	.1	.3					
X1	36280	16	1390.0	1470.0	285	330	310			
GR	6090.0	1000.0	6080.0	1070.0	6078.0	1100.0	6076.0	1140.0	6076.0	1390.0
GR	6070.0	1410.0	6064.0	1435.0	6064.0	1450.0	6078.0	1470.0	6080.0	1490.0
GR	6082.0	1565.0	6086.0	1595.0	6088.0	1610.0	6090.0	1650.0	6092.0	1759.0
GR	6100.0	1760.0								
NC	.12	.12	.065	.1	.3					
X1	36565	16	1140.0	1190.0	270	300	285			
GR	6094.0	1000.0	6092.0	1035.0	6080.0	1075.0	6078.0	1100.0	6076.0	1140.0
GR	6070.0	1160.0	6070.0	1175.0	6072.0	1190.0	6074.0	1225.0	6076.0	1280.0
GR	6078.0	1290.0	6080.0	1310.0	6082.0	1370.0	6084.0	1390.0	6086.0	1465.0
GR	6084.0	1530.0								
NC	.09	.130	.065	.1	.3					
X1	36820	18	1215.0	1280.0	290	225	255			
GR	6100.0	1000.0	6098.0	1070.0	6096.0	1130.0	6094.0	1165.0	6092.0	1200.0
GR	6090.0	1215.0	6074.0	1240.0	6074.0	1260.0	6078.0	1280.0	6078.0	1295.0
GR	6080.0	1310.0	6080.0	1350.0	6082.0	1500.0	6084.0	1520.0	6086.0	1590.0
GR	6086	1605	6084	1650	6090	1670				

NC	.135	.135	.065	.1	.3					
X1	37080	16	1305.0	1350.0	290	225	260			
GR	6098.0	1000.0	6092.0	1020.0	6090.0	1070.0	6088.0	1160.0	6086.0	1270.0
GR	6084.0	1305.0	6076.0	1315.0	6076.0	1330.0	6084.0	1350.0	6084.0	1450.0
GR	6084.0	1480.0	6086.0	1520.0	6086.0	1640.0	6086	1660	6090	1680
GR	6092	1700								

NC	.140	.12	.065	.1	.3					
X1	37460	13	1350.0	1395.0	320	410	380			
GR	6096.0	1000.0	6090.0	1015.0	6088.0	1250.0	6086.0	1350.0	6080.0	1365.0
GR	6080.0	1380.0	6090.0	1395.0	6092.0	1405.0	6093.0	1455.0	6092.0	1510.0
GR	6096.0	1570.0	6098.0	1680.0	6100.0	1700.0				

NC	.12	.12	.065	.1	.3					
X1	37770	16	1300.0	1365.0	260	340	310			
GR	6106.0	1000.0	6100.0	1040.0	6098.0	1100.0	6098.0	1155.0	6096.0	1300.0
GR	6090.0	1320.0	6084.0	1340.0	6084.0	1360.0	6092.0	1365.0	6094.0	1530.0
GR	6096.0	1550.0	6098.0	1580.0	6100.0	1695.0	6102.0	1715.0	6104.0	1800.0
GR	6106.0	1930.0								

NC	.08	.12	.065	.1	.3					
X1	38120	18	1155.0	1220.0	375	225	350			
GR	6116.0	1000.0	6114.0	1140.0	6112.0	1155.0	6090.0	1190.0	6090.0	1205.0
GR	6092.0	1210.0	6094.0	1220.0	6096.0	1240.0	6096.0	1270.0	6096.0	1535.0
GR	6096.0	1560.0	6098.0	1570.0	6100.0	1615.0	6100.0	1690.0	6102.0	1700.0
GR	6104.0	1795.0	6104.0	1890.0	6110.0	1910.0				

NC	.08	.12	.065	.1	.3					
X1	38386	13	1130.0	1210.0	266	266	266			
GR	6112.0	1000.0	6110.0	1055.0	6108.0	1120.0	6106.0	1130.0	6100.0	1155.0
GR	6092.0	1170.0	6092.0	1190.0	6100.0	1210.0	6100.0	1460.0	6102.0	1480.0
GR	6102.0	1600.0	6106.0	1620.0	6112.0	1640.0				

NC	.13	.13	.065	.3	.5					
X1	38629	19	1240.0	1280.0	243	243	243			
GR	6120	660	6116	710	6114	760	6112	795	6110	950
GR	6110.0	1000.0	6108.0	1040	6106.0	1070	6104	1240	6094	1241
GR	6094	1279	6102	1280	6102	1340	6102	1455	6106	1520
GR	6106	1670	6108	1720	6110	1760	6120	1950		

CAMPGROUND BRIDGE

NC	.13	.13	.065	.3	.5					
X1	38630	0	0	0	1	1	1			
NC	.13	.13	.065	.3	.5					
X1	38650	0	0	0	20	20	20			
NC	.13	.13	.065	.3	.5					
X1	38651	0	0	0	1	1	1			

NC	.12	.12	.065	.3	.5					
X1	38770	15	1335	1410	160	60	119			
GR	6122	650	6120	700	6118	730	6116	780	6112	870
GR	6111.5	1000	6106	1200	6102	1335	6097	1360	6097	1390
GR	6104	1410	6104	1490	6106	1540	6110	1710	6130	1750

31ST STREET BRIDGE

NC	.12	.12	.065	.3	.5					
SB	1.25	1.56	2.6	0	32	3.0	440	2.8	6097.5	6097
X1	38840	16	1335.0	1415.0	70	70	70			
X2	0	0	1	6106	6106	0	0	0	0	0
BT	-15	700	6120	6120	730	6118	6118	780	6116	6116
BT		870	6112	6112	1000	6111.5	6111.5	1120	6110	6110
BT		1335	6109	6109	1341	6108.9	6106	1360	6108.7	6105.8
BT		1390	6108.3	6105.2	1409	6108.1	6105	1415	6108	6108
BT		1610	6110	6110	1700	6110	6110	1740	6130	6130
GR	6122	650	6120	700	6118	730	6116	780	6112	870
GR	6111.5	1000	6110	1120	6109	1335	6106	1341	6097.5	1360
GR	6097.5	1390	6105	1409	6108	1415	6110	1610	6110	1700
GR	6130	1740								

NC	.15	.10	.065	.3	.5					
X1	39350	15	1460	1580	480	660	510			
GR	6124	930	6114	1055	6114	1310	6116	1390	6132	1391
GR	6132	1459	6116	1460	6114	1475	6104	1495	6104	1510
GR	6110	1520	6112	1555	6120	1580	6122	1585	6124	1620

NC	.150	.10	.065	.3	.5					
X1	39850	17	1520	1570	500	500	500			
GR	6130	1000	6120	1125	6120	1340	6120	1360	6132	1361
GR	6132	1429	6122	1430	6120	1455	6118	1500	6116	1520
GR	6110	1529	6110	1543	6110	1560	6120	1570	6130	1585
GR	6140	1605	6142	1620						

NC	.150	.10	.065	.1	.3					
X1	40150	13	1510	1565	300	300	300			
GR	6130	1000	6124	1110	6124	1250	6124	1340	6136	1341
GR	6136	1470	6122	1471	6120	1510	6115	1523	6115	1545
GR	6126	1565	6128	1585	6140	1620				

THIS RUN EXECUTED 6JUL94 15:21:32

HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

FOUNTAIN CREEK 100-YEAR

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	.000	.00	.00	.00	5790.00	39167.00	5806.08	5806.08	5808.51	72.28	15.70	6590.17	4607.06
*	.000	.00	.00	.00	5790.00	19067.00	5803.00	5803.00	5805.29	73.44	13.30	2871.23	2224.97
	900.000	900.00	.00	.00	5796.00	39167.00	5812.09	.00	5814.12	53.33	13.86	6609.99	5363.42
*	900.000	900.00	.00	.00	5796.00	19067.00	5808.49	5807.37	5810.30	56.36	11.66	2893.69	2539.81
	1200.000	300.00	.00	.00	5798.00	39167.00	5814.49	.00	5815.61	41.20	12.25	9188.37	6101.99
*	1200.000	300.00	.00	.00	5798.00	19067.00	5810.24	.00	5811.91	69.13	12.57	3720.02	2293.21
	1850.000	625.00	.00	.00	5800.00	39167.00	5816.43	.00	5817.59	36.35	12.05	9789.94	6496.74
*	1850.000	625.00	.00	.00	5800.00	19067.00	5813.78	.00	5814.70	28.75	9.43	5180.88	3555.96
*	2450.000	610.00	.00	.00	5802.00	39167.00	5818.76	5818.76	5821.17	67.14	15.27	6076.21	4779.95
*	2450.000	610.00	.00	.00	5802.00	19067.00	5816.70	.00	5817.93	37.02	10.17	3562.15	3133.54
	3455.000	1020.00	.00	.00	5810.00	39075.00	5825.92	.00	5830.18	94.69	16.54	2361.82	4015.65
*	3455.000	1020.00	.00	.00	5810.00	18134.00	5823.03	.00	5824.58	45.42	10.01	1811.38	2690.65
	3545.000	90.00	.00	.00	5810.00	39075.00	5827.87	.00	5831.01	60.31	14.22	2747.60	5031.77
*	3545.000	90.00	.00	.00	5810.00	18134.00	5823.59	.00	5824.98	38.30	9.46	1916.06	2930.19
*	4125.000	560.00	.00	.00	5814.00	39075.00	5832.84	.00	5833.46	16.97	9.15	13983.92	9485.97
*	4125.000	560.00	.00	.00	5814.00	18134.00	5825.73	5823.37	5827.49	57.42	12.00	3265.77	2393.15
	5125.000	1000.00	.00	.00	5820.00	39075.00	5834.47	.00	5835.81	30.66	10.59	8003.01	7056.95
*	5125.000	1000.00	.00	.00	5820.00	18134.00	5830.46	.00	5831.47	30.14	8.39	2836.29	3302.89
*	6125.000	1000.00	.00	.00	5824.00	39075.00	5838.32	5838.32	5841.93	83.09	16.26	3611.24	4286.80
*	6125.000	1000.00	.00	.00	5824.00	18134.00	5835.03	.00	5836.92	58.89	11.22	1881.95	2363.13
*	6625.000	550.00	.00	.00	5824.00	39075.00	5843.63	.00	5844.40	15.05	7.03	5556.59	10072.13
*	6625.000	550.00	.00	.00	5824.00	18134.00	5838.66	.00	5839.09	15.23	5.26	3448.34	4647.05

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
6635.000	10.00	.00	.00	5825.00	39075.00	5843.58	.00	5844.49	27.09	7.65	5111.00	7507.85
6635.000	10.00	.00	.00	5825.00	18134.00	5838.62	.00	5839.18	27.63	6.00	3022.46	3449.80
6690.000	55.00	.00	.00	5825.00	39075.00	5843.76	.00	5844.64	25.94	7.53	5187.48	7671.47
6690.000	55.00	.00	.00	5825.00	18134.00	5838.79	.00	5839.33	25.84	5.87	3090.52	3567.50
6700.000	45.00	.00	.00	5826.00	39075.00	5843.91	.00	5844.75	17.80	7.33	5331.99	9262.83
6700.000	45.00	.00	.00	5826.00	18134.00	5838.94	.00	5839.44	18.96	5.65	3209.14	4164.45
* 7430.000	720.00	.00	.00	5830.00	39075.00	5846.49	5846.49	5849.93	83.10	18.04	4427.02	4286.38
* 7430.000	720.00	.00	.00	5830.00	18134.00	5842.51	5842.51	5845.30	81.00	14.52	2042.54	2014.92
* 8420.000	1000.00	.00	.00	5838.00	38426.00	5854.76	5854.76	5857.58	60.88	16.22	5599.51	4924.71
* 8420.000	1000.00	.00	.00	5838.00	18134.00	5849.98	.00	5852.66	72.78	14.01	1830.71	2125.67
9070.000	637.00	.00	.00	5842.00	38426.00	5859.05	.00	5860.70	37.67	12.56	7363.16	6260.73
* 9070.000	637.00	.00	.00	5842.00	18134.00	5854.48	.00	5856.14	46.32	11.04	2458.80	2664.44
9340.000	320.00	.00	.00	5842.00	38426.00	5860.97	.00	5861.85	19.50	9.65	6871.50	8701.84
* 9340.000	320.00	.00	.00	5842.00	18134.00	5856.55	.00	5857.14	17.33	7.45	4124.41	4356.23
9341.000	1.00	.00	.00	5842.00	38426.00	5860.89	.00	5861.93	22.91	10.45	6665.16	8028.08
9341.000	1.00	.00	.00	5842.00	18134.00	5856.52	.00	5857.18	19.07	7.83	4042.16	4152.47
9370.000	30.00	.00	.00	5842.00	38426.00	5860.98	.00	5862.00	22.41	10.37	6718.74	8116.88
9370.000	30.00	.00	.00	5842.00	18134.00	5856.59	.00	5857.24	18.59	7.76	4083.50	4206.00
9371.000	1.00	.00	.00	5842.00	38426.00	5861.23	.00	5862.06	18.22	9.42	7036.60	9001.71
9371.000	1.00	.00	.00	5842.00	18134.00	5856.69	.00	5857.26	16.37	7.30	4216.52	4481.35
* 10150.000	710.00	.00	.00	5848.00	38426.00	5862.84	.00	5864.10	43.98	11.02	6013.64	5794.27
* 10150.000	710.00	.00	.00	5848.00	18134.00	5858.79	.00	5859.81	57.44	9.38	3154.29	2392.79
10151.000	1.00	.00	.00	5848.00	38426.00	5863.31	.00	5864.21	37.83	9.45	6525.85	6247.58
10151.000	1.00	.00	.00	5848.00	18134.00	5859.14	.00	5859.90	49.88	8.20	3337.88	2567.69
10249.000	100.00	.00	.00	5848.00	38426.00	5863.76	.00	5864.57	32.62	8.98	6898.65	6728.28
* 10249.000	100.00	.00	.00	5848.00	18134.00	5859.73	.00	5860.33	36.50	7.37	3758.24	3001.44
10250.000	1.00	.00	.00	5848.00	38426.00	5863.72	.00	5864.61	33.18	9.20	6762.27	6671.01
10250.000	1.00	.00	.00	5848.00	18134.00	5859.71	.00	5860.36	37.81	7.61	3764.07	2949.08
* 11173.000	925.00	.00	.00	5854.00	38426.00	5869.40	5869.40	5874.19	103.59	18.51	2939.81	3775.46
* 11173.000	925.00	.00	.00	5854.00	18134.00	5865.57	.00	5868.05	79.54	12.97	1659.47	2033.29
11763.000	590.00	.00	.00	5858.00	38426.00	5877.19	.00	5879.37	68.72	15.19	6221.14	4635.22
* 11763.000	590.00	.00	.00	5858.00	18134.00	5871.40	5871.40	5874.74	120.19	16.25	1781.20	1654.09
12638.000	860.00	.00	.00	5868.00	38426.00	5882.96	.00	5884.22	45.53	9.86	7414.58	5694.64
* 12638.000	860.00	.00	.00	5868.00	18134.00	5879.02	.00	5880.39	71.18	9.40	2072.20	2149.45

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
12788.000	155.00	.00	.00	5876.00	38426.00	5884.32	.00	5884.99	46.79	7.86	9613.95	5617.31
* 12788.000	155.00	.00	.00	5876.00	18134.00	5881.07	5881.07	5882.30	124.80	9.35	3030.48	1623.23
13303.000	515.00	.00	.00	5876.00	38426.00	5886.27	.00	5887.21	41.08	8.40	6965.81	5995.01
* 13303.000	515.00	.00	.00	5876.00	18134.00	5884.31	.00	5884.77	26.72	5.68	4343.99	3508.01
* 13933.000	630.00	.00	.00	5880.00	38426.00	5889.66	.00	5891.19	105.55	11.90	6059.15	3740.19
* 13933.000	630.00	.00	.00	5880.00	18134.00	5887.71	.00	5888.65	93.41	8.88	3495.70	1876.27
15020.000	1050.00	.00	.00	5884.00	38426.00	5899.38	5899.31	5902.25	100.20	18.49	7636.43	3838.81
* 15020.000	1050.00	.00	.00	5884.00	18134.00	5895.25	5895.25	5898.18	126.34	16.37	2954.88	1613.32
15030.000	10.00	.00	.00	5886.00	38426.00	5900.53	.00	5902.43	77.78	16.20	9217.43	4357.15
* 15030.000	10.00	.00	.00	5886.00	18134.00	5895.61	5895.61	5898.36	151.76	16.68	3096.38	1472.03
* 15155.000	120.00	.00	.00	5886.00	38426.00	5901.17	5901.17	5904.11	107.16	19.05	7821.96	3711.94
* 15155.000	120.00	.00	.00	5886.00	18134.00	5899.41	.00	5900.72	50.23	11.90	5495.26	2558.61
* 15843.000	690.00	.00	.00	5892.00	36371.00	5907.59	.00	5908.08	32.20	9.40	13524.56	6409.93
* 15843.000	690.00	.00	.00	5892.00	16697.00	5902.94	.00	5903.82	64.40	10.49	5472.59	2080.63
16540.000	660.00	.00	.00	5896.00	36371.00	5909.45	5905.72	5911.09	41.10	10.45	5110.90	5673.22
* 16540.000	660.00	.00	.00	5896.00	16697.00	5907.61	.00	5908.15	16.24	5.93	2821.58	4143.75
16620.000	80.00	5907.50	5907.00	5896.00	36371.00	5909.45	.00	5911.09	41.27	10.46	5091.53	5661.80
16620.000	80.00	5907.50	5907.00	5896.00	16697.00	5907.96	.00	5908.47	14.44	5.71	3033.33	4393.61
16900.000	270.00	.00	.00	5898.00	36371.00	5910.62	5908.60	5912.37	50.38	11.03	5306.47	5124.32
* 16900.000	270.00	.00	.00	5898.00	16697.00	5908.37	.00	5909.11	26.48	6.94	2656.24	3244.51
17150.000	220.00	.00	.00	5900.00	36371.00	5911.69	5909.40	5913.84	65.75	11.81	3433.44	4485.33
* 17150.000	220.00	.00	.00	5900.00	16697.00	5909.01	.00	5909.90	38.75	7.56	2209.80	2682.28
17210.000	60.00	5910.00	5912.00	5900.00	36371.00	5911.70	.00	5913.84	65.03	11.76	3460.27	4510.18
17210.000	60.00	5910.00	5912.00	5900.00	16697.00	5909.06	.00	5909.94	37.93	7.50	2224.86	2711.25
18240.000	1030.00	.00	.00	5904.00	36371.00	5917.81	.00	5919.29	43.33	9.97	4783.16	5525.25
* 18240.000	1030.00	.00	.00	5904.00	16697.00	5913.86	.00	5914.78	46.29	7.71	2165.36	2454.14
19250.000	1000.00	.00	.00	5909.00	36371.00	5922.61	.00	5924.85	67.52	12.04	3140.37	4426.20
* 19250.000	1000.00	.00	.00	5909.00	16697.00	5919.18	.00	5920.34	57.80	8.62	1936.73	2196.28
20240.000	1000.00	.00	.00	5914.00	36371.00	5928.88	.00	5932.55	78.36	15.55	2577.25	4108.63
* 20240.000	1000.00	.00	.00	5914.00	16697.00	5924.66	.00	5926.53	68.63	11.02	1583.78	2015.48
21250.000	1000.00	.00	.00	5920.00	36371.00	5936.37	.00	5940.37	76.25	17.17	2888.25	4165.14
* 21250.000	1000.00	.00	.00	5920.00	16697.00	5931.19	.00	5933.68	79.75	13.12	1586.20	1869.68
22250.000	1000.00	.00	.00	5928.00	35860.00	5943.94	.00	5948.10	77.82	16.66	2457.01	4065.11
* 22250.000	1000.00	.00	.00	5928.00	16473.00	5939.25	.00	5941.43	69.43	11.93	1455.67	1977.01

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
22980.000	700.00	.00	.00	5932.00	35860.00	5950.11	.00	5952.51	48.48	12.52	3043.06	5150.09
* 22980.000	700.00	.00	.00	5932.00	16473.00	5944.57	.00	5946.16	58.97	10.12	1627.77	2145.23
23315.000	330.00	.00	.00	5934.00	35860.00	5951.57	.00	5954.85	69.77	14.83	2686.11	4293.05
* 23315.000	330.00	.00	.00	5934.00	16473.00	5946.41	.00	5948.44	71.34	11.53	1518.27	1950.38
23405.000	90.00	5957.00	5959.80	5934.00	35860.00	5952.27	.00	5955.06	56.95	13.77	2853.45	4751.92
23405.000	90.00	5957.00	5959.80	5934.00	16473.00	5946.83	.00	5948.63	60.09	10.87	1609.77	2125.07
* 23635.000	230.00	.00	.00	5939.00	12934.00	5953.63	5952.24	5956.60	91.21	13.95	1025.66	1354.26
* 23635.000	230.00	.00	.00	5939.00	4264.00	5950.04	.00	5950.84	36.37	7.19	593.42	707.02
* 23670.000	35.00	.00	.00	5940.00	12934.00	5953.90	5953.90	5958.53	153.10	17.30	755.64	1045.31
23670.000	35.00	.00	.00	5940.00	4264.00	5949.92	.00	5951.30	68.62	9.41	453.04	514.73
* 23791.000	120.00	.00	.00	5942.00	12934.00	5958.86	.00	5960.20	29.39	9.54	1612.97	2385.65
* 23791.000	120.00	.00	.00	5942.00	4264.00	5951.10	.00	5952.09	51.34	7.97	535.11	595.09
23792.000	1.00	.00	.00	5942.00	12934.00	5958.87	.00	5960.21	52.00	9.57	1586.16	1793.67
23792.000	1.00	.00	.00	5942.00	4264.00	5951.17	.00	5952.11	75.01	7.77	548.81	492.34
23892.000	100.00	.00	.00	5942.00	12934.00	5959.60	.00	5960.74	42.47	8.90	1738.98	1984.76
* 23892.000	100.00	.00	.00	5942.00	4264.00	5952.07	.00	5952.80	52.94	6.82	625.36	586.06
23893.000	1.00	.00	.00	5942.00	12934.00	5959.59	.00	5960.76	35.82	8.95	1772.83	2160.95
23893.000	1.00	.00	.00	5942.00	4264.00	5952.07	.00	5952.81	51.80	6.90	618.28	592.44
24360.000	450.00	.00	.00	5946.00	12934.00	5961.77	.00	5962.19	25.95	7.97	4925.15	2538.87
* 24360.000	450.00	.00	.00	5946.00	4264.00	5954.49	5953.83	5956.06	130.88	11.09	606.67	372.71
* 24780.000	375.00	.00	.00	5952.00	12934.00	5962.39	5962.36	5966.33	214.24	16.06	853.88	883.66
* 24780.000	375.00	.00	.00	5952.00	4264.00	5959.65	.00	5960.63	88.43	7.96	548.60	453.45
* 24861.000	65.00	5964.00	5960.00	5952.00	12934.00	5965.91	.00	5967.71	62.78	10.99	1376.19	1632.38
24861.000	65.00	5964.00	5960.00	5952.00	4264.00	5959.83	.00	5960.75	80.25	7.72	566.87	476.00
* 25268.000	380.00	.00	.00	5955.00	12934.00	5970.10	5970.10	5972.88	129.08	13.89	1414.03	1138.42
* 25268.000	380.00	.00	.00	5955.00	4264.00	5964.11	.00	5965.82	156.71	10.48	406.77	340.62
* 25625.000	367.00	.00	.00	5960.00	12934.00	5975.42	.00	5976.10	44.76	8.35	3611.54	1933.29
* 25625.000	367.00	.00	.00	5960.00	4264.00	5968.90	.00	5970.18	117.17	9.18	531.41	393.92
25725.000	65.00	5974.00	5970.00	5960.50	12934.00	5975.19	.00	5976.49	82.83	9.45	2088.15	1421.12
* 25725.000	65.00	.00	.00	5960.50	4264.00	5970.22	.00	5970.82	48.53	6.25	682.75	612.10
26265.000	563.00	.00	.00	5964.00	12934.00	5980.24	.00	5980.95	88.40	8.08	2917.19	1375.65
* 26265.000	563.00	.00	.00	5964.00	4264.00	5976.98	.00	5977.56	111.33	6.33	919.64	404.13
26780.000	505.00	.00	.00	5972.00	12934.00	5984.13	.00	5984.51	63.10	8.20	4114.47	1628.23
* 26780.000	505.00	.00	.00	5972.00	4264.00	5979.79	5979.79	5980.79	198.16	10.07	1000.22	302.91

Run Date: 6JUL94 Run Time: 15:21:08 HMVersion: 6.40 Data File: fc-fut.hc2

Page 156

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
27180.000	400.00	.00	.00	5976.00	12934.00	5986.91	.00	5987.49	85.56	9.34	3416.76	1398.25
* 27180.000	400.00	.00	.00	5976.00	4264.00	5983.90	.00	5984.40	84.87	7.21	1433.10	462.85
28100.000	920.00	.00	.00	5980.00	12934.00	5994.81	.00	5995.83	93.03	11.11	2761.14	1340.95
* 28100.000	920.00	.00	.00	5980.00	4264.00	5991.85	.00	5992.45	58.10	7.26	1215.87	559.40
29100.000	1000.00	.00	.00	5990.00	12934.00	6003.59	.00	6005.23	91.29	11.85	1700.77	1353.68
* 29100.000	1000.00	.00	.00	5990.00	4264.00	5998.54	.00	5999.47	81.16	8.07	671.06	473.32
30125.000	1025.00	.00	.00	5996.00	12934.00	6013.94	.00	6017.17	140.10	17.04	1259.33	1092.75
* 30125.000	1025.00	.00	.00	5996.00	4264.00	6007.54	.00	6009.22	111.93	11.19	525.22	403.04
* 31115.000	990.00	.00	.00	6006.00	12934.00	6024.67	.00	6025.83	57.42	10.06	1999.26	1706.81
* 31115.000	990.00	.00	.00	6006.00	4264.00	6017.18	.00	6018.09	82.67	8.19	648.25	468.97
31400.000	285.00	.00	.00	6010.00	12934.00	6026.37	.00	6027.23	41.27	8.01	2202.98	2013.38
* 31400.000	285.00	.00	.00	6010.00	4264.00	6019.72	.00	6020.34	66.65	6.34	707.24	522.30
31640.000	240.00	.00	.00	6016.00	12934.00	6027.82	.00	6028.17	41.87	7.23	3209.59	1998.92
* 31640.000	240.00	.00	.00	6016.00	4264.00	6020.75	.00	6021.19	191.73	7.63	934.54	307.94
* 31940.000	300.00	.00	.00	6016.00	12546.00	6028.92	.00	6030.10	107.44	11.43	1992.38	1210.40
* 31940.000	300.00	.00	.00	6016.00	4079.00	6026.53	.00	6026.83	34.07	5.48	1321.05	698.79
32080.000	140.00	.00	.00	6018.00	12546.00	6029.97	.00	6031.55	99.25	10.09	1244.00	1259.30
* 32080.000	140.00	.00	.00	6018.00	4079.00	6027.21	.00	6027.53	26.42	4.50	907.13	793.50
32160.000	80.00	.00	.00	6020.00	12546.00	6030.68	.00	6032.76	148.87	11.59	1082.25	1028.26
* 32160.000	80.00	.00	.00	6020.00	4079.00	6027.42	.00	6027.94	56.10	5.79	704.24	544.62
32500.000	340.00	.00	.00	6024.00	12546.00	6037.88	.00	6039.28	154.29	12.42	2245.71	1010.05
* 32500.000	340.00	.00	.00	6024.00	4079.00	6033.15	6033.15	6035.50	258.75	12.51	396.45	253.58
32840.000	340.00	.00	.00	6028.00	12546.00	6042.07	.00	6043.62	96.62	10.17	1515.58	1276.33
* 32840.000	340.00	.00	.00	6028.00	4079.00	6038.24	.00	6038.71	46.51	5.52	739.47	598.10
* 32890.000	50.00	6040.00	6038.80	6028.00	12546.00	6043.36	.00	6044.23	45.94	7.97	2269.56	1851.00
32890.000	50.00	6040.00	6038.80	6028.00	4079.00	6038.24	.00	6038.71	36.52	5.09	803.05	675.00
33213.000	323.00	.00	.00	6032.00	12546.00	6045.44	.00	6045.77	41.03	7.20	3951.79	1958.70
* 33213.000	323.00	.00	.00	6032.00	4079.00	6040.00	6040.00	6040.91	162.58	9.26	952.98	319.91
* 33700.000	487.00	.00	.00	6036.00	12546.00	6049.66	6049.66	6051.77	154.63	14.18	1995.36	1008.94
* 33700.000	487.00	.00	.00	6036.00	4079.00	6046.67	.00	6047.66	80.61	8.41	739.16	454.31
* 34176.000	476.00	.00	.00	6040.00	12546.00	6054.99	.00	6055.83	52.28	7.95	2506.64	1735.13
* 34176.000	476.00	.00	.00	6040.00	4079.00	6050.46	.00	6050.89	47.91	5.28	780.02	589.30
* 34700.000	524.00	.00	.00	6048.00	12546.00	6062.14	6062.14	6064.67	195.51	14.21	1479.27	897.26
* 34700.000	524.00	.00	.00	6048.00	4079.00	6057.25	.00	6059.06	216.34	10.80	377.64	277.32

Run Date: 6JUL94 Run Time: 15:21:08 HMVersion: 6.40 Data File: fc-fut.hc2

Page 157

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
* 35128.000	428.00	.00	.00	6052.00	12546.00	6068.04	6062.52	6069.50	67.43	10.07	1811.93	1527.79
* 35128.000	428.00	.00	.00	6052.00	4079.00	6061.98	.00	6062.54	44.13	6.04	675.61	614.02
35153.000	25.00	.00	.00	6052.00	12546.00	6068.44	.00	6069.72	58.49	9.55	2069.68	1640.40
35153.000	25.00	.00	.00	6052.00	4079.00	6062.10	.00	6062.65	42.30	5.95	685.28	627.14
* 35420.000	267.00	.00	.00	6056.00	12546.00	6071.01	6071.01	6073.46	168.66	12.94	1279.25	966.04
* 35420.000	267.00	.00	.00	6056.00	4079.00	6065.28	.00	6066.85	211.05	10.07	404.97	280.78
35699.000	279.00	.00	.00	6058.00	12546.00	6075.30	6073.52	6077.22	102.91	11.98	1593.00	1236.76
* 35699.000	279.00	.00	.00	6058.00	4079.00	6069.06	.00	6070.12	90.06	8.24	495.05	429.83
* 35700.000	1.00	6074.00	6075.30	6059.00	12546.00	6076.92	6076.92	6078.23	585.41	10.90	1623.67	518.53
* 35700.000	1.00	6074.00	6075.30	6059.00	4079.00	6068.82	.00	6070.39	298.81	10.08	404.76	235.97
* 35735.000	35.00	6074.00	6075.30	6059.00	12546.00	6079.02	.00	6079.31	116.85	5.53	3128.59	1160.60
35735.000	35.00	6074.00	6075.30	6059.00	4079.00	6070.25	.00	6071.35	188.12	8.43	483.63	297.40
* 35736.000	1.00	.00	.00	6059.00	12546.00	6078.84	.00	6079.50	37.46	7.82	3233.58	2049.85
* 35736.000	1.00	.00	.00	6059.00	4079.00	6070.42	.00	6071.40	80.97	7.95	513.29	453.32
* 35970.000	235.00	.00	.00	6060.00	12546.00	6079.78	.00	6080.14	15.82	5.62	3880.66	3154.31
* 35970.000	235.00	.00	.00	6060.00	4079.00	6072.29	.00	6072.66	28.28	4.89	862.31	767.09
* 36280.000	310.00	.00	.00	6064.00	12546.00	6080.15	.00	6081.33	85.82	10.11	2121.17	1354.32
* 36280.000	310.00	.00	.00	6064.00	4079.00	6074.18	.00	6075.54	155.21	9.37	435.46	327.41
36565.000	285.00	.00	.00	6070.00	12546.00	6082.80	.00	6084.03	103.48	11.55	1921.44	1233.32
* 36565.000	285.00	.00	.00	6070.00	4079.00	6077.31	.00	6078.55	197.02	10.23	589.69	290.60
36820.000	255.00	.00	.00	6074.00	12546.00	6085.82	.00	6087.29	169.66	12.59	1872.83	963.19
* 36820.000	255.00	.00	.00	6074.00	4079.00	6082.14	.00	6083.29	157.54	9.56	704.91	324.99
37080.000	260.00	.00	.00	6076.00	12546.00	6089.74	.00	6090.88	124.44	11.92	2532.60	1124.69
* 37080.000	260.00	.00	.00	6076.00	4079.00	6086.45	6085.71	6087.46	115.25	9.07	849.10	379.96
37460.000	380.00	.00	.00	6080.00	12546.00	6094.07	.00	6095.00	100.52	10.94	2657.54	1251.35
* 37460.000	380.00	.00	.00	6080.00	4079.00	6090.21	.00	6091.07	109.62	8.68	944.58	389.59
* 37770.000	310.00	.00	.00	6084.00	12546.00	6097.44	6097.37	6099.68	215.62	14.11	1485.15	854.39
* 37770.000	310.00	.00	.00	6084.00	4079.00	6094.68	.00	6095.60	104.97	8.21	714.96	398.12
* 38120.000	350.00	.00	.00	6090.00	12546.00	6102.58	.00	6102.97	65.07	7.76	3160.54	1555.36
* 38120.000	350.00	.00	.00	6090.00	4079.00	6097.78	6097.78	6098.73	194.51	9.88	879.01	292.47
* 38386.000	266.00	.00	.00	6092.00	12546.00	6104.63	.00	6105.68	149.03	10.83	2161.55	1027.71
* 38386.000	266.00	.00	.00	6092.00	4079.00	6102.50	.00	6102.95	63.70	6.36	1166.15	511.08
38629.000	243.00	.00	.00	6094.00	12546.00	6107.85	.00	6108.84	112.78	11.05	2644.25	1181.40
* 38629.000	243.00	.00	.00	6094.00	4079.00	6104.29	.00	6105.12	91.11	8.12	849.27	427.33

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
38630.000	1.00	.00	.00	6094.00	12546.00	6107.87	.00	6108.85	111.42	10.99	2659.06	1188.59
38630.000	1.00	.00	.00	6094.00	4079.00	6104.30	.00	6105.13	91.14	8.12	849.14	427.27
38650.000	20.00	.00	.00	6094.00	12546.00	6108.39	.00	6109.12	83.85	9.78	3018.32	1370.10
38650.000	20.00	.00	.00	6094.00	4079.00	6104.66	.00	6105.34	73.98	7.49	957.72	474.25
38651.000	1.00	.00	.00	6094.00	12546.00	6108.40	.00	6109.13	83.38	9.76	3025.79	1374.00
38651.000	1.00	.00	.00	6094.00	4079.00	6104.67	.00	6105.34	73.94	7.49	958.03	474.38
38770.000	119.00	.00	.00	6097.00	12546.00	6109.18	.00	6110.12	81.87	9.72	2503.13	1386.59
38770.000	119.00	.00	.00	6097.00	4079.00	6105.52	.00	6106.19	75.31	6.99	869.58	470.03
* 38840.000	70.00	6106.00	6106.00	6097.50	12546.00	6111.47	6111.40	6113.23	123.41	11.84	1978.87	1129.36
38840.000	70.00	6108.00	6106.00	6097.50	4079.00	6106.34	.00	6107.61	143.05	9.04	451.05	341.04
39350.000	510.00	.00	.00	6104.00	12546.00	6118.54	.00	6119.45	109.82	9.20	2477.53	1197.19
* 39350.000	510.00	.00	.00	6104.00	4079.00	6114.59	6112.94	6115.59	149.02	8.15	644.44	334.15
39850.000	500.00	.00	.00	6110.00	12546.00	6124.06	.00	6125.79	128.58	12.97	2141.18	1106.40
* 39850.000	500.00	.00	.00	6110.00	4079.00	6119.73	.00	6121.11	122.86	9.60	497.65	368.01
40150.000	300.00	.00	.00	6115.00	12546.00	6128.28	.00	6130.03	155.07	13.23	2054.83	1007.48
* 40150.000	300.00	.00	.00	6115.00	4079.00	6124.05	6122.91	6125.64	172.08	10.50	487.54	310.95

FOUNTAIN CREEK 100-YEAR

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	.000	39167.00	5806.08	.00	.00	2.08	1329.46	.00
*	.000	19067.00	5803.00	-3.08	.00	-1.00	949.06	.00
	900.000	39167.00	5812.09	.00	6.01	.00	1257.03	900.00
*	900.000	19067.00	5808.49	-3.60	1.22	.00	862.60	900.00
	1200.000	39167.00	5814.49	.00	2.40	.00	1596.40	300.00
*	1200.000	19067.00	5810.24	-4.25	.00	.00	1038.20	300.00
	1850.000	39167.00	5816.43	.00	1.94	.00	1950.42	625.00
*	1850.000	19067.00	5813.78	-2.65	.46	.00	1349.45	625.00
*	2450.000	39167.00	5818.76	.00	2.32	.00	1882.86	610.00
*	2450.000	19067.00	5816.70	-2.06	.64	.00	851.38	610.00
	3455.000	39075.00	5825.92	.00	7.17	.00	195.39	1020.00
*	3455.000	18134.00	5823.03	-2.90	1.29	.00	184.56	1020.00
	3545.000	39075.00	5827.87	.00	1.95	.00	202.64	90.00
*	3545.000	18134.00	5823.59	-4.28	.13	.00	186.67	90.00
*	4125.000	39075.00	5832.84	.00	4.96	.00	1604.58	560.00
*	4125.000	18134.00	5825.73	-7.11	.32	.00	1228.73	560.00
	5125.000	39075.00	5834.47	.00	1.63	.00	1842.30	1000.00
*	5125.000	18134.00	5830.46	-4.01	.82	.00	554.94	1000.00
*	6125.000	39075.00	5838.32	.00	3.85	.00	719.79	1000.00
*	6125.000	18134.00	5835.03	-3.29	1.35	.00	331.45	1000.00
*	6625.000	39075.00	5843.63	.00	5.31	.00	430.00	550.00
*	6625.000	18134.00	5838.66	-4.97	.36	.00	416.66	550.00
	6635.000	39075.00	5843.58	.00	-.05	.00	438.12	10.00
	6635.000	18134.00	5838.62	-4.96	-.04	.00	404.62	10.00
	6690.000	39075.00	5843.76	.00	.18	.00	439.30	55.00
	6690.000	18134.00	5838.79	-4.96	.17	.00	405.76	55.00
	6700.000	39075.00	5843.91	.00	.16	.00	439.61	45.00
	6700.000	18134.00	5838.94	-4.97	.15	.00	410.28	45.00
*	7430.000	39075.00	5846.49	.00	2.57	.00	698.20	720.00
*	7430.000	18134.00	5842.51	-3.97	3.03	.00	495.63	720.00
*	8420.000	38426.00	5854.76	.00	8.27	.00	1168.29	1000.00
*	8420.000	18134.00	5849.98	-4.78	1.85	.00	274.65	1000.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	9070.000	38426.00	5859.05	.00	4.29	.00	1460.98	637.00
*	9070.000	18134.00	5854.48	-4.57	.80	.00	449.76	637.00
	9340.000	38426.00	5860.97	.00	1.92	.00	633.88	320.00
*	9340.000	18134.00	5856.55	-4.42	.16	.00	604.05	320.00
	9341.000	38426.00	5860.89	.00	-.08	.00	612.92	1.00
	9341.000	18134.00	5856.52	-4.37	-.03	.00	583.69	1.00
	9370.000	38426.00	5860.98	.00	.09	.00	613.21	30.00
	9370.000	18134.00	5856.59	-4.39	.07	.00	584.23	30.00
	9371.000	38426.00	5861.23	.00	.25	.00	634.92	1.00
	9371.000	18134.00	5856.69	-4.54	.11	.00	605.20	1.00
*	10150.000	38426.00	5862.84	.00	1.62	.00	837.49	710.00
*	10150.000	18134.00	5858.79	-4.05	.79	.00	657.91	710.00
	10151.000	38426.00	5863.31	.00	.46	.00	830.05	1.00
	10151.000	18134.00	5859.14	-4.17	.35	.00	694.83	1.00
	10249.000	38426.00	5863.76	.00	.46	.00	842.46	100.00
*	10249.000	18134.00	5859.73	-4.03	.13	.00	714.14	100.00
	10250.000	38426.00	5863.72	.00	-.04	.00	866.05	1.00
	10250.000	18134.00	5859.71	-4.01	-.02	.00	667.11	1.00
*	11173.000	38426.00	5869.40	.00	5.67	.00	470.61	925.00
*	11173.000	18134.00	5865.57	-3.83	1.76	.00	220.00	925.00
	11763.000	38426.00	5877.19	.00	7.79	.00	1301.97	590.00
*	11763.000	18134.00	5871.40	-5.79	1.94	.00	290.47	590.00
	12638.000	38426.00	5882.96	.00	5.77	.00	2007.20	860.00
*	12638.000	18134.00	5879.02	-3.94	1.51	.00	506.77	860.00
	12788.000	38426.00	5884.32	.00	1.36	.00	2296.96	155.00
*	12788.000	18134.00	5881.07	-3.25	.85	.00	1730.25	155.00
	13303.000	38426.00	5886.27	.00	1.95	.00	1795.97	515.00
*	13303.000	18134.00	5884.31	-1.95	.37	.00	1220.97	515.00
*	13933.000	38426.00	5889.66	.00	3.39	.00	1359.76	630.00
*	13933.000	18134.00	5887.71	-1.95	1.28	.00	1172.55	630.00
	15020.000	38426.00	5899.38	.00	9.72	.00	1416.94	1050.00
*	15020.000	18134.00	5895.25	-4.13	2.21	.00	709.87	1050.00
	15030.000	38426.00	5900.53	.00	1.15	.00	1551.51	10.00
*	15030.000	18134.00	5895.61	-4.92	.36	.00	755.38	10.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	15155.000	38426.00	5901.17	.00	.64	.00	1356.86	120.00
*	15155.000	18134.00	5899.41	-1.77	.22	.00	1253.32	120.00
*	15843.000	36371.00	5907.59	.00	6.42	.00	1952.54	690.00
*	15843.000	16697.00	5902.94	-4.65	.90	.00	1518.89	690.00
	16540.000	36371.00	5909.45	.00	1.87	.00	1655.16	660.00
*	16540.000	16697.00	5907.61	-1.85	.79	.00	405.13	660.00
	16620.000	36371.00	5909.45	.00	-.01	.00	1651.05	80.00
	16620.000	16697.00	5907.96	-1.49	.36	.00	781.34	80.00
	16900.000	36371.00	5910.62	.00	1.17	.00	1461.46	270.00
*	16900.000	16697.00	5908.37	-2.25	.12	.00	1013.45	270.00
	17150.000	36371.00	5911.69	.00	1.07	.00	839.59	220.00
*	17150.000	16697.00	5909.01	-2.68	.19	.00	311.52	220.00
	17210.000	36371.00	5911.70	.00	.02	.00	851.34	60.00
	17210.000	16697.00	5909.06	-2.64	.05	.00	311.78	60.00
	18240.000	36371.00	5917.81	.00	6.10	.00	949.75	1030.00
*	18240.000	16697.00	5913.86	-3.95	1.18	.00	330.25	1030.00
	19250.000	36371.00	5922.61	.00	4.80	.00	405.90	1000.00
*	19250.000	16697.00	5919.18	-3.43	1.41	.00	302.49	1000.00
	20240.000	36371.00	5928.88	.00	6.26	.00	251.56	1000.00
*	20240.000	16697.00	5924.66	-4.22	1.55	.00	219.96	1000.00
	21250.000	36371.00	5936.37	.00	7.49	.00	266.30	1000.00
*	21250.000	16697.00	5931.19	-5.18	1.82	.00	236.40	1000.00
	22250.000	35860.00	5943.94	.00	7.57	.00	231.27	1000.00
*	22250.000	16473.00	5939.25	-4.70	1.78	.00	193.09	1000.00
	22980.000	35860.00	5950.11	.00	6.17	.00	301.95	700.00
*	22980.000	16473.00	5944.57	-5.54	1.09	.00	201.35	700.00
	23315.000	35860.00	5951.57	.00	1.47	.00	239.17	330.00
*	23315.000	16473.00	5946.41	-5.17	.51	.00	211.81	330.00
	23405.000	35860.00	5952.27	.00	.70	.00	242.84	90.00
	23405.000	16473.00	5946.83	-5.44	.42	.00	214.08	90.00
*	23635.000	12934.00	5953.63	.00	1.36	.00	202.07	230.00
*	23635.000	4264.00	5950.04	-3.60	1.21	.00	82.73	230.00
*	23670.000	12934.00	5953.90	.00	.26	.00	89.22	35.00
	23670.000	4264.00	5949.92	-3.98	-.12	.00	66.34	35.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	23791.000	12934.00	5958.86	.00	4.96	.00	215.82	120.00
*	23791.000	4264.00	5951.10	-7.76	.21	.00	83.12	120.00
	23792.000	12934.00	5958.87	.00	.01	.00	207.79	1.00
	23792.000	4264.00	5951.17	-7.70	.07	.00	82.32	1.00
	23892.000	12934.00	5959.60	.00	.73	.00	210.92	100.00
*	23892.000	4264.00	5952.07	-7.52	.19	.00	87.17	100.00
	23893.000	12934.00	5959.59	.00	-.01	.00	218.97	1.00
	23893.000	4264.00	5952.07	-7.51	.00	.00	88.77	1.00
	24360.000	12934.00	5961.77	.00	2.18	.00	899.56	450.00
*	24360.000	4264.00	5954.49	-7.28	.95	.00	207.62	450.00
*	24780.000	12934.00	5962.39	.00	.62	.00	119.94	375.00
*	24780.000	4264.00	5959.65	-2.74	.82	.00	103.25	375.00
*	24861.000	12934.00	5965.91	.00	3.52	.00	206.39	65.00
	24861.000	4264.00	5959.83	-6.08	.18	.00	104.13	65.00
*	25268.000	12934.00	5970.10	.00	4.19	.00	630.85	380.00
*	25268.000	4264.00	5964.11	-5.99	1.24	.00	66.89	380.00
*	25625.000	12934.00	5975.42	.00	5.32	.00	880.04	367.00
*	25625.000	4264.00	5968.90	-6.52	1.05	.00	174.61	367.00
	25725.000	12934.00	5975.19	.00	-.23	.00	853.56	65.00
*	25725.000	4264.00	5970.22	-4.97	.18	.00	95.54	65.00
	26265.000	12934.00	5980.24	.00	5.05	.00	920.38	563.00
*	26265.000	4264.00	5976.98	-3.26	2.39	.00	475.69	563.00
	26780.000	12934.00	5984.13	.00	3.89	.00	822.38	505.00
*	26780.000	4264.00	5979.79	-4.35	1.80	.00	508.30	505.00
	27180.000	12934.00	5986.91	.00	2.77	.00	668.18	400.00
*	27180.000	4264.00	5983.90	-3.01	.83	.00	642.50	400.00
	28100.000	12934.00	5994.81	.00	7.90	.00	544.16	920.00
*	28100.000	4264.00	5991.85	-2.97	1.30	.00	444.89	920.00
	29100.000	12934.00	6003.59	.00	8.78	.00	226.34	1000.00
*	29100.000	4264.00	5998.54	-5.05	1.99	.00	161.69	1000.00
	30125.000	12934.00	6013.94	.00	10.35	.00	178.21	1025.00
*	30125.000	4264.00	6007.54	-6.40	2.47	.00	82.78	1025.00
*	31115.000	12934.00	6024.67	.00	10.73	.00	352.94	990.00
*	31115.000	4264.00	6017.18	-7.49	2.04	.00	112.17	990.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
31400.000	12934.00	6026.37	.00	1.70	.00	285.07	285.00
* 31400.000	4264.00	6019.72	-6.65	.53	.00	151.63	285.00
31640.000	12934.00	6027.82	.00	1.45	.00	353.59	240.00
* 31640.000	4264.00	6020.75	-7.07	.24	.00	273.68	240.00
* 31940.000	12546.00	6028.92	.00	1.10	.00	298.07	300.00
* 31940.000	4079.00	6026.53	-2.39	.31	.00	264.25	300.00
32080.000	12546.00	6029.97	.00	1.05	.00	127.88	140.00
* 32080.000	4079.00	6027.21	-2.75	.57	.00	116.86	140.00
32160.000	12546.00	6030.68	.00	.71	.00	122.71	80.00
* 32160.000	4079.00	6027.42	-3.25	.07	.00	109.70	80.00
32500.000	12546.00	6037.88	.00	7.20	.00	507.81	340.00
* 32500.000	4079.00	6033.15	-4.73	2.61	.00	159.52	340.00
32840.000	12546.00	6042.07	.00	4.19	.00	384.68	340.00
* 32840.000	4079.00	6038.24	-3.83	.49	.00	108.29	340.00
* 32890.000	12546.00	6043.36	.00	1.29	.00	413.95	50.00
32890.000	4079.00	6038.24	-5.12	.00	.00	117.60	50.00
33213.000	12546.00	6045.44	.00	2.08	.00	624.64	323.00
* 33213.000	4079.00	6040.00	-5.45	.82	.00	459.65	323.00
* 33700.000	12546.00	6049.66	.00	4.21	.00	475.17	487.00
* 33700.000	4079.00	6046.67	-2.98	.99	.00	288.22	487.00
* 34176.000	12546.00	6054.99	.00	5.33	.00	497.29	476.00
* 34176.000	4079.00	6050.46	-4.53	.65	.00	156.21	476.00
* 34700.000	12546.00	6062.14	.00	7.15	.00	473.33	524.00
* 34700.000	4079.00	6057.25	-4.90	2.62	.00	61.63	524.00
* 35128.000	12546.00	6068.04	.00	5.90	.00	642.62	428.00
* 35128.000	4079.00	6061.98	-6.07	.59	.00	75.44	428.00
35153.000	12546.00	6068.44	.00	.39	.00	667.22	25.00
35153.000	4079.00	6062.10	-6.33	.13	.00	75.64	25.00
* 35420.000	12546.00	6071.01	.00	2.58	.00	433.48	267.00
* 35420.000	4079.00	6065.28	-5.73	1.22	.00	72.97	267.00
35699.000	12546.00	6075.30	.00	4.28	.00	444.48	279.00
* 35699.000	4079.00	6069.06	-6.23	.68	.00	59.50	279.00
* 35700.000	12546.00	6076.92	.00	1.63	.00	603.29	1.00
* 35700.000	4079.00	6068.82	-8.11	-.25	.00	53.47	1.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	35735.000	12546.00	6079.02	.00	2.09	.00	808.77	35.00
	35735.000	4079.00	6070.25	-8.77	1.43	.00	57.02	35.00
*	35736.000	12546.00	6078.84	.00	-.17	.00	796.17	1.00
*	35736.000	4079.00	6070.42	-8.42	.17	.00	59.87	1.00
*	35970.000	12546.00	6079.78	.00	.93	.00	633.98	235.00
*	35970.000	4079.00	6072.29	-7.49	.27	.00	138.45	235.00
*	36280.000	12546.00	6080.15	.00	.37	.00	426.95	310.00
*	36280.000	4079.00	6074.18	-5.97	.84	.00	68.48	310.00
	36565.000	12546.00	6082.80	.00	2.65	.00	312.30	285.00
*	36565.000	4079.00	6077.31	-5.49	.95	.00	172.73	285.00
	36820.000	12546.00	6085.82	.00	3.02	.00	408.93	255.00
*	36820.000	4079.00	6082.14	-3.67	1.04	.00	274.19	255.00
	37080.000	12546.00	6089.74	.00	3.93	.00	597.38	260.00
*	37080.000	4079.00	6086.45	-3.29	.69	.00	417.36	260.00
	37460.000	12546.00	6094.07	.00	4.33	.00	536.15	380.00
*	37460.000	4079.00	6090.21	-3.86	.97	.00	381.57	380.00
*	37770.000	12546.00	6097.44	.00	3.37	.00	375.87	310.00
*	37770.000	4079.00	6094.68	-2.76	.80	.00	232.30	310.00
*	38120.000	12546.00	6102.58	.00	5.14	.00	557.64	350.00
*	38120.000	4079.00	6097.78	-4.80	1.62	.00	391.27	350.00
*	38386.000	12546.00	6104.63	.00	2.05	.00	477.43	266.00
*	38386.000	4079.00	6102.50	-2.13	.45	.00	457.92	266.00
	38629.000	12546.00	6107.85	.00	3.22	.00	673.69	243.00
*	38629.000	4079.00	6104.29	-3.56	.53	.00	276.77	243.00
	38630.000	12546.00	6107.87	.00	.03	.00	674.57	1.00
	38630.000	4079.00	6104.30	-3.58	.01	.00	276.72	1.00
	38650.000	12546.00	6108.39	.00	.52	.00	695.55	20.00
	38650.000	4079.00	6104.66	-3.73	.36	.00	313.95	20.00
	38651.000	12546.00	6108.40	.00	.01	.00	695.98	1.00
	38651.000	4079.00	6104.67	-3.74	.01	.00	314.04	1.00
	38770.000	12546.00	6109.18	.00	.78	.00	590.88	119.00
	38770.000	4079.00	6105.52	-3.66	.86	.00	312.46	119.00
*	38840.000	12546.00	6111.47	.00	2.29	.00	700.68	70.00
	38840.000	4079.00	6106.34	-5.14	.81	.00	71.36	70.00

Run Date: 6JUL94 Run Time: 15:21:08 HMVersion: 6.40 Data File: fc-fut.hc2

Page 165

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
39350.000	12546.00	6118.54	.00	7.07	.00	507.48	510.00
* 39350.000	4079.00	6114.59	-3.95	1.90	.00	378.64	510.00
39850.000	12546.00	6124.06	.00	5.52	.00	432.36	500.00
* 39850.000	4079.00	6119.73	-4.33	1.46	.00	108.62	500.00
40150.000	12546.00	6128.28	.00	4.22	.00	424.23	300.00
* 40150.000	4079.00	6124.05	-4.23	1.26	.00	321.41	300.00

**HEC-2 INPUT AND SUMMARY OUTPUT
10- AND 100-YEAR EXISTING CONDITIONS**

HEC2 S/N: 1126460211 HMVersion: 6.40 Data File: fc-ex.hc2

```
*****
* HEC-2 WATER SURFACE PROFILES *
*                               *
* Version  4.6.2; May 1991      *
*                               *
* RUN DATE   6JUL94   TIME  16:09:09 *
*****
```

```
*****
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET, SUITE D    *
* DAVIS, CALIFORNIA 95616-4687 *
* (916) 756-1104                *
*****
```

```

X   X  XXXXXXXX  XXXXX          XXXXX
X   X  X        X   X          X   X
X   X  X        X              X
XXXXXXX XXXX   X              XXXXX XXXXX
X   X  X        X              X
X   X  X        X   X          X
X   X  XXXXXXXX  XXXXX          XXXXXXXX
```

```

::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::
:::
:::  FULL MICRO-COMPUTER IMPLEMENTATION  :::
:::
::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::
```

```

=====
H A E S T A D   M E T H O D S
=====
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

EXISTING
(CURRENT PHYSICAL CONDITIONS)
INPUT / OUTPUT

THIS RUN EXECUTED 6JUL94 16:09:09

HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991

T1 FOUNTAIN CREEK DRAINAGE BASIN PLANNING STUDY
T2 MULLER ENGINEERING CO.
T3 FOUNTAIN CREEK 100-YEAR FLOOD (FUTURE), EXISTING CHANNEL CONDITIONS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	-1	0	0	0	5804	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1	0	-1							

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

150

NC	.12	.12	.045	.15	.3					
QT	2	39167	19067							
X1	0	22	1660.0	1775.0	0	0	0			
GR	5830.0	1000.0	5828.0	1045.0	5826.0	1235.0	5824.0	1395.0	5820.0	1420.0
GR	5810.0	1460.0	5802.0	1490.0	5800.0	1610.0	5798.0	1660.0	5790.0	1690.0
GR	5792.0	1750.0	5798.0	1775.0	5800.0	1800.0	5802.0	1880.0	5800.0	2100.0
GR	5800.0	2230.0	5802.0	2250.0	5802.0	2280.0	5804.0	2590.0	5804.0	2740.0
GR	5806.0	2800.0	5808.0	2900.0						
NC	.12	.12	.045							
X1	900	17	1140.0	1275.0	900	900	900			
GR	5826.0	1000.0	5820.0	1020.0	5810.0	1050.0	5808.0	1080.0	5806.0	1140.0
GR	5800.0	1160.0	5798.0	1170.0	5796.0	1200.0	5796.0	1245.0	5802.0	1275.0
GR	5802.0	1300.0	5804.0	1350.0	5806.0	1370.0	5807.0	1735.0	5808.0	1910.0
GR	5810.0	2015.0	5814.0	2560.0						
NC	.08	.12	.045							
X1	1200	13	1350.0	1450.0	295	275	300			
GR	5842.0	1000.0	5840.0	1090.0	5838.0	1180.0	5830.0	1290.0	5820.0	1320.0
GR	5810.0	1350.0	5798.0	1375.0	5798.0	1430.0	5804.0	1450.0	5806.0	1670.0
GR	5810.0	2360.0	5814.0	2810.0	5816.0	3310.0				
NC	.095	.12	.045							
X1	1850	15	1200	1305	650	380	625			
GR	5820.0	1000.0	5814.0	1025.0	5812.0	1045.0	5812.0	1110.0	5808.0	1130.0
GR	5806.0	1200.0	5800.0	1230.0	5800.0	1290.0	5806.0	1305.0	5808.0	1415.0
GR	5810.0	1440.0	5812.0	2225.0	5814.0	2395.0	5814.0	2625.0	5820.0	3465.0

NC	.095	.12	.045	.15	.3					
X1	2450	21	1270	1390	590	700	610			
GR	5830.0	1000.0	5820.0	1045.0	5816.0	1070.0	5814.0	1085.0	5812.0	1115.0
GR	5810.0	1210.0	5808.0	1270.0	5802.0	1290.0	5802.0	1340.0	5804.0	1350.0
GR	5810.0	1370.0	5814.0	1390.0	5815.0	1440.0	5814.0	1510.0	5814.0	1590.0
GR	5816.0	1910.0	5818.0	1930.0	5818.0	2300.0	5818	2860	5820	3060
GR	5830	3400								

NC	.08	.08	.045	.3	.5					
QT	2	39075	18134							
X1	3455	8	1050	1320	980	1100	1020			
GR	5850	1050	5840	1072	5812.0	1130.0	5810.0	1170.0	5810.0	1220.0
GR	5814.0	1230.0	5816.0	1280.0	5840.0	1320.0				

CIRCLE DRIVE BRIDGE

NC	.08	.08	.045	.15	.30					
X1	3545	0	0	0	90	90	90			
NC	.08	.15	.045	.3	.5					
X1	4125	16	1080.0	1190.0	580	650	560			
X3	10									
GR	5850.0	1000.0	5830.0	1040.0	5826.0	1055.0	5824.0	1080.0	5814.0	1100.0
GR	5814.0	1180.0	5816.0	1190.0	5818.0	1290.0	5826	1315.0	5826.0	1335.0
GR	5825.0	1540.0	5824	1740	5824	2030	5826	2410	5830	2620
GR	5836	2660								

NC	.10	.15	.045	.15	.3					
X1	5125	20	1570.0	1770.0	1000	850	1000			
X3	10									
GR	5840	360	5840	1000	5838	1020	5834	1090	5832	1140
GR	5830	1260	5828	1445	5826	1540	5824	1570	5820	1600
GR	5820	1730	5822	1770	5832	1790	5832	1800	5832	1810
GR	5834	1849	5832	2040	5832	2230	5832	2920	5838	2930

NC	.1	.1	.045							
X1	6125	24	1830.0	1995.0	1000	1150	1000			
GR	5848	1079	5848.0	1080.0	5846.0	1140.0	5844.0	1210.0	5842.0	1265.0
GR	5840.0	1340.0	5838.0	1475.0	5836.0	1680.0	5836.0	1780.0	5834.0	1830.0
GR	5824.0	1860.0	5824.0	1940.0	5826.0	1975.0	5830.0	1995.0	5832.0	2020.0
GR	5834.0	2120.0	5836.0	2150.0	5840.0	2190.0	5842.0	2210.0	5844.0	2240.0
GR	5846.0	2280.0	5848.0	2340.0	5852.0	2380.0	5854.0	2460.0		

NC	.1	.1	.045	.3	.5					
X1	6625	25	1700	2130	750	350	550			
X3	10									
GR	5850	1000	5848	1160	5848	1220	5848	5848.2	5847.7	
GR	5846	1470	5844	1675	5842	1700	5840	1300	5846	1380
GR	5836	1720	5834	1745	5832	1795	5830	1710	5838	1715
GR	5824	1880	5826	1948	5832	2035	5834	1835	5826	1865
GR	5840	2195	5842	2265	5844	2300	5848	2105	5838	2130
								2410	5850	2480

JANITELL ROAD BRIDGE

NC	.045	.045	.045	.3	.5					
X1	6635	26	1000.1	1453	10	10	10			
GR	5852.4	1000	5844	1000.1	5834	1034	5833.7	1088.5	5853.7	1088.6
GR	5853.7	1091.5	5833.7	1091.6	5830.3	1159.6	5828.3	1179.5	5854.3	1179.6
GR	5854.3	1182.5	5828.3	1182.6	5825	1203	5825	1265	5828.3	1270.5
GR	5854.3	1270.6	5854.3	1273.5	5828.3	1273.6	5831.3	1294	5832.6	1361.5
GR	5853.6	1361.6	5853.6	1364.5	5832.6	1364.6	5835	1423	5844	1453
GR	5852.3	1453.1								

NC	.045	.045	.045	.1	.3					
X1	6690	26	1000.1	1453	55	55	55			
GR	5852.4	1000	5844	1000.1	5834	1034	5833.7	1088.5	5853.7	1088.6
GR	5853.7	1091.5	5833.7	1091.6	5830.3	1159.6	5828.3	1179.5	5854.3	1179.6
GR	5854.3	1182.5	5828.3	1182.6	5825	1203	5825	1265	5828.3	1270.5
GR	5854.3	1270.6	5854.3	1273.5	5828.3	1273.6	5831.3	1294	5832.6	1361.5
GR	5853.6	1361.6	5853.6	1364.5	5832.6	1364.6	5835	1423	5844	1453
GR	5852.3	1453.1								

NC	.045	.045	.045	.3	.5					
X1	6700	27	1825	2265	45	45	45			
X3	10									
GR	5852	1000	5850	1190	5846	1250	5840	5848.2	5847.7	
GR	5840	1585	5840	1665	5844	1705	5844	1290	5840	1370
GR	5834	1870	5832	1930	5830	1995	5844	1740	5844	1825
GR	5830	2115	5832	2160	5834	2225	5826	2025	5826	2095
GR	5848	2380	5848	2415	5842	2475	5840	2265	5842	2370
GR	5852	2720	5854	2825			5844	2505	5850	2660

NC	.10	.11	.045	.3	.5					
X1	7430	27	1680.0	1775.0	530	750	720			
GR	5858	340	5852	790	5850	1000	5848	1130	5846	1180
GR	5844	1270	5842	1360	5840	1400	5840	1525	5842	1550
GR	5842	1580	5840	1600	5838	1630	5836	1680	5830	1705
GR	5830	1755	5832	1765	5838	1775	5840	1790	5840	1820
GR	5844	1840	5846	1865	5858	1890	5860	1915	5858	1925
GR	5856	1980	5856	2400						

SPRING CREEK OUTFALL

QT	2	38426	18134							
NC	.11	.11	.045	.1	.3					
X1	8420	22	2480.0	2580.0	850	1050	1000			
GR	5860.0	1000.0	5858.0	1180.0	5856.0	1470.0	5854.0	1500.0	5852.0	1700.0
GR	5852.0	2115.0	5851.0	2300.0	5850.0	2320.0	5850.0	2370.0	5846.0	2390.0
GR	5844.0	2460.0	5842.0	2480.0	5838.0	2490.0	5838.0	2560.0	5840.0	2570.0
GR	5844.0	2580.0	5846.0	2605.0	5848.0	2610.0	5850.0	2645.0	5858.0	2665.0
GR	5860.0	2750.0	5862.0	2825.0						

NC	.11	.11	.045							
X1	9070	18	1305.0	1435.0	637	637	637			
GR	5868	140	5858	255	5856	480	5856.0	1175.0	5854.0	1240.0
GR	5850.0	1250.0	5848.0	1305.0	5842.0	1340.0	5842.0	1390.0	5844.0	1420.0
GR	5848.0	1435.0	5850.0	1460.0	5852.0	1500.0	5854.0	1570.0	5850.0	1610.0
GR	5850.0	1645.0	5860.0	1710.0	5874	1755				

NC	.08	.08	.045	.3	.5					
X1	9340	21	1210.0	1335.0	500	300	320			
GR	5870.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5850.0	1140.0	5850.0	1195.0	5848.0	1210.0	5846.0	1225.0	5844.0	1260.0
GR	5842.0	1270.0	5842.0	1315.0	5846.0	1335.0	5850.0	1370.0	5852.0	1410.0
GR	5854.0	1480.0	5850.0	1530.0	5850.0	1590.0	5852.0	1630.0	5860.0	1650.0
GR	5870.0	1670.0								

U.S. 24 BYPASS BRIDGE ON-RAMP

NC	.08	.08	.045	.3	.5					
X1	9341	36	1212.1	1333.0	1	1	1			
GR	5871.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5867.0	1083.0	5867.0	1087.0	5852.0	1087.1	5850.0	1140.0	5850.0	1195.0
GR	5848.0	1208.0	5868.0	1208.1	5868.0	1212.0	5848.0	1212.1	5846.0	1225.0
GR	5844.0	1260.0	5842.0	1270.0	5842.0	1315.0	5846.0	1333.0	5868.0	1333.1
GR	5868.0	1337.0	5846.0	1337.1	5850.0	1370.0	5852.0	1410.0	5853.0	1458.0
GR	5869.0	1458.1	5869.0	1462.0	5853.0	1462.1	5850.0	1530.0	5850.0	1583.0
GR	5870.0	1583.1	5870.0	1587.0	5850.0	1587.1	5852.0	1630.0	5860.0	1650.0
GR	5874.0	1670.0								

NC	.08	.08	.045	.1	.3					
X1	9370	36	1212.1	1333.0	30	30	30			
GR	5871.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5867.0	1083.0	5867.0	1087.0	5852.0	1087.1	5850.0	1140.0	5850.0	1195.0
GR	5848.0	1208.0	5868.0	1208.1	5868.0	1212.0	5848.0	1212.1	5846.0	1225.0
GR	5844.0	1260.0	5842.0	1270.0	5842.0	1315.0	5846.0	1333.0	5868.0	1333.1
GR	5868.0	1337.0	5846.0	1337.1	5850.0	1370.0	5852.0	1410.0	5853.0	1458.0
GR	5869.0	1458.1	5869.0	1462.0	5853.0	1462.1	5850.0	1530.0	5850.0	1583.0
GR	5870.0	1583.1	5870.0	1587.0	5850.0	1587.1	5852.0	1630.0	5860.0	1650.0
GR	5874.0	1670.0								

NC	.08	.08	.045	.3	.5					
X1	9371	21	1210.0	1335.0	1	1	1			
GR	5870.0	1000.0	5860.0	1020.0	5856.0	1040.0	5854.0	1060.0	5852.0	1083.0
GR	5850.0	1140.0	5850.0	1195.0	5848.0	1210.0	5846.0	1225.0	5844.0	1260.0
GR	5842.0	1270.0	5842.0	1315.0	5846.0	1335.0	5850.0	1370.0	5852.0	1410.0
GR	5854.0	1480.0	5850.0	1530.0	5850.0	1590.0	5852.0	1630.0	5860.0	1650.0
GR	5870.0	1670.0								

NC	.10	.1	.045	.1	.3					
X1	10150	23	1480.0	1670	700	720	710			
GR	5874.0	1000.0	5858.0	1040.0	5856.0	1080.0	5854.0	1155.0	5852.0	1170.0
GR	5852.0	1197.0	5854.0	1210.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0
GR	5850.0	1565.0	5852.0	1600.0	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0
GR	5862.0	1720.0	5862.0	1840.0	5864.0	1900.0	5866.0	1970.0	5866.0	2060.0
GR	5868.0	2110.0	5870.0	2130.0	5872.0	2150.0				

U.S. 24 BRIDGE BYPASS

NC	.085	.085	.045	.3	.5					
X1	10151	56	1480.0	1690	1	1	1			
GR	5872.0	1000.0	5858.0	1040.0	5856.0	1078.0	5873.0	1078.0	5873.0	1082.0
GR	5856.0	1082.0	5854.0	1155.0	5852.0	1170.0	5852.0	1197.0	5854.0	1206.0
GR	5873.0	1206.0	5873.0	1210.0	5854.0	1210.0	5854.0	1334.0	5873.0	1334.0
GR	5873.0	1338.0	5856.0	1338.0	5856.0	1462.0	5873.0	1462.0	5873.0	1466.0
GR	5856.0	1466.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0	5850.0	1565.0
GR	5850.0	1590.0	5873.0	1590.0	5873.0	1594.0	5850.0	1594.0	5852.0	1600.0
GR	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0	5858.0	1718.0	5873.0	1718.0
GR	5873.0	1722.0	5858.0	1722.0	5862.0	1840.0	5862.0	1846.0	5873.0	1846.0
GR	5873.0	1850.0	5862.0	1850.0	5864.0	1900.0	5866.0	1970.0	5866.0	1973.0
GR	5873.0	1974.0	5873.0	1978.0	5866.0	1978.0	5866.0	2060.0	5867.0	2102.0
GR	5873.0	2102.0	5873.0	2106.0	5867.0	2106.0	5868.0	2110.0	5870.0	2130.0
GR	5872.0	2150.0								
NC	.085	.085	.045	.1	.3					
X1	10249	56	1480.0	1690	100	100	100			
GR	5872.0	1000.0	5858.0	1040.0	5856.0	1078.0	5873.0	1078.0	5873.0	1082.0
GR	5856.0	1082.0	5854.0	1155.0	5852.0	1170.0	5852.0	1197.0	5854.0	1206.0
GR	5873.0	1206.0	5873.0	1210.0	5854.0	1210.0	5854.0	1334.0	5873.0	1334.0
GR	5873.0	1338.0	5856.0	1338.0	5856.0	1462.0	5873.0	1462.0	5873.0	1466.0
GR	5856.0	1466.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0	5850.0	1565.0
GR	5850.0	1590.0	5873.0	1590.0	5873.0	1594.0	5850.0	1594.0	5852.0	1600.0
GR	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0	5858.0	1718.0	5873.0	1718.0
GR	5873.0	1722.0	5858.0	1722.0	5862.0	1840.0	5862.0	1846.0	5873.0	1846.0
GR	5873.0	1850.0	5862.0	1850.0	5864.0	1900.0	5866.0	1970.0	5866.0	1974.0
GR	5873.0	1974.0	5873.0	1978.0	5866.0	1978.0	5866.0	2060.0	5867.0	2102.0
GR	5873.0	2102.0	5873.0	2106.0	5867.0	2106.0	5868.0	2110.0	5870.0	2130.0
GR	5872.0	2150.0								
NC	.10	.10	.045	.3	.5					
X1	10250	23	1480.0	1720.0	1	1	1			
GR	5874.0	1000.0	5858.0	1040.0	5856.0	1080.0	5854.0	1155.0	5852.0	1170.0
GR	5852.0	1197.0	5854.0	1210.0	5856.0	1480.0	5848.0	1505.0	5848.0	1530.0
GR	5850.0	1565.0	5852.0	1600.0	5854.0	1635.0	5856.0	1670.0	5858.0	1690.0
GR	5862.0	1720.0	5862.0	1840.0	5864.0	1900.0	5866.0	1970.0	5866.0	2060.0
GR	5868.0	2110.0	5870.0	2130.0	5872.0	2150.0				
NC	.12	.12	.045	.1	.3					
X1	11173	18	1250	1390	950	900	925			
GR	5876	170	5872	265	5872	450	5876	515	5876	675
GR	5882	705	5882	1120	5862	1180	5860	1250	5854	1310
GR	5854	1370	5866	1390	5868	1440	5868	1490	5873	1530
GR	5873	1630	5866	1710	5876	1970				
NC	.12	.12	.045	.1	.3					
X1	11763	29	1590.0	1700	580	600	590			
X4	1	5876	1800							
GR	5880	305	5876	515	5874	540	5874	605	5874	915
GR	5878.0	1000.0	5880.0	1070.0	5880.0	1360.0	5878.0	1415.0	5876.0	1450.0
GR	5868.0	1475.0	5866.0	1500.0	5864.0	1590.0	5860.0	1600.0	5858.0	1620.0
GR	5858.0	1635.0	5860.0	1650.0	5870.0	1675.0	5876.0	1700.0	5870.0	1830.0
GR	5868.0	1850.0	5868.0	1880.0	5872.0	1900.0	5874.0	1995.0	5874.0	2140.0

GR	5874.0	2180.0	5880.0	2220.0	5886.0	2260.0	5888.0	2315.0		
NC	.135	.12	.045	.1	.3					
X1	12638	28	1760	2105	820	950	860			
GR	5890	890	5882	930	5880.0	1000.0	5880.0	1250.0	5878	1380
GR	5878	1430	5878	1465	5878	1485	5880	1540	5880	1600
GR	5880.0	1690.0	5880.0	1760.0	5878.0	1800.0	5868.0	1825.0	5868.0	1840.0
GR	5870.0	1910.0	5872.0	1960.0	5872.0	1990.0	5876.0	2020.0	5878.0	2080.0
GR	5882.0	2105.0	5882.0	2240.0	5880	2660	5882	2870	5884	3000
GR	5884	3100	5888	3130	5890	3150				
NC	.135	.12	.045							
X1	12788	20	1790	2300	100	250	155			
GR	5890	875	5880	930	5880	1050	5880	1245	5880	1295
GR	5880	1790	5876	1800	5876	1960	5877	2120	5878	2130
GR	5880	2200	5884	2300	5884	2400	5882	2410	5880	2440
GR	5880	2660	5882	3020	5884	3200	5886	3220	5900	3300
NC	.135	.12	.045							
X1	13303	22	1650.0	2140	700	180	515			
GR	5900.0	1000.0	5892.0	1030.0	5890.0	1070.0	5888.0	1150.0	5886.0	1230.0
GR	5886.0	1610.0	5884.0	1650.0	5876.0	1675.0	5876.0	1760.0	5878.0	1770.0
GR	5878.0	1970.0	5880.0	2110.0	5884.0	2130.0	5886.0	2140.0	5886.0	2230.0
GR	5882.0	2260.0	5882.0	2340.0	5882.0	2720.0	5884.0	2970.0	5886.0	3010.0
GR	5888.0	3050.0	5900.0	3110.0						
NC	.135	.125	.045							
X1	13933	26	1670.0	2000	690	550	630			
GR	5910	1000	5900	1190	5898	1240	5896	1280	5894.0	1330.0
GR	5892.0	1360.0	5890.0	1420.0	5890.0	1630.0	5888.0	1670.0	5882.0	1685.0
GR	5880.0	1700.0	5880.0	1740.0	5882.0	1750.0	5884.0	1920.0	5886.0	2000.0
GR	5886	2070	5888	2080	5888	2170	5886	2200	5884	2215
GR	5884	2290	5884	2470	5886	2700	5888	2980	5890	3000
GR	5898	3060								
NC	.135	.2	.045							
X1	15020	30	1720	1800	1070	1010	1050			
GR	5910	1000	5908	1085	5906	1170	5904	1260	5902	1304
GR	5900	1345	5898	1410	5896	1480	5896	1695	5894	1720
GR	5890	1730	5884	1740	5884	1790	5888	1800	5888	1900
GR	5888	1980	5892	2005	5892	2070	5894	2090	5894	2125
GR	5892	2140	5892	2200	5894	2230	5894	2270	5896	2500
GR	5898	2625	5898	2720	5900	2810	5900	2870	5902	2930
NC	.15	.2	.045							
X1	15030	30	1720	1800	10	10	10			
GR	5910	1000	5908	1085	5906	1170	5904	1260	5902	1304
GR	5900	1345	5898	1410	5896	1480	5896	1695	5894	1720
GR	5890	1730	5886	1740	5886	1790	5888	1800	5888	1900
GR	5888	1980	5892	2005	5892	2070	5894	2090	5894	2125
GR	5892	2140	5892	2200	5894	2230	5894	2270	5896	2500
GR	5898	2625	5898	2720	5900	2810	5900	2870	5902	2930

NC	.15	.2	.045							
X1	15155	22	1665.0	1740.0	120	120	120			
GR	5910	1000	5908	1045	5906	1150	5904	1190	5902	1270
GR	5902.0	1350.0	5898.0	1390.0	5896.0	1665.0	5886.0	1680.0	5886.0	1725.0
GR	5890.0	1740.0	5891.0	1785.0	5892.0	1940.0	5894.0	1955.0	5894.0	2040.0
GR	5894.0	2130.0	5896	2260	5898	2510	5900	2680	5902	2740
GR	5904	2980	5906	3040						

QT	2	36371	16697							
NC	.155	.2	.045	.1	.3					
X1	15843	20	2150	2260	800	530	690			
GR	5912	1000.0	5906.0	1050.0	5902.0	1110.0	5900.0	1270.0	5900.0	1535.0
GR	5898.0	1750.0	5898.0	2120.0	5899	2150.0	5898.0	2160.0	5892.0	2180.0
GR	5892.0	2220.0	5900.0	2240.0	5908.0	2260.0	5910	2530	5910	2650
GR	5900	2680	5900	2840	5904	3110	5908	3420	5910	3700

NC	.155	.2	.045	.3	.5					
X1	16540	19	1650	1955	700	680	660			
GR	5916	450	5914	560	5912	680	5910	830	5908	1000
GR	5908	1320	5909.5	1480	5910	1650	5900	1665	5898	1705
GR	5896	1740	5896	1820	5900	1930	5910	1955	5910	2045
GR	5908	2235	5907.5	2590	5908	2760	5912	3000		

NEVADA STREET BRIDGE

SB	1.05	1.56	3	0	300	6	2600			
X1	16620	0			80	80	80			
X2			1	5907	5907.5					
BT	-19	450	5916	5916	560	5914	5914	680	5912	5912
BT		830	5910	5910	1000	5908	5908	1320	5908	5908
BT		1480	5909.5	5909.5	1650	5910	5910	1665	5910.8	5907
BT		1705	5910.8	5907	1740	5910.8	5907	1820	5910.8	5907
BT		1930	5910.8	5907	1955	5910	5910	2045	5910	5910
BT		2235	5908	5908	2590	5907.5	5907.5	2760	5908	5908
BT		3000	5912	5912						

NC	.155	.2	.045	.3	.5					
X1	16900	25	1345.0	1640.0	250	320	270			
GR	5916	200	5910	450	5908	630	5908	880	5908	900
GR	5908.0	1000.0	5908.0	1185.0	5908.0	1320.0	5910.0	1340.0	5910.0	1345.0
GR	5902.0	1370.0	5900.0	1380.0	5900.0	1440.0	5898.0	1460.0	5898.0	1535.0
GR	5900.0	1545.0	5900.0	1620.0	5910.0	1640.0	5914.0	1905.0	5930.0	1950.0
GR	5930	2060	5912	2105	5910	2260	5910	2360	5911	2450

NC	.155	.2	.045	.3	.5					
X1	17150	22	1400	1750	240	230	220			
GR	5920	50	5916	300	5914	520	5912	610	5910	760
GR	5914	1115	5916.3	1330	5914	1400	5912	1410	5904	1435
GR	5902	1465	5900	1550	5900	1620	5902	1645	5904	1720
GR	5910	1733	5912	1740	5914	1750	5916	1780	5914	1980
GR	5912	2100	5910.5	2400						

TEJON STREET BRIDGE

NC	.155	.2	.045	.3	.5					
SB	1.05	1.56	2.6	0	322.5	6	3500			
X1	17210	0			60	60	60			
X2			1	5912	5910					
BT	-22	50	5920	5920	300	5916	5916	520	5914	5914
BT		610	5912	5912	760	5910	5910	1115	5914	5914
BT		1330	5916.3	5916.3	1400	5917	5917	1410	5917	5912
BT		1435	5917	5910.5	1465	5917.5	5911	1550	5918.5	5912
BT		1620	5918.5	5912	1645	5918	5911.5	1720	5917	5910.5
BT		1733	5917	5910.5	1740	5917	5912	1750	5917	5914
BT		1780	5916	5916	1980	5914	5914	2100	5912	5912
BT		2400	5910.5	5910.5						
NC	.155	.12	.045	.1	.3					
X1	18240	15	1700.0	2041.0	800	1100	1030			
GR	5920.0	1000.0	5916.0	1055.0	5914.0	1215.0	5914.0	1300.0	5916	1400.0
GR	5918.0	1665.0	5918.0	1700.0	5910.0	1720.0	5908.0	1780.0	5908.0	1940.0
GR	5906.0	1960.0	5904.0	1970.0	5904.0	2040.0	5920.0	2041.0	5920.0	2100.0
NC	.15	.12	.045	.1	.3					
X1	19250	18	1340.0	1665	950	1100	1000			
GR	5934.0	1000.0	5932.0	1030.0	5930.0	1060.0	5926.0	1105.0	5924.0	1130.0
GR	5924.0	1240.0	5922.0	1260.0	5920.0	1340.0	5914.0	1365.0	5914.0	1435.0
GR	5909.0	1460.0	5909.0	1515.0	5912.0	1535.0	5914.0	1620.0	5920.0	1650.0
GR	5924.0	1665.0	5924.0	1700.0	5926.0	1725.0				
NC	.11	.12	.045	.1	.3					
X1	20240	13	1070.0	1255.0	1000	1000	1000			
GR	5948.0	1000.0	5940.0	1020.0	5920.0	1070.0	5918.0	1135.0	5914.0	1155.0
GR	5914.0	1195.0	5914.0	1220.0	5920.0	1255.0	5930.0	1305.0	5930.0	1355.0
GR	5930.0	1435.0	5934.0	1450.0	5934.0	1480.0				
NC	.11	.12	.045	.1	.3					
X1	21250	12	1120.0	1245.0	975	1025	1000			
GR	5950.0	1000.0	5928.0	1050.0	5926.0	1120.0	5922.0	1150.0	5920.0	1170.0
GR	5920.0	1220.0	5926.0	1245.0	5930.0	1275.0	5940.0	1310.0	5940.0	1420.0
GR	5948.0	1470.0	5950.0	1540.0						
QT	2	35860	16473							
NC	.11	.11	.045	.1	.3					
X1	22250	12	1160.0	1310.0	930	1050	1000			
GR	5950.0	1000.0	5950.0	1080.0	5948.0	1110.0	5934.0	1160.0	5932.0	1180.0
GR	5930.0	1210.0	5928.0	1220.0	5928.0	1280.0	5936.0	1310.0	5940.0	1340.0
GR	5950.0	1380.0	5950.0	1460.0						
NC	.11	.11	.045							
X1	22980	14	1330.0	1550.0	700	700	700			
GR	5952.0	1000.0	5952.0	1290.0	5950.0	1305.0	5948.0	1320.0	5946.0	1330.0
GR	5936.0	1360.0	5932.0	1380.0	5932.0	1445.0	5936.0	1460.0	5940.0	1500.0
GR	5942.0	1510.0	5946.0	1550.0	5948.0	1600.0	5960.0	1635.0		

NC	.11	.11	.045	.3	.5					
X1	23315	17	1180.0	1365.0	320	340	330			
GR	5970.0	1000.0	5968.0	1038.0	5966.0	1090.0	5964.0	1125.0	5959.8	1135
GR	5940.0	1200.0	5936.0	1230.0	5934.0	1240.0	5934.0	1260.0	5936.0	1280.0
GR	5938.0	1300.0	5940.0	1335.0	5942.0	1345.0	5946	1390	5953.5	1405
GR	5956.0	1410.0	5957.0	1510						

CIMMARON STREET BRIDGE

NC	.08	.08	.045	.3	.5					
SB	1.25	1.56	2.6	0	169	7.5	4200	3	0	0
X1	23405	0			90	90	90			
X2	0	0	1	5959.8	5957					
BT	-17	1000	5970	5970	1038	5968	5968	1090	5966	5966
BT		1125	5964	5964	1135	5964.8	5959.8	1200	5963.2	5958.2
BT		1230	5962.5	5957.5	1240	5962.3	5957.3	1260	5962	5957
BT		1280	5961.5	5956.5	1300	5961	5956	1335	5960	5955
BT		1345	5959.8	5954.8	1390	5959	5954	1405	5958.5	5953.5
BT		1410	5958.4	5958.4	1510	5957	5957			

CONFLUENCE WITH MONUMENT CREEK

QT	2	12934	4264							
NC	.08	.02	.045	.3	.5					
X1	23635	9	1270	1370	450	60	230			
GR	5970	1000	5956	1070	5954	1140	5952	1255	5950	1270
GR	5939	1295	5939	1320	5956	1370	5957	1420		

NC	.08	.02	.045	.3	.5					
X1	23670	9	1245	1330	35	35	35			
GR	5970	1000	5962	1125	5958	1205	5956	1225	5952	1245
GR	5940	1265	5940	1290	5956	1330	5957	1400		

NC	.08	.08	.045	.3	.5					
X1	23791	15	1280.0	1380.0	120	120	120			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5942.0	1305.0	5942.0	1340.0	5950.0	1365.0	5954.0	1380.0	5956.0	1390.0
GR	5956.0	1480.0	5960.0	1490.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0

NC	.08	.08	.05	.3	.5					
X1	23792	35	1282.1	1380.0	1	1	1			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5980.0	1280.0	5980.0	1282.0	5953.0	1282.1	5942.0	1300.0	5942.0	1335.0
GR	5979.0	1335.0	5979.0	1337.0	5942.0	1337.0	5942.0	1340.0	5950.0	1365.0
GR	5954.0	1380.0	5956.0	1390.0	5977.0	1390.0	5977.0	1392.0	5956.0	1392.0
GR	5956.0	1400.0	5956.0	1445.0	5976.0	1445.0	5976.0	1447.0	5956.0	1447.0
GR	5956.0	1480.0	5960.0	1490.0	5964.0	1500.0	5974.0	1500.0	5974.0	1502.0
GR	5964.0	1502.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0	5970.0	1650.0

NC	.08	.08	.05	.3	.5					
X1	23892	35	1282.1	1380.0	100	100	100			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5980.0	1280.0	5980.0	1282.0	5953.0	1282.1	5942.0	1300.0	5942.0	1335.0
GR	5979.0	1335.0	5979.0	1337.0	5942.0	1337.0	5942.0	1340.0	5950.0	1365.0
GR	5954.0	1380.0	5956.0	1390.0	5977.0	1390.0	5977.0	1392.0	5956.0	1392.0

GR	5956.0	1400.0	5956.0	1445.0	5976.0	1445.0	5976.0	1447.0	5956.0	1447.0
GR	5956.0	1480.0	5960.0	1490.0	5964.0	1500.0	5974.0	1500.0	5974.0	1502.0
GR	5964.0	1502.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0	5970.0	1650.0

NC	.11	.11	.055	.3	.5					
X1	23893	15	1280.0	1380.0	1	1	1			
GR	5988.0	1000.0	5986.0	1120.0	5984.0	1200.0	5982.0	1230.0	5954.0	1280.0
GR	5942.0	1305.0	5942.0	1340.0	5950.0	1365.0	5954.0	1380.0	5956.0	1390.0
GR	5956.0	1480.0	5960.0	1490.0	5974.0	1520.0	5972.0	1620.0	5970.0	1650.0

NC	.15	.12	.055	.1	.3					
X1	24360	12	1630.0	1675.0	440	460	450			
GR	5962	910	5960	1000	5958	1170	5956	1320	5954.0	1600.0
GR	5950.0	1630.0	5946.0	1650.0	5946.0	1660.0	5950.0	1675.0	5952.0	1730.0
GR	5960.0	1760.0	5961	1820						

NC	.12	.12	.055	.3	.5					
X1	24780	12	1235	1330.0	600	300	375			
GR	5968.0	1000.0	5966.0	1140.0	5964.0	1220.0	5960.0	1235.0	5954.0	1250
GR	5952.0	1260	5952.0	1290	5954.0	1295	5956.0	1330.0	5964.0	1350.0
GR	5964.0	1410	5964.0	1580						

U.S. 24 BRIDGE NEAR 8TH STREET

NC	.12	.12	.055	.3	.5					
SB	1.05	1.56	2.6	0	65	4	700	2	0	0
X1	24861	10	1235	1330	65	65	65			
X2	0	0	1	5960	5964	0	0	0	0	0
BT	-7	1000	5968	5968	1140	5966	5966	1220	5965	5964
BT		1235	5965	5960	1270	5965	5960	1340	5964.8	5960
BT		1350	5964.7	5964.7						
GR	5968.0	1000.0	5966.0	1140.0	5964.0	1220.0	5960.0	1235.0	5954.0	1250
GR	5952.0	1260	5952.0	1290	5954.0	1295	5956.0	1330.0	5964.0	1350.0

NC	.15	.12	.057	.1	.3					
X1	25268	11	1590.0	1670.0	345	415	380			
GR	5976.0	1000.0	5970.0	1050.0	5970.0	1270.0	5968.0	1510.0	5966.0	1590.0
GR	5955	1610.0	5955	1630.0	5958.0	1640.0	5960.0	1650.0	5968.0	1670.0
GR	5969	1680								

NC	.15	.12	.06	.3	.5					
X1	25625	17	1470.0	1550.0	360	375	367			
GR	5980	600	5978	640	5978	720	5976	760	5974	840
GR	5974.0	1000.0	5972.0	1110.0	5970.0	1260.0	5968.0	1450.0	5966.0	1470.0
GR	5960.0	1495.0	5960.0	1520.0	5974.0	1550.0	5976.0	1710.0	5978.0	1755.0
GR	5980.0	1770.0	5982.0	1840.0						

8TH STREET BRIDGE

NC	.15	.12	.06	.3	.5					
SB	0	1.56	2.6	0	61.5	0	662	0	0	0
X1	25725	15	1170	1315.0	65	65	65			
X2	0	0	1	5970	5974	0	0	0	0	0
BT	-15	300	5984	5984	355	5980	5980	430	5978	5978
BT		530	5974	5974	780	5974	5974	1000	5974	5974
BT		1170	5974	5974	1205	5974	5972	1210	5974	5970

BT		1305	5974	5970	1315	5974	5974	1380	5976	5976
BT		1485	5978	5978	1560	5980	5980	1600	5982	5982
GR	5984	300	5980	355	5978	430	5974	530	5974	780
GR	5974.0	1000.0	5974.0	1170.0	5972.0	1205.0	5960.5	1235.0	5960.5	1280.0
GR	5974.0	1315.0	5976.0	1380.0	5978.0	1485.0	5980.0	1560.0	5982.0	1600.0
NC	.15	.12	.065	.1	.3					
X1	26265	20	1280.0	1420.0	150	700	563			
GR	5988	540	5978	570	5976	620	5976	780	5978	860
GR	5980.0	1000.0	5980.0	1120.0	5980	1190	5994	1191	5994	1249
GR	5980	1250	5980	1270	5978	1280	5964	1295	5964	1310
GR	5974	1330	5976	1420	5976	1530	5990	1575	5994	1610
NC	.145	.12	.065	.1	.3					
X1	26780	19	1570	1615	430	510	505			
GR	5998	980	5984	1020	5982	1035	5980	1080	5978	1150
GR	5978	1280	5980	1350	5978	1460	5976	1570	5972	1585
GR	5972	1600	5980	1615	5982	1790	5982	1820	5984	1840
GR	5986	1870	5988	1950	5990	1990	5992	2005		
NC	.140	.145	.065	.1	.3					
X1	27180	13	1365.0	1420.0	400	400	400			
GR	6000.0	1000.0	5984.0	1040.0	5982.0	1125.0	5982.0	1210.0	5982.0	1320.0
GR	5980.0	1340.0	5978.0	1365.0	5976.0	1385.0	5976.0	1400.0	5982.0	1420.0
GR	5982.0	1630.0	5984.0	1690.0	6000.0	1750.0				
NC	.12	.150	.065							
X1	28100	19	1325.0	1373.0	920	920	920			
GR	6008.0	1000.0	6000.0	1025.0	5998.0	1060.0	5996.0	1070.0	5990.0	1090.0
GR	5990.0	1180.0	5992.0	1210.0	5992.0	1260.0	5990.0	1300.0	5988.0	1325.0
GR	5980.0	1350.0	5980.0	1360.0	5986.0	1373.0	5988.0	1385.0	5990.0	1510.0
GR	5992.0	1590.0	5996.0	1630.0	6000.0	1665.0	6004.0	1730.0		
NC	.12	.12	.065							
X1	29100	16	1430	1490.0	1000	1000	1000			
GR	6012.0	1000.0	6012.0	1140.0	6010.0	1170.0	6008.0	1200.0	6006.0	1370.0
GR	6000.0	1390.0	5996.0	1415.0	5994.0	1430.0	5990.0	1435.0	5990.0	1480.0
GR	5994.0	1490.0	5996.0	1500.0	5998.0	1550.0	6000.0	1590.0	6010.0	1630.0
GR	6020.0	1700.0								
NC	.12	.12	.065							
X1	30125	15	1205.0	1235.0	1025	1025	1025			
X4	1	6014	1060							
GR	6030.0	1000.0	6020.0	1025.0	6018.0	1040.0	6014.0	1130.0	6012.0	1160.0
GR	6010.0	1170.0	6000.0	1205.0	5996.0	1210.0	5996.0	1230.0	6000.0	1235.0
GR	6010.0	1270.0	6012.0	1280.0	6014.0	1310.0	6020.0	1335.0	6030.0	1370.0
NC	.125	.12	.065							
X1	31115	20	1220.0	1280.0	990	990	990			
GR	6036.0	1000.0	6034.0	1045.0	6030.0	1055.0	6024.0	1080.0	6024.0	1100.0
GR	6024.0	1185.0	6022.0	1200.0	6020.0	1220.0	6010.0	1240.0	6006.0	1250.0
GR	6006.0	1265.0	6010.0	1280.0	6014.0	1310.0	6018.0	1345.0	6020.0	1370.0
GR	6024.0	1410.0	6026.0	1470.0	6028.0	1500.0	6030.0	1540.0	6040.0	1590.0

NC	.130	.12	.065	.1	.3					
QT	2	7388	4264							
X1	31400	16	1310	1415	340	270	285			
GR	6038.0	1000.0	6036.0	1040	6030.0	1050.0	6028	1060	6028.0	1110.0
GR	6030.0	1180.0	6030.0	1215.0	6024.0	1255.0	6020.0	1310.0	6010.0	1340
GR	6010.0	1360.0	6016.0	1405.0	6018.0	1415.0	6020.0	1470.0	6030.0	1555.0
GR	6040.0	1600.0								

NC	.125	.12	.065	.1	.3					
X1	31640	14	1450	1490.0	90	280	240			
GR	6038.0	1000.0	6036.0	1040.0	6030.0	1050.0	6028.0	1060.0	6028.0	1110.0
GR	6030.0	1180.0	6030.0	1230.0	6024.0	1250.0	6022.0	1300.0	6018.0	1315.0
GR	6018.0	1450.0	6016.0	1490.0	6016.0	1570.0	6050	1630		

QT	2	7000	4079							
NC	.125	.12	.065	.3	.5					
X1	31940	16	1525.0	1575.0	170	300	300			
GR	6038	1000	6036	1040	6030	1050	6028	1060	6028	1110
GR	6030	1180	6032	1280	6026	1330	6022	1370	6022	1465
GR	6020	1525	6016	1540	6016	1560	6024	1575	6030	1610
GR	6040	1640								

NC	.09	.09	.065	.3	.5					
X1	32080	17	1538	1612	60	170	140			
X3	10									
GR	6038	1000	6036	1040	6030	1050	6028	1060	6028	1110
GR	6030	1180	6032	1280	6034	1400	6036	1500	6036.8	1538
GR	6032.8	1542	6018	1560	6018	1590	6033.8	1607	6038.2	1612
GR	6040	1700	6042	1800						

U.S. 24 BRIDGE NEAR 21ST STREET BRIDGE

NC	.09	.09	.065	.3	.5					
QT	2	12546	4079							
SB	1.05	1.56	2.6	0	30	4.0	640	1.5	6020	6018
X1	32160	18	1518	1600	80	80	80			
X2	0	0	1	6033.8	6028	0	0	0	0	0
BT	-17	1000	6038	6038	1040	6036	6036	1050	6030	6030
BT		1060	6028	6028	1110	6028	6028	1130	6029	6029
BT		1180	6030	6030	1280	6032	6032	1380	6034	6034
BT		1470	6036	6036	1518	6037	6037	1523	6037.1	6033
BT		1540	6037.4	6033	1570	6038	6033.5	1593	6038.5	6033.8
BT		1600	6038.6	6038.6	1665	6040	6040			
GR	6038	1000	6036	1040	6030	1050	6028	1060	6028	1110
GR	6029	1130	6030	1180	6032	1280	6034	1380	6036	1470
GR	6037	1518	6032.8	1523	6020	1540	6020	1570	6033.8	1593
GR	6038.6	1600	6040	1665	6042	1750				

NC	.140	.12	.065	.3	.5					
X1	32500	13	1500	1560.0	680	220	340			
GR	6050.0	1000.0	6040.0	1040.0	6036.0	1055.0	6034.0	1310.0	6032.0	1490.0
GR	6030.0	1500.0	6024.0	1510.0	6024.0	1530.0	6030.0	1540.0	6040.0	1560.0
GR	6046.0	1580.0	6044.0	1630.0	6046.0	1735.0				

NC	.130	.120	.065	.3	.5					
X1	32840	13	1350.0	1470.0	400	250	340			
GR	6050.0	1000.0	6048.0	1035.0	6046.0	1070.0	6044.0	1110.0	6042.0	1180.0
GR	6040.0	1300.0	6040.0	1350.0	6028.0	1385.0	6028.0	1415.0	6032.0	1440.0
GR	6040.0	1470.0	6042.0	1560.0	6044.0	1630.0				

21ST STREET BRIDGE

NC	.13	.12	.065	.3	.5					
SB	0.95	1.56	2.6	0	47	4.0	665	1.7	0	0
X1	32890	16	1280.0	1395.0	50	50	50			
X2	0	0	1	6038.8	6040	0	0	0	0	0
BT	-14	1000	6050	6050	1040	6042	6042	1090	6040	6040
BT		1230	6040	6040	1280	6040.8	6038	1284	6040.9	6037
BT		1315	6041.4	6037.5	1360	6042.1	6038.1	1392	6042.8	6038.8
BT		1395	6042.9	6040	1420	6043.2	6042	1460	6044	6044
BT		1590	6044	6044	1640	6046	6046			
GR	6050	1000	6042	1040	6040	1090	6040	1230	6038	1280
GR	6037	1284	6028	1315	6028	1360	6038.8	1392	6040	1395
GR	6042	1420	6044	1460	6044	1590	6046	1640	6046	1760
GR	6048	1980								

NC	.135	.130	.065	.3	.5					
X1	33213	20	1340.0	1390.0	300	325	323			
GR	6056.0	1000.0	6050.0	1020.0	6042.0	1040.0	6040.0	1080.0	6038.0	1150.0
GR	6038.0	1280.0	6038.0	1340.0	6032.0	1355.0	6032.0	1370.0	6038.0	1390.0
GR	6038.0	1450.0	6040.0	1540.0	6042.0	1580.0	6044.0	1620.0	6046.0	1670.0
GR	6048.0	1700.0	6048.0	1790.0	6048.0	1880.0	6050.0	2060.0	6060.0	2170.0

NC	.08	.15	.065	.1	.3					
X1	33700	12	1110	1160.0	487	487	487			
GR	6064.0	1000.0	6060.0	1080.0	6040.0	1110.0	6036	1120.0	6036	1140.0
GR	6040.0	1150.0	6044.0	1160.0	6046.0	1305.0	6048.0	1550.0	6050.0	1575.0
GR	6052.0	1630.0	6052.0	1660.0						

NC	.08	.15	.065	.1	.3					
X1	34176	17	1185.0	1310.0	485	450	476			
GR	6070.0	1000.0	6068.0	1140.0	6050.0	1185.0	6046.0	1205.0	6044.0	1225.0
GR	6042.0	1245.0	6040.0	1260.0	6040.0	1270.0	6050.0	1310.0	6052.0	1440.0
GR	6052.0	1630.0	6054.0	1650.0	6056.0	1690.0	6056.0	1740.0	6056.0	1840.0
GR	6058.0	1960.0	6060.0	2020.0						

NC	.08	.15	.065	.1	.3					
X1	34700	12	1055.0	1135	480	540	524			
GR	6074.0	1055.0	6058.0	1070.0	6048.0	1090.0	6048.0	1110.0	6058.0	1135.0
GR	6058.0	1280.0	6060.0	1320.0	6062.0	1340.0	6062.0	1440.0	6062.0	1520.0
GR	6064.0	1790.0	6070.0	1860.0						

NC	.12	.135	.065	.3	.5					
X1	35128	15	1390.0	1470.0	430	380	428			
GR	6076.0	1105.0	6074.0	1150.0	6072.0	1195.0	6070.0	1230.0	6068.0	1310.0
GR	6066.0	1390.0	6052.0	1400.0	6052.0	1460.0	6064.0	1470.0	6066.0	1540.0
GR	6066.0	1640.0	6068	1785	6068	1950	6070	1995	6072	2040

25TH STREET BRIDGE

NC	.12	.135	.065	.3	.5					
SB	0.90	1.56	1.0	0	56	2.5	640	0	6052.5	6052.5
X1	35153	19	1400.0	1460.0	25	25	25			
X2	0	0	1	6064	6066	0	0	0	0	0
BT	-16	1180	6072	6072	1230	6070	6070	1310	6068	6068
BT		1400	6067.5	6067.5	1401	6067.5	6064	1402	6067.5	6064
BT		1458	6067.5	6064	1459	6067.5	6064	1460	6067.5	6067.5
BT		1540	6066	6066	1580	6068	6068	1640	6066	6066
BT		1785	6068	6068	1950	6068	6068	1995	6070	6070
BT		2040	6072	6072						
GR	6076	1105	6074	1135	6072	1180	6070	1230	6068	1310
GR	6067.5	1400	6064	1401	6052.5	1402	6052.5	1458	6064	1459
GR	6067.5	1460	6066	1540	6068	1580	6066	1640	6068	1785
GR	6068	1950	6070	1995	6072	2040	6076	2140		

NC	.11	.11	.065	.3	.5					
X1	35420	14	1125.0	1220.0	250	270	267			
X3	10									
GR	6080.0	1000.0	6070.0	1125.0	6056.0	1150.0	6056.0	1170.0	6060.0	1180.0
GR	6068.0	1220.0	6070.0	1285.0	6070.0	1395.0	6070.0	1480.0	6072.0	1610.0
GR	6074.0	1680.0	6080.0	1720.0	6082.0	1730.0	6084.0	1820.0		

NC	.11	.11	.065	.3	.5					
X1	35699	18	1510	1577	290	270	279			
GR	6090	1000	6088	1050	6080	1200	6078	1280	6076	1420
GR	6074	1510	6058	1530	6058	1560	6070	1577	6072	1630
GR	6074	1785	6076	1955	6078	2015	6080	2080	6082	2150
GR	6084	2215	6086	2290	6088	2400				

26TH STREET BRIDGE

NC	.11	.11	.065	.3	.5					
X1	35700	23	1510	1580	1	1	1			
BT	-20	1200	6080	6080	1280	6078	6078	1420	6076	6076
BT		1510	6075.3	6075.3	1513	6075.3	6072	1529	6075.3	6072
BT		1529.1	6075.3	6072	1530.4	6075.3	6072	1530.5	6075.3	6072
BT		1559.5	6075.3	6072	1559.6	6075.3	6072	1560.9	6075.3	6072
BT		1561	6075.3	6072	1577	6075.3	6072	1580	6075.3	6075.3
BT		1680	6074	6074	1765	6074	6074	1910	6076	6076
BT		2015	6078	6078	2080	6080	6080			
GR	6090	1000	6088	1050	6080	1200	6078	1280	6076	1420
GR	6075.3	1510	6072	1513	6059	1529	6072	1529.1	6072	1530.4
GR	6059	1530.5	6059	1559.5	6072	1559.6	6072	1560.9	6059	1561
GR	6072	1577	6075.3	1580	6074	1680	6074	1765	6076	1910
GR	6078	2015	6080	2080	6090	2480				

NC	.11	.11	.065	.3	.5					
X1	35735	0	0	0	35	35	35			
X2										

NC	.11	.11	.065	.3	.5					
X1	35736	17	1510	1580	1	1	1			
GR	6090	1000	6088	1050	6080	1200	6078	1280	6076	1420
GR	6075.3	1510	6072	1513	6059	1530	6059	1560	6072	1577
GR	6075.3	1580	6074	1680	6074	1765	6076	1910	6078	2015
GR	6080	2080	6090	2480						

NC	.11	.11	.065	.3	.5					
X1	35970	19	1370.0	1470.0	250	225	235			
GR	6090.0	1000.0	6080.0	1050.0	6078.0	1065.0	6076.0	1240.0	6074.0	1350.0
GR	6070.0	1370.0	6060.0	1400.0	6060.0	1420.0	6070.0	1470.0	6072.0	1485.0
GR	6074.0	1570.0	6074.0	1610.0	6078.0	1650.0	6080.0	1690.0	6082	1750
GR	6084	1930	6086	2020	6088	2090	6090	2180		

NC	.12	.11	.065	.1	.3					
X1	36280	16	1390.0	1470.0	285	330	310			
GR	6090.0	1000.0	6080.0	1070.0	6078.0	1100.0	6076.0	1140.0	6076.0	1390.0
GR	6070.0	1410.0	6064.0	1435.0	6064.0	1450.0	6078.0	1470.0	6080.0	1490.0
GR	6082.0	1565.0	6086.0	1595.0	6088.0	1610.0	6090.0	1650.0	6092.0	1759.0
GR	6100.0	1760.0								

NC	.12	.12	.065	.1	.3					
X1	36565	16	1140.0	1190.0	270	300	285			
GR	6094.0	1000.0	6092.0	1035.0	6080.0	1075.0	6078.0	1100.0	6076.0	1140.0
GR	6070.0	1160.0	6070.0	1175.0	6072.0	1190.0	6074.0	1225.0	6076.0	1280.0
GR	6078.0	1290.0	6080.0	1310.0	6082.0	1370.0	6084.0	1390.0	6086.0	1465.0
GR	6084.0	1530.0								

NC	.09	.130	.065	.1	.3					
X1	36820	18	1215.0	1280.0	290	225	255			
GR	6100.0	1000.0	6098.0	1070.0	6096.0	1130.0	6094.0	1165.0	6092.0	1200.0
GR	6090.0	1215.0	6074.0	1240.0	6074.0	1260.0	6078.0	1280.0	6078.0	1295.0
GR	6080.0	1310.0	6080.0	1350.0	6082.0	1500.0	6084.0	1520.0	6086.0	1590.0
GR	6086	1605	6084	1650	6090	1670				

NC	.135	.135	.065	.1	.3					
X1	37080	16	1305.0	1350.0	290	225	260			
GR	6098.0	1000.0	6092.0	1020.0	6090.0	1070.0	6088.0	1160.0	6086.0	1270.0
GR	6084.0	1305.0	6076.0	1315.0	6076.0	1330.0	6084.0	1350.0	6084.0	1450.0
GR	6084.0	1480.0	6086.0	1520.0	6086.0	1640.0	6086	1660	6090	1680
GR	6092	1700								

NC	.140	.12	.065	.1	.3					
X1	37460	13	1350.0	1395.0	320	410	380			
GR	6096.0	1000.0	6090.0	1015.0	6088.0	1250.0	6086.0	1350.0	6080.0	1365.0
GR	6080.0	1380.0	6090.0	1395.0	6092.0	1405.0	6093.0	1455.0	6092.0	1510.0
GR	6096.0	1570.0	6098.0	1680.0	6100.0	1700.0				

NC	.12	.12	.065	.1	.3					
X1	37770	16	1300.0	1365.0	260	340	310			
GR	6106.0	1000.0	6100.0	1040.0	6098.0	1100.0	6098.0	1155.0	6096.0	1300.0
GR	6090.0	1320.0	6084.0	1340.0	6084.0	1360.0	6092.0	1365.0	6094.0	1530.0
GR	6096.0	1550.0	6098.0	1580.0	6100.0	1695.0	6102.0	1715.0	6104.0	1800.0
GR	6106.0	1930.0								

NC	.08	.12	.065	.1	.3					
X1	38120	18	1155.0	1220.0	375	225	350			
GR	6116.0	1000.0	6114.0	1140.0	6112.0	1155.0	6090.0	1190.0	6090.0	1205.0
GR	6092.0	1210.0	6094.0	1220.0	6096.0	1240.0	6096.0	1270.0	6096.0	1535.0
GR	6096.0	1560.0	6098.0	1570.0	6100.0	1615.0	6100.0	1690.0	6102.0	1700.0
GR	6104.0	1795.0	6104.0	1890.0	6110.0	1910.0				

NC	.08	.12	.065	.1	.3					
X1	38386	13	1130.0	1210.0	266	266	266			
GR	6112.0	1000.0	6110.0	1055.0	6108.0	1120.0	6106.0	1130.0	6100.0	1155.0
GR	6092.0	1170.0	6092.0	1190.0	6100.0	1210.0	6100.0	1460.0	6102.0	1480.0
GR	6102.0	1600.0	6106.0	1620.0	6112.0	1640.0				

NC	.13	.13	.065	.3	.5					
X1	38629	19	1240.0	1280.0	243	243	243			
GR	6120	660	6116	710	6114	760	6112	795	6110	950
GR	6110.0	1000.0	6108.0	1040	6106.0	1070	6104	1240	6094	1241
GR	6094	1279	6102	1280	6102	1340	6102	1455	6106	1520
GR	6106	1670	6108	1720	6110	1760	6120	1950		

CAMPGROUND BRIDGE

NC	.13	.13	.065	.3	.5					
X1	38630	22	1240	1280	1	1	1			
BT	-16	1000	6110	6110	1040	6108	6108	1070	6106	6106
BT		1240	6105	6105	1240.3	6105	6102.3	1241	6105	6102.3
BT		1254	6104.8	6102.1	1279	6104.5	6101.8	1279.7	6104.5	6101.8
BT		1280	6104.5	6104.5	1340	6102.9	6102.9	1455	6104	6104
BT		1520	6106	6106	1670	6106	6106	1720	6108	6108
BT		1760	6110	6110						
GR	6120	660	6116	710	6114	760	6112	795	6110	950
GR	6110	1000	6108	1040	6106	1070	6105	1240	6102.3	1240.3
GR	6100	1241	6094	1254	6094	1279	6101.8	1279.7	6104.5	1280
GR	6102.9	1340	6104	1455	6106	1520	6106	1670	6108	1720
GR	6110	1760	6120	1950						

NC	.13	.13	.065	.3	.5					
X1	38650	22	1240	1280	20	20	20			
BT	-16	1000	6110	6110	1040	6108	6108	1070	6106	6106
BT		1240	6105	6105	1240.3	6105	6102.3	1241	6105	6102.3
BT		1254	6104.8	6102.1	1279	6104.5	6101.8	1279.7	6104.5	6101.8
BT		1280	6104.5	6104.5	1340	6102.9	6102.9	1455	6104	6104
BT		1520	6106	6106	1670	6106	6106	1720	6108	6108
BT		1760	6110	6110						
GR	6120	660	6116	710	6114	760	6112	795	6110	950
GR	6110	1000	6108	1040	6106	1070	6105	1240	6102.3	1240.3
GR	6100	1241	6094	1254	6094	1279	6101.8	1279.7	6104.5	1280

GR	6102.9	1340	6104	1455	6106	1520	6106	1670	6108	1720
GR	6110	1760	6120	1950						

NC	.13	.13	.065	.3	.5					
X1	38651	22	1240	1280	1	1	1			
GR	6120	660	6116	710	6114	760	6112	795	6110	950
GR	6110	1000	6108	1040	6106	1070	6105	1240	6102.3	1240.3
GR	6100	1241	6094	1254	6094	1279	6101.8	1279.7	6104.5	1280
GR	6102.9	1340	6104	1455	6106	1520	6106	1670	6108	1720
GR	6110	1760	6120	1950						

NC	.12	.12	.065	.3	.5					
X1	38770	15	1335	1410	160	60	119			
GR	6122	650	6120	700	6118	730	6116	780	6112	870
GR	6111.5	1000	6106	1200	6102	1335	6097	1360	6097	1390
GR	6104	1410	6104	1490	6106	1540	6110	1710	6130	1750

31ST STREET BRIDGE

NC	.12	.12	.065	.3	.5					
SB	1.25	1.56	2.6	0	32	3.0	440	2.8	6097.5	6097.0
X1	38840	16	1335.0	1415.0	70	70	70			
X2	0	0	1	6106	6106	0	0	0	0	0
BT	-15	700	6120	6120	730	6118	6118	780	6116	6116
BT		870	6112	6112	1000	6111.5	6111.5	1120	6110	6110
BT		1335	6109	6109	1341	6108.9	6106	1360	6108.7	6105.8
BT		1390	6108.3	6105.2	1409	6108.1	6105	1415	6108	6108
BT		1610	6110	6110	1700	6110	6110	1740	6130	6130
GR	6122	650	6120	700	6118	730	6116	780	6112	870
GR	6111.5	1000	6110	1120	6109	1335	6106	1341	6097.5	1360
GR	6097.5	1390	6105	1409	6108	1415	6110	1610	6110	1700
GR	6130	1740								

NC	.15	.10	.065	.3	.5					
X1	39350	15	1460	1580	480	660	510			
GR	6124	930	6114	1055	6114	1310	6116	1390	6132	1391
GR	6132	1459	6116	1460	6114	1475	6104	1495	6104	1510
GR	6110	1520	6112	1555	6120	1580	6122	1585	6124	1620

NC	.150	.10	.065	.3	.5					
X1	39850	17	1520	1570	500	500	500			
GR	6130	1000	6120	1125	6120	1340	6120	1360	6132	1361
GR	6132	1429	6122	1430	6120	1455	6118	1500	6116	1520
GR	6110	1529	6110	1543	6110	1560	6120	1570	6130	1585
GR	6140	1605	6142	1620						

NC	.150	.10	.065	.1	.3					
X1	40150	13	1510	1565	300	300	300			
GR	6130	1000	6124	1110	6124	1250	6124	1340	6136	1341
GR	6136	1470	6122	1471	6120	1510	6115	1523	6115	1545
GR	6126	1565	6128	1585	6140	1620				

THIS RUN EXECUTED 6JUL94 16:09:34

HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

FOUNTAIN CREEK 100-YEAR

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	.000	.00	.00	.00	5790.00	39167.00	5806.08	5806.08	5808.51	72.28	15.70	6590.17	4607.06
*	.000	.00	.00	.00	5790.00	19067.00	5803.00	5803.00	5805.29	73.44	13.30	2871.23	2224.97
	900.000	900.00	.00	.00	5796.00	39167.00	5812.09	.00	5814.12	53.33	13.86	6609.99	5363.42
*	900.000	900.00	.00	.00	5796.00	19067.00	5808.49	5807.37	5810.30	56.36	11.66	2893.69	2539.81
	1200.000	300.00	.00	.00	5798.00	39167.00	5814.49	.00	5815.61	41.20	12.25	9188.37	6101.99
*	1200.000	300.00	.00	.00	5798.00	19067.00	5810.24	.00	5811.91	69.13	12.57	3720.02	2293.21
	1850.000	625.00	.00	.00	5800.00	39167.00	5816.43	.00	5817.59	36.35	12.05	9789.94	6496.74
*	1850.000	625.00	.00	.00	5800.00	19067.00	5813.78	.00	5814.70	28.75	9.43	5180.88	3555.96
*	2450.000	610.00	.00	.00	5802.00	39167.00	5818.76	5818.76	5821.17	67.14	15.27	6076.21	4779.95
*	2450.000	610.00	.00	.00	5802.00	19067.00	5816.70	.00	5817.93	37.02	10.17	3562.15	3133.54
	3455.000	1020.00	.00	.00	5810.00	39075.00	5825.92	.00	5830.18	94.69	16.54	2361.82	4015.65
*	3455.000	1020.00	.00	.00	5810.00	18134.00	5823.03	.00	5824.58	45.42	10.01	1811.38	2690.65
	3545.000	90.00	.00	.00	5810.00	39075.00	5827.87	.00	5831.01	60.31	14.22	2747.60	5031.77
*	3545.000	90.00	.00	.00	5810.00	18134.00	5823.59	.00	5824.98	38.30	9.46	1916.06	2930.19
*	4125.000	560.00	.00	.00	5814.00	39075.00	5832.84	.00	5833.46	16.97	9.15	13983.92	9485.97
*	4125.000	560.00	.00	.00	5814.00	18134.00	5825.73	5823.37	5827.49	57.42	12.00	3265.77	2393.15
	5125.000	1000.00	.00	.00	5820.00	39075.00	5834.47	.00	5835.81	30.66	10.59	8003.01	7056.95
*	5125.000	1000.00	.00	.00	5820.00	18134.00	5830.46	.00	5831.47	30.14	8.39	2836.29	3302.89
*	6125.000	1000.00	.00	.00	5824.00	39075.00	5838.32	5838.32	5841.93	83.09	16.26	3611.24	4286.80
*	6125.000	1000.00	.00	.00	5824.00	18134.00	5835.03	.00	5836.92	58.89	11.22	1881.95	2363.13
*	6625.000	550.00	.00	.00	5824.00	39075.00	5843.63	.00	5844.40	15.05	7.03	5556.59	10072.13
*	6625.000	550.00	.00	.00	5824.00	18134.00	5838.66	.00	5839.09	15.23	5.26	3448.34	4647.05

Run Date: 6JUL94 Run Time: 16:09:09 HMVersion: 6.40 Data File: fc-ex.hc2

Page 156

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
6635.000	10.00	.00	.00	5825.00	39075.00	5843.58	.00	5844.49	27.09	7.65	5111.00	7507.85
6635.000	10.00	.00	.00	5825.00	18134.00	5838.62	.00	5839.18	27.63	6.00	3022.46	3449.80
6690.000	55.00	.00	.00	5825.00	39075.00	5843.76	.00	5844.64	25.94	7.53	5187.48	7671.47
6690.000	55.00	.00	.00	5825.00	18134.00	5838.79	.00	5839.33	25.84	5.87	3090.52	3567.50
6700.000	45.00	.00	.00	5826.00	39075.00	5843.91	.00	5844.75	17.80	7.33	5331.99	9262.83
6700.000	45.00	.00	.00	5826.00	18134.00	5838.94	.00	5839.44	18.96	5.65	3209.14	4164.45
* 7430.000	720.00	.00	.00	5830.00	39075.00	5846.49	5846.49	5849.93	83.10	18.04	4427.02	4286.38
* 7430.000	720.00	.00	.00	5830.00	18134.00	5842.51	5842.51	5845.30	81.00	14.52	2042.54	2014.92
* 8420.000	1000.00	.00	.00	5838.00	38426.00	5854.76	5854.76	5857.58	60.88	16.22	5599.51	4924.71
* 8420.000	1000.00	.00	.00	5838.00	18134.00	5849.98	.00	5852.66	72.78	14.01	1830.71	2125.67
9070.000	637.00	.00	.00	5842.00	38426.00	5859.05	.00	5860.70	37.67	12.56	7363.16	6260.73
* 9070.000	637.00	.00	.00	5842.00	18134.00	5854.48	.00	5856.14	46.32	11.04	2458.80	2664.44
9340.000	320.00	.00	.00	5842.00	38426.00	5860.97	.00	5861.85	19.50	9.65	6871.50	8701.84
* 9340.000	320.00	.00	.00	5842.00	18134.00	5856.55	.00	5857.14	17.33	7.45	4124.41	4356.23
9341.000	1.00	.00	.00	5842.00	38426.00	5860.89	.00	5861.93	22.91	10.45	6665.16	8028.08
9341.000	1.00	.00	.00	5842.00	18134.00	5856.52	.00	5857.18	19.07	7.83	4042.16	4152.47
9370.000	30.00	.00	.00	5842.00	38426.00	5860.98	.00	5862.00	22.41	10.37	6718.74	8116.88
9370.000	30.00	.00	.00	5842.00	18134.00	5856.59	.00	5857.24	18.59	7.76	4083.50	4206.00
9371.000	1.00	.00	.00	5842.00	38426.00	5861.23	.00	5862.06	18.22	9.42	7036.60	9001.71
9371.000	1.00	.00	.00	5842.00	18134.00	5856.69	.00	5857.26	16.37	7.30	4216.52	4481.35
* 10150.000	710.00	.00	.00	5848.00	38426.00	5862.84	.00	5864.10	43.98	11.02	6013.64	5794.27
* 10150.000	710.00	.00	.00	5848.00	18134.00	5858.79	.00	5859.81	57.44	9.38	3154.29	2392.79
10151.000	1.00	.00	.00	5848.00	38426.00	5863.31	.00	5864.21	37.83	9.45	6525.85	6247.58
10151.000	1.00	.00	.00	5848.00	18134.00	5859.14	.00	5859.90	49.88	8.20	3337.88	2567.69
10249.000	100.00	.00	.00	5848.00	38426.00	5863.76	.00	5864.57	32.62	8.98	6898.65	6728.28
* 10249.000	100.00	.00	.00	5848.00	18134.00	5859.73	.00	5860.33	36.50	7.37	3758.24	3001.44
10250.000	1.00	.00	.00	5848.00	38426.00	5863.72	.00	5864.61	33.18	9.20	6762.27	6671.01
10250.000	1.00	.00	.00	5848.00	18134.00	5859.71	.00	5860.36	37.81	7.61	3764.07	2949.08
* 11173.000	925.00	.00	.00	5854.00	38426.00	5869.40	5869.40	5874.19	103.59	18.51	2939.81	3775.46
* 11173.000	925.00	.00	.00	5854.00	18134.00	5865.57	.00	5868.05	79.54	12.97	1659.47	2033.29
11763.000	590.00	.00	.00	5858.00	38426.00	5877.19	.00	5879.37	68.72	15.19	6221.14	4635.22
* 11763.000	590.00	.00	.00	5858.00	18134.00	5871.40	5871.40	5874.74	120.19	16.25	1781.20	1654.09
12638.000	860.00	.00	.00	5868.00	38426.00	5882.96	.00	5884.22	45.53	9.86	7414.58	5694.64
* 12638.000	860.00	.00	.00	5868.00	18134.00	5879.02	.00	5880.39	71.18	9.40	2072.20	2149.45

Run Date: 6JUL94 Run Time: 16:09:09 HMVersion: 6.40 Data File: fc-ex.hc2

Page 157

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
12788.000	155.00	.00	.00	5876.00	38426.00	5884.32	.00	5884.99	46.79	7.86	9613.95	5617.31
* 12788.000	155.00	.00	.00	5876.00	18134.00	5881.07	5881.07	5882.30	124.80	9.35	3030.48	1623.23
13303.000	515.00	.00	.00	5876.00	38426.00	5886.27	.00	5887.21	41.08	8.40	6965.81	5995.01
* 13303.000	515.00	.00	.00	5876.00	18134.00	5884.31	.00	5884.77	26.72	5.68	4343.99	3508.01
* 13933.000	630.00	.00	.00	5880.00	38426.00	5889.66	.00	5891.19	105.55	11.90	6059.15	3740.19
* 13933.000	630.00	.00	.00	5880.00	18134.00	5887.71	.00	5888.65	93.41	8.88	3495.70	1876.27
15020.000	1050.00	.00	.00	5884.00	38426.00	5899.38	5899.31	5902.25	100.20	18.49	7636.43	3838.81
* 15020.000	1050.00	.00	.00	5884.00	18134.00	5895.25	5895.25	5898.18	126.34	16.37	2954.88	1613.32
15030.000	10.00	.00	.00	5886.00	38426.00	5900.53	.00	5902.43	77.78	16.20	9217.43	4357.15
* 15030.000	10.00	.00	.00	5886.00	18134.00	5895.61	5895.61	5898.36	151.76	16.68	3096.38	1472.03
* 15155.000	120.00	.00	.00	5886.00	38426.00	5901.17	5901.17	5904.11	107.16	19.05	7821.96	3711.94
* 15155.000	120.00	.00	.00	5886.00	18134.00	5899.41	.00	5900.72	50.23	11.90	5495.26	2558.61
* 15843.000	690.00	.00	.00	5892.00	36371.00	5907.59	.00	5908.08	32.20	9.40	13524.56	6409.90
* 15843.000	690.00	.00	.00	5892.00	16697.00	5902.94	.00	5903.82	64.40	10.49	5472.59	2080.63
16540.000	660.00	.00	.00	5896.00	36371.00	5909.45	5905.72	5911.09	41.10	10.45	5110.90	5673.22
* 16540.000	660.00	.00	.00	5896.00	16697.00	5907.61	.00	5908.15	16.24	5.93	2821.58	4143.75
16620.000	80.00	5907.50	5907.00	5896.00	36371.00	5909.45	.00	5911.09	41.27	10.46	5091.53	5661.80
16620.000	80.00	5907.50	5907.00	5896.00	16697.00	5907.96	.00	5908.47	14.44	5.71	3033.33	4393.61
16900.000	270.00	.00	.00	5898.00	36371.00	5910.62	5908.60	5912.37	50.38	11.03	5306.47	5124.32
* 16900.000	270.00	.00	.00	5898.00	16697.00	5908.37	.00	5909.11	26.48	6.94	2656.24	3244.51
17150.000	220.00	.00	.00	5900.00	36371.00	5911.69	5909.40	5913.84	65.75	11.81	3433.44	4485.33
* 17150.000	220.00	.00	.00	5900.00	16697.00	5909.01	.00	5909.90	38.75	7.56	2209.80	2682.28
17210.000	60.00	5910.00	5912.00	5900.00	36371.00	5911.70	.00	5913.84	65.03	11.76	3460.27	4510.18
17210.000	60.00	5910.00	5912.00	5900.00	16697.00	5909.06	.00	5909.94	37.93	7.50	2224.86	2711.25
18240.000	1030.00	.00	.00	5904.00	36371.00	5917.81	.00	5919.29	43.33	9.97	4783.16	5525.25
* 18240.000	1030.00	.00	.00	5904.00	16697.00	5913.86	.00	5914.78	46.29	7.71	2165.36	2454.14
19250.000	1000.00	.00	.00	5909.00	36371.00	5922.61	.00	5924.85	67.52	12.04	3140.37	4426.20
* 19250.000	1000.00	.00	.00	5909.00	16697.00	5919.18	.00	5920.34	57.80	8.62	1936.73	2196.28
20240.000	1000.00	.00	.00	5914.00	36371.00	5928.88	.00	5932.55	78.36	15.55	2577.25	4108.63
* 20240.000	1000.00	.00	.00	5914.00	16697.00	5924.66	.00	5926.53	68.63	11.02	1583.78	2015.48
21250.000	1000.00	.00	.00	5920.00	36371.00	5936.37	.00	5940.37	76.25	17.17	2888.25	4165.14
* 21250.000	1000.00	.00	.00	5920.00	16697.00	5931.19	.00	5933.68	79.75	13.12	1586.20	1869.68
22250.000	1000.00	.00	.00	5928.00	35860.00	5943.94	.00	5948.10	77.82	16.66	2457.01	4065.11
* 22250.000	1000.00	.00	.00	5928.00	16473.00	5939.25	.00	5941.43	69.43	11.93	1455.67	1977.01

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
22980.000	700.00	.00	.00	5932.00	35860.00	5950.11	.00	5952.51	48.48	12.52	3043.06	5150.09
* 22980.000	700.00	.00	.00	5932.00	16473.00	5944.57	.00	5946.16	58.97	10.12	1627.77	2145.23
23315.000	330.00	.00	.00	5934.00	35860.00	5951.57	.00	5954.85	69.77	14.83	2686.11	4293.05
* 23315.000	330.00	.00	.00	5934.00	16473.00	5946.41	.00	5948.44	71.34	11.53	1518.27	1950.38
23405.000	90.00	5957.00	5959.80	5934.00	35860.00	5952.27	.00	5955.06	56.95	13.77	2853.45	4751.92
23405.000	90.00	5957.00	5959.80	5934.00	16473.00	5946.83	.00	5948.63	60.09	10.87	1609.77	2125.07
* 23635.000	230.00	.00	.00	5939.00	12934.00	5953.63	5952.24	5956.60	91.21	13.95	1025.66	1354.26
* 23635.000	230.00	.00	.00	5939.00	4264.00	5950.04	.00	5950.84	36.37	7.19	593.42	707.02
* 23670.000	35.00	.00	.00	5940.00	12934.00	5953.90	5953.90	5958.53	153.10	17.30	755.64	1045.31
23670.000	35.00	.00	.00	5940.00	4264.00	5949.92	.00	5951.30	68.62	9.41	453.04	514.73
* 23791.000	120.00	.00	.00	5942.00	12934.00	5958.86	.00	5960.20	29.39	9.54	1612.97	2385.65
* 23791.000	120.00	.00	.00	5942.00	4264.00	5951.10	.00	5952.09	51.34	7.97	535.11	595.09
23792.000	1.00	.00	.00	5942.00	12934.00	5958.87	.00	5960.21	52.00	9.57	1586.16	1793.67
23792.000	1.00	.00	.00	5942.00	4264.00	5951.17	.00	5952.11	75.01	7.77	548.81	492.34
23892.000	100.00	.00	.00	5942.00	12934.00	5959.60	.00	5960.74	42.47	8.90	1738.98	1984.76
* 23892.000	100.00	.00	.00	5942.00	4264.00	5952.07	.00	5952.80	52.94	6.82	625.36	586.06
23893.000	1.00	.00	.00	5942.00	12934.00	5959.59	.00	5960.76	35.82	8.95	1772.83	2160.95
23893.000	1.00	.00	.00	5942.00	4264.00	5952.07	.00	5952.81	51.80	6.90	618.28	592.44
24360.000	450.00	.00	.00	5946.00	12934.00	5961.77	.00	5962.19	25.95	7.97	4925.15	2538.87
* 24360.000	450.00	.00	.00	5946.00	4264.00	5954.49	5953.83	5956.06	130.88	11.09	606.67	372.71
* 24780.000	375.00	.00	.00	5952.00	12934.00	5962.39	5962.36	5966.33	214.24	16.06	853.88	883.66
* 24780.000	375.00	.00	.00	5952.00	4264.00	5959.65	.00	5960.63	88.43	7.96	548.60	453.45
* 24861.000	65.00	5964.00	5960.00	5952.00	12934.00	5965.91	.00	5967.71	62.78	10.99	1376.19	1632.38
24861.000	65.00	5964.00	5960.00	5952.00	4264.00	5959.83	.00	5960.75	80.25	7.72	566.87	476.00
* 25268.000	380.00	.00	.00	5955.00	12934.00	5970.10	5970.10	5972.88	129.08	13.89	1414.03	1138.42
* 25268.000	380.00	.00	.00	5955.00	4264.00	5964.11	.00	5965.82	156.71	10.48	406.77	340.62
* 25625.000	367.00	.00	.00	5960.00	12934.00	5975.42	.00	5976.10	44.76	8.35	3611.54	1933.29
* 25625.000	367.00	.00	.00	5960.00	4264.00	5968.90	.00	5970.18	117.17	9.18	531.41	393.92
25725.000	65.00	5974.00	5970.00	5960.50	12934.00	5975.19	.00	5976.49	82.83	9.45	2088.15	1421.12
* 25725.000	65.00	.00	.00	5960.50	4264.00	5970.22	.00	5970.82	48.53	6.25	682.75	612.10
26265.000	563.00	.00	.00	5964.00	12934.00	5980.24	.00	5980.95	88.40	8.08	2917.19	1375.65
* 26265.000	563.00	.00	.00	5964.00	4264.00	5976.98	.00	5977.56	111.33	6.33	919.64	404.13
26780.000	505.00	.00	.00	5972.00	12934.00	5984.13	.00	5984.51	63.10	8.20	4114.47	1628.23
* 26780.000	505.00	.00	.00	5972.00	4264.00	5979.79	5979.79	5980.79	198.16	10.07	1000.22	302.91

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
27180.000	400.00	.00	.00	5976.00	12934.00	5986.91	.00	5987.49	85.56	9.34	3416.76	1398.25
* 27180.000	400.00	.00	.00	5976.00	4264.00	5983.90	.00	5984.40	84.87	7.21	1433.10	462.85
28100.000	920.00	.00	.00	5980.00	12934.00	5994.81	.00	5995.83	93.03	11.11	2761.14	1340.95
* 28100.000	920.00	.00	.00	5980.00	4264.00	5991.85	.00	5992.45	58.10	7.26	1215.87	559.40
29100.000	1000.00	.00	.00	5990.00	12934.00	6003.59	.00	6005.23	91.29	11.85	1700.77	1353.68
* 29100.000	1000.00	.00	.00	5990.00	4264.00	5998.54	.00	5999.47	81.16	8.07	671.06	473.32
30125.000	1025.00	.00	.00	5996.00	12934.00	6013.94	.00	6017.17	140.10	17.04	1259.33	1092.75
* 30125.000	1025.00	.00	.00	5996.00	4264.00	6007.54	.00	6009.22	111.93	11.19	525.22	403.04
* 31115.000	990.00	.00	.00	6006.00	12934.00	6024.67	.00	6025.83	57.42	10.06	1999.26	1706.81
* 31115.000	990.00	.00	.00	6006.00	4264.00	6017.18	.00	6018.09	82.67	8.19	648.25	468.97
31400.000	285.00	.00	.00	6010.00	7388.00	6026.47	.00	6026.75	13.08	4.53	2230.06	2042.97
* 31400.000	285.00	.00	.00	6010.00	4264.00	6019.72	.00	6020.34	66.65	6.34	707.24	522.30
31640.000	240.00	.00	.00	6016.00	7388.00	6026.95	.00	6027.09	18.49	4.55	2905.56	1717.94
* 31640.000	240.00	.00	.00	6016.00	4264.00	6020.75	.00	6021.19	191.73	7.63	934.54	307.94
* 31940.000	300.00	.00	.00	6016.00	7000.00	6027.47	.00	6028.07	63.00	7.97	1573.79	881.95
* 31940.000	300.00	.00	.00	6016.00	4079.00	6026.53	.00	6026.83	34.07	5.48	1321.05	698.79
* 32080.000	140.00	.00	.00	6018.00	7000.00	6028.32	6028.32	6032.40	373.00	16.21	431.91	362.45
* 32080.000	140.00	.00	.00	6018.00	4079.00	6027.93	.00	6029.46	145.71	9.93	410.87	337.92
* 32160.000	80.00	6028.00	6033.80	6020.00	12546.00	6032.86	6032.85	6034.91	206.12	13.45	1381.16	873.87
* 32160.000	80.00	6028.00	6033.80	6020.00	4079.00	6027.31	6027.31	6030.19	383.73	13.63	299.24	208.23
* 32500.000	340.00	.00	.00	6024.00	12546.00	6039.81	.00	6040.37	61.37	8.45	3233.55	1601.49
* 32500.000	340.00	.00	.00	6024.00	4079.00	6034.40	6033.16	6035.67	129.94	9.59	671.82	357.84
32840.000	340.00	.00	.00	6028.00	12546.00	6042.04	.00	6043.60	97.73	10.21	1505.08	1269.08
* 32840.000	340.00	.00	.00	6028.00	4079.00	6038.08	.00	6038.58	49.60	5.65	722.47	579.19
* 32890.000	50.00	6040.00	6038.80	6028.00	12546.00	6043.34	.00	6044.22	46.16	7.99	2264.31	1846.67
32890.000	50.00	6040.00	6038.80	6028.00	4079.00	6038.08	.00	6038.58	38.99	5.20	785.35	653.27
33213.000	323.00	.00	.00	6032.00	12546.00	6045.44	.00	6045.76	41.11	7.20	3949.05	1956.79
* 33213.000	323.00	.00	.00	6032.00	4079.00	6039.88	6039.88	6040.90	182.18	9.68	900.98	302.21
* 33700.000	487.00	.00	.00	6036.00	12546.00	6049.66	6049.66	6051.77	154.44	14.17	1996.52	1009.55
* 33700.000	487.00	.00	.00	6036.00	4079.00	6046.67	.00	6047.66	80.80	8.42	737.89	453.78
* 34176.000	476.00	.00	.00	6040.00	12546.00	6054.99	.00	6055.83	52.30	7.95	2506.15	1734.78
* 34176.000	476.00	.00	.00	6040.00	4079.00	6050.46	.00	6050.89	47.90	5.28	780.09	589.38
* 34700.000	524.00	.00	.00	6048.00	12546.00	6062.14	6062.14	6064.67	196.06	14.22	1476.27	896.01
* 34700.000	524.00	.00	.00	6048.00	4079.00	6057.25	.00	6059.06	216.39	10.80	377.61	277.29

Run Date: 6JUL94 Run Time: 16:09:09 HMVersion: 6.40 Data File: fc-ex.hc2

Page 160

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
* 35128.000	428.00	.00	.00	6052.00	12546.00	6068.05	6062.56	6069.51	67.34	10.07	1814.44	1528.83
* 35128.000	428.00	.00	.00	6052.00	4079.00	6061.98	.00	6062.54	44.14	6.04	675.58	613.97
35153.000	25.00	6066.00	6064.00	6052.50	12546.00	6070.19	.00	6071.21	60.57	9.25	2819.74	1612.02
35153.000	25.00	6066.00	6064.00	6052.50	4079.00	6062.02	.00	6062.90	78.28	7.54	540.78	461.02
35420.000	267.00	.00	.00	6056.00	12546.00	6071.99	6071.02	6073.60	105.09	10.89	1738.03	1223.84
* 35420.000	267.00	.00	.00	6056.00	4079.00	6065.70	.00	6067.06	173.47	9.35	436.14	309.70
35699.000	279.00	.00	.00	6058.00	12546.00	6074.82	6073.81	6077.11	124.39	12.86	1395.19	1124.89
* 35699.000	279.00	.00	.00	6058.00	4079.00	6069.03	.00	6070.09	91.02	8.27	493.16	427.55
* 35700.000	1.00	6074.00	6075.30	6059.00	12546.00	6076.92	6076.92	6078.23	585.41	10.90	1623.67	518.53
* 35700.000	1.00	6074.00	6075.30	6059.00	4079.00	6068.78	.00	6070.37	302.25	10.12	402.98	234.62
* 35735.000	35.00	6074.00	6075.30	6059.00	12546.00	6079.02	.00	6079.31	116.85	5.53	3128.59	1160.60
35735.000	35.00	6074.00	6075.30	6059.00	4079.00	6070.23	.00	6071.34	188.96	8.45	482.80	296.73
* 35736.000	1.00	.00	.00	6059.00	12546.00	6078.84	.00	6079.50	37.46	7.82	3233.58	2049.85
* 35736.000	1.00	.00	.00	6059.00	4079.00	6070.41	.00	6071.39	81.29	7.96	512.56	452.42
* 35970.000	235.00	.00	.00	6060.00	12546.00	6079.78	.00	6080.14	15.82	5.62	3880.66	3154.31
* 35970.000	235.00	.00	.00	6060.00	4079.00	6072.28	.00	6072.65	28.36	4.90	861.36	765.99
* 36280.000	310.00	.00	.00	6064.00	12546.00	6080.15	.00	6081.33	85.82	10.11	2121.17	1354.32
* 36280.000	310.00	.00	.00	6064.00	4079.00	6074.18	.00	6075.54	155.31	9.37	435.36	327.30
36565.000	285.00	.00	.00	6070.00	12546.00	6082.80	.00	6084.03	103.48	11.55	1921.44	1233.32
* 36565.000	285.00	.00	.00	6070.00	4079.00	6077.31	.00	6078.55	197.09	10.23	589.61	290.55
36820.000	255.00	.00	.00	6074.00	12546.00	6085.82	.00	6087.29	169.66	12.59	1872.83	963.19
* 36820.000	255.00	.00	.00	6074.00	4079.00	6082.43	.00	6083.37	128.93	8.85	781.67	359.23
37080.000	260.00	.00	.00	6076.00	12546.00	6089.74	.00	6090.88	124.44	11.92	2532.60	1124.69
* 37080.000	260.00	.00	.00	6076.00	4079.00	6086.46	6085.71	6087.46	114.21	9.04	854.20	381.69
37460.000	380.00	.00	.00	6080.00	12546.00	6094.07	.00	6095.00	100.52	10.94	2657.54	1251.35
* 37460.000	380.00	.00	.00	6080.00	4079.00	6090.21	.00	6091.07	109.66	8.68	944.39	389.52
* 37770.000	310.00	.00	.00	6084.00	12546.00	6097.44	6097.37	6099.68	215.62	14.11	1485.15	854.39
* 37770.000	310.00	.00	.00	6084.00	4079.00	6094.68	.00	6095.60	104.97	8.21	714.96	398.12
* 38120.000	350.00	.00	.00	6090.00	12546.00	6102.58	.00	6102.97	65.07	7.76	3160.54	1555.36
* 38120.000	350.00	.00	.00	6090.00	4079.00	6097.78	6097.78	6098.73	194.51	9.88	879.01	292.47
* 38386.000	266.00	.00	.00	6092.00	12546.00	6104.63	.00	6105.68	149.03	10.83	2161.55	1027.71
* 38386.000	266.00	.00	.00	6092.00	4079.00	6102.50	.00	6102.95	63.79	6.36	1165.25	510.71
38629.000	243.00	.00	.00	6094.00	12546.00	6107.85	.00	6108.84	112.78	11.05	2644.25	1181.40
* 38629.000	243.00	.00	.00	6094.00	4079.00	6104.29	.00	6105.12	91.14	8.12	849.14	427.27

Run Date: 6JUL94 Run Time: 16:09:09 HMVersion: 6.40 Data File: fc-ex.hc2

Page 161

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
* 38630.000	1.00	6102.90	6105.00	6094.00	12546.00	6108.51	.00	6109.00	258.28	8.08	2531.14	780.66
* 38630.000	1.00	6102.90	6105.00	6094.00	4079.00	6105.25	6105.25	6106.32	604.65	9.66	622.17	165.88
38650.000	20.00	6102.90	6105.00	6094.00	12546.00	6109.12	.00	6109.46	164.88	6.71	2968.82	977.06
* 38650.000	20.00	6102.90	6105.00	6094.00	4079.00	6106.84	.00	6107.05	121.11	4.93	1417.54	370.65
38651.000	1.00	.00	.00	6094.00	12546.00	6108.86	.00	6109.74	102.69	10.65	2890.47	1238.06
* 38651.000	1.00	.00	.00	6094.00	4079.00	6106.75	.00	6107.15	42.26	6.10	1467.98	627.43
38770.000	119.00	.00	.00	6097.00	12546.00	6109.94	.00	6110.61	56.38	8.46	2975.77	1670.86
* 38770.000	119.00	.00	.00	6097.00	4079.00	6107.24	.00	6107.49	25.22	4.70	1503.12	812.15
* 38840.000	70.00	6106.00	6106.00	6097.50	12546.00	6111.63	6111.44	6113.24	112.41	11.41	2094.07	1183.31
* 38840.000	70.00	6106.00	6106.00	6097.50	4079.00	6108.38	.00	6109.08	61.70	6.74	612.32	519.31
39350.000	510.00	.00	.00	6104.00	12546.00	6118.38	.00	6119.36	119.10	9.48	2399.66	1149.63
* 39350.000	510.00	.00	.00	6104.00	4079.00	6114.70	6113.16	6115.63	138.60	7.90	686.04	346.47
39850.000	500.00	.00	.00	6110.00	12546.00	6124.12	.00	6125.81	124.83	12.82	2169.92	1122.91
* 39850.000	500.00	.00	.00	6110.00	4079.00	6119.71	.00	6121.10	123.56	9.61	496.16	366.96
40150.000	300.00	.00	.00	6115.00	12546.00	6128.26	.00	6130.02	157.00	13.29	2043.86	1001.29
* 40150.000	300.00	.00	.00	6115.00	4079.00	6124.05	6122.91	6125.64	172.16	10.50	487.23	310.87

FOUNTAIN CREEK 100-YEAR

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	.000	39167.00	5806.08	.00	.00	2.08	1329.46	.00
*	.000	19067.00	5803.00	-3.08	.00	-1.00	949.06	.00
	900.000	39167.00	5812.09	.00	6.01	.00	1257.03	900.00
*	900.000	19067.00	5808.49	-3.60	1.22	.00	862.60	900.00
	1200.000	39167.00	5814.49	.00	2.40	.00	1596.40	300.00
*	1200.000	19067.00	5810.24	-4.25	.00	.00	1038.20	300.00
	1850.000	39167.00	5816.43	.00	1.94	.00	1950.42	625.00
*	1850.000	19067.00	5813.78	-2.65	.46	.00	1349.45	625.00
*	2450.000	39167.00	5818.76	.00	2.32	.00	1882.86	610.00
*	2450.000	19067.00	5816.70	-2.06	.64	.00	851.38	610.00
	3455.000	39075.00	5825.92	.00	7.17	.00	195.39	1020.00
*	3455.000	18134.00	5823.03	-2.90	1.29	.00	184.56	1020.00
	3545.000	39075.00	5827.87	.00	1.95	.00	202.64	90.00
*	3545.000	18134.00	5823.59	-4.28	.13	.00	186.67	90.00
*	4125.000	39075.00	5832.84	.00	4.96	.00	1604.58	560.00
*	4125.000	18134.00	5825.73	-7.11	.32	.00	1228.73	560.00
	5125.000	39075.00	5834.47	.00	1.63	.00	1842.30	1000.00
*	5125.000	18134.00	5830.46	-4.01	.82	.00	554.94	1000.00
*	6125.000	39075.00	5838.32	.00	3.85	.00	719.79	1000.00
*	6125.000	18134.00	5835.03	-3.29	1.35	.00	331.45	1000.00
*	6625.000	39075.00	5843.63	.00	5.31	.00	430.00	550.00
*	6625.000	18134.00	5838.66	-4.97	.36	.00	416.66	550.00
	6635.000	39075.00	5843.58	.00	-.05	.00	438.12	10.00
	6635.000	18134.00	5838.62	-4.96	-.04	.00	404.62	10.00
	6690.000	39075.00	5843.76	.00	.18	.00	439.30	55.00
	6690.000	18134.00	5838.79	-4.96	.17	.00	405.76	55.00
	6700.000	39075.00	5843.91	.00	.16	.00	439.61	45.00
	6700.000	18134.00	5838.94	-4.97	.15	.00	410.28	45.00
*	7430.000	39075.00	5846.49	.00	2.57	.00	698.20	720.00
*	7430.000	18134.00	5842.51	-3.97	3.03	.00	495.63	720.00
*	8420.000	38426.00	5854.76	.00	8.27	.00	1168.29	1000.00
*	8420.000	18134.00	5849.98	-4.78	1.85	.00	274.65	1000.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	9070.000	38426.00	5859.05	.00	4.29	.00	1460.98	637.00
*	9070.000	18134.00	5854.48	-4.57	.80	.00	449.76	637.00
	9340.000	38426.00	5860.97	.00	1.92	.00	633.88	320.00
*	9340.000	18134.00	5856.55	-4.42	.16	.00	604.05	320.00
	9341.000	38426.00	5860.89	.00	-.08	.00	612.92	1.00
	9341.000	18134.00	5856.52	-4.37	-.03	.00	583.69	1.00
	9370.000	38426.00	5860.98	.00	.09	.00	613.21	30.00
	9370.000	18134.00	5856.59	-4.39	.07	.00	584.23	30.00
	9371.000	38426.00	5861.23	.00	.25	.00	634.92	1.00
	9371.000	18134.00	5856.69	-4.54	.11	.00	605.20	1.00
*	10150.000	38426.00	5862.84	.00	1.62	.00	837.49	710.00
*	10150.000	18134.00	5858.79	-4.05	.79	.00	657.91	710.00
	10151.000	38426.00	5863.31	.00	.46	.00	830.05	1.00
	10151.000	18134.00	5859.14	-4.17	.35	.00	694.83	1.00
	10249.000	38426.00	5863.76	.00	.46	.00	842.46	100.00
*	10249.000	18134.00	5859.73	-4.03	.13	.00	714.14	100.00
	10250.000	38426.00	5863.72	.00	-.04	.00	866.05	1.00
	10250.000	18134.00	5859.71	-4.01	-.02	.00	667.11	1.00
*	11173.000	38426.00	5869.40	.00	5.67	.00	470.61	925.00
*	11173.000	18134.00	5865.57	-3.83	1.76	.00	220.00	925.00
	11763.000	38426.00	5877.19	.00	7.79	.00	1301.97	590.00
*	11763.000	18134.00	5871.40	-5.79	1.94	.00	290.47	590.00
	12638.000	38426.00	5882.96	.00	5.77	.00	2007.20	860.00
*	12638.000	18134.00	5879.02	-3.94	1.51	.00	506.77	860.00
	12788.000	38426.00	5884.32	.00	1.36	.00	2296.96	155.00
*	12788.000	18134.00	5881.07	-3.25	.85	.00	1730.25	155.00
	13303.000	38426.00	5886.27	.00	1.95	.00	1795.97	515.00
*	13303.000	18134.00	5884.31	-1.95	.37	.00	1220.97	515.00
*	13933.000	38426.00	5889.66	.00	3.39	.00	1359.76	630.00
*	13933.000	18134.00	5887.71	-1.95	1.28	.00	1172.55	630.00
	15020.000	38426.00	5899.38	.00	9.72	.00	1416.94	1050.00
*	15020.000	18134.00	5895.25	-4.13	2.21	.00	709.87	1050.00
	15030.000	38426.00	5900.53	.00	1.15	.00	1551.51	10.00
*	15030.000	18134.00	5895.61	-4.92	.36	.00	755.38	10.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	15155.000	38426.00	5901.17	.00	.64	.00	1356.86	120.00
*	15155.000	18134.00	5899.41	-1.77	.22	.00	1253.32	120.00
*	15843.000	36371.00	5907.59	.00	6.42	.00	1952.54	690.00
*	15843.000	16697.00	5902.94	-4.65	.90	.00	1518.89	690.00
	16540.000	36371.00	5909.45	.00	1.87	.00	1655.16	660.00
*	16540.000	16697.00	5907.61	-1.85	.79	.00	405.13	660.00
	16620.000	36371.00	5909.45	.00	-.01	.00	1651.05	80.00
	16620.000	16697.00	5907.96	-1.49	.36	.00	781.34	80.00
	16900.000	36371.00	5910.62	.00	1.17	.00	1461.46	270.00
*	16900.000	16697.00	5908.37	-2.25	.12	.00	1013.45	270.00
	17150.000	36371.00	5911.69	.00	1.07	.00	839.59	220.00
*	17150.000	16697.00	5909.01	-2.68	.19	.00	311.52	220.00
	17210.000	36371.00	5911.70	.00	.02	.00	851.34	60.00
	17210.000	16697.00	5909.06	-2.64	.05	.00	311.78	60.00
	18240.000	36371.00	5917.81	.00	6.10	.00	949.75	1030.00
*	18240.000	16697.00	5913.86	-3.95	1.18	.00	330.25	1030.00
	19250.000	36371.00	5922.61	.00	4.80	.00	405.90	1000.00
*	19250.000	16697.00	5919.18	-3.43	1.41	.00	302.49	1000.00
	20240.000	36371.00	5928.88	.00	6.26	.00	251.56	1000.00
*	20240.000	16697.00	5924.66	-4.22	1.55	.00	219.96	1000.00
	21250.000	36371.00	5936.37	.00	7.49	.00	266.30	1000.00
*	21250.000	16697.00	5931.19	-5.18	1.82	.00	236.40	1000.00
	22250.000	35860.00	5943.94	.00	7.57	.00	231.27	1000.00
*	22250.000	16473.00	5939.25	-4.70	1.78	.00	193.09	1000.00
	22980.000	35860.00	5950.11	.00	6.17	.00	301.95	700.00
*	22980.000	16473.00	5944.57	-5.54	1.09	.00	201.35	700.00
	23315.000	35860.00	5951.57	.00	1.47	.00	239.17	330.00
*	23315.000	16473.00	5946.41	-5.17	.51	.00	211.81	330.00
	23405.000	35860.00	5952.27	.00	.70	.00	242.84	90.00
	23405.000	16473.00	5946.83	-5.44	.42	.00	214.08	90.00
*	23635.000	12934.00	5953.63	.00	1.36	.00	202.07	230.00
*	23635.000	4264.00	5950.04	-3.60	1.21	.00	82.73	230.00
*	23670.000	12934.00	5953.90	.00	.26	.00	89.22	35.00
	23670.000	4264.00	5949.92	-3.98	-.12	.00	66.34	35.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	23791.000	12934.00	5958.86	.00	4.96	.00	215.82	120.00
*	23791.000	4264.00	5951.10	-7.76	.21	.00	83.12	120.00
	23792.000	12934.00	5958.87	.00	.01	.00	207.79	1.00
	23792.000	4264.00	5951.17	-7.70	.07	.00	82.32	1.00
	23892.000	12934.00	5959.60	.00	.73	.00	210.92	100.00
*	23892.000	4264.00	5952.07	-7.52	.19	.00	87.17	100.00
	23893.000	12934.00	5959.59	.00	-.01	.00	218.97	1.00
	23893.000	4264.00	5952.07	-7.51	.00	.00	88.77	1.00
	24360.000	12934.00	5961.77	.00	2.18	.00	899.56	450.00
*	24360.000	4264.00	5954.49	-7.28	.95	.00	207.62	450.00
*	24780.000	12934.00	5962.39	.00	.62	.00	119.94	375.00
*	24780.000	4264.00	5959.65	-2.74	.82	.00	103.25	375.00
*	24861.000	12934.00	5965.91	.00	3.52	.00	206.39	65.00
	24861.000	4264.00	5959.83	-6.08	.18	.00	104.13	65.00
*	25268.000	12934.00	5970.10	.00	4.19	.00	630.85	380.00
*	25268.000	4264.00	5964.11	-5.99	1.24	.00	66.89	380.00
*	25625.000	12934.00	5975.42	.00	5.32	.00	880.04	367.00
*	25625.000	4264.00	5968.90	-6.52	1.05	.00	174.61	367.00
	25725.000	12934.00	5975.19	.00	-.23	.00	853.56	65.00
*	25725.000	4264.00	5970.22	-4.97	.18	.00	95.54	65.00
	26265.000	12934.00	5980.24	.00	5.05	.00	920.38	563.00
*	26265.000	4264.00	5976.98	-3.26	2.39	.00	475.69	563.00
	26780.000	12934.00	5984.13	.00	3.89	.00	822.38	505.00
*	26780.000	4264.00	5979.79	-4.35	1.80	.00	508.30	505.00
	27180.000	12934.00	5986.91	.00	2.77	.00	668.18	400.00
*	27180.000	4264.00	5983.90	-3.01	.83	.00	642.50	400.00
	28100.000	12934.00	5994.81	.00	7.90	.00	544.16	920.00
*	28100.000	4264.00	5991.85	-2.97	1.30	.00	444.89	920.00
	29100.000	12934.00	6003.59	.00	8.78	.00	226.34	1000.00
*	29100.000	4264.00	5998.54	-5.05	1.99	.00	161.69	1000.00
	30125.000	12934.00	6013.94	.00	10.35	.00	178.21	1025.00
*	30125.000	4264.00	6007.54	-6.40	2.47	.00	82.78	1025.00
*	31115.000	12934.00	6024.67	.00	10.73	.00	352.94	990.00
*	31115.000	4264.00	6017.18	-7.49	2.04	.00	112.17	990.00

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
31400.000	7388.00	6026.47	.00	1.81	.00	286.50	285.00
* 31400.000	4264.00	6019.72	-6.75	.53	.00	151.63	285.00
31640.000	7388.00	6026.95	.00	.48	.00	349.18	240.00
* 31640.000	4264.00	6020.75	-6.21	.24	.00	273.68	240.00
* 31940.000	7000.00	6027.47	.00	.52	.00	277.47	300.00
* 31940.000	4079.00	6026.53	-.94	.31	.00	264.25	300.00
* 32080.000	7000.00	6028.32	.00	.86	.00	53.67	140.00
* 32080.000	4079.00	6027.93	-.40	.57	.00	52.76	140.00
* 32160.000	12546.00	6032.86	.00	4.53	.00	346.21	80.00
* 32160.000	4079.00	6027.31	-5.55	-.62	.00	51.89	80.00
* 32500.000	12546.00	6039.81	.00	6.95	.00	518.88	340.00
* 32500.000	4079.00	6034.40	-5.41	1.18	.00	289.91	340.00
32840.000	12546.00	6042.04	.00	2.23	.00	382.77	340.00
* 32840.000	4079.00	6038.08	-3.96	.53	.00	107.24	340.00
* 32890.000	12546.00	6043.34	.00	1.31	.00	413.63	50.00
32890.000	4079.00	6038.08	-5.26	.00	.00	113.32	50.00
33213.000	12546.00	6045.44	.00	2.09	.00	624.52	323.00
* 33213.000	4079.00	6039.88	-5.56	.80	.00	450.51	323.00
* 33700.000	12546.00	6049.66	.00	4.22	.00	475.21	487.00
* 33700.000	4079.00	6046.67	-2.98	1.00	.00	287.68	487.00
* 34176.000	12546.00	6054.99	.00	5.33	.00	497.27	476.00
* 34176.000	4079.00	6050.46	-4.53	.65	.00	156.24	476.00
* 34700.000	12546.00	6062.14	.00	7.15	.00	472.47	524.00
* 34700.000	4079.00	6057.25	-4.89	2.62	.00	61.63	524.00
* 35128.000	12546.00	6068.05	.00	5.91	.00	642.87	428.00
* 35128.000	4079.00	6061.98	-6.07	.59	.00	75.44	428.00
35153.000	12546.00	6070.19	.00	2.15	.00	774.58	25.00
35153.000	4079.00	6062.02	-8.18	.04	.00	57.66	25.00
35420.000	12546.00	6071.99	.00	1.79	.00	508.94	267.00
* 35420.000	4079.00	6065.70	-6.29	1.10	.00	75.81	267.00
35699.000	12546.00	6074.82	.00	2.83	.00	382.28	279.00
* 35699.000	4079.00	6069.03	-5.79	.67	.00	59.42	279.00
* 35700.000	12546.00	6076.92	.00	2.10	.00	603.29	1.00
* 35700.000	4079.00	6068.78	-8.14	-.25	.00	53.38	1.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
*	35735.000	12546.00	6079.02	.00	2.09	.00	808.77	35.00
	35735.000	4079.00	6070.23	-8.78	1.45	.00	56.99	35.00
*	35736.000	12546.00	6078.84	.00	-.17	.00	796.17	1.00
*	35736.000	4079.00	6070.41	-8.43	.17	.00	59.84	1.00
*	35970.000	12546.00	6079.78	.00	.93	.00	633.98	235.00
*	35970.000	4079.00	6072.28	-7.49	.27	.00	138.13	235.00
*	36280.000	12546.00	6080.15	.00	.37	.00	426.95	310.00
*	36280.000	4079.00	6074.18	-5.97	.84	.00	68.48	310.00
	36565.000	12546.00	6082.80	.00	2.65	.00	312.30	285.00
*	36565.000	4079.00	6077.31	-5.49	.95	.00	172.71	285.00
	36820.000	12546.00	6085.82	.00	3.02	.00	408.93	255.00
*	36820.000	4079.00	6082.43	-3.39	2.74	.00	277.41	255.00
	37080.000	12546.00	6089.74	.00	3.93	.00	597.38	260.00
*	37080.000	4079.00	6086.46	-3.28	.68	.00	418.10	260.00
	37460.000	12546.00	6094.07	.00	4.33	.00	536.15	380.00
*	37460.000	4079.00	6090.21	-3.86	.97	.00	381.56	380.00
*	37770.000	12546.00	6097.44	.00	3.37	.00	375.87	310.00
*	37770.000	4079.00	6094.68	-2.76	.80	.00	232.30	310.00
*	38120.000	12546.00	6102.58	.00	5.14	.00	557.64	350.00
*	38120.000	4079.00	6097.78	-4.80	1.62	.00	391.27	350.00
*	38386.000	12546.00	6104.63	.00	2.05	.00	477.43	266.00
*	38386.000	4079.00	6102.50	-2.13	.45	.00	457.90	266.00
	38629.000	12546.00	6107.85	.00	3.22	.00	673.69	243.00
*	38629.000	4079.00	6104.29	-3.56	.53	.00	276.72	243.00
*	38630.000	12546.00	6108.51	.00	.67	.00	700.25	1.00
*	38630.000	4079.00	6105.25	-3.26	.96	.00	298.82	1.00
	38650.000	12546.00	6109.12	.00	.61	.00	724.82	20.00
*	38650.000	4079.00	6106.84	-2.28	1.58	.00	633.46	20.00
	38651.000	12546.00	6108.86	.00	-.26	.00	714.51	1.00
*	38651.000	4079.00	6106.75	-2.11	-.09	.00	629.86	1.00
	38770.000	12546.00	6109.94	.00	1.08	.00	650.91	119.00
*	38770.000	4079.00	6107.24	-2.70	.05	.00	437.50	119.00
*	38840.000	12546.00	6111.63	.00	1.70	.00	737.67	70.00
*	38840.000	4079.00	6108.38	-3.25	1.14	.00	116.24	70.00

Run Date: 6JUL94 Run Time: 16:09:09 HMVersion: 6.40 Data File: fc-ex.hc2

Page 168

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
39350.000	12546.00	6118.38	.00	6.75	.00	505.06	510.00
* 39350.000	4079.00	6114.70	-3.68	1.76	.00	385.51	510.00
39850.000	12546.00	6124.12	.00	5.74	.00	433.31	500.00
* 39850.000	4079.00	6119.71	-4.41	1.47	.00	108.30	500.00
40150.000	12546.00	6128.26	.00	4.13	.00	423.68	300.00
* 40150.000	4079.00	6124.05	-4.21	1.26	.00	321.39	300.00

TYPICAL CHANNEL ROUGHNESS VALUES

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DRPS

Sheet No. 1 Of

Prepared By: D.A.Z.I.

Checked By:

Date: 1/25/94

Project No.: 9117

TYPICAL CHANNEL ROUGHNESS VALUES
MANNING'S "n"

Water surface profiles of Fountain Creek for this study was computed by the U.S. Army Corps of Engineers HEC-2 computer program. That program calculates water surface profiles for steady gradually varied flow based on the solution of a one-dimensional energy equation with energy loss due to friction evaluated with Manning's equation. In applying the Manning's formula, the greatest difficulty lies in determining the roughness coefficient n , since there are many variables associated in a given channel that may result in a wide range of resistance to the flow. Some of these variables are surface roughness, vegetation, channel irregularity, channel alignment, silting and scouring, obstructions, size and shape of channel, stage and discharges, seasonal changes, and suspended material and bed loads. Because there are so many variables, often the engineer uses his/her sound engineering judgment and experience to estimate the resistance to flow in a given channel and the use of published tables of typical "n" values for channels of various types. Following are six typical Manning's "n" values that were determined to be applicable for the Fountain Creek drainageway. For the most part, the Manning's "n" values were determined based on the procedure developed by Cowan as presented in Chow's Open Channel Hydraulics book, and in the Soil Conservation Service's Engineering Handbook, Supplement B Hydraulics Section. This procedure may be calculated as follows:

$$n = (n_0 + n_1 + n_2 + n_3 + n_4) m_5$$

- where
- n_0 = basic n value for a straight, uniform, smooth channel
 - n_1 = correction for surface irregularities
 - n_2 = correction for variation in channel shape and size
 - n_3 = correction for obstructions
 - n_4 = correction for vegetation
 - m_5 = correction factor for meandering of channel

Attached is a tabulation of suggested values for the computation of the roughness coefficient.

TABLE 5-5. VALUES FOR THE COMPUTATION OF THE ROUGHNESS COEFFICIENT BY Eq. (5-12)

Channel conditions		Values	
Material involved	Earth	n_0	0.020
	Rock cut		0.025
	Fine gravel		0.024
	Coarse gravel		0.028
Degree of irregularity	Smooth	n_1	0.000
	Minor		0.005
	Moderate		0.010
	Severe		0.020
Variations of channel cross section	Gradual	n_2	0.000
	Alternating occasionally		0.005
	Alternating frequently		0.010-0.015
Relative effect of obstructions	Negligible	n_3	0.000
	Minor		0.010-0.015
	Appreciable		0.020-0.030
	Severe		0.040-0.060
Vegetation	Low	n_4	0.005-0.010
	Medium		0.010-0.025
	High		0.025-0.050
	Very high		0.050-0.100
Degree of meandering	Minor	m_5	1.000
	Appreciable		1.150
	Severe		1.300

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 2 Of

Prepared By: D.A.ZI.

Checked By:

Date: 1/25/94

Project No.: 9117

Typical Manning's "n" Coefficients

1. Channel Roughness (between the banks) downstream of the Confluence with Monument Creek



Approximately Sta 128+00 (Looking U/s of WWTP)

$$n = (n_0 + n_1 + n_2 + n_3 + n_4) m_s$$

$$n_0 = 0.020 \quad \text{Earth bottom}$$

$$n_1 = 0.005 \quad \text{Minor degree of irregularity}$$

$$n_2 = 0.005 \quad \text{Variations of cross section alternate occasionally}$$

$$n_3 = 0.010 \quad \text{Minor relative effect of obstructions}$$

$$+ n_4 = 0.005 \quad \text{Low Vegetation}$$

$$\underline{0.045}$$

$$\times m_s = 1.000 \quad \text{Minor degree of meandering}$$

$$\underline{\underline{n = 0.045}}$$

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 3 Of

Prepared By: D.A.N.

Checked By:

Date: 1/25/94

Project No.: 9117

Typical Manning's "n" Coefficients (cont.)

2. Channel Roughness (between the banks) upstream of the confluence with Monument Creek



Approximately Sta 368+00 (In between 26th and 31st Streets)

$$n = (n_0 + n_1 + n_2 + n_3 + n_4) m_s$$

$n_0 = 0.020$ Earth bottom

$n_1 = 0.010$ Moderate degree of irregularity

$n_2 = 0.010$ Frequent variations of cross sections

$n_3 = 0.015$ Minor relative effect of obstructions

$+ n_4 = 0.010$ Low vegetation

0.065

$\times m_s = 1.000$ Minor degree of meandering

$n = 0.065$

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 4 Of

Prepared By: D.A.N. Checked By:

Date: 1/25/94

Project No.: 9117

Typical Manning's "n" Coefficients (cont.)

3. Over bank Roughness, $n = 0.08$



Approximately Sta 36+00 (U/S of Circle Drive)

$$n = (n_0 + n_1 + n_2 + n_3 + n_4) m_s$$

$$n_0 = 0.020 \quad \text{Earth Material}$$

$$n_1 = 0.010 \quad \text{Moderate Degree of Irregularity}$$

$$n_2 = 0.010 \quad \text{Frequent Variations of Channel Cross-Section}$$

$$n_3 = 0.020 \quad \text{Appreciable effects from Obstructions}$$

$$+ n_4 = 0.020 \quad \text{Medium Vegetation}$$

$$\underline{\quad 0.080 \quad}$$

$$\times m_s = 1.000 \quad \text{Minor degree of Meandering}$$

$$\underline{\underline{n = 0.080}}$$

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

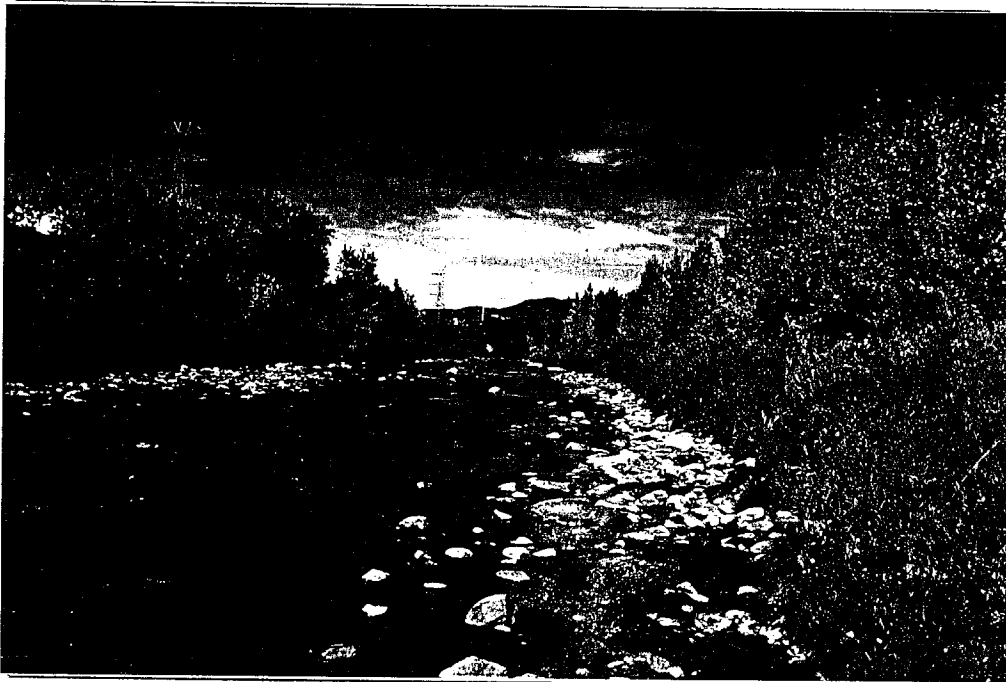
Subject: Fountain Creek DBPS

Sheet No. 5 Of

Prepared By: D.A.Z. Checked By: Date: 1/25/94

Project No.: 9117

4. Overbank Roughness, $n = 0.11$ to 0.12



Approximately 214+00 (D/S of Bear Creek Confluence)

$$n = (n_0 + n_1 + n_2 + n_3 + n_4) m_s$$

$$n_0 = 0.020 \quad \text{Earth material}$$

$$n_1 = 0.010 \quad \text{Moderate degree of Irregularity}$$

$$n_2 = 0.010 \quad \text{Frequent variations of Channel Cross-Sections}$$

$$n_3 = 0.020 \quad \text{Appreciable effects from Obstructions}$$

$$+ n_4 = 0.050 \quad \text{High Vegetation}$$

$$0.110$$

$$\times m_s = 1.000 \quad \text{Minor degree of Meandering}$$

$$\underline{\underline{n = 0.110}}$$

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 6 Of

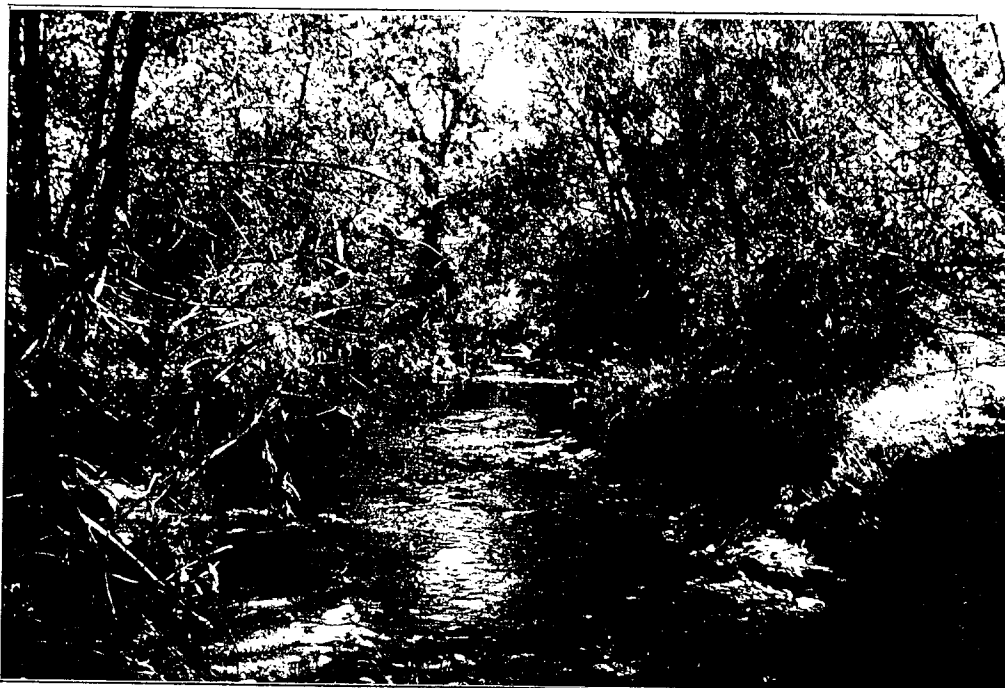
Prepared By: D.AZL.

Checked By:

Date: 1/25/94

Project No.: 9117

5. Overbank Roughness, $n = 0.12$ to 0.13



Approximately Sta 328+00 (21st Street)

$$n = (n_0 + n_1 + n_2 + n_3 + n_4) m_s$$

$$n_0 = 0.020$$

Earth material

$$n_1 = 0.010$$

Moderate degree of Irregularity

$$n_2 = 0.010$$

Frequent Variations of Channel Cross-Sections

$$n_3 = 0.020$$

Appreciable effects from Obstructions

$$+ n_4 = 0.070$$

Very high Vegetation

$$0.130$$

$$\times m_s = 1.000$$

Minor degree of meandering

$$\underline{\underline{n = 0.130}}$$

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 7 Of

Prepared By: DAZL

Checked By:

Date: 1/25/94

Project No.: 9117

6. Overbank Roughness, $n = 0.15$ to 0.20
(Urban Areas)



Approximately Sta 180+00 ± (Looking West Along Las Vegas St.)

Few, if any, verified values of "n" currently are available for urban areas. Values of Manning's roughness coefficients for flooded urbanized areas vary depending upon the density of buildings on a flood plain, depth of flow, and surface roughnesses. It is our estimation that the resistance to flow in the urbanized areas of Colorado Springs in the Fountain Creek drainageway range from a Manning's "n" value of 0.15 to 0.20 depending upon the density of development.

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 1 Of

Prepared By: DAZL

Checked By:

Date: 1/25/94

Project No.: 9117

**TABULATION OF
 MANNING'S "n" VALUES
 USED IN HEC-2 ANALYSIS**

STA.	Left	Right	Center	STA.	Left	Right	Center
0+00	.12	.12	.045	158+43	.155	.20	.045
9+00	.12	.12	.045	165+40	.155	.20	.045
12+00	.08	.12	.045	<u>Nevada</u> 166+20	.155	.20	.045
18+50	.095	.12	.045	169+00	.155	.20	.045
24+50	.095	.12	.045	171+50	.155	.20	.045
34+55	.08	.08	.045	<u>Tejon</u> 172+10	.155	.20	.045
<u>Circle Dr.</u> 35+45	.08	.08	.045	182+40	.155	.12	.045
41+25	.08	.15	.045	192+50	.15	.12	.045
51+25	.10	.15	.045	202+40	.11	.12	.045
61+25	.10	.10	.045	212+50	.11	.12	.045
<u>Junipero Rd.</u> 66+25	.10	.10	.045	222+50	.11	.11	.045
66+35	.045	.045	.045	229+80	.11	.11	.045
66+90	.045	.045	.045	233+15	.11	.11	.045
67+00	.045	.045	.045	<u>Cimarron</u> 234+05	.08	.08	.045
74+30	.10	.11	.045	236+35	.08	.02	.045
84+20	.11	.11	.045	236+70	.08	.02	.045
90+70	.11	.11	.045	237+91	.08	.08	.045
93+40	.08	.08	.045	237+92	.08	.08	.050
<u>U.S. 29 Bypass</u> 93+41	.08	.08	.045	238+92	.08	.08	.050
93+70	.08	.08	.045	238+93	.11	.11	.055
93+71	.08	.08	.045	243+60	.15	.12	.055
101+50	.10	.10	.045	247+80	.12	.12	.055
<u>U.S. 29 Bypass</u> 101+51	.085	.085	.045	<u>U.S. 29</u> 248+61	.12	.12	.055
102+49	.085	.085	.045	252+68	.15	.12	.057
102+50	.10	.10	.045	256+25	.15	.12	.060
111+73	.12	.12	.045	<u>8th St.</u> 257+25	.15	.12	.060
117+63	.12	.12	.045	262+65	.15	.12	.065
126+38	.135	.12	.045	267+80	.145	.12	.065
127+88	.135	.12	.045	271+80	.14	.145	.065
133+03	.135	.12	.045	281+00	.12	.15	.065
139+33	.135	.125	.045	291+00	.12	.12	.065
150+20	.135	.20	.045	301+25	.12	.12	.065
150+30	.15	.20	.045	311+15	.125	.12	.065
151+55	.15	.20	.045	314+00	.13	.12	.065

Muller Engineering Company, Inc.
DESIGN NOTES AND COMPUTATIONS

Subject: FOUNTAIN CREEK DBPS

Sheet No. 2 Of

Prepared By: D.A. ZI

Checked By:

Date: 1/25/94

Project No.: 9117

TABULATION OF
MANNING'S "n" VALUES
USED IN HEC-2 ANALYSIS
(CONTINUED)

STA.	Left	Right	Center
401+50	.15	.10	.065
316+40	.125	.12	.065
319+40	.125	.12	.065
320+80	.09	.09	.065
321+60	.09	.09	.065
325+00	.14	.12	.065
328+40	.13	.12	.065
328+90	.13	.12	.065
332+13	.135	.13	.065
337+00	.08	.15	.065
341+76	.08	.15	.065
347+00	.08	.15	.065
351+28	.12	.135	.065
351+53	.12	.135	.065
354+20	.11	.11	.065
357+00	.11	.11	.065
357+35	.11	.11	.065
359+70	.11	.11	.065
362+80	.12	.11	.065
365+65	.12	.12	.065
368+20	.09	.13	.065
370+80	.135	.135	.065
374+60	.14	.12	.065
377+70	.12	.12	.065
381+20	.08	.12	.065
383+86	.08	.12	.065
386+29	.13	.13	.065
386+30	.13	.13	.065
386+50	.13	.13	.065
386+51	.13	.13	.065
387+70	.12	.12	.065
388+40	.12	.12	.065
393+50	.15	.10	.065
398+50	.15	.10	.065

U.S. 24

21st St.

25th St.

26th St.

Highway Bridge

31st St.

APPENDIX C
ALTERNATIVES ANALYSIS
(EMPTY - ALL INFORMATION IS IN VOLUMES I AND II)

APPENDIX D
PRESENT VALUE ANALYSIS

APPENDIX D

**TABLES 6.3-36 THROUGH 6.3-42
PRESENT VALUE ANALYSIS**

TABLE 6.3-36
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10-YEAR CAPITAL COST EXPENDITURES

TABLE 6.3 - 36
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 1 Summary							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	617.51	514.60	385.95	834.49	1,003.46	823.35	591.78	617.51
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	2,161,300	5,969,305	1,698,164	1,204,153	3,712,805	4,075,595	3,876,189	988,023
Present Value Capital/Reach	\$	0	0	0	0	0	0	0	0
Present Value Alternative	\$	2,161,300	5,969,305	1,698,164	1,204,153	3,712,805	4,075,595	3,876,189	988,023
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)									
YEAR	F1	F2	F3	F4	F5	F6	F7	F8	
1993	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
1994	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
1995	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
1996	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
1997	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
1998	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
1999	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2000	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2001	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2002	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2003	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2004	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2005	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2006	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2007	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2008	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2009	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2010	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2011	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2012	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2013	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2014	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2015	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2016	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2017	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2018	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2019	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2020	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2021	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2022	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2023	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2024	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2025	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2026	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2027	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2028	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2029	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2030	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2031	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2032	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2033	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2034	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2035	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2036	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2037	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2038	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2039	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2040	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2041	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	
2042	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00	

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

[illegible]

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 2							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	102,92	102,92	102,92	102,92	102,92	102,92	102,92	102,92
Reach Length	lf	3500	11800	4400	3800	3700	4950	6550	1800
Present Value O & M	\$	380,217	1,193,861	452,844	370,509	380,801	509,449	674,120	164,670
Present Value Capital/Reach	\$	2,933,963	542,521	28,150	2,002,892	1,309,813	3,158,222	1,458,921	1,379,078
Present Value Alternative	\$	3,294,180	1,736,382	480,994	2,373,400	1,690,613	3,687,672	2,133,040	1,543,748
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

[illegible]

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 2							
DISCOUNT RATE:	3 %								
PERIOD	10 YEARS								
		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST	(\$MM/REACH)	3.4395	0.636	0.033	2.348	1.5355	3.7024	1.7103	1.6167
PROJECT YEARS		10	10	10	10	10	10	10	10
COST PER YEAR	((\$MM/REACH)	0.34395	0.0636	0.0033	0.2348	0.15355	0.37024	0.17103	0.16167
Analysis									
		Capital Cost, \$/LF (1993 DOLLARS)							
YEAR		F1	F2	F3	F4	F5	F6	F7	F8
1993		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
1994		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
1995		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
1996		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
1997		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
1998		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
1999		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
2000		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
2001		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162
2002		0.344	0.064	0.003	0.235	0.154	0.370	0.171	0.162

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 3							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	25.73	102.92	102.92	25.73	102.92	102.92	102.92	0.00
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	90,054	1,193,861	452,844	92,627	380,801	509,449	674,120	0
Present Value Capital/Reach	\$	764,733	7,709,469	2,030,359	1,329,859	5,540,879	5,817,598	5,367,801	0
Present Value Alternative	\$	854,787	8,903,330	2,483,203	1,422,488	5,921,679	6,327,048	6,041,921	0
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)								
YEAR	F1	F2	F3	F4	F5	F6	F7	F8
1993	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
1994	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
1995	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
1996	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
1997	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
1998	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
1999	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2000	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2001	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2002	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2003	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2004	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2005	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2006	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2007	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2008	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2009	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2010	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2011	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2012	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2013	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2014	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2015	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2016	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2017	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2018	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2019	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2020	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2021	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2022	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2023	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2024	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2025	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2026	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2027	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2028	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2029	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2030	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2031	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2032	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2033	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2034	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2035	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2036	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2037	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2038	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2039	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2040	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2041	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00
2042	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 3							
DISCOUNT RATE:	3 %								
PERIOD	10 YEARS								
		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST	(\$MM/REACH)	0.8965	9.03785	2.3802	1.559	6.4956	6.82	6.2927	0
PROJECT YEARS		10	10	10	10	10	10	10	10
COST PER YEAR	(\$MM/REACH)	0.08965	0.903785	0.23802	0.1559	0.64956	0.682	0.62927	0
Analysis									
Capital Cost, \$/LF (1993 DOLLARS)									
YEAR		F1	F2	F3	F4	F5	F6	F7	F8
1993		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
1994		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
1995		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
1996		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
1997		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
1998		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
1999		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
2000		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
2001		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000
2002		0.090	0.904	0.238	0.156	0.650	0.682	0.629	0.000

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		F1	F2	Alternative 4		F5	F6	F7	F8
Present Value O & M	\$/lf	25.73	77.19	F3	F4	102.92	0.00	102.92	0.00
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	90,054	895,396	339,633	185,254	380,801	0	674,120	0
Present Value Capital/Reach	\$	728,624	5,743,412	3,662,239	1,701,983	2,984,347	0	4,294,904	0
Present Value Alternative	\$	818,679	6,638,808	4,001,872	1,887,237	3,365,148	0	4,969,024	0
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)								
YEAR	F1	F2	F3	F4	F5	F6	F7	F8
1993	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1994	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1995	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1996	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1997	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1998	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1999	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2000	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2001	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2002	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2003	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2004	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2005	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2006	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2007	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2008	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2009	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2010	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2011	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2012	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2013	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2014	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2015	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2016	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2017	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2018	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2019	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2020	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2021	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2022	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2023	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2024	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2025	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2026	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2027	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2028	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2029	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2030	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2031	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2032	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2033	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2034	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2035	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2036	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2037	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2038	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2039	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2040	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2041	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2042	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 4							
DISCOUNT RATE:	3 %								
PERIOD	20 YEARS								
		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST	(\$MM/REACH)	0.9795	7.72095	4.9232	2.288	4.0119	0	5.7737	0
PROJECT YEARS		20	20	20	20	20	20	20	20
COST PER YEAR	(\$MM/REACH)	0.048975	0.3860475	0.24616	0.1144	0.200595	0	0.288685	0
Analysis									
Capital Cost, \$/LF (1993 DOLLARS)									
YEAR		F1	F2	F3	F4	F5	F6	F7	F8
1993		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1994		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1995		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1996		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1997		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1998		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1999		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2000		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2001		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2002		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 5							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	0.00	25.73	25.73	0.00	0.00	0.00	0.00	0.00
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	0	298,465	113,211	0	0	0	0	0
Present Value Capital/Reach	\$	0	11,078,899	9,627,358	0	0	0	0	0
Present Value Alternative	\$	0	11,377,365	9,740,568	0	0	0	0	0
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)								
YEAR	F1	F2	F3	F4	F5	F6	F7	F8
1993	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
1994	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
1995	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
1996	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
1998	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
1999	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2000	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2004	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2006	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2007	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2008	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2009	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2016	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2018	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2019	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2021	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2023	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2024	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2025	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2026	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2027	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2028	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2029	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2030	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2031	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2032	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2033	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2034	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2035	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2036	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2037	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2038	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2039	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2040	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2041	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
2042	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00

TABLE 6.3 - 36 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 1 - 10 YEAR CAPITAL COST EXPENDITURE

		Alternative 5							
DISCOUNT RATE:	3 %								
PERIOD	10 YEARS								
		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST	(\$MM/REACH)	0	12.98785	11.2862	0	0	0	0	0
PROJECT YEARS		10	10	10	10	10	10	10	10
COST PER YEAR	(\$MM/REACH)	0	1.298785	1.12862	0	0	0	0	0
Analysis									
Capital Cost, \$/LF (1993 DOLLARS)									
YEAR		F1	F2	F3	F4	F5	F6	F7	F8
1993		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
1994		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
1995		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
1996		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
1997		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
1998		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
1999		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
2000		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
2001		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000
2002		0.000	1.299	1.129	0.000	0.000	0.000	0.000	0.000

TABLE 6.3-37
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20-YEAR CAPITAL COST EXPENDITURES

TABLE 6.3 - 37
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

		Alternative 1 Summary							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	617.51	514.60	385.95	334.49	1,003.46	823.35	591.78	617.51
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	2,161,300	5,969,305	1,698,164	1,204,153	3,712,805	4,075,595	3,876,189	988,023
Present Value Capital/Reach	\$	0	0	0	0	0	0	0	0
Present Value Alternative	\$	2,161,300	5,969,305	1,698,164	1,204,153	3,712,805	4,075,595	3,876,189	988,023
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)								
YEAR	F1	F2	F3	F4	F5	F6	F7	F8
1993	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
1994	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
1995	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
1996	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
1997	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
1998	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
1999	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2000	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2001	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2002	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2003	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2004	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2005	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2006	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2007	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2008	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2009	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2010	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2011	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2012	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2013	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2014	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2015	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2016	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2017	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2018	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2019	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2020	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2021	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2022	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2023	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2024	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2025	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2026	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2027	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2028	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2029	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2030	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2031	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2032	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2033	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2034	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2035	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2036	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2037	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2038	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2039	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2040	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2041	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00
2042	24.00	20.00	15.00	13.00	39.00	32.00	23.00	24.00

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

DISCOUNT RATE:	3 %	Alternative 1
PERIOD	20 YEARS	

	F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST (\$MM/REACH)	0	0	0	0	0	0	0	0
PROJECT YEARS	20	20	20	20	20	20	20	20
COST PER YEAR (\$MM/REACH)	0	0	0	0	0	0	0	0

Capital Cost, \$/LF (1993 DOLLARS)

[illegible]

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

		Alternative 2 Summary							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/yr	102.92	102.92	102.92	102.92	102.92	102.92	102.92	102.92
Reach Length	lf	3500	11800	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	360,217	1,193,861	452,844	370,509	380,801	509,449	674,120	164,670
Present Value Capital/Reach	\$	2,558,554	473,104	24,548	1,746,816	1,142,218	2,754,118	1,272,247	1,202,621
Present Value Alternative	\$	2,918,770	1,666,965	477,392	2,117,124	1,523,019	3,263,567	1,946,367	1,367,291
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)									
YEAR	F1	F2	F3	F4	F5	F6	F7	F8	
1993	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1994	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1995	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1996	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1997	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1998	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
1999	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2000	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2001	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2002	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2003	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2004	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2005	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2006	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2007	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2008	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2009	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2010	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2011	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2012	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2013	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2014	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2015	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2016	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2017	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2018	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2019	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2020	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2021	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2022	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2023	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2024	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2025	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2026	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2027	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2028	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2029	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2030	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2031	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2032	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2033	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2034	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2035	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2036	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2037	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2038	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2039	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2040	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2041	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2042	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2043	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

Alternative 2									
DISCOUNT RATE:	3 %								
PERIOD	20 YEARS								
		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST	(\$MM/REACH)	3.4395	0.638	0.033	2.348	1.5355	3.7024	1.7103	1.6167
PROJECT YEARS		20	20	20	20	20	20	20	20
COST PER YEAR	(\$MM/REACH)	0.171975	0.0318	0.00165	0.1174	0.076775	0.18512	0.085515	0.080835
Analysis									
Capital Cost, \$/LF (1993 DOLLARS)									
YEAR	F1	F2	F3	F4	F5	F6	F7	F8	
1993	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
1994	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
1995	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
1996	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
1997	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
1998	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
1999	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2000	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2001	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2002	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2003	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2004	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2005	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2006	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2007	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2008	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2009	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2010	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2011	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	
2012	0.172	0.032	0.002	0.117	0.077	0.185	0.086	0.081	

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

		Alternative 3 Summary							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	25.73	102.92	102.92	25.73	102.92	102.92	102.92	0.00
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	90,054	1,193,881	452,844	92,627	380,801	509,449	674,120	0
Present Value Capital/Reach	\$	666,883	6,723,019	1,770,568	1,159,699	4,831,906	5,073,219	4,680,974	0
Present Value Alternative	\$	756,937	7,916,880	2,223,412	1,252,328	5,212,707	5,582,668	5,355,094	0
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)									
YEAR	F1	F2	F3	F4	F5	F6	F7	F8	
1993	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
1994	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
1995	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
1996	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
1997	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
1998	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
1999	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2000	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2001	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2002	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2003	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2004	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2005	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2006	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2007	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2008	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2009	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2010	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2011	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2012	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2013	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2014	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2015	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2016	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2017	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2018	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2019	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2020	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2021	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2022	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2023	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2024	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2025	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2026	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2027	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2028	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2029	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2030	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2031	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2032	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2033	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2034	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2035	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2036	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2037	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2038	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2039	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2040	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2041	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2042	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	
2043	1.00	4.00	4.00	1.00	4.00	4.00	4.00	0.00	

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

Alternative 3	
DISCOUNT RATE:	3 %
PERIOD	20 YEARS

		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST (\$MM/REACH)		0.8965	9.03785	2.3802	1.559	6.4956	6.82	6.2927	0
PROJECT YEARS		20	20	20	20	20	20	20	20
COST PER YEAR (\$MM/REACH)		0.044825	0.4518925	0.11901	0.07795	0.32478	0.341	0.314635	0

Analysis

Capital Cost, \$/LF (1993 DOLLARS)

YEAR	F1	F2	F3	F4	F5	F6	F7	F8
1993	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
1994	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
1995	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
1996	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
1997	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
1998	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
1999	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2000	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2001	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2002	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2003	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2004	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2005	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2006	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2007	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2008	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2009	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2010	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2011	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000
2012	0.045	0.452	0.119	0.078	0.325	0.341	0.315	0.000

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

		Alternative 4 Summary							
		F1	F2	F3	F4	F5	F6	F7	F8
Present Value O & M	\$/lf	25.73	77.19	77.19	51.46	102.92	0.00	102.92	0.00
Reach Length	lf	3500	11600	4400	3600	3700	4950	6550	1600
Present Value O & M	\$	90,054	895,396	339,633	185,254	380,801	0	674,120	0
Present Value Capital/Reach	\$	728,624	5,743,412	3,682,239	1,701,983	2,984,347	0	4,294,904	0
Present Value Alternative	\$	818,679	6,638,808	4,001,872	1,887,237	3,365,148	0	4,969,024	0
DISCOUNT RATE:	3 %	ASSUMED							
PERIOD	50 YEARS								

Operation And Maintenance (O & M) Cost, \$/LF (1993 DOLLARS)								
YEAR	F1	F2	F3	F4	F5	F6	F7	F8
1993	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1994	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1995	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1996	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1997	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1998	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
1999	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2000	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2001	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2002	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2003	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2004	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2005	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2006	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2007	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2008	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2009	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2010	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2011	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2012	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2013	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2014	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2015	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2016	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2017	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2018	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2019	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2020	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2021	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2022	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2023	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2024	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2025	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2026	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2027	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2028	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2029	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2030	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2031	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2032	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2033	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2034	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2035	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2036	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2037	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2038	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2039	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2040	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2041	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00
2042	1.00	3.00	3.00	2.00	4.00	0.00	4.00	0.00

TABLE 6.3 - 37 (cont)
PRESENT VALUE ANALYSIS
SCENARIO 2 - 20 YEAR CAPITAL COST EXPENDITURE

		Alternative 4							
DISCOUNT RATE:	3 %								
PERIOD	20 YEARS								
		F1	F2	F3	F4	F5	F6	F7	F8
CAPITAL COST (\$MM/REACH)		0.9795	7.72095	4.9232	2.288	4.0119	0	5.7737	0
PROJECT YEARS		20	20	20	20	20	20	20	20
COST PER YEAR Analysis (\$MM/REACH)		0.048975	0.3860475	0.24616	0.1144	0.200595	0	0.288685	0
Capital Cost, \$/LF (1993 DOLLARS)									
YEAR		F1	F2	F3	F4	F5	F6	F7	F8
1993		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1994		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1995		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1996		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1997		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1998		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
1999		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2000		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2001		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2002		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2003		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2004		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2005		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2006		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2007		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2008		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2009		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2010		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2011		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000
2012		0.049	0.386	0.246	0.114	0.201	0.000	0.289	0.000