LETTER OF MAP REVISION REQUEST FOR SKUNK CREEK

PHOENIX, ARIZONA
(Additional Data)

Prepared For:

CITY OF PHOENIX

December 15, 2004

Prepared By:

Shaw™ EMCON/OWT, Inc.
305 S. Euclid Avenue, Suite 101
Tucson, Arizona 85719
(520) 792-2800

Project 844905

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2801 W. Durango
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City of Phoenix

December 15, 2004

Sacha Tohme, CFM
Michael Baker Jr., Inc.
3601 Eisenhower Avenue
Suite 600
Alexandria, Virginia 22304-6425

IN REPLY TO:
Case No.: 03-09-0661P
Community: City of Phoenix, AZ
Community No.: 040051

316-ACK.FRQ

Dear Mr. Tohme:

This is a response to your request, dated September 16, 2004, requesting additional data to complete the review of the above-mentioned request to issue a revision to the Flood Insurance Rate Map (FIRM) for Maricopa County, Arizona and Incorporated Areas. Pertinent information about the request is listed below.

Identifier:	Skunk Creek Delineation from I-17 to Adobe Dam
Flooding Source:	Skunk Creek
FIRM Panel(s) Affected:	04013C1185 G and 1205 F

The following discussions are responses to your review comments in your letter dated September 16, 2004.

ITEM

FEMA Comment No. 1:

Our comparison of the revised conditions HEC-2 hydraulic model for Skunk Creek to the submitted topographic work map entitled "North Area Topography – January 2003 – Skunk Creek Landfill" prepared by EMCON/OWT, Inc., dated January 2003, revealed that the revised conditions HEC-2 model did not reflect the existing topography shown on the aforementioned plans from Station 10.41 to Station 11.03. Our detailed review of the HEC-2 model for Skunk Creek also revealed that only the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) was restudied based on revised conditions. In addition to the based flood, the effective hydraulic model for Skunk Creek includes the flood having a 10-, 2-, and 0.2-percent chance of being equaled or exceeded in any given year. Please submit a revised hydraulic model for Skunk Creek along with a topographic work map, certified by a registered professional engineer, that

shows the boundary delineations along Skunk Creek of the area that would be inundated by the 0.2-percent-annual-chance flood. The revised hydraulic model for Skunk Creek should include:

a. The existing topography, from Station 10.4 to Station 11.3, and

b. The study of the 10-, 2-, and 0.2-percent-annual-chance floods for the entire area of revision.

Response:

The Skunk Creek Landfill is a currently operating landfill and elevations of currently open landfill cells are continuously changing. Our previous response included a topographic map from survey data collected in April 2003. A more recent topographic map, from survey data collected in March 2004 is available; however, elevations in the area being questioned are still below the base flood elevation. As discussed on a June 8, 2004 teleconference with FEMA, we have evaluated the approximate point in time at which the land surface elevation in the landfill will be above the base flood elevation. Based on current waste acceptance rates at the landfill, this will occur in late 2005 or early 2006. The landfill is projected to close in 2006, with ground surface elevations above the top of the soil-cement bank protection. Since the time frame to achieve ground surface elevations above the base flood elevation is over one year away, the City is temporarily withdrawing its request to have these areas removed from the regulatory floodplain area. It should be noted that the entire base flood is contained within the limits of the existing soil-cement bank protection, so no change has been made to the hydraulic model. However, the areas behind the bank protection which are below the base flood elevation are so indicated on the attached revised topographic work map. It should also be noted that, since this condition does not affect the hydraulics of the modeled flow in Skunk Creek, at such time as actual ground surface elevations are above the top of the soil-cement bank protection, the City intends to submit for a Letter of Map Revision by fill, with no revisions to the effective hydraulic model.

In addition, as requested by FEMA, the previously estimated flow rates for the 10-, 2-, and 0.2-percent-annual-chance floods have been modeled for the entire area of revision. As discussed on our June 8, 2004 teleconference, where the 0.2-percent-annual-chance flood elevation exceeded the limits of the available topography, the modeled flow was constrained by the limits of topography (which is a conservative assumption) and the modeled flood elevation was tied to the effective model floodplain elevations.

FEMA Comment No. 2:

Our detailed review of the aforementioned plans and topographic work map entitled "Skunk Creek, Revised Work Study Map, LOMR" (Revised Work Study Map), prepared by EMCON/OWT, Inc., dated October 2003, revealed that the elevations of the Skunk Creek Landfill Cell 6 – Phases II and III, and the elevations of the areas located between two successive landfill cells are lower than the Base Flood Elevations (BFEs) for Skunk Creek. The submitted report entitled "Letter of Map Revision Request for Skunk Creek (additional data)," prepared by the City of Phoenix, dated October 17, 2003, specifies that the Skunk Creek bank protection and the parapet concrete walls built on top of the bank protection will not comply with the requirements of Section 65.10 of the National

Flood Insurance Program (NFIP) regulations. Therefore, please provide a topographic work map, certified by a registered professional engineer, that shows the boundary delineations of the Special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, for the areas behind the bank protection and parapet walls.

Response:
As discussed in our response to FEMA Comment No. 1, the City of Phoenix is temporarily withdrawing its request to remove the entire area behind the soil-cement bank protection from the regulatory floodplain. The area behind the soil-cement bank protection that is below the base flood elevation is depicted as regulatory floodplain on the revised topographic work study map. It should be noted that the City intends to submit a LOMR request for this area based on fill (i.e., no revisions to the effective hydraulic model) at such time as landfilling in this area brings the land surface elevation above the top of the soil-cement bank protection.

FEMA Comment No. 3:
Our detailed review revealed that the area west of the proposed floodway delineation for Skunk Creek, between Station 9.45 and Station 9.65, would act as an ineffective flow area, so the ineffective flow area option in the HEC-2 model for Skunk Creek should be used to delineate the SFHA at this location. Please revise the HEC-2 model for Skunk Creek to use the ineffective flow area option between Station 9.45 and Station 9.65. In addition, the scale and topographic definition of the submitted Revised Work Study Map is not sufficient to provide reasonable accuracy for the area described above, and no topographic information was submitted for the areas west of the Skunk Creek right bank protection between Station 9.16 and Station 9.65. Our concern is that the elevations of the areas west of the Skunk Creek right bank protection would be lower than the corresponding BFEs for Skunk Creek. Please provide an electronic version of the submitted topographic work map, along with topographic information for the area west of the Skunk Creek right bank protection between Station 9.16 and Station 9.65.

Response:
As discussed in our June 8, 2004 teleconference, the hydraulic modeling conducted for this reach of Skunk Creek utilized the ET card with Method 1 to specify areas outside of the modeled flow area which allow neither flow or storage. These limits were set at the "Limit of Detailed Study" line on the topographic work map. As a verification, the hydraulic model was revised to model ineffective flow areas on the right side of the model at the affected cross-sections using the X3 card. No change to predicted water surface elevations resulted. Model data for the run using the ineffective flow option is attached.

As discussed previously, the City of Phoenix performed additional surveys in the area west of the Skunk Creek bank protection between Pinnacle Peak Road (approximately Station 9.16) and Alameda Road (north of Station 9.65), in order to close the topography above the predicted base flood elevation. The topographic work study map was revised to include this additional information, and a hard-copy of this revised topographic work study map, sealed by a registered professional engineer, is attached along with an

electronic copy in AutoCAD 2004 format. The information shown on the hard-copy map contains a portion of the spot elevations provided by the City of Phoenix surveyor. Additional spot elevations in this area which were used in developing the depicted contours are included in the electronic copy. The City of Phoenix surveyor collected survey data from available locations; however, portions of this area are in private property so a gridded topographic survey could not be performed. The surveyed points included centerline and edge of pavement of affected streets (including Soft Wind Drive, Alameda Road, and 35th Drive), property corners, building corners, and finished floor elevations.

To supplement the survey data, EMCON/OWT, Inc. personnel visited the site to observe the presence and measure heights of curbs and retaining walls which could affect the location of the base floodplain delineation. Curbs were noted along the south side of Soft Wind Drive and both sides of Alameda Road with a curb height of 5.5 inches above the surveyed gutter elevations. In addition, a retaining wall was noted on the south side of Soft Wind Drive, with a height ranging from 64 inches at the east end to 6 inches at the west end. The lot south of this wall is graded at the approximate elevation of the top of the retaining wall, as shown on the attached photograph. Since both the retaining wall and the curbs have soil retained behind them at the approximate elevation of the top of these structures, these structures may serve to define the floodplain limit in certain locations. Ponded water in gutters/streets adjacent to curbs which define the floodplain limit would have a depth of less than 0.5 feet and may be indistinguishable from local street drainage. Approximate structure elevations were determined by adding the measured height to the surveyed elevations. These elevations are noted on the revised topographic work study map as approximate elevations rounded to the nearest 0.1 foot.

FEMA Comment No. 4:

From the submitted information, it is not clear how the left (looking downstream) boundary of the revised regulatory floodway for Skunk Creek, as shown on the submitted Revised Work Study Map, was delineated from Station 9.16 to Station 9.30. From Station 9.16 to Station 9.22, the floodway between the rockwall and the left boundary has been delineated along a split-flow area, and no encroachment analysis has been modeled. Please revise the floodway analysis model for Skunk Creek between Station 9.16 and 9.30, without causing a negative surcharge or a surcharge of more than 1.0 foot, and revise the Revised Work Study Map to show a smooth floodway delineation between Station 9.16 and Station 9.30.

Response:

The floodway delineation for the area in question was determined by manually adjusting the encroachment stations using the ET card in the HEC-2 model until an encroached model demonstrating no surcharging of greater than 1.0 feet in water surface elevation was achieved. Since the revised base flood hydraulic model includes a flow split in the area in question, which would be eliminated if the left bank were encroached upon, an automated solution to the encroachment delineation using HEC-2 was not possible. The Pinnacle Peak Road bridge, as well as the channel section between the drop structure and the bridge, and the channel section below the bridge have capacity to carry the entire base

flood flow rate within the banks of the channel. The encroachment line depicted on the Revised Work Study Map represents the mathematical position of the modeled encroachment run. However, based on the conversation on our June 8, 2004 teleconference, the floodway limit line was smoothed and extended to Station 9.16, maintaining the depicted floodway limit outside the modeled floodway limit. No change has been made to the encroachment modeling presented earlier.

FEMA Comment No. 5:

The above-referenced report specifies that the base flood from the split flow would overtop Pinnacle Peak Road and then flow south to Paseo Highlands Park, but no as-built elevations for Pinnacle Peak Road were provided. In addition, without the as-built elevations of 35th Avenue, it is not clear how much flow would spill back into the main channel between Pinnacle Peak Road and Parkside Lane. Please provide a topographic work map, certified by a registered professional engineer, with the as-built elevations of Pinnacle Peak Road and of 35th Avenue between Pinnacle Peak Road and Parkside Lane.

Response:

The elevations depicted on the Revised Work Study Map were determined by an aerial topographic mapping including the area of the Skunk Creek channel, Skunk Creek Landfill, and affected roadways (including Pinnacle Peak Road and 35th Avenue). Therefore, the elevations depicted on the Revised Work Study Map along these roadways depict existing (i.e., already built) conditions as of the date of the aerial survey. As discussed in our June 8, 2004 teleconference and mentioned earlier in this letter, an electronic copy of the Revised Work Study Map (including topographic information) is attached to allow FEMA to review the topography in this area at a greater level of detail.

Should you have further questions in this regard, please do not hesitate to contact Mr. Garth Bowers, P.E., EMCON/OWT, Inc., 305 S. Euclid Avenue, Suite 101, Tucson, Arizona 85719-6649, Telephone (520) 792-2800. If you have any other questions, please contact this office at (602)-262-4960.

Sincerely,

Hasan Mushtaq, Ph.D., P.E., CFM
Floodplain Manager

attachments: Revised Topographic Work Study Maps (4 sheets)
HEC-2 Input and Output Files (10-, 2, and 0.2 % annual chance floods)
Additional Model Run Input/Output Files (X3 Card Option)
Photo Log
City of Phoenix Surveyor Data Sheets
Electronic Copy of HEC-2 and AutoCAD Files

Cc: Garth Bowers, P.E.
EMCON/OWT, Inc.

Tim Murphy, P.E., CFM
Flood Control District of Maricopa County

Brian Cosson, ADWR
NFIP Coordinator

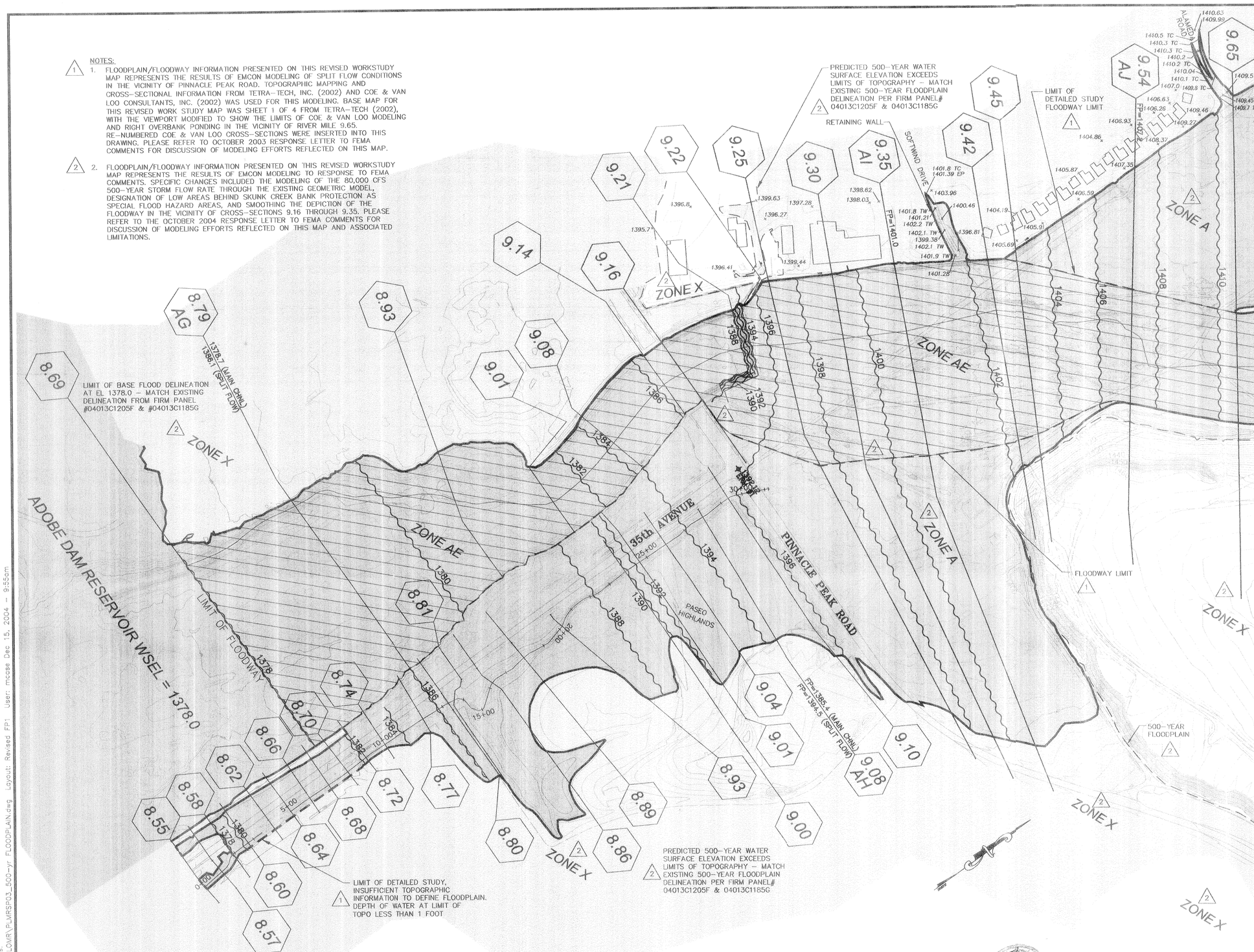
REVISED TOPOGRAPHIC WORK STUDY MAPS

(4 SHEETS)

NOTES:

1. FLOODPLAIN/FLOODWAY INFORMATION PRESENTED ON THIS REVISED WORKSTUDY MAP REPRESENTS THE RESULTS OF EMCON MODELING OF SPLIT FLOW CONDITIONS IN THE VICINITY OF PINNACLE PEAK ROAD. TOPOGRAPHIC MAPPING AND CROSS-SECTIONAL INFORMATION FROM TETRA-TECH, INC. (2002) AND COE & VAN LOO CONSULTANTS, INC. (2002) WAS USED FOR THIS MODELING. BASE MAP FOR THIS REVISED WORK STUDY MAP WAS SHEET 1 OF 4 FROM TETRA-TECH (2002), WITH THE VIEWPORT MODIFIED TO SHOW THE LIMITS OF COE & VAN LOO MODELING AND RIGHT OVERBANK PONDING IN THE VICINITY OF RIVER MILE 9.65. RE-NUMBERED COE & VAN LOO CROSS-SECTIONS WERE INSERTED INTO THIS DRAWING. PLEASE REFER TO OCTOBER 2003 RESPONSE LETTER TO FEMA COMMENTS FOR DISCUSSION OF MODELING EFFORTS REFLECTED ON THIS MAP.

2. FLOODPLAIN/FLOODWAY INFORMATION PRESENTED ON THIS REVISED WORKSTUDY MAP REPRESENTS THE RESULTS OF EMCON MODELING TO RESPONSE TO FEMA COMMENTS. SPECIFIC CHANGES INCLUDED THE MODELING OF THE 80,000 CFS 500-YEAR STORM FLOW RATE THROUGH THE EXISTING GEOMETRIC MODEL, DESIGNATION OF LOW AREAS BEHIND SKUNK CREEK BANK PROTECTION AS SPECIAL FLOOD HAZARD AREAS, AND SMOOTHING THE DEPICTION OF THE FLOODWAY IN THE VICINITY OF CROSS-SECTIONS 9.16 THROUGH 9.35. PLEASE REFER TO THE OCTOBER 2004 RESPONSE LETTER TO FEMA COMMENTS FOR DISCUSSION OF MODELING EFFORTS REFLECTED ON THIS MAP AND ASSOCIATED LIMITATIONS.



1. TOPOGRAPHY NOTE: PASEO HIGHLANDS PARK TOPOGRAPHY PROVIDED BY EEC. EMCON/OWT, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CONTROL SURVEY OR THE BASE TOPOGRAPHIC MAPPING.

THE BASE TOPOGRAPHIC MAPPING USED TO CONDUCT THIS FLOODPLAIN DELINEATION STUDY WAS PREPARED BY M & B AERIAL MAPPING COMPANY, INC. THIS MAPPING IS BASED ON AERIAL PHOTOGRAPHY TAKEN FEB 11, 2000 AND JAN 24, 2001. PROJECT CONTROL WAS PROVIDED BY MORRISON-MAIERLE, INC. TETRA TECH, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CONTROL SURVEY OR THE BASE TOPOGRAPHIC MAPPING.

2. TOPOGRAPHY NOTE: CITY OF PHOENIX SURVEYOR PROVIDED HORIZONTAL AND VERTICAL COORDINATES FOR POINTS WEST OF THE SKUNK CREEK CHANNEL BETWEEN CROSS-SECTION 9.16 AND 9.80. THIS COORDINATE DATA WAS USED TO EXTEND THE TOPOGRAPHY IN THESE AREAS. EMCON/OWT INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS SURVEY. PLEASE REFER TO DECEMBER 2004 RESPONSE TO FEMA FOR DISCUSSION OF METHODOLOGY AND LIMITATIONS OF TOPOGRAPHY EXTENSION.

200 0 200 400

SCALE: 1"= 200 FEET

CONTOUR INTERVAL = 2 FEET

LEGEND

- 100-YR FLOODPLAIN BOUNDARY (1)
- 100-YR FLOODPLAIN BOUNDARY (1)
- HYDRAULIC BASE LINE
- CROSS SECTION (0.10 A) FP= 1483.6
- ELEVATION REFERENCE MARK — ERM XXX
- BASE FLOOD ELEVATION (1) — 1462
- SFH ZONE DESIGNATION — ZONE AE
- FLOODWAY LIMIT (1)
- FLOODWAY
- 100-YR FLOODPLAIN (2)
- 500-YR FLOODPLAIN

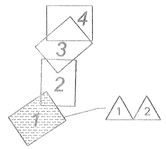
ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION
ERM #1	1392.12	FOUND BRASS CAP IN HANDHOLE IN INTERSECTION OF 35TH AVENUE AND PINNACLE PEAK ROAD. N: 981,636.31 E: 433,844.66

FOR CONTINUATION SEE SHEET 2

KEY MAP



NO.	REVISION	BY	DATE
2	SEE NOTE 2	JR/GB	12/04
1	SEE NOTE 1	DS/GB	10/03

CITY OF PHOENIX
MARICOPA COUNTY, ARIZONA

SKUNK CREEK
REVISED WORK STUDY MAP
LETTER OF MAP REVISION

Shaw EMCON/OWT, Inc.

(1) ORIGINAL WORK STUDY MAP SEALED BY PEDRO A. CALZA AZ PE No. 30493 OF TETRA-TECH, INC.

TETRA TECH, INC.
INFRASTRUCTURE SOUTHWEST GROUP
4801 East Washington Street, Suite 260, Phoenix, AZ 85034
(602) 682-3300 FAX (602) 244-1164

	BY	DATE
DESIGN	LML	09/2002
DESIGN CHK.	PAC	09/2002
PLANS	LML	09/2002
PLANS CHK.	PAC	09/2002

SHEET 1 OF 4

XREF Files: XLMRBW01
XLMRCE02
XLMRCE03 IMAGE Files:
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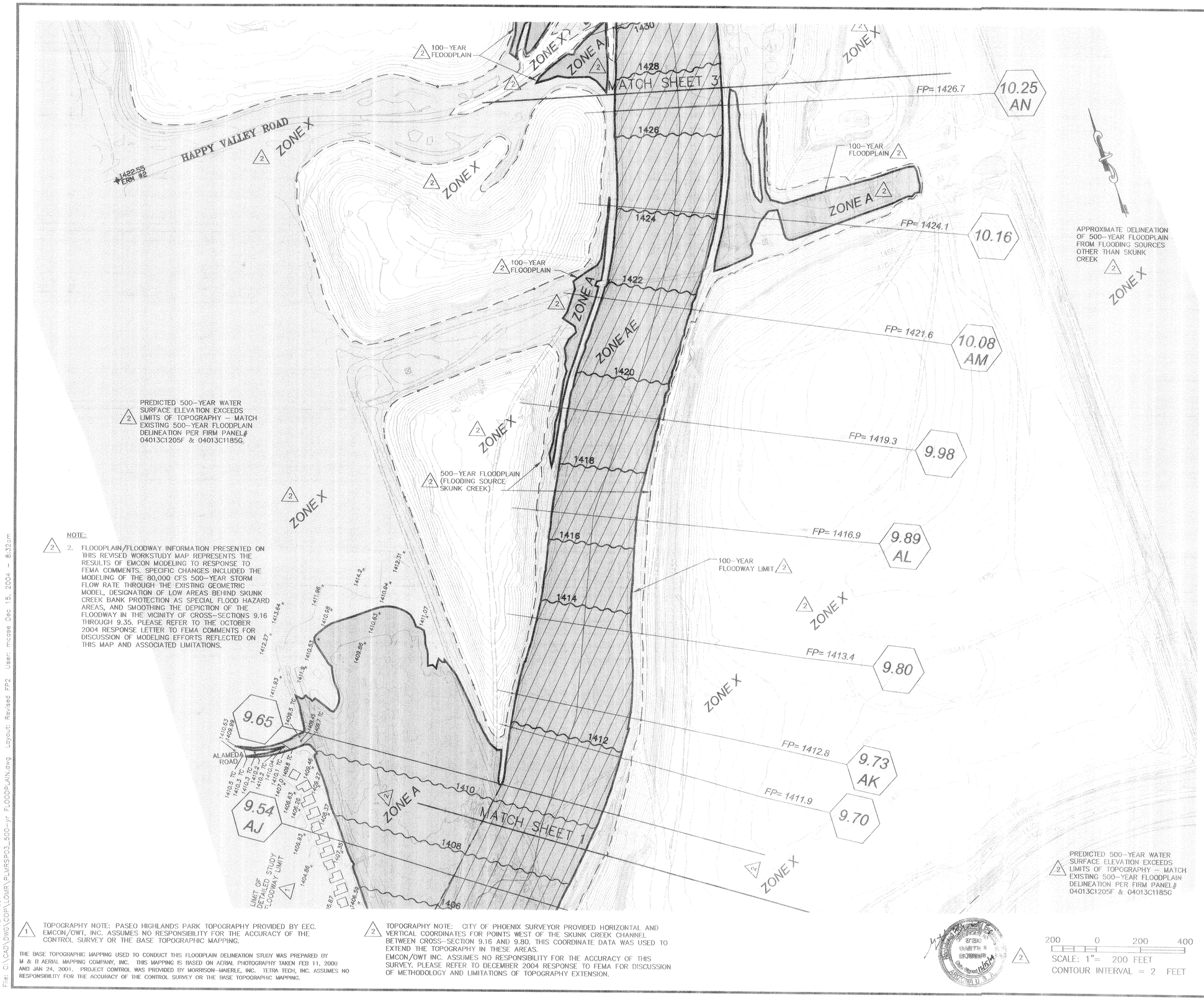

NOTE:

2. FLOODPLAIN/FLOODWAY INFORMATION PRESENTED ON THIS REVISED WORKSTUDY MAP REPRESENTS THE RESULTS OF EMCON MODELING TO RESPONSE TO FEMA COMMENTS. SPECIFIC CHANGES INCLUDED THE MODELING OF THE 80,000 CFS 500-YEAR STORM FLOW RATE THROUGH THE EXISTING GEOMETRIC MODEL, DESIGNATION OF LOW AREAS BEHIND SKUNK CREEK BANK PROTECTION AS SPECIAL FLOOD HAZARD AREAS, AND SMOOTHING THE DEPICTION OF THE FLOODWAY IN THE VICINITY OF CROSS-SECTIONS 9.16 THROUGH 9.35. PLEASE REFER TO THE OCTOBER 2004 RESPONSE LETTER TO FEMA COMMENTS FOR DISCUSSION OF MODELING EFFORTS REFLECTED ON THIS MAP AND ASSOCIATED LIMITATIONS.

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200 0 200 400
SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET

LEGEND

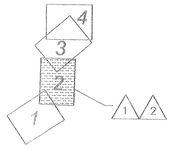
100-YR FLOODPLAIN BOUNDARY
500-YR FLOODPLAIN BOUNDARY
HYDRAULIC BASE LINE
CROSS SECTION — 0.10 A — FP= 1483.6
ELEVATION REFERENCE MARK — ERM XXX
BASE FLOOD ELEVATION — 1462
SFH ZONE DESIGNATION — ZONE AE
FLOODWAY LIMIT
FLOODWAY
100-YR FLOODPLAIN
500-YR FLOODPLAIN

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION
ERM #2	1422.55	FOUND BRASS CAP IN HANDHOLE IN INTERSECTION OF 35TH AVENUE AND HAPPY VALLEY ROAD. N: 986,915.82 E: 433,818.21

KEY MAP



NO.	REVISION	BY	DATE
2	See Note 2	JR/GB	12/04
1	Added Zone AH backwater near River-mile 9.65	DS/GB	10/03

CITY OF PHOENIX
MARICOPA COUNTY, ARIZONA

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	BY	DATE
DESIGN	LML	09/2002
DESIGN CHK.	PAC	09/2002
PLANS	LML	09/2002
PLANS CHK.	PAC	09/2002

SHEET 2 OF 4

XREF Files: XLMRBM01 XLMRDE02 XLMRDE03 IMAGE Files:
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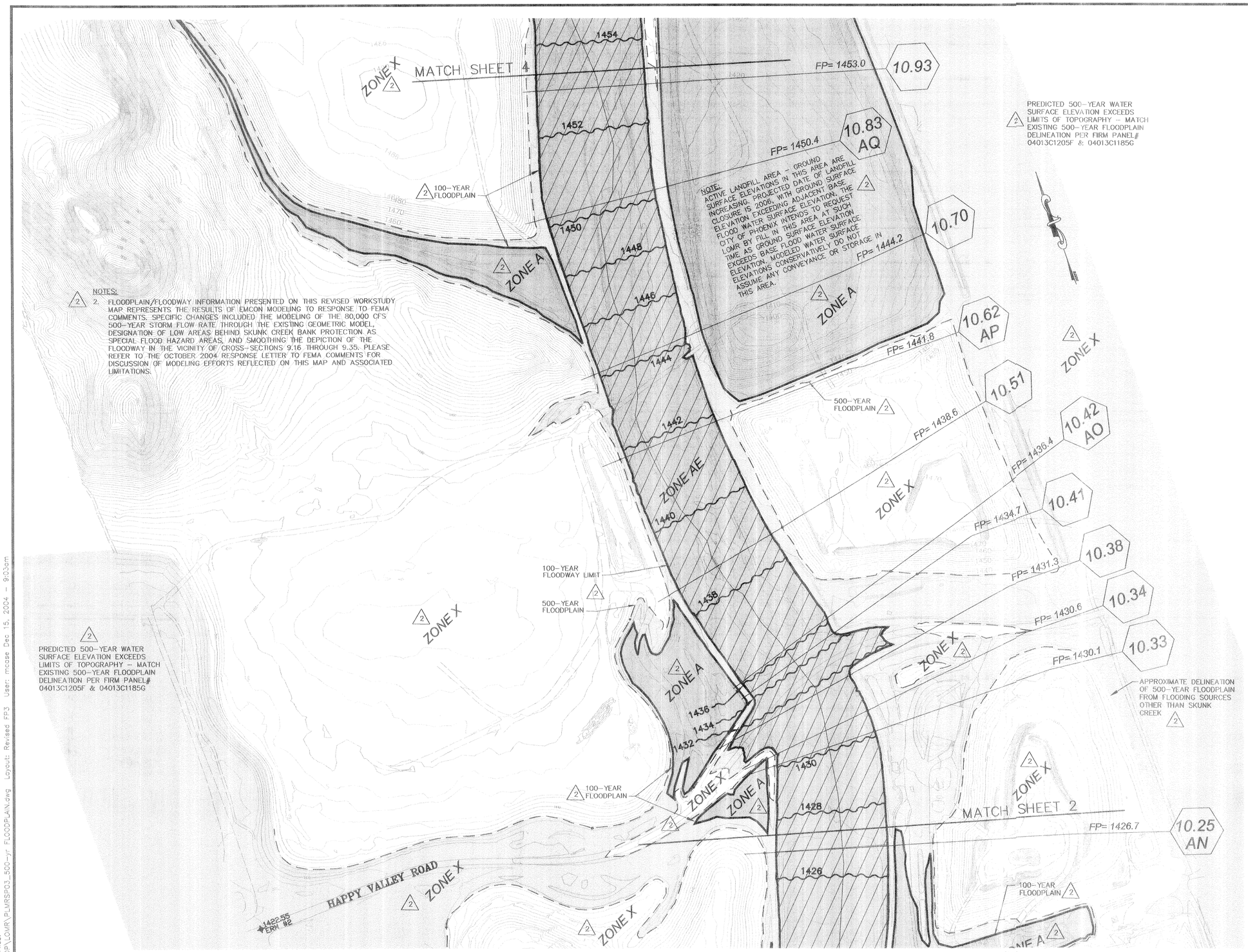

LEGEND

- 100-YR FLOODPLAIN BOUNDARY
- 500-YR FLOODPLAIN BOUNDARY
- HYDRAULIC BASE LINE
- CROSS SECTION — 0.10 A — FP= 1483.6
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- BASE FLOOD ELEVATION — 1462
- SFH ZONE DESIGNATION — ZONE AE
- FLOODWAY LIMIT
- FLOODWAY
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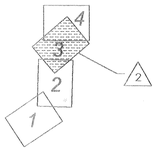

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1	NO REVISION	JR/GB	10/03

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MARICOPA COUNTY, ARIZONA

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	BY	DATE
DESIGN	LML	09/2002
DESIGN CHK.	PAC	09/2002
PLANS	LML	09/2002
PLANS CHK.	PAC	09/2002

SHEET 3 OF 4

TOPOGRAPHY NOTE: PASEO HIGHLANDS PARK TOPOGRAPHY PROVIDED BY EEC. EMCON/OWT, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CONTROL SURVEY OR THE BASE TOPOGRAPHIC MAPPING.

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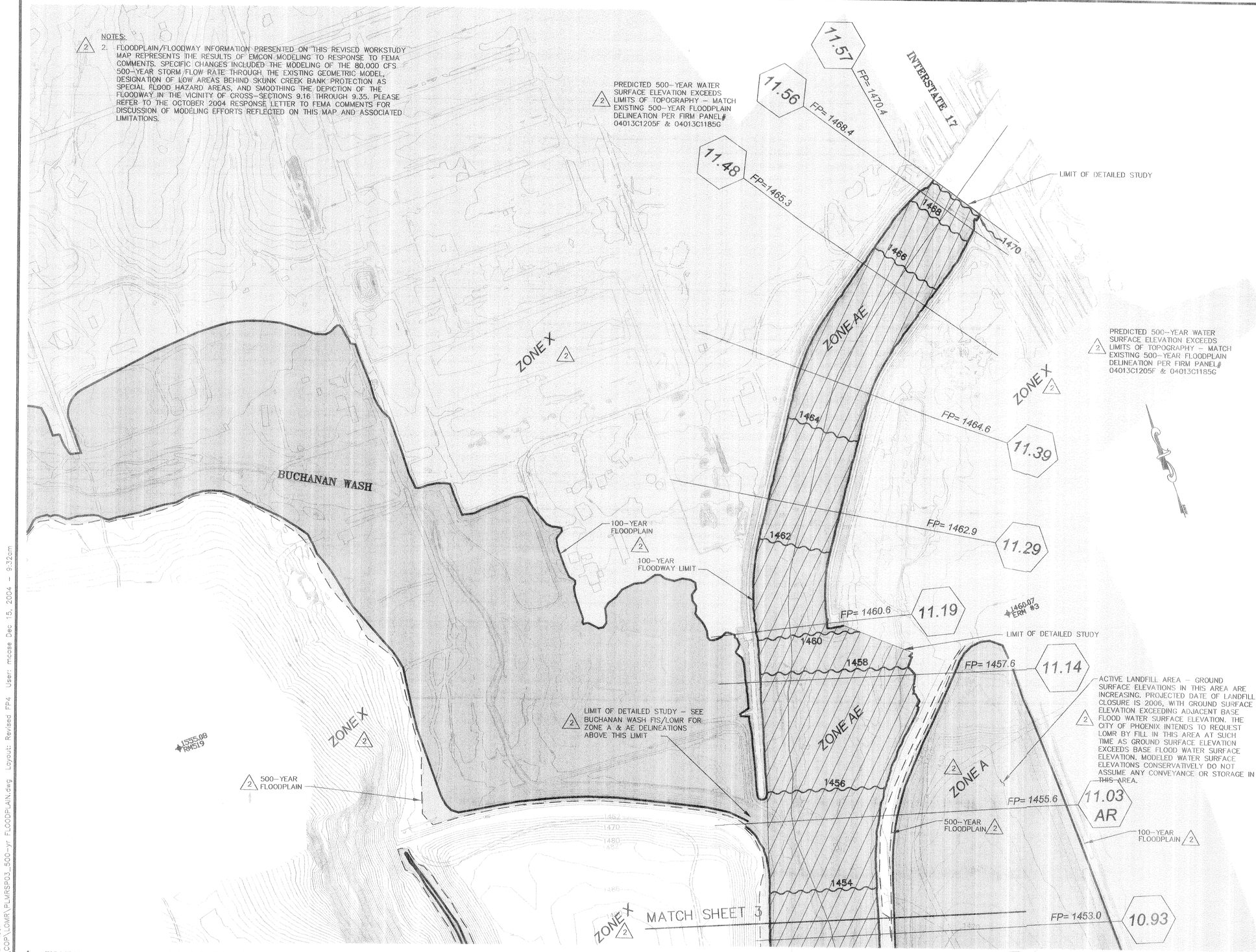
200 0 200 400
SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET

XREF Files: XLMRBM01
XLMRDE02
XLMRDE03 IMAGE Files:
File: C:\CAD\DWG\COP\LOMR\PLMRSP03_500-yr FLOODPLAIN.dwg Layout: Revised FP3 User: mcase Dec 15, 2004 - 9:03am

NOTES:

2. FLOODPLAIN/FLOODWAY INFORMATION PRESENTED ON THIS REVISED WORKSTUDY MAP REPRESENTS THE RESULTS OF EMCON MODELING TO RESPONSE TO FEMA COMMENTS. SPECIFIC CHANGES INCLUDED THE MODELING OF THE 80,000 CFS 500-YEAR STORM/FLOW RATE THROUGH THE EXISTING GEOMETRIC MODEL, DESIGNATION OF LOW AREAS BEHIND SKUNK CREEK BANK PROTECTION AS SPECIAL FLOOD HAZARD AREAS, AND SMOOTHING THE DEPICTION OF THE FLOODWAY IN THE VICINITY OF CROSS-SECTIONS 9.16 THROUGH 9.35. PLEASE REFER TO THE OCTOBER 2004 RESPONSE LETTER TO FEMA COMMENTS FOR DISCUSSION OF MODELING EFFORTS REFLECTED ON THIS MAP AND ASSOCIATED LIMITATIONS.



TOPOGRAPHY NOTE: PASEO HIGHLANDS PARK TOPOGRAPHY PROVIDED BY EEC. EMCON/OWT, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CONTROL SURVEY OR THE BASE TOPOGRAPHIC MAPPING.

THE BASE TOPOGRAPHIC MAPPING USED TO CONDUCT THIS FLOODPLAIN DELINEATION STUDY WAS PREPARED BY M & B AERIAL MAPPING COMPANY, INC. THIS MAPPING IS BASED ON AERIAL PHOTOGRAPHY TAKEN FEB 11, 2000 AND JAN 24, 2001. PROJECT CONTROL WAS PROVIDED BY MORRISON-MAIERLE, INC. TETRA TECH, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CONTROL SURVEY OR THE BASE TOPOGRAPHIC MAPPING.

TOPOGRAPHY NOTE: CITY OF PHOENIX SURVEYOR PROVIDED HORIZONTAL AND VERTICAL COORDINATES FOR POINTS WEST OF THE SKUNK CREEK CHANNEL BETWEEN CROSS-SECTION 9.16 AND 9.80. THIS COORDINATE DATA WAS USED TO EXTEND THE TOPOGRAPHY IN THESE AREAS.
EMCON/OWT INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS SURVEY. PLEASE REFER TO DECEMBER 2004 RESPONSE TO FEMA FOR DISCUSSION OF METHODOLOGY AND LIMITATIONS OF TOPOGRAPHY EXTENSION.

CERTIFICATE NO. 27290 GARTH A. BOWERS ARIZONA, U.S.A.

200 0 200 400
SCALE: 1"= 200 FEET
CONTOUR INTERVAL = 2 FEET

LEGEND

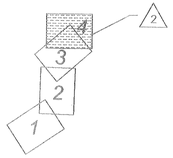
100-YR FLOODPLAIN BOUNDARY
500-YR FLOODPLAIN BOUNDARY
HYDRAULIC BASE LINE
CROSS SECTION — 0.10 A — FP= 1483.6
ELEVATION REFERENCE MARK — ERM XXX
BASE FLOOD ELEVATION — 1462
SFH ZONE DESIGNATION — ZONE AE
FLOODWAY LIMIT
FLOODWAY
100-YR FLOODPLAIN
500-YR FLOODPLAIN

ELEVATION REFERENCE MARKS

NOTE: ALL ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

I.D. NUMBER	ELEVATION (FT)	DESCRIPTION/LOCATION
RM519	1555.08	FOUND STONE AT THE SE CORNER OF SEC. 34, T5N R2E. N: 991,520.42 E: 434,056.21
ERM #3	1460.07	BC NORTH END OF LEVEE N: 990,864.33 E: 437,624.80

KEY MAP



NO.	REVISION	BY	DATE
2	SEE NOTE 2	JR/GB	12/04
1	NO REVISION	JR/GB	10/03

CITY OF PHOENIX
MARICOPA COUNTY, ARIZONA

SKUNK CREEK
REVISED WORK STUDY MAP
LETTER OF MAP REVISION

Shaw EMCON/OWT, Inc.

TETRA TECH, INC.
INFRASTRUCTURE SOUTHWEST GROUP
6001 East Washington Street, Suite 200, Phoenix, AZ 85034
(602) 682-3900 FAX (602) 244-1164

ORIGINAL WORK STUDY MAP SEALED BY PEDRO A. CALZA AZ PE No. 30493 OF TETRA-TECH, INC.

	BY	DATE
DESIGN	LML	09/2002
DESIGN CHK.	PAC	09/2002
PLANS	LML	09/2002
PLANS CHK.	PAC	09/2002

SHEET 4 OF 4

XREF Files: XLMRBM01
XLMRBE02
XLMRBE03 IMAGE Files:
File: C:\CAD\DWG\COP\LOMR\PLMRSP03_500-yr FLOODPLAIN.dwg Layout: Revised FP4 User: mcase Dec 15, 2004 - 8:32am

HEC-2 INPUT AND OUTPUT FILES

(10, 2, and 0.2% annual chance floods)

10% Annual Chance Flood

Main Channel

Input File: main10.dat

```
T1     MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2     INPUT FILE: main10.dat        10-YR FLOOD ELEVATION
T3     ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4     October 2003 EMCON/OWT Inc. rev. for add'l ret. int. August 2004
*
*      This model is used to determine the main channel Base Floodplain
*      Extended x-section data used for stationing 9.21 - 9.35 (rockwall removed)
*      Split flowrates are applied from bkt10.dat and are partitioned across
*      relevant cross sections.
*
*      Starting WSEL is Adobe Dam reservoir 100-yr WSEL from effective FIS study.
*      Boundary conditions were taken from Tetra Tech modeling.
J1      0       2                       0               0       0 1378.00
J2      1       0      -1       0       0              -1       0
J3     38      43       1       2      26       8       4      25      68      53
J3     54
*  10-yr peak discharge is from effective FIS study.
QT      1   11973
*
NC 0.045   0.045   0.035     0.1     0.3
ET           5.1                 3796.61 5556.89
X1  8.69      95 4025.25 5073.77
GR1380.0 3796.61 1380.00 3854.47 1379.00 3861.47 1378.00 3868.42 1378.00 3878.69
GR1378.6 3884.04 1380.00 3896.01 1380.00 3907.92 1379.82 3923.26 1379.91 3925.58
GR1380.0 4002.41 1380.54 4004.61 1382.00 4011.19 1382.00 4016.12 1381.16 4025.25
GR1380.0 4037.88 1379.55 4039.54 1378.00 4045.04 1376.66 4058.92 1376.33 4063.23
GR1376.0 4067.80 1375.66 4071.80 1374.51 4084.66 1374.14 4088.53 1374.00 4090.42
GR1373.8 4091.18 1373.53 4092.99 1372.00 4102.33 1371.23 4129.14 1370.00 4171.62
GR1370.0 4446.38 1370.04 4448.91 1372.00 4550.37 1372.00 4583.65 1371.80 4601.95
GR1371.2 4726.77 1371.45 4741.81 1371.10 4787.06 1371.00 4796.71 1370.54 4837.32
GR1370.6 4872.36 1370.52 4876.45 1370.60 4881.98 1370.60 4882.00 1370.82 4897.47
GR1371.4 4906.65 1371.83 4913.95 1372.00 4917.45 1372.34 4920.12 1374.00 4933.03
GR1374.3 4936.71 1374.00 4958.00 1373.51 4959.38 1372.00 4963.60 1371.80 4964.16
GR1370.0 4969.21 1368.37 4973.77 1368.00 4974.80 1366.00 4980.35 1365.56 4981.39
GR1364.7 4987.21 1364.21 4990.25 1364.00 4992.46 1364.00 5000.00 1364.00 5003.25
GR1365.5 5010.85 1365.78 5012.36 1366.00 5013.46 1366.52 5014.69 1368.00 5018.15
GR1368.3 5018.85 1370.00 5022.82 1370.70 5024.49 1372.00 5027.49 1373.05 5031.15
GR1374.0 5034.40 1375.00 5039.27 1376.00 5044.17 1376.23 5045.52 1377.39 5052.81
GR1378.0 5059.14 1378.78 5065.36 1379.49 5073.77 1379.70 5074.11 1379.26 5077.51
GR1378.7 5079.93 1378.00 5082.02 1378.00 5116.40 1378.13 5146.24 1378.00 5177.10
GR1378.0 5181.33 1377.50 5273.67 1377.18 5375.38 1377.56 5451.37 1377.29 5556.89
*
QT      1   11973
ET           5.1                 3855.70 5475.95
X1  8.79      89 4095.41 5039.30     530     546     539
GR1384.0 3855.70 1384.00 3973.82 1382.64 3980.66 1384.00 3998.09 1382.65 4051.20
GR1382.6 4058.69 1382.49 4060.23 1382.89 4064.63 1384.00 4067.90 1384.00 4095.41
GR1382.2 4107.84 1382.00 4109.37 1380.85 4117.39 1380.00 4123.50 1378.49 4137.14
GR1378.0 4141.55 1376.51 4154.98 1376.00 4159.65 1374.00 4171.01 1373.84 4176.47
GR1372.0 4222.80 1372.00 4265.74 1371.40 4267.19 1370.00 4271.65 1370.02 4277.10
GR1370.5 4303.75 1372.00 4387.79 1372.60 4464.89 1373.01 4509.16 1373.45 4564.23
GR1373.6 4589.91 1374.00 4659.42 1374.00 4677.54 1373.79 4707.25 1374.00 4731.92
GR1375.0 4815.01 1375.48 4838.28 1375.82 4866.71 1375.01 4881.51 1374.70 4887.04
GR1374.0 4898.81 1374.00 4914.20 1376.00 4932.06 1377.09 4941.83 1377.77 4948.33
GR1378.0 4950.51 1378.00 4973.99 1377.74 4974.57 1376.00 4978.35 1375.92 4978.54
GR1375.3 4979.92 1374.00 4982.54 1373.68 4983.19 1372.00 4986.64 1371.40 4987.87
GR1370.0 4990.74 1369.23 4992.31 1368.00 4994.83 1367.12 4996.63 1366.00 4998.93
GR1366.0 5000.00 1367.19 5002.89 1368.00 5004.26 1369.43 5006.66 1370.00 5007.63
GR1371.8 5010.72 1372.00 5011.01 1372.55 5011.93 1374.00 5014.64 1374.46 5015.50
GR1376.0 5018.37 1377.54 5024.62 1378.00 5026.26 1378.19 5027.55 1378.48 5029.47
GR1380.0 5039.30 1380.47 5053.53 1381.00 5070.14 1381.05 5074.82 1381.51 5092.11
GR1381.8 5130.27 1381.56 5144.28 1381.81 5200.42 1381.90 5207.46 1381.92 5219.18
GR1382.0 5303.86 1382.00 5320.81 1381.88 5345.60 1381.56 5475.95
*
QT      1   11942
ET           5.1                 4279.99 5437.79
X1  8.93      71 4541.12 5252.00     565     711     722
GR1386.3 4279.99 1386.00 4295.47 1386.34 4315.43 1386.00 4350.00 1385.51 4354.32
GR1386.0 4371.17 1386.00 4454.56 1386.25 4457.97 1387.66 4480.76 1388.00 4485.92
GR1388.0 4526.66 1386.72 4541.12 1386.00 4552.20 1385.40 4560.69 1385.02 4564.36
GR1384.5 4569.41 1384.00 4573.51 1382.63 4586.39 1382.43 4588.53 1382.00 4594.51
GR1381.7 4598.20 1380.48 4604.38 1380.00 4606.94 1379.91 4608.36 1378.58 4632.57
GR1378.0 4639.26 1376.00 4653.50 1375.35 4704.64 1374.00 4828.12 1373.68 4850.43
GR1373.1 4888.01 1372.88 4901.73 1372.00 4950.77 1371.17 4970.32 1370.00 4996.16
GR1370.1 5000.00 1370.40 5014.94 1370.52 5018.25 1370.89 5033.81 1371.01 5037.53
GR1371.3 5046.38 1371.00 5056.40 1370.55 5068.53 1370.60 5102.71 1370.78 5109.11
GR1371.1 5116.39 1371.60 5131.46 1372.00 5139.38 1373.19 5146.05 1373.89 5149.69
GR1374.0 5150.47 1374.30 5152.78 1374.67 5155.69 1376.00 5166.46 1376.39 5169.57
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GR1378.0 5182.62 1379.50 5195.03 1380.00 5200.27 1380.58 5207.92 1381.76 5224.62
GR1382.0 5227.77 1382.80 5252.00 1384.00 5330.07 1384.00 5333.71 1384.91 5347.75
GR1386.0 5362.52 1386.60 5376.48 1386.90 5391.40 1387.03 5397.63 1387.24 5419.21
GR1387.0 5437.79
*
QT     1   11967
ET           5.1                  4519.91 5433.52
X1  9.01      81 4817.29 5340.88     363     558     430
GR1388.4 4519.91 1388.00 4559.91 1388.00 4561.41 1388.84 4570.06 1388.45 4571.71
GR1388.0 4573.70 1388.00 4576.09 1388.46 4578.03 1388.77 4579.51 1388.28 4582.90
GR1388.0 4583.57 1388.00 4677.39 1388.26 4681.88 1389.30 4700.64 1389.76 4708.44
GR1389.3 4717.62 1388.98 4718.21 1388.52 4718.22 1388.00 4721.78 1387.37 4732.92
GR1387.1 4737.05 1386.95 4738.08 1386.40 4758.07 1386.64 4764.66 1386.86 4770.00
GR1387.0 4774.77 1387.38 4799.17 1387.08 4803.47 1386.92 4804.87 1386.44 4811.50
GR1386.0 4817.29 1384.00 4825.73 1383.63 4827.33 1382.00 4834.13 1380.26 4841.49
GR1380.0 4842.58 1379.21 4845.86 1378.00 4850.84 1376.45 4856.91 1376.00 4858.68
GR1375.8 4859.41 1374.00 4866.60 1373.72 4878.11 1373.33 4898.38 1373.06 4911.20
GR1372.9 4920.39 1372.51 4939.85 1372.35 4949.90 1372.19 4962.38 1372.32 4994.02
GR1372.4 5000.00 1372.50 5005.13 1373.08 5052.28 1373.49 5089.07 1373.86 5118.83
GR1374.0 5130.57 1375.57 5137.72 1376.00 5139.67 1377.54 5146.76 1378.00 5149.27
GR1379.4 5157.21 1380.00 5161.68 1380.57 5169.64 1380.83 5173.36 1380.91 5174.01
GR1381.2 5177.53 1381.59 5182.69 1382.00 5188.14 1382.37 5193.51 1383.14 5206.05
GR1384.0 5217.34 1385.32 5244.41 1385.68 5252.28 1386.00 5257.06 1387.77 5292.41
GR1388.0 5296.60 1388.84 5320.16 1389.58 5340.88 1389.68 5346.00 1390.00 5351.31
GR1390.0 5433.52
*
QT     1   11686
ET           5.1                  4515.30 5233.18
X1  9.08      70 4796.92 5198.84     432     165     365
GR1391.1 4515.30 1390.24 4539.50 1390.00 4540.45 1390.00 4625.97 1390.21 4628.50
GR1390.6 4632.33 1390.69 4632.97 1390.44 4647.05 1390.08 4647.52 1390.00 4647.64
GR1389.6 4649.23 1388.00 4655.18 1388.00 4670.31 1388.16 4671.07 1388.14 4787.35
GR1388.0 4796.92 1387.24 4809.20 1386.69 4817.41 1386.00 4827.18 1384.79 4833.74
GR1384.0 4837.38 1383.79 4838.28 1382.78 4842.68 1382.00 4845.64 1381.40 4847.91
GR1380.0 4853.19 1378.86 4857.51 1378.00 4860.75 1377.03 4864.25 1376.00 4868.13
GR1375.1 4871.58 1374.00 4875.67 1373.97 4878.43 1373.92 4884.08 1373.76 4895.74
GR1373.7 4902.64 1373.65 4905.82 1373.59 4911.57 1373.49 4920.43 1373.47 5000.00
GR1373.5 5095.48 1373.56 5107.93 1373.59 5109.03 1373.62 5112.59 1373.70 5119.31
GR1373.8 5122.87 1373.82 5124.67 1373.85 5126.00 1373.92 5128.16 1373.94 5130.06
GR1374.0 5131.14 1374.13 5131.77 1376.00 5140.79 1377.41 5147.57 1378.00 5150.02
GR1378.6 5152.38 1380.00 5158.25 1381.29 5163.54 1382.00 5166.47 1383.45 5172.44
GR1384.0 5174.70 1385.73 5181.83 1386.00 5182.93 1387.10 5187.46 1388.00 5190.99
GR1388.1 5191.61 1389.08 5195.22 1390.00 5198.84 1390.04 5199.45 1390.27 5233.18
*
QT     1   10632
NC 0.035   0.035   0.035
ET           5.1                  4525.85 5437.55
X1  9.14      94 4835.60 5165.24     288     385     333
GR1392.1 4525.85 1392.00 4598.96 1391.59 4608.73 1390.99 4723.68 1391.42 4775.78
GR1391.5 4789.87 1391.64 4805.14 1391.00 4830.80 1390.59 4832.90 1390.00 4835.60
GR1389.7 4836.69 1389.00 4839.12 1388.44 4841.11 1388.00 4842.60 1387.57 4843.96
GR1387.0 4845.55 1386.47 4846.70 1386.00 4847.68 1385.71 4848.28 1385.00 4849.75
GR1384.7 4850.41 1384.00 4851.87 1383.84 4852.20 1383.32 4853.25 1383.00 4853.91
GR1382.8 4854.33 1382.00 4856.07 1381.65 4856.77 1381.00 4858.07 1380.00 4860.14
GR1379.7 4861.00 1379.19 4861.98 1379.00 4862.42 1378.49 4863.58 1378.00 4864.71
GR1377.4 4866.13 1377.00 4867.28 1376.43 4869.03 1376.00 4869.56 1375.54 4872.43
GR1374.5 4874.14 1374.00 4875.08 1374.00 5000.00 1374.00 5062.13 1374.39 5091.47
GR1375.0 5121.35 1375.00 5125.45 1375.71 5129.68 1376.00 5131.10 1376.94 5133.66
GR1377.0 5134.06 1377.77 5135.68 1378.00 5136.16 1379.00 5138.25 1379.92 5140.18
GR1380.0 5140.35 1380.80 5142.03 1381.00 5142.44 1381.45 5143.38 1382.00 5144.53
GR1382.9 5146.34 1383.00 5146.63 1383.72 5148.14 1384.00 5148.75 1384.46 5149.37
GR1385.0 5150.09 1385.25 5150.43 1386.00 5151.41 1386.80 5152.48 1387.00 5152.75
GR1387.2 5153.56 1388.00 5156.83 1388.60 5159.29 1389.00 5160.92 1389.34 5162.35
GR1389.7 5164.16 1390.00 5165.24 1390.00 5165.45 1390.42 5166.34 1391.00 5168.32
GR1391.8 5170.94 1391.91 5171.50 1392.00 5171.73 1392.22 5174.81 1392.64 5180.92
GR1393.0 5184.53 1392.55 5196.46 1392.91 5224.81 1392.45 5256.91 1392.29 5293.65
GR1392.1 5328.16 1392.00 5380.42 1392.00 5416.53 1391.87 5437.55
* DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT     1    9300
X1 9.145      66    5015    5325       8       8       8
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
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GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1374.94    5045 1374.94    5085
GR1374.9 5088.74 1390.80 5088.75 1390.80 5093.75 1374.94 5093.76 1374.94    5125
GR1374.9 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1374.94 5172.51
GR1374.9    5205 1374.94    5245 1374.94 5246.24    1391 5246.25    1391 5251.25
GR1374.9 5251.26 1374.94    5285 1374.94    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
* UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT      1    9300
X1 9.155      66    5015    5325    80.2    80.2    80.2
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1375.14    5045 1375.14    5085
GR1375.1 5088.74  1390.8 5088.75  1390.8 5093.75 1375.14 5093.76 1375.14    5125
GR1375.1 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1375.14 5172.51
GR1375.1    5205 1375.14    5245 1375.14 5246.24    1391 5246.25    1391 5251.25
GR1375.1 5251.26 1375.14    5285 1375.14    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
*
QT      1    9300
ET           5.1                  4528.66 5445.27
X1  9.16      89 4852.56 5164.29       8       8       8
GR1392.6 4528.66 1392.16 4581.89 1392.81 4592.32 1392.00 4643.39 1391.85 4708.61
GR1392.0 4756.55 1392.50 4805.50 1392.00 4836.76 1391.23 4838.82 1391.00 4839.41
GR1390.5 4842.05 1390.00 4852.56 1389.00 4854.43 1388.00 4856.29 1387.00 4857.94
GR1386.0 4859.59 1385.00 4861.24 1384.00 4862.89 1383.40 4863.88 1383.00 4864.54
GR1382.5 4865.33 1382.00 4866.18 1381.00 4867.82 1380.61 4868.61 1380.00 4869.92
GR1379.8 4870.35 1379.00 4872.01 1378.40 4873.27 1378.00 4874.11 1377.29 4875.60
GR1377.0 4876.20 1376.18 4877.92 1376.00 4878.30 1375.00 4880.39 1374.81 4915.05
GR1374.0 4961.04 1374.20 5000.00 1374.50 5083.02 1374.70 5107.91 1375.00 5129.31
GR1375.6 5132.84 1376.00 5135.04 1377.00 5138.70 1378.00 5140.93 1379.00 5142.76
GR1379.6 5143.88 1380.00 5144.79 1380.41 5145.63 1381.00 5146.82 1381.33 5147.49
GR1382.0 5148.85 1382.47 5149.81 1383.64 5152.18 1384.00 5152.91 1384.55 5154.02
GR1385.0 5154.94 1386.00 5156.58 1386.42 5157.20 1387.00 5158.07 1388.00 5161.31
GR1388.6 5162.08 1389.00 5162.75 1389.58 5163.63 1390.00 5164.29 1390.52 5165.66
GR1390.7 5169.65 1390.00 5170.91 1390.00 5171.15 1390.65 5172.70 1391.00 5173.49
GR1391.5 5174.67 1392.00 5175.74 1392.49 5177.88 1393.00 5180.15 1393.00 5215.17
GR1392.8 5239.51 1393.00 5302.86 1393.00 5330.00 1393.00 5335.30 1393.52 5343.99
GR1394.0 5352.89 1394.20 5356.22 1394.67 5363.95 1395.00 5372.98 1395.00 5394.93
GR1394.9 5404.04 1394.00 5430.80 1393.15 5432.47 1393.36 5445.27
*
* BOTTOM OF DROP STRUCTURE
QT      1    9300
NC 0.035   0.035   0.020
ET           5.1                     4732 5190.05
X1  9.21       7    4732 5174.57     145     355     279
GR  1389    4732    1376    4765    1376    4901    1376    5000    1376 5140.72
GR  1391 5174.57    1392 5190.05
*
* TOP OF DROP STRUCTURE
QT      1    9300
NC 0.040   0.035   0.035
ET           5.1                     4664 5314.09
X1  9.22      14    4664 5192.98     122     104      39
GR  1395    4664    1390    4708    1390 4871.20    1390    5000    1390 5167.75
GR  1391 5173.76    1392 5177.14    1393 5179.36    1394 5181.58    1395 5184.44
GR  1396 5187.36    1397 5192.98    1398 5219.20    1399 5314.09
*
QT      1    9300
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ET            5.1                  4572.95 5304.55
X1  9.25       45     4825 5285.60     155       82      141
GR  1400     3023   1399.1     3123  1397.6     3223  1395.8     3323  1392.7     3423
GR  1392     3523     1393     3623  1393.6     3723  1393.5     3762    1394     3874
GR  1394     3898     1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25     1395 4365.84    1395  4385.4  1395.7 4563.07    1395 4565.34
GR  1395 4570.45 1395.57 4572.95 1395.46 4582.97    1395 4585.82    1395 4590.84
GR  1395 4598.19     1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32     1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38     1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
* END FLOW SPLIT; RETURN TO FULL FLOW
QT     1   12000
ET            5.1                  4441.50 5290.19
X1  9.30       52 4779.69 5280.97     262      282      261
GR1401.5     2940   1402.6     2970  1400.5     3070  1398.6     3170    1397     3270
GR  1394     3370     1394     3470    1394     3570    1394     3670  1394.8     3770
GR  1395     3820     1394     3930    1394 4045.09    1395 4108.19    1395     4117
GR  1396 4323.15 1396.42 4425.34    1396 4429.71    1396 4434.42    1396   4441.5
GR  1396 4445.67     1396  4449.8    1395 4453.93 1394.13 4458.61    1394 4462.74
GR  1393 4494.69     1393 4512.86    1394 4520.79    1395 4539.92    1395 4544.55
GR  1395 4549.38     1396 4554.31    1397  4672.3    1397 4703.41    1397 4730.49
GR  1397 4737.81   1396.5     4750    1396 4768.57    1395 4779.69    1394  4811.1
GR  1393  4973.9     1393     5000    1393 5090.01    1394 5237.22    1395 5265.28
GR  1395 5270.89     1396 5273.07    1397 5275.25    1398 5277.47    1399 5279.81
GR1399.5 5280.97     1400 5290.19
*
ET            5.1                  4252.38 5287.77
X1  9.35       64     4775 5275.88     291      274      274
GR1403.4     2913     1404     2963  1401.9     3063  1400.6     3163  1399,1     3263
GR  1396     3363     1396     3463  1394.8     3563  1395.2     3663    1396     3763
GR  1396     3863     1396     3873    1396     3970    1396 4133.14    1397 4227.56
GR  1397 4246.88     1397 4251.02    1397 4252.38    1397 4261.99    1397 4262.89
GR  1397 4266.45     1397 4272.25    1396 4279.28    1395 4304.83    1395 4325.29
GR  1396  4342.7     1397 4379.18    1398  4402.1    1399 4459.05    1399 4467.32
GR  1399 4490.46     1399 4657.95    1399 4675.14    1399    4775    1399 4817.89
GR  1398 4824.28     1398 4830.91    1398 4833.58    1397 4841.76    1396 4854.67
GR  1395 4861.17     1394 4882.23    1393 4897.87    1392 4929.89    1392 4995.23
GR1392.2     5000     1393 5015.98    1394 5050.46    1394 5062.07    1394 5081.74
GR  1394 5098.98     1393 5104.45    1393 5165.77    1394 5255.79 1394.16 5261.12
GR  1395 5263.15     1396 5265.55    1397 5267.94    1398 5270.34    1399 5272.74
GR1399.9 5274.92     1400 5275.88    1401 5287.77    1401 5364.41
*
* FIRST LANDFILL CROSS SECTION
X1  9.42       84     4717 5216.97     400      402      399
GR  1428     4000     1426 4011.37    1424 4051.66    1424 4057.37    1426 4081.68
GR  1428 4110.92     1428 4121.45    1426 4129.13    1424 4134.76    1422 4139.19
GR  1421 4142.73     1420 4161.87 1419.19 4203.29    1418 4205.11    1416 4226.25
GR  1414 4237.19     1412 4246.78    1410 4256.36    1408 4267.25    1406 4278.32
GR  1404 4313.42     1402 4319.63    1401 4385.11    1401 4391.49    1400 4399.73
GR  1400 4402.48     1400     4425    1399 4435.31    1399 4437.98    1400  4464.1
GR  1400 4473.55     1401 4478.99    1401 4489.28    1401 4501.38    1401 4506.58
GR  1401 4519.28     1401 4549.48    1401 4609.38    1401 4631.43    1401    4640
GR  1401     4717     1401 4808.53    1401 4810.26    1400 4816.66    1399  4821.3
GR  1398 4826.32     1397 4831.26    1396  4836.2    1395 4840.81    1394 4845.47
GR  1394 4861.29     1394 4874.91    1394 4881.71    1395 4899.25    1395 4935.92
GR  1394 4952.05     1393 4968.09    1393 4971.63    1393 4977.75    1393    5000
GR  1393  5022.4     1394 5029.45    1395 5047.57    1396 5049.85    1397 5052.12
GR  1397 5069.99     1396 5075.09    1395 5080.13    1394 5086.54    1393 5111.54
GR  1393 5144.13     1394 5187.94    1395 5201.29    1396 5203.58    1397 5205.87
GR  1398 5208.12     1399 5210.33    1400 5212.55    1401 5214.76    1402 5216.97
GR1402.1 5217.23     1403 5227.59    1404 5237.39 1404.24 5239.73
*
NC 0.040   0.040   0.040
X1  9.45       97     4709     5209      93      126      118
GR  1444     4000     1446   4007.9    1448 4067.98    1448 4129.56    1446 4153.01
GR  1444   4163.3     1442 4166.26    1440 4169.22    1438 4175.44    1436 4186.62
GR  1434 4200.28     1432 4214.71    1430 4223.41    1428 4230.51    1426 4245.88
GR  1424 4268.57 1422.59 4278.96    1422 4280.89    1420 4290.71    1418 4299.79
GR  1416 4308.72     1414 4317.57    1412 4326.42    1410 4337.33    1408 4350.71
GR  1406 4364.09     1404 4377.47    1402 4400.54    1401 4461.44    1400 4466.82
GR  1400 4480.64     1400 4491.26    1400 4512.14    1401 4518.92 1401.69 4560.74
GR  1402 4579.32     1403 4582.89    1403 4591.95    1402 4596.75    1402    4660
GR  1402 4672.46   1401.7     4709    1401 4801.15    1400 4808.19    1399 4812.86
GR  1398 4817.28     1397 4822.04    1396 4829.31    1395 4850.48    1395 4874.85
GR  1396 4881.97     1397  4899.1    1397 4923.02    1396 4938.23    1395 4946.05
GR  1394 4960.72     1394 4965.12    1394 4968.36    1394 4997.02 1393.39    5000
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GR  1393 5001.91    1393 5029.22    1394 5035.16    1395 5037.25    1396 5039.33
GR  1397 5041.64    1398 5043.96    1399 5046.15    1400 5048.19    1401 5065.48
GR  1401 5071.95    1401 5081.45    1401  5133.8    1400 5156.91    1399 5160.41
GR  1398 5163.93    1397 5167.45    1396 5170.97    1395 5174.49    1394 5180.55
GR  1394    5209    1394 5237.19    1395 5242.58    1396 5247.96    1397 5251.97
GR  1398 5255.85    1399 5259.53    1400  5261.9    1401 5264.27  1404.8 5265.18
GR  1402 5266.67    1403 5269.03    1404 5271.38  1405.2 5272.32  1404.6  5276.7
GR  1405 5277.23    1405 5281.63
*
NC 0.035   0.040   0.040
ET           5.1                 4663.35    5177
X1  9.54      85 4685.93    5177     410     515     500
GR  1456    4000    1456  4021.5    1454 4238.02    1454 4370.23    1456 4373.71
GR  1458 4382.67    1460 4392.58    1462 4402.82    1464 4414.23    1464 4416.59
GR  1462 4419.16    1460 4421.73    1458  4424.3    1456 4426.86    1454 4429.43
GR  1452 4432.03    1450 4434.89    1448 4437.71    1446 4440.53    1444 4443.94
GR  1442 4455.27    1440 4466.36    1438 4475.82    1436 4485.28    1434 4494.74
GR  1432 4503.98    1430 4512.83    1428 4521.68    1426 4530.63    1424 4537.95
GR  1422  4543.4    1420  4548.8    1418 4566.76    1416 4576.41    1414 4588.78
GR  1412  4606.7    1410 4618.24    1408 4626.12    1406  4646.3 1405.45 4653.56
GR  1406  4654.9    1408 4659.52 1409.53 4663.35 1409.41 4679.83    1408 4685.93
GR  1406 4694.77    1404 4704.62    1402 4714.47    1400 4759.39    1399 4817.12
GR  1399 4833.11    1399 4849.47    1399    4877    1398 4880.23    1397 4889.16
GR  1397 4922.52    1398 4930.18    1398 4954.06    1397 4978.17    1397    5000
GR  1397 5021.85    1398 5031.11    1399 5044.96    1400 5072.02    1401 5077.75
GR  1402 5083.41    1403 5099.61    1404 5131.49    1404 5150.42    1404 5168.37
GR  1404    5177    1404 5197.33    1404  5199.5    1404 5210.97    1404 5253.08
GR  1404 5391.09    1403 5589.76    1403 5598.79    1404 5665.44    1405  5677.3
GR  1406 5688.92    1407 5698.83    1408 5708.08  1408.1 5709.05    1408 5712.42
*
ET           5.1                 4736.39 5231.86
X1  9.65      77 4754.19 5231.86     475     503     558
GR  1464    4000    1464 4008.95    1464 4009.76    1462 4321.74    1460 4399.87
GR  1458 4431.45    1456 4444.62    1454 4455.94    1452 4520.78    1450 4527.92
GR  1448 4534.57    1446 4541.22    1444  4547.9    1442 4555.79    1440 4564.66
GR  1438 4573.56    1436 4582.53    1434  4591.5    1432 4600.47    1430 4609.44
GR  1428 4617.73    1426 4626.65    1424 4636.67    1422 4647.12    1420 4657.56
GR  1418 4668.01    1416 4678.25 1415.47 4681.09    1414 4684.72    1412 4698.82
GR  1410 4712.91 1408.84 4718.95    1410 4724.03    1412 4732.19 1412.28 4733.95
GR1412.3 4736.39 1412.23 4752.15 1412.23 4753.27    1412 4754.19    1410 4762.26
GR  1408 4770.81    1406 4779.35    1404 4787.89    1402 4808.39    1402 4880.47
GR  1402    5000    1402  5117.6    1402 5177.99    1404  5201.2    1406 5208.98
GR  1408 5216.75    1410 5224.53 1411.67 5231.28 1411.74 5231.86 1411.54 5244.69
GR1411.6 5244.92    1410 5251.38    1408 5258.75    1406 5266.02    1405 5297.23
GR  1405 5320.44    1406 5347.25    1406 5388.09    1406 5408.08    1407  5541.7
GR  1407 5718.14    1406  5754.4    1406 5784.09    1406 5792.77    1406 5810.87
GR  1406 5820.41    1406 5838.97    1407 5936.82    1408 6017.23    1409 6081.83
GR  1410 6155.49    1411 6165.28
*
NC 0.035   0.035   0.035
ET           5.1                 4752.73 5283.89
X1  9.70      45 4757.14 5273.18     253     259     256
GR  1466    4109    1464  4316.8    1462 4420.43    1460 4447.14    1458 4478.14
GR  1456 4489.46    1454 4500.45    1452 4509.98    1450 4519.51    1448 4529.04
GR  1446 4538.57    1444  4548.1    1442 4557.38    1440 4566.27    1438 4575.05
GR  1436 4583.83    1434 4592.61    1432 4601.39    1430 4609.72    1428 4617.43
GR  1426 4627.56    1424 4668.02    1422 4677.03    1420 4686.23    1418 4694.23
GR  1416 4702.22    1414 4725.62 1413.09 4738.64 1413.15 4752.73    1412 4757.14
GR  1410 4765.55    1408 4773.94    1406  4782.3    1404 4790.65    1404    5000
GR  1404 5228.02    1406 5244.34    1408 5253.96    1412 5273.18 1412.96 5277.81
GR1413.2 5283.89    1414 5286.99    1416 5294.01    1418 5300.98    1420 5310.97
*
ET           5.1                 4761.98 5298.67
X1  9.73      47 4763.41 5284.93     187     151     169
GR  1468    4092    1466 4213.55    1464    4379    1462  4470.4    1460 4508.81
GR  1458 4525.45    1456 4535.99    1454 4546.24    1452  4556.5    1450 4565.64
GR  1448 4574.49    1446 4582.67    1444 4590.66    1442 4598.64    1440 4606.63
GR  1438 4614.61    1436  4622.6    1434  4630.3    1432 4638.03    1430 4646.07
GR  1428 4654.12    1426 4662.16    1424  4670.2    1422 4678.24    1420 4686.28
GR  1418 4694.59    1416 4735.51    1414 4745.63 1413.77 4747.24    1414 4754.45
GR1414.2 4761.98    1414 4763.41    1412 4771.23    1410 4779.05    1408 4786.93
GR  1406 4794.83    1404 4807.46    1404    5000    1404 5232.22    1406 5255.68
GR  1408 5265.54    1410 5275.37    1412 5284.93    1414 5298.67    1416 5306.36
GR  1418 5314.06    1420 5322.58
*
ET           5.1                 4698.37 5217.67
X1  9.80      62 4738.89 5206.55     383     349     365
GR  1476    4000    1476 4071.22    1474  4291.9    1472 4368.03    1470 4404.99
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GR  1468 4419.78    1466 4435.01    1464 4454.29    1462 4489.38    1460 4517.69
GR  1458 4526.82    1456 4535.94    1454 4545.06    1452 4554.19    1450 4563.31
GR  1448 4572.44    1446 4580.51    1444 4588.95    1442 4597.51    1440 4606.07
GR  1438 4614.65    1436 4623.22    1434 4631.58    1432 4639.42    1430 4647.25
GR  1428 4655.08    1426 4662.93    1424 4670.84    1422 4678.74    1420 4686.85
GR  1418 4698.37    1416 4738.89    1416 4742.87    1416 4745.09 1415.15 4749.88
GR1415.7 4766.09    1414 4773.04    1412 4781.48    1410 4789.92    1408 4798.11
GR  1406 4814.33    1406    5000    1406  5168.2    1408 5177.78    1410 5187.37
GR  1412 5196.96    1414 5206.55 1414.61 5209.05  1414.9 5217.67    1416 5221.57
GR  1418 5228.59    1420 5235.61    1422 5242.63    1424 5250.86    1426  5260.4
GR  1428 5270.06    1430 5279.73    1432    5290    1434 5301.13    1436 5313.24
GR  1438 5329.65    1440 5350.74
*
ET           5.1                 4678.48 5167.47
X1  9.89      61 4741.17 5163.70     509     484     495
GR  1480    4000    1480 4097.31    1478  4315.5    1476 4369.55    1474 4409.22
GR  1472 4428.88    1470 4447.01    1468 4467.06    1466 4484.74    1464 4501.35
GR  1462 4517.81    1460 4528.28    1458 4538.09    1456 4547.75    1454 4557.31
GR  1452 4566.31    1450 4574.08    1448 4581.28    1446 4588.48    1444  4595.7
GR  1442 4603.03    1440 4610.35    1438 4617.67    1436 4624.99    1434 4631.68
GR  1432 4638.82    1430 4646.76    1428 4654.71    1426 4662.61    1424 4670.44
GR  1422 4678.48    1422 4689.89 1422.06 4691.09    1422 4691.98 1421.45  4699.1
GR  1420 4741.17    1418 4771.38    1416 4778.99    1414 4786.68    1412 4794.99
GR  1410  4803.8    1408  4840.1    1406 4951.17    1406 4964.91 1407.43    5000
GR  1408 5114.09    1410 5126.94    1412 5136.13    1414 5145.32    1416 5154.51
GR  1418  5163.7  1418.8 5167.47  1418.7 5180.97    1418 5182.68    1418 5202.91
GR  1420 5221.64    1422 5236.46    1424 5244.79    1426 5252.68    1428  5260.3
GR  1430 5267.91
*
ET           5.1                 4813.54 5284.14
X1  9.98      68 4828.11 5274.26     462     469     475
GR  1476    4020    1476 4135.18    1474 4180.69    1472 4242.44    1472 4405.93
GR  1474 4459.87    1474  4532.3    1472 4564.64    1470 4600.47    1468 4627.43
GR  1466 4644.39    1464 4650.73    1462 4658.68    1460 4666.95    1458 4675.21
GR  1456 4683.48    1454 4692.64    1452 4702.53    1450 4711.67    1448 4720.68
GR  1446 4728.08    1444  4734.3    1442 4740.53    1440 4746.75    1438 4752.97
GR  1436 4759.19    1434 4766.97    1432 4775.44    1430 4783.95    1428 4813.54
GR  1428  4821.2 1428.96 4826.63    1428 4828.11    1426 4830.93 1425.95 4831.02
GR1425.7  4834.7    1424 4840.53    1422  4847.1    1420 4853.67    1418 4860.24
GR  1416 4866.81    1414 4874.06    1412 4895.31    1410 4925.82    1410 4957.15
GR  1410  4985.2    1410    5000    1410 5196.05    1412 5234.32    1414 5243.75
GR  1416 5253.18    1418 5262.85    1420 5274.26 1421.67 5284.14 1421.15 5293.67
GR  1420  5297.1  1418.2 5302.27    1420 5323.38    1422  5337.3    1424 5349.84
GR  1426 5361.61    1428 5370.82    1430 5379.99    1432 5389.15    1434  5398.3
GR  1436 5407.46    1438  5416.8    1440 5427.51
*
ET           5.1                 4840.61 5275.34
X1 10.08      60 4841.72 5274.76     508     514     511
GR  1476    4000    1478 4028.78    1480 4085.32    1480 4214.24    1478 4270.59
GR  1476 4333.92    1474 4385.59    1472 4415.91    1470 4435.24    1468 4453.48
GR  1466 4471.72    1464 4489.47    1462 4507.08    1460 4524.24    1458 4540.43
GR  1456 4560.04    1454 4579.47    1452 4664.02    1450 4686.12    1448 4711.59
GR  1446 4736.49    1444 4743.04    1442 4749.49    1440 4755.86    1438 4761.79
GR  1436 4767.07    1434 4772.52    1432 4778.04    1430 4783.56    1428 4789.08
GR  1426 4795.68    1426 4838.85 1426.35 4840.61    1426 4841.72    1424 4848.12
GR  1422 4854.53    1420 4861.27    1418 4869.07    1416 4880.94    1414 4903.67
GR1412.5    5000    1412 5028.73    1412 5119.72    1414 5215.45    1416 5233.54
GR  1418 5244.05    1420 5254.55    1422 5265.05    1424 5274.76 1424.17 5275.34
GR  1424 5277.85  1423.5 5284.05    1422 5288.76    1420  5294.8    1420  5307.7
GR  1422 5411.56    1424 5519.39    1426 5568.38    1428 5584.58    1430 5600.76
*
ET           5.1                 4784.92 5288.33
X1 10.16      48 4797.94 5270.13     447     418     430
GR  1438    4000    1436  4021.6    1434 4039.29    1432 4060.58    1430 4087.84
GR  1428 4116.35    1426 4163.37    1426  4172.5    1426  4329.8    1424 4615.05
GR  1422 4727.69    1422 4765.14    1424 4772.65    1426 4779.85  1427.4 4784.92
GR1426.9 4794.24    1426 4797.94    1424 4806.13    1422 4814.72    1420 4823.31
GR  1418 4831.89    1416 4850.45    1416    5000    1416  5206.7    1418 5231.48
GR  1420 5241.03    1422 5250.58    1424 5260.12    1426 5270.13 1426.69 5273.76
GR1426.8 5288.33    1426 5290.46    1424 5295.56 1423.73 5296.35    1424 5299.13
GR  1426 5318.58    1428 5331.54    1430 5343.77    1432 5355.48    1434  5367.2
GR  1436 5379.53    1438 5392.13    1440 5404.93    1442 5417.74    1444 5430.71
GR  1446 5445.59    1448 5460.48    1450 5475.78
*
ET           5.1                 4772.87 5312.98
X1 10.25      50 4772.87 5312.98     496     420     460
GR  1462    4000    1462  4353.1    1462 4360.97    1464 4372.48    1466  4380.6
GR  1466 4394.69    1464 4399.98    1462 4402.86    1460 4405.73    1458 4408.62
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GR  1456 4420.57    1454 4432.06    1452 4443.38    1450  4454.7    1448 4465.92
GR  1446 4476.55    1444 4487.22    1442 4497.92    1440 4509.43    1438 4521.31
GR  1436 4534.04    1434 4573.89    1434 4576.65    1434 4582.76    1432 4590.09
GR  1430 4597.07    1428 4604.05    1426 4740.78    1426 4758.62    1428 4766.33
GR1429.7 4772.87 1429.36 4781.13    1428 4786.37    1426 4794.42    1424 4802.47
GR  1422 4810.53    1420 4841.46    1420 5225.51    1422 5254.59    1424 5264.85
GR  1426 5274.47    1428 5284.05  1429.2 5289.83 1429.27 5312.98    1430 5319.77
GR  1432 5338.35    1434 5354.33    1436 5382.04    1438 5398.07    1440 5414.09
*
ET           5.1                 4766.40 5271.99
X1 10.33      47 4782.32 5269.64     519     373     444
GR  1450    4000    1448 4073.55    1448 4076.89    1448 4151.72    1446 4166.89
GR  1444 4179.19    1442 4193.45    1440 4215.25    1438 4234.67    1436 4254.62
GR  1434 4273.64    1432 4293.27    1430 4335.46    1428 4352.32    1428 4394.66
GR  1430 4399.29    1432 4405.29    1434 4417.32    1436 4573.71    1434  4592.8
GR  1432 4607.16    1430  4731.8    1430 4744.77    1432 4752.19    1434 4759.52
GR1435.8  4766.4 1435.17 4782.32    1434 4787.13    1432 4795.34    1430 4802.67
GR  1428    4810    1426 4817.69    1424 4826.71 1422.57    5000    1422 5069.23
GR  1422 5172.18    1424 5223.94    1426 5234.36    1428 5243.12    1430 5251.96
GR  1432  5260.8    1434 5269.64 1434.83 5271.99 1434.09 5290.23    1434 5290.52
GR  1432 5296.74    1430 5302.97
*
ET           5.1                 4756.86 5252.58
X1 10.34      38 4775.45 5243.36     104      42      73
GR  1434    4000    1434 4020.85    1432 4060.47    1432 4210.33    1432 4230.74
GR  1430    4304    1430    4351    1430 4400.08    1430 4476.92    1432 4558.77
GR  1432 4579.43    1430 4699.87    1430 4741.11    1432 4746.28    1434 4751.62
GR1435.9 4756.86    1435 4775.45    1434 4779.27    1432 4786.85    1430 4794.42
GR  1428 4803.16    1426 4811.92    1424 4839.17 1422.77    5000    1422 5099.99
GR  1422 5118.31    1424 5204.31    1426 5212.97    1428 5217.15    1430  5226.8
GR  1432 5234.78    1434 5243.36 1435.48 5252.58 1434.92 5272.38    1434 5274.21
GR  1432 5278.35    1430 5282.48    1430 5283.56
*
* HAPPY VALLEY ROAD CROSSING
NC 0.030   0.030   0.030
ET           5.1                 4823.21    5272
X1 10.38      34 4823.21 5293.86     173     143     162
GR  1432    4050    1432 4345.47    1434 4359.49    1436 4382.17    1436 4444.22
GR  1434 4514.59    1434 4523.97    1436 4605.62    1436 4667.41    1434 4710.47
GR  1434  4776.7 1435.99 4798.29 1435.82 4823.21    1434 4831.49    1432 4838.95
GR  1430 4845.97    1428 4854.29    1426 4860.89    1424  4952.8    1424    5000
GR  1424 5110.95    1426  5223.7    1428 5293.86    1430 5418.28    1432 5426.63
GR  1434 5436.09    1436 5445.55    1436 5462.06 1438.33 5462.07 1438.33 5463.07
GR  1436 5463.08    1436 5478.57 1435.96 5479.62    1434 5488.87
*
NC 0.035   0.035   0.035
ET           5.1                 4783.08 5262.74
X1 10.41      52 4791.83 5251.18     198     142     171
GR  1434    4064    1434 4072.38    1436  4078.9    1438 4083.68    1440 4114.64
GR  1442 4124.08    1444 4141.29    1444 4186.45    1442 4196.42    1438 4216.34
GR  1436 4223.27    1434 4229.95    1432 4236.99    1432 4370.62    1434 4373.56
GR  1436  4376.5    1438 4379.45    1440 4383.45    1440 4469.41    1438  4505.1
GR  1436 4516.74    1434 4526.64    1432 4535.95    1432 4754.33    1434 4759.91
GR1435.7 4764.94    1436 4772.28    1436 4782.06 1438.34 4782.07 1438.34 4783.07
GR  1436 4783.08    1436 4791.83    1434 4800.27    1432 4808.85    1430 4817.15
GR  1428  4863.1    1428    5000    1428 5071.88    1428 5119.31    1428 5202.52
GR  1430 5229.35    1432 5236.74    1434 5244.12    1436 5251.18    1436 5262.73
GR1438.9 5262.74  1438.9 5262.75    1436 5262.76    1436 5274.27    1434  5279.7
GR  1432 5285.08    1430  5290.4
*
ET           5.1                 4758.78 5239.41
X1 10.42      46 4772.17 5239.37      70      58      64
GR  1434    4057    1434 4122.12    1434 4141.01    1432 4192.42    1432 4500.07
GR  1434 4518.47    1436 4524.56    1438 4530.85    1438    4566    1436 4602.78
GR  1434 4617.91    1432 4648.14    1432 4733.89    1434  4738.7    1436 4743.37
GR  1436 4757.77    1439 4757.78    1439 4758.78    1436 4758.79    1436 4772.17
GR  1434 4781.27    1432  4790.3 1431.35 4793.22    1430 4857.83    1428  4863.2
GR  1426 4872.34    1426    5000    1426 5035.16    1428 5059.55    1430 5071.52
GR  1430 5178.76    1430  5209.5    1432  5217.1    1434 5224.61    1436 5232.04
GR  1438 5239.37    1438 5239.40  1439.8 5239.41  1439.8 5240.41    1438 5240.42
GR  1438 5240.71 1437.62 5260.38    1436 5263.54    1434 5267.47    1432 5271.31
GR  1430 5275.13
*
ET           5.1                 4717.29 5219.45
X1 10.51      85 4720.44 5201.75     439     487     472
GR  1434    4000    1432 4130.14    1428 4139.76    1426  4144.4    1424 4149.04
GR  1422 4153.68    1418 4208.59    1418 4223.25    1418  4230.6    1418 4282.85
GR  1418 4360.51    1416 4368.14    1414 4375.06    1412 4381.98    1408 4395.81
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GR  1406 4403.31    1404  4411.2    1402 4420.45    1398 4444.12    1396 4455.04
GR  1396 4458.71    1398 4462.24    1400 4465.78    1402  4469.3    1404  4472.7
GR  1406 4476.09    1406 4476.39    1404 4480.43    1402 4489.41    1400 4498.38
GR  1398 4511.86    1398 4523.62    1402 4606.66    1404 4619.36    1406 4625.57
GR  1408 4631.74    1412 4641.43    1414  4645.8    1416 4650.17    1418 4654.55
GR  1422 4663.24    1424 4666.88    1426 4670.52    1428 4674.16    1432 4681.45
GR  1434 4685.09    1436 4688.73    1438 4692.35    1440 4695.92    1440 4716.28
GR1443.2 4716.29  1443.2 4717.29 1440.66 4717.32    1440 4720.44    1438 4729.62
GR  1436  4738.8    1434 4747.98 1432.68 4754.05    1434 4795.05    1434 4811.47
GR  1432 4826.23    1430 4844.12    1428 4880.89    1428 4916.32    1428  4916.6
GR  1428 4924.94    1430 4975.63    1430 4993.27    1430    5000    1430 5004.42
GR  1430 5038.01    1430 5060.04    1432 5076.82    1434 5173.28    1436  5182.8
GR  1438 5192.33    1440 5201.75    1440 5219.44 1443.73 5219.45 1443.73 5220.45
GR1440.7 5220.46  1440.7 5237.12    1442 5243.12    1444 5251.74    1444  5270.2
*
NC 0.035    0.05   0.035
ET           5.1                 4664.91 5132.57
X1 10.62      87 4665.97 5128.07     535     618     596
GR  1438    4000    1438 4067.63    1438 4119.75    1438 4123.09    1436 4126.37
GR  1434 4129.64    1432 4132.91    1428 4139.57    1426 4142.92    1424 4157.62
GR  1422 4197.88    1422 4274.19    1422 4279.99    1418 4285.73    1416 4288.61
GR  1414 4291.48    1412 4294.36    1408  4300.1    1406 4302.98    1404 4305.85
GR  1402 4308.72    1398 4314.87    1396 4318.05    1394 4326.83    1392 4337.52
GR  1392  4407.2    1394 4430.83    1396 4477.86    1398 4520.73    1402 4551.89
GR  1404 4565.94    1406 4587.33    1408 4591.51    1412 4599.92    1414  4604.3
GR  1416 4608.68    1418 4613.06    1422 4621.46    1424 4625.35    1426 4629.24
GR  1428 4633.13    1432 4640.85    1434 4644.69    1436 4648.53    1438 4652.37
GR  1440 4656.21    1442 4660.05    1444 4663.89    1444 4663.90  1445.7 4663.91
GR1445.7 4664.91    1444 4664.92    1444 4665.97 1443.33 4681.76    1442 4687.65
GR  1440 4696.48    1438 4705.29 1436.53 4711.79    1436 4760.05    1434 4774.11
GR  1432  4791.7    1432 4792.06    1434 4804.84    1434 4812.38    1434 4844.64
GR  1434 4908.11    1432 4978.39    1430 4993.25    1430    5000    1430 5019.08
GR  1432 5025.21    1434 5047.48    1436 5072.96 1436.27 5078.41    1438 5088.52
GR  1440 5100.18    1442  5111.6    1444 5128.07 1444.34 5132.57    1446 5140.61
GR  1448  5150.2    1450 5159.88    1452 5169.67    1454 5179.15    1454 5200.76
GR  1454  5213.3    1456 5219.38
*
NC 0.035   0.035   0.035
ET           5.1                 4748.11  5211.3
X1 10.70      43 4759.88  5193.3     390     382     402
GR  1444    4000    1444 4038.07    1444 4066.66    1444 4284.59    1442 4345.59
GR  1440  4412.2    1440 4618.19    1442 4696.02 1442.67 4720.77    1444 4727.26
GR1446.2 4734.32  1446.2 4747.10 1448.10 4747.11 1448.10 4748.11  1446.2 4748.12
GR1446.2 4759.88    1444 4767.51    1442 4775.38 1440.89 4779.56    1440 4856.65
GR  1438 4908.41    1436 4929.27    1434 4963.32    1434    5000    1434 5015.86
GR  1436 5039.71    1436 5072.24    1436 5119.55    1438 5144.54    1440 5154.48
GR  1442 5163.53    1444 5172.15    1446 5188.42 1446.48  5193.3    1448 5197.69
GR  1450 5201.41    1452 5205.12    1454 5208.74 1455.47  5211.3    1456 5213.46
GR  1458 5222.24    1458 5238.92    1456 5256.86
*
ET           5.1                 4782.29 5310.03
X1 10.83      54  4800.8 5298.85     642     704     717
GR  1448    4234    1448 4375.81    1448 4583.91    1446 4610.95    1446  4656.3
GR  1446 4742.93 1444.39  4761.2    1446 4765.18    1448 4769.97    1450 4774.76
GR  1452 4779.31    1452 4781.28 1454.60 4781.29 1454.60 4782.29    1452 4782.30
GR  1452  4800.8    1450 4808.34    1448 4816.39    1446 4825.37    1444 4844.86
GR  1442 4867.57    1440 4888.99    1438 4911.48    1438  4931.3    1440 4955.08
GR  1440 4961.15    1440    5000    1440 5073.72    1442 5081.76    1444 5085.61
GR  1446 5088.41    1446 5095.29    1446 5268.61    1448  5283.3    1450 5291.33
GR  1452 5298.85    1452 5310.02 1454.25 5310.03 1454.25 5311.03    1452 5311.04
GR  1452 5321.19    1450 5325.84    1448 5330.48    1446  5352.1    1444  5429.4
GR  1442 5433.87    1442  5453.7    1442 5462.01    1440 5467.15    1438 5472.69
GR  1438 5487.43    1440 5493.52    1442 5499.62    1444 5505.79
*
ET           5.1                 4766.74    5290
X1 10.93      47 4790.58 5279.54     456     557     516
GR  1450    4075    1450 4401.05    1450 4472.44    1450 4658.68    1448 4685.74
GR  1446 4692.07    1446 4738.32    1448 4747.74    1450 4752.28    1452 4756.82
GR  1454 4761.36    1456 4765.91 1456.34 4766.74 1456.31  4782.2    1456 4783.11
GR  1454 4790.58    1452 4801.13    1450 4811.94    1448 4852.07    1446 4882.26
GR  1444  4895.5    1442 4901.64    1440 4907.78    1440 4909.75    1440    5000
GR  1442 5025.23    1444 5039.36    1446 5045.88    1448 5065.33    1448 5141.49
GR  1446 5151.73    1446 5160.63    1448    5249    1450 5259.77    1452 5267.62
GR  1454 5275.29  1455.1 5279.54 1458.23    5290 1458.23    5291  1455.6 5291.01
GR1455.6 5301.19    1454 5303.86    1452 5307.17    1450 5311.25    1448 5317.12
GR  1446 5322.99    1446 5329.64
*
* CONFLUENCE WITH BUCHANAN WASH
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ET           5.1                    4581.43 5120.83
X1 11.03      59 4598.63 5120.83     506     504     525
GR  1454    4082    1454  4316.5    1454 4398.81    1454 4405.76    1454 4444.05
GR  1454 4463.63    1452 4472.52    1452 4546.98    1452 4556.11 1451.02 4559.09
GR  1452 4561.67    1454 4566.38    1456 4571.08    1458 4575.79    1460 4580.49
GR1460.3 4581.43 1460.24 4597.21    1460 4598.63    1458 4606.22    1456 4613.78
GR  1454 4621.09    1452 4629.76    1450 4642.89    1449 4647.63    1448 4693.69
GR  1448 4736.54    1450 4814.76    1450 4864.18    1448 4942.71    1446 4949.67
GR  1444 4956.46    1442 4984.22    1442    5000    1442 5002.45    1444 5021.76
GR  1446 5026.06    1448  5043.9    1448 5055.01    1446 5062.54    1444 5069.86
GR  1442  5077.4    1442 5100.06    1444 5110.31    1446 5120.83    1448 5131.74
GR  1448 5143.33    1448 5159.14    1450 5172.98    1452 5186.65    1454    5200
GR  1456 5213.08    1458 5227.34    1460 5242.36 1460.78 5249.29  1460.5 5289.31
GR  1460 5290.38    1458 5301.57    1456 5314.34    1454 5329.62
*
NC 0.050   0.035   0.035
ET           5.1                    4762 5149.91
X1 11.14      32    4762 5149.91     606     610     606
GR  1460 4331.11    1460 4359.12    1458 4450.29    1456 4510.13    1454 4516.73
GR  1452 4523.33    1450 4529.82    1450 4653.75    1452 4685.50    1452    4762
GR  1452 4830.94    1450 4913.55    1450 4965.11    1448 4975.89    1448    5000
GR  1448 5056.87    1450 5060.92    1452 5064.99    1452 5097.48    1454 5121.70
GR  1456 5126.41    1458 5131.13    1460 5135.85    1462 5140.57    1464 5145.28
GR  1466 5149.91    1466 5173.09    1464 5177.70    1462 5182.56    1460 5187.75
GR  1458 5192.64    1456 5197.53
*
* BEGIN CORPS LEVEES
NC 0.035   0.035   0.020
ET           5.1                    4825.06 5165.90
X1 11.19      80 4825.06 5161.07     277     212     225
GR1466.0 4799.55 1466.00 4823.70 1466.00 4825.06 1465.44 4826.50 1464.00 4830.18
GR1463.6 4831.26 1462.00 4835.30 1461.78 4835.87 1460.47 4839.23 1460.00 4840.18
GR1459.8 4840.67 1458.00 4844.27 1457.08 4846.17 1456.00 4848.37 1454.68 4851.08
GR1454.0 4852.47 1452.35 4858.63 1452.00 4861.70 1452.00 4865.26 1452.00 4867.38
GR1452.0 4906.20 1452.00 4944.98 1452.00 4945.21 1452.00 4948.20 1452.00 4955.59
GR1452.0 4974.23 1452.00 4983.63 1452.00 5000.00 1452.00 5052.40 1452.00 5075.88
GR1452.0 5079.43 1452.00 5080.15 1452.00 5083.16 1452.00 5085.12 1452.21 5091.07
GR1452.2 5091.41 1452.82 5104.84 1453.40 5118.66 1453.68 5124.97 1454.00 5131.82
GR1455.9 5136.57 1456.00 5136.91 1456.04 5136.99 1458.00 5141.74 1458.38 5142.66
GR1460.0 5146.57 1460.56 5147.92 1462.00 5151.40 1462.67 5153.01 1464.00 5156.23
GR1464.7 5158.02 1466.00 5161.07 1466.79 5162.98 1468.00 5165.90 1468.00 5172.97
GR1468.0 5198.33 1468.00 5198.71 1468.00 5208.06 1467.82 5208.79 1467.42 5210.39
GR1466.0 5213.89 1464.59 5217.33 1464.00 5218.79 1462.10 5223.33 1462.00 5223.58
GR1461.9 5223.73 1460.00 5228.27 1459.05 5230.49 1458.00 5232.96 1456.96 5238.16
GR1456.5 5239.87 1456.32 5241.27 1456.00 5249.77 1456.00 5262.87 1455.84 5273.99
GR1456.0 5290.85 1456.15 5294.26 1456.26 5305.86 1456.31 5328.45 1456.18 5342.81
*
ET           5.1                    4827.39 5184.66
X1 11.29      94 4827.39 5184.66     486     591     536
GR1458.6 4498.36 1458.15 4531.48 1458.00 4544.39 1457.54 4552.02 1456.00 4556.76
GR1455.7 4557.78 1454.54 4561.02 1454.00 4562.59 1454.00 4605.58 1454.95 4629.82
GR1456.0 4655.24 1456.33 4661.92 1456.76 4672.63 1456.93 4675.47 1457.17 4678.43
GR1457.5 4684.77 1456.93 4728.58 1456.76 4749.58 1457.01 4757.49 1457.65 4782.78
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GR1462.5 4805.93 1464.00 4810.36 1464.90 4812.84 1466.00 4815.95 1466.99 4818.67
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GR1454.0 4879.94 1453.00 5000.00 1452.00 5012.73 1452.37 5018.03 1454.00 5112.94
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GR1464.0 5170.83 1466.00 5175.45 1467.53 5178.97 1468.00 5180.06 1469.67 5183.89
GR1470.0 5184.66 1470.00 5197.62 1468.00 5202.94 1466.00 5208.26 1464.00 5213.46
GR1463.4 5215.12 1462.00 5218.65 1460.33 5224.18 1460.00 5225.24 1459.63 5239.24
GR1459.4 5247.72 1459.19 5284.15 1459.63 5287.69 1460.00 5297.44 1461.23 5325.09
GR1462.0 5340.83 1463.27 5373.45 1463.76 5392.61 1463.91 5397.59 1464.00 5403.23
GR1464.0 5404.95 1463.47 5430.53 1463.48 5446.78 1463.10 5468.14 1463.01 5472.72
GR1462.8 5480.65 1462.48 5495.44 1462.00 5521.62 1462.00 5562.61
*
ET           5.1                    4826.47 5170.48
X1 11.39      88 4826.47 5170.48     520     577     548
GR1463.4 4540.53 1462.24 4575.55 1462.00 4587.19 1461.52 4589.31 1460.82 4592.35
GR1460.0 4595.75 1459.40 4598.25 1458.00 4604.08 1457.77 4611.59 1457.02 4638.45
GR1456.6 4651.90 1456.25 4664.52 1456.00 4673.48 1456.00 4685.48 1457.34 4692.89
GR1458.0 4696.00 1458.60 4698.45 1460.00 4704.69 1460.84 4725.05 1461.22 4734.45
GR1461.5 4742.42 1461.65 4747.02 1462.00 4766.90 1462.17 4770.00 1464.00 4788.85
GR1465.9 4795.51 1466.00 4795.86 1468.00 4802.87 1469.82 4809.24 1470.00 4809.88
GR1470.0 4826.47 1469.00 4828.70 1468.00 4830.90 1466.98 4833.16 1466.00 4835.34
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GR1465.0 4837.62 1464.00 4839.77 1462.95 4842.10 1462.00 4844.21 1460.92 4846.60
GR1460.0 4848.64 1458.80 4851.31 1458.00 4853.08 1456.24 4856.99 1456.00 4857.51
GR1454.1 4861.74 1454.00 4861.94 1453.77 4869.54 1453.41 4939.48 1453.70 5000.00
GR1454.0 5052.77 1454.00 5137.60 1454.79 5139.20 1456.00 5141.80 1457.23 5144.29
GR1458.0 5145.86 1459.52 5148.94 1460.00 5149.91 1461.94 5153.84 1462.00 5153.96
GR1462.2 5154.43 1464.00 5158.09 1464.41 5158.94 1466.00 5162.22 1466.71 5163.68
GR1468.0 5166.35 1468.90 5168.21 1470.00 5170.48 1471.01 5177.47 1471.30 5178.73
GR1471.0 5187.97 1470.52 5189.60 1470.00 5191.33 1469.06 5193.63 1468.00 5196.22
GR1466.9 5199.00 1466.00 5201.12 1464.50 5204.79 1464.00 5205.96 1463.56 5227.10
GR1463.3 5302.27 1463.50 5392.62 1464.00 5459.82 1464.00 5496.38 1464.34 5500.49
GR1466.0 5520.78 1466.48 5534.57 1467.00 5553.06
*
ET           5.1                  4831.85 5174.56
X1 11.48      93 4831.85 5174.56     443     532     487
GR1469.5 4463.12 1470.00 4514.20 1470.67 4526.19 1472.00 4532.14 1472.00 4536.27
GR1471.2 4545.52 1472.00 4549.52 1471.16 4556.05 1470.89 4562.81 1470.59 4569.92
GR1470.0 4586.17 1470.00 4654.03 1469.53 4674.85 1469.10 4688.69 1468.83 4699.75
GR1468.6 4709.20 1468.27 4720.52 1468.00 4733.02 1467.35 4737.19 1467.59 4745.21
GR1467.3 4752.17 1466.00 4781.13 1465.37 4784.00 1465.14 4788.41 1465.46 4789.08
GR1465.9 4791.67 1466.00 4791.93 1467.84 4797.88 1468.00 4798.37 1468.75 4800.80
GR1469.1 4801.97 1469.53 4803.27 1470.00 4804.79 1472.00 4813.30 1472.00 4827.27
GR1471.5 4828.31 1470.00 4831.85 1469.59 4832.79 1468.00 4836.43 1467.65 4837.23
GR1466.0 4841.01 1465.73 4841.62 1464.00 4845.59 1463.85 4845.93 1462.31 4849.46
GR1462.0 4850.16 1461.96 4850.24 1460.00 4854.68 1459.78 4855.19 1458.00 4859.04
GR1456.8 4861.86 1456.00 4863.63 1454.62 4866.83 1454.00 4868.24 1454.00 4891.27
GR1454.5 4982.94 1454.00 5000.00 1454.00 5139.53 1455.68 5143.25 1456.00 5143.95
GR1457.7 5147.78 1458.00 5148.36 1459.81 5152.35 1460.00 5152.78 1461.90 5156.97
GR1462.0 5157.19 1463.56 5160.62 1464.00 5161.59 1466.00 5165.91 1468.00 5170.24
GR1468.3 5170.98 1470.00 5174.56 1471.57 5177.96 1472.00 5179.19 1472.00 5194.00
GR1470.3 5199.62 1470.00 5200.65 1468.88 5204.39 1468.00 5207.39 1467.56 5217.72
GR1466.9 5233.75 1466.58 5241.08 1466.33 5246.90 1466.40 5250.99 1466.61 5264.73
GR1467.0 5289.91 1467.20 5306.66 1467.34 5341.05 1467.60 5361.43 1467.94 5383.99
GR1467.8 5395.19 1467.56 5419.40 1468.00 5430.41
*
* END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17
ET           5.1                  4845.32 5152.45
X1 11.56      87 4845.32 5152.45     386     396     390
GR1471.8 4676.86 1471.19 4685.14 1470.77 4690.44 1470.54 4693.47 1470.29 4696.28
GR1470.3 4700.82 1470.50 4703.37 1470.83 4707.69 1471.29 4713.13 1472.00 4721.56
GR1472.0 4845.32 1470.73 4853.22 1470.34 4856.19 1470.00 4857.83 1469.42 4859.18
GR1468.0 4862.39 1467.55 4863.42 1466.00 4867.01 1464.74 4869.91 1464.00 4871.63
GR1462.4 4875.29 1462.00 4876.26 1460.24 4880.32 1460.00 4880.88 1459.55 4891.07
GR1459.2 4900.27 1459.14 4911.50 1459.18 4917.72 1459.27 4936.45 1459.28 4951.90
GR1459.3 4956.77 1459.32 4970.56 1459.36 4977.34 1459.35 4986.98 1459.40 5000.00
GR1459.5 5006.02 1459.50 5012.85 1459.48 5022.30 1459.43 5032.20 1459.31 5049.20
GR1459.3 5049.41 1459.31 5049.51 1459.31 5049.72 1459.30 5060.17 1459.48 5072.34
GR1459.5 5084.60 1459.48 5091.51 1459.47 5098.77 1459.30 5109.95 1459.40 5114.80
GR1459.6 5117.41 1459.59 5117.63 1460.00 5124.33 1461.59 5127.25 1461.65 5127.38
GR1462.0 5128.28 1462.29 5129.00 1462.54 5129.65 1463.39 5131.68 1464.00 5133.13
GR1465.0 5135.40 1466.00 5137.90 1466.70 5139.56 1468.00 5142.66 1468.53 5143.93
GR1470.0 5147.43 1470.90 5149.69 1472.00 5152.45 1472.00 5165.70 1471.55 5168.67
GR1471.2 5170.75 1470.00 5178.38 1470.00 5225.76 1470.27 5226.00 1472.00 5227.56
GR1472.5 5228.46 1472.76 5229.77 1472.00 5233.24 1471.71 5234.57 1471.42 5235.87
GR1471.4 5236.02 1470.93 5237.02 1470.00 5239.41 1470.00 5268.37 1470.59 5293.04
GR1470.9 5296.51 1471.02 5306.55
*
* OUTLET OF I-17 CROSSING
ET           5.1                  4880.47 5126.63
X1 11.57      92 4880.47 5126.63      72      75      73
GR1470.8 4670.15 1471.04 4676.02 1471.81 4692.20 1472.00 4696.83 1472.63 4707.63
GR1472.8 4711.11 1473.05 4715.60 1473.66 4746.09 1473.57 4751.49 1473.41 4760.54
GR1474.0 4769.16 1474.00 4816.39 1473.19 4827.23 1472.71 4833.86 1472.64 4834.85
GR1472.0 4844.37 1472.00 4861.16 1472.54 4870.52 1472.00 4880.47 1471.79 4880.62
GR1470.1 4881.77 1470.00 4881.79 1468.35 4882.11 1468.00 4882.18 1466.41 4882.49
GR1466.0 4882.57 1464.43 4882.88 1464.00 4882.96 1462.45 4883.27 1462.00 4883.35
GR1461.6 4896.00 1461.53 4899.52 1461.22 4909.97 1461.03 4926.96 1460.86 4934.09
GR1460.6 4946.27 1460.36 4961.63 1460.29 4993.04 1460.30 5000.00 1460.41 5002.11
GR1460.5 5010.81 1460.63 5019.07 1461.14 5020.57 1461.34 5048.98 1461.18 5074.02
GR1460.9 5090.68 1461.37 5103.14 1461.81 5115.32 1461.86 5116.93 1462.00 5120.67
GR1462.6 5120.78 1464.00 5121.06 1464.40 5121.17 1466.00 5121.48 1466.51 5121.56
GR1467.1 5121.69 1468.00 5121.86 1469.43 5122.14 1470.00 5122.25 1470.50 5123.25
GR1471.7 5125.87 1472.00 5126.63 1472.00 5154.31 1471.46 5159.70 1470.38 5170.04
GR1470.4 5174.42 1470.49 5174.60 1470.77 5175.42 1472.00 5179.41 1472.00 5180.09
GR1471.6 5182.32 1470.00 5193.35 1470.00 5209.59 1470.38 5210.71 1471.63 5215.00
GR1472.0 5216.25 1472.00 5216.38 1472.00 5218.35 1471.83 5219.05 1470.00 5223.24
GR1470.0 5225.98 1470.22 5226.92 1470.00 5227.88 1470.00 5234.90 1470.81 5241.05
GR1470.8 5241.43 1471.05 5249.44 1470.99 5250.35 1470.90 5250.66 1470.72 5261.88
GR1471.0 5291.96 1471.60 5306.88
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*
EJ
ER
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10% Annual Chance Flood

Main Channel

Output File: main10.out

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.2;  May 1991            *
 *                                        *
 *  RUN DATE    15SEP04    TIME   15:02:12 *
 *****************************************
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*****************************************
*  U.S. ARMY CORPS OF ENGINEERS         *
*  HYDROLOGIC ENGINEERING CENTER        *
*  609 SECOND STREET, SUITE D           *
*  DAVIS, CALIFORNIA 95616-4687         *
*          (916) 756-1104               *
*****************************************
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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
```

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15SEP04 15:02:12

PAGE 1

THIS RUN EXECUTED 15SEP04 15:02:12

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*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
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```
T1    MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2    INPUT FILE: main10.dat       10-YR FLOOD ELEVATION
T3    ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4    October 2003 EMCON/OWT Inc. rev. for add'l ret. int. August 2004

      This model is used to determine the main channel Base Floodplain
      Extended x-section data used for stationing 9.21 - 9.35 (rockwall removed)
      Split flowrates are applied from bkt10.dat and are partitioned across
      relevant cross sections.

      Starting WSEL is Adobe Dam reservoir 100-yr WSEL from effective FIS study.
      Boundary conditions were taken from Tetra Tech modeling.
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2			0		0	0	1378.00	

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38 43 1 2 26 8 4 25 68 53
54

10-yr peak discharge is from effective FIS study.

QT	1	11973								
NC	0.045	0.045	0.035	0.1	0.3					
ET		5.1			3796.61	5556.89				
X1	8.69	95	4025.25	5073.77						
GR	1380.0	3796.61	1380.00	3854.47	1379.00	3861.47	1378.00	3868.42	1378.00	3878.69
GR	1378.6	3884.04	1380.00	3896.01	1380.00	3907.92	1379.82	3923.26	1379.91	3925.58
GR	1380.0	4002.41	1380.54	4004.61	1382.00	4011.19	1382.00	4016.12	1381.16	4025.25
GR	1380.0	4037.88	1379.55	4039.54	1378.00	4045.04	1376.66	4058.92	1376.33	4063.23
GR	1376.0	4067.80	1375.66	4071.80	1374.51	4084.66	1374.14	4088.53	1374.00	4090.42
GR	1373.8	4091.18	1373.53	4092.99	1372.00	4102.33	1371.23	4129.14	1370.00	4171.62
GR	1370.0	4446.38	1370.04	4448.91	1372.00	4550.37	1372.00	4583.65	1371.80	4601.95
GR	1371.2	4726.77	1371.45	4741.81	1371.10	4787.06	1371.00	4796.71	1370.54	4837.32
GR	1370.6	4872.36	1370.52	4876.45	1370.60	4881.98	1370.60	4882.00	1370.82	4897.47
GR	1371.4	4906.65	1371.83	4913.95	1372.00	4917.45	1372.34	4920.12	1374.00	4933.03
GR	1374.3	4936.71	1374.00	4958.00	1373.51	4959.38	1372.00	4963.60	1371.80	4964.16
GR	1370.0	4969.21	1368.37	4973.77	1368.00	4974.80	1366.00	4980.35	1365.56	4981.39

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GR	1364.7	4987.21	1364.21	4990.25	1364.00	4992.46	1364.00	5000.00	1364.00	5003.25
GR	1365.5	5010.85	1365.78	5012.36	1366.00	5013.46	1366.52	5014.69	1368.00	5018.15
GR	1368.3	5018.85	1370.00	5022.82	1370.70	5024.49	1372.00	5027.49	1373.05	5031.15
GR	1374.0	5034.40	1375.00	5039.27	1376.00	5044.17	1376.23	5045.52	1377.39	5052.81
GR	1378.0	5059.14	1378.78	5065.36	1379.49	5073.77	1379.70	5074.11	1379.26	5077.51
GR	1378.7	5079.93	1378.00	5082.02	1378.00	5116.40	1378.13	5146.24	1378.00	5177.10
GR	1378.0	5181.33	1377.50	5273.67	1377.18	5375.38	1377.56	5451.37	1377.29	5556.89

QT	1	11973								
ET		5.1			3855.70	5475.95				
X1	8.79	89	4095.41	5039.30	530	546	539			
GR	1384.0	3855.70	1384.00	3973.82	1382.64	3980.66	1384.00	3998.09	1382.65	4051.20
GR	1382.6	4058.69	1382.49	4060.23	1382.89	4064.63	1384.00	4067.90	1384.00	4095.41
GR	1382.2	4107.84	1382.00	4109.37	1380.85	4117.39	1380.00	4123.50	1378.49	4137.14
GR	1378.0	4141.55	1376.51	4154.98	1376.00	4159.65	1374.00	4171.01	1373.84	4176.47
GR	1372.0	4222.80	1372.00	4265.74	1371.40	4267.19	1370.00	4271.65	1370.02	4277.10
GR	1370.5	4303.75	1372.00	4387.79	1372.60	4464.89	1373.01	4509.16	1373.45	4564.23
GR	1373.6	4589.91	1374.00	4659.42	1374.00	4677.54	1373.79	4707.25	1374.00	4731.92
GR	1375.0	4815.01	1375.48	4838.28	1375.82	4866.71	1375.01	4881.51	1374.70	4887.04
GR	1374.0	4898.81	1374.00	4914.20	1376.00	4932.06	1377.09	4941.83	1377.77	4948.33
GR	1378.0	4950.51	1378.00	4973.99	1377.74	4974.57	1376.00	4978.35	1375.92	4978.54
GR	1375.3	4979.92	1374.00	4982.54	1373.68	4983.19	1372.00	4986.64	1371.40	4987.87
GR	1370.0	4990.74	1369.23	4992.31	1368.00	4994.83	1367.12	4996.63	1366.00	4998.93
GR	1366.0	5000.00	1367.19	5002.89	1368.00	5004.26	1369.43	5006.66	1370.00	5007.63
GR	1371.8	5010.72	1372.00	5011.01	1372.55	5011.93	1374.00	5014.64	1374.46	5015.50
GR	1376.0	5018.37	1377.54	5024.62	1378.00	5026.26	1378.19	5027.55	1378.48	5029.47
GR	1380.0	5039.30	1380.47	5053.53	1381.00	5070.14	1381.05	5074.82	1381.51	5092.11
GR	1381.8	5130.27	1381.56	5144.28	1381.81	5200.42	1381.90	5207.46	1381.92	5219.18
GR	1382.0	5303.86	1382.00	5320.81	1381.88	5345.60	1381.56	5475.95		

QT	1	11942								
ET		5.1			4279.99	5437.79				
X1	8.93	71	4541.12	5252.00	565	711	722			
GR	1386.3	4279.99	1386.00	4295.47	1386.34	4315.43	1386.00	4350.00	1385.51	4354.32
GR	1386.0	4371.17	1386.00	4454.56	1386.25	4457.97	1387.66	4480.76	1388.00	4485.92
GR	1388.0	4526.66	1386.72	4541.12	1386.00	4552.20	1385.40	4560.69	1385.02	4564.36
GR	1384.5	4569.41	1384.00	4573.51	1382.63	4586.39	1382.43	4588.53	1382.00	4594.51
GR	1381.7	4598.20	1380.48	4604.38	1380.00	4606.94	1379.91	4608.36	1378.58	4632.57
GR	1378.0	4639.26	1376.00	4653.50	1375.35	4704.64	1374.00	4828.12	1373.68	4850.43
GR	1373.1	4888.01	1372.88	4901.73	1372.00	4950.77	1371.17	4970.32	1370.00	4996.16
GR	1370.1	5000.00	1370.40	5014.94	1370.52	5018.25	1370.89	5033.81	1371.01	5037.53
GR	1371.3	5046.38	1371.00	5056.40	1370.55	5068.53	1370.60	5102.71	1370.78	5109.11
GR	1371.1	5116.39	1371.60	5131.46	1372.00	5139.38	1373.19	5146.05	1373.89	5149.69
GR	1374.0	5150.47	1374.30	5152.78	1374.67	5155.69	1376.00	5166.46	1376.39	5169.57
GR	1378.0	5182.62	1379.50	5195.03	1380.00	5200.27	1380.58	5207.92	1381.76	5224.62
GR	1382.0	5227.77	1382.80	5252.00	1384.00	5330.07	1384.00	5333.71	1384.91	5347.75
GR	1386.0	5362.52	1386.60	5376.48	1386.90	5391.40	1387.03	5397.63	1387.24	5419.21
GR	1387.0	5437.79								

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QT	1	11967								
ET		5.1			4519.91	5433.52				
X1	9.01	81	4817.29	5340.88	363	558	430			
GR	1388.4	4519.91	1388.00	4559.91	1388.00	4561.41	1388.84	4570.06	1388.45	4571.71
GR	1388.0	4573.70	1388.00	4576.09	1388.46	4578.03	1388.77	4579.51	1388.28	4582.90
GR	1388.0	4583.57	1388.00	4677.39	1388.26	4681.88	1389.30	4700.64	1389.76	4708.44
GR	1389.3	4717.62	1388.98	4718.21	1388.52	4718.22	1388.00	4721.78	1387.37	4732.92
GR	1387.1	4737.05	1386.95	4738.08	1386.40	4758.07	1386.64	4764.66	1386.86	4770.00
GR	1387.0	4774.77	1387.38	4799.17	1387.08	4803.47	1386.92	4804.87	1386.44	4811.50
GR	1386.0	4817.29	1384.00	4825.73	1383.63	4827.33	1382.00	4834.13	1380.26	4841.49
GR	1380.0	4842.58	1379.21	4845.86	1378.00	4850.84	1376.45	4856.91	1376.00	4858.68
GR	1375.8	4859.41	1374.00	4866.60	1373.72	4878.11	1373.33	4898.38	1373.06	4911.20
GR	1372.9	4920.39	1372.51	4939.85	1372.35	4949.90	1372.19	4962.38	1372.32	4994.02
GR	1372.4	5000.00	1372.50	5005.13	1373.08	5052.28	1373.49	5089.07	1373.86	5118.83
GR	1374.0	5130.57	1375.57	5137.72	1376.00	5139.67	1377.54	5146.76	1378.00	5149.27
GR	1379.4	5157.21	1380.00	5161.68	1380.57	5169.64	1380.83	5173.36	1380.91	5174.01
GR	1381.2	5177.53	1381.59	5182.69	1382.00	5188.14	1382.37	5193.51	1383.14	5206.05
GR	1384.0	5217.34	1385.32	5244.41	1385.68	5252.28	1386.00	5257.06	1387.77	5292.41
GR	1388.0	5296.60	1388.84	5320.16	1389.58	5340.88	1389.68	5346.00	1390.00	5351.31
GR	1390.0	5433.52								

QT	1	11686								
ET		5.1			4515.30	5233.18				
X1	9.08	70	4796.92	5198.84	432	165	365			
GR	1391.1	4515.30	1390.24	4539.50	1390.00	4540.45	1390.00	4625.97	1390.21	4628.50
GR	1390.6	4632.33	1390.69	4632.97	1390.44	4647.05	1390.08	4647.52	1390.00	4647.64
GR	1389.6	4649.23	1388.00	4655.18	1388.00	4670.31	1388.16	4671.07	1388.14	4787.35
GR	1388.0	4796.92	1387.24	4809.20	1386.69	4817.41	1386.00	4827.18	1384.79	4833.74
GR	1384.0	4837.38	1383.79	4838.28	1382.78	4842.68	1382.00	4845.64	1381.40	4847.91
GR	1380.0	4853.19	1378.86	4857.51	1378.00	4860.75	1377.03	4864.25	1376.00	4868.13

GR	1375.1	4871.58	1374.00	4875.67	1373.97	4878.43	1373.92	4884.08	1373.76	4895.74
GR	1373.7	4902.64	1373.65	4905.82	1373.59	4911.57	1373.49	4920.43	1373.47	5000.00
GR	1373.5	5095.48	1373.56	5107.93	1373.59	5109.03	1373.62	5112.59	1373.70	5119.31
GR	1373.8	5122.87	1373.82	5124.67	1373.85	5126.00	1373.92	5128.16	1373.94	5130.06
GR	1374.0	5131.14	1374.13	5131.77	1376.00	5140.79	1377.41	5147.57	1378.00	5150.02
GR	1378.6	5152.38	1380.00	5158.25	1381.29	5163.54	1382.00	5166.47	1383.45	5172.44
GR	1384.0	5174.70	1385.73	5181.83	1386.00	5182.93	1387.10	5187.46	1388.00	5190.99
GR	1388.1	5191.61	1389.08	5195.22	1390.00	5198.84	1390.04	5199.45	1390.27	5233.18

QT	1	10632								
NC	0.035	0.035	0.035							
ET		5.1			4525.85	5437.55				
X1	9.14	94	4835.60	5165.24	288	385	333			
GR	1392.1	4525.85	1392.00	4598.96	1391.59	4608.73	1390.99	4723.68	1391.42	4775.78
GR	1391.5	4789.87	1391.64	4805.14	1391.00	4830.80	1390.59	4832.90	1390.00	4835.60
GR	1389.7	4836.69	1389.00	4839.12	1388.44	4841.11	1388.00	4842.60	1387.57	4843.96
GR	1387.0	4845.55	1386.47	4846.70	1386.00	4847.68	1385.71	4848.28	1385.00	4849.75
GR	1384.7	4850.41	1384.00	4851.87	1383.84	4852.20	1383.32	4853.25	1383.00	4853.91
GR	1382.8	4854.33	1382.00	4856.07	1381.65	4856.77	1381.00	4858.07	1380.00	4860.14
GR	1379.7	4861.00	1379.19	4861.98	1379.00	4862.42	1378.49	4863.58	1378.00	4864.71
GR	1377.4	4866.13	1377.00	4867.28	1376.43	4869.03	1376.00	4869.56	1375.54	4872.43

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GR	1374.5	4874.14	1374.00	4875.08	1374.00	5000.00	1374.00	5062.13	1374.39	5091.47
GR	1375.0	5121.35	1375.00	5125.45	1375.71	5129.68	1376.00	5131.10	1376.94	5133.66
GR	1377.0	5134.06	1377.77	5135.68	1378.00	5136.16	1379.00	5138.25	1379.92	5140.18
GR	1380.0	5140.35	1380.80	5142.03	1381.00	5142.44	1381.45	5143.38	1382.00	5144.53
GR	1382.9	5146.34	1383.00	5146.63	1383.72	5148.14	1384.00	5148.75	1384.46	5149.37
GR	1385.0	5150.09	1385.25	5150.43	1386.00	5151.41	1386.80	5152.48	1387.00	5152.75
GR	1387.2	5153.56	1388.00	5156.83	1388.60	5159.29	1389.00	5160.92	1389.34	5162.35
GR	1389.7	5164.16	1390.00	5165.24	1390.00	5165.45	1390.42	5166.34	1391.00	5168.32
GR	1391.8	5170.94	1391.91	5171.50	1392.00	5171.73	1392.22	5174.81	1392.64	5180.92
GR	1393.0	5184.53	1392.55	5196.46	1392.91	5224.81	1392.45	5256.91	1392.29	5293.65
GR	1392.1	5328.16	1392.00	5380.42	1392.00	5416.53	1391.87	5437.55		

DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT	1	9300								
X1	9.145	66	5015	5325	8	8	8			
X3	10	0	0	0	0	0	0	1392.2	1393.1	
BT	-16	5015	1394.5	1394.5	5015.01	1394.5	1390	5045	1394.8	1390.3
BT		5085	1395.2	1390.7	5088.75	1395.2	1390.8	5093.75	1395.3	1390.8
BT		5125	1395.6	1391.1	5170	1395.7	1391.2	5205	1395.7	1391.2
BT		5245	1395.5	1391	5246.25	1395.5	1391	5251.25	1395.5	1391
BT		5285	1395.2	1390.7	5295	1395.1	1390.6	5324.99	1394.7	1390.2
BT		5325	1394.7	1394.7						
GR	1395.6	3767.9	1395.5	3820.9	1395.4	3873.6	1395.4	3891.5	1395.4	3939.2
GR	1395.2	3990.7	1395.4	4052.6	1395.4	4113.7	1395.3	4176.6	1395.1	4229.3
GR	1395.1	4287.4	1394.9	4334.4	1394.8	4385.2	1394.7	4450.4	1394.8	4489.6
GR	1394.5	4524.7	1394.1	4576.1	1394	4617.7	1393.7	4656.6	1393.2	4693.1
GR	1393.1	4730.9	1392.4	4761	1392.2	4821	1392.4	4881	1393.59	4956
GR	1394.4	5006	1394.5	5015	1390	5015.01	1374.94	5045	1374.94	5085
GR	1374.9	5088.74	1390.80	5088.75	1390.80	5093.75	1374.94	5093.76	1374.94	5125
GR	1374.9	5167.49	1391.2	5167.5	1391.2	5170	1391.2	5172.5	1374.94	5172.51
GR	1374.9	5205	1374.94	5245	1374.94	5246.24	1391	5246.25	1391	5251.25

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GR   1374.9    5251.26    1374.94      5285    1374.94      5295     1390.2    5324.99     1394.7      5325
GR   1394.8       5326    1393.95      5376    1393.27      5453    1393.07       5520     1393.1    5541.9
GR   1392.9     5588.6     1392.7    5636.9     1392.7    5681.4     1392.5     5740.6     1392.6    5796.6
GR   1392.6     5855.7     1392.4    5922.7     1392.3      5988     1392.3     6032.1     1392.1    6079.5
  UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT        1       9300
X1    9.155         66       5015      5325       80.2      80.2       80.2
X3       10          0          0         0          0         0          0    1392.2     1393.1
BT      -16       5015     1394.5    1394.5    5015.01    1394.5       1390      5045     1394.8    1390.3
BT                5085     1395.2    1390.7    5088.75    1395.2     1390.8   5093.75     1395.3    1390.8
BT                5125     1395.6    1391.1       5170    1395.7     1391.2      5205     1395.7    1391.2
BT                5245     1395.5      1391    5246.25    1395.5       1391   5251.25     1395.5      1391
BT                5285     1395.2    1390.7       5295    1395.1     1390.6   5324.99     1394.7    1390.2
BT                5325     1394.7    1394.7
GR   1395.6     3767.9     1395.5    3820.9     1395.4    3873.6     1395.4     3891.5     1395.4    3939.2
GR   1395.2     3990.7     1395.4    4052.6     1395.4    4113.7     1395.3     4176.6     1395.1    4229.3
GR   1395.1     4287.4     1394.9    4334.4     1394.8    4385.2     1394.7     4450.4     1394.8    4489.6
GR   1394.5     4524.7     1394.1    4576.1       1394    4617.7     1393.7     4656.6     1393.2    4693.1
GR   1393.1     4730.9     1392.4      4761     1392.2      4821     1392.4       4881    1393.59      4956
GR   1394.4       5006     1394.5      5015       1390   5015.01    1375.14       5045    1375.14      5085
GR   1375.1    5088.74     1390.8   5088.75     1390.8   5093.75    1375.14    5093.76    1375.14      5125
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GR   1375.1    5167.49     1391.2    5167.5     1391.2      5170     1391.2     5172.5    1375.14   5172.51
GR   1375.1       5205    1375.14      5245    1375.14   5246.24       1391   5246.25       1391   5251.25
GR   1375.1    5251.26    1375.14      5285    1375.14      5295     1390.2    5324.99     1394.7      5325
GR   1394.8       5326    1393.95      5376    1393.27      5453    1393.07       5520     1393.1    5541.9
GR   1392.9     5588.6     1392.7    5636.9     1392.7    5681.4     1392.5     5740.6     1392.6    5796.6
GR   1392.6     5855.7     1392.4    5922.7     1392.3      5988     1392.3     6032.1     1392.1    6079.5
GR   1392.1       6085

QT        1       9300
ET                  5.1                       4528.66    5445.27
X1    9.16         89    4852.56    5164.29         8         8          8
GR   1392.6    4528.66    1392.16    4581.89    1392.81   4592.32    1392.00    4643.39    1391.85   4708.61
GR   1392.0    4756.55    1392.50    4805.50    1392.00   4836.76    1391.23    4838.82    1391.00   4839.41
GR   1390.5    4842.05    1390.00    4852.56    1389.00   4854.43    1388.00    4856.29    1387.00   4857.94
GR   1386.0    4859.59    1385.00    4861.24    1384.00   4862.89    1383.40    4863.88    1383.00   4864.54
GR   1382.5    4865.33    1382.00    4866.18    1381.00   4867.82    1380.61    4868.61    1380.00   4869.92
GR   1379.8    4870.35    1379.00    4872.01    1378.40   4873.27    1378.00    4874.11    1377.29   4875.60
GR   1377.0    4876.20    1376.18    4877.92    1376.00   4878.30    1375.00    4880.39    1374.81   4915.05
GR   1374.0    4961.04    1374.20    5000.00    1374.50   5083.02    1374.70    5107.91    1375.00   5129.31
GR   1375.6    5132.84    1376.00    5135.04    1377.00   5138.70    1378.00    5140.93    1379.00   5142.76
GR   1379.6    5143.88    1380.00    5144.79    1380.41   5145.63    1381.00    5146.82    1381.33   5147.49
GR   1382.0    5148.85    1382.47    5149.81    1383.64   5152.18    1384.00    5152.91    1384.55   5154.02
GR   1385.0    5154.94    1386.00    5156.58    1386.42   5157.20    1387.00    5158.07    1388.00   5161.31
GR   1388.6    5162.08    1389.00    5162.75    1389.58   5163.63    1390.00    5164.29    1390.52   5165.66
GR   1390.7    5169.65    1390.00    5170.91    1390.00   5171.15    1390.65    5172.70    1391.00   5173.49
GR   1391.5    5174.67    1392.00    5175.74    1392.49   5177.88    1393.00    5180.15    1393.00   5215.17
GR   1392.8    5239.51    1393.00    5302.86    1393.00   5330.00    1393.00    5335.30    1393.52   5343.99
GR   1394.0    5352.89    1394.20    5356.22    1394.67   5363.95    1395.00    5372.98    1395.00   5394.93
GR   1394.9    5404.04    1394.00    5430.80    1393.15   5432.47    1393.36    5445.27
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BOTTOM OF DROP STRUCTURE

QT	1	9300								
NC	0.035	0.035	0.020							
ET		5.1			4732	5190.05				
X1	9.21	7	4732	5174.57	145	355	279			
GR	1389	4732	1376	4765	1376	4901	1376	5000	1376	5140.72
GR	1391	5174.57	1392	5190.05						

TOP OF DROP STRUCTURE

QT	1	9300								
NC	0.040	0.035	0.035							
ET		5.1			4664	5314.09				
X1	9.22	14	4664	5192.98	122	104	39			
GR	1395	4664	1390	4708	1390	4871.20	1390	5000	1390	5167.75
GR	1391	5173.76	1392	5177.14	1393	5179.36	1394	5181.58	1395	5184.44
GR	1396	5187.36	1397	5192.98	1398	5219.20	1399	5314.09		

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QT	1	9300								
ET		5.1			4572.95	5304.55				
X1	9.25	45	4825	5285.60	155	82	141			
GR	1400	3023	1399.1	3123	1397.6	3223	1395.8	3323	1392.7	3423
GR	1392	3523	1393	3623	1393.6	3723	1393.5	3762	1394	3874
GR	1394	3898	1394	4003.81	1394	4062.18	1395	4283.87	1395	4298.29
GR	1395	4301.25	1395	4365.84	1395	4385.4	1395.7	4563.07	1395	4565.34
GR	1395	4570.45	1395.57	4572.95	1395.46	4582.97	1395	4585.82	1395	4590.84
GR	1395	4598.19	1395	4614.18	1395	4621.31	1394	4735.08	1394	4738.18
GR	1394	4838.32	1393	4871.51	1392	4892.27	1392	5000	1392	5077.8
GR	1393	5179.38	1394	5266.49	1395	5275.95	1396	5278.52	1397	5281.09
GR	1398	5283.83	1398.64	5285.6	1399	5290.86	1400	5304.55	1399	5325.36

END FLOW SPLIT; RETURN TO FULL FLOW

QT	1	12000								
ET		5.1			4441.50	5290.19				
X1	9.30	52	4779.69	5280.97	262	282	261			
GR	1401.5	2940	1402.6	2970	1400.5	3070	1398.6	3170	1397	3270
GR	1394	3370	1394	3470	1394	3570	1394	3670	1394.8	3770
GR	1395	3820	1394	3930	1394	4045.09	1395	4108.19	1395	4117
GR	1396	4323.15	1396.42	4425.34	1396	4429.71	1396	4434.42	1396	4441.5
GR	1396	4445.67	1396	4449.8	1395	4453.93	1394.13	4458.61	1394	4462.74
GR	1393	4494.69	1393	4512.86	1394	4520.79	1395	4539.92	1395	4544.55
GR	1395	4549.38	1396	4554.31	1397	4672.3	1397	4703.41	1397	4730.49
GR	1397	4737.81	1396.5	4750	1396	4768.57	1395	4779.69	1394	4811.1
GR	1393	4973.9	1393	5000	1393	5090.01	1394	5237.22	1395	5265.28
GR	1395	5270.89	1396	5273.07	1397	5275.25	1398	5277.47	1399	5279.81
GR	1399.5	5280.97	1400	5290.19						

ET		5.1			4252.38	5287.77

X1	9.35	64	4775	5275.88	291	274	274			
GR	1403.4	2913	1404	2963	1401.9	3063	1400.6	3163	1399.1	3263
GR	1396	3363	1396	3463	1394.8	3563	1395.2	3663	1396	3763
GR	1396	3863	1396	3873	1396	3970	1396	4133.14	1397	4227.56
GR	1397	4246.88	1397	4251.02	1397	4252.38	1397	4261.99	1397	4262.89
GR	1397	4266.45	1397	4272.25	1396	4279.28	1395	4304.83	1395	4325.29
GR	1396	4342.7	1397	4379.18	1398	4402.1	1399	4459.05	1399	4467.32
GR	1399	4490.46	1399	4657.95	1399	4675.14	1399	4775	1399	4817.89
GR	1398	4824.28	1398	4830.91	1398	4833.58	1397	4841.76	1396	4854.67
GR	1395	4861.17	1394	4882.23	1393	4897.87	1392	4929.89	1392	4995.23
GR	1392.2	5000	1393	5015.98	1394	5050.46	1394	5062.07	1394	5081.74
GR	1394	5098.98	1393	5104.45	1393	5165.77	1394	5255.79	1394.16	5261.12
GR	1395	5263.15	1396	5265.55	1397	5267.94	1398	5270.34	1399	5272.74
GR	1399.9	5274.92	1400	5275.88	1401	5287.77	1401	5364.41		

FIRST LANDFILL CROSS SECTION

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X1	9.42	84	4717	5216.97	400	402	399			
GR	1428	4000	1426	4011.37	1424	4051.66	1424	4057.37	1426	4081.68
GR	1428	4110.92	1428	4121.45	1426	4129.13	1424	4134.76	1422	4139.19
GR	1421	4142.73	1420	4161.87	1419.19	4203.29	1418	4205.11	1416	4226.25
GR	1414	4237.19	1412	4246.78	1410	4256.36	1408	4267.25	1406	4278.32
GR	1404	4313.42	1402	4319.63	1401	4385.11	1401	4391.49	1400	4399.73
GR	1400	4402.48	1400	4425	1399	4435.31	1399	4437.98	1400	4464.1
GR	1400	4473.55	1401	4478.99	1401	4489.28	1401	4501.38	1401	4506.58
GR	1401	4519.28	1401	4549.48	1401	4609.38	1401	4631.43	1401	4640
GR	1401	4717	1401	4808.53	1401	4810.26	1400	4816.66	1399	4821.3
GR	1398	4826.32	1397	4831.26	1396	4836.2	1395	4840.81	1394	4845.47
GR	1394	4861.29	1394	4874.91	1394	4881.71	1395	4899.25	1395	4935.92
GR	1394	4952.05	1393	4968.09	1393	4971.63	1393	4977.75	1393	5000
GR	1393	5022.4	1394	5029.45	1395	5047.57	1396	5049.85	1397	5052.12
GR	1397	5069.99	1396	5075.09	1395	5080.13	1394	5086.54	1393	5111.54
GR	1393	5144.13	1394	5187.94	1395	5201.29	1396	5203.58	1397	5205.87
GR	1398	5208.12	1399	5210.33	1400	5212.55	1401	5214.76	1402	5216.97
GR	1402.1	5217.23	1403	5227.59	1404	5237.39	1404.24	5239.73		

NC	0.040	0.040	0.040							
X1	9.45	97	4709	5209	93	126	118			
GR	1444	4000	1446	4007.9	1448	4067.98	1448	4129.56	1446	4153.01
GR	1444	4163.3	1442	4166.26	1440	4169.22	1438	4175.44	1436	4186.62
GR	1434	4200.28	1432	4214.71	1430	4223.41	1428	4230.51	1426	4245.88
GR	1424	4268.57	1422.59	4278.96	1422	4280.89	1420	4290.71	1418	4299.79
GR	1416	4308.72	1414	4317.57	1412	4326.42	1410	4337.33	1408	4350.71
GR	1406	4364.09	1404	4377.47	1402	4400.54	1401	4461.44	1400	4466.82
GR	1400	4480.64	1400	4491.26	1400	4512.14	1401	4518.92	1401.69	4560.74
GR	1402	4579.32	1403	4582.89	1403	4591.95	1402	4596.75	1402	4660
GR	1402	4672.46	1401.7	4709	1401	4801.15	1400	4808.19	1399	4812.86
GR	1398	4817.28	1397	4822.04	1396	4829.31	1395	4850.48	1395	4874.85
GR	1396	4881.97	1397	4899.1	1397	4923.02	1396	4938.23	1395	4946.05
GR	1394	4960.72	1394	4965.12	1394	4968.36	1394	4997.02	1393.39	5000
GR	1393	5001.91	1393	5029.22	1394	5035.16	1395	5037.25	1396	5039.33
GR	1397	5041.64	1398	5043.96	1399	5046.15	1400	5048.19	1401	5065.48

GR	1401	5071.95	1401	5081.45	1401	5133.8	1400	5156.91	1399	5160.41
GR	1398	5163.93	1397	5167.45	1396	5170.97	1395	5174.49	1394	5180.55
GR	1394	5209	1394	5237.19	1395	5242.58	1396	5247.96	1397	5251.97
GR	1398	5255.85	1399	5259.53	1400	5261.9	1401	5264.27	1404.8	5265.18
GR	1402	5266.67	1403	5269.03	1404	5271.38	1405.2	5272.32	1404.6	5276.7
GR	1405	5277.23	1405	5281.63						

NC	0.035	0.040	0.040							
ET		5.1			4663.35	5177				
X1	9.54	85	4685.93	5177	410	515	500			
GR	1456	4000	1456	4021.5	1454	4238.02	1454	4370.23	1456	4373.71
GR	1458	4382.67	1460	4392.58	1462	4402.82	1464	4414.23	1464	4416.59
GR	1462	4419.16	1460	4421.73	1458	4424.3	1456	4426.86	1454	4429.43
GR	1452	4432.03	1450	4434.89	1448	4437.71	1446	4440.53	1444	4443.94
GR	1442	4455.27	1440	4466.36	1438	4475.82	1436	4485.28	1434	4494.74
GR	1432	4503.98	1430	4512.83	1428	4521.68	1426	4530.63	1424	4537.95

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GR	1422	4543.4	1420	4548.8	1418	4566.76	1416	4576.41	1414	4588.78
GR	1412	4606.7	1410	4618.24	1408	4626.12	1406	4646.3	1405.45	4653.56
GR	1406	4654.9	1408	4659.52	1409.53	4663.35	1409.41	4679.83	1408	4685.93
GR	1406	4694.77	1404	4704.62	1402	4714.47	1400	4759.39	1399	4817.12
GR	1399	4833.11	1399	4849.47	1399	4877	1398	4880.23	1397	4889.16
GR	1397	4922.52	1398	4930.18	1398	4954.06	1397	4978.17	1397	5000
GR	1397	5021.85	1398	5031.11	1399	5044.96	1400	5072.02	1401	5077.75
GR	1402	5083.41	1403	5099.61	1404	5131.49	1404	5150.42	1404	5168.37
GR	1404	5177	1404	5197.33	1404	5199.5	1404	5210.97	1404	5253.08
GR	1404	5391.09	1403	5589.76	1403	5598.79	1404	5665.44	1405	5677.3
GR	1406	5688.92	1407	5698.83	1408	5708.08	1408.1	5709.05	1408	5712.42

ET		5.1			4736.39	5231.86				
X1	9.65	77	4754.19	5231.86	475	503	558			
GR	1464	4000	1464	4008.95	1464	4009.76	1462	4321.74	1460	4399.87
GR	1458	4431.45	1456	4444.62	1454	4455.94	1452	4520.78	1450	4527.92
GR	1448	4534.57	1446	4541.22	1444	4547.9	1442	4555.79	1440	4564.66
GR	1438	4573.56	1436	4582.53	1434	4591.5	1432	4600.47	1430	4609.44
GR	1428	4617.73	1426	4626.65	1424	4636.67	1422	4647.12	1420	4657.56
GR	1418	4668.01	1416	4678.25	1415.47	4681.09	1414	4684.72	1412	4698.82
GR	1410	4712.91	1408.84	4718.95	1410	4724.03	1412	4732.19	1412.28	4733.95
GR	1412.3	4736.39	1412.23	4752.15	1412.23	4753.27	1412	4754.19	1410	4762.26
GR	1408	4770.81	1406	4779.35	1404	4787.89	1402	4808.39	1402	4880.47
GR	1402	5000	1402	5117.6	1402	5177.99	1404	5201.2	1406	5208.98
GR	1408	5216.75	1410	5224.53	1411.67	5231.28	1411.74	5231.86	1411.54	5244.69
GR	1411.6	5244.92	1410	5251.38	1408	5258.75	1406	5266.02	1405	5297.23
GR	1405	5320.44	1406	5347.25	1406	5388.09	1406	5408.08	1407	5541.7
GR	1407	5718.14	1406	5754.4	1406	5784.09	1406	5792.77	1406	5810.87
GR	1406	5820.41	1406	5838.97	1407	5936.82	1408	6017.23	1409	6081.83
GR	1410	6155.49	1411	6165.28						

NC	0.035	0.035	0.035				
ET		5.1			4752.73	5283.89	
X1	9.70	45	4757.14	5273.18	253	259	256

GR	1466	4109	1464	4316.8	1462	4420.43	1460	4447.14	1458	4478.14
GR	1456	4489.46	1454	4500.45	1452	4509.98	1450	4519.51	1448	4529.04
GR	1446	4538.57	1444	4548.1	1442	4557.38	1440	4566.27	1438	4575.05
GR	1436	4583.83	1434	4592.61	1432	4601.39	1430	4609.72	1428	4617.43
GR	1426	4627.56	1424	4668.02	1422	4677.03	1420	4686.23	1418	4694.23
GR	1416	4702.22	1414	4725.62	1413.09	4738.64	1413.15	4752.73	1412	4757.14
GR	1410	4765.55	1408	4773.94	1406	4782.3	1404	4790.65	1404	5000
GR	1404	5228.02	1406	5244.34	1408	5253.96	1412	5273.18	1412.96	5277.81
GR	1413.2	5283.89	1414	5286.99	1416	5294.01	1418	5300.98	1420	5310.97

ET		5.1			4761.98	5298.67				
X1	9.73	47	4763.41	5284.93	187	151	169			
GR	1468	4092	1466	4213.55	1464	4379	1462	4470.4	1460	4508.81
GR	1458	4525.45	1456	4535.99	1454	4546.24	1452	4556.5	1450	4565.64
GR	1448	4574.49	1446	4582.67	1444	4590.66	1442	4598.64	1440	4606.63
GR	1438	4614.61	1436	4622.6	1434	4630.3	1432	4638.03	1430	4646.07
GR	1428	4654.12	1426	4662.16	1424	4670.2	1422	4678.24	1420	4686.28

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GR	1418	4694.59	1416	4735.51	1414	4745.63	1413.77	4747.24	1414	4754.45
GR	1414.2	4761.98	1414	4763.41	1412	4771.23	1410	4779.05	1408	4786.93
GR	1406	4794.83	1404	4807.46	1404	5000	1404	5232.22	1406	5255.68
GR	1408	5265.54	1410	5275.37	1412	5284.93	1414	5298.67	1416	5306.36
GR	1418	5314.06	1420	5322.58						

ET		5.1			4698.37	5217.67				
X1	9.80	62	4738.89	5206.55	383	349	365			
GR	1476	4000	1476	4071.22	1474	4291.9	1472	4368.03	1470	4404.99
GR	1468	4419.78	1466	4435.01	1464	4454.29	1462	4489.38	1460	4517.69
GR	1458	4526.82	1456	4535.94	1454	4545.06	1452	4554.19	1450	4563.31
GR	1448	4572.44	1446	4580.51	1444	4588.95	1442	4597.51	1440	4606.07
GR	1438	4614.65	1436	4623.22	1434	4631.58	1432	4639.42	1430	4647.25
GR	1428	4655.08	1426	4662.93	1424	4670.84	1422	4678.74	1420	4686.85
GR	1418	4698.37	1416	4738.89	1416	4742.87	1416	4745.09	1415.15	4749.88
GR	1415.7	4766.09	1414	4773.04	1412	4781.48	1410	4789.92	1408	4798.11
GR	1406	4814.33	1406	5000	1406	5168.2	1408	5177.78	1410	5187.37
GR	1412	5196.96	1414	5206.55	1414.61	5209.05	1414.9	5217.67	1416	5221.57
GR	1418	5228.59	1420	5235.61	1422	5242.63	1424	5250.86	1426	5260.4
GR	1428	5270.06	1430	5279.73	1432	5290	1434	5301.13	1436	5313.24
GR	1438	5329.65	1440	5350.74						

ET		5.1			4678.48	5167.47				
X1	9.89	61	4741.17	5163.70	509	484	495			
GR	1480	4000	1480	4097.31	1478	4315.5	1476	4369.55	1474	4409.22
GR	1472	4428.88	1470	4447.01	1468	4467.06	1466	4484.74	1464	4501.35
GR	1462	4517.81	1460	4528.28	1458	4538.09	1456	4547.75	1454	4557.31
GR	1452	4566.31	1450	4574.08	1448	4581.28	1446	4588.48	1444	4595.7
GR	1442	4603.03	1440	4610.35	1438	4617.67	1436	4624.99	1434	4631.68
GR	1432	4638.82	1430	4646.76	1428	4654.71	1426	4662.61	1424	4670.44
GR	1422	4678.48	1422	4689.89	1422.06	4691.09	1422	4691.98	1421.45	4699.1
GR	1420	4741.17	1418	4771.38	1416	4778.99	1414	4786.68	1412	4794.99
GR	1410	4803.8	1408	4840.1	1406	4951.17	1406	4964.91	1407.43	5000

GR	1408	5114.09	1410	5126.94	1412	5136.13	1414	5145.32	1416	5154.51
GR	1418	5163.7	1418.8	5167.47	1418.7	5180.97	1418	5182.68	1418	5202.91
GR	1420	5221.64	1422	5236.46	1424	5244.79	1426	5252.68	1428	5260.3
GR	1430	5267.91								
ET		5.1			4813.54	5284.14				
X1	9.98	68	4828.11	5274.26	462	469	475			
GR	1476	4020	1476	4135.18	1474	4180.69	1472	4242.44	1472	4405.93
GR	1474	4459.87	1474	4532.3	1472	4564.64	1470	4600.47	1468	4627.43
GR	1466	4644.39	1464	4650.73	1462	4658.68	1460	4666.95	1458	4675.21
GR	1456	4683.48	1454	4692.64	1452	4702.53	1450	4711.67	1448	4720.68
GR	1446	4728.08	1444	4734.3	1442	4740.53	1440	4746.75	1438	4752.97
GR	1436	4759.19	1434	4766.97	1432	4775.44	1430	4783.95	1428	4813.54
GR	1428	4821.2	1428.96	4826.63	1428	4828.11	1426	4830.93	1425.95	4831.02
GR	1425.7	4834.7	1424	4840.53	1422	4847.1	1420	4853.67	1418	4860.24
GR	1416	4866.81	1414	4874.06	1412	4895.31	1410	4925.82	1410	4957.15
GR	1410	4985.2	1410	5000	1410	5196.05	1412	5234.32	1414	5243.75
GR	1416	5253.18	1418	5262.85	1420	5274.26	1421.67	5284.14	1421.15	5293.67

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GR	1420	5297.1	1418.2	5302.27	1420	5323.38	1422	5337.3	1424	5349.84
GR	1426	5361.61	1428	5370.82	1430	5379.99	1432	5389.15	1434	5398.3
GR	1436	5407.46	1438	5416.8	1440	5427.51				
ET		5.1			4840.61	5275.34				
X1	10.08	60	4841.72	5274.76	508	514	511			
GR	1476	4000	1478	4028.78	1480	4085.32	1480	4214.24	1478	4270.59
GR	1476	4333.92	1474	4385.59	1472	4415.91	1470	4435.24	1468	4453.48
GR	1466	4471.72	1464	4489.47	1462	4507.08	1460	4524.24	1458	4540.43
GR	1456	4560.04	1454	4579.47	1452	4664.02	1450	4686.12	1448	4711.59
GR	1446	4736.49	1444	4743.04	1442	4749.49	1440	4755.86	1438	4761.79
GR	1436	4767.07	1434	4772.52	1432	4778.04	1430	4783.56	1428	4789.08
GR	1426	4795.68	1426	4838.85	1426.35	4840.61	1426	4841.72	1424	4848.12
GR	1422	4854.53	1420	4861.27	1418	4869.07	1416	4880.94	1414	4903.67
GR	1412.5	5000	1412	5028.73	1412	5119.72	1414	5215.45	1416	5233.54
GR	1418	5244.05	1420	5254.55	1422	5265.05	1424	5274.76	1424.17	5275.34
GR	1424	5277.85	1423.5	5284.05	1422	5288.76	1420	5294.8	1420	5307.7
GR	1422	5411.56	1424	5519.39	1426	5568.38	1428	5584.58	1430	5600.76
ET		5.1			4784.92	5288.33				
X1	10.16	48	4797.94	5270.13	447	418	430			
GR	1438	4000	1436	4021.6	1434	4039.29	1432	4060.58	1430	4087.84
GR	1428	4116.35	1426	4163.37	1426	4172.5	1426	4329.8	1424	4615.05
GR	1422	4727.69	1422	4765.14	1424	4772.65	1426	4779.85	1427.4	4784.92
GR	1426.9	4794.24	1426	4797.94	1424	4806.13	1422	4814.72	1420	4823.31
GR	1418	4831.89	1416	4850.45	1416	5000	1416	5206.7	1418	5231.48
GR	1420	5241.03	1422	5250.58	1424	5260.12	1426	5270.13	1426.69	5273.76
GR	1426.8	5288.33	1426	5290.46	1424	5295.56	1423.73	5296.35	1424	5299.13
GR	1426	5318.58	1428	5331.54	1430	5343.77	1432	5355.48	1434	5367.2
GR	1436	5379.53	1438	5392.13	1440	5404.93	1442	5417.74	1444	5430.71
GR	1446	5445.59	1448	5460.48	1450	5475.78				

ET		5.1			4772.87	5312.98				
X1	10.25	50	4772.87	5312.98	496	420	460			
GR	1462	4000	1462	4353.1	1462	4360.97	1464	4372.48	1466	4380.6
GR	1466	4394.69	1464	4399.98	1462	4402.86	1460	4405.73	1458	4408.62
GR	1456	4420.57	1454	4432.06	1452	4443.38	1450	4454.7	1448	4465.92
GR	1446	4476.55	1444	4487.22	1442	4497.92	1440	4509.43	1438	4521.31
GR	1436	4534.04	1434	4573.89	1434	4576.65	1434	4582.76	1432	4590.09
GR	1430	4597.07	1428	4604.05	1426	4740.78	1426	4758.62	1428	4766.33
GR	1429.7	4772.87	1429.36	4781.13	1428	4786.37	1426	4794.42	1424	4802.47
GR	1422	4810.53	1420	4841.46	1420	5225.51	1422	5254.59	1424	5264.85
GR	1426	5274.47	1428	5284.05	1429.2	5289.83	1429.27	5312.98	1430	5319.77
GR	1432	5338.35	1434	5354.33	1436	5382.04	1438	5398.07	1440	5414.09

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ET		5.1			4766.40	5271.99				
X1	10.33	47	4782.32	5269.64	519	373	444			
GR	1450	4000	1448	4073.55	1448	4076.89	1448	4151.72	1446	4166.89
GR	1444	4179.19	1442	4193.45	1440	4215.25	1438	4234.67	1436	4254.62
GR	1434	4273.64	1432	4293.27	1430	4335.46	1428	4352.32	1428	4394.66
GR	1430	4399.29	1432	4405.29	1434	4417.32	1436	4573.71	1434	4592.8
GR	1432	4607.16	1430	4731.8	1430	4744.77	1432	4752.19	1434	4759.52
GR	1435.8	4766.4	1435.17	4782.32	1434	4787.13	1432	4795.34	1430	4802.67
GR	1428	4810	1426	4817.69	1424	4826.71	1422.57	5000	1422	5069.23
GR	1422	5172.18	1424	5223.94	1426	5234.36	1428	5243.12	1430	5251.96
GR	1432	5260.8	1434	5269.64	1434.83	5271.99	1434.09	5290.23	1434	5290.52
GR	1432	5296.74	1430	5302.97						

ET		5.1			4756.86	5252.58				
X1	10.34	38	4775.45	5243.36	104	42	73			
GR	1434	4000	1434	4020.85	1432	4060.47	1432	4210.33	1432	4230.74
GR	1430	4304	1430	4351	1430	4400.08	1430	4476.92	1432	4558.77
GR	1432	4579.43	1430	4699.87	1430	4741.11	1432	4746.28	1434	4751.62
GR	1435.9	4756.86	1435	4775.45	1434	4779.27	1432	4786.85	1430	4794.42
GR	1428	4803.16	1426	4811.92	1424	4839.17	1422.77	5000	1422	5099.99
GR	1422	5118.31	1424	5204.31	1426	5212.97	1428	5217.15	1430	5226.8
GR	1432	5234.78	1434	5243.36	1435.48	5252.58	1434.92	5272.38	1434	5274.21
GR	1432	5278.35	1430	5282.48	1430	5283.56				

HAPPY VALLEY ROAD CROSSING

NC	0.030	0.030	0.030							
ET		5.1			4823.21	5272				
X1	10.38	34	4823.21	5293.86	173	143	162			
GR	1432	4050	1432	4345.47	1434	4359.49	1436	4382.17	1436	4444.22
GR	1434	4514.59	1434	4523.97	1436	4605.62	1436	4667.41	1434	4710.47
GR	1434	4776.7	1435.99	4798.29	1435.82	4823.21	1434	4831.49	1432	4838.95
GR	1430	4845.97	1428	4854.29	1426	4860.89	1424	4952.8	1424	5000
GR	1424	5110.95	1426	5223.7	1428	5293.86	1430	5418.28	1432	5426.63
GR	1434	5436.09	1436	5445.55	1436	5462.06	1438.33	5462.07	1438.33	5463.07
GR	1436	5463.08	1436	5478.57	1435.96	5479.62	1434	5488.87		

NC	0.035	0.035	0.035							
ET		5.1			4783.08	5262.74				
X1	10.41	52	4791.83	5251.18	198	142	171			
GR	1434	4064	1434	4072.38	1436	4078.9	1438	4083.68	1440	4114.64
GR	1442	4124.08	1444	4141.29	1444	4186.45	1442	4196.42	1438	4216.34
GR	1436	4223.27	1434	4229.95	1432	4236.99	1432	4370.62	1434	4373.56
GR	1436	4376.5	1438	4379.45	1440	4383.45	1440	4469.41	1438	4505.1
GR	1436	4516.74	1434	4526.64	1432	4535.95	1432	4754.33	1434	4759.91
GR	1435.7	4764.94	1436	4772.28	1436	4782.06	1438.34	4782.07	1438.34	4783.07
GR	1436	4783.08	1436	4791.83	1434	4800.27	1432	4808.85	1430	4817.15
GR	1428	4863.1	1428	5000	1428	5071.88	1428	5119.31	1428	5202.52
GR	1430	5229.35	1432	5236.74	1434	5244.12	1436	5251.18	1436	5262.73
GR	1438.9	5262.74	1438.9	5262.75	1436	5262.76	1436	5274.27	1434	5279.7
GR	1432	5285.08	1430	5290.4						

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ET		5.1			4758.78	5239.41				
X1	10.42	46	4772.17	5239.37	70	58	64			
GR	1434	4057	1434	4122.12	1434	4141.01	1432	4192.42	1432	4500.07
GR	1434	4518.47	1436	4524.56	1438	4530.85	1438	4566	1436	4602.78
GR	1434	4617.91	1432	4648.14	1432	4733.89	1434	4738.7	1436	4743.37
GR	1436	4757.77	1439	4757.78	1439	4758.78	1436	4758.79	1436	4772.17
GR	1434	4781.27	1432	4790.3	1431.35	4793.22	1430	4857.83	1428	4863.2
GR	1426	4872.34	1426	5000	1426	5035.16	1428	5059.55	1430	5071.52
GR	1430	5178.76	1430	5209.5	1432	5217.1	1434	5224.61	1436	5232.04
GR	1438	5239.37	1438	5239.40	1439.8	5239.41	1439.8	5240.41	1438	5240.42
GR	1438	5240.71	1437.62	5260.38	1436	5263.54	1434	5267.47	1432	5271.31
GR	1430	5275.13								

ET		5.1			4717.29	5219.45				
X1	10.51	85	4720.44	5201.75	439	487	472			
GR	1434	4000	1432	4130.14	1428	4139.76	1426	4144.4	1424	4149.04
GR	1422	4153.68	1418	4208.59	1418	4223.25	1418	4230.6	1418	4282.85
GR	1418	4360.51	1416	4368.14	1414	4375.06	1412	4381.98	1408	4395.81
GR	1406	4403.31	1404	4411.2	1402	4420.45	1398	4444.12	1396	4455.04
GR	1396	4458.71	1398	4462.24	1400	4465.78	1402	4469.3	1404	4472.7
GR	1406	4476.09	1406	4476.39	1404	4480.43	1402	4489.41	1400	4498.38
GR	1398	4511.86	1398	4523.62	1402	4606.66	1404	4619.36	1406	4625.57
GR	1408	4631.74	1412	4641.43	1414	4645.8	1416	4650.17	1418	4654.55
GR	1422	4663.24	1424	4666.88	1426	4670.52	1428	4674.16	1432	4681.45
GR	1434	4685.09	1436	4688.73	1438	4692.35	1440	4695.92	1440	4716.28
GR	1443.2	4716.29	1443.2	4717.29	1440.66	4717.32	1440	4720.44	1438	4729.62
GR	1436	4738.8	1434	4747.98	1432.68	4754.05	1434	4795.05	1434	4811.47
GR	1432	4826.23	1430	4844.12	1428	4880.89	1428	4916.32	1428	4916.6
GR	1428	4924.94	1430	4975.63	1430	4993.27	1430	5000	1430	5004.42
GR	1430	5038.01	1430	5060.04	1432	5076.82	1434	5173.28	1436	5182.8
GR	1438	5192.33	1440	5201.75	1440	5219.44	1443.73	5219.45	1443.73	5220.45
GR	1440.7	5220.46	1440.7	5237.12	1442	5243.12	1444	5251.74	1444	5270.2

NC	0.035	0.05	0.035

ET		5.1			4664.91	5132.57				
X1	10.62	87	4665.97	5128.07	535	618	596			
GR	1438	4000	1438	4067.63	1438	4119.75	1438	4123.09	1436	4126.37
GR	1434	4129.64	1432	4132.91	1428	4139.57	1426	4142.92	1424	4157.62
GR	1422	4197.88	1422	4274.19	1422	4279.99	1418	4285.73	1416	4288.61
GR	1414	4291.48	1412	4294.36	1408	4300.1	1406	4302.98	1404	4305.85
GR	1402	4308.72	1398	4314.87	1396	4318.05	1394	4326.83	1392	4337.52
GR	1392	4407.2	1394	4430.83	1396	4477.86	1398	4520.73	1402	4551.89
GR	1404	4565.94	1406	4587.33	1408	4591.51	1412	4599.92	1414	4604.3
GR	1416	4608.68	1418	4613.06	1422	4621.46	1424	4625.35	1426	4629.24
GR	1428	4633.13	1432	4640.85	1434	4644.69	1436	4648.53	1438	4652.37
GR	1440	4656.21	1442	4660.05	1444	4663.89	1444	4663.90	1445.7	4663.91
GR	1445.7	4664.91	1444	4664.92	1444	4665.97	1443.33	4681.76	1442	4687.65
GR	1440	4696.48	1438	4705.29	1436.53	4711.79	1436	4760.05	1434	4774.11
GR	1432	4791.7	1432	4792.06	1434	4804.84	1434	4812.38	1434	4844.64
GR	1434	4908.11	1432	4978.39	1430	4993.25	1430	5000	1430	5019.08

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GR	1432	5025.21	1434	5047.48	1436	5072.96	1436.27	5078.41	1438	5088.52
GR	1440	5100.18	1442	5111.6	1444	5128.07	1444.34	5132.57	1446	5140.61
GR	1448	5150.2	1450	5159.88	1452	5169.67	1454	5179.15	1454	5200.76
GR	1454	5213.3	1456	5219.38						

NC	0.035	0.035	0.035							
ET		5.1			4748.11	5211.3				
X1	10.70	43	4759.88	5193.3	390	382	402			
GR	1444	4000	1444	4038.07	1444	4066.66	1444	4284.59	1442	4345.59
GR	1440	4412.2	1440	4618.19	1442	4696.02	1442.67	4720.77	1444	4727.26
GR	1446.2	4734.32	1446.2	4747.10	1448.10	4747.11	1448.10	4748.11	1446.2	4748.12
GR	1446.2	4759.88	1444	4767.51	1442	4775.38	1440.89	4779.56	1440	4856.65
GR	1438	4908.41	1436	4929.27	1434	4963.32	1434	5000	1434	5015.86
GR	1436	5039.71	1436	5072.24	1436	5119.55	1438	5144.54	1440	5154.48
GR	1442	5163.53	1444	5172.15	1446	5188.42	1446.48	5193.3	1448	5197.69
GR	1450	5201.41	1452	5205.12	1454	5208.74	1455.47	5211.3	1456	5213.46
GR	1458	5222.24	1458	5238.92	1456	5256.86				

ET		5.1			4782.29	5310.03				
X1	10.83	54	4800.8	5298.85	642	704	717			
GR	1448	4234	1448	4375.81	1448	4583.91	1446	4610.95	1446	4656.3
GR	1446	4742.93	1444.39	4761.2	1446	4765.18	1448	4769.97	1450	4774.76
GR	1452	4779.31	1452	4781.28	1454.60	4781.29	1454.60	4782.29	1452	4782.30
GR	1452	4800.8	1450	4808.34	1448	4816.39	1446	4825.37	1444	4844.86
GR	1442	4867.57	1440	4888.99	1438	4911.48	1438	4931.3	1440	4955.08
GR	1440	4961.15	1440	5000	1440	5073.72	1442	5081.76	1444	5085.61
GR	1446	5088.41	1446	5095.29	1446	5268.61	1448	5283.3	1450	5291.33
GR	1452	5298.85	1452	5310.02	1454.25	5310.03	1454.25	5311.03	1452	5311.04
GR	1452	5321.19	1450	5325.84	1448	5330.48	1446	5352.1	1444	5429.4
GR	1442	5433.87	1442	5453.7	1442	5462.01	1440	5467.15	1438	5472.69
GR	1438	5487.43	1440	5493.52	1442	5499.62	1444	5505.79		

ET		5.1			4766.74	5290				
X1	10.93	47	4790.58	5279.54	456	557	516			

GR	1450	4075	1450	4401.05	1450	4472.44	1450	4658.68	1448	4685.74
GR	1446	4692.07	1446	4738.32	1448	4747.74	1450	4752.28	1452	4756.82
GR	1454	4761.36	1456	4765.91	1456.34	4766.74	1456.31	4782.2	1456	4783.11
GR	1454	4790.58	1452	4801.13	1450	4811.94	1448	4852.07	1446	4882.26
GR	1444	4895.5	1442	4901.64	1440	4907.78	1440	4909.75	1440	5000
GR	1442	5025.23	1444	5039.36	1446	5045.88	1448	5065.33	1448	5141.49
GR	1446	5151.73	1446	5160.63	1448	5249	1450	5259.77	1452	5267.62
GR	1454	5275.29	1455.1	5279.54	1458.23	5290	1458.23	5291	1455.6	5291.01
GR	1455.6	5301.19	1454	5303.86	1452	5307.17	1450	5311.25	1448	5317.12
GR	1446	5322.99	1446	5329.64						

CONFLUENCE WITH BUCHANAN WASH

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ET		5.1			4581.43	5120.83				
X1	11.03	59	4598.63	5120.83	506	504	525			
GR	1454	4082	1454	4316.5	1454	4398.81	1454	4405.76	1454	4444.05
GR	1454	4463.63	1452	4472.52	1452	4546.98	1452	4556.11	1451.02	4559.09
GR	1452	4561.67	1454	4566.38	1456	4571.08	1458	4575.79	1460	4580.49
GR	1460.3	4581.43	1460.24	4597.21	1460	4598.63	1458	4606.22	1456	4613.78
GR	1454	4621.09	1452	4629.76	1450	4642.89	1449	4647.63	1448	4693.69
GR	1448	4736.54	1450	4814.76	1450	4864.18	1448	4942.71	1446	4949.67
GR	1444	4956.46	1442	4984.22	1442	5000	1442	5002.45	1444	5021.76
GR	1446	5026.06	1448	5043.9	1448	5055.01	1446	5062.54	1444	5069.86
GR	1442	5077.4	1442	5100.06	1444	5110.31	1446	5120.83	1448	5131.74
GR	1448	5143.33	1448	5159.14	1450	5172.98	1452	5186.65	1454	5200
GR	1456	5213.08	1458	5227.34	1460	5242.36	1460.78	5249.29	1460.5	5289.31
GR	1460	5290.38	1458	5301.57	1456	5314.34	1454	5329.62		

NC	0.050	0.035	0.035							
ET		5.1			4762	5149.91				
X1	11.14	32	4762	5149.91	606	610	606			
GR	1460	4331.11	1460	4359.12	1458	4450.29	1456	4510.13	1454	4516.73
GR	1452	4523.33	1450	4529.82	1450	4653.75	1452	4685.50	1452	4762
GR	1452	4830.94	1450	4913.55	1450	4965.11	1448	4975.89	1448	5000
GR	1448	5056.87	1450	5060.92	1452	5064.99	1452	5097.48	1454	5121.70
GR	1456	5126.41	1458	5131.13	1460	5135.85	1462	5140.57	1464	5145.28
GR	1466	5149.91	1466	5173.09	1464	5177.70	1462	5182.56	1460	5187.75
GR	1458	5192.64	1456	5197.53						

BEGIN CORPS LEVEES

NC	0.035	0.035	0.020							
ET		5.1			4825.06	5165.90				
X1	11.19	80	4825.06	5161.07	277	212	225			
GR	1466.0	4799.55	1466.00	4823.70	1466.00	4825.06	1465.44	4826.50	1464.00	4830.18
GR	1463.6	4831.26	1462.00	4835.30	1461.78	4835.87	1460.47	4839.23	1460.00	4840.18
GR	1459.8	4840.67	1458.00	4844.27	1457.08	4846.17	1456.00	4848.37	1454.68	4851.08
GR	1454.0	4852.47	1452.35	4858.63	1452.00	4861.70	1452.00	4865.26	1452.00	4867.38
GR	1452.0	4906.20	1452.00	4944.98	1452.00	4945.21	1452.00	4948.20	1452.00	4955.59
GR	1452.0	4974.23	1452.00	4983.63	1452.00	5000.00	1452.00	5052.40	1452.00	5075.88
GR	1452.0	5079.43	1452.00	5080.15	1452.00	5083.16	1452.00	5085.12	1452.21	5091.07
GR	1452.2	5091.41	1452.82	5104.84	1453.40	5118.66	1453.68	5124.97	1454.00	5131.82

GR	1455.9	5136.57	1456.00	5136.91	1456.04	5136.99	1458.00	5141.74	1458.38	5142.66
GR	1460.0	5146.57	1460.56	5147.92	1462.00	5151.40	1462.67	5153.01	1464.00	5156.23
GR	1464.7	5158.02	1466.00	5161.07	1466.79	5162.98	1468.00	5165.90	1468.00	5172.97
GR	1468.0	5198.33	1468.00	5198.71	1468.00	5208.06	1467.82	5208.79	1467.42	5210.39
GR	1466.0	5213.89	1464.59	5217.33	1464.00	5218.79	1462.10	5223.33	1462.00	5223.58
GR	1461.9	5223.73	1460.00	5228.27	1459.05	5230.49	1458.00	5232.96	1456.96	5238.16
GR	1456.5	5239.87	1456.32	5241.27	1456.00	5249.77	1456.00	5262.87	1455.84	5273.99
GR	1456.0	5290.85	1456.15	5294.26	1456.26	5305.86	1456.31	5328.45	1456.18	5342.81

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ET		5.1			4827.39	5184.66				
X1	11.29	94	4827.39	5184.66	486	591	536			
GR	1458.6	4498.36	1458.15	4531.48	1458.00	4544.39	1457.54	4552.02	1456.00	4556.76
GR	1455.7	4557.78	1454.54	4561.02	1454.00	4562.59	1454.00	4605.58	1454.95	4629.82
GR	1456.0	4655.24	1456.33	4661.92	1456.76	4672.63	1456.93	4675.47	1457.17	4678.43
GR	1457.5	4684.77	1456.93	4728.58	1456.76	4749.58	1457.01	4757.49	1457.65	4782.78
GR	1458.0	4791.03	1459.18	4795.59	1460.00	4799.16	1461.62	4803.60	1462.00	4804.63
GR	1462.5	4805.93	1464.00	4810.36	1464.90	4812.84	1466.00	4815.95	1466.99	4818.67
GR	1468.0	4821.53	1469.43	4825.50	1469.95	4827.39	1469.68	4829.36	1468.00	4841.57
GR	1466.8	4844.22	1466.00	4846.08	1464.73	4848.95	1464.00	4850.59	1462.59	4853.77
GR	1462.0	4855.10	1460.39	4858.74	1460.00	4859.58	1459.55	4860.64	1458.00	4864.17
GR	1456.8	4866.84	1456.00	4868.69	1454.77	4871.46	1454.00	4873.20	1453.89	4874.55
GR	1454.0	4879.94	1453.00	5000.00	1452.00	5012.73	1452.37	5018.03	1454.00	5112.94
GR	1454.0	5148.06	1456.00	5152.69	1458.00	5157.26	1460.00	5161.76	1462.00	5166.34
GR	1464.0	5170.83	1466.00	5175.45	1467.53	5178.97	1468.00	5180.06	1469.67	5183.89
GR	1470.0	5184.66	1470.00	5197.62	1468.00	5202.94	1466.00	5208.26	1464.00	5213.46
GR	1463.4	5215.12	1462.00	5218.65	1460.33	5224.18	1460.00	5225.24	1459.63	5239.24
GR	1459.4	5247.72	1459.19	5284.15	1459.63	5287.69	1460.00	5297.44	1461.23	5325.09
GR	1462.0	5340.83	1463.27	5373.45	1463.76	5392.61	1463.91	5397.59	1464.00	5403.23
GR	1464.0	5404.95	1463.47	5430.53	1463.48	5446.78	1463.10	5468.14	1463.01	5472.72
GR	1462.8	5480.65	1462.48	5495.44	1462.00	5521.62	1462.00	5562.61		

ET		5.1			4826.47	5170.48				
X1	11.39	88	4826.47	5170.48	520	577	548			
GR	1463.4	4540.53	1462.24	4575.55	1462.00	4587.19	1461.52	4589.31	1460.82	4592.35
GR	1460.0	4595.75	1459.40	4598.25	1458.00	4604.08	1457.77	4611.59	1457.02	4638.45
GR	1456.6	4651.90	1456.25	4664.52	1456.00	4673.48	1456.00	4685.48	1457.34	4692.89
GR	1458.0	4696.00	1458.60	4698.45	1460.00	4704.69	1460.84	4725.05	1461.22	4734.45
GR	1461.5	4742.42	1461.65	4747.02	1462.00	4766.90	1462.17	4770.00	1464.00	4788.85
GR	1465.9	4795.51	1466.00	4795.86	1468.00	4802.87	1469.82	4809.24	1470.00	4809.88
GR	1470.0	4826.47	1469.00	4828.70	1468.00	4830.90	1466.98	4833.16	1466.00	4835.34
GR	1465.0	4837.62	1464.00	4839.77	1462.95	4842.10	1462.00	4844.21	1460.92	4846.60
GR	1460.0	4848.64	1458.80	4851.31	1458.00	4853.08	1456.24	4856.99	1456.00	4857.51
GR	1454.1	4861.74	1454.00	4861.94	1453.77	4869.54	1453.41	4939.48	1453.70	5000.00
GR	1454.0	5052.77	1454.00	5137.60	1454.79	5139.20	1456.00	5141.80	1457.23	5144.29
GR	1458.0	5145.86	1459.52	5148.94	1460.00	5149.91	1461.94	5153.84	1462.00	5153.96
GR	1462.2	5154.43	1464.00	5158.09	1464.41	5158.94	1466.00	5162.22	1466.71	5163.68
GR	1468.0	5166.35	1468.90	5168.21	1470.00	5170.48	1471.01	5177.47	1471.30	5178.73
GR	1471.0	5187.97	1470.52	5189.60	1470.00	5191.33	1469.06	5193.63	1468.00	5196.22
GR	1466.9	5199.00	1466.00	5201.12	1464.50	5204.79	1464.00	5205.96	1463.56	5227.10
GR	1463.3	5302.27	1463.50	5392.62	1464.00	5459.82	1464.00	5496.38	1464.34	5500.49
GR	1466.0	5520.78	1466.48	5534.57	1467.00	5553.06				

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ET                 5.1                                  4831.85     5174.56
X1     11.48        93     4831.85     5174.56          443         532         487
GR    1469.5    4463.12    1470.00     4514.20      1470.67     4526.19     1472.00     4532.14     1472.00     4536.27
GR    1471.2    4545.52    1472.00     4549.52      1471.16     4556.05     1470.89     4562.81     1470.59     4569.92
GR    1470.0    4586.17    1470.00     4654.03      1469.53     4674.85     1469.10     4688.69     1468.83     4699.75
GR    1468.6    4709.20    1468.27     4720.52      1468.00     4733.02     1467.35     4737.19     1467.59     4745.21
GR    1467.3    4752.17    1466.00     4781.13      1465.37     4784.00     1465.14     4788.41     1465.46     4789.08
GR    1465.9    4791.67    1466.00     4791.93      1467.84     4797.88     1468.00     4798.37     1468.75     4800.80
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GR    1469.1    4801.97    1469.53     4803.27      1470.00     4804.79     1472.00     4813.30     1472.00     4827.27
GR    1471.5    4828.31    1470.00     4831.85      1469.59     4832.79     1468.00     4836.43     1467.65     4837.23
GR    1466.0    4841.01    1465.73     4841.62      1464.00     4845.59     1463.85     4845.93     1462.31     4849.46
GR    1462.0    4850.16    1461.96     4850.24      1460.00     4854.68     1459.78     4855.19     1458.00     4859.04
GR    1456.8    4861.86    1456.00     4863.63      1454.62     4866.83     1454.00     4868.24     1454.00     4891.27
GR    1454.5    4982.94    1454.00     5000.00      1454.00     5139.53     1455.68     5143.25     1456.00     5143.95
GR    1457.7    5147.78    1458.00     5148.36      1459.81     5152.35     1460.00     5152.78     1461.90     5156.97
GR    1462.0    5157.19    1463.56     5160.62      1464.00     5161.59     1466.00     5165.91     1468.00     5170.24
GR    1468.3    5170.98    1470.00     5174.56      1471.57     5177.96     1472.00     5179.19     1472.00     5194.00
GR    1470.3    5199.62    1470.00     5200.65      1468.88     5204.39     1468.00     5207.39     1467.56     5217.72
GR    1466.9    5233.75    1466.58     5241.08      1466.33     5246.90     1466.40     5250.99     1466.61     5264.73
GR    1467.0    5289.91    1467.20     5306.66      1467.34     5341.05     1467.60     5361.43     1467.94     5383.99
GR    1467.8    5395.19    1467.56     5419.40      1468.00     5430.41

  END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17

ET                 5.1                                  4845.32     5152.45
X1     11.56        87     4845.32     5152.45          386         396         390
GR    1471.8    4676.86    1471.19     4685.14      1470.77     4690.44     1470.54     4693.47     1470.29     4696.28
GR    1470.3    4700.82    1470.50     4703.37      1470.83     4707.69     1471.29     4713.13     1472.00     4721.56
GR    1472.0    4845.32    1470.73     4853.22      1470.34     4856.19     1470.00     4857.83     1469.42     4859.18
GR    1468.0    4862.39    1467.55     4863.42      1466.00     4867.01     1464.74     4869.91     1464.00     4871.63
GR    1462.4    4875.29    1462.00     4876.26      1460.24     4880.32     1460.00     4880.88     1459.55     4891.07
GR    1459.2    4900.27    1459.14     4911.50      1459.18     4917.72     1459.27     4936.45     1459.28     4951.90
GR    1459.3    4956.77    1459.32     4970.56      1459.36     4977.34     1459.35     4986.98     1459.40     5000.00
GR    1459.5    5006.02    1459.50     5012.85      1459.48     5022.30     1459.43     5032.20     1459.31     5049.20
GR    1459.3    5049.41    1459.31     5049.51      1459.31     5049.72     1459.30     5060.17     1459.48     5072.34
GR    1459.5    5084.60    1459.48     5091.51      1459.47     5098.77     1459.30     5109.95     1459.40     5114.80
GR    1459.6    5117.41    1459.59     5117.63      1460.00     5124.33     1461.59     5127.25     1461.65     5127.38
GR    1462.0    5128.28    1462.29     5129.00      1462.54     5129.65     1463.39     5131.68     1464.00     5133.13
GR    1465.0    5135.40    1466.00     5137.90      1466.70     5139.56     1468.00     5142.66     1468.53     5143.93
GR    1470.0    5147.43    1470.90     5149.69      1472.00     5152.45     1472.00     5165.70     1471.55     5168.67
GR    1471.2    5170.75    1470.00     5178.38      1470.00     5225.76     1470.27     5226.00     1472.00     5227.56
GR    1472.5    5228.46    1472.76     5229.77      1472.00     5233.24     1471.71     5234.57     1471.42     5235.87
GR    1471.4    5236.02    1470.93     5237.02      1470.00     5239.41     1470.00     5268.37     1470.59     5293.04
GR    1470.9    5296.51    1471.02     5306.55

  OUTLET OF I-17 CROSSING

ET                 5.1                                  4880.47     5126.63
X1     11.57        92     4880.47     5126.63           72          75          73
GR    1470.8    4670.15    1471.04     4676.02      1471.81     4692.20     1472.00     4696.83     1472.63     4707.63
GR    1472.8    4711.11    1473.05     4715.60      1473.66     4746.09     1473.57     4751.49     1473.41     4760.54
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GR   1474.0    4769.16    1474.00    4816.39    1473.19    4827.23    1472.71    4833.86    1472.64    4834.85
GR   1472.0    4844.37    1472.00    4861.16    1472.54    4870.52    1472.00    4880.47    1471.79    4880.62
GR   1470.1    4881.77    1470.00    4881.79    1468.35    4882.11    1468.00    4882.18    1466.41    4882.49
GR   1466.0    4882.57    1464.43    4882.88    1464.00    4882.96    1462.45    4883.27    1462.00    4883.35
GR   1461.6    4896.00    1461.53    4899.52    1461.22    4909.97    1461.03    4926.96    1460.86    4934.09
GR   1460.6    4946.27    1460.36    4961.63    1460.29    4993.04    1460.30    5000.00    1460.41    5002.11
GR   1460.5    5010.81    1460.63    5019.07    1461.14    5020.57    1461.34    5048.98    1461.18    5074.02
GR   1460.9    5090.68    1461.37    5103.14    1461.81    5115.32    1461.86    5116.93    1462.00    5120.67
GR   1462.6    5120.78    1464.00    5121.06    1464.40    5121.17    1466.00    5121.48    1466.51    5121.56
GR   1467.1    5121.69    1468.00    5121.86    1469.43    5122.14    1470.00    5122.25    1470.50    5123.25
GR   1471.7    5125.87    1472.00    5126.63    1472.00    5154.31    1471.46    5159.70    1470.38    5170.04
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GR   1470.4    5174.42    1470.49    5174.60    1470.77    5175.42    1472.00    5179.41    1472.00    5180.09
GR   1471.6    5182.32    1470.00    5193.35    1470.00    5209.59    1470.38    5210.71    1471.63    5215.00
GR   1472.0    5216.25    1472.00    5216.38    1472.00    5218.35    1471.83    5219.05    1470.00    5223.24
GR   1470.0    5225.98    1470.22    5226.92    1470.00    5227.88    1470.00    5234.90    1470.81    5241.05
GR   1470.8    5241.43    1471.05    5249.44    1470.99    5250.35    1470.90    5250.66    1470.72    5261.88
GR   1471.0    5291.96    1471.60    5306.88

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   15SEP04      15:02:12
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

CCHV=     .100 CEHV=     .300
*SECNO 8.690

3265 DIVIDED FLOW

3280 CROSS SECTION      8.69 EXTENDED       .71 FEET

3470 ENCROACHMENT STATIONS=     3796.6    5556.9  TYPE=      1  TARGET=     1760.280
     8.690     14.00   1378.00   1372.27       .00   1378.04       .04       .00       .00   1381.16
   11973.0       .0   11923.1      49.9        .0    7026.5     198.7        .0        .0   1379.49
       .00       .00      1.70       .25      .000      .035      .045      .000   1364.00   4045.04
   .000122       0.        0.        0.         0        14         0       .00   1389.66   5556.89

*SECNO 8.790

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .44
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3470 ENCROACHMENT STATIONS=     3855.7    5476.0  TYPE=      1  TARGET=     1620.250
     8.790     12.06   1378.06   1374.84       .00   1378.20       .13       .13       .03   1384.00
   11973.0        .0   11973.0        .0        .0    4072.0        .0      69.9      14.1   1380.00
       .05       .00      2.94       .00      .000      .035      .000      .000   1366.00   4140.96
   .000634      530.      539.      546.         0        21         0       .00    885.74   5026.70

*SECNO 8.930

3470 ENCROACHMENT STATIONS=     4280.0    5437.8  TYPE=      1  TARGET=     1157.800
     8.930      8.55   1378.55   1375.38       .00   1378.81       .26       .57       .04   1386.72
   11942.0        .0   11942.0        .0        .0    2917.0        .0     127.8      26.0   1382.80
       .10       .00      4.09       .00      .000      .035      .000      .000   1370.00   4632.95
   .001017      565.      722.      711.         2        14         0       .00    554.20   5187.15

*SECNO 9.010
1
   15SEP04      15:02:12                                                                                PAGE   19

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .57

3470 ENCROACHMENT STATIONS=     4519.9    5433.5  TYPE=      1  TARGET=      913.610
     9.010      6.68   1378.87   1376.98       .00   1379.69       .82       .71       .17   1386.00
   11967.0        .0   11967.0        .0        .0    1646.5        .0     150.4      30.3   1389.58
       .12       .00      7.27       .00      .000      .035      .000      .000   1372.19   4847.28
   .003136      363.      430.      558.         2        11         0       .00    306.90   5154.18

*SECNO 9.080

3470 ENCROACHMENT STATIONS=     4515.3    5233.2  TYPE=      1  TARGET=      717.880
     9.080      6.53   1380.00   1377.50       .00   1380.66       .65       .95       .02   1388.00
   11686.0        .0   11686.0        .0        .0    1800.0        .0     164.8      32.9   1390.00
       .13       .00      6.49       .00      .000      .035      .000      .000   1373.47   4853.17
   .002207      432.      365.      165.         2        14         0       .00    305.10   5158.27

*SECNO 9.140

3470 ENCROACHMENT STATIONS=     4525.9    5437.5  TYPE=      1  TARGET=      911.700
     9.140      6.76   1380.76   1377.89       .00   1381.32       .56       .65       .01   1390.00
   10632.0        .0   10632.0        .0        .0    1777.2        .0     178.5      35.1   1390.00
       .15       .00      5.98       .00      .000      .035      .000      .000   1374.00   4858.56
   .001738      288.      333.      385.         2        14         0       .00    283.40   5141.96
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*SECNO 9.145

3265 DIVIDED FLOW

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =    .68

3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70

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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

     9.145      5.81   1380.71   1378.53       .00   1381.37       .66       .02       .03   1394.50
    9300.0        .0    9300.0        .0        .0    1424.0        .0     178.8      35.2   1394.70
       .15       .00      6.53       .00      .000      .035      .000      .000   1374.90   5033.51
   .002903        8.        8.        8.         2        22         0       .00    257.78   5306.34

*SECNO 9.155

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

     9.155      5.85   1380.95   1378.73       .00   1381.60       .65       .23       .00   1394.50
    9300.0        .0    9300.0        .0        .0    1435.2        .0     181.4      35.6   1394.70
       .15       .00      6.48       .00      .000      .035      .000      .000   1375.10   5033.28
   .002837       80.       80.       80.         2        22         0       .00    258.25   5306.57

*SECNO 9.160

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.49

3470 ENCROACHMENT STATIONS=     4528.7    5445.3  TYPE=      1  TARGET=      916.610
     9.160      7.22   1381.22   1377.93       .00   1381.64       .42       .01       .02   1390.00
    9300.0        .0    9300.0        .0        .0    1790.3        .0     181.7      35.7   1390.00
       .15       .00      5.19       .00      .000      .035      .000      .000   1374.00   4867.46
   .001276        8.        8.        8.         2        14         0       .00    279.81   5147.27
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*SECNO 9.210

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.87

3470 ENCROACHMENT STATIONS= 4732.0 5190.0 TYPE= 1 TARGET= 458.050

1

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
9.210	5.53	1381.53	1378.65	.00	1381.82	.29	.17	.01	1439.00
9300.0	.0	9300.0	.0	.0	2153.1	.0	194.3	37.9	1391.00
.17	.00	4.32	.00	.000	.020	.000	.000	1376.00	4750.95
.000364	145.	279.	355.	2	18	0	.00	402.26	5153.21

*SECNO 9.220

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 4664.0 5314.1 TYPE= 1 TARGET= 650.090

9.220	2.29	1392.29	1392.29	.00	1393.42	1.13	.04	.25	1445.00
9300.0	.0	9300.0	.0	.0	1091.5	.0	195.8	38.3	1397.00
.17	.00	8.52	.00	.000	.035	.000	.000	1390.00	4687.81
.013859	122.	39.	104.	0	18	0	.00	489.98	5177.79

*SECNO 9.250
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 4573.0 5304.5 TYPE= 1 TARGET= 731.600

9.250	3.01	1395.01	1395.01	.00	1395.97	.95	1.86	.02	1394.00
9300.0	168.9	9131.1	.0	62.0	1155.0	.0	199.5	40.2	1398.64
.18	2.72	7.91	.00	.040	.035	.000	.000	1392.00	4585.74
.012517	155.	141.	82.	0	11	0	.00	690.25	5275.98

*SECNO 9.300

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.37

3470 ENCROACHMENT STATIONS= 4441.5 5290.2 TYPE= 1 TARGET= 848.690

9.300	4.02	1397.02	1395.93	.00	1397.52	.51	1.51	.04	1395.00
12000.0	1759.7	10240.3	.0	424.8	1725.0	.0	209.6	44.8	1399.50

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      .19      4.14      5.94       .00      .040      .035      .000      .000   1393.00   4441.50
  .003711      262.      261.      282.         3         8         0       .00    833.80   5275.30
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   SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
   Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
   TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.350

3265 DIVIDED FLOW

3470 ENCROACHMENT STATIONS=     4252.4    5287.8  TYPE=      1  TARGET=     1035.390
     9.350      5.87   1397.87   1396.23       .00   1398.37       .50       .85       .00   1399.00
   12000.0     742.0   11258.0        .0     245.9    1933.3        .0     223.4      49.3   1400.00
       .20      3.02      5.82       .00      .040      .035      .000      .000   1392.00   4252.38
   .002586      291.      274.      274.         3         8         0       .00    582.08   5270.02

*SECNO 9.420
     9.420      5.89   1398.89   1397.30       .00   1399.59       .70      1.16       .06   1401.00
   12000.0        .0   12000.0        .0        .0    1790.5        .0     241.5      53.8   1402.00
       .22       .00      6.70       .00      .000      .035      .000      .000   1393.00   4821.86
   .003271      400.      399.      402.         2        19         0       .00    388.22   5210.08

*SECNO 9.450

3265 DIVIDED FLOW

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .58

     9.450      6.07   1399.07   1398.55       .00   1400.40      1.32       .62       .19   1401.70
   12000.0        .0    9926.1    2073.9        .0    1097.0     205.5     245.7      54.7   1394.00
       .22       .00      9.05     10.09      .000      .040      .040      .000   1393.00   4812.51
   .009841       93.      118.      126.         2        11         0       .00    333.36   5259.71

*SECNO 9.540

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4663.4    5177.0  TYPE=      1  TARGET=      513.650
     9.540      6.23   1403.23   1401.88       .00   1404.02       .79      3.57       .05   1408.00
   12000.0        .0   12000.0        .0        .0    1685.1        .0     262.9      59.0 100000.00
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      .24       .00      7.12       .00      .000      .040      .000      .000   1397.00   4708.39
  .005391      410.      500.      515.         3        15         0       .00    398.68   5107.07
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   SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
   Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
   TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
   SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.650

3470 ENCROACHMENT STATIONS=     4736.4    5231.9  TYPE=      1  TARGET=      495.470
     9.650      4.28   1406.28   1405.07       .00   1407.01       .73      2.99       .01   1412.00
   12000.0        .0   12000.0       .0        .0    1747.2        .0     284.9      64.3 100000.00
       .26       .00      6.87       .00      .000      .040      .000      .000   1402.00   4778.15
   .005315      475.      558.      503.         3         8         0       .00    431.93   5210.07

*SECNO 9.700

3470 ENCROACHMENT STATIONS=     4752.7    5283.9  TYPE=      1  TARGET=      531.160
     9.700      3.61   1407.61   1406.81       .00   1408.43       .82      1.39       .02   1412.00
   12000.0        .0   12000.0       .0        .0    1656.3        .0     294.9      66.9   1412.00
       .27       .00      7.25       .00      .000      .035      .000      .000   1404.00   4775.56
   .005542      253.      256.      259.         2        14         0       .00    476.54   5252.10

*SECNO 9.730

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.47

3470 ENCROACHMENT STATIONS=     4762.0    5298.7  TYPE=      1  TARGET=      536.690
     9.730      4.57   1408.57   1406.84       .00   1409.07       .51       .62       .03   1414.00
   12000.0        .0   12000.0       .0        .0    2097.0        .0     302.2      68.8   1412.00
       .28       .00      5.72       .00      .000      .035      .000      .000   1404.00   4784.70
   .002575      187.      169.      151.         2        15         0       .00    483.62   5268.32

*SECNO 9.800

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .56

3470 ENCROACHMENT STATIONS=     4698.4    5217.7  TYPE=      1  TARGET=      519.300
     9.800      3.63   1409.63   1409.21       .00   1410.83      1.20      1.54       .21   1416.00
   12000.0        .0   12000.0       .0        .0    1365.1        .0     316.7      72.5   1414.00
       .29       .00      8.79       .00      .000      .035      .000      .000   1406.00   4791.43
   .008201      383.      365.      349.         2        19         0       .00    394.18   5185.61
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 9.890

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.54

3470 ENCROACHMENT STATIONS=     4678.5    5167.5  TYPE=      1  TARGET=      488.990
   9.890      6.59   1412.59   1410.99       .00   1413.38       .79      2.52       .04   1420.00
12000.0        .0   12000.0        .0        .0    1679.9        .0     334.0      76.7   1418.00
     .31       .00      7.14       .00      .000      .035      .000      .000   1406.00   4792.54
 .003457      509.      495.      484.         2        11         0       .00    346.29   5138.83

*SECNO 9.980

3470 ENCROACHMENT STATIONS=     4813.5    5284.1  TYPE=      1  TARGET=      470.600
   9.980      4.50   1414.50   1413.60       .00   1415.49       .99      2.05       .06   1428.00
12000.0        .0   12000.0        .0        .0    1504.4        .0     351.4      80.6   1420.00
     .33       .00      7.98       .00      .000      .035      .000      .000   1410.00   4872.24
 .005525      462.      475.      469.         3        11         0       .00    373.87   5246.11

*SECNO 10.080

3470 ENCROACHMENT STATIONS=     4840.6    5275.3  TYPE=      1  TARGET=      434.730
  10.080      5.27   1417.27   1416.27       .00   1418.24       .97      2.75       .00   1426.00
12000.0        .0   12000.0        .0        .0    1517.1        .0     369.1      85.0   1424.00
     .35       .00      7.91       .00      .000      .035      .000      .000   1412.00   4873.47
 .005234      508.      511.      514.         2        11         0       .00    366.68   5240.15

*SECNO 10.160

3470 ENCROACHMENT STATIONS=     4784.9    5288.3  TYPE=      1  TARGET=      503.410
  10.160      3.77   1419.77   1419.15       .00   1420.80      1.02      2.54       .02   1426.00
12000.0        .0   12000.0        .0        .0    1479.0        .0     383.9      88.8   1426.00
     .36       .00      8.11       .00      .000      .035      .000      .000   1416.00   4824.28
 .006735      447.      430.      418.         2        14         0       .00    415.67   5239.95

*SECNO 10.250

3470 ENCROACHMENT STATIONS=     4772.9    5313.0  TYPE=      1  TARGET=      540.110
  10.250      3.27   1423.27   1422.96       .00   1424.41      1.14      3.58       .03   1429.70
12000.0        .0   12000.0        .0        .0    1402.0        .0     399.1      93.4 100000.00
     .38       .00      8.56       .00      .000      .035      .000      .000   1420.00   4805.39
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   .009094      496.      460.      420.         2        15         0       .00    455.74   5261.13

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   15SEP04      15:02:12                                                                                  PAGE   25

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

 *SECNO 10.330

 3470 ENCROACHMENT STATIONS=     4766.4    5272.0  TYPE=      1  TARGET=      505.590
    10.330      4.63   1426.63   1425.79       .00   1427.52       .89      3.09       .02   1435.17
   12000.0        .0   12000.0       .0        .0    1582.0        .0     414.3      97.9   1434.00
       .39       .00      7.59       .00      .000      .035      .000      .000   1422.00   4815.23
   .005490      519.      444.      373.         1         8         0       .00    421.92   5237.16

 *SECNO 10.340

 3470 ENCROACHMENT STATIONS=     4756.9    5252.6  TYPE=      1  TARGET=      495.720
    10.340      5.01   1427.01   1426.15       .00   1427.93       .92       .40       .01   1435.00
   12000.0        .0   12000.0       .0        .0    1558.8        .0     416.9      98.6   1434.00
       .40       .00      7.70       .00      .000      .035      .000      .000   1422.00   4807.48
   .005509      104.       73.       42.         3        11         0       .00    407.60   5215.09

 *SECNO 10.380

 3301 HV CHANGED MORE THAN HVINS

 7185 MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

 3470 ENCROACHMENT STATIONS=     4823.2    5272.0  TYPE=      1  TARGET=      448.790
    10.380      3.78   1427.78   1427.78       .00   1429.27      1.49      1.14       .17   1435.82
   12000.0        .0   12000.0       .0        .0    1225.8        .0     422.1     100.1 100000.00
       .40       .00      9.79       .00      .000      .030      .000      .000   1424.00   4855.01
   .009297      173.      162.      143.         0        15         0       .00    416.99   5272.00

 *SECNO 10.410
 3280 CROSS SECTION     10.41 EXTENDED      1.15 FEET

 7185 MINIMUM SPECIFIC ENERGY
 3720 CRITICAL DEPTH ASSUMED

 3470 ENCROACHMENT STATIONS=     4783.1    5262.7  TYPE=      1  TARGET=      479.660
    10.410      3.15   1431.15   1431.15       .00   1432.63      1.48      1.85       .00   1436.00
   12000.0        .0   12000.0       .0        .0    1229.8        .0     426.9     101.8   1436.00
       .41       .00      9.76       .00      .000      .035      .000      .000   1428.00   4812.39
   .012674      198.      171.      142.         0        15         0       .00    421.20   5233.59
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 10.420
3280 CROSS SECTION 10.42 EXTENDED 2.38 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.74

3470 ENCROACHMENT STATIONS= 4758.8 5239.4 TYPE= 1 TARGET= 480.630

10.420	6.38	1432.38	1431.18	.00	1433.13	.75	.43	.07	1436.00
12000.0	.0	12000.0	.0	.0	1731.4	.0	429.1	102.4	1438.00
.41	.00	6.93	.00	.000	.035	.000	.000	1426.00	4788.56
.004176	70.	64.	58.	3	14	0	.00	429.98	5218.54

*SECNO 10.510

3470 ENCROACHMENT STATIONS= 4717.3 5219.5 TYPE= 1 TARGET= 502.160

10.510	38.61	1434.61	1433.67	.00	1435.54	.93	2.36	.06	1440.00
12000.0	.0	12000.0	.0	.0	1548.5	.0	446.9	107.1	1440.00
.43	.00	7.75	.00	.000	.035	.000	.000	1396.00	4745.16
.006068	439.	472.	487.	3	14	0	.00	431.04	5176.20

*SECNO 10.620

3470 ENCROACHMENT STATIONS= 4664.9 5132.6 TYPE= 1 TARGET= 467.660

10.620	45.90	1437.90	1436.67	.00	1438.80	.91	3.26	.00	1444.00
12000.0	.0	12000.0	.0	.0	1569.8	.0	468.2	112.6	1444.00
.45	.00	7.64	.00	.000	.035	.000	.000	1392.00	4705.75
.004950	535.	596.	618.	2	14	0	.00	382.17	5087.92

*SECNO 10.700

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .70

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                                                                  MAIN10
    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3470 ENCROACHMENT STATIONS=      4748.1     5211.3  TYPE=       1  TARGET=       463.190
    10.700       6.13   1440.13    1439.86       .00    1441.78       1.65       2.76        .22    1446.20
   12000.0        .0   12000.0         .0        .0     1163.9         .0      480.8      115.8    1446.48
       .46       .00     10.31        .00      .000       .035       .000       .000    1434.00    4845.10
   .010130      390.      402.       382.         2         17          0        .00     309.98    5155.08


*SECNO 10.830
3280 CROSS SECTION     10.83 EXTENDED      1.57 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.41


3470 ENCROACHMENT STATIONS=      4782.3     5310.0  TYPE=       1  TARGET=       527.740
    10.830       7.57   1445.57    1444.34       .00    1446.83       1.26       5.01        .04    1452.00
   12000.0        .0   12000.0         .0        .0     1331.3         .0      501.4      120.5    1452.00
       .48       .00      9.01        .00      .000       .035       .000       .000    1438.00    4829.57
   .005104      642.      717.       704.         2          8          0        .00     258.24    5087.81


*SECNO 10.930
3280 CROSS SECTION     10.93 EXTENDED      2.70 FEET


3470 ENCROACHMENT STATIONS=      4766.7     5290.0  TYPE=       1  TARGET=       523.260
    10.930       8.70   1448.70    1447.20       .00    1449.61        .91       2.75        .04    1454.00
   12000.0        .0   12000.0         .0        .0     1566.3         .0      518.5      124.5    1455.10
       .50       .00      7.66        .00      .000       .035       .000       .000    1440.00    4838.11
   .005566      456.      516.       557.         2         12          0        .00     414.63    5252.75


*SECNO 11.030

3470 ENCROACHMENT STATIONS=      4581.4     5120.8  TYPE=       1  TARGET=       539.400
    11.030       9.27   1451.27    1449.58       .00    1451.84        .58       2.20        .03    1460.00
   12000.0        .0   12000.0         .0        .0     1969.5         .0      539.8      129.9  100000.00
       .52       .00      6.09        .00      .000       .035       .000       .000    1442.00    4634.57
   .003259      506.      525.       504.         2         12          0        .00     486.25    5120.83


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   15SEP04      15:02:12                                                                                    PAGE   28

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST
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*SECNO 11.140

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .55


3470 ENCROACHMENT STATIONS=     4762.0    5149.9  TYPE=      1  TARGET=      387.910
    11.140      5.90   1453.90   1453.73       .00   1455.41      1.51      3.28       .28   1452.00
   12000.0        .0   12000.0        .0        .0    1215.8        .0     562.0     135.8 100000.00
       .54       .00      9.87       .00      .000      .035      .000      .000   1448.00   4762.00
   .010725      606.      606.      610.         2        14         0       .00    358.43   5120.43


*SECNO 11.190
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4825.1    5165.9  TYPE=      1  TARGET=      340.840
    11.190      4.04   1456.04   1456.04       .00   1457.94      1.90      1.34       .12   1466.00
   12000.0        .0   12000.0        .0        .0    1085.7        .0     567.9     137.5   1466.00
       .55       .00     11.05       .00      .000      .020      .000      .000   1452.00   4848.28
   .003804      277.      225.      212.         0        14         0       .00    288.71   5137.00


*SECNO 11.290

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.42


3470 ENCROACHMENT STATIONS=     4827.4    5184.7  TYPE=      1  TARGET=      357.270
    11.290      6.17   1458.17   1457.25       .00   1459.39      1.22      1.39       .07   1469.95
   12000.0        .0   12000.0        .0        .0    1353.4        .0     582.9     141.0 100000.00
       .56       .00      8.87       .00      .000      .020      .000      .000   1452.00   4863.77
   .001874      486.      536.      591.         2        11         0       .00    293.88   5157.65


*SECNO 11.390
1
   15SEP04      15:02:12                                                                                PAGE   29

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3470 ENCROACHMENT STATIONS=     4826.5    5170.5  TYPE=      1  TARGET=      344.010
    11.390      5.92   1459.33   1457.61       .00   1460.21       .88       .78       .03   1470.00
   12000.0        .0   12000.0        .0        .0    1594.2        .0     601.5     144.8 100000.00
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                                                                  MAIN10
      .58        .00       7.53        .00       .000       .020       .000       .000   1453.41   4850.13
   .001111       520.       548.       577.          2         14          0        .00    298.42   5148.55

*SECNO 11.480

3470 ENCROACHMENT STATIONS=     4831.9    5174.6  TYPE=       1  TARGET=      342.710
    11.480       5.90   1459.90   1457.97        .00   1460.72        .82        .51        .01   1470.00
   12000.0         .0   12000.0        .0         .0    1652.1         .0      619.6      148.1 100000.00
       .60        .00      7.26        .00       .000       .020       .000       .000   1454.00   4854.91
   .000983       443.       487.       532.          2         14          0        .00    297.65   5152.56

*SECNO 11.560

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4845.3    5152.5  TYPE=       1  TARGET=      307.130
    11.560       4.44   1463.58   1463.58        .00   1465.61       2.04        .67        .37   1472.00
   12000.0         .0   12000.0        .0         .0    1047.4         .0      631.7      150.6 100000.00
       .61        .00     11.46        .00       .000       .020       .000       .000   1459.14   4872.60
   .003730       386.       390.       396.          0         15          0        .00    259.52   5132.12

*SECNO 11.570
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4880.5    5126.6  TYPE=       1  TARGET=      246.160
    11.570       4.99   1465.28   1465.28        .00   1467.43       2.15        .27        .03   1472.00
   12000.0         .0   12000.0        .0         .0    1019.5         .0      633.4      151.0 100000.00
       .61        .00     11.77        .00       .000       .020       .000       .000   1460.29   4882.71
   .003731        72.        73.        75.          0          8          0        .00    238.63   5121.34

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                                                                                THIS RUN EXECUTED 15SEP04     15:02:13
*************************************
 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


IGINAL MODEL SKNKLOMR.IH
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SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
	8.690	11973.00	1378.00	1372.27	1.70	14.00	1389.66	7225.27	.11	4045.04	5556.89
*	8.790	11973.00	1378.06	1374.84	2.94	12.06	885.74	4072.04	.24	4140.96	5026.70
	8.930	11942.00	1378.55	1375.38	4.09	8.55	554.20	2917.03	.31	4632.95	5187.15
*	9.010	11967.00	1378.87	1376.98	7.27	6.68	306.90	1646.47	.55	4847.28	5154.18
	9.080	11686.00	1380.00	1377.50	6.49	6.53	305.10	1800.05	.47	4853.17	5158.27
	9.140	10632.00	1380.76	1377.89	5.98	6.76	283.40	1777.21	.42	4858.56	5141.96
*	9.145	9300.00	1380.71	1378.53	6.53	5.81	257.78	1424.05	.50	5033.51	5306.34
	9.155	9300.00	1380.95	1378.73	6.48	5.85	258.25	1435.24	.50	5033.28	5306.57
*	9.160	9300.00	1381.22	1377.93	5.19	7.22	279.81	1790.34	.36	4867.46	5147.27
*	9.210	9300.00	1381.53	1378.65	4.32	5.53	402.26	2153.08	.33	4750.95	5153.21
*	9.220	9300.00	1392.29	1392.29	8.52	2.29	489.98	1091.48	1.01	4687.81	5177.79
*	9.250	9300.00	1395.01	1395.01	7.91	3.01	690.25	1217.01	.95	4585.74	5275.98
*	9.300	12000.00	1397.02	1395.93	5.94	4.02	833.80	2149.82	.56	4441.50	5275.30
	9.350	12000.00	1397.87	1396.23	5.82	5.87	582.08	2179.25	.52	4252.38	5270.02
	9.420	12000.00	1398.89	1397.30	6.70	5.89	388.22	1790.49	.55	4821.86	5210.08
*	9.450	12000.00	1399.07	1398.55	9.05	6.07	333.36	1302.49	.96	4812.51	5259.71
	9.540	12000.00	1403.23	1401.88	7.12	6.23	398.68	1685.07	.61	4708.39	5107.07

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	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
	9.650	12000.00	1406.28	1405.07	6.87	4.28	431.93	1747.16	.60	4778.15	5210.07
	9.700	12000.00	1407.61	1406.81	7.25	3.61	476.54	1656.28	.68	4775.56	5252.10
*	9.730	12000.00	1408.57	1406.84	5.72	4.57	483.62	2097.05	.48	4784.70	5268.32
*	9.800	12000.00	1409.63	1409.21	8.79	3.63	394.18	1365.08	.83	4791.43	5185.61
*	9.890	12000.00	1412.59	1410.99	7.14	6.59	346.29	1679.92	.57	4792.54	5138.83
	9.980	12000.00	1414.50	1413.60	7.98	4.50	373.87	1504.37	.70	4872.24	5246.11

	10.080	12000.00	1417.27	1416.27	7.91	5.27	366.68	1517.06	.69	4873.47	5240.15
	10.160	12000.00	1419.77	1419.15	8.11	3.77	415.67	1479.00	.76	4824.28	5239.95
	10.250	12000.00	1423.27	1422.96	8.56	3.27	455.74	1402.02	.86	4805.39	5261.13
	10.330	12000.00	1426.63	1425.79	7.59	4.63	421.92	1581.99	.69	4815.23	5237.16
	10.340	12000.00	1427.01	1426.15	7.70	5.01	407.60	1558.78	.69	4807.48	5215.09
*	10.380	12000.00	1427.78	1427.78	9.79	3.78	416.99	1225.79	1.01	4855.01	5272.00
*	10.410	12000.00	1431.15	1431.15	9.76	3.15	421.20	1229.77	1.01	4812.39	5233.59
*	10.420	12000.00	1432.38	1431.18	6.93	6.38	429.98	1731.38	.61	4788.56	5218.54
	10.510	12000.00	1434.61	1433.67	7.75	38.61	431.04	1548.54	.72	4745.16	5176.20
	10.620	12000.00	1437.90	1436.67	7.64	45.90	382.17	1569.83	.66	4705.75	5087.92
*	10.700	12000.00	1440.13	1439.86	10.31	6.13	309.98	1163.86	.94	4845.10	5155.08
*	10.830	12000.00	1445.57	1444.34	9.01	7.57	258.24	1331.28	.70	4829.57	5087.81
	10.930	12000.00	1448.70	1447.20	7.66	8.70	414.63	1566.27	.69	4838.11	5252.75
	11.030	12000.00	1451.27	1449.58	6.09	9.27	486.25	1969.53	.53	4634.57	5120.83
*	11.140	12000.00	1453.90	1453.73	9.87	5.90	358.43	1215.83	.94	4762.00	5120.43
*	11.190	12000.00	1456.04	1456.04	11.05	4.04	288.71	1085.68	1.00	4848.28	5137.00
*	11.290	12000.00	1458.17	1457.25	8.87	6.17	293.88	1353.37	.73	4863.77	5157.65
	11.390	12000.00	1459.33	1457.61	7.53	5.92	298.42	1594.16	.57	4850.13	5148.55
	11.480	12000.00	1459.90	1457.97	7.26	5.90	297.65	1652.14	.54	4854.91	5152.56
*	11.560	12000.00	1463.58	1463.58	11.46	4.44	259.52	1047.36	1.01	4872.60	5132.12

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	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
*	11.570	12000.00	1465.28	1465.28	11.77	4.99	238.63	1019.54	1.00	4882.71	5121.34

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      8.790  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.010  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.145  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.210  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.220  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.220  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      9.250  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.250  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.450  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.730  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.890  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     10.380  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.380  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     10.410  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.410  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     10.420  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     10.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     10.830  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     11.140  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     11.190  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.190  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     11.290  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     11.560  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.560  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.570  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.570  PROFILE=  1  MINIMUM SPECIFIC ENERGY
1
```

<u>10% Annual Chance Flood</u>

Breakout Channel

Input File: bkt10.dat

```
* Combined Split Flow Model
* WEIR IS SET ALONG HIGH GROUND RIDGE WEST OF 35TH AVENUE AND
* SOUTH OF PINNACLE PEAK ROAD
SF
JC      SPLIT FLOW ANALYSIS DUE TO WEIR ACTION
JP      0     0.5     100       1       0
TW       RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57
WS      2    8.55    8.57      -1    2.65
WC        1381.9      97 1380.27
TW       RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58
WS      2    8.57    8.58      -1    2.65
WC       1380.27      92 1378.96
TW       RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60
WS      2    8.58    8.60      -1    2.65
WC       1378.96      80 1378.76
TW       RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62
WS      2    8.60    8.62      -1    2.65
WC       1378.76     128  1379.5
TW       RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64
WS      2    8.62    8.64      -1    2.65
WC        1379.5     100 1379.87
TW       RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66
WS      2    8.64    8.66      -1    2.65
WC       1379.87     100 1380.23
TW       RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68
WS      2    8.66    8.68      -1    2.65
WC       1380.23     100 1380.64
TW       RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70
WS      2    8.68    8.70      -1    2.65
WC       1380.64     100 1381.27
TW       RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72
WS      2    8.70    8.72      -1    2.65
WC       1381.27     100  1381.9
TW       RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74
WS      2    8.72    8.74      -1    2.65
WC        1381.9     100 1382.55
TW       RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77
WS      2    8.74    8.77      -1    2.65
WC       1382.55     200 1384.48
TW       RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79
WS      2    8.77    8.79      -1    2.65
WC       1384.48      81 1385.31
TW       RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80
WS      2    8.79    8.80      -1    2.65
WC       1385.31      49 1385.75
TW       RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81
WS      2    8.80    8.81      -1    2.65
WC       1385.75     105    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86
WS      2    8.81    8.86      -1    2.65
WC          1386     266    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89
WS      2    8.86    8.89      -1    2.65
WC          1386     175    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93
WS      2    8.89    8.93      -1    2.65
WC          1386     217    1387
TW       RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00
WS      2    8.93    9.00      -1    2.65
WC          1387     370    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01
WS      2    9.00    9.01      -1    2.65
WC          1390      76    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04
WS      2    9.01    9.04      -1    2.65
WC          1390     137    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08
WS      2    9.04    9.08      -1    2.65
WC          1390     200    1391
TW       RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10
WS      2    9.08    9.10      -1    2.65
WC          1391     137  1392.0
EE
T1       COMBINED CVL (North and South) AND TETRA TECH'S EAST SPLIT FLOW MODEL
T2       INPUT FILE: bkt10.dat
T3       EMCON 8/4/04 by: GRB
T4       CVL'S X-SECTIONS (8.55 - 9.15) HAVE BEEN RE-NAMED TO MATCH
T5       TETRA TECH'S RIVER MILE NOMENCLATURE
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T6      BOUNDARY CONDITIONS WERE TAKEN FROM TETRA TECH'S EAST SPLIT FLOW MODEL
T7      FLOWRATE WAS DETERMINED BY MATCHING WSEL AT RIVER MILE 9.25 IN THE
T8      MAIN10.DAT MODEL.

J1      0       2                   0.007               0       0
QT      1    2700
NC 0.040   0.040   0.040     0.1     0.3
X1  8.55      10    9965   10072       0       0       0
GR1381.7     9915  1380.9    9965 1378.36 9979.42 1377.36 9985.03    1374 9999.67
GR1375.010003.77  1376.010012.77    137810046.83  1380.010052.41  1381.9   10072
* CVL STATION 3
X1  8.57       9    9975   10062      97      97      97
GR1382.2    9905  1381.0 9957.55    1381    9968  1380.0    9975 1374.69 9995.58
GR  1376 9998.47    137610001.60  1378.010022.35 1380.27   10062
* CVL STATION 100
X1  8.58      14 9973.96   10030      92      92      92
X3    10
GR1382.2    9875 1381.34 9925.30  1380.0 9935.97  1380.0 9950.56 1378.72 9963.92
GR1378.9 9973.96  1378.0 9979.62 1377.29 9984.99 1375.95 9990.91  1376.4 9997.51
GR1376.410003.79  1376.710009.69  1378.010014.44 1378.96   10030
* DOWNSTREAM SIDE OF CULVERTS - CVL STATION 192
SC 3.013      .5     2.7               2       0      80     2.1  1376.5  1376.4
X1  8.60      11 9970.83   10030      80      80      80
X2                     2          1380.5
X3    10
BT      3  9973.9  1381.3           10004  1380.5           10030 1378.82
GR  1383 9924.75  1382.3 9925.90  1382.3 9970.83  1381.3  9973.9    1378 9983.49
GR1376.5 9991.93  1376.5 9997.91  1376.510001.78  1376.7   10004  1378.010013.25
GR1378.7   10030
* UPSTREAM SIDE OF CULVERTS - CVL STATION 272
X1  8.62       6 9983.94   10037     128     128     128
GR1382.5 9924.19  1382.8    9970 1378.00 9983.94 1377.11 9994.73 1377.1110004.77
GR1379.5   10037
* CVL STATION 400
X1  8.64       4    9970   10028     100     100     100
GR1382.5 9923.75  1381.7    9970 1377.62   10000 1379.87   10028
* SOUTH OF HANCE BOULIVARD - CVL STATION 500
X1  8.66       5 9931.5310029.76     100     100     100
GR1382.0 9924.19  1381.3 9931.53 1380.68    9970 1378.13   10000 1380.2310029.76
* CVL STATION 600
X1  8.68       5    9972   10031     100     100     100
GR1382.2 9927.05 1381.05    9972 1378.00 9990.92 1378.92   10000 1380.64   10031
* CVL STATION 700
X1  8.70       5  9984.5   10033     100     100     100
GR1382.2    9910 1381.35    9960 1379.59 9984.50  1379.8   10000 1381.27   10033
* CVL STATION 800
X1  8.72       4 9983.26   10030     100     100     100
GR1383.2 9925.99    1383 9983.26  1380.9   10000  1381.9   10030
* CVL STATION 900
X1  8.74       5    998210029.18     100     100     100
GR1385.3 9927.33    1385 9957.83    1385    9982    1382   10000 1382.5510029.18
* CVL STATION 1000
X1  8.77       6    9989   10017     200     200     200
GR1385.6 9936.14  1385.4    9989  1383.6    9995  1383.6   10005  1384.4   10017
GR1384.4   10040
* CVL STATION 1200
NH      1    .016   10048
X1  8.79       3   10011   10048      81      81      81
GR1385.3    9963 1385.99   10011 1385.31   10048
* SOUTH OF PARKSIDE LANE - TETRA TECH STATION MATCH - CVL STATION 1281
NH      1    .016   10052
X1  8.80       3   10015   10052      49      49      49
GR1385.1    9966 1385.79   10015 1385.75   10052
* CVL STATION 1330
NH      1    .01610100.74
X1  8.81      15    998010100.74      20     105      29
GR  1388    9725    1388 9758.88    1388 9773.41    1388 9847.74    1388 9873.96
GR  1388 9898.54    1388 9920.62    1388 9949.55    1388 9959.31    1388    9980
GR1384.710003.87 1385.0010035.11 1385.0010042.29 1385.0010069.88    138610100.74
* CVL STATION 1359
NH      1    .0310079.07
X1  8.86      23 9874.5910079.07     266     266     266
X3                         9700 1386.67
GR1387.5    9386    1387    9433    1386    9471    1385    9491    1385    9548
GR  1386    9574 1386.32 9597.38 1386.63 9626.66 1386.67 9713.22  1386.5 9774.68
GR1386.3 9822.26    1386 9874.59 1385.69 9893.32 1385.53 9914.97 1385.01 9952.81
GR1383.8 9969.32    1383 9981.35    1382 9992.12    138210009.37    138310023.87
GR  138410039.45 1384.7310053.84    138610079.07
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* CVL STATION 1625
NH     1     .0310065.05
X1  8.89      23 9942.5210065.05     175     175     175
X3                          9601    1388
GR1390.3 9289.97 1390.00 9326.96 1390.00 9340.05 1389.00 9373.44 1388.00 9413.37
GR1387.0 9482.88 1386.31 9501.52 1386.29 9513.91 1386.48 9523.04 1387.00 9535.79
GR1387.9 9585.07 1387.99 9601.04 1387.63 9687.08 1387.38 9757.74 1387.00 9820.33
GR1386.0 9942.52 1385.00 9958.61 1384.00 9970.67 1382.00 9991.61 1382.0010009.81
GR1383.410022.67 1385.0110041.63 1386.0010065.05
* CVL STATION 1800
NH     2     .0310044.82    .01610046.99
X1  8.93      38 9968.5210044.82     217     217     217
GR1397.0 9120.13 1397.00 9134.51 1396.00 9153.49 1395.00 9155.41 1395.00 9162.29
GR1394.6 9192.51 1394.00 9229.41 1393.57 9241.75 1393.00 9275.34 1393.00 9277.60
GR1392.0 9287.63 1391.00 9310.35 1391.00 9342.55 1390.40 9360.99 1389.80 9371.35
GR1389.0 9379.50 1388.95 9385.38 1388.00 9472.01 1388.00 9480.92 1387.36 9496.67
GR1387.1 9525.25 1387.24 9574.28 1387.23 9658.54 1386.96 9737.74 1386.48 9823.34
GR1386.0 9894.09 1386.00 9923.16 1387.00 9954.39 1387.00 9968.52 1385.00 9988.91
GR1384.9 9993.20 1385.0010003.66 1384.6710006.10 1385.0010012.74 1385.0010019.94
GR1386.010038.35 1387.0010044.82 1386.9210046.99
* CVL STATION 2017
NH     2     .0310035.65    .016   10040
X1  9.00      28 9968.2210035.65     370     370     370
X3    10
GR1394.9 9185.54 1394.37 9231.03 1394.00 9248.91 1393.20 9263.39 1392.67 9275.80
GR1392.7 9294.12 1392.01 9300.06 1391.95 9320.94 1391.32 9344.61 1391.00 9357.15
GR1391.0 9370.24 1390.51 9444.59 1390.00 9553.58 1389.69 9607.41 1389.37 9693.57
GR1389.0 9791.14 1388.57 9847.63 1388.45 9912.41 1388.51 9946.72 1388.54 9968.22
GR1388.0 9979.69 1385.93 9988.45 1385.00 9993.90 1385.0310004.08 1386.0510009.74
GR1389.010021.77 1390.0010035.65    1390   10040
* CVL STATION 2387
SC 2.013      .5     2.7               3       0      75     2.1 1386.02    1385
NH     2     .0310037.29    .016   10040
X1  9.01      33 9947.3510037.29      76      76      76
X2                     2         1389.89
X3    10
BT     4  9896.9 1389.37         9930.05 1389.98        10006.96 1390.27
BT10037. 1389.89
GR1397.8 9185.54 1397.00 9201.36 1397.00 9206.41 1396.00 9206.73 1396.00 9219.83
GR1395.4 9242.50 1395.00 9252.28 1393.89 9317.37 1393.16 9347.04 1392.00 9381.56
GR1391.4 9405.92 1391.00 9432.55 1391.00 9465.97 1390.72 9533.86 1390.59 9603.95
GR1390.2 9682.01 1389.87 9740.25 1389.67 9804.11 1389.45 9885.39 1389.39 9896.69
GR1390.0 9930.05 1390.05 9936.10 1391.00 9938.65 1391.00 9944.23 1391.22 9947.35
GR1390.8 9956.07 1390.00 9963.63 1389.00 9982.55 1386.02 9994.89 1386.0210006.96
GR1389.010018.85 1390.0010037.29    1390   10040
* CVL STATION 2463
NH     2     .0310034.44    .016   10040
X1  9.04      18 9965.8910034.44     137     137     137
GR1397.5 9317.90 1397.49 9325.05 1397.00 9353.18 1397.00 9377.94 1394.00 9387.32
GR1393.0 9393.21 1392.95 9424.18 1392.00 9629.08 1391.36 9785.41 1391.35 9851.75
GR1391.0 9883.49 1391.00 9965.89 1390.52 9972.28 1387.00 9989.15 1387.0010011.45
GR1389.210022.01    139010034.44    1390   10040
* CVL STATION 2600
NH     2     .0310029.03    .016   10040
X1  9.08      15  9968.510033.71     200     200     200
GR1396.0 9300.07 1396.00 9353.28 1395.36 9370.91 1395.00 9379.29 1394.00 9385.46
GR1394.0 9451.69 1393.41 9534.65 1393.00 9710.81 1392.01 9961.65 1392.00 9968.50
GR1388.0 9989.48 1388.0010009.46 1391.0010029.03 1391.0010033.71    1391   10040
* CVL STATION 2800
NH     1     .03 10025.6
X1  9.10      25 9963.69 10025.6     137     137     137
GR1397.0 9327.52 1397.00 9330.04 1397.84 9337.46 1396.00 9358.21 1395.00 9368.07
GR1394.6 9376.12 1394.44 9384.36 1394.44 9395.42 1394.29 9408.30 1394.27 9432.12
GR1394.0 9443.12 1394.00 9709.01 1393.96 9714.46 1393.81 9772.64 1393.00 9863.05
GR1393.0 9963.69 1392.00 9969.68 1390.74 9979.26 1388.78 9989.57 1388.03 9998.62
GR1388.610006.61 1389.0010009.41 1391.0010015.48 1391.0010020.98 1392.0010025.60
* END OF CVL CROSS-SECTIONS - CVL STATION 2937
NC 0.016   0.016   0.016     0.1     0.3
ET           5.1                 4118.87 5417.09
X1  9.13      14    4918 5058.33      98      98      98
GR  1398 3791.43    1396 3900.27    1394 4218.11    1394 4768.19  1393.5    4918
GR1393.2    5000    1393 5058.33  1392.7    5085    1392 5150.02    1392 5159.91
GR  1392 5184.70    1391    5264    1392 5371.23    1392 5418.98
* CENTERLINE OF PINNACLE PEAK ROAD - BEGIN TETRA TECH'S EAST SPLIT X-SECTIONS
ET           5.1                 4133.61 5424.01
X1  9.14      14 4904.57 5104.30      33      33      33
GR  1398 3778.24    1396 3970.46    1394 4372.20    1394 4430.01  1394.4 4623.96
GR  1394 4904.57  1393.6    5000  1393.6 5007.96    1393 5104.30    1392 5183.96
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GR1391.5 5279.96    1392 5352.33  1392.8 5407.96  1392.8 5429.75
* UPSTREAM SIDE OF PINNACLE PEAK ROAD
NC 0.040   0.040   0.040
ET           5.1                  4161.93 5443.67
X1  9.15      11 4994.21 5082.19      43      43      43
GR  1398 3719.90    1396 3900.98    1394 4069.81    1393 4325.58    1393    4814
GR  1393 4994.21    1393    5000    1393 5082.19    1392 5210.16    1392 5403.10
GR  1392 5443.67
* RIGHT BANK ENCROACHMENT SET AT FLOW SPLIT BOUNDARY FOR BREAKOUT WSEL MATCHING
ET           5.1                     3023 4572.95
X1  9.25      45    4825 5285.60     155      82     141
GR  1400    3023  1399.1    3123  1397.6    3223  1395.8    3323  1392.7    3423
GR  1392    3523    1393    3623  1393.6    3723  1393.5    3762    1394    3874
GR  1394    3898    1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25    1395 4365.84    1395  4385.4  1395.7 4563.07    1396 4565.34
GR  1397 4570.45 1397.57 4572.95 1397.46 4582.97    1397 4585.82    1396 4590.84
GR  1395 4598.19    1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32    1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38    1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
EJ
ER
```

10% Annual Chance Flood

Breakout Channel

Output File: bkt10.out

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.2;  May 1991            *
 *                                        *
 *  RUN DATE    15SEP04    TIME   15:06:09 *
 *****************************************
```

```
*****************************************
*  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
```

1

15SEP04 15:06:09

THIS RUN EXECUTED 15SEP04 15:06:09

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*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

Combined Split Flow Model
WEIR IS SET ALONG HIGH GROUND RIDGE WEST OF 35TH AVENUE AND
SOUTH OF PINNACLE PEAK ROAD

SPLIT FLOW BEING PERFORMED

SF

```
JC      SPLIT FLOW ANALYSIS DUE TO WEIR ACTION
JP      0     0.5     100       1       0

TW       RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57
WS      2    8.55    8.57      -1    2.65
WC         1381.9      97 1380.27

TW       RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58
WS      2    8.57    8.58      -1    2.65
WC        1380.27      92 1378.96
```

```
TW      RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60
WS     2    8.58    8.60      -1    2.65
WC       1378.96      80 1378.76

TW      RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62
WS     2    8.60    8.62      -1    2.65
WC       1378.76     128  1379.5

TW      RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64
WS     2    8.62    8.64      -1    2.65
WC         1379.5     100 1379.87

TW      RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66
WS     2    8.64    8.66      -1    2.65
WC       1379.87     100 1380.23

TW      RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68
WS     2    8.66    8.68      -1    2.65
WC       1380.23     100 1380.64

TW      RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70
WS     2    8.68    8.70      -1    2.65
WC       1380.64     100 1381.27
1
   15SEP04      15:06:09
```



```
TW      RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72
WS     2    8.70    8.72      -1    2.65
WC       1381.27     100  1381.9

TW      RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74
WS     2    8.72    8.74      -1    2.65
WC         1381.9     100 1382.55

TW      RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77
WS     2    8.74    8.77      -1    2.65
WC       1382.55     200 1384.48

TW      RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79
WS     2    8.77    8.79      -1    2.65
WC       1384.48      81 1385.31

TW      RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80
WS     2    8.79    8.80      -1    2.65
WC       1385.31      49 1385.75

TW      RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81
WS     2    8.80    8.81      -1    2.65
WC       1385.75     105    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86
WS     2    8.81    8.86      -1    2.65
WC          1386     266    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89
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WS      2    8.86    8.89      -1    2.65
WC           1386     175    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93
WS      2    8.89    8.93      -1    2.65
WC           1386     217    1387

TW      RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00
WS      2    8.93    9.00      -1    2.65
WC           1387     370    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01
WS      2    9.00    9.01      -1    2.65
WC           1390      76    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04
WS      2    9.01    9.04      -1    2.65
WC           1390     137    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08
WS      2    9.04    9.08      -1    2.65
WC           1390     200    1391
1
   15SEP04      15:06:09                                                                    PAGE    3


TW      RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10
WS      2    9.08    9.10      -1    2.65
WC           1391     137  1392.0
1
   15SEP04      15:06:09                                                                    PAGE    4

T1      COMBINED CVL (North and South) AND TETRA TECH'S EAST SPLIT FLOW MODEL
T2      INPUT FILE: bkt10.dat
T3      EMCON 8/4/04 by: GRB
T4      CVL'S X-SECTIONS (8.55 - 9.15) HAVE BEEN RE-NAMED TO MATCH
T5      TETRA TECH'S RIVER MILE NOMENCLATURE
T6      BOUNDARY CONDITIONS WERE TAKEN FROM TETRA TECH'S EAST SPLIT FLOW MODEL
T7      FLOWRATE WAS DETERMINED BY MATCHING WSEL AT RIVER MILE 9.25 IN THE
T8      MAIN10.DAT MODEL.

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0        2                          0.007                   0         0

QT        1      2700
NC    0.040     0.040     0.040       0.1       0.3
X1     8.55        10      9965     10072         0         0         0
GR   1381.7      9915    1380.9      9965   1378.36   9979.42   1377.36   9985.03      1374   9999.67
GR   1375.0  10003.77    1376.0  10012.77      1378  10046.83    1380.0  10052.41    1381.9     10072
  CVL STATION 3

X1     8.57         9      9975     10062        97        97        97
GR   1382.2      9905    1381.0   9957.55      1381      9968    1380.0      9975   1374.69   9995.58
```

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                                                                BKT10
GR     1376    9998.47       1376   10001.60      1378.0    10022.35     1380.27       10062
  CVL STATION 100

X1     8.58         14    9973.96      10030          92          92          92
X3       10
GR   1382.2       9875    1381.34    9925.30      1380.0     9935.97      1380.0     9950.56     1378.72     9963.92
GR   1378.9    9973.96     1378.0    9979.62     1377.29     9984.99     1375.95     9990.91      1376.4     9997.51
GR   1376.4   10003.79     1376.7   10009.69      1378.0    10014.44     1378.96       10030
  DOWNSTREAM SIDE OF CULVERTS - CVL STATION 192

SC    3.013         .5       2.7                      2           0          80         2.1      1376.5      1376.4
X1     8.60         11    9970.83      10030          80          80          80
X2                             2                  1380.5
X3       10
BT        3     9973.9     1381.3                   10004      1380.5                10030     1378.82
GR     1383    9924.75     1382.3    9925.90      1382.3     9970.83     1381.3      9973.9        1378     9983.49
GR   1376.5    9991.93     1376.5    9997.91      1376.5    10001.78     1376.7       10004      1378.0    10013.25
GR   1378.7      10030
  UPSTREAM SIDE OF CULVERTS - CVL STATION 272

X1     8.62          6    9983.94      10037         128         128         128
GR   1382.5    9924.19     1382.8       9970     1378.00     9983.94     1377.11     9994.73     1377.11    10004.77
GR   1379.5      10037
  CVL STATION 400

X1     8.64          4       9970      10028         100         100         100
GR   1382.5    9923.75     1381.7       9970     1377.62       10000     1379.87       10028
  SOUTH OF HANCE BOULIVARD - CVL STATION 500
1
   15SEP04      15:06:09                                                                                    PAGE     5


X1     8.66          5    9931.53   10029.76         100         100         100
GR   1382.0    9924.19     1381.3    9931.53     1380.68        9970     1378.13       10000     1380.23    10029.76
  CVL STATION 600

X1     8.68          5       9972      10031         100         100         100
GR   1382.2    9927.05    1381.05       9972     1378.00     9990.92     1378.92       10000     1380.64       10031
  CVL STATION 700

X1     8.70          5      9984.5      10033         100         100         100
GR   1382.2       9910    1381.35       9960     1379.59     9984.50      1379.8       10000     1381.27       10033
  CVL STATION 800

X1     8.72          4    9983.26      10030         100         100         100
GR   1383.2    9925.99       1383    9983.26      1380.9       10000     1381.9       10030
  CVL STATION 900

X1     8.74          5       9982   10029.18         100         100         100
GR   1385.3    9927.33       1385    9957.83        1385        9982       1382       10000     1382.55    10029.18
  CVL STATION 1000

X1     8.77          6       9989      10017         200         200         200
GR   1385.6    9936.14     1385.4       9989     1383.6        9995     1383.6       10005      1384.4       10017
GR   1384.4      10040
  CVL STATION 1200
```

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NH        1        .016      10048
X1     8.79           3      10011       10048          81          81          81
GR   1385.3        9963    1385.99       10011     1385.31       10048
  SOUTH OF PARKSIDE LANE - TETRA TECH STATION MATCH - CVL STATION 1281

NH        1        .016      10052
X1     8.80           3      10015       10052          49          49          49
GR   1385.1        9966    1385.79       10015     1385.75       10052
  CVL STATION 1330

NH        1        .016   10100.74
X1     8.81          15       9980    10100.74          20         105          29
GR     1388        9725       1388     9758.88        1388     9773.41        1388     9847.74        1388     9873.96
GR     1388     9898.54       1388     9920.62        1388     9949.55        1388     9959.31        1388        9980
GR   1384.7    10003.87    1385.00    10035.11     1385.00    10042.29     1385.00    10069.88        1386    10100.74
  CVL STATION 1359

NH        1         .03   10079.07
X1     8.86          23     9874.59    10079.07         266         266         266
X3                                        9700     1386.67
GR   1387.5        9386       1387        9433        1386        9471        1385        9491        1385        9548
GR     1386        9574    1386.32     9597.38     1386.63     9626.66     1386.67     9713.22      1386.5     9774.68
GR   1386.3     9822.26       1386     9874.59     1385.69     9893.32     1385.53     9914.97     1385.01     9952.81
GR   1383.8     9969.32       1383     9981.35        1382     9992.12        1382    10009.37        1383    10023.87
GR     1384    10039.45    1384.73    10053.84        1386    10079.07
  CVL STATION 1625
1
   15SEP04      15:06:09                                                                                          PAGE     6

NH        1         .03   10065.05
X1     8.89          23     9942.52    10065.05         175         175         175
X3                                        9601        1388
GR   1390.3     9289.97    1390.00     9326.96     1390.00     9340.05     1389.00     9373.44     1388.00     9413.37
GR   1387.0     9482.88    1386.31     9501.52     1386.29     9513.91     1386.48     9523.04     1387.00     9535.79
GR   1387.9     9585.07    1387.99     9601.04     1387.63     9687.08     1387.38     9757.74     1387.00     9820.33
GR   1386.0     9942.52    1385.00     9958.61     1384.00     9970.67     1382.00     9991.61     1382.00    10009.81
GR   1383.4    10022.67    1385.01    10041.63     1386.00    10065.05
  CVL STATION 1800

NH        2         .03   10044.82        .016    10046.99
X1     8.93          38     9968.52    10044.82         217         217         217
GR   1397.0     9120.13    1397.00     9134.51     1396.00     9153.49     1395.00     9155.41     1395.00     9162.29
GR   1394.6     9192.51    1394.00     9229.41     1393.57     9241.75     1393.00     9275.34     1393.00     9277.60
GR   1392.0     9287.63    1391.00     9310.35     1391.00     9342.55     1390.40     9360.99     1389.80     9371.35
GR   1389.0     9379.50    1388.95     9385.38     1388.00     9472.01     1388.00     9480.92     1387.36     9496.67
GR   1387.1     9525.25    1387.24     9574.28     1387.23     9658.54     1386.96     9737.74     1386.48     9823.34
GR   1386.0     9894.09    1386.00     9923.16     1387.00     9954.39     1387.00     9968.52     1385.00     9988.91
GR   1384.9     9993.20    1385.00    10003.66     1384.67    10006.10     1385.00    10012.74     1385.00    10019.94
GR   1386.0    10038.35    1387.00    10044.82     1386.92    10046.99
  CVL STATION 2017

NH        2         .03   10035.65        .016       10040
X1     9.00          28     9968.22    10035.65         370         370         370
X3       10
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                                                                BKT10
GR   1394.9    9185.54    1394.37    9231.03    1394.00    9248.91    1393.20    9263.39    1392.67    9275.80
GR   1392.7    9294.12    1392.01    9300.06    1391.95    9320.94    1391.32    9344.61    1391.00    9357.15
GR   1391.0    9370.24    1390.51    9444.59    1390.00    9553.58    1389.69    9607.41    1389.37    9693.57
GR   1389.0    9791.14    1388.57    9847.63    1388.45    9912.41    1388.51    9946.72    1388.54    9968.22
GR   1388.0    9979.69    1385.93    9988.45    1385.00    9993.90    1385.03   10004.08    1386.05   10009.74
GR   1389.0   10021.77    1390.00   10035.65       1390      10040
  CVL STATION 2387

SC    2.013         .5        2.7                      3          0         75        2.1    1386.02       1385
NH        2        .03   10037.29       .016      10040
X1     9.01         33    9947.35   10037.29         76         76         76
X2                              2                1389.89
X3       10
BT        4     9896.9    1389.37                9930.05    1389.98                10006.96    1390.27
BT   10037.    1389.89
GR   1397.8    9185.54    1397.00    9201.36    1397.00    9206.41    1396.00    9206.73    1396.00    9219.83
GR   1395.4    9242.50    1395.00    9252.28    1393.89    9317.37    1393.16    9347.04    1392.00    9381.56
GR   1391.4    9405.92    1391.00    9432.55    1391.00    9465.97    1390.72    9533.86    1390.59    9603.95
GR   1390.2    9682.01    1389.87    9740.25    1389.67    9804.11    1389.45    9885.39    1389.39    9896.69
GR   1390.0    9930.05    1390.05    9936.10    1391.00    9938.65    1391.00    9944.23    1391.22    9947.35
GR   1390.8    9956.07    1390.00    9963.63    1389.00    9982.55    1386.02    9994.89    1386.02   10006.96
GR   1389.0   10018.85    1390.00   10037.29       1390      10040
  CVL STATION 2463
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NH        2        .03   10034.44       .016      10040
X1     9.04         18    9965.89   10034.44        137        137        137
GR   1397.5    9317.90    1397.49    9325.05    1397.00    9353.18    1397.00    9377.94    1394.00    9387.32
GR   1393.0    9393.21    1392.95    9424.18    1392.00    9629.08    1391.36    9785.41    1391.35    9851.75
GR   1391.0    9883.49    1391.00    9965.89    1390.52    9972.28    1387.00    9989.15    1387.00   10011.45
GR   1389.2   10022.01       1390   10034.44       1390      10040
  CVL STATION 2600

NH        2        .03   10029.03       .016      10040
X1     9.08         15     9968.5   10033.71        200        200        200
GR   1396.0    9300.07    1396.00    9353.28    1395.36    9370.91    1395.00    9379.29    1394.00    9385.46
GR   1394.0    9451.69    1393.41    9534.65    1393.00    9710.81    1392.01    9961.65    1392.00    9968.50
GR   1388.0    9989.48    1388.00   10009.46    1391.00   10029.03    1391.00   10033.71       1391      10040
  CVL STATION 2800

NH        1        .03    10025.6
X1     9.10         25    9963.69    10025.6        137        137        137
GR   1397.0    9327.52    1397.00    9330.04    1397.84    9337.46    1396.00    9358.21    1395.00    9368.07
GR   1394.6    9376.12    1394.44    9384.36    1394.44    9395.42    1394.29    9408.30    1394.27    9432.12
GR   1394.0    9443.12    1394.00    9709.01    1393.96    9714.46    1393.81    9772.64    1393.00    9863.05
GR   1393.0    9963.69    1392.00    9969.68    1390.74    9979.26    1388.78    9989.57    1388.03    9998.62
GR   1388.6   10006.61    1389.00   10009.41    1391.00   10015.48    1391.00   10020.98    1392.00   10025.60
  END OF CVL CROSS-SECTIONS - CVL STATION 2937

NC    0.016      0.016      0.016        0.1        0.3
ET                 5.1                           4118.87    5417.09
X1     9.13         14       4918    5058.33         98         98         98
GR     1398    3791.43       1396    3900.27       1394    4218.11       1394    4768.19     1393.5       4918
GR   1393.2       5000       1393    5058.33     1392.7       5085       1392    5150.02       1392    5159.91
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                                                                BKT10
GR      1392    5184.70       1391       5264        1392     5371.23        1392     5418.98
  CENTERLINE OF PINNACLE PEAK ROAD - BEGIN TETRA TECH'S EAST SPLIT X-SECTIONS

ET                 5.1                              4133.61     5424.01
X1      9.14        14     4904.57    5104.30          33          33          33
GR      1398    3778.24       1396    3970.46        1394     4372.20        1394     4430.01      1394.4     4623.96
GR      1394    4904.57     1393.6       5000      1393.6     5007.96        1393     5104.30        1392     5183.96
GR    1391.5    5279.96       1392    5352.33      1392.8     5407.96      1392.8     5429.75
  UPSTREAM SIDE OF PINNACLE PEAK ROAD

NC     0.040      0.040      0.040
ET                 5.1                              4161.93     5443.67
X1      9.15        11     4994.21    5082.19          43          43          43
GR      1398    3719.90       1396    3900.98        1394     4069.81        1393     4325.58        1393       4814
GR      1393    4994.21       1393       5000        1393     5082.19        1392     5210.16        1392     5403.10
GR      1392    5443.67
  RIGHT BANK ENCROACHMENT SET AT FLOW SPLIT BOUNDARY FOR BREAKOUT WSEL MATCHING

ET                 5.1                               3023     4572.95
X1      9.25        45       4825    5285.60         155          82         141
GR      1400       3023     1399.1       3123      1397.6        3223      1395.8       3323      1392.7       3423
GR      1392       3523       1393       3623      1393.6        3723      1393.5       3762        1394       3874
GR      1394       3898       1394    4003.81        1394     4062.18        1395     4283.87        1395     4298.29
GR      1395    4301.25       1395    4365.84        1395      4385.4      1395.7     4563.07        1396     4565.34
1
   15SEP04      15:06:09                                                                                          PAGE     8

GR      1397    4570.45     1397.57    4572.95     1397.46     4582.97        1397     4585.82        1396     4590.84
GR      1395    4598.19       1395    4614.18        1395     4621.31        1394     4735.08        1394     4738.18
GR      1394    4838.32       1393    4871.51        1392     4892.27        1392        5000        1392      5077.8
GR      1393    5179.38       1394    5266.49        1395     5275.95        1396     5278.52        1397     5281.09
GR      1398    5283.83     1398.64     5285.6        1399     5290.86        1400     5304.55        1399     5325.36

1
   15SEP04      15:06:09                                                                                          PAGE     9

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*PROF 1

CCHV=      .100 CEHV=      .300
*SECNO 8.550
2096 WSEL NOT GIVEN, AVG OF MAX, MIN USED
     8.550      1.57   1375.57       .00       .00   1375.66       .09       .00       .00   1380.90
      27.0        .0      27.0        .0        .0      11.2        .0        .0        .0   1381.90
       .00       .00      2.40       .00      .000      .040      .000      .000   1374.00   9992.82
   .006921        0.        0.        0.         0         0         5       .00     16.09  10008.91

*SECNO 8.570
     8.570      1.67   1376.36       .00       .00   1376.47       .11       .80       .01   1380.00
```

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                                                        BKT10
     27.0        .0      27.0        .0        .0      10.1        .0        .0        .0   1380.27
      .01       .00      2.66       .00      .000      .040      .000      .000   1374.69   9989.11
  .010044       97.       97.       97.         2         0         0       .00     16.22  10005.33

*SECNO 8.580

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.50

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1378.90 ELREA=      1378.96

     8.580      1.07   1377.02       .00       .00   1377.07       .05       .59       .01   1378.90
      27.0        .0      27.0        .0        .0      15.1        .0        .1        .1   1378.96
       .02       .00      1.78       .00      .000      .040      .000      .000   1375.95   9986.15
  .004478       92.       92.       92.         3         0         0       .00     24.74  10010.89


SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     3         .013      .50      2.70       .00      2.00       .00      80.00     2         1       1376.50   1376.40

CHART  2 - CORRUGATED METAL PIPE CULVERT
SCALE  1 - HEADWALL

5140, NORMAL DEPTH EXCEEDS CULVERT HEIGHT
*SECNO 8.600
1
   15SEP04      15:06:09                                                                                    PAGE   10

    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


SPECIAL CULVERT OUTLET CONTROL
EGIC =   1378.063  EGOC =   1378.240  PCWSE=   1377.018  ELTRD=   1380.500

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.62

SPECIAL CULVERT

     EGIC      EGOC        H4      QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
  1378.06   1378.24      1.17        0.       27.      .708       9.4   1380.50        0.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1382.30 ELREA=      1378.70

     8.600      1.73   1378.23       .00       .00   1378.24       .01      1.17       .00   1382.30
      27.0        .0      27.0        .0        .0      38.2        .0        .1        .1   1378.70
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                                                                BKT10
      .06       .00       .71       .00      .000      .040      .000      .000   1376.50   9982.79
  .000342       80.       80.       80.         0         0         0       .00     36.21  10019.00

*SECNO 8.620

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =    .63

     8.620      1.18   1378.29       .00       .00   1378.31       .01       .07       .00   1378.00
      27.0        .0      27.0        .0        .1      29.1        .0        .2        .2   1379.50
       .09       .29       .93       .00      .040      .040      .000      .000   1377.11   9983.10
  .000849      128.      128.      128.         2         0         0       .00     37.56  10020.67

*SECNO 8.640
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.640       .85   1378.47   1378.47       .00   1378.69       .22       .25       .06   1381.70
      27.0        .0      27.0        .0        .0       7.2        .0        .2        .3   1379.87
       .10       .00      3.76       .00      .000      .040      .000      .000   1377.62   9993.73
  .032114      100.      100.      100.        20        19         0       .00     16.87  10010.60
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     SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
     Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
     TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
     SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 8.660

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.37

     8.660      1.22   1379.35       .00       .00   1379.38       .03       .67       .02   1381.30
      27.0        .0      27.0        .0        .0      19.1        .0        .3        .4   1380.23
       .12       .00      1.41       .00      .000      .040      .000      .000   1378.13   9985.71
  .002822      100.      100.      100.         3         0         0       .00     31.49  10017.21

*SECNO 8.680
     8.680      1.58   1379.58       .00       .00   1379.60       .02       .22       .00   1381.05
      27.0        .0      27.0        .0        .0      21.8        .0        .3        .4   1380.64
       .14       .00      1.24       .00      .000      .040      .000      .000   1378.00   9981.13
  .001771      100.      100.      100.         3         0         0       .00     30.75  10011.88

*SECNO 8.700
3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.700       .49   1380.08   1380.08       .00   1380.24       .15       .47       .04   1379.59
      27.0       4.6      22.4        .0       1.7       6.9        .0        .4        .5   1381.27
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                                                                  BKT10
      .15      2.73      3.23       .00      .040      .040      .000      .000   1379.59   9977.63
   .034935     100.      100.      100.        20        17         0       .00     28.75  10006.37

*SECNO 8.720

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.99

    8.720       .85   1381.75       .00       .00   1381.82       .06      1.57       .01   1383.00
     27.0        .0      27.0        .0        .0      13.7        .0        .4        .6   1381.90
      .17       .00      1.97       .00      .000      .040      .000      .000   1380.90   9993.23
   .008865     100.      100.      100.         4         0         0       .00     32.24  10025.47

*SECNO 8.740
3280 CROSS SECTION      8.74 EXTENDED       .14 FEET

    8.740       .69   1382.69       .00       .00   1382.75       .06       .94       .00   1385.00
     27.0        .0      27.0        .0        .0      13.4        .0        .4        .6   1382.55
      .18       .00      2.01       .00      .000      .040      .000      .000   1382.00   9995.88
   .009889     100.      100.      100.         4         0         0       .00     33.30  10029.18

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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 8.770
    8.770       .76   1384.36       .00       .00   1384.43       .07      1.68       .00   1385.40
     27.0        .0      27.0        .0        .0      13.0        .0        .5        .8   1384.40
      .21       .00      2.08       .00      .000      .040      .000      .000   1383.60   9992.46
   .007206     200.      200.      200.         3         0         0       .00     23.98  10016.44

1490 NH CARD USED
*SECNO 8.790

3265 DIVIDED FLOW

3280 CROSS SECTION      8.79 EXTENDED       .56 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
    8.790       .56   1385.86   1385.86       .00   1386.00       .14       .51       .02   1385.99
     58.1      33.3      24.8        .0      10.9       8.2        .0        .5        .9   1385.31
      .21      3.05      3.00       .00      .016      .016      .000      .000   1385.30   9963.00
   .005985       81.       81.       81.         3        19         0       .00     68.96  10048.00

1490 NH CARD USED
*SECNO 8.800
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3280 CROSS SECTION 8.80 EXTENDED .92 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.85

8.800	.92	1386.02	1385.98	.00	1386.18	.16	.17	.00	1385.79
113.0	94.9	18.1	.0	28.3	9.3	.0	.5	1.0	1385.75
.22	3.36	1.95	.00	.016	.016	.000	.000	1385.10	9966.00
.002788	49.	49.	49.	11	14	0	.00	86.00	10052.00

1490 NH CARD USED
*SECNO 8.810
3280 CROSS SECTION 8.81 EXTENDED .17 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.85

8.810	1.47	1386.17	.00	.00	1386.20	.03	.01	.01	1388.00
163.3	.0	163.3	.0	.0	110.2	.0	.6	1.0	1386.00
.22	.00	1.48	.00	.000	.016	.000	.000	1384.70	9993.25
.000247	20.	29.	105.	3	0	0	.00	107.49	10100.74

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO 8.860
3280 CROSS SECTION 8.86 EXTENDED .22 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 2.72

3470 ENCROACHMENT STATIONS= 9700.0 10079.1 TYPE= 1 TARGET= -9700.000
ELENCL= 1386.67 ELENCR= 100000.00

8.860	4.23	1386.23	.00	.00	1386.23	.01	.03	.00	1386.00
235.8	.4	235.3	.0	4.3	378.1	.0	2.1	2.1	100000.00
.34	.10	.62	.00	.030	.030	.000	.000	1382.00	9835.69
.000070	266.	266.	266.	3	0	0	.00	243.38	10079.07

1490 NH CARD USED
*SECNO 8.890
3280 CROSS SECTION 8.89 EXTENDED .23 FEET

3470 ENCROACHMENT STATIONS= 9601.0 10065.0 TYPE= 1 TARGET= -9601.000
ELENCL= 1388.00 ELENCR= 100000.00

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                                                                BKT10
     8.890      4.24   1386.24       .00       .00   1386.26       .02       .02       .00   1386.00
     292.2        .5     291.8        .0       3.3     278.5        .0       3.4       2.9 100000.00
       .39       .15      1.05       .00      .030      .030      .000      .000   1382.00   9913.96
   .000151      175.      175.      175.         1         0         0       .00    151.09  10065.05

1490 NH CARD USED
*SECNO 8.930

3265 DIVIDED FLOW

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.930      1.56   1386.23   1386.23       .00   1386.55       .32       .11       .09   1387.00
     303.0      16.7     286.3        .0      11.2      61.5        .0       4.3       3.6   1387.00
       .40      1.50      4.66       .00      .030      .030      .000      .000   1384.67   9860.73
   .009228      217.      217.      217.        20        18         0       .00    132.90  10039.81

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     SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
     Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
     TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
     SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

1490 NH CARD USED
*SECNO 9.000

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.83

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1388.54 ELREA=      1390.00

     9.000      3.00   1388.00       .00       .00   1388.26       .25      1.71       .01   1388.54
     303.0        .0     303.0        .0        .0      74.9        .0       4.9       4.3   1390.00
       .43       .00      4.04       .00      .000      .030      .000      .000   1385.00   9979.69
   .002755      370.      370.      370.         4         0         0       .00     38.00  10017.69


SPECIAL CULVERT

SC  CUNO       CUNV       ENTLC      COFQ       RDLEN      RISE       SPAN       CULVLN     CHRT       SCL        ELCHU      ELCHD
     2          .013       .50       2.70       .00       3.00       .00       75.00      2          1         1386.02    1385.00

CHART  2 - CORRUGATED METAL PIPE CULVERT
SCALE  1 - HEADWALL

5130, EGIC= 1405.48..MAY BE TOO LARGE IF INLET CONTROLS.
5135, EGOC= 1402.57 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
1490 NH CARD USED
*SECNO 9.010
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SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG =   1390.65
3280 CROSS SECTION      9.01 EXTENDED       .60 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.49

SPECIAL CULVERT

     EGIC      EGOC        H4     QWEIR     QCULV       VCH     ACULV     ELTRD    WEIRLN
  1405.48   1402.57      2.39      200.      117.     1.807      14.1   1389.89      140.


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1391.22 ELREA=      1390.00

     9.010      4.58   1390.60       .00       .00   1390.65       .05      2.39       .00   1391.22
     314.5        .0     312.4       2.0        .0     172.9       1.6       5.1       4.4   1390.00
       .44       .00      1.81      1.26      .000      .030      .016      .000   1386.02   9957.97
   .000478       76.       76.       76.         2         0         0       .00     82.03  10040.00

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    SECNO      DEPTH      CWSEL      CRIWS      WSELK       EG        HV        HL     OLOSS     L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH      AROB       VOL       TWA     R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH     XNR        WTN       ELMIN   SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC      ICONT      CORAR     TOPWID  ENDST

1490 NH CARD USED
*SECNO 9.040
3280 CROSS SECTION      9.04 EXTENDED       .64 FEET

     9.040      3.63   1390.63       .00       .00   1390.82       .19       .13       .04   1391.00
     543.6        .0     534.6       9.0        .0     152.6       3.5       5.7       4.7   1390.00
       .45       .00      3.50      2.55      .000      .030      .016      .000   1387.00   9970.72
   .001583      137.      137.      137.         2         0         0       .00     69.28  10040.00

1490 NH CARD USED
*SECNO 9.080
3280 CROSS SECTION      9.08 EXTENDED       .70 FEET

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.080      3.70   1391.70   1391.70       .00   1392.83      1.13       .91       .28   1392.00
    1368.1        .0    1340.2      27.9        .0     156.2       4.4       6.4       5.0   1391.00
       .46       .00      8.58      6.33      .000      .029      .016      .000   1388.00   9970.07
   .008607      200.      200.      200.        20         5         0       .00     69.93  10040.00
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1490 NH CARD USED
*SECNO 9.100
3280 CROSS SECTION      9.10 EXTENDED      2.30 FEET

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.100      6.27   1394.30   1394.30       .00   1394.90       .60       .61       .05   1393.00
    2700.0     813.5    1886.5        .0     319.4     259.4        .0       7.6       6.1   1392.00
       .46      2.55      7.27       .00      .030      .030      .000      .000   1388.03   9407.49
   .003411      137.      137.      137.        20        14         0       .00    618.11  10025.60
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

CCHV=     .100 CEHV=     .300
*SECNO 9.130
3280 CROSS SECTION      9.13 EXTENDED      2.96 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  6.97

3470 ENCROACHMENT STATIONS=     4118.9    5417.1  TYPE=      1  TARGET=     1298.220
     9.130      3.95   1394.95       .00   1394.95   1394.98       .03       .02       .06   1393.50
    2700.0     592.9     266.9    1840.2     770.2     239.9    1108.2      10.6       8.2   1393.00
       .48       .77      1.11      1.66      .016      .016      .016      .000   1391.00   4118.87
   .000070       98.       98.       98.         2         0         0       .00   1298.22   5417.09

*SECNO 9.140
3280 CROSS SECTION      9.14 EXTENDED      2.14 FEET

3470 ENCROACHMENT STATIONS=     4133.6    5424.0  TYPE=      1  TARGET=     1290.400
     9.140      3.44   1394.94       .00   1394.94   1394.99       .06       .00       .01   1394.00
    2700.0     411.8     362.7    1925.5     492.8     277.1     906.5      12.0       9.2   1393.00
       .49       .84      1.31      2.12      .016      .016      .016      .000   1391.50   4183.78
   .000128       33.       33.       33.         2         0         0       .00   1240.23   5424.01

*SECNO 9.150
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3280 CROSS SECTION 9.15 EXTENDED 2.99 FEET

3470 ENCROACHMENT STATIONS= 4161.9 5443.7 TYPE= 1 TARGET= 1281.740

9.150	2.99	1394.99	.00	1394.99	1395.00	.02	.01	.00	1393.00
2700.0	1402.7	156.2	1141.1	1602.4	174.9	1016.2	14.2	10.4	1393.00
.50	.88	.89	1.12	.040	.040	.040	.000	1392.00	4161.93
.000231	43.	43.	43.	2	0	0	.00	1281.74	5443.67

*SECNO 9.250

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .38

3470 ENCROACHMENT STATIONS= 3023.0 4573.0 TYPE= 1 TARGET= 1549.950

9.250	3.02	1395.02	.00	1395.02	1395.09	.07	.07	.02	100000.00
2700.0	2700.0	.0	.0	1283.8	.0	.0	20.6	14.2	100000.00
.52	2.10	.00	.00	.040	.000	.000	.000	1392.00	3348.25
.001580	155.	141.	82.	2	0	0	.00	1041.52	4389.77

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TW RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1375.661	1376.469	8.550	8.570

TW RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1376.469	1377.068	8.570	8.580

TW RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1377.068	1378.240	8.580	8.600

TW RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62

BKT10

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1378.240	1378.308	8.600	8.620

TW RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1378.308	1378.691	8.620	8.640

TW RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1378.691	1379.382	8.640	8.660

TW RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1379.382	1379.603	8.660	8.680

TW RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1379.603	1380.238	8.680	8.700

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TW RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	21	1380.238	1381.815	8.700	8.720

TW RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
6.75	6.74	.05	6.75	6.74	.05	21	1381.815	1382.751	8.720	8.740

TW RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
15.39	15.39	.04	22.14	22.13	.04	21	1382.751	1384.431	8.740	8.770

TW RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
46.25	46.23	.03	68.39	68.36	.04	21	1384.431	1386.003	8.770	8.790

TW RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
54.97	54.93	.07	123.35	123.29	.05	21	1386.003	1386.179	8.790	8.800

TW RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
50.27	50.24	.05	173.62	173.53	.05	21	1386.179	1386.203	8.800	8.810

TW RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
72.44	72.29	.21	246.06	245.82	.10	21	1386.203	1386.235	8.810	8.860

TW RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
56.48	56.36	.23	302.54	302.17	.12	21	1386.235	1386.256	8.860	8.890

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TW RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
10.74	10.74	.01	313.29	312.91	.12	21	1386.256	1386.546	8.890	8.930

TW RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	313.29	312.91	.12	21	1386.546	1388.258	8.930	9.000

TW RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
11.47	11.45	.21	324.76	324.36	.12	21	1388.258	1390.649	9.000	9.010

TW RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
229.12	228.83	.13	553.88	553.19	.12	21	1390.649	1390.819	9.010	9.040

TW RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
824.53	824.29	.03	1378.41	1377.49	.07	21	1390.819	1392.833	9.040	9.080

TW RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1331.90	1331.74	.01	2710.31	2709.23	.04	21	1392.833	1394.904	9.080	9.100

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PROFILE FOR STREAM EMCON 8/4/04 by: GRB

PLOTTED POINTS (BY PRIORITY) E-ENERGY,W-WATER SURFACE,I-INVERT,C-CRITICAL W.S.,L-LEFT BANK,R-RIGHT BANK,M-LOWER END STA

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ELEVATION  1374.     1379.     1384.     1389.     1394.     1399.     1404.     1409.     1414.     1419.
    SECNO   CUMDIS

     8.55      0.  I  E      .   LMR   .         .         .         .         .         .         .         .
              20.  I  WE     .  L R   .         .         .         .         .         .         .         .
              40.  CI  E     .  LR    .         .         .         .         .         .         .         .
              60.  CI  E     .  LR    .         .         .         .         .         .         .         .
              80.  CI  WE    . LR     .         .         .         .         .         .         .         .
     8.57    100.  CI   E    . LR     .         .         .         .         .         .         .         .
             120.  C I  E    . L      .         .         .         .         .         .         .         .
             140.  C I  E    .L       .         .         .         .         .         .         .         .
             160.  C  I  E   .L       .         .         .         .         .         .         .         .
             180.  C   I E   L        .         .         .         .         .         .         .         .
     8.58    200.  C   I E   L        .         .         .         .         .         .         .         .
             220.  C   I  E  R L      .         .         .         .         .         .         .         .
             240.  C   I  E  R  L     .         .         .         .         .         .         .         .
             260.  C    I  E R    L   .         .         .         .         .         .         .         .
     8.60    280.  C    I  ER.      L .         .         .         .         .         .         .         .
             300.  C    I  WER    L   .         .         .         .         .         .         .         .
             320.  C    I   ER   L    .         .         .         .         .         .         .         .
             340.  C     I  ER  L     .         .         .         .         .         .         .         .
             360.  C     I  ERL       .         .         .         .         .         .         .         .
             380.  C     I  ELR       .         .         .         .         .         .         .         .
     8.62    400.  C     I LE.R       .         .         .         .         .         .         .         .
             420.  C     I  E.R       .         .         .         .         .         .         .         .
             440.  C      I E.L       .         .         .         .         .         .         .         .
             460.  C      I E.RL      .         .         .         .         .         .         .         .
             480.  C      I E. R L    .         .         .         .         .         .         .         .
     8.64    500.  .      I E. R  L   .         .         .         .         .         .         .         .
             520.  C      I WE R  L   .         .         .         .         .         .         .         .
             540.  C       I E R  L   .         .         .         .         .         .         .         .
             560.  C       I E R  L   .         .         .         .         .         .         .         .
             580.  C       I E R  L   .         .         .         .         .         .         .         .
     8.66    600.  C       I .ER  L   .         .         .         .         .         .         .         .
             620.  C       I .E R L   .         .         .         .         .         .         .         .
             640.  C       I .E RL    .         .         .         .         .         .         .         .
             660.  C       I .E RL    .         .         .         .         .         .         .         .
             680.  C       I .E RL    .         .         .         .         .         .         .         .
     8.68    700.  C       I .E RL    .         .         .         .         .         .         .         .
             720.  C        I.E  L    .         .         .         .         .         .         .         .
             740.  C        I. ELR    .         .         .         .         .         .         .         .
             760.  C         I E R    .         .         .         .         .         .         .         .
             780.  C         .IE R    .         .         .         .         .         .         .         .
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8.70   800.  .        .IE  R    .          .         .         .         .         .         .
       820.  C        . IE R    .          .         .         .         .         .         .
       840.  C        . IWER    .          .         .         .         .         .         .
       860.  C        .  IEL    .          .         .         .         .         .         .
       880.  C        .  I ERL  .          .         .         .         .         .         .
8.72   900.  C        .   I E L .          .         .         .         .         .         .
       920.  C        .   I E  L.          .         .         .         .         .         .
       940.  C        .    IE   L          .         .         .         .         .         .
       960.  C        .    I E  L          .         .         .         .         .         .
       980.  C        .     IE  .L         .         .         .         .         .         .
8.74  1000.  C        .     IWE . L        .         .         .         .         .         .
      1020.  C        .     IRE . L        .         .         .         .         .         .
      1040.  C        .      IE . L        .         .         .         .         .         .
      1060.  C        .      IWE. L        .         .         .         .         .         .
      1080.  C        .      I E. L        .         .         .         .         .         .
      1100.  C        .       IE. L        .         .         .         .         .         .
      1120.  C        .       IWE L        .         .         .         .         .         .
      1140.  C        .       I E  L       .         .         .         .         .         .
      1160.  C        .        IE  L       .         .         .         .         .         .
      1180.  C        .        IWE L       .         .         .         .         .         .
8.77  1200.  C        .        I.E L       .         .         .         .         .         .
      1220.  C        .         IWEL       .         .         .         .         .         .
      1240.  C        .         .IEL       .         .         .         .         .         .
      1260.  C        .         . IEL      .         .         .         .         .         .
8.79  1280.  .        .         .  IE      .         .         .         .         .         .
      1300.  .        .         . IRE      .         .         .         .         .         .
      1320.  .        .         . IRE      .         .         .         .         .         .
8.80  1340.  .        .         . I E      .         .         .         .         .         .
8.81  1360.  C        .         .I  E   L .         .         .         .         .         .
      1380.  C        .         .I  E   L .         .         .         .         .         R
      1400.  C        .         .I  E  L  .         .         .         .         .         R
      1420.  C        .         I   E  L  .         .         .         .         .         R
      1440.  C        .         I   E  L  .         .         .         .         .         R
      1460.  C        .        I.   E L   .         .         .         .         .         R
      1480.  C        .        I.   E L   .         .         .         .         .         R
      1500.  C        .        I.   E L   .         .         .         .         .         R
      1520.  C        .       I .   E L   .         .         .         .         .         R
      1540.  C        .       I .   EL    .         .         .         .         .         R
      1560.  C        .      I  .   EL    .         .         .         .         .         R
      1580.  C        .      I  .   EL    .         .         .         .         .         R
      1600.  C        .      I  .   E     .         .         .         .         .         R
      1620.  C        .     I   .   E     .         .         .         .         .         R
8.86  1640.  C        .     I   .   E     .         .         .         .         .         R
      1660.  C        .     I   .   E     .         .         .         .         .         R
      1680.  C        .     I   .   E     .         .         .         .         .         R
      1700.  C        .     I   .   E     .         .         .         .         .         R
      1720.  C        .     I   .   E     .         .         .         .         .         R
      1740.  C        .     I   .   E     .         .         .         .         .         R
      1760.  C        .     I   .   WE    .         .         .         .         .         R
      1780.  C        .     I   .   WE    .         .         .         .         .         R
8.89  1800.  C        .     I   .   WE    .         .         .         .         .         R
      1820.  C        .     I   .   WE    .         .         .         .         .         R
      1840.  C        .      I  .   WE    .         .         .         .         .         R
      1860.  C        .      I  .   WE    .         .         .         .         .         R
      1880.  C        .       I .   WE    .         .         .         .         .         R
      1900.  C        .       I .   WE    .         .         .         .         .         R
      1920.  C        .        I.   WE    .         .         .         .         .         R
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      1940.  C        .       I.   WE    .        .        .        .        .        .        R
      1960.  C        .        I   WE    .        .        .        .        .        .        R
      1980.  C        .        I   WEL   .        .        .        .        .        .        R
      2000.  C        .       .I   WEL   .        .        .        .        .        .        R
8.93  2020.  .        .       .I   WEL   .        .        .        .        .        .        .
      2040.  C        .       .I    EL   .        .        .        .        .        .        .
      2060.  C        .       .I   ELR   .        .        .        .        .        .        .
      2080.  C        .       .I   WER   .        .        .        .        .        .        .
      2100.  C        .       .I   WEL   .        .        .        .        .        .        .
      2120.  C        .       . I  WELR  .        .        .        .        .        .        .
      2140.  C        .       . I   ELR  .        .        .        .        .        .        .
      2160.  C        .       . I   ELR  .        .        .        .        .        .        .
      2180.  C        .       . I   WE R.        .        .        .        .        .        .
      2200.  C        .       . I   WE R.        .        .        .        .        .        .
      2220.  C        .       . I   WELR.        .        .        .        .        .        .
      2240.  C        .       . I    EL R        .        .        .        .        .        .
      2260.  C        .       . I    EL R        .        .        .        .        .        .
      2280.  C        .       . I    WE R        .        .        .        .        .        .
      2300.  C        .       . I    WE .R       .        .        .        .        .        .
      2320.  C        .       . I    WE .R       .        .        .        .        .        .
      2340.  C        .       . I     EL.R       .        .        .        .        .        .
      2360.  C        .       . I     EL. R      .        .        .        .        .        .
      2380.  C        .       . I     EL. R      .        .        .        .        .        .
9.00  2400.  C        .       . I     WE. R      .        .        .        .        .        .
      2420.  C        .       .  I     WE R      .        .        .        .        .        .
      2440.  C        .       .  I      .EL      .        .        .        .        .        .
9.01  2460.  C        .       .   I     . REL    .        .        .        .        .        .
      2480.  C        .       .   I     . REL    .        .        .        .        .        .
      2500.  C        .       .    I    . REL    .        .        .        .        .        .
      2520.  C        .       .    I    . REL    .        .        .        .        .        .
      2540.  C        .       .    I    . REL    .        .        .        .        .        .
      2560.  C        .       .    I    . RWE    .        .        .        .        .        .
      2580.  C        .       .     I   . RWE    .        .        .        .        .        .
9.04  2600.  C        .       .     I   . RWE    .        .        .        .        .        .
      2620.  C        .       .     I   . RWE    .        .        .        .        .        .
      2640.  C        .       .     I   . R E    .        .        .        .        .        .
      2660.  C        .       .      I  .  RWE   .        .        .        .        .        .
      2680.  C        .       .      I  .  RWE   .        .        .        .        .        .
      2700.  C        .       .      I  .  RWLE  .        .        .        .        .        .
      2720.  C        .       .      I  .  R WE  .        .        .        .        .        .
      2740.  C        .       .      I  .  R WE  .        .        .        .        .        .
      2760.  C        .       .       I .   RWLE .        .        .        .        .        .
      2780.  C        .       .       I .   RWLE .        .        .        .        .        .
9.08  2800.  .        .       .       I .   RWL E .        .        .        .        .        .
      2820.  .        .       .       I .   R W E .        .        .        .        .        .
      2840.  .        .       .       I .    R W E.        .        .        .        .        .
      2860.  .        .       .       I .    R LWE.        .        .        .        .        .
      2880.  .        .       .       I .    R LW E        .        .        .        .        .
      2900.  .        .       .       I .    R L W.E       .        .        .        .        .
      2920.  .        .       .       I .     R L WE       .        .        .        .        .
9.10  2940.  .        .       .       I .     R L .WE      .        .        .        .        .
      2960.  C        .       .        I.     R L .WE      .        .        .        .        .
      2980.  C        .       .         I     MRL .WE      .        .        .        .        .
      3000.  C        .       .         . I   MR L.WE      .        .        .        .        .
      3020.  C        .       .         .  I  M RL. E      .        .        .        .        .
9.13  3040.  C        .       .         .   I M RL. E      .        .        .        .        .
      3060.  C        .       .         .    I MR L E      .        .        .        .        .
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                                                                BKT10
     9.14  3080.  C        .        .        .   I  R L E       .        .        .        .        .        .
           3100.  C        .        .        .   I MRL. E       .        .        .        .        .        .
     9.15  3120.  C        .        .        .    I L . E       .        .        .        .        .        .
           3140.  C        .        .        .    I M . E       .        .        .        .        .        L
           3160.  C        .        .        .    I   M E       .        .        .        .        .        L
           3180.  C        .        .        .    I   . E       .        .        .        .        .        L
           3200.  C        .        .        .    I   . E M     .        .        .        .        .        L
           3220.  C        .        .        .    I   . E   M   .        .        .        .        .        L
           3240.  C        .        .        .    I   . E     M .        .        .        .        .        L
     9.25  3260.  C        .        .        .    I   . E       M        .        .        .        .        L
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   15SEP04      15:06:09                                                                          PAGE   21
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THIS RUN EXECUTED 15SEP04 15:06:10

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 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

EMCON 8/4/04 by: GRB

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	8.550	.00	.00	.00	1374.00	27.00	1375.57	.00	1375.66	69.21	2.40	11.24	3.25
	8.570	97.00	.00	.00	1374.69	27.00	1376.36	.00	1376.47	100.44	2.66	10.13	2.69
*	8.580	92.00	.00	.00	1375.95	27.00	1377.02	.00	1377.07	44.78	1.78	15.14	4.03
*	8.600	80.00	1380.50	.00	1376.50	27.00	1378.23	.00	1378.24	3.42	.71	38.16	14.60
*	8.620	128.00	.00	.00	1377.11	27.00	1378.29	.00	1378.31	8.49	.93	29.24	9.27
*	8.640	100.00	.00	.00	1377.62	27.00	1378.47	1378.47	1378.69	321.14	3.76	7.19	1.51
*	8.660	100.00	.00	.00	1378.13	27.00	1379.35	.00	1379.38	28.22	1.41	19.12	5.08
	8.680	100.00	.00	.00	1378.00	27.00	1379.58	.00	1379.60	17.71	1.24	21.81	6.42
*	8.700	100.00	.00	.00	1379.59	27.00	1380.08	1380.08	1380.24	349.35	3.23	8.63	1.44
*	8.720	100.00	.00	.00	1380.90	27.00	1381.75	.00	1381.82	88.65	1.97	13.68	2.87
	8.740	100.00	.00	.00	1382.00	27.00	1382.69	.00	1382.75	98.89	2.01	13.44	2.72
	8.770	200.00	.00	.00	1383.60	27.00	1384.36	.00	1384.43	72.06	2.08	12.96	3.18

*	8.790	81.00	.00	.00	1385.30	58.08	1385.86	1385.86	1386.00	59.85	3.00	19.18	7.51
*	8.800	49.00	.00	.00	1385.10	113.05	1386.02	1385.98	1386.18	27.88	1.95	37.59	21.41
*	8.810	29.00	.00	.00	1384.70	163.31	1386.17	.00	1386.20	2.47	1.48	110.19	103.87
*	8.860	266.00	.00	.00	1382.00	235.75	1386.23	.00	1386.23	.70	.62	382.47	282.26
	8.890	175.00	.00	.00	1382.00	292.24	1386.24	.00	1386.26	1.51	1.05	281.80	238.09

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	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	8.930	217.00	.00	.00	1384.67	302.98	1386.23	1386.23	1386.55	92.28	4.66	72.65	31.54
*	9.000	370.00	.00	.00	1385.00	302.98	1388.00	.00	1388.26	27.55	4.04	74.94	57.72
*	9.010	76.00	1389.89	.00	1386.02	314.45	1390.60	.00	1390.65	4.78	1.81	174.48	143.90
	9.040	137.00	.00	.00	1387.00	543.57	1390.63	.00	1390.82	15.83	3.50	156.10	136.63
*	9.080	200.00	.00	.00	1388.00	1368.10	1391.70	1391.70	1392.83	86.07	8.58	160.60	147.47
*	9.100	137.00	.00	.00	1388.03	2700.00	1394.30	1394.30	1394.90	34.11	7.27	578.77	462.33
*	9.130	98.00	.00	.00	1391.00	2700.00	1394.95	.00	1394.98	.70	1.11	2118.32	3223.24
	9.140	33.00	.00	.00	1391.50	2700.00	1394.94	.00	1394.99	1.28	1.31	1676.33	2382.68
	9.150	43.00	.00	.00	1392.00	2700.00	1394.99	.00	1395.00	2.31	.89	2793.59	1776.33
*	9.250	141.00	.00	.00	1392.00	2700.00	1395.02	.00	1395.09	15.80	.00	1283.79	679.19

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EMCON 8/4/04 by: GRB

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	8.550	27.00	1375.57	.00	.00	.00	16.09	.00
	8.570	27.00	1376.36	.00	.79	.00	16.22	97.00
*	8.580	27.00	1377.02	.00	.66	.00	24.74	92.00
*	8.600	27.00	1378.23	.00	1.21	.00	36.21	80.00
*	8.620	27.00	1378.29	.00	.06	.00	37.56	128.00

*	8.640	27.00	1378.47	.00	.18	.00	16.87	100.00
*	8.660	27.00	1379.35	.00	.88	.00	31.49	100.00
	8.680	27.00	1379.58	.00	.23	.00	30.75	100.00
*	8.700	27.00	1380.08	.00	.50	.00	28.75	100.00
*	8.720	27.00	1381.75	.00	1.67	.00	32.24	100.00
	8.740	27.00	1382.69	.00	.93	.00	33.30	100.00
	8.770	27.00	1384.36	.00	1.67	.00	23.98	200.00
*	8.790	58.08	1385.86	.00	1.50	.00	68.96	81.00
*	8.800	113.05	1386.02	.00	.16	.00	86.00	49.00
*	8.810	163.31	1386.17	.00	.15	.00	107.49	29.00
*	8.860	235.75	1386.23	.00	.06	.00	243.38	266.00
	8.890	292.24	1386.24	.00	.01	.00	151.09	175.00
*	8.930	302.98	1386.23	.00	-.01	.00	132.90	217.00
*	9.000	302.98	1388.00	.00	1.78	.00	38.00	370.00
*	9.010	314.45	1390.60	.00	2.59	.00	82.03	76.00
	9.040	543.57	1390.63	.00	.03	.00	69.28	137.00
*	9.080	1368.10	1391.70	.00	1.07	.00	69.93	200.00
*	9.100	2700.00	1394.30	.00	2.60	.00	618.11	137.00
*	9.130	2700.00	1394.95	.00	.65	.00	1298.22	98.00

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SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
9.140	2700.00	1394.94	.00	-.01	.00	1240.23	33.00
9.150	2700.00	1394.99	.00	.05	.00	1281.74	43.00
* 9.250	2700.00	1395.02	.00	.03	.00	1041.52	141.00

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SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING	SECNO=	8.580	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING	SECNO=	8.600	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING	SECNO=	8.620	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION	SECNO=	8.640	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.640	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	8.640	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING	SECNO=	8.660	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION	SECNO=	8.700	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.700	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	8.700	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING	SECNO=	8.720	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION	SECNO=	8.790	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.790	PROFILE= 1	MINIMUM SPECIFIC ENERGY
WARNING	SECNO=	8.800	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING	SECNO=	8.810	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING	SECNO=	8.860	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION	SECNO=	8.930	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	8.930	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	8.930	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING	SECNO=	9.000	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING	SECNO=	9.010	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION	SECNO=	9.080	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	9.080	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	9.080	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION	SECNO=	9.100	PROFILE= 1	CRITICAL DEPTH ASSUMED
CAUTION	SECNO=	9.100	PROFILE= 1	PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION	SECNO=	9.100	PROFILE= 1	20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING	SECNO=	9.130	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING	SECNO=	9.250	PROFILE= 1	CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

2% Annual Chance Flood

Main Channel

Input File: main50.dat

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T1     MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2     INPUT FILE: main50.dat        50-YR FLOOD ELEVATION
T3     ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4     October 2003 EMCON/OWT Inc. rev. for add'l ret. int. August 2004
*
*      This model is used to determine the main channel Base Floodplain
*      Extended x-section data used for stationing 9.21 - 9.35 (rockwall removed)
*      Split flowrates are applied from bkt50.dat and are partitioned across
*      relevant cross sections.
*
*      Starting WSEL is Adobe Dam reservoir 100-yr WSEL from effective FIS study.
*      Boundary conditions were taken from Tetra Tech modeling.
J1      0       2                       0               0       0 1378.00
J2      1       0      -1       0       0              -1       0
J3     38      43       1       2      26       8       4      25      68      53
J3     54
*  50-yr peak discharge is from effective FIS study.
QT      1   28920
*
NC 0.045   0.045   0.035     0.1     0.3
ET           5.1                  3796.61 5556.89
X1  8.69      95 4025.25 5073.77
GR1380.0 3796.61 1380.00 3854.47 1379.00 3861.47 1378.00 3868.42 1378.00 3878.69
GR1378.6 3884.04 1380.00 3896.01 1380.00 3907.92 1379.82 3923.26 1379.91 3925.58
GR1380.0 4002.41 1380.54 4004.61 1382.00 4011.19 1382.00 4016.12 1381.16 4025.25
GR1380.0 4037.88 1379.55 4039.54 1378.00 4045.04 1376.66 4058.92 1376.33 4063.23
GR1376.0 4067.80 1375.66 4071.80 1374.51 4084.66 1374.14 4088.53 1374.00 4090.42
GR1373.8 4091.18 1373.53 4092.99 1372.00 4102.33 1371.23 4129.14 1370.00 4171.62
GR1370.0 4446.38 1370.04 4448.91 1372.00 4550.37 1372.00 4583.65 1371.80 4601.95
GR1371.2 4726.77 1371.45 4741.81 1371.10 4787.06 1371.00 4796.71 1370.54 4837.32
GR1370.6 4872.36 1370.52 4876.45 1370.60 4881.98 1370.60 4882.00 1370.82 4897.47
GR1371.4 4906.65 1371.83 4913.95 1372.00 4917.45 1372.34 4920.12 1374.00 4933.03
GR1374.3 4936.71 1374.00 4958.00 1373.51 4959.38 1372.00 4963.60 1371.80 4964.16
GR1370.0 4969.21 1368.37 4973.77 1368.00 4974.80 1366.00 4980.35 1365.56 4981.39
GR1364.7 4987.21 1364.21 4990.25 1364.00 4992.46 1364.00 5000.00 1364.00 5003.25
GR1365.5 5010.85 1365.78 5012.36 1366.00 5013.46 1366.52 5014.69 1368.00 5018.15
GR1368.3 5018.85 1370.00 5022.82 1370.70 5024.49 1372.00 5027.49 1373.05 5031.15
GR1374.0 5034.40 1375.00 5039.27 1376.00 5044.17 1376.23 5045.52 1377.39 5052.81
GR1378.0 5059.14 1378.78 5065.36 1379.49 5073.77 1379.70 5074.11 1379.26 5077.51
GR1378.7 5079.93 1378.00 5082.02 1378.00 5116.40 1378.13 5146.24 1378.00 5177.10
GR1378.0 5181.33 1377.50 5273.67 1377.18 5375.38 1377.56 5451.37 1377.29 5556.89
*
QT      1   28920
ET           5.1                  3855.70 5475.95
X1  8.79      89 4095.41 5039.30     530     546     539
GR1384.0 3855.70 1384.00 3973.82 1382.64 3980.66 1384.00 3998.09 1382.65 4051.20
GR1382.6 4058.69 1382.49 4060.23 1382.89 4064.63 1384.00 4067.90 1384.00 4095.41
GR1382.2 4107.84 1382.00 4109.37 1380.85 4117.39 1380.00 4123.50 1378.49 4137.14
GR1378.0 4141.55 1376.51 4154.98 1376.00 4159.65 1374.00 4171.01 1373.84 4176.47
GR1372.0 4222.80 1372.00 4265.74 1371.40 4267.19 1370.00 4271.65 1370.02 4277.10
GR1370.5 4303.75 1372.00 4387.79 1372.60 4464.89 1373.01 4509.16 1373.45 4564.23
GR1373.6 4589.91 1374.00 4659.42 1374.00 4677.54 1373.79 4707.25 1374.00 4731.92
GR1375.0 4815.01 1375.48 4838.28 1375.82 4866.71 1375.01 4881.51 1374.70 4887.04
GR1374.0 4898.81 1374.00 4914.20 1376.00 4932.06 1377.09 4941.83 1377.77 4948.33
GR1378.0 4950.51 1378.00 4973.99 1377.74 4974.57 1376.00 4978.35 1375.92 4978.54
GR1375.3 4979.92 1374.00 4982.54 1373.68 4983.19 1372.00 4986.64 1371.40 4987.87
GR1370.0 4990.74 1369.23 4992.31 1368.00 4994.83 1367.12 4996.63 1366.00 4998.93
GR1366.0 5000.00 1367.19 5002.89 1368.00 5004.26 1369.43 5006.66 1370.00 5007.63
GR1371.8 5010.72 1372.00 5011.01 1372.55 5011.93 1374.00 5014.64 1374.46 5015.50
GR1376.0 5018.37 1377.54 5024.62 1378.00 5026.26 1378.19 5027.55 1378.48 5029.47
GR1380.0 5039.30 1380.47 5053.53 1381.00 5070.14 1381.05 5074.82 1381.51 5092.11
GR1381.8 5130.27 1381.56 5144.28 1381.81 5200.42 1381.90 5207.46 1381.92 5219.18
GR1382.0 5303.86 1382.00 5320.81 1381.88 5345.60 1381.56 5475.95
*
QT      1   28903
ET           5.1                  4279.99 5437.79
X1  8.93      71 4541.12 5252.00     565     711     722
GR1386.3 4279.99 1386.00 4295.47 1386.34 4315.43 1386.00 4350.00 1385.51 4354.32
GR1386.0 4371.17 1386.00 4454.56 1386.25 4457.97 1387.66 4480.76 1388.00 4485.92
GR1388.0 4526.66 1386.72 4541.12 1386.00 4552.20 1385.40 4560.69 1385.02 4564.36
GR1384.5 4569.41 1384.00 4573.51 1382.63 4586.39 1382.43 4588.53 1382.00 4594.51
GR1381.7 4598.20 1380.48 4604.38 1380.00 4606.94 1379.91 4608.36 1378.58 4632.57
GR1378.0 4639.26 1376.00 4653.50 1375.35 4704.64 1374.00 4828.12 1373.68 4850.43
GR1373.1 4888.01 1372.88 4901.73 1372.00 4950.77 1371.17 4970.32 1370.00 4996.16
GR1370.1 5000.00 1370.40 5014.94 1370.52 5018.25 1370.89 5033.81 1371.01 5037.53
GR1371.3 5046.38 1371.00 5056.40 1370.55 5068.53 1370.60 5102.71 1370.78 5109.11
GR1371.1 5116.39 1371.60 5131.46 1372.00 5139.38 1373.19 5146.05 1373.89 5149.69
GR1374.0 5150.47 1374.30 5152.78 1374.67 5155.69 1376.00 5166.46 1376.39 5169.57
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GR1378.0 5182.62 1379.50 5195.03 1380.00 5200.27 1380.58 5207.92 1381.76 5224.62
GR1382.0 5227.77 1382.80 5252.00 1384.00 5330.07 1384.00 5333.71 1384.91 5347.75
GR1386.0 5362.52 1386.60 5376.48 1386.90 5391.40 1387.03 5397.63 1387.24 5419.21
GR1387.0 5437.79
*
QT     1   28190
ET           5.1                   4519.91 5433.52
X1  9.01      81 4817.29 5340.88     363     558     430
GR1388.4 4519.91 1388.00 4559.91 1388.00 4561.41 1388.84 4570.06 1388.45 4571.71
GR1388.0 4573.70 1388.00 4576.09 1388.46 4578.03 1388.77 4579.51 1388.28 4582.90
GR1388.0 4583.57 1388.00 4677.39 1388.26 4681.88 1389.30 4700.64 1389.76 4708.44
GR1389.3 4717.62 1388.98 4718.21 1388.52 4718.22 1388.00 4721.78 1387.37 4732.92
GR1387.1 4737.05 1386.95 4738.08 1386.40 4758.07 1386.64 4764.66 1386.86 4770.00
GR1387.0 4774.77 1387.38 4799.17 1387.08 4803.47 1386.92 4804.87 1386.44 4811.50
GR1386.0 4817.29 1384.00 4825.73 1383.63 4827.33 1382.00 4834.13 1380.26 4841.49
GR1380.0 4842.58 1379.21 4845.86 1378.00 4850.84 1376.45 4856.91 1376.00 4858.68
GR1375.8 4859.41 1374.00 4866.60 1373.72 4878.11 1373.33 4898.38 1373.06 4911.20
GR1372.9 4920.39 1372.51 4939.85 1372.35 4949.90 1372.19 4962.38 1372.32 4994.02
GR1372.4 5000.00 1372.50 5005.13 1373.08 5052.28 1373.49 5089.07 1373.86 5118.83
GR1374.0 5130.57 1375.57 5137.72 1376.00 5139.67 1377.54 5146.76 1378.00 5149.27
GR1379.4 5157.21 1380.00 5161.68 1380.57 5169.64 1380.83 5173.36 1380.91 5174.01
GR1381.2 5177.53 1381.59 5182.69 1382.00 5188.14 1382.37 5193.51 1383.14 5206.05
GR1384.0 5217.34 1385.32 5244.41 1385.68 5252.28 1386.00 5257.06 1387.77 5292.41
GR1388.0 5296.60 1388.84 5320.16 1389.58 5340.88 1389.68 5346.00 1390.00 5351.31
GR1390.0 5433.52
*
QT     1   28054
ET           5.1                   4515.30 5233.18
X1  9.08      70 4796.92 5198.84     432     165     365
GR1391.1 4515.30 1390.24 4539.50 1390.00 4540.45 1390.00 4625.97 1390.21 4628.50
GR1390.6 4632.33 1390.69 4632.97 1390.44 4647.05 1390.08 4647.52 1390.00 4647.64
GR1389.6 4649.23 1388.00 4655.18 1388.00 4670.31 1388.16 4671.07 1388.14 4787.35
GR1388.0 4796.92 1387.24 4809.20 1386.69 4817.41 1386.00 4827.18 1384.79 4833.74
GR1384.0 4837.38 1383.79 4838.28 1382.78 4842.68 1382.00 4845.64 1381.40 4847.91
GR1380.0 4853.19 1378.86 4857.51 1378.00 4860.75 1377.03 4864.25 1376.00 4868.13
GR1375.1 4871.58 1374.00 4875.67 1373.97 4878.43 1373.92 4884.08 1373.76 4895.74
GR1373.7 4902.64 1373.65 4905.82 1373.59 4911.57 1373.49 4920.43 1373.47 5000.00
GR1373.5 5095.48 1373.56 5107.93 1373.59 5109.03 1373.62 5112.59 1373.70 5119.31
GR1373.8 5122.87 1373.82 5124.67 1373.85 5126.00 1373.92 5128.16 1373.94 5130.06
GR1374.0 5131.14 1374.13 5131.77 1376.00 5140.79 1377.41 5147.57 1378.00 5150.02
GR1378.6 5152.38 1380.00 5158.25 1381.29 5163.54 1382.00 5166.47 1383.45 5172.44
GR1384.0 5174.70 1385.73 5181.83 1386.00 5182.93 1387.10 5187.46 1388.00 5190.99
GR1388.1 5191.61 1389.08 5195.22 1390.00 5198.84 1390.04 5199.45 1390.27 5233.18
*
QT     1   23960
NC 0.035   0.035   0.035
ET           5.1                   4525.85 5437.55
X1  9.14      94 4835.60 5165.24     288     385     333
GR1392.1 4525.85 1392.00 4598.96 1391.59 4608.73 1390.99 4723.68 1391.42 4775.78
GR1391.5 4789.87 1391.64 4805.14 1391.00 4830.80 1390.59 4832.90 1390.00 4835.60
GR1389.7 4836.69 1389.00 4839.12 1388.44 4841.11 1388.00 4842.60 1387.57 4843.96
GR1387.0 4845.55 1386.47 4846.70 1386.00 4847.68 1385.71 4848.28 1385.00 4849.75
GR1384.7 4850.41 1384.00 4851.87 1383.84 4852.20 1383.32 4853.25 1383.00 4853.91
GR1382.8 4854.33 1382.00 4856.07 1381.65 4856.77 1381.00 4858.07 1380.00 4860.14
GR1379.7 4861.00 1379.19 4861.98 1379.00 4862.42 1378.49 4863.58 1378.00 4864.71
GR1377.4 4866.13 1377.00 4867.28 1376.43 4869.03 1376.00 4869.56 1375.54 4872.43
GR1374.5 4874.14 1374.00 4875.08 1374.00 5000.00 1374.00 5062.13 1374.39 5091.47
GR1375.0 5121.35 1375.00 5125.45 1375.71 5129.68 1376.00 5131.10 1376.94 5133.66
GR1377.0 5134.06 1377.77 5135.68 1378.00 5136.16 1379.00 5138.25 1379.92 5140.18
GR1380.0 5140.35 1380.80 5142.03 1381.00 5142.44 1381.45 5143.38 1382.00 5144.53
GR1382.9 5146.34 1383.00 5146.63 1383.72 5148.14 1384.00 5148.75 1384.46 5149.37
GR1385.0 5150.09 1385.25 5150.43 1386.00 5151.41 1386.80 5152.48 1387.00 5152.75
GR1387.2 5153.56 1388.00 5156.83 1388.60 5159.29 1389.00 5160.92 1389.34 5162.35
GR1389.7 5164.16 1390.00 5165.24 1390.00 5165.45 1390.42 5166.34 1391.00 5168.32
GR1391.8 5170.94 1391.91 5171.50 1392.00 5171.73 1392.22 5174.81 1392.64 5180.92
GR1393.0 5184.53 1392.55 5196.46 1392.91 5224.81 1392.45 5256.91 1392.29 5293.65
GR1392.1 5328.16 1392.00 5380.42 1392.00 5416.53 1391.87 5437.55
* DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT     1   21000
X1 9.145      66    5015    5325       8       8       8
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
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GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1374.94    5045 1374.94    5085
GR1374.9 5088.74 1390.80 5088.75 1390.80 5093.75 1374.94 5093.76 1374.94    5125
GR1374.9 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1374.94 5172.51
GR1374.9    5205 1374.94    5245 1374.94 5246.24    1391 5246.25    1391 5251.25
GR1374.9 5251.26 1374.94    5285 1374.94    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
* UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT     1   21000
X1 9.155      66    5015    5325    80.2    80.2    80.2
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1375.14    5045 1375.14    5085
GR1375.1 5088.74  1390.8 5088.75  1390.8 5093.75 1375.14 5093.76 1375.14    5125
GR1375.1 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1375.14 5172.51
GR1375.1    5205 1375.14    5245 1375.14 5246.24    1391 5246.25    1391 5251.25
GR1375.1 5251.26 1375.14    5285 1375.14    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
*
QT     1   21000
ET           5.1                    4528.66 5445.27
X1  9.16      89 4852.56 5164.29       8       8       8
GR1392.6 4528.66 1392.16 4581.89 1392.81 4592.32 1392.00 4643.39 1391.85 4708.61
GR1392.0 4756.55 1392.50 4805.50 1392.00 4836.76 1391.23 4838.82 1391.00 4839.41
GR1390.5 4842.05 1390.00 4852.56 1389.00 4854.43 1388.00 4856.29 1387.00 4857.94
GR1386.0 4859.59 1385.00 4861.24 1384.00 4862.89 1383.40 4863.88 1383.00 4864.54
GR1382.5 4865.33 1382.00 4866.18 1381.00 4867.82 1380.61 4868.61 1380.00 4869.92
GR1379.8 4870.35 1379.00 4872.01 1378.40 4873.27 1378.00 4874.11 1377.29 4875.60
GR1377.0 4876.20 1376.18 4877.92 1376.00 4878.30 1375.00 4880.39 1374.81 4915.05
GR1374.0 4961.04 1374.20 5000.00 1374.50 5083.02 1374.70 5107.91 1375.00 5129.31
GR1375.6 5132.84 1376.00 5135.04 1377.00 5138.70 1378.00 5140.93 1379.00 5142.76
GR1379.6 5143.88 1380.00 5144.79 1380.41 5145.63 1381.00 5146.82 1381.33 5147.49
GR1382.0 5148.85 1382.47 5149.81 1383.64 5152.18 1384.00 5152.91 1384.55 5154.02
GR1385.0 5154.94 1386.00 5156.58 1386.42 5157.20 1387.00 5158.07 1388.00 5161.31
GR1388.6 5162.08 1389.00 5162.75 1389.58 5163.63 1390.00 5164.29 1390.52 5165.66
GR1390.7 5169.65 1390.00 5170.91 1390.00 5171.15 1390.65 5172.70 1391.00 5173.49
GR1391.5 5174.67 1392.00 5175.74 1392.49 5177.88 1393.00 5180.15 1393.00 5215.17
GR1392.8 5239.51 1393.00 5302.86 1393.00 5330.00 1393.00 5335.30 1393.52 5343.99
GR1394.0 5352.89 1394.20 5356.22 1394.67 5363.95 1395.00 5372.98 1395.00 5394.93
GR1394.9 5404.04 1394.00 5430.80 1393.15 5432.47 1393.36 5445.27
*
* BOTTOM OF DROP STRUCTURE
QT     1   21000
NC 0.035   0.035   0.020
ET           5.1                    4732 5190.05
X1  9.21       7    4732 5174.57     145     355     279
GR  1389    4732    1376    4765    1376    4901    1376    5000    1376 5140.72
GR  1391 5174.57    1392 5190.05
*
* TOP OF DROP STRUCTURE
QT     1   21000
NC 0.040   0.035   0.035
ET           5.1                    4664 5314.09
X1  9.22      14    4664 5192.98     122     104      39
GR  1395    4664    1390    4708    1390 4871.20    1390    5000    1390 5167.75
GR  1391 5173.76    1392 5177.14    1393 5179.36    1394 5181.58    1395 5184.44
GR  1396 5187.36    1397 5192.98    1398 5219.20    1399 5314.09
*
QT     1   21000
```

```
ET          5.1                   4572.95 5304.55
X1  9.25     45    4825 5285.60     155      82     141
GR  1400    3023  1399.1    3123  1397.6    3223  1395.8    3323  1392.7    3423
GR  1392    3523    1393    3623  1393.6    3723  1393.5    3762    1394    3874
GR  1394    3898    1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25    1395 4365.84    1395  4385.4  1395.7 4563.07    1395 4565.34
GR  1395 4570.45 1395.57 4572.95 1395.46 4582.97    1395 4585.82    1395 4590.84
GR  1395 4598.19    1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32    1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38    1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
* END FLOW SPLIT; RETURN TO FULL FLOW
QT     1   29000
ET          5.1                   4441.50 5290.19
X1  9.30     52 4779.69 5280.97     262     282     261
GR1401.5    2940  1402.6    2970  1400.5    3070  1398.6    3170    1397    3270
GR  1394    3370    1394    3470    1394    3570    1394    3670  1394.8    3770
GR  1395    3820    1394    3930    1394 4045.09    1395 4108.19    1395    4117
GR  1396 4323.15 1396.42 4425.34    1396 4429.71    1396 4434.42    1396  4441.5
GR  1396 4445.67    1396  4449.8    1395 4453.93 1394.13 4458.61    1394 4462.74
GR  1393 4494.69    1393 4512.86    1394 4520.79    1395 4539.92    1395 4544.55
GR  1395 4549.38    1396 4554.31    1397  4672.3    1397 4703.41    1397 4730.49
GR  1397 4737.81  1396.5    4750    1396 4768.57    1395 4779.69    1394  4811.1
GR  1393  4973.9    1393    5000    1393 5090.01    1394 5237.22    1395 5265.28
GR  1395 5270.89    1396 5273.07    1397 5275.25    1398 5277.47    1399 5279.81
GR1399.5 5280.97    1400 5290.19
*
ET          5.1                   4252.38 5287.77
X1  9.35     64    4775 5275.88     291     274     274
GR1403.4    2913    1404    2963  1401.9    3063  1400.6    3163  1399.1    3263
GR  1396    3363    1396    3463  1394.8    3563  1395.2    3663    1396    3763
GR  1396    3863    1396    3873    1396    3970    1396 4133.14    1397 4227.56
GR  1397 4246.88    1397 4251.02    1397 4252.38    1397 4261.99    1397 4262.89
GR  1397 4266.45    1397 4272.25    1396 4279.28    1395 4304.83    1395 4325.29
GR  1396  4342.7    1397 4379.18    1398  4402.1    1399 4459.05    1399 4467.32
GR  1399 4490.46    1399 4657.95    1399 4675.14    1399    4775    1399 4817.89
GR  1398 4824.28    1398 4830.91    1398 4833.58    1397 4841.76    1396 4854.67
GR  1395 4861.17    1394 4882.23    1393 4897.87    1392 4929.89    1392 4995.23
GR1392.2    5000    1393 5015.98    1394 5050.46    1394 5062.07    1394 5081.74
GR  1394 5098.98    1393 5104.45    1393 5165.77    1394 5255.79 1394.16 5261.12
GR  1395 5263.15    1396 5265.55    1397 5267.94    1398 5270.34    1399 5272.74
GR1399.9 5274.92    1400 5275.88    1401 5287.77    1401 5364.41
*
* FIRST LANDFILL CROSS SECTION
X1  9.42     84    4717 5216.97     400     402     399
GR  1428    4000    1426 4011.37    1424 4051.66    1424 4057.37    1426 4081.68
GR  1428 4110.92    1428 4121.45    1426 4129.13    1424 4134.76    1422 4139.19
GR  1421 4142.73    1420 4161.87 1419.19 4203.29    1418 4205.11    1416 4226.25
GR  1414 4237.19    1412 4246.78    1410 4256.36    1408 4267.25    1406 4278.32
GR  1404 4313.42    1402 4319.63    1401 4385.11    1401 4391.49    1400 4399.73
GR  1400 4402.48    1400    4425    1399 4435.31    1399 4437.98    1400  4464.1
GR  1400 4473.55    1401 4478.99    1401 4489.28    1401 4501.38    1401 4506.58
GR  1401 4519.28    1401 4549.48    1401 4609.38    1401 4631.43    1401    4640
GR  1401    4717    1401 4808.53    1401 4810.26    1400 4816.66    1399  4821.3
GR  1398 4826.32    1397 4831.26    1396  4836.2    1395 4840.81    1394 4845.47
GR  1394 4861.29    1394 4874.91    1394 4881.71    1395 4899.25    1395 4935.92
GR  1394 4952.05    1393 4968.09    1393 4971.63    1393 4977.75    1393    5000
GR  1393  5022.4    1394 5029.45    1395 5047.57    1396 5049.85    1397 5052.12
GR  1397 5069.99    1396 5075.09    1395 5080.13    1394 5086.54    1393 5111.54
GR  1393 5144.13    1394 5187.94    1395 5201.29    1396 5203.58    1397 5205.87
GR  1398 5208.12    1399 5210.33    1400 5212.55    1401 5214.76    1402 5216.97
GR1402.1 5217.23    1403 5227.59    1404 5237.39 1404.24 5239.73
*
NC 0.040   0.040   0.040
X1  9.45     97    4709    5209      93     126     118
GR  1444    4000    1446  4007.9    1448 4067.98    1448 4129.56    1446 4153.01
GR  1444  4163.3    1442 4166.26    1440 4169.22    1438 4175.44    1436 4186.62
GR  1434 4200.28    1432 4214.71    1430 4223.41    1428 4230.51    1426 4245.88
GR  1424 4268.57 1422.59 4278.96    1422 4280.89    1420 4290.71    1418 4299.79
GR  1416 4308.72    1414 4317.57    1412 4326.42    1410 4337.33    1408 4350.71
GR  1406 4364.09    1404 4377.47    1402 4400.54    1401 4461.44    1400 4466.82
GR  1400 4480.64    1400 4491.26    1400 4512.14    1401 4518.92 1401.69 4560.74
GR  1402 4579.32    1403 4582.89    1403 4591.95    1402 4596.75    1402    4660
GR  1402 4672.46  1401.7    4709    1401 4801.15    1400 4808.19    1399 4812.86
GR  1398 4817.28    1397 4822.04    1396 4829.31    1395 4850.48    1395 4874.85
GR  1396 4881.97    1397  4899.1    1397 4923.02    1396 4938.23    1395 4946.05
GR  1394 4960.72    1394 4965.12    1394 4968.36    1394 4997.02 1393.39    5000
```

```
GR  1393 5001.91    1393 5029.22    1394 5035.16    1395 5037.25    1396 5039.33
GR  1397 5041.64    1398 5043.96    1399 5046.15    1400 5048.19    1401 5065.48
GR  1401 5071.95    1401 5081.45    1401  5133.8    1400 5156.91    1399 5160.41
GR  1398 5163.93    1397 5167.45    1396 5170.97    1395 5174.49    1394 5180.55
GR  1394    5209    1394 5237.19    1395 5242.58    1396 5247.96    1397 5251.97
GR  1398 5255.85    1399 5259.53    1400  5261.9    1401 5264.27  1404.8 5265.18
GR  1402 5266.67    1403 5269.03    1404 5271.38  1405.2 5272.32  1404.6  5276.7
GR  1405 5277.23    1405 5281.63
*
NC 0.035   0.040   0.040
ET          5.1                 4663.35    5177
X1  9.54      85 4685.93    5177     410     515     500
GR  1456    4000    1456  4021.5    1454 4238.02    1454 4370.23    1456 4373.71
GR  1458 4382.67    1460 4392.58    1462 4402.82    1464 4414.23    1464 4416.59
GR  1462 4419.16    1460 4421.73    1458  4424.3    1456 4426.86    1454 4429.43
GR  1452 4432.03    1450 4434.89    1448 4437.71    1446 4440.53    1444 4443.94
GR  1442 4455.27    1440 4466.36    1438 4475.82    1436 4485.28    1434 4494.74
GR  1432 4503.98    1430 4512.83    1428 4521.68    1426 4530.63    1424 4537.95
GR  1422  4543.4    1420  4548.8    1418 4566.76    1416 4576.41    1414 4588.78
GR  1412  4606.7    1410 4618.24    1408 4626.12    1406  4646.3 1405.45 4653.56
GR  1406  4654.9    1408 4659.52 1409.53 4663.35 1409.41 4679.83    1408 4685.93
GR  1406 4694.77    1404 4704.62    1402 4714.47    1400 4759.39    1399 4817.12
GR  1399 4833.11    1399 4849.47    1399    4877    1398 4880.23    1397 4889.16
GR  1397 4922.52    1398 4930.18    1398 4954.06    1397 4978.17    1397    5000
GR  1397 5021.85    1398 5031.11    1399 5044.96    1400 5072.02    1401 5077.75
GR  1402 5083.41    1403 5099.61    1404 5131.49    1404 5150.42    1404 5168.37
GR  1404    5177    1404 5197.33    1404  5199.5    1404 5210.97    1404 5253.08
GR  1404 5391.09    1403 5589.76    1403 5598.79    1404 5665.44    1405  5677.3
GR  1406 5688.92    1407 5698.83    1408 5708.08  1408.1 5709.05    1408 5712.42
*
ET          5.1                 4736.39 5231.86
X1  9.65      77 4754.19 5231.86     475     503     558
GR  1464    4000    1464 4008.95    1464 4009.76    1462 4321.74    1460 4399.87
GR  1458 4431.45    1456 4444.62    1454 4455.94    1452 4520.78    1450 4527.92
GR  1448 4534.57    1446 4541.22    1444  4547.9    1442 4555.79    1440 4564.66
GR  1438 4573.56    1436 4582.53    1434  4591.5    1432 4600.47    1430 4609.44
GR  1428 4617.73    1426 4626.65    1424 4636.67    1422 4647.12    1420 4657.56
GR  1418 4668.01    1416 4678.25 1415.47 4681.09    1414 4684.72    1412 4698.82
GR  1410 4712.91 1408.84 4718.95    1410 4724.03    1412 4732.19 1412.28 4733.95
GR1412.3 4736.39 1412.23 4752.15 1412.23 4753.27    1412 4754.19    1410 4762.26
GR  1408 4770.81    1406 4779.35    1404 4787.89    1402 4808.39    1402 4880.47
GR  1402    5000    1402  5117.6    1402 5177.99    1404  5201.2    1406 5208.98
GR  1408 5216.75    1410 5224.53 1411.67 5231.28 1411.74 5231.86 1411.54 5244.69
GR1411.6 5244.92    1410 5251.38    1408 5258.75    1406 5266.02    1405 5297.23
GR  1405 5320.44    1406 5347.25    1406 5388.09    1406 5408.08    1407  5541.7
GR  1407 5718.14    1406  5754.4    1406 5784.09    1406 5792.77    1406 5810.87
GR  1406 5820.41    1406 5838.97    1407 5936.82    1408 6017.23    1409 6081.83
GR  1410 6155.49    1411 6165.28
*
NC 0.035   0.035   0.035
ET          5.1                 4752.73 5283.89
X1  9.70      45 4757.14 5273.18     253     259     256
GR  1466    4109    1464  4316.8    1462 4420.43    1460 4447.14    1458 4478.14
GR  1456 4489.46    1454 4500.45    1452 4509.98    1450 4519.51    1448 4529.04
GR  1446 4538.57    1444  4548.1    1442 4557.38    1440 4566.27    1438 4575.05
GR  1436 4583.83    1434 4592.61    1432 4601.39    1430 4609.72    1428 4617.43
GR  1426 4627.56    1424 4668.02    1422 4677.03    1420 4686.23    1418 4694.23
GR  1416 4702.22    1414 4725.62 1413.09 4738.64 1413.15 4752.73    1412 4757.14
GR  1410 4765.55    1408 4773.94    1406  4782.3    1404 4790.65    1404    5000
GR  1404 5228.02    1406 5244.34    1408 5253.96    1412 5273.18 1412.96 5277.81
GR1413.2 5283.89    1414 5286.99    1416 5294.01    1418 5300.98    1420 5310.97
*
ET          5.1                 4761.98 5298.67
X1  9.73      47 4763.41 5284.93     187     151     169
GR  1468    4092    1466 4213.55    1464    4379    1462  4470.4    1460 4508.81
GR  1458 4525.45    1456 4535.99    1454 4546.24    1452  4556.5    1450 4565.64
GR  1448 4574.49    1446 4582.67    1444 4590.66    1442 4598.64    1440 4606.63
GR  1438 4614.61    1436  4622.6    1434  4630.3    1432 4638.03    1430 4646.07
GR  1428 4654.12    1426 4662.16    1424  4670.2    1422 4678.24    1420 4686.28
GR  1418 4694.59    1416 4735.51    1414 4745.63 1413.77 4747.24    1414 4754.45
GR1414.2 4761.98    1414 4763.41    1412 4771.23    1410 4779.05    1408 4786.93
GR  1406 4794.83    1404 4807.46    1404    5000    1404 5232.22    1406 5255.68
GR  1408 5265.54    1410 5275.37    1412 5284.93    1414 5298.67    1416 5306.36
GR  1418 5314.06    1420 5322.58
*
ET          5.1                 4698.37 5217.67
X1  9.80      62 4738.89 5206.55     383     349     365
GR  1476    4000    1476 4071.22    1474  4291.9    1472 4368.03    1470 4404.99
```

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GR  1468 4419.78    1466 4435.01    1464 4454.29    1462 4489.38    1460 4517.69
GR  1458 4526.82    1456 4535.94    1454 4545.06    1452 4554.19    1450 4563.31
GR  1448 4572.44    1446 4580.51    1444 4588.95    1442 4597.51    1440 4606.07
GR  1438 4614.65    1436 4623.22    1434 4631.58    1432 4639.42    1430 4647.25
GR  1428 4655.08    1426 4662.93    1424 4670.84    1422 4678.74    1420 4686.85
GR  1418 4698.37    1416 4738.89    1416 4742.87    1416 4745.09 1415.15 4749.88
GR1415.7 4766.09    1414 4773.04    1412 4781.48    1410 4789.92    1408 4798.11
GR  1406 4814.33    1406    5000    1406  5168.2    1408 5177.78    1410 5187.37
GR  1412 5196.96    1414 5206.55 1414.61 5209.05  1414.9 5217.67    1416 5221.57
GR  1418 5228.59    1420 5235.61    1422 5242.63    1424 5250.86    1426  5260.4
GR  1428 5270.06    1430 5279.73    1432    5290    1434 5301.13    1436 5313.24
GR  1438 5329.65    1440 5350.74
*
ET           5.1                 4678.48 5167.47
X1  9.89       61 4741.17 5163.70     509     484     495
GR  1480    4000    1480 4097.31    1478  4315.5    1476 4369.55    1474 4409.22
GR  1472 4428.88    1470 4447.01    1468 4467.06    1466 4484.74    1464 4501.35
GR  1462 4517.81    1460 4528.28    1458 4538.09    1456 4547.75    1454 4557.31
GR  1452 4566.31    1450 4574.08    1448 4581.28    1446 4588.48    1444  4595.7
GR  1442 4603.03    1440 4610.35    1438 4617.67    1436 4624.99    1434 4631.68
GR  1432 4638.82    1430 4646.76    1428 4654.71    1426 4662.61    1424 4670.44
GR  1422 4678.48    1422 4689.89 1422.06 4691.09    1422 4691.98 1421.45  4699.1
GR  1420 4741.17    1418 4771.38    1416 4778.99    1414 4786.68    1412 4794.99
GR  1410  4803.8    1408  4840.1    1406 4951.17    1406 4964.91 1407.43    5000
GR  1408 5114.09    1410 5126.94    1412 5136.13    1414 5145.32    1416 5154.51
GR  1418  5163.7  1418.8 5167.47  1418.7 5180.97    1418 5182.68    1418 5202.91
GR  1420 5221.64    1422 5236.46    1424 5244.79    1426 5252.68    1428  5260.3
GR  1430 5267.91
*
ET           5.1                 4813.54 5284.14
X1  9.98       68 4828.11 5274.26     462     469     475
GR  1476    4020    1476 4135.18    1474 4180.69    1472 4242.44    1472 4405.93
GR  1474 4459.87    1474  4532.3    1472 4564.64    1470 4600.47    1468 4627.43
GR  1466 4644.39    1464 4650.73    1462 4658.68    1460 4666.95    1458 4675.21
GR  1456 4683.48    1454 4692.64    1452 4702.53    1450 4711.67    1448 4720.68
GR  1446 4728.08    1444  4734.3    1442 4740.53    1440 4746.75    1438 4752.97
GR  1436 4759.19    1434 4766.97    1432 4775.44    1430 4783.95    1428 4813.54
GR  1428  4821.2 1428.96 4826.63    1428 4828.11    1426 4830.93 1425.95 4831.02
GR1425.7  4834.7    1424 4840.53    1422  4847.1    1420 4853.67    1418 4860.24
GR  1416 4866.81    1414 4874.06    1412 4895.31    1410 4925.82    1410 4957.15
GR  1410  4985.2    1410    5000    1410 5196.05    1412 5234.32    1414 5243.75
GR  1416 5253.18    1418 5262.85    1420 5274.26 1421.67 5284.14 1421.15 5293.67
GR  1420  5297.1  1418.2 5302.27    1420 5323.38    1422  5337.3    1424 5349.84
GR  1426 5361.61    1428 5370.82    1430 5379.99    1432 5389.15    1434  5398.3
GR  1436 5407.46    1438  5416.8    1440 5427.51
*
ET           5.1                 4840.61 5275.34
X1 10.08       60 4841.72 5274.76     508     514     511
GR  1476    4000    1478 4028.78    1480 4085.32    1480 4214.24    1478 4270.59
GR  1476 4333.92    1474 4385.59    1472 4415.91    1470 4435.24    1468 4453.48
GR  1466 4471.72    1464 4489.47    1462 4507.08    1460 4524.24    1458 4540.43
GR  1456 4560.04    1454 4579.47    1452 4664.02    1450 4686.12    1448 4711.59
GR  1446 4736.49    1444 4743.04    1442 4749.49    1440 4755.86    1438 4761.79
GR  1436 4767.07    1434 4772.52    1432 4778.04    1430 4783.56    1428 4789.08
GR  1426 4795.68    1426 4838.85 1426.35 4840.61    1426 4841.72    1424 4848.12
GR  1422 4854.53    1420 4861.27    1418 4869.07    1416 4880.94    1414 4903.67
GR1412.5    5000    1412 5028.73    1412 5119.72    1414 5215.45    1416 5233.54
GR  1418 5244.05    1420 5254.55    1422 5265.05    1424 5274.76 1424.17 5275.34
GR  1424 5277.85  1423.5 5284.05    1422 5288.76    1420  5294.8    1420  5307.7
GR  1422 5411.56    1424 5519.39    1426 5568.38    1428 5584.58    1430 5600.76
*
ET           5.1                 4784.92 5288.33
X1 10.16       48 4797.94 5270.13     447     418     430
GR  1438    4000    1436  4021.6    1434 4039.29    1432 4060.58    1430 4087.84
GR  1428 4116.35    1426 4163.37    1426  4172.5    1426  4329.8    1424 4615.05
GR  1422 4727.69    1422 4765.14    1424 4772.65    1426 4779.85  1427.4 4784.92
GR1426.9 4794.24    1426 4797.94    1424 4806.13    1422 4814.72    1420 4823.31
GR  1418 4831.89    1416 4850.45    1416    5000    1416  5206.7    1418 5231.48
GR  1420 5241.03    1422 5250.58    1424 5260.12    1426 5270.13 1426.69 5273.76
GR1426.8 5288.33    1426 5290.46    1424 5295.56 1423.73 5296.35    1424 5299.13
GR  1426 5318.58    1428 5331.54    1430 5343.77    1432 5355.48    1434  5367.2
GR  1436 5379.53    1438 5392.13    1440 5404.93    1442 5417.74    1444 5430.71
GR  1446 5445.59    1448 5460.48    1450 5475.78
*
ET           5.1                 4772.87 5312.98
X1 10.25       50 4772.87 5312.98     496     420     460
GR  1462    4000    1462  4353.1    1462 4360.97    1464 4372.48    1466  4380.6
GR  1466 4394.69    1464 4399.98    1462 4402.86    1460 4405.73    1458 4408.62
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GR  1456 4420.57    1454 4432.06    1452 4443.38    1450  4454.7    1448 4465.92
GR  1446 4476.55    1444 4487.22    1442 4497.92    1440 4509.43    1438 4521.31
GR  1436 4534.04    1434 4573.89    1434 4576.65    1434 4582.76    1432 4590.09
GR  1430 4597.07    1428 4604.05    1426 4740.78    1426 4758.62    1428 4766.33
GR1429.7 4772.87 1429.36 4781.13    1428 4786.37    1426 4794.42    1424 4802.47
GR  1422 4810.53    1420 4841.46    1420 5225.51    1422 5254.59    1424 5264.85
GR  1426 5274.47    1428 5284.05  1429.2 5289.83 1429.27 5312.98    1430 5319.77
GR  1432 5338.35    1434 5354.33    1436 5382.04    1438 5398.07    1440 5414.09
*
ET           5.1                 4766.40 5271.99
X1 10.33      47 4782.32 5269.64     519     373     444
GR  1450    4000    1448 4073.55    1448 4076.89    1448 4151.72    1446 4166.89
GR  1444 4179.19    1442 4193.45    1440 4215.25    1438 4234.67    1436 4254.62
GR  1434 4273.64    1432 4293.27    1430 4335.46    1428 4352.32    1428 4394.66
GR  1430 4399.29    1432 4405.29    1434 4417.32    1436 4573.71    1434  4592.8
GR  1432 4607.16    1430  4731.8    1430 4744.77    1432 4752.19    1434 4759.52
GR1435.8  4766.4 1435.17 4782.32    1434 4787.13    1432 4795.34    1430 4802.67
GR  1428    4810    1426 4817.69    1424 4826.71 1422.57    5000    1422 5069.23
GR  1422 5172.18    1424 5223.94    1426 5234.36    1428 5243.12    1430 5251.96
GR  1432  5260.8    1434 5269.64 1434.83 5271.99 1434.09 5290.23    1434 5290.52
GR  1432 5296.74    1430 5302.97
*
ET           5.1                 4756.86 5252.58
X1 10.34      38 4775.45 5243.36     104      42      73
GR  1434    4000    1434 4020.85    1432 4060.47    1432 4210.33    1432 4230.74
GR  1430    4304    1430    4351    1430 4400.08    1430 4476.92    1432 4558.77
GR  1432 4579.43    1430 4699.87    1430 4741.11    1432 4746.28    1434 4751.62
GR1435.9 4756.86    1435 4775.45    1434 4779.27    1432 4786.85    1430 4794.42
GR  1428 4803.16    1426 4811.92    1424 4839.17 1422.77    5000    1422 5099.99
GR  1422 5118.31    1424 5204.31    1426 5212.97    1428 5217.15    1430  5226.8
GR  1432 5234.78    1434 5243.36 1435.48 5252.58 1434.92 5272.38    1434 5274.21
GR  1432 5278.35    1430 5282.48    1430 5283.56
*
* HAPPY VALLEY ROAD CROSSING
NC 0.030   0.030   0.030
ET           5.1                 4823.21    5272
X1 10.38      34 4823.21 5293.86     173     143     162
GR  1432    4050    1432 4345.47    1434 4359.49    1436 4382.17    1436 4444.22
GR  1434 4514.59    1434 4523.97    1436 4605.62    1436 4667.41    1434 4710.47
GR  1434  4776.7 1435.99 4798.29 1435.82 4823.21    1434 4831.49    1432 4838.95
GR  1430 4845.97    1428 4854.29    1426 4860.89    1424  4952.8    1424    5000
GR  1424 5110.95    1426  5223.7    1428 5293.86    1430 5418.28    1432 5426.63
GR  1434 5436.09    1436 5445.55    1436 5462.06 1438.33 5462.07 1438.33 5463.07
GR  1436 5463.08    1436 5478.57 1435.96 5479.62    1434 5488.87
*
NC 0.035   0.035   0.035
ET           5.1                 4783.08 5262.74
X1 10.41      52 4791.83 5251.18     198     142     171
GR  1434    4064    1434 4072.38    1436  4078.9    1438 4083.68    1440 4114.64
GR  1442 4124.08    1444 4141.29    1444 4186.45    1442 4196.42    1438 4216.34
GR  1436 4223.27    1434 4229.95    1432 4236.99    1432 4370.62    1434 4373.56
GR  1436  4376.5    1438 4379.45    1440 4383.45    1440 4469.41    1438  4505.1
GR  1436 4516.74    1434 4526.64    1432 4535.95    1432 4754.33    1434 4759.91
GR1435.7 4764.94    1436 4772.28    1436 4782.06 1438.34 4782.07 1438.34 4783.07
GR  1436 4783.08    1436 4791.83    1434 4800.27    1432 4808.85    1430 4817.15
GR  1428  4863.1    1428    5000    1428 5071.88    1428 5119.31    1428 5202.52
GR  1430 5229.35    1432 5236.74    1434 5244.12    1436 5251.18    1436 5262.73
GR1438.9 5262.74  1438.9 5262.75    1436 5262.76    1436 5274.27    1434  5279.7
GR  1432 5285.08    1430  5290.4
*
ET           5.1                 4758.78 5239.41
X1 10.42      46 4772.17 5239.37      70      58      64
GR  1434    4057    1434 4122.12    1434 4141.01    1432 4192.42    1432 4500.07
GR  1434 4518.47    1436 4524.56    1438 4530.85    1438    4566    1436 4602.78
GR  1434 4617.91    1432 4648.14    1432 4733.89    1434  4738.7    1436 4743.37
GR  1436 4757.77    1439 4757.78    1439 4758.78    1436 4758.79    1436 4772.17
GR  1434 4781.27    1432  4790.3 1431.35 4793.22    1430 4857.83    1428  4863.2
GR  1426 4872.34    1426    5000    1426 5035.16    1428 5059.55    1430 5071.52
GR  1430 5178.76    1430  5209.5    1432  5217.1    1434 5224.61    1436 5232.04
GR  1438 5239.37    1438 5239.40  1439.8 5239.41  1439.8 5240.41    1438 5240.42
GR  1438 5240.71 1437.62 5260.38    1436 5263.54    1434 5267.47    1432 5271.31
GR  1430 5275.13
*
ET           5.1                 4717.29 5219.45
X1 10.51      85 4720.44 5201.75     439     487     472
GR  1434    4000    1432 4130.14    1428 4139.76    1426  4144.4    1424 4149.04
GR  1422 4153.68    1418 4208.59    1418 4223.25    1418  4230.6    1418 4282.85
GR  1418 4360.51    1416 4368.14    1414 4375.06    1412 4381.98    1408 4395.81
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GR  1406 4403.31    1404  4411.2    1402 4420.45    1398 4444.12    1396 4455.04
GR  1396 4458.71    1398 4462.24    1400 4465.78    1402  4469.3    1404  4472.7
GR  1406 4476.09    1406 4476.39    1404 4480.43    1402 4489.41    1400 4498.38
GR  1398 4511.86    1398 4523.62    1402 4606.66    1404 4619.36    1406 4625.57
GR  1408 4631.74    1412 4641.43    1414  4645.8    1416 4650.17    1418 4654.55
GR  1422 4663.24    1424 4666.88    1426 4670.52    1428 4674.16    1432 4681.45
GR  1434 4685.09    1436 4688.73    1438 4692.35    1440 4695.92    1440 4716.28
GR1443.2 4716.29  1443.2 4717.29 1440.66 4717.32    1440 4720.44    1438 4729.62
GR  1436  4738.8    1434 4747.98 1432.68 4754.05    1434 4795.05    1434 4811.47
GR  1432 4826.23    1430 4844.12    1428 4880.89    1428 4916.32    1428  4916.6
GR  1428 4924.94    1430 4975.63    1430 4993.27    1430    5000    1430 5004.42
GR  1430 5038.01    1430 5060.04    1432 5076.82    1434 5173.28    1436  5182.8
GR  1438 5192.33    1440 5201.75    1440 5219.44 1443.73 5219.45 1443.73 5220.45
GR1440.7 5220.46  1440.7 5237.12    1442 5243.12    1444 5251.74    1444  5270.2
*
NC 0.035    0.05   0.035
ET           5.1                 4664.91 5132.57
X1 10.62      87 4665.97 5128.07     535     618     596
GR  1438    4000    1438 4067.63    1438 4119.75    1438 4123.09    1436 4126.37
GR  1434 4129.64    1432 4132.91    1428 4139.57    1426 4142.92    1424 4157.62
GR  1422 4197.88    1422 4274.19    1422 4279.99    1418 4285.73    1416 4288.61
GR  1414 4291.48    1412 4294.36    1408  4300.1    1406 4302.98    1404 4305.85
GR  1402 4308.72    1398 4314.87    1396 4318.05    1394 4326.83    1392 4337.52
GR  1392  4407.2    1394 4430.83    1396 4477.86    1398 4520.73    1402 4551.89
GR  1404 4565.94    1406 4587.33    1408 4591.51    1412 4599.92    1414  4604.3
GR  1416 4608.68    1418 4613.06    1422 4621.46    1424 4625.35    1426 4629.24
GR  1428 4633.13    1432 4640.85    1434 4644.69    1436 4648.53    1438 4652.37
GR  1440 4656.21    1442 4660.05    1444 4663.89    1444 4663.90  1445.7 4663.91
GR1445.7 4664.91    1444 4664.92    1444 4665.97 1443.33 4681.76    1442 4687.65
GR  1440 4696.48    1438 4705.29 1436.53 4711.79    1436 4760.05    1434 4774.11
GR  1432  4791.7    1432 4792.06    1434 4804.84    1434 4812.38    1434 4844.64
GR  1434 4908.11    1432 4978.39    1430 4993.25    1430    5000    1430 5019.08
GR  1432 5025.21    1434 5047.48    1436 5072.96 1436.27 5078.41    1438 5088.52
GR  1440 5100.18    1442  5111.6    1444 5128.07 1444.34 5132.57    1446 5140.61
GR  1448  5150.2    1450 5159.88    1452 5169.67    1454 5179.15    1454 5200.76
GR  1454  5213.3    1456 5219.38
*
NC 0.035   0.035   0.035
ET           5.1                 4748.11  5211.3
X1 10.70      43 4759.88  5193.3     390     382     402
GR  1444    4000    1444 4038.07    1444 4066.66    1444 4284.59    1442 4345.59
GR  1440  4412.2    1440 4618.19    1442 4696.02 1442.67 4720.77    1444 4727.26
GR1446.2 4734.32  1446.2 4747.10 1448.10 4747.11 1448.10 4748.11  1446.2 4748.12
GR1446.2 4759.88    1444 4767.51    1442 4775.38 1440.89 4779.56    1440 4856.65
GR  1438 4908.41    1436 4929.27    1434 4963.32    1434    5000    1434 5015.86
GR  1436 5039.71    1436 5072.24    1436 5119.55    1438 5144.54    1440 5154.48
GR  1442 5163.53    1444 5172.15    1446 5188.42 1446.48  5193.3    1448 5197.69
GR  1450 5201.41    1452 5205.12    1454 5208.74 1455.47  5211.3    1456 5213.46
GR  1458 5222.24    1458 5238.92    1456 5256.86
*
ET           5.1                 4782.29 5310.03
X1 10.83      54  4800.8 5298.85     642     704     717
GR  1448    4234    1448 4375.81    1448 4583.91    1446 4610.95    1446  4656.3
GR  1446 4742.93 1444.39  4761.2    1446 4765.18    1448 4769.97    1450 4774.76
GR  1452 4779.31    1452 4781.28 1454.60 4781.29 1454.60 4782.29    1452 4782.30
GR  1452  4800.8    1450 4808.34    1448 4816.39    1446 4825.37    1444 4844.86
GR  1442 4867.57    1440 4888.99    1438 4911.48    1438  4931.3    1440 4955.08
GR  1440 4961.15    1440    5000    1440 5073.72    1442 5081.76    1444 5085.61
GR  1446 5088.41    1446 5095.29    1446 5268.61    1448  5283.3    1450 5291.33
GR  1452 5298.85    1452 5310.02 1454.25 5310.03 1454.25 5311.03    1452 5311.04
GR  1452 5321.19    1450 5325.84    1448 5330.48    1446  5352.1    1444  5429.4
GR  1442 5433.87    1442  5453.7    1442 5462.01    1440 5467.15    1438 5472.69
GR  1438 5487.43    1440 5493.52    1442 5499.62    1444 5505.79
*
ET           5.1                 4766.74    5290
X1 10.93      47 4790.58 5279.54     456     557     516
GR  1450    4075    1450 4401.05    1450 4472.44    1450 4658.68    1448 4685.74
GR  1446 4692.07    1446 4738.32    1448 4747.74    1450 4752.28    1452 4756.82
GR  1454 4761.36    1456 4765.91 1456.34 4766.74 1456.31  4782.2    1456 4783.11
GR  1454 4790.58    1452 4801.13    1450 4811.94    1448 4852.07    1446 4882.26
GR  1444  4895.5    1442 4901.64    1440 4907.78    1440 4909.75    1440    5000
GR  1442 5025.23    1444 5039.36    1446 5045.88    1448 5065.33    1448 5141.49
GR  1446 5151.73    1446 5160.63    1448    5249    1450 5259.77    1452 5267.62
GR  1454 5275.29  1455.1 5279.54 1458.23    5290 1458.23    5291  1455.6 5291.01
GR1455.6 5301.19    1454 5303.86    1452 5307.17    1450 5311.25    1448 5317.12
GR  1446 5322.99    1446 5329.64
*
* CONFLUENCE WITH BUCHANAN WASH
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ET           5.1                    4581.43 5120.83
X1 11.03       59 4598.63 5120.83     506     504     525
GR  1454     4082     1454  4316.5    1454 4398.81    1454 4405.76    1454 4444.05
GR  1454 4463.63     1452 4472.52    1452 4546.98    1452 4556.11 1451.02 4559.09
GR  1452 4561.67     1454 4566.38    1456 4571.08    1458 4575.79    1460 4580.49
GR1460.3 4581.43 1460.24 4597.21    1460 4598.63    1458 4606.22    1456 4613.78
GR  1454 4621.09     1452 4629.76    1450 4642.89    1449 4647.63    1448 4693.69
GR  1448 4736.54     1450 4814.76    1450 4864.18    1448 4942.71    1446 4949.67
GR  1444 4956.46     1442 4984.22    1442    5000    1442 5002.45    1444 5021.76
GR  1446 5026.06     1448  5043.9    1448 5055.01    1446 5062.54    1444 5069.86
GR  1442  5077.4     1442 5100.06    1444 5110.31    1446 5120.83    1448 5131.74
GR  1448 5143.33     1448 5159.14    1450 5172.98    1452 5186.65    1454    5200
GR  1456 5213.08     1458 5227.34    1460 5242.36 1460.78 5249.29  1460.5 5289.31
GR  1460 5290.38     1458 5301.57    1456 5314.34    1454 5329.62
*
NC 0.050   0.035   0.035
ET           5.1                    4762 5149.91
X1 11.14       32     4762 5149.91     606     610     606
GR  1460 4331.11     1460 4359.12    1458 4450.29    1456 4510.13    1454 4516.73
GR  1452 4523.33     1450 4529.82    1450 4653.75    1452 4685.50    1452    4762
GR  1452 4830.94     1450 4913.55    1450 4965.11    1448 4975.89    1448    5000
GR  1448 5056.87     1450 5060.92    1452 5064.99    1452 5097.48    1454 5121.70
GR  1456 5126.41     1458 5131.13    1460 5135.85    1462 5140.57    1464 5145.28
GR  1466 5149.91     1466 5173.09    1464 5177.70    1462 5182.56    1460 5187.75
GR  1458 5192.64     1456 5197.53
*
* BEGIN CORPS LEVEES
NC 0.035   0.035   0.020
ET           5.1                    4825.06 5165.90
X1 11.19       80 4825.06 5161.07     277     212     225
GR1466.0 4799.55 1466.00 4823.70 1466.00 4825.06 1465.44 4826.50 1464.00 4830.18
GR1463.6 4831.26 1462.00 4835.30 1461.78 4835.87 1460.47 4839.23 1460.00 4840.18
GR1459.8 4840.67 1458.00 4844.27 1457.08 4846.17 1456.00 4848.37 1454.68 4851.08
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GR1452.0 4906.20 1452.00 4944.98 1452.00 4945.21 1452.00 4948.20 1452.00 4955.59
GR1452.0 4974.23 1452.00 4983.63 1452.00 5000.00 1452.00 5052.40 1452.00 5075.88
GR1452.0 5079.43 1452.00 5080.15 1452.00 5083.16 1452.00 5085.12 1452.21 5091.07
GR1452.2 5091.41 1452.82 5104.84 1453.40 5118.66 1453.68 5124.97 1454.00 5131.82
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GR1464.7 5158.02 1466.00 5161.07 1466.79 5162.98 1468.00 5165.90 1468.00 5172.97
GR1468.0 5198.33 1468.00 5198.71 1468.00 5208.06 1467.82 5208.79 1467.42 5210.39
GR1466.0 5213.89 1464.59 5217.33 1464.00 5218.79 1462.10 5223.33 1462.00 5223.58
GR1461.9 5223.73 1460.00 5228.27 1459.05 5230.49 1458.00 5232.96 1456.96 5238.16
GR1456.5 5239.87 1456.32 5241.27 1456.00 5249.77 1456.00 5262.87 1455.84 5273.99
GR1456.0 5290.85 1456.15 5294.26 1456.26 5305.86 1456.31 5328.45 1456.18 5342.81
*
ET           5.1                    4827.39 5184.66
X1 11.29       94 4827.39 5184.66     486     591     536
GR1458.6 4498.36 1458.15 4531.48 1458.00 4544.39 1457.54 4552.02 1456.00 4556.76
GR1455.7 4557.78 1454.54 4561.02 1454.00 4562.59 1454.00 4605.58 1454.95 4629.82
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GR1457.5 4684.77 1456.93 4728.58 1456.76 4749.58 1457.01 4757.49 1457.65 4782.78
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GR1462.5 4805.93 1464.00 4810.36 1464.90 4812.84 1466.00 4815.95 1466.99 4818.67
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GR1463.4 5215.12 1462.00 5218.65 1460.33 5224.18 1460.00 5225.24 1459.63 5239.24
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GR1464.0 5404.95 1463.47 5430.53 1463.48 5446.78 1463.10 5468.14 1463.01 5472.72
GR1462.8 5480.65 1462.48 5495.44 1462.00 5521.62 1462.00 5562.61
*
ET           5.1                    4826.47 5170.48
X1 11.39       88 4826.47 5170.48     520     577     548
GR1463.4 4540.53 1462.24 4575.55 1462.00 4587.19 1461.52 4589.31 1460.82 4592.35
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GR1471.0 5187.97 1470.52 5189.60 1470.00 5191.33 1469.06 5193.63 1468.00 5196.22
GR1466.9 5199.00 1466.00 5201.12 1464.50 5204.79 1464.00 5205.96 1463.56 5227.10
GR1463.3 5302.27 1463.50 5392.62 1464.00 5459.82 1464.00 5496.38 1464.34 5500.49
GR1466.0 5520.78 1466.48 5534.57 1467.00 5553.06
*
ET           5.1                  4831.85 5174.56
X1 11.48      93 4831.85 5174.56     443     532     487
GR1469.5 4463.12 1470.00 4514.20 1470.67 4526.19 1472.00 4532.14 1472.00 4536.27
GR1471.2 4545.52 1472.00 4549.52 1471.16 4556.05 1470.89 4562.81 1470.59 4569.92
GR1470.0 4586.17 1470.00 4654.03 1469.53 4674.85 1469.10 4688.69 1468.83 4699.75
GR1468.6 4709.20 1468.27 4720.52 1468.00 4733.02 1467.35 4737.19 1467.59 4745.21
GR1467.3 4752.17 1466.00 4781.13 1465.37 4784.00 1465.14 4788.41 1465.46 4789.08
GR1465.9 4791.67 1466.00 4791.93 1467.84 4797.88 1468.00 4798.37 1468.75 4800.80
GR1469.1 4801.97 1469.53 4803.27 1470.00 4804.79 1472.00 4813.30 1472.00 4827.27
GR1471.5 4828.31 1470.00 4831.85 1469.59 4832.79 1468.00 4836.43 1467.65 4837.23
GR1466.0 4841.01 1465.73 4841.62 1464.00 4845.59 1463.85 4845.93 1462.31 4849.46
GR1462.0 4850.16 1461.96 4850.24 1460.00 4854.68 1459.78 4855.19 1458.00 4859.04
GR1456.8 4861.86 1456.00 4863.63 1454.62 4866.83 1454.00 4868.24 1454.00 4891.27
GR1454.5 4982.94 1454.00 5000.00 1454.00 5139.53 1455.68 5143.25 1456.00 5143.95
GR1457.7 5147.78 1458.00 5148.36 1459.81 5152.35 1460.00 5152.78 1461.90 5156.97
GR1462.0 5157.19 1463.56 5160.62 1464.00 5161.59 1466.00 5165.91 1468.00 5170.24
GR1468.3 5170.98 1470.00 5174.56 1471.57 5177.96 1472.00 5179.19 1472.00 5194.00
GR1470.3 5199.62 1470.00 5200.65 1468.88 5204.39 1468.00 5207.39 1467.56 5217.72
GR1466.9 5233.75 1466.58 5241.08 1466.33 5246.90 1466.40 5250.99 1466.61 5264.73
GR1467.0 5289.91 1467.20 5306.66 1467.34 5341.05 1467.60 5361.43 1467.94 5383.99
GR1467.8 5395.19 1467.56 5419.40 1468.00 5430.41
*
* END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17
ET           5.1                  4845.32 5152.45
X1 11.56      87 4845.32 5152.45     386     396     390
GR1471.8 4676.86 1471.19 4685.14 1470.77 4690.44 1470.54 4693.47 1470.29 4696.28
GR1470.3 4700.82 1470.50 4703.37 1470.83 4707.69 1471.29 4713.13 1472.00 4721.56
GR1472.0 4845.32 1470.73 4853.22 1470.34 4856.19 1470.00 4857.83 1469.42 4859.18
GR1468.0 4862.39 1467.55 4863.42 1466.00 4867.01 1464.74 4869.91 1464.00 4871.63
GR1462.4 4875.29 1462.00 4876.26 1460.24 4880.32 1460.00 4880.88 1459.55 4891.07
GR1459.2 4900.27 1459.14 4911.50 1459.18 4917.72 1459.27 4936.45 1459.28 4951.90
GR1459.3 4956.77 1459.32 4970.56 1459.36 4977.34 1459.35 4986.98 1459.40 5000.00
GR1459.5 5006.02 1459.50 5012.85 1459.48 5022.30 1459.43 5032.20 1459.31 5049.20
GR1459.3 5049.41 1459.31 5049.51 1459.31 5049.72 1459.30 5060.17 1459.48 5072.34
GR1459.5 5084.60 1459.48 5091.51 1459.47 5098.77 1459.30 5109.95 1459.40 5114.80
GR1459.6 5117.41 1459.59 5117.63 1460.00 5124.33 1461.59 5127.25 1461.65 5127.38
GR1462.0 5128.28 1462.29 5129.00 1462.54 5129.65 1463.39 5131.68 1464.00 5133.13
GR1465.0 5135.40 1466.00 5137.90 1466.70 5139.56 1468.00 5142.66 1468.53 5143.93
GR1470.0 5147.43 1470.90 5149.69 1472.00 5152.45 1472.00 5165.70 1471.55 5168.67
GR1471.2 5170.75 1470.00 5178.38 1470.00 5225.76 1470.27 5226.00 1472.00 5227.56
GR1472.5 5228.46 1472.76 5229.77 1472.00 5233.24 1471.71 5234.57 1471.42 5235.87
GR1471.4 5236.02 1470.93 5237.02 1470.00 5239.41 1470.00 5268.37 1470.59 5293.04
GR1470.9 5296.51 1471.02 5306.55
*
* OUTLET OF I-17 CROSSING
ET           5.1                  4880.47 5126.63
X1 11.57      92 4880.47 5126.63      72      75      73
GR1470.8 4670.15 1471.04 4676.02 1471.81 4692.20 1472.00 4696.83 1472.63 4707.63
GR1472.8 4711.11 1473.05 4715.60 1473.66 4746.09 1473.57 4751.49 1473.41 4760.54
GR1474.0 4769.16 1474.00 4816.39 1473.19 4827.23 1472.71 4833.86 1472.64 4834.85
GR1472.0 4844.37 1472.00 4861.16 1472.54 4870.52 1472.00 4880.47 1471.79 4880.62
GR1470.1 4881.77 1470.00 4881.79 1468.35 4882.11 1468.00 4882.18 1466.41 4882.49
GR1466.0 4882.57 1464.43 4882.88 1464.00 4882.96 1462.45 4883.27 1462.00 4883.35
GR1461.6 4896.00 1461.53 4899.52 1461.22 4909.97 1461.03 4926.96 1460.86 4934.09
GR1460.6 4946.27 1460.36 4961.63 1460.29 4993.04 1460.30 5000.00 1460.41 5002.11
GR1460.5 5010.81 1460.63 5019.07 1461.14 5020.57 1461.34 5048.98 1461.18 5074.02
GR1460.9 5090.68 1461.37 5103.14 1461.81 5115.32 1461.86 5116.93 1462.00 5120.67
GR1462.6 5120.78 1464.00 5121.06 1464.40 5121.17 1466.00 5121.48 1466.51 5121.56
GR1467.1 5121.69 1468.00 5121.86 1469.43 5122.14 1470.00 5122.25 1470.50 5123.25
GR1471.7 5125.87 1472.00 5126.63 1472.00 5154.31 1471.46 5159.70 1470.38 5170.04
GR1470.4 5174.42 1470.49 5174.60 1470.77 5175.42 1472.00 5179.41 1472.00 5180.09
GR1471.6 5182.32 1470.00 5193.35 1470.00 5209.59 1470.38 5210.71 1471.63 5215.00
GR1472.0 5216.25 1472.00 5216.38 1472.00 5218.35 1471.83 5219.05 1470.00 5223.24
GR1470.0 5225.98 1470.22 5226.92 1470.00 5227.88 1470.00 5234.90 1470.81 5241.05
GR1470.8 5241.43 1471.05 5249.44 1470.99 5250.35 1470.90 5250.66 1470.72 5261.88
GR1471.0 5291.96 1471.60 5306.88
```

```
*
EJ
ER
```

2% Annual Chance Flood

Main Channel

Output File: main50.out

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.2;  May 1991            *
 *                                        *
 *  RUN DATE    15SEP04    TIME   15:08:30 *
 *****************************************
```

```
*************************************
*  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
```

1

15SEP04 15:08:30

THIS RUN EXECUTED 15SEP04 15:08:30

```
*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

```
T1    MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2    INPUT FILE: main50.dat       50-YR FLOOD ELEVATION
T3    ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4    October 2003 EMCON/OWT Inc. rev. for add'l ret. int. August 2004

      This model is used to determine the main channel Base Floodplain
      Extended x-section data used for stationing 9.21 - 9.35 (rockwall removed)
      Split flowrates are applied from bkt50.dat and are partitioned across
      relevant cross sections.

      Starting WSEL is Adobe Dam reservoir 100-yr WSEL from effective FIS study.
      Boundary conditions were taken from Tetra Tech modeling.
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2			0		0	0	1378.00	

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38 43 1 2 26 8 4 25 68 53
54

50-yr peak discharge is from effective FIS study.

QT	1	28920								
NC	0.045	0.045	0.035	0.1	0.3					
ET		5.1			3796.61	5556.89				
X1	8.69	95	4025.25	5073.77						
GR	1380.0	3796.61	1380.00	3854.47	1379.00	3861.47	1378.00	3868.42	1378.00	3878.69
GR	1378.6	3884.04	1380.00	3896.01	1380.00	3907.92	1379.82	3923.26	1379.91	3925.58
GR	1380.0	4002.41	1380.54	4004.61	1382.00	4011.19	1382.00	4016.12	1381.16	4025.25
GR	1380.0	4037.88	1379.55	4039.54	1378.00	4045.04	1376.66	4058.92	1376.33	4063.23
GR	1376.0	4067.80	1375.66	4071.80	1374.51	4084.66	1374.14	4088.53	1374.00	4090.42
GR	1373.8	4091.18	1373.53	4092.99	1372.00	4102.33	1371.23	4129.14	1370.00	4171.62
GR	1370.0	4446.38	1370.04	4448.91	1372.00	4550.37	1372.00	4583.65	1371.80	4601.95
GR	1371.2	4726.77	1371.45	4741.81	1371.10	4787.06	1371.00	4796.71	1370.54	4837.32
GR	1370.6	4872.36	1370.52	4876.45	1370.60	4881.98	1370.60	4882.00	1370.82	4897.47
GR	1371.4	4906.65	1371.83	4913.95	1372.00	4917.45	1372.34	4920.12	1374.00	4933.03
GR	1374.3	4936.71	1374.00	4958.00	1373.51	4959.38	1372.00	4963.60	1371.80	4964.16
GR	1370.0	4969.21	1368.37	4973.77	1368.00	4974.80	1366.00	4980.35	1365.56	4981.39

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GR	1364.7	4987.21	1364.21	4990.25	1364.00	4992.46	1364.00	5000.00	1364.00	5003.25
GR	1365.5	5010.85	1365.78	5012.36	1366.00	5013.46	1366.52	5014.69	1368.00	5018.15
GR	1368.3	5018.85	1370.00	5022.82	1370.70	5024.49	1372.00	5027.49	1373.05	5031.15
GR	1374.0	5034.40	1375.00	5039.27	1376.00	5044.17	1376.23	5045.52	1377.39	5052.81
GR	1378.0	5059.14	1378.78	5065.36	1379.49	5073.77	1379.70	5074.11	1379.26	5077.51
GR	1378.7	5079.93	1378.00	5082.02	1378.00	5116.40	1378.13	5146.24	1378.00	5177.10
GR	1378.0	5181.33	1377.50	5273.67	1377.18	5375.38	1377.56	5451.37	1377.29	5556.89

QT	1	28920								
ET		5.1			3855.70	5475.95				
X1	8.79	89	4095.41	5039.30	530	546	539			
GR	1384.0	3855.70	1384.00	3973.82	1382.64	3980.66	1384.00	3998.09	1382.65	4051.20
GR	1382.6	4058.69	1382.49	4060.23	1382.89	4064.63	1384.00	4067.90	1384.00	4095.41
GR	1382.2	4107.84	1382.00	4109.37	1380.85	4117.39	1380.00	4123.50	1378.49	4137.14
GR	1378.0	4141.55	1376.51	4154.98	1376.00	4159.65	1374.00	4171.01	1373.84	4176.47
GR	1372.0	4222.80	1372.00	4265.74	1371.40	4267.19	1370.00	4271.65	1370.02	4277.10
GR	1370.5	4303.75	1372.00	4387.79	1372.60	4464.89	1373.01	4509.16	1373.45	4564.23
GR	1373.6	4589.91	1374.00	4659.42	1374.00	4677.54	1373.79	4707.25	1374.00	4731.92
GR	1375.0	4815.01	1375.48	4838.28	1375.82	4866.71	1375.01	4881.51	1374.70	4887.04

GR	1374.0	4898.81	1374.00	4914.20	1376.00	4932.06	1377.09	4941.83	1377.77	4948.33
GR	1378.0	4950.51	1378.00	4973.99	1377.74	4974.57	1376.00	4978.35	1375.92	4978.54
GR	1375.3	4979.92	1374.00	4982.54	1373.68	4983.19	1372.00	4986.64	1371.40	4987.87
GR	1370.0	4990.74	1369.23	4992.31	1368.00	4994.83	1367.12	4996.63	1366.00	4998.93
GR	1366.0	5000.00	1367.19	5002.89	1368.00	5004.26	1369.43	5006.66	1370.00	5007.63
GR	1371.8	5010.72	1372.00	5011.01	1372.55	5011.93	1374.00	5014.64	1374.46	5015.50
GR	1376.0	5018.37	1377.54	5024.62	1378.00	5026.26	1378.19	5027.55	1378.48	5029.47
GR	1380.0	5039.30	1380.47	5053.53	1381.00	5070.14	1381.05	5074.82	1381.51	5092.11
GR	1381.8	5130.27	1381.56	5144.28	1381.81	5200.42	1381.90	5207.46	1381.92	5219.18
GR	1382.0	5303.86	1382.00	5320.81	1381.88	5345.60	1381.56	5475.95		

QT	1	28903								
ET		5.1			4279.99	5437.79				
X1	8.93	71	4541.12	5252.00	565	711	722			
GR	1386.3	4279.99	1386.00	4295.47	1386.34	4315.43	1386.00	4350.00	1385.51	4354.32
GR	1386.0	4371.17	1386.00	4454.56	1386.25	4457.97	1387.66	4480.76	1388.00	4485.92
GR	1388.0	4526.66	1386.72	4541.12	1386.00	4552.20	1385.40	4560.69	1385.02	4564.36
GR	1384.5	4569.41	1384.00	4573.51	1382.63	4586.39	1382.43	4588.53	1382.00	4594.51
GR	1381.7	4598.20	1380.48	4604.38	1380.00	4606.94	1379.91	4608.36	1378.58	4632.57
GR	1378.0	4639.26	1376.00	4653.50	1375.35	4704.64	1374.00	4828.12	1373.68	4850.43
GR	1373.1	4888.01	1372.88	4901.73	1372.00	4950.77	1371.17	4970.32	1370.00	4996.16
GR	1370.1	5000.00	1370.40	5014.94	1370.52	5018.25	1370.89	5033.81	1371.01	5037.53
GR	1371.3	5046.38	1371.00	5056.40	1370.55	5068.53	1370.60	5102.71	1370.78	5109.11
GR	1371.1	5116.39	1371.60	5131.46	1372.00	5139.38	1373.19	5146.05	1373.89	5149.69
GR	1374.0	5150.47	1374.30	5152.78	1374.67	5155.69	1376.00	5166.46	1376.39	5169.57
GR	1378.0	5182.62	1379.50	5195.03	1380.00	5200.27	1380.58	5207.92	1381.76	5224.62
GR	1382.0	5227.77	1382.80	5252.00	1384.00	5330.07	1384.00	5333.71	1384.91	5347.75
GR	1386.0	5362.52	1386.60	5376.48	1386.90	5391.40	1387.03	5397.63	1387.24	5419.21
GR	1387.0	5437.79								

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QT	1	28190								
ET		5.1			4519.91	5433.52				
X1	9.01	81	4817.29	5340.88	363	558	430			
GR	1388.4	4519.91	1388.00	4559.91	1388.00	4561.41	1388.84	4570.06	1388.45	4571.71
GR	1388.0	4573.70	1388.00	4576.09	1388.46	4578.03	1388.77	4579.51	1388.28	4582.90
GR	1388.0	4583.57	1388.00	4677.39	1388.26	4681.88	1389.30	4700.64	1389.76	4708.44
GR	1389.3	4717.62	1388.98	4718.21	1388.52	4718.22	1388.00	4721.78	1387.37	4732.92
GR	1387.1	4737.05	1386.95	4738.08	1386.40	4758.07	1386.64	4764.66	1386.86	4770.00
GR	1387.0	4774.77	1387.38	4799.17	1387.08	4803.47	1386.92	4804.87	1386.44	4811.50
GR	1386.0	4817.29	1384.00	4825.73	1383.63	4827.33	1382.00	4834.13	1380.26	4841.49
GR	1380.0	4842.58	1379.21	4845.86	1378.00	4850.84	1376.45	4856.91	1376.00	4858.68
GR	1375.8	4859.41	1374.00	4866.60	1373.72	4878.11	1373.33	4898.38	1373.06	4911.20
GR	1372.9	4920.39	1372.51	4939.85	1372.35	4949.90	1372.19	4962.38	1372.32	4994.02
GR	1372.4	5000.00	1372.50	5005.13	1373.08	5052.28	1373.49	5089.07	1373.86	5118.83
GR	1374.0	5130.57	1375.57	5137.72	1376.00	5139.67	1377.54	5146.76	1378.00	5149.27
GR	1379.4	5157.21	1380.00	5161.68	1380.57	5169.64	1380.83	5173.36	1380.91	5174.01

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GR    1381.2    5177.53    1381.59    5182.69    1382.00    5188.14    1382.37    5193.51    1383.14    5206.05
GR    1384.0    5217.34    1385.32    5244.41    1385.68    5252.28    1386.00    5257.06    1387.77    5292.41
GR    1388.0    5296.60    1388.84    5320.16    1389.58    5340.88    1389.68    5346.00    1390.00    5351.31
GR    1390.0    5433.52

QT         1      28054
ET                  5.1                          4515.30    5233.18
X1      9.08         70    4796.92    5198.84        432        165        365
GR    1391.1    4515.30    1390.24    4539.50    1390.00    4540.45    1390.00    4625.97    1390.21    4628.50
GR    1390.6    4632.33    1390.69    4632.97    1390.44    4647.05    1390.08    4647.52    1390.00    4647.64
GR    1389.6    4649.23    1388.00    4655.18    1388.00    4670.31    1388.16    4671.07    1388.14    4787.35
GR    1388.0    4796.92    1387.24    4809.20    1386.69    4817.41    1386.00    4827.18    1384.79    4833.74
GR    1384.0    4837.38    1383.79    4838.28    1382.78    4842.68    1382.00    4845.64    1381.40    4847.91
GR    1380.0    4853.19    1378.86    4857.51    1378.00    4860.75    1377.03    4864.25    1376.00    4868.13
GR    1375.1    4871.58    1374.00    4875.67    1373.97    4878.43    1373.92    4884.08    1373.76    4895.74
GR    1373.7    4902.64    1373.65    4905.82    1373.59    4911.57    1373.49    4920.43    1373.47    5000.00
GR    1373.5    5095.48    1373.56    5107.93    1373.59    5109.03    1373.62    5112.59    1373.70    5119.31
GR    1373.8    5122.87    1373.82    5124.67    1373.85    5126.00    1373.92    5128.16    1373.94    5130.06
GR    1374.0    5131.14    1374.13    5131.77    1376.00    5140.79    1377.41    5147.57    1378.00    5150.02
GR    1378.6    5152.38    1380.00    5158.25    1381.29    5163.54    1382.00    5166.47    1383.45    5172.44
GR    1384.0    5174.70    1385.73    5181.83    1386.00    5182.93    1387.10    5187.46    1388.00    5190.99
GR    1388.1    5191.61    1389.08    5195.22    1390.00    5198.84    1390.04    5199.45    1390.27    5233.18

QT         1      23960
NC     0.035      0.035      0.035
ET                  5.1                          4525.85    5437.55
X1      9.14         94    4835.60    5165.24        288        385        333
GR    1392.1    4525.85    1392.00    4598.96    1391.59    4608.73    1390.99    4723.68    1391.42    4775.78
GR    1391.5    4789.87    1391.64    4805.14    1391.00    4830.80    1390.59    4832.90    1390.00    4835.60
GR    1389.7    4836.69    1389.00    4839.12    1388.44    4841.11    1388.00    4842.60    1387.57    4843.96
GR    1387.0    4845.55    1386.47    4846.70    1386.00    4847.68    1385.71    4848.28    1385.00    4849.75
GR    1384.7    4850.41    1384.00    4851.87    1383.84    4852.20    1383.32    4853.25    1383.00    4853.91
GR    1382.8    4854.33    1382.00    4856.07    1381.65    4856.77    1381.00    4858.07    1380.00    4860.14
GR    1379.7    4861.00    1379.19    4861.98    1379.00    4862.42    1378.49    4863.58    1378.00    4864.71
GR    1377.4    4866.13    1377.00    4867.28    1376.43    4869.03    1376.00    4869.56    1375.54    4872.43
1
   15SEP04      15:08:30                                                                                PAGE     4

GR    1374.5    4874.14    1374.00    4875.08    1374.00    5000.00    1374.00    5062.13    1374.39    5091.47
GR    1375.0    5121.35    1375.00    5125.45    1375.71    5129.68    1376.00    5131.10    1376.94    5133.66
GR    1377.0    5134.06    1377.77    5135.68    1378.00    5136.16    1379.00    5138.25    1379.92    5140.18
GR    1380.0    5140.35    1380.80    5142.03    1381.00    5142.44    1381.45    5143.38    1382.00    5144.53
GR    1382.9    5146.34    1383.00    5146.63    1383.72    5148.14    1384.00    5148.75    1384.46    5149.37
GR    1385.0    5150.09    1385.25    5150.43    1386.00    5151.41    1386.80    5152.48    1387.00    5152.75
GR    1387.2    5153.56    1388.00    5156.83    1388.60    5159.29    1389.00    5160.92    1389.34    5162.35
GR    1389.7    5164.16    1390.00    5165.24    1390.00    5165.45    1390.42    5166.34    1391.00    5168.32
GR    1391.8    5170.94    1391.91    5171.50    1392.00    5171.73    1392.22    5174.81    1392.64    5180.92
GR    1393.0    5184.53    1392.55    5196.46    1392.91    5224.81    1392.45    5256.91    1392.29    5293.65
GR    1392.1    5328.16    1392.00    5380.42    1392.00    5416.53    1391.87    5437.55
```

DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT	1	21000								
X1	9.145	66	5015	5325	8	8	8			
X3	10	0	0	0	0	0	0	1392.2	1393.1	
BT	-16	5015	1394.5	1394.5	5015.01	1394.5	1390	5045	1394.8	1390.3
BT		5085	1395.2	1390.7	5088.75	1395.2	1390.8	5093.75	1395.3	1390.8
BT		5125	1395.6	1391.1	5170	1395.7	1391.2	5205	1395.7	1391.2
BT		5245	1395.5	1391	5246.25	1395.5	1391	5251.25	1395.5	1391
BT		5285	1395.2	1390.7	5295	1395.1	1390.6	5324.99	1394.7	1390.2
BT		5325	1394.7	1394.7						
GR	1395.6	3767.9	1395.5	3820.9	1395.4	3873.6	1395.4	3891.5	1395.4	3939.2
GR	1395.2	3990.7	1395.4	4052.6	1395.4	4113.7	1395.3	4176.6	1395.1	4229.3
GR	1395.1	4287.4	1394.9	4334.4	1394.8	4385.2	1394.7	4450.4	1394.8	4489.6
GR	1394.5	4524.7	1394.1	4576.1	1394	4617.7	1393.7	4656.6	1393.2	4693.1
GR	1393.1	4730.9	1392.4	4761	1392.2	4821	1392.4	4881	1393.59	4956
GR	1394.4	5006	1394.5	5015	1390	5015.01	1374.94	5045	1374.94	5085
GR	1374.9	5088.74	1390.80	5088.75	1390.80	5093.75	1374.94	5093.76	1374.94	5125
GR	1374.9	5167.49	1391.2	5167.5	1391.2	5170	1391.2	5172.5	1374.94	5172.51
GR	1374.9	5205	1374.94	5245	1374.94	5246.24	1391	5246.25	1391	5251.25
GR	1374.9	5251.26	1374.94	5285	1374.94	5295	1390.2	5324.99	1394.7	5325
GR	1394.8	5326	1393.95	5376	1393.27	5453	1393.07	5520	1393.1	5541.9
GR	1392.9	5588.6	1392.7	5636.9	1392.7	5681.4	1392.5	5740.6	1392.6	5796.6
GR	1392.6	5855.7	1392.4	5922.7	1392.3	5988	1392.3	6032.1	1392.1	6079.5
GR	1392.1	6085								

UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT	1	21000								
X1	9.155	66	5015	5325	80.2	80.2	80.2			
X3	10	0	0	0	0	0	0	1392.2	1393.1	
BT	-16	5015	1394.5	1394.5	5015.01	1394.5	1390	5045	1394.8	1390.3
BT		5085	1395.2	1390.7	5088.75	1395.2	1390.8	5093.75	1395.3	1390.8
BT		5125	1395.6	1391.1	5170	1395.7	1391.2	5205	1395.7	1391.2
BT		5245	1395.5	1391	5246.25	1395.5	1391	5251.25	1395.5	1391
BT		5285	1395.2	1390.7	5295	1395.1	1390.6	5324.99	1394.7	1390.2
BT		5325	1394.7	1394.7						
GR	1395.6	3767.9	1395.5	3820.9	1395.4	3873.6	1395.4	3891.5	1395.4	3939.2
GR	1395.2	3990.7	1395.4	4052.6	1395.4	4113.7	1395.3	4176.6	1395.1	4229.3
GR	1395.1	4287.4	1394.9	4334.4	1394.8	4385.2	1394.7	4450.4	1394.8	4489.6
GR	1394.5	4524.7	1394.1	4576.1	1394	4617.7	1393.7	4656.6	1393.2	4693.1
GR	1393.1	4730.9	1392.4	4761	1392.2	4821	1392.4	4881	1393.59	4956
GR	1394.4	5006	1394.5	5015	1390	5015.01	1375.14	5045	1375.14	5085
GR	1375.1	5088.74	1390.8	5088.75	1390.8	5093.75	1375.14	5093.76	1375.14	5125

1

GR	1375.1	5167.49	1391.2	5167.5	1391.2	5170	1391.2	5172.5	1375.14	5172.51
GR	1375.1	5205	1375.14	5245	1375.14	5246.24	1391	5246.25	1391	5251.25
GR	1375.1	5251.26	1375.14	5285	1375.14	5295	1390.2	5324.99	1394.7	5325
GR	1394.8	5326	1393.95	5376	1393.27	5453	1393.07	5520	1393.1	5541.9
GR	1392.9	5588.6	1392.7	5636.9	1392.7	5681.4	1392.5	5740.6	1392.6	5796.6

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GR   1392.6     5855.7     1392.4     5922.7     1392.3       5988     1392.3     6032.1     1392.1     6079.5
GR   1392.1       6085


QT        1      21000
ET                 5.1                           4528.66     5445.27
X1     9.16         89    4852.56    5164.29          8          8           8
GR   1392.6    4528.66    1392.16    4581.89    1392.81    4592.32     1392.00    4643.39    1391.85    4708.61
GR   1392.0    4756.55    1392.50    4805.50    1392.00    4836.76     1391.23    4838.82    1391.00    4839.41
GR   1390.5    4842.05    1390.00    4852.56    1389.00    4854.43     1388.00    4856.29    1387.00    4857.94
GR   1386.0    4859.59    1385.00    4861.24    1384.00    4862.89     1383.40    4863.88    1383.00    4864.54
GR   1382.5    4865.33    1382.00    4866.18    1381.00    4867.82     1380.61    4868.61    1380.00    4869.92
GR   1379.8    4870.35    1379.00    4872.01    1378.40    4873.27     1378.00    4874.11    1377.29    4875.60
GR   1377.0    4876.20    1376.18    4877.92    1376.00    4878.30     1375.00    4880.39    1374.81    4915.05
GR   1374.0    4961.04    1374.20    5000.00    1374.50    5083.02     1374.70    5107.91    1375.00    5129.31
GR   1375.6    5132.84    1376.00    5135.04    1377.00    5138.70     1378.00    5140.93    1379.00    5142.76
GR   1379.6    5143.88    1380.00    5144.79    1380.41    5145.63     1381.00    5146.82    1381.33    5147.49
GR   1382.0    5148.85    1382.47    5149.81    1383.64    5152.18     1384.00    5152.91    1384.55    5154.02
GR   1385.0    5154.94    1386.00    5156.58    1386.42    5157.20     1387.00    5158.07    1388.00    5161.31
GR   1388.6    5162.08    1389.00    5162.75    1389.58    5163.63     1390.00    5164.29    1390.52    5165.66
GR   1390.7    5169.65    1390.00    5170.91    1390.00    5171.15     1390.65    5172.70    1391.00    5173.49
GR   1391.5    5174.67    1392.00    5175.74    1392.49    5177.88     1393.00    5180.15    1393.00    5215.17
GR   1392.8    5239.51    1393.00    5302.86    1393.00    5330.00     1393.00    5335.30    1393.52    5343.99
GR   1394.0    5352.89    1394.20    5356.22    1394.67    5363.95     1395.00    5372.98    1395.00    5394.93
GR   1394.9    5404.04    1394.00    5430.80    1393.15    5432.47     1393.36    5445.27

  BOTTOM OF DROP STRUCTURE

QT        1      21000
NC    0.035      0.035      0.020
ET                 5.1                           4732     5190.05
X1     9.21          7       4732    5174.57       145         355         279
GR     1389       4732       1376       4765      1376        4901        1376       5000       1376    5140.72
GR     1391    5174.57       1392    5190.05

  TOP OF DROP STRUCTURE

QT        1      21000
NC    0.040      0.035      0.035
ET                 5.1                           4664     5314.09
X1     9.22         14       4664    5192.98       122         104          39
GR     1395       4664       1390       4708      1390     4871.20        1390       5000       1390    5167.75
GR     1391    5173.76       1392    5177.14      1393     5179.36        1394    5181.58       1395    5184.44
GR     1396    5187.36       1397    5192.98      1398     5219.20        1399    5314.09
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QT        1      21000
ET                 5.1                           4572.95     5304.55
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X1      9.25        45      4825   5285.60       155        82       141
GR      1400      3023    1399.1      3123    1397.6      3223    1395.8      3323    1392.7      3423
GR      1392      3523      1393      3623    1393.6      3723    1393.5      3762      1394      3874
GR      1394      3898      1394   4003.81      1394   4062.18      1395   4283.87      1395   4298.29
GR      1395   4301.25      1395   4365.84      1395    4385.4    1395.7   4563.07      1395   4565.34
GR      1395   4570.45   1395.57   4572.95   1395.46   4582.97      1395   4585.82      1395   4590.84
GR      1395   4598.19      1395   4614.18      1395   4621.31      1394   4735.08      1394   4738.18
GR      1394   4838.32      1393   4871.51      1392   4892.27      1392      5000      1392    5077.8
GR      1393   5179.38      1394   5266.49      1395   5275.95      1396   5278.52      1397   5281.09
GR      1398   5283.83   1398.64    5285.6      1399   5290.86      1400   5304.55      1399   5325.36

  END FLOW SPLIT; RETURN TO FULL FLOW

QT         1     29000
ET                 5.1                      4441.50   5290.19
X1      9.30        52   4779.69   5280.97       262       282       261
GR    1401.5      2940    1402.6      2970    1400.5      3070    1398.6      3170      1397      3270
GR      1394      3370      1394      3470      1394      3570      1394      3670    1394.8      3770
GR      1395      3820      1394      3930      1394   4045.09      1395   4108.19      1395      4117
GR      1396   4323.15   1396.42   4425.34      1396   4429.71      1396   4434.42      1396    4441.5
GR      1396   4445.67      1396    4449.8      1395   4453.93   1394.13   4458.61      1394   4462.74
GR      1393   4494.69      1393   4512.86      1394   4520.79      1395   4539.92      1395   4544.55
GR      1395   4549.38      1396   4554.31      1397    4672.3      1397   4703.41      1397   4730.49
GR      1397   4737.81    1396.5      4750      1396   4768.57      1395   4779.69      1394    4811.1
GR      1393    4973.9      1393      5000      1393   5090.01      1394   5237.22      1395   5265.28
GR      1395   5270.89      1396   5273.07      1397   5275.25      1398   5277.47      1399   5279.81
GR    1399.5   5280.97      1400   5290.19

ET                 5.1                      4252.38   5287.77
X1      9.35        64      4775   5275.88       291       274       274
GR    1403.4      2913      1404      2963    1401.9      3063    1400.6      3163    1399.1      3263
GR      1396      3363      1396      3463    1394.8      3563    1395.2      3663      1396      3763
GR      1396      3863      1396      3873      1396      3970      1396   4133.14      1397   4227.56
GR      1397   4246.88      1397   4251.02      1397   4252.38      1397   4261.99      1397   4262.89
GR      1397   4266.45      1397   4272.25      1396   4279.28      1395   4304.83      1395   4325.29
GR      1396    4342.7      1397   4379.18      1398    4402.1      1399   4459.05      1399   4467.32
GR      1399   4490.46      1399   4657.95      1399   4675.14      1399      4775      1399   4817.89
GR      1398   4824.28      1398   4830.91      1398   4833.58      1397   4841.76      1396   4854.67
GR      1395   4861.17      1394   4882.23      1393   4897.87      1392   4929.89      1392   4995.23
GR    1392.2      5000      1393   5015.98      1394   5050.46      1394   5062.07      1394   5081.74
GR      1394   5098.98      1393   5104.45      1393   5165.77      1394   5255.79    1394.16   5261.12
GR      1395   5263.15      1396   5265.55      1397   5267.94      1398   5270.34      1399   5272.74
GR    1399.9   5274.92      1400   5275.88      1401   5287.77      1401   5364.41

  FIRST LANDFILL CROSS SECTION
1
   15SEP04      15:08:30                                                                    PAGE     7

X1      9.42        84      4717   5216.97       400       402       399
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GR	1428	4000	1426	4011.37	1424	4051.66	1424	4057.37	1426	4081.68
GR	1428	4110.92	1428	4121.45	1426	4129.13	1424	4134.76	1422	4139.19
GR	1421	4142.73	1420	4161.87	1419.19	4203.29	1418	4205.11	1416	4226.25
GR	1414	4237.19	1412	4246.78	1410	4256.36	1408	4267.25	1406	4278.32
GR	1404	4313.42	1402	4319.63	1401	4385.11	1401	4391.49	1400	4399.73
GR	1400	4402.48	1400	4425	1399	4435.31	1399	4437.98	1400	4464.1
GR	1400	4473.55	1401	4478.99	1401	4489.28	1401	4501.38	1401	4506.58
GR	1401	4519.28	1401	4549.48	1401	4609.38	1401	4631.43	1401	4640
GR	1401	4717	1401	4808.53	1401	4810.26	1400	4816.66	1399	4821.3
GR	1398	4826.32	1397	4831.26	1396	4836.2	1395	4840.81	1394	4845.47
GR	1394	4861.29	1394	4874.91	1394	4881.71	1395	4899.25	1395	4935.92
GR	1394	4952.05	1393	4968.09	1393	4971.63	1393	4977.75	1393	5000
GR	1393	5022.4	1394	5029.45	1395	5047.57	1396	5049.85	1397	5052.12
GR	1397	5069.99	1396	5075.09	1395	5080.13	1394	5086.54	1393	5111.54
GR	1393	5144.13	1394	5187.94	1395	5201.29	1396	5203.58	1397	5205.87
GR	1398	5208.12	1399	5210.33	1400	5212.55	1401	5214.76	1402	5216.97
GR	1402.1	5217.23	1403	5227.59	1404	5237.39	1404.24	5239.73		

NC	0.040	0.040	0.040							
X1	9.45	97	4709	5209	93	126	118			
GR	1444	4000	1446	4007.9	1448	4067.98	1448	4129.56	1446	4153.01
GR	1444	4163.3	1442	4166.26	1440	4169.22	1438	4175.44	1436	4186.62
GR	1434	4200.28	1432	4214.71	1430	4223.41	1428	4230.51	1426	4245.88
GR	1424	4268.57	1422.59	4278.96	1422	4280.89	1420	4290.71	1418	4299.79
GR	1416	4308.72	1414	4317.57	1412	4326.42	1410	4337.33	1408	4350.71
GR	1406	4364.09	1404	4377.47	1402	4400.54	1401	4461.44	1400	4466.82
GR	1400	4480.64	1400	4491.26	1400	4512.14	1401	4518.92	1401.69	4560.74
GR	1402	4579.32	1403	4582.89	1403	4591.95	1402	4596.75	1402	4660
GR	1402	4672.46	1401.7	4709	1401	4801.15	1400	4808.19	1399	4812.86
GR	1398	4817.28	1397	4822.04	1396	4829.31	1395	4850.48	1395	4874.85
GR	1396	4881.97	1397	4899.1	1397	4923.02	1396	4938.23	1395	4946.05
GR	1394	4960.72	1394	4965.12	1394	4968.36	1394	4997.02	1393.39	5000
GR	1393	5001.91	1393	5029.22	1394	5035.16	1395	5037.25	1396	5039.33
GR	1397	5041.64	1398	5043.96	1399	5046.15	1400	5048.19	1401	5065.48
GR	1401	5071.95	1401	5081.45	1401	5133.8	1400	5156.91	1399	5160.41
GR	1398	5163.93	1397	5167.45	1396	5170.97	1395	5174.49	1394	5180.55
GR	1394	5209	1394	5237.19	1395	5242.58	1396	5247.96	1397	5251.97
GR	1398	5255.85	1399	5259.53	1400	5261.9	1401	5264.27	1404.8	5265.18
GR	1402	5266.67	1403	5269.03	1404	5271.38	1405.2	5272.32	1404.6	5276.7
GR	1405	5277.23	1405	5281.63						

NC	0.035	0.040	0.040							
ET		5.1			4663.35	5177				
X1	9.54	85	4685.93	5177	410	515	500			
GR	1456	4000	1456	4021.5	1454	4238.02	1454	4370.23	1456	4373.71
GR	1458	4382.67	1460	4392.58	1462	4402.82	1464	4414.23	1464	4416.59
GR	1462	4419.16	1460	4421.73	1458	4424.3	1456	4426.86	1454	4429.43
GR	1452	4432.03	1450	4434.89	1448	4437.71	1446	4440.53	1444	4443.94
GR	1442	4455.27	1440	4466.36	1438	4475.82	1436	4485.28	1434	4494.74
GR	1432	4503.98	1430	4512.83	1428	4521.68	1426	4530.63	1424	4537.95

GR	1422	4543.4	1420	4548.8	1418	4566.76	1416	4576.41	1414	4588.78
GR	1412	4606.7	1410	4618.24	1408	4626.12	1406	4646.3	1405.45	4653.56
GR	1406	4654.9	1408	4659.52	1409.53	4663.35	1409.41	4679.83	1408	4685.93
GR	1406	4694.77	1404	4704.62	1402	4714.47	1400	4759.39	1399	4817.12
GR	1399	4833.11	1399	4849.47	1399	4877	1398	4880.23	1397	4889.16
GR	1397	4922.52	1398	4930.18	1398	4954.06	1397	4978.17	1397	5000
GR	1397	5021.85	1398	5031.11	1399	5044.96	1400	5072.02	1401	5077.75
GR	1402	5083.41	1403	5099.61	1404	5131.49	1404	5150.42	1404	5168.37
GR	1404	5177	1404	5197.33	1404	5199.5	1404	5210.97	1404	5253.08
GR	1404	5391.09	1403	5589.76	1403	5598.79	1404	5665.44	1405	5677.3
GR	1406	5688.92	1407	5698.83	1408	5708.08	1408.1	5709.05	1408	5712.42
ET		5.1			4736.39	5231.86				
X1	9.65	77	4754.19	5231.86	475	503	558			
GR	1464	4000	1464	4008.95	1464	4009.76	1462	4321.74	1460	4399.87
GR	1458	4431.45	1456	4444.62	1454	4455.94	1452	4520.78	1450	4527.92
GR	1448	4534.57	1446	4541.22	1444	4547.9	1442	4555.79	1440	4564.66
GR	1438	4573.56	1436	4582.53	1434	4591.5	1432	4600.47	1430	4609.44
GR	1428	4617.73	1426	4626.65	1424	4636.67	1422	4647.12	1420	4657.56
GR	1418	4668.01	1416	4678.25	1415.47	4681.09	1414	4684.72	1412	4698.82
GR	1410	4712.91	1408.84	4718.95	1410	4724.03	1412	4732.19	1412.28	4733.95
GR	1412.3	4736.39	1412.23	4752.15	1412.23	4753.27	1412	4754.19	1410	4762.26
GR	1408	4770.81	1406	4779.35	1404	4787.89	1402	4808.39	1402	4880.47
GR	1402	5000	1402	5117.6	1402	5177.99	1404	5201.2	1406	5208.98
GR	1408	5216.75	1410	5224.53	1411.67	5231.28	1411.74	5231.86	1411.54	5244.69
GR	1411.6	5244.92	1410	5251.38	1408	5258.75	1406	5266.02	1405	5297.23
GR	1405	5320.44	1406	5347.25	1406	5388.09	1406	5408.08	1407	5541.7
GR	1407	5718.14	1406	5754.4	1406	5784.09	1406	5792.77	1406	5810.87
GR	1406	5820.41	1406	5838.97	1407	5936.82	1408	6017.23	1409	6081.83
GR	1410	6155.49	1411	6165.28						
NC	0.035	0.035	0.035							
ET		5.1			4752.73	5283.89				
X1	9.70	45	4757.14	5273.18	253	259	256			
GR	1466	4109	1464	4316.8	1462	4420.43	1460	4447.14	1458	4478.14
GR	1456	4489.46	1454	4500.45	1452	4509.98	1450	4519.51	1448	4529.04
GR	1446	4538.57	1444	4548.1	1442	4557.38	1440	4566.27	1438	4575.05
GR	1436	4583.83	1434	4592.61	1432	4601.39	1430	4609.72	1428	4617.43
GR	1426	4627.56	1424	4668.02	1422	4677.03	1420	4686.23	1418	4694.23
GR	1416	4702.22	1414	4725.62	1413.09	4738.64	1413.15	4752.73	1412	4757.14
GR	1410	4765.55	1408	4773.94	1406	4782.3	1404	4790.65	1404	5000
GR	1404	5228.02	1406	5244.34	1408	5253.96	1412	5273.18	1412.96	5277.81
GR	1413.2	5283.89	1414	5286.99	1416	5294.01	1418	5300.98	1420	5310.97
ET		5.1			4761.98	5298.67				

X1	9.73	47	4763.41	5284.93	187	151	169			
GR	1468	4092	1466	4213.55	1464	4379	1462	4470.4	1460	4508.81
GR	1458	4525.45	1456	4535.99	1454	4546.24	1452	4556.5	1450	4565.64
GR	1448	4574.49	1446	4582.67	1444	4590.66	1442	4598.64	1440	4606.63
GR	1438	4614.61	1436	4622.6	1434	4630.3	1432	4638.03	1430	4646.07
GR	1428	4654.12	1426	4662.16	1424	4670.2	1422	4678.24	1420	4686.28

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GR	1418	4694.59	1416	4735.51	1414	4745.63	1413.77	4747.24	1414	4754.45
GR	1414.2	4761.98	1414	4763.41	1412	4771.23	1410	4779.05	1408	4786.93
GR	1406	4794.83	1404	4807.46	1404	5000	1404	5232.22	1406	5255.68
GR	1408	5265.54	1410	5275.37	1412	5284.93	1414	5298.67	1416	5306.36
GR	1418	5314.06	1420	5322.58						

ET		5.1			4698.37	5217.67				
X1	9.80	62	4738.89	5206.55	383	349	365			
GR	1476	4000	1476	4071.22	1474	4291.9	1472	4368.03	1470	4404.99
GR	1468	4419.78	1466	4435.01	1464	4454.29	1462	4489.38	1460	4517.69
GR	1458	4526.82	1456	4535.94	1454	4545.06	1452	4554.19	1450	4563.31
GR	1448	4572.44	1446	4580.51	1444	4588.95	1442	4597.51	1440	4606.07
GR	1438	4614.65	1436	4623.22	1434	4631.58	1432	4639.42	1430	4647.25
GR	1428	4655.08	1426	4662.93	1424	4670.84	1422	4678.74	1420	4686.85
GR	1418	4698.37	1416	4738.89	1416	4742.87	1416	4745.09	1415.15	4749.88
GR	1415.7	4766.09	1414	4773.04	1412	4781.48	1410	4789.92	1408	4798.11
GR	1406	4814.33	1406	5000	1406	5168.2	1408	5177.78	1410	5187.37
GR	1412	5196.96	1414	5206.55	1414.61	5209.05	1414.9	5217.67	1416	5221.57
GR	1418	5228.59	1420	5235.61	1422	5242.63	1424	5250.86	1426	5260.4
GR	1428	5270.06	1430	5279.73	1432	5290	1434	5301.13	1436	5313.24
GR	1438	5329.65	1440	5350.74						

ET		5.1			4678.48	5167.47				
X1	9.89	61	4741.17	5163.70	509	484	495			
GR	1480	4000	1480	4097.31	1478	4315.5	1476	4369.55	1474	4409.22
GR	1472	4428.88	1470	4447.01	1468	4467.06	1466	4484.74	1464	4501.35
GR	1462	4517.81	1460	4528.28	1458	4538.09	1456	4547.75	1454	4557.31
GR	1452	4566.31	1450	4574.08	1448	4581.28	1446	4588.48	1444	4595.7
GR	1442	4603.03	1440	4610.35	1438	4617.67	1436	4624.99	1434	4631.68
GR	1432	4638.82	1430	4646.76	1428	4654.71	1426	4662.61	1424	4670.44
GR	1422	4678.48	1422	4689.89	1422.06	4691.09	1422	4691.98	1421.45	4699.1
GR	1420	4741.17	1418	4771.38	1416	4778.99	1414	4786.68	1412	4794.99
GR	1410	4803.8	1408	4840.1	1406	4951.17	1406	4964.91	1407.43	5000
GR	1408	5114.09	1410	5126.94	1412	5136.13	1414	5145.32	1416	5154.51
GR	1418	5163.7	1418.8	5167.47	1418.7	5180.97	1418	5182.68	1418	5202.91
GR	1420	5221.64	1422	5236.46	1424	5244.79	1426	5252.68	1428	5260.3
GR	1430	5267.91								

ET		5.1			4813.54	5284.14				

X1	9.98	68	4828.11	5274.26	462	469	475			
GR	1476	4020	1476	4135.18	1474	4180.69	1472	4242.44	1472	4405.93
GR	1474	4459.87	1474	4532.3	1472	4564.64	1470	4600.47	1468	4627.43
GR	1466	4644.39	1464	4650.73	1462	4658.68	1460	4666.95	1458	4675.21
GR	1456	4683.48	1454	4692.64	1452	4702.53	1450	4711.67	1448	4720.68
GR	1446	4728.08	1444	4734.3	1442	4740.53	1440	4746.75	1438	4752.97
GR	1436	4759.19	1434	4766.97	1432	4775.44	1430	4783.95	1428	4813.54
GR	1428	4821.2	1428.96	4826.63	1428	4828.11	1426	4830.93	1425.95	4831.02
GR	1425.7	4834.7	1424	4840.53	1422	4847.1	1420	4853.67	1418	4860.24
GR	1416	4866.81	1414	4874.06	1412	4895.31	1410	4925.82	1410	4957.15
GR	1410	4985.2	1410	5000	1410	5196.05	1412	5234.32	1414	5243.75
GR	1416	5253.18	1418	5262.85	1420	5274.26	1421.67	5284.14	1421.15	5293.67

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GR	1420	5297.1	1418.2	5302.27	1420	5323.38	1422	5337.3	1424	5349.84
GR	1426	5361.61	1428	5370.82	1430	5379.99	1432	5389.15	1434	5398.3
GR	1436	5407.46	1438	5416.8	1440	5427.51				
ET		5.1			4840.61	5275.34				
X1	10.08	60	4841.72	5274.76	508	514	511			
GR	1476	4000	1478	4028.78	1480	4085.32	1480	4214.24	1478	4270.59
GR	1476	4333.92	1474	4385.59	1472	4415.91	1470	4435.24	1468	4453.48
GR	1466	4471.72	1464	4489.47	1462	4507.08	1460	4524.24	1458	4540.43
GR	1456	4560.04	1454	4579.47	1452	4664.02	1450	4686.12	1448	4711.59
GR	1446	4736.49	1444	4743.04	1442	4749.49	1440	4755.86	1438	4761.79
GR	1436	4767.07	1434	4772.52	1432	4778.04	1430	4783.56	1428	4789.08
GR	1426	4795.68	1426	4838.85	1426.35	4840.61	1426	4841.72	1424	4848.12
GR	1422	4854.53	1420	4861.27	1418	4869.07	1416	4880.94	1414	4903.67
GR	1412.5	5000	1412	5028.73	1412	5119.72	1414	5215.45	1416	5233.54
GR	1418	5244.05	1420	5254.55	1422	5265.05	1424	5274.76	1424.17	5275.34
GR	1424	5277.85	1423.5	5284.05	1422	5288.76	1420	5294.8	1420	5307.7
GR	1422	5411.56	1424	5519.39	1426	5568.38	1428	5584.58	1430	5600.76
ET		5.1			4784.92	5288.33				
X1	10.16	48	4797.94	5270.13	447	418	430			
GR	1438	4000	1436	4021.6	1434	4039.29	1432	4060.58	1430	4087.84
GR	1428	4116.35	1426	4163.37	1426	4172.5	1426	4329.8	1424	4615.05
GR	1422	4727.69	1422	4765.14	1424	4772.65	1426	4779.85	1427.4	4784.92
GR	1426.9	4794.24	1426	4797.94	1424	4806.13	1422	4814.72	1420	4823.31
GR	1418	4831.89	1416	4850.45	1416	5000	1416	5206.7	1418	5231.48
GR	1420	5241.03	1422	5250.58	1424	5260.12	1426	5270.13	1426.69	5273.76
GR	1426.8	5288.33	1426	5290.46	1424	5295.56	1423.73	5296.35	1424	5299.13
GR	1426	5318.58	1428	5331.54	1430	5343.77	1432	5355.48	1434	5367.2
GR	1436	5379.53	1438	5392.13	1440	5404.93	1442	5417.74	1444	5430.71
GR	1446	5445.59	1448	5460.48	1450	5475.78				
ET		5.1			4772.87	5312.98				

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X1	10.25	50	4772.87	5312.98	496	420	460			
GR	1462	4000	1462	4353.1	1462	4360.97	1464	4372.48	1466	4380.6
GR	1466	4394.69	1464	4399.98	1462	4402.86	1460	4405.73	1458	4408.62
GR	1456	4420.57	1454	4432.06	1452	4443.38	1450	4454.7	1448	4465.92
GR	1446	4476.55	1444	4487.22	1442	4497.92	1440	4509.43	1438	4521.31
GR	1436	4534.04	1434	4573.89	1434	4576.65	1434	4582.76	1432	4590.09
GR	1430	4597.07	1428	4604.05	1426	4740.78	1426	4758.62	1428	4766.33
GR	1429.7	4772.87	1429.36	4781.13	1428	4786.37	1426	4794.42	1424	4802.47
GR	1422	4810.53	1420	4841.46	1420	5225.51	1422	5254.59	1424	5264.85
GR	1426	5274.47	1428	5284.05	1429.2	5289.83	1429.27	5312.98	1430	5319.77
GR	1432	5338.35	1434	5354.33	1436	5382.04	1438	5398.07	1440	5414.09

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ET		5.1			4766.40	5271.99				
X1	10.33	47	4782.32	5269.64	519	373	444			
GR	1450	4000	1448	4073.55	1448	4076.89	1448	4151.72	1446	4166.89
GR	1444	4179.19	1442	4193.45	1440	4215.25	1438	4234.67	1436	4254.62
GR	1434	4273.64	1432	4293.27	1430	4335.46	1428	4352.32	1428	4394.66
GR	1430	4399.29	1432	4405.29	1434	4417.32	1436	4573.71	1434	4592.8
GR	1432	4607.16	1430	4731.8	1430	4744.77	1432	4752.19	1434	4759.52
GR	1435.8	4766.4	1435.17	4782.32	1434	4787.13	1432	4795.34	1430	4802.67
GR	1428	4810	1426	4817.69	1424	4826.71	1422.57	5000	1422	5069.23
GR	1422	5172.18	1424	5223.94	1426	5234.36	1428	5243.12	1430	5251.96
GR	1432	5260.8	1434	5269.64	1434.83	5271.99	1434.09	5290.23	1434	5290.52
GR	1432	5296.74	1430	5302.97						

ET		5.1			4756.86	5252.58				
X1	10.34	38	4775.45	5243.36	104	42	73			
GR	1434	4000	1434	4020.85	1432	4060.47	1432	4210.33	1432	4230.74
GR	1430	4304	1430	4351	1430	4400.08	1430	4476.92	1432	4558.77
GR	1432	4579.43	1430	4699.87	1430	4741.11	1432	4746.28	1434	4751.62
GR	1435.9	4756.86	1435	4775.45	1434	4779.27	1432	4786.85	1430	4794.42
GR	1428	4803.16	1426	4811.92	1424	4839.17	1422.77	5000	1422	5099.99
GR	1422	5118.31	1424	5204.31	1426	5212.97	1428	5217.15	1430	5226.8
GR	1432	5234.78	1434	5243.36	1435.48	5252.58	1434.92	5272.38	1434	5274.21
GR	1432	5278.35	1430	5282.48	1430	5283.56				

HAPPY VALLEY ROAD CROSSING

NC	0.030	0.030	0.030							
ET		5.1			4823.21	5272				
X1	10.38	34	4823.21	5293.86	173	143	162			
GR	1432	4050	1432	4345.47	1434	4359.49	1436	4382.17	1436	4444.22
GR	1434	4514.59	1434	4523.97	1436	4605.62	1436	4667.41	1434	4710.47
GR	1434	4776.7	1435.99	4798.29	1435.82	4823.21	1434	4831.49	1432	4838.95
GR	1430	4845.97	1428	4854.29	1426	4860.89	1424	4952.8	1424	5000
GR	1424	5110.95	1426	5223.7	1428	5293.86	1430	5418.28	1432	5426.63

GR	1434	5436.09	1436	5445.55	1436	5462.06	1438.33	5462.07	1438.33	5463.07
GR	1436	5463.08	1436	5478.57	1435.96	5479.62	1434	5488.87		

NC	0.035	0.035	0.035							
ET		5.1			4783.08	5262.74				
X1	10.41	52	4791.83	5251.18	198	142	171			
GR	1434	4064	1434	4072.38	1436	4078.9	1438	4083.68	1440	4114.64
GR	1442	4124.08	1444	4141.29	1444	4186.45	1442	4196.42	1438	4216.34
GR	1436	4223.27	1434	4229.95	1432	4236.99	1432	4370.62	1434	4373.56
GR	1436	4376.5	1438	4379.45	1440	4383.45	1440	4469.41	1438	4505.1
GR	1436	4516.74	1434	4526.64	1432	4535.95	1432	4754.33	1434	4759.91
GR	1435.7	4764.94	1436	4772.28	1436	4782.06	1438.34	4782.07	1438.34	4783.07
GR	1436	4783.08	1436	4791.83	1434	4800.27	1432	4808.85	1430	4817.15
GR	1428	4863.1	1428	5000	1428	5071.88	1428	5119.31	1428	5202.52
GR	1430	5229.35	1432	5236.74	1434	5244.12	1436	5251.18	1436	5262.73
GR	1438.9	5262.74	1438.9	5262.75	1436	5262.76	1436	5274.27	1434	5279.7
GR	1432	5285.08	1430	5290.4						

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ET		5.1			4758.78	5239.41				
X1	10.42	46	4772.17	5239.37	70	58	64			
GR	1434	4057	1434	4122.12	1434	4141.01	1432	4192.42	1432	4500.07
GR	1434	4518.47	1436	4524.56	1438	4530.85	1438	4566	1436	4602.78
GR	1434	4617.91	1432	4648.14	1432	4733.89	1434	4738.7	1436	4743.37
GR	1436	4757.77	1439	4757.78	1439	4758.78	1436	4758.79	1436	4772.17
GR	1434	4781.27	1432	4790.3	1431.35	4793.22	1430	4857.83	1428	4863.2
GR	1426	4872.34	1426	5000	1426	5035.16	1428	5059.55	1430	5071.52
GR	1430	5178.76	1430	5209.5	1432	5217.1	1434	5224.61	1436	5232.04
GR	1438	5239.37	1438	5239.40	1439.8	5239.41	1439.8	5240.41	1438	5240.42
GR	1438	5240.71	1437.62	5260.38	1436	5263.54	1434	5267.47	1432	5271.31
GR	1430	5275.13								

ET		5.1			4717.29	5219.45				
X1	10.51	85	4720.44	5201.75	439	487	472			
GR	1434	4000	1432	4130.14	1428	4139.76	1426	4144.4	1424	4149.04
GR	1422	4153.68	1418	4208.59	1418	4223.25	1418	4230.6	1418	4282.85
GR	1418	4360.51	1416	4368.14	1414	4375.06	1412	4381.98	1408	4395.81
GR	1406	4403.31	1404	4411.2	1402	4420.45	1398	4444.12	1396	4455.04
GR	1396	4458.71	1398	4462.24	1400	4465.78	1402	4469.3	1404	4472.7
GR	1406	4476.09	1406	4476.39	1404	4480.43	1402	4489.41	1400	4498.38
GR	1398	4511.86	1398	4523.62	1402	4606.66	1404	4619.36	1406	4625.57
GR	1408	4631.74	1412	4641.43	1414	4645.8	1416	4650.17	1418	4654.55
GR	1422	4663.24	1424	4666.88	1426	4670.52	1428	4674.16	1432	4681.45
GR	1434	4685.09	1436	4688.73	1438	4692.35	1440	4695.92	1440	4716.28
GR	1443.2	4716.29	1443.2	4717.29	1440.66	4717.32	1440	4720.44	1438	4729.62
GR	1436	4738.8	1434	4747.98	1432.68	4754.05	1434	4795.05	1434	4811.47

GR	1432	4826.23	1430	4844.12	1428	4880.89	1428	4916.32	1428	4916.6
GR	1428	4924.94	1430	4975.63	1430	4993.27	1430	5000	1430	5004.42
GR	1430	5038.01	1430	5060.04	1432	5076.82	1434	5173.28	1436	5182.8
GR	1438	5192.33	1440	5201.75	1440	5219.44	1443.73	5219.45	1443.73	5220.45
GR	1440.7	5220.46	1440.7	5237.12	1442	5243.12	1444	5251.74	1444	5270.2

NC	0.035	0.05	0.035							
ET		5.1			4664.91	5132.57				
X1	10.62	87	4665.97	5128.07	535	618	596			
GR	1438	4000	1438	4067.63	1438	4119.75	1438	4123.09	1436	4126.37
GR	1434	4129.64	1432	4132.91	1428	4139.57	1426	4142.92	1424	4157.62
GR	1422	4197.88	1422	4274.19	1422	4279.99	1418	4285.73	1416	4288.61
GR	1414	4291.48	1412	4294.36	1408	4300.1	1406	4302.98	1404	4305.85
GR	1402	4308.72	1398	4314.87	1396	4318.05	1394	4326.83	1392	4337.52
GR	1392	4407.2	1394	4430.83	1396	4477.86	1398	4520.73	1402	4551.89
GR	1404	4565.94	1406	4587.33	1408	4591.51	1412	4599.92	1414	4604.3
GR	1416	4608.68	1418	4613.06	1422	4621.46	1424	4625.35	1426	4629.24
GR	1428	4633.13	1432	4640.85	1434	4644.69	1436	4648.53	1438	4652.37
GR	1440	4656.21	1442	4660.05	1444	4663.89	1444	4663.90	1445.7	4663.91
GR	1445.7	4664.91	1444	4664.92	1444	4665.97	1443.33	4681.76	1442	4687.65
GR	1440	4696.48	1438	4705.29	1436.53	4711.79	1436	4760.05	1434	4774.11
GR	1432	4791.7	1432	4792.06	1434	4804.84	1434	4812.38	1434	4844.64
GR	1434	4908.11	1432	4978.39	1430	4993.25	1430	5000	1430	5019.08

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GR	1432	5025.21	1434	5047.48	1436	5072.96	1436.27	5078.41	1438	5088.52
GR	1440	5100.18	1442	5111.6	1444	5128.07	1444.34	5132.57	1446	5140.61
GR	1448	5150.2	1450	5159.88	1452	5169.67	1454	5179.15	1454	5200.76
GR	1454	5213.3	1456	5219.38						

NC	0.035	0.035	0.035							
ET		5.1			4748.11	5211.3				
X1	10.70	43	4759.88	5193.3	390	382	402			
GR	1444	4000	1444	4038.07	1444	4066.66	1444	4284.59	1442	4345.59
GR	1440	4412.2	1440	4618.19	1442	4696.02	1442.67	4720.77	1444	4727.26
GR	1446.2	4734.32	1446.2	4747.10	1448.10	4747.11	1448.10	4748.11	1446.2	4748.12
GR	1446.2	4759.88	1444	4767.51	1442	4775.38	1440.89	4779.56	1440	4856.65
GR	1438	4908.41	1436	4929.27	1434	4963.32	1434	5000	1434	5015.86
GR	1436	5039.71	1436	5072.24	1436	5119.55	1438	5144.54	1440	5154.48
GR	1442	5163.53	1444	5172.15	1446	5188.42	1446.48	5193.3	1448	5197.69
GR	1450	5201.41	1452	5205.12	1454	5208.74	1455.47	5211.3	1456	5213.46
GR	1458	5222.24	1458	5238.92	1456	5256.86				

ET		5.1			4782.29	5310.03				
X1	10.83	54	4800.8	5298.85	642	704	717			
GR	1448	4234	1448	4375.81	1448	4583.91	1446	4610.95	1446	4656.3
GR	1446	4742.93	1444.39	4761.2	1446	4765.18	1448	4769.97	1450	4774.76

GR	1452	4779.31	1452	4781.28	1454.60	4781.29	1454.60	4782.29	1452	4782.30
GR	1452	4800.8	1450	4808.34	1448	4816.39	1446	4825.37	1444	4844.86
GR	1442	4867.57	1440	4888.99	1438	4911.48	1438	4931.3	1440	4955.08
GR	1440	4961.15	1440	5000	1440	5073.72	1442	5081.76	1444	5085.61
GR	1446	5088.41	1446	5095.29	1446	5268.61	1448	5283.3	1450	5291.33
GR	1452	5298.85	1452	5310.02	1454.25	5310.03	1454.25	5311.03	1452	5311.04
GR	1452	5321.19	1450	5325.84	1448	5330.48	1446	5352.1	1444	5429.4
GR	1442	5433.87	1442	5453.7	1442	5462.01	1440	5467.15	1438	5472.69
GR	1438	5487.43	1440	5493.52	1442	5499.62	1444	5505.79		

ET		5.1			4766.74	5290				
X1	10.93	47	4790.58	5279.54	456	557	516			
GR	1450	4075	1450	4401.05	1450	4472.44	1450	4658.68	1448	4685.74
GR	1446	4692.07	1446	4738.32	1448	4747.74	1450	4752.28	1452	4756.82
GR	1454	4761.36	1456	4765.91	1456.34	4766.74	1456.31	4782.2	1456	4783.11
GR	1454	4790.58	1452	4801.13	1450	4811.94	1448	4852.07	1446	4882.26
GR	1444	4895.5	1442	4901.64	1440	4907.78	1440	4909.75	1440	5000
GR	1442	5025.23	1444	5039.36	1446	5045.88	1448	5065.33	1448	5141.49
GR	1446	5151.73	1446	5160.63	1448	5249	1450	5259.77	1452	5267.62
GR	1454	5275.29	1455.1	5279.54	1458.23	5290	1458.23	5291	1455.6	5291.01
GR	1455.6	5301.19	1454	5303.86	1452	5307.17	1450	5311.25	1448	5317.12
GR	1446	5322.99	1446	5329.64						

CONFLUENCE WITH BUCHANAN WASH

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ET		5.1			4581.43	5120.83				
X1	11.03	59	4598.63	5120.83	506	504	525			
GR	1454	4082	1454	4316.5	1454	4398.81	1454	4405.76	1454	4444.05
GR	1454	4463.63	1452	4472.52	1452	4546.98	1452	4556.11	1451.02	4559.09
GR	1452	4561.67	1454	4566.38	1456	4571.08	1458	4575.79	1460	4580.49
GR	1460.3	4581.43	1460.24	4597.21	1460	4598.63	1458	4606.22	1456	4613.78
GR	1454	4621.09	1452	4629.76	1450	4642.89	1449	4647.63	1448	4693.69
GR	1448	4736.54	1450	4814.76	1450	4864.18	1448	4942.71	1446	4949.67
GR	1444	4956.46	1442	4984.22	1442	5000	1442	5002.45	1444	5021.76
GR	1446	5026.06	1448	5043.9	1448	5055.01	1446	5062.54	1444	5069.86
GR	1442	5077.4	1442	5100.06	1444	5110.31	1446	5120.83	1448	5131.74
GR	1448	5143.33	1448	5159.14	1450	5172.98	1452	5186.65	1454	5200
GR	1456	5213.08	1458	5227.34	1460	5242.36	1460.78	5249.29	1460.5	5289.31
GR	1460	5290.38	1458	5301.57	1456	5314.34	1454	5329.62		

NC	0.050	0.035	0.035							
ET		5.1			4762	5149.91				
X1	11.14	32	4762	5149.91	606	610	606			
GR	1460	4331.11	1460	4359.12	1458	4450.29	1456	4510.13	1454	4516.73
GR	1452	4523.33	1450	4529.82	1450	4653.75	1452	4685.50	1452	4762
GR	1452	4830.94	1450	4913.55	1450	4965.11	1448	4975.89	1448	5000

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GR     1448    5056.87      1450    5060.92      1452    5064.99      1452    5097.48      1454    5121.70
GR     1456    5126.41      1458    5131.13      1460    5135.85      1462    5140.57      1464    5145.28
GR     1466    5149.91      1466    5173.09      1464    5177.70      1462    5182.56      1460    5187.75
GR     1458    5192.64      1456    5197.53

  BEGIN CORPS LEVEES

NC    0.035      0.035      0.020
ET                 5.1                        4825.06    5165.90
X1    11.19         80    4825.06    5161.07       277       212       225
GR   1466.0    4799.55    1466.00    4823.70   1466.00   4825.06   1465.44   4826.50   1464.00   4830.18
GR   1463.6    4831.26    1462.00    4835.30   1461.78   4835.87   1460.47   4839.23   1460.00   4840.18
GR   1459.8    4840.67    1458.00    4844.27   1457.08   4846.17   1456.00   4848.37   1454.68   4851.08
GR   1454.0    4852.47    1452.35    4858.63   1452.00   4861.70   1452.00   4865.26   1452.00   4867.38
GR   1452.0    4906.20    1452.00    4944.98   1452.00   4945.21   1452.00   4948.20   1452.00   4955.59
GR   1452.0    4974.23    1452.00    4983.63   1452.00   5000.00   1452.00   5052.40   1452.00   5075.88
GR   1452.0    5079.43    1452.00    5080.15   1452.00   5083.16   1452.00   5085.12   1452.21   5091.07
GR   1452.2    5091.41    1452.82    5104.84   1453.40   5118.66   1453.68   5124.97   1454.00   5131.82
GR   1455.9    5136.57    1456.00    5136.91   1456.04   5136.99   1458.00   5141.74   1458.38   5142.66
GR   1460.0    5146.57    1460.56    5147.92   1462.00   5151.40   1462.67   5153.01   1464.00   5156.23
GR   1464.7    5158.02    1466.00    5161.07   1466.79   5162.98   1468.00   5165.90   1468.00   5172.97
GR   1468.0    5198.33    1468.00    5198.71   1468.00   5208.06   1467.82   5208.79   1467.42   5210.39
GR   1466.0    5213.89    1464.59    5217.33   1464.00   5218.79   1462.10   5223.33   1462.00   5223.58
GR   1461.9    5223.73    1460.00    5228.27   1459.05   5230.49   1458.00   5232.96   1456.96   5238.16
GR   1456.5    5239.87    1456.32    5241.27   1456.00   5249.77   1456.00   5262.87   1455.84   5273.99
GR   1456.0    5290.85    1456.15    5294.26   1456.26   5305.86   1456.31   5328.45   1456.18   5342.81
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ET                 5.1                        4827.39    5184.66
X1    11.29         94    4827.39    5184.66       486       591       536
GR   1458.6    4498.36    1458.15    4531.48   1458.00   4544.39   1457.54   4552.02   1456.00   4556.76
GR   1455.7    4557.78    1454.54    4561.02   1454.00   4562.59   1454.00   4605.58   1454.95   4629.82
GR   1456.0    4655.24    1456.33    4661.92   1456.76   4672.63   1456.93   4675.47   1457.17   4678.43
GR   1457.5    4684.77    1456.93    4728.58   1456.76   4749.58   1457.01   4757.49   1457.65   4782.78
GR   1458.0    4791.03    1459.18    4795.59   1460.00   4799.16   1461.62   4803.60   1462.00   4804.63
GR   1462.5    4805.93    1464.00    4810.36   1464.90   4812.84   1466.00   4815.95   1466.99   4818.67
GR   1468.0    4821.53    1469.43    4825.50   1469.95   4827.39   1469.68   4829.36   1468.00   4841.57
GR   1466.8    4844.22    1466.00    4846.08   1464.73   4848.95   1464.00   4850.59   1462.59   4853.77
GR   1462.0    4855.10    1460.39    4858.74   1460.00   4859.58   1459.55   4860.64   1458.00   4864.17
GR   1456.8    4866.84    1456.00    4868.69   1454.77   4871.46   1454.00   4873.20   1453.89   4874.55
GR   1454.0    4879.94    1453.00    5000.00   1452.00   5012.73   1452.37   5018.03   1454.00   5112.94
GR   1454.0    5148.06    1456.00    5152.69   1458.00   5157.26   1460.00   5161.76   1462.00   5166.34
GR   1464.0    5170.83    1466.00    5175.45   1467.53   5178.97   1468.00   5180.06   1469.67   5183.89
GR   1470.0    5184.66    1470.00    5197.62   1468.00   5202.94   1466.00   5208.26   1464.00   5213.46
GR   1463.4    5215.12    1462.00    5218.65   1460.33   5224.18   1460.00   5225.24   1459.63   5239.24
GR   1459.4    5247.72    1459.19    5284.15   1459.63   5287.69   1460.00   5297.44   1461.23   5325.09
GR   1462.0    5340.83    1463.27    5373.45   1463.76   5392.61   1463.91   5397.59   1464.00   5403.23
GR   1464.0    5404.95    1463.47    5430.53   1463.48   5446.78   1463.10   5468.14   1463.01   5472.72
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GR   1462.8    5480.65    1462.48    5495.44    1462.00    5521.62    1462.00    5562.61

ET                 5.1                           4826.47    5170.48
X1    11.39         88    4826.47    5170.48        520        577        548
GR   1463.4    4540.53    1462.24    4575.55    1462.00    4587.19    1461.52    4589.31    1460.82    4592.35
GR   1460.0    4595.75    1459.40    4598.25    1458.00    4604.08    1457.77    4611.59    1457.02    4638.45
GR   1456.6    4651.90    1456.25    4664.52    1456.00    4673.48    1456.00    4685.48    1457.34    4692.89
GR   1458.0    4696.00    1458.60    4698.45    1460.00    4704.69    1460.84    4725.05    1461.22    4734.45
GR   1461.5    4742.42    1461.65    4747.02    1462.00    4766.90    1462.17    4770.00    1464.00    4788.85
GR   1465.9    4795.51    1466.00    4795.86    1468.00    4802.87    1469.82    4809.24    1470.00    4809.88
GR   1470.0    4826.47    1469.00    4828.70    1468.00    4830.90    1466.98    4833.16    1466.00    4835.34
GR   1465.0    4837.62    1464.00    4839.77    1462.95    4842.10    1462.00    4844.21    1460.92    4846.60
GR   1460.0    4848.64    1458.80    4851.31    1458.00    4853.08    1456.24    4856.99    1456.00    4857.51
GR   1454.1    4861.74    1454.00    4861.94    1453.77    4869.54    1453.41    4939.48    1453.70    5000.00
GR   1454.0    5052.77    1454.00    5137.60    1454.79    5139.20    1456.00    5141.80    1457.23    5144.29
GR   1458.0    5145.86    1459.52    5148.94    1460.00    5149.91    1461.94    5153.84    1462.00    5153.96
GR   1462.2    5154.43    1464.00    5158.09    1464.41    5158.94    1466.00    5162.22    1466.71    5163.68
GR   1468.0    5166.35    1468.90    5168.21    1470.00    5170.48    1471.01    5177.47    1471.30    5178.73
GR   1471.0    5187.97    1470.52    5189.60    1470.00    5191.33    1469.06    5193.63    1468.00    5196.22
GR   1466.9    5199.00    1466.00    5201.12    1464.50    5204.79    1464.00    5205.96    1463.56    5227.10
GR   1463.3    5302.27    1463.50    5392.62    1464.00    5459.82    1464.00    5496.38    1464.34    5500.49
GR   1466.0    5520.78    1466.48    5534.57    1467.00    5553.06

ET                 5.1                           4831.85    5174.56
X1    11.48         93    4831.85    5174.56        443        532        487
GR   1469.5    4463.12    1470.00    4514.20    1470.67    4526.19    1472.00    4532.14    1472.00    4536.27
GR   1471.2    4545.52    1472.00    4549.52    1471.16    4556.05    1470.89    4562.81    1470.59    4569.92
GR   1470.0    4586.17    1470.00    4654.03    1469.53    4674.85    1469.10    4688.69    1468.83    4699.75
GR   1468.6    4709.20    1468.27    4720.52    1468.00    4733.02    1467.35    4737.19    1467.59    4745.21
GR   1467.3    4752.17    1466.00    4781.13    1465.37    4784.00    1465.14    4788.41    1465.46    4789.08
GR   1465.9    4791.67    1466.00    4791.93    1467.84    4797.88    1468.00    4798.37    1468.75    4800.80
1
   15SEP04      15:08:30                                                                                  PAGE    16

GR   1469.1    4801.97    1469.53    4803.27    1470.00    4804.79    1472.00    4813.30    1472.00    4827.27
GR   1471.5    4828.31    1470.00    4831.85    1469.59    4832.79    1468.00    4836.43    1467.65    4837.23
GR   1466.0    4841.01    1465.73    4841.62    1464.00    4845.59    1463.85    4845.93    1462.31    4849.46
GR   1462.0    4850.16    1461.96    4850.24    1460.00    4854.68    1459.78    4855.19    1458.00    4859.04
GR   1456.8    4861.86    1456.00    4863.63    1454.62    4866.83    1454.00    4868.24    1454.00    4891.27
GR   1454.5    4982.94    1454.00    5000.00    1454.00    5139.53    1455.68    5143.25    1456.00    5143.95
GR   1457.7    5147.78    1458.00    5148.36    1459.81    5152.35    1460.00    5152.78    1461.90    5156.97
GR   1462.0    5157.19    1463.56    5160.62    1464.00    5161.59    1466.00    5165.91    1468.00    5170.24
GR   1468.3    5170.98    1470.00    5174.56    1471.57    5177.96    1472.00    5179.19    1472.00    5194.00
GR   1470.3    5199.62    1470.00    5200.65    1468.88    5204.39    1468.00    5207.39    1467.56    5217.72
GR   1466.9    5233.75    1466.58    5241.08    1466.33    5246.90    1466.40    5250.99    1466.61    5264.73
GR   1467.0    5289.91    1467.20    5306.66    1467.34    5341.05    1467.60    5361.43    1467.94    5383.99
GR   1467.8    5395.19    1467.56    5419.40    1468.00    5430.41

  END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17
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ET                 5.1                                  4845.32     5152.45
X1    11.56         87     4845.32     5152.45          386         396         390
GR   1471.8    4676.86     1471.19     4685.14      1470.77     4690.44     1470.54     4693.47     1470.29     4696.28
GR   1470.3    4700.82     1470.50     4703.37      1470.83     4707.69     1471.29     4713.13     1472.00     4721.56
GR   1472.0    4845.32     1470.73     4853.22      1470.34     4856.19     1470.00     4857.83     1469.42     4859.18
GR   1468.0    4862.39     1467.55     4863.42      1466.00     4867.01     1464.74     4869.91     1464.00     4871.63
GR   1462.4    4875.29     1462.00     4876.26      1460.24     4880.32     1460.00     4880.88     1459.55     4891.07
GR   1459.2    4900.27     1459.14     4911.50      1459.18     4917.72     1459.27     4936.45     1459.28     4951.90
GR   1459.3    4956.77     1459.32     4970.56      1459.36     4977.34     1459.35     4986.98     1459.40     5000.00
GR   1459.5    5006.02     1459.50     5012.85      1459.48     5022.30     1459.43     5032.20     1459.31     5049.20
GR   1459.3    5049.41     1459.31     5049.51      1459.31     5049.72     1459.30     5060.17     1459.48     5072.34
GR   1459.5    5084.60     1459.48     5091.51      1459.47     5098.77     1459.30     5109.95     1459.40     5114.80
GR   1459.6    5117.41     1459.59     5117.63      1460.00     5124.33     1461.59     5127.25     1461.65     5127.38
GR   1462.0    5128.28     1462.29     5129.00      1462.54     5129.65     1463.39     5131.68     1464.00     5133.13
GR   1465.0    5135.40     1466.00     5137.90      1466.70     5139.56     1468.00     5142.66     1468.53     5143.93
GR   1470.0    5147.43     1470.90     5149.69      1472.00     5152.45     1472.00     5165.70     1471.55     5168.67
GR   1471.2    5170.75     1470.00     5178.38      1470.00     5225.76     1470.27     5226.00     1472.00     5227.56
GR   1472.5    5228.46     1472.76     5229.77      1472.00     5233.24     1471.71     5234.57     1471.42     5235.87
GR   1471.4    5236.02     1470.93     5237.02      1470.00     5239.41     1470.00     5268.37     1470.59     5293.04
GR   1470.9    5296.51     1471.02     5306.55
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OUTLET OF I-17 CROSSING

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ET                 5.1                                  4880.47     5126.63
X1    11.57         92     4880.47     5126.63           72          75          73
GR   1470.8    4670.15     1471.04     4676.02      1471.81     4692.20     1472.00     4696.83     1472.63     4707.63
GR   1472.8    4711.11     1473.05     4715.60      1473.66     4746.09     1473.57     4751.49     1473.41     4760.54
GR   1474.0    4769.16     1474.00     4816.39      1473.19     4827.23     1472.71     4833.86     1472.64     4834.85
GR   1472.0    4844.37     1472.00     4861.16      1472.54     4870.52     1472.00     4880.47     1471.79     4880.62
GR   1470.1    4881.77     1470.00     4881.79      1468.35     4882.11     1468.00     4882.18     1466.41     4882.49
GR   1466.0    4882.57     1464.43     4882.88      1464.00     4882.96     1462.45     4883.27     1462.00     4883.35
GR   1461.6    4896.00     1461.53     4899.52      1461.22     4909.97     1461.03     4926.96     1460.86     4934.09
GR   1460.6    4946.27     1460.36     4961.63      1460.29     4993.04     1460.30     5000.00     1460.41     5002.11
GR   1460.5    5010.81     1460.63     5019.07      1461.14     5020.57     1461.34     5048.98     1461.18     5074.02
GR   1460.9    5090.68     1461.37     5103.14      1461.81     5115.32     1461.86     5116.93     1462.00     5120.67
GR   1462.6    5120.78     1464.00     5121.06      1464.40     5121.17     1466.00     5121.48     1466.51     5121.56
GR   1467.1    5121.69     1468.00     5121.86      1469.43     5122.14     1470.00     5122.25     1470.50     5123.25
GR   1471.7    5125.87     1472.00     5126.63      1472.00     5154.31     1471.46     5159.70     1470.38     5170.04
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GR   1470.4    5174.42     1470.49     5174.60      1470.77     5175.42     1472.00     5179.41     1472.00     5180.09
GR   1471.6    5182.32     1470.00     5193.35      1470.00     5209.59     1470.38     5210.71     1471.63     5215.00
GR   1472.0    5216.25     1472.00     5216.38      1472.00     5218.35     1471.83     5219.05     1470.00     5223.24
GR   1470.0    5225.98     1470.22     5226.92      1470.00     5227.88     1470.00     5234.90     1470.81     5241.05
GR   1470.8    5241.43     1471.05     5249.44      1470.99     5250.35     1470.90     5250.66     1470.72     5261.88
GR   1471.0    5291.96     1471.60     5306.88
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

 *PROF 1

 CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

 CCHV=     .100 CEHV=     .300
 *SECNO 8.690

 3265 DIVIDED FLOW

 3280 CROSS SECTION      8.69 EXTENDED       .71 FEET


 3470 ENCROACHMENT STATIONS=     3796.6    5556.9  TYPE=      1  TARGET=     1760.280
      8.690     14.00   1378.00   1373.77       .00   1378.26       .26       .00       .00   1381.16
   28920.0        .0   28799.5     120.5        .0    7026.5     198.7        .0        .0   1379.49
       .00       .00      4.10       .61      .000      .035      .045      .000   1364.00   4045.04
   .000709        0.        0.        0.         0        17         0       .00   1389.66   5556.89


 *SECNO 8.790

 3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .49


 3470 ENCROACHMENT STATIONS=     3855.7    5476.0  TYPE=      1  TARGET=     1620.250
      8.790     12.39   1378.39   1376.56       .00   1379.08       .68       .69       .13   1384.00
   28920.0        .0   28920.0        .0        .0    4358.1        .0      71.7      14.1   1380.00
       .02       .00      6.64       .00      .000      .035      .000      .000   1366.00   4138.06
   .002970      530.      539.      546.         1        14         0       .00    890.79   5028.86


 *SECNO 8.930

 3470 ENCROACHMENT STATIONS=     4280.0    5437.8  TYPE=      1  TARGET=     1157.800
      8.930     10.24   1380.24   1377.56       .00   1381.10       .85      1.97       .05   1386.72
   28903.0        .0   28903.0        .0        .0    3896.0        .0     140.1      26.5   1382.80
       .05       .00      7.42       .00      .000      .035      .000      .000   1370.00   4605.63
   .002513      565.      722.      711.         2        14         0       .00    597.87   5203.50


 *SECNO 9.010
1
    15SEP04      15:08:30
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SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .60


3470 ENCROACHMENT STATIONS=     4519.9    5433.5  TYPE=      1  TARGET=      913.610
     9.010      8.62   1380.81   1379.93       .00   1383.21      2.40       1.65        .46   1386.00
   28190.0        .0   28190.0        .0        .0    2267.3        .0      170.5       31.1   1389.58
       .06       .00     12.43       .00      .000      .035      .000       .000    1372.19   4839.14
   .006710      363.      430.      558.         3        15         0        .00     334.00   5173.15


*SECNO 9.080

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.49


3470 ENCROACHMENT STATIONS=     4515.3    5233.2  TYPE=      1  TARGET=      717.880
     9.080      9.93   1383.40   1380.51       .00   1384.87      1.47       1.57        .09   1388.00
   28054.0        .0   28054.0        .0        .0    2882.3        .0      192.1       33.9   1390.00
       .07       .00      9.73       .00      .000      .035      .000       .000    1373.47   4839.97
   .002976      432.      365.      165.         3        15         0        .00     332.28   5172.25


*SECNO 9.140

3470 ENCROACHMENT STATIONS=     4525.9    5437.5  TYPE=      1  TARGET=      911.700
     9.140     10.65   1384.65   1380.52       .00   1385.70      1.05        .78        .04   1390.00
   23960.0        .0   23960.0        .0        .0    2909.1        .0      214.2       36.3   1390.00
       .08       .00      8.24       .00      .000      .035      .000       .000    1374.00   4850.52
   .001848      288.      333.      385.         2        14         0        .00     299.11   5149.62


*SECNO 9.145

3265 DIVIDED FLOW
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SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

     9.145       9.71   1384.61   1381.08       .00   1385.74       1.13       .02        .02   1394.50
   21000.0         .0   21000.0        .0        .0    2460.3         .0     214.7       36.3   1394.70
       .08        .00      8.54       .00      .000      .035       .000      .000    1374.90   5025.74
   .002842        8.        8.        8.         2        23          0       .00     273.24   5314.01

*SECNO 9.155

3265 DIVIDED FLOW


3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

     9.155       9.75   1384.85   1381.28       .00   1385.97       1.12       .23        .00   1394.50
   21000.0         .0   21000.0        .0        .0    2473.5         .0     219.3       36.8   1394.70
       .08        .00      8.49       .00      .000      .035       .000      .000    1375.10   5025.40
   .002801       80.       80.       80.         2        23          0       .00     273.91   5314.34

*SECNO 9.160

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.44


3470 ENCROACHMENT STATIONS=     4528.7    5445.3  TYPE=      1  TARGET=      916.610
     9.160      11.23   1385.23   1380.37       .00   1386.02        .79       .02        .03   1390.00
   21000.0         .0   21000.0        .0        .0    2940.8         .0     219.8       36.9   1390.00
       .08        .00      7.14       .00      .000      .035       .000      .000    1374.00   4860.86
   .001343        8.        8.        8.         2        14          0       .00     294.45   5155.31


*SECNO 9.210
1
   15SEP04      15:08:30                                                                          PAGE    21
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SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.21


3470 ENCROACHMENT STATIONS=     4732.0    5190.0  TYPE=      1  TARGET=      458.050
     9.210       9.75   1385.75   1380.53       .00   1386.20       .45        .15        .03   1439.00
   21000.0        .0   21000.0        .0        .0    3893.1        .0      241.6       39.2   1391.00
       .10       .00      5.39       .00      .000      .020      .000       .000    1376.00   4740.24
   .000276      145.      279.      355.         1        18         0        .00     422.49   5162.73


*SECNO 9.220

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4664.0    5314.1  TYPE=      1  TARGET=      650.090
     9.220       3.92   1393.92   1393.92       .00   1395.81      1.89        .03        .43   1445.00
   21000.0        .0   21000.0        .0        .0    1901.0        .0      244.2       39.6   1397.00
       .10       .00     11.05       .00      .000      .035      .000       .000    1390.00   4673.53
   .011673      122.       39.      104.         0        18         0        .00     507.86   5181.40


*SECNO 9.250
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4573.0    5304.5  TYPE=      1  TARGET=      731.600
     9.250       4.39   1396.39   1396.39       .00   1397.93      1.53       1.59        .04   1394.00
   21000.0     1608.4   19391.6        .0     284.1    1898.7        .0      250.9       41.6   1398.64
       .10       5.66     10.21       .00      .040      .035      .000       .000    1392.00   4572.95
   .010867      155.      141.       82.         0         8         0        .00     706.58   5279.53


*SECNO 9.300

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.97


3470 ENCROACHMENT STATIONS=     4441.5    5290.2  TYPE=      1  TARGET=      848.690
     9.300       5.64   1398.64   1397.84       .00   1399.79      1.15       1.83        .04   1395.00
   29000.0     5889.8   23110.2        .0     969.1    2525.6        .0      267.9       46.2   1399.50
       .11       6.08      9.15       .00      .040      .035      .000       .000    1393.00   4441.50
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                                                                                MAIN50
   .005360      262.      261.      282.         2         8         0       .00    837.45   5278.95

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   15SEP04      15:08:30                                                                                                PAGE   22

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.350

3470 ENCROACHMENT STATIONS=     4252.4     5287.8  TYPE=      1  TARGET=     1035.390
     9.350       8.05   1400.05   1398.43       .00   1401.02       .97       1.21       .02   1399.00
   29000.0     4230.8   24769.2        .0     994.8    2967.4        .0      291.7      52.2   1400.00
       .12       4.25      8.35       .03      .040      .035      .035       .000   1392.00   4252.38
   .003621       291.      274.      274.         3         9         0        .00   1024.15   5276.53

*SECNO 9.420

3301 HV CHANGED MORE THAN HVINS

     9.420       8.43   1401.43   1399.91       .00   1402.93      1.50       1.75       .16   1401.00
   29000.0      710.8   28289.2        .0     251.8    2843.0        .0      324.1      60.9   1402.00
       .13       2.82      9.95       .00      .040      .035      .000       .000   1393.00   4356.69
   .005437       400.      399.      402.         2        12         0        .00    859.03   5215.72

*SECNO 9.450

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.450       9.14   1402.14   1402.14       .00   1404.00      1.87       .87       .11   1401.70
   29000.0      976.4   22757.5    5266.2     215.6    2215.5     370.6      332.0      63.0   1394.00
       .14       4.53     10.27     14.21      .040      .040      .040       .000   1393.00   4398.94
   .010589        93.      118.      126.         0         8         0        .00    849.73   5267.00

*SECNO 9.540

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.42
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3470 ENCROACHMENT STATIONS=     4663.4    5177.0  TYPE=      1  TARGET=      513.650
     9.540      9.34   1406.34   1404.62       .00   1407.68      1.34      3.62       .05   1408.00
   29000.0        .0   29000.0        .0        .0    3118.5        .0     365.8      70.4 100000.00
       .15       .00      9.30       .00      .000      .040      .000      .000   1397.00   4693.28
   .005271      410.      500.      515.         3        15         0       .00    483.72   5177.00
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.650

3470 ENCROACHMENT STATIONS=     4736.4    5231.9  TYPE=      1  TARGET=      495.470
     9.650      7.22   1409.22   1407.45       .00   1410.62      1.40      2.92       .02   1412.00
   29000.0        .0   29000.0        .0        .0    3052.0        .0     405.3      76.4 100000.00
       .17       .00      9.50       .00      .000      .040      .000      .000   1402.00   4765.59
   .005207      475.      558.      503.         3        11         0       .00    455.91   5221.50

*SECNO 9.700

3470 ENCROACHMENT STATIONS=     4752.7    5283.9  TYPE=      1  TARGET=      531.160
     9.700      6.46   1410.46   1409.00       .00   1411.86      1.40      1.24       .00   1412.00
   29000.0        .0   29000.0        .0        .0    3049.8        .0     423.2      79.2   1412.00
       .17       .00      9.51       .00      .000      .035      .000      .000   1404.00   4763.61
   .004542      253.      256.      259.         2        19         0       .00    502.17   5265.78

*SECNO 9.730

3470 ENCROACHMENT STATIONS=     4762.0    5298.7  TYPE=      1  TARGET=      536.690
     9.730      7.45   1411.45   1409.04       .00   1412.50      1.05       .60       .04   1414.00
   29000.0        .0   29000.0        .0        .0    3529.8        .0     436.0      81.2   1412.00
       .18       .00      8.22       .00      .000      .035      .000      .000   1404.00   4773.37
   .002842      187.      169.      151.         2        15         0       .00    508.94   5282.31

*SECNO 9.800

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =    .61
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                                                                  MAIN50
3470 ENCROACHMENT STATIONS=     4698.4    5217.7  TYPE=      1  TARGET=      519.300
     9.800      6.23   1412.23   1411.70       .00   1414.46      2.23      1.61       .36   1416.00
   29000.0        .0   29000.0        .0        .0    2418.4        .0     460.9      85.1   1414.00
       .19       .00     11.99       .00      .000      .035      .000      .000   1406.00   4780.52
   .007699      383.      365.      349.         3        15         0       .00    417.53   5198.05


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   15SEP04      15:08:30                                                                                    PAGE   24

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.890

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4678.5    5167.5  TYPE=      1  TARGET=      488.990
     9.890      9.57   1415.57   1413.76       .00   1417.30      1.72      2.78       .05   1420.00
   29000.0        .0   29000.0        .0        .0    2753.4        .0     490.3      89.5   1418.00
       .20       .00     10.53       .00      .000      .035      .000      .000   1406.00   4780.62
   .004288      509.      495.      484.         2        11         0       .00    371.95   5152.57


*SECNO 9.980

3470 ENCROACHMENT STATIONS=     4813.5    5284.1  TYPE=      1  TARGET=      470.600
     9.980      7.71   1417.71   1416.21       .00   1419.44      1.73      2.14       .00   1428.00
   29000.0        .0   29000.0        .0        .0    2749.8        .0     520.3      93.7   1420.00
       .21       .00     10.55       .00      .000      .035      .000      .000   1410.00   4861.17
   .004746      462.      475.      469.         2        14         0       .00    400.32   5261.49


*SECNO 10.080

3470 ENCROACHMENT STATIONS=     4840.6    5275.3  TYPE=      1  TARGET=      434.730
    10.080      8.18   1420.18   1418.93       .00   1422.07      1.89      2.58       .05   1426.00
   29000.0        .0   29000.0        .0        .0    2632.0        .0     551.9      98.4   1424.00
       .23       .00     11.02       .00      .000      .035      .000      .000   1412.00   4860.66
   .005387      508.      511.      514.         2        11         0       .00    394.84   5255.50


*SECNO 10.160

3470 ENCROACHMENT STATIONS=     4784.9    5288.3  TYPE=      1  TARGET=      503.410
    10.160      6.68   1422.68   1421.56       .00   1424.44      1.76      2.36       .01   1426.00
   29000.0        .0   29000.0        .0        .0    2724.2        .0     578.3     102.5   1426.00
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      .24       .00     10.65       .00      .000      .035      .000      .000   1416.00   4811.81
  .005583      447.      430.      418.         3        14         0       .00    442.00   5253.81

*SECNO 10.250

3470 ENCROACHMENT STATIONS=     4772.9    5313.0  TYPE=      1  TARGET=      540.110
   10.250      5.55   1425.55   1425.22       .00   1427.70      2.15      3.15       .12   1429.70
  29000.0        .0   29000.0       .0        .0    2464.7        .0     605.7     107.4 100000.00
      .25       .00     11.77       .00      .000      .035      .000      .000   1420.00   4796.21
  .008597      496.      460.      420.         2        15         0       .00    476.13   5272.33
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15SEP04 15:08:30 PAGE 25

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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 10.330

3470 ENCROACHMENT STATIONS=     4766.4    5272.0  TYPE=      1  TARGET=      505.590
   10.330      7.08   1429.08   1428.18       .00   1430.96      1.88      3.23       .03   1435.17
  29000.0        .0   29000.0       .0        .0    2636.8        .0     631.7     112.1   1434.00
      .26       .00     11.00       .00      .000      .035      .000      .000   1422.00   4806.04
  .006221      519.      444.      373.         2         8         0       .00    441.86   5247.90

*SECNO 10.340

3470 ENCROACHMENT STATIONS=     4756.9    5252.6  TYPE=      1  TARGET=      495.720
   10.340      7.49   1429.49   1428.59       .00   1431.43      1.94       .46       .02   1435.00
  29000.0        .0   29000.0       .0        .0    2591.3        .0     636.1     112.8   1434.00
      .26       .00     11.19       .00      .000      .035      .000      .000   1422.00   4796.65
  .006316      104.       73.       42.         3        11         0       .00    427.69   5224.34

*SECNO 10.380

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4823.2    5272.0  TYPE=      1  TARGET=      448.790
   10.380      6.15   1430.15   1430.15       .00   1432.79      2.64      1.13       .21   1435.82
  29000.0        .0   29000.0       .0        .0    2222.7        .0     645.0     114.4 100000.00
      .27       .00     13.05       .00      .000      .030      .000      .000   1424.00   4845.46
```

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                                                                    MAIN50
   .007761      173.      162.      143.         0        15         0       .00    426.54   5272.00

*SECNO 10.410
3280 CROSS SECTION     10.41 EXTENDED      3.51 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4783.1    5262.7  TYPE=      1  TARGET=      479.660
    10.410       5.51   1433.51   1433.51       .00   1436.10      2.59      1.54       .01   1436.00
   29000.0         .0   29000.0        .0        .0    2247.4        .0     653.8     116.1   1436.00
       .27        .00     12.90       .00      .000      .035      .000      .000   1428.00   4802.37
   .010530      198.      171.      142.         0        11         0       .00    439.95   5242.32


1
   15SEP04      15:08:30                                                                          PAGE   26

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 10.420
3280 CROSS SECTION     10.42 EXTENDED      5.11 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.53

3470 ENCROACHMENT STATIONS=     4758.8    5239.4  TYPE=      1  TARGET=      480.630
    10.420       9.11   1435.11   1433.59       .00   1436.63      1.52       .42       .11   1436.00
   29000.0         .0   29000.0        .0        .0    2932.3        .0     657.6     116.7   1438.00
       .27        .00      9.89       .00      .000      .035      .000      .000   1426.00   4776.24
   .004516       70.       64.       58.         4        11         0       .00    452.48   5228.72

*SECNO 10.510

3470 ENCROACHMENT STATIONS=     4717.3    5219.5  TYPE=      1  TARGET=      502.160
    10.510      41.33   1437.33   1436.40       .00   1439.05      1.72      2.37       .06   1440.00
   29000.0         .0   29000.0        .0        .0    2756.8        .0     688.4     121.7   1440.00
       .28        .00     10.52       .00      .000      .035      .000      .000   1396.00   4732.66
   .005603      439.      472.      487.         3        16         0       .00    456.51   5189.17
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*SECNO 10.620

3470 ENCROACHMENT STATIONS=     4664.9    5132.6  TYPE=      1  TARGET=      467.660
    10.620     48.58   1440.58   1439.56       .00   1442.46      1.89      3.36       .05   1444.00
   29000.0        .0   29000.0        .0        .0    2631.3        .0     725.3     127.6   1444.00
       .30       .00     11.02       .00      .000      .035      .000      .000   1392.00   4693.93
   .005676      535.      596.      618.         2        13         0       .00    409.55   5103.48

*SECNO 10.700

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4748.1    5211.3  TYPE=      1  TARGET=      463.190
    10.700      8.95   1442.95   1442.78       .00   1445.59      2.64      2.90       .23   1446.20
   29000.0        .0   29000.0        .0        .0    2223.9        .0     747.7     131.3   1446.48
       .31       .00     13.04       .00      .000      .035      .000      .000   1434.00   4771.63
   .009487      390.      402.      382.         2        25         0       .00    396.01   5167.64
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 10.830
3280 CROSS SECTION     10.83 EXTENDED      5.06 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4782.3    5310.0  TYPE=      1  TARGET=      527.740
    10.830     11.06   1449.06   1447.84       .00   1450.66      1.60      4.97       .10   1452.00
   29000.0        .0   29000.0        .0        .0    2854.6        .0     789.5     138.5   1452.00
       .33       .00     10.16       .00      .000      .035      .000      .000   1438.00   4812.11
   .005282      642.      717.      704.         2         8         0       .00    475.46   5287.57

*SECNO 10.930
3280 CROSS SECTION     10.93 EXTENDED      5.73 FEET

3470 ENCROACHMENT STATIONS=     4766.7    5290.0  TYPE=      1  TARGET=      523.260
    10.930     11.72   1451.72   1450.25       .00   1453.26      1.54      2.59       .01   1454.00
   29000.0        .0   29000.0        .0        .0    2915.8        .0     823.7     144.0   1455.10
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                                                                  MAIN50
      .34       .00      9.95       .00      .000      .035      .000      .000   1440.00   4802.61
  .004762      456.      516.      557.         2        15         0       .00    463.94   5266.55

*SECNO 11.030
3280 CROSS SECTION     11.03 EXTENDED       .20 FEET

3470 ENCROACHMENT STATIONS=     4581.4    5120.8  TYPE=      1  TARGET=      539.400
    11.030     12.20   1454.20   1451.95       .00   1455.32      1.12      2.02       .04   1460.00
   29000.0        .0   29000.0        .0        .0    3419.1        .0     861.9     149.9 100000.00
       .36       .00      8.48       .00      .000      .035      .000      .000   1442.00   4620.36
  .003171      506.      525.      504.         2        15         0       .00    500.47   5120.83

*SECNO 11.140
3280 CROSS SECTION     11.14 EXTENDED       .35 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
1
   15SEP04      15:08:30                                                                          PAGE   28

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4762.0    5149.9  TYPE=      1  TARGET=      387.910
    11.140      8.35   1456.35   1456.35       .00   1459.30      2.95      3.19       .55   1452.00
   29000.0        .0   29000.0        .0        .0    2104.1        .0     900.3     155.9 100000.00
       .37       .00     13.78       .00      .000      .035      .000      .000   1448.00   4762.00
  .010428      606.      606.      610.         0        19         0       .00    365.23   5127.23

*SECNO 11.190
3280 CROSS SECTION     11.19 EXTENDED      2.92 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4825.1    5165.9  TYPE=      1  TARGET=      340.840
    11.190      7.10   1459.10   1459.10       .00   1462.40      3.30      1.18       .11   1466.00
   29000.0        .0   29000.0        .0        .0    1989.0        .0     910.8     157.6   1466.00
       .38       .00     14.58       .00      .000      .020      .000      .000   1452.00   4842.07
  .003157      277.      225.      212.         0        11         0       .00    302.32   5144.39
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*SECNO 11.290

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4827.4    5184.7  TYPE=      1  TARGET=      357.270
    11.290       9.36   1461.36   1460.32       .00   1463.80      2.44       1.32       .09   1469.95
   29000.0         .0   29000.0        .0        .0    2312.0        .0      937.3     161.4 100000.00
       .39       .00     12.54       .00      .000      .020      .000       .000   1452.00   4856.55
   .001968      486.      536.      591.         3         8         0        .00    308.31   5164.87


*SECNO 11.390

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4826.5    5170.5  TYPE=      1  TARGET=      344.010
    11.390       9.49   1462.90   1460.63       .00   1464.71      1.81        .84       .06   1470.00
   29000.0         .0   29000.0        .0        .0    2685.7        .0      968.7     165.3 100000.00
       .40       .00     10.80       .00      .000      .020      .000       .000   1453.41   4842.22
   .001226      520.      548.      577.         2        15         0        .00    313.63   5155.85
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 11.480

3470 ENCROACHMENT STATIONS=     4831.9    5174.6  TYPE=      1  TARGET=      342.710
    11.480       9.59   1463.59   1461.02       .00   1465.28      1.69        .56       .01   1470.00
   29000.0         .0   29000.0        .0        .0    2781.6        .0      999.3     168.8 100000.00
       .41       .00     10.43       .00      .000      .020      .000       .000   1454.00   4846.52
   .001094      443.      487.      532.         2        15         0        .00    314.18   5160.69


*SECNO 11.560

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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                                                                  MAIN50
3470 ENCROACHMENT STATIONS=     4845.3    5152.5  TYPE=      1  TARGET=      307.130
    11.560      7.71   1466.85   1466.85       .00   1470.38      3.54       .67       .56   1472.00
   29000.0        .0   29000.0        .0        .0    1921.0        .0    1020.4     171.4 100000.00
       .42       .00     15.10       .00      .000      .020      .000      .000   1459.14   4865.05
   .003133      386.     * 390.      396.         0        15         0       .00    274.85   5139.91


*SECNO 11.570
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4880.5    5126.6  TYPE=      1  TARGET=      246.160
    11.570      8.41   1468.70   1468.70       .00   1472.57      3.87       .23       .10   1472.00
   29000.0        .0   29000.0        .0        .0    1837.5        .0    1023.5     171.8 100000.00
       .42       .00     15.78       .00      .000      .020      .000      .000   1460.29   4882.04
   .003175       72.       73.       75.         0         8         0       .00    239.95   5122.00


1
   15SEP04      15:08:30                                                                          PAGE   30


                                                                   THIS RUN EXECUTED 15SEP04     15:08:31
*************************************
 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

IGINAL MODEL SKNKLOMR.IH

SUMMARY PRINTOUT
```

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
	8.690	28920.00	1378.00	1373.77	4.10	14.00	1389.66	7225.27	.28	4045.04	5556.89
*	8.790	28920.00	1378.39	1376.56	6.64	12.39	890.79	4358.08	.53	4138.06	5028.86
	8.930	28903.00	1380.24	1377.56	7.42	10.24	597.87	3896.04	.51	4605.63	5203.50
*	9.010	28190.00	1380.81	1379.93	12.43	8.62	334.00	2267.34	.84	4839.14	5173.15
*	9.080	28054.00	1383.40	1380.51	9.73	9.93	332.28	2882.29	.58	4839.97	5172.25

	9.140	23960.00	1384.65	1380.52	8.24	10.65	299.11	2909.13	.47	4850.52	5149.62
	9.145	21000.00	1384.61	1381.08	8.54	9.71	273.24	2460.30	.51	5025.74	5314.01
	9.155	21000.00	1384.85	1381.28	8.49	9.75	273.91	2473.51	.51	5025.40	5314.34
*	9.160	21000.00	1385.23	1380.37	7.14	11.23	294.45	2940.81	.40	4860.86	5155.31
*	9.210	21000.00	1385.75	1380.53	5.39	9.75	422.49	3893.15	.31	4740.24	5162.73
*	9.220	21000.00	1393.92	1393.92	11.05	3.92	507.86	1901.01	1.01	4673.53	5181.40
*	9.250	21000.00	1396.39	1396.39	10.21	4.39	706.58	2182.89	.96	4572.95	5279.53
*	9.300	29000.00	1398.64	1397.84	9.15	5.64	837.45	3494.62	.72	4441.50	5278.95
	9.350	29000.00	1400.05	1398.43	8.35	8.05	1024.15	3962.30	.60	4252.38	5276.53
	9.420	29000.00	1401.43	1399.91	9.95	8.43	859.03	3094.80	.73	4356.69	5215.72
*	9.450	29000.00	1402.14	1402.14	10.27	9.14	849.73	2801.68	.86	4398.94	5267.00
*	9.540	29000.00	1406.34	1404.62	9.30	9.34	483.72	3118.52	.65	4693.28	5177.00

1

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
	9.650	29000.00	1409.22	1407.45	9.50	7.22	455.91	3051.98	.65	4765.59	5221.50
	9.700	29000.00	1410.46	1409.00	9.51	6.46	502.17	3049.78	.68	4763.61	5265.78
	9.730	29000.00	1411.45	1409.04	8.22	7.45	508.94	3529.77	.55	4773.37	5282.31
*	9.800	29000.00	1412.23	1411.70	11.99	6.23	417.53	2418.41	.88	4780.52	5198.05
	9.890	29000.00	1415.57	1413.76	10.53	9.57	371.95	2753.42	.68	4780.62	5152.57
	9.980	29000.00	1417.71	1416.21	10.55	7.71	400.32	2749.82	.71	4861.17	5261.49
	10.080	29000.00	1420.18	1418.93	11.02	8.18	394.84	2631.99	.75	4860.66	5255.50
	10.160	29000.00	1422.68	1421.56	10.65	6.68	442.00	2724.15	.76	4811.81	5253.81
	10.250	29000.00	1425.55	1425.22	11.77	5.55	476.13	2464.72	.91	4796.21	5272.33
	10.330	29000.00	1429.08	1428.18	11.00	7.08	441.86	2636.83	.79	4806.04	5247.90
	10.340	29000.00	1429.49	1428.59	11.19	7.49	427.69	2591.31	.80	4796.65	5224.34

*	10.380	29000.00	1430.15	1430.15	13.05	6.15	426.54	2222.66	1.01	4845.46	5272.00
*	10.410	29000.00	1433.51	1433.51	12.90	5.51	439.95	2247.41	1.01	4802.37	5242.32
*	10.420	29000.00	1435.11	1433.59	9.89	9.11	452.48	2932.27	.68	4776.24	5228.72
	10.510	29000.00	1437.33	1436.40	10.52	41.33	456.51	2756.84	.75	4732.66	5189.17
	10.620	29000.00	1440.58	1439.56	11.02	48.58	409.55	2631.26	.77	4693.93	5103.48
	10.700	29000.00	1442.95	1442.78	13.04	8.95	396.01	2223.86	.97	4771.63	5167.64
	10.830	29000.00	1449.06	1447.84	10.16	11.06	475.46	2854.63	.73	4812.11	5287.57
	10.930	29000.00	1451.72	1450.25	9.95	11.72	463.94	2915.85	.70	4802.61	5266.55
	11.030	29000.00	1454.20	1451.95	8.48	12.20	500.47	3419.09	.57	4620.36	5120.83
*	11.140	29000.00	1456.35	1456.35	13.78	8.35	365.23	2104.11	1.01	4762.00	5127.23
*	11.190	29000.00	1459.10	1459.10	14.58	7.10	302.32	1989.01	1.00	4842.07	5144.39
	11.290	29000.00	1461.36	1460.32	12.54	9.36	308.31	2312.00	.81	4856.55	5164.87
	11.390	29000.00	1462.90	1460.63	10.80	9.49	313.63	2685.68	.65	4842.22	5155.85
	11.480	29000.00	1463.59	1461.02	10.43	9.59	314.18	2781.57	.62	4846.52	5160.69
*	11.560	29000.00	1466.85	1466.85	15.10	7.71	274.85	1920.98	1.01	4865.05	5139.91

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
*	11.570	29000.00	1468.70	1468.70	15.78	8.41	239.95	1837.51	1.01	4882.04	5122.00

SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING SECNO= 8.790 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 9.010 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 9.080 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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WARNING SECNO=      9.160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.210  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.220  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.220  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      9.250  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.250  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.450  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.450  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.540  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     10.380  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.380  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     10.410  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.410  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     10.420  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     11.140  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.140  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.190  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.190  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.560  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.560  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.570  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.570  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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2% Annual Chance Flood

Breakout Channel

Input File: bkt50.dat

```
* Combined Split Flow Model
* WEIR IS SET ALONG HIGH GROUND RIDGE WEST OF 35TH AVENUE AND
* SOUTH OF PINNACLE PEAK ROAD
SF
JC      SPLIT FLOW ANALYSIS DUE TO WEIR ACTION
JP      0     0.5     100       1       0
TW       RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57
WS      2    8.55    8.57      -1    2.65
WC        1381.9      97 1380.27
TW       RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58
WS      2    8.57    8.58      -1    2.65
WC       1380.27      92 1378.96
TW       RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60
WS      2    8.58    8.60      -1    2.65
WC       1378.96      80 1378.76
TW       RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62
WS      2    8.60    8.62      -1    2.65
WC       1378.76     128  1379.5
TW       RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64
WS      2    8.62    8.64      -1    2.65
WC        1379.5     100 1379.87
TW       RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66
WS      2    8.64    8.66      -1    2.65
WC       1379.87     100 1380.23
TW       RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68
WS      2    8.66    8.68      -1    2.65
WC       1380.23     100 1380.64
TW       RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70
WS      2    8.68    8.70      -1    2.65
WC       1380.64     100 1381.27
TW       RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72
WS      2    8.70    8.72      -1    2.65
WC       1381.27     100  1381.9
TW       RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74
WS      2    8.72    8.74      -1    2.65
WC        1381.9     100 1382.55
TW       RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77
WS      2    8.74    8.77      -1    2.65
WC       1382.55     200 1384.48
TW       RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79
WS      2    8.77    8.79      -1    2.65
WC       1384.48      81 1385.31
TW       RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80
WS      2    8.79    8.80      -1    2.65
WC       1385.31      49 1385.75
TW       RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81
WS      2    8.80    8.81      -1    2.65
WC       1385.75     105    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86
WS      2    8.81    8.86      -1    2.65
WC          1386     266    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89
WS      2    8.86    8.89      -1    2.65
WC          1386     175    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93
WS      2    8.89    8.93      -1    2.65
WC          1386     217    1387
TW       RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00
WS      2    8.93    9.00      -1    2.65
WC          1387     370    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01
WS      2    9.00    9.01      -1    2.65
WC          1390      76    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04
WS      2    9.01    9.04      -1    2.65
WC          1390     137    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08
WS      2    9.04    9.08      -1    2.65
WC          1390     200    1391
TW       RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10
WS      2    9.08    9.10      -1    2.65
WC          1391     137  1392.0
EE
T1       COMBINED CVL (North and South) AND TETRA TECH'S EAST SPLIT FLOW MODEL
T2       INPUT FILE: bkt50.dat
T3       EMCON 8/5/04 by: GRB
T4       CVL'S X-SECTIONS (8.55 - 9.15) HAVE BEEN RE-NAMED TO MATCH
T5       TETRA TECH'S RIVER MILE NOMENCLATURE
```

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T6      BOUNDARY CONDITIONS WERE TAKEN FROM TETRA TECH'S EAST SPLIT FLOW MODEL
T7      FLOWRATE WAS DETERMINED BY MATCHING WSEL AT RIVER MILE 9.25 IN THE
T8      MAIN50.DAT MODEL.

J1      0       2                    0.007                0       0
QT      1    8000
NC 0.040   0.040   0.040     0.1     0.3
X1  8.55      10    9965   10072       0       0       0
GR1381.7    9915  1380.9    9965 1378.36 9979.42 1377.36 9985.03    1374 9999.67
GR1375.010003.77  1376.010012.77    137810046.83  1380.010052.41  1381.9   10072
* CVL STATION 3
X1  8.57       9    9975   10062      97      97      97
GR1382.2    9905  1381.0 9957.55    1381    9968  1380.0    9975 1374.69 9995.58
GR  1376 9998.47    137610001.60  1378.010022.35 1380.27   10062
* CVL STATION 100
X1  8.58      14 9973.96   10030      92      92      92
X3    10
GR1382.2    9875 1381.34 9925.30  1380.0 9935.97  1380.0 9950.56 1378.72 9963.92
GR1378.9 9973.96  1378.0 9979.62 1377.29 9984.99 1375.95 9990.91  1376.4 9997.51
GR1376.410003.79  1376.710009.69  1378.010014.44 1378.96   10030
* DOWNSTREAM SIDE OF CULVERTS - CVL STATION 192
SC 3.013      .5     2.7               2       0      80     2.1  1376.5  1376.4
X1  8.60      11 9970.83   10030      80      80      80
X2                     2          1380.5
X3    10
BT      3  9973.9  1381.3           10004  1380.5           10030 1378.82
GR  1383 9924.75  1382.3 9925.90  1382.3 9970.83  1381.3  9973.9    1378 9983.49
GR1376.5 9991.93  1376.5 9997.91  1376.510001.78  1376.7   10004  1378.010013.25
GR1378.7   10030
* UPSTREAM SIDE OF CULVERTS - CVL STATION 272
X1  8.62       6 9983.94   10037     128     128     128
GR1382.5 9924.19  1382.8    9970 1378.00 9983.94 1377.11 9994.73 1377.1110004.77
GR1379.5   10037
* CVL STATION 400
X1  8.64       4    9970   10028     100     100     100
GR1382.5 9923.75  1381.7    9970 1377.62   10000 1379.87   10028
* SOUTH OF HANCE BOULIVARD - CVL STATION 500
X1  8.66       5 9931.5310029.76     100     100     100
GR1382.0 9924.19  1381.3 9931.53 1380.68    9970 1378.13   10000 1380.2310029.76
* CVL STATION 600
X1  8.68       5    9972   10031     100     100     100
GR1382.2 9927.05 1381.05    9972 1378.00 9990.92 1378.92   10000 1380.64   10031
* CVL STATION 700
X1  8.70       5  9984.5   10033     100     100     100
GR1382.2    9910 1381.35    9960 1379.59 9984.50  1379.8   10000 1381.27   10033
* CVL STATION 800
X1  8.72       4 9983.26   10030     100     100     100
GR1383.2 9925.99    1383 9983.26  1380.9   10000  1381.9   10030
* CVL STATION 900
X1  8.74       5    998210029.18     100     100     100
GR1385.3 9927.33    1385 9957.83    1385    9982    1382   10000 1382.5510029.18
* CVL STATION 1000
X1  8.77       6    9989   10017     200     200     200
GR1385.6 9936.14  1385.4    9989  1383.6    9995  1383.6   10005  1384.4   10017
GR1384.4   10040
* CVL STATION 1200
NH      1    .016   10048
X1  8.79       3   10011   10048      81      81      81
GR1385.3    9963 1385.99   10011 1385.31   10048
* SOUTH OF PARKSIDE LANE - TETRA TECH STATION MATCH - CVL STATION 1281
NH      1    .016   10052
X1  8.80       3   10015   10052      49      49      49
GR1385.1    9966 1385.79   10015 1385.75   10052
* CVL STATION 1330
NH      1    .01610100.74
X1  8.81      15    998010100.74      20     105      29
GR  1388    9725    1388 9758.88    1388 9773.41    1388 9847.74    1388 9873.96
GR  1388 9898.54    1388 9920.62    1388 9949.55    1388 9959.31    1388    9980
GR1384.710003.87 1385.0010035.11 1385.0010042.29 1385.0010069.88    138610100.74
* CVL STATION 1359
NH      1     .0310079.07
X1  8.86      23 9874.5910079.07     266     266     266
X3                         9700 1386.67
GR1387.5    9386    1387    9433    1386    9471    1385    9491    1385    9548
GR  1386    9574 1386.32 9597.38 1386.63 9626.66 1386.67 9713.22  1386.5 9774.68
GR1386.3 9822.26    1386 9874.59 1385.69 9893.32 1385.53 9914.97 1385.01 9952.81
GR1383.8 9969.32    1383 9981.35    1382 9992.12    138210009.37    138310023.87
GR  138410039.45 1384.7310053.84    138610079.07
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* CVL STATION 1625
NH     1     .0310065.05
X1  8.89      23 9942.5210065.05     175     175     175
X3                          9601    1388
GR1390.3 9289.97 1390.00 9326.96 1390.00 9340.05 1389.00 9373.44 1388.00 9413.37
GR1387.0 9482.88 1386.31 9501.52 1386.29 9513.91 1386.48 9523.04 1387.00 9535.79
GR1387.9 9585.07 1387.99 9601.04 1387.63 9687.08 1387.38 9757.74 1387.00 9820.33
GR1386.0 9942.52 1385.00 9958.61 1384.00 9970.67 1382.00 9991.61 1382.0010009.81
GR1383.410022.67 1385.0110041.63 1386.0010065.05
* CVL STATION 1800
NH     2     .0310044.82    .01610046.99
X1  8.93      38 9968.5210044.82     217     217     217
GR1397.0 9120.13 1397.00 9134.51 1396.00 9153.49 1395.00 9155.41 1395.00 9162.29
GR1394.6 9192.51 1394.00 9229.41 1393.57 9241.75 1393.00 9275.34 1393.00 9277.60
GR1392.0 9287.63 1391.00 9310.35 1391.00 9342.55 1390.40 9360.99 1389.80 9371.35
GR1389.0 9379.50 1388.95 9385.38 1388.00 9472.01 1388.00 9480.92 1387.36 9496.67
GR1387.1 9525.25 1387.24 9574.28 1387.23 9658.54 1386.96 9737.74 1386.48 9823.34
GR1386.0 9894.09 1386.00 9923.16 1387.00 9954.39 1387.00 9968.52 1385.00 9988.91
GR1384.9 9993.20 1385.0010003.66 1384.6710006.10 1385.0010012.74 1385.0010019.94
GR1386.010038.35 1387.0010044.82 1386.9210046.99
* CVL STATION 2017
NH     2     .0310035.65    .016   10040
X1  9.00      28 9968.2210035.65     370     370     370
X3    10
GR1394.9 9185.54 1394.37 9231.03 1394.00 9248.91 1393.20 9263.39 1392.67 9275.80
GR1392.7 9294.12 1392.01 9300.06 1391.95 9320.94 1391.32 9344.61 1391.00 9357.15
GR1391.0 9370.24 1390.51 9444.59 1390.00 9553.58 1389.69 9607.41 1389.37 9693.57
GR1389.0 9791.14 1388.57 9847.63 1388.45 9912.41 1388.51 9946.72 1388.54 9968.22
GR1388.0 9979.69 1385.93 9988.45 1385.00 9993.90 1385.0310004.08 1386.0510009.74
GR1389.010021.77 1390.0010035.65    1390   10040
* CVL STATION 2387
SC 2.013      .5     2.7              3       0      75     2.1 1386.02    1385
NH     2     .0310037.29    .016   10040
X1  9.01      33 9947.3510037.29      76      76      76
X2                     2         1389.89
X3    10
BT     4  9896.9 1389.37         9930.05 1389.98        10006.96 1390.27
BT10037. 1389.89
GR1397.8 9185.54 1397.00 9201.36 1397.00 9206.41 1396.00 9206.73 1396.00 9219.83
GR1395.4 9242.50 1395.00 9252.28 1393.89 9317.37 1393.16 9347.04 1392.00 9381.56
GR1391.4 9405.92 1391.00 9432.55 1391.00 9465.97 1390.72 9533.86 1390.59 9603.95
GR1390.2 9682.01 1389.87 9740.25 1389.67 9804.11 1389.45 9885.39 1389.39 9896.69
GR1390.0 9930.05 1390.05 9936.10 1391.00 9938.65 1391.00 9944.23 1391.22 9947.35
GR1390.8 9956.07 1390.00 9963.63 1389.00 9982.55 1386.02 9994.89 1386.0210006.96
GR1389.010018.85 1390.0010037.29    1390   10040
* CVL STATION 2463
NH     2     .0310034.44    .016   10040
X1  9.04      18 9965.8910034.44     137     137     137
GR1397.5 9317.90 1397.49 9325.05 1397.00 9353.18 1397.00 9377.94 1394.00 9387.32
GR1393.0 9393.21 1392.95 9424.18 1392.00 9629.08 1391.36 9785.41 1391.35 9851.75
GR1391.0 9883.49 1391.00 9965.89 1390.52 9972.28 1387.00 9989.15 1387.0010011.45
GR1389.210022.01    139010034.44    1390   10040
* CVL STATION 2600
NH     2     .0310029.03    .016   10040
X1  9.08      15  9968.510033.71     200     200     200
GR1396.0 9300.07 1396.00 9353.28 1395.36 9370.91 1395.00 9379.29 1394.00 9385.46
GR1394.0 9451.69 1393.41 9534.65 1393.00 9710.81 1392.01 9961.65 1392.00 9968.50
GR1388.0 9989.48 1388.0010009.46 1391.0010029.03 1391.0010033.71    1391   10040
* CVL STATION 2800
NH     1     .03 10025.6
X1  9.10      25 9963.69 10025.6     137     137     137
GR1397.0 9327.52 1397.00 9330.04 1397.84 9337.46 1396.00 9358.21 1395.00 9368.07
GR1394.6 9376.12 1394.44 9384.36 1394.44 9395.42 1394.29 9408.30 1394.27 9432.12
GR1394.0 9443.12 1394.00 9709.01 1393.96 9714.46 1393.81 9772.64 1393.00 9863.05
GR1393.0 9963.69 1392.00 9969.68 1390.74 9979.26 1388.78 9989.57 1388.03 9998.62
GR1388.610006.61 1389.0010009.41 1391.0010015.48 1391.0010020.98 1392.0010025.60
* END OF CVL CROSS-SECTIONS - CVL STATION 2937
NC 0.016   0.016   0.016     0.1     0.3
ET           5.1                 4118.87 5417.09
X1  9.13      14    4918 5058.33      98      98      98
GR  1398 3791.43    1396 3900.27    1394 4218.11    1394 4768.19  1393.5    4918
GR1393.2    5000    1393 5058.33  1392.7    5085    1392 5150.02    1392 5159.91
GR  1392 5184.70    1391    5264    1392 5371.23    1392 5418.98
* CENTERLINE OF PINNACLE PEAK ROAD - BEGIN TETRA TECH'S EAST SPLIT X-SECTIONS
ET           5.1                 4133.61 5424.01
X1  9.14      14 4904.57 5104.30      33      33      33
GR  1398 3778.24    1396 3970.46    1394 4372.20    1394 4430.01  1394.4 4623.96
GR  1394 4904.57  1393.6    5000  1393.6 5007.96    1393 5104.30    1392 5183.96
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GR1391.5 5279.96    1392 5352.33  1392.8 5407.96  1392.8 5429.75
* UPSTREAM SIDE OF PINNACLE PEAK ROAD
NC 0.040   0.040   0.040
ET           5.1                  4161.93 5443.67
X1  9.15      11 4994.21 5082.19      43      43      43
GR  1398 3719.90    1396 3900.98    1394 4069.81    1393 4325.58    1393    4814
GR  1393 4994.21    1393    5000    1393 5082.19    1392 5210.16    1392 5403.10
GR  1392 5443.67
* RIGHT BANK ENCROACHMENT SET AT FLOW SPLIT BOUNDARY FOR BREAKOUT WSEL MATCHING
ET           5.1                     3023 4572.95
X1  9.25      45    4825 5285.60     155      82     141
GR  1400    3023  1399.1    3123  1397.6    3223  1395.8    3323  1392.7    3423
GR  1392    3523    1393    3623  1393.6    3723  1393.5    3762    1394    3874
GR  1394    3898    1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25    1395 4365.84    1395  4385.4  1395.7 4563.07    1396 4565.34
GR  1397 4570.45 1397.57 4572.95 1397.46 4582.97    1397 4585.82    1396 4590.84
GR  1395 4598.19    1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32    1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38    1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
EJ
ER
```

2% Annual Chance Flood

Breakout Channel

Output File: bkt50.out

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.2;  May 1991            *
 *                                        *
 *  RUN DATE    15SEP04    TIME   15:11:12 *
 *****************************************
```

```
*****************************************
*  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
```

1

15SEP04 15:11:12

THIS RUN EXECUTED 15SEP04 15:11:12

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*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

Combined Split Flow Model
WEIR IS SET ALONG HIGH GROUND RIDGE WEST OF 35TH AVENUE AND
SOUTH OF PINNACLE PEAK ROAD

SPLIT FLOW BEING PERFORMED

SF

```
JC     SPLIT FLOW ANALYSIS DUE TO WEIR ACTION
JP     0     0.5     100       1       0

TW      RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57
WS     2    8.55    8.57      -1    2.65
WC        1381.9      97 1380.27
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```
TW      RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58
WS     2    8.57    8.58      -1    2.65
WC       1380.27      92 1378.96

TW      RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60
WS     2    8.58    8.60      -1    2.65
WC       1378.96      80 1378.76

TW      RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62
WS     2    8.60    8.62      -1    2.65
WC       1378.76     128  1379.5

TW      RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64
WS     2    8.62    8.64      -1    2.65
WC        1379.5     100 1379.87

TW      RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66
WS     2    8.64    8.66      -1    2.65
WC       1379.87     100 1380.23

TW      RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68
WS     2    8.66    8.68      -1    2.65
WC       1380.23     100 1380.64

TW      RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70
WS     2    8.68    8.70      -1    2.65
WC       1380.64     100 1381.27
1
   15SEP04      15:11:12
```



```
TW      RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72
WS     2    8.70    8.72      -1    2.65
WC       1381.27     100  1381.9

TW      RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74
WS     2    8.72    8.74      -1    2.65
WC        1381.9     100 1382.55

TW      RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77
WS     2    8.74    8.77      -1    2.65
WC       1382.55     200 1384.48

TW      RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79
WS     2    8.77    8.79      -1    2.65
WC       1384.48      81 1385.31

TW      RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80
WS     2    8.79    8.80      -1    2.65
WC       1385.31      49 1385.75
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TW      RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81
WS     2    8.80    8.81      -1    2.65
WC       1385.75     105    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86
WS     2    8.81    8.86      -1    2.65
WC          1386     266    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89
WS     2    8.86    8.89      -1    2.65
WC          1386     175    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93
WS     2    8.89    8.93      -1    2.65
WC          1386     217    1387

TW      RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00
WS     2    8.93    9.00      -1    2.65
WC          1387     370    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01
WS     2    9.00    9.01      -1    2.65
WC          1390      76    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04
WS     2    9.01    9.04      -1    2.65
WC          1390     137    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08
WS     2    9.04    9.08      -1    2.65
WC          1390     200    1391
1
   15SEP04      15:11:12
```



```
TW      RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10
WS     2    9.08    9.10      -1    2.65
WC          1391     137  1392.0
1
   15SEP04      15:11:12
```



```
T1      COMBINED CVL (North and South) AND TETRA TECH'S EAST SPLIT FLOW MODEL
T2      INPUT FILE: bkt50.dat
T3      EMCON 8/5/04 by: GRB
T4      CVL'S X-SECTIONS (8.55 - 9.15) HAVE BEEN RE-NAMED TO MATCH
T5      TETRA TECH'S RIVER MILE NOMENCLATURE
T6      BOUNDARY CONDITIONS WERE TAKEN FROM TETRA TECH'S EAST SPLIT FLOW MODEL
T7      FLOWRATE WAS DETERMINED BY MATCHING WSEL AT RIVER MILE 9.25 IN THE
T8      MAIN50.DAT MODEL.
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J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

      0        2                          0.007                   0         0

QT        1       8000
NC    0.040      0.040      0.040       0.1       0.3
X1     8.55         10       9965     10072         0         0         0
GR   1381.7       9915     1380.9      9965   1378.36   9979.42   1377.36   9985.03      1374   9999.67
GR   1375.0   10003.77     1376.0  10012.77      1378  10046.83    1380.0  10052.41    1381.9     10072
  CVL STATION 3

X1     8.57          9       9975     10062        97        97        97
GR   1382.2       9905     1381.0   9957.55      1381      9968    1380.0      9975   1374.69   9995.58
GR     1376    9998.47       1376  10001.60    1378.0  10022.35   1380.27     10062
  CVL STATION 100

X1     8.58         14    9973.96     10030        92        92        92
X3       10
GR   1382.2       9875    1381.34    9925.30    1380.0    9935.97    1380.0   9950.56   1378.72   9963.92
GR   1378.9    9973.96     1378.0    9979.62   1377.29    9984.99   1375.95   9990.91    1376.4   9997.51
GR   1376.4   10003.79     1376.7   10009.69    1378.0   10014.44   1378.96     10030
  DOWNSTREAM SIDE OF CULVERTS - CVL STATION 192

SC    3.013         .5       2.7                    2         0        80       2.1    1376.5    1376.4
X1     8.60         11    9970.83     10030        80        80        80
X2                            2                1380.5
X3       10
BT        3     9973.9     1381.3                10004    1380.5                10030   1378.82
GR     1383    9924.75     1382.3    9925.90   1382.3    9970.83    1381.3    9973.9      1378   9983.49
GR   1376.5    9991.93     1376.5    9997.91   1376.5   10001.78    1376.7     10004    1378.0  10013.25
GR   1378.7      10030
  UPSTREAM SIDE OF CULVERTS - CVL STATION 272

X1     8.62          6    9983.94     10037      128       128       128
GR   1382.5    9924.19     1382.8      9970  1378.00    9983.94   1377.11   9994.73   1377.11  10004.77
GR   1379.5      10037
  CVL STATION 400

X1     8.64          4       9970     10028      100       100       100
GR   1382.5    9923.75     1381.7      9970  1377.62     10000   1379.87     10028
  SOUTH OF HANCE BOULIVARD - CVL STATION 500
1
   15SEP04      15:11:12                                                                          PAGE     5


X1     8.66          5    9931.53  10029.76      100       100       100
GR   1382.0    9924.19     1381.3    9931.53  1380.68      9970   1378.13     10000   1380.23  10029.76
  CVL STATION 600
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X1      8.68          5       9972      10031        100        100        100
GR    1382.2    9927.05    1381.05       9972    1378.00    9990.92    1378.92      10000    1380.64      10031
  CVL STATION 700

X1      8.70          5     9984.5      10033        100        100        100
GR    1382.2       9910    1381.35       9960    1379.59    9984.50     1379.8      10000    1381.27      10033
  CVL STATION 800

X1      8.72          4    9983.26      10030        100        100        100
GR    1383.2    9925.99       1383    9983.26     1380.9      10000     1381.9      10030
  CVL STATION 900

X1      8.74          5       9982   10029.18        100        100        100
GR    1385.3    9927.33       1385    9957.83       1385       9982       1382      10000    1382.55   10029.18
  CVL STATION 1000

X1      8.77          6       9989      10017        200        200        200
GR    1385.6    9936.14     1385.4       9989     1383.6       9995     1383.6      10005     1384.4      10017
GR    1384.4      10040
  CVL STATION 1200

NH         1       .016      10048
X1      8.79          3      10011      10048         81         81         81
GR    1385.3       9963    1385.99      10011    1385.31      10048
  SOUTH OF PARKSIDE LANE - TETRA TECH STATION MATCH - CVL STATION 1281

NH         1       .016      10052
X1      8.80          3      10015      10052         49         49         49
GR    1385.1       9966    1385.79      10015    1385.75      10052
  CVL STATION 1330

NH         1       .016   10100.74
X1      8.81         15       9980   10100.74         20        105         29
GR      1388       9725       1388    9758.88       1388    9773.41       1388    9847.74       1388    9873.96
GR      1388    9898.54       1388    9920.62       1388    9949.55       1388    9959.31       1388       9980
GR    1384.7   10003.87    1385.00   10035.11    1385.00   10042.29    1385.00   10069.88       1386   10100.74
  CVL STATION 1359

NH         1        .03   10079.07
X1      8.86         23    9874.59   10079.07        266        266        266
X3                                       9700    1386.67
GR    1387.5       9386       1387       9433       1386       9471       1385       9491       1385       9548
GR      1386       9574    1386.32    9597.38    1386.63    9626.66    1386.67    9713.22     1386.5    9774.68
GR    1386.3    9822.26       1386    9874.59    1385.69    9893.32    1385.53    9914.97    1385.01    9952.81
GR    1383.8    9969.32       1383    9981.35       1382    9992.12       1382   10009.37       1383   10023.87
GR      1384   10039.45    1384.73   10053.84       1386   10079.07
  CVL STATION 1625
1
   15SEP04      15:11:12                                                                                  PAGE     6
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NH        1        .03   10065.05
X1     8.89         23    9942.52   10065.05       175       175       175
X3                                       9601      1388
GR   1390.3    9289.97    1390.00    9326.96    1390.00   9340.05   1389.00   9373.44   1388.00   9413.37
GR   1387.0    9482.88    1386.31    9501.52    1386.29   9513.91   1386.48   9523.04   1387.00   9535.79
GR   1387.9    9585.07    1387.99    9601.04    1387.63   9687.08   1387.38   9757.74   1387.00   9820.33
GR   1386.0    9942.52    1385.00    9958.61    1384.00   9970.67   1382.00   9991.61   1382.00  10009.81
  CVL STATION 1800

NH        2        .03   10044.82       .016   10046.99
X1     8.93         38    9968.52   10044.82        217       217       217
GR   1397.0    9120.13    1397.00    9134.51    1396.00   9153.49   1395.00   9155.41   1395.00   9162.29
GR   1394.6    9192.51    1394.00    9229.41    1393.57   9241.75   1393.00   9275.34   1393.00   9277.60
GR   1392.0    9287.63    1391.00    9310.35    1391.00   9342.55   1390.40   9360.99   1389.80   9371.35
GR   1389.0    9379.50    1388.95    9385.38    1388.00   9472.01   1388.00   9480.92   1387.36   9496.67
GR   1387.1    9525.25    1387.24    9574.28    1387.23   9658.54   1386.96   9737.74   1386.48   9823.34
GR   1386.0    9894.09    1386.00    9923.16    1387.00   9954.39   1387.00   9968.52   1385.00   9988.91
GR   1384.9    9993.20    1385.00   10003.66    1384.67  10006.10   1385.00  10012.74   1385.00  10019.94
GR   1386.0   10038.35    1387.00   10044.82    1386.92  10046.99
  CVL STATION 2017

NH        2        .03   10035.65       .016      10040
X1     9.00         28    9968.22   10035.65        370       370       370
X3       10
GR   1394.9    9185.54    1394.37    9231.03    1394.00   9248.91   1393.20   9263.39   1392.67   9275.80
GR   1392.7    9294.12    1392.01    9300.06    1391.95   9320.94   1391.32   9344.61   1391.00   9357.15
GR   1391.0    9370.24    1390.51    9444.59    1390.00   9553.58   1389.69   9607.41   1389.37   9693.57
GR   1389.0    9791.14    1388.57    9847.63    1388.45   9912.41   1388.51   9946.72   1388.54   9968.22
GR   1388.0    9979.69    1385.93    9988.45    1385.00   9993.90   1385.03  10004.08   1386.05  10009.74
GR   1389.0   10021.77    1390.00   10035.65       1390     10040
  CVL STATION 2387

SC    2.013         .5       2.7                     3         0        75       2.1   1386.02      1385
NH        2        .03   10037.29       .016      10040
X1     9.01         33    9947.35   10037.29         76        76        76
X2                            2                  1389.89
X3       10
BT        4     9896.9    1389.37                9930.05   1389.98              10006.96   1390.27
BT    10037.    1389.89
GR   1397.8    9185.54    1397.00    9201.36    1397.00   9206.41   1396.00   9206.73   1396.00   9219.83
GR   1395.4    9242.50    1395.00    9252.28    1393.89   9317.37   1393.16   9347.04   1392.00   9381.56
GR   1391.4    9405.92    1391.00    9432.55    1391.00   9465.97   1390.72   9533.86   1390.59   9603.95
GR   1390.2    9682.01    1389.87    9740.25    1389.67   9804.11   1389.45   9885.39   1389.39   9896.69
GR   1390.0    9930.05    1390.05    9936.10    1391.00   9938.65   1391.00   9944.23   1391.22   9947.35
GR   1390.8    9956.07    1390.00    9963.63    1389.00   9982.55   1386.02   9994.89   1386.02  10006.96
GR   1389.0   10018.85    1390.00   10037.29       1390     10040
  CVL STATION 2463
1
   15SEP04      15:11:12                                                                          PAGE     7
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NH        2        .03   10034.44       .016      10040
X1     9.04         18    9965.89   10034.44        137        137        137
GR   1397.5    9317.90    1397.49    9325.05    1397.00    9353.18    1397.00    9377.94    1394.00    9387.32
GR   1393.0    9393.21    1392.95    9424.18    1392.00    9629.08    1391.36    9785.41    1391.35    9851.75
GR   1391.0    9883.49    1391.00    9965.89    1390.52    9972.28    1387.00    9989.15    1387.00   10011.45
GR   1389.2   10022.01       1390   10034.44       1390      10040
  CVL STATION 2600

NH        2        .03   10029.03       .016      10040
X1     9.08         15     9968.5   10033.71        200        200        200
GR   1396.0    9300.07    1396.00    9353.28    1395.36    9370.91    1395.00    9379.29    1394.00    9385.46
GR   1394.0    9451.69    1393.41    9534.65    1393.00    9710.81    1392.01    9961.65    1392.00    9968.50
GR   1388.0    9989.48    1388.00   10009.46    1391.00   10029.03    1391.00   10033.71       1391      10040
  CVL STATION 2800

NH        1        .03    10025.6
X1     9.10         25    9963.69    10025.6        137        137        137
GR   1397.0    9327.52    1397.00    9330.04    1397.84    9337.46    1396.00    9358.21    1395.00    9368.07
GR   1394.6    9376.12    1394.44    9384.36    1394.44    9395.42    1394.29    9408.30    1394.27    9432.12
GR   1394.0    9443.12    1394.00    9709.01    1393.96    9714.46    1393.81    9772.64    1393.00    9863.05
GR   1393.0    9963.69    1392.00    9969.68    1390.74    9979.26    1388.78    9989.57    1388.03    9998.62
GR   1388.6   10006.61    1389.00   10009.41    1391.00   10015.48    1391.00   10020.98    1392.00   10025.60
  END OF CVL CROSS-SECTIONS - CVL STATION 2937

NC    0.016      0.016      0.016        0.1        0.3
ET                 5.1                          4118.87    5417.09
X1     9.13         14       4918    5058.33         98         98         98
GR     1398    3791.43       1396    3900.27       1394    4218.11       1394    4768.19     1393.5       4918
GR   1393.2       5000       1393    5058.33     1392.7       5085       1392    5150.02       1392    5159.91
GR     1392    5184.70       1391       5264       1392    5371.23       1392    5418.98
  CENTERLINE OF PINNACLE PEAK ROAD - BEGIN TETRA TECH'S EAST SPLIT X-SECTIONS

ET                 5.1                          4133.61    5424.01
X1     9.14         14    4904.57    5104.30         33         33         33
GR     1398    3778.24       1396    3970.46       1394    4372.20       1394    4430.01     1394.4    4623.96
GR     1394    4904.57     1393.6       5000     1393.6    5007.96       1393    5104.30       1392    5183.96
GR   1391.5    5279.96       1392    5352.33     1392.8    5407.96     1392.8    5429.75
  UPSTREAM SIDE OF PINNACLE PEAK ROAD

NC    0.040      0.040      0.040
ET                 5.1                          4161.93    5443.67
X1     9.15         11    4994.21    5082.19         43         43         43
GR     1398    3719.90       1396    3900.98       1394    4069.81       1393    4325.58       1393       4814
GR     1393    4994.21       1393       5000       1393    5082.19       1392    5210.16       1392    5403.10
GR     1392    5443.67
  RIGHT BANK ENCROACHMENT SET AT FLOW SPLIT BOUNDARY FOR BREAKOUT WSEL MATCHING

ET                 5.1                          3023    4572.95
X1     9.25         45       4825    5285.60        155         82        141
GR     1400       3023     1399.1       3123     1397.6       3223     1395.8       3323     1392.7       3423
GR     1392       3523       1393       3623     1393.6       3723     1393.5       3762       1394       3874
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GR     1394       3898       1394     4003.81       1394     4062.18       1395     4283.87       1395     4298.29
GR     1395    4301.25       1395     4365.84       1395      4385.4     1395.7     4563.07       1396     4565.34
1
   15SEP04      15:11:12                                                                                    PAGE    8

GR     1397    4570.45    1397.57     4572.95    1397.46     4582.97       1397     4585.82       1396     4590.84
GR     1395    4598.19       1395     4614.18       1395     4621.31       1394     4735.08       1394     4738.18
GR     1394    4838.32       1393     4871.51       1392     4892.27       1392        5000       1392      5077.8
GR     1393    5179.38       1394     5266.49       1395     5275.95       1396     5278.52       1397     5281.09
GR     1398    5283.83    1398.64      5285.6       1399     5290.86       1400     5304.55       1399     5325.36

1
   15SEP04      15:11:12                                                                                    PAGE    9

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*PROF 1

CCHV=      .100 CEHV=      .300
*SECNO 8.550
2096 WSEL NOT GIVEN, AVG OF MAX, MIN USED
     8.550      2.29   1376.29       .00       .00   1376.43       .14       .00       .00   1380.90
      80.0        .0      80.0        .0        .0      26.7        .0        .0        .0   1381.90
       .00       .00      3.00       .00      .000      .040      .000      .000   1374.00   9989.68
   .007115        0.        0.        0.         0         0         5       .00     28.10  10017.77

*SECNO 8.570
     8.570      2.35   1377.04       .00       .00   1377.20       .17       .76       .01   1380.00
      80.0        .0      80.0        .0        .0      24.4        .0        .1        .1   1380.27
       .01       .00      3.28       .00      .000      .040      .000      .000   1374.69   9986.49
   .008723       97.       97.       97.         2         0         0       .00     25.87  10012.35

*SECNO 8.580

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.45

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1378.90 ELREA=      1378.96

     8.580      1.70   1377.65       .00       .00   1377.75       .09       .54       .01   1378.90
      80.0        .0      80.0        .0        .0      32.5        .0        .1        .1   1378.96
       .02       .00      2.46       .00      .000      .040      .000      .000   1375.95   9982.22
   .004169       92.       92.       92.         3         0         0       .00     30.97  10013.19
```

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.013	.50	2.70	.00	2.00	.00	80.00	2	1	1376.50	1376.40

CHART 2 - CORRUGATED METAL PIPE CULVERT
SCALE 1 - HEADWALL

5140, NORMAL DEPTH EXCEEDS CULVERT HEIGHT
*SECNO 8.600
5155, 20 TRIALS OF QWEIR NOT ENOUGH; POSSIBLY INVALID
FINAL QWEIR + QCULV = 136. DOES NOT EQUAL ACTUAL Q = 80.

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 1380.53
3280 CROSS SECTION 8.60 EXTENDED 1.83 FEET

1
15SEP04 15:11:12 PAGE 10

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 8.77

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1380.61	1380.00	2.78	57.	79.	.528	9.4	1380.50	27.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1382.30 ELREA= 1378.70

8.600	4.03	1380.53	.00	.00	1380.53	.00	2.78	.00	1382.30
80.0	.0	80.0	.0	.0	151.4	.0	.3	.2	1378.70
.06	.00	.53	.00	.000	.040	.000	.000	1376.50	9976.14
.000054	80.	80.	80.	0	0	0	.00	53.86	10030.00

*SECNO 8.620
3280 CROSS SECTION 8.62 EXTENDED 1.03 FEET

8.620	3.42	1380.53	.00	.00	1380.54	.00	.01	.00	1378.00
80.0	3.1	76.9	.0	9.3	138.3	.0	.7	.4	1379.50

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                                                                  BKT50
      .13       .34       .56       .00      .040      .040      .000      .000   1377.11   9976.58
  .000064      128.      128.      128.         2         0         0       .00     60.42  10037.00

*SECNO 8.640
3280 CROSS SECTION      8.64 EXTENDED       .67 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .42

    8.640      2.92   1380.54       .00       .00   1380.55       .01       .01       .00   1381.70
     80.0        .0      80.0        .0        .0      81.6        .0       1.0        .5   1379.87
      .15       .00       .98       .00      .000      .040      .000      .000   1377.62   9978.53
  .000367      100.      100.      100.         2         0         0       .00     49.47  10028.00

*SECNO 8.660
3280 CROSS SECTION      8.66 EXTENDED       .35 FEET

    8.660      2.45   1380.58       .00       .00   1380.60       .02       .04       .00   1381.30
     80.0        .0      80.0        .0        .0      77.1        .0       1.2        .6   1380.23
      .18       .00      1.04       .00      .000      .040      .000      .000   1378.13   9971.15
  .000548      100.      100.      100.         2         0         0       .00     58.61  10029.76

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   15SEP04      15:11:12                                                                          PAGE   11

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 8.680
3280 CROSS SECTION      8.68 EXTENDED       .00 FEET

    8.680      2.64   1380.64       .00       .00   1380.67       .02       .06       .00   1381.05
     80.0        .0      80.0        .0        .0      68.3        .0       1.3        .7   1380.64
      .20       .00      1.17       .00      .000      .040      .000      .000   1378.00   9974.52
  .000777      100.      100.      100.         2         0         0       .00     56.48  10031.00

*SECNO 8.700

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .37

    8.700      1.18   1380.77       .00       .00   1380.85       .07       .16       .02   1379.59
     80.0      18.9      61.1        .0       9.7      27.3        .0       1.5        .9   1381.27
      .22      1.94      2.24       .00      .040      .040      .000      .000   1379.59   9968.06
  .005543      100.      100.      100.         3         0         0       .00     53.73  10021.79
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*SECNO 8.720
3280 CROSS SECTION      8.72 EXTENDED       .01 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.720      1.01   1381.91   1381.91       .00   1382.18       .27      1.09       .06   1383.00
      80.0        .0      80.0        .0        .0      19.3        .0       1.5       1.0   1381.90
       .22       .00      4.14       .00      .000      .040      .000      .000   1380.90   9991.96
   .030709      100.      100.      100.         2        15         0       .00     38.04  10030.00


*SECNO 8.740
3280 CROSS SECTION      8.74 EXTENDED       .66 FEET


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.32

     8.740      1.21   1383.21       .00       .00   1383.31       .10      1.12       .02   1385.00
      80.0        .0      80.0        .0        .0      31.7        .0       1.6       1.1   1382.55
       .23       .00      2.52       .00      .000      .040      .000      .000   1382.00   9992.74
   .005712      100.      100.      100.         4         0         0       .00     36.44  10029.18
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 8.770
3280 CROSS SECTION      8.77 EXTENDED       .28 FEET

     8.770      1.08   1384.68       .00       .00   1384.84       .15      1.51       .02   1385.40
      80.0        .0      69.4      10.6        .0      21.0       6.5       1.7       1.3   1384.40
       .25       .00      3.31      1.62      .000      .040      .040      .000   1383.60   9991.39
   .010471      200.      200.      200.         3         0         0       .00     48.61  10040.00


1490 NH CARD USED
*SECNO 8.790

3265 DIVIDED FLOW

3280 CROSS SECTION      8.79 EXTENDED       .69 FEET

7185 MINIMUM SPECIFIC ENERGY
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3720 CRITICAL DEPTH ASSUMED
     8.790       .69   1385.99   1385.99       .00   1386.16       .18       .59       .01   1385.99
      96.8      55.3      41.5        .0      16.4      12.4        .0       1.8       1.4   1385.31
       .26      3.38      3.33       .00      .016      .016      .000      .000   1385.30   9963.00
   .005611       81.       81.       81.         4        14         0       .00     84.53  10048.00

1490 NH CARD USED
*SECNO 8.800
3280 CROSS SECTION      8.80 EXTENDED      1.04 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.38

     8.800      1.04   1386.14   1386.11       .00   1386.38       .24       .20       .02   1385.79
     179.3     141.8      37.5        .0      33.9      13.6        .0       1.8       1.5   1385.75
       .26      4.18      2.76       .00      .016      .016      .000      .000   1385.10   9966.00
   .003405       49.       49.       49.         4        14         0       .00     86.00  10052.00

1490 NH CARD USED
*SECNO 8.810
3280 CROSS SECTION      8.81 EXTENDED       .33 FEET

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   15SEP04      15:11:12
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  4.28

     8.810      1.64   1386.34       .00       .00   1386.41       .08       .02       .02   1388.00
     284.2        .0     284.2        .0        .0     127.6        .0       1.9       1.5   1386.00
       .27       .00      2.23       .00      .000      .016      .000      .000   1384.70   9992.09
   .000467       20.       29.      105.         3         0         0       .00    108.65  10100.74

1490 NH CARD USED
*SECNO 8.860
3280 CROSS SECTION      8.86 EXTENDED       .47 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.67

3470 ENCROACHMENT STATIONS=     9700.0   10079.1  TYPE=      1  TARGET=    -9700.000
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```
 ELENCL=   1386.67  ELENCR= 100000.00
     8.860      4.47   1386.47       .00       .00   1386.49       .02       .07       .01   1386.00
     498.3       6.0     492.3        .0      20.2     428.6        .0       3.6       2.8 100000.00
       .33       .30      1.15       .00      .030      .030      .000      .000   1382.00   9781.88
   .000201      266.      266.      266.         4         0         0       .00    297.19  10079.07

1490 NH CARD USED
*SECNO 8.890
3280 CROSS SECTION      8.89 EXTENDED       .49 FEET

3470 ENCROACHMENT STATIONS=     9601.0   10065.0  TYPE=      1  TARGET=    -9601.000
 ELENCL=   1388.00  ELENCR= 100000.00
     8.890      4.49   1386.49       .00       .00   1386.56       .07       .06       .02   1386.00
     675.6       6.8     668.8        .0      14.8     310.2        .0       5.2       3.7 100000.00
       .35       .46      2.16       .00      .030      .030      .000      .000   1382.00   9882.32
   .000554      175.      175.      175.         2         0         0       .00    182.73  10065.05

1490 NH CARD USED
*SECNO 8.930

3265 DIVIDED FLOW

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   15SEP04      15:11:12
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.930      2.13   1386.80   1386.80       .00   1387.18       .37       .34       .09   1387.00
     810.3     250.0     560.4        .0      82.7     100.9        .0       6.4       4.8   1387.00
       .37      3.02      5.55       .00      .030      .030      .000      .000   1384.67   9765.54
   .008199      217.      217.      217.        20        14         0       .00    255.77  10043.55

1490 NH CARD USED
*SECNO 9.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1388.54 ELREA=      1390.00

     9.000      3.96   1388.96   1388.95       .00   1389.40       .44      2.21       .02   1388.54
     817.2     122.5     694.7        .0      65.9     121.5        .0       8.0       6.9   1390.00
       .39      1.86      5.72       .00      .030      .030      .000      .000   1385.00   9795.71
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						BKT50			
.004540	370.	370.	370.	7	18	0	.00	225.92	10021.63

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	2	.013	.50	2.70	.00	3.00	.00	75.00	2	1	1386.02	1385.00

CHART 2 - CORRUGATED METAL PIPE CULVERT
SCALE 1 - HEADWALL

5130, EGIC= 1514.71..MAY BE TOO LARGE IF INLET CONTROLS.
5135, EGOC= 1494.94 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
1490 NH CARD USED
*SECNO 9.010

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 1391.66
3280 CROSS SECTION 9.01 EXTENDED 1.65 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 6.33

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1514.71	1494.94	2.25	803.	138.	1.241	14.1	1389.89	140.

9.010	5.62	1391.64	.00	.00	1391.66	.02	2.25	.00	1391.22
945.6	613.6	326.9	5.2	747.6	263.4	4.5	9.1	7.6	1390.00
.41	.82	1.24	1.16	.030	.030	.016	.000	1386.02	9395.85
.000152	76.	76.	76.	1	0	0	.00	644.15	10040.00

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

1490 NH CARD USED
*SECNO 9.040
3280 CROSS SECTION 9.04 EXTENDED 1.86 FEET

3301 HV CHANGED MORE THAN HVINS

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3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.040      4.86   1391.86   1391.86       .00   1392.48       .62       .10       .18   1391.00
    2037.3     346.3    1617.5      73.4     156.3     235.4      10.3      11.3       9.2   1390.00
       .41      2.22      6.87      7.10      .030      .030      .016      .000   1387.00   9663.52
   .003758      137.      137.      137.        20         9         0       .00    376.48  10040.00

1490 NH CARD USED
*SECNO 9.080
3280 CROSS SECTION      9.08 EXTENDED      3.08 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.080      6.08   1394.08   1394.08       .00   1394.85       .77       .74       .04   1392.00
    5040.0    2144.6    2718.8     176.6     599.8     311.1      19.4      14.4      11.6   1391.00
       .42      3.58      8.74      9.11      .030      .029      .016      .000   1388.00   9384.97
   .003656      200.      200.      200.        20        11         0       .00    655.03  10040.00

1490 NH CARD USED
*SECNO 9.100
3280 CROSS SECTION      9.10 EXTENDED      3.34 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.100      7.31   1395.34   1395.34       .00   1396.25       .91       .61       .04   1393.00
    8000.0    4675.2    3324.8        .0     934.0     324.1        .0      17.8      13.7   1392.00
       .43      5.01     10.26       .00      .030      .030      .000      .000   1388.03   9364.68
   .005152      137.      137.      137.        20        11         0       .00    660.92  10025.60

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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

CCHV=      .100 CEHV=      .300
*SECNO 9.130
3280 CROSS SECTION      9.13 EXTENDED      4.29 FEET

3301 HV CHANGED MORE THAN HVINS
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3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  6.98

3470 ENCROACHMENT STATIONS=     4118.9    5417.1  TYPE=      1  TARGET=     1298.220
     9.130      5.29   1396.29       .00   1396.29   1396.37       .08       .03       .08   1393.50
    8000.0    3061.7     857.6    4080.7    1836.7     427.2    1587.0      23.5      15.9   1393.00
       .44      1.67      2.01      2.57      .016      .016      .016      .000   1391.00   4118.87
   .000106       98.       98.       98.         3         0         0       .00   1298.22   5417.09

*SECNO 9.140
3280 CROSS SECTION      9.14 EXTENDED      3.48 FEET

3470 ENCROACHMENT STATIONS=     4133.6    5424.0  TYPE=      1  TARGET=     1290.400
     9.140      4.78   1396.28       .00   1396.28   1396.38       .10       .00       .01   1394.00
    8000.0    2772.7    1228.1    3999.2    1518.9     544.5    1334.6      26.3      16.9   1393.00
       .44      1.83      2.26      3.00      .016      .016      .016      .000   1391.50   4133.61
   .000155       33.       33.       33.         2         0         0       .00   1290.40   5424.01

*SECNO 9.150
3280 CROSS SECTION      9.15 EXTENDED      4.34 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .61

3470 ENCROACHMENT STATIONS=     4161.9    5443.7  TYPE=      1  TARGET=     1281.740
     9.150      4.34   1396.34       .00   1396.34   1396.39       .05       .01       .01   1393.00
    8000.0    4564.1     498.5    2937.4    2731.2     294.2    1506.5      30.2      18.1   1393.00
       .45      1.67      1.69      1.95      .040      .040      .040      .000   1392.00   4161.93
   .000416       43.       43.       43.         2         0         0       .00   1281.74   5443.67
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 9.250

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .53

3470 ENCROACHMENT STATIONS=     3023.0    4573.0  TYPE=      1  TARGET=     1549.950
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						BKT50			
9.250	4.40	1396.40	.00	1396.40	1396.51	.12	.10	.02	100000.00
8000.0	8000.0	.0	.0	2937.4	.0	.0	42.2	22.4	100000.00
.47	2.72	.00	.00	.040	.000	.000	.000	1392.00	3289.83
.001465	155.	141.	82.	2	0	0	.00	1277.54	4567.37

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TW RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	75	1376.433	1377.204	8.550	8.570

TW RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.00	.00	.00	.00	.00	.00	75	1377.204	1377.747	8.570	8.580

TW RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
118.60	118.60	.00	118.60	118.60	.00	75	1377.747	1380.531	8.580	8.600

TW RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
569.47	569.47	.00	688.07	688.07	.00	75	1380.531	1380.538	8.600	8.620

TW RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
212.98	212.98	.00	901.04	901.04	.00	75	1380.538	1380.554	8.620	8.640

TW RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
102.46	102.46	.00	1003.50	1003.50	.00	75	1380.554	1380.599	8.640	8.660

TW RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
25.51	25.51	.00	1029.01	1029.01	.00	75	1380.599	1380.665	8.660	8.680

TW RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
.02	.02	.00	1029.04	1029.04	.00	75	1380.665	1380.846	8.680	8.700

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TW RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
6.01	6.01	.00	1035.05	1035.05	.00	75	1380.846	1382.175	8.700	8.720

TW RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
100.92	100.92	.00	1135.97	1135.97	.00	75	1382.175	1383.307	8.720	8.740

TW RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
223.35	223.35	.00	1359.32	1359.32	.00	75	1383.307	1384.835	8.740	8.770

TW RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
102.49	102.70	.21	1461.81	1462.03	.01	75	1384.835	1386.161	8.770	8.790

TW RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
82.53	82.73	.25	1544.34	1544.76	.03	75	1386.161	1386.377	8.790	8.800

TW RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
104.88	104.95	.07	1649.21	1649.70	.03	75	1386.377	1386.414	8.800	8.810

TW RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
214.10	214.07	.01	1863.31	1863.77	.02	75	1386.414	1386.489	8.810	8.860

TW RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
177.31	177.36	.03	2040.62	2041.14	.03	75	1386.489	1386.564	8.860	8.890

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TW RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
134.74	134.61	.10	2175.37	2175.74	.02	75	1386.564	1387.179	8.890	8.930

TW RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
6.86	6.86	.04	2182.23	2182.61	.02	75	1387.179	1389.405	8.930	9.000

TW RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
128.40	126.21	1.72	2310.64	2308.82	.08	75	1389.405	1391.656	9.000	9.010

TW RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1091.66	1085.74	.54	3402.29	3394.55	.23	75	1391.656	1392.482	9.010	9.040

TW RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
3002.74	3002.69	.00	6405.03	6397.25	.12	75	1392.482	1394.849	9.040	9.080

TW RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
2959.99	2959.99	.00	9365.02	9357.24	.08	75	1394.849	1396.251	9.080	9.100

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PROFILE FOR STREAM EMCON 8/5/04 by: GRB

PLOTTED POINTS (BY PRIORITY) E-ENERGY,W-WATER SURFACE,I-INVERT,C-CRITICAL W.S.,L-LEFT BANK,R-RIGHT BANK,M-LOWER END STA

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ELEVATION  1374.     1379.     1384.     1389.     1394.     1399.     1404.     1409.     1414.     1419.
   SECNO   CUMDIS

   8.55      0.  I    E    .   LMR  .         .         .         .         .         .         .         .         .
              20.  I    E    .  L R   .         .         .         .         .         .         .         .         .
              40.  CI   E    .  LR    .         .         .         .         .         .         .         .         .
              60.  CI    E   .  LR    .         .         .         .         .         .         .         .         .
              80.  CI    E   . LR     .         .         .         .         .         .         .         .         .
   8.57     100.  CI    E   . LR     .         .         .         .         .         .         .         .         .
             120.  C I   WE  . L      .         .         .         .         .         .         .         .         .
             140.  C I    E  .L       .         .         .         .         .         .         .         .         .
             160.  C  I   E  .L       .         .         .         .         .         .         .         .         .
             180.  C   I  E  L        .         .         .         .         .         .         .         .         .
   8.58     200.  C   I  WE L        .         .         .         .         .         .         .         .         .
             220.  C   I    ER L      .         .         .         .         .         .         .         .         .
             240.  C   I     E  L     .         .         .         .         .         .         .         .         .
             260.  C    I    R E  L   .         .         .         .         .         .         .         .         .
   8.60     280.  C    I   R.  E   L .         .         .         .         .         .         .         .         .
             300.  C    I    R  E L   .         .         .         .         .         .         .         .         .
             320.  C    I    R  EL    .         .         .         .         .         .         .         .         .
             340.  C     I   R  E     .         .         .         .         .         .         .         .         .
             360.  C     I   RL E     .         .         .         .         .         .         .         .         .
             380.  C     I   LR E     .         .         .         .         .         .         .         .         .
   8.62     400.  C     I L .R E     .         .         .         .         .         .         .         .         .
             420.  C     I  L.R E     .         .         .         .         .         .         .         .         .
             440.  C      I  .L E     .         .         .         .         .         .         .         .         .
             460.  C      I  .RLE     .         .         .         .         .         .         .         .         .
             480.  C      I  . REL    .         .         .         .         .         .         .         .         .
   8.64     500.  C      I  . RE L   .         .         .         .         .         .         .         .         .
             520.  C      I  . RE L   .         .         .         .         .         .         .         .         .
             540.  C       I . RE L   .         .         .         .         .         .         .         .         .
             560.  C       I . RE L   .         .         .         .         .         .         .         .         .
             580.  C       I . RE L   .         .         .         .         .         .         .         .         .
   8.66     600.  C       I . RE L   .         .         .         .         .         .         .         .         .
             620.  C       I .  E L   .         .         .         .         .         .         .         .         .
             640.  C       I .  EL    .         .         .         .         .         .         .         .         .
             660.  C       I .  EL    .         .         .         .         .         .         .         .         .
             680.  C       I .  EL    .         .         .         .         .         .         .         .         .
   8.68     700.  C       I .  EL    .         .         .         .         .         .         .         .         .
             720.  C        I.  EL    .         .         .         .         .         .         .         .         .
             740.  C        I.  ER    .         .         .         .         .         .         .         .         .
             760.  C         I LWE    .         .         .         .         .         .         .         .         .
             780.  C         .ILWE    .         .         .         .         .         .         .         .         .
   8.70     800.  C         .I  ER   .         .         .         .         .         .         .         .         .
             820.  C         . ILER   .         .         .         .         .         .         .         .         .
             840.  C         . I WE   .         .         .         .         .         .         .         .         .
             860.  C         .  I E   .         .         .         .         .         .         .         .         .
             880.  C         .  I WEL .         .         .         .         .         .         .         .         .
   8.72     900.  .         .   I E L .         .         .         .         .         .         .         .         .
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       920.  C          .  I WE L.          .         .         .         .         .         .         .         .
       940.  C          .   IRE  L          .         .         .         .         .         .         .         .
       960.  C          .   I WE L          .         .         .         .         .         .         .         .
       980.  C          .    IRE .L         .         .         .         .         .         .         .         .
8.74  1000.  C          .    IRWE. L        .         .         .         .         .         .         .         .
      1020.  C          .    IR E. L        .         .         .         .         .         .         .         .
      1040.  C          .     IRE. L        .         .         .         .         .         .         .         .
      1060.  C          .     IRWE L        .         .         .         .         .         .         .         .
      1080.  C          .     I RE L        .         .         .         .         .         .         .         .
      1100.  C          .      IRE L        .         .         .         .         .         .         .         .
      1120.  C          .      IRE L        .         .         .         .         .         .         .         .
      1140.  C          .      I WE L       .         .         .         .         .         .         .         .
      1160.  C          .       IRE L       .         .         .         .         .         .         .         .
      1180.  C          .       IRE L       .         .         .         .         .         .         .         .
8.77  1200.  C          .       I.WEL       .         .         .         .         .         .         .         .
      1220.  C          .        IREL       .         .         .         .         .         .         .         .
      1240.  C          .        .IRE       .         .         .         .         .         .         .         .
      1260.  C          .        . IWE      .         .         .         .         .         .         .         .
8.79  1280.  .          .        .  IE      .         .         .         .         .         .         .         .
      1300.  .          .        . IRE      .         .         .         .         .         .         .         .
      1320.  .          .        . IRWE     .         .         .         .         .         .         .         .
8.80  1340.  .          .        . I WE     .         .         .         .         .         .         .         .
8.81  1360.  C          .        .I  RE  L  .         .         .         .         .         .         .         .
      1380.  C          .        .I  ME  L  .         .         .         .         .         .         .         R
      1400.  C          .        .I  ME L   .         .         .         .         .         .         .         R
      1420.  C          .        I   ME L   .         .         .         .         .         .         .         R
      1440.  C          .        I   ME L   .         .         .         .         .         .         .         R
      1460.  C          .       I.   MEL    .         .         .         .         .         .         .         R
      1480.  C          .       I.   MEL    .         .         .         .         .         .         .         R
      1500.  C          .       I.   MEL    .         .         .         .         .         .         .         R
      1520.  C          .      I .   MEL    .         .         .         .         .         .         .         R
      1540.  C          .      I .   ME     .         .         .         .         .         .         .         R
      1560.  C          .     I  .   ME     .         .         .         .         .         .         .         R
      1580.  C          .     I  .   ME     .         .         .         .         .         .         .         R
      1600.  C          .     I  .   LE     .         .         .         .         .         .         .         R
      1620.  C          .    I   .   LE     .         .         .         .         .         .         .         R
8.86  1640.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1660.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1680.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1700.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1720.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1740.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1760.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1780.  C          .    I   .   LE     .         .         .         .         .         .         .         R
8.89  1800.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1820.  C          .    I   .   LE     .         .         .         .         .         .         .         R
      1840.  C          .     I  .   LE     .         .         .         .         .         .         .         R
      1860.  C          .     I  .    E     .         .         .         .         .         .         .         R
      1880.  C          .      I .    WE    .         .         .         .         .         .         .         R
      1900.  C          .      I .    WE    .         .         .         .         .         .         .         R
      1920.  C          .       I.    WE    .         .         .         .         .         .         .         R
      1940.  C          .       I.    WE    .         .         .         .         .         .         .         R
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      1960.  C        .        I    WE   .        .        .        .        .        .        .        R
      1980.  C        .        I    WE   .        .        .        .        .        .        .        R
      2000.  C        .        .I    E   .        .        .        .        .        .        .        R
 8.93 2020.  .        .        .I    E   .        .        .        .        .        .        .        .
      2040.  .        .        .I    WE  .        .        .        .        .        .        .        .
      2060.  .        .        .I    WE  .        .        .        .        .        .        .        .
      2080.  .        .        .I    WE  .        .        .        .        .        .        .        .
      2100.  .        .        .I     E  .        .        .        .        .        .        .        .
      2120.  .        .        . I    WE .        .        .        .        .        .        .        .
      2140.  .        .        . I    WE .        .        .        .        .        .        .        .
      2160.  .        .        . I    WE .        .        .        .        .        .        .        .
      2180.  .        .        . I    WER.        .        .        .        .        .        .        .
      2200.  .        .        . I    LWE.        .        .        .        .        .        .        .
      2220.  .        .        . I     WE.        .        .        .        .        .        .        .
      2240.  .        .        . I     WER        .        .        .        .        .        .        .
      2260.  .        .        . I     WER        .        .        .        .        .        .        .
      2280.  .        .        . I     LER        .        .        .        .        .        .        .
      2300.  .        .        . I     LWER       .        .        .        .        .        .        .
      2320.  .        .        . I     LWER       .        .        .        .        .        .        .
      2340.  .        .        . I      WER       .        .        .        .        .        .        .
      2360.  .        .        . I      LE R      .        .        .        .        .        .        .
      2380.  .        .        . I      LWER      .        .        .        .        .        .        .
 9.00 2400.  .        .        . I      LWER      .        .        .        .        .        .        .
      2420.  C        .        .  I      LWE      .        .        .        .        .        .        .
      2440.  C        .        .  I      . LE     .        .        .        .        .        .        .
 9.01 2460.  C        .        .   I     . R LE   .        .        .        .        .        .        .
      2480.  C        .        .   I     . R LWE  .        .        .        .        .        .        .
      2500.  C        .        .    I    . R LWE  .        .        .        .        .        .        .
      2520.  C        .        .    I    . R LWE  .        .        .        .        .        .        .
      2540.  C        .        .    I    . R L E  .        .        .        .        .        .        .
      2560.  C        .        .    I    . R L WE .        .        .        .        .        .        .
      2580.  C        .        .     I   . R L WE .        .        .        .        .        .        .
 9.04 2600.  .        .        .     I   . R L WE .        .        .        .        .        .        .
      2620.  .        .        .     I   . R L WE .        .        .        .        .        .        .
      2640.  .        .        .     I   . R L  WE.        .        .        .        .        .        .
      2660.  .        .        .      I  .  R L WE.        .        .        .        .        .        .
      2680.  .        .        .      I  .  R L W E.       .        .        .        .        .        .
      2700.  .        .        .      I  .  R L  WE.       .        .        .        .        .        .
      2720.  .        .        .      I  .  R L  W E       .        .        .        .        .        .
      2740.  .        .        .      I  .  R L   WE       .        .        .        .        .        .
      2760.  .        .        .       I .   R L  W.E      .        .        .        .        .        .
      2780.  .        .        .       I .   R L   WE      .        .        .        .        .        .
 9.08 2800.  .        .        .       I .   R L   W E     .        .        .        .        .        .
      2820.  .        .        .       I .   R L   .WE     .        .        .        .        .        .
      2840.  .        .        .       I .    R L  .W E    .        .        .        .        .        .
      2860.  .        .        .       I .    R L  .W E    .        .        .        .        .        .
      2880.  .        .        .       I .    R L  . WE    .        .        .        .        .        .
      2900.  .        .        .       I .    R L  . W E   .        .        .        .        .        .
      2920.  .        .        .       I .     R L . W E   .        .        .        .        .        .
 9.10 2940.  .        .        .       I .     R L .  W E  .        .        .        .        .        .
      2960.  C        .        .        I.     R L .  W E  .        .        .        .        .        .
      2980.  C        .        .         I     MRL .  W E  .        .        .        .        .        .
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                                                                  BKT50
          3000.  C        .        .        . I   MR L.   WE    .        .        .        .        .        .
          3020.  C        .        .        .  I  M RL.   WE    .        .        .        .        .        .
     9.13 3040.  C        .        .        .   I M RL.    E    .        .        .        .        .        .
          3060.  C        .        .        .    I MR L    E    .        .        .        .        .        .
     9.14 3080.  C        .        .        .    I  R L    E    .        .        .        .        .        .
          3100.  C        .        .        .    I MRL.    E    .        .        .        .        .        .
     9.15 3120.  C        .        .        .     I L .    E    .        .        .        .        .        .
          3140.  C        .        .        .     I M .    E    .        .        .        .        .        L
          3160.  C        .        .        .     I   M    E    .        .        .        .        .        L
          3180.  C        .        .        .     I   . M  E    .        .        .        .        .        L
          3200.  C        .        .        .     I   .   ME    .        .        .        .        .        L
          3220.  C        .        .        .     I   .    EM   .        .        .        .        .        L
          3240.  C        .        .        .     I   .    E  M .        .        .        .        .        L
     9.25 3260.  C        .        .        .     I   .    E   M         .        .        .        .        L
1
   15SEP04      15:11:12                                                                          PAGE   21
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THIS RUN EXECUTED 15SEP04 15:11:17

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************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

EMCON 8/5/04 by: GRB

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	8.550	.00	.00	.00	1374.00	80.00	1376.29	.00	1376.43	71.15	3.00	26.69	9.48
	8.570	97.00	.00	.00	1374.69	80.00	1377.04	.00	1377.20	87.23	3.28	24.38	8.57
*	8.580	92.00	.00	.00	1375.95	80.00	1377.65	.00	1377.75	41.69	2.46	32.51	12.39
*	8.600	80.00	1380.50	.00	1376.50	80.00	1380.53	.00	1380.53	.54	.53	151.38	108.66
	8.620	128.00	.00	.00	1377.11	80.00	1380.53	.00	1380.54	.64	.56	147.67	99.88
*	8.640	100.00	.00	.00	1377.62	80.00	1380.54	.00	1380.55	3.67	.98	81.60	41.78
	8.660	100.00	.00	.00	1378.13	80.00	1380.58	.00	1380.60	5.48	1.04	77.09	34.18

BKT50

	8.680	100.00	.00	.00	1378.00	80.00	1380.64	.00	1380.67	7.77	1.17	68.31	28.70
*	8.700	100.00	.00	.00	1379.59	80.00	1380.77	.00	1380.85	55.43	2.24	36.96	10.75
*	8.720	100.00	.00	.00	1380.90	80.00	1381.91	1381.91	1382.18	307.09	4.14	19.33	4.57
*	8.740	100.00	.00	.00	1382.00	80.00	1383.21	.00	1383.31	57.12	2.52	31.70	10.59
	8.770	200.00	.00	.00	1383.60	80.00	1384.68	.00	1384.84	104.71	3.31	27.47	7.82
*	8.790	81.00	.00	.00	1385.30	96.79	1385.99	1385.99	1386.16	56.11	3.33	28.82	12.92
*	8.800	49.00	.00	.00	1385.10	179.31	1386.14	1386.11	1386.38	34.05	2.76	47.50	30.73
*	8.810	29.00	.00	.00	1384.70	284.19	1386.34	.00	1386.41	4.67	2.23	127.55	131.47
*	8.860	266.00	.00	.00	1382.00	498.29	1386.47	.00	1386.49	2.01	1.15	448.73	351.08
	8.890	175.00	.00	.00	1382.00	675.60	1386.49	.00	1386.56	5.54	2.16	325.01	287.01

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	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
*	8.930	217.00	.00	.00	1384.67	810.34	1386.80	1386.80	1387.18	81.99	5.55	183.65	89.49
	9.000	370.00	.00	.00	1385.00	817.21	1388.96	1388.95	1389.40	45.40	5.72	187.36	121.28
*	9.010	76.00	1389.89	.00	1386.02	945.61	1391.64	.00	1391.66	1.52	1.24	1015.51	768.11
*	9.040	137.00	.00	.00	1387.00	2037.27	1391.86	1391.86	1392.48	37.58	6.87	402.11	332.31
*	9.080	200.00	.00	.00	1388.00	5040.01	1394.08	1394.08	1394.85	36.56	8.74	930.31	833.53
*	9.100	137.00	.00	.00	1388.03	8000.00	1395.34	1395.34	1396.25	51.52	10.26	1258.01	1114.52
*	9.130	98.00	.00	.00	1391.00	8000.00	1396.29	.00	1396.37	1.06	2.01	3850.91	7774.12
	9.140	33.00	.00	.00	1391.50	8000.00	1396.28	.00	1396.38	1.55	2.26	3398.05	6428.97
*	9.150	43.00	.00	.00	1392.00	8000.00	1396.34	.00	1396.39	4.16	1.69	4531.89	3923.48
*	9.250	141.00	.00	.00	1392.00	8000.00	1396.40	.00	1396.51	14.65	.00	2937.44	2089.92

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EMCON 8/5/04 by: GRB

SUMMARY PRINTOUT TABLE 150

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	8.550	80.00	1376.29	.00	.00	.00	28.10	.00
	8.570	80.00	1377.04	.00	.74	.00	25.87	97.00
*	8.580	80.00	1377.65	.00	.62	.00	30.97	92.00
*	8.600	80.00	1380.53	.00	2.87	.00	53.86	80.00
	8.620	80.00	1380.53	.00	.01	.00	60.42	128.00
*	8.640	80.00	1380.54	.00	.01	.00	49.47	100.00
	8.660	80.00	1380.58	.00	.04	.00	58.61	100.00
	8.680	80.00	1380.64	.00	.06	.00	56.48	100.00
*	8.700	80.00	1380.77	.00	.13	.00	53.73	100.00
*	8.720	80.00	1381.91	.00	1.14	.00	38.04	100.00
*	8.740	80.00	1383.21	.00	1.30	.00	36.44	100.00
	8.770	80.00	1384.68	.00	1.47	.00	48.61	200.00
*	8.790	96.79	1385.99	.00	1.30	.00	84.53	81.00
*	8.800	179.31	1386.14	.00	.15	.00	86.00	49.00
*	8.810	284.19	1386.34	.00	.20	.00	108.65	29.00
*	8.860	498.29	1386.47	.00	.13	.00	297.19	266.00
	8.890	675.60	1386.49	.00	.02	.00	182.73	175.00
*	8.930	810.34	1386.80	.00	.31	.00	255.77	217.00
	9.000	817.21	1388.96	.00	2.16	.00	225.92	370.00
*	9.010	945.61	1391.64	.00	2.68	.00	644.15	76.00
*	9.040	2037.27	1391.86	.00	.22	.00	376.48	137.00
*	9.080	5040.01	1394.08	.00	2.22	.00	655.03	200.00
*	9.100	8000.00	1395.34	.00	1.26	.00	660.92	137.00
*	9.130	8000.00	1396.29	.00	.95	.00	1298.22	98.00

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15SEP04 15:11:12 PAGE 24

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	9.140	8000.00	1396.28	.00	-.01	.00	1290.40	33.00
*	9.150	8000.00	1396.34	.00	.07	.00	1281.74	43.00
*	9.250	8000.00	1396.40	.00	.05	.00	1277.54	141.00

1
15SEP04 15:11:12 PAGE 25

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      8.580  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.600  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.640  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      8.720  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.720  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      8.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      8.790  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.790  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      8.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.860  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      8.930  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.930  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      8.930  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      9.010  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.040  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.040  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=      9.040  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=      9.080  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.080  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      9.080  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=      9.100  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.100  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      9.100  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      9.130  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.150  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.250  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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<u>0.2% Annual Chance Flood</u>

Main Channel

Input File: main500.dat

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T1     MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2     INPUT FILE: main500.dat        500-YR FLOOD ELEVATION
T3     ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4     October 2003 EMCON/OWT Inc. rev. for add'l ret. int. August 2004
*
*      This model is used to determine the main channel Base Floodplain
*      Extended x-section data used for stationing 9.21 - 9.35 (rockwall removed)
*      Split flowrates are applied from bkt500.dat and are partitioned across
*      relevant cross sections.
*
*      Starting WSEL is Adobe Dam reservoir 100-yr WSEL from effective FIS study.
*      Boundary conditions were taken from Tetra Tech modeling.
J1      0       2                       0                0       0 1378.00
J2      1       0      -1       0       0               -1       0
J3     38      43       1       2      26       8       4      25      68      53
J3     54
*  500-yr peak discharge is from effective FIS study.
QT      1   79724
*
NC 0.045   0.045   0.035     0.1     0.3
ET           5.1                  3796.61 5556.89
X1  8.69      95 4025.25 5073.77
GR1380.0 3796.61 1380.00 3854.47 1379.00 3861.47 1378.00 3868.42 1378.00 3878.69
GR1378.6 3884.04 1380.00 3896.01 1380.00 3907.92 1379.82 3923.26 1379.91 3925.58
GR1380.0 4002.41 1380.54 4004.61 1382.00 4011.19 1382.00 4016.12 1381.16 4025.25
GR1380.0 4037.88 1379.55 4039.54 1378.00 4045.04 1376.66 4058.92 1376.33 4063.23
GR1376.0 4067.80 1375.66 4071.80 1374.51 4084.66 1374.14 4088.53 1374.00 4090.42
GR1373.8 4091.18 1373.53 4092.99 1372.00 4102.33 1371.23 4129.14 1370.00 4171.62
GR1370.0 4446.38 1370.04 4448.91 1372.00 4550.37 1372.00 4583.65 1371.80 4601.95
GR1371.2 4726.77 1371.45 4741.81 1371.10 4787.06 1371.00 4796.71 1370.54 4837.32
GR1370.6 4872.36 1370.52 4876.45 1370.60 4881.98 1370.60 4882.00 1370.82 4897.47
GR1371.4 4906.65 1371.83 4913.95 1372.00 4917.45 1372.34 4920.12 1374.00 4933.03
GR1374.3 4936.71 1374.00 4958.00 1373.51 4959.38 1372.00 4963.60 1371.80 4964.16
GR1370.0 4969.21 1368.37 4973.77 1368.00 4974.80 1366.00 4980.35 1365.56 4981.39
GR1364.7 4987.21 1364.21 4990.25 1364.00 4992.46 1364.00 5000.00 1364.00 5003.25
GR1365.5 5010.85 1365.78 5012.36 1366.00 5013.46 1366.52 5014.69 1368.00 5018.15
GR1368.3 5018.85 1370.00 5022.82 1370.70 5024.49 1372.00 5027.49 1373.05 5031.15
GR1374.0 5034.40 1375.00 5039.27 1376.00 5044.17 1376.23 5045.52 1377.39 5052.81
GR1378.0 5059.14 1378.78 5065.36 1379.49 5073.77 1379.70 5074.11 1379.26 5077.51
GR1378.7 5079.93 1378.00 5082.02 1378.00 5116.40 1378.13 5146.24 1378.00 5177.10
GR1378.0 5181.33 1377.50 5273.67 1377.18 5375.38 1377.56 5451.37 1377.29 5556.89
*
QT      1   79724
ET           5.1                  3855.70 5475.95
X1  8.79      89 4095.41 5039.30     530     546     539
GR1384.0 3855.70 1384.00 3973.82 1382.64 3980.66 1384.00 3998.09 1382.65 4051.20
GR1382.6 4058.69 1382.49 4060.23 1382.89 4064.63 1384.00 4067.90 1384.00 4095.41
GR1382.2 4107.84 1382.00 4109.37 1380.85 4117.39 1380.00 4123.50 1378.49 4137.14
GR1378.0 4141.55 1376.51 4154.98 1376.00 4159.65 1374.00 4171.01 1373.84 4176.47
GR1372.0 4222.80 1372.00 4265.74 1371.40 4267.19 1370.00 4271.65 1370.02 4277.10
GR1370.5 4303.75 1372.00 4387.79 1372.60 4464.89 1373.01 4509.16 1373.45 4564.23
GR1373.6 4589.91 1374.00 4659.42 1374.00 4677.54 1373.79 4707.25 1374.00 4731.92
GR1375.0 4815.01 1375.48 4838.28 1375.82 4866.71 1375.01 4881.51 1374.70 4887.04
GR1374.0 4898.81 1374.00 4914.20 1376.00 4932.06 1377.09 4941.83 1377.77 4948.33
GR1378.0 4950.51 1378.00 4973.99 1377.74 4974.57 1376.00 4978.35 1375.92 4978.54
GR1375.3 4979.92 1374.00 4982.54 1373.68 4983.19 1372.00 4986.64 1371.40 4987.87
GR1370.0 4990.74 1369.23 4992.31 1368.00 4994.83 1367.12 4996.63 1366.00 4998.93
GR1366.0 5000.00 1367.19 5002.89 1368.00 5004.26 1369.43 5006.66 1370.00 5007.63
GR1371.8 5010.72 1372.00 5011.01 1372.55 5011.93 1374.00 5014.64 1374.46 5015.50
GR1376.0 5018.37 1377.54 5024.62 1378.00 5026.26 1378.19 5027.55 1378.48 5029.47
GR1380.0 5039.30 1380.47 5053.53 1381.00 5070.14 1381.05 5074.82 1381.51 5092.11
GR1381.8 5130.27 1381.56 5144.28 1381.81 5200.42 1381.90 5207.46 1381.92 5219.18
GR1382.0 5303.86 1382.00 5320.81 1381.88 5345.60 1381.56 5475.95
*
QT      1   79724
ET           5.1                  4279.99 5437.79
X1  8.93      71 4541.12 5252.00     565     711     722
GR1386.3 4279.99 1386.00 4295.47 1386.34 4315.43 1386.00 4350.00 1385.51 4354.32
GR1386.0 4371.17 1386.00 4454.56 1386.25 4457.97 1387.66 4480.76 1388.00 4485.92
GR1388.0 4526.66 1386.72 4541.12 1386.00 4552.20 1385.40 4560.69 1385.02 4564.36
GR1384.5 4569.41 1384.00 4573.51 1382.63 4586.39 1382.43 4588.53 1382.00 4594.51
GR1381.7 4598.20 1380.48 4604.38 1380.00 4606.94 1379.91 4608.36 1378.58 4632.57
GR1378.0 4639.26 1376.00 4653.50 1375.35 4704.64 1374.00 4828.12 1373.68 4850.43
GR1373.1 4888.01 1372.88 4901.73 1372.00 4950.77 1371.17 4970.32 1370.00 4996.16
GR1370.1 5000.00 1370.40 5014.94 1370.52 5018.25 1370.89 5033.81 1371.01 5037.53
GR1371.3 5046.38 1371.00 5056.40 1370.55 5068.53 1370.60 5102.71 1370.78 5109.11
GR1371.1 5116.39 1371.60 5131.46 1372.00 5139.38 1373.19 5146.05 1373.89 5149.69
GR1374.0 5150.47 1374.30 5152.78 1374.67 5155.69 1376.00 5166.46 1376.39 5169.57
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GR1378.0 5182.62 1379.50 5195.03 1380.00 5200.27 1380.58 5207.92 1381.76 5224.62
GR1382.0 5227.77 1382.80 5252.00 1384.00 5330.07 1384.00 5333.71 1384.91 5347.75
GR1386.0 5362.52 1386.60 5376.48 1386.90 5391.40 1387.03 5397.63 1387.24 5419.21
GR1387.0 5437.79
*
QT     1   76646
ET           5.1                  4519.91 5433.52
X1  9.01      81 4817.29 5340.88     363     558     430
GR1388.4 4519.91 1388.00 4559.91 1388.00 4561.41 1388.84 4570.06 1388.45 4571.71
GR1388.0 4573.70 1388.00 4576.09 1388.46 4578.03 1388.77 4579.51 1388.28 4582.90
GR1388.0 4583.57 1388.00 4677.39 1388.26 4681.88 1389.30 4700.64 1389.76 4708.44
GR1389.3 4717.62 1388.98 4718.21 1388.52 4718.22 1388.00 4721.78 1387.37 4732.92
GR1387.1 4737.05 1386.95 4738.08 1386.40 4758.07 1386.64 4764.66 1386.86 4770.00
GR1387.0 4774.77 1387.38 4799.17 1387.08 4803.47 1386.92 4804.87 1386.44 4811.50
GR1386.0 4817.29 1384.00 4825.73 1383.63 4827.33 1382.00 4834.13 1380.26 4841.49
GR1380.0 4842.58 1379.21 4845.86 1378.00 4850.84 1376.45 4856.91 1376.00 4858.68
GR1375.8 4859.41 1374.00 4866.60 1373.72 4878.11 1373.33 4898.38 1373.06 4911.20
GR1372.9 4920.39 1372.51 4939.85 1372.35 4949.90 1372.19 4962.38 1372.32 4994.02
GR1372.4 5000.00 1372.50 5005.13 1373.08 5052.28 1373.49 5089.07 1373.86 5118.83
GR1374.0 5130.57 1375.57 5137.72 1376.00 5139.67 1377.54 5146.76 1378.00 5149.27
GR1379.4 5157.21 1380.00 5161.68 1380.57 5169.64 1380.83 5173.36 1380.91 5174.01
GR1381.2 5177.53 1381.59 5182.69 1382.00 5188.14 1382.37 5193.51 1383.14 5206.05
GR1384.0 5217.34 1385.32 5244.41 1385.68 5252.28 1386.00 5257.06 1387.77 5292.41
GR1388.0 5296.60 1388.84 5320.16 1389.58 5340.88 1389.68 5346.00 1390.00 5351.31
GR1390.0 5433.52
*
QT     1   73779
ET           5.1                  4515.30 5233.18
X1  9.08      70 4796.92 5198.84     432     165     365
GR1391.1 4515.30 1390.24 4539.50 1390.00 4540.45 1390.00 4625.97 1390.21 4628.50
GR1390.6 4632.33 1390.69 4632.97 1390.44 4647.05 1390.08 4647.52 1390.00 4647.64
GR1389.6 4649.23 1388.00 4655.18 1388.00 4670.31 1388.16 4671.07 1388.14 4787.35
GR1388.0 4796.92 1387.24 4809.20 1386.69 4817.41 1386.00 4827.18 1384.79 4833.74
GR1384.0 4837.38 1383.79 4838.28 1382.78 4842.68 1382.00 4845.64 1381.40 4847.91
GR1380.0 4853.19 1378.86 4857.51 1378.00 4860.75 1377.03 4864.25 1376.00 4868.13
GR1375.1 4871.58 1374.00 4875.67 1373.97 4878.43 1373.92 4884.08 1373.76 4895.74
GR1373.7 4902.64 1373.65 4905.82 1373.59 4911.57 1373.49 4920.43 1373.47 5000.00
GR1373.5 5095.48 1373.56 5107.93 1373.59 5109.03 1373.62 5112.59 1373.70 5119.31
GR1373.8 5122.87 1373.82 5124.67 1373.85 5126.00 1373.92 5128.16 1373.94 5130.06
GR1374.0 5131.14 1374.13 5131.77 1376.00 5140.79 1377.41 5147.57 1378.00 5150.02
GR1378.6 5152.38 1380.00 5158.25 1381.29 5163.54 1382.00 5166.47 1383.45 5172.44
GR1384.0 5174.70 1385.73 5181.83 1386.00 5182.93 1387.10 5187.46 1388.00 5190.99
GR1388.1 5191.61 1389.08 5195.22 1390.00 5198.84 1390.04 5199.45 1390.27 5233.18
*
QT     1   59075
NC 0.035   0.035   0.035
ET           5.1                  4525.85 5437.55
X1  9.14      94 4835.60 5165.24     288     385     333
GR1392.1 4525.85 1392.00 4598.96 1391.59 4608.73 1390.99 4723.68 1391.42 4775.78
GR1391.5 4789.87 1391.64 4805.14 1391.00 4830.80 1390.59 4832.90 1390.00 4835.60
GR1389.7 4836.69 1389.00 4839.12 1388.44 4841.11 1388.00 4842.60 1387.57 4843.96
GR1387.0 4845.55 1386.47 4846.70 1386.00 4847.68 1385.71 4848.28 1385.00 4849.75
GR1384.7 4850.41 1384.00 4851.87 1383.84 4852.20 1383.32 4853.25 1383.00 4853.91
GR1382.8 4854.33 1382.00 4856.07 1381.65 4856.77 1381.00 4858.07 1380.00 4860.14
GR1379.7 4861.00 1379.19 4861.98 1379.00 4862.42 1378.49 4863.58 1378.00 4864.71
GR1377.4 4866.13 1377.00 4867.28 1376.43 4869.03 1376.00 4869.56 1375.54 4872.43
GR1374.5 4874.14 1374.00 4875.08 1374.00 5000.00 1374.00 5062.13 1374.39 5091.47
GR1375.0 5121.35 1375.00 5125.45 1375.71 5129.68 1376.00 5131.10 1376.94 5133.66
GR1377.0 5134.06 1377.77 5135.68 1378.00 5136.16 1379.00 5138.25 1379.92 5140.18
GR1380.0 5140.35 1380.80 5142.03 1381.00 5142.44 1381.45 5143.38 1382.00 5144.53
GR1382.9 5146.34 1383.00 5146.63 1383.72 5148.14 1384.00 5148.75 1384.46 5149.37
GR1385.0 5150.09 1385.25 5150.43 1386.00 5151.41 1386.80 5152.48 1387.00 5152.75
GR1387.2 5153.56 1388.00 5156.83 1388.60 5159.29 1389.00 5160.92 1389.34 5162.35
GR1389.7 5164.16 1390.00 5165.24 1390.00 5165.45 1390.42 5166.34 1391.00 5168.32
GR1391.8 5170.94 1391.91 5171.50 1392.00 5171.73 1392.22 5174.81 1392.64 5180.92
GR1393.0 5184.53 1392.55 5196.46 1392.91 5224.81 1392.45 5256.91 1392.29 5293.65
GR1392.1 5328.16 1392.00 5380.42 1392.00 5416.53 1391.87 5437.55
* DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT     1   52375
X1 9.145      66    5015    5325       8       8       8
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
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GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1374.94    5045 1374.94    5085
GR1374.9 5088.74 1390.80 5088.75 1390.80 5093.75 1374.94 5093.76 1374.94    5125
GR1374.9 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1374.94 5172.51
GR1374.9    5205 1374.94    5245 1374.94 5246.24    1391 5246.25    1391 5251.25
GR1374.9 5251.26 1374.94    5285 1374.94    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
* UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT      1   52375
X1 9.155      66    5015    5325    80.2    80.2    80.2
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1375.14    5045 1375.14    5085
GR1375.1 5088.74  1390.8 5088.75  1390.8 5093.75 1375.14 5093.76 1375.14    5125
GR1375.1 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1375.14 5172.51
GR1375.1    5205 1375.14    5245 1375.14 5246.24    1391 5246.25    1391 5251.25
GR1375.1 5251.26 1375.14    5285 1375.14    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
*
QT      1   52375
ET            5.1                   4528.66 5445.27
X1  9.16       89 4852.56 5164.29       8       8       8
GR1392.6 4528.66 1392.16 4581.89 1392.81 4592.32 1392.00 4643.39 1391.85 4708.61
GR1392.0 4756.55 1392.50 4805.50 1392.00 4836.76 1391.23 4838.82 1391.00 4839.41
GR1390.5 4842.05 1390.00 4852.56 1389.00 4854.43 1388.00 4856.29 1387.00 4857.94
GR1386.0 4859.59 1385.00 4861.24 1384.00 4862.89 1383.40 4863.88 1383.00 4864.54
GR1382.5 4865.33 1382.00 4866.18 1381.00 4867.82 1380.61 4868.61 1380.00 4869.92
GR1379.8 4870.35 1379.00 4872.01 1378.40 4873.27 1378.00 4874.11 1377.29 4875.60
GR1377.0 4876.20 1376.18 4877.92 1376.00 4878.30 1375.00 4880.39 1374.81 4915.05
GR1374.0 4961.04 1374.20 5000.00 1374.50 5083.02 1374.70 5107.91 1375.00 5129.31
GR1375.6 5132.84 1376.00 5135.04 1377.00 5138.70 1378.00 5140.93 1379.00 5142.76
GR1379.6 5143.88 1380.00 5144.79 1380.41 5145.63 1381.00 5146.82 1381.33 5147.49
GR1382.0 5148.85 1382.47 5149.81 1383.64 5152.18 1384.00 5152.91 1384.55 5154.02
GR1385.0 5154.94 1386.00 5156.58 1386.42 5157.20 1387.00 5158.07 1388.00 5161.31
GR1388.6 5162.08 1389.00 5162.75 1389.58 5163.63 1390.00 5164.29 1390.52 5165.66
GR1390.7 5169.65 1390.00 5170.91 1390.00 5171.15 1390.65 5172.70 1391.00 5173.49
GR1391.5 5174.67 1392.00 5175.74 1392.49 5177.88 1393.00 5180.15 1393.00 5215.17
GR1392.8 5239.51 1393.00 5302.86 1393.00 5330.00 1393.00 5335.30 1393.52 5343.99
GR1394.0 5352.89 1394.20 5356.22 1394.67 5363.95 1395.00 5372.98 1395.00 5394.93
GR1394.9 5404.04 1394.00 5430.80 1393.15 5432.47 1393.36 5445.27
*
* BOTTOM OF DROP STRUCTURE
QT      1   52375
NC 0.035   0.035   0.020
ET            5.1                   4732 5190.05
X1  9.21       7    4732 5174.57     145     355     279
GR  1389    4732    1376    4765    1376    4901    1376    5000    1376 5140.72
GR  1391 5174.57    1392 5190.05
*
* TOP OF DROP STRUCTURE
QT      1   52375
NC 0.040   0.035   0.035
ET            5.1                   4664 5314.09
X1  9.22      14    4664 5192.98     122     104      39
GR  1395    4664    1390    4708    1390 4871.20    1390    5000    1390 5167.75
GR  1391 5173.76    1392 5177.14    1393 5179.36    1394 5181.58    1395 5184.44
GR  1396 5187.36    1397 5192.98    1398 5219.20    1399 5314.09
*
QT      1   52375
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ET          5.1                   4572.95 5304.55
X1  9.25      45    4825 5285.60     155      82     141
GR  1400    3023  1399.1    3123  1397.6    3223  1395.8    3323  1392.7    3423
GR  1392    3523    1393    3623  1393.6    3723  1393.5    3762    1394    3874
GR  1394    3898    1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25    1395 4365.84    1395  4385.4  1395.7 4563.07    1395 4565.34
GR  1395 4570.45 1395.57 4572.95 1395.46 4582.97    1395 4585.82    1395 4590.84
GR  1395 4598.19    1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32    1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38    1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
* END FLOW SPLIT; RETURN TO FULL FLOW
QT     1   80000
ET          5.1                   4441.50 5290.19
X1  9.30      52 4779.69 5280.97     262     282     261
GR1401.5    2940  1402.6    2970  1400.5    3070  1398.6    3170    1397    3270
GR  1394    3370    1394    3470    1394    3570    1394    3670  1394.8    3770
GR  1395    3820    1394    3930    1394 4045.09    1395 4108.19    1395    4117
GR  1396 4323.15 1396.42 4425.34    1396 4429.71    1396 4434.42    1396  4441.5
GR  1396 4445.67    1396  4449.8    1395 4453.93 1394.13 4458.61    1394 4462.74
GR  1393 4494.69    1393 4512.86    1394 4520.79    1395 4539.92    1395 4544.55
GR  1395 4549.38    1396 4554.31    1397  4672.3    1397 4703.41    1397 4730.49
GR  1397 4737.81  1396.5    4750    1396 4768.57    1395 4779.69    1394  4811.1
GR  1393  4973.9    1393    5000    1393 5090.01    1394 5237.22    1395 5265.28
GR  1395 5270.89    1396 5273.07    1397 5275.25    1398 5277.47    1399 5279.81
GR1399.5 5280.97    1400 5290.19
*
ET          5.1                   4252.38 5287.77
X1  9.35      64    4775 5275.88     291     274     274
GR1403.4    2913    1404    2963  1401.9    3063  1400.6    3163  1399.1    3263
GR  1396    3363    1396    3463  1394.8    3563  1395.2    3663    1396    3763
GR  1396    3863    1396    3873    1396    3970    1396 4133.14    1397 4227.56
GR  1397 4246.88    1397 4251.02    1397 4252.38    1397 4261.99    1397 4262.89
GR  1397 4266.45    1397 4272.25    1396 4279.28    1395 4304.83    1395 4325.29
GR  1396  4342.7    1397 4379.18    1398  4402.1    1399 4459.05    1399 4467.32
GR  1399 4490.46    1399 4657.95    1399 4675.14    1399    4775    1399 4817.89
GR  1398 4824.28    1398 4830.91    1398 4833.58    1397 4841.76    1396 4854.67
GR  1395 4861.17    1394 4882.23    1393 4897.87    1392 4929.89    1392 4995.23
GR1392.2    5000    1393 5015.98    1394 5050.46    1394 5062.07    1394 5081.74
GR  1394 5098.98    1393 5104.45    1393 5165.77    1394 5255.79 1394.16 5261.12
GR  1395 5263.15    1396 5265.55    1397 5267.94    1398 5270.34    1399 5272.74
GR1399.9 5274.92    1400 5275.88    1401 5287.77    1401 5364.41
*
* FIRST LANDFILL CROSS SECTION
X1  9.42      84    4717 5216.97     400     402     399
GR  1428    4000    1426 4011.37    1424 4051.66    1424 4057.37    1426 4081.68
GR  1428 4110.92    1428 4121.45    1426 4129.13    1424 4134.76    1422 4139.19
GR  1421 4142.73    1420 4161.87 1419.19 4203.29    1418 4205.11    1416 4226.25
GR  1414 4237.19    1412 4246.78    1410 4256.36    1408 4267.25    1406 4278.32
GR  1404 4313.42    1402 4319.63    1401 4385.11    1401 4391.49    1400 4399.73
GR  1400 4402.48    1400    4425    1399 4435.31    1399 4437.98    1400  4464.1
GR  1400 4473.55    1401 4478.99    1401 4489.28    1401 4501.38    1401 4506.58
GR  1401 4519.28    1401 4549.48    1401 4609.38    1401 4631.43    1401    4640
GR  1401    4717    1401 4808.53    1401 4810.26    1400 4816.66    1399  4821.3
GR  1398 4826.32    1397 4831.26    1396  4836.2    1395 4840.81    1394 4845.47
GR  1394 4861.29    1394 4874.91    1394 4881.71    1395 4899.25    1395 4935.92
GR  1394 4952.05    1393 4968.09    1393 4971.63    1393 4977.75    1393    5000
GR  1393  5022.4    1394 5029.45    1395 5047.57    1396 5049.85    1397 5052.12
GR  1397 5069.99    1396 5075.09    1395 5080.13    1394 5086.54    1393 5111.54
GR  1393 5144.13    1394 5187.94    1395 5201.29    1396 5203.58    1397 5205.87
GR  1398 5208.12    1399 5210.33    1400 5212.55    1401 5214.76    1402 5216.97
GR1402.1 5217.23    1403 5227.59    1404 5237.39 1404.24 5239.73
*
NC 0.040   0.040   0.040
X1  9.45      97    4709    5209      93     126     118
GR  1444    4000    1446  4007.9    1448 4067.98    1448 4129.56    1446 4153.01
GR  1444  4163.3    1442 4166.26    1440 4169.22    1438 4175.44    1436 4186.62
GR  1434 4200.28    1432 4214.71    1430 4223.41    1428 4230.51    1426 4245.88
GR  1424 4268.57 1422.59 4278.96    1422 4280.89    1420 4290.71    1418 4299.79
GR  1416 4308.72    1414 4317.57    1412 4326.42    1410 4337.33    1408 4350.71
GR  1406 4364.09    1404 4377.47    1402 4400.54    1401 4461.44    1400 4466.82
GR  1400 4480.64    1400 4491.26    1400 4512.14    1401 4518.92 1401.69 4560.74
GR  1402 4579.32    1403 4582.89    1403 4591.95    1402 4596.75    1402    4660
GR  1402 4672.46  1401.7    4709    1401 4801.15    1400 4808.19    1399 4812.86
GR  1398 4817.28    1397 4822.04    1396 4829.31    1395 4850.48    1395 4874.85
GR  1396 4881.97    1397  4899.1    1397 4923.02    1396 4938.23    1395 4946.05
GR  1394 4960.72    1394 4965.12    1394 4968.36    1394 4997.02 1393.39    5000
```

```
GR  1393 5001.91    1393 5029.22    1394 5035.16    1395 5037.25    1396 5039.33
GR  1397 5041.64    1398 5043.96    1399 5046.15    1400 5048.19    1401 5065.48
GR  1401 5071.95    1401 5081.45    1401  5133.8    1400 5156.91    1399 5160.41
GR  1398 5163.93    1397 5167.45    1396 5170.97    1395 5174.49    1394 5180.55
GR  1394    5209    1394 5237.19    1395 5242.58    1396 5247.96    1397 5251.97
GR  1398 5255.85    1399 5259.53    1400  5261.9    1401 5264.27  1404.8 5265.18
GR  1402 5266.67    1403 5269.03    1404 5271.38  1405.2 5272.32  1404.6  5276.7
GR  1405 5277.23    1405 5281.63
*
NC 0.035   0.040   0.040
ET           5.1                 4663.35    5177
X1  9.54      85 4685.93    5177     410     515     500
GR  1456    4000    1456  4021.5    1454 4238.02    1454 4370.23    1456 4373.71
GR  1458 4382.67    1460 4392.58    1462 4402.82    1464 4414.23    1464 4416.59
GR  1462 4419.16    1460 4421.73    1458  4424.3    1456 4426.86    1454 4429.43
GR  1452 4432.03    1450 4434.89    1448 4437.71    1446 4440.53    1444 4443.94
GR  1442 4455.27    1440 4466.36    1438 4475.82    1436 4485.28    1434 4494.74
GR  1432 4503.98    1430 4512.83    1428 4521.68    1426 4530.63    1424 4537.95
GR  1422  4543.4    1420  4548.8    1418 4566.76    1416 4576.41    1414 4588.78
GR  1412  4606.7    1410 4618.24    1408 4626.12    1406  4646.3 1405.45 4653.56
GR  1406  4654.9    1408 4659.52 1409.53 4663.35 1409.41 4679.83    1408 4685.93
GR  1406 4694.77    1404 4704.62    1402 4714.47    1400 4759.39    1399 4817.12
GR  1399 4833.11    1399 4849.47    1399    4877    1398 4880.23    1397 4889.16
GR  1397 4922.52    1398 4930.18    1398 4954.06    1397 4978.17    1397    5000
GR  1397 5021.85    1398 5031.11    1399 5044.96    1400 5072.02    1401 5077.75
GR  1402 5083.41    1403 5099.61    1404 5131.49    1404 5150.42    1404 5168.37
GR  1404    5177    1404 5197.33    1404  5199.5    1404 5210.97    1404 5253.08
GR  1404 5391.09    1403 5589.76    1403 5598.79    1404 5665.44    1405  5677.3
GR  1406 5688.92    1407 5698.83    1408 5708.08  1408.1 5709.05    1408 5712.42
*
ET           5.1                 4736.39 5231.86
X1  9.65      77 4754.19 5231.86     475     503     558
GR  1464    4000    1464 4008.95    1464 4009.76    1462 4321.74    1460 4399.87
GR  1458 4431.45    1456 4444.62    1454 4455.94    1452 4520.78    1450 4527.92
GR  1448 4534.57    1446 4541.22    1444  4547.9    1442 4555.79    1440 4564.66
GR  1438 4573.56    1436 4582.53    1434  4591.5    1432 4600.47    1430 4609.44
GR  1428 4617.73    1426 4626.65    1424 4636.67    1422 4647.12    1420 4657.56
GR  1418 4668.01    1416 4678.25 1415.47 4681.09    1414 4684.72    1412 4698.82
GR  1410 4712.91 1408.84 4718.95    1410 4724.03    1412 4732.19 1412.28 4733.95
GR1412.3 4736.39 1412.23 4752.15 1412.23 4753.27    1412 4754.19    1410 4762.26
GR  1408 4770.81    1406 4779.35    1404 4787.89    1402 4808.39    1402 4880.47
GR  1402    5000    1402  5117.6    1402 5177.99    1404  5201.2    1406 5208.98
GR  1408 5216.75    1410 5224.53 1411.67 5231.28 1411.74 5231.86 1411.54 5244.69
GR1411.6 5244.92    1410 5251.38    1408 5258.75    1406 5266.02    1405 5297.23
GR  1405 5320.44    1406 5347.25    1406 5388.09    1406 5408.08    1407  5541.7
GR  1407 5718.14    1406  5754.4    1406 5784.09    1406 5792.77    1406 5810.87
GR  1406 5820.41    1406 5838.97    1407 5936.82    1408 6017.23    1409 6081.83
GR  1410 6155.49    1411 6165.28
*
NC 0.035   0.035   0.035
ET           5.1                 4752.73 5283.89
X1  9.70      45 4757.14 5273.18     253     259     256
GR  1466    4109    1464  4316.8    1462 4420.43    1460 4447.14    1458 4478.14
GR  1456 4489.46    1454 4500.45    1452 4509.98    1450 4519.51    1448 4529.04
GR  1446 4538.57    1444  4548.1    1442 4557.38    1440 4566.27    1438 4575.05
GR  1436 4583.83    1434 4592.61    1432 4601.39    1430 4609.72    1428 4617.43
GR  1426 4627.56    1424 4668.02    1422 4677.03    1420 4686.23    1418 4694.23
GR  1416 4702.22    1414 4725.62 1413.09 4738.64 1413.15 4752.73    1412 4757.14
GR  1410 4765.55    1408 4773.94    1406  4782.3    1404 4790.65    1404    5000
GR  1404 5228.02    1406 5244.34    1408 5253.96    1412 5273.18 1412.96 5277.81
GR1413.2 5283.89    1414 5286.99    1416 5294.01    1418 5300.98    1420 5310.97
*
ET           5.1                 4761.98 5298.67
X1  9.73      47 4763.41 5284.93     187     151     169
GR  1468    4092    1466 4213.55    1464    4379    1462  4470.4    1460 4508.81
GR  1458 4525.45    1456 4535.99    1454 4546.24    1452  4556.5    1450 4565.64
GR  1448 4574.49    1446 4582.67    1444 4590.66    1442 4598.64    1440 4606.63
GR  1438 4614.61    1436  4622.6    1434  4630.3    1432 4638.03    1430 4646.07
GR  1428 4654.12    1426 4662.16    1424  4670.2    1422 4678.24    1420 4686.28
GR  1418 4694.59    1416 4735.51    1414 4745.63 1413.77 4747.24    1414 4754.45
GR1414.2 4761.98    1414 4763.41    1412 4771.23    1410 4779.05    1408 4786.93
GR  1406 4794.83    1404 4807.46    1404    5000    1404 5232.22    1406 5255.68
GR  1408 5265.54    1410 5275.37    1412 5284.93    1414 5298.67    1416 5306.36
GR  1418 5314.06    1420 5322.58
*
ET           5.1                 4698.37 5217.67
X1  9.80      62 4738.89 5206.55     383     349     365
GR  1476    4000    1476 4071.22    1474  4291.9    1472 4368.03    1470 4404.99
```

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GR  1468 4419.78    1466 4435.01    1464 4454.29    1462 4489.38    1460 4517.69
GR  1458 4526.82    1456 4535.94    1454 4545.06    1452 4554.19    1450 4563.31
GR  1448 4572.44    1446 4580.51    1444 4588.95    1442 4597.51    1440 4606.07
GR  1438 4614.65    1436 4623.22    1434 4631.58    1432 4639.42    1430 4647.25
GR  1428 4655.08    1426 4662.93    1424 4670.84    1422 4678.74    1420 4686.85
GR  1418 4698.37    1416 4738.89    1416 4742.87    1416 4745.09 1415.15 4749.88
GR1415.7 4766.09    1414 4773.04    1412 4781.48    1410 4789.92    1408 4798.11
GR  1406 4814.33    1406    5000    1406  5168.2    1408 5177.78    1410 5187.37
GR  1412 5196.96    1414 5206.55 1414.61 5209.05  1414.9 5217.67    1416 5221.57
GR  1418 5228.59    1420 5235.61    1422 5242.63    1424 5250.86    1426  5260.4
GR  1428 5270.06    1430 5279.73    1432    5290    1434 5301.13    1436 5313.24
GR  1438 5329.65    1440 5350.74
*
ET           5.1                 4678.48 5167.47
X1  9.89      61 4741.17 5163.70     509     484     495
GR  1480    4000    1480 4097.31    1478  4315.5    1476 4369.55    1474 4409.22
GR  1472 4428.88    1470 4447.01    1468 4467.06    1466 4484.74    1464 4501.35
GR  1462 4517.81    1460 4528.28    1458 4538.09    1456 4547.75    1454 4557.31
GR  1452 4566.31    1450 4574.08    1448 4581.28    1446 4588.48    1444  4595.7
GR  1442 4603.03    1440 4610.35    1438 4617.67    1436 4624.99    1434 4631.68
GR  1432 4638.82    1430 4646.76    1428 4654.71    1426 4662.61    1424 4670.44
GR  1422 4678.48    1422 4689.89 1422.06 4691.09    1422 4691.98 1421.45  4699.1
GR  1420 4741.17    1418 4771.38    1416 4778.99    1414 4786.68    1412 4794.99
GR  1410  4803.8    1408  4840.1    1406 4951.17    1406 4964.91 1407.43    5000
GR  1408 5114.09    1410 5126.94    1412 5136.13    1414 5145.32    1416 5154.51
GR  1418  5163.7  1418.8 5167.47  1418.7 5180.97    1418 5182.68    1418 5202.91
GR  1420 5221.64    1422 5236.46    1424 5244.79    1426 5252.68    1428  5260.3
GR  1430 5267.91
*
ET           5.1                 4813.54 5284.14
X1  9.98      68 4828.11 5274.26     462     469     475
GR  1476    4020    1476 4135.18    1474 4180.69    1472 4242.44    1472 4405.93
GR  1474 4459.87    1474  4532.3    1472 4564.64    1470 4600.47    1468 4627.43
GR  1466 4644.39    1464 4650.73    1462 4658.68    1460 4666.95    1458 4675.21
GR  1456 4683.48    1454 4692.64    1452 4702.53    1450 4711.67    1448 4720.68
GR  1446 4728.08    1444  4734.3    1442 4740.53    1440 4746.75    1438 4752.97
GR  1436 4759.19    1434 4766.97    1432 4775.44    1430 4783.95    1428 4813.54
GR  1428  4821.2 1428.96 4826.63    1428 4828.11    1426 4830.93 1425.95 4831.02
GR1425.7  4834.7    1424 4840.53    1422  4847.1    1420 4853.67    1418 4860.24
GR  1416 4866.81    1414 4874.06    1412 4895.31    1410 4925.82    1410 4957.15
GR  1410  4985.2    1410    5000    1410 5196.05    1412 5234.32    1414 5243.75
GR  1416 5253.18    1418 5262.85    1420 5274.26 1421.67 5284.14 1421.15 5293.67
GR  1420  5297.1  1418.2 5302.27    1420 5323.38    1422  5337.3    1424 5349.84
GR  1426 5361.61    1428 5370.82    1430 5379.99    1432 5389.15    1434  5398.3
GR  1436 5407.46    1438  5416.8    1440 5427.51
*
ET           5.1                 4840.61 5275.34
X1 10.08      60 4841.72 5274.76     508     514     511
GR  1476    4000    1478 4028.78    1480 4085.32    1480 4214.24    1478 4270.59
GR  1476 4333.92    1474 4385.59    1472 4415.91    1470 4435.24    1468 4453.48
GR  1466 4471.72    1464 4489.47    1462 4507.08    1460 4524.24    1458 4540.43
GR  1456 4560.04    1454 4579.47    1452 4664.02    1450 4686.12    1448 4711.59
GR  1446 4736.49    1444 4743.04    1442 4749.49    1440 4755.86    1438 4761.79
GR  1436 4767.07    1434 4772.52    1432 4778.04    1430 4783.56    1428 4789.08
GR  1426 4795.68    1426 4838.85 1426.35 4840.61    1426 4841.72    1424 4848.12
GR  1422 4854.53    1420 4861.27    1418 4869.07    1416 4880.94    1414 4903.67
GR1412.5    5000    1412 5028.73    1412 5119.72    1414 5215.45    1416 5233.54
GR  1418 5244.05    1420 5254.55    1422 5265.05    1424 5274.76 1424.17 5275.34
GR  1424 5277.85  1423.5 5284.05    1422 5288.76    1420  5294.8    1420  5307.7
GR  1422 5411.56    1424 5519.39    1426 5568.38    1428 5584.58    1430 5600.76
*
ET           5.1                 4784.92 5288.33
X1 10.16      48 4797.94 5270.13     447     418     430
GR  1438    4000    1436  4021.6    1434 4039.29    1432 4060.58    1430 4087.84
GR  1428 4116.35    1426 4163.37    1426  4172.5    1426  4329.8    1424 4615.05
GR  1422 4727.69    1422 4765.14    1424 4772.65    1426 4779.85  1427.4 4784.92
GR1426.9 4794.24    1426 4797.94    1424 4806.13    1422 4814.72    1420 4823.31
GR  1418 4831.89    1416 4850.45    1416    5000    1416  5206.7    1418 5231.48
GR  1420 5241.03    1422 5250.58    1424 5260.12    1426 5270.13 1426.69 5273.76
GR1426.8 5288.33    1426 5290.46    1424 5295.56 1423.73 5296.35    1424 5299.13
GR  1426 5318.58    1428 5331.54    1430 5343.77    1432 5355.48    1434  5367.2
GR  1436 5379.53    1438 5392.13    1440 5404.93    1442 5417.74    1444 5430.71
GR  1446 5445.59    1448 5460.48    1450 5475.78
*
ET           5.1                 4772.87 5312.98
X1 10.25      50 4772.87 5312.98     496     420     460
GR  1462    4000    1462  4353.1    1462 4360.97    1464 4372.48    1466  4380.6
GR  1466 4394.69    1464 4399.98    1462 4402.86    1460 4405.73    1458 4408.62
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GR  1456 4420.57    1454 4432.06    1452 4443.38    1450  4454.7    1448 4465.92
GR  1446 4476.55    1444 4487.22    1442 4497.92    1440 4509.43    1438 4521.31
GR  1436 4534.04    1434 4573.89    1434 4576.65    1434 4582.76    1432 4590.09
GR  1430 4597.07    1428 4604.05    1426 4740.78    1426 4758.62    1428 4766.33
GR1429.7 4772.87 1429.36 4781.13    1428 4786.37    1426 4794.42    1424 4802.47
GR  1422 4810.53    1420 4841.46    1420 5225.51    1422 5254.59    1424 5264.85
GR  1426 5274.47    1428 5284.05  1429.2 5289.83 1429.27 5312.98    1430 5319.77
GR  1432 5338.35    1434 5354.33    1436 5382.04    1438 5398.07    1440 5414.09
*
ET           5.1                 4766.40 5271.99
X1 10.33      47 4782.32 5269.64     519     373     444
GR  1450    4000    1448 4073.55    1448 4076.89    1448 4151.72    1446 4166.89
GR  1444 4179.19    1442 4193.45    1440 4215.25    1438 4234.67    1436 4254.62
GR  1434 4273.64    1432 4293.27    1430 4335.46    1428 4352.32    1428 4394.66
GR  1430 4399.29    1432 4405.29    1434 4417.32    1436 4573.71    1434  4592.8
GR  1432 4607.16    1430  4731.8    1430 4744.77    1432 4752.19    1434 4759.52
GR1435.8  4766.4 1435.17 4782.32    1434 4787.13    1432 4795.34    1430 4802.67
GR  1428    4810    1426 4817.69    1424 4826.71 1422.57    5000    1422 5069.23
GR  1422 5172.18    1424 5223.94    1426 5234.36    1428 5243.12    1430 5251.96
GR  1432  5260.8    1434 5269.64 1434.83 5271.99 1434.09 5290.23    1434 5290.52
GR  1432 5296.74    1430 5302.97
*
ET           5.1                 4756.86 5252.58
X1 10.34      38 4775.45 5243.36     104      42      73
GR  1434    4000    1434 4020.85    1432 4060.47    1432 4210.33    1432 4230.74
GR  1430    4304    1430    4351    1430 4400.08    1430 4476.92    1432 4558.77
GR  1432 4579.43    1430 4699.87    1430 4741.11    1432 4746.28    1434 4751.62
GR1435.9 4756.86    1435 4775.45    1434 4779.27    1432 4786.85    1430 4794.42
GR  1428 4803.16    1426 4811.92    1424 4839.17 1422.77    5000    1422 5099.99
GR  1422 5118.31    1424 5204.31    1426 5212.97    1428 5217.15    1430  5226.8
GR  1432 5234.78    1434 5243.36 1435.48 5252.58 1434.92 5272.38    1434 5274.21
GR  1432 5278.35    1430 5282.48    1430 5283.56
*
* HAPPY VALLEY ROAD CROSSING
NC 0.030   0.030   0.030
ET           5.1                 4823.21    5272
X1 10.38      34 4823.21 5293.86     173     143     162
GR  1432    4050    1432 4345.47    1434 4359.49    1436 4382.17    1436 4444.22
GR  1434 4514.59    1434 4523.97    1436 4605.62    1436 4667.41    1434 4710.47
GR  1434  4776.7 1435.99 4798.29 1435.82 4823.21    1434 4831.49    1432 4838.95
GR  1430 4845.97    1428 4854.29    1426 4860.89    1424  4952.8    1424    5000
GR  1424 5110.95    1426  5223.7    1428 5293.86    1430 5418.28    1432 5426.63
GR  1434 5436.09    1436 5445.55    1436 5462.06 1438.33 5462.07 1438.33 5463.07
GR  1436 5463.08    1436 5478.57 1435.96 5479.62    1434 5488.87
*
NC 0.035   0.035   0.035
ET           5.1                 4783.08 5262.74
X1 10.41      52 4791.83 5251.18     198     142     171
GR  1434    4064    1434 4072.38    1436  4078.9    1438 4083.68    1440 4114.64
GR  1442 4124.08    1444 4141.29    1444 4186.45    1442 4196.42    1438 4216.34
GR  1436 4223.27    1434 4229.95    1432 4236.99    1432 4370.62    1434 4373.56
GR  1436  4376.5    1438 4379.45    1440 4383.45    1440 4469.41    1438  4505.1
GR  1436 4516.74    1434 4526.64    1432 4535.95    1432 4754.33    1434 4759.91
GR1435.7 4764.94    1436 4772.28    1436 4782.06 1438.34 4782.07 1438.34 4783.07
GR  1436 4783.08    1436 4791.83    1434 4800.27    1432 4808.85    1430 4817.15
GR  1428  4863.1    1428    5000    1428 5071.88    1428 5119.31    1428 5202.52
GR  1430 5229.35    1432 5236.74    1434 5244.12    1436 5251.18    1436 5262.73
GR1438.9 5262.74  1438.9 5262.75    1436 5262.76    1436 5274.27    1434  5279.7
GR  1432 5285.08    1430  5290.4
*
ET           5.1                 4758.78 5239.41
X1 10.42      46 4772.17 5239.37      70      58      64
GR  1434    4057    1434 4122.12    1434 4141.01    1432 4192.42    1432 4500.07
GR  1434 4518.47    1436 4524.56    1438 4530.85    1438    4566    1436 4602.78
GR  1434 4617.91    1432 4648.14    1432 4733.89    1434  4738.7    1436 4743.37
GR  1436 4757.77    1439 4757.78    1439 4758.78    1436 4758.79    1436 4772.17
GR  1434 4781.27    1432  4790.3 1431.35 4793.22    1430 4857.83    1428  4863.2
GR  1426 4872.34    1426    5000    1426 5035.16    1428 5059.55    1430 5071.52
GR  1430 5178.76    1430  5209.5    1432  5217.1    1434 5224.61    1436 5232.04
GR  1438 5239.37    1438 5239.40  1439.8 5239.41  1439.8 5240.41    1438 5240.42
GR  1438 5240.71 1437.62 5260.38    1436 5263.54    1434 5267.47    1432 5271.31
GR  1430 5275.13
*
ET           5.1                 4717.29 5219.45
X1 10.51      85 4720.44 5201.75     439     487     472
GR  1434    4000    1432 4130.14    1428 4139.76    1426  4144.4    1424 4149.04
GR  1422 4153.68    1418 4208.59    1418 4223.25    1418  4230.6    1418 4282.85
GR  1418 4360.51    1416 4368.14    1414 4375.06    1412 4381.98    1408 4395.81
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GR  1406 4403.31    1404  4411.2    1402 4420.45    1398 4444.12    1396 4455.04
GR  1396 4458.71    1398 4462.24    1400 4465.78    1402  4469.3    1404  4472.7
GR  1406 4476.09    1406 4476.39    1404 4480.43    1402 4489.41    1400 4498.38
GR  1398 4511.86    1398 4523.62    1402 4606.66    1404 4619.36    1406 4625.57
GR  1408 4631.74    1412 4641.43    1414  4645.8    1416 4650.17    1418 4654.55
GR  1422 4663.24    1424 4666.88    1426 4670.52    1428 4674.16    1432 4681.45
GR  1434 4685.09    1436 4688.73    1438 4692.35    1440 4695.92    1440 4716.28
GR1443.2 4716.29  1443.2 4717.29 1440.66 4717.32    1440 4720.44    1438 4729.62
GR  1436  4738.8    1434 4747.98 1432.68 4754.05    1434 4795.05    1434 4811.47
GR  1432 4826.23    1430 4844.12    1428 4880.89    1428 4916.32    1428  4916.6
GR  1428 4924.94    1430 4975.63    1430 4993.27    1430    5000    1430 5004.42
GR  1430 5038.01    1430 5060.04    1432 5076.82    1434 5173.28    1436  5182.8
GR  1438 5192.33    1440 5201.75    1440 5219.44 1443.73 5219.45 1443.73 5220.45
GR1440.7 5220.46  1440.7 5237.12    1442 5243.12    1444 5251.74    1444  5270.2
*
NC 0.035    0.05   0.035
ET           5.1                 4664.91 5132.57
X1 10.62      87 4665.97 5128.07     535     618     596
GR  1438    4000    1438 4067.63    1438 4119.75    1438 4123.09    1436 4126.37
GR  1434 4129.64    1432 4132.91    1428 4139.57    1426 4142.92    1424 4157.62
GR  1422 4197.88    1422 4274.19    1422 4279.99    1418 4285.73    1416 4288.61
GR  1414 4291.48    1412 4294.36    1408  4300.1    1406 4302.98    1404 4305.85
GR  1402 4308.72    1398 4314.87    1396 4318.05    1394 4326.83    1392 4337.52
GR  1392  4407.2    1394 4430.83    1396 4477.86    1398 4520.73    1402 4551.89
GR  1404 4565.94    1406 4587.33    1408 4591.51    1412 4599.92    1414  4604.3
GR  1416 4608.68    1418 4613.06    1422 4621.46    1424 4625.35    1426 4629.24
GR  1428 4633.13    1432 4640.85    1434 4644.69    1436 4648.53    1438 4652.37
GR  1440 4656.21    1442 4660.05    1444 4663.89    1444 4663.90  1445.7 4663.91
GR1445.7 4664.91    1444 4664.92    1444 4665.97 1443.33 4681.76    1442 4687.65
GR  1440 4696.48    1438 4705.29 1436.53 4711.79    1436 4760.05    1434 4774.11
GR  1432  4791.7    1432 4792.06    1434 4804.84    1434 4812.38    1434 4844.64
GR  1434 4908.11    1432 4978.39    1430 4993.25    1430    5000    1430 5019.08
GR  1432 5025.21    1434 5047.48    1436 5072.96 1436.27 5078.41    1438 5088.52
GR  1440 5100.18    1442  5111.6    1444 5128.07 1444.34 5132.57    1446 5140.61
GR  1448  5150.2    1450 5159.88    1452 5169.67    1454 5179.15    1454 5200.76
GR  1454  5213.3    1456 5219.38
*
NC 0.035   0.035   0.035
ET           5.1                 4748.11  5211.3
X1 10.70      43 4759.88  5193.3     390     382     402
GR  1444    4000    1444 4038.07    1444 4066.66    1444 4284.59    1442 4345.59
GR  1440  4412.2    1440 4618.19    1442 4696.02 1442.67 4720.77    1444 4727.26
GR1446.2 4734.32  1446.2 4747.10 1448.10 4747.11 1448.10 4748.11  1446.2 4748.12
GR1446.2 4759.88    1444 4767.51    1442 4775.38 1440.89 4779.56    1440 4856.65
GR  1438 4908.41    1436 4929.27    1434 4963.32    1434    5000    1434 5015.86
GR  1436 5039.71    1436 5072.24    1436 5119.55    1438 5144.54    1440 5154.48
GR  1442 5163.53    1444 5172.15    1446 5188.42 1446.48  5193.3    1448 5197.69
GR  1450 5201.41    1452 5205.12    1454 5208.74 1455.47  5211.3    1456 5213.46
GR  1458 5222.24    1458 5238.92    1456 5256.86
*
ET           5.1                 4782.29 5310.03
X1 10.83      54  4800.8 5298.85     642     704     717
GR  1448    4234    1448 4375.81    1448 4583.91    1446 4610.95    1446  4656.3
GR  1446 4742.93 1444.39  4761.2    1446 4765.18    1448 4769.97    1450 4774.76
GR  1452 4779.31    1452 4781.28 1454.60 4781.29 1454.60 4782.29    1452 4782.30
GR  1452  4800.8    1450 4808.34    1448 4816.39    1446 4825.37    1444 4844.86
GR  1442 4867.57    1440 4888.99    1438 4911.48    1438  4931.3    1440 4955.08
GR  1440 4961.15    1440    5000    1440 5073.72    1442 5081.76    1444 5085.61
GR  1446 5088.41    1446 5095.29    1446 5268.61    1448  5283.3    1450 5291.33
GR  1452 5298.85    1452 5310.02 1454.25 5310.03 1454.25 5311.03    1452 5311.04
GR  1452 5321.19    1450 5325.84    1448 5330.48    1446  5352.1    1444  5429.4
GR  1442 5433.87    1442  5453.7    1442 5462.01    1440 5467.15    1438 5472.69
GR  1438 5487.43    1440 5493.52    1442 5499.62    1444 5505.79
*
ET           5.1                 4766.74    5290
X1 10.93      47 4790.58 5279.54     456     557     516
GR  1450    4075    1450 4401.05    1450 4472.44    1450 4658.68    1448 4685.74
GR  1446 4692.07    1446 4738.32    1448 4747.74    1450 4752.28    1452 4756.82
GR  1454 4761.36    1456 4765.91 1456.34 4766.74 1456.31  4782.2    1456 4783.11
GR  1454 4790.58    1452 4801.13    1450 4811.94    1448 4852.07    1446 4882.26
GR  1444  4895.5    1442 4901.64    1440 4907.78    1440 4909.75    1440    5000
GR  1442 5025.23    1444 5039.36    1446 5045.88    1448 5065.33    1448 5141.49
GR  1446 5151.73    1446 5160.63    1448    5249    1450 5259.77    1452 5267.62
GR  1454 5275.29  1455.1 5279.54 1458.23    5290 1458.23    5291  1455.6 5291.01
GR1455.6 5301.19    1454 5303.86    1452 5307.17    1450 5311.25    1448 5317.12
GR  1446 5322.99    1446 5329.64
*
* CONFLUENCE WITH BUCHANAN WASH
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ET           5.1                    4581.43 5120.83
X1 11.03      59 4598.63 5120.83     506     504     525
GR  1454    4082    1454  4316.5    1454 4398.81    1454 4405.76    1454 4444.05
GR  1454 4463.63    1452 4472.52    1452 4546.98    1452 4556.11 1451.02 4559.09
GR  1452 4561.67    1454 4566.38    1456 4571.08    1458 4575.79    1460 4580.49
GR1460.3 4581.43 1460.24 4597.21    1460 4598.63    1458 4606.22    1456 4613.78
GR  1454 4621.09    1452 4629.76    1450 4642.89    1449 4647.63    1448 4693.69
GR  1448 4736.54    1450 4814.76    1450 4864.18    1448 4942.71    1446 4949.67
GR  1444 4956.46    1442 4984.22    1442    5000    1442 5002.45    1444 5021.76
GR  1446 5026.06    1448  5043.9    1448 5055.01    1446 5062.54    1444 5069.86
GR  1442  5077.4    1442 5100.06    1444 5110.31    1446 5120.83    1448 5131.74
GR  1448 5143.33    1448 5159.14    1450 5172.98    1452 5186.65    1454    5200
GR  1456 5213.08    1458 5227.34    1460 5242.36 1460.78 5249.29  1460.5 5289.31
GR  1460 5290.38    1458 5301.57    1456 5314.34    1454 5329.62
*
NC 0.050   0.035   0.035
ET           5.1                    4762 5149.91
X1 11.14      32    4762 5149.91     606     610     606
GR  1460 4331.11    1460 4359.12    1458 4450.29    1456 4510.13    1454 4516.73
GR  1452 4523.33    1450 4529.82    1450 4653.75    1452 4685.50    1452    4762
GR  1452 4830.94    1450 4913.55    1450 4965.11    1448 4975.89    1448    5000
GR  1448 5056.87    1450 5060.92    1452 5064.99    1452 5097.48    1454 5121.70
GR  1456 5126.41    1458 5131.13    1460 5135.85    1462 5140.57    1464 5145.28
GR  1466 5149.91    1466 5173.09    1464 5177.70    1462 5182.56    1460 5187.75
GR  1458 5192.64    1456 5197.53
*
* BEGIN CORPS LEVEES
NC 0.035   0.035   0.020
ET           5.1                    4825.06 5165.90
X1 11.19      80 4825.06 5161.07     277     212     225
GR1466.0 4799.55 1466.00 4823.70 1466.00 4825.06 1465.44 4826.50 1464.00 4830.18
GR1463.6 4831.26 1462.00 4835.30 1461.78 4835.87 1460.47 4839.23 1460.00 4840.18
GR1459.8 4840.67 1458.00 4844.27 1457.08 4846.17 1456.00 4848.37 1454.68 4851.08
GR1454.0 4852.47 1452.35 4858.63 1452.00 4861.70 1452.00 4865.26 1452.00 4867.38
GR1452.0 4906.20 1452.00 4944.98 1452.00 4945.21 1452.00 4948.20 1452.00 4955.59
GR1452.0 4974.23 1452.00 4983.63 1452.00 5000.00 1452.00 5052.40 1452.00 5075.88
GR1452.0 5079.43 1452.00 5080.15 1452.00 5083.16 1452.00 5085.12 1452.21 5091.07
GR1452.2 5091.41 1452.82 5104.84 1453.40 5118.66 1453.68 5124.97 1454.00 5131.82
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GR1464.7 5158.02 1466.00 5161.07 1466.79 5162.98 1468.00 5165.90 1468.00 5172.97
GR1468.0 5198.33 1468.00 5198.71 1468.00 5208.06 1467.82 5208.79 1467.42 5210.39
GR1466.0 5213.89 1464.59 5217.33 1464.00 5218.79 1462.10 5223.33 1462.00 5223.58
GR1461.9 5223.73 1460.00 5228.27 1459.05 5230.49 1458.00 5232.96 1456.96 5238.16
GR1456.5 5239.87 1456.32 5241.27 1456.00 5249.77 1456.00 5262.87 1455.84 5273.99
GR1456.0 5290.85 1456.15 5294.26 1456.26 5305.86 1456.31 5328.45 1456.18 5342.81
*
ET           5.1                    4827.39 5184.66
X1 11.29      94 4827.39 5184.66     486     591     536
GR1458.6 4498.36 1458.15 4531.48 1458.00 4544.39 1457.54 4552.02 1456.00 4556.76
GR1455.7 4557.78 1454.54 4561.02 1454.00 4562.59 1454.00 4605.58 1454.95 4629.82
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GR1457.5 4684.77 1456.93 4728.58 1456.76 4749.58 1457.01 4757.49 1457.65 4782.78
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GR1463.4 5215.12 1462.00 5218.65 1460.33 5224.18 1460.00 5225.24 1459.63 5239.24
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GR1462.8 5480.65 1462.48 5495.44 1462.00 5521.62 1462.00 5562.61
*
ET           5.1                    4826.47 5170.48
X1 11.39      88 4826.47 5170.48     520     577     548
GR1463.4 4540.53 1462.24 4575.55 1462.00 4587.19 1461.52 4589.31 1460.82 4592.35
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GR1468.0 5166.35 1468.90 5168.21 1470.00 5170.48 1471.01 5177.47 1471.30 5178.73
GR1471.0 5187.97 1470.52 5189.60 1470.00 5191.33 1469.06 5193.63 1468.00 5196.22
GR1466.9 5199.00 1466.00 5201.12 1464.50 5204.79 1464.00 5205.96 1463.56 5227.10
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GR1466.0 5520.78 1466.48 5534.57 1467.00 5553.06
*
ET           5.1                  4831.85 5174.56
X1 11.48      93 4831.85 5174.56     443     532     487
GR1469.5 4463.12 1470.00 4514.20 1470.67 4526.19 1472.00 4532.14 1472.00 4536.27
GR1471.2 4545.52 1472.00 4549.52 1471.16 4556.05 1470.89 4562.81 1470.59 4569.92
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GR1468.6 4709.20 1468.27 4720.52 1468.00 4733.02 1467.35 4737.19 1467.59 4745.21
GR1467.3 4752.17 1466.00 4781.13 1465.37 4784.00 1465.14 4788.41 1465.46 4789.08
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GR1471.5 4828.31 1470.00 4831.85 1469.59 4832.79 1468.00 4836.43 1467.65 4837.23
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GR1454.5 4982.94 1454.00 5000.00 1454.00 5139.53 1455.68 5143.25 1456.00 5143.95
GR1457.7 5147.78 1458.00 5148.36 1459.81 5152.35 1460.00 5152.78 1461.90 5156.97
GR1462.0 5157.19 1463.56 5160.62 1464.00 5161.59 1466.00 5165.91 1468.00 5170.24
GR1468.3 5170.98 1470.00 5174.56 1471.57 5177.96 1472.00 5179.19 1472.00 5194.00
GR1470.3 5199.62 1470.00 5200.65 1468.88 5204.39 1468.00 5207.39 1467.56 5217.72
GR1466.9 5233.75 1466.58 5241.08 1466.33 5246.90 1466.40 5250.99 1466.61 5264.73
GR1467.0 5289.91 1467.20 5306.66 1467.34 5341.05 1467.60 5361.43 1467.94 5383.99
GR1467.8 5395.19 1467.56 5419.40 1468.00 5430.41
*
* END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17
ET           5.1                  4845.32 5152.45
X1 11.56      87 4845.32 5152.45     386     396     390
GR1471.8 4676.86 1471.19 4685.14 1470.77 4690.44 1470.54 4693.47 1470.29 4696.28
GR1470.3 4700.82 1470.50 4703.37 1470.83 4707.69 1471.29 4713.13 1472.00 4721.56
GR1472.0 4845.32 1470.73 4853.22 1470.34 4856.19 1470.00 4857.83 1469.42 4859.18
GR1468.0 4862.39 1467.55 4863.42 1466.00 4867.01 1464.74 4869.91 1464.00 4871.63
GR1462.4 4875.29 1462.00 4876.26 1460.24 4880.32 1460.00 4880.88 1459.55 4891.07
GR1459.2 4900.27 1459.14 4911.50 1459.18 4917.72 1459.27 4936.45 1459.28 4951.90
GR1459.3 4956.77 1459.32 4970.56 1459.36 4977.34 1459.35 4986.98 1459.40 5000.00
GR1459.5 5006.02 1459.50 5012.85 1459.48 5022.30 1459.43 5032.20 1459.31 5049.20
GR1459.3 5049.41 1459.31 5049.51 1459.31 5049.72 1459.30 5060.17 1459.48 5072.34
GR1459.5 5084.60 1459.48 5091.51 1459.47 5098.77 1459.30 5109.95 1459.40 5114.80
GR1459.6 5117.41 1459.59 5117.63 1460.00 5124.33 1461.59 5127.25 1461.65 5127.38
GR1462.0 5128.28 1462.29 5129.00 1462.54 5129.65 1463.39 5131.68 1464.00 5133.13
GR1465.0 5135.40 1466.00 5137.90 1466.70 5139.56 1468.00 5142.66 1468.53 5143.93
GR1470.0 5147.43 1470.90 5149.69 1472.00 5152.45 1472.00 5165.70 1471.55 5168.67
GR1471.2 5170.75 1470.00 5178.38 1470.00 5225.76 1470.27 5226.00 1472.00 5227.56
GR1472.5 5228.46 1472.76 5229.77 1472.00 5233.24 1471.71 5234.57 1471.42 5235.87
GR1471.4 5236.02 1470.93 5237.02 1470.00 5239.41 1470.00 5268.37 1470.59 5293.04
GR1470.9 5296.51 1471.02 5306.55
*
* OUTLET OF I-17 CROSSING
ET           5.1                  4880.47 5126.63
X1 11.57      92 4880.47 5126.63      72      75      73
GR1470.8 4670.15 1471.04 4676.02 1471.81 4692.20 1472.00 4696.83 1472.63 4707.63
GR1472.8 4711.11 1473.05 4715.60 1473.66 4746.09 1473.57 4751.49 1473.41 4760.54
GR1474.0 4769.16 1474.00 4816.39 1473.19 4827.23 1472.71 4833.86 1472.64 4834.85
GR1472.0 4844.37 1472.00 4861.16 1472.54 4870.52 1472.00 4880.47 1471.79 4880.62
GR1470.1 4881.77 1470.00 4881.79 1468.35 4882.11 1468.00 4882.18 1466.41 4882.49
GR1466.0 4882.57 1464.43 4882.88 1464.00 4882.96 1462.45 4883.27 1462.00 4883.35
GR1461.6 4896.00 1461.53 4899.52 1461.22 4909.97 1461.03 4926.96 1460.86 4934.09
GR1460.6 4946.27 1460.36 4961.63 1460.29 4993.04 1460.30 5000.00 1460.41 5002.11
GR1460.5 5010.81 1460.63 5019.07 1461.14 5020.57 1461.34 5048.98 1461.18 5074.02
GR1460.9 5090.68 1461.37 5103.14 1461.81 5115.32 1461.86 5116.93 1462.00 5120.67
GR1462.6 5120.78 1464.00 5121.06 1464.40 5121.17 1466.00 5121.48 1466.51 5121.56
GR1467.1 5121.69 1468.00 5121.86 1469.43 5122.14 1470.00 5122.25 1470.50 5123.25
GR1471.7 5125.87 1472.00 5126.63 1472.00 5154.31 1471.46 5159.70 1470.38 5170.04
GR1470.4 5174.42 1470.49 5174.60 1470.77 5175.42 1472.00 5179.41 1472.00 5180.09
GR1471.6 5182.32 1470.00 5193.35 1470.00 5209.59 1470.38 5210.71 1471.63 5215.00
GR1472.0 5216.25 1472.00 5216.38 1472.00 5218.35 1471.83 5219.05 1470.00 5223.24
GR1470.0 5225.98 1470.22 5226.92 1470.00 5227.88 1470.00 5234.90 1470.81 5241.05
GR1470.8 5241.43 1471.05 5249.44 1470.99 5250.35 1470.90 5250.66 1470.72 5261.88
GR1471.0 5291.96 1471.60 5306.88
```

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*
EJ
ER
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<u>0.2% Annual Chance Flood</u>

Main Channel

Output File: main500.out

```
1*******************************************
 *  HEC-2 WATER SURFACE PROFILES            *
 *                                          *
 *  Version   4.6.2;  May 1991              *
 *                                          *
 *  RUN DATE    15SEP04    TIME   15:13:29  *
 *******************************************
```

```
****************************************
*  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
```

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THIS RUN EXECUTED 15SEP04 15:13:29

```
*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

```
T1    MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2    INPUT FILE: main500.dat       500-YR FLOOD ELEVATION
T3    ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4    October 2003 EMCON/OWT Inc. rev. for add'l ret. int. August 2004

      This model is used to determine the main channel Base Floodplain
      Extended x-section data used for stationing 9.21 - 9.35 (rockwall removed)
      Split flowrates are applied from bkt500.dat and are partitioned across
      relevant cross sections.

      Starting WSEL is Adobe Dam reservoir 100-yr WSEL from effective FIS study.
      Boundary conditions were taken from Tetra Tech modeling.
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2			0		0	0	1378.00	

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38 43 1 2 26 8 4 25 68 53
54

500-yr peak discharge is from effective FIS study.

QT	1	79724								
NC	0.045	0.045	0.035	0.1	0.3					
ET		5.1			3796.61	5556.89				
X1	8.69	95	4025.25	5073.77						
GR	1380.0	3796.61	1380.00	3854.47	1379.00	3861.47	1378.00	3868.42	1378.00	3878.69
GR	1378.6	3884.04	1380.00	3896.01	1380.00	3907.92	1379.82	3923.26	1379.91	3925.58
GR	1380.0	4002.41	1380.54	4004.61	1382.00	4011.19	1382.00	4016.12	1381.16	4025.25
GR	1380.0	4037.88	1379.55	4039.54	1378.00	4045.04	1376.66	4058.92	1376.33	4063.23
GR	1376.0	4067.80	1375.66	4071.80	1374.51	4084.66	1374.14	4088.53	1374.00	4090.42
GR	1373.8	4091.18	1373.53	4092.99	1372.00	4102.33	1371.23	4129.14	1370.00	4171.62
GR	1370.0	4446.38	1370.04	4448.91	1372.00	4550.37	1372.00	4583.65	1371.80	4601.95
GR	1371.2	4726.77	1371.45	4741.81	1371.10	4787.06	1371.00	4796.71	1370.54	4837.32
GR	1370.6	4872.36	1370.52	4876.45	1370.60	4881.98	1370.60	4882.00	1370.82	4897.47
GR	1371.4	4906.65	1371.83	4913.95	1372.00	4917.45	1372.34	4920.12	1374.00	4933.03
GR	1374.3	4936.71	1374.00	4958.00	1373.51	4959.38	1372.00	4963.60	1371.80	4964.16
GR	1370.0	4969.21	1368.37	4973.77	1368.00	4974.80	1366.00	4980.35	1365.56	4981.39

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GR	1364.7	4987.21	1364.21	4990.25	1364.00	4992.46	1364.00	5000.00	1364.00	5003.25
GR	1365.5	5010.85	1365.78	5012.36	1366.00	5013.46	1366.52	5014.69	1368.00	5018.15
GR	1368.3	5018.85	1370.00	5022.82	1370.70	5024.49	1372.00	5027.49	1373.05	5031.15
GR	1374.0	5034.40	1375.00	5039.27	1376.00	5044.17	1376.23	5045.52	1377.39	5052.81
GR	1378.0	5059.14	1378.78	5065.36	1379.49	5073.77	1379.70	5074.11	1379.26	5077.51
GR	1378.7	5079.93	1378.00	5082.02	1378.00	5116.40	1378.13	5146.24	1378.00	5177.10
GR	1378.0	5181.33	1377.50	5273.67	1377.18	5375.38	1377.56	5451.37	1377.29	5556.89

QT	1	79724								
ET		5.1			3855.70	5475.95				
X1	8.79	89	4095.41	5039.30	530	546	539			
GR	1384.0	3855.70	1384.00	3973.82	1382.64	3980.66	1384.00	3998.09	1382.65	4051.20
GR	1382.6	4058.69	1382.49	4060.23	1382.89	4064.63	1384.00	4067.90	1384.00	4095.41
GR	1382.2	4107.84	1382.00	4109.37	1380.85	4117.39	1380.00	4123.50	1378.49	4137.14
GR	1378.0	4141.55	1376.51	4154.98	1376.00	4159.65	1374.00	4171.01	1373.84	4176.47
GR	1372.0	4222.80	1372.00	4265.74	1371.40	4267.19	1370.00	4271.65	1370.02	4277.10
GR	1370.5	4303.75	1372.00	4387.79	1372.60	4464.89	1373.01	4509.16	1373.45	4564.23
GR	1373.6	4589.91	1374.00	4659.42	1374.00	4677.54	1373.79	4707.25	1374.00	4731.92
GR	1375.0	4815.01	1375.48	4838.28	1375.82	4866.71	1375.01	4881.51	1374.70	4887.04
GR	1374.0	4898.81	1374.00	4914.20	1376.00	4932.06	1377.09	4941.83	1377.77	4948.33
GR	1378.0	4950.51	1378.00	4973.99	1377.74	4974.57	1376.00	4978.35	1375.92	4978.54
GR	1375.3	4979.92	1374.00	4982.54	1373.68	4983.19	1372.00	4986.64	1371.40	4987.87
GR	1370.0	4990.74	1369.23	4992.31	1368.00	4994.83	1367.12	4996.63	1366.00	4998.93
GR	1366.0	5000.00	1367.19	5002.89	1368.00	5004.26	1369.43	5006.66	1370.00	5007.63
GR	1371.8	5010.72	1372.00	5011.01	1372.55	5011.93	1374.00	5014.64	1374.46	5015.50
GR	1376.0	5018.37	1377.54	5024.62	1378.00	5026.26	1378.19	5027.55	1378.48	5029.47
GR	1380.0	5039.30	1380.47	5053.53	1381.00	5070.14	1381.05	5074.82	1381.51	5092.11
GR	1381.8	5130.27	1381.56	5144.28	1381.81	5200.42	1381.90	5207.46	1381.92	5219.18
GR	1382.0	5303.86	1382.00	5320.81	1381.88	5345.60	1381.56	5475.95		

QT	1	79724								
ET		5.1			4279.99	5437.79				
X1	8.93	71	4541.12	5252.00	565	711	722			
GR	1386.3	4279.99	1386.00	4295.47	1386.34	4315.43	1386.00	4350.00	1385.51	4354.32
GR	1386.0	4371.17	1386.00	4454.56	1386.25	4457.97	1387.66	4480.76	1388.00	4485.92
GR	1388.0	4526.66	1386.72	4541.12	1386.00	4552.20	1385.40	4560.69	1385.02	4564.36
GR	1384.5	4569.41	1384.00	4573.51	1382.63	4586.39	1382.43	4588.53	1382.00	4594.51
GR	1381.7	4598.20	1380.48	4604.38	1380.00	4606.94	1379.91	4608.36	1378.58	4632.57
GR	1378.0	4639.26	1376.00	4653.50	1375.35	4704.64	1374.00	4828.12	1373.68	4850.43
GR	1373.1	4888.01	1372.88	4901.73	1372.00	4950.77	1371.17	4970.32	1370.00	4996.16
GR	1370.1	5000.00	1370.40	5014.94	1370.52	5018.25	1370.89	5033.81	1371.01	5037.53
GR	1371.3	5046.38	1371.00	5056.40	1370.55	5068.53	1370.60	5102.71	1370.78	5109.11
GR	1371.1	5116.39	1371.60	5131.46	1372.00	5139.38	1373.19	5146.05	1373.89	5149.69
GR	1374.0	5150.47	1374.30	5152.78	1374.67	5155.69	1376.00	5166.46	1376.39	5169.57
GR	1378.0	5182.62	1379.50	5195.03	1380.00	5200.27	1380.58	5207.92	1381.76	5224.62
GR	1382.0	5227.77	1382.80	5252.00	1384.00	5330.07	1384.00	5333.71	1384.91	5347.75
GR	1386.0	5362.52	1386.60	5376.48	1386.90	5391.40	1387.03	5397.63	1387.24	5419.21
GR	1387.0	5437.79								

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QT	1	76646								
ET		5.1			4519.91	5433.52				
X1	9.01	81	4817.29	5340.88	363	558	430			
GR	1388.4	4519.91	1388.00	4559.91	1388.00	4561.41	1388.84	4570.06	1388.45	4571.71
GR	1388.0	4573.70	1388.00	4576.09	1388.46	4578.03	1388.77	4579.51	1388.28	4582.90
GR	1388.0	4583.57	1388.00	4677.39	1388.26	4681.88	1389.30	4700.64	1389.76	4708.44
GR	1389.3	4717.62	1388.98	4718.21	1388.52	4718.22	1388.00	4721.78	1387.37	4732.92
GR	1387.1	4737.05	1386.95	4738.08	1386.40	4758.07	1386.64	4764.66	1386.86	4770.00
GR	1387.0	4774.77	1387.38	4799.17	1387.08	4803.47	1386.92	4804.87	1386.44	4811.50
GR	1386.0	4817.29	1384.00	4825.73	1383.63	4827.33	1382.00	4834.13	1380.26	4841.49
GR	1380.0	4842.58	1379.21	4845.86	1378.00	4850.84	1376.45	4856.91	1376.00	4858.68
GR	1375.8	4859.41	1374.00	4866.60	1373.72	4878.11	1373.33	4898.38	1373.06	4911.20
GR	1372.9	4920.39	1372.51	4939.85	1372.35	4949.90	1372.19	4962.38	1372.32	4994.02
GR	1372.4	5000.00	1372.50	5005.13	1373.08	5052.28	1373.49	5089.07	1373.86	5118.83
GR	1374.0	5130.57	1375.57	5137.72	1376.00	5139.67	1377.54	5146.76	1378.00	5149.27
GR	1379.4	5157.21	1380.00	5161.68	1380.57	5169.64	1380.83	5173.36	1380.91	5174.01
GR	1381.2	5177.53	1381.59	5182.69	1382.00	5188.14	1382.37	5193.51	1383.14	5206.05
GR	1384.0	5217.34	1385.32	5244.41	1385.68	5252.28	1386.00	5257.06	1387.77	5292.41
GR	1388.0	5296.60	1388.84	5320.16	1389.58	5340.88	1389.68	5346.00	1390.00	5351.31
GR	1390.0	5433.52								

QT	1	73779								
ET		5.1			4515.30	5233.18				
X1	9.08	70	4796.92	5198.84	432	165	365			
GR	1391.1	4515.30	1390.24	4539.50	1390.00	4540.45	1390.00	4625.97	1390.21	4628.50
GR	1390.6	4632.33	1390.69	4632.97	1390.44	4647.05	1390.08	4647.52	1390.00	4647.64
GR	1389.6	4649.23	1388.00	4655.18	1388.00	4670.31	1388.16	4671.07	1388.14	4787.35
GR	1388.0	4796.92	1387.24	4809.20	1386.69	4817.41	1386.00	4827.18	1384.79	4833.74
GR	1384.0	4837.38	1383.79	4838.28	1382.78	4842.68	1382.00	4845.64	1381.40	4847.91
GR	1380.0	4853.19	1378.86	4857.51	1378.00	4860.75	1377.03	4864.25	1376.00	4868.13

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GR   1375.1    4871.58    1374.00    4875.67    1373.97    4878.43    1373.92    4884.08    1373.76    4895.74
GR   1373.7    4902.64    1373.65    4905.82    1373.59    4911.57    1373.49    4920.43    1373.47    5000.00
GR   1373.5    5095.48    1373.56    5107.93    1373.59    5109.03    1373.62    5112.59    1373.70    5119.31
GR   1373.8    5122.87    1373.82    5124.67    1373.85    5126.00    1373.92    5128.16    1373.94    5130.06
GR   1374.0    5131.14    1374.13    5131.77    1376.00    5140.79    1377.41    5147.57    1378.00    5150.02
GR   1378.6    5152.38    1380.00    5158.25    1381.29    5163.54    1382.00    5166.47    1383.45    5172.44
GR   1384.0    5174.70    1385.73    5181.83    1386.00    5182.93    1387.10    5187.46    1388.00    5190.99
GR   1388.1    5191.61    1389.08    5195.22    1390.00    5198.84    1390.04    5199.45    1390.27    5233.18

QT        1      59075
NC    0.035      0.035      0.035
ET                 5.1                          4525.85    5437.55
X1     9.14         94    4835.60    5165.24        288        385        333
GR   1392.1    4525.85    1392.00    4598.96    1391.59    4608.73    1390.99    4723.68    1391.42    4775.78
GR   1391.5    4789.87    1391.64    4805.14    1391.00    4830.80    1390.59    4832.90    1390.00    4835.60
GR   1389.7    4836.69    1389.00    4839.12    1388.44    4841.11    1388.00    4842.60    1387.57    4843.96
GR   1387.0    4845.55    1386.47    4846.70    1386.00    4847.68    1385.71    4848.28    1385.00    4849.75
GR   1384.7    4850.41    1384.00    4851.87    1383.84    4852.20    1383.32    4853.25    1383.00    4853.91
GR   1382.8    4854.33    1382.00    4856.07    1381.65    4856.77    1381.00    4858.07    1380.00    4860.14
GR   1379.7    4861.00    1379.19    4861.98    1379.00    4862.42    1378.49    4863.58    1378.00    4864.71
GR   1377.4    4866.13    1377.00    4867.28    1376.43    4869.03    1376.00    4869.56    1375.54    4872.43
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GR   1374.5    4874.14    1374.00    4875.08    1374.00    5000.00    1374.00    5062.13    1374.39    5091.47
GR   1375.0    5121.35    1375.00    5125.45    1375.71    5129.68    1376.00    5131.10    1376.94    5133.66
GR   1377.0    5134.06    1377.77    5135.68    1378.00    5136.16    1379.00    5138.25    1379.92    5140.18
GR   1380.0    5140.35    1380.80    5142.03    1381.00    5142.44    1381.45    5143.38    1382.00    5144.53
GR   1382.9    5146.34    1383.00    5146.63    1383.72    5148.14    1384.00    5148.75    1384.46    5149.37
GR   1385.0    5150.09    1385.25    5150.43    1386.00    5151.41    1386.80    5152.48    1387.00    5152.75
GR   1387.2    5153.56    1388.00    5156.83    1388.60    5159.29    1389.00    5160.92    1389.34    5162.35
GR   1389.7    5164.16    1390.00    5165.24    1390.00    5165.45    1390.42    5166.34    1391.00    5168.32
GR   1391.8    5170.94    1391.91    5171.50    1392.00    5171.73    1392.22    5174.81    1392.64    5180.92
GR   1393.0    5184.53    1392.55    5196.46    1392.91    5224.81    1392.45    5256.91    1392.29    5293.65
GR   1392.1    5328.16    1392.00    5380.42    1392.00    5416.53    1391.87    5437.55
  DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT        1      52375
X1    9.145         66       5015       5325          8          8          8
X3       10          0          0          0          0          0          0     1392.2     1393.1
BT      -16       5015     1394.5     1394.5    5015.01     1394.5       1390       5045     1394.8     1390.3
BT                5085     1395.2     1390.7    5088.75     1395.2     1390.8    5093.75     1395.3     1390.8
BT                5125     1395.6     1391.1       5170     1395.7     1391.2       5205     1395.7     1391.2
BT                5245     1395.5       1391    5246.25     1395.5       1391    5251.25     1395.5       1391
BT                5285     1395.2     1390.7       5295     1395.1     1390.6    5324.99     1394.7     1390.2
BT                5325     1394.7     1394.7
GR   1395.6    3767.9     1395.5     3820.9     1395.4     3873.6     1395.4     3891.5     1395.4     3939.2
GR   1395.2    3990.7     1395.4     4052.6     1395.4     4113.7     1395.3     4176.6     1395.1     4229.3
GR   1395.1    4287.4     1394.9     4334.4     1394.8     4385.2     1394.7     4450.4     1394.8     4489.6
GR   1394.5    4524.7     1394.1     4576.1       1394     4617.7     1393.7     4656.6     1393.2     4693.1
GR   1393.1    4730.9     1392.4       4761     1392.2       4821     1392.4       4881    1393.59       4956
GR   1394.4       5006     1394.5       5015       1390    5015.01     1374.94       5045     1374.94       5085
GR   1374.9    5088.74    1390.80    5088.75    1390.80    5093.75     1374.94    5093.76     1374.94       5125
GR   1374.9    5167.49     1391.2     5167.5     1391.2       5170     1391.2     5172.5     1374.94    5172.51
GR   1374.9       5205    1374.94       5245    1374.94    5246.24       1391    5246.25       1391    5251.25
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GR   1374.9    5251.26    1374.94      5285    1374.94      5295    1390.2    5324.99    1394.7      5325
GR   1394.8       5326    1393.95      5376    1393.27      5453   1393.07       5520    1393.1    5541.9
GR   1392.9     5588.6     1392.7    5636.9     1392.7    5681.4    1392.5     5740.6    1392.6    5796.6
GR   1392.6     5855.7     1392.4    5922.7     1392.3      5988    1392.3     6032.1    1392.1    6079.5
GR   1392.1       6085
  UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT        1      52375
X1    9.155         66       5015      5325       80.2      80.2      80.2
X3       10          0          0         0          0         0      0    1392.2    1393.1
BT      -16       5015     1394.5    1394.5    5015.01    1394.5      1390      5045    1394.8    1390.3
BT                5085     1395.2    1390.7    5088.75    1395.2    1390.8   5093.75    1395.3    1390.8
BT                5125     1395.6    1391.1       5170    1395.7    1391.2      5205    1395.7    1391.2
BT                5245     1395.5      1391    5246.25    1395.5      1391   5251.25    1395.5      1391
BT                5285     1395.2    1390.7       5295    1395.1    1390.6   5324.99    1394.7    1390.2
BT                5325     1394.7    1394.7
GR   1395.6     3767.9     1395.5    3820.9     1395.4    3873.6    1395.4     3891.5    1395.4    3939.2
GR   1395.2     3990.7     1395.4    4052.6     1395.4    4113.7    1395.3     4176.6    1395.1    4229.3
GR   1395.1     4287.4     1394.9    4334.4     1394.8    4385.2    1394.7     4450.4    1394.8    4489.6
GR   1394.5     4524.7     1394.1    4576.1       1394    4617.7    1393.7     4656.6    1393.2    4693.1
GR   1393.1     4730.9     1392.4      4761     1392.2      4821    1392.4       4881   1393.59      4956
GR   1394.4       5006     1394.5      5015       1390   5015.01   1375.14       5045   1375.14      5085
GR   1375.1    5088.74     1390.8   5088.75     1390.8   5093.75   1375.14    5093.76   1375.14      5125
1
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GR   1375.1    5167.49     1391.2    5167.5     1391.2      5170    1391.2     5172.5   1375.14   5172.51
GR   1375.1       5205    1375.14      5245    1375.14    5246.24      1391    5246.25      1391   5251.25
GR   1375.1    5251.26    1375.14      5285    1375.14      5295    1390.2    5324.99    1394.7      5325
GR   1394.8       5326    1393.95      5376    1393.27      5453   1393.07       5520    1393.1    5541.9
GR   1392.9     5588.6     1392.7    5636.9     1392.7    5681.4    1392.5     5740.6    1392.6    5796.6
GR   1392.6     5855.7     1392.4    5922.7     1392.3      5988    1392.3     6032.1    1392.1    6079.5
GR   1392.1       6085

QT        1      52375
ET                 5.1                       4528.66    5445.27
X1    9.16         89    4852.56    5164.29       8         8         8
GR   1392.6    4528.66    1392.16    4581.89    1392.81    4592.32   1392.00    4643.39   1391.85   4708.61
GR   1392.0    4756.55    1392.50    4805.50    1392.00    4836.76   1391.23    4838.82   1391.00   4839.41
GR   1390.5    4842.05    1390.00    4852.56    1389.00    4854.43   1388.00    4856.29   1387.00   4857.94
GR   1386.0    4859.59    1385.00    4861.24    1384.00    4862.89   1383.40    4863.88   1383.00   4864.54
GR   1382.5    4865.33    1382.00    4866.18    1381.00    4867.82   1380.61    4868.61   1380.00   4869.92
GR   1379.8    4870.35    1379.00    4872.01    1378.40    4873.27   1378.00    4874.11   1377.29   4875.60
GR   1377.0    4876.20    1376.18    4877.92    1376.00    4878.30   1375.00    4880.39   1374.81   4915.05
GR   1374.0    4961.04    1374.20    5000.00    1374.50    5083.02   1374.70    5107.91   1375.00   5129.31
GR   1375.6    5132.84    1376.00    5135.04    1377.00    5138.70   1378.00    5140.93   1379.00   5142.76
GR   1379.6    5143.88    1380.00    5144.79    1380.41    5145.63   1381.00    5146.82   1381.33   5147.49
GR   1382.0    5148.85    1382.47    5149.81    1383.64    5152.18   1384.00    5152.91   1384.55   5154.02
GR   1385.0    5154.94    1386.00    5156.58    1386.42    5157.20   1387.00    5158.07   1388.00   5161.31
GR   1388.6    5162.08    1389.00    5162.75    1389.58    5163.63   1390.00    5164.29   1390.52   5165.66
GR   1390.7    5169.65    1390.00    5170.91    1390.00    5171.15   1390.65    5172.70   1391.00   5173.49
GR   1391.5    5174.67    1392.00    5175.74    1392.49    5177.88   1393.00    5180.15   1393.00   5215.17
GR   1392.8    5239.51    1393.00    5302.86    1393.00    5330.00   1393.00    5335.30   1393.52   5343.99
GR   1394.0    5352.89    1394.20    5356.22    1394.67    5363.95   1395.00    5372.98   1395.00   5394.93
GR   1394.9    5404.04    1394.00    5430.80    1393.15    5432.47   1393.36    5445.27
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BOTTOM OF DROP STRUCTURE

QT	1	52375								
NC	0.035	0.035	0.020							
ET		5.1			4732	5190.05				
X1	9.21	7	4732	5174.57	145	355	279			
GR	1389	4732	1376	4765	1376	4901	1376	5000	1376	5140.72
GR	1391	5174.57	1392	5190.05						

TOP OF DROP STRUCTURE

QT	1	52375								
NC	0.040	0.035	0.035							
ET		5.1			4664	5314.09				
X1	9.22	14	4664	5192.98	122	104	39			
GR	1395	4664	1390	4708	1390	4871.20	1390	5000	1390	5167.75
GR	1391	5173.76	1392	5177.14	1393	5179.36	1394	5181.58	1395	5184.44
GR	1396	5187.36	1397	5192.98	1398	5219.20	1399	5314.09		

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QT	1	52375								
ET		5.1			4572.95	5304.55				
X1	9.25	45	4825	5285.60	155	82	141			
GR	1400	3023	1399.1	3123	1397.6	3223	1395.8	3323	1392.7	3423
GR	1392	3523	1393	3623	1393.6	3723	1393.5	3762	1394	3874
GR	1394	3898	1394	4003.81	1394	4062.18	1395	4283.87	1395	4298.29
GR	1395	4301.25	1395	4365.84	1395	4385.4	1395.7	4563.07	1395	4565.34
GR	1395	4570.45	1395.57	4572.95	1395.46	4582.97	1395	4585.82	1395	4590.84
GR	1395	4598.19	1395	4614.18	1395	4621.31	1394	4735.08	1394	4738.18
GR	1394	4838.32	1393	4871.51	1392	4892.27	1392	5000	1392	5077.8
GR	1393	5179.38	1394	5266.49	1395	5275.95	1396	5278.52	1397	5281.09
GR	1398	5283.83	1398.64	5285.6	1399	5290.86	1400	5304.55	1399	5325.36

END FLOW SPLIT; RETURN TO FULL FLOW

QT	1	80000								
ET		5.1			4441.50	5290.19				
X1	9.30	52	4779.69	5280.97	262	282	261			
GR	1401.5	2940	1402.6	2970	1400.5	3070	1398.6	3170	1397	3270
GR	1394	3370	1394	3470	1394	3570	1394	3670	1394.8	3770
GR	1395	3820	1394	3930	1394	4045.09	1395	4108.19	1395	4117
GR	1396	4323.15	1396.42	4425.34	1396	4429.71	1396	4434.42	1396	4441.5
GR	1396	4445.67	1396	4449.8	1395	4453.93	1394.13	4458.61	1394	4462.74
GR	1393	4494.69	1393	4512.86	1394	4520.79	1395	4539.92	1395	4544.55
GR	1395	4549.38	1396	4554.31	1397	4672.3	1397	4703.41	1397	4730.49
GR	1397	4737.81	1396.5	4750	1396	4768.57	1395	4779.69	1394	4811.1
GR	1393	4973.9	1393	5000	1393	5090.01	1394	5237.22	1395	5265.28
GR	1395	5270.89	1396	5273.07	1397	5275.25	1398	5277.47	1399	5279.81
GR	1399.5	5280.97	1400	5290.19						

ET		5.1			4252.38	5287.77

X1	9.35	64	4775	5275.88	291	274	274			
GR	1403.4	2913	1404	2963	1401.9	3063	1400.6	3163	1399.1	3263
GR	1396	3363	1396	3463	1394.8	3563	1395.2	3663	1396	3763
GR	1396	3863	1396	3873	1396	3970	1396	4133.14	1397	4227.56
GR	1397	4246.88	1397	4251.02	1397	4252.38	1397	4261.99	1397	4262.89
GR	1397	4266.45	1397	4272.25	1396	4279.28	1395	4304.83	1395	4325.29
GR	1396	4342.7	1397	4379.18	1398	4402.1	1399	4459.05	1399	4467.32
GR	1399	4490.46	1399	4657.95	1399	4675.14	1399	4775	1399	4817.89
GR	1398	4824.28	1398	4830.91	1398	4833.58	1397	4841.76	1396	4854.67
GR	1395	4861.17	1394	4882.23	1393	4897.87	1392	4929.89	1392	4995.23
GR	1392.2	5000	1393	5015.98	1394	5050.46	1394	5062.07	1394	5081.74
GR	1394	5098.98	1393	5104.45	1393	5165.77	1394	5255.79	1394.16	5261.12
GR	1395	5263.15	1396	5265.55	1397	5267.94	1398	5270.34	1399	5272.74
GR	1399.9	5274.92	1400	5275.88	1401	5287.77	1401	5364.41		

FIRST LANDFILL CROSS SECTION

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X1	9.42	84	4717	5216.97	400	402	399			
GR	1428	4000	1426	4011.37	1424	4051.66	1424	4057.37	1426	4081.68
GR	1428	4110.92	1428	4121.45	1426	4129.13	1424	4134.76	1422	4139.19
GR	1421	4142.73	1420	4161.87	1419.19	4203.29	1418	4205.11	1416	4226.25
GR	1414	4237.19	1412	4246.78	1410	4256.36	1408	4267.25	1406	4278.32
GR	1404	4313.42	1402	4319.63	1401	4385.11	1401	4391.49	1400	4399.73
GR	1400	4402.48	1400	4425	1399	4435.31	1399	4437.98	1400	4464.1
GR	1400	4473.55	1401	4478.99	1401	4489.28	1401	4501.38	1401	4506.58
GR	1401	4519.28	1401	4549.48	1401	4609.38	1401	4631.43	1401	4640
GR	1401	4717	1401	4808.53	1401	4810.26	1400	4816.66	1399	4821.3
GR	1398	4826.32	1397	4831.26	1396	4836.2	1395	4840.81	1394	4845.47
GR	1394	4861.29	1394	4874.91	1394	4881.71	1395	4899.25	1395	4935.92
GR	1394	4952.05	1393	4968.09	1393	4971.63	1393	4977.75	1393	5000
GR	1393	5022.4	1394	5029.45	1395	5047.57	1396	5049.85	1397	5052.12
GR	1397	5069.99	1396	5075.09	1395	5080.13	1394	5086.54	1393	5111.54
GR	1393	5144.13	1394	5187.94	1395	5201.29	1396	5203.58	1397	5205.87
GR	1398	5208.12	1399	5210.33	1400	5212.55	1401	5214.76	1402	5216.97
GR	1402.1	5217.23	1403	5227.59	1404	5237.39	1404.24	5239.73		

NC	0.040	0.040	0.040							
X1	9.45	97	4709	5209	93	126	118			
GR	1444	4000	1446	4007.9	1448	4067.98	1448	4129.56	1446	4153.01
GR	1444	4163.3	1442	4166.26	1440	4169.22	1438	4175.44	1436	4186.62
GR	1434	4200.28	1432	4214.71	1430	4223.41	1428	4230.51	1426	4245.88
GR	1424	4268.57	1422.59	4278.96	1422	4280.89	1420	4290.71	1418	4299.79
GR	1416	4308.72	1414	4317.57	1412	4326.42	1410	4337.33	1408	4350.71
GR	1406	4364.09	1404	4377.47	1402	4400.54	1401	4461.44	1400	4466.82
GR	1400	4480.64	1400	4491.26	1400	4512.14	1401	4518.92	1401.69	4560.74
GR	1402	4579.32	1403	4582.89	1403	4591.95	1402	4596.75	1402	4660
GR	1402	4672.46	1401.7	4709	1401	4801.15	1400	4808.19	1399	4812.86
GR	1398	4817.28	1397	4822.04	1396	4829.31	1395	4850.48	1395	4874.85
GR	1396	4881.97	1397	4899.1	1397	4923.02	1396	4938.23	1395	4946.05
GR	1394	4960.72	1394	4965.12	1394	4968.36	1394	4997.02	1393.39	5000
GR	1393	5001.91	1393	5029.22	1394	5035.16	1395	5037.25	1396	5039.33
GR	1397	5041.64	1398	5043.96	1399	5046.15	1400	5048.19	1401	5065.48

GR	1401	5071.95	1401	5081.45	1401	5133.8	1400	5156.91	1399	5160.41
GR	1398	5163.93	1397	5167.45	1396	5170.97	1395	5174.49	1394	5180.55
GR	1394	5209	1394	5237.19	1395	5242.58	1396	5247.96	1397	5251.97
GR	1398	5255.85	1399	5259.53	1400	5261.9	1401	5264.27	1404.8	5265.18
GR	1402	5266.67	1403	5269.03	1404	5271.38	1405.2	5272.32	1404.6	5276.7
GR	1405	5277.23	1405	5281.63						
NC	0.035	0.040	0.040							
ET		5.1			4663.35	5177				
X1	9.54	85	4685.93	5177	410	515	500			
GR	1456	4000	1456	4021.5	1454	4238.02	1454	4370.23	1456	4373.71
GR	1458	4382.67	1460	4392.58	1462	4402.82	1464	4414.23	1464	4416.59
GR	1462	4419.16	1460	4421.73	1458	4424.3	1456	4426.86	1454	4429.43
GR	1452	4432.03	1450	4434.89	1448	4437.71	1446	4440.53	1444	4443.94
GR	1442	4455.27	1440	4466.36	1438	4475.82	1436	4485.28	1434	4494.74
GR	1432	4503.98	1430	4512.83	1428	4521.68	1426	4530.63	1424	4537.95

GR	1422	4543.4	1420	4548.8	1418	4566.76	1416	4576.41	1414	4588.78
GR	1412	4606.7	1410	4618.24	1408	4626.12	1406	4646.3	1405.45	4653.56
GR	1406	4654.9	1408	4659.52	1409.53	4663.35	1409.41	4679.83	1408	4685.93
GR	1406	4694.77	1404	4704.62	1402	4714.47	1400	4759.39	1399	4817.12
GR	1399	4833.11	1399	4849.47	1399	4877	1398	4880.23	1397	4889.16
GR	1397	4922.52	1398	4930.18	1398	4954.06	1397	4978.17	1397	5000
GR	1397	5021.85	1398	5031.11	1399	5044.96	1400	5072.02	1401	5077.75
GR	1402	5083.41	1403	5099.61	1404	5131.49	1404	5150.42	1404	5168.37
GR	1404	5177	1404	5197.33	1404	5199.5	1404	5210.97	1404	5253.08
GR	1404	5391.09	1403	5589.76	1403	5598.79	1404	5665.44	1405	5677.3
GR	1406	5688.92	1407	5698.83	1408	5708.08	1408.1	5709.05	1408	5712.42
ET		5.1			4736.39	5231.86				
X1	9.65	77	4754.19	5231.86	475	503	558			
GR	1464	4000	1464	4008.95	1464	4009.76	1462	4321.74	1460	4399.87
GR	1458	4431.45	1456	4444.62	1454	4455.94	1452	4520.78	1450	4527.92
GR	1448	4534.57	1446	4541.22	1444	4547.9	1442	4555.79	1440	4564.66
GR	1438	4573.56	1436	4582.53	1434	4591.5	1432	4600.47	1430	4609.44
GR	1428	4617.73	1426	4626.65	1424	4636.67	1422	4647.12	1420	4657.56
GR	1418	4668.01	1416	4678.25	1415.47	4681.09	1414	4684.72	1412	4698.82
GR	1410	4712.91	1408.84	4718.95	1410	4724.03	1412	4732.19	1412.28	4733.95
GR	1412.3	4736.39	1412.23	4752.15	1412.23	4753.27	1412	4754.19	1410	4762.26
GR	1408	4770.81	1406	4779.35	1404	4787.89	1402	4808.39	1402	4880.47
GR	1402	5000	1402	5117.6	1402	5177.99	1404	5201.2	1406	5208.98
GR	1408	5216.75	1410	5224.53	1411.67	5231.28	1411.74	5231.86	1411.54	5244.69
GR	1411.6	5244.92	1410	5251.38	1408	5258.75	1406	5266.02	1405	5297.23
GR	1405	5320.44	1406	5347.25	1406	5388.09	1406	5408.08	1407	5541.7
GR	1407	5718.14	1406	5754.4	1406	5784.09	1406	5792.77	1406	5810.87
GR	1406	5820.41	1406	5838.97	1407	5936.82	1408	6017.23	1409	6081.83
GR	1410	6155.49	1411	6165.28						
NC	0.035	0.035	0.035							
ET		5.1			4752.73	5283.89				
X1	9.70	45	4757.14	5273.18	253	259	256			

GR	1466	4109	1464	4316.8	1462	4420.43	1460	4447.14	1458	4478.14
GR	1456	4489.46	1454	4500.45	1452	4509.98	1450	4519.51	1448	4529.04
GR	1446	4538.57	1444	4548.1	1442	4557.38	1440	4566.27	1438	4575.05
GR	1436	4583.83	1434	4592.61	1432	4601.39	1430	4609.72	1428	4617.43
GR	1426	4627.56	1424	4668.02	1422	4677.03	1420	4686.23	1418	4694.23
GR	1416	4702.22	1414	4725.62	1413.09	4738.64	1413.15	4752.73	1412	4757.14
GR	1410	4765.55	1408	4773.94	1406	4782.3	1404	4790.65	1404	5000
GR	1404	5228.02	1406	5244.34	1408	5253.96	1412	5273.18	1412.96	5277.81
GR	1413.2	5283.89	1414	5286.99	1416	5294.01	1418	5300.98	1420	5310.97

ET		5.1			4761.98	5298.67				
X1	9.73	47	4763.41	5284.93	187	151	169			
GR	1468	4092	1466	4213.55	1464	4379	1462	4470.4	1460	4508.81
GR	1458	4525.45	1456	4535.99	1454	4546.24	1452	4556.5	1450	4565.64
GR	1448	4574.49	1446	4582.67	1444	4590.66	1442	4598.64	1440	4606.63
GR	1438	4614.61	1436	4622.6	1434	4630.3	1432	4638.03	1430	4646.07
GR	1428	4654.12	1426	4662.16	1424	4670.2	1422	4678.24	1420	4686.28

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GR	1418	4694.59	1416	4735.51	1414	4745.63	1413.77	4747.24	1414	4754.45
GR	1414.2	4761.98	1414	4763.41	1412	4771.23	1410	4779.05	1408	4786.93
GR	1406	4794.83	1404	4807.46	1404	5000	1404	5232.22	1406	5255.68
GR	1408	5265.54	1410	5275.37	1412	5284.93	1414	5298.67	1416	5306.36
GR	1418	5314.06	1420	5322.58						

ET		5.1			4698.37	5217.67				
X1	9.80	62	4738.89	5206.55	383	349	365			
GR	1476	4000	1476	4071.22	1474	4291.9	1472	4368.03	1470	4404.99
GR	1468	4419.78	1466	4435.01	1464	4454.29	1462	4489.38	1460	4517.69
GR	1458	4526.82	1456	4535.94	1454	4545.06	1452	4554.19	1450	4563.31
GR	1448	4572.44	1446	4580.51	1444	4588.95	1442	4597.51	1440	4606.07
GR	1438	4614.65	1436	4623.22	1434	4631.58	1432	4639.42	1430	4647.25
GR	1428	4655.08	1426	4662.93	1424	4670.84	1422	4678.74	1420	4686.85
GR	1418	4698.37	1416	4738.89	1416	4742.87	1416	4745.09	1415.15	4749.88
GR	1415.7	4766.09	1414	4773.04	1412	4781.48	1410	4789.92	1408	4798.11
GR	1406	4814.33	1406	5000	1406	5168.2	1408	5177.78	1410	5187.37
GR	1412	5196.96	1414	5206.55	1414.61	5209.05	1414.9	5217.67	1416	5221.57
GR	1418	5228.59	1420	5235.61	1422	5242.63	1424	5250.86	1426	5260.4
GR	1428	5270.06	1430	5279.73	1432	5290	1434	5301.13	1436	5313.24
GR	1438	5329.65	1440	5350.74						

ET		5.1			4678.48	5167.47				
X1	9.89	61	4741.17	5163.70	509	484	495			
GR	1480	4000	1480	4097.31	1478	4315.5	1476	4369.55	1474	4409.22
GR	1472	4428.88	1470	4447.01	1468	4467.06	1466	4484.74	1464	4501.35
GR	1462	4517.81	1460	4528.28	1458	4538.09	1456	4547.75	1454	4557.31
GR	1452	4566.31	1450	4574.08	1448	4581.28	1446	4588.48	1444	4595.7
GR	1442	4603.03	1440	4610.35	1438	4617.67	1436	4624.99	1434	4631.68
GR	1432	4638.82	1430	4646.76	1428	4654.71	1426	4662.61	1424	4670.44
GR	1422	4678.48	1422	4689.89	1422.06	4691.09	1422	4691.98	1421.45	4699.1
GR	1420	4741.17	1418	4771.38	1416	4778.99	1414	4786.68	1412	4794.99
GR	1410	4803.8	1408	4840.1	1406	4951.17	1406	4964.91	1407.43	5000

GR	1408	5114.09	1410	5126.94	1412	5136.13	1414	5145.32	1416	5154.51
GR	1418	5163.7	1418.8	5167.47	1418.7	5180.97	1418	5182.68	1418	5202.91
GR	1420	5221.64	1422	5236.46	1424	5244.79	1426	5252.68	1428	5260.3
GR	1430	5267.91								

ET		5.1			4813.54	5284.14				
X1	9.98	68	4828.11	5274.26	462	469	475			
GR	1476	4020	1476	4135.18	1474	4180.69	1472	4242.44	1472	4405.93
GR	1474	4459.87	1474	4532.3	1472	4564.64	1470	4600.47	1468	4627.43
GR	1466	4644.39	1464	4650.73	1462	4658.68	1460	4666.95	1458	4675.21
GR	1456	4683.48	1454	4692.64	1452	4702.53	1450	4711.67	1448	4720.68
GR	1446	4728.08	1444	4734.3	1442	4740.53	1440	4746.75	1438	4752.97
GR	1436	4759.19	1434	4766.97	1432	4775.44	1430	4783.95	1428	4813.54
GR	1428	4821.2	1428.96	4826.63	1428	4828.11	1426	4830.93	1425.95	4831.02
GR	1425.7	4834.7	1424	4840.53	1422	4847.1	1420	4853.67	1418	4860.24
GR	1416	4866.81	1414	4874.06	1412	4895.31	1410	4925.82	1410	4957.15
GR	1410	4985.2	1410	5000	1410	5196.05	1412	5234.32	1414	5243.75
GR	1416	5253.18	1418	5262.85	1420	5274.26	1421.67	5284.14	1421.15	5293.67

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GR	1420	5297.1	1418.2	5302.27	1420	5323.38	1422	5337.3	1424	5349.84
GR	1426	5361.61	1428	5370.82	1430	5379.99	1432	5389.15	1434	5398.3
GR	1436	5407.46	1438	5416.8	1440	5427.51				

ET		5.1			4840.61	5275.34				
X1	10.08	60	4841.72	5274.76	508	514	511			
GR	1476	4000	1478	4028.78	1480	4085.32	1480	4214.24	1478	4270.59
GR	1476	4333.92	1474	4385.59	1472	4415.91	1470	4435.24	1468	4453.48
GR	1466	4471.72	1464	4489.47	1462	4507.08	1460	4524.24	1458	4540.43
GR	1456	4560.04	1454	4579.47	1452	4664.02	1450	4686.12	1448	4711.59
GR	1446	4736.49	1444	4743.04	1442	4749.49	1440	4755.86	1438	4761.79
GR	1436	4767.07	1434	4772.52	1432	4778.04	1430	4783.56	1428	4789.08
GR	1426	4795.68	1426	4838.85	1426.35	4840.61	1426	4841.72	1424	4848.12
GR	1422	4854.53	1420	4861.27	1418	4869.07	1416	4880.94	1414	4903.67
GR	1412.5	5000	1412	5028.73	1412	5119.72	1414	5215.45	1416	5233.54
GR	1418	5244.05	1420	5254.55	1422	5265.05	1424	5274.76	1424.17	5275.34
GR	1424	5277.85	1423.5	5284.05	1422	5288.76	1420	5294.8	1420	5307.7
GR	1422	5411.56	1424	5519.39	1426	5568.38	1428	5584.58	1430	5600.76

ET		5.1			4784.92	5288.33				
X1	10.16	48	4797.94	5270.13	447	418	430			
GR	1438	4000	1436	4021.6	1434	4039.29	1432	4060.58	1430	4087.84
GR	1428	4116.35	1426	4163.37	1426	4172.5	1426	4329.8	1424	4615.05
GR	1422	4727.69	1422	4765.14	1424	4772.65	1426	4779.85	1427.4	4784.92
GR	1426.9	4794.24	1426	4797.94	1424	4806.13	1422	4814.72	1420	4823.31
GR	1418	4831.89	1416	4850.45	1416	5000	1416	5206.7	1418	5231.48
GR	1420	5241.03	1422	5250.58	1424	5260.12	1426	5270.13	1426.69	5273.76
GR	1426.8	5288.33	1426	5290.46	1424	5295.56	1423.73	5296.35	1424	5299.13
GR	1426	5318.58	1428	5331.54	1430	5343.77	1432	5355.48	1434	5367.2
GR	1436	5379.53	1438	5392.13	1440	5404.93	1442	5417.74	1444	5430.71
GR	1446	5445.59	1448	5460.48	1450	5475.78				

ET		5.1			4772.87	5312.98				
X1	10.25	50	4772.87	5312.98	496	420	460			
GR	1462	4000	1462	4353.1	1462	4360.97	1464	4372.48	1466	4380.6
GR	1466	4394.69	1464	4399.98	1462	4402.86	1460	4405.73	1458	4408.62
GR	1456	4420.57	1454	4432.06	1452	4443.38	1450	4454.7	1448	4465.92
GR	1446	4476.55	1444	4487.22	1442	4497.92	1440	4509.43	1438	4521.31
GR	1436	4534.04	1434	4573.89	1434	4576.65	1434	4582.76	1432	4590.09
GR	1430	4597.07	1428	4604.05	1426	4740.78	1426	4758.62	1428	4766.33
GR	1429.7	4772.87	1429.36	4781.13	1428	4786.37	1426	4794.42	1424	4802.47
GR	1422	4810.53	1420	4841.46	1420	5225.51	1422	5254.59	1424	5264.85
GR	1426	5274.47	1428	5284.05	1429.2	5289.83	1429.27	5312.98	1430	5319.77
GR	1432	5338.35	1434	5354.33	1436	5382.04	1438	5398.07	1440	5414.09

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ET		5.1			4766.40	5271.99				
X1	10.33	47	4782.32	5269.64	519	373	444			
GR	1450	4000	1448	4073.55	1448	4076.89	1448	4151.72	1446	4166.89
GR	1444	4179.19	1442	4193.45	1440	4215.25	1438	4234.67	1436	4254.62
GR	1434	4273.64	1432	4293.27	1430	4335.46	1428	4352.32	1428	4394.66
GR	1430	4399.29	1432	4405.29	1434	4417.32	1436	4573.71	1434	4592.8
GR	1432	4607.16	1430	4731.8	1430	4744.77	1432	4752.19	1434	4759.52
GR	1435.8	4766.4	1435.17	4782.32	1434	4787.13	1432	4795.34	1430	4802.67
GR	1428	4810	1426	4817.69	1424	4826.71	1422.57	5000	1422	5069.23
GR	1422	5172.18	1424	5223.94	1426	5234.36	1428	5243.12	1430	5251.96
GR	1432	5260.8	1434	5269.64	1434.83	5271.99	1434.09	5290.23	1434	5290.52
GR	1432	5296.74	1430	5302.97						

ET		5.1			4756.86	5252.58				
X1	10.34	38	4775.45	5243.36	104	42	73			
GR	1434	4000	1434	4020.85	1432	4060.47	1432	4210.33	1432	4230.74
GR	1430	4304	1430	4351	1430	4400.08	1430	4476.92	1432	4558.77
GR	1432	4579.43	1430	4699.87	1430	4741.11	1432	4746.28	1434	4751.62
GR	1435.9	4756.86	1435	4775.45	1434	4779.27	1432	4786.85	1430	4794.42
GR	1428	4803.16	1426	4811.92	1424	4839.17	1422.77	5000	1422	5099.99
GR	1422	5118.31	1424	5204.31	1426	5212.97	1428	5217.15	1430	5226.8
GR	1432	5234.78	1434	5243.36	1435.48	5252.58	1434.92	5272.38	1434	5274.21
GR	1432	5278.35	1430	5282.48	1430	5283.56				

HAPPY VALLEY ROAD CROSSING

NC	0.030	0.030	0.030							
ET		5.1			4823.21	5272				
X1	10.38	34	4823.21	5293.86	173	143	162			
GR	1432	4050	1432	4345.47	1434	4359.49	1436	4382.17	1436	4444.22
GR	1434	4514.59	1434	4523.97	1436	4605.62	1436	4667.41	1434	4710.47
GR	1434	4776.7	1435.99	4798.29	1435.82	4823.21	1434	4831.49	1432	4838.95
GR	1430	4845.97	1428	4854.29	1426	4860.89	1424	4952.8	1424	5000
GR	1424	5110.95	1426	5223.7	1428	5293.86	1430	5418.28	1432	5426.63
GR	1434	5436.09	1436	5445.55	1436	5462.06	1438.33	5462.07	1438.33	5463.07
GR	1436	5463.08	1436	5478.57	1435.96	5479.62	1434	5488.87		

NC	0.035	0.035	0.035							
ET		5.1			4783.08	5262.74				
X1	10.41	52	4791.83	5251.18	198	142	171			
GR	1434	4064	1434	4072.38	1436	4078.9	1438	4083.68	1440	4114.64
GR	1442	4124.08	1444	4141.29	1444	4186.45	1442	4196.42	1438	4216.34
GR	1436	4223.27	1434	4229.95	1432	4236.99	1432	4370.62	1434	4373.56
GR	1436	4376.5	1438	4379.45	1440	4383.45	1440	4469.41	1438	4505.1
GR	1436	4516.74	1434	4526.64	1432	4535.95	1432	4754.33	1434	4759.91
GR	1435.7	4764.94	1436	4772.28	1436	4782.06	1438.34	4782.07	1438.34	4783.07
GR	1436	4783.08	1436	4791.83	1434	4800.27	1432	4808.85	1430	4817.15
GR	1428	4863.1	1428	5000	1428	5071.88	1428	5119.31	1428	5202.52
GR	1430	5229.35	1432	5236.74	1434	5244.12	1436	5251.18	1436	5262.73
GR	1438.9	5262.74	1438.9	5262.75	1436	5262.76	1436	5274.27	1434	5279.7
GR	1432	5285.08	1430	5290.4						

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ET		5.1			4758.78	5239.41				
X1	10.42	46	4772.17	5239.37	70	58	64			
GR	1434	4057	1434	4122.12	1434	4141.01	1432	4192.42	1432	4500.07
GR	1434	4518.47	1436	4524.56	1438	4530.85	1438	4566	1436	4602.78
GR	1434	4617.91	1432	4648.14	1432	4733.89	1434	4738.7	1436	4743.37
GR	1436	4757.77	1439	4757.78	1439	4758.78	1436	4758.79	1436	4772.17
GR	1434	4781.27	1432	4790.3	1431.35	4793.22	1430	4857.83	1428	4863.2
GR	1426	4872.34	1426	5000	1426	5035.16	1428	5059.55	1430	5071.52
GR	1430	5178.76	1430	5209.5	1432	5217.1	1434	5224.61	1436	5232.04
GR	1438	5239.37	1438	5239.40	1439.8	5239.41	1439.8	5240.41	1438	5240.42
GR	1438	5240.71	1437.62	5260.38	1436	5263.54	1434	5267.47	1432	5271.31
GR	1430	5275.13								

ET		5.1			4717.29	5219.45				
X1	10.51	85	4720.44	5201.75	439	487	472			
GR	1434	4000	1432	4130.14	1428	4139.76	1426	4144.4	1424	4149.04
GR	1422	4153.68	1418	4208.59	1418	4223.25	1418	4230.6	1418	4282.85
GR	1418	4360.51	1416	4368.14	1414	4375.06	1412	4381.98	1408	4395.81
GR	1406	4403.31	1404	4411.2	1402	4420.45	1398	4444.12	1396	4455.04
GR	1396	4458.71	1398	4462.24	1400	4465.78	1402	4469.3	1404	4472.7
GR	1406	4476.09	1406	4476.39	1404	4480.43	1402	4489.41	1400	4498.38
GR	1398	4511.86	1398	4523.62	1402	4606.66	1404	4619.36	1406	4625.57
GR	1408	4631.74	1412	4641.43	1414	4645.8	1416	4650.17	1418	4654.55
GR	1422	4663.24	1424	4666.88	1426	4670.52	1428	4674.16	1432	4681.45
GR	1434	4685.09	1436	4688.73	1438	4692.35	1440	4695.92	1440	4716.28
GR	1443.2	4716.29	1443.2	4717.29	1440.66	4717.32	1440	4720.44	1438	4729.62
GR	1436	4738.8	1434	4747.98	1432.68	4754.05	1434	4795.05	1434	4811.47
GR	1432	4826.23	1430	4844.12	1428	4880.89	1428	4916.32	1428	4916.6
GR	1428	4924.94	1430	4975.63	1430	4993.27	1430	5000	1430	5004.42
GR	1430	5038.01	1430	5060.04	1432	5076.82	1434	5173.28	1436	5182.8
GR	1438	5192.33	1440	5201.75	1440	5219.44	1443.73	5219.45	1443.73	5220.45
GR	1440.7	5220.46	1440.7	5237.12	1442	5243.12	1444	5251.74	1444	5270.2

NC	0.035	0.05	0.035

ET		5.1			4664.91	5132.57				
X1	10.62	87	4665.97	5128.07	535	618	596			
GR	1438	4000	1438	4067.63	1438	4119.75	1438	4123.09	1436	4126.37
GR	1434	4129.64	1432	4132.91	1428	4139.57	1426	4142.92	1424	4157.62
GR	1422	4197.88	1422	4274.19	1422	4279.99	1418	4285.73	1416	4288.61
GR	1414	4291.48	1412	4294.36	1408	4300.1	1406	4302.98	1404	4305.85
GR	1402	4308.72	1398	4314.87	1396	4318.05	1394	4326.83	1392	4337.52
GR	1392	4407.2	1394	4430.83	1396	4477.86	1398	4520.73	1402	4551.89
GR	1404	4565.94	1406	4587.33	1408	4591.51	1412	4599.92	1414	4604.3
GR	1416	4608.68	1418	4613.06	1422	4621.46	1424	4625.35	1426	4629.24
GR	1428	4633.13	1432	4640.85	1434	4644.69	1436	4648.53	1438	4652.37
GR	1440	4656.21	1442	4660.05	1444	4663.89	1444	4663.90	1445.7	4663.91
GR	1445.7	4664.91	1444	4664.92	1444	4665.97	1443.33	4681.76	1442	4687.65
GR	1440	4696.48	1438	4705.29	1436.53	4711.79	1436	4760.05	1434	4774.11
GR	1432	4791.7	1432	4792.06	1434	4804.84	1434	4812.38	1434	4844.64
GR	1434	4908.11	1432	4978.39	1430	4993.25	1430	5000	1430	5019.08

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GR	1432	5025.21	1434	5047.48	1436	5072.96	1436.27	5078.41	1438	5088.52
GR	1440	5100.18	1442	5111.6	1444	5128.07	1444.34	5132.57	1446	5140.61
GR	1448	5150.2	1450	5159.88	1452	5169.67	1454	5179.15	1454	5200.76
GR	1454	5213.3	1456	5219.38						

NC	0.035	0.035	0.035							
ET		5.1			4748.11	5211.3				
X1	10.70	43	4759.88	5193.3	390	382	402			
GR	1444	4000	1444	4038.07	1444	4066.66	1444	4284.59	1442	4345.59
GR	1440	4412.2	1440	4618.19	1442	4696.02	1442.67	4720.77	1444	4727.26
GR	1446.2	4734.32	1446.2	4747.10	1448.10	4747.11	1448.10	4748.11	1446.2	4748.12
GR	1446.2	4759.88	1444	4767.51	1442	4775.38	1440.89	4779.56	1440	4856.65
GR	1438	4908.41	1436	4929.27	1434	4963.32	1434	5000	1434	5015.86
GR	1436	5039.71	1436	5072.24	1436	5119.55	1438	5144.54	1440	5154.48
GR	1442	5163.53	1444	5172.15	1446	5188.42	1446.48	5193.3	1448	5197.69
GR	1450	5201.41	1452	5205.12	1454	5208.74	1455.47	5211.3	1456	5213.46
GR	1458	5222.24	1458	5238.92	1456	5256.86				

ET		5.1			4782.29	5310.03				
X1	10.83	54	4800.8	5298.85	642	704	717			
GR	1448	4234	1448	4375.81	1448	4583.91	1446	4610.95	1446	4656.3
GR	1446	4742.93	1444.39	4761.2	1446	4765.18	1448	4769.97	1450	4774.76
GR	1452	4779.31	1452	4781.28	1454.60	4781.29	1454.60	4782.29	1452	4782.30
GR	1452	4800.8	1450	4808.34	1448	4816.39	1446	4825.37	1444	4844.86
GR	1442	4867.57	1440	4888.99	1438	4911.48	1438	4931.3	1440	4955.08
GR	1440	4961.15	1440	5000	1440	5073.72	1442	5081.76	1444	5085.61
GR	1446	5088.41	1446	5095.29	1446	5268.61	1448	5283.3	1450	5291.33
GR	1452	5298.85	1452	5310.02	1454.25	5310.03	1454.25	5311.03	1452	5311.04
GR	1452	5321.19	1450	5325.84	1448	5330.48	1446	5352.1	1444	5429.4
GR	1442	5433.87	1442	5453.7	1442	5462.01	1440	5467.15	1438	5472.69
GR	1438	5487.43	1440	5493.52	1442	5499.62	1444	5505.79		

ET		5.1			4766.74	5290	
X1	10.93	47	4790.58	5279.54	456	557	516

GR	1450	4075	1450	4401.05	1450	4472.44	1450	4658.68	1448	4685.74
GR	1446	4692.07	1446	4738.32	1448	4747.74	1450	4752.28	1452	4756.82
GR	1454	4761.36	1456	4765.91	1456.34	4766.74	1456.31	4782.2	1456	4783.11
GR	1454	4790.58	1452	4801.13	1450	4811.94	1448	4852.07	1446	4882.26
GR	1444	4895.5	1442	4901.64	1440	4907.78	1440	4909.75	1440	5000
GR	1442	5025.23	1444	5039.36	1446	5045.88	1448	5065.33	1448	5141.49
GR	1446	5151.73	1446	5160.63	1448	5249	1450	5259.77	1452	5267.62
GR	1454	5275.29	1455.1	5279.54	1458.23	5290	1458.23	5291	1455.6	5291.01
GR	1455.6	5301.19	1454	5303.86	1452	5307.17	1450	5311.25	1448	5317.12
GR	1446	5322.99	1446	5329.64						

CONFLUENCE WITH BUCHANAN WASH

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ET		5.1			4581.43	5120.83				
X1	11.03	59	4598.63	5120.83	506	504	525			
GR	1454	4082	1454	4316.5	1454	4398.81	1454	4405.76	1454	4444.05
GR	1454	4463.63	1452	4472.52	1452	4546.98	1452	4556.11	1451.02	4559.09
GR	1452	4561.67	1454	4566.38	1456	4571.08	1458	4575.79	1460	4580.49
GR	1460.3	4581.43	1460.24	4597.21	1460	4598.63	1458	4606.22	1456	4613.78
GR	1454	4621.09	1452	4629.76	1450	4642.89	1449	4647.63	1448	4693.69
GR	1448	4736.54	1450	4814.76	1450	4864.18	1448	4942.71	1446	4949.67
GR	1444	4956.46	1442	4984.22	1442	5000	1442	5002.45	1444	5021.76
GR	1446	5026.06	1448	5043.9	1448	5055.01	1446	5062.54	1444	5069.86
GR	1442	5077.4	1442	5100.06	1444	5110.31	1446	5120.83	1448	5131.74
GR	1448	5143.33	1448	5159.14	1450	5172.98	1452	5186.65	1454	5200
GR	1456	5213.08	1458	5227.34	1460	5242.36	1460.78	5249.29	1460.5	5289.31
GR	1460	5290.38	1458	5301.57	1456	5314.34	1454	5329.62		

NC	0.050	0.035	0.035							
ET		5.1			4762	5149.91				
X1	11.14	32	4762	5149.91	606	610	606			
GR	1460	4331.11	1460	4359.12	1458	4450.29	1456	4510.13	1454	4516.73
GR	1452	4523.33	1450	4529.82	1450	4653.75	1452	4685.50	1452	4762
GR	1452	4830.94	1450	4913.55	1450	4965.11	1448	4975.89	1448	5000
GR	1448	5056.87	1450	5060.92	1452	5064.99	1452	5097.48	1454	5121.70
GR	1456	5126.41	1458	5131.13	1460	5135.85	1462	5140.57	1464	5145.28
GR	1466	5149.91	1466	5173.09	1464	5177.70	1462	5182.56	1460	5187.75
GR	1458	5192.64	1456	5197.53						

BEGIN CORPS LEVEES

NC	0.035	0.035	0.020							
ET		5.1			4825.06	5165.90				
X1	11.19	80	4825.06	5161.07	277	212	225			
GR	1466.0	4799.55	1466.00	4823.70	1466.00	4825.06	1465.44	4826.50	1464.00	4830.18
GR	1463.6	4831.26	1462.00	4835.30	1461.78	4835.87	1460.47	4839.23	1460.00	4840.18
GR	1459.8	4840.67	1458.00	4844.27	1457.08	4846.17	1456.00	4848.37	1454.68	4851.08
GR	1454.0	4852.47	1452.35	4858.63	1452.00	4861.70	1452.00	4865.26	1452.00	4867.38
GR	1452.0	4906.20	1452.00	4944.98	1452.00	4945.21	1452.00	4948.20	1452.00	4955.59
GR	1452.0	4974.23	1452.00	4983.63	1452.00	5000.00	1452.00	5052.40	1452.00	5075.88
GR	1452.0	5079.43	1452.00	5080.15	1452.00	5083.16	1452.00	5085.12	1452.21	5091.07
GR	1452.2	5091.41	1452.82	5104.84	1453.40	5118.66	1453.68	5124.97	1454.00	5131.82

GR	1455.9	5136.57	1456.00	5136.91	1456.04	5136.99	1458.00	5141.74	1458.38	5142.66
GR	1460.0	5146.57	1460.56	5147.92	1462.00	5151.40	1462.67	5153.01	1464.00	5156.23
GR	1464.7	5158.02	1466.00	5161.07	1466.79	5162.98	1468.00	5165.90	1468.00	5172.97
GR	1468.0	5198.33	1468.00	5198.71	1468.00	5208.06	1467.82	5208.79	1467.42	5210.39
GR	1466.0	5213.89	1464.59	5217.33	1464.00	5218.79	1462.10	5223.33	1462.00	5223.58
GR	1461.9	5223.73	1460.00	5228.27	1459.05	5230.49	1458.00	5232.96	1456.96	5238.16
GR	1456.5	5239.87	1456.32	5241.27	1456.00	5249.77	1456.00	5262.87	1455.84	5273.99
GR	1456.0	5290.85	1456.15	5294.26	1456.26	5305.86	1456.31	5328.45	1456.18	5342.81

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ET		5.1			4827.39	5184.66				
X1	11.29	94	4827.39	5184.66	486	591	536			
GR	1458.6	4498.36	1458.15	4531.48	1458.00	4544.39	1457.54	4552.02	1456.00	4556.76
GR	1455.7	4557.78	1454.54	4561.02	1454.00	4562.59	1454.00	4605.58	1454.95	4629.82
GR	1456.0	4655.24	1456.33	4661.92	1456.76	4672.63	1456.93	4675.47	1457.17	4678.43
GR	1457.5	4684.77	1456.93	4728.58	1456.76	4749.58	1457.01	4757.49	1457.65	4782.78
GR	1458.0	4791.03	1459.18	4795.59	1460.00	4799.16	1461.62	4803.60	1462.00	4804.63
GR	1462.5	4805.93	1464.00	4810.36	1464.90	4812.84	1466.00	4815.95	1466.99	4818.67
GR	1468.0	4821.53	1469.43	4825.50	1469.95	4827.39	1469.68	4829.36	1468.00	4841.57
GR	1466.8	4844.22	1466.00	4846.08	1464.73	4848.95	1464.00	4850.59	1462.59	4853.77
GR	1462.0	4855.10	1460.39	4858.74	1460.00	4859.58	1459.55	4860.64	1458.00	4864.17
GR	1456.8	4866.84	1456.00	4868.69	1454.77	4871.46	1454.00	4873.20	1453.89	4874.55
GR	1454.0	4879.94	1453.00	5000.00	1452.00	5012.73	1452.37	5018.03	1454.00	5112.94
GR	1454.0	5148.06	1456.00	5152.69	1458.00	5157.26	1460.00	5161.76	1462.00	5166.34
GR	1464.0	5170.83	1466.00	5175.45	1467.53	5178.97	1468.00	5180.06	1469.67	5183.89
GR	1470.0	5184.66	1470.00	5197.62	1468.00	5202.94	1466.00	5208.26	1464.00	5213.46
GR	1463.4	5215.12	1462.00	5218.65	1460.33	5224.18	1460.00	5225.24	1459.63	5239.24
GR	1459.4	5247.72	1459.19	5284.15	1459.63	5287.69	1460.00	5297.44	1461.23	5325.09
GR	1462.0	5340.83	1463.27	5373.45	1463.76	5392.61	1463.91	5397.59	1464.00	5403.23
GR	1464.0	5404.95	1463.47	5430.53	1463.48	5446.78	1463.10	5468.14	1463.01	5472.72
GR	1462.8	5480.65	1462.48	5495.44	1462.00	5521.62	1462.00	5562.61		

ET		5.1			4826.47	5170.48				
X1	11.39	88	4826.47	5170.48	520	577	548			
GR	1463.4	4540.53	1462.24	4575.55	1462.00	4587.19	1461.52	4589.31	1460.82	4592.35
GR	1460.0	4595.75	1459.40	4598.25	1458.00	4604.08	1457.77	4611.59	1457.02	4638.45
GR	1456.6	4651.90	1456.25	4664.52	1456.00	4673.48	1456.00	4685.48	1457.34	4692.89
GR	1458.0	4696.00	1458.60	4698.45	1460.00	4704.69	1460.84	4725.05	1461.22	4734.45
GR	1461.5	4742.42	1461.65	4747.02	1462.00	4766.90	1462.17	4770.00	1464.00	4788.85
GR	1465.9	4795.51	1466.00	4795.86	1468.00	4802.87	1469.82	4809.24	1470.00	4809.88
GR	1470.0	4826.47	1469.00	4828.70	1468.00	4830.90	1466.98	4833.16	1466.00	4835.34
GR	1465.0	4837.62	1464.00	4839.77	1462.95	4842.10	1462.00	4844.21	1460.92	4846.60
GR	1460.0	4848.64	1458.80	4851.31	1458.00	4853.08	1456.24	4856.99	1456.00	4857.51
GR	1454.1	4861.74	1454.00	4861.94	1453.77	4869.54	1453.41	4939.48	1453.70	5000.00
GR	1454.0	5052.77	1454.00	5137.60	1454.79	5139.20	1456.00	5141.80	1457.23	5144.29
GR	1458.0	5145.86	1459.52	5148.94	1460.00	5149.91	1461.94	5153.84	1462.00	5153.96
GR	1462.2	5154.43	1464.00	5158.09	1464.41	5158.94	1466.00	5162.22	1466.71	5163.68
GR	1468.0	5166.35	1468.90	5168.21	1470.00	5170.48	1471.01	5177.47	1471.30	5178.73
GR	1471.0	5187.97	1470.52	5189.60	1470.00	5191.33	1469.06	5193.63	1468.00	5196.22
GR	1466.9	5199.00	1466.00	5201.12	1464.50	5204.79	1464.00	5205.96	1463.56	5227.10
GR	1463.3	5302.27	1463.50	5392.62	1464.00	5459.82	1464.00	5496.38	1464.34	5500.49
GR	1466.0	5520.78	1466.48	5534.57	1467.00	5553.06				

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ET                 5.1                                 4831.85     5174.56
X1     11.48        93     4831.85     5174.56          443         532         487
GR    1469.5    4463.12     1470.00     4514.20      1470.67     4526.19     1472.00     4532.14     1472.00     4536.27
GR    1471.2    4545.52     1472.00     4549.52      1471.16     4556.05     1470.89     4562.81     1470.59     4569.92
GR    1470.0    4586.17     1470.00     4654.03      1469.53     4674.85     1469.10     4688.69     1468.83     4699.75
GR    1468.6    4709.20     1468.27     4720.52      1468.00     4733.02     1467.35     4737.19     1467.59     4745.21
GR    1467.3    4752.17     1466.00     4781.13      1465.37     4784.00     1465.14     4788.41     1465.46     4789.08
GR    1465.9    4791.67     1466.00     4791.93      1467.84     4797.88     1468.00     4798.37     1468.75     4800.80
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GR    1469.1    4801.97     1469.53     4803.27      1470.00     4804.79     1472.00     4813.30     1472.00     4827.27
GR    1471.5    4828.31     1470.00     4831.85      1469.59     4832.79     1468.00     4836.43     1467.65     4837.23
GR    1466.0    4841.01     1465.73     4841.62      1464.00     4845.59     1463.85     4845.93     1462.31     4849.46
GR    1462.0    4850.16     1461.96     4850.24      1460.00     4854.68     1459.78     4855.19     1458.00     4859.04
GR    1456.8    4861.86     1456.00     4863.63      1454.62     4866.83     1454.00     4868.24     1454.00     4891.27
GR    1454.5    4982.94     1454.00     5000.00      1454.00     5139.53     1455.68     5143.25     1456.00     5143.95
GR    1457.7    5147.78     1458.00     5148.36      1459.81     5152.35     1460.00     5152.78     1461.90     5156.97
GR    1462.0    5157.19     1463.56     5160.62      1464.00     5161.59     1466.00     5165.91     1468.00     5170.24
GR    1468.3    5170.98     1470.00     5174.56      1471.57     5177.96     1472.00     5179.19     1472.00     5194.00
GR    1470.3    5199.62     1470.00     5200.65      1468.88     5204.39     1468.00     5207.39     1467.56     5217.72
GR    1466.9    5233.75     1466.58     5241.08      1466.33     5246.90     1466.40     5250.99     1466.61     5264.73
GR    1467.0    5289.91     1467.20     5306.66      1467.34     5341.05     1467.60     5361.43     1467.94     5383.99
GR    1467.8    5395.19     1467.56     5419.40      1468.00     5430.41

  END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17

ET                 5.1                                 4845.32     5152.45
X1     11.56        87     4845.32     5152.45          386         396         390
GR    1471.8    4676.86     1471.19     4685.14      1470.77     4690.44     1470.54     4693.47     1470.29     4696.28
GR    1470.3    4700.82     1470.50     4703.37      1470.83     4707.69     1471.29     4713.13     1472.00     4721.56
GR    1472.0    4845.32     1470.73     4853.22      1470.34     4856.19     1470.00     4857.83     1469.42     4859.18
GR    1468.0    4862.39     1467.55     4863.42      1466.00     4867.01     1464.74     4869.91     1464.00     4871.63
GR    1462.4    4875.29     1462.00     4876.26      1460.24     4880.32     1460.00     4880.88     1459.55     4891.07
GR    1459.2    4900.27     1459.14     4911.50      1459.18     4917.72     1459.27     4936.45     1459.28     4951.90
GR    1459.3    4956.77     1459.32     4970.56      1459.36     4977.34     1459.35     4986.98     1459.40     5000.00
GR    1459.5    5006.02     1459.50     5012.85      1459.48     5022.30     1459.43     5032.20     1459.31     5049.20
GR    1459.3    5049.41     1459.31     5049.51      1459.31     5049.72     1459.30     5060.17     1459.48     5072.34
GR    1459.5    5084.60     1459.48     5091.51      1459.47     5098.77     1459.30     5109.95     1459.40     5114.80
GR    1459.6    5117.41     1459.59     5117.63      1460.00     5124.33     1461.59     5127.25     1461.65     5127.38
GR    1462.0    5128.28     1462.29     5129.00      1462.54     5129.65     1463.39     5131.68     1464.00     5133.13
GR    1465.0    5135.40     1466.00     5137.90      1466.70     5139.56     1468.00     5142.66     1468.53     5143.93
GR    1470.0    5147.43     1470.90     5149.69      1472.00     5152.45     1472.00     5165.70     1471.55     5168.67
GR    1471.2    5170.75     1470.00     5178.38      1470.00     5225.76     1470.27     5226.00     1472.00     5227.56
GR    1472.5    5228.46     1472.76     5229.77      1472.00     5233.24     1471.71     5234.57     1471.42     5235.87
GR    1471.4    5236.02     1470.93     5237.02      1470.00     5239.41     1470.00     5268.37     1470.59     5293.04
GR    1470.9    5296.51     1471.02     5306.55

  OUTLET OF I-17 CROSSING

ET                 5.1                                 4880.47     5126.63
X1     11.57        92     4880.47     5126.63           72          75          73
GR    1470.8    4670.15     1471.04     4676.02      1471.81     4692.20     1472.00     4696.83     1472.63     4707.63
GR    1472.8    4711.11     1473.05     4715.60      1473.66     4746.09     1473.57     4751.49     1473.41     4760.54
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GR   1474.0    4769.16    1474.00    4816.39    1473.19    4827.23    1472.71    4833.86    1472.64    4834.85
GR   1472.0    4844.37    1472.00    4861.16    1472.54    4870.52    1472.00    4880.47    1471.79    4880.62
GR   1470.1    4881.77    1470.00    4881.79    1468.35    4882.11    1468.00    4882.18    1466.41    4882.49
GR   1466.0    4882.57    1464.43    4882.88    1464.00    4882.96    1462.45    4883.27    1462.00    4883.35
GR   1461.6    4896.00    1461.53    4899.52    1461.22    4909.97    1461.03    4926.96    1460.86    4934.09
GR   1460.6    4946.27    1460.36    4961.63    1460.29    4993.04    1460.30    5000.00    1460.41    5002.11
GR   1460.5    5010.81    1460.63    5019.07    1461.14    5020.57    1461.34    5048.98    1461.18    5074.02
GR   1460.9    5090.68    1461.37    5103.14    1461.81    5115.32    1461.86    5116.93    1462.00    5120.67
GR   1462.6    5120.78    1464.00    5121.06    1464.40    5121.17    1466.00    5121.48    1466.51    5121.56
GR   1467.1    5121.69    1468.00    5121.86    1469.43    5122.14    1470.00    5122.25    1470.50    5123.25
GR   1471.7    5125.87    1472.00    5126.63    1472.00    5154.31    1471.46    5159.70    1470.38    5170.04
1
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GR   1470.4    5174.42    1470.49    5174.60    1470.77    5175.42    1472.00    5179.41    1472.00    5180.09
GR   1471.6    5182.32    1470.00    5193.35    1470.00    5209.59    1470.38    5210.71    1471.63    5215.00
GR   1472.0    5216.25    1472.00    5216.38    1472.00    5218.35    1471.83    5219.05    1470.00    5223.24
GR   1470.0    5225.98    1470.22    5226.92    1470.00    5227.88    1470.00    5234.90    1470.81    5241.05
GR   1470.8    5241.43    1471.05    5249.44    1470.99    5250.35    1470.90    5250.66    1470.72    5261.88
GR   1471.0    5291.96    1471.60    5306.88

1
   15SEP04      15:13:29                                                                                  PAGE   18

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

CCHV=     .100 CEHV=     .300
*SECNO 8.690

3265 DIVIDED FLOW

3280 CROSS SECTION      8.69 EXTENDED       .71 FEET

3470 ENCROACHMENT STATIONS=     3796.6    5556.9  TYPE=      1  TARGET=     1760.280
     8.690     14.00   1378.00   1376.74       .00   1379.97      1.97       .00       .00   1381.16
   79724.0        .0   79391.9     332.1        .0    7026.5     198.7        .0        .0   1379.49
       .00       .00     11.30      1.67      .000      .035      .045      .000   1364.00   4045.04
   .005391        0.        0.        0.         0        11         0       .00   1389.66   5556.89

*SECNO 8.790

3470 ENCROACHMENT STATIONS=     3855.7    5476.0  TYPE=      1  TARGET=     1620.250
     8.790     14.84   1380.84   1379.88       .00   1383.11      2.27      3.05       .09   1384.00
   79724.0        .0   79706.4      17.6        .0    6589.6      10.8      85.6      14.5   1380.00
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                                                                  MAIN500
      .01        .00      12.10       1.63       .000       .035       .045       .000   1366.00   4117.44
   .005952      530.       539.       546.          2          6          0        .00    947.79   5065.23

*SECNO 8.930

3470 ENCROACHMENT STATIONS=      4280.0     5437.8  TYPE=       1  TARGET=      1157.800
     8.930     14.34   1384.34   1382.01        .00   1386.64       2.30       3.51        .01   1386.72
   79724.0        .0   79575.0     149.0         .0    6531.8       75.3      195.0       28.7   1382.80
      .03        .00     12.18      1.98       .000       .035       .045       .000   1370.00   4570.75
   .004052      565.       722.       711.          3         15          0        .00    768.16   5338.91

*SECNO 9.010

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
1
   15SEP04      15:13:29                                                                                PAGE   19

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      4519.9     5433.5  TYPE=       1  TARGET=       913.610
     9.010     13.96   1386.15   1386.15        .00   1391.04       4.89       2.41        .78   1386.00
   76646.0        .1   76645.9        .0         .1    4319.5        .0      249.0       34.8   1389.58
      .04        .53     17.74       .00       .045       .035       .000       .000   1372.19   4815.33
   .008434      363.       430.       558.          0          8          0        .00    444.69   5260.03

*SECNO 9.080

3265 DIVIDED FLOW

3280 CROSS SECTION      9.08 EXTENDED       .01 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.58

3470 ENCROACHMENT STATIONS=      4515.3     5233.2  TYPE=       1  TARGET=       717.880
     9.080     16.81   1390.28   1386.47        .00   1393.03       2.75       1.78        .21   1388.00
   73779.0     978.5   72798.5       2.0      338.7    5431.7        4.3      291.6       39.6   1390.00
      .04       2.89     13.40       .47       .045       .035       .045       .000   1373.47   4538.43
   .003130      432.       365.       165.          3         12          0        .00    676.66   5233.18
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*SECNO 9.140

3265 DIVIDED FLOW

3280 CROSS SECTION      9.14 EXTENDED       .08 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4525.9    5437.5  TYPE=      1  TARGET=      911.700
     9.140     17.95   1391.95   1385.57       .00   1393.92      1.97       .80       .08   1390.00
   59075.0     212.7   58850.5      11.7     151.6    5218.5       6.4     334.0      44.2   1390.00
       .05      1.40     11.28      1.83      .035      .035      .035      .000   1374.00   4600.19
   .001822      288.      333.      385.         2        19         0       .00    584.06   5437.55
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.145

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .43


3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

     9.145     16.78   1391.68   1386.07       .00   1394.07      2.38       .03       .12   1394.50
   52375.0        .0   52375.0        .0        .0    4227.1        .0     334.8      44.3   1394.70
       .05       .00     12.39       .00      .000      .035      .000      .000   1374.90   5015.01
   .007694        8.        8.        8.         2        15         0   -270.14    309.99   5324.99

*SECNO 9.155

3265 DIVIDED FLOW

3280 CROSS SECTION      9.15 EXTENDED       .17 FEET


3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70


3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

     9.155     17.17   1392.27   1386.27       .00   1394.72      2.44       .63       .02   1394.50
   52375.0        .6   52374.4        .0       1.5    4174.1        .0     342.6      44.9   1394.70
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                                                                  MAIN500
      .05        .41      12.55       .00       .035       .035       .000       .000   1375.10   4799.73
   .008022       80.        80.       80.          2         15          0   -452.22    352.53   5324.99

*SECNO 9.160

3265 DIVIDED FLOW

3280 CROSS SECTION      9.16 EXTENDED       .14 FEET

3301 HV CHANGED MORE THAN HVINS

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   15SEP04      15:13:29                                                                                    PAGE   21

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.70

3470 ENCROACHMENT STATIONS=     4528.7    5445.3  TYPE=      1  TARGET=      916.610
     9.160      19.50   1393.50   1385.14       .00   1394.84       1.34        .02        .11   1390.00
   52375.0      826.2   51368.8     180.0     450.4    5477.2      127.9      343.5       45.0   1390.00
      .05       1.83      9.38      1.41      .035      .035       .035       .000    1374.00   4528.66
   .001101        8.        8.        8.         2        14          0        .00     828.43   5445.27

*SECNO 9.210
3280 CROSS SECTION      9.21 EXTENDED      2.29 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.34

3470 ENCROACHMENT STATIONS=     4732.0    5190.0  TYPE=      1  TARGET=      458.050
     9.210      18.28   1394.28   1384.29       .00   1395.02        .73        .11        .06   1439.00
   52375.0         .0   52328.2     46.8        .0    7624.2       43.1      386.9       48.8   1391.00
      .06        .00      6.86      1.09      .000      .020       .035       .000    1376.00   4732.00
   .000201      145.       279.      355.         2        14          0        .00     458.05   5190.05

*SECNO 9.220

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
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3470 ENCROACHMENT STATIONS=      4664.0     5314.1  TYPE=       1  TARGET=       650.090
     9.220       7.08   1397.08   1397.08       .00   1400.46      3.38       .02       .80   1445.00
   52375.0        .0   52375.0        .0        .0    3547.6        .1     392.0      49.3   1397.00
       .07       .00     14.76       .04      .000      .035      .035      .000   1390.00   4664.00
   .009693      122.       39.      104.         0        18         0       .00    531.04   5195.04
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     SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
     Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
     TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
     SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.250
3280 CROSS SECTION      9.25 EXTENDED       .40 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=      4573.0     5304.5  TYPE=       1  TARGET=       731.600
     9.250       7.40   1399.40   1398.95       .00   1401.78      2.37      1.21       .10   1394.00
   52375.0     7064.8   45301.1       9.1     780.7    3536.8       4.1     404.8      51.3   1398.64
       .07       9.05     12.81      2.22      .040      .035      .035      .000   1392.00   4572.95
   .007576      155.      141.       82.         3         8         0       .00    723.34   5296.29

*SECNO 9.300
3280 CROSS SECTION      9.30 EXTENDED      1.19 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=      4441.5     5290.2  TYPE=       1  TARGET=       848.690
     9.300       8.19   1401.19   1401.19       .00   1404.50      3.31      2.20       .28   1395.00
   80000.0    20541.9   59395.2      62.9    1833.0    3805.3      13.2     434.7      56.1   1399.50
       .07      11.21     15.61      4.75      .040      .035      .035      .000   1393.00   4441.50
   .009082      262.      261.      282.         0         8         0       .00    848.69   5290.19

*SECNO 9.350
3280 CROSS SECTION      9.35 EXTENDED      3.47 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.75
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3470 ENCROACHMENT STATIONS=     4252.4    5287.8  TYPE=      1  TARGET=     1035.390
     9.350      12.47   1404.47   1402.24       .00   1406.01      1.53      1.33       .18   1399.00
   80000.0    23152.6   56617.3     230.1    3304.6    5181.2      47.3     480.4      62.1   1400.00
       .08       7.01     10.93      4.87      .040      .035      .035      .000   1392.00   4252.38
   .002951       291.      274.      274.         3        11         0       .00   1035.39   5287.77
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.420
3280 CROSS SECTION      9.42 EXTENDED      1.01 FEET

3301 HV CHANGED MORE THAN HVINS

     9.420      12.24   1405.24   1404.65       .00   1407.92      2.68      1.57       .34   1401.00
   80000.0    13190.6   66550.1     259.3    1783.3    4748.1      48.5     549.6      71.2   1402.00
       .09       7.40     14.02      5.35      .040      .035      .035      .000   1393.00   4291.57
   .005464       400.      399.      402.         3        11         0       .00    948.16   5239.73

*SECNO 9.450
3280 CROSS SECTION      9.45 EXTENDED      .90 FEET

     9.450      12.90   1405.90   1405.56       .00   1408.74      2.84       .77       .05   1401.70
   80000.0    13316.3   56913.3    9770.4    1443.9    4096.4     608.6     566.0      73.6   1394.00
       .09       9.22     13.89     16.05      .040      .040      .040      .000   1393.00   4364.76
   .008536        93.      118.      126.         2         8         0       .00    916.87   5281.63

*SECNO 9.540
3280 CROSS SECTION      9.54 EXTENDED      1.42 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4663.4    5177.0  TYPE=      1  TARGET=      513.650
     9.540      12.42   1409.42   1409.39       .00   1414.06      4.64      4.78       .54   1408.00
   80000.0       15.2   79984.8        .0       4.3    4624.6        .0     626.5      81.3 100000.00
       .10       3.50     17.30       .00      .035      .040      .000      .000   1397.00   4678.98
   .011096       410.      500.      515.         2         8         0       .00    498.02   5177.00

*SECNO 9.650
3280 CROSS SECTION      9.65 EXTENDED      4.27 FEET
```

3301 HV CHANGED MORE THAN HVINS

1

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 1.54

3470 ENCROACHMENT STATIONS= 4736.4 5231.9 TYPE= 1 TARGET= 495.470

9.650	13.26	1415.26	1412.46	.00	1418.08	2.82	3.84	.18	1412.00
80000.0	293.1	79706.9	.0	53.6	5910.4	.0	694.3	87.7	100000.00
.11	5.47	13.49	.00	.035	.040	.000	.000	1402.00	4736.39
.004676	475.	558.	503.	2	11	0	.00	495.47	5231.86

*SECNO 9.700

3470 ENCROACHMENT STATIONS= 4752.7 5283.9 TYPE= 1 TARGET= 531.160

9.700	12.53	1416.53	1413.66	.00	1419.12	2.58	1.01	.02	1412.00
80000.0	73.1	79721.8	205.2	17.5	6174.1	39.8	730.1	90.7	1412.00
.12	4.18	12.91	5.16	.035	.035	.035	.000	1404.00	4752.73
.003394	253.	256.	259.	3	15	0	.00	531.16	5283.89

*SECNO 9.730

3470 ENCROACHMENT STATIONS= 4762.0 5298.7 TYPE= 1 TARGET= 536.690

9.730	13.43	1417.43	1413.70	.00	1419.66	2.23	.51	.03	1414.00
80000.0	10.7	79678.5	310.9	4.8	6634.2	60.9	755.2	92.7	1412.00
.12	2.24	12.01	5.11	.035	.035	.035	.000	1404.00	4761.98
.002707	187.	169.	151.	2	15	0	.00	536.69	5298.67

*SECNO 9.800

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

3470 ENCROACHMENT STATIONS= 4698.4 5217.7 TYPE= 1 TARGET= 519.300

9.800	11.44	1417.44	1417.02	.00	1421.83	4.40	1.52	.65	1416.00
80000.0	60.7	79744.0	195.3	21.0	4731.7	31.0	803.3	97.1	1414.00
.13	2.90	16.85	6.31	.035	.035	.035	.000	1406.00	4709.74
.007239	383.	365.	349.	3	15	0	.00	507.92	5217.67

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

*SECNO 9.890

3470 ENCROACHMENT STATIONS= 4678.5 5167.5 TYPE= 1 TARGET= 488.990

9.890	14.85	1420.85	1419.66	.00	1425.07	4.21	3.21	.02	1420.00
80000.0	18.9	79940.8	40.3	10.3	4850.8	9.2	858.1	102.6	1418.00
.14	1.83	16.48	4.37	.035	.035	.035	.000	1406.00	4716.68
.005856	509.	495.	484.	3	11	0	.00	450.79	5167.47

*SECNO 9.980

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 4813.5 5284.1 TYPE= 1 TARGET= 470.600

9.980	14.15	1424.15	1421.65	.00	1427.46	3.31	2.31	.09	1428.00
80000.0	.0	79831.2	168.8	.0	5458.7	32.7	914.6	107.5	1420.00
.15	.00	14.62	5.16	.000	.035	.035	.000	1410.00	4840.02
.004090	462.	475.	469.	2	15	0	.00	444.11	5284.14

*SECNO 10.080

3470 ENCROACHMENT STATIONS= 4840.6 5275.3 TYPE= 1 TARGET= 434.730

10.080	14.13	1426.13	1424.42	.00	1429.92	3.79	2.32	.14	1426.00
80000.0	.0	79997.9	2.1	.0	5120.2	1.2	976.9	112.6	1424.00
.15	.03	15.62	1.81	.035	.035	.035	.000	1412.00	4841.29
.005062	508.	511.	514.	2	11	0	.00	434.05	5275.34

*SECNO 10.160

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS= 4784.9 5288.3 TYPE= 1 TARGET= 503.410

10.160	12.80	1428.80	1426.61	.00	1431.98	3.18	2.00	.06	1426.00
80000.0	96.0	79736.5	167.6	24.1	5564.4	38.8	1029.9	117.2	1426.00
.16	3.99	14.33	4.32	.035	.035	.035	.000	1416.00	4784.92
.004270	447.	430.	418.	3	15	0	.00	503.41	5288.33

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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV

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    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 10.250

3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      4772.9     5313.0  TYPE=       1  TARGET=       540.110
    10.250     10.82   1430.82   1430.08       .00   1434.60      3.77       2.44        .18   1429.70
   80000.0        .0   80000.0        .0        .0    5132.4        .0     1086.7      122.7 100000.00
       .17       .00     15.59       .00      .000      .035      .000       .000    1420.00   4772.87
   .006769      496.      460.      420.         2        15         0        .00     540.11   5312.98

*SECNO 10.330
3280 CROSS SECTION     10.33 EXTENDED      3.51 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=      4766.4     5272.0  TYPE=       1  TARGET=       505.590
    10.330     11.51   1433.51   1433.22       .00   1438.06      4.55       3.23        .23   1435.17
   80000.0        .0   80000.0        .0        .0    4674.3        .0     1136.7      127.9   1434.00
       .18       .00     17.11       .00      .000      .035      .000       .000    1422.00   4789.14
   .007826      519.      444.      373.         2         8         0        .00     478.34   5267.48

*SECNO 10.340
3280 CROSS SECTION     10.34 EXTENDED      3.96 FEET


3470 ENCROACHMENT STATIONS=      4756.9     5252.6  TYPE=       1  TARGET=       495.720
    10.340     11.96   1433.96   1433.76       .00   1438.69      4.72        .58        .05   1435.00
   80000.0        .0   80000.0        .0        .0    4586.5        .0     1144.5      128.7   1434.00
       .18       .00     17.44       .00      .000      .035      .000       .000    1422.00   4779.40
   .008006      104.       73.       42.         2         8         0        .00     463.80   5243.21

*SECNO 10.380
3280 CROSS SECTION     10.38 EXTENDED      1.24 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
1
   15SEP04      15:13:29                                                                                  PAGE   27

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST
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                                                    MAIN500
3470 ENCROACHMENT STATIONS=     4823.2    5272.0  TYPE=      1  TARGET=      448.790
    10.380     11.24   1435.24   1435.24       .00   1440.28      5.03      1.15       .09   1435.82
   80000.0        .0   80000.0        .0        .0    4442.8        .0    1161.2     130.4 100000.00
       .18       .00     18.01       .00      .000      .030      .000      .000   1424.00   4825.85
   .006336      173.      162.      143.         0        11         0       .00    446.15   5272.00


*SECNO 10.410
3280 CROSS SECTION     10.41 EXTENDED      8.47 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4783.1    5262.7  TYPE=      1  TARGET=      479.660
    10.410     10.47   1438.47   1438.47       .00   1443.32      4.85      1.24       .02   1436.00
   80000.0     129.8   79692.5     177.7      21.6    4502.2      28.6    1178.9     132.2   1436.00
       .18      6.00     17.70      6.22      .035      .035      .035      .000   1428.00   4783.08
   .008325      198.      171.      142.         0        11         0       .00    479.66   5262.74


*SECNO 10.420
3280 CROSS SECTION     10.42 EXTENDED     10.60 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4758.8    5239.4  TYPE=      1  TARGET=      480.630
    10.420     14.60   1440.60   1438.52       .00   1443.86      3.26       .38       .16   1436.00
   80000.0     394.3   79605.7        .0      61.5    5480.7        .1    1186.3     132.9   1438.00
       .19      6.41     14.52       .03      .035      .035      .035      .000   1426.00   4758.78
   .004420       70.       64.       58.         5        11         0       .00    480.63   5239.41


*SECNO 10.510

3470 ENCROACHMENT STATIONS=     4717.3    5219.5  TYPE=      1  TARGET=      502.160
    10.510     46.67   1442.67   1440.92       .00   1446.18      3.51      2.25       .07   1440.00
   80000.0      28.1   79718.1     253.8       7.3    5294.5      47.4    1245.3     138.3   1440.00
       .19      3.82     15.06      5.36      .035      .035      .035      .000   1396.00   4717.30
   .005167      439.      472.      487.         3        18         0       .00    502.15   5219.45


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   15SEP04      15:13:29                                                                                PAGE   28

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 10.620

3301 HV CHANGED MORE THAN HVINS
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3470 ENCROACHMENT STATIONS=     4664.9    5132.6  TYPE=      1  TARGET=      467.660
    10.620     53.65   1445.65   1444.63       .00   1449.85      4.20      3.46       .21   1444.00
   80000.0       4.4   79978.1      17.5       1.7    4863.4       6.7    1315.2     144.9   1444.00
       .20      2.54     16.45      2.63      .035      .035      .050      .000   1392.00   4664.91
   .006550      535.      596.      618.         2        17         0       .00    467.66   5132.57

*SECNO 10.700

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4748.1    5211.3  TYPE=      1  TARGET=      463.190
    10.700     14.15   1448.15   1448.15       .00   1453.24      5.10      2.96       .27   1446.20
   80000.0     124.9   79861.2      13.9      22.9    4404.7       4.0    1358.2     149.1   1446.48
       .21      5.45     18.13      3.48      .035      .035      .035      .000   1434.00   4748.11
   .008330      390.      402.      382.         0        14         0       .00    449.85   5197.96

*SECNO 10.830
3280 CROSS SECTION     10.83 EXTENDED     10.60 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4782.3    5310.0  TYPE=      1  TARGET=      527.740
    10.830     16.60   1454.60   1452.67       .00   1457.75      3.15      4.31       .19   1452.00
   80000.0     238.9   79624.1     137.0      48.2    5581.6      29.1    1441.1     157.1   1452.00
       .22      4.96     14.27      4.71      .035      .035      .035      .000   1438.00   4782.29
   .004539      642.      717.      704.         2         8         0       .00    527.73   5310.02

*SECNO 10.930
3280 CROSS SECTION     10.93 EXTENDED     10.88 FEET
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3470 ENCROACHMENT STATIONS=     4766.7    5290.0  TYPE=      1  TARGET=      523.260
    10.930     16.88   1456.88   1455.15       .00   1460.27      3.40      2.45       .07   1454.00
   80000.0      81.1   79904.7      14.2      23.3    5399.9       5.3    1506.8     163.3   1455.10
       .23      3.48     14.80      2.69      .035      .035      .035      .000   1440.00   4766.74
   .004978      456.      516.      557.         3        11         0       .00    518.75   5285.49
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*SECNO 11.030
3280 CROSS SECTION     11.03 EXTENDED      6.01 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4581.4    5120.8  TYPE=      1  TARGET=      539.400
    11.030     18.01   1460.01   1456.57       .00   1462.45      2.43      2.08       .10   1460.00
   80000.0        .0   80000.0        .0        .0    6390.7        .0    1578.0     169.6 100000.00
       .25       .00     12.52       .00      .000      .035      .000      .000   1442.00   4598.55
   .003223      506.      525.      504.         3        15         0       .00    522.28   5120.83

*SECNO 11.140
3280 CROSS SECTION     11.14 EXTENDED      5.98 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4762.0    5149.9  TYPE=      1  TARGET=      387.910
    11.140     13.98   1461.98   1461.98       .00   1467.62      5.64      2.99       .96   1452.00
   80000.0        .0   80000.0        .0        .0    4197.5        .0    1651.6     175.9 100000.00
       .25       .00     19.06       .00      .000      .035      .000      .000   1448.00   4762.00
   .008517      606.      606.      610.         0        15         0       .00    378.51   5140.51

*SECNO 11.190
3280 CROSS SECTION     11.19 EXTENDED      9.39 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
1
   15SEP04      15:13:29                                                                          PAGE   30

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3470 ENCROACHMENT STATIONS=     4825.1    5165.9  TYPE=      1  TARGET=      340.840
    11.190     13.57   1465.57   1465.57       .00   1471.64      6.07       .97       .13   1466.00
   80000.0        .0   80000.0        .0        .0    4044.7        .0    1672.9     177.7   1466.00
       .26       .00     19.78       .00      .000      .020      .000      .000   1452.00   4826.17
   .002598      277.      225.      212.         0         8         0       .00    333.88   5160.05

*SECNO 11.290
3280 CROSS SECTION     11.29 EXTENDED      5.80 FEET
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3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4827.4    5184.7  TYPE=      1  TARGET=      357.270
    11.290     15.80   1467.80   1466.71       .00   1472.95      5.15       1.22       .09   1469.95
   80000.0        .0   80000.0        .0        .0    4391.2        .0     1724.8     181.8 100000.00
       .27       .00     18.22       .00      .000      .020      .000       .000   1452.00   4842.02
   .002011      486.      536.      591.         4         8         0        .00    337.57   5179.59


*SECNO 11.390
3280 CROSS SECTION     11.39 EXTENDED      3.03 FEET


3301 HV CHANGED MORE THAN HVINS


3470 ENCROACHMENT STATIONS=     4826.5    5170.5  TYPE=      1  TARGET=      344.010
    11.390     16.62   1470.03   1467.06       .00   1473.96      3.93        .88       .12   1470.00
   80000.0        .0   80000.0        .0        .0    5030.0        .0     1784.1     186.1 100000.00
       .28       .00     15.90       .00      .000      .020      .000       .000   1453.41   4826.47
   .001317      520.      548.      577.         3        11         0        .00    344.01   5170.48


*SECNO 11.480
3280 CROSS SECTION     11.48 EXTENDED      2.91 FEET


3470 ENCROACHMENT STATIONS=     4831.9    5174.6  TYPE=      1  TARGET=      342.710
    11.480     16.91   1470.91   1467.44       .00   1474.59      3.68        .61       .03   1470.00
   80000.0        .0   80000.0        .0        .0    5199.3        .0     1841.3     189.9 100000.00
       .28       .00     15.39       .00      .000      .020      .000       .000   1454.00   4831.85
   .001180      443.      487.      532.         2        15         0        .00    342.71   5174.56


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   15SEP04      15:13:29                                                                          PAGE   31

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


*SECNO 11.560
3280 CROSS SECTION     11.56 EXTENDED      2.69 FEET


3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4845.3    5152.5  TYPE=      1  TARGET=      307.130
    11.560     14.57   1473.71   1473.71       .00   1480.13      6.43        .66       .83   1472.00
   80000.0        .0   80000.0        .0        .0    3931.7        .0     1882.2     192.9 100000.00
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                                                                  MAIN500
      .29        .00      20.35        .00       .000       .020       .000       .000   1459.14   4845.32
   .002593      386.       390.       396.          0         11          0        .00    307.13   5152.45

*SECNO 11.570
3280 CROSS SECTION     11.57 EXTENDED      4.49 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4880.5    5126.6  TYPE=      1  TARGET=      246.160
    11.570     15.80   1476.09   1476.09       .00   1483.58       7.48        .19        .32   1472.00
   80000.0        .0   80000.0        .0        .0    3644.5         .0     1888.5      193.3 100000.00
       .29       .00     21.95       .00       .000       .020       .000       .000   1460.29   4880.47
   .002704       72.       73.       75.          0          8          0        .00    246.16   5126.63

1
   15SEP04      15:13:29                                                                                PAGE    32


                                                                                THIS RUN EXECUTED 15SEP04     15:13:29
*************************************
 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

IGINAL MODEL SKNKLOMR.IH

SUMMARY PRINTOUT

      SECNO        Q        CWSEL      CRIWS      VCH       DEPTH     TOPWID     AREA       FRCH      SSTA      ENDST

       8.690  79724.00   1378.00   1376.74    11.30     14.00   1389.66   7225.27       .76   4045.04   5556.89

       8.790  79724.00   1380.84   1379.88    12.10     14.84    947.79   6600.47       .80   4117.44   5065.23

       8.930  79724.00   1384.34   1382.01    12.18     14.34    768.16   6607.04       .69   4570.75   5338.91

*      9.010  76646.00   1386.15   1386.15    17.74     13.96    444.69   4319.60      1.00   4815.33   5260.03

*      9.080  73779.00   1390.28   1386.47    13.40     16.81    676.66   5774.74       .64   4538.43   5233.18

       9.140  59075.00   1391.95   1385.57    11.28     17.95    584.06   5376.43       .50   4600.19   5437.55

*      9.145  52375.00   1391.68   1386.07    12.39     16.78    309.99   4227.06       .59   5015.01   5324.99
```

	9.155	52375.00	1392.27	1386.27	12.55	17.17	352.53	4175.57	.60	4799.73	5324.99
*	9.160	52375.00	1393.50	1385.14	9.38	19.50	828.43	6055.39	.39	4528.66	5445.27
*	9.210	52375.00	1394.28	1384.29	6.86	18.28	458.05	7667.37	.29	4732.00	5190.05
*	9.220	52375.00	1397.08	1397.08	14.76	7.08	531.04	3547.67	1.00	4664.00	5195.04
	9.250	52375.00	1399.40	1398.95	12.81	7.40	723.34	4321.59	.89	4572.95	5296.29
*	9.300	80000.00	1401.19	1401.19	15.61	8.19	848.69	5651.58	1.00	4441.50	5290.19
*	9.350	80000.00	1404.47	1402.24	10.93	12.47	1035.39	8533.07	.60	4252.38	5287.77
	9.420	80000.00	1405.24	1404.65	14.02	12.24	948.16	6579.90	.80	4291.57	5239.73
	9.450	80000.00	1405.90	1405.56	13.89	12.90	916.87	6148.84	.86	4364.76	5281.63
	9.540	80000.00	1409.42	1409.39	17.30	12.42	498.02	4628.98	.99	4678.98	5177.00

1
15SEP04 15:13:29 PAGE 33

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
*	9.650	80000.00	1415.26	1412.46	13.49	13.26	495.47	5963.99	.68	4736.39	5231.86
	9.700	80000.00	1416.53	1413.66	12.91	12.53	531.16	6231.33	.66	4752.73	5283.89
	9.730	80000.00	1417.43	1413.70	12.01	13.43	536.69	6699.84	.59	4761.98	5298.67
*	9.800	80000.00	1417.44	1417.02	16.85	11.44	507.92	4783.65	.93	4709.74	5217.67
	9.890	80000.00	1420.85	1419.66	16.48	14.85	450.79	4870.35	.86	4716.68	5167.47
	9.980	80000.00	1424.15	1421.65	14.62	14.15	444.11	5491.43	.73	4840.02	5284.14
	10.080	80000.00	1426.13	1424.42	15.62	14.13	434.05	5121.46	.80	4841.29	5275.34
	10.160	80000.00	1428.80	1426.61	14.33	12.80	503.41	5627.29	.74	4784.92	5288.33
	10.250	80000.00	1430.82	1430.08	15.59	10.82	540.11	5132.43	.89	4772.87	5312.98
	10.330	80000.00	1433.51	1433.22	17.11	11.51	478.34	4674.30	.96	4789.14	5267.48
	10.340	80000.00	1433.96	1433.76	17.44	11.96	463.80	4586.54	.98	4779.40	5243.21
*	10.380	80000.00	1435.24	1435.24	18.01	11.24	446.15	4442.84	1.01	4825.85	5272.00
*	10.410	80000.00	1438.47	1438.47	17.70	10.47	479.66	4552.38	1.00	4783.08	5262.74
	10.420	80000.00	1440.60	1438.52	14.52	14.60	480.63	5542.34	.75	4758.78	5239.41
	10.510	80000.00	1442.67	1440.92	15.06	46.67	502.15	5349.23	.80	4717.30	5219.45

	10.620	80000.00	1445.65	1444.63	16.45	53.65	467.66	4871.74	.89	4664.91	5132.57
*	10.700	80000.00	1448.15	1448.15	18.13	14.15	449.85	4431.63	1.00	4748.11	5197.96
	10.830	80000.00	1454.60	1452.67	14.27	16.60	527.73	5658.85	.75	4782.29	5310.02
	10.930	80000.00	1456.88	1455.15	14.80	16.88	518.75	5428.44	.78	4766.74	5285.49
	11.030	80000.00	1460.01	1456.57	12.52	18.01	522.28	6390.74	.63	4598.55	5120.83
*	11.140	80000.00	1461.98	1461.98	19.06	13.98	378.51	4197.52	1.01	4762.00	5140.51
*	11.190	80000.00	1465.57	1465.57	19.78	13.57	333.88	4044.70	1.00	4826.17	5160.05
	11.290	80000.00	1467.80	1466.71	18.22	15.80	337.57	4391.21	.89	4842.02	5179.59
	11.390	80000.00	1470.03	1467.06	15.90	16.62	344.01	5030.04	.73	4826.47	5170.48
	11.480	80000.00	1470.91	1467.44	15.39	16.91	342.71	5199.27	.70	4831.85	5174.56
*	11.560	80000.00	1473.71	1473.71	20.35	14.57	307.13	3931.67	1.00	4845.32	5152.45

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
*	11.570	80000.00	1476.09	1476.09	21.95	15.80	246.16	3644.47	1.01	4880.47	5126.63

SUMMARY OF ERRORS AND SPECIAL NOTES

```
CAUTION SECNO=      9.010  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.010  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.145  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.210  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.220  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.220  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      9.300  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.300  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.350  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=      9.650  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     10.380  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.380  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     10.410  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.410  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     10.700  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.700  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.140  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.140  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.190  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.190  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.560  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.560  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.570  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.570  PROFILE=  1  MINIMUM SPECIFIC ENERGY
```

<u>0.2% Annual Chance Flood</u>

Breakout Channel

Input File: bkt500.dat

```
* Combined Split Flow Model
* WEIR IS SET ALONG HIGH GROUND RIDGE WEST OF 35TH AVENUE AND
* SOUTH OF PINNACLE PEAK ROAD
SF
JC      SPLIT FLOW ANALYSIS DUE TO WEIR ACTION
JP      0     0.5     100       1       0
TW       RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57
WS      2    8.55    8.57      -1    2.65
WC        1381.9      97 1380.27
TW       RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58
WS      2    8.57    8.58      -1    2.65
WC       1380.27      92 1378.96
TW       RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60
WS      2    8.58    8.60      -1    2.65
WC       1378.96      80 1378.76
TW       RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62
WS      2    8.60    8.62      -1    2.65
WC       1378.76     128  1379.5
TW       RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64
WS      2    8.62    8.64      -1    2.65
WC        1379.5     100 1379.87
TW       RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66
WS      2    8.64    8.66      -1    2.65
WC       1379.87     100 1380.23
TW       RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68
WS      2    8.66    8.68      -1    2.65
WC       1380.23     100 1380.64
TW       RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70
WS      2    8.68    8.70      -1    2.65
WC       1380.64     100 1381.27
TW       RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72
WS      2    8.70    8.72      -1    2.65
WC       1381.27     100  1381.9
TW       RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74
WS      2    8.72    8.74      -1    2.65
WC        1381.9     100 1382.55
TW       RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77
WS      2    8.74    8.77      -1    2.65
WC       1382.55     200 1384.48
TW       RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79
WS      2    8.77    8.79      -1    2.65
WC       1384.48      81 1385.31
TW       RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80
WS      2    8.79    8.80      -1    2.65
WC       1385.31      49 1385.75
TW       RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81
WS      2    8.80    8.81      -1    2.65
WC       1385.75     105    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86
WS      2    8.81    8.86      -1    2.65
WC          1386     266    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89
WS      2    8.86    8.89      -1    2.65
WC          1386     175    1386
TW       RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93
WS      2    8.89    8.93      -1    2.65
WC          1386     217    1387
TW       RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00
WS      2    8.93    9.00      -1    2.65
WC          1387     370    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01
WS      2    9.00    9.01      -1    2.65
WC          1390      76    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04
WS      2    9.01    9.04      -1    2.65
WC          1390     137    1390
TW       RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08
WS      2    9.04    9.08      -1    2.65
WC          1390     200    1391
TW       RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10
WS      2    9.08    9.10      -1    2.65
WC          1391     137  1392.0
EE
T1       COMBINED CVL (North and South) AND TETRA TECH'S EAST SPLIT FLOW MODEL
T2       INPUT FILE: bkt500.dat
T3       EMCON 8/4/04 by: GRB
T4       CVL'S X-SECTIONS (8.55 - 9.15) HAVE BEEN RE-NAMED TO MATCH
T5       TETRA TECH'S RIVER MILE NOMENCLATURE
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T6      BOUNDARY CONDITIONS WERE TAKEN FROM TETRA TECH'S EAST SPLIT FLOW MODEL
T7      FLOWRATE WAS DETERMINED BY MATCHING WSEL AT RIVER MILE 9.25 IN THE
T8      MAIN500.DAT MODEL.

J1     0       2                    0.007                0       0
QT     1   27625
NC 0.040   0.040   0.040     0.1     0.3
X1  8.55      10    9965   10072       0       0       0
GR1381.7    9915  1380.9    9965 1378.36 9979.42 1377.36 9985.03    1374 9999.67
GR1375.010003.77  1376.010012.77    137810046.83  1380.010052.41  1381.9   10072
* CVL STATION 3
X1  8.57       9    9975   10062      97      97      97
GR1382.2    9905  1381.0 9957.55    1381    9968  1380.0    9975 1374.69 9995.58
GR  1376 9998.47    137610001.60  1378.010022.35 1380.27   10062
* CVL STATION 100
X1  8.58      14 9973.96   10030      92      92      92
X3    10
GR1382.2    9875 1381.34 9925.30  1380.0 9935.97  1380.0 9950.56 1378.72 9963.92
GR1378.9 9973.96  1378.0 9979.62 1377.29 9984.99 1375.95 9990.91  1376.4 9997.51
GR1376.410003.79  1376.710009.69  1378.010014.44 1378.96   10030
* DOWNSTREAM SIDE OF CULVERTS - CVL STATION 192
SC 3.013      .5     2.7               2       0      80     2.1  1376.5  1376.4
X1  8.60      11 9970.83   10030      80      80      80
X2                     2          1380.5
X3    10
BT     3  9973.9  1381.3           10004  1380.5           10030 1378.82
GR  1383 9924.75  1382.3 9925.90  1382.3 9970.83  1381.3  9973.9    1378 9983.49
GR1376.5 9991.93  1376.5 9997.91  1376.510001.78  1376.7   10004  1378.010013.25
GR1378.7   10030
* UPSTREAM SIDE OF CULVERTS - CVL STATION 272
X1  8.62       6 9983.94   10037     128     128     128
GR1382.5 9924.19  1382.8    9970 1378.00 9983.94 1377.11 9994.73 1377.1110004.77
GR1379.5   10037
* CVL STATION 400
X1  8.64       4    9970   10028     100     100     100
GR1382.5 9923.75  1381.7    9970 1377.62   10000 1379.87   10028
* SOUTH OF HANCE BOULIVARD - CVL STATION 500
X1  8.66       5 9931.5310029.76     100     100     100
GR1382.0 9924.19  1381.3 9931.53 1380.68    9970 1378.13   10000 1380.2310029.76
* CVL STATION 600
X1  8.68       5    9972   10031     100     100     100
GR1382.2 9927.05 1381.05    9972 1378.00 9990.92 1378.92   10000 1380.64   10031
* CVL STATION 700
X1  8.70       5  9984.5   10033     100     100     100
GR1382.2    9910 1381.35    9960 1379.59 9984.50  1379.8   10000 1381.27   10033
* CVL STATION 800
X1  8.72       4 9983.26   10030     100     100     100
GR1383.2 9925.99    1383 9983.26  1380.9   10000  1381.9   10030
* CVL STATION 900
X1  8.74       5    998210029.18     100     100     100
GR1385.3 9927.33    1385 9957.83    1385    9982    1382   10000 1382.5510029.18
* CVL STATION 1000
X1  8.77       6    9989   10017     200     200     200
GR1385.6 9936.14  1385.4    9989  1383.6    9995  1383.6   10005  1384.4   10017
GR1384.4   10040
* CVL STATION 1200
NH     1    .016   10048
X1  8.79       3   10011   10048      81      81      81
GR1385.3    9963 1385.99   10011 1385.31   10048
* SOUTH OF PARKSIDE LANE - TETRA TECH STATION MATCH - CVL STATION 1281
NH     1    .016   10052
X1  8.80       3   10015   10052      49      49      49
GR1385.1    9966 1385.79   10015 1385.75   10052
* CVL STATION 1330
NH     1    .01610100.74
X1  8.81      15    998010100.74      20     105      29
GR  1388    9725    1388 9758.88    1388 9773.41    1388 9847.74    1388 9873.96
GR  1388 9898.54    1388 9920.62    1388 9949.55    1388 9959.31    1388    9980
GR1384.710003.87 1385.0010035.11 1385.0010042.29 1385.0010069.88    138610100.74
* CVL STATION 1359
NH     1     .0310079.07
X1  8.86      23 9874.5910079.07     266     266     266
X3                         9700 1386.67
GR1387.5    9386    1387    9433    1386    9471    1385    9491    1385    9548
GR  1386    9574 1386.32 9597.38 1386.63 9626.66 1386.67 9713.22  1386.5 9774.68
GR1386.3 9822.26    1386 9874.59 1385.69 9893.32 1385.53 9914.97 1385.01 9952.81
GR1383.8 9969.32    1383 9981.35    1382 9992.12    138210009.37    138310023.87
GR  138410039.45 1384.7310053.84    138610079.07
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* CVL STATION 1625
NH     1     .0310065.05
X1  8.89      23 9942.5210065.05     175     175     175
X3                          9601    1388
GR1390.3 9289.97 1390.00 9326.96 1390.00 9340.05 1389.00 9373.44 1388.00 9413.37
GR1387.0 9482.88 1386.31 9501.52 1386.29 9513.91 1386.48 9523.04 1387.00 9535.79
GR1387.9 9585.07 1387.99 9601.04 1387.63 9687.08 1387.38 9757.74 1387.00 9820.33
GR1386.0 9942.52 1385.00 9958.61 1384.00 9970.67 1382.00 9991.61 1382.0010009.81
GR1383.410022.67 1385.0110041.63 1386.0010065.05
* CVL STATION 1800
NH     2     .0310044.82    .01610046.99
X1  8.93      38 9968.5210044.82     217     217     217
GR1397.0 9120.13 1397.00 9134.51 1396.00 9153.49 1395.00 9155.41 1395.00 9162.29
GR1394.6 9192.51 1394.00 9229.41 1393.57 9241.75 1393.00 9275.34 1393.00 9277.60
GR1392.0 9287.63 1391.00 9310.35 1391.00 9342.55 1390.40 9360.99 1389.80 9371.35
GR1389.0 9379.50 1388.95 9385.38 1388.00 9472.01 1388.00 9480.92 1387.36 9496.67
GR1387.1 9525.25 1387.24 9574.28 1387.23 9658.54 1386.96 9737.74 1386.48 9823.34
GR1386.0 9894.09 1386.00 9923.16 1387.00 9954.39 1387.00 9968.52 1385.00 9988.91
GR1384.9 9993.20 1385.0010003.66 1384.6710006.10 1385.0010012.74 1385.0010019.94
GR1386.010038.35 1387.0010044.82 1386.9210046.99
* CVL STATION 2017
NH     2     .0310035.65    .016   10040
X1  9.00      28 9968.2210035.65     370     370     370
X3    10
GR1394.9 9185.54 1394.37 9231.03 1394.00 9248.91 1393.20 9263.39 1392.67 9275.80
GR1392.7 9294.12 1392.01 9300.06 1391.95 9320.94 1391.32 9344.61 1391.00 9357.15
GR1391.0 9370.24 1390.51 9444.59 1390.00 9553.58 1389.69 9607.41 1389.37 9693.57
GR1389.0 9791.14 1388.57 9847.63 1388.45 9912.41 1388.51 9946.72 1388.54 9968.22
GR1388.0 9979.69 1385.93 9988.45 1385.00 9993.90 1385.0310004.08 1386.0510009.74
GR1389.010021.77 1390.0010035.65    1390   10040
* CVL STATION 2387
SC 2.013      .5     2.7               3       0      75     2.1 1386.02    1385
NH     2     .0310037.29    .016   10040
X1  9.01      33 9947.3510037.29      76      76      76
X2                     2         1389.89
X3    10
BT     4  9896.9 1389.37         9930.05 1389.98        10006.96 1390.27
BT10037. 1389.89
GR1397.8 9185.54 1397.00 9201.36 1397.00 9206.41 1396.00 9206.73 1396.00 9219.83
GR1395.4 9242.50 1395.00 9252.28 1393.89 9317.37 1393.16 9347.04 1392.00 9381.56
GR1391.4 9405.92 1391.00 9432.55 1391.00 9465.97 1390.72 9533.86 1390.59 9603.95
GR1390.2 9682.01 1389.87 9740.25 1389.67 9804.11 1389.45 9885.39 1389.39 9896.69
GR1390.0 9930.05 1390.05 9936.10 1391.00 9938.65 1391.00 9944.23 1391.22 9947.35
GR1390.8 9956.07 1390.00 9963.63 1389.00 9982.55 1386.02 9994.89 1386.0210006.96
GR1389.010018.85 1390.0010037.29    1390   10040
* CVL STATION 2463
NH     2     .0310034.44    .016   10040
X1  9.04      18 9965.8910034.44     137     137     137
GR1397.5 9317.90 1397.49 9325.05 1397.00 9353.18 1397.00 9377.94 1394.00 9387.32
GR1393.0 9393.21 1392.95 9424.18 1392.00 9629.08 1391.36 9785.41 1391.35 9851.75
GR1391.0 9883.49 1391.00 9965.89 1390.52 9972.28 1387.00 9989.15 1387.0010011.45
GR1389.210022.01    139010034.44    1390   10040
* CVL STATION 2600
NH     2     .0310029.03    .016   10040
X1  9.08      15  9968.510033.71     200     200     200
GR1396.0 9300.07 1396.00 9353.28 1395.36 9370.91 1395.00 9379.29 1394.00 9385.46
GR1394.0 9451.69 1393.41 9534.65 1393.00 9710.81 1392.01 9961.65 1392.00 9968.50
GR1388.0 9989.48 1388.0010009.46 1391.0010029.03 1391.0010033.71    1391   10040
* CVL STATION 2800
NH     1     .03 10025.6
X1  9.10      25 9963.69 10025.6     137     137     137
GR1397.0 9327.52 1397.00 9330.04 1397.84 9337.46 1396.00 9358.21 1395.00 9368.07
GR1394.6 9376.12 1394.44 9384.36 1394.44 9395.42 1394.29 9408.30 1394.27 9432.12
GR1394.0 9443.12 1394.00 9709.01 1393.96 9714.46 1393.81 9772.64 1393.00 9863.05
GR1393.0 9963.69 1392.00 9969.68 1390.74 9979.26 1388.78 9989.57 1388.03 9998.62
GR1388.610006.61 1389.0010009.41 1391.0010015.48 1391.0010020.98 1392.0010025.60
* END OF CVL CROSS-SECTIONS - CVL STATION 2937
NC 0.016   0.016   0.016     0.1     0.3
ET           5.1                 4118.87 5417.09
X1  9.13      14    4918 5058.33      98      98      98
GR  1398 3791.43    1396 3900.27    1394 4218.11    1394 4768.19  1393.5    4918
GR1393.2    5000    1393 5058.33  1392.7    5085    1392 5150.02    1392 5159.91
GR  1392 5184.70    1391    5264    1392 5371.23    1392 5418.98
* CENTERLINE OF PINNACLE PEAK ROAD - BEGIN TETRA TECH'S EAST SPLIT X-SECTIONS
ET           5.1                 4133.61 5424.01
X1  9.14      14 4904.57 5104.30      33      33      33
GR  1398 3778.24    1396 3970.46    1394 4372.20    1394 4430.01  1394.4 4623.96
GR  1394 4904.57  1393.6    5000  1393.6 5007.96    1393 5104.30    1392 5183.96
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GR1391.5 5279.96    1392 5352.33  1392.8 5407.96  1392.8 5429.75
* UPSTREAM SIDE OF PINNACLE PEAK ROAD
NC 0.040   0.040   0.040
ET           5.1                 4161.93 5443.67
X1  9.15      11 4994.21 5082.19      43      43      43
GR  1398 3719.90    1396 3900.98    1394 4069.81    1393 4325.58    1393    4814
GR  1393 4994.21    1393    5000    1393 5082.19    1392 5210.16    1392 5403.10
GR  1392 5443.67
* RIGHT BANK ENCROACHMENT SET AT FLOW SPLIT BOUNDARY FOR BREAKOUT WSEL MATCHING
ET           5.1                     3023 4572.95
X1  9.25      45    4825 5285.60     155      82     141
GR  1400    3023  1399.1    3123  1397.6    3223  1395.8    3323  1392.7    3423
GR  1392    3523    1393    3623  1393.6    3723  1393.5    3762    1394    3874
GR  1394    3898    1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25    1395 4365.84    1395  4385.4  1395.7 4563.07    1396 4565.34
GR  1397 4570.45 1397.57 4572.95 1397.46 4582.97    1397 4585.82    1396 4590.84
GR  1395 4598.19    1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32    1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38    1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
EJ
ER
```

<u>0.2% Annual Chance Flood</u>

Breakout Channel

Output File: bkt500.out

```
1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.2;  May 1991            *
 *                                        *
 *  RUN DATE    15SEP04    TIME   15:15:51 *
 *****************************************
```

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*****************************************
*  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
```

1

15SEP04 15:15:51

THIS RUN EXECUTED 15SEP04 15:15:51

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*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

Combined Split Flow Model
WEIR IS SET ALONG HIGH GROUND RIDGE WEST OF 35TH AVENUE AND
SOUTH OF PINNACLE PEAK ROAD

SPLIT FLOW BEING PERFORMED

SF

```
JC     SPLIT FLOW ANALYSIS DUE TO WEIR ACTION
JP     0     0.5     100       1       0

TW      RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57
WS     2    8.55    8.57      -1    2.65
WC        1381.9      97 1380.27

TW      RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58
WS     2    8.57    8.58      -1    2.65
WC       1380.27      92 1378.96
```

```
TW      RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60
WS     2    8.58    8.60      -1    2.65
WC       1378.96      80 1378.76

TW      RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62
WS     2    8.60    8.62      -1    2.65
WC       1378.76     128  1379.5

TW      RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64
WS     2    8.62    8.64      -1    2.65
WC        1379.5     100 1379.87

TW      RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66
WS     2    8.64    8.66      -1    2.65
WC       1379.87     100 1380.23

TW      RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68
WS     2    8.66    8.68      -1    2.65
WC       1380.23     100 1380.64

TW      RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70
WS     2    8.68    8.70      -1    2.65
WC       1380.64     100 1381.27
1
   15SEP04      15:15:51
```



```
TW      RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72
WS     2    8.70    8.72      -1    2.65
WC       1381.27     100  1381.9

TW      RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74
WS     2    8.72    8.74      -1    2.65
WC        1381.9     100 1382.55

TW      RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77
WS     2    8.74    8.77      -1    2.65
WC       1382.55     200 1384.48

TW      RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79
WS     2    8.77    8.79      -1    2.65
WC       1384.48      81 1385.31

TW      RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80
WS     2    8.79    8.80      -1    2.65
WC       1385.31      49 1385.75

TW      RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81
WS     2    8.80    8.81      -1    2.65
WC       1385.75     105    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86
WS     2    8.81    8.86      -1    2.65
WC          1386     266    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89
```

```
WS      2    8.86    8.89      -1    2.65
WC           1386     175    1386

TW      RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93
WS      2    8.89    8.93      -1    2.65
WC           1386     217    1387

TW      RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00
WS      2    8.93    9.00      -1    2.65
WC           1387     370    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01
WS      2    9.00    9.01      -1    2.65
WC           1390      76    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04
WS      2    9.01    9.04      -1    2.65
WC           1390     137    1390

TW      RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08
WS      2    9.04    9.08      -1    2.65
WC           1390     200    1391
1
   15SEP04      15:15:51                                                    PAGE    3


TW      RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10
WS      2    9.08    9.10      -1    2.65
WC           1391     137  1392.0
1
   15SEP04      15:15:51                                                    PAGE    4


T1      COMBINED CVL (North and South) AND TETRA TECH'S EAST SPLIT FLOW MODEL
T2      INPUT FILE: bkt500.dat
T3      EMCON 8/4/04 by: GRB
T4      CVL'S X-SECTIONS (8.55 - 9.15) HAVE BEEN RE-NAMED TO MATCH
T5      TETRA TECH'S RIVER MILE NOMENCLATURE
T6      BOUNDARY CONDITIONS WERE TAKEN FROM TETRA TECH'S EAST SPLIT FLOW MODEL
T7      FLOWRATE WAS DETERMINED BY MATCHING WSEL AT RIVER MILE 9.25 IN THE
T8      MAIN500.DAT MODEL.

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0        2                          0.007                   0         0

QT        1     27625
NC    0.040     0.040     0.040       0.1       0.3
X1     8.55        10      9965     10072         0         0         0
GR   1381.7      9915    1380.9      9965   1378.36   9979.42   1377.36   9985.03      1374   9999.67
GR   1375.0  10003.77    1376.0  10012.77      1378  10046.83    1380.0  10052.41    1381.9     10072
  CVL STATION 3

X1     8.57         9      9975     10062        97        97        97
GR   1382.2      9905    1381.0   9957.55      1381      9968    1380.0      9975   1374.69   9995.58
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                                                                BKT500
GR      1376    9998.47       1376   10001.60      1378.0    10022.35     1380.27       10062
  CVL STATION 100

X1      8.58         14    9973.96      10030          92          92          92
X3        10
GR    1382.2       9875    1381.34    9925.30      1380.0     9935.97      1380.0     9950.56     1378.72     9963.92
GR    1378.9    9973.96     1378.0    9979.62     1377.29     9984.99     1375.95     9990.91      1376.4     9997.51
GR    1376.4   10003.79     1376.7   10009.69      1378.0    10014.44     1378.96       10030
  DOWNSTREAM SIDE OF CULVERTS - CVL STATION 192

SC     3.013         .5        2.7                     2           0          80         2.1      1376.5      1376.4
X1      8.60         11    9970.83      10030          80          80          80
X2                              2                 1380.5
X3        10
BT         3     9973.9     1381.3                10004      1380.5                    10030     1378.82
GR      1383    9924.75     1382.3    9925.90     1382.3     9970.83     1381.3      9973.9        1378     9983.49
GR    1376.5    9991.93     1376.5    9997.91     1376.5    10001.78     1376.7       10004      1378.0    10013.25
GR    1378.7      10030
  UPSTREAM SIDE OF CULVERTS - CVL STATION 272

X1      8.62          6    9983.94      10037        128         128         128
GR    1382.5    9924.19     1382.8       9970    1378.00     9983.94     1377.11     9994.73     1377.11    10004.77
GR    1379.5      10037
  CVL STATION 400

X1      8.64          4       9970      10028        100         100         100
GR    1382.5    9923.75     1381.7       9970    1377.62       10000     1379.87       10028
  SOUTH OF HANCE BOULIVARD - CVL STATION 500
1
   15SEP04      15:15:51                                                                                    PAGE     5


X1      8.66          5    9931.53   10029.76        100         100         100
GR    1382.0    9924.19     1381.3    9931.53    1380.68        9970     1378.13       10000     1380.23    10029.76
  CVL STATION 600

X1      8.68          5       9972      10031        100         100         100
GR    1382.2    9927.05    1381.05       9972    1378.00     9990.92     1378.92       10000     1380.64       10031
  CVL STATION 700

X1      8.70          5      9984.5      10033        100         100         100
GR    1382.2      9910    1381.35       9960    1379.59     9984.50      1379.8       10000     1381.27       10033
  CVL STATION 800

X1      8.72          4    9983.26      10030        100         100         100
GR    1383.2    9925.99       1383    9983.26     1380.9       10000     1381.9       10030
  CVL STATION 900

X1      8.74          5       9982   10029.18        100         100         100
GR    1385.3    9927.33       1385    9957.83       1385        9982        1382       10000     1382.55    10029.18
  CVL STATION 1000

X1      8.77          6       9989      10017        200         200         200
GR    1385.6    9936.14     1385.4       9989    1383.6        9995     1383.6       10005      1384.4       10017
GR    1384.4      10040
  CVL STATION 1200
```

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NH        1       .016      10048
X1     8.79          3      10011      10048         81         81         81
GR   1385.3       9963    1385.99      10011    1385.31      10048
  SOUTH OF PARKSIDE LANE - TETRA TECH STATION MATCH - CVL STATION 1281

NH        1       .016      10052
X1     8.80          3      10015      10052         49         49         49
GR   1385.1       9966    1385.79      10015    1385.75      10052
  CVL STATION 1330

NH        1       .016   10100.74
X1     8.81         15       9980   10100.74         20        105         29
GR     1388       9725       1388    9758.88       1388    9773.41       1388    9847.74       1388    9873.96
GR     1388    9898.54       1388    9920.62       1388    9949.55       1388    9959.31       1388       9980
GR   1384.7   10003.87    1385.00   10035.11    1385.00   10042.29    1385.00   10069.88       1386   10100.74
  CVL STATION 1359

NH        1        .03   10079.07
X1     8.86         23    9874.59   10079.07        266        266        266
X3                                      9700    1386.67
GR   1387.5       9386       1387       9433       1386       9471       1385       9491       1385       9548
GR     1386       9574    1386.32    9597.38    1386.63    9626.66    1386.67    9713.22     1386.5    9774.68
GR   1386.3    9822.26       1386    9874.59    1385.69    9893.32    1385.53    9914.97    1385.01    9952.81
GR   1383.8    9969.32       1383    9981.35       1382    9992.12       1382   10009.37       1383   10023.87
GR     1384   10039.45    1384.73   10053.84       1386   10079.07
  CVL STATION 1625
1
   15SEP04      15:15:51                                                                                PAGE     6

NH        1        .03   10065.05
X1     8.89         23    9942.52   10065.05        175        175        175
X3                                      9601       1388
GR   1390.3    9289.97    1390.00    9326.96    1390.00    9340.05    1389.00    9373.44    1388.00    9413.37
GR   1387.0    9482.88    1386.31    9501.52    1386.29    9513.91    1386.48    9523.04    1387.00    9535.79
GR   1387.9    9585.07    1387.99    9601.04    1387.63    9687.08    1387.38    9757.74    1387.00    9820.33
GR   1386.0    9942.52    1385.00    9958.61    1384.00    9970.67    1382.00    9991.61    1382.00   10009.81
GR   1383.4   10022.67    1385.01   10041.63    1386.00   10065.05
  CVL STATION 1800

NH        2        .03   10044.82       .016   10046.99
X1     8.93         38    9968.52   10044.82        217        217        217
GR   1397.0    9120.13    1397.00    9134.51    1396.00    9153.49    1395.00    9155.41    1395.00    9162.29
GR   1394.6    9192.51    1394.00    9229.41    1393.57    9241.75    1393.00    9275.34    1393.00    9277.60
GR   1392.0    9287.63    1391.00    9310.35    1391.00    9342.55    1390.40    9360.99    1389.80    9371.35
GR   1389.0    9379.50    1388.95    9385.38    1388.00    9472.01    1388.00    9480.92    1387.36    9496.67
GR   1387.1    9525.25    1387.24    9574.28    1387.23    9658.54    1386.96    9737.74    1386.48    9823.34
GR   1386.0    9894.09    1386.00    9923.16    1387.00    9954.39    1387.00    9968.52    1385.00    9988.91
GR   1384.9    9993.20    1385.00   10003.66    1384.67   10006.10    1385.00   10012.74    1385.00   10019.94
GR   1386.0   10038.35    1387.00   10044.82    1386.92   10046.99
  CVL STATION 2017

NH        2        .03   10035.65       .016       10040
X1     9.00         28    9968.22   10035.65         370        370        370
X3       10
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GR   1394.9    9185.54    1394.37    9231.03    1394.00    9248.91    1393.20    9263.39    1392.67    9275.80
GR   1392.7    9294.12    1392.01    9300.06    1391.95    9320.94    1391.32    9344.61    1391.00    9357.15
GR   1391.0    9370.24    1390.51    9444.59    1390.00    9553.58    1389.69    9607.41    1389.37    9693.57
GR   1389.0    9791.14    1388.57    9847.63    1388.45    9912.41    1388.51    9946.72    1388.54    9968.22
GR   1388.0    9979.69    1385.93    9988.45    1385.00    9993.90    1385.03   10004.08    1386.05   10009.74
GR   1389.0   10021.77    1390.00   10035.65       1390      10040
  CVL STATION 2387

SC    2.013         .5       2.7                      3          0         75        2.1    1386.02       1385
NH        2        .03  10037.29       .016      10040
X1     9.01         33   9947.35   10037.29         76         76         76
X2                             2                 1389.89
X3       10
BT        4     9896.9    1389.37                9930.05    1389.98                  10006.96    1390.27
BT   10037.    1389.89
GR   1397.8    9185.54    1397.00    9201.36    1397.00    9206.41    1396.00    9206.73    1396.00    9219.83
GR   1395.4    9242.50    1395.00    9252.28    1393.89    9317.37    1393.16    9347.04    1392.00    9381.56
GR   1391.4    9405.92    1391.00    9432.55    1391.00    9465.97    1390.72    9533.86    1390.59    9603.95
GR   1390.2    9682.01    1389.87    9740.25    1389.67    9804.11    1389.45    9885.39    1389.39    9896.69
GR   1390.0    9930.05    1390.05    9936.10    1391.00    9938.65    1391.00    9944.23    1391.22    9947.35
GR   1390.8    9956.07    1390.00    9963.63    1389.00    9982.55    1386.02    9994.89    1386.02   10006.96
GR   1389.0   10018.85    1390.00   10037.29       1390      10040
  CVL STATION 2463
1
   15SEP04      15:15:51                                                                                  PAGE    7

NH        2        .03  10034.44       .016      10040
X1     9.04         18   9965.89   10034.44        137        137        137
GR   1397.5    9317.90    1397.49    9325.05    1397.00    9353.18    1397.00    9377.94    1394.00    9387.32
GR   1393.0    9393.21    1392.95    9424.18    1392.00    9629.08    1391.36    9785.41    1391.35    9851.75
GR   1391.0    9883.49    1391.00    9965.89    1390.52    9972.28    1387.00    9989.15    1387.00   10011.45
GR   1389.2   10022.01       1390   10034.44       1390      10040
  CVL STATION 2600

NH        2        .03  10029.03       .016      10040
X1     9.08         15     9968.5   10033.71        200        200        200
GR   1396.0    9300.07    1396.00    9353.28    1395.36    9370.91    1395.00    9379.29    1394.00    9385.46
GR   1394.0    9451.69    1393.41    9534.65    1393.00    9710.81    1392.01    9961.65    1392.00    9968.50
GR   1388.0    9989.48    1388.00   10009.46    1391.00   10029.03    1391.00   10033.71       1391      10040
  CVL STATION 2800

NH        1        .03   10025.6
X1     9.10         25   9963.69    10025.6        137        137        137
GR   1397.0    9327.52    1397.00    9330.04    1397.84    9337.46    1396.00    9358.21    1395.00    9368.07
GR   1394.6    9376.12    1394.44    9384.36    1394.44    9395.42    1394.29    9408.30    1394.27    9432.12
GR   1394.0    9443.12    1394.00    9709.01    1393.96    9714.46    1393.81    9772.64    1393.00    9863.05
GR   1393.0    9963.69    1392.00    9969.68    1390.74    9979.26    1388.78    9989.57    1388.03    9998.62
GR   1388.6   10006.61    1389.00   10009.41    1391.00   10015.48    1391.00   10020.98    1392.00   10025.60
  END OF CVL CROSS-SECTIONS - CVL STATION 2937

NC    0.016      0.016      0.016        0.1        0.3
ET                 5.1                           4118.87    5417.09
X1     9.13         14       4918    5058.33         98         98         98
GR     1398    3791.43       1396    3900.27       1394    4218.11       1394    4768.19     1393.5       4918
GR   1393.2       5000       1393    5058.33     1392.7       5085       1392    5150.02       1392    5159.91
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                                                                BKT500
GR     1392    5184.70       1391       5264        1392     5371.23        1392     5418.98
  CENTERLINE OF PINNACLE PEAK ROAD - BEGIN TETRA TECH'S EAST SPLIT X-SECTIONS

ET                 5.1                              4133.61     5424.01
X1     9.14         14     4904.57    5104.30          33          33          33
GR     1398    3778.24       1396    3970.46        1394     4372.20        1394     4430.01      1394.4     4623.96
GR     1394    4904.57     1393.6       5000      1393.6     5007.96        1393     5104.30        1392     5183.96
GR   1391.5    5279.96       1392    5352.33      1392.8     5407.96      1392.8     5429.75
  UPSTREAM SIDE OF PINNACLE PEAK ROAD

NC    0.040      0.040      0.040
ET                 5.1                              4161.93     5443.67
X1     9.15         11     4994.21    5082.19          43          43          43
GR     1398    3719.90       1396    3900.98        1394     4069.81        1393     4325.58        1393       4814
GR     1393    4994.21       1393       5000        1393     5082.19        1392     5210.16        1392     5403.10
GR     1392    5443.67
  RIGHT BANK ENCROACHMENT SET AT FLOW SPLIT BOUNDARY FOR BREAKOUT WSEL MATCHING

ET                 5.1                                3023     4572.95
X1     9.25         45       4825    5285.60         155          82         141
GR     1400       3023     1399.1       3123      1397.6        3223      1395.8       3323      1392.7       3423
GR     1392       3523       1393       3623      1393.6        3723      1393.5       3762        1394       3874
GR     1394       3898       1394    4003.81        1394     4062.18        1395     4283.87        1395    4298.29
GR     1395    4301.25       1395    4365.84        1395      4385.4      1395.7     4563.07        1396    4565.34
1
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GR     1397    4570.45    1397.57    4572.95     1397.46     4582.97        1397     4585.82        1396    4590.84
GR     1395    4598.19       1395    4614.18        1395     4621.31        1394     4735.08        1394    4738.18
GR     1394    4838.32       1393    4871.51        1392     4892.27        1392        5000        1392     5077.8
GR     1393    5179.38       1394    5266.49        1395     5275.95        1396     5278.52        1397    5281.09
GR     1398    5283.83    1398.64     5285.6        1399     5290.86        1400     5304.55        1399    5325.36

1
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*PROF 1

CCHV=     .100 CEHV=     .300
*SECNO 8.550
2096 WSEL NOT GIVEN, AVG OF MAX, MIN USED
     8.550      3.43   1377.43       .00       .00   1377.65       .23       .00       .00   1380.90
     276.3        .0     276.2        .0        .0      72.2        .0        .0        .0   1381.90
       .00       .00      3.83       .00      .000      .040      .000      .000   1374.00   9984.66
   .007018        0.        0.        0.         0         0         6       .00     52.39  10037.05

*SECNO 8.570
     8.570      3.45   1378.14       .00       .00   1378.45       .31       .77       .03   1380.00
```

BKT500

276.3	.0	276.2	.0	.0	61.6	.0	.1	.1	1380.27
.01	.00	4.48	.00	.000	.040	.000	.000	1374.69	9982.21
.009117	97.	97.	97.	2	0	0	.00	42.57	10024.78

*SECNO 8.580

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1378.90 ELREA= 1378.96

8.580	2.93	1378.88	.00	.00	1379.05	.17	.59	.01	1378.90
276.3	.0	276.2	.0	.0	82.5	.0	.3	.2	1378.96
.01	.00	3.35	.00	.000	.040	.000	.000	1375.95	9974.16
.004709	92.	92.	92.	2	0	0	.00	54.35	10028.51

SPECIAL CULVERT

SC	CUNO	CUNV	ENTLC	COFQ	RDLEN	RISE	SPAN	CULVLN	CHRT	SCL	ELCHU	ELCHD
	3	.013	.50	2.70	.00	2.00	.00	80.00	2	1	1376.50	1376.40

CHART 2 - CORRUGATED METAL PIPE CULVERT
SCALE 1 - HEADWALL

5130, EGIC= 1410.44..MAY BE TOO LARGE IF INLET CONTROLS.
5135, EGOC= 1412.14 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
*SECNO 8.600

SPECIAL CULVERT OUTLET CONTROL + WEIR FLOW EG = 1381.44
3280 CROSS SECTION 8.60 EXTENDED 2.71 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 4.12

1
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
1410.44	1412.14	2.39	200.	77.	1.381	9.4	1380.50	56.

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1382.30 ELREA= 1378.70

8.600	4.91	1381.41	.00	.00	1381.44	.03	2.39	.00	1382.30
276.3	.0	276.2	.0	.0	200.1	.0	.6	.3	1378.70
.03	.00	1.38	.00	.000	.040	.000	.000	1376.50	9973.55
.000277	80.	80.	80.	2	0	0	.00	56.45	10030.00

```
*SECNO 8.620
3280 CROSS SECTION      8.62 EXTENDED      1.95 FEET

     8.620      4.34   1381.45       .00       .00   1381.48       .03       .04       .00   1378.00
     276.3      14.8     261.4        .0      17.3     187.0        .0       1.2        .5   1379.50
       .06       .86      1.40       .00      .040      .040      .000      .000   1377.11   9973.92
   .000278      128.      128.      128.         2         0         0       .00     63.08  10037.00

*SECNO 8.640
3280 CROSS SECTION      8.64 EXTENDED      1.60 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50

     8.640      3.85   1381.47       .00       .00   1381.54       .07       .05       .01   1381.70
     276.3        .0     276.2        .0        .0     131.0        .0       1.5        .6   1379.87
       .07       .00      2.11       .00      .000      .040      .000      .000   1377.62   9971.67
   .001095      100.      100.      100.         2         0         0       .00     56.33  10028.00

*SECNO 8.660
3280 CROSS SECTION      8.66 EXTENDED      1.38 FEET

     8.660      3.48   1381.61       .00       .00   1381.65       .05       .11       .00   1381.30
     276.3        .2     276.1        .0        .5     162.0        .0       1.9        .8   1380.23
       .09       .35      1.70       .00      .040      .040      .000      .000   1378.13   9928.32
   .001103      100.      100.      100.         2         0         0       .00    101.44  10029.76
```



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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 8.680
3280 CROSS SECTION      8.68 EXTENDED      1.06 FEET

     8.680      3.70   1381.70       .00       .00   1381.77       .07       .11       .01   1381.05
     276.3       5.0     271.3        .0       8.4     130.3        .0       2.2       1.0   1380.64
       .10       .59      2.08       .00      .040      .040      .000      .000   1378.00   9946.42
   .001126      100.      100.      100.         2         0         0       .00     84.58  10031.00

*SECNO 8.700
3280 CROSS SECTION      8.70 EXTENDED       .57 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .66
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     8.700      2.26   1381.85       .00       .00   1381.94       .09       .16       .01   1379.59
     276.3      83.3     193.0        .0      40.9      76.5        .0       2.5       1.2   1381.27
       .11      2.04      2.52       .00      .040      .040      .000      .000   1379.59   9930.90
   .002548      100.      100.      100.         2         0         0       .00    102.10  10033.00

*SECNO 8.720
3280 CROSS SECTION      8.72 EXTENDED       .68 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.720      1.68   1382.58   1382.58       .00   1383.12       .55       .58       .14   1383.00
     276.3        .0     276.2        .0        .0      46.5        .0       2.7       1.4   1381.90
       .12       .00      5.94       .00      .000      .040      .000      .000   1380.90   9986.64
   .023909      100.      100.      100.        20        19         0       .00     43.36  10030.00

*SECNO 8.740
3280 CROSS SECTION      8.74 EXTENDED      1.54 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.81

     8.740      2.09   1384.09       .00       .00   1384.36       .27      1.21       .03   1385.00
     276.3        .0     276.2        .0        .0      66.0        .0       2.8       1.5   1382.55
       .12       .00      4.19       .00      .000      .040      .000      .000   1382.00   9987.47
   .007274      100.      100.      100.         3         0         0       .00     41.71  10029.18

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   15SEP04      15:15:51                                                                          PAGE   12

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 8.770
3280 CROSS SECTION      8.77 EXTENDED      1.15 FEET

     8.770      1.95   1385.55       .00       .00   1385.79       .24      1.43       .00   1385.40
     276.3       1.7     186.9      87.7       3.1      44.5      26.5       3.2       1.8   1384.40
       .14       .56      4.20      3.31      .040      .040      .040      .000   1383.60   9948.69
   .007000      200.      200.      200.         2         0         0       .00     91.31  10040.00

1490 NH CARD USED
*SECNO 8.790
3280 CROSS SECTION      8.79 EXTENDED      1.03 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.790      1.03   1386.33   1386.33       .00   1386.68       .35       .45       .03   1385.99
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                                                                  BKT500
     276.3      157.1      119.1        .0       32.9       25.2        .0        3.3       2.0   1385.31
       .14       4.77       4.73       .00       .016       .016      .000       .000   1385.30   9963.00
   .004479        81.        81.       81.         20         11         0        .00     85.00  10048.00

1490 NH CARD USED
*SECNO 8.800
3280 CROSS SECTION      8.80 EXTENDED      1.40 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     8.800       1.40   1386.50   1386.50        .00   1386.94       .44       .19       .03   1385.79
     413.5      293.1      120.4        .0       51.6       27.0        .0       3.4       2.1   1385.75
       .14       5.68       4.46       .00       .016       .016      .000       .000   1385.10   9966.00
   .003618        49.        49.       49.          2         11         0        .00     86.00  10052.00

1490 NH CARD USED
*SECNO 8.810
3280 CROSS SECTION      8.81 EXTENDED       .71 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.00

     8.810       2.01   1386.71        .00        .00   1387.00       .29       .04       .02   1388.00
     734.1         .0      734.1         .0         .0     169.1        .0       3.4       2.1   1386.00
       .14        .00       4.34       .00       .000       .016      .000       .000   1384.70   9989.36
   .001264        20.        29.      105.          4          0         0        .00    111.38  10100.74
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

1490 NH CARD USED
*SECNO 8.860
3280 CROSS SECTION      8.86 EXTENDED      1.15 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  3.11

3470 ENCROACHMENT STATIONS=     9700.0   10079.1  TYPE=      1  TARGET=    -9700.000
 ELENCL=   1386.67  ELENCR= 100000.00
     8.860       5.14   1387.14   1385.32        .00   1387.22       .08       .20       .02   1386.00
    1561.7      217.9    1343.8        .0      250.3      566.9        .0       6.4       4.5 100000.00
       .18        .87       2.37       .00       .030       .030      .000       .000   1382.00   9419.26
   .000593       266.       266.      266.         10         14         0        .00    659.80  10079.07

1490 NH CARD USED
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*SECNO 8.890
3280 CROSS SECTION      8.89 EXTENDED      1.09 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .67

3470 ENCROACHMENT STATIONS=     9601.0   10065.0  TYPE=      1  TARGET=    -9601.000
 ELENCL=   1388.00  ELENCR= 100000.00
     8.890      5.09   1387.09       .00       .00   1387.57       .48       .23       .12   1386.00
    2328.2     137.8    2190.4        .0      73.2     383.8        .0       9.0       6.3 100000.00
       .19      1.88      5.71       .00      .030      .030      .000      .000   1382.00   9804.95
   .002942      175.      175.      175.         2         0         0       .00    260.10  10065.05

1490 NH CARD USED
*SECNO 8.930
3280 CROSS SECTION      8.93 EXTENDED      1.11 FEET

     8.930      3.36   1388.03       .00       .00   1388.37       .34       .78       .01   1387.00
    3353.5    2185.4    1157.1      11.1     571.1     194.0       2.3      12.1       8.4   1387.00
       .20      3.83      5.96      4.77      .030      .030      .016      .000   1384.67   9469.44
   .004196      217.      217.      217.         3         0         0       .00    577.55  10046.99

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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

1490 NH CARD USED
*SECNO 9.000
3280 CROSS SECTION      9.00 EXTENDED       .40 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.000      5.40   1390.40   1390.40       .00   1391.10       .70      2.03       .11   1388.54
    4697.6    2867.9    1823.1       6.7     558.6     210.6       1.7      18.6      13.3   1390.00
       .22      5.13      8.66      3.90      .030      .030      .016      .000   1385.00   9468.85
   .006799      370.      370.      370.        10        11         0       .00    571.15  10040.00

SPECIAL CULVERT

SC  CUNO      CUNV      ENTLC     COFQ      RDLEN     RISE      SPAN      CULVLN    CHRT      SCL       ELCHU     ELCHD
     2          .013       .50      2.70       .00      3.00       .00     75.00      2         1       1386.02   1385.00

CHART  2 - CORRUGATED METAL PIPE CULVERT
SCALE  1 - HEADWALL

5130, EGIC= 5572.87..MAY BE TOO LARGE IF INLET CONTROLS.
```

5135, EGOC= 4892.32 ..MAY BE TOO LARGE IF OUTLET CONTROLS.
1490 NH CARD USED
*SECNO 9.010

SPECIAL CULVERT INLET CONTROL + WEIR FLOW, EG = 1396.30
3280 CROSS SECTION 9.01 EXTENDED 6.27 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = 12.51

SPECIAL CULVERT

EGIC	EGOC	H4	QWEIR	QCULV	VCH	ACULV	ELTRD	WEIRLN
5572.87	4892.32	5.20	5971.	208.	1.654	14.1	1389.89	140.

9.010	10.25	1396.27	.00	.00	1396.30	.03	5.20	.00	1391.22
6220.9	5076.6	1123.2	21.1	3713.6	679.0	17.0	23.1	14.5	1390.00
.23	1.37	1.65	1.24	.030	.030	.016	.000	1386.02	9206.64
.000076	76.	76.	76.	2	0	0	.00	833.36	10040.00

1490 NH CARD USED
*SECNO 9.040
1
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3280 CROSS SECTION 9.04 EXTENDED 6.14 FEET

3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .61

9.040	9.14	1396.14	.00	.00	1396.41	.27	.03	.07	1391.00
12033.9	9022.9	2830.8	180.2	2466.7	528.8	34.1	34.8	16.9	1390.00
.24	3.66	5.35	5.28	.030	.030	.016	.000	1387.00	9380.63
.000776	137.	137.	137.	3	0	0	.00	659.37	10040.00

1490 NH CARD USED
*SECNO 9.080
3280 CROSS SECTION 9.08 EXTENDED 5.31 FEET

3301 HV CHANGED MORE THAN HVINS

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY

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3720 CRITICAL DEPTH ASSUMED
     9.080       8.31   1396.31   1396.31       .00   1397.70      1.39       .40       .34   1392.00
   20925.3    14598.2    5895.4     431.7    1947.3     456.4      33.4      47.4      20.1   1391.00
       .25       7.50     12.92     12.93      .030      .029      .016      .000   1388.00   9300.07
   .004732       200.      200.      200.        20        10         0       .00    739.93  10040.00

1490 NH CARD USED
*SECNO 9.100

3265 DIVIDED FLOW

3280 CROSS SECTION      9.10 EXTENDED      5.39 FEET

3685 20 TRIALS ATTEMPTED WSEL,CWSEL
3693 PROBABLE MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED
     9.100       9.36   1397.39   1397.39       .00   1399.26      1.87       .79       .14   1393.00
   27625.0    21116.7    6508.4        .0    2186.0     451.0        .0      55.3      22.3   1392.00
       .25       9.66     14.43       .00      .030      .030      .000      .000   1388.03   9327.52
   .006832       137.      137.      137.        20        11         0       .00    689.12  10025.60
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15SEP04 15:15:51


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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

CCHV=     .100 CEHV=     .300
*SECNO 9.130
3280 CROSS SECTION      9.13 EXTENDED      7.27 FEET

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  7.10

3470 ENCROACHMENT STATIONS=     4118.9    5417.1  TYPE=      1  TARGET=     1298.220
     9.130       8.27   1399.27       .00   1399.27   1399.47       .21       .04       .17   1393.50
   27625.0    13792.1    3027.2   10805.7    4220.0     845.7    2657.0      67.0      24.6   1393.00
       .26       3.27      3.58      4.07      .016      .016      .016      .000   1391.00   4118.87
   .000135        98.       98.       98.         2         0         0       .00   1298.22   5417.09

*SECNO 9.140
3280 CROSS SECTION      9.14 EXTENDED      6.45 FEET

3470 ENCROACHMENT STATIONS=     4133.6    5424.0  TYPE=      1  TARGET=     1290.400
     9.140       7.75   1399.25       .00   1399.25   1399.49       .23       .00       .01   1394.00
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                                                                  BKT500
   27625.0   13202.4    4346.0   10076.6    3809.2    1137.9    2284.4      72.7      25.5   1393.00
      .26      3.47      3.82      4.41      .016      .016      .016      .000   1391.50   4133.61
  .000166       33.       33.       33.         2         0         0       .00   1290.40   5424.01

*SECNO 9.150
3280 CROSS SECTION      9.15 EXTENDED      7.34 FEET

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .50

3470 ENCROACHMENT STATIONS=     4161.9    5443.7  TYPE=      1  TARGET=     1281.740
     9.150      7.33   1399.33       .00   1399.33   1399.50       .17       .01       .01   1393.00
   27625.0   16793.3    1812.1    9019.6    5220.5     557.4    2587.6      80.3      26.8   1393.00
      .26      3.22      3.25      3.49      .040      .040      .040      .000   1392.00   4161.93
  .000653       43.       43.       43.         2         0         0       .00   1281.74   5443.67

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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.250
3280 CROSS SECTION      9.25 EXTENDED      .41 FEET

3470 ENCROACHMENT STATIONS=     3023.0    4573.0  TYPE=      1  TARGET=     1549.950
     9.250      7.41   1399.41       .00   1399.41   1399.65       .24       .12       .02 100000.00
   27625.0   27625.0        .0        .0    7074.4        .0        .0     105.6      31.4 100000.00
      .27      3.90       .00       .00      .040      .000      .000      .000   1392.00   3088.43
  .001200       155.      141.       82.         2         0         0       .00   1484.52   4572.95

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 TW      RIGHT BANK WEIR BETWEEN SECTION 8.55 AND 8.57

    ASQ       QCOMP      ERRAC      TASQ       TCQ       TABER      NITER      DSWS       USWS      DSSNO      USSNO
     .00        .00        .00       .00       .00        .00         27  1377.653   1378.451      8.550      8.570

 TW      RIGHT BANK WEIR BETWEEN SECTION 8.57 AND 8.58

    ASQ       QCOMP      ERRAC      TASQ       TCQ       TABER      NITER      DSWS       USWS      DSSNO      USSNO
     .13        .13        .17       .13       .13        .17         27  1378.451   1379.052      8.570      8.580
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TW RIGHT BANK WEIR BETWEEN SECTION 8.58 AND 8.60

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
385.92	385.92	.00	386.05	386.05	.00	27	1379.052	1381.444	8.580	8.600

TW RIGHT BANK WEIR BETWEEN SECTION 8.60 AND 8.62

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1211.00	1210.99	.00	1597.05	1597.05	.00	27	1381.444	1381.479	8.600	8.620

TW RIGHT BANK WEIR BETWEEN SECTION 8.62 AND 8.64

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
653.80	653.80	.00	2250.85	2250.85	.00	27	1381.479	1381.540	8.620	8.640

TW RIGHT BANK WEIR BETWEEN SECTION 8.64 AND 8.66

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
510.03	510.03	.00	2760.88	2760.88	.00	27	1381.540	1381.653	8.640	8.660

TW RIGHT BANK WEIR BETWEEN SECTION 8.66 AND 8.68

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
382.81	382.81	.00	3143.70	3143.69	.00	27	1381.653	1381.770	8.660	8.680

TW RIGHT BANK WEIR BETWEEN SECTION 8.68 AND 8.70

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
228.11	228.11	.00	3371.80	3371.80	.00	27	1381.770	1381.940	8.680	8.700

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TW RIGHT BANK WEIR BETWEEN SECTION 8.70 AND 8.72

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
246.88	246.88	.00	3618.68	3618.67	.00	27	1381.940	1383.125	8.700	8.720

TW RIGHT BANK WEIR BETWEEN SECTION 8.72 AND 8.74

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
497.79	497.79	.00	4116.47	4116.46	.00	27	1383.125	1384.361	8.720	8.740

TW RIGHT BANK WEIR BETWEEN SECTION 8.74 AND 8.77

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1036.95	1036.95	.00	5153.42	5153.42	.00	27	1384.361	1385.791	8.740	8.770

TW RIGHT BANK WEIR BETWEEN SECTION 8.77 AND 8.79

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
333.51	333.51	.00	5486.94	5486.93	.00	27	1385.791	1386.682	8.770	8.790

TW RIGHT BANK WEIR BETWEEN SECTION 8.79 AND 8.80

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
188.72	188.74	.01	5675.66	5675.67	.00	27	1386.682	1386.944	8.790	8.800

TW RIGHT BANK WEIR BETWEEN SECTION 8.80 AND 8.81

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
320.63	320.72	.03	5996.29	5996.39	.00	27	1386.944	1387.004	8.800	8.810

TW RIGHT BANK WEIR BETWEEN SECTION 8.81 AND 8.86

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
827.55	827.63	.01	6823.83	6824.02	.00	27	1387.004	1387.220	8.810	8.860

TW RIGHT BANK WEIR BETWEEN SECTION 8.86 AND 8.89

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
766.55	766.73	.02	7590.39	7590.75	.00	27	1387.220	1387.572	8.860	8.890

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TW RIGHT BANK WEIR BETWEEN SECTION 8.89 AND 8.93

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1025.31	1025.30	.00	8615.70	8616.05	.00	27	1387.572	1388.367	8.890	8.930

TW RIGHT BANK WEIR BETWEEN SECTION 8.93 AND 9.00

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1344.09	1344.18	.01	9959.79	9960.23	.00	27	1388.367	1391.098	8.930	9.000

TW RIGHT BANK WEIR BETWEEN SECTION 9.00 AND 9.01

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
1523.22	1523.28	.00	11483.01	11483.50	.00	27	1391.098	1396.300	9.000	9.010

TW RIGHT BANK WEIR BETWEEN SECTION 9.01 AND 9.04

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
5813.05	5813.05	.00	17296.06	17296.55	.00	27	1396.300	1396.405	9.010	9.040

TW RIGHT BANK WEIR BETWEEN SECTION 9.04 AND 9.08

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
8891.34	8891.35	.00	26187.40	26187.90	.00	27	1396.405	1397.701	9.040	9.080

TW RIGHT BANK WEIR BETWEEN SECTION 9.08 AND 9.10

ASQ	QCOMP	ERRAC	TASQ	TCQ	TABER	NITER	DSWS	USWS	DSSNO	USSNO
6699.74	6699.74	.00	32887.15	32887.64	.00	27	1397.701	1399.264	9.080	9.100

1
PROFILE FOR STREAM EMCON 8/4/04 by: GRB

PLOTTED POINTS (BY PRIORITY) E-ENERGY,W-WATER SURFACE,I-INVERT,C-CRITICAL W.S.,L-LEFT BANK,R-RIGHT BANK,M-LOWER END STA

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ELEVATION  1374.     1379.     1384.     1389.     1394.     1399.     1404.     1409.     1414.     1419.
    SECNO   CUMDIS

     8.55     0.  I      E  .   LMR   .         .         .         .         .         .         .         .
             20.  I      WE .  L R    .         .         .         .         .         .         .         .
             40.  CI     WE .  LR     .         .         .         .         .         .         .         .
             60.  CI      E .  LR     .         .         .         .         .         .         .         .
             80.  CI      WE. LR      .         .         .         .         .         .         .         .
     8.57   100.  CI      WE. LR      .         .         .         .         .         .         .         .
            120.  C I      E. L       .         .         .         .         .         .         .         .
            140.  C I      E.L        .         .         .         .         .         .         .         .
            160.  C  I     WEL        .         .         .         .         .         .         .         .
            180.  C   I     E         .         .         .         .         .         .         .         .
     8.58   200.  C   I     E         .         .         .         .         .         .         .         .
            220.  C   I     REL       .         .         .         .         .         .         .         .
            240.  C   I     R EL      .         .         .         .         .         .         .         .
            260.  C    I    R   EL    .         .         .         .         .         .         .         .
     8.60   280.  C    I   R.    E L  .         .         .         .         .         .         .         .
            300.  C    I    R    E    .         .         .         .         .         .         .         .
            320.  C    I    R   LE    .         .         .         .         .         .         .         .
            340.  C     I   R  L E    .         .         .         .         .         .         .         .
            360.  C     I   RL   E    .         .         .         .         .         .         .         .
            380.  C     I   LR   E    .         .         .         .         .         .         .         .
     8.62   400.  C     I L .R   E    .         .         .         .         .         .         .         .
            420.  C     I  L.R   E    .         .         .         .         .         .         .         .
            440.  C      I  .L   E    .         .         .         .         .         .         .         .
            460.  C      I  .RL  E    .         .         .         .         .         .         .         .
            480.  C      I  . R LE    .         .         .         .         .         .         .         .
     8.64   500.  C      I  . R  E    .         .         .         .         .         .         .         .
            520.  C      I  . R  E    .         .         .         .         .         .         .         .
            540.  C       I . R  E    .         .         .         .         .         .         .         .
            560.  C       I . R  E    .         .         .         .         .         .         .         .
            580.  C       I . R  E    .         .         .         .         .         .         .         .
     8.66   600.  C       I . R  E    .         .         .         .         .         .         .         .
            620.  C       I .  R E    .         .         .         .         .         .         .         .
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        640.  C      I .  RLE    .          .          .          .          .          .          .
        660.  C      I .  RLE    .          .          .          .          .          .          .
        680.  C      I .  RLE    .          .          .          .          .          .          .
8.68    700.  C      I .  RLWE   .          .          .          .          .          .          .
        720.  C       I.   LWE   .          .          .          .          .          .          .
        740.  C       I.  LR E   .          .          .          .          .          .          .
        760.  C        I L R E   .          .          .          .          .          .          .
        780.  C        .IL R E   .          .          .          .          .          .          .
8.70    800.  C        .I   RE   .          .          .          .          .          .          .
        820.  C        . IL RE   .          .          .          .          .          .          .
        840.  C        . I LRWE  .          .          .          .          .          .          .
        860.  C        .  I L E  .          .          .          .          .          .          .
        880.  C        .  I  RWE .          .          .          .          .          .          .
8.72    900.  .        .   I RWE .          .          .          .          .          .          .
        920.  C        .   I R WE.          .          .          .          .          .          .
        940.  C        .    IR WEL          .          .          .          .          .          .
        960.  C        .    I R WE          .          .          .          .          .          .
        980.  C        .     IR  EL         .          .          .          .          .          .
8.74   1000.  C        .     IR  WEL        .          .          .          .          .          .
       1020.  C        .     IR  WEL        .          .          .          .          .          .
       1040.  C        .      IR .EL        .          .          .          .          .          .
       1060.  C        .      IR .WE        .          .          .          .          .          .
       1080.  C        .      I R.WE        .          .          .          .          .          .
       1100.  C        .       IR. E        .          .          .          .          .          .
       1120.  C        .       IR. E        .          .          .          .          .          .
       1140.  C        .       I R WE       .          .          .          .          .          .
       1160.  C        .        IR  E       .          .          .          .          .          .
       1180.  C        .        IR  E       .          .          .          .          .          .
8.77   1200.  C        .        I.R WE      .          .          .          .          .          .
       1220.  C        .         IR WE      .          .          .          .          .          .
       1240.  C        .         .IRLE      .          .          .          .          .          .
       1260.  C        .         . I WE     .          .          .          .          .          .
8.79   1280.  .        .         .  ILE     .          .          .          .          .          .
       1300.  .        .         . IRLWE    .          .          .          .          .          .
       1320.  .        .         . IRLWE    .          .          .          .          .          .
8.80   1340.  .        .         . I LWE    .          .          .          .          .          .
8.81   1360.  C        .         .I  RWE L  .          .          .          .          .          .
       1380.  C        .         .I  MWE L  .          .          .          .          .          .
       1400.  C        .         .I  M EL   .          .          .          .          .          R
       1420.  C        .         I   M EL   .          .          .          .          .          R
       1440.  C        .         I   M EL   .          .          .          .          .          R
       1460.  C        .        I.   M E    .          .          .          .          .          R
       1480.  C        .        I.   M E    .          .          .          .          .          R
       1500.  C        .        I.   M E    .          .          .          .          .          R
       1520.  C        .       I .   M E    .          .          .          .          .          R
       1540.  C        .       I .   MLE    .          .          .          .          .          R
       1560.  C        .      I  .   MLE    .          .          .          .          .          R
       1580.  C        .      I  .   MLE    .          .          .          .          .          R
       1600.  C        .      I  .   L E    .          .          .          .          .          R
       1620.  C        .     I   .   L E    .          .          .          .          .          R
8.86   1640.  .        .     I   .  CL E    .          .          .          .          .          R
       1660.  C        .     I   .   L WE   .          .          .          .          .          R
       1680.  C        .     I   .   L WE   .          .          .          .          .          R
       1700.  C        .     I   .   L WE   .          .          .          .          .          R
       1720.  C        .     I   .   L WE   .          .          .          .          .          R
       1740.  C        .     I   .   L WE   .          .          .          .          .          R
       1760.  C        .     I   .   L WE   .          .          .          .          .          R
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      1780. C        .    I   .   L WE  .         .         .         .         .         .         R
8.89  1800. C        .    I   .   L WE  .         .         .         .         .         .         R
      1820. C        .    I   .   L WE  .         .         .         .         .         .         R
      1840. C        .     I  .   L  E  .         .         .         .         .         .         R
      1860. C        .     I  .    L WE .         .         .         .         .         .         R
      1880. C        .      I .    L WE .         .         .         .         .         .         R
      1900. C        .      I .    L WE .         .         .         .         .         .         R
      1920. C        .       I.    L WE .         .         .         .         .         .         R
      1940. C        .       I.    L WE .         .         .         .         .         .         R
      1960. C        .        I    L  E .         .         .         .         .         .         R
      1980. C        .        I     L E .         .         .         .         .         .         R
      2000. C        .         .I    L WE.         .         .         .         .         .         R
8.93  2020. C        .         .I    L WE.         .         .         .         .         .         .
      2040. C        .         .I    L WE.         .         .         .         .         .         .
      2060. C        .         .I    LR E.         .         .         .         .         .         .
      2080. C        .         .I    LR WE         .         .         .         .         .         .
      2100. C        .         .I     L WE         .         .         .         .         .         .
      2120. C        .         . I    LRWE         .         .         .         .         .         .
      2140. C        .         . I    LR WE        .         .         .         .         .         .
      2160. C        .         . I    LR WE        .         .         .         .         .         .
      2180. C        .         . I    L RWE        .         .         .         .         .         .
      2200. C        .         . I    L RWE        .         .         .         .         .         .
      2220. C        .         . I     LR.WE       .         .         .         .         .         .
      2240. C        .         . I     L RWE       .         .         .         .         .         .
      2260. C        .         . I     L RWE       .         .         .         .         .         .
      2280. C        .         . I     L RW E      .         .         .         .         .         .
      2300. C        .         . I     L .RWE      .         .         .         .         .         .
      2320. C        .         . I     L .RWE      .         .         .         .         .         .
      2340. C        .         . I      L.RWE      .         .         .         .         .         .
      2360. C        .         . I      L. W E     .         .         .         .         .         .
      2380. C        .         . I      L. RWE     .         .         .         .         .         .
9.00  2400. .        .         . I      L. RWE     .         .         .         .         .         .
      2420. C        .         .  I      L R   WE  .         .         .         .         .         .
      2440. C        .         .  I      . L      WE         .         .         .         .         .
9.01  2460. C        .         .   I     . R L     .    E    .         .         .         .         .
      2480. C        .         .   I     . R L     .    E    .         .         .         .         .
      2500. C        .         .    I    . R L     .   WE    .         .         .         .         .
      2520. C        .         .    I    . R L     .   WE    .         .         .         .         .
      2540. C        .         .    I    . R L     .   WE    .         .         .         .         .
      2560. C        .         .    I    . R L     .   WE    .         .         .         .         .
      2580. C        .         .     I   . R L     .   WE    .         .         .         .         .
9.04  2600. C        .         .     I   . R L     .   WE    .         .         .         .         .
      2620. C        .         .     I   . R L     .   WE    .         .         .         .         .
      2640. C        .         .     I   . R L     .   WE    .         .         .         .         .
      2660. C        .         .      I  .  R L    .   W E   .         .         .         .         .
      2680. C        .         .      I  .  R L    .   W E   .         .         .         .         .
      2700. C        .         .      I  .  R L    .   W E   .         .         .         .         .
      2720. C        .         .      I  .  R L    .   W E   .         .         .         .         .
      2740. C        .         .      I  .  R L    .    W E  .         .         .         .         .
      2760. C        .         .       I .   R L   .    W E  .         .         .         .         .
      2780. C        .         .       I .   R L   .    W E  .         .         .         .         .
9.08  2800. .        .         .       I .   R L   .    W E  .         .         .         .         .
      2820. .        .         .       I .   R L   .    W  E .         .         .         .         .
      2840. .        .         .       I .    R L  .    W  E .         .         .         .         .
      2860. .        .         .       I .    R L  .     W  E.         .         .         .         .
      2880. .        .         .       I .    R L  .     W  E.         .         .         .         .
      2900. .        .         .       I .    R L  .     W   E         .         .         .         .
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                                                  BKT500
        2920.  .         .         .      I .     R L .      W  E         .         .         .         .         .
 9.10   2940.  .         .         .      I .     R L .      W  .E        .         .         .         .         .
        2960.  C         .         .       I.     R L .       W .E        .         .         .         .         .
        2980.  C         .         .        I     MRL .       W .E        .         .         .         .         .
        3000.  C         .         .         . I   MR L.        W.E        .         .         .         .         .
        3020.  C         .         .         .  I  M RL.         WE        .         .         .         .         .
 9.13   3040.  C         .         .         .   I M RL.         .E        .         .         .         .         .
        3060.  C         .         .         .    I MR L         .E        .         .         .         .         .
 9.14   3080.  C         .         .         .    I  R L         .E        .         .         .         .         .
        3100.  C         .         .         .    I MRL.         .E        .         .         .         .         .
 9.15   3120.  C         .         .         .     I L .         .E        .         .         .         .         .
        3140.  C         .         .         .     I M .         .E        .         .         .         .         L
        3160.  C         .         .         .     I   M         .E        .         .         .         .         L
        3180.  C         .         .         .     I   . M       .E        .         .         .         .         L
        3200.  C         .         .         .     I   .   M     .E        .         .         .         .         L
        3220.  C         .         .         .     I   .     M   .E        .         .         .         .         L
        3240.  C         .         .         .     I   .       M .E        .         .         .         .         L
 9.25   3260.  C         .         .         .     I   .         ME        .         .         .         .         L
1
   15SEP04      15:15:51
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THIS RUN EXECUTED 15SEP04 15:15:53

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 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

EMCON 8/4/04 by: GRB

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
	8.550	.00	.00	.00	1374.00	276.25	1377.43	.00	1377.65	70.18	3.83	72.22	32.98
	8.570	97.00	.00	.00	1374.69	276.25	1378.14	.00	1378.45	91.17	4.48	61.63	28.93
	8.580	92.00	.00	.00	1375.95	276.25	1378.88	.00	1379.05	47.09	3.35	82.52	40.26
*	8.600	80.00	1380.50	.00	1376.50	276.25	1381.41	.00	1381.44	2.77	1.38	200.09	165.97
	8.620	128.00	.00	.00	1377.11	276.25	1381.45	.00	1381.48	2.78	1.40	204.27	165.70
*	8.640	100.00	.00	.00	1377.62	276.25	1381.47	.00	1381.54	10.95	2.11	130.98	83.48
	8.660	100.00	.00	.00	1378.13	276.25	1381.61	.00	1381.65	11.03	1.70	162.47	83.16
	8.680	100.00	.00	.00	1378.00	276.25	1381.70	.00	1381.77	11.26	2.08	138.71	82.34

*	8.700	100.00	.00	.00	1379.59	276.25	1381.85	.00	1381.94	25.48	2.52	117.42	54.72
*	8.720	100.00	.00	.00	1380.90	276.25	1382.58	1382.58	1383.12	239.09	5.94	46.48	17.87
*	8.740	100.00	.00	.00	1382.00	276.25	1384.09	.00	1384.36	72.74	4.19	65.97	32.39
	8.770	200.00	.00	.00	1383.60	276.25	1385.55	.00	1385.79	70.00	4.20	74.05	33.02
*	8.790	81.00	.00	.00	1385.30	276.25	1386.33	1386.33	1386.68	44.79	4.73	58.16	41.28
*	8.800	49.00	.00	.00	1385.10	413.51	1386.50	1386.50	1386.94	36.18	4.46	78.60	68.74
*	8.810	29.00	.00	.00	1384.70	734.14	1386.71	.00	1387.00	12.64	4.34	169.13	206.46
*	8.860	266.00	.00	.00	1382.00	1561.69	1387.14	1385.32	1387.22	5.93	2.37	817.17	641.12
*	8.890	175.00	.00	.00	1382.00	2328.24	1387.09	.00	1387.57	29.42	5.71	457.01	429.26

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SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10*KS	VCH	AREA	.01K
8.930	217.00	.00	.00	1384.67	3353.55	1388.03	.00	1388.37	41.96	5.96	767.43	517.73
* 9.000	370.00	.00	.00	1385.00	4697.64	1390.40	1390.40	1391.10	67.99	8.66	770.89	569.70
* 9.010	76.00	1389.89	.00	1386.02	6220.87	1396.27	.00	1396.30	.76	1.65	4409.58	7125.55
* 9.040	137.00	.00	.00	1387.00	12033.91	1396.14	.00	1396.41	7.76	5.35	3029.65	4320.96
* 9.080	200.00	.00	.00	1388.00	20925.26	1396.31	1396.31	1397.70	47.32	12.92	2437.15	3041.96
* 9.100	137.00	.00	.00	1388.03	27625.00	1397.39	1397.39	1399.26	68.32	14.43	2636.96	3342.07
* 9.130	98.00	.00	.00	1391.00	27625.00	1399.27	.00	1399.47	1.35	3.58	7722.75	23738.59
9.140	33.00	.00	.00	1391.50	27625.00	1399.25	.00	1399.49	1.66	3.82	7231.45	21427.76
* 9.150	43.00	.00	.00	1392.00	27625.00	1399.33	.00	1399.50	6.53	3.25	8365.53	10809.19
9.250	141.00	.00	.00	1392.00	27625.00	1399.41	.00	1399.65	12.00	.00	7074.39	7975.10

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EMCON 8/4/04 by: GRB

SUMMARY PRINTOUT TABLE 150

SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
8.550	276.25	1377.43	.00	.00	.00	52.39	.00

	8.570	276.25	1378.14	.00	.71	.00	42.57	97.00
	8.580	276.25	1378.88	.00	.74	.00	54.35	92.00
*	8.600	276.25	1381.41	.00	2.54	.00	56.45	80.00
	8.620	276.25	1381.45	.00	.04	.00	63.08	128.00
*	8.640	276.25	1381.47	.00	.02	.00	56.33	100.00
	8.660	276.25	1381.61	.00	.14	.00	101.44	100.00
	8.680	276.25	1381.70	.00	.10	.00	84.58	100.00
*	8.700	276.25	1381.85	.00	.15	.00	102.10	100.00
*	8.720	276.25	1382.58	.00	.72	.00	43.36	100.00
*	8.740	276.25	1384.09	.00	1.51	.00	41.71	100.00
	8.770	276.25	1385.55	.00	1.46	.00	91.31	200.00
*	8.790	276.25	1386.33	.00	.78	.00	85.00	81.00
*	8.800	413.51	1386.50	.00	.17	.00	86.00	49.00
*	8.810	734.14	1386.71	.00	.21	.00	111.38	29.00
*	8.860	1561.69	1387.14	.00	.43	.00	659.80	266.00
*	8.890	2328.24	1387.09	.00	-.05	.00	260.10	175.00
	8.930	3353.55	1388.03	.00	.93	.00	577.55	217.00
*	9.000	4697.64	1390.40	.00	2.37	.00	571.15	370.00
*	9.010	6220.87	1396.27	.00	5.87	.00	833.36	76.00
*	9.040	12033.91	1396.14	.00	-.13	.00	659.37	137.00
*	9.080	20925.26	1396.31	.00	.17	.00	739.93	200.00
*	9.100	27625.00	1397.39	.00	1.09	.00	689.12	137.00
*	9.130	27625.00	1399.27	.00	1.87	.00	1298.22	98.00

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15SEP04 15:15:51 PAGE 24

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	TOPWID	XLCH
	9.140	27625.00	1399.25	.00	-.02	.00	1290.40	33.00
*	9.150	27625.00	1399.33	.00	.08	.00	1281.74	43.00

9.250	27625.00	1399.41	.00	.08	.00	1484.52	141.00

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=      8.600  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.640  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.700  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      8.720  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.720  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      8.720  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      8.740  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      8.790  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.790  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      8.790  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=      8.800  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      8.800  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      8.810  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.860  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      8.890  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.000  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.000  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.010  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.040  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.080  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.080  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      9.080  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO=      9.100  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.100  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=      9.100  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=      9.130  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.150  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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ADDITIONAL MODEL RUN INPUT/OUTPUT FILES

(X3 Card Option)

1% Annual Chance Flood

Main Channel (X3 Card Option)

Input File: mainbas.dat

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T1     MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2     INPUT FILE: mainbar.dat        100-YR FLOOD ELEVATION
T3     ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4     October 2003 EMCON/OWT Inc.
*
*      At the request of FEMA we have revisited the ineffective flow modeling
*      technique for the area in the vicinity of STA 9.45 to 9.65 to use the
*      X3 card and demonstrate that no change in the WSE occurs.
*
*
*
*
J1      0       2                       0               0       0 1378.00
J2      1       0      -1       0       0              -1       0
J3     38      43       1       2      26       8       4      25      68      53
J3     54
*  100-yr peak discharge is from effective FIS study.
QT      1   38888
*
NC 0.045   0.045   0.035     0.1     0.3
ET           5.1                  3796.61 5556.89
X1  8.69      95 4025.25 5073.77
GR1380.0 3796.61 1380.00 3854.47 1379.00 3861.47 1378.00 3868.42 1378.00 3878.69
GR1378.6 3884.04 1380.00 3896.01 1380.00 3907.92 1379.82 3923.26 1379.91 3925.58
GR1380.0 4002.41 1380.54 4004.61 1382.00 4011.19 1382.00 4016.12 1381.16 4025.25
GR1380.0 4037.88 1379.55 4039.54 1378.00 4045.04 1376.66 4058.92 1376.33 4063.23
GR1376.0 4067.80 1375.66 4071.80 1374.51 4084.66 1374.14 4088.53 1374.00 4090.42
GR1373.8 4091.18 1373.53 4092.99 1372.00 4102.33 1371.23 4129.14 1370.00 4171.62
GR1370.0 4446.38 1370.04 4448.91 1372.00 4550.37 1372.00 4583.65 1371.80 4601.95
GR1371.2 4726.77 1371.45 4741.81 1371.10 4787.06 1371.00 4796.71 1370.54 4837.32
GR1370.6 4872.36 1370.52 4876.45 1370.60 4881.98 1370.60 4882.00 1370.82 4897.47
GR1371.4 4906.65 1371.83 4913.95 1372.00 4917.45 1372.34 4920.12 1374.00 4933.03
GR1374.3 4936.71 1374.00 4958.00 1373.51 4959.38 1372.00 4963.60 1371.80 4964.16
GR1370.0 4969.21 1368.37 4973.77 1368.00 4974.80 1366.00 4980.35 1365.56 4981.39
GR1364.7 4987.21 1364.21 4990.25 1364.00 4992.46 1364.00 5000.00 1364.00 5003.25
GR1365.5 5010.85 1365.78 5012.36 1366.00 5013.46 1366.52 5014.69 1368.00 5018.15
GR1368.3 5018.85 1370.00 5022.82 1370.70 5024.49 1372.00 5027.49 1373.05 5031.15
GR1374.0 5034.40 1375.00 5039.27 1376.00 5044.17 1376.23 5045.52 1377.39 5052.81
GR1378.0 5059.14 1378.78 5065.36 1379.49 5073.77 1379.70 5074.11 1379.26 5077.51
GR1378.7 5079.93 1378.00 5082.02 1378.00 5116.40 1378.13 5146.24 1378.00 5177.10
GR1378.0 5181.33 1377.50 5273.67 1377.18 5375.38 1377.56 5451.37 1377.29 5556.89
*
QT      1   38875
ET           5.1                  3855.70 5475.95
X1  8.79      89 4095.41 5039.30     530     546     539
GR1384.0 3855.70 1384.00 3973.82 1382.64 3980.66 1384.00 3998.09 1382.65 4051.20
GR1382.6 4058.69 1382.49 4060.23 1382.89 4064.63 1384.00 4067.90 1384.00 4095.41
GR1382.2 4107.84 1382.00 4109.37 1380.85 4117.39 1380.00 4123.50 1378.49 4137.14
GR1378.0 4141.55 1376.51 4154.98 1376.00 4159.65 1374.00 4171.01 1373.84 4176.47
GR1372.0 4222.80 1372.00 4265.74 1371.40 4267.19 1370.00 4271.65 1370.02 4277.10
GR1370.5 4303.75 1372.00 4387.79 1372.60 4464.89 1373.01 4509.16 1373.45 4564.23
GR1373.6 4589.91 1374.00 4659.42 1374.00 4677.54 1373.79 4707.25 1374.00 4731.92
GR1375.0 4815.01 1375.48 4838.28 1375.82 4866.71 1375.01 4881.51 1374.70 4887.04
GR1374.0 4898.81 1374.00 4914.20 1376.00 4932.06 1377.09 4941.83 1377.77 4948.33
GR1378.0 4950.51 1378.00 4973.99 1377.74 4974.57 1376.00 4978.35 1375.92 4978.54
GR1375.3 4979.92 1374.00 4982.54 1373.68 4983.19 1372.00 4986.64 1371.40 4987.87
GR1370.0 4990.74 1369.23 4992.31 1368.00 4994.83 1367.12 4996.63 1366.00 4998.93
GR1366.0 5000.00 1367.19 5002.89 1368.00 5004.26 1369.43 5006.66 1370.00 5007.63
GR1371.8 5010.72 1372.00 5011.01 1372.55 5011.93 1374.00 5014.64 1374.46 5015.50
GR1376.0 5018.37 1377.54 5024.62 1378.00 5026.26 1378.19 5027.55 1378.48 5029.47
GR1380.0 5039.30 1380.47 5053.53 1381.00 5070.14 1381.05 5074.82 1381.51 5092.11
GR1381.8 5130.27 1381.56 5144.28 1381.81 5200.42 1381.90 5207.46 1381.92 5219.18
GR1382.0 5303.86 1382.00 5320.81 1381.88 5345.60 1381.56 5475.95
*
QT      1   37676
ET           5.1                  4279.99 5437.79
X1  8.93      71 4541.12 5252.00     565     711     722
GR1386.3 4279.99 1386.00 4295.47 1386.34 4315.43 1386.00 4350.00 1385.51 4354.32
GR1386.0 4371.17 1386.00 4454.56 1386.25 4457.97 1387.66 4480.76 1388.00 4485.92
GR1388.0 4526.66 1386.72 4541.12 1386.00 4552.20 1385.40 4560.69 1385.02 4564.36
GR1384.5 4569.41 1384.00 4573.51 1382.63 4586.39 1382.43 4588.53 1382.00 4594.51
GR1381.7 4598.20 1380.48 4604.38 1380.00 4606.94 1379.91 4608.36 1378.58 4632.57
GR1378.0 4639.26 1376.00 4653.50 1375.35 4704.64 1374.00 4828.12 1373.68 4850.43
GR1373.1 4888.01 1372.88 4901.73 1372.00 4950.77 1371.17 4970.32 1370.00 4996.16
GR1370.1 5000.00 1370.40 5014.94 1370.52 5018.25 1370.89 5033.81 1371.01 5037.53
GR1371.3 5046.38 1371.00 5056.40 1370.55 5068.53 1370.60 5102.71 1370.78 5109.11
GR1371.1 5116.39 1371.60 5131.46 1372.00 5139.38 1373.19 5146.05 1373.89 5149.69
GR1374.0 5150.47 1374.30 5152.78 1374.67 5155.69 1376.00 5166.46 1376.39 5169.57
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GR1378.0 5182.62 1379.50 5195.03 1380.00 5200.27 1380.58 5207.92 1381.76 5224.62
GR1382.0 5227.77 1382.80 5252.00 1384.00 5330.07 1384.00 5333.71 1384.91 5347.75
GR1386.0 5362.52 1386.60 5376.48 1386.90 5391.40 1387.03 5397.63 1387.24 5419.21
GR1387.0 5437.79
*
QT     1   37207
ET           5.1                  4519.91 5433.52
X1  9.01      81 4817.29 5340.88     363     558     430
GR1388.4 4519.91 1388.00 4559.91 1388.00 4561.41 1388.84 4570.06 1388.45 4571.71
GR1388.0 4573.70 1388.00 4576.09 1388.46 4578.03 1388.77 4579.51 1388.28 4582.90
GR1388.0 4583.57 1388.00 4677.39 1388.26 4681.88 1389.30 4700.64 1389.76 4708.44
GR1389.3 4717.62 1388.98 4718.21 1388.52 4718.22 1388.00 4721.78 1387.37 4732.92
GR1387.1 4737.05 1386.95 4738.08 1386.40 4758.07 1386.64 4764.66 1386.86 4770.00
GR1387.0 4774.77 1387.38 4799.17 1387.08 4803.47 1386.92 4804.87 1386.44 4811.50
GR1386.0 4817.29 1384.00 4825.73 1383.63 4827.33 1382.00 4834.13 1380.26 4841.49
GR1380.0 4842.58 1379.21 4845.86 1378.00 4850.84 1376.45 4856.91 1376.00 4858.68
GR1375.8 4859.41 1374.00 4866.60 1373.72 4878.11 1373.33 4898.38 1373.06 4911.20
GR1372.9 4920.39 1372.51 4939.85 1372.35 4949.90 1372.19 4962.38 1372.32 4994.02
GR1372.4 5000.00 1372.50 5005.13 1373.08 5052.28 1373.49 5089.07 1373.86 5118.83
GR1374.0 5130.57 1375.57 5137.72 1376.00 5139.67 1377.54 5146.76 1378.00 5149.27
GR1379.4 5157.21 1380.00 5161.68 1380.57 5169.64 1380.83 5173.36 1380.91 5174.01
GR1381.2 5177.53 1381.59 5182.69 1382.00 5188.14 1382.37 5193.51 1383.14 5206.05
GR1384.0 5217.34 1385.32 5244.41 1385.68 5252.28 1386.00 5257.06 1387.77 5292.41
GR1388.0 5296.60 1388.84 5320.16 1389.58 5340.88 1389.68 5346.00 1390.00 5351.31
GR1390.0 5433.52
*
QT     1   31427
ET           5.1                  4515.30 5233.18
X1  9.08      70 4796.92 5198.84     432     165     365
GR1391.1 4515.30 1390.24 4539.50 1390.00 4540.45 1390.00 4625.97 1390.21 4628.50
GR1390.6 4632.33 1390.69 4632.97 1390.44 4647.05 1390.08 4647.52 1390.00 4647.64
GR1389.6 4649.23 1388.00 4655.18 1388.00 4670.31 1388.16 4671.07 1388.14 4787.35
GR1388.0 4796.92 1387.24 4809.20 1386.69 4817.41 1386.00 4827.18 1384.79 4833.74
GR1384.0 4837.38 1383.79 4838.28 1382.78 4842.68 1382.00 4845.64 1381.40 4847.91
GR1380.0 4853.19 1378.86 4857.51 1378.00 4860.75 1377.03 4864.25 1376.00 4868.13
GR1375.1 4871.58 1374.00 4875.67 1373.97 4878.43 1373.92 4884.08 1373.76 4895.74
GR1373.7 4902.64 1373.65 4905.82 1373.59 4911.57 1373.49 4920.43 1373.47 5000.00
GR1373.5 5095.48 1373.56 5107.93 1373.59 5109.03 1373.62 5112.59 1373.70 5119.31
GR1373.8 5122.87 1373.82 5124.67 1373.85 5126.00 1373.92 5128.16 1373.94 5130.06
GR1374.0 5131.14 1374.13 5131.77 1376.00 5140.79 1377.41 5147.57 1378.00 5150.02
GR1378.6 5152.38 1380.00 5158.25 1381.29 5163.54 1382.00 5166.47 1383.45 5172.44
GR1384.0 5174.70 1385.73 5181.83 1386.00 5182.93 1387.10 5187.46 1388.00 5190.99
GR1388.1 5191.61 1389.08 5195.22 1390.00 5198.84 1390.04 5199.45 1390.27 5233.18
*
QT     1   27780
NC 0.035   0.035   0.035
ET           5.1                  4525.85 5437.55
X1  9.14      94 4835.60 5165.24     288     385     333
GR1392.1 4525.85 1392.00 4598.96 1391.59 4608.73 1390.99 4723.68 1391.42 4775.78
GR1391.5 4789.87 1391.64 4805.14 1391.00 4830.80 1390.59 4832.90 1390.00 4835.60
GR1389.7 4836.69 1389.00 4839.12 1388.44 4841.11 1388.00 4842.60 1387.57 4843.96
GR1387.0 4845.55 1386.47 4846.70 1386.00 4847.68 1385.71 4848.28 1385.00 4849.75
GR1384.7 4850.41 1384.00 4851.87 1383.84 4852.20 1383.32 4853.25 1383.00 4853.91
GR1382.8 4854.33 1382.00 4856.07 1381.65 4856.77 1381.00 4858.07 1380.00 4860.14
GR1379.7 4861.00 1379.19 4861.98 1379.00 4862.42 1378.49 4863.58 1378.00 4864.71
GR1377.4 4866.13 1377.00 4867.28 1376.43 4869.03 1376.00 4869.56 1375.54 4872.43
GR1374.5 4874.14 1374.00 4875.08 1374.00 5000.00 1374.00 5062.13 1374.39 5091.47
GR1375.0 5121.35 1375.00 5125.45 1375.71 5129.68 1376.00 5131.10 1376.94 5133.66
GR1377.0 5134.06 1377.77 5135.68 1378.00 5136.16 1379.00 5138.25 1379.92 5140.18
GR1380.0 5140.35 1380.80 5142.03 1381.00 5142.44 1381.45 5143.38 1382.00 5144.53
GR1382.9 5146.34 1383.00 5146.63 1383.72 5148.14 1384.00 5148.75 1384.46 5149.37
GR1385.0 5150.09 1385.25 5150.43 1386.00 5151.41 1386.80 5152.48 1387.00 5152.75
GR1387.2 5153.56 1388.00 5156.83 1388.60 5159.29 1389.00 5160.92 1389.34 5162.35
GR1389.7 5164.16 1390.00 5165.24 1390.00 5165.45 1390.42 5166.34 1391.00 5168.32
GR1391.8 5170.94 1391.91 5171.50 1392.00 5171.73 1392.22 5174.81 1392.64 5180.92
GR1393.0 5184.53 1392.55 5196.46 1392.91 5224.81 1392.45 5256.91 1392.29 5293.65
GR1392.1 5328.16 1392.00 5380.42 1392.00 5416.53 1391.87 5437.55
* DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT     1   27780
X1 9.145      66    5015    5325       8       8       8
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
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GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1374.94    5045 1374.94    5085
GR1374.9 5088.74 1390.80 5088.75 1390.80 5093.75 1374.94 5093.76 1374.94    5125
GR1374.9 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1374.94 5172.51
GR1374.9    5205 1374.94    5245 1374.94 5246.24    1391 5246.25    1391 5251.25
GR1374.9 5251.26 1374.94    5285 1374.94    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
* UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE
QT      1   27780
X1 9.155      66    5015    5325    80.2    80.2    80.2
X3    10       0       0       0       0       0       0  1392.2  1393.1
BT   -16    5015  1394.5  1394.5 5015.01  1394.5    1390    5045  1394.8  1390.3
BT          5085  1395.2  1390.7 5088.75  1395.2  1390.8 5093.75  1395.3  1390.8
BT          5125  1395.6  1391.1    5170  1395.7  1391.2    5205  1395.7  1391.2
BT          5245  1395.5    1391 5246.25  1395.5    1391 5251.25  1395.5    1391
BT          5285  1395.2  1390.7    5295  1395.1  1390.6 5324.99  1394.7  1390.2
BT          5325  1394.7  1394.7
GR1395.6  3767.9  1395.5  3820.9  1395.4  3873.6  1395.4  3891.5  1395.4  3939.2
GR1395.2  3990.7  1395.4  4052.6  1395.4  4113.7  1395.3  4176.6  1395.1  4229.3
GR1395.1  4287.4  1394.9  4334.4  1394.8  4385.2  1394.7  4450.4  1394.8  4489.6
GR1394.5  4524.7  1394.1  4576.1    1394  4617.7  1393.7  4656.6  1393.2  4693.1
GR1393.1  4730.9  1392.4    4761  1392.2    4821  1392.4    4881 1393.59    4956
GR1394.4    5006  1394.5    5015    1390 5015.01 1375.14    5045 1375.14    5085
GR1375.1 5088.74  1390.8 5088.75  1390.8 5093.75 1375.14 5093.76 1375.14    5125
GR1375.1 5167.49  1391.2  5167.5  1391.2    5170  1391.2  5172.5 1375.14 5172.51
GR1375.1    5205 1375.14    5245 1375.14 5246.24    1391 5246.25    1391 5251.25
GR1375.1 5251.26 1375.14    5285 1375.14    5295  1390.2 5324.99  1394.7    5325
GR1394.8    5326 1393.95    5376 1393.27    5453 1393.07    5520  1393.1  5541.9
GR1392.9  5588.6  1392.7  5636.9  1392.7  5681.4  1392.5  5740.6  1392.6  5796.6
GR1392.6  5855.7  1392.4  5922.7  1392.3    5988  1392.3  6032.1  1392.1  6079.5
GR1392.1    6085
*
QT      1   27780
ET            5.1                   4528.66 5445.27
X1  9.16       89 4852.56 5164.29       8       8       8
GR1392.6 4528.66 1392.16 4581.89 1392.81 4592.32 1392.00 4643.39 1391.85 4708.61
GR1392.0 4756.55 1392.50 4805.50 1392.00 4836.76 1391.23 4838.82 1391.00 4839.41
GR1390.5 4842.05 1390.00 4852.56 1389.00 4854.43 1388.00 4856.29 1387.00 4857.94
GR1386.0 4859.59 1385.00 4861.24 1384.00 4862.89 1383.40 4863.88 1383.00 4864.54
GR1382.5 4865.33 1382.00 4866.18 1381.00 4867.82 1380.61 4868.61 1380.00 4869.92
GR1379.8 4870.35 1379.00 4872.01 1378.40 4873.27 1378.00 4874.11 1377.29 4875.60
GR1377.0 4876.20 1376.18 4877.92 1376.00 4878.30 1375.00 4880.39 1374.81 4915.05
GR1374.0 4961.04 1374.20 5000.00 1374.50 5083.02 1374.70 5107.91 1375.00 5129.31
GR1375.6 5132.84 1376.00 5135.04 1377.00 5138.70 1378.00 5140.93 1379.00 5142.76
GR1379.6 5143.88 1380.00 5144.79 1380.41 5145.63 1381.00 5146.82 1381.33 5147.49
GR1382.0 5148.85 1382.47 5149.81 1383.64 5152.18 1384.00 5152.91 1384.55 5154.02
GR1385.0 5154.94 1386.00 5156.58 1386.42 5157.20 1387.00 5158.07 1388.00 5161.31
GR1388.6 5162.08 1389.00 5162.75 1389.58 5163.63 1390.00 5164.29 1390.52 5165.66
GR1390.7 5169.65 1390.00 5170.91 1390.00 5171.15 1390.65 5172.70 1391.00 5173.49
GR1391.5 5174.67 1392.00 5175.74 1392.49 5177.88 1393.00 5180.15 1393.00 5215.17
GR1392.8 5239.51 1393.00 5302.86 1393.00 5330.00 1393.00 5335.30 1393.52 5343.99
GR1394.0 5352.89 1394.20 5356.22 1394.67 5363.95 1395.00 5372.98 1395.00 5394.93
GR1394.9 5404.04 1394.00 5430.80 1393.15 5432.47 1393.36 5445.27
*
* BOTTOM OF DROP STRUCTURE
QT      1   27780
NC 0.035   0.035   0.020
ET            5.1                    4732 5190.05
X1  9.21       7    4732 5174.57     145     355     279
GR  1389    4732    1376    4765    1376    4901    1376    5000    1376 5140.72
GR  1391 5174.57    1392 5190.05
*
* TOP OF DROP STRUCTURE
QT      1   27780
NC 0.040   0.035   0.035
ET            5.1                    4664 5314.09
X1  9.22      14    4664 5192.98     122     104      39
GR  1395    4664    1390    4708    1390 4871.20    1390    5000    1390 5167.75
GR  1391 5173.76    1392 5177.14    1393 5179.36    1394 5181.58    1395 5184.44
GR  1396 5187.36    1397 5192.98    1398 5219.20    1399 5314.09
*
QT      1   27780
```

```
ET          5.1                  4572.95 5304.55
X1  9.25     45    4825 5285.60     155      82     141
GR  1400    3023  1399.1    3123  1397.6    3223  1395.8    3323  1392.7    3423
GR  1392    3523    1393    3623  1393.6    3723  1393.5    3762    1394    3874
GR  1394    3898    1394 4003.81    1394 4062.18    1395 4283.87    1395 4298.29
GR  1395 4301.25    1395 4365.84    1395  4385.4  1395.7 4563.07    1395 4565.34
GR  1395 4570.45 1395.57 4572.95 1395.46 4582.97    1395 4585.82    1395 4590.84
GR  1395 4598.19    1395 4614.18    1395 4621.31    1394 4735.08    1394 4738.18
GR  1394 4838.32    1393 4871.51    1392 4892.27    1392    5000    1392  5077.8
GR  1393 5179.38    1394 5266.49    1395 5275.95    1396 5278.52    1397 5281.09
GR  1398 5283.83 1398.64  5285.6    1399 5290.86    1400 5304.55    1399 5325.36
*
* END FLOW SPLIT; RETURN TO FULL FLOW
QT     1   39000
ET          5.1                  4441.50 5290.19
X1  9.30     52 4779.69 5280.97     262     282     261
GR1401.5    2940  1402.6    2970  1400.5    3070  1398.6    3170    1397    3270
GR  1394    3370    1394    3470    1394    3570    1394    3670  1394.8    3770
GR  1395    3820    1394    3930    1394 4045.09    1395 4108.19    1395    4117
GR  1396 4323.15 1396.42 4425.34    1396 4429.71    1396 4434.42    1396  4441.5
GR  1396 4445.67    1396  4449.8    1395 4453.93 1394.13 4458.61    1394 4462.74
GR  1393 4494.69    1393 4512.86    1394 4520.79    1395 4539.92    1395 4544.55
GR  1395 4549.38    1396 4554.31    1397  4672.3    1397 4703.41    1397 4730.49
GR  1397 4737.81  1396.5    4750    1396 4768.57    1395 4779.69    1394  4811.1
GR  1393  4973.9    1393    5000    1393 5090.01    1394 5237.22    1395 5265.28
GR  1395 5270.89    1396 5273.07    1397 5275.25    1398 5277.47    1399 5279.81
GR1399.5 5280.97    1400 5290.19
*
ET          5.1                  4252.38 5287.77
X1  9.35     64    4775 5275.88     291     274     274
GR1403.4    2913    1404    2963  1401.9    3063  1400.6    3163  1399.1    3263
GR  1396    3363    1396    3463  1394.8    3563  1395.2    3663    1396    3763
GR  1396    3863    1396    3873    1396    3970    1396 4133.14    1397 4227.56
GR  1397 4246.88    1397 4251.02    1397 4252.38    1397 4261.99    1397 4262.89
GR  1397 4266.45    1397 4272.25    1396 4279.28    1395 4304.83    1395 4325.29
GR  1396  4342.7    1397 4379.18    1398  4402.1    1399 4459.05    1399 4467.32
GR  1399 4490.46    1399 4657.95    1399 4675.14    1399    4775    1399 4817.89
GR  1398 4824.28    1398 4830.91    1398 4833.58    1397 4841.76    1396 4854.67
GR  1395 4861.17    1394 4882.23    1393 4897.87    1392 4929.89    1392 4995.23
GR1392.2    5000    1393 5015.98    1394 5050.46    1394 5062.07    1394 5081.74
GR  1394 5098.98    1393 5104.45    1393 5165.77    1394 5255.79 1394.16 5261.12
GR  1395 5263.15    1396 5265.55    1397 5267.94    1398 5270.34    1399 5272.74
GR1399.9 5274.92    1400 5275.88    1401 5287.77    1401 5364.41
*
* FIRST LANDFILL CROSS SECTION
X1  9.42     84    4717 5216.97     400     402     399
GR  1428    4000    1426 4011.37    1424 4051.66    1424 4057.37    1426 4081.68
GR  1428 4110.92    1428 4121.45    1426 4129.13    1424 4134.76    1422 4139.19
GR  1421 4142.73    1420 4161.87 1419.19 4203.29    1418 4205.11    1416 4226.25
GR  1414 4237.19    1412 4246.78    1410 4256.36    1408 4267.25    1406 4278.32
GR  1404 4313.42    1402 4319.63    1401 4385.11    1401 4391.49    1400 4399.73
GR  1400 4402.48    1400    4425    1399 4435.31    1399 4437.98    1400  4464.1
GR  1400 4473.55    1401 4478.99    1401 4489.28    1401 4501.38    1401 4506.58
GR  1401 4519.28    1401 4549.48    1401 4609.38    1401 4631.43    1401    4640
GR  1401    4717    1401 4808.53    1401 4810.26    1400 4816.66    1399  4821.3
GR  1398 4826.32    1397 4831.26    1396  4836.2    1395 4840.81    1394 4845.47
GR  1394 4861.29    1394 4874.91    1394 4881.71    1395 4899.25    1395 4935.92
GR  1394 4952.05    1393 4968.09    1393 4971.63    1393 4977.75    1393    5000
GR  1393  5022.4    1394 5029.45    1395 5047.57    1396 5049.85    1397 5052.12
GR  1397 5069.99    1396 5075.09    1395 5080.13    1394 5086.54    1393 5111.54
GR  1393 5144.13    1394 5187.94    1395 5201.29    1396 5203.58    1397 5205.87
GR  1398 5208.12    1399 5210.33    1400 5212.55    1401 5214.76    1402 5216.97
GR1402.1 5217.23    1403 5227.59    1404 5237.39 1404.24 5239.73
*
NC 0.040   0.040   0.040
X1  9.45     97    4709    5209      93     126     118
GR  1444    4000    1446  4007.9    1448 4067.98    1448 4129.56    1446 4153.01
GR  1444  4163.3    1442 4166.26    1440 4169.22    1438 4175.44    1436 4186.62
GR  1434 4200.28    1432 4214.71    1430 4223.41    1428 4230.51    1426 4245.88
GR  1424 4268.57 1422.59 4278.96    1422 4280.89    1420 4290.71    1418 4299.79
GR  1416 4308.72    1414 4317.57    1412 4326.42    1410 4337.33    1408 4350.71
GR  1406 4364.09    1404 4377.47    1402 4400.54    1401 4461.44    1400 4466.82
GR  1400 4480.64    1400 4491.26    1400 4512.14    1401 4518.92 1401.69 4560.74
GR  1402 4579.32    1403 4582.89    1403 4591.95    1402 4596.75    1402    4660
GR  1402 4672.46  1401.7    4709    1401 4801.15    1400 4808.19    1399 4812.86
GR  1398 4817.28    1397 4822.04    1396 4829.31    1395 4850.48    1395 4874.85
GR  1396 4881.97    1397  4899.1    1397 4923.02    1396 4938.23    1395 4946.05
GR  1394 4960.72    1394 4965.12    1394 4968.36    1394 4997.02 1393.39    5000
```

```
GR  1393 5001.91    1393 5029.22    1394 5035.16    1395 5037.25    1396 5039.33
GR  1397 5041.64    1398 5043.96    1399 5046.15    1400 5048.19    1401 5065.48
GR  1401 5071.95    1401 5081.45    1401  5133.8    1400 5156.91    1399 5160.41
GR  1398 5163.93    1397 5167.45    1396 5170.97    1395 5174.49    1394 5180.55
GR  1394    5209    1394 5237.19    1395 5242.58    1396 5247.96    1397 5251.97
GR  1398 5255.85    1399 5259.53    1400  5261.9    1401 5264.27  1404.8 5265.18
GR  1402 5266.67    1403 5269.03    1404 5271.38  1405.2 5272.32  1404.6  5276.7
GR  1405 5277.23    1405 5281.63
*
NC 0.035   0.040   0.040
X1  9.54      85 4685.93    5177     410     515     500
X3                        4663.35            5177
GR  1456    4000    1456  4021.5    1454 4238.02    1454 4370.23    1456 4373.71
GR  1458 4382.67    1460 4392.58    1462 4402.82    1464 4414.23    1464 4416.59
GR  1462 4419.16    1460 4421.73    1458  4424.3    1456 4426.86    1454 4429.43
GR  1452 4432.03    1450 4434.89    1448 4437.71    1446 4440.53    1444 4443.94
GR  1442 4455.27    1440 4466.36    1438 4475.82    1436 4485.28    1434 4494.74
GR  1432 4503.98    1430 4512.83    1428 4521.68    1426 4530.63    1424 4537.95
GR  1422  4543.4    1420  4548.8    1418 4566.76    1416 4576.41    1414 4588.78
GR  1412  4606.7    1410 4618.24    1408 4626.12    1406  4646.3 1405.45 4653.56
GR  1406  4654.9    1408 4659.52 1409.53 4663.35 1409.41 4679.83    1408 4685.93
GR  1406 4694.77    1404 4704.62    1402 4714.47    1400 4759.39    1399 4817.12
GR  1399 4833.11    1399 4849.47    1399    4877    1398 4880.23    1397 4889.16
GR  1397 4922.52    1398 4930.18    1398 4954.06    1397 4978.17    1397    5000
GR  1397 5021.85    1398 5031.11    1399 5044.96    1400 5072.02    1401 5077.75
GR  1402 5083.41    1403 5099.61    1404 5131.49    1404 5150.42    1404 5168.37
GR  1404    5177    1404 5197.33    1404  5199.5    1404 5210.97    1404 5253.08
GR  1404 5391.09    1403 5589.76    1403 5598.79    1404 5665.44    1405  5677.3
GR  1406 5688.92    1407 5698.83    1408 5708.08  1408.1 5709.05    1408 5712.42
*
X1  9.65      77 4754.19 5231.86     475     503     558
X3                        4736.39         5231.86
GR  1464    4000    1464 4008.95    1464 4009.76    1462 4321.74    1460 4399.87
GR  1458 4431.45    1456 4444.62    1454 4455.94    1452 4520.78    1450 4527.92
GR  1448 4534.57    1446 4541.22    1444  4547.9    1442 4555.79    1440 4564.66
GR  1438 4573.56    1436 4582.53    1434  4591.5    1432 4600.47    1430 4609.44
GR  1428 4617.73    1426 4626.65    1424 4636.67    1422 4647.12    1420 4657.56
GR  1418 4668.01    1416 4678.25 1415.47 4681.09    1414 4684.72    1412 4698.82
GR  1410 4712.91 1408.84 4718.95    1410 4724.03    1412 4732.19 1412.28 4733.95
GR1412.3 4736.39 1412.23 4752.15 1412.23 4753.27    1412 4754.19    1410 4762.26
GR  1408 4770.81    1406 4779.35    1404 4787.89    1402 4808.39    1402 4880.47
GR  1402    5000    1402  5117.6    1402 5177.99    1404  5201.2    1406 5208.98
GR  1408 5216.75    1410 5224.53 1411.67 5231.28 1411.74 5231.86 1411.54 5244.69
GR1411.6 5244.92    1410 5251.38    1408 5258.75    1406 5266.02    1405 5297.23
GR  1405 5320.44    1406 5347.25    1406 5388.09    1406 5408.08    1407  5541.7
GR  1407 5718.14    1406  5754.4    1406 5784.09    1406 5792.77    1406 5810.87
GR  1406 5820.41    1406 5838.97    1407 5936.82    1408 6017.23    1409 6081.83
GR  1410 6155.49    1411 6165.28
*
NC 0.035   0.035   0.035
ET           5.1                 4752.73 5283.89
X1  9.70      45 4757.14 5273.18     253     259     256
GR  1466    4109    1464  4316.8    1462 4420.43    1460 4447.14    1458 4478.14
GR  1456 4489.46    1454 4500.45    1452 4509.98    1450 4519.51    1448 4529.04
GR  1446 4538.57    1444  4548.1    1442 4557.38    1440 4566.27    1438 4575.05
GR  1436 4583.83    1434 4592.61    1432 4601.39    1430 4609.72    1428 4617.43
GR  1426 4627.56    1424 4668.02    1422 4677.03    1420 4686.23    1418 4694.23
GR  1416 4702.22    1414 4725.62 1413.09 4738.64 1413.15 4752.73    1412 4757.14
GR  1410 4765.55    1408 4773.94    1406  4782.3    1404 4790.65    1404    5000
GR  1404 5228.02    1406 5244.34    1408 5253.96    1412 5273.18 1412.96 5277.81
GR1413.2 5283.89    1414 5286.99    1416 5294.01    1418 5300.98    1420 5310.97
*
ET           5.1                 4761.98 5298.67
X1  9.73      47 4763.41 5284.93     187     151     169
GR  1468    4092    1466 4213.55    1464    4379    1462  4470.4    1460 4508.81
GR  1458 4525.45    1456 4535.99    1454 4546.24    1452  4556.5    1450 4565.64
GR  1448 4574.49    1446 4582.67    1444 4590.66    1442 4598.64    1440 4606.63
GR  1438 4614.61    1436  4622.6    1434  4630.3    1432 4638.03    1430 4646.07
GR  1428 4654.12    1426 4662.16    1424  4670.2    1422 4678.24    1420 4686.28
GR  1418 4694.59    1416 4735.51    1414 4745.63 1413.77 4747.24    1414 4754.45
GR1414.2 4761.98    1414 4763.41    1412 4771.23    1410 4779.05    1408 4786.93
GR  1406 4794.83    1404 4807.46    1404    5000    1404 5232.22    1406 5255.68
GR  1408 5265.54    1410 5275.37    1412 5284.93    1414 5298.67    1416 5306.36
GR  1418 5314.06    1420 5322.58
*
ET           5.1                 4698.37 5217.67
X1  9.80      62 4738.89 5206.55     383     349     365
GR  1476    4000    1476 4071.22    1474  4291.9    1472 4368.03    1470 4404.99
```

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GR  1468 4419.78    1466 4435.01    1464 4454.29    1462 4489.38    1460 4517.69
GR  1458 4526.82    1456 4535.94    1454 4545.06    1452 4554.19    1450 4563.31
GR  1448 4572.44    1446 4580.51    1444 4588.95    1442 4597.51    1440 4606.07
GR  1438 4614.65    1436 4623.22    1434 4631.58    1432 4639.42    1430 4647.25
GR  1428 4655.08    1426 4662.93    1424 4670.84    1422 4678.74    1420 4686.85
GR  1418 4698.37    1416 4738.89    1416 4742.87    1416 4745.09 1415.15 4749.88
GR1415.7 4766.09    1414 4773.04    1412 4781.48    1410 4789.92    1408 4798.11
GR  1406 4814.33    1406    5000    1406  5168.2    1408 5177.78    1410 5187.37
GR  1412 5196.96    1414 5206.55 1414.61 5209.05  1414.9 5217.67    1416 5221.57
GR  1418 5228.59    1420 5235.61    1422 5242.63    1424 5250.86    1426  5260.4
GR  1428 5270.06    1430 5279.73    1432    5290    1434 5301.13    1436 5313.24
GR  1438 5329.65    1440 5350.74
*
ET           5.1                 4678.48 5167.47
X1  9.89      61 4741.17 5163.70     509     484     495
GR  1480    4000    1480 4097.31    1478  4315.5    1476 4369.55    1474 4409.22
GR  1472 4428.88    1470 4447.01    1468 4467.06    1466 4484.74    1464 4501.35
GR  1462 4517.81    1460 4528.28    1458 4538.09    1456 4547.75    1454 4557.31
GR  1452 4566.31    1450 4574.08    1448 4581.28    1446 4588.48    1444  4595.7
GR  1442 4603.03    1440 4610.35    1438 4617.67    1436 4624.99    1434 4631.68
GR  1432 4638.82    1430 4646.76    1428 4654.71    1426 4662.61    1424 4670.44
GR  1422 4678.48    1422 4689.89 1422.06 4691.09    1422 4691.98 1421.45  4699.1
GR  1420 4741.17    1418 4771.38    1416 4778.99    1414 4786.68    1412 4794.99
GR  1410  4803.8    1408  4840.1    1406 4951.17    1406 4964.91 1407.43    5000
GR  1408 5114.09    1410 5126.94    1412 5136.13    1414 5145.32    1416 5154.51
GR  1418  5163.7  1418.8 5167.47  1418.7 5180.97    1418 5182.68    1418 5202.91
GR  1420 5221.64    1422 5236.46    1424 5244.79    1426 5252.68    1428  5260.3
GR  1430 5267.91
*
ET           5.1                 4813.54 5284.14
X1  9.98      68 4828.11 5274.26     462     469     475
GR  1476    4020    1476 4135.18    1474 4180.69    1472 4242.44    1472 4405.93
GR  1474 4459.87    1474  4532.3    1472 4564.64    1470 4600.47    1468 4627.43
GR  1466 4644.39    1464 4650.73    1462 4658.68    1460 4666.95    1458 4675.21
GR  1456 4683.48    1454 4692.64    1452 4702.53    1450 4711.67    1448 4720.68
GR  1446 4728.08    1444  4734.3    1442 4740.53    1440 4746.75    1438 4752.97
GR  1436 4759.19    1434 4766.97    1432 4775.44    1430 4783.95    1428 4813.54
GR  1428  4821.2 1428.96 4826.63    1428 4828.11    1426 4830.93 1425.95 4831.02
GR1425.7  4834.7    1424 4840.53    1422  4847.1    1420 4853.67    1418 4860.24
GR  1416 4866.81    1414 4874.06    1412 4895.31    1410 4925.82    1410 4957.15
GR  1410  4985.2    1410    5000    1410 5196.05    1412 5234.32    1414 5243.75
GR  1416 5253.18    1418 5262.85    1420 5274.26 1421.67 5284.14 1421.15 5293.67
GR  1420  5297.1  1418.2 5302.27    1420 5323.38    1422  5337.3    1424 5349.84
GR  1426 5361.61    1428 5370.82    1430 5379.99    1432 5389.15    1434  5398.3
GR  1436 5407.46    1438  5416.8    1440 5427.51
*
ET           5.1                 4840.61 5275.34
X1 10.08      60 4841.72 5274.76     508     514     511
GR  1476    4000    1478 4028.78    1480 4085.32    1480 4214.24    1478 4270.59
GR  1476 4333.92    1474 4385.59    1472 4415.91    1470 4435.24    1468 4453.48
GR  1466 4471.72    1464 4489.47    1462 4507.08    1460 4524.24    1458 4540.43
GR  1456 4560.04    1454 4579.47    1452 4664.02    1450 4686.12    1448 4711.59
GR  1446 4736.49    1444 4743.04    1442 4749.49    1440 4755.86    1438 4761.79
GR  1436 4767.07    1434 4772.52    1432 4778.04    1430 4783.56    1428 4789.08
GR  1426 4795.68    1426 4838.85 1426.35 4840.61    1426 4841.72    1424 4848.12
GR  1422 4854.53    1420 4861.27    1418 4869.07    1416 4880.94    1414 4903.67
GR1412.5    5000    1412 5028.73    1412 5119.72    1414 5215.45    1416 5233.54
GR  1418 5244.05    1420 5254.55    1422 5265.05    1424 5274.76 1424.17 5275.34
GR  1424 5277.85  1423.5 5284.05    1422 5288.76    1420  5294.8    1420  5307.7
GR  1422 5411.56    1424 5519.39    1426 5568.38    1428 5584.58    1430 5600.76
*
ET           5.1                 4784.92 5288.33
X1 10.16      48 4797.94 5270.13     447     418     430
GR  1438    4000    1436  4021.6    1434 4039.29    1432 4060.58    1430 4087.84
GR  1428 4116.35    1426 4163.37    1426  4172.5    1426  4329.8    1424 4615.05
GR  1422 4727.69    1422 4765.14    1424 4772.65    1426 4779.85  1427.4 4784.92
GR1426.9 4794.24    1426 4797.94    1424 4806.13    1422 4814.72    1420 4823.31
GR  1418 4831.89    1416 4850.45    1416    5000    1416  5206.7    1418 5231.48
GR  1420 5241.03    1422 5250.58    1424 5260.12    1426 5270.13 1426.69 5273.76
GR1426.8 5288.33    1426 5290.46    1424 5295.56 1423.73 5296.35    1424 5299.13
GR  1426 5318.58    1428 5331.54    1430 5343.77    1432 5355.48    1434  5367.2
GR  1436 5379.53    1438 5392.13    1440 5404.93    1442 5417.74    1444 5430.71
GR  1446 5445.59    1448 5460.48    1450 5475.78
*
ET           5.1                 4772.87 5312.98
X1 10.25      50 4772.87 5312.98     496     420     460
GR  1462    4000    1462  4353.1    1462 4360.97    1464 4372.48    1466  4380.6
GR  1466 4394.69    1464 4399.98    1462 4402.86    1460 4405.73    1458 4408.62
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GR  1456 4420.57    1454 4432.06    1452 4443.38    1450  4454.7    1448 4465.92
GR  1446 4476.55    1444 4487.22    1442 4497.92    1440 4509.43    1438 4521.31
GR  1436 4534.04    1434 4573.89    1434 4576.65    1434 4582.76    1432 4590.09
GR  1430 4597.07    1428 4604.05    1426 4740.78    1426 4758.62    1428 4766.33
GR1429.7 4772.87 1429.36 4781.13    1428 4786.37    1426 4794.42    1424 4802.47
GR  1422 4810.53    1420 4841.46    1420 5225.51    1422 5254.59    1424 5264.85
GR  1426 5274.47    1428 5284.05  1429.2 5289.83 1429.27 5312.98    1430 5319.77
GR  1432 5338.35    1434 5354.33    1436 5382.04    1438 5398.07    1440 5414.09
*
ET           5.1                 4766.40 5271.99
X1 10.33      47 4782.32 5269.64     519     373     444
GR  1450    4000    1448 4073.55    1448 4076.89    1448 4151.72    1446 4166.89
GR  1444 4179.19    1442 4193.45    1440 4215.25    1438 4234.67    1436 4254.62
GR  1434 4273.64    1432 4293.27    1430 4335.46    1428 4352.32    1428 4394.66
GR  1430 4399.29    1432 4405.29    1434 4417.32    1436 4573.71    1434  4592.8
GR  1432 4607.16    1430  4731.8    1430 4744.77    1432 4752.19    1434 4759.52
GR1435.8  4766.4 1435.17 4782.32    1434 4787.13    1432 4795.34    1430 4802.67
GR  1428    4810    1426 4817.69    1424 4826.71 1422.57    5000    1422 5069.23
GR  1422 5172.18    1424 5223.94    1426 5234.36    1428 5243.12    1430 5251.96
GR  1432  5260.8    1434 5269.64 1434.83 5271.99 1434.09 5290.23    1434 5290.52
GR  1432 5296.74    1430 5302.97
*
ET           5.1                 4756.86 5252.58
X1 10.34      38 4775.45 5243.36     104      42      73
GR  1434    4000    1434 4020.85    1432 4060.47    1432 4210.33    1432 4230.74
GR  1430    4304    1430    4351    1430 4400.08    1430 4476.92    1432 4558.77
GR  1432 4579.43    1430 4699.87    1430 4741.11    1432 4746.28    1434 4751.62
GR1435.9 4756.86    1435 4775.45    1434 4779.27    1432 4786.85    1430 4794.42
GR  1428 4803.16    1426 4811.92    1424 4839.17 1422.77    5000    1422 5099.99
GR  1422 5118.31    1424 5204.31    1426 5212.97    1428 5217.15    1430  5226.8
GR  1432 5234.78    1434 5243.36 1435.48 5252.58 1434.92 5272.38    1434 5274.21
GR  1432 5278.35    1430 5282.48    1430 5283.56
*
* HAPPY VALLEY ROAD CROSSING
NC 0.030   0.030   0.030
ET           5.1                 4823.21    5272
X1 10.38      34 4823.21 5293.86     173     143     162
GR  1432    4050    1432 4345.47    1434 4359.49    1436 4382.17    1436 4444.22
GR  1434 4514.59    1434 4523.97    1436 4605.62    1436 4667.41    1434 4710.47
GR  1434  4776.7 1435.99 4798.29 1435.82 4823.21    1434 4831.49    1432 4838.95
GR  1430 4845.97    1428 4854.29    1426 4860.89    1424  4952.8    1424    5000
GR  1424 5110.95    1426  5223.7    1428 5293.86    1430 5418.28    1432 5426.63
GR  1434 5436.09    1436 5445.55    1436 5462.06 1438.33 5462.07 1438.33 5463.07
GR  1436 5463.08    1436 5478.57 1435.96 5479.62    1434 5488.87
*
NC 0.035   0.035   0.035
ET           5.1                 4783.08 5262.74
X1 10.41      52 4791.83 5251.18     198     142     171
GR  1434    4064    1434 4072.38    1436  4078.9    1438 4083.68    1440 4114.64
GR  1442 4124.08    1444 4141.29    1444 4186.45    1442 4196.42    1438 4216.34
GR  1436 4223.27    1434 4229.95    1432 4236.99    1432 4370.62    1434 4373.56
GR  1436  4376.5    1438 4379.45    1440 4383.45    1440 4469.41    1438  4505.1
GR  1436 4516.74    1434 4526.64    1432 4535.95    1432 4754.33    1434 4759.91
GR1435.7 4764.94    1436 4772.28    1436 4782.06 1438.34 4782.07 1438.34 4783.07
GR  1436 4783.08    1436 4791.83    1434 4800.27    1432 4808.85    1430 4817.15
GR  1428  4863.1    1428    5000    1428 5071.88    1428 5119.31    1428 5202.52
GR  1430 5229.35    1432 5236.74    1434 5244.12    1436 5251.18    1436 5262.73
GR1438.9 5262.74  1438.9 5262.75    1436 5262.76    1436 5274.27    1434  5279.7
GR  1432 5285.08    1430  5290.4
*
ET           5.1                 4758.78 5239.41
X1 10.42      46 4772.17 5239.37      70      58      64
GR  1434    4057    1434 4122.12    1434 4141.01    1432 4192.42    1432 4500.07
GR  1434 4518.47    1436 4524.56    1438 4530.85    1438    4566    1436 4602.78
GR  1434 4617.91    1432 4648.14    1432 4733.89    1434  4738.7    1436 4743.37
GR  1436 4757.77    1439 4757.78    1439 4758.78    1436 4758.79    1436 4772.17
GR  1434 4781.27    1432  4790.3 1431.35 4793.22    1430 4857.83    1428  4863.2
GR  1426 4872.34    1426    5000    1426 5035.16    1428 5059.55    1430 5071.52
GR  1430 5178.76    1430  5209.5    1432  5217.1    1434 5224.61    1436 5232.04
GR  1438 5239.37    1438 5239.40  1439.8 5239.41  1439.8 5240.41    1438 5240.42
GR  1438 5240.71 1437.62 5260.38    1436 5263.54    1434 5267.47    1432 5271.31
GR  1430 5275.13
*
ET           5.1                 4717.29 5219.45
X1 10.51      85 4720.44 5201.75     439     487     472
GR  1434    4000    1432 4130.14    1428 4139.76    1426  4144.4    1424 4149.04
GR  1422 4153.68    1418 4208.59    1418 4223.25    1418  4230.6    1418 4282.85
GR  1418 4360.51    1416 4368.14    1414 4375.06    1412 4381.98    1408 4395.81
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GR  1406 4403.31    1404  4411.2    1402 4420.45    1398 4444.12    1396 4455.04
GR  1396 4458.71    1398 4462.24    1400 4465.78    1402  4469.3    1404  4472.7
GR  1406 4476.09    1406 4476.39    1404 4480.43    1402 4489.41    1400 4498.38
GR  1398 4511.86    1398 4523.62    1402 4606.66    1404 4619.36    1406 4625.57
GR  1408 4631.74    1412 4641.43    1414  4645.8    1416 4650.17    1418 4654.55
GR  1422 4663.24    1424 4666.88    1426 4670.52    1428 4674.16    1432 4681.45
GR  1434 4685.09    1436 4688.73    1438 4692.35    1440 4695.92    1440 4716.28
GR1443.2 4716.29  1443.2 4717.29 1440.66 4717.32    1440 4720.44    1438 4729.62
GR  1436  4738.8    1434 4747.98 1432.68 4754.05    1434 4795.05    1434 4811.47
GR  1432 4826.23    1430 4844.12    1428 4880.89    1428 4916.32    1428  4916.6
GR  1428 4924.94    1430 4975.63    1430 4993.27    1430    5000    1430 5004.42
GR  1430 5038.01    1430 5060.04    1432 5076.82    1434 5173.28    1436  5182.8
GR  1438 5192.33    1440 5201.75    1440 5219.44 1443.73 5219.45 1443.73 5220.45
GR1440.7 5220.46  1440.7 5237.12    1442 5243.12    1444 5251.74    1444  5270.2
*
NC 0.035    0.05   0.035
ET           5.1                 4664.91 5132.57
X1 10.62      87 4665.97 5128.07     535     618     596
GR  1438    4000    1438 4067.63    1438 4119.75    1438 4123.09    1436 4126.37
GR  1434 4129.64    1432 4132.91    1428 4139.57    1426 4142.92    1424 4157.62
GR  1422 4197.88    1422 4274.19    1422 4279.99    1418 4285.73    1416 4288.61
GR  1414 4291.48    1412 4294.36    1408  4300.1    1406 4302.98    1404 4305.85
GR  1402 4308.72    1398 4314.87    1396 4318.05    1394 4326.83    1392 4337.52
GR  1392  4407.2    1394 4430.83    1396 4477.86    1398 4520.73    1402 4551.89
GR  1404 4565.94    1406 4587.33    1408 4591.51    1412 4599.92    1414  4604.3
GR  1416 4608.68    1418 4613.06    1422 4621.46    1424 4625.35    1426 4629.24
GR  1428 4633.13    1432 4640.85    1434 4644.69    1436 4648.53    1438 4652.37
GR  1440 4656.21    1442 4660.05    1444 4663.89    1444 4663.90  1445.7 4663.91
GR1445.7 4664.91    1444 4664.92    1444 4665.97 1443.33 4681.76    1442 4687.65
GR  1440 4696.48    1438 4705.29 1436.53 4711.79    1436 4760.05    1434 4774.11
GR  1432  4791.7    1432 4792.06    1434 4804.84    1434 4812.38    1434 4844.64
GR  1434 4908.11    1432 4978.39    1430 4993.25    1430    5000    1430 5019.08
GR  1432 5025.21    1434 5047.48    1436 5072.96 1436.27 5078.41    1438 5088.52
GR  1440 5100.18    1442  5111.6    1444 5128.07 1444.34 5132.57    1446 5140.61
GR  1448  5150.2    1450 5159.88    1452 5169.67    1454 5179.15    1454 5200.76
GR  1454  5213.3    1456 5219.38
*
NC 0.035   0.035   0.035
ET           5.1                 4748.11  5211.3
X1 10.70      43 4759.88  5193.3     390     382     402
GR  1444    4000    1444 4038.07    1444 4066.66    1444 4284.59    1442 4345.59
GR  1440  4412.2    1440 4618.19    1442 4696.02 1442.67 4720.77    1444 4727.26
GR1446.2 4734.32  1446.2 4747.10 1448.10 4747.11 1448.10 4748.11  1446.2 4748.12
GR1446.2 4759.88    1444 4767.51    1442 4775.38 1440.89 4779.56    1440 4856.65
GR  1438 4908.41    1436 4929.27    1434 4963.32    1434    5000    1434 5015.86
GR  1436 5039.71    1436 5072.24    1436 5119.55    1438 5144.54    1440 5154.48
GR  1442 5163.53    1444 5172.15    1446 5188.42 1446.48  5193.3    1448 5197.69
GR  1450 5201.41    1452 5205.12    1454 5208.74 1455.47  5211.3    1456 5213.46
GR  1458 5222.24    1458 5238.92    1456 5256.86
*
ET           5.1                 4782.29 5310.03
X1 10.83      54  4800.8 5298.85     642     704     717
GR  1448    4234    1448 4375.81    1448 4583.91    1446 4610.95    1446  4656.3
GR  1446 4742.93 1444.39  4761.2    1446 4765.18    1448 4769.97    1450 4774.76
GR  1452 4779.31    1452 4781.28 1454.60 4781.29 1454.60 4782.29    1452 4782.30
GR  1452  4800.8    1450 4808.34    1448 4816.39    1446 4825.37    1444 4844.86
GR  1442 4867.57    1440 4888.99    1438 4911.48    1438  4931.3    1440 4955.08
GR  1440 4961.15    1440    5000    1440 5073.72    1442 5081.76    1444 5085.61
GR  1446 5088.41    1446 5095.29    1446 5268.61    1448  5283.3    1450 5291.33
GR  1452 5298.85    1452 5310.02 1454.25 5310.03 1454.25 5311.03    1452 5311.04
GR  1452 5321.19    1450 5325.84    1448 5330.48    1446  5352.1    1444  5429.4
GR  1442 5433.87    1442  5453.7    1442 5462.01    1440 5467.15    1438 5472.69
GR  1438 5487.43    1440 5493.52    1442 5499.62    1444 5505.79
*
ET           5.1                 4766.74    5290
X1 10.93      47 4790.58 5279.54     456     557     516
GR  1450    4075    1450 4401.05    1450 4472.44    1450 4658.68    1448 4685.74
GR  1446 4692.07    1446 4738.32    1448 4747.74    1450 4752.28    1452 4756.82
GR  1454 4761.36    1456 4765.91 1456.34 4766.74 1456.31  4782.2    1456 4783.11
GR  1454 4790.58    1452 4801.13    1450 4811.94    1448 4852.07    1446 4882.26
GR  1444  4895.5    1442 4901.64    1440 4907.78    1440 4909.75    1440    5000
GR  1442 5025.23    1444 5039.36    1446 5045.88    1448 5065.33    1448 5141.49
GR  1446 5151.73    1446 5160.63    1448    5249    1450 5259.77    1452 5267.62
GR  1454 5275.29  1455.1 5279.54 1458.23    5290 1458.23    5291  1455.6 5291.01
GR1455.6 5301.19    1454 5303.86    1452 5307.17    1450 5311.25    1448 5317.12
GR  1446 5322.99    1446 5329.64
*
* CONFLUENCE WITH BUCHANAN WASH
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ET          5.1                   4581.43 5120.83
X1 11.03      59 4598.63 5120.83     506     504     525
GR  1454    4082    1454  4316.5    1454 4398.81    1454 4405.76    1454 4444.05
GR  1454 4463.63    1452 4472.52    1452 4546.98    1452 4556.11 1451.02 4559.09
GR  1452 4561.67    1454 4566.38    1456 4571.08    1458 4575.79    1460 4580.49
GR1460.3 4581.43 1460.24 4597.21    1460 4598.63    1458 4606.22    1456 4613.78
GR  1454 4621.09    1452 4629.76    1450 4642.89    1449 4647.63    1448 4693.69
GR  1448 4736.54    1450 4814.76    1450 4864.18    1448 4942.71    1446 4949.67
GR  1444 4956.46    1442 4984.22    1442    5000    1442 5002.45    1444 5021.76
GR  1446 5026.06    1448  5043.9    1448 5055.01    1446 5062.54    1444 5069.86
GR  1442  5077.4    1442 5100.06    1444 5110.31    1446 5120.83    1448 5131.74
GR  1448 5143.33    1448 5159.14    1450 5172.98    1452 5186.65    1454    5200
GR  1456 5213.08    1458 5227.34    1460 5242.36 1460.78 5249.29  1460.5 5289.31
GR  1460 5290.38    1458 5301.57    1456 5314.34    1454 5329.62
*
NC 0.050   0.035   0.035
ET          5.1                   4762 5149.91
X1 11.14      32    4762 5149.91     606     610     606
GR  1460 4331.11    1460 4359.12    1458 4450.29    1456 4510.13    1454 4516.73
GR  1452 4523.33    1450 4529.82    1450 4653.75    1452 4685.50    1452    4762
GR  1452 4830.94    1450 4913.55    1450 4965.11    1448 4975.89    1448    5000
GR  1448 5056.87    1450 5060.92    1452 5064.99    1452 5097.48    1454 5121.70
GR  1456 5126.41    1458 5131.13    1460 5135.85    1462 5140.57    1464 5145.28
GR  1466 5149.91    1466 5173.09    1464 5177.70    1462 5182.56    1460 5187.75
GR  1458 5192.64    1456 5197.53
*
* BEGIN CORPS LEVEES
NC 0.035   0.035   0.020
ET          5.1                   4825.06 5165.90
X1 11.19      80 4825.06 5161.07     277     212     225
GR1466.0 4799.55 1466.00 4823.70 1466.00 4825.06 1465.44 4826.50 1464.00 4830.18
GR1463.6 4831.26 1462.00 4835.30 1461.78 4835.87 1460.47 4839.23 1460.00 4840.18
GR1459.8 4840.67 1458.00 4844.27 1457.08 4846.17 1456.00 4848.37 1454.68 4851.08
GR1454.0 4852.47 1452.35 4858.63 1452.00 4861.70 1452.00 4865.26 1452.00 4867.38
GR1452.0 4906.20 1452.00 4944.98 1452.00 4945.21 1452.00 4948.20 1452.00 4955.59
GR1452.0 4974.23 1452.00 4983.63 1452.00 5000.00 1452.00 5052.40 1452.00 5075.88
GR1452.0 5079.43 1452.00 5080.15 1452.00 5083.16 1452.00 5085.12 1452.21 5091.07
GR1452.2 5091.41 1452.82 5104.84 1453.40 5118.66 1453.68 5124.97 1454.00 5131.82
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GR1464.7 5158.02 1466.00 5161.07 1466.79 5162.98 1468.00 5165.90 1468.00 5172.97
GR1468.0 5198.33 1468.00 5198.71 1468.00 5208.06 1467.82 5208.79 1467.42 5210.39
GR1466.0 5213.89 1464.59 5217.33 1464.00 5218.79 1462.10 5223.33 1462.00 5223.58
GR1461.9 5223.73 1460.00 5228.27 1459.05 5230.49 1458.00 5232.96 1456.96 5238.16
GR1456.5 5239.87 1456.32 5241.27 1456.00 5249.77 1456.00 5262.87 1455.84 5273.99
GR1456.0 5290.85 1456.15 5294.26 1456.26 5305.86 1456.31 5328.45 1456.18 5342.81
*
ET          5.1                   4827.39 5184.66
X1 11.29      94 4827.39 5184.66     486     591     536
GR1458.6 4498.36 1458.15 4531.48 1458.00 4544.39 1457.54 4552.02 1456.00 4556.76
GR1455.7 4557.78 1454.54 4561.02 1454.00 4562.59 1454.00 4605.58 1454.95 4629.82
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GR1457.5 4684.77 1456.93 4728.58 1456.76 4749.58 1457.01 4757.49 1457.65 4782.78
GR1458.0 4791.03 1459.18 4795.59 1460.00 4799.16 1461.62 4803.60 1462.00 4804.63
GR1462.5 4805.93 1464.00 4810.36 1464.90 4812.84 1466.00 4815.95 1466.99 4818.67
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GR1463.4 5215.12 1462.00 5218.65 1460.33 5224.18 1460.00 5225.24 1459.63 5239.24
GR1459.4 5247.72 1459.19 5284.15 1459.63 5287.69 1460.00 5297.44 1461.23 5325.09
GR1462.0 5340.83 1463.27 5373.45 1463.76 5392.61 1463.91 5397.59 1464.00 5403.23
GR1464.0 5404.95 1463.47 5430.53 1463.48 5446.78 1463.10 5468.14 1463.01 5472.72
GR1462.8 5480.65 1462.48 5495.44 1462.00 5521.62 1462.00 5562.61
*
ET          5.1                   4826.47 5170.48
X1 11.39      88 4826.47 5170.48     520     577     548
GR1463.4 4540.53 1462.24 4575.55 1462.00 4587.19 1461.52 4589.31 1460.82 4592.35
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GR1471.0 5187.97 1470.52 5189.60 1470.00 5191.33 1469.06 5193.63 1468.00 5196.22
GR1466.9 5199.00 1466.00 5201.12 1464.50 5204.79 1464.00 5205.96 1463.56 5227.10
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GR1466.0 5520.78 1466.48 5534.57 1467.00 5553.06
*
ET           5.1                  4831.85 5174.56
X1 11.48      93 4831.85 5174.56     443     532     487
GR1469.5 4463.12 1470.00 4514.20 1470.67 4526.19 1472.00 4532.14 1472.00 4536.27
GR1471.2 4545.52 1472.00 4549.52 1471.16 4556.05 1470.89 4562.81 1470.59 4569.92
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GR1468.6 4709.20 1468.27 4720.52 1468.00 4733.02 1467.35 4737.19 1467.59 4745.21
GR1467.3 4752.17 1466.00 4781.13 1465.37 4784.00 1465.14 4788.41 1465.46 4789.08
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GR1469.1 4801.97 1469.53 4803.27 1470.00 4804.79 1472.00 4813.30 1472.00 4827.27
GR1471.5 4828.31 1470.00 4831.85 1469.59 4832.79 1468.00 4836.43 1467.65 4837.23
GR1466.0 4841.01 1465.73 4841.62 1464.00 4845.59 1463.85 4845.93 1462.31 4849.46
GR1462.0 4850.16 1461.96 4850.24 1460.00 4854.68 1459.78 4855.19 1458.00 4859.04
GR1456.8 4861.86 1456.00 4863.63 1454.62 4866.83 1454.00 4868.24 1454.00 4891.27
GR1454.5 4982.94 1454.00 5000.00 1454.00 5139.53 1455.68 5143.25 1456.00 5143.95
GR1457.7 5147.78 1458.00 5148.36 1459.81 5152.35 1460.00 5152.78 1461.90 5156.97
GR1462.0 5157.19 1463.56 5160.62 1464.00 5161.59 1466.00 5165.91 1468.00 5170.24
GR1468.3 5170.98 1470.00 5174.56 1471.57 5177.96 1472.00 5179.19 1472.00 5194.00
GR1470.3 5199.62 1470.00 5200.65 1468.88 5204.39 1468.00 5207.39 1467.56 5217.72
GR1466.9 5233.75 1466.58 5241.08 1466.33 5246.90 1466.40 5250.99 1466.61 5264.73
GR1467.0 5289.91 1467.20 5306.66 1467.34 5341.05 1467.60 5361.43 1467.94 5383.99
GR1467.8 5395.19 1467.56 5419.40 1468.00 5430.41
*
* END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17
ET           5.1                  4845.32 5152.45
X1 11.56      87 4845.32 5152.45     386     396     390
GR1471.8 4676.86 1471.19 4685.14 1470.77 4690.44 1470.54 4693.47 1470.29 4696.28
GR1470.3 4700.82 1470.50 4703.37 1470.83 4707.69 1471.29 4713.13 1472.00 4721.56
GR1472.0 4845.32 1470.73 4853.22 1470.34 4856.19 1470.00 4857.83 1469.42 4859.18
GR1468.0 4862.39 1467.55 4863.42 1466.00 4867.01 1464.74 4869.91 1464.00 4871.63
GR1462.4 4875.29 1462.00 4876.26 1460.24 4880.32 1460.00 4880.88 1459.55 4891.07
GR1459.2 4900.27 1459.14 4911.50 1459.18 4917.72 1459.27 4936.45 1459.28 4951.90
GR1459.3 4956.77 1459.32 4970.56 1459.36 4977.34 1459.35 4986.98 1459.40 5000.00
GR1459.5 5006.02 1459.50 5012.85 1459.48 5022.30 1459.43 5032.20 1459.31 5049.20
GR1459.3 5049.41 1459.31 5049.51 1459.31 5049.72 1459.30 5060.17 1459.48 5072.34
GR1459.5 5084.60 1459.48 5091.51 1459.47 5098.77 1459.30 5109.95 1459.40 5114.80
GR1459.6 5117.41 1459.59 5117.63 1460.00 5124.33 1461.59 5127.25 1461.65 5127.38
GR1462.0 5128.28 1462.29 5129.00 1462.54 5129.65 1463.39 5131.68 1464.00 5133.13
GR1465.0 5135.40 1466.00 5137.90 1466.70 5139.56 1468.00 5142.66 1468.53 5143.93
GR1470.0 5147.43 1470.90 5149.69 1472.00 5152.45 1472.00 5165.70 1471.55 5168.67
GR1471.2 5170.75 1470.00 5178.38 1470.00 5225.76 1470.27 5226.00 1472.00 5227.56
GR1472.5 5228.46 1472.76 5229.77 1472.00 5233.24 1471.71 5234.57 1471.42 5235.87
GR1471.4 5236.02 1470.93 5237.02 1470.00 5239.41 1470.00 5268.37 1470.59 5293.04
GR1470.9 5296.51 1471.02 5306.55
*
* OUTLET OF I-17 CROSSING
ET           5.1                  4880.47 5126.63
X1 11.57      92 4880.47 5126.63      72      75      73
GR1470.8 4670.15 1471.04 4676.02 1471.81 4692.20 1472.00 4696.83 1472.63 4707.63
GR1472.8 4711.11 1473.05 4715.60 1473.66 4746.09 1473.57 4751.49 1473.41 4760.54
GR1474.0 4769.16 1474.00 4816.39 1473.19 4827.23 1472.71 4833.86 1472.64 4834.85
GR1472.0 4844.37 1472.00 4861.16 1472.54 4870.52 1472.00 4880.47 1471.79 4880.62
GR1470.1 4881.77 1470.00 4881.79 1468.35 4882.11 1468.00 4882.18 1466.41 4882.49
GR1466.0 4882.57 1464.43 4882.88 1464.00 4882.96 1462.45 4883.27 1462.00 4883.35
GR1461.6 4896.00 1461.53 4899.52 1461.22 4909.97 1461.03 4926.96 1460.86 4934.09
GR1460.6 4946.27 1460.36 4961.63 1460.29 4993.04 1460.30 5000.00 1460.41 5002.11
GR1460.5 5010.81 1460.63 5019.07 1461.14 5020.57 1461.34 5048.98 1461.18 5074.02
GR1460.9 5090.68 1461.37 5103.14 1461.81 5115.32 1461.86 5116.93 1462.00 5120.67
GR1462.6 5120.78 1464.00 5121.06 1464.40 5121.17 1466.00 5121.48 1466.51 5121.56
GR1467.1 5121.69 1468.00 5121.86 1469.43 5122.14 1470.00 5122.25 1470.50 5123.25
GR1471.7 5125.87 1472.00 5126.63 1472.00 5154.31 1471.46 5159.70 1470.38 5170.04
GR1470.4 5174.42 1470.49 5174.60 1470.77 5175.42 1472.00 5179.41 1472.00 5180.09
GR1471.6 5182.32 1470.00 5193.35 1470.00 5209.59 1470.38 5210.71 1471.63 5215.00
GR1472.0 5216.25 1472.00 5216.38 1472.00 5218.35 1471.83 5219.05 1470.00 5223.24
GR1470.0 5225.98 1470.22 5226.92 1470.00 5227.88 1470.00 5234.90 1470.81 5241.05
GR1470.8 5241.43 1471.05 5249.44 1470.99 5250.35 1470.90 5250.66 1470.72 5261.88
GR1471.0 5291.96 1471.60 5306.88
```

*
EJ
ER

1% Annual Chance Flood

Main Channel (X3 Card Option)

Output File: mainbas.out

```
1*******************************************
 *  HEC-2 WATER SURFACE PROFILES            *
 *                                          *
 *  Version   4.6.2;  May 1991              *
 *                                          *
 *  RUN DATE    15SEP04    TIME   15:22:46  *
 *******************************************
```

```
*****************************************
*  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
```

1

15SEP04 15:22:46

THIS RUN EXECUTED 15SEP04 15:22:46

```
*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
```

```
T1    MODIFIED SKUNK CREEK FLOODPLAIN STUDY - SKUNK CREEK FROM ADOBE DAM TO I-17
T2    INPUT FILE: mainbar.dat       100-YR FLOOD ELEVATION
T3    ORIGINAL MODEL SKNKLOMR.IH2 BY TETRA TECH, INC. SEPTEMBER 2002
T4    October 2003 EMCON/OWT Inc.

      At the request of FEMA we have revisited the ineffective flow modeling
      technique for the area in the vicinity of STA 9.45 to 9.65 to use the
      X3 card and demonstrate that no change in the WSE occurs.
```

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2			0		0	0	1378.00	

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

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38 43 1 2 26 8 4 25 68 53
54

100-yr peak discharge is from effective FIS study.

QT	1	38888								
NC	0.045	0.045	0.035	0.1	0.3					
ET		5.1			3796.61	5556.89				
X1	8.69	95	4025.25	5073.77						
GR	1380.0	3796.61	1380.00	3854.47	1379.00	3861.47	1378.00	3868.42	1378.00	3878.69
GR	1378.6	3884.04	1380.00	3896.01	1380.00	3907.92	1379.82	3923.26	1379.91	3925.58
GR	1380.0	4002.41	1380.54	4004.61	1382.00	4011.19	1382.00	4016.12	1381.16	4025.25
GR	1380.0	4037.88	1379.55	4039.54	1378.00	4045.04	1376.66	4058.92	1376.33	4063.23
GR	1376.0	4067.80	1375.66	4071.80	1374.51	4084.66	1374.14	4088.53	1374.00	4090.42
GR	1373.8	4091.18	1373.53	4092.99	1372.00	4102.33	1371.23	4129.14	1370.00	4171.62
GR	1370.0	4446.38	1370.04	4448.91	1372.00	4550.37	1372.00	4583.65	1371.80	4601.95
GR	1371.2	4726.77	1371.45	4741.81	1371.10	4787.06	1371.00	4796.71	1370.54	4837.32
GR	1370.6	4872.36	1370.52	4876.45	1370.60	4881.98	1370.60	4882.00	1370.82	4897.47
GR	1371.4	4906.65	1371.83	4913.95	1372.00	4917.45	1372.34	4920.12	1374.00	4933.03
GR	1374.3	4936.71	1374.00	4958.00	1373.51	4959.38	1372.00	4963.60	1371.80	4964.16
GR	1370.0	4969.21	1368.37	4973.77	1368.00	4974.80	1366.00	4980.35	1365.56	4981.39

1

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GR	1364.7	4987.21	1364.21	4990.25	1364.00	4992.46	1364.00	5000.00	1364.00	5003.25
GR	1365.5	5010.85	1365.78	5012.36	1366.00	5013.46	1366.52	5014.69	1368.00	5018.15
GR	1368.3	5018.85	1370.00	5022.82	1370.70	5024.49	1372.00	5027.49	1373.05	5031.15
GR	1374.0	5034.40	1375.00	5039.27	1376.00	5044.17	1376.23	5045.52	1377.39	5052.81
GR	1378.0	5059.14	1378.78	5065.36	1379.49	5073.77	1379.70	5074.11	1379.26	5077.51
GR	1378.7	5079.93	1378.00	5082.02	1378.00	5116.40	1378.13	5146.24	1378.00	5177.10
GR	1378.0	5181.33	1377.50	5273.67	1377.18	5375.38	1377.56	5451.37	1377.29	5556.89

QT	1	38875								
ET		5.1			3855.70	5475.95				
X1	8.79	89	4095.41	5039.30	530	546	539			
GR	1384.0	3855.70	1384.00	3973.82	1382.64	3980.66	1384.00	3998.09	1382.65	4051.20
GR	1382.6	4058.69	1382.49	4060.23	1382.89	4064.63	1384.00	4067.90	1384.00	4095.41
GR	1382.2	4107.84	1382.00	4109.37	1380.85	4117.39	1380.00	4123.50	1378.49	4137.14
GR	1378.0	4141.55	1376.51	4154.98	1376.00	4159.65	1374.00	4171.01	1373.84	4176.47
GR	1372.0	4222.80	1372.00	4265.74	1371.40	4267.19	1370.00	4271.65	1370.02	4277.10
GR	1370.5	4303.75	1372.00	4387.79	1372.60	4464.89	1373.01	4509.16	1373.45	4564.23
GR	1373.6	4589.91	1374.00	4659.42	1374.00	4677.54	1373.79	4707.25	1374.00	4731.92
GR	1375.0	4815.01	1375.48	4838.28	1375.82	4866.71	1375.01	4881.51	1374.70	4887.04

GR	1374.0	4898.81	1374.00	4914.20	1376.00	4932.06	1377.09	4941.83	1377.77	4948.33
GR	1378.0	4950.51	1378.00	4973.99	1377.74	4974.57	1376.00	4978.35	1375.92	4978.54
GR	1375.3	4979.92	1374.00	4982.54	1373.68	4983.19	1372.00	4986.64	1371.40	4987.87
GR	1370.0	4990.74	1369.23	4992.31	1368.00	4994.83	1367.12	4996.63	1366.00	4998.93
GR	1366.0	5000.00	1367.19	5002.89	1368.00	5004.26	1369.43	5006.66	1370.00	5007.63
GR	1371.8	5010.72	1372.00	5011.01	1372.55	5011.93	1374.00	5014.64	1374.46	5015.50
GR	1376.0	5018.37	1377.54	5024.62	1378.00	5026.26	1378.19	5027.55	1378.48	5029.47
GR	1380.0	5039.30	1380.47	5053.53	1381.00	5070.14	1381.05	5074.82	1381.51	5092.11
GR	1381.8	5130.27	1381.56	5144.28	1381.81	5200.42	1381.90	5207.46	1381.92	5219.18
GR	1382.0	5303.86	1382.00	5320.81	1381.88	5345.60	1381.56	5475.95		

QT	1	37676								
ET		5.1			4279.99	5437.79				
X1	8.93	71	4541.12	5252.00	565	711	722			
GR	1386.3	4279.99	1386.00	4295.47	1386.34	4315.43	1386.00	4350.00	1385.51	4354.32
GR	1386.0	4371.17	1386.00	4454.56	1386.25	4457.97	1387.66	4480.76	1388.00	4485.92
GR	1388.0	4526.66	1386.72	4541.12	1386.00	4552.20	1385.40	4560.69	1385.02	4564.36
GR	1384.5	4569.41	1384.00	4573.51	1382.63	4586.39	1382.43	4588.53	1382.00	4594.51
GR	1381.7	4598.20	1380.48	4604.38	1380.00	4606.94	1379.91	4608.36	1378.58	4632.57
GR	1378.0	4639.26	1376.00	4653.50	1375.35	4704.64	1374.00	4828.12	1373.68	4850.43
GR	1373.1	4888.01	1372.88	4901.73	1372.00	4950.77	1371.17	4970.32	1370.00	4996.16
GR	1370.1	5000.00	1370.40	5014.94	1370.52	5018.25	1370.89	5033.81	1371.01	5037.53
GR	1371.3	5046.38	1371.00	5056.40	1370.55	5068.53	1370.60	5102.71	1370.78	5109.11
GR	1371.1	5116.39	1371.60	5131.46	1372.00	5139.38	1373.19	5146.05	1373.89	5149.69
GR	1374.0	5150.47	1374.30	5152.78	1374.67	5155.69	1376.00	5166.46	1376.39	5169.57
GR	1378.0	5182.62	1379.50	5195.03	1380.00	5200.27	1380.58	5207.92	1381.76	5224.62
GR	1382.0	5227.77	1382.80	5252.00	1384.00	5330.07	1384.00	5333.71	1384.91	5347.75
GR	1386.0	5362.52	1386.60	5376.48	1386.90	5391.40	1387.03	5397.63	1387.24	5419.21
GR	1387.0	5437.79								

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QT	1	37207								
ET		5.1			4519.91	5433.52				
X1	9.01	81	4817.29	5340.88	363	558	430			
GR	1388.4	4519.91	1388.00	4559.91	1388.00	4561.41	1388.84	4570.06	1388.45	4571.71
GR	1388.0	4573.70	1388.00	4576.09	1388.46	4578.03	1388.77	4579.51	1388.28	4582.90
GR	1388.0	4583.57	1388.00	4677.39	1388.26	4681.88	1389.30	4700.64	1389.76	4708.44
GR	1389.3	4717.62	1388.98	4718.21	1388.52	4718.22	1388.00	4721.78	1387.37	4732.92
GR	1387.1	4737.05	1386.95	4738.08	1386.40	4758.07	1386.64	4764.66	1386.86	4770.00
GR	1387.0	4774.77	1387.38	4799.17	1387.08	4803.47	1386.92	4804.87	1386.44	4811.50
GR	1386.0	4817.29	1384.00	4825.73	1383.63	4827.33	1382.00	4834.13	1380.26	4841.49
GR	1380.0	4842.58	1379.21	4845.86	1378.00	4850.84	1376.45	4856.91	1376.00	4858.68
GR	1375.8	4859.41	1374.00	4866.60	1373.72	4878.11	1373.33	4898.38	1373.06	4911.20
GR	1372.9	4920.39	1372.51	4939.85	1372.35	4949.90	1372.19	4962.38	1372.32	4994.02
GR	1372.4	5000.00	1372.50	5005.13	1373.08	5052.28	1373.49	5089.07	1373.86	5118.83
GR	1374.0	5130.57	1375.57	5137.72	1376.00	5139.67	1377.54	5146.76	1378.00	5149.27
GR	1379.4	5157.21	1380.00	5161.68	1380.57	5169.64	1380.83	5173.36	1380.91	5174.01

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GR   1381.2    5177.53    1381.59    5182.69    1382.00    5188.14    1382.37    5193.51    1383.14    5206.05
GR   1384.0    5217.34    1385.32    5244.41    1385.68    5252.28    1386.00    5257.06    1387.77    5292.41
GR   1388.0    5296.60    1388.84    5320.16    1389.58    5340.88    1389.68    5346.00    1390.00    5351.31
GR   1390.0    5433.52

QT        1      31427
ET                 5.1                           4515.30    5233.18
X1     9.08         70    4796.92    5198.84        432        165        365
GR   1391.1    4515.30    1390.24    4539.50    1390.00    4540.45    1390.00    4625.97    1390.21    4628.50
GR   1390.6    4632.33    1390.69    4632.97    1390.44    4647.05    1390.08    4647.52    1390.00    4647.64
GR   1389.6    4649.23    1388.00    4655.18    1388.00    4670.31    1388.16    4671.07    1388.14    4787.35
GR   1388.0    4796.92    1387.24    4809.20    1386.69    4817.41    1386.00    4827.18    1384.79    4833.74
GR   1384.0    4837.38    1383.79    4838.28    1382.78    4842.68    1382.00    4845.64    1381.40    4847.91
GR   1380.0    4853.19    1378.86    4857.51    1378.00    4860.75    1377.03    4864.25    1376.00    4868.13
GR   1375.1    4871.58    1374.00    4875.67    1373.97    4878.43    1373.92    4884.08    1373.76    4895.74
GR   1373.7    4902.64    1373.65    4905.82    1373.59    4911.57    1373.49    4920.43    1373.47    5000.00
GR   1373.5    5095.48    1373.56    5107.93    1373.59    5109.03    1373.62    5112.59    1373.70    5119.31
GR   1373.8    5122.87    1373.82    5124.67    1373.85    5126.00    1373.92    5128.16    1373.94    5130.06
GR   1374.0    5131.14    1374.13    5131.77    1376.00    5140.79    1377.41    5147.57    1378.00    5150.02
GR   1378.6    5152.38    1380.00    5158.25    1381.29    5163.54    1382.00    5166.47    1383.45    5172.44
GR   1384.0    5174.70    1385.73    5181.83    1386.00    5182.93    1387.10    5187.46    1388.00    5190.99
GR   1388.1    5191.61    1389.08    5195.22    1390.00    5198.84    1390.04    5199.45    1390.27    5233.18

QT        1      27780
NC    0.035      0.035      0.035
ET                 5.1                           4525.85    5437.55
X1     9.14         94    4835.60    5165.24        288        385        333
GR   1392.1    4525.85    1392.00    4598.96    1391.59    4608.73    1390.99    4723.68    1391.42    4775.78
GR   1391.5    4789.87    1391.64    4805.14    1391.00    4830.80    1390.59    4832.90    1390.00    4835.60
GR   1389.7    4836.69    1389.00    4839.12    1388.44    4841.11    1388.00    4842.60    1387.57    4843.96
GR   1387.0    4845.55    1386.47    4846.70    1386.00    4847.68    1385.71    4848.28    1385.00    4849.75
GR   1384.7    4850.41    1384.00    4851.87    1383.84    4852.20    1383.32    4853.25    1383.00    4853.91
GR   1382.8    4854.33    1382.00    4856.07    1381.65    4856.77    1381.00    4858.07    1380.00    4860.14
GR   1379.7    4861.00    1379.19    4861.98    1379.00    4862.42    1378.49    4863.58    1378.00    4864.71
GR   1377.4    4866.13    1377.00    4867.28    1376.43    4869.03    1376.00    4869.56    1375.54    4872.43
1
   15SEP04      15:22:46                                                                                PAGE     4

GR   1374.5    4874.14    1374.00    4875.08    1374.00    5000.00    1374.00    5062.13    1374.39    5091.47
GR   1375.0    5121.35    1375.00    5125.45    1375.71    5129.68    1376.00    5131.10    1376.94    5133.66
GR   1377.0    5134.06    1377.77    5135.68    1378.00    5136.16    1379.00    5138.25    1379.92    5140.18
GR   1380.0    5140.35    1380.80    5142.03    1381.00    5142.44    1381.45    5143.38    1382.00    5144.53
GR   1382.9    5146.34    1383.00    5146.63    1383.72    5148.14    1384.00    5148.75    1384.46    5149.37
GR   1385.0    5150.09    1385.25    5150.43    1386.00    5151.41    1386.80    5152.48    1387.00    5152.75
GR   1387.2    5153.56    1388.00    5156.83    1388.60    5159.29    1389.00    5160.92    1389.34    5162.35
GR   1389.7    5164.16    1390.00    5165.24    1390.00    5165.45    1390.42    5166.34    1391.00    5168.32
GR   1391.8    5170.94    1391.91    5171.50    1392.00    5171.73    1392.22    5174.81    1392.64    5180.92
GR   1393.0    5184.53    1392.55    5196.46    1392.91    5224.81    1392.45    5256.91    1392.29    5293.65
GR   1392.1    5328.16    1392.00    5380.42    1392.00    5416.53    1391.87    5437.55
```

DOWNSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT	1	27780								
X1	9.145	66	5015	5325	8	8	8			
X3	10	0	0	0	0	0	0	1392.2	1393.1	
BT	-16	5015	1394.5	1394.5	5015.01	1394.5	1390	5045	1394.8	1390.3
BT		5085	1395.2	1390.7	5088.75	1395.2	1390.8	5093.75	1395.3	1390.8
BT		5125	1395.6	1391.1	5170	1395.7	1391.2	5205	1395.7	1391.2
BT		5245	1395.5	1391	5246.25	1395.5	1391	5251.25	1395.5	1391
BT		5285	1395.2	1390.7	5295	1395.1	1390.6	5324.99	1394.7	1390.2
BT		5325	1394.7	1394.7						
GR	1395.6	3767.9	1395.5	3820.9	1395.4	3873.6	1395.4	3891.5	1395.4	3939.2
GR	1395.2	3990.7	1395.4	4052.6	1395.4	4113.7	1395.3	4176.6	1395.1	4229.3
GR	1395.1	4287.4	1394.9	4334.4	1394.8	4385.2	1394.7	4450.4	1394.8	4489.6
GR	1394.5	4524.7	1394.1	4576.1	1394	4617.7	1393.7	4656.6	1393.2	4693.1
GR	1393.1	4730.9	1392.4	4761	1392.2	4821	1392.4	4881	1393.59	4956
GR	1394.4	5006	1394.5	5015	1390	5015.01	1374.94	5045	1374.94	5085
GR	1374.9	5088.74	1390.80	5088.75	1390.80	5093.75	1374.94	5093.76	1374.94	5125
GR	1374.9	5167.49	1391.2	5167.5	1391.2	5170	1391.2	5172.5	1374.94	5172.51
GR	1374.9	5205	1374.94	5245	1374.94	5246.24	1391	5246.25	1391	5251.25
GR	1374.9	5251.26	1374.94	5285	1374.94	5295	1390.2	5324.99	1394.7	5325
GR	1394.8	5326	1393.95	5376	1393.27	5453	1393.07	5520	1393.1	5541.9
GR	1392.9	5588.6	1392.7	5636.9	1392.7	5681.4	1392.5	5740.6	1392.6	5796.6
GR	1392.6	5855.7	1392.4	5922.7	1392.3	5988	1392.3	6032.1	1392.1	6079.5
GR	1392.1	6085								

UPSTREAM FACE OF PINNACLE PEAK ROAD BRIDGE

QT	1	27780								
X1	9.155	66	5015	5325	80.2	80.2	80.2			
X3	10	0	0	0	0	0	0	1392.2	1393.1	
BT	-16	5015	1394.5	1394.5	5015.01	1394.5	1390	5045	1394.8	1390.3
BT		5085	1395.2	1390.7	5088.75	1395.2	1390.8	5093.75	1395.3	1390.8
BT		5125	1395.6	1391.1	5170	1395.7	1391.2	5205	1395.7	1391.2
BT		5245	1395.5	1391	5246.25	1395.5	1391	5251.25	1395.5	1391
BT		5285	1395.2	1390.7	5295	1395.1	1390.6	5324.99	1394.7	1390.2
BT		5325	1394.7	1394.7						
GR	1395.6	3767.9	1395.5	3820.9	1395.4	3873.6	1395.4	3891.5	1395.4	3939.2
GR	1395.2	3990.7	1395.4	4052.6	1395.4	4113.7	1395.3	4176.6	1395.1	4229.3
GR	1395.1	4287.4	1394.9	4334.4	1394.8	4385.2	1394.7	4450.4	1394.8	4489.6
GR	1394.5	4524.7	1394.1	4576.1	1394	4617.7	1393.7	4656.6	1393.2	4693.1
GR	1393.1	4730.9	1392.4	4761	1392.2	4821	1392.4	4881	1393.59	4956
GR	1394.4	5006	1394.5	5015	1390	5015.01	1375.14	5045	1375.14	5085
GR	1375.1	5088.74	1390.8	5088.75	1390.8	5093.75	1375.14	5093.76	1375.14	5125

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GR	1375.1	5167.49	1391.2	5167.5	1391.2	5170	1391.2	5172.5	1375.14	5172.51
GR	1375.1	5205	1375.14	5245	1375.14	5246.24	1391	5246.25	1391	5251.25
GR	1375.1	5251.26	1375.14	5285	1375.14	5295	1390.2	5324.99	1394.7	5325
GR	1394.8	5326	1393.95	5376	1393.27	5453	1393.07	5520	1393.1	5541.9
GR	1392.9	5588.6	1392.7	5636.9	1392.7	5681.4	1392.5	5740.6	1392.6	5796.6

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GR   1392.6     5855.7     1392.4     5922.7     1392.3       5988     1392.3     6032.1     1392.1     6079.5
GR   1392.1       6085


QT        1      27780
ET                 5.1                           4528.66     5445.27
X1     9.16         89    4852.56    5164.29          8          8          8
GR   1392.6    4528.66    1392.16    4581.89    1392.81    4592.32    1392.00    4643.39    1391.85    4708.61
GR   1392.0    4756.55    1392.50    4805.50    1392.00    4836.76    1391.23    4838.82    1391.00    4839.41
GR   1390.5    4842.05    1390.00    4852.56    1389.00    4854.43    1388.00    4856.29    1387.00    4857.94
GR   1386.0    4859.59    1385.00    4861.24    1384.00    4862.89    1383.40    4863.88    1383.00    4864.54
GR   1382.5    4865.33    1382.00    4866.18    1381.00    4867.82    1380.61    4868.61    1380.00    4869.92
GR   1379.8    4870.35    1379.00    4872.01    1378.40    4873.27    1378.00    4874.11    1377.29    4875.60
GR   1377.0    4876.20    1376.18    4877.92    1376.00    4878.30    1375.00    4880.39    1374.81    4915.05
GR   1374.0    4961.04    1374.20    5000.00    1374.50    5083.02    1374.70    5107.91    1375.00    5129.31
GR   1375.6    5132.84    1376.00    5135.04    1377.00    5138.70    1378.00    5140.93    1379.00    5142.76
GR   1379.6    5143.88    1380.00    5144.79    1380.41    5145.63    1381.00    5146.82    1381.33    5147.49
GR   1382.0    5148.85    1382.47    5149.81    1383.64    5152.18    1384.00    5152.91    1384.55    5154.02
GR   1385.0    5154.94    1386.00    5156.58    1386.42    5157.20    1387.00    5158.07    1388.00    5161.31
GR   1388.6    5162.08    1389.00    5162.75    1389.58    5163.63    1390.00    5164.29    1390.52    5165.66
GR   1390.7    5169.65    1390.00    5170.91    1390.00    5171.15    1390.65    5172.70    1391.00    5173.49
GR   1391.5    5174.67    1392.00    5175.74    1392.49    5177.88    1393.00    5180.15    1393.00    5215.17
GR   1392.8    5239.51    1393.00    5302.86    1393.00    5330.00    1393.00    5335.30    1393.52    5343.99
GR   1394.0    5352.89    1394.20    5356.22    1394.67    5363.95    1395.00    5372.98    1395.00    5394.93
GR   1394.9    5404.04    1394.00    5430.80    1393.15    5432.47    1393.36    5445.27

  BOTTOM OF DROP STRUCTURE

QT        1      27780
NC    0.035      0.035      0.020
ET                 5.1                            4732     5190.05
X1     9.21          7       4732    5174.57       145         355        279
GR     1389       4732       1376       4765      1376        4901       1376       5000       1376    5140.72
GR     1391    5174.57       1392    5190.05

  TOP OF DROP STRUCTURE

QT        1      27780
NC    0.040      0.035      0.035
ET                 5.1                            4664     5314.09
X1     9.22         14       4664    5192.98       122         104         39
GR     1395       4664       1390       4708      1390     4871.20       1390       5000       1390    5167.75
GR     1391    5173.76       1392    5177.14      1393     5179.36       1394    5181.58       1395    5184.44
GR     1396    5187.36       1397    5192.98      1398     5219.20       1399    5314.09
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QT        1      27780
ET                 5.1                           4572.95     5304.55
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                                                        MAINBAR
X1      9.25        45      4825    5285.60       155        82       141
GR      1400      3023    1399.1       3123    1397.6      3223    1395.8      3323    1392.7      3423
GR      1392      3523      1393       3623    1393.6      3723    1393.5      3762      1394      3874
GR      1394      3898      1394    4003.81      1394   4062.18      1395   4283.87      1395   4298.29
GR      1395   4301.25      1395    4365.84      1395    4385.4    1395.7   4563.07      1395   4565.34
GR      1395   4570.45   1395.57    4572.95   1395.46   4582.97      1395   4585.82      1395   4590.84
GR      1395   4598.19      1395    4614.18      1395   4621.31      1394   4735.08      1394   4738.18
GR      1394   4838.32      1393    4871.51      1392   4892.27      1392      5000      1392    5077.8
GR      1393   5179.38      1394    5266.49      1395   5275.95      1396   5278.52      1397   5281.09
GR      1398   5283.83   1398.64     5285.6      1399   5290.86      1400   5304.55      1399   5325.36

  END FLOW SPLIT; RETURN TO FULL FLOW

QT        1     39000
ET                5.1                         4441.50   5290.19
X1      9.30        52    4779.69    5280.97       262       282       261
GR    1401.5      2940    1402.6       2970    1400.5      3070    1398.6      3170      1397      3270
GR      1394      3370      1394       3470      1394      3570      1394      3670    1394.8      3770
GR      1395      3820      1394       3930      1394   4045.09      1395   4108.19      1395      4117
GR      1396   4323.15   1396.42    4425.34      1396   4429.71      1396   4434.42      1396    4441.5
GR      1396   4445.67      1396     4449.8      1395   4453.93   1394.13   4458.61      1394   4462.74
GR      1393   4494.69      1393    4512.86      1394   4520.79      1395   4539.92      1395   4544.55
GR      1395   4549.38      1396    4554.31      1397    4672.3      1397   4703.41      1397   4730.49
GR      1397   4737.81    1396.5       4750      1396   4768.57      1395   4779.69      1394    4811.1
GR      1393    4973.9      1393       5000      1393   5090.01      1394   5237.22      1395   5265.28
GR      1395   5270.89      1396    5273.07      1397   5275.25      1398   5277.47      1399   5279.81
GR    1399.5   5280.97      1400    5290.19

ET                5.1                         4252.38   5287.77
X1      9.35        64      4775    5275.88       291       274       274
GR    1403.4      2913      1404       2963    1401.9      3063    1400.6      3163    1399.1      3263
GR      1396      3363      1396       3463    1394.8      3563    1395.2      3663      1396      3763
GR      1396      3863      1396       3873      1396      3970      1396   4133.14      1397   4227.56
GR      1397   4246.88      1397    4251.02      1397   4252.38      1397   4261.99      1397   4262.89
GR      1397   4266.45      1397    4272.25      1396   4279.28      1395   4304.83      1395   4325.29
GR      1396    4342.7      1397    4379.18      1398    4402.1      1399   4459.05      1399   4467.32
GR      1399   4490.46      1399    4657.95      1399   4675.14      1399      4775      1399   4817.89
GR      1398   4824.28      1398    4830.91      1398   4833.58      1397   4841.76      1396   4854.67
GR      1395   4861.17      1394    4882.23      1393   4897.87      1392   4929.89      1392   4995.23
GR    1392.2      5000      1393    5015.98      1394   5050.46      1394   5062.07      1394   5081.74
GR      1394   5098.98      1393    5104.45      1393   5165.77      1394   5255.79   1394.16   5261.12
GR      1395   5263.15      1396    5265.55      1397   5267.94      1398   5270.34      1399   5272.74
GR    1399.9   5274.92      1400    5275.88      1401   5287.77      1401   5364.41

  FIRST LANDFILL CROSS SECTION
1
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X1      9.42        84      4717    5216.97       400       402       399
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GR	1428	4000	1426	4011.37	1424	4051.66	1424	4057.37	1426	4081.68
GR	1428	4110.92	1428	4121.45	1426	4129.13	1424	4134.76	1422	4139.19
GR	1421	4142.73	1420	4161.87	1419.19	4203.29	1418	4205.11	1416	4226.25
GR	1414	4237.19	1412	4246.78	1410	4256.36	1408	4267.25	1406	4278.32
GR	1404	4313.42	1402	4319.63	1401	4385.11	1401	4391.49	1400	4399.73
GR	1400	4402.48	1400	4425	1399	4435.31	1399	4437.98	1400	4464.1
GR	1400	4473.55	1401	4478.99	1401	4489.28	1401	4501.38	1401	4506.58
GR	1401	4519.28	1401	4549.48	1401	4609.38	1401	4631.43	1401	4640
GR	1401	4717	1401	4808.53	1401	4810.26	1400	4816.66	1399	4821.3
GR	1398	4826.32	1397	4831.26	1396	4836.2	1395	4840.81	1394	4845.47
GR	1394	4861.29	1394	4874.91	1394	4881.71	1395	4899.25	1395	4935.92
GR	1394	4952.05	1393	4968.09	1393	4971.63	1393	4977.75	1393	5000
GR	1393	5022.4	1394	5029.45	1395	5047.57	1396	5049.85	1397	5052.12
GR	1397	5069.99	1396	5075.09	1395	5080.13	1394	5086.54	1393	5111.54
GR	1393	5144.13	1394	5187.94	1395	5201.29	1396	5203.58	1397	5205.87
GR	1398	5208.12	1399	5210.33	1400	5212.55	1401	5214.76	1402	5216.97
GR	1402.1	5217.23	1403	5227.59	1404	5237.39	1404.24	5239.73		

NC	0.040	0.040	0.040							
X1	9.45	97	4709	5209	93	126	118			
GR	1444	4000	1446	4007.9	1448	4067.98	1448	4129.56	1446	4153.01
GR	1444	4163.3	1442	4166.26	1440	4169.22	1438	4175.44	1436	4186.62
GR	1434	4200.28	1432	4214.71	1430	4223.41	1428	4230.51	1426	4245.88
GR	1424	4268.57	1422.59	4278.96	1422	4280.89	1420	4290.71	1418	4299.79
GR	1416	4308.72	1414	4317.57	1412	4326.42	1410	4337.33	1408	4350.71
GR	1406	4364.09	1404	4377.47	1402	4400.54	1401	4461.44	1400	4466.82
GR	1400	4480.64	1400	4491.26	1400	4512.14	1401	4518.92	1401.69	4560.74
GR	1402	4579.32	1403	4582.89	1403	4591.95	1402	4596.75	1402	4660
GR	1402	4672.46	1401.7	4709	1401	4801.15	1400	4808.19	1399	4812.86
GR	1398	4817.28	1397	4822.04	1396	4829.31	1395	4850.48	1395	4874.85
GR	1396	4881.97	1397	4899.1	1397	4923.02	1396	4938.23	1395	4946.05
GR	1394	4960.72	1394	4965.12	1394	4968.36	1394	4997.02	1393.39	5000
GR	1393	5001.91	1393	5029.22	1394	5035.16	1395	5037.25	1396	5039.33
GR	1397	5041.64	1398	5043.96	1399	5046.15	1400	5048.19	1401	5065.48
GR	1401	5071.95	1401	5081.45	1401	5133.8	1400	5156.91	1399	5160.41
GR	1398	5163.93	1397	5167.45	1396	5170.97	1395	5174.49	1394	5180.55
GR	1394	5209	1394	5237.19	1395	5242.58	1396	5247.96	1397	5251.97
GR	1398	5255.85	1399	5259.53	1400	5261.9	1401	5264.27	1404.8	5265.18
GR	1402	5266.67	1403	5269.03	1404	5271.38	1405.2	5272.32	1404.6	5276.7
GR	1405	5277.23	1405	5281.63						

NC	0.035	0.040	0.040							
X1	9.54	85	4685.93	5177	410	515	500			
X3				4663.35		5177				
GR	1456	4000	1456	4021.5	1454	4238.02	1454	4370.23	1456	4373.71
GR	1458	4382.67	1460	4392.58	1462	4402.82	1464	4414.23	1464	4416.59
GR	1462	4419.16	1460	4421.73	1458	4424.3	1456	4426.86	1454	4429.43
GR	1452	4432.03	1450	4434.89	1448	4437.71	1446	4440.53	1444	4443.94
GR	1442	4455.27	1440	4466.36	1438	4475.82	1436	4485.28	1434	4494.74
GR	1432	4503.98	1430	4512.83	1428	4521.68	1426	4530.63	1424	4537.95

GR	1422	4543.4	1420	4548.8	1418	4566.76	1416	4576.41	1414	4588.78
GR	1412	4606.7	1410	4618.24	1408	4626.12	1406	4646.3	1405.45	4653.56
GR	1406	4654.9	1408	4659.52	1409.53	4663.35	1409.41	4679.83	1408	4685.93
GR	1406	4694.77	1404	4704.62	1402	4714.47	1400	4759.39	1399	4817.12
GR	1399	4833.11	1399	4849.47	1399	4877	1398	4880.23	1397	4889.16
GR	1397	4922.52	1398	4930.18	1398	4954.06	1397	4978.17	1397	5000
GR	1397	5021.85	1398	5031.11	1399	5044.96	1400	5072.02	1401	5077.75
GR	1402	5083.41	1403	5099.61	1404	5131.49	1404	5150.42	1404	5168.37
GR	1404	5177	1404	5197.33	1404	5199.5	1404	5210.97	1404	5253.08
GR	1404	5391.09	1403	5589.76	1403	5598.79	1404	5665.44	1405	5677.3
GR	1406	5688.92	1407	5698.83	1408	5708.08	1408.1	5709.05	1408	5712.42
X1	9.65	77	4754.19	5231.86	475	503	558			
X3				4736.39		5231.86				
GR	1464	4000	1464	4008.95	1464	4009.76	1462	4321.74	1460	4399.87
GR	1458	4431.45	1456	4444.62	1454	4455.94	1452	4520.78	1450	4527.92
GR	1448	4534.57	1446	4541.22	1444	4547.9	1442	4555.79	1440	4564.66
GR	1438	4573.56	1436	4582.53	1434	4591.5	1432	4600.47	1430	4609.44
GR	1428	4617.73	1426	4626.65	1424	4636.67	1422	4647.12	1420	4657.56
GR	1418	4668.01	1416	4678.25	1415.47	4681.09	1414	4684.72	1412	4698.82
GR	1410	4712.91	1408.84	4718.95	1410	4724.03	1412	4732.19	1412.28	4733.95
GR	1412.3	4736.39	1412.23	4752.15	1412.23	4753.27	1412	4754.19	1410	4762.26
GR	1408	4770.81	1406	4779.35	1404	4787.89	1402	4808.39	1402	4880.47
GR	1402	5000	1402	5117.6	1402	5177.99	1404	5201.2	1406	5208.98
GR	1408	5216.75	1410	5224.53	1411.67	5231.28	1411.74	5231.86	1411.54	5244.69
GR	1411.6	5244.92	1410	5251.38	1408	5258.75	1406	5266.02	1405	5297.23
GR	1405	5320.44	1406	5347.25	1406	5388.09	1406	5408.08	1407	5541.7
GR	1407	5718.14	1406	5754.4	1406	5784.09	1406	5792.77	1406	5810.87
GR	1406	5820.41	1406	5838.97	1407	5936.82	1408	6017.23	1409	6081.83
GR	1410	6155.49	1411	6165.28						
NC	0.035	0.035	0.035							
ET		5.1			4752.73	5283.89				
X1	9.70	45	4757.14	5273.18	253	259	256			
GR	1466	4109	1464	4316.8	1462	4420.43	1460	4447.14	1458	4478.14
GR	1456	4489.46	1454	4500.45	1452	4509.98	1450	4519.51	1448	4529.04
GR	1446	4538.57	1444	4548.1	1442	4557.38	1440	4566.27	1438	4575.05
GR	1436	4583.83	1434	4592.61	1432	4601.39	1430	4609.72	1428	4617.43
GR	1426	4627.56	1424	4668.02	1422	4677.03	1420	4686.23	1418	4694.23
GR	1416	4702.22	1414	4725.62	1413.09	4738.64	1413.15	4752.73	1412	4757.14
GR	1410	4765.55	1408	4773.94	1406	4782.3	1404	4790.65	1404	5000
GR	1404	5228.02	1406	5244.34	1408	5253.96	1412	5273.18	1412.96	5277.81
GR	1413.2	5283.89	1414	5286.99	1416	5294.01	1418	5300.98	1420	5310.97
ET		5.1			4761.98	5298.67				

X1	9.73	47	4763.41	5284.93	187	151	169			
GR	1468	4092	1466	4213.55	1464	4379	1462	4470.4	1460	4508.81
GR	1458	4525.45	1456	4535.99	1454	4546.24	1452	4556.5	1450	4565.64
GR	1448	4574.49	1446	4582.67	1444	4590.66	1442	4598.64	1440	4606.63
GR	1438	4614.61	1436	4622.6	1434	4630.3	1432	4638.03	1430	4646.07
GR	1428	4654.12	1426	4662.16	1424	4670.2	1422	4678.24	1420	4686.28

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GR	1418	4694.59	1416	4735.51	1414	4745.63	1413.77	4747.24	1414	4754.45
GR	1414.2	4761.98	1414	4763.41	1412	4771.23	1410	4779.05	1408	4786.93
GR	1406	4794.83	1404	4807.46	1404	5000	1404	5232.22	1406	5255.68
GR	1408	5265.54	1410	5275.37	1412	5284.93	1414	5298.67	1416	5306.36
GR	1418	5314.06	1420	5322.58						

ET		5.1			4698.37	5217.67				
X1	9.80	62	4738.89	5206.55	383	349	365			
GR	1476	4000	1476	4071.22	1474	4291.9	1472	4368.03	1470	4404.99
GR	1468	4419.78	1466	4435.01	1464	4454.29	1462	4489.38	1460	4517.69
GR	1458	4526.82	1456	4535.94	1454	4545.06	1452	4554.19	1450	4563.31
GR	1448	4572.44	1446	4580.51	1444	4588.95	1442	4597.51	1440	4606.07
GR	1438	4614.65	1436	4623.22	1434	4631.58	1432	4639.42	1430	4647.25
GR	1428	4655.08	1426	4662.93	1424	4670.84	1422	4678.74	1420	4686.85
GR	1418	4698.37	1416	4738.89	1416	4742.87	1416	4745.09	1415.15	4749.88
GR	1415.7	4766.09	1414	4773.04	1412	4781.48	1410	4789.92	1408	4798.11
GR	1406	4814.33	1406	5000	1406	5168.2	1408	5177.78	1410	5187.37
GR	1412	5196.96	1414	5206.55	1414.61	5209.05	1414.9	5217.67	1416	5221.57
GR	1418	5228.59	1420	5235.61	1422	5242.63	1424	5250.86	1426	5260.4
GR	1428	5270.06	1430	5279.73	1432	5290	1434	5301.13	1436	5313.24
GR	1438	5329.65	1440	5350.74						

ET		5.1			4678.48	5167.47				
X1	9.89	61	4741.17	5163.70	509	484	495			
GR	1480	4000	1480	4097.31	1478	4315.5	1476	4369.55	1474	4409.22
GR	1472	4428.88	1470	4447.01	1468	4467.06	1466	4484.74	1464	4501.35
GR	1462	4517.81	1460	4528.28	1458	4538.09	1456	4547.75	1454	4557.31
GR	1452	4566.31	1450	4574.08	1448	4581.28	1446	4588.48	1444	4595.7
GR	1442	4603.03	1440	4610.35	1438	4617.67	1436	4624.99	1434	4631.68
GR	1432	4638.82	1430	4646.76	1428	4654.71	1426	4662.61	1424	4670.44
GR	1422	4678.48	1422	4689.89	1422.06	4691.09	1422	4691.98	1421.45	4699.1
GR	1420	4741.17	1418	4771.38	1416	4778.99	1414	4786.68	1412	4794.99
GR	1410	4803.8	1408	4840.1	1406	4951.17	1406	4964.91	1407.43	5000
GR	1408	5114.09	1410	5126.94	1412	5136.13	1414	5145.32	1416	5154.51
GR	1418	5163.7	1418.8	5167.47	1418.7	5180.97	1418	5182.68	1418	5202.91
GR	1420	5221.64	1422	5236.46	1424	5244.79	1426	5252.68	1428	5260.3
GR	1430	5267.91								

ET		5.1			4813.54	5284.14				

X1	9.98	68	4828.11	5274.26	462	469	475			
GR	1476	4020	1476	4135.18	1474	4180.69	1472	4242.44	1472	4405.93
GR	1474	4459.87	1474	4532.3	1472	4564.64	1470	4600.47	1468	4627.43
GR	1466	4644.39	1464	4650.73	1462	4658.68	1460	4666.95	1458	4675.21
GR	1456	4683.48	1454	4692.64	1452	4702.53	1450	4711.67	1448	4720.68
GR	1446	4728.08	1444	4734.3	1442	4740.53	1440	4746.75	1438	4752.97
GR	1436	4759.19	1434	4766.97	1432	4775.44	1430	4783.95	1428	4813.54
GR	1428	4821.2	1428.96	4826.63	1428	4828.11	1426	4830.93	1425.95	4831.02
GR	1425.7	4834.7	1424	4840.53	1422	4847.1	1420	4853.67	1418	4860.24
GR	1416	4866.81	1414	4874.06	1412	4895.31	1410	4925.82	1410	4957.15
GR	1410	4985.2	1410	5000	1410	5196.05	1412	5234.32	1414	5243.75
GR	1416	5253.18	1418	5262.85	1420	5274.26	1421.67	5284.14	1421.15	5293.67

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GR	1420	5297.1	1418.2	5302.27	1420	5323.38	1422	5337.3	1424	5349.84
GR	1426	5361.61	1428	5370.82	1430	5379.99	1432	5389.15	1434	5398.3
GR	1436	5407.46	1438	5416.8	1440	5427.51				
ET		5.1			4840.61	5275.34				
X1	10.08	60	4841.72	5274.76	508	514	511			
GR	1476	4000	1478	4028.78	1480	4085.32	1480	4214.24	1478	4270.59
GR	1476	4333.92	1474	4385.59	1472	4415.91	1470	4435.24	1468	4453.48
GR	1466	4471.72	1464	4489.47	1462	4507.08	1460	4524.24	1458	4540.43
GR	1456	4560.04	1454	4579.47	1452	4664.02	1450	4686.12	1448	4711.59
GR	1446	4736.49	1444	4743.04	1442	4749.49	1440	4755.86	1438	4761.79
GR	1436	4767.07	1434	4772.52	1432	4778.04	1430	4783.56	1428	4789.08
GR	1426	4795.68	1426	4838.85	1426.35	4840.61	1426	4841.72	1424	4848.12
GR	1422	4854.53	1420	4861.27	1418	4869.07	1416	4880.94	1414	4903.67
GR	1412.5	5000	1412	5028.73	1412	5119.72	1414	5215.45	1416	5233.54
GR	1418	5244.05	1420	5254.55	1422	5265.05	1424	5274.76	1424.17	5275.34
GR	1424	5277.85	1423.5	5284.05	1422	5288.76	1420	5294.8	1420	5307.7
GR	1422	5411.56	1424	5519.39	1426	5568.38	1428	5584.58	1430	5600.76
ET		5.1			4784.92	5288.33				
X1	10.16	48	4797.94	5270.13	447	418	430			
GR	1438	4000	1436	4021.6	1434	4039.29	1432	4060.58	1430	4087.84
GR	1428	4116.35	1426	4163.37	1426	4172.5	1426	4329.8	1424	4615.05
GR	1422	4727.69	1422	4765.14	1424	4772.65	1426	4779.85	1427.4	4784.92
GR	1426.9	4794.24	1426	4797.94	1424	4806.13	1422	4814.72	1420	4823.31
GR	1418	4831.89	1416	4850.45	1416	5000	1416	5206.7	1418	5231.48
GR	1420	5241.03	1422	5250.58	1424	5260.12	1426	5270.13	1426.69	5273.76
GR	1426.8	5288.33	1426	5290.46	1424	5295.56	1423.73	5296.35	1424	5299.13
GR	1426	5318.58	1428	5331.54	1430	5343.77	1432	5355.48	1434	5367.2
GR	1436	5379.53	1438	5392.13	1440	5404.93	1442	5417.74	1444	5430.71
GR	1446	5445.59	1448	5460.48	1450	5475.78				
ET		5.1			4772.87	5312.98				

MAINBAR

X1	10.25	50	4772.87	5312.98	496	420	460			
GR	1462	4000	1462	4353.1	1462	4360.97	1464	4372.48	1466	4380.6
GR	1466	4394.69	1464	4399.98	1462	4402.86	1460	4405.73	1458	4408.62
GR	1456	4420.57	1454	4432.06	1452	4443.38	1450	4454.7	1448	4465.92
GR	1446	4476.55	1444	4487.22	1442	4497.92	1440	4509.43	1438	4521.31
GR	1436	4534.04	1434	4573.89	1434	4576.65	1434	4582.76	1432	4590.09
GR	1430	4597.07	1428	4604.05	1426	4740.78	1426	4758.62	1428	4766.33
GR	1429.7	4772.87	1429.36	4781.13	1428	4786.37	1426	4794.42	1424	4802.47
GR	1422	4810.53	1420	4841.46	1420	5225.51	1422	5254.59	1424	5264.85
GR	1426	5274.47	1428	5284.05	1429.2	5289.83	1429.27	5312.98	1430	5319.77
GR	1432	5338.35	1434	5354.33	1436	5382.04	1438	5398.07	1440	5414.09

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ET		5.1			4766.40	5271.99				
X1	10.33	47	4782.32	5269.64	519	373	444			
GR	1450	4000	1448	4073.55	1448	4076.89	1448	4151.72	1446	4166.89
GR	1444	4179.19	1442	4193.45	1440	4215.25	1438	4234.67	1436	4254.62
GR	1434	4273.64	1432	4293.27	1430	4335.46	1428	4352.32	1428	4394.66
GR	1430	4399.29	1432	4405.29	1434	4417.32	1436	4573.71	1434	4592.8
GR	1432	4607.16	1430	4731.8	1430	4744.77	1432	4752.19	1434	4759.52
GR	1435.8	4766.4	1435.17	4782.32	1434	4787.13	1432	4795.34	1430	4802.67
GR	1428	4810	1426	4817.69	1424	4826.71	1422.57	5000	1422	5069.23
GR	1422	5172.18	1424	5223.94	1426	5234.36	1428	5243.12	1430	5251.96
GR	1432	5260.8	1434	5269.64	1434.83	5271.99	1434.09	5290.23	1434	5290.52
GR	1432	5296.74	1430	5302.97						

ET		5.1			4756.86	5252.58				
X1	10.34	38	4775.45	5243.36	104	42	73			
GR	1434	4000	1434	4020.85	1432	4060.47	1432	4210.33	1432	4230.74
GR	1430	4304	1430	4351	1430	4400.08	1430	4476.92	1432	4558.77
GR	1432	4579.43	1430	4699.87	1430	4741.11	1432	4746.28	1434	4751.62
GR	1435.9	4756.86	1435	4775.45	1434	4779.27	1432	4786.85	1430	4794.42
GR	1428	4803.16	1426	4811.92	1424	4839.17	1422.77	5000	1422	5099.99
GR	1422	5118.31	1424	5204.31	1426	5212.97	1428	5217.15	1430	5226.8
GR	1432	5234.78	1434	5243.36	1435.48	5252.58	1434.92	5272.38	1434	5274.21
GR	1432	5278.35	1430	5282.48	1430	5283.56				

HAPPY VALLEY ROAD CROSSING

NC	0.030	0.030	0.030							
ET		5.1			4823.21	5272				
X1	10.38	34	4823.21	5293.86	173	143	162			
GR	1432	4050	1432	4345.47	1434	4359.49	1436	4382.17	1436	4444.22
GR	1434	4514.59	1434	4523.97	1436	4605.62	1436	4667.41	1434	4710.47
GR	1434	4776.7	1435.99	4798.29	1435.82	4823.21	1434	4831.49	1432	4838.95
GR	1430	4845.97	1428	4854.29	1426	4860.89	1424	4952.8	1424	5000
GR	1424	5110.95	1426	5223.7	1428	5293.86	1430	5418.28	1432	5426.63

GR	1434	5436.09	1436	5445.55	1436	5462.06	1438.33	5462.07	1438.33	5463.07
GR	1436	5463.08	1436	5478.57	1435.96	5479.62	1434	5488.87		

NC	0.035	0.035	0.035							
ET		5.1			4783.08	5262.74				
X1	10.41	52	4791.83	5251.18	198	142	171			
GR	1434	4064	1434	4072.38	1436	4078.9	1438	4083.68	1440	4114.64
GR	1442	4124.08	1444	4141.29	1444	4186.45	1442	4196.42	1438	4216.34
GR	1436	4223.27	1434	4229.95	1432	4236.99	1432	4370.62	1434	4373.56
GR	1436	4376.5	1438	4379.45	1440	4383.45	1440	4469.41	1438	4505.1
GR	1436	4516.74	1434	4526.64	1432	4535.95	1432	4754.33	1434	4759.91
GR	1435.7	4764.94	1436	4772.28	1436	4782.06	1438.34	4782.07	1438.34	4783.07
GR	1436	4783.08	1436	4791.83	1434	4800.27	1432	4808.85	1430	4817.15
GR	1428	4863.1	1428	5000	1428	5071.88	1428	5119.31	1428	5202.52
GR	1430	5229.35	1432	5236.74	1434	5244.12	1436	5251.18	1436	5262.73
GR	1438.9	5262.74	1438.9	5262.75	1436	5262.76	1436	5274.27	1434	5279.7
GR	1432	5285.08	1430	5290.4						

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ET		5.1			4758.78	5239.41				
X1	10.42	46	4772.17	5239.37	70	58	64			
GR	1434	4057	1434	4122.12	1434	4141.01	1432	4192.42	1432	4500.07
GR	1434	4518.47	1436	4524.56	1438	4530.85	1438	4566	1436	4602.78
GR	1434	4617.91	1432	4648.14	1432	4733.89	1434	4738.7	1436	4743.37
GR	1436	4757.77	1439	4757.78	1439	4758.78	1436	4758.79	1436	4772.17
GR	1434	4781.27	1432	4790.3	1431.35	4793.22	1430	4857.83	1428	4863.2
GR	1426	4872.34	1426	5000	1426	5035.16	1428	5059.55	1430	5071.52
GR	1430	5178.76	1430	5209.5	1432	5217.1	1434	5224.61	1436	5232.04
GR	1438	5239.37	1438	5239.40	1439.8	5239.41	1439.8	5240.41	1438	5240.42
GR	1438	5240.71	1437.62	5260.38	1436	5263.54	1434	5267.47	1432	5271.31
GR	1430	5275.13								

ET		5.1			4717.29	5219.45				
X1	10.51	85	4720.44	5201.75	439	487	472			
GR	1434	4000	1432	4130.14	1428	4139.76	1426	4144.4	1424	4149.04
GR	1422	4153.68	1418	4208.59	1418	4223.25	1418	4230.6	1418	4282.85
GR	1418	4360.51	1416	4368.14	1414	4375.06	1412	4381.98	1408	4395.81
GR	1406	4403.31	1404	4411.2	1402	4420.45	1398	4444.12	1396	4455.04
GR	1396	4458.71	1398	4462.24	1400	4465.78	1402	4469.3	1404	4472.7
GR	1406	4476.09	1406	4476.39	1404	4480.43	1402	4489.41	1400	4498.38
GR	1398	4511.86	1398	4523.62	1402	4606.66	1404	4619.36	1406	4625.57
GR	1408	4631.74	1412	4641.43	1414	4645.8	1416	4650.17	1418	4654.55
GR	1422	4663.24	1424	4666.88	1426	4670.52	1428	4674.16	1432	4681.45
GR	1434	4685.09	1436	4688.73	1438	4692.35	1440	4695.92	1440	4716.28
GR	1443.2	4716.29	1443.2	4717.29	1440.66	4717.32	1440	4720.44	1438	4729.62
GR	1436	4738.8	1434	4747.98	1432.68	4754.05	1434	4795.05	1434	4811.47

GR	1432	4826.23	1430	4844.12	1428	4880.89	1428	4916.32	1428	4916.6
GR	1428	4924.94	1430	4975.63	1430	4993.27	1430	5000	1430	5004.42
GR	1430	5038.01	1430	5060.04	1432	5076.82	1434	5173.28	1436	5182.8
GR	1438	5192.33	1440	5201.75	1440	5219.44	1443.73	5219.45	1443.73	5220.45
GR	1440.7	5220.46	1440.7	5237.12	1442	5243.12	1444	5251.74	1444	5270.2

NC	0.035	0.05	0.035							
ET		5.1			4664.91	5132.57				
X1	10.62	87	4665.97	5128.07	535	618	596			
GR	1438	4000	1438	4067.63	1438	4119.75	1438	4123.09	1436	4126.37
GR	1434	4129.64	1432	4132.91	1428	4139.57	1426	4142.92	1424	4157.62
GR	1422	4197.88	1422	4274.19	1422	4279.99	1418	4285.73	1416	4288.61
GR	1414	4291.48	1412	4294.36	1408	4300.1	1406	4302.98	1404	4305.85
GR	1402	4308.72	1398	4314.87	1396	4318.05	1394	4326.83	1392	4337.52
GR	1392	4407.2	1394	4430.83	1396	4477.86	1398	4520.73	1402	4551.89
GR	1404	4565.94	1406	4587.33	1408	4591.51	1412	4599.92	1414	4604.3
GR	1416	4608.68	1418	4613.06	1422	4621.46	1424	4625.35	1426	4629.24
GR	1428	4633.13	1432	4640.85	1434	4644.69	1436	4648.53	1438	4652.37
GR	1440	4656.21	1442	4660.05	1444	4663.89	1444	4663.90	1445.7	4663.91
GR	1445.7	4664.91	1444	4664.92	1444	4665.97	1443.33	4681.76	1442	4687.65
GR	1440	4696.48	1438	4705.29	1436.53	4711.79	1436	4760.05	1434	4774.11
GR	1432	4791.7	1432	4792.06	1434	4804.84	1434	4812.38	1434	4844.64
GR	1434	4908.11	1432	4978.39	1430	4993.25	1430	5000	1430	5019.08

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GR	1432	5025.21	1434	5047.48	1436	5072.96	1436.27	5078.41	1438	5088.52
GR	1440	5100.18	1442	5111.6	1444	5128.07	1444.34	5132.57	1446	5140.61
GR	1448	5150.2	1450	5159.88	1452	5169.67	1454	5179.15	1454	5200.76
GR	1454	5213.3	1456	5219.38						

NC	0.035	0.035	0.035							
ET		5.1			4748.11	5211.3				
X1	10.70	43	4759.88	5193.3	390	382	402			
GR	1444	4000	1444	4038.07	1444	4066.66	1444	4284.59	1442	4345.59
GR	1440	4412.2	1440	4618.19	1442	4696.02	1442.67	4720.77	1444	4727.26
GR	1446.2	4734.32	1446.2	4747.10	1448.10	4747.11	1448.10	4748.11	1446.2	4748.12
GR	1446.2	4759.88	1444	4767.51	1442	4775.38	1440.89	4779.56	1440	4856.65
GR	1438	4908.41	1436	4929.27	1434	4963.32	1434	5000	1434	5015.86
GR	1436	5039.71	1436	5072.24	1436	5119.55	1438	5144.54	1440	5154.48
GR	1442	5163.53	1444	5172.15	1446	5188.42	1446.48	5193.3	1448	5197.69
GR	1450	5201.41	1452	5205.12	1454	5208.74	1455.47	5211.3	1456	5213.46
GR	1458	5222.24	1458	5238.92	1456	5256.86				

ET		5.1			4782.29	5310.03				
X1	10.83	54	4800.8	5298.85	642	704	717			
GR	1448	4234	1448	4375.81	1448	4583.91	1446	4610.95	1446	4656.3
GR	1446	4742.93	1444.39	4761.2	1446	4765.18	1448	4769.97	1450	4774.76

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GR      1452    4779.31      1452    4781.28    1454.60    4781.29    1454.60    4782.29      1452    4782.30
GR      1452     4800.8      1450    4808.34       1448    4816.39       1446    4825.37      1444    4844.86
GR      1442    4867.57      1440    4888.99       1438    4911.48       1438     4931.3      1440    4955.08
GR      1440    4961.15      1440       5000       1440    5073.72       1442    5081.76      1444    5085.61
GR      1446    5088.41      1446    5095.29       1446    5268.61       1448     5283.3      1450    5291.33
GR      1452    5298.85      1452    5310.02    1454.25    5310.03    1454.25    5311.03      1452    5311.04
GR      1452    5321.19      1450    5325.84       1448    5330.48       1446     5352.1      1444     5429.4
GR      1442    5433.87      1442     5453.7       1442    5462.01       1440    5467.15      1438    5472.69
GR      1438    5487.43      1440    5493.52       1442    5499.62       1444    5505.79

ET                 5.1                          4766.74       5290
X1    10.93         47    4790.58    5279.54       456        557        516
GR     1450       4075      1450    4401.05       1450    4472.44       1450    4658.68      1448    4685.74
GR     1446    4692.07      1446    4738.32       1448    4747.74       1450    4752.28      1452    4756.82
GR     1454    4761.36      1456    4765.91    1456.34    4766.74    1456.31     4782.2      1456    4783.11
GR     1454    4790.58      1452    4801.13       1450    4811.94       1448    4852.07      1446    4882.26
GR     1444     4895.5      1442    4901.64       1440    4907.78       1440    4909.75      1440       5000
GR     1442    5025.23      1444    5039.36       1446    5045.88       1448    5065.33      1448    5141.49
GR     1446    5151.73      1446    5160.63       1448       5249       1450    5259.77      1452    5267.62
GR     1454    5275.29    1455.1    5279.54    1458.23       5290    1458.23       5291    1455.6    5291.01
GR   1455.6    5301.19      1454    5303.86       1452    5307.17       1450    5311.25      1448    5317.12
GR     1446    5322.99      1446    5329.64
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CONFLUENCE WITH BUCHANAN WASH

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ET                 5.1                          4581.43    5120.83
X1    11.03         59    4598.63    5120.83       506        504        525
GR     1454       4082      1454     4316.5       1454    4398.81       1454    4405.76      1454    4444.05
GR     1454    4463.63      1452    4472.52       1452    4546.98       1452    4556.11   1451.02    4559.09
GR     1452    4561.67      1454    4566.38       1456    4571.08       1458    4575.79      1460    4580.49
GR   1460.3    4581.43    1460.24    4597.21       1460    4598.63       1458    4606.22      1456    4613.78
GR     1454    4621.09      1452    4629.76       1450    4642.89       1449    4647.63      1448    4693.69
GR     1448    4736.54      1450    4814.76       1450    4864.18       1448    4942.71      1446    4949.67
GR     1444    4956.46      1442    4984.22       1442       5000       1442    5002.45      1444    5021.76
GR     1446    5026.06      1448     5043.9       1448    5055.01       1446    5062.54      1444    5069.86
GR     1442     5077.4      1442    5100.06       1444    5110.31       1446    5120.83      1448    5131.74
GR     1448    5143.33      1448    5159.14       1450    5172.98       1452    5186.65      1454       5200
GR     1456    5213.08      1458    5227.34       1460    5242.36    1460.78    5249.29    1460.5    5289.31
GR     1460    5290.38      1458    5301.57       1456    5314.34       1454    5329.62

NC    0.050      0.035      0.035
ET                 5.1                           4762    5149.91
X1    11.14         32       4762    5149.91        606        610        606
GR     1460    4331.11      1460    4359.12       1458    4450.29       1456    4510.13      1454    4516.73
GR     1452    4523.33      1450    4529.82       1450    4653.75       1452    4685.50      1452       4762
GR     1452    4830.94      1450    4913.55       1450    4965.11       1448    4975.89      1448       5000
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GR     1448    5056.87      1450    5060.92      1452    5064.99      1452    5097.48      1454    5121.70
GR     1456    5126.41      1458    5131.13      1460    5135.85      1462    5140.57      1464    5145.28
GR     1466    5149.91      1466    5173.09      1464    5177.70      1462    5182.56      1460    5187.75
GR     1458    5192.64      1456    5197.53

  BEGIN CORPS LEVEES

NC    0.035      0.035      0.020
ET                 5.1                          4825.06    5165.90
X1    11.19         80    4825.06    5161.07       277        212        225
GR   1466.0    4799.55    1466.00    4823.70    1466.00    4825.06    1465.44    4826.50    1464.00    4830.18
GR   1463.6    4831.26    1462.00    4835.30    1461.78    4835.87    1460.47    4839.23    1460.00    4840.18
GR   1459.8    4840.67    1458.00    4844.27    1457.08    4846.17    1456.00    4848.37    1454.68    4851.08
GR   1454.0    4852.47    1452.35    4858.63    1452.00    4861.70    1452.00    4865.26    1452.00    4867.38
GR   1452.0    4906.20    1452.00    4944.98    1452.00    4945.21    1452.00    4948.20    1452.00    4955.59
GR   1452.0    4974.23    1452.00    4983.63    1452.00    5000.00    1452.00    5052.40    1452.00    5075.88
GR   1452.0    5079.43    1452.00    5080.15    1452.00    5083.16    1452.00    5085.12    1452.21    5091.07
GR   1452.2    5091.41    1452.82    5104.84    1453.40    5118.66    1453.68    5124.97    1454.00    5131.82
GR   1455.9    5136.57    1456.00    5136.91    1456.04    5136.99    1458.00    5141.74    1458.38    5142.66
GR   1460.0    5146.57    1460.56    5147.92    1462.00    5151.40    1462.67    5153.01    1464.00    5156.23
GR   1464.7    5158.02    1466.00    5161.07    1466.79    5162.98    1468.00    5165.90    1468.00    5172.97
GR   1468.0    5198.33    1468.00    5198.71    1468.00    5208.06    1467.82    5208.79    1467.42    5210.39
GR   1466.0    5213.89    1464.59    5217.33    1464.00    5218.79    1462.10    5223.33    1462.00    5223.58
GR   1461.9    5223.73    1460.00    5228.27    1459.05    5230.49    1458.00    5232.96    1456.96    5238.16
GR   1456.5    5239.87    1456.32    5241.27    1456.00    5249.77    1456.00    5262.87    1455.84    5273.99
GR   1456.0    5290.85    1456.15    5294.26    1456.26    5305.86    1456.31    5328.45    1456.18    5342.81
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ET                 5.1                          4827.39    5184.66
X1    11.29         94    4827.39    5184.66       486        591        536
GR   1458.6    4498.36    1458.15    4531.48    1458.00    4544.39    1457.54    4552.02    1456.00    4556.76
GR   1455.7    4557.78    1454.54    4561.02    1454.00    4562.59    1454.00    4605.58    1454.95    4629.82
GR   1456.0    4655.24    1456.33    4661.92    1456.76    4672.63    1456.93    4675.47    1457.17    4678.43
GR   1457.5    4684.77    1456.93    4728.58    1456.76    4749.58    1457.01    4757.49    1457.65    4782.78
GR   1458.0    4791.03    1459.18    4795.59    1460.00    4799.16    1461.62    4803.60    1462.00    4804.63
GR   1462.5    4805.93    1464.00    4810.36    1464.90    4812.84    1466.00    4815.95    1466.99    4818.67
GR   1468.0    4821.53    1469.43    4825.50    1469.95    4827.39    1469.68    4829.36    1468.00    4841.57
GR   1466.8    4844.22    1466.00    4846.08    1464.73    4848.95    1464.00    4850.59    1462.59    4853.77
GR   1462.0    4855.10    1460.39    4858.74    1460.00    4859.58    1459.55    4860.64    1458.00    4864.17
GR   1456.8    4866.84    1456.00    4868.69    1454.77    4871.46    1454.00    4873.20    1453.89    4874.55
GR   1454.0    4879.94    1453.00    5000.00    1452.00    5012.73    1452.37    5018.03    1454.00    5112.94
GR   1454.0    5148.06    1456.00    5152.69    1458.00    5157.26    1460.00    5161.76    1462.00    5166.34
GR   1464.0    5170.83    1466.00    5175.45    1467.53    5178.97    1468.00    5180.06    1469.67    5183.89
GR   1470.0    5184.66    1470.00    5197.62    1468.00    5202.94    1466.00    5208.26    1464.00    5213.46
GR   1463.4    5215.12    1462.00    5218.65    1460.33    5224.18    1460.00    5225.24    1459.63    5239.24
GR   1459.4    5247.72    1459.19    5284.15    1459.63    5287.69    1460.00    5297.44    1461.23    5325.09
GR   1462.0    5340.83    1463.27    5373.45    1463.76    5392.61    1463.91    5397.59    1464.00    5403.23
GR   1464.0    5404.95    1463.47    5430.53    1463.48    5446.78    1463.10    5468.14    1463.01    5472.72
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MAINBAR

GR	1462.8	5480.65	1462.48	5495.44	1462.00	5521.62	1462.00	5562.61		
ET		5.1			4826.47	5170.48				
X1	11.39	88	4826.47	5170.48	520	577	548			
GR	1463.4	4540.53	1462.24	4575.55	1462.00	4587.19	1461.52	4589.31	1460.82	4592.35
GR	1460.0	4595.75	1459.40	4598.25	1458.00	4604.08	1457.77	4611.59	1457.02	4638.45
GR	1456.6	4651.90	1456.25	4664.52	1456.00	4673.48	1456.00	4685.48	1457.34	4692.89
GR	1458.0	4696.00	1458.60	4698.45	1460.00	4704.69	1460.84	4725.05	1461.22	4734.45
GR	1461.5	4742.42	1461.65	4747.02	1462.00	4766.90	1462.17	4770.00	1464.00	4788.85
GR	1465.9	4795.51	1466.00	4795.86	1468.00	4802.87	1469.82	4809.24	1470.00	4809.88
GR	1470.0	4826.47	1469.00	4828.70	1468.00	4830.90	1466.98	4833.16	1466.00	4835.34
GR	1465.0	4837.62	1464.00	4839.77	1462.95	4842.10	1462.00	4844.21	1460.92	4846.60
GR	1460.0	4848.64	1458.80	4851.31	1458.00	4853.08	1456.24	4856.99	1456.00	4857.51
GR	1454.1	4861.74	1454.00	4861.94	1453.77	4869.54	1453.41	4939.48	1453.70	5000.00
GR	1454.0	5052.77	1454.00	5137.60	1454.79	5139.20	1456.00	5141.80	1457.23	5144.29
GR	1458.0	5145.86	1459.52	5148.94	1460.00	5149.91	1461.94	5153.84	1462.00	5153.96
GR	1462.2	5154.43	1464.00	5158.09	1464.41	5158.94	1466.00	5162.22	1466.71	5163.68
GR	1468.0	5166.35	1468.90	5168.21	1470.00	5170.48	1471.01	5177.47	1471.30	5178.73
GR	1471.0	5187.97	1470.52	5189.60	1470.00	5191.33	1469.06	5193.63	1468.00	5196.22
GR	1466.9	5199.00	1466.00	5201.12	1464.50	5204.79	1464.00	5205.96	1463.56	5227.10
GR	1463.3	5302.27	1463.50	5392.62	1464.00	5459.82	1464.00	5496.38	1464.34	5500.49
GR	1466.0	5520.78	1466.48	5534.57	1467.00	5553.06				
ET		5.1			4831.85	5174.56				
X1	11.48	93	4831.85	5174.56	443	532	487			
GR	1469.5	4463.12	1470.00	4514.20	1470.67	4526.19	1472.00	4532.14	1472.00	4536.27
GR	1471.2	4545.52	1472.00	4549.52	1471.16	4556.05	1470.89	4562.81	1470.59	4569.92
GR	1470.0	4586.17	1470.00	4654.03	1469.53	4674.85	1469.10	4688.69	1468.83	4699.75
GR	1468.6	4709.20	1468.27	4720.52	1468.00	4733.02	1467.35	4737.19	1467.59	4745.21
GR	1467.3	4752.17	1466.00	4781.13	1465.37	4784.00	1465.14	4788.41	1465.46	4789.08
GR	1465.9	4791.67	1466.00	4791.93	1467.84	4797.88	1468.00	4798.37	1468.75	4800.80

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GR	1469.1	4801.97	1469.53	4803.27	1470.00	4804.79	1472.00	4813.30	1472.00	4827.27
GR	1471.5	4828.31	1470.00	4831.85	1469.59	4832.79	1468.00	4836.43	1467.65	4837.23
GR	1466.0	4841.01	1465.73	4841.62	1464.00	4845.59	1463.85	4845.93	1462.31	4849.46
GR	1462.0	4850.16	1461.96	4850.24	1460.00	4854.68	1459.78	4855.19	1458.00	4859.04
GR	1456.8	4861.86	1456.00	4863.63	1454.62	4866.83	1454.00	4868.24	1454.00	4891.27
GR	1454.5	4982.94	1454.00	5000.00	1454.00	5139.53	1455.68	5143.25	1456.00	5143.95
GR	1457.7	5147.78	1458.00	5148.36	1459.81	5152.35	1460.00	5152.78	1461.90	5156.97
GR	1462.0	5157.19	1463.56	5160.62	1464.00	5161.59	1466.00	5165.91	1468.00	5170.24
GR	1468.3	5170.98	1470.00	5174.56	1471.57	5177.96	1472.00	5179.19	1472.00	5194.00
GR	1470.3	5199.62	1470.00	5200.65	1468.88	5204.39	1468.00	5207.39	1467.56	5217.72
GR	1466.9	5233.75	1466.58	5241.08	1466.33	5246.90	1466.40	5250.99	1466.61	5264.73
GR	1467.0	5289.91	1467.20	5306.66	1467.34	5341.05	1467.60	5361.43	1467.94	5383.99
GR	1467.8	5395.19	1467.56	5419.40	1468.00	5430.41				

END CORPS LEVEES; BEGIN BOX CHANNEL UNDER I-17

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ET                 5.1                          4845.32     5152.45
X1     11.56        87     4845.32     5152.45       386         396         390
GR    1471.8   4676.86     1471.19     4685.14   1470.77     4690.44     1470.54     4693.47     1470.29     4696.28
GR    1470.3   4700.82     1470.50     4703.37   1470.83     4707.69     1471.29     4713.13     1472.00     4721.56
GR    1472.0   4845.32     1470.73     4853.22   1470.34     4856.19     1470.00     4857.83     1469.42     4859.18
GR    1468.0   4862.39     1467.55     4863.42   1466.00     4867.01     1464.74     4869.91     1464.00     4871.63
GR    1462.4   4875.29     1462.00     4876.26   1460.24     4880.32     1460.00     4880.88     1459.55     4891.07
GR    1459.2   4900.27     1459.14     4911.50   1459.18     4917.72     1459.27     4936.45     1459.28     4951.90
GR    1459.3   4956.77     1459.32     4970.56   1459.36     4977.34     1459.35     4986.98     1459.40     5000.00
GR    1459.5   5006.02     1459.50     5012.85   1459.48     5022.30     1459.43     5032.20     1459.31     5049.20
GR    1459.3   5049.41     1459.31     5049.51   1459.31     5049.72     1459.30     5060.17     1459.48     5072.34
GR    1459.5   5084.60     1459.48     5091.51   1459.47     5098.77     1459.30     5109.95     1459.40     5114.80
GR    1459.6   5117.41     1459.59     5117.63   1460.00     5124.33     1461.59     5127.25     1461.65     5127.38
GR    1462.0   5128.28     1462.29     5129.00   1462.54     5129.65     1463.39     5131.68     1464.00     5133.13
GR    1465.0   5135.40     1466.00     5137.90   1466.70     5139.56     1468.00     5142.66     1468.53     5143.93
GR    1470.0   5147.43     1470.90     5149.69   1472.00     5152.45     1472.00     5165.70     1471.55     5168.67
GR    1471.2   5170.75     1470.00     5178.38   1470.00     5225.76     1470.27     5226.00     1472.00     5227.56
GR    1472.5   5228.46     1472.76     5229.77   1472.00     5233.24     1471.71     5234.57     1471.42     5235.87
GR    1471.4   5236.02     1470.93     5237.02   1470.00     5239.41     1470.00     5268.37     1470.59     5293.04
GR    1470.9   5296.51     1471.02     5306.55
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OUTLET OF I-17 CROSSING

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ET                 5.1                          4880.47     5126.63
X1     11.57        92     4880.47     5126.63        72          75          73
GR    1470.8   4670.15     1471.04     4676.02   1471.81     4692.20     1472.00     4696.83     1472.63     4707.63
GR    1472.8   4711.11     1473.05     4715.60   1473.66     4746.09     1473.57     4751.49     1473.41     4760.54
GR    1474.0   4769.16     1474.00     4816.39   1473.19     4827.23     1472.71     4833.86     1472.64     4834.85
GR    1472.0   4844.37     1472.00     4861.16   1472.54     4870.52     1472.00     4880.47     1471.79     4880.62
GR    1470.1   4881.77     1470.00     4881.79   1468.35     4882.11     1468.00     4882.18     1466.41     4882.49
GR    1466.0   4882.57     1464.43     4882.88   1464.00     4882.96     1462.45     4883.27     1462.00     4883.35
GR    1461.6   4896.00     1461.53     4899.52   1461.22     4909.97     1461.03     4926.96     1460.86     4934.09
GR    1460.6   4946.27     1460.36     4961.63   1460.29     4993.04     1460.30     5000.00     1460.41     5002.11
GR    1460.5   5010.81     1460.63     5019.07   1461.14     5020.57     1461.34     5048.98     1461.18     5074.02
GR    1460.9   5090.68     1461.37     5103.14   1461.81     5115.32     1461.86     5116.93     1462.00     5120.67
GR    1462.6   5120.78     1464.00     5121.06   1464.40     5121.17     1466.00     5121.48     1466.51     5121.56
GR    1467.1   5121.69     1468.00     5121.86   1469.43     5122.14     1470.00     5122.25     1470.50     5123.25
GR    1471.7   5125.87     1472.00     5126.63   1472.00     5154.31     1471.46     5159.70     1470.38     5170.04
1
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GR    1470.4   5174.42     1470.49     5174.60   1470.77     5175.42     1472.00     5179.41     1472.00     5180.09
GR    1471.6   5182.32     1470.00     5193.35   1470.00     5209.59     1470.38     5210.71     1471.63     5215.00
GR    1472.0   5216.25     1472.00     5216.38   1472.00     5218.35     1471.83     5219.05     1470.00     5223.24
GR    1470.0   5225.98     1470.22     5226.92   1470.00     5227.88     1470.00     5234.90     1470.81     5241.05
GR    1470.8   5241.43     1471.05     5249.44   1470.99     5250.35     1470.90     5250.66     1470.72     5261.88
GR    1471.0   5291.96     1471.60     5306.88
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*PROF 1

CRITICAL DEPTH TO BE CALCULATED AT ALL CROSS SECTIONS
0

CCHV=     .100 CEHV=     .300
*SECNO 8.690

3265 DIVIDED FLOW

3280 CROSS SECTION      8.69 EXTENDED       .71 FEET


3470 ENCROACHMENT STATIONS=     3796.6    5556.9  TYPE=      1  TARGET=     1760.280
     8.690     14.00   1378.00   1374.49       .00   1378.47       .47        .00        .00   1381.16
   38888.0        .0   38726.0     162.0        .0    7026.5     198.7         .0         .0   1379.49
       .00       .00      5.51       .82      .000      .035      .045       .000    1364.00   4045.04
   .001283        0.        0.        0.         0        13         0        .00    1389.66   5556.89


*SECNO 8.790

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .55


3470 ENCROACHMENT STATIONS=     3855.7    5476.0  TYPE=      1  TARGET=     1620.250
     8.790     12.73   1378.73   1377.36       .00   1379.81      1.08       1.16        .18   1384.00
   38875.0        .0   38875.0        .0        .0    4665.6        .0       73.6      14.2   1380.00
       .02       .00      8.33       .00      .000      .035      .000       .000    1366.00   4134.96
   .004310      530.      539.      546.         2        14         0        .00     896.14   5031.10


*SECNO 8.930

3470 ENCROACHMENT STATIONS=     4280.0    5437.8  TYPE=      1  TARGET=     1157.800
     8.930     11.20   1381.20   1378.47       .00   1382.30      1.10       2.49        .01   1386.72
   37676.0        .0   37676.0        .0        .0    4475.5        .0      149.3      26.7   1382.80
       .04       .00      8.42       .00      .000      .035      .000       .000    1370.00   4600.73
   .002799      565.      722.      711.         2        19         0        .00     615.96   5216.70
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 9.010

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .56


3470 ENCROACHMENT STATIONS=     4519.9    5433.5  TYPE=      1  TARGET=      913.610
     9.010      9.36   1381.55   1381.32       .00   1384.94      3.39      1.95       .69   1386.00
   37207.0        .0   37207.0        .0        .0    2519.4        .0     183.9      31.5   1389.58
       .05       .00     14.77       .00      .000      .035      .000      .000   1372.19   4836.01
   .008632      363.      430.      558.         3        15         0       .00    346.24   5182.25

*SECNO 9.080

3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.75


3470 ENCROACHMENT STATIONS=     4515.3    5233.2  TYPE=      1  TARGET=      717.880
     9.080     11.88   1385.35   1381.03       .00   1386.57      1.22      1.42       .22   1388.00
   31427.0        .0   31427.0        .0        .0    3545.3        .0     209.3      34.4   1390.00
       .06       .00      8.86       .00      .000      .035      .000      .000   1373.47   4830.71
   .002006      432.      365.      165.         3        15         0       .00    349.55   5180.26

*SECNO 9.140

3470 ENCROACHMENT STATIONS=     4525.9    5437.5  TYPE=      1  TARGET=      911.700
     9.140     12.12   1386.12   1381.16       .00   1387.18      1.06       .60       .02   1390.00
   27780.0        .0   27780.0        .0        .0    3354.4        .0     235.6      36.9   1390.00
       .07       .00      8.28       .00      .000      .035      .000      .000   1374.00   4847.42
   .001586      288.      333.      385.         2        14         0       .00    304.16   5151.58

*SECNO 9.145

3265 DIVIDED FLOW
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =   .68

3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

    9.145     10.90   1385.80   1382.34       .00   1387.34      1.54       .02       .14   1394.50
  27780.0        .0   27780.0        .0        .0    2789.0        .0     236.2      36.9   1394.70
      .07       .00      9.96       .00      .000      .035      .000      .000   1374.90   5023.37
  .003437        8.        8.        8.         2        15         0       .00    277.96   5316.35

*SECNO 9.155

3265 DIVIDED FLOW

3370 NORMAL BRIDGE, NRD=  16 MIN ELTRD=  1394.50 MAX ELLC=  1394.70

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1392.20 ELREA=      1393.10

    9.155     11.01   1386.11   1382.53       .00   1387.62      1.50       .27       .00   1394.50
  27780.0        .0   27780.0        .0        .0    2822.7        .0     241.4      37.4   1394.70
      .07       .00      9.84       .00      .000      .035      .000      .000   1375.10   5022.85
  .003323       80.       80.       80.         2        15         0       .00    278.98   5316.85

*SECNO 9.160

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.46

3470 ENCROACHMENT STATIONS=     4528.7    5445.3  TYPE=      1  TARGET=      916.610
    9.160     12.61   1386.61   1381.55       .00   1387.68      1.07       .02       .04   1390.00
  27780.0        .0   27780.0        .0        .0    3352.8        .0     241.9      37.5   1390.00
      .08       .00      8.29       .00      .000      .035      .000      .000   1374.00   4858.57
  .001554        8.        8.        8.         2        14         0       .00    298.92   5157.49
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 SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
 Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
 TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
 SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 9.210

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  2.30

3470 ENCROACHMENT STATIONS=     4732.0    5190.0  TYPE=      1  TARGET=      458.050
   9.210     11.31   1387.31   1381.46       .00   1387.89       .58       .16       .05   1439.00
27780.0        .0   27780.0        .0        .0    4555.4        .0     267.3      39.8   1391.00
     .09       .00      6.10       .00      .000      .020      .000      .000   1376.00   4736.29
 .000294     145.      279.      355.         2        14         0       .00    429.95   5166.24

*SECNO 9.220

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4664.0    5314.1  TYPE=      1  TARGET=      650.090
   9.220      4.71   1394.71   1394.71       .00   1396.96      2.25       .03       .50   1445.00
27780.0        .0   27780.0        .0        .0    2305.7        .0     270.3      40.2   1397.00
     .09       .00     12.05       .00      .000      .035      .000      .000   1390.00   4666.58
 .010999     122.       39.      104.         0        18         0       .00    517.02   5183.60

*SECNO 9.250
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4573.0    5304.5  TYPE=      1  TARGET=      731.600
   9.250      5.01   1397.01   1397.01       .00   1398.86      1.85      1.53       .04   1394.00
27780.0    2633.6   25146.4        .0     386.6    2234.9        .0     278.4      42.3   1398.64
     .09      6.81     11.25       .00      .040      .035      .000      .000   1392.00   4572.95
 .010658     155.      141.       82.         0         8         0       .00    708.17   5281.12

*SECNO 9.300

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.87
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3470 ENCROACHMENT STATIONS= 4441.5 5290.2 TYPE= 1 TARGET= 848.690
1
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SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST
9.300	6.33	1399.33	1398.63	.00	1400.85	1.53	1.96	.03	1395.00
39000.0	8658.8	30341.2	.0	1204.3	2873.5	.0	298.5	46.9	1399.50
.10	7.19	10.56	.00	.040	.035	.000	.000	1393.00	4441.50
.006038	262.	261.	282.	2	8	0	.00	839.07	5280.57

*SECNO 9.350
3280 CROSS SECTION 9.35 EXTENDED .03 FEET

3470 ENCROACHMENT STATIONS= 4252.4 5287.8 TYPE= 1 TARGET= 1035.390

9.350	9.03	1401.03	1399.77	.00	1402.15	1.12	1.26	.04	1399.00
39000.0	7419.3	31570.3	10.4	1505.2	3456.6	6.3	327.4	53.0	1400.00
.11	4.93	9.13	1.65	.040	.035	.035	.000	1392.00	4252.38
.003537	291.	274.	274.	3	11	0	.00	1035.39	5287.77

*SECNO 9.420

3301 HV CHANGED MORE THAN HVINS

9.420	9.29	1402.29	1401.85	.00	1404.15	1.85	1.77	.22	1401.00
39000.0	2293.9	36705.9	.1	582.3	3271.6	.3	367.9	61.8	1402.00
.12	3.94	11.22	.53	.040	.035	.035	.000	1393.00	4318.72
.005753	400.	399.	402.	3	8	0	.00	900.72	5219.44

*SECNO 9.450

3265 DIVIDED FLOW

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

9.450	10.03	1403.03	1403.03	.00	1405.13	2.10	.87	.07	1401.70
39000.0	2709.4	30053.8	6236.9	486.9	2663.1	422.0	377.7	64.0	1394.00
.12	5.57	11.29	14.78	.040	.040	.040	.000	1393.00	4388.62
.010000	93.	118.	126.	0	8	0	.00	879.13	5269.11

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*SECNO 9.540

3470 ENCROACHMENT STATIONS=     4663.4    5177.0  TYPE=      1  TARGET=      513.650
     9.540     10.19   1407.19   1405.70       .00   1409.08      1.89      3.93       .02   1408.00
   39000.0        .0   39000.0        .0        .0    3531.0        .0     418.0      71.6 100000.00
       .13       .00     11.04       .00      .000      .040      .000      .000   1397.00   4689.53
   .006382      410.      500.      515.         2        15         0       .00    487.47   5177.00
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 9.650

3470 ENCROACHMENT STATIONS=     4736.4    5231.9  TYPE=      1  TARGET=      495.470
     9.650      8.57   1410.57   1408.58       .00   1412.32      1.75      3.22       .01   1412.00
   39000.0        .0   39000.0        .0        .0    3673.8        .0     464.1      77.7 100000.00
       .15       .00     10.62       .00      .000      .040      .000      .000   1402.00   4759.96
   .005242      475.      558.      503.         2        14         0       .00    466.86   5226.83

*SECNO 9.700

3470 ENCROACHMENT STATIONS=     4752.7    5283.9  TYPE=      1  TARGET=      531.160
     9.700      7.86   1411.86   1410.10       .00   1413.53      1.67      1.20       .01   1412.00
   39000.0        .0   39000.0        .0        .0    3761.4        .0     486.0      80.6   1412.00
       .16       .00     10.37       .00      .000      .035      .000      .000   1404.00   4757.73
   .004224      253.      256.      259.         2        15         0       .00    514.78   5272.51

*SECNO 9.730

3470 ENCROACHMENT STATIONS=     4762.0    5298.7  TYPE=      1  TARGET=      536.690
     9.730      8.83   1412.83   1410.11       .00   1414.14      1.31       .58       .04   1414.00
   39000.0        .0   38997.0       3.0        .0    4237.6       2.4     501.5      82.6   1412.00
       .16       .00      9.20      1.25      .000      .035      .035      .000   1404.00   4767.99
   .002855      187.      169.      151.         2        15         0       .00    522.64   5290.63

*SECNO 9.800

3301 HV CHANGED MORE THAN HVINS

3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =    .61
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3470 ENCROACHMENT STATIONS=     4698.4    5217.7  TYPE=      1  TARGET=      519.300
     9.800      7.42   1413.42   1412.91       .00   1416.18      2.76      1.61       .43   1416.00
   39000.0        .0   39000.0       .0        .0    2923.9        .0     531.5      86.6   1414.00
       .17       .00     13.34       .00      .000      .035      .000      .000   1406.00   4775.48
   .007657      383.      365.      349.         3        15         0       .00    428.31   5203.78
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    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST

*SECNO 9.890

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4678.5    5167.5  TYPE=      1  TARGET=      488.990
     9.890     10.91   1416.91   1415.10       .00   1419.14      2.23      2.90       .05   1420.00
   39000.0        .0   39000.0       .0        .0    3255.5        .0     566.6      91.2   1418.00
       .18       .00     11.98       .00      .000      .035      .000      .000   1406.00   4775.54
   .004620      509.      495.      484.         3        11         0       .00    383.14   5158.68

*SECNO 9.980

3470 ENCROACHMENT STATIONS=     4813.5    5284.1  TYPE=      1  TARGET=      470.600
     9.980      9.25   1419.25   1417.47       .00   1421.32      2.07      2.17       .02   1428.00
   39000.0        .0   39000.0       .0        .0    3377.5        .0     602.8      95.5   1420.00
       .19       .00     11.55       .00      .000      .035      .000      .000   1410.00   4856.10
   .004527      462.      475.      469.         2        14         0       .00    413.94   5270.04

*SECNO 10.080

3470 ENCROACHMENT STATIONS=     4840.6    5275.3  TYPE=      1  TARGET=      434.730
    10.080      9.59   1421.59   1420.21       .00   1423.90      2.31      2.50       .07   1426.00
   39000.0        .0   39000.0       .0        .0    3196.8        .0     641.4     100.3   1424.00
       .20       .00     12.20       .00      .000      .035      .000      .000   1412.00   4855.91
   .005312      508.      511.      514.         0        11         0       .00    406.99   5262.90

*SECNO 10.160

3470 ENCROACHMENT STATIONS=     4784.9    5288.3  TYPE=      1  TARGET=      503.410
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   10.160      8.09   1424.09   1422.72       .00   1426.19      2.10      2.27       .02   1426.00
  39000.0        .0   39000.0        .0        .0    3356.3        .0     673.7     104.6   1426.00
      .21       .00     11.62       .00      .000      .035      .000      .000   1416.00   4805.77
  .005236      447.      430.      418.         2        19         0       .00    454.79   5260.56

*SECNO 10.250

3470 ENCROACHMENT STATIONS=     4772.9    5313.0  TYPE=      1  TARGET=      540.110
   10.250      6.71   1426.71   1426.31       .00   1429.30      2.59      2.96       .15   1429.70
  39000.0        .0   39000.0        .0        .0    3020.7        .0     707.4     109.6 100000.00
      .22       .00     12.91       .00      .000      .035      .000      .000   1420.00   4791.56
  .008124      496.      460.      420.         2        15         0       .00    486.32   5277.88

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   15SEP04      15:22:46                                                                          PAGE   25

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 10.330
3280 CROSS SECTION     10.33 EXTENDED       .13 FEET

3470 ENCROACHMENT STATIONS=     4766.4    5272.0  TYPE=      1  TARGET=      505.590
   10.330      8.13   1430.13   1429.33       .00   1432.58      2.45      3.27       .01   1435.17
  39000.0        .0   39000.0        .0        .0    3105.2        .0     738.6     114.3   1434.00
      .23       .00     12.56       .00      .000      .035      .000      .000   1422.00   4802.19
  .006696      519.      444.      373.         3         8         0       .00    450.35   5252.54

*SECNO 10.340
3280 CROSS SECTION     10.34 EXTENDED       .57 FEET

3470 ENCROACHMENT STATIONS=     4756.9    5252.6  TYPE=      1  TARGET=      495.720
   10.340      8.57   1430.57   1429.81       .00   1433.09      2.53       .49       .02   1435.00
  39000.0        .0   39000.0        .0        .0    3057.7        .0     743.8     115.1   1434.00
      .24       .00     12.75       .00      .000      .035      .000      .000   1422.00   4792.27
  .006771      104.       73.       42.         2         8         0       .00    436.80   5229.07

*SECNO 10.380

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
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3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4823.2    5272.0  TYPE=      1  TARGET=      448.790
    10.380      7.33   1431.33   1431.33       .00   1434.50      3.17      1.13       .19   1435.82
   39000.0        .0   39000.0        .0        .0    2728.3        .0     754.5     116.7 100000.00
       .24       .00     14.29       .00      .000      .030      .000      .000   1424.00   4841.32
   .007208      173.      162.      143.         0        11         0       .00    430.68   5272.00


*SECNO 10.410
3280 CROSS SECTION     10.41 EXTENDED      4.66 FEET

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4783.1    5262.7  TYPE=      1  TARGET=      479.660
1
   15SEP04      15:22:46
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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST


    10.410      6.66   1434.66   1434.66       .00   1437.76      3.11      1.44       .01   1436.00
   39000.0        .0   39000.0        .0        .0    2756.2        .0     765.3     118.4   1436.00
       .24       .00     14.15       .00      .000      .035      .000      .000   1428.00   4797.50
   .009916      198.      171.      142.         0        11         0       .00    448.93   5246.44


*SECNO 10.420
3280 CROSS SECTION     10.42 EXTENDED      6.39 FEET


3301 HV CHANGED MORE THAN HVINS


3302 WARNING:  CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE,  KRATIO =  1.48


3470 ENCROACHMENT STATIONS=     4758.8    5239.4  TYPE=      1  TARGET=      480.630
    10.420     10.40   1436.40   1434.71       .00   1438.30      1.90       .41       .12   1436.00
   39000.0        8.0   38992.0        .0       5.3    3521.5        .0     769.9     119.1   1438.00
       .24       1.51     11.07       .00      .035      .035      .000      .000   1426.00   4758.79
   .004553       70.       64.       58.         4        11         0       .00    474.70   5233.48


*SECNO 10.510

3470 ENCROACHMENT STATIONS=     4717.3    5219.5  TYPE=      1  TARGET=      502.160
```

```
                                                                  MAINBAR
   10.510     42.61   1438.61   1437.03       .00   1440.72      2.11      2.36       .06   1440.00
  39000.0        .0   39000.0       .0        .0    3346.3        .0     807.1     124.2   1440.00
     .25       .00     11.65       .00      .000      .035      .000      .000   1396.00   4726.81
  .005501      439.      472.      487.         3        15         0       .00    468.40   5195.21

*SECNO 10.620

3470 ENCROACHMENT STATIONS=     4664.9    5132.6  TYPE=      1  TARGET=      467.660
   10.620     49.81   1441.81   1440.35       .00   1444.20      2.39      3.40       .08   1444.00
  39000.0        .0   39000.0       .0        .0    3143.4        .0     851.5     130.3   1444.00
     .27       .00     12.41       .00      .000      .035      .000      .000   1392.00   4688.49
  .005909      535.      596.      618.         2        17         0       .00    422.02   5110.51

*SECNO 10.700
1
   15SEP04      15:22:46                                                                                PAGE   27

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4748.1    5211.3  TYPE=      1  TARGET=      463.190
   10.700     10.16   1444.16   1444.03       .00   1447.38      3.22      2.93       .25   1446.20
  39000.0        .0   39000.0       .0        .0    2707.8        .0     878.5     134.1   1446.48
     .28       .00     14.40       .00      .000      .035      .000      .000   1434.00   4766.96
  .009224      390.      402.      382.         2        21         0       .00    406.49   5173.45

*SECNO 10.830
3280 CROSS SECTION     10.83 EXTENDED      6.36 FEET

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4782.3    5310.0  TYPE=      1  TARGET=      527.740
   10.830     12.36   1450.36   1448.93       .00   1452.32      1.95      4.81       .13   1452.00
  39000.0        .0   39000.0       .0        .0    3476.2        .0     929.4     141.5   1452.00
     .29       .00     11.22       .00      .000      .035      .000      .000   1438.00   4807.00
  .005100      642.      717.      704.         2         8         0       .00    485.67   5292.67

*SECNO 10.930
```

3280 CROSS SECTION 10.93 EXTENDED 6.96 FEET

3470 ENCROACHMENT STATIONS= 4766.7 5290.0 TYPE= 1 TARGET= 523.260

10.930	12.96	1452.96	1451.39	.00	1454.89	1.94	2.57	.00	1454.00
39000.0	.0	39000.0	.0	.0	3493.4	.0	970.7	147.1	1455.10
.31	.00	11.16	.00	.000	.035	.000	.000	1440.00	4796.08
.004871	456.	516.	557.	3	15	0	.00	475.20	5271.29

*SECNO 11.030
3280 CROSS SECTION 11.03 EXTENDED 1.58 FEET

3301 HV CHANGED MORE THAN HVINS

1
15SEP04 15:22:46 PAGE 28

SECNO	DEPTH	CWSEL	CRIWS	WSELK	EG	HV	HL	OLOSS	L-BANK ELEV
Q	QLOB	QCH	QROB	ALOB	ACH	AROB	VOL	TWA	R-BANK ELEV
TIME	VLOB	VCH	VROB	XNL	XNCH	XNR	WTN	ELMIN	SSTA
SLOPE	XLOBL	XLCH	XLOBR	ITRIAL	IDC	ICONT	CORAR	TOPWID	ENDST

3470 ENCROACHMENT STATIONS= 4581.4 5120.8 TYPE= 1 TARGET= 539.400

11.030	13.58	1455.58	1453.00	.00	1456.98	1.40	2.03	.05	1460.00
39000.0	.0	39000.0	.0	.0	4113.8	.0	1016.6	153.1	100000.00
.32	.00	9.48	.00	.000	.035	.000	.000	1442.00	4615.31
.003149	506.	525.	504.	2	15	0	.00	505.52	5120.83

*SECNO 11.140
3280 CROSS SECTION 11.14 EXTENDED 1.62 FEET

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS= 4762.0 5149.9 TYPE= 1 TARGET= 387.910

11.140	9.62	1457.62	1457.62	.00	1461.19	3.57	3.11	.65	1452.00
39000.0	.0	39000.0	.0	.0	2572.7	.0	1063.1	159.1	100000.00
.33	.00	15.16	.00	.000	.035	.000	.000	1448.00	4762.00
.009806	606.	606.	610.	0	19	0	.00	368.24	5130.24

*SECNO 11.190
3280 CROSS SECTION 11.19 EXTENDED 4.38 FEET

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7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4825.1    5165.9  TYPE=      1  TARGET=      340.840
    11.190      8.56   1460.56   1460.56       .00   1464.54      3.99      1.12       .13   1466.00
   39000.0        .0   39000.0        .0        .0    2434.4        .0    1076.0     160.9   1466.00
       .34       .00     16.02       .00      .000      .020      .000      .000   1452.00   4839.01
   .003003      277.      225.      212.         0        11         0       .00    308.90   5147.91

*SECNO 11.290
3280 CROSS SECTION     11.29 EXTENDED       .87 FEET

3301 HV CHANGED MORE THAN HVINS

1
   15SEP04      15:22:46                                                                                PAGE   29

    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

3470 ENCROACHMENT STATIONS=     4827.4    5184.7  TYPE=      1  TARGET=      357.270
    11.290     10.88   1462.88   1461.79       .00   1465.93      3.05      1.29       .09   1469.95
   39000.0        .0   39000.0        .0        .0    2784.2        .0    1108.1     164.7 100000.00
       .35       .00     14.01       .00      .000      .020      .000      .000   1452.00   4853.13
   .001977      486.      536.      591.         3         8         0       .00    315.16   5168.30

*SECNO 11.390

3301 HV CHANGED MORE THAN HVINS

3470 ENCROACHMENT STATIONS=     4826.5    5170.5  TYPE=      1  TARGET=      344.010
    11.390     11.17   1464.58   1462.10       .00   1466.85      2.28       .85       .08   1470.00
   39000.0        .0   39000.0        .0        .0    3220.8        .0    1145.9     168.7 100000.00
       .36       .00     12.11       .00      .000      .020      .000      .000   1453.41   4838.52
   .001250      520.      548.      577.         2        15         0       .00    320.78   5159.30

*SECNO 11.480

3470 ENCROACHMENT STATIONS=     4831.9    5174.6  TYPE=      1  TARGET=      342.710
    11.480     11.32   1465.32   1462.48       .00   1467.45      2.13       .58       .01   1470.00
   39000.0        .0   39000.0        .0        .0    3329.2        .0    1182.5     172.3 100000.00
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                                                                  MAINBAR
      .37        .00      11.71       .00       .000       .020       .000       .000   1454.00   4842.57
   .001125      443.       487.      532.          2         15          0        .00    321.86   5164.43

*SECNO 11.560

3301 HV CHANGED MORE THAN HVINS

7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4845.3    5152.5  TYPE=      1  TARGET=      307.130
    11.560      9.29   1468.43   1468.43       .00   1472.66      4.24        .67        .63   1472.00
   39000.0        .0   39000.0        .0        .0    2361.1        .0     1208.0      175.0 100000.00
       .38       .00     16.52       .00       .000      .020      .000       .000   1459.14   4861.43
   .002959      386.       390.      396.         0        15         0        .00    282.25   5143.68
```



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    SECNO      DEPTH      CWSEL      CRIWS      WSELK      EG         HV         HL         OLOSS      L-BANK ELEV
    Q          QLOB       QCH        QROB       ALOB       ACH        AROB       VOL        TWA        R-BANK ELEV
    TIME       VLOB       VCH        VROB       XNL        XNCH       XNR        WTN        ELMIN      SSTA
    SLOPE      XLOBL      XLCH       XLOBR      ITRIAL     IDC        ICONT      CORAR      TOPWID     ENDST

*SECNO 11.570
7185 MINIMUM SPECIFIC ENERGY
3720 CRITICAL DEPTH ASSUMED

3470 ENCROACHMENT STATIONS=     4880.5    5126.6  TYPE=      1  TARGET=      246.160
    11.570     10.10   1470.39   1470.39       .00   1475.08      4.69        .22        .14   1472.00
   39000.0        .0   39000.0        .0        .0    2243.6        .0     1211.8      175.5 100000.00
       .38       .00     17.38       .00       .000      .020      .000       .000   1460.29   4881.57
   .003014       72.        73.       75.         0         8         0        .00    241.45   5123.02
```



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                                                                THIS RUN EXECUTED 15SEP04    15:22:46
*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

IGINAL MODEL SKNKLOMR.IH

SUMMARY PRINTOUT

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
	8.690	38888.00	1378.00	1374.49	5.51	14.00	1389.66	7225.27	.37	4045.04	5556.89
*	8.790	38875.00	1378.73	1377.36	8.33	12.73	896.14	4665.65	.64	4134.96	5031.10
	8.930	37676.00	1381.20	1378.47	8.42	11.20	615.96	4475.54	.55	4600.73	5216.70
*	9.010	37207.00	1381.55	1381.32	14.77	9.36	346.24	2519.44	.96	4836.01	5182.25
*	9.080	31427.00	1385.35	1381.03	8.86	11.88	349.55	3545.34	.49	4830.71	5180.26
	9.140	27780.00	1386.12	1381.16	8.28	12.12	304.16	3354.43	.44	4847.42	5151.58
*	9.145	27780.00	1385.80	1382.34	9.96	10.90	277.96	2788.99	.57	5023.37	5316.35
	9.155	27780.00	1386.11	1382.53	9.84	11.01	278.98	2822.72	.56	5022.85	5316.85
*	9.160	27780.00	1386.61	1381.55	8.29	12.61	298.92	3352.84	.44	4858.57	5157.49
*	9.210	27780.00	1387.31	1381.46	6.10	11.31	429.95	4555.37	.33	4736.29	5166.24
*	9.220	27780.00	1394.71	1394.71	12.05	4.71	517.02	2305.71	1.01	4666.58	5183.60
*	9.250	27780.00	1397.01	1397.01	11.25	5.01	708.17	2621.46	.98	4572.95	5281.12
*	9.300	39000.00	1399.33	1398.63	10.56	6.33	839.07	4077.78	.78	4441.50	5280.57
	9.350	39000.00	1401.03	1399.77	9.13	9.03	1035.39	4968.11	.61	4252.38	5287.77
	9.420	39000.00	1402.29	1401.85	11.22	9.29	900.72	3854.21	.77	4318.72	5219.44
*	9.450	39000.00	1403.03	1403.03	11.29	10.03	879.13	3571.95	.86	4388.62	5269.11
	9.540	39000.00	1407.19	1405.70	11.04	10.19	487.47	3531.03	.72	4689.53	5177.00

1

15SEP04 15:22:46 PAGE 32

SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
9.650	39000.00	1410.57	1408.58	10.62	8.57	466.86	3673.84	.67	4759.96	5226.83

	9.700	39000.00	1411.86	1410.10	10.37	7.86	514.78	3761.41	.68	4757.73	5272.51
	9.730	39000.00	1412.83	1410.11	9.20	8.83	522.64	4239.95	.57	4767.99	5290.63
*	9.800	39000.00	1413.42	1412.91	13.34	7.42	428.31	2923.88	.90	4775.48	5203.78
	9.890	39000.00	1416.91	1415.10	11.98	10.91	383.14	3255.50	.72	4775.54	5158.68
	9.980	39000.00	1419.25	1417.47	11.55	9.25	413.94	3377.51	.71	4856.10	5270.04
	10.080	39000.00	1421.59	1420.21	12.20	9.59	406.99	3196.75	.77	4855.91	5262.90
	10.160	39000.00	1424.09	1422.72	11.62	8.09	454.79	3356.29	.75	4805.77	5260.56
	10.250	39000.00	1426.71	1426.31	12.91	6.71	486.32	3020.73	.91	4791.56	5277.88
	10.330	39000.00	1430.13	1429.33	12.56	8.13	450.35	3105.21	.84	4802.19	5252.54
	10.340	39000.00	1430.57	1429.81	12.75	8.57	436.80	3057.69	.85	4792.27	5229.07
*	10.380	39000.00	1431.33	1431.33	14.29	7.33	430.68	2728.34	1.00	4841.32	5272.00
*	10.410	39000.00	1434.66	1434.66	14.15	6.66	448.93	2756.23	1.01	4797.50	5246.44
*	10.420	39000.00	1436.40	1434.71	11.07	10.40	474.70	3526.77	.71	4758.79	5233.48
	10.510	39000.00	1438.61	1437.03	11.65	42.61	468.40	3346.32	.77	4726.81	5195.21
	10.620	39000.00	1441.81	1440.35	12.41	49.81	422.02	3143.43	.80	4688.49	5110.51
	10.700	39000.00	1444.16	1444.03	14.40	10.16	406.49	2707.75	.98	4766.96	5173.45
	10.830	39000.00	1450.36	1448.93	11.22	12.36	485.67	3476.25	.74	4807.00	5292.67
	10.930	39000.00	1452.96	1451.39	11.16	12.96	475.20	3493.44	.73	4796.08	5271.29
	11.030	39000.00	1455.58	1453.00	9.48	13.58	505.52	4113.78	.59	4615.31	5120.83
*	11.140	39000.00	1457.62	1457.62	15.16	9.62	368.24	2572.74	1.01	4762.00	5130.24
*	11.190	39000.00	1460.56	1460.56	16.02	8.56	308.90	2434.44	1.01	4839.01	5147.91
	11.290	39000.00	1462.88	1461.79	14.01	10.88	315.16	2784.22	.83	4853.13	5168.30
	11.390	39000.00	1464.58	1462.10	12.11	11.17	320.78	3220.78	.67	4838.52	5159.30
	11.480	39000.00	1465.32	1462.48	11.71	11.32	321.86	3329.18	.64	4842.57	5164.43
*	11.560	39000.00	1468.43	1468.43	16.52	9.29	282.25	2361.09	1.01	4861.43	5143.68

1

	SECNO	Q	CWSEL	CRIWS	VCH	DEPTH	TOPWID	AREA	FRCH	SSTA	ENDST
*	11.570	39000.00	1470.39	1470.39	17.38	10.10	241.45	2243.58	1.00	4881.57	5123.02

1

SUMMARY OF ERRORS AND SPECIAL NOTES

```
WARNING SECNO=      8.790  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.010  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.145  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.160  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=      9.210  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.220  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.220  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=      9.250  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.250  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.300  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=      9.450  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=      9.450  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=      9.800  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     10.380  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.380  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     10.410  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     10.410  PROFILE=  1  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     10.420  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     11.140  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.140  PROFILE=  1  MINIMUM SPECIFIC ENERGY
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CAUTION SECNO=     11.190  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.190  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.560  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.560  PROFILE=  1  MINIMUM SPECIFIC ENERGY

CAUTION SECNO=     11.570  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     11.570  PROFILE=  1  MINIMUM SPECIFIC ENERGY
```

PHOTO LOG

Figure 1 – Curb and west end of retaining wall south of Soft Wind Drive (looking southeast).

Figure 2 – Retaining wall south of Soft Wind Drive (note ground elevations behind wall at and above wall elevation) (looking east).

Figure 3 – Alameda Road looking east toward 35th Avenue (note curbs on both sides).

Figure 4 – 35th Avenue looking south at Pinnacle Peak Road intersection.

CITY OF PHOENIX SURVEYOR DATA SHEETS

City of Phoenix

Date: **November 15, 2004.**

To: **Hasan Mushtaq, PE,** Civil Engineer III
Street Transportation Department

From: **Tom Farnsworth, RLS,** Survey Supervisor
Street Transportation Department

Subject: **35th Drive flood plain elevations**

General Comments:

Field survey performed using City Of Phoenix bench mark datum, NGVD 1929.

Elevations taken on natural ground, except as noted.

Drawings referenced to North Canyon Ranch, Parcel 3-B, recorded in Book 414, Page 21 and North Canyon Ranch Industrial Park, recorded in Book 324, Page 24.

There are 22 houses / commercial buildings, all located on 35th Drive.

If you have any further questions, please feel free to contact me at 602-534-7082.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23371
THOMAS G.
FARNSWORTH
Date Signed 11/15/04
ARIZONA, U.S.A.

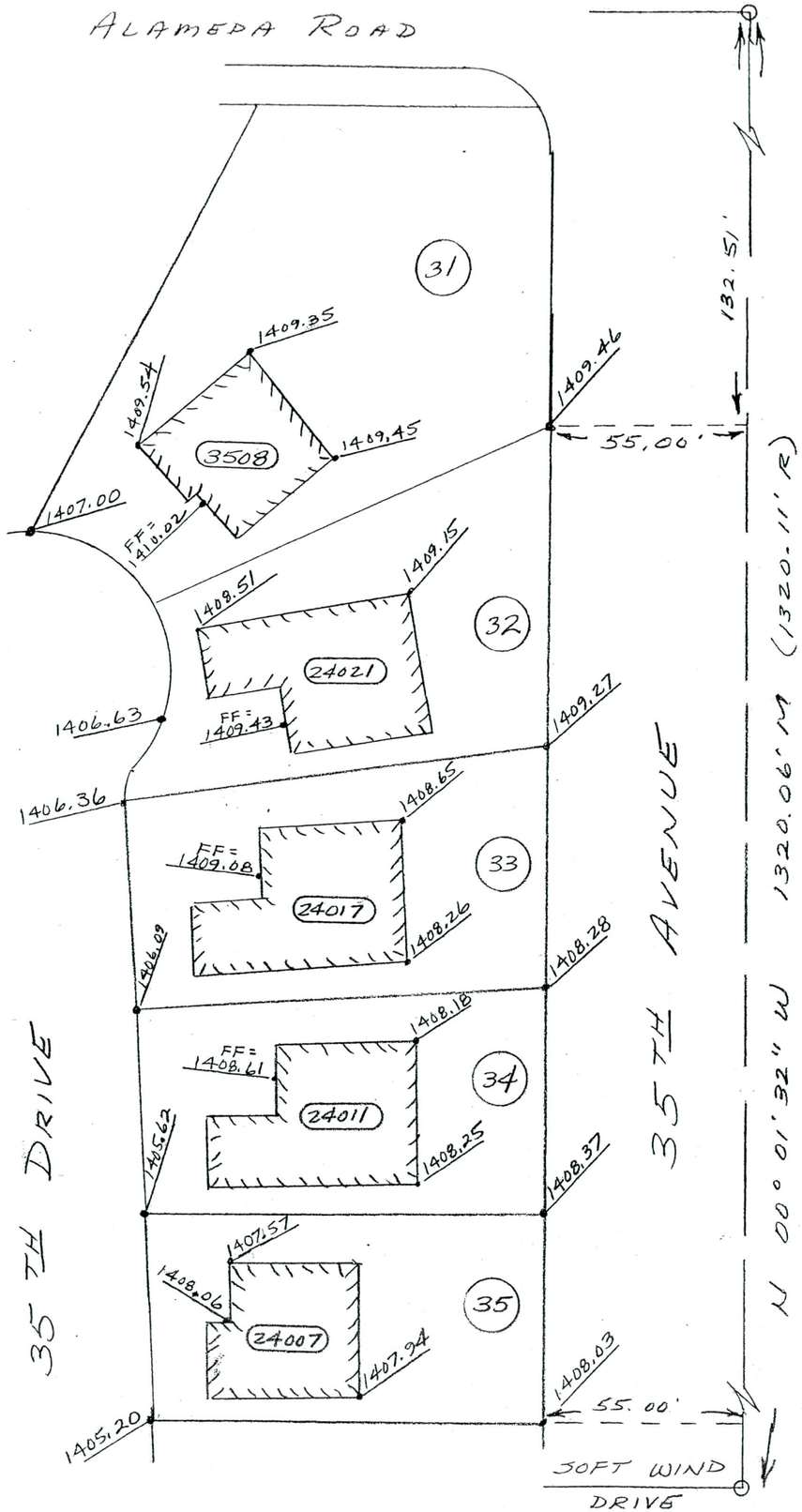


EXHIBIT FOR CITY OF PHOENIX:

FLOOD PLAIN ELEVATIONS FOR:

3508 W. ALAMEDA RD.
24021 N. 35TH DRIVE
24017 " " "
24011 " " "
24007 " " "

LOTS 31-35, NORTH CANYON RANCH, PARCEL 3-B, AS RECORDED IN BOOK 414, PAGE 21, MCR. LOCATED IN A PORTION OF: E1/2, SECTION 10, T-4-N, R-2-E, G&SRM, MARICOPA COUNTY, ARIZONA.

N

SCALE: 1" = 40'

0 40 80

LEGEND:

O = FOUND BRASS CAP
m = MEASURED
R = RECORD
✓ = GROUND ELEVATION
FF = FINISHED FLOOR
(3508) = ADDRESS
(31) = LOT NUMBER

SURVEYOR'S CERTIFICATE

FIELD SURVEY PERFORMED UNDER MY DIRECT SUPERVISION DURING MONTH OF OCTOBER, 2004.

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 23371
THOMAS G. FARNSWORTH
Date Signed 11/10/04
ARIZONA, U.S.A.

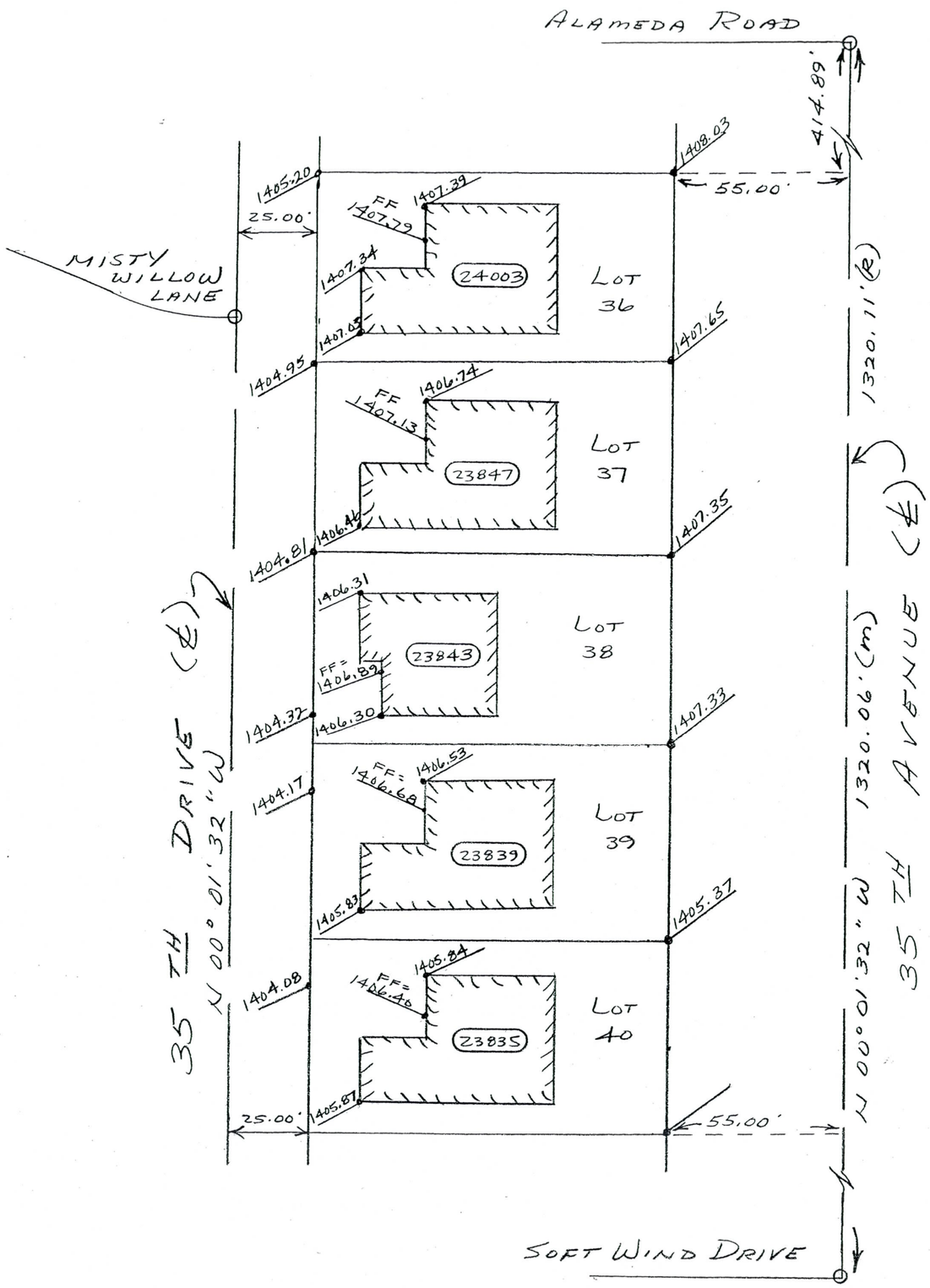


EXHIBIT FOR CITY OF PHOENIX:

FLOOD PLAIN ELEVATIONS FOR:

23835 N. 35TH DRIVE
23839 " " "
23843 " " "
23847 " " "
24003 " " "

LOTS 36-40, NORTH CANYON RANCH, PARCEL 3-B, AS RECORED IN BOOK 414, PAGE 21, MCR. LOCATED IN A PORTION OF E½, SECTION 10, T-4-N, R-2-E, G&SRM, MARICOPA COUNTY, ARIZONA

N

SCALE: 1" = 40'

0 40 80

LEGEND:

O = FOUND BRASS CAP
m = MEASURED
R = RECORD
•/ = GROUND ELEVATION
FF = FINISH FLOOR
(24003) = ADDRESS
℄ = CENTERLINE

SURVEYOR'S CERTIFICATE:

FIELD SURVEY PERFORMED UNDER MY DIRECT SUPERVISION DURING MONTH OF OCTOBER, 2004.

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 23371
THOMAS G. FARNSWORTH
Date Signed 11/12/04
ARIZONA, U.S.A.

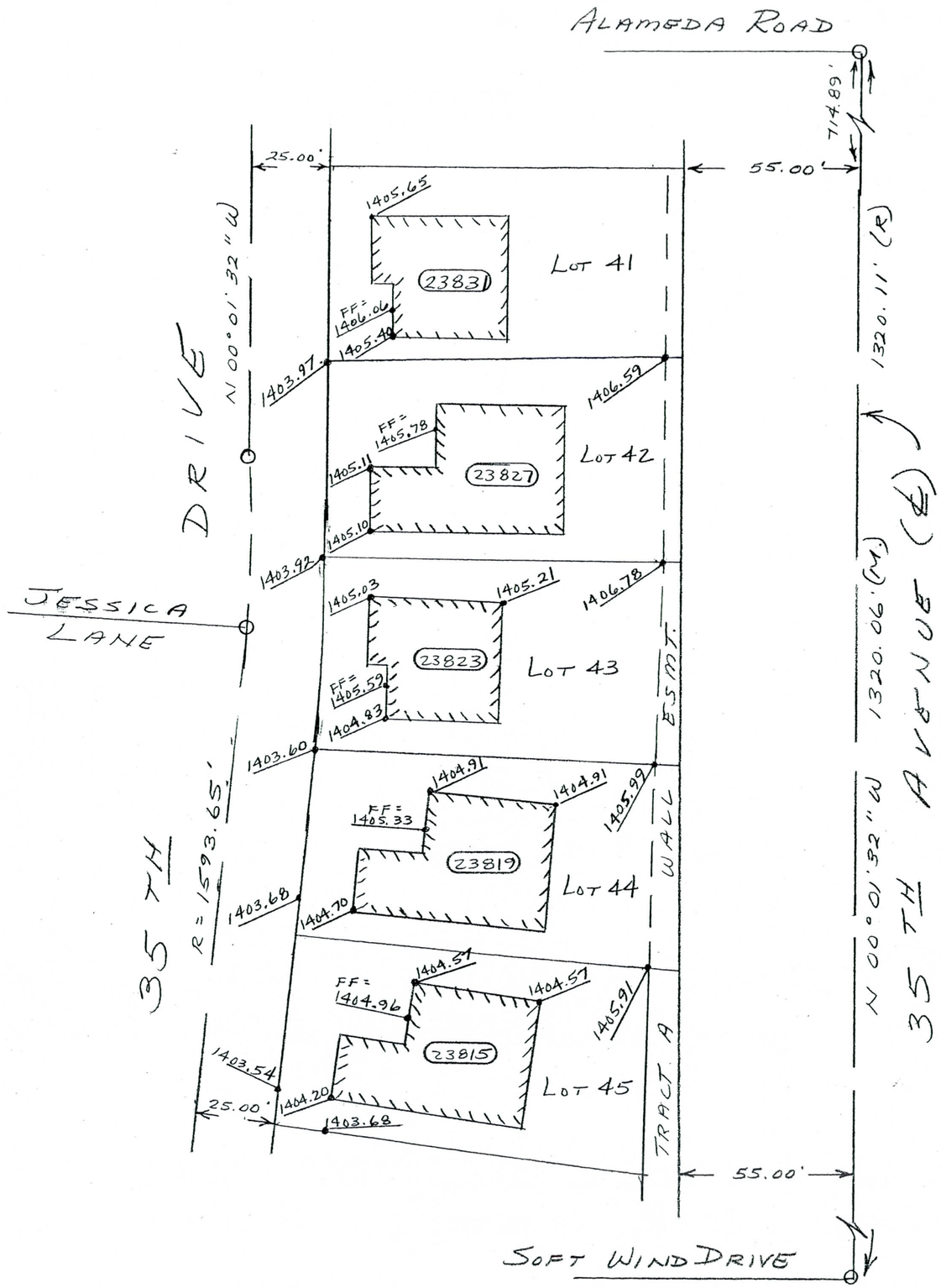


EXHIBIT FOR CITY OF PHOENIX:

FLOOD PLAIN ELEVATIONS FOR:

23831 N. 35TH DRIVE
23827 " " "
23823 " " "
23819 " " "
23815 " " "

LOTS 41-45, NORTH CANYON RANCH, PARCEL 3-B, AS RECORDED IN BOOK 414, PAGE 21, MCR.

LOCATED IN A PORTION OF: E½, SECTION 10, T-4-N, R-2-E, G&SRM, MARICOPA COUNTY, ARIZONA.

N

SCALE: 1" = 40'

0 40 80

LEGEND:

O = FOUND BRASS CAP
M = MEASURED
R = RECORD
FF = FINISH FLOOR
℄ = CENTERLINE
• = GROUND ELEVATION
(23831) = ADDRESS

SURVEYOR'S CERTIFICATE:

FIELD SURVEY PERFORMED UNDER MY DIRECT SUPERVISION DURING MONTH OF OCTOBER, 2004.

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 23371
THOMAS G. FARNSWORTH
Date Signed 11/12/04
ARIZONA, U.S.A.

EXHIBIT FOR CITY OF PHOENIX:

FLOOD PLAIN ELEVATIONS FOR:

23801 N. 35TH DRIVE

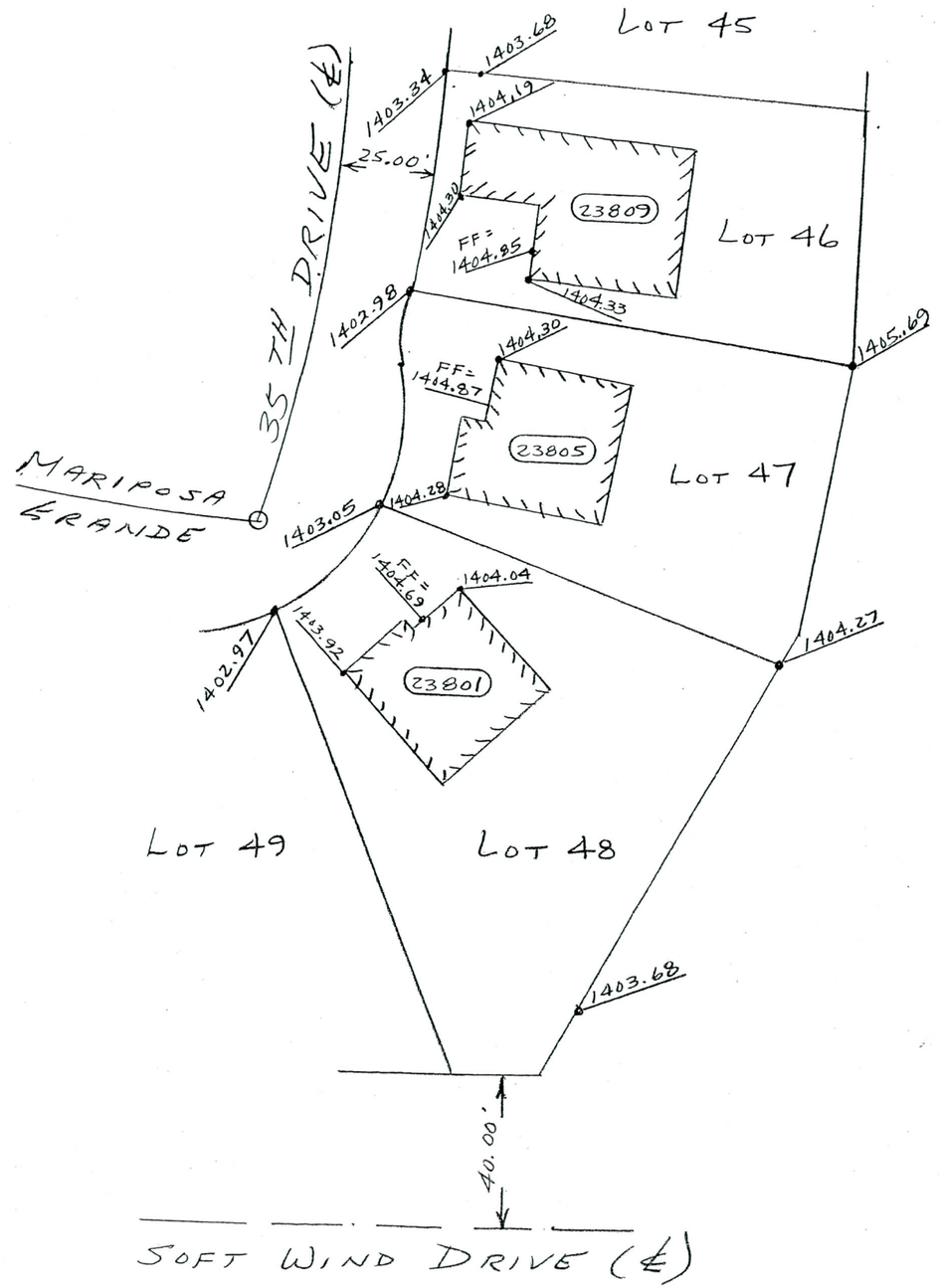
23805 " " "

23809 " " "

LOTS 46-48, NORTH CANYON RANCH, PARCEL 3-B, AS RECORDED IN BOOK 414, PAGE 21, MCR. LOCATED IN A PORTION OF: E½, SECTION 10, T-4-N, R-2-E, G&SRM, MARICOPA COUNTY, ARIZONA.

SCALE: 1" = 40'

0 40 80



LEGEND:

O = FOUND BRASS CAP

FF = FINISHED FLOOR

✓ = GROUND ELEVATION

℄ = CENTERLINE

▭ = ADDRESS

SURVEYOR'S CERTIFICATE

FIELD SURVEY PERFORMED UNDER MY DIRECT SUPERVISION DURING MONTH OF OCTOBER, 2004.

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 23371
THOMAS G. FARNSWORTH
Date Signed 11/15/04
ARIZONA, U.S.A.

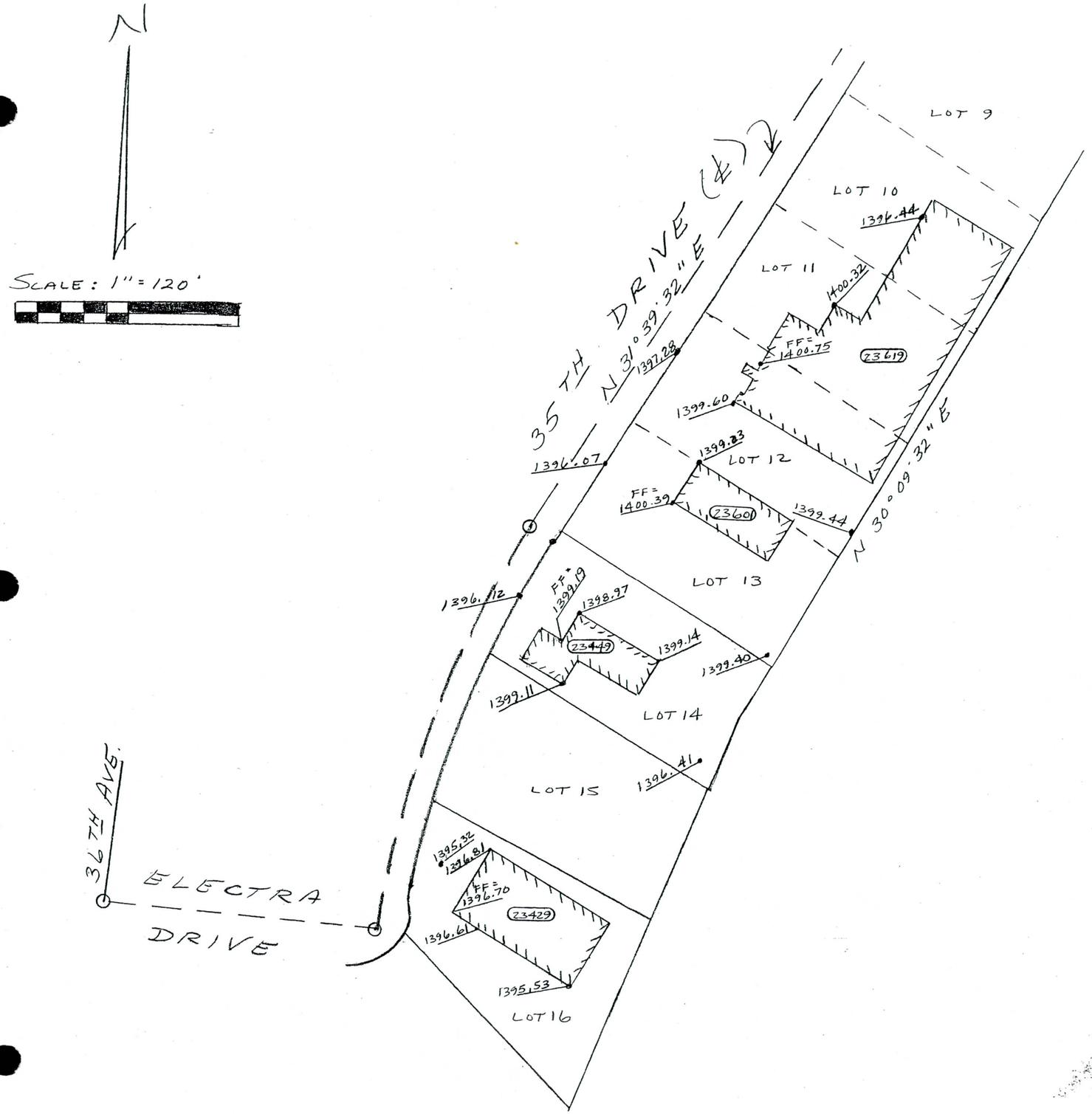


EXHIBIT FOR CITY OF PHOENIX:

FLOOD PLAIN ELEVATIONS FOR:

23429 N. 35TH DRIVE
23449 " " "
23601 " " "
23619 " " "

LOTS 10-16, NORTH CANYON RANCH, INDUSTRIAL PARK, AS RECORDED IN BOOK 324, PAGE 24, MCR.

A PORTION OF: SE 1/4, SECTION 18, T-4-N, R-2-E, G&SRM, MARICOPA COUNTY, ARIZONA.

LEGEND:

O = FOUND BRASS CAP
FF = FINISHED FLOOR
• / = GROUND ELEVATION
⬭ = ADDRESS
℄ = CENTERLINE

SURVEYOR'S CERTIFICATE:

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THOMAS G. FARNSWORTH
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ARIZONA, U.S.A.