F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV0033CF.DAT TIME/DATE OF STUDY: 13:14 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.183 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.305 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.469
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
********************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.197 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.578
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.323
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
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 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.795 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.515
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.556 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.363
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0033CF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                   | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 19376.4|
18.000 I
         | 119.00 12603.00| Convex Routing: Stream #1| 19376.4 19237.4|
18.000 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0 118.9|
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 19237.4 | 19270.1 |
18.000 I
| 12603.00 | 12603.00| Zero Out:
                            Stream #2| 118.9
                                              0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 19270.1
                                             19252.01
18.083 |
920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                             315.11
16.250 I
          1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 19252.0
                                            19345.91
           18.083 I
| 126.00 | 126.00| Zero Out: Stream #2| 315.1 | 0.0|
| 600.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                             94.11
16.333 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 19345.9
                                            19365.1
18.083 |
         1
| 126.00 | 126.00| Zero Out:
                           Stream #2| 94.1
                                              0.01
               | 126.00 12720.50| Convex Routing: Stream #1| 19365.1
                                            19354.01
18.167 |
         320.00
         331.00| Subarea (UH) Added to Stream #2| 0.0 443.3|
16.333 |
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                               290.81
16.333 I
+------
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 51.5|
16.417 |
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 443.3 | 490.7 |
16.333 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                      51.5
                                              0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                       490.7
                                               781.5|
16.333
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```

I		Zero Out:			
•		 ++			
331.00 18.167		Stream #2 Added to:	Stream #1	19354.0	19619.8
	12720.50	Zero Out:	Stream #2	781.5	0.0
	127.00	Convex Routing:			
12710.00	127.00	Subarea (UH) Added to	Stream #2	0.0	348.0
		Stream #2 Added to:			
+		++			
127.00	127.00	Zero Out:	Stream #2	348.0	0.0
127.00 18.250	12902.00	Convex Routing:	Stream #1	19691.5	19675.0
50220.00 16.333	50347.00	Subarea (UH) Added to			
50347.00		Convex Routing:			
12902.00	12902.00	Stream #2 Added to:	Stream #1	19675.0	19947.7
+		++			
		Zero Out:			
12902.00 7.417	129.00	Convex Routing: Subarea (UH) Added to	Stream #1	19947.7	19930.8
50400.00 6.250	129.00	Subarea (UH) Added to	Stream #2	0.0	238.7
129.00		Stream #2 Added to:			
129.00	129.00	Zero Out:			
		++ Subarea (UH) Added to	Stream #2	0.0	134.1
6.333 222.00	129.00	Stream #2 Added to:	Stream #1	19995.1	20056.9
7.333 129.00	129.00	Zero Out:	Stream #2	134.1	0.0
129.00		 Convex Routing:			
7.417 13010.00 6.833	132.00	Subarea (UH) Added to	Stream #2	0.0	1582.0
++ Notes: 1 =	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-M	MINUTE UNIT

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	 +-				+		+
UPSTREAM		-+	+		ı	UPSTREAM	DOWNSTREAM
TIME(2) TO NODE # PEAK (HR)	NODE # MODELED (AE	HYDROLOGIC/I	S				PEAK (CFS)
+-							+
132.00 17.250	13305.00	Convex Rout	ing:	Stream	#2	1582.0	1534.5
13305.00	133.00	Convex Rout	ing:	Stream	#2	1534.5	1523.4
17.500 132.00 16.583	133.00	Subarea (UH) Added to	Stream	#3	0.0	693.7
133.00	133.00			Stream	#2	1523.4	2015.0
17.417 133.00	I						0.0
+-		-+	+				
133.00 17.417			dded to:	Stream	#1	20046.9	22061.9
133.00		Zero Out:		Stream	#2	2015.0	0.0
133.00 17.417	18131.00	3					22061.9
Notes: 1 = INTERVAL	BASIN MODEI	-+	+ EEDED; 2 =	TIME IS	AI	END OF 5-M	

END OF FLOODSCx ROUTING ANALYSIS

FLOOD ROUTING ANALYSIS USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV0033TF.DAT TIME/DATE OF STUDY: 14:54 10/25/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< _____ WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.795 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.515 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744 3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987****************** FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) = 315.00

```
CHANNEL LENGTH (FT) = 9760.05
                           MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                 212.00
 CHANNEL LENGTH(FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.556 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.363
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744
  3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
```

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1	* AES FLOODSCx	PROGRAM RESU	JLTS SUMMARY '
Page: 1 of			
		+	+-
+	+		
UPSTREAM	DOWNSTREAM	UPSTREAM	DOWNSTREAM
	MAX. STORAGE		
NODE #	NODE # HYDROLOGIC/HYDRAULIC PROCESS	PEAK (CFS)	PEAK (CFS)
	MODELED (AF) FOOTNOTES		
		+	+-
	+		
	132.00 Subarea (UH) Added to Stream #2	0.0	3421.1
16.833			
	13305.00 Convex Routing: Stream #2	3421.1	3313.5
17.083			
13305.00	133.00 Convex Routing: Stream #2	3313.5	3247.5
17.250			
132.00	133.00 Subarea (UH) Added to Stream #3	0.0	1499.0
16.583			
	133.00 Stream #3 Added to: Stream #2	3247.5	3888.1
17.250	 		
	+	-+	+-
		1/00 0	0 01
133.00	133.00 Zero Out: Stream #3	1499.0	0.01
	133.00 Stream #2 Added to: Stream #1	1 0 0	3888 11
17.250	133.00 Stream #2 Added to. Stream #1	0.0	3000.11
1 133 00	133.00 Zero Out: Stream #2	3888 1	0.01
1 155.00		. 5000.1	0.01
	133.00 View: Stream #1	T.	3888 11
	1403.36 3	. 1	3000.11
	+	+	+-
+	+		
Notes: 1 =	BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS A	T END OF 5-1	MINUTE UNIT
INTERVAL			
3 =	RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS	AFTER THE 1	PEAK DAY OF
THE DESIGN S	TORM		
+			

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV0033UF.DAT TIME/DATE OF STUDY: 13:14 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.183 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.305 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.469
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
********************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.197 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.578
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.323
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
_____
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
**********************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
```

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0033UF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                     | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 19871.1|
18.000 I
19722.6
18.000 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0
                                               126.71
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 19722.6
                                                19754.61
| 12603.00 | 12603.00| Zero Out:
                             Stream #2| 126.7
                                                 0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 19754.6
                                                19732.91
          18.083 |
920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                                 336.71
16.250 I
           1
126.00
         126.00| Stream #2 Added to: Stream #1| 19732.9
                                                19824.91
           18.083 I
         126.00| Zero Out: Stream #2| 336.7
126.00
                                                 0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                101.61
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 19824.9
                                                19843.71
18.083 |
          | 126.00 | 126.00| Zero Out:
                             Stream #2| 101.6
                                                 0.01
         | 126.00 | 12720.50 | Convex Routing: | Stream #1 | 19843.7
                                                19831.31
18.167 |
          320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0
                                               468.51
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                                  308.41
16.333 |
390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 54.7|
16.417 |
          | 331.00 | 331.00| Stream #4 Added to: Stream #2|
                                          468.5 519.0|
16.333 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                        54.7
                                                 0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                          519.0
                                                  827.3|
16.333
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                                          Page 10
```

		Zero Out:			
+-					
12720.50		Zero Out:	Stream #2	827.3	0.0
12720.50	127.00	Convex Routing:	Stream #1	20091.8	20046.9
.250 12710.00	127.00	 Subarea (UH) Added to	Stream #2	0.0	371.2
127.00	127.00	Stream #2 Added to:	Stream #1	20046.9	20156.7
127.00	127.00	Zero Out:	Stream #2	371.2	0.0
	12902.00	Convex Routing:			
50220.00	50347.00	Subarea (UH) Added to	Stream #2	0.0	586.2
5.333 50347.00	12902.00	Convex Routing:	Stream #2	586.2	576.7
12902.00	12902.00	Stream #2 Added to:	Stream #1	20142.9	20343.4
		++ Zero Out:			
12902.00 .417	129.00	Convex Routing: Subarea (UH) Added to	Stream #1	20343.4	20327.9
50400.00 5.250	129.00	Subarea (UH) Added to	Stream #2	0.0	256.5
129.00	129.00	Stream #2 Added to:	Stream #1	20327.9	20390.2
129.00	129.00	Zero Out:			
210.00	221.00	++ Subarea (UH) Added to	Stream #2	0.0	142.3
222.00	129.00	 Stream #2 Added to:	Stream #1	20390.2	20445.4
129.00	129.00	Zero Out:	Stream #2	142.3	0.0
129.00					20434.6
133.00 1417		3	Stream #1		20434.6
129.00 .417 133.00 .417 Notes: 1 =	133.00 133.00 16961.79 BASIN MODE	Convex Routing:	Stream #1 Stream #1	20445.4	2)

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+		
/ * AES FLOODSCx	PROGRAM RESU	LTS SUMMARY *
INPUT FILENAME: [EV0033UF.DAT]		
Page: 2 of		
	-+	+-
UPSTREAM DOWNSTREAM	UPSTREAM	DOWNSTREAM
TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS PEAK (HR) MODELED (AF) FOOTNOTES	PEAK (CFS)	PEAK (CFS)
+	-+	+-
+		

END OF FLOODSCx ROUTING ANALYSIS



F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV0034CF.DAT TIME/DATE OF STUDY: 00:49 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE (CFS) = 0.00_____ FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.183 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

Date: 08/11/2023

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.305 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.469
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
********************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.197 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.578
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.323
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.795 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.515
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

Date: 08/11/2023

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.556 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.363
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.311 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.408
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
_____
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
```

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 		+ * AES	FLOODS	'x P	ROGRAM RESII	LTS SUMMARY
			THOODBO	<i>J</i> A 1	NOGIVIT NEBO	DIO CONTRICT
INPUT FILEN age: 1 of	=	34CF.DAT]				
+	+-			+		+
		++			IIDCTDEAM	DOWNSTREAM
UPSTREAM D IME(2) TO		GE			UPSIKLAM	DOWNSIREAM
EAK (HR)	MODELED (A)	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+- 10100 00	119 001	++ Subarea (IH) Added to	Stream	#1 I	0.0	18989 81
8.000	12602 001	Convex Routing:	Ctroam	#11	10000 0	10055 01
8.000	12003.001	convex Routing:	Stream	#1	10909.0	10000.91
6 0 5 0 1		Subarea (UH) Added to				
8.000	1					
		Zero Out:				
+	+			+		+
12603.00	126.00	++ Convex Routing:	Stream	#1	18889.2	18874.2
8.083 920.00		 Subarea (UH) Added to	Stream	#2	0.0	300.1
6.250 126.00	126.00	Stream #2 Added to:	Stream	#1	18874.2	18969.8
8.083						
	1	Subarea (UH) Added to				
6.333	1	 				
+-		++ Stream #2 Added to:				
8.083	1	Zero Out:				
3.167		Convex Routing:				
320.00 6.333	1	Subarea (UH) Added to				
400.00		Subarea (UH) Added to				
390.00 6.417	331.00	Subarea (UH) Added to	Stream	#4	0.0	49.2
331.00 6.333	331.00	Stream #4 Added to:	Stream	#2	425.9	471.4
331.00		Zero Out:	Stream	#4	49.2	0.0
	331.00	Stream #3 Added to:	Stream	#2	471.4	750.0

		Zero Out:				
331.00	12720.50	-++ Stream #2 Added to:				
18.167 12720.50	12720.50	Zero Out:	Stream	#2	750.0	0.0
12720.50 18.250	127.00	Convex Routing:	Stream	#1	19249.2	19212.7
		Subarea (UH) Added to				
127.00 17.250		Stream #2 Added to:				19357.8
·		Zero Out:	Stream	#2	332.0	0.0
127.00 17.333	12902.00	Convex Routing:	Stream	#1	19357.8	19349.2
50220.00		Subarea (UH) Added to				
50347.00 50417	12902.00	Convex Routing:	Stream	#2	526.0	517.5
12902.00	12902.00	Stream #2 Added to:				
12902.00	12902.00	-++ Zero Out:	Stream	#2	517.5	0.0
12902.00 17.333	129.00	Convex Routing:	Stream	#1	19634.7	19623.5
50400.00 16.250	129.00	Subarea (UH) Added to	Stream	#2	0.0	226.3
129.00	129.00	Stream #2 Added to:	Stream	#1	19623.5	19691.4
	1	Zero Out:				0.0
		-++ Subarea (UH) Added to	Stream	#2	0.0	128.5
16.333		Stream #2 Added to:				
17.333 129.00	129.00	Zero Out:	Stream	#2	128.5	0.0
		Convex Routing:	Stream	#1	19753.0	19741.0
16.833	1	Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODEI	VOLUME EXCEEDED; 2 =	: TIME IS	S AT	END OF 5-M	INUTE UNIT
		File name: EV0034CF				je 14

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0034CF.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                   | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: Stream #2 | 1519.1 | 1473.9 |
17.250 I
          | 13305.00
         133.00| Convex Routing: Stream #2| 1473.9 1464.0|
17.500 I
132.00
         133.00| Subarea (UH) Added to Stream #3| 0.0 668.2|
          1
16.583 |
| 133.00
         133.00| Stream #3 Added to: Stream #2| 1464.0
                                             1948.7
17.417 |
          | 133.00 | 133.00| Zero Out:
                                      668.2
                            Stream #3|
                                               0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 19741.0
                                              21689.71
         17.417 |
| 133.00 | 133.00| Zero Out:
                            Stream #2| 1948.7
                                               0.01
| 133.00 | 134.00| Convex Routing: Stream #1| 21689.7
                                              21667.1|
17.583 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2| 0.0
                                             775.01
16.333 |
          | 134.00 | 134.00| Stream #2 Added to: Stream #1| 21667.1
                                              22010.51
17.583 |
| 134.00 | 134.00| Zero Out:
                        Stream #2| 775.0 0.0|
17.250 |
134.00
         134.00| Stream #2 Added to: Stream #1| 22010.5
                                              23179.81
17.500 |
          | 134.00 | 134.00 | Zero Out: Stream #2 | 1192.1
                                               0.01
| 134.00 | 134.00| View:
                             Stream #1|
                                              23179.81
17.500 | 19199.88| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
```

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END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV0034UF.DAT TIME/DATE OF STUDY: 00:49 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.183 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
*******************
 FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<<<<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.305 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.469
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.197 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.578
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.323
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*****************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.795 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.515
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.556 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.363
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>>>
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.311 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

*******	******	*******	******
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 6	
>>>>STREAM NUMBER 2 CLEA	RED AND SET TO ZE	ERO<<<<	
**********	******	*********	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER 1	HYDROGRAPH<		

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I		* AES	FLOODSO	Cx E	PROGRAM RESU	LTS SUMMARY
age: 1 of	1	34UF.DAT]		+	·	
	DOWNSTREAM	++			UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS			
10100.00	119.00	++ Subarea (UH) Added to				
	12603.00	Convex Routing:	Stream	#1	19257.0	19120.2
	809.00	Subarea (UH) Added to	Stream	#2	0.0	116.9
6.250 12603.00	12603.00	Stream #2 Added to:	Stream	#1	19120.2	19153.1
		Zero Out:				
12603.00	126.00	++ Convex Routing:	Stream	#1	19153.1	19135.8
	905.00	Subarea (UH) Added to	Stream	#2	0.0	309.7
6.250 126.00 8.083	126.00	Stream #2 Added to:	Stream	#1	19135.8	19230.2
126.00	126.00	Zero Out:	Stream	#2	309.7	0.0
6.333		Subarea (UH) Added to				
126.00	126.00	++ Stream #2 Added to:	Stream	#1	19230.2	19249.6
8.083 126.00	126.00	Zero Out:	Stream	#2	92.2	0.0
126.00		 Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	437.0
6.333 I		Subarea (UH) Added to				
390.00	331.00	++ Subarea (UH) Added to				
6.417 331.00	331.00	Stream #4 Added to:	Stream	#2	437.0	483.7
6.333			Stream	#4	50.7	0.0
331.00 6.333		Stream #3 Added to:	Stream	#2	483.7	770.3

331.00 18.167 12720.50 	12720.50	++ Stream #2 Added to:				'
12720.50	12720.50					
12720.50 18.250		Zero Out:	Stream	#2	770.3	0.0
10.230	127.00	Convex Routing:	Stream	#1	19505.9	19467.3
16.500	127.00	Subarea (UH) Added to	Stream	#2	0.0	342.5
127.00	127.00	Stream #2 Added to:	Stream	#1	19467.3	19579.6
		+ ++ Zero Out:				
127.00	12902.00	Convex Routing:	Stream	#1	19579.6	19566.4
17.333 50220.00	50347.00	Subarea (UH) Added to	Stream	#2	0.0	541.6
50347.00	12902.00	Convex Routing: Stream #2 Added to:	Stream	#2	541.6	533.0
12902.00 17.333 +	12902.00	Stream #2 Added to:	Stream	#1	19566.4	19854.7
12902.00	12902.00	++ Zero Out:	Stream	#2	533.0	0.0
12902.00 17.417	129.00	Convex Routing:	Stream	#1	19854.7	19837.5
50400.00 16.250	129.00	Subarea (UH) Added to				
129.00 17.333		Stream #2 Added to:				
		Zero Out: 				
+		++ Subarea (UH) Added to				
16.333	1					
17.333	1	Zero Out:				
		 Convex Routing:				
17.417 13010.00 16.833	132.00	Subarea (UH) Added to	Stream	#2	0.0	1560.8
Notes: 1 = B INTERVAL 3 = R THE DESIGN STO	ASIN MODEI UNOFF ESTI	L VOLUME EXCEEDED; 2 =	TIME IS	S AT	END OF 5-M	INUTE UNIT

	+						DOWNSTREAM
OFSTREAM FIME (2) TO NODE # PEAK (HR)	MAX. STORAGE NODE # H	HYDROLOGIO	C/HYDRAULIC	PROCESS	I	PEAK (CFS)	PEAK (CFS)
	13305.00 0	-+ Convex Roi	+ uting:	Stream	#2	1560.8	1514.2
17.250 13305.00							
17.500 132.00 6.583	133.00 8	Subarea (JH) Added to	Stream	#3	0.0	684.9
133.00	133.00 8	Stream #3	Added to:	Stream	#2	1503.6	1992.8
17.417 133.00	ı	Zero Out:					
+		+	+				
17.417 133.00	133.00 2	Zero Out:		Stream	#2	1992.8	0.0
133.00 7 583	134.00 0	Convex Roi	uting:	Stream	#1	21948.8	21926.7
133.00	134.00 5	Subarea (JH) Added to	Stream	#2	0.0	797.5
16.333 134.00 17.583 +	134.00 8		Added to:				
+-		+	+				
134.00 134.00 17.583							
Notes: 1 = INTERVAL	BASIN MODEL	VOLUME EX	+ KCEEDED; 2 = 	= TIME IS	S AT	END OF 5-M	

 Date: 08/11/2023
 File name: EV0034UF.RES
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 File name: EV0034UF.RES
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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

Michael Baker International 5 Hutton Centre Drive, Suite 500 Santa Ana, CA 92707

* RANCHO MISSION VIEJO - FREE DRAINING UH * ULTIMATE CONDITION - REGIONAL NODE 119 * 100-YR EV APRIL 2019 FKAZI ******************** FILE NAME: EV00119F.DAT TIME/DATE OF STUDY: 08:51 04/10/2019 ** INPUT SUMMARY ** ****************** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.345; 30-MINUTE = 0.395; 1-HOUR = 0.435 3-HOUR = 0.785; 6-HOUR = 0.904; 24-HOUR = 0.944****************** FLOW PROCESS FROM NODE 119.00 TO NODE 119.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH< ______

+			
	* AES FLOODSCx		
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HY PEAK (HR) MODELED (AF) FOOTNOTES	+ DRAULIC PROCESS 	UPSTREAM D	OWNSTREAM EAK (CFS)
10100.00 119.00 Subarea (UH) 18.000	+ Added to Stream #1 Stream #1	0.0	20321.2
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF THE DESIGN STORM			
+	+		

END OF FLOODSCx ROUTING ANALYSIS

Date: 06/06/2019 File name: EV00119F.RES Page 1 Date: 06/06/2019 File name: EV00119F.RES Page 2

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 126 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV MAY 2023 ROKAMOTO FILE NAME: EV00126F.DAT TIME/DATE OF STUDY: 13:16 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.183 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

File name: FV00126F.RFS

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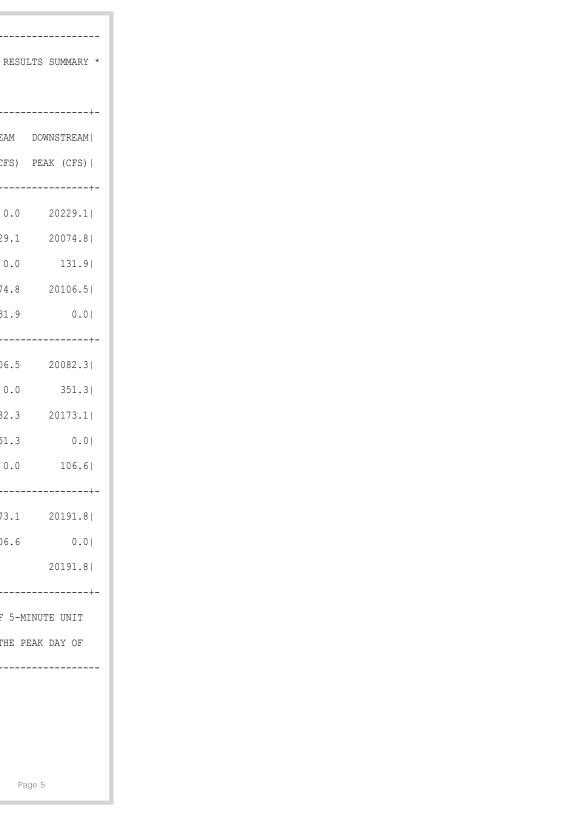
Date: 05/15/2023

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

****************	*****
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<	
	:======

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	+		+		+		
	DOWNSTREAM MAX. STORA		I		١	UPSTREAM	DOWNSTREAM
NODE #	NODE #	HYDROLOG	IC/HYDRAULIC				
	119.00	'	(UH) Added to	Stream	#1	0.0	20229.1
	12603.00	Convex R	outing:	Stream	#1	20229.1	20074.8
		Subarea	(UH) Added to	Stream	#2	0.0	131.9
	12603.00	Stream #	2 Added to:	Stream	#1	20074.8	20106.5
12603.00			: [']				
		Convex R	+ couting:	Stream	#1	20106.5	20082.3
	905.00		(UH) Added to	Stream	#2	0.0	351.3
6.250 126.00	126.00	Stream #	2 Added to:	Stream	#1	20082.3	20173.1
8.083 126.00	126.00	Zero Out	:	Stream	#2	351.3	0.0
6.333 I			(UH) Added to				
126.00	126.00	+ Stream #					
		Zero Out	·:	Stream	#2	106.6	0.0
8.083	126.00 16212.29	3			#1		20191.8
+ Notes: 1 = NTERVAL 3 =	BASIN MODE	+ L VOLUME IMATES DO	EXCEEDED; 2 =	TIME IS	AYS		EAK DAY OF



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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 127 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV MAY 2023 ROKAMOTO FILE NAME: EV00127F.DAT TIME/DATE OF STUDY: 13:14 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.183 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
______
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                          240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
_____
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
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Date: 05/15/2023 File name: EV00127F.RES Page 5 Date: 05/15/2023 File name: EV00127F.RES Page 6

		+				
 INPUT FILE	NAME: [EV00]		FLOODSO	Cx I	PROGRAM RESU	LTS SUMMARY *
Page: 1 of	 +			+		+-
+ UPSTREAM	DOWNSTREAM	++				DOWNSTREAM
NODE # PEAK (HR)	NODE # MODELED (A)	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+	119.00	++ Subarea (UH) Added to				
119.00	12603.00	Convex Routing:	Stream	#1	20011.5	19860.5
18.000 810.00 16.250		Subarea (UH) Added to	Stream	#2	0.0	128.8
12603.00		Stream #2 Added to:	Stream	#1	19860.5	19892.4
	12603.00	Zero Out:				
+						
12603.00 18.083	126.00	Convex Routing:	Stream	#1	19892.4	19869.5
920.00 16.250	905.00	Subarea (UH) Added to	Stream	#2	0.0	342.7
126.00 18.083	126.00	Stream #2 Added to:	Stream	#1	19869.5	19961.0
		Zero Out:	Stream	#2	342.7	0.0
16.333	1	Subarea (UH) Added to				
+		++				
18.083		Stream #2 Added to:				
126.00		Zero Out:	Stream	#2	103.6	0.0
126.00 18.167		Convex Routing:	Stream	#1	19979.8	19966.9
		Subarea (UH) Added to	Stream	#2	0.0	475.5
400.00 16.333	331.00	Subarea (UH) Added to				
+		++		,		+-
390.00 16.417	I	Subarea (UH) Added to				
331.00 16.333		Stream #4 Added to:				
331.00		Zero Out:	Stream	#4	55.6	0.0
331.00 16.333		Stream #3 Added to:	Stream	#2	526.7	840.0
Da	te: 05/15/2023	File name: EV00127F.	RES		Pa	age 7

	1	Zero Out:				
		++				Τ
		Stream #2 Added	to: Stream	#1	19966.9	20226.1
	12720.50	Zero Out:	Stream	#2	840.0	0.0
12720.50 18.250	127.00	Convex Routing:	Stream	#1	20226.1	20180.1
	127.00	Subarea (UH) Ado	ded to Stream	#2	0.0	377.6
127.00	127.00	Stream #2 Added	to: Stream	#1	20180.1	20289.3
18.250	1	 				
•		++				
		Zero Out:	Stream	#2	377.6	0.0
18.250	16650.18					
				+-		+-
		++ L VOLUME EXCEEDE	D; 2 = TIME IS	AT	END OF 5-MI	INUTE UNIT
3 = THE DESIGN S		IMATES DO NOT EX	TEND PAST 2 DA 	AYS A	FTER THE PI	EAK DAY OF
т						

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 137 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV00137F.DAT TIME/DATE OF STUDY: 00:48 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.183 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.305 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.469
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
********************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.197 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.578
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.323
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.795 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.515
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.556 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.363
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.311 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.408
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.420
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
```

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV00137F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                                | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 18908.1|
18.000 I
        | 119.00 12603.00| Convex Routing: Stream #1| 18908.1
                                         18774.8|
18.000 I
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 18774.8
                                          18808.21
18.000 I
| 12603.00 | 12603.00| Zero Out:
                         Stream #2| 112.4
                                          0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 18808.2
                                          18793.91
18.083
| 920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                          297.5
16.250 I
         1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 18793.9
                                         18889.91
         18.083 I
| 126.00 | 126.00| Zero Out: | Stream #2| 297.5
                                         0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                            88.21
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 18889.9
                                          18909.51
18.083 |
        1
| 126.00 | 126.00| Zero Out:
                         Stream #2| 88.2
                                           0.01
   | 126.00 | 12720.50 | Convex Routing: | Stream #1 | 18909.5
                                         18899.11
18.167
423.0|
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                           276.41
         16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 48.8|
16.417 |
         | 331.00 | 331.00| Stream #4 Added to: Stream #2|
                                    423.0 468.1
16.333 I
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                   48.8
                                           0.01
| 331.00 | 331.00| Stream #3 Added to: Stream #2|
                                    468.1
                                           744.5|
16.333
     Date: 08/11/2023 File name: EV00137F.RES
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```

127.00			Zero Out:			
331.00 12720.50 Stream #2 Added to: Stream #1 18899.1 19170.3 18.167	'			+-		+-
12720.50	331.00	12720.50	Stream #2 Added to:	Stream #1	18899.1	19170.3
12710.00				Stream #2	744.5	0.0
12710.00						
127.00	12710.00	127.00	Subarea (UH) Added to	Stream #2	0.0	329.0
127.00 127.00 Zero Out: Stream #2 329.0 0.0	127.00					
127.00	+	+		+-		
127.00 12902.00 Convex Routing: Stream #1 19289.9 19280.9 17.333	127.00	127.00	Zero Out:	Stream #2	329.0	0.0
50220.00 50347.00 Subarea (UH) Added to Stream #2 0.0 521.9 16.333	127.00	12902.00	Convex Routing:			
50347.00 12902.00 Convex Routing: Stream #2 521.9 513.3 16.417	50220.00			Stream #2	0.0	521.9
12902.00 12902.00 Stream #2 Added to: Stream #1 19280.9 19565.6 17.333	50347.00		Convex Routing:	Stream #2	521.9	513.3
12902.00 12902.00 Zero Out: Stream #2 513.3 0.0 12902.00 129.00 Convex Routing: Stream #1 19565.6 19556.5 17.333	12902.00	12902.00				
12902.00 129.00 Convex Routing: Stream #1 19565.6 19556.5 17.333	+	+		+-		+-
12902.00 129.00 Convex Routing: Stream #1 19565.6 19556.5 17.333	12902.00	12902.00	Zero Out:	Stream #2	513.3	0.0
129.00 129.00 Stream #2 Added to: Stream #1 19556.5 19624.3 17.333						
129.00 129.00 Zero Out: Stream #2 224.1 0.0	50400.00 16.250	129.00	Subarea (UH) Added to	Stream #2	0.0	224.1
129.00 129.00 Zero Out: Stream #2 224.1 0.0	17.333					
210.00 221.00 Subarea (UH) Added to Stream #2 0.0 127.5 16.333	129.00	1				
210.00	+					+-
222.00	210.00	221.00	Subarea (UH) Added to	Stream #2	0.0	127.5
129.00	1 222 00	129 001	Stream #2 Added to:	Stream #1	19624.3	19685.9
17.417	129.00	129.00	Zero Out:	Stream #2	127.5	0.0
13010.00			Convex Routing:	Stream #1	19685.9	19673.4
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF THE DESIGN STORM +	13010.00	132.00	1			
	Notes: 1 = INTERVAL	BASIN MODE:	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-MI	NUTE UNIT
+						
			+			
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ı		*	AES FLOODSCx	PROGRAM RES	JLTS SUMMARY
age: 2 of		137F.DAT]		_+	
+ UPSTREAM	DOWNSTREAM	++		UPSTREAM	
NODE #		GE HYDROLOGIC/HYDRAUL F) FOOTNOTES			
+ 132.00	13305.00	++ Convex Routing:	Stream #	2 1507.2	1462.4
		Convex Routing:	Stream #	2 1462.4	1452.6
	133.00	Subarea (UH) Added			
133.00	133.00	Stream #3 Added to	: Stream #	2 1452.6	1936.0
133.00	133.00	Zero Out: 	Stream #	3 663.4	0.0
+ 133.00	133.001	++ Stream #2 Added to	: Stream #	1 19673.4	21609.5
7.417 133.00	133.00	Zero Out:	Stream #	2 1936.0	0.0
7.583 133.00	134.00	Convex Routing: Subarea (UH) Added	to Stream #	2 0.0	769.0
134.00 7.583	134.00	Stream #2 Added to	: Stream #	1 21586.7	21930.7
+		++			
		Zero Out:			
13500.00 7.250	134.00	Subarea (UH) Added	to Stream #	2 0.0	1185.3
134.00		Stream #2 Added to	: Stream #	1 21930.7	23095.0
	134.00	Zero Out:	Stream #	2 1185.3	0.0
134.00 7.667		Convex Routing:	Stream #	1 23095.0	23072.8
+	137.00	++ Subarea (UH) Added	to Stream #	2 0.0	493.0
6.500 137.00		 Stream #2 Added to	: Stream #	1 23072.8	23324.3
7.667 137.00	137.00	Zero Out:	Stream #	2 493.0	0.0

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+	+			
•			'	'
	+	-+		
Notes: 1 = BASIN	MODEL VOLUME EXCE	EDED; $2 = TIME$	IS AT END OF 5-	-MINUTE UNIT
INTERVAL				
3 = RUNOFI	F ESTIMATES DO NOT	EXTEND PAST 2	DAYS AFTER THE	PEAK DAY OF
THE DESIGN STORM				
+				

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 138 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 100-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV00138F.DAT TIME/DATE OF STUDY: 00:48 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.964 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.376 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.51; 30-MINUTE = 0.95; 1-HOUR = 1.32 3-HOUR = 2.49; 6-HOUR = 3.72; 24-HOUR = 6.54*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.183 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.374 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.215 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.434
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.711
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.285 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.239
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.239 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.311
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.359 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.451
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
 3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.584
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.305 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.469
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.197 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.578
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.323
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.795 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.515
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.556 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.363
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.311 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.252 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.408
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.401 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.420
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH (FT) = 4643.67
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.502 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.450
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.40; 30-MINUTE = 0.87; 1-HOUR = 1.15
  3-HOUR = 1.94; 6-HOUR = 2.71; 24-HOUR = 4.49
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
_____
```

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		+				
1		·	FLOODS	Cx P	ROGRAM RESU	LTS SUMMARY *
INPUT FILEN Page: 1 of	1	138F.DAT]		+		+-
		+		ı	UPSTREAM	DOWNSTREAM
TIME(2) TO NODE # PEAK (HR)	MAX. STORAG NODE # MODELED (AB	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS	I	PEAK (CFS)	PEAK (CFS)
10100.00	119.00	++ Subarea (UH) Added to				
18.000		Convex Routing:				
18.000 810.00	809.00	 Subarea (UH) Added to	Stream	#2	0.0	111.3
16.250 12603.00	12603.00	Stream #2 Added to:	Stream	#1	18689.6	18723.1
18.000	12603.00	Zero Out:				
	+-			+		+-
12603.00	126.00	++ Convex Routing:	Stream	#1	18723.1	18709.1
	905.00	Subarea (UH) Added to	Stream	#2	0.0	294.6
	126.00	Stream #2 Added to:	Stream	#1	18709.1	18805.5
18.083 126.00 	126.00	Zero Out:	Stream	#2	294.6	0.0
600.00 16.333	1	Subarea (UH) Added to				
+-		++ Stream #2 Added to:				
18.083	1					
	1	Convex Routing:				
18.167		Subarea (UH) Added to				
16.333 400.00	1	Subarea (UH) Added to				
16.333						
+- 390.00		++ Subarea (UH) Added to	Stream	#4	0.0	48.3
16.417 331.00		Stream #4 Added to:				
16.333 331.00		Zero Out:	Stream	#4	48.3	0.0
 331.00 16.333	331.00	 Stream #3 Added to:	Stream	#2	464.4	738.4
	e: 08/11/2023	File name: EV00138F	.RES		Pa	ge 15

		Zero Out:				
331.00	12720.50	-++ Stream #2 Added to:				
18.167 12720.50	12720.50	Zero Out:	Stream	#2	738.4	0.0
12720.50 18.250	127.00	Convex Routing:	Stream	#1	19087.2	19052.4
12710.00	127.00	Subarea (UH) Added to				
127.00		Stream #2 Added to:				19218.7
		Zero Out:	Stream	#2	325.8	0.0
127.00 17.333	12902.00	Convex Routing:	Stream	#1	19218.7	19209.4
50220.00		Subarea (UH) Added to				
50347.00 16.417	12902.00	Convex Routing:	Stream	#2	517.2	508.8
12902.00 17.250 +	12902.00 	Stream #2 Added to:				
12902.00	12902.00	Zero Out:	Stream	#2	508.8	0.0
12902.00 17.333	129.00	Convex Routing:	Stream	#1	19494.8	19485.9
50400.00 16.250	129.00	Subarea (UH) Added to				
129.00 17.333	129.00	Stream #2 Added to: Zero Out:	Stream	#1	19485.9	19553.8
		Zero Out:				
		++ Subarea (UH) Added to	Stream	#2	0.0	126.4
16.333		Stream #2 Added to:				
17.333 129.00	129.00	Zero Out:	Stream	#2	126.4	0.0
		 Convex Routing:	Stream	#1	19615.3	19602.4
16.833	1	Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODEI	VOLUME EXCEEDED; 2 =	TIME IS	S AT	END OF 5-M	INUTE UNIT
		File name: EV00138F				ge 16

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV00138F.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                  | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: Stream #2 | 1494.3 | 1450.0 |
17.250 I
         | 13305.00
         133.00| Convex Routing: Stream #2| 1450.0 1440.2|
17.500 I
132.00
         133.00| Subarea (UH) Added to Stream #3| 0.0 658.3|
16.583 |
         | 133.00 | 133.00 | Stream #3 Added to: Stream #2| 1440.2 | 1922.3|
17.500 |
         | 133.00 | 133.00| Zero Out:
                           Stream #3| 658.3
                                             0.01
+------
| 133.00 | 133.00| Stream #2 Added to: Stream #1| 19602.4
                                            21524.31
17.417
| 133.00 | 133.00 | Zero Out: | Stream #2 | 1922.3
                                             0.01
- 1
| 133.00 | 134.00| Convex Routing: | Stream #1| 21524.3
                                            21501.4|
17.583 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2| 0.0
                                           762.21
         16.333 |
| 134.00 | 134.00| Stream #2 Added to: Stream #1| 21501.4
                                            21846.01
17.583 |
| 134.00 | 134.00 | Zero Out: Stream #2| 762.2 | 0.0|
17.250 |
134.00
         134.00| Stream #2 Added to: Stream #1| 21846.0
                                            23005.11
17.500 |
         | 134.00 | 134.00 | Zero Out: Stream #2| 1178.1
                                             0.01
| 134.00 | 137.00 | Convex Routing: | Stream #1 | 23005.1
         | 134.00 | 137.00| Subarea (UH) Added to Stream #2| 0.0 488.7|
16.500 I
         | 137.00 | 137.00| Stream #2 Added to: Stream #1| 22982.7 | 23234.6|
          17.667 I
| 137.00 | 137.00 | Zero Out: Stream #2| 488.7
                                             0.01
| 137.00 | 138.00 | Convex Routing: | Stream #1 | 23234.6
                                           23216.7|
17.750
      Date: 08/11/2023 File name: EV00138F.RES Page 18
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137.00 16.583	1								
+							+-		
138.00 17.750					:	Stream	#1	23216.7	23487.4
138.00	138.00	Zero Out	:			Stream	#2	473.4	0.0
 138.00 17.750	19657.85	3				Stream			23487.4
+							+-		+-
Notes: 1 = I		•			2 =	TIME IS	S AT	END OF 5-MIN	UTE UNIT
3 = 1 THE DESIGN ST		IMATES DO	TON C	EXTEN!	D PA	AST 2 DA	AYS A	FTER THE PEA	K DAY OF
				-+					

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 139 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV02139F.DAT TIME/DATE OF STUDY: 10:45 10/27/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.141 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE(CFS) = 0.00 ************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.429 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.449 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.402 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.680 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.310 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                  315.00
 CHANNEL LENGTH (FT) = 427.51 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                  212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.947 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 173.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.391 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 135.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.991 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.567; LOW LOSS FRACTION = 0.908
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 173.00; DOWNSTREAM ELEVATION(FT) =
                                              133.00
 CHANNEL LENGTH (FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.534 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.474; LOW LOSS FRACTION = 0.781
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
***********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 133.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH(FT) = 4643.67 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.534 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.923 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.534; LOW LOSS FRACTION = 0.861
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 119.70; DOWNSTREAM ELEVATION(FT) =
                                                100.00
 CHANNEL LENGTH(FT) = 3107.78 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 428.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.288 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.413; LOW LOSS FRACTION = 0.670
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 7
```

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>>>>STREAM	NUMBER 2 ADDE	ED TO STREAM NUMBE	R 1<<<<	

FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 0	5
>>>>STREAM	NUMBER 2 CLEA	ARED AND SET TO ZE	RO<<<< =================================	
*****	******	******	******	*****
FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 1	1
>>>>VIEW S	TREAM NUMBER 1	HYDROGRAPH<		
==========				

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV02139F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                                     | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 502.7|
20.417 |
          | 119.00 12603.00| Convex Routing: Stream #1|
                                         502.7
                                                501.5|
20.500 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                                 16.81
16.167 |
         | 12603.00 | 12603.00| Stream #2 Added to: Stream #1|
                                          501.5
                                                  503.61
| 12603.00 | 12603.00| Zero Out:
                                                  0.0|
                             Stream #2|
                                        16.8
| 12603.00 | 126.00| Convex Routing: | Stream #1|
                                          503.6
                                                  502.81
20.583 |
| 920.00 | 126.00| Subarea (UH) Added to Stream #2|
                                         0.0
                                                 16.61
16.333 I
          1
126.00
         126.00| Stream #2 Added to: Stream #1|
                                          502.8
                                                  505.41
20.583 I
          1 126.00
         126.00| Zero Out: Stream #2|
                                                 0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2|
                                                   1.41
16.500 |
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                          505.4
                                                  505.71
20.583 |
          | 126.00 | 126.00| Zero Out:
                            Stream #2|
                                          1.4
                                                 0.0
         1
| 126.00 12720.50| Convex Routing: Stream #1|
                                          505.7
                                                  505.11
20.750 |
         320.00
                                                  78.51
           331.00| Subarea (UH) Added to Stream #2|
16.500 I
| 430.00 | 331.00| Subarea (UH) Added to Stream #3|
                                                   43.71
16.500 I
1.51
16.750 I
          | 331.00 | 331.00| Stream #4 Added to: Stream #2|
                                          78.5
                                                  79.91
           16.500 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                          1.5
                                                 0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                          79.9
                                                  123.5|
16.500
      Date: 12/14/2022 File name: EV00139F.RES
                                          Page 16
```

		Zero Out:			
		++ Stream #2 Added to:			
	12720.50	Zero Out:	Stream #2	123.5	0.0
	127.00	Convex Routing:			
		Subarea (UH) Added to	Stream #2	0.0	3.4
20.833	1	Stream #2 Added to:			
	127.00	++ Zero Out:			
127.00		Convex Routing:			
	50347.00	Subarea (UH) Added to	Stream #2	0.0	56.1
	12902.00	Convex Routing:	Stream #2	56.1	55.6
		Stream #2 Added to:			
+-		Zero Out:			
12902.00	129.00	Convex Routing:	Stream #1	537.7	537.5
50400.00	129.00	Subarea (UH) Added to	Stream #2	0.0	8.4
21 000 1	1	Stream #2 Added to:			
129.00	129.00	Zero Out:			
+-		++ Subarea (UH) Added to			
	129.00	Stream #2 Added to:	Stream #1	538.7	542.2
	129.00	Zero Out:	Stream #2	22.6	0.0
129.00	133.00	Convex Routing:	Stream #1	542.2	542.0
17.333 I	1	Subarea (UH) Added to			
	BASIN MODE:	L VOLUME EXCEEDED; 2 =	TIME IS A	T END OF 5-1	MINUTE UNIT
		+	DEC	6-	ngo 17
Dat	C. 12/14/2UZZ	File name: EV00139F	INLU	Fo	age 17

+		+				
1		* AES	FLOODSO	Cx E	PROGRAM RESU	LTS SUMMARY *
INPUT FILEN Page: 2 of	1	39F.DAT 				
		++				DOWNSTREAM
TIME(2) TO	MAX. STORAG	GE HYDROLOGIC/HYDRAULIC				
DEAR (IID) I	MODELED (AL	F) FOOTNOTES				
+-		++ Convex Routing:				
17.333 I	1	Convex Routing:				
17.750 I						
17.000 133.00	133.00	Stream #3 Added to:	Stream	#2	128.6	191.4
17.583 133.00	133.00	Zero Out:	Stream	#3	68.8	0.0
		 		+		+-
133.00	133.00	++ Stream #2 Added to:	Stream	#1	542.0	715.9
17.750 133.00		Zero Out:	Stream	#2	191.4	0.0
	134.00	Convex Routing:	Stream	#1	715.9	715.1
17.917 133.00 16.417	134.00	Subarea (UH) Added to	Stream	#2	0.0	59.8
134.00 17.333	1	Stream #2 Added to:				750.6
+-						+-
		Zero Out:				
18.000		Subarea (UH) Added to Stream #2 Added to:				
17.333						
134.00	I	Zero Out: Convex Routing:				
18.167 I	1	 				
		++ Subarea (UH) Added to				
16.583 137.00	137.00	Stream #2 Added to:	Stream	#1	793.2	828.0
17.500 137.00	137.00		Stream	#2	46.6	0.0
137.00 17.750		Convex Routing:	Stream	#1	828.0	825.2
Date	e: 12/14/2022	File name: EV00139F.	RES		Pag	e 19

17.000	138.00 Subarea	1							
•				+	+-				
	138.00 Stream	•	Stream #	‡1∣ 825. 2	852.01				
17.750									
138.00	138.00 Zero Ou	t:	Stream #	‡2 30 . 4	0.0				
	139.00 Convex 1	Routing:	Stream #	#1 852 . (851.0				
17.917	 139.00 Subarea	(IIH) Added to	Stream ±	±21 ∩ (31 01				
16.333			DCICUM	121	31.01				
	139.00 Stream	#2 Added to:	Stream #	#1 851.0	865.0				
17.917									
				+	+-				
	+ 139.00 Zero Ou		Stroom +	¥2.I 31. (0.01				
1 139.00	139.00 Zelo ou		SCIEAN T	72 31.0	0.01				
139.00	139.00 View:		Stream #	# 1	865.0				
17.917	960.61 3								
				+	+-				
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT									
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF									
THE DESIGN STORM									
1									

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

* RMV PA-3 BODR 2022 - NODE 133C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV MAY 2023 ROKAMOTO ****************** FILE NAME: EV0233CF.DAT TIME/DATE OF STUDY: 14:13 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE (CFS) = 0.00-----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.220 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                  315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                  212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.948 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0233CF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                 | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
20.417 |
        | 119.00 12603.00| Convex Routing: Stream #1| 508.6 507.2|
20.500 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                           15.71
16.250 |
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1|
                                     507.2
                                            509.31
20.500 I
| 12603.00 | 12603.00| Zero Out:
                          Stream #2|
                                    15.7
                                            0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1|
                                            508.31
20.583
| 920.00 | 126.00| Subarea (UH) Added to Stream #2|
                                     0.0
                                           17.51
16.333 |
         1
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                     508.3 511.0
          20.583 |
        126.00| Zero Out: Stream #2|
1 126.00
                                           0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2|
                                             1.51
16.500 |
+------
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                     511.0
                                         511.2|
20.583 |
         | 126.00 | 126.00| Zero Out:
                         Stream #2|
                                     1.5
                                            0.01
              | 126.00 12720.50| Convex Routing: Stream #1|
                                     511.2
                                            510.51
20.750 |
        320.00
        331.00| Subarea (UH) Added to Stream #2|
                                             89.01
16.417 I
| 430.00 | 331.00| Subarea (UH) Added to Stream #3|
                                             49.91
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 1.6|
16.667 |
         | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 89.0
                                             90.51
16.417 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                            0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                            140.1|
16.417
     Date: 05/15/2023 File name: EV0233CF.RES
                                      Page 12
```

		Zero Out:			
		++ Stream #2 Added to:			
	12720.50	Zero Out:	Stream #2	140.1	0.0
	127.00	Convex Routing:			
		Subarea (UH) Added to	Stream #2	0.0	3.6
20.833	1	Stream #2 Added to:			
+-	127.00	++ Zero Out:			
		 Convex Routing:			
20.917 50220.00	50347.00	 Subarea (UH) Added to	Stream #2	0.0	58.9
	12902.00	Convex Routing:	Stream #2	58.9	58.2
		Stream #2 Added to:			
+-		Zero Out:			
12902.00	129.00	Convex Routing:	Stream #1	542.6	542.5
50400.00	129.00	Subarea (UH) Added to	Stream #2	0.0	8.9
21 002 1	1	Stream #2 Added to:			
129.00	129.00	Zero Out:			
+-		++ Subarea (UH) Added to			
	129.00	Stream #2 Added to:	Stream #1	543.6	547.1
	129.00	Zero Out:	Stream #2	23.8	0.0
129.00	133.00	Convex Routing:	Stream #1	547.1	547.0
17.333 I	1	Subarea (UH) Added to			
	BASIN MODE:	L VOLUME EXCEEDED; 2 =	TIME IS A	T END OF 5-1	MINUTE UNIT
		File name: EV0233CF	RES	Do	nge 13
Sati				1.0	J

+		
		DOLINGEDERNA
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE	UPSTREAM	DOWNSTREAM
NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS PEAK (HR) MODELED (AF) FOOTNOTES		
+	-+	+-
132.00 13305.00 Convex Routing: Stream #2	2 134.5	133.0
13305.00 133.00 Convex Routing: Stream #2	2 133.0	132.4
18.250	31 0.0	71.5
17.000		
133.00 133.00 Stream #3 Added to: Stream #2	2 132.4	192.7
133.00 133.00 Zero Out: Stream #3		
+	-+	+-
133.00 133.00 Stream #2 Added to: Stream #1	1 547.0	719.9
133.00 133.00 Zero Out: Stream #2	192.7	0.0
133.00 133.00 View: Stream #1 17.000 823.00 3		719.9
++	-+	+-
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS A	AT END OF 5-1	MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS THE DESIGN STORM	S AFTER THE I	PEAK DAY OF
+		

END OF FLOODSCx ROUTING ANALYSIS

ESU	LTS SUMMARY *
	+-
1	DOWNSTREAM
3)	PEAK (CFS)
	+-
. 5	133.0
. 0	132.4
. 0	71.5
. 4	192.7
. 5	
	+-
	719.9
. 7	0.0
,	719.9
	+-
	INUTE UNIT
E P	EAK DAY OF
Pag	ge 15

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

* RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T * PHASE NO PA-5 REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV0233TF.DAT TIME/DATE OF STUDY: 12:39 10/27/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< _____ WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 1.262 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744 3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987****************** FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) = 315.00

```
CHANNEL LENGTH (FT) = 427.51
                           MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                 212.00
 CHANNEL LENGTH(FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.947 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744
  3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
```

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			=======

>>>>STREAM NUMBER 2 CLEA	RED AND SET TO ZER	0<<<<	

>>>>VIEW STREAM NUMBER 1	HYDROGRAPH<		

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0233TF.DAT ]
Page: 1 of |
-----
|UPSTREAM DOWNSTREAM|
                                | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 13010.00 | 132.00| Subarea (UH) Added to Stream #2| 0.0 | 352.4|
17.333 I
        | 132.00 | 13305.00 | Convex Routing: Stream #2 | 352.4 | 352.3 |
17.333 |
17.583 |
| 132.00 | 133.00| Subarea (UH) Added to Stream #3| 0.0 178.9|
17.000 |
| 133.00 | 133.00 | Stream #3 Added to: Stream #2| 339.7
                                         451.4|
17.500 I
| 133.00 | 133.00 | Zero Out: | Stream #3| | 178.9 | 0.0|
| 133.00 | 133.00| Stream #2 Added to: Stream #1| 0.0 451.4|
         17.500 I
| 133.00 | 133.00 | Zero Out: Stream #2| 451.4
                                          0.01
| 133.00 | 133.00| View:
                      Stream #1| 451.4|
17.500 | 170.65| 3 |
-----+
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM
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END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV0233UF.DAT TIME/DATE OF STUDY: 14:13 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.220 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
************************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
**********************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
```

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0233UF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                 | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
20.417 |
         | 119.00 12603.00| Convex Routing: Stream #1| 513.4
                                           511.9|
20.500 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                            16.51
16.250 |
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1|
                                     511.9
                                             514.01
| 12603.00 | 12603.00| Zero Out:
                          Stream #2|
                                    16.5
                                             0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1|
                                             512.91
         20.583 |
| 920.00 | 126.00| Subarea (UH) Added to Stream #2|
                                     0.0
                                            18.31
16.333 |
         | 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                     512.9
                                             515.61
          20.583 |
        126.00| Zero Out: Stream #2|
126.00
                                              0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2|
                                             1.51
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                             515.81
20.583 |
         1
| 126.00 | 126.00| Zero Out:
                          Stream #2|
                                     1.5
                                             0.01
        | 126.00 12720.50| Convex Routing: Stream #1|
                                            515.11
20.750 |
         320.00
         331.00| Subarea (UH) Added to Stream #2|
                                             94.61
16.417 I
| 430.00 | 331.00| Subarea (UH) Added to Stream #3|
                                             52.31
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0
                                             1.71
16.667 |
         | 331.00 | 331.00| Stream #4 Added to: Stream #2| 94.6
                                             96.01
16.417 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                             0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                            148.1|
16.417
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                                      Page 10
```

		Zero Out:				
+-				·		
12720.50		Zero Out:	Stream	#2	148.1	0.0
12720.50	127.00	Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	3.7
		Stream #2 Added to:				
++-				+-		+-
		Zero Out:	Stream	#2	3.7	0.0
	12902.00	Convex Routing:	Stream	#1	537.4	537.1
		Subarea (UH) Added to	Stream	#2	0.0	61.5
	12902.00	Convex Routing:	Stream	#2	61.5	60.8
12902.00 20.917	1	Stream #2 Added to:				
		++				
		Zero Out:				
		Convex Routing:				
50400.00 16.333	129.00	Subarea (UH) Added to	Stream	#2	0.0	9.3
129.00 21.083	129.00	Stream #2 Added to:	Stream	#1	546.9	548.1
129.00		Zero Out:				
		++		·		
16.333						
21.083		Stream #2 Added to:				
129.00	129.00	Zero Out:	Stream	#2		
129.00 21.167	133.00	Convex Routing:	Stream	#1	551.5	551.3
133.00 21.167 +		3	Stream			551.3
	BASIN MODE	UVOLUME EXCEEDED; 2 =	TIME IS	AT YS A	END OF 5-MIN	NUTE UNIT
		File name: EV0233UF.			Page	

++						
	* AES	FLOODSCx	PROGRAM	RESULT	S SUM	MARY *
INPUT FILENAME: [EV0233UF.DAT]						
Page: 2 of +			-+			+-
+			l IIDampi		0133108	
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE			UPSTRE	EAM D	OWNST	REAM
NODE # NODE # HYDROLOGIC/HYDRAU	JLIC E	PROCESS	PEAK (CFS) P	EAK (CFS)
()			-+			+-
+						

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV0234CF.DAT TIME/DATE OF STUDY: 01:25 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.220 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE =
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
```

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```
3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                  315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                  212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.948 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.390 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.991 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.567; LOW LOSS FRACTION = 0.908
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
_____
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
```

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I		* AES	FLOODSO	Cx F	ROGRAM RESU	LTS SUMMARY
INPUT FILEN	1	34CF.DAT]				
		+				DOWNSTREAM
IME(2) TO NODE #	MAX. STORAG NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS	ı	PEAK (CFS)	PEAK (CFS)
+-		++ Subarea (UH) Added to				
0.417 119.00	12603.00	Convex Routing:	Stream	#1	504.7	503.5
		Subarea (UH) Added to				
		 Stream #2 Added to:				
0.500 12603.00	12603.00	Zero Out:	Stream	#2	15.1	0.0
+-						
0.583		Subarea (UH) Added to				
6 333	1	Stream #2 Added to:				
0.583		Zero Out:				
	1	 Subarea (UH) Added to				
+		 ++		+		+
126.00	126.00	Stream #2 Added to:	Stream	#1	507.4	507.6
126.00	126.00	Zero Out:	Stream	#2	1.4	0.0
0.750	1	Convex Routing:				
320.00 6.417	331.00	Subarea (UH) Added to	Stream	#2	0.0	86.1
430.00 6.333	331.00	Subarea (UH) Added to				
+-		++				
6.667		·				
331.00 6.417		Stream #4 Added to: Zero Out:			1.6	
	1	zero out: Stream #3 Added to:				
· · · ·	1	ı				

		Zero Out:			
		++ Stream #2 Added to:	Stream #1	507.0	529.1
20.750 12720.50	12720.50	Zero Out:	Stream #2	135.4	0.0
12720.50	127.00	Convex Routing:	Stream #1	529.1	528.8
	127.00	Subarea (UH) Added to	Stream #2	0.0	3.5
20.833	1	Stream #2 Added to:			529.4
+-		++			
		Zero Out:			
127.00 20.917	12902.00	Convex Routing:	Stream #1	529.4	529.2
50220.00 16.500	50347.00	Subarea (UH) Added to	Stream #2	0.0	57.0
	12902.00	Convex Routing:	Stream #2	57.0	56.4
12902.00		Stream #2 Added to:			
		++		56.4	
12902.00	129.00	Convex Routing:	Stream #1	539.2	539.0
21.083 50400.00	129.00	Subarea (UH) Added to	Stream #2	0.0	8.6
16.333 129.00 21.000	129.00	Stream #2 Added to:	Stream #1	539.0	540.2
129.00	129.00	Zero Out:			
+-		++			
16.333	1	Subarea (UH) Added to			
129.00 21.000	129.00	Stream #2 Added to:	Stream #1	540.2	543.7
129.00	129.00	Zero Out:	Stream #2	23.0	0.0
129.00 21.167	133.00	Convex Routing:	Stream #1	543.7	543.5
13010.00 17.333	132.00	Subarea (UH) Added to			
Notes: 1 = INTERVAL 3 =	BASIN MODEL	VOLUME EXCEEDED; 2 =			
		File name: EV0234CF.		Page 1	

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0234CF.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                  | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
131.5 130.1
17.917 I
         | 13305.00
         133.00| Convex Routing: Stream #2|
                                     130.1
                                            129.6
18.250 |
132.00
         133.00| Subarea (UH) Added to Stream #3|
                                     0.0 69.61
17.000 |
          133.00
         133.00| Stream #3 Added to: Stream #2|
                                      129.6
                                             189.2|
17.167 |
          | 133.00 | 133.00| Zero Out:
                                             0.0|
                           Stream #3|
                                      69.6
+------
| 133.00 | 133.00| Stream #2 Added to: Stream #1|
                                      543.5
                                             711.11
         17.667 |
| 133.00 | 133.00| Zero Out:
                           Stream #2|
                                      189.2
                                             0.01
| 133.00 | 134.00| Convex Routing: | Stream #1|
                                      711.1
                                           710.5
17.917 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2|
                                            60.81
16.417 |
          | 134.00 | 134.00| Stream #2 Added to: Stream #1|
                                     710.5
                                             752.81
17.250 |
| 134.00 | 134.00| Zero Out:
                       Stream #2|
                                            0.01
48.01
         18.500 |
134.00
         134.00| Stream #2 Added to: Stream #1|
                                     752.8 796.9
17.250 |
         | 134.00
                                             0.01
        134.00| Zero Out: Stream #2|
                                     48.0
| 134.00 | 134.00| View:
                           Stream #1|
                                             796.91
17.250 |
         894.57| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
```

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END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV0234UF.DAT TIME/DATE OF STUDY: 01:26 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.220 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*****************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.948 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.390 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

1	*****	*****	*****	*****	***	*****	***	****	****	***	***	***	***	***	***	****	****
_	FLOW	PROCES	S FROM	NODE		134.00	TO	NODE	C	134.	00	IS	CODE	Ξ =	6		
	>>>>	STREAM	NUMBE	R 2 CI	LEAR	ED ANI	SE	г то	ZERO)<<<	<<						
=		=====		=====	====	=====	:===:	====	====			===	-===		:===:	====	
1	*****	*****	*****	*****	***	*****	***	****	****	****	***	***	***	***	***	****	****
	FLOW	PROCES	S FROM	NODE		134.00) TO	NODE	Ē	134.	00	IS	CODE	=	11		
	>>>>	VIEW S	TREAM	NUMBEF	R 1	HYDROG	GRAPI	I<<<	<<								

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+		+ * AES	FLOODSO	Cx F	PROGRAM RESU	LTS SUMMARY *
INPUT FILE Page: 1 of	1	34UF.DAT]		+		+-
+ UPSTREAM		++		ı	UPSTREAM	DOWNSTREAM
DESTI (IID)	NODE #	GE HYDROLOGIC/HYDRAULIC : F) FOOTNOTES				
10100.00	119.00	++ Subarea (UH) Added to	Stream	#1	0.0	507.5
119.00	12603.00	Convex Routing:	Stream	#1	507.5	506.1
810.00	12603.00	Subarea (UH) Added to				
	12603.00	Stream #2 Added to:	Stream	#1	506.1	508.2
		Zero Out:				
12603.00	126.00	++ Convex Routing:	Stream	#1	508.2	507.3
	126.00	Subarea (UH) Added to	Stream	#2	0.0	17.3
16.333 126.00 20.583		Stream #2 Added to:	Stream	#1	507.3	509.9
1 126.00	126.00	Zero Out:	Stream	#2	17.3	0.0
600.00 16.500		Subarea (UH) Added to				
126.00	126.00	++ Stream #2 Added to:	Stream	#1	509.9	510.2
20.583 126.00	126.00	Zero Out:	Stream	#2	1.5	0.0
	12720.50	Convex Routing:	Stream	#1	510.2	509.5
		Subarea (UH) Added to	Stream	#2	0.0	88.0
16.333 I		Subarea (UH) Added to				
390.00	331.00	++ Subarea (UH) Added to				
		Stream #4 Added to:	Stream	#2	88.0	89.4
	331.00		Stream	#4	1.6	0.0
331.00 3417		Stream #3 Added to:	Stream	#2	89.4	138.5
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		Zero Out:				
+-		-++ Stream #2 Added to:				
20.750	1					
12720.50	127.00	Convex Routing:	Stream	#1	531.7	531.3
20.833 12710.00	127.00	 Subarea (UH) Added to	Stream	#2	0.0	3.5
20.833		Stream #2 Added to:			531.3	531.9
		 ++				+-
127.00	127.00	Zero Out:	Stream	#2	3.5	0.0
127.00 20.917	12902.00	Convex Routing:	Stream	#1	531.9	531.7
16 500 1	1	Subarea (UH) Added to				
50347.00 16.583	12902.00	Convex Routing:	Stream	#2	58.2	57.6
12902.00 20.917	1	Stream #2 Added to:				
		Zero Out:	Stream	#2	57.6	0.0
1 12902.00 21.083	129.00	Convex Routing:	Stream	#1	541.7	541.5
50400.00		Subarea (UH) Added to	Stream	#2	0.0	8.8
		Stream #2 Added to:	Stream	#1	541.5	542.6
		Zero Out:				
+-						·
16.333	1	Subarea (UH) Added to				
129.00 21.083	129.00	Stream #2 Added to:	Stream	#1	542.6	546.1
129.00	129.00	Zero Out:	Stream	#2	23.5	0.0
129.00	133.00	Convex Routing:	Stream	#1	546.1	546.0
13010.00 17.333	132.00	Subarea (UH) Added to				
Notes: 1 = INTERVAL	BASIN MODEI	VOLUME EXCEEDED; 2 =	TIME IS	S AT AYS A	END OF 5-MINU	TE UNIT
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UPSTREAM DOWNSTREAM		+		[JPSTREAM	DOWNSTREAM
PEAK (HR) MAX. STORA NODE # NODE # PEAK (HR) MODELED (A	HYDROLOGI F) FOOTNO	C/HYDRAULIC 1 TES	PROCESS	PE	CAK (CFS)	PEAK (CFS)
132.00 13305.00	+Convex Ro	+ uting:				
13305.00 133.00	Convex Ro	uting:	Stream	#2	132.0	131.5
132.00 133.00		UH) Added to				
.7.000 133.00 133.00	Stream #3	Added to:	Stream	#2	131.5	191.7
7.167 133.00	Zero Out:		Stream	#3	70.9	0.0
133.00 133.00	+ Stream #2	+ Added to:	Stream	#1	546.0	716.9
7.000	Zero Out:	I	Stream	#2	191.7	0.0
133.00 134.00						
.7.833 133.00 134.00						
6.417 134.00 134.00 7.250	Stream #2	Added to:	Stream	#1	714.5	759.6
+	+	+				
134.00 134.00 	View:		Stream	#1	0211	759.6

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

* RMV PA-3 BODR 2022 - NODE 133C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV MAY 2023 ROKAMOTO ****************** FILE NAME: EV0533CF.DAT TIME/DATE OF STUDY: 14:06 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE (CFS) = 0.00-----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.203 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
********************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.986 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <<>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.700 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0533CF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                 | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
19.333 |
        | 119.00 12603.00| Convex Routing: Stream #1| 2235.8 2214.7|
19.417 I
| 810.00 12603.00| Subarea (UH) Added to Stream #2| 0.0
16.250 |
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 2214.7
                                            2218.81
| 12603.00 | 12603.00| Zero Out:
                          Stream #2| 32.0
                                            0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| | 2218.8
                                            2208.91
19.250
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                           53.51
16.333 |
         | 126.00 | 126.00| Stream #2 Added to: Stream #1| 2208.9
                                           2215.1
          19.250 I
| 126.00 | 126.00| Zero Out: | Stream #2| | 53.5
                                           0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                            10.81
16.417 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 2215.1
                                            2215.91
19.250 |
         1
| 126.00 | 126.00| Zero Out:
                          Stream #2| 10.8
                                            0.01
              | 126.00 12720.50| Convex Routing: Stream #1| 2215.9
                                            2209.01
19.417 |
        320.00
        331.00| Subarea (UH) Added to Stream #2| 0.0
                                          156.01
16.417 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3|
                                             94.01
16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 6.5|
16.500 I
         | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 156.0 | 162.0 |
16.417 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                     6.5
                                            0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                    162.0
                                            251.3|
16.333
     Date: 05/15/2023 File name: EV0533CF.RES
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```

		Zero Out:			
		++		-+	
		Stream #2 Added to:	Stream #	1 2209.0	2253.5
19.333 12720.50		Zero Out:	Stream #	2 251.3	0.0
	127.00	 Convex Routing:	Stream #	1 2253.5	2252.7
		Subarea (UH) Added to	Stream #	2 0.0	38.6
		Stream #2 Added to:			
19.500 +	 +-	 		-+	
	127.00	++ Zero Out:	Stream #	2 38.6	0.0
127.00		 Convex Routing:			
	50347.00	 Subarea (UH) Added to	Stream #	2 0.0	120.5
	12902.00	Convex Routing:	Stream #	2 120.5	119.1
		Stream #2 Added to:			
		 ++		-+	
	12902.00	Zero Out:	Stream #	2 119.1	0.0
12902.00	129.00	Convex Routing:	Stream #	1 2285.1	2281.8
6 333 1	1	Subarea (UH) Added to			
129.00 8.417	129.00	Stream #2 Added to:	Stream #	1 2281.8	2285.9
129.00	129.00	Zero Out:	Stream #	2 33.7	0.0
•		 ++		-+	
210.00	129.00	Subarea (UH) Added to	Stream #	2 0.0	43.9
6.333 129.00	129.00	Stream #2 Added to:	Stream #	1 2285.9	2296.8
.8.417 129.00	129.00	Zero Out:	Stream #	2 43.9	0.0
129.00	133.00	Convex Routing:	Stream #	1 2296.8	2293.8
7.000	1	Subarea (UH) Added to			
Notes: 1 = Noterval 3 = Cheen 3	BASIN MODE:	L VOLUME EXCEEDED; 2 =	TIME IS	AT END OF 5-1	MINUTE UNIT

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+							
PEAK (HR)	MAX. STORAG NODE # MODELED (AH	GE HYDROLOGIC/HYI F) FOOTNOTES		PROCESS	ı	PEAK (CFS)	
+		+	+				
17.500 13305.00	133.00	Convex Routing	g:	Stream	#2	293.4	291.8
	133.00	Subarea (UH) A	Added to	Stream	#3	0.0	153.1
	133.00	Stream #3 Adde	ed to:	Stream	#2	291.8	396.8
I	1	Zero Out:					
+ 133.00	133.00	+ Stream #2 Adde	+				
18.417 133.00		Zero Out:		Stream	#2	396.8	0.0
133.00 18.417	2399.27			Stream			2610.9

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV0533TF.DAT TIME/DATE OF STUDY: 09:40 10/27/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< _____ WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.986 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744 3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987****************** FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) = 315.00

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```
CHANNEL LENGTH (FT) = 9760.05
                           MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <<->
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                 212.00
 CHANNEL LENGTH(FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.699 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744
  3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
```

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>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<

>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

+ * AES FLOODSCx 1	PROGRAM RESU	JLTS SUMMARY *
INPUT FILENAME: [EV0533TF.DAT] Page: 1 of		
+	+	+-
UPSTREAM DOWNSTREAM	UPSTREAM	DOWNSTREAM
TIME(2) TO MAX. STORAGE		
NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS	PEAK (CFS)	PEAK (CFS)
PEAK (HR) MODELED (AF) FOOTNOTES	+	+-
+	•	·
13010.00 132.00 Subarea (UH) Added to Stream #2	0.0	777.5
17.000	1 777 5	736 01
17.333	111.5	736.9
13305.00 133.00 Convex Routing: Stream #2	736.9	724.1
17 500 1		
132.00 133.00 Subarea (UH) Added to Stream #3	0.0	389.8
16.750		
17.583	/24.1	030.71
+	+	+-
133.00 133.00 Zero Out: Stream #3	389.8	0.01
	0.0	856.71
17.583		000.71
133.00 133.00 Zero Out: Stream #2	856.7	0.0
	ı	056.71
133.00 133.00 View: Stream #1 17.583 314.32 3	l	856.7
†	+	+-
+		
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS A	F END OF 5-N	MINUTE UNIT
INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS	AFTER THE I	DEVK DVA OE
THE DESIGN STORM	111 1111 11111 I	. LIIII DAI OF
+		

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV0533UF.DAT TIME/DATE OF STUDY: 14:07 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.203 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
```

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```
3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
**********************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
```

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0533UF.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                                   | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
19.333 I
2301.4|
19.417 I
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                              34.71
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 2301.4
                                              2305.51
| 12603.00 | 12603.00| Zero Out:
                           Stream #2|
                                     34.7
                                              0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 2305.5
                                              2289.21
         19.250 |
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                              60.61
16.333 |
          1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 2289.2
                                              2295.51
           19.250 I
        126.00| Zero Out: Stream #2| 60.6
126.00
                                               0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                              12.91
16.417 |
        126.00| Stream #2 Added to: Stream #1| 2295.5
126.00
                                              2296.21
19.250 |
         1
| 126.00 | 126.00| Zero Out:
                           Stream #2| 12.9
                                              0.01
         | 126.00 | 12720.50| Convex Routing: Stream #1| 2296.2
                                              2291.51
19.583 |
         320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0
                                              165.21
16.417 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3|
                                       0.0
                                              100.41
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 7.4|
16.500 I
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 165.2 | 171.9 |
16.417 |
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                       7.4
                                              0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                              267.1|
16.333 |
        Date: 05/15/2023 File name: EV0533UF.RES
                                        Page 10
```

1	1	Zero Out:				
+-		++ Stream #2 Added to:				·
12720.50	12720.50	Zero Out:	Stream	#2	267.1	0.0
40 =00 :	127.00	Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	46.3
		Stream #2 Added to:				
19.500 +	·+-	 		+-		+-
127.00	127.00	Zero Out:	Stream	#2	46.3	0.0
127.00	12902.00	Convex Routing:				
	50347.00	Subarea (UH) Added to	Stream	#2	0.0	130.2
	12902.00	Convex Routing:	Stream	#2	130.2	128.5
19.583 I	1	Stream #2 Added to:				
+-						
		Zero Out:				
12902.00 19.750	129.00	Convex Routing:	Stream	#1	2357.1	2355.9
50400.00 16.333	129.00	Subarea (UH) Added to	Stream	#2	0.0	39.1
19.750						
129.00		Zero Out:				
		++		·		
16.333	1	Subarea (UH) Added to				
19.750		Stream #2 Added to:				
		Zero Out:				
129.00	1	Convex Routing:			2365.4	
133.00 19.833 +	133.00 2159.43	View: 3	Stream			2362.9
Notes: 1 = INTERVAL	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS	AT YS A	END OF 5-M	INUTE UNIT
		File name: EV0533UF	RES		Pag	ge 11

+		
* AES FLOODSC	x PROGRAM RESU	JLTS SUMMARY *
INPUT FILENAME: [EV0533UF.DAT]		
Page: 2 of		
·	+	+-
UPSTREAM DOWNSTREAM	UPSTREAM	DOWNSTREAM
NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS	PEAK (CFS)	PEAK (CFS)
+	+	+-
++ UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS PEAK (HR) MODELED (AF) FOOTNOTES	UPSTREAM	DOWNSTREAM PEAK (CFS)

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV0534CF.DAT TIME/DATE OF STUDY: 01:17 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE =
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.986 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                  315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <<>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                  212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.700 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.353 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.767
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.180 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.473; LOW LOSS FRACTION = 0.843
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
_____
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
```

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		+				
I		•	FLOODS	Cx P	ROGRAM RESU	LTS SUMMARY *
INPUT FILEN Page: 1 of	1	34CF.DAT]				
		++				
	MAX. STORAG	GE				DOWNSTREAM
PEAK (HR)	MODELED (A)	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+-	119.001	++ Subarea (UH) Added to	Stream	#1।	0.0	2166.11
19.333	12603 001	Convex Routing:	Stream	#11	2166 1	2148 01
19.417	12603.001	Subarea (UH) Added to	C+room	#21	0.0	20.01
16.250 I	1	Stream #2 Added to:				
18 833 I	1	1				
		Zero Out:				
		 ++		+		+-
19.250		Convex Routing:				
16.333	1	Subarea (UH) Added to				
126.00 19.250	126.00	Stream #2 Added to:	Stream	#1	2147.8	2154.0
		Zero Out:	Stream	#2	48.3	0.0
600.00 16.417	1	Subarea (UH) Added to				
		+		+		+-
L9.250 I	1	Stream #2 Added to:				
126.00	126.00	Zero Out:	Stream	#2	9.3	0.0
126.00 9.333		Convex Routing:	Stream	#1	2154.8	2148.3
	331.00	Subarea (UH) Added to	Stream	#2	0.0	149.4
400.00 6.333	331.00	Subarea (UH) Added to				
+-						·
390.00 L6.500	1	Subarea (UH) Added to				
331.00 6.417	1	Stream #4 Added to:	Stream	#2	149.4	154.8
331.00			Stream	#4	5.9	0.0
	331.00	Stream #3 Added to:	Stream	#2	154.8	240.3
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		Zero Out:				
·		++				0.1.0.0.0.1
18.500	12720.50	Stream #2 Added to:	Stream	#1	2148.3	2199.0
12720.50	12720.50	Zero Out:	Stream	#2	240.3	0.0
12720.50	127.00	Convex Routing:	Stream	#1	2199.0	2196.4
	127.00	 Subarea (UH) Added to	Stream	#2	0.0	32.8
16.417 127.00	127.00	Stream #2 Added to:	Stream	#1	2196.4	2200.1
18.583 +	 +-	l		+-		+-
		+	Stream	#21	32.8	0.0
	1	 Convex Routing:				
18.667						
16 500 1	1	Subarea (UH) Added to				
50347.00 16.583	12902.00	Convex Routing:	Stream	#2	113.4	112.2
12902.00 18.333	12902.00	Stream #2 Added to:				
+-		++				·
	1					0.0
12902.00 18.417	129.00	Convex Routing:	Stream	#1	2244.7	2241.6
50400.00 16.250	129.00	Subarea (UH) Added to	Stream	#2	0.0	29.8
	129.00	Stream #2 Added to:	Stream	#1	2241.6	2245.8
129.00	129.00	Zero Out:				
210.00 16.333	129.00	Subarea (UH) Added to	Stream	#2	0.0	41.8
	129.00	Stream #2 Added to:	Stream	#1	2245.8	2256.7
	129.00	Zero Out:	Stream	#2	41.8	0.0
		Convex Routing:	Stream	#1	2256.7	2253.9
17.000		Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODEI		TIME IS	S AT	END OF 5-M	MINUTE UNIT
		 +				
Date	e: 08/11/2023	File name: EV0534CF.	RES		Pa	ge 14

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0534CF.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                     | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: | Stream #2|
                                          284.9 278.61
17.583 I
          | 13305.00
          133.00 | Convex Routing: Stream #2|
                                          278.6 277.31
17.833 |
132.00
          133.00| Subarea (UH) Added to Stream #3|
                                        0.0 145.21
16.750 |
           133.00
          133.00| Stream #3 Added to: Stream #2|
                                          277.3 381.1|
17.667 |
           | 133.00 | 133.00| Zero Out:
                              Stream #3|
                                        145.2
                                                 0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 2253.9
                                                 2566.31
          18.417 |
| 133.00 | 133.00| Zero Out:
                             Stream #2|
                                        381.1
                                                 0.01
| 133.00 | 134.00| Convex Routing: | Stream #1|
                                         2566.3
                                                 2563.81
18.583 I
           1 133.00
          134.00| Subarea (UH) Added to Stream #2|
                                                 145.91
16.417 |
           | 134.00 | 134.00| Stream #2 Added to: Stream #1| 2563.8
                                                 2600.01
18.250 |
| 134.00 | 134.00| Zero Out:
                         Stream #2|
                                        145.9
                                               0.01
0.0 138.2|
| 13500.00 | 134.00| Subarea (UH) Added to Stream #2|
          18.083 |
134.00
         134.00| Stream #2 Added to: Stream #1|
                                         2600.0
                                               2737.5
18.250 |
          | 134.00 | 134.00 | Zero Out: | Stream #2|
                                                 0.01
                                        138.2
| 134.00 | 134.00| View:
                              Stream #1|
                                                 2737.51
18.250 |
         2545.55| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
```

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END OF FLOODSCx ROUTING ANALYSIS

Date: 08/11/2023 File name: EV0534CF.RES

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Analysis prepared by:

* RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV0534UF.DAT TIME/DATE OF STUDY: 01:17 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
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FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
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******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
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******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
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 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
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*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
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******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
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*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
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 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
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******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
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 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.986 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <<>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
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******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
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 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.700 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
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 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.353 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.767
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

******	******	******	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 6	
>>>>STREAM NUMBER 2 CLEA	ARED AND SET TO ZE	R0<<<<	
=======================================			=====
********	*******	*********	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER	1 HYDROGRAPH<		

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		·+				
		·	FLOODS	Cx E	ROGRAM RESU	LTS SUMMARY *
INPUT FILEN	1	34UF.DAT]		+		+-
		++		ı	UPSTREAM	DOWNSTREAM
NODE # PEAK (HR)	NODE # MODELED (A	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
	119 001	+	Stream	#1।	0 0	2214 01
19.333 119.00	12603.00	Convex Routing:	Stream	#1	2214.0	2193.8
810.00	12603.00	Subarea (UH) Added to	Stream	#2	0.0	31.3
		Stream #2 Added to:	Stream	#1	2193.8	2197.8
	12603.00	Zero Out:				
				+		+-
19.250		Convex Routing:				
1 (222	1	Subarea (UH) Added to				
126.00 19.250	126.00	Stream #2 Added to:	Stream	#1	2189.6	2195.8
126.00	126.00	Zero Out:	Stream	#2	51.8	0.0
600.00 16.417	1	Subarea (UH) Added to				
126.00	126.00	++ Stream #2 Added to:				
19.250 126.00	126.00	Zero Out:	Stream	#2	10.3	0.0
		Convex Routing:	Stream	#1	2196.6	2189.8
	331.00	Subarea (UH) Added to	Stream	#2	0.0	153.8
16.417 400.00 16.333		Subarea (UH) Added to				
•		++ Subarea (UH) Added to				
16.500 331.00		Stream #4 Added to:				
16.417 331.00					6.3	
 331.00 16.333	331.00	Stream #3 Added to:	Stream	#2	159.6	247.4
Date	e: 08/11/2023	File name: EV0534UF	.RES		Pa	ge 13

		Zero Out:				
331.00	12720.50	-++ Stream #2 Added to:				
19.333 12720.50		Zero Out:	Stream	#2	247.4	0.0
12720.50	127.00	Convex Routing:	Stream	#1	2234.6	2233.5
19.500 12710.00	127.00	Subarea (UH) Added to	Stream	#2	0.0	36.7
		Stream #2 Added to:				
+-	127.00					
1 127.00	12902.00	Convex Routing:	Stream	#1	2236.2	2235.3
		Subarea (UH) Added to				
16.500 50347.00	12902.00	Convex Routing:	Stream	#2	118.2	116.8
	12902.00	Stream #2 Added to:				
		-++ Zero Out:				
12902.00 18.417	129.00	Convex Routing:	Stream	#1	2272.5	2269.3
		Subarea (UH) Added to	Stream	#2	0.0	32.4
129.00 18.417	129.00	Stream #2 Added to:	Stream	#1	2269.3	2273.4
129.00 	129.00	Zero Out:				
+-		-++ Subarea (UH) Added to				
	 129.00	Stream #2 Added to:	Stream	#1	2273.4	2284.3
18.417 129.00	129.00	Zero Out:	Stream	#2	43.2	0.0
		Convex Routing:	Stream	#1	2284.3	2281.4
17.000		Subarea (UH) Added to				
Notes: 1 = INTERVAL	BASIN MODEI RUNOFF ESTI ORM	VOLUME EXCEEDED; 2 =	TIME IS	S AT AYS A	END OF 5-MI	NUTE UNIT
		File name: EV0534UF.			Page	

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV0534UF.DAT ]
Page: 2 of |
|UPSTREAM DOWNSTREAM|
                                 | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: Stream #2 | 295.9 | 288.6 |
17.500 I
         17.833 |
0.0 150.51
         16.750 |
| 133.00 | 133.00 | Stream #3 Added to: Stream #2| 287.1 | 391.6|
17.667 |
         | 133.00 | 133.00| Zero Out:
                                    150.5
                                            0.0|
                          Stream #3|
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1| 2281.4
                                            2597.11
18.417 | |
| 133.00 | 133.00 | Zero Out: | Stream #2| 391.6
                                            0.01
1
| 133.00 | 134.00 | Convex Routing: Stream #1 | 2597.1 | 2594.4 |
18.583 I
         133.00
        134.00| Subarea (UH) Added to Stream #2| 0.0 154.2|
         16.417
| 134.00 | 134.00| Stream #2 Added to: Stream #1| 2594.4
                                            2628.31
18.250 |
+-----
| 134.00 | 134.00 | Zero Out: | Stream #2| | 154.2 | 0.0|
| 134.00 | 134.00| View:
                          Stream #1| 2628.3|
18.250 |
        2459.16| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM
  END OF FLOODSCx ROUTING ANALYSIS
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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV1033CF.DAT TIME/DATE OF STUDY: 13:58 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.191 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
```

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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
```

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```
3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.938 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <<>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV1033CF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                 | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
18.333 I
        | 119.00 12603.00| Convex Routing: Stream #1| 6535.6 6521.1|
18.417 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0 66.5|
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 6521.1 | 6529.7 |
| 12603.00 | 12603.00| Zero Out:
                          Stream #2| 66.5
                                            0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 6529.7
                                           6514.81
18.500 |
920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                           149.61
16.333 |
         1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 6514.8 6529.9|
          18.500 I
        126.00| Zero Out: Stream #2| 149.6
1 126.00
                                           0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                            40.61
16.417 |
+------
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 6529.9
                                           6532.51
18.500 I
         1
| 126.00 | 126.00| Zero Out:
                          Stream #2| 40.6
                                            0.01
              | 126.00 12720.50| Convex Routing: Stream #1| 6532.5
                                          6497.61
18.583 |
        320.00
        331.00| Subarea (UH) Added to Stream #2| 0.0
                                          263.51
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3|
                                     0.0
                                           172.3|
16.333 I
+------
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 21.3|
16.500 I
         | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 263.5 | 282.2|
16.333 I
| 331.00 331.00| Zero Out: Stream #4|
                                    21.3
                                            0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                     282.2
                                            454.5|
16.333
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```

127.00		1	Zero Out:			
331.00 12720.50 Stream #2 Added to: Stream #1 6497.6 6587.6 18.583				+		+-
12720.50	331.00	12720.50	Stream #2 Added to:	Stream #1	6497.6	6587.6
18.667				Stream #2	454.5	0.0
12710.00	1 12720.50	127.00	Convex Routing:	Stream #1	6587.6	6572.9
127.00	12710.00	127.00	Subarea (UH) Added to	Stream #2	0.0	142.1
127.00 127.00 Zero Out: Stream #2 142.1 0.0	127.00	127.00	Stream #2 Added to:			
127.00	+	+		+		+-
18.750	127.00	127.00	Zero Out:	Stream #2	142.1	0.0
50220.00				Stream #1	6584.7	6573.2
50347.00 12902.00 Convex Routing: Stream #2 300.9 295.8 16.500	50220.00			Stream #2	0.0	300.9
12902.00 12902.00 Stream #2 Added to: Stream #1 6573.2 6637.0 18.417	50347.00		Convex Routing:	Stream #2	300.9	295.8
12902.00 12902.00 Zero Out: Stream #2 295.8 0.0	12902.00	12902.00				
12902.00			+	+		+-
129.00 129.00 Stream #2 Added to: Stream #1 6625.4 6633.2 18.500	12902.00	12902.00	Zero Out:	Stream #2	295.8	0.0
129.00 129.00 Stream #2 Added to: Stream #1 6625.4 6633.2 18.500	12902.00	129.00	Convex Routing:	Stream #1	6637.0	6625.4
129.00 129.00 Zero Out: Stream #2 114.8	50400.00 16.250	129.00	Subarea (UH) Added to	Stream #2	0.0	114.8
129.00 129.00 Zero Out: Stream #2 114.8 0.0	129.00 18.500	129.00	Stream #2 Added to:	Stream #1	6625.4	6633.2
210.00 221.00 Subarea (UH) Added to Stream #2 0.0 80.4 16.333	129.00	129.00	Zero Out:			
210.00	+			+		+-
129.00 129.00 Stream #2 Added to: Stream #1 6633.2 6648.2 18.500	210.00	221.00	Subarea (UH) Added to	Stream #2	0.0	80.4
129.00	129.00	129.00	Stream #2 Added to:	Stream #1	6633.2	6648.2
18.250	129.00	129.00	Zero Out:	Stream #2	80.4	0.0
13010.00			Convex Routing:	Stream #1	6648.2	6643.5
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF THE DESIGN STORM ++	13010.00	132.00	1			
+	Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODE: RUNOFF EST:	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-M	INUTE UNIT
· ·						
Date: 05/15/2023 File name: EV1033CF.RES Page 13			+			
	Dat	e: 05/15/2023	File name: EV1033CF.	RES	Pag	ge 13

+			LTS SUMMARY *
+			
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE	0	PSTREAM	DOWNSTREAM
NODE # NODE # HYDROLOGIC/HYDRAULIC PRO PEAK (HR) MODELED (AF) FOOTNOTES			
+			+-
132.00 13305.00 Convex Routing: St	ream #2	692.8	663.1
17.417	ream #2	663.1	656.0
17.833	ream #31	0 0	327.31
16.667			
133.00 133.00 Stream #3 Added to: St	ream #2	656.0	831.1
133.00 133.00 Zero Out: St			
+			+-
133.00 133.00 Stream #2 Added to: St	ream #1	6643.5	7440.9
133.00 133.00 Zero Out: St	ream #2	831.1	0.0
17.917 5638.96 3	ream #1		7440.9
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TI INTERVAL	ME IS AT E	ND OF 5-M	INUTE UNIT

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV1033TF.DAT TIME/DATE OF STUDY: 08:09 10/27/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2< _____ WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.938 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744 3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987****************** FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) = 315.00

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```
CHANNEL LENGTH (FT) = 9760.05
                           MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                 212.00
 CHANNEL LENGTH(FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744
  3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
```

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			=======

>>>>STREAM NUMBER 2 CLEA	RED AND SET TO ZER	0<<<<	

>>>>VIEW STREAM NUMBER 1	HYDROGRAPH<		

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV1033TF.DAT ]
Page: 1 of |
-----+
|UPSTREAM DOWNSTREAM|
                                | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE| |
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 13010.00 | 132.00| Subarea (UH) Added to Stream #2| 0.0 | 1730.8|
17.000 I
        | 132.00 | 13305.00| Convex Routing: Stream #2| 1730.8 | 1657.0|
17.333 |
17.583 |
| 132.00 | 133.00| Subarea (UH) Added to Stream #3| 0.0 812.1|
16.667 |
| 133.00 | 133.00 | Stream #3 Added to: Stream #2| 1627.3 | 1868.9|
17.500 I
+------
| 133.00 | 133.00 | Zero Out: | Stream #3| | 812.1 | 0.0|
| 133.00 | 133.00| Stream #2 Added to: Stream #1| 0.0 | 1868.9|
         17.500 I
| 133.00 | 133.00 | Zero Out: | Stream #2| 1868.9
                                           0.01
| 133.00 | 133.00| View:
                      Stream #1| 1868.9|
17.500 | 610.61| 3 |
-----+
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM
```

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV1033UF.DAT TIME/DATE OF STUDY: 13:59 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.191 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<<<<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH(FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*********************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
```

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV1033UF.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                                    | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
18.333 I
| 119.00 | 12603.00| Convex Routing: | Stream #1| 6875.1
                                             6856.61
18.417 |
71.41
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 6856.6
                                               6865.21
| 12603.00 | 12603.00| Zero Out:
                            Stream #2| 71.4
                                                0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 6865.2
                                               6848.01
         18.500 |
920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                               162.2|
16.333 |
          1
126.00
         126.00| Stream #2 Added to: Stream #1|
                                       6848.0
                                               6863.1|
           18.500 I
         126.00| Zero Out: Stream #2| 162.2
126.00
                                               0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                 44.61
16.417 |
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 6863.1
                                               6865.71
18.500 |
          1
| 126.00 | 126.00| Zero Out:
                            Stream #2| 44.6
                                                0.01
         | 126.00 | 12720.50| Convex Routing: Stream #1| 6865.7
                                               6833.71
18.583 |
         320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0
                                                278.91
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3|
                                                183.31
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 23.0|
16.500 I
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 278.9
                                                299.1
16.333 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                       23.0
                                                0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                        299.1
                                                482.4|
16.333 |
        Date: 05/15/2023 File name: EV1033UF.RES
                                         Page 10
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		Zero Out:				
+-				·		·
12720.50	12720.50	Zero Out:	Stream	#2	482.4	0.0
	127.00	Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	156.4
		Stream #2 Added to:				
+	·+	 ++		+-		+-
127.00	127.00	Zero Out:	Stream	#2	156.4	0.0
127.00		Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	321.7
16.417 50347.00 16.500	12902.00	Convex Routing:	Stream	#2	321.7	313.7
12902.00 18.417	1	Stream #2 Added to:				
+-		 ++				
		Zero Out:				
12902.00 18.833	129.00	Convex Routing:	Stream	#1	6961.0	6947.6
50400.00	129.00	Subarea (UH) Added to	Stream	#2	0.0	125.7
18.500		Stream #2 Added to:				
129.00		Zero Out:				
		++		·		
16.333	1	Subarea (UH) Added to				
18.500		Stream #2 Added to:				
	129.00	Zero Out:				
18.583 I		Convex Routing:	Stream	#1	6970.1	6960.1
133.00 18.583 +	133.00 5236.45	3	Stream			6960.1
	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS	AT YS A	END OF 5-M	INUTE UNIT
		File name: EV1033UF	RES		Paç	ge 11

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·	AES FI	LOODSCx	PROGRAM	RESULTS	S SUMMA	RY *
Page: 2 of			-+			+-
			l mamp			224
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE			UPSTRE	EAM DO	OWNSTRE.	AM
NODE # NODE # HYDROLOGIC/HYDRAU: PEAK (HR) MODELED (AF) FOOTNOTES	LIC PRO	OCESS	PEAK (CFS) PI	EAK (CF	S)
+			-+			+-
+						

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV1034CF.DAT TIME/DATE OF STUDY: 01:10 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE (CFS) = 0.00-----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.191 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<<<<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH(FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.938 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.337 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.699
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.489 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.760
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
_____
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
```

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+ 			FLOODSO	Cx E	PROGRAM RESU	LTS SUMMARY
INPUT FILEN Page: 1 of	1	34CF.DAT]		+		+
UPSTREAM I	OOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC : F) FOOTNOTES				
+-		++ Subarea (UH) Added to				
10 222 1	1	Convex Routing:				
L8.417	1	 Subarea (UH) Added to				
16.250 12603.00	12603.00	 Stream #2 Added to:	Stream	#1	6264.6	6273.2
		Zero Out:				
+	+-	· 		+		+-
·	126.00	Convex Routing:	Stream	#1	6273.2	6260.0
		Subarea (UH) Added to	Stream	#2	0.0	140.5
126.00	126.00	Stream #2 Added to:	Stream	#1	6260.0	6275.2
		Zero Out:	Stream	#2	140.5	0.0
600.00 6.417	1	Subarea (UH) Added to				
		 ++		+		+
8.500 I		Stream #2 Added to:				
126.00	126.00	Zero Out:	Stream	#2	37.8	0.0
8.583	1	Convex Routing:				
320.00	331.00	Subarea (UH) Added to	Stream	#2	0.0	253.0
400.00 6.333	331.00	Subarea (UH) Added to				
+-		++				
6.500		Subarea (UH) Added to				
6.333	1	Stream #4 Added to:				
331.00	I				20.0	
331.00 6.333	331.00	Stream #3 Added to:	Stream	#2	270.6	435.3
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		Zero Out:				
		++				
331.00 18.583	12720.50	Stream #2 Added to:	Stream	#1	6241.7	6331.8
	12720.50	Zero Out:	Stream	#2	435.3	0.0
12720.50	127.00	Convex Routing:	Stream	#1	6331.8	6316.9
	127.00	 Subarea (UH) Added to	Stream	#2	0.0	132.3
	127.00	Stream #2 Added to:	Stream	#1	6316.9	6328.8
18.667 +	 +-	l		+-		+-
127.00		++ Zero Out:	Stream	#21	132.3	0.0
		 Convex Routing:				
18.750						
16 /17	1	Subarea (UH) Added to				
16.500		Convex Routing:				
18.417		Stream #2 Added to:				
		++	Chasan	шо.	201 2	0.01
						0.0
12902.00 18.500	129.00	Convex Routing:	Stream	#1	6388.3	6378.5
50400.00 16.250	129.00	Subarea (UH) Added to	Stream	#2	0.0	107.2
	129.00	Stream #2 Added to:	Stream	#1	6378.5	6392.3
129.00	129.00	Zero Out:				
•		 ++		+-		+-
210.00 16.333	221.00	Subarea (UH) Added to	Stream	#2	0.0	76.8
	129.00	Stream #2 Added to:	Stream	#1	6392.3	6419.7
	129.00	Zero Out:	Stream	#2	76.8	0.0
		Convex Routing:	Stream	#1	6419.7	6415.0
17.000		Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST	+++ Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF					
+						
						
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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV1034CF.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                      | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: | Stream #2|
                                          661.8 634.01
17.417 |
          | 13305.00
          133.00| Convex Routing: Stream #2|
                                          634.0 627.81
17.833 |
132.00
          133.00| Subarea (UH) Added to Stream #3|
                                               313.21
16.667 |
           133.00
          133.00| Stream #3 Added to: Stream #2|
                                          627.8
                                               801.8|
17.750 |
           | 133.00 | 133.00| Zero Out:
                              Stream #3|
                                          313.2
                                                  0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 6415.0
                                                 7192.11
          17.917 |
| 133.00 | 133.00| Zero Out:
                             Stream #2|
                                        801.8
                                                 0.01
| 133.00 | 134.00| Convex Routing: Stream #1|
                                         7192.1
                                                 7180.7|
18.083 I
           1 133.00
          134.00| Subarea (UH) Added to Stream #2|
                                                 381.41
16.417 |
           | 134.00 | 134.00| Stream #2 Added to: Stream #1|
                                        7180.7
                                                 7285.61
18.083 |
| 134.00 | 134.00| Zero Out:
                                                 0.0
                         Stream #2|
                                          381.4
0.0 394.6
| 13500.00 | 134.00| Subarea (UH) Added to Stream #2|
           17.500 I
134.00
          134.00| Stream #2 Added to: Stream #1|
                                         7285.6
                                                 7620.6|
18.083 |
          | 134.00
                                                 0.01
         134.00| Zero Out: Stream #2|
                                          394.6
| 134.00 | 134.00| View:
                              Stream #1|
                                                 7620.61
18.083 |
         5918.86| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
```

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END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV1034UF.DAT TIME/DATE OF STUDY: 01:11 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.191 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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```
*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.938 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.337 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.699
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

*********	**********
FLOW PROCESS FROM NODE 134.00 T	O NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND S	ET TO ZERO<
********	*****
FLOW PROCESS FROM NODE 134.00 T	O NODE 134.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRA	 PH<<<<

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•		+				
1		·	FLOODS	Cx P	ROGRAM RESU	LTS SUMMARY *
 INPUT FILEN Page: 1 of +	1	34UF.DAT]		+		
		++			IIDSTREAM	DOWNSTREAM
TIME(2) TO NODE # PEAK (HR)	MAX. STORAG NODE # MODELED (AH	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS	I	PEAK (CFS)	PEAK (CFS)
	119.00	++ Subarea (UH) Added to				
18.333		 Convex Routing:				
18.417 810.00	809.00	 Subarea (UH) Added to	Stream	#2	0.0	65.2
16.250 12603.00	12603.00	Stream #2 Added to:	Stream	#1	6441.5	6450.1
18.417 12603.00	12603.00	Zero Out:				
	+-			+		+-
12603.00	126.00	Convex Routing:	Stream	#1	6450.1	6435.4
	905.00	Subarea (UH) Added to				
		Stream #2 Added to:	Stream	#1	6435.4	6450.5
	126.00	Zero Out:	Stream	#2	146.4	0.0
16.417 I	1	Subarea (UH) Added to				
+-		+ Stream #2 Added to:				
L8.500	1					
	1	 Convex Routing:				
18.583 I						
6.333 400.00		Subarea (UH) Added to				
		 		+		+
390.00	331.00	++ Subarea (UH) Added to	Stream	#4	0.0	20.8
6.500 331.00		Stream #4 Added to:	Stream	#2	259.7	278.0
16.333 331.00	331.00		Stream	#4	20.8	0.0
331.00 6.333	331.00	Stream #3 Added to:	Stream	#2	278.0	447.6
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		Zero Out:				
+-		++				
18.583						
12720.50	12720.50	Zero Out:	Stream	#2	447.6	0.0
12720.50 18.667	127.00	Convex Routing:	Stream	#1	6507.5	6492.5
		Subarea (UH) Added to				
4.0 6.68		Stream #2 Added to:				
		++				+-
127.00	127.00	Zero Out:	Stream	#2	138.6	0.0
127.00	12902.00	Convex Routing:	Stream	#1	6504.3	6493.0
50220.00		Subarea (UH) Added to				
16.417 50347.00	12902.00	Convex Routing:	Stream	#2	295.8	290.7
	12902.00	Stream #2 Added to:				
		++				0.01
		 Convex Routing:				·
18.500		Subarea (UH) Added to				
16.250		Stream #2 Added to:				
18.500	129.00	Zero Out:	Stream	#1	0349.1	0550.91
		Zero Out: 				
210.00		++ Subarea (UH) Added to	Stream	#2	0.0	79.1
	129.00	Stream #2 Added to:	Stream	#1	6556.9	6577.0
17.917 129.00	 129.00	Zero Out:	Stream	#2	79.1	0.0
129.00	133.00	Convex Routing:	Stream	#1	6577.0	6571.9
17.000	1	Subarea (UH) Added to				
Notes: 1 = INTERVAL	BASIN MODEI	VOLUME EXCEEDED; 2 =	TIME IS	S AT	END OF 5-M	INUTE UNIT
		+				
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TIME(2) TO I	DOWNSTREAM		+		1	UPSTREAM	DOWNSTREAM
NODE # PEAK (HR)	MODELED (AF	HYDROLOGI ') FOOTNO	C/HYDRAULIC				
132.00	13305.00	Convex Ro	uting:	Stream	#2	682.0	653.0
17.417 13305.00	133.00	Convex Ro	uting:	Stream	#2	653.0	646.4
17.833 132.00	133.00		UH) Added to				
16.667 133.00	133.00	Stream #3	Added to:	Stream	#2	646.4	821.1
17.750 133.00 	133.00						0.0
+-		-+	+ Added to:				7363.7
17.917 133.00	133.00	Zero Out:	I	Stream	#2	821.1	0.0
133.00	134.00	Convex Ro	uting:	Stream	#1	7363.7	7351.4
18.083 133.00		Subarea (UH) Added to	Stream	#2	0.0	395.6
16.417 134.00 18.083	134.00	Stream #2	Added to:				
+-		-+					
134.00							
134.00		View: 3	1	Stream	#1		7455.1

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Analysis prepared by:

Michael Baker International 5 Hutton Centre Drive, Suite 500 Santa Ana, CA 92707

* RANCHO MISSION VIEJO - FREE DRAINING UH * ULTIMATE CONDITION - REGIONAL NODE 119 * 2-YR EV APRIL 2019 FKAZI ******************** FILE NAME: EV02119F.DAT TIME/DATE OF STUDY: 12:04 04/10/2019 ** INPUT SUMMARY ** ****************** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.345; 30-MINUTE = 0.395; 1-HOUR = 0.435 3-HOUR = 0.785; 6-HOUR = 0.904; 24-HOUR = 0.944****************** FLOW PROCESS FROM NODE 119.00 TO NODE 119.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH< ______

+	
	* AES FLOODSCx PROGRAM RESULTS SUMMARY *
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HYI PEAK (HR) MODELED (AF) FOOTNOTES	UPSTREAM DOWNSTREAM
10100.00 119.00 Subarea (UH) 20.417	Added to Stream #1 0.0 525.2
Notes: 1 = BASIN MODEL VOLUME EXCEEDINTERVAL	·
	 -

END OF FLOODSCx ROUTING ANALYSIS

Date: 06/12/2019 File name: EV02119F.RES Page 1 Date: 06/12/2019 File name: EV02119F.RES Page 2

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 126 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV02126F.DAT TIME/DATE OF STUDY: 14:14 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

Date: 05/15/2023

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.220 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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File name: EV02126F.RES Page 1

```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
*******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

*********	*****	*********
FLOW PROCESS FROM NODE	126.00 TO NODE	126.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1	HYDROGRAPH<	

Date: 05/15/2023 File name: EV02126F.RES Page 3 Date: 05/15/2023 File name: EV02126F.RES Page 4

 UPSTREAM I		+	+		UPS	rream	DOWNS'	TREAM
NODE #	NODE #	GE HYDROLOGIC/F F) FOOTNOTES	HYDRAULIC 1					
10100.00		+Subarea (UH)	+					
	12603.00	Convex Rout:	ing:	Stream	#1	519.9		518.1
		Subarea (UH)	Added to	Stream	#2	0.0		17.1
	12603.00	Stream #2 Ad	dded to:	Stream	#1	518.1		520.2
		Zero Out:						
+-		+	+					
0.583		Convex Rout:						
6.333	1	Subarea (UH)						
0.583		Stream #2 Ac						
126.00	1	Zero Out:						
6 500 I	1	Subarea (UH) 						1.6
126.00	126.00	+		Stream	#1	521.6		521.8
0.583 126.00	126.00	Zero Out:		Stream	#2	1.6		0.0
0.583	561.48	 View: 3		Stream	#1			521.8
	BASIN MODE	L VOLUME EXC	+ EEDED; 2 =					

SUMMARY *
+-
NSTREAM
K (CFS)
+-
519.9
518.1
17.1
520.2
0.0
+-
518.9
18.9
521.6
0.0
1.6
+-
521.8
0.0
521.8
+-
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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 127 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV02127F.DAT TIME/DATE OF STUDY: 14:13 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.220 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
______
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                          240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
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+		+ + * AES	FLOODS	 Cx I	PROGRAM RESU	LTS SUMMARY *
INPUT FILEN	1	27F.DAT]				+-
UPSTREAM	OOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+		++ Subarea (UH) Added to				
119.00	12603.00	Convex Routing:	Stream	#1	514.8	513.3
810.00	12603.00	Subarea (UH) Added to	Stream	#2	0.0	16.7
16.250 12603.00 20.500	12603.00	Stream #2 Added to:	Stream	#1	513.3	515.4
	12603.00	Zero Out:	Stream	#2	16.7	0.0
+		· 		+		+-
	126.00	Convex Routing:	Stream	#1	515.4	514.3
920.00		Subarea (UH) Added to	Stream	#2	0.0	18.6
126.00	126.00	Stream #2 Added to:	Stream	#1	514.3	517.0
	126.00	Zero Out:	Stream	#2	18.6	0.0
16.500	1	Subarea (UH) Added to				
+-		 ++				
20.583		Stream #2 Added to:				
		Zero Out:				
20.750	1	Convex Routing:				
320.00 16.417	331.00	Subarea (UH) Added to	Stream	#2	0.0	96.2
430.00 16.333		Subarea (UH) Added to				
		++ Subarea (UH) Added to				
16.667	1	Stream #4 Added to:				
16.417 331.00					1.7	
 331.00 16.417		Stream #3 Added to:	Stream	#2	97.7	150.4
Dat	te: 05/15/2023	File name: EV02127F	.RES		Pa	ige 7

		Zero Out:			
		++			
		Stream #2 Added to	Stream	#1 516.5	538.6
	12720.50	Zero Out:	Stream	#2 150.4	0.0
12720.50	127.00	Convex Routing:	Stream	#1 538.6	538.1
	127.00	Subarea (UH) Added	d to Stream	#2 0.0	3.8
	127.00	Stream #2 Added to	o: Stream	#1 538.1	538.8
+	+-			+	+-
		Zero Out:	Stream =	#2 3.8	0.0
20.833	635.23				538.8
•				+	+-
Notes: 1 = INTERVAL	BASIN MODE RUNOFF EST	L VOLUME EXCEEDED; IMATES DO NOT EXTEI			

END OF FLOODSCX ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 137 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV02137F.DAT TIME/DATE OF STUDY: 01:25 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.220 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
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*****************
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 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
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 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
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 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
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  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
********************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.948 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.390 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.991 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.567; LOW LOSS FRACTION = 0.908
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE *USER ENTERED "LAG" TIME = 0.549 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.474; LOW LOSS FRACTION = 0.781 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ********************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1 _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO< ______ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV02137F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                              | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
20.417 |
        502.61
20.500 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                        15.01
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1|
                                  502.6
                                        504.71
20.500 |
| 12603.00 | 12603.00| Zero Out:
                        Stream #2|
                                 15.0
                                        0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1|
                                        503.91
20.583
| 920.00 | 126.00| Subarea (UH) Added to Stream #2|
                                  0.0
                                        16.81
16.333 I
        1 1
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                  503.9
                                        506.51
         20.583 |
| 126.00 | 126.00| Zero Out: | Stream #2|
                                        0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2|
                                         1.41
16.500 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                  506.5
                                        506.81
20.583 |
        | 126.00 | 126.00| Zero Out:
                       Stream #2|
                                  1.4
                                        0.01
   I I
| 126.00 12720.50| Convex Routing: Stream #1|
                                        506.21
20.750
320.00
       331.00| Subarea (UH) Added to Stream #2|
                                         85.61
16.417 I
| 430.00 | 331.00| Subarea (UH) Added to Stream #3|
                                         48.01
        16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0
                                         1.51
16.667 |
        | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 85.6
                                         87.01
16.417 |
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                        0.01
| 331.00 | 331.00| Stream #3 Added to: Stream #2|
                                  87.0
                                        134.6|
16.417
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```

	1	Zero Out:			
+-	12720.50	++ Stream #2 Added to:			
	12720.50	Zero Out:	Stream #2	134.6	0.0
		Convex Routing:	Stream #1	528.3	528.0
		Subarea (UH) Added to	Stream #2	0.0	3.5
		Stream #2 Added to:			
127.00	127.00	++ Zero Out:			
		Convex Routing:	Stream #1	528.7	528.4
20.917 50220.00 16.500	50347.00	Subarea (UH) Added to	Stream #2	0.0	56.6
50347.00 50347.00	12902.00	Convex Routing:	Stream #2	56.6	56.0
1 12902.00	12902.00	Stream #2 Added to:	Stream #1	528.4	538.4
+-	12902.00	Zero Out:			
12902.00	129.00	Convex Routing:	Stream #1	538.4	538.2
50400.00	129.00	Subarea (UH) Added to	Stream #2	0.0	8.5
16.333 129.00 21.000	129.00	Stream #2 Added to:	Stream #1	538.2	539.4
129.00	129.00	Zero Out:			
		++ Subarea (UH) Added to	Stream #2	0.0	22.9
129.00	129.00	Stream #2 Added to:	Stream #1	539.4	542.9
129.00	129.00	Zero Out:	Stream #2	22.9	0.0
1 129.00	133.00	Convex Routing:	Stream #1	542.9	542.8
17.333 I	1	Subarea (UH) Added to			
Notes: 1 = INTERVAL	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS AT I	END OF 5-MINU	JTE UNIT

I		* AE	S FLOODSC>	PROGF	RAM RESU	LTS SUMMARY
	-	37F.DAT]				
	+-			-+		
UPSTREAM	DOWNSTREAM	++		UPS	STREAM	DOWNSTREAM
NODE #		GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+ 132.00	13305.00	++ Convex Routing:	Stream #	2	130.9	129.5
13305.00	133.00	Convex Routing:	Stream #	2	129.5	129.1
	133.00	Subarea (UH) Added t				
133.00	133.00	Stream #3 Added to:	Stream #	2	129.1	190.0
	133.00	Zero Out:				
+ 133 00	133 001	++ Stream #2 Added to:	Stream +	11	5/12 8	712 0
133.00	133.00	Zero Out:	Stream #	2	190.0	0.0
133.00	134.00	Convex Routing:	Stream #	1	712.0	711.3
133.00	134.00	Convex Routing: Subarea (UH) Added t	o Stream #	2	0.0	60.4
		Stream #2 Added to:	Stream #	1	711.3	751.6
	+-	·		-+		
134.00	134.00	Zero Out:	Stream #	2	60.4	0.0
13500.00	134.00	Subarea (UH) Added t				
8.000 134.00	134.00	Stream #2 Added to:	Stream #	1	751.6	795.7
7.250 134.00	134.00	Stream #2 Added to: Zero Out:	Stream #	2	47.9	0.0
134.00 7.500	137.00	Convex Routing:	Stream #	1	795.7	
134.00	137.00	+ Subarea (UH) Added t			0.0	46.5
6.583 137.00	137.00	Stream #2 Added to:	Stream #	1	793.0	829.3
7.500 137.00		Zero Out:	Stream #	2	46.5	0.0
137.00	137.00 923.05	View:	Stream #	1		829.3

+		+			+		+-
+					'		
		•					
Notes: 1 =	BASIN M	ODEL VOLUME	EXCEEDED; 2	= TIME	IS AT END (OF 5-MINUTE	UNIT
INTERVAL							
3 =	RUNOFF	ESTIMATES DO	O NOT EXTEND	PAST 2	DAYS AFTER	THE PEAK I	DAY OF
THE DESIGN S	STORM						
+							

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 138 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV02138F.DAT TIME/DATE OF STUDY: 01:22 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.220 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
********************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.948 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.390 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.991 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.567; LOW LOSS FRACTION = 0.908
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE *USER ENTERED "LAG" TIME = 0.534 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.474; LOW LOSS FRACTION = 0.781 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ********************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1 _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO< ______ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV02138F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                              | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
20.417 |
        502.61
20.500 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                        15.01
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1|
                                  502.6
                                        504.71
20.500 |
| 12603.00 | 12603.00| Zero Out:
                        Stream #2|
                                 15.0
                                        0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1|
                                        503.91
20.583
| 920.00 | 126.00| Subarea (UH) Added to Stream #2|
                                  0.0
                                        16.81
16.333 I
        1
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                  503.9
                                        506.51
         20.583 |
| 126.00 | 126.00| Zero Out: | Stream #2|
                                        0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2|
                                         1.41
16.500 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                  506.5
                                        506.81
20.583 |
        | 126.00 | 126.00| Zero Out:
                       Stream #2|
                                  1.4
                                        0.01
   I I
| 126.00 12720.50| Convex Routing: Stream #1|
                                        506.21
20.750
320.00
       331.00| Subarea (UH) Added to Stream #2|
                                         85.61
16.417 I
| 430.00 | 331.00| Subarea (UH) Added to Stream #3|
                                         48.01
        16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0
                                         1.51
16.667 |
        | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 85.6
                                         87.01
16.417 |
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                        0.01
| 331.00 | 331.00| Stream #3 Added to: Stream #2|
                                  87.0
                                        134.6|
16.417
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```

		Zero Out:			
		++ Stream #2 Added to:	Stream #1	506.2	528.3
		Zero Out:	Stream #2	134.6	0.0
		Convex Routing:			
		Subarea (UH) Added to	Stream #2	0.0	3.5
		Stream #2 Added to:			
	127.00	++ Zero Out:			
		 Convex Routing:			
20.917 50220.00	50347.00	 Subarea (UH) Added to	Stream #2	0.0	56.6
	12902.00	Convex Routing:	Stream #2	56.6	56.0
		Stream #2 Added to:			
		Zero Out:			
1 12902.00	129.00	Convex Routing:	Stream #1	538.4	538.2
50400.00 50333	129.00	Subarea (UH) Added to	Stream #2	0.0	8.5
129.00		Stream #2 Added to:			
		Zero Out:			
210.00	129.00	++ Subarea (UH) Added to			
16.333 129.00	129.00	Stream #2 Added to:	Stream #1	539.4	542.9
21.000 129.00	129.00	Zero Out:	Stream #2	22.9	0.0
129.00 129.00	133.00	Convex Routing:	Stream #1	542.9	542.8
13010.00	1	Subarea (UH) Added to			
	BASIN MODE: RUNOFF EST:	L VOLUME EXCEEDED; 2 =	TIME IS A	r end of 5-1	4INUTE UNIT
		File name: EV02138F	DEC		ge 15
					3

		* AE	S FLOODSCx	PROGRAM RESU	LTS SUMMARY
	-	38F.DAT]			
	+-			-+	
UPSTREAM	DOWNSTREAM	++		UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES			
132.00	13305.00	++ Convex Routing:	Stream #:	2 130.9	129.5
1.917 13305.00	133.00	Convex Routing:	Stream #:	2 129.5	129.0
	133.00	Subarea (UH) Added t			
133.00	133.00	Stream #3 Added to:	Stream #:	2 129.0	188.4
	133.00	Zero Out:			
+ 1 133 00	133 001	++ Stream #2 Added to:	Stream #	11 5/12 8	709 Q
133.00	133.00	Zero Out:	Stream #	2 188.4	0.0
133.00	134.00	Convex Routing:	Stream #	709.9	709.3
133.00	134.00	Convex Routing: Subarea (UH) Added t	o Stream #:	2 0.0	60.4
7 250 1	1	Stream #2 Added to:			
+	+-	·			
134.00	134.00	Zero Out:	Stream #:	2 60.4	0.0
		Subarea (UH) Added t	o Stream #	2 0.0	47.9
8.000 134.00	134.00	Stream #2 Added to:	Stream #	1 750.9	794.9
7.230		Zero Out:			
134.00 7.500		Convex Routing:		794.9	792.1
134.00	137.00	++ Subarea (UH) Added t		2 0.0	47.0
6.583 137.00	137.00	Stream #2 Added to:	Stream #	1 792.1	828.2
7.500 137.00		Zero Out:	Stream #:	2 47.0	0.0
137.00 7.500	137.00	View:	Stream #	1	828.2

+		+			+		+-
+					'		
		•					
Notes: 1 =	BASIN M	ODEL VOLUME	EXCEEDED; 2	= TIME	IS AT END (OF 5-MINUTE	UNIT
INTERVAL							
3 =	RUNOFF	ESTIMATES DO	O NOT EXTEND	PAST 2	DAYS AFTER	THE PEAK I	DAY OF
THE DESIGN S	STORM						
+							

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 139 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 2-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV02139F.DAT TIME/DATE OF STUDY: 01:21 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 5.382 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.595; LOW LOSS FRACTION = 0.931 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.16; 30-MINUTE = 0.30; 1-HOUR = 0.41 3-HOUR = 0.77; 6-HOUR = 1.15; 24-HOUR = 2.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.220 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.348; LOW LOSS FRACTION = 0.638 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.292 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.509; LOW LOSS FRACTION = 0.862
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.430 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.580; LOW LOSS FRACTION = 0.966
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.360 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.201; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 430.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.315 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.270; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.576 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.566; LOW LOSS FRACTION = 0.925
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
 3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.473 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.589; LOW LOSS FRACTION = 0.980
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.427 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.434; LOW LOSS FRACTION = 0.737
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
********************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.545; LOW LOSS FRACTION = 0.912
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.309 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.256; LOW LOSS FRACTION = 0.498
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.262 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.830
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.948 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.449; LOW LOSS FRACTION = 0.752
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.390 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.487; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.991 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.567; LOW LOSS FRACTION = 0.908
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
********************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.549 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.474; LOW LOSS FRACTION = 0.781
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
***********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH(FT) = 4643.67 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.534 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.923 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.534; LOW LOSS FRACTION = 0.861
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 119.70; DOWNSTREAM ELEVATION(FT) =
                                                100.00
 CHANNEL LENGTH(FT) = 3107.78 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
______
 WATERSHED AREA = 428.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.288 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.413; LOW LOSS FRACTION = 0.670
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37
  3-HOUR = 0.62; 6-HOUR = 0.85; 24-HOUR = 1.44
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 7
```

5-MINUTE = 0.13; 30-MINUTE = 0.28; 1-HOUR = 0.37

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>>>>STREAM	NUMBER 2 ADDE	ED TO STREAM NUMBE	R 1<<<<	

FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 0	5
>>>>STREAM	NUMBER 2 CLEA	ARED AND SET TO ZE	RO<<<< =================================	
*****	******	*******	******	*****
FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 1	1
>>>>VIEW S	TREAM NUMBER 1	HYDROGRAPH<		
==========				

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV02139F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                                      | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 502.7|
20.417 |
          | 119.00 12603.00| Convex Routing: Stream #1|
                                           502.7 501.5
20.500 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2|
                                                  14.91
16.250 |
          | 12603.00 | 12603.00| Stream #2 Added to: Stream #1|
                                           501.5
                                                   503.61
| 12603.00 | 12603.00| Zero Out:
                                                   0.0|
                              Stream #2|
                                         14.9
| 12603.00 | 126.00| Convex Routing: | Stream #1|
                                           503.6
                                                   502.81
20.583
| 920.00 | 126.00| Subarea (UH) Added to Stream #2|
                                           0.0
                                                  16.61
16.333 I
           1
126.00
         126.00| Stream #2 Added to: Stream #1|
                                           502.8
                                                   505.41
20.583 |
           1 126.00
         126.00| Zero Out: Stream #2|
                                                  0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2|
                                                    1.41
16.500 |
| 126.00 | 126.00| Stream #2 Added to: Stream #1|
                                           505.4
                                                   505.71
20.583 |
          | 126.00 | 126.00| Zero Out:
                             Stream #2|
                                           1.4
                                                   0.0
          1
| 126.00 12720.50| Convex Routing: Stream #1|
                                           505.7
                                                   505.11
20.750 |
          320.00
           331.00| Subarea (UH) Added to Stream #2|
                                                    84.81
16.417 I
                                                    47.61
| 430.00 | 331.00| Subarea (UH) Added to Stream #3|
16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0
                                                    1.51
16.667 |
           331.00
          331.00| Stream #4 Added to: Stream #2| 84.8
                                                    86.21
           16.417 |
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                           1.5
                                                   0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                            86.2
                                                   133.4|
16.417
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```

		Zero Out:			
		++ Stream #2 Added to:			
	12720.50	Zero Out:	Stream #	2 133.4	0.0
	127.00	Convex Routing:			
		Subarea (UH) Added to	Stream #	2 0.0	3.4
20.833	1	Stream #2 Added to:			
	127.00	++ Zero Out:			
127.00		Convex Routing:			
	50347.00	Subarea (UH) Added to	Stream #	2 0.0	56.1
	12902.00	Convex Routing:	Stream #	2 56.1	55.6
		Stream #2 Added to:			
+-		Zero Out:			
12902.00	129.00	Convex Routing:	Stream #	1 537.4	537.2
50400.00	129.00	Subarea (UH) Added to	Stream #	2 0.0	8.4
21 000 1	1	Stream #2 Added to:			
	1	Zero Out:			
· +-		++ Subarea (UH) Added to			
129.00	129.00	Stream #2 Added to:	Stream #	1 538.4	541.9
21.000 129.00	129.00	Zero Out:	Stream #	21 22.7	0.0
129.00	133.00	Convex Routing:	Stream #	1 541.9	541.7
17.333 I	1	Subarea (UH) Added to			
	BASIN MODE:	L VOLUME EXCEEDED; 2 =	TIME IS	AT END OF 5-	MINUTE UNIT
		+	DEC		age 17
Dat	0. 00/11/2023	File name: EV02139F		F	age 17

+		·				
 INPUT FILEN Page: 2 of	1					LTS SUMMARY *
+-		++				
DEAR (IID) I	MAX. STORAG	GE HYDROLOGIC/HYDRAULIC	PROCESS	ı		PEAK (CFS)
+	+-			+		+-
132.00 17.917		Convex Routing:	Stream	#2	130.0	128.7
13305.00 18.250	133.00	Convex Routing:	Stream	#2	128.7	128.2
132.00	133.00	Subarea (UH) Added to	Stream	#3	0.0	68.8
		Stream #3 Added to:	Stream	#2	128.2	187.4
		Zero Out:				
+-		++ Stream #2 Added to:				
133.00	133.00	Zero Out:	Stream	#2	187.4	0.0
	134.00	Convex Routing:	Stream	#1	708.3	707.7
		Subarea (UH) Added to	Stream	#2	0.0	59.9
16.417 134.00 17.250	134.00	Stream #2 Added to:				748.2
		Zero Out:				0.0
13500.00 18.000	134.00	Subarea (UH) Added to	Stream	#2	0.0	47.7
	134.00	Stream #2 Added to:	Stream	#1	748.2	792.1
134.00	134.00	Zero Out:	Stream	#2	47.7	0.0
134.00 17.500 +		Convex Routing:				
+-		++				
134.00		Subarea (UH) Added to				
137.00 17.500	1					
[1				46.1	
137.00 17.750	138.00	Convex Routing:	Stream	#1	825.6	823.0
Date	e: 08/11/2023	File name: EV02139F.	RES		Pag	e 19

137.00 17.000		Subarea (UH)					
+-					'		
138.00		Stream #2 Ad	ded to:	Stream	#1	823.0	849.7
17.750 138.00		Zero Out:		Stream	#2	30.4	0.0
138.00 17.833	139.00	Convex Routi	ng:	Stream	#1	849.7	849.2
138.00	139.00	Subarea (UH)	Added to	Stream	#2	0.0	31.0
16.333 139.00		Stream #2 Ad	ded to:	Stream	#1	849.2	863.4
17.833							
+-							
139.00	139.00	Zero Out:		Stream	#2	31.0	0.0
139.00 17.833	960.61	3					
++- Notes: 1 = 1			-+				
INTERVAL	2110111 110221			1111111111	, 111 211	2 01 0 111110	12 01111
3 = : THE DESIGN ST	ORM	MATES DO NOT	EXTEND PA			ER THE PEAR	

END OF FLOODSCX ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV2533CF.DAT TIME/DATE OF STUDY: 13:45 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
_____
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
```

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3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.856 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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Date: 05/15/2023

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV2533CF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                   | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 14229.7|
18.167 I
         | 119.00 12603.00| Convex Routing: Stream #1| 14229.7 14153.0|
18.083 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2| 0.0 | 94.5|
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 14153.0 | 14176.8 |
18.083 I
| 12603.00 | 12603.00| Zero Out:
                           Stream #2| 94.5
                                              0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 14176.8
                                            14155.1
18.250
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                             239.31
16.250 I
          | 126.00 | 126.00| Stream #2 Added to: Stream #1| 14155.1 | 14217.2|
           18.167 I
| 126.00 | 126.00| Zero Out: | Stream #2| | 239.3 | 0.0|
| 600.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                             68.01
16.333 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 14217.2
                                            14229.4
18.167 |
         1
| 126.00 | 126.00| Zero Out:
                           Stream #2| 68.0
                                              0.01
               | 126.00 12720.50| Convex Routing: Stream #1| 14229.4
                                            14215.31
18.333 |
         320.00
        331.00| Subarea (UH) Added to Stream #2| 0.0 353.1|
16.333 |
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                              233.91
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 38.8|
16.417 |
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 353.1 | 388.4|
16.333 |
| 331.00 331.00| Zero Out: Stream #4|
                                      38.8
                                              0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                       388.4
                                              622.3|
16.333
     Date: 05/15/2023 File name: EV2533CF.RES
                                       Page 12
```

		Zero Out:				
+-		 ++		+-		
331.00 18.333	12720.50	Stream #2 Added to:	Stream #	‡1	14215.3	14376.5
	12720.50	Zero Out:	Stream #	‡2	622.3	0.0
	127.00	Convex Routing:				
	127.00	Subarea (UH) Added to	Stream #	‡2	0.0	262.2
	127.00	Stream #2 Added to:	Stream #	‡1	14357.8	14423.9
18.417 +	 +:	l		-+-		
		++				
127.00	127.00	Zero Out:	Stream #	‡2	262.2	0.0
		Convex Routing:	Stream #	‡1	14423.9	14413.9
	50347.00	Subarea (UH) Added to	Stream #	‡2∣	0.0	438.9
	12902.00	Convex Routing:	Stream #	‡2∣	438.9	429.2
12902.00		Stream #2 Added to:				
+-		++				
12902.00	12902.00	Zero Out:	Stream #	‡2	429.2	0.0
12902.00 17.500	129.00	Convex Routing:	Stream ‡	‡1	14573.7	14563.6
50400.00	129.00	Subarea (UH) Added to	Stream #	‡2	0.0	181.4
		Stream #2 Added to:				
129.00	129.00	Zero Out:	Stream #	‡2	181.4	0.0
•				+-		
210.00	129.00	++ Subarea (UH) Added to	Stream #	‡2	0.0	107.6
16.333 129.00	129.00	Stream #2 Added to:	Stream #	ŧ1	14606.6	14646.2
17.500 129.00		Zero Out:	Stream #	‡2	107.6	0.0
	133.00	Convex Routing:	Stream #	ŧ1	14646.2	14637.1
129.00 17.583					0.0	

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UPSTREAM I		+		U	PSTREAM	DOWNSTREAM
NODE # PEAK (HR)	MODELED (AF)	DROLOGIC/HYDRA				
+-	+					
7.417 13305.00		nvex Routing:				
17.667 132.00 6.667	133.00 Su	barea (UH) Add	ed to Stream	#3	0.0	537.5
133.00 7.500	133.00 St	ream #3 Added	to: Stream	#2	1114.7	1473.1
133.00	133.00 Ze	ro Out: 				
	133.00 St	+ ream #2 Added	to: Stream	#1	14637.1	16108.3
	133.00 Ze	ro Out:	Stream	#2	1473.1	0.0
7.583	133.00 Vi 13381.62	3	Stream			16108.3
Notes: 1 =	BASIN MODEL V	+ OLUME EXCEEDED TES DO NOT EXT	; 2 = TIME IS	AT E	ND OF 5-M	INUTE UNIT

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV2533TF.DAT TIME/DATE OF STUDY: 14:04 10/26/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2< _____ WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.856 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744 3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987****************** FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) = 315.00

```
CHANNEL LENGTH (FT) = 9760.05
                           MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                 212.00
 CHANNEL LENGTH(FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744
  3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
```

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>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<

>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

+			-+ * AES	FLOODSCx	PROGRAM RES	ULTS SUMMARY *
Page: 1 of		•				
•					-+	+-
UPSTREAM	DOWNSTREAM	+	-+		UPSTREAM	DOWNSTREAM
, ,		GE HVDPOLOGIC /H	VDDAIIT.TC	DDUCESS	IDENK (CEG)	PEAK (CFS)
PEAK (HR)	MODELED (A	F) FOOTNOTES	1			+-
		+			-+	+-
	132.00	Subarea (UH)		Stream #	2 0.0	2536.8
132.00	13305.00		ng:	Stream #	2 2536.8	2443.8
17.417 I	1	1				2399.9
132.00	133.00	Subarea (UH)	Added to	Stream #	3 0.0	1156.9
16.667 133.00 17.333	133.00		ded to:	Stream #	2 2399.9	2847.6
+	·+				-+	+-
		7ero Out:		Stream #	31 1156 0	0.0
155.00				DCIEdii #	51 1150.5	0.01
133.00 17.333			ded to:	Stream #	1 0.0	2847.6
	133.00	Zero Out:		Stream #	2 2847.6	0.0
	133.00	View:		Stream #	1	2847.6
•					-+	
		+L VOLUME EXCE		TIME IS	AT END OF 5-	MINUTE UNIT
		IMATES DO NOT	EXTEND PA	AST 2 DAY	S AFTER THE	PEAK DAY OF
+						

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV2533UF.DAT TIME/DATE OF STUDY: 13:45 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 _____ FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*********************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
```

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV2533UF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                    | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 14590.1|
18.167 I
14504.1
18.083 |
810.00 12603.00| Subarea (UH) Added to Stream #2| 0.0
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 14504.1
                                               14527.51
| 12603.00 | 12603.00| Zero Out:
                             Stream #2| 100.9
                                                0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 14527.5
                                               14504.71
          18.250 |
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                               256.71
16.250 I
          | 126.00 | 126.00| Stream #2 Added to: Stream #1| 14504.7
                                               14565.31
           18.167 I
         126.00| Zero Out: Stream #2| 256.7
126.00
                                                 0.01
| 600.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                73.71
         126.00| Stream #2 Added to: Stream #1| 14565.3
126.00
                                               14577.3|
18.167
          | 126.00 | 126.00| Zero Out:
                            Stream #2| 73.7
                                                0.01
         | 126.00 | 12720.50| Convex Routing: Stream #1| 14577.3
                                               14563.41
18.333 |
         320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0
                                                373.21
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                                248.21
16.333 |
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 41.2|
16.417 |
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 373.2 | 410.6|
16.333 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                       41.2
                                                0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                        410.6
                                                658.8|
16.333
      Date: 05/15/2023 File name: EV2533UF.RES
                                         Page 10
```

· +		Zero Out:			
8 333 I		++ Stream #2 Added to:	·		
12720.50		Zero Out:	Stream #2	658.8	0.0
	127.00	 Convex Routing:			
	127.00	Subarea (UH) Added to	Stream #2	0.0	280.3
		Stream #2 Added to:			
18.417 +	+-	 ++	+-		
127.00	127.00	Zero Out:	Stream #2	280.3	0.0
		Convex Routing:	Stream #1	14766.7	14753.2
18.417 50220.00 16.333	50347.00	Subarea (UH) Added to	Stream #2	0.0	468.6
50347.00 6.417	12902.00	Convex Routing:	Stream #2	468.6	459.2
12902.00	12902.00	Stream #2 Added to:	Stream #1	14753.2	14851.9
+		++			
		Zero Out:			
12902.00 .8.500	129.00	Convex Routing: Subarea (UH) Added to	Stream #1	14851.9	14836.8
50400.00 6.250	129.00	Subarea (UH) Added to	Stream #2	0.0	195.4
7 500 1	1	Stream #2 Added to:			
		Zero Out:			
		++ Subarea (UH) Added to	Stream #2	0.0	114.1
.6.333 129.00	129.00	Stream #2 Added to:	Stream #1	14874.8	14914.0
7.500 129.00	129.00	Zero Out:	Stream #2	114.1	0.0
	1	 Convex Routing:			
.7.583	133.00	View: 3	Stream #1		14905.8

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+		
* AES FLOODSCx	PROGRAM RESU	LTS SUMMARY *
INPUT FILENAME: [EV2533UF.DAT]		
Page: 2 of		
	-+	+-
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE	UPSTREAM	DOWNSTREAM
	PEAK (CFS)	PEAK (CFS)
++	-+	+-

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV2534CF.DAT TIME/DATE OF STUDY: 01:04 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE (CFS) = 0.00-----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
```

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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.856 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.322 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.481
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.350 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.463
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
```

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		* AES	FLOODS	Cx P	ROGRAM RESU	LTS SUMMARY
age: 1 of	1	84CF.DAT]				
	OOWNSTREAM	+				DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
	119.00	++ Subarea (UH) Added to	Stream	#1	0.0	13948.2
8.167 119.00	12603.00	Convex Routing:	Stream	#1	13948.2	13875.3
810.00	12603.00	Subarea (UH) Added to	Stream	#2	0.0	90.1
6.250 12603.00	12603.00	Stream #2 Added to:	Stream	#1	13875.3	13899.6
12603.00	12603.00	Zero Out:	Stream	#2	90.1	0.0
+-						
8.250		Subarea (UH) Added to				
6 250 I	1	Stream #2 Added to:				
8.167		Zero Out:				
	1	Subarea (UH) Added to				
6.333	1	 				
126.00	126.00	Stream #2 Added to:	Stream	#1	13942.0	13954.5
8.167 126.00	126.00	Zero Out:	Stream	#2	64.2	0.0
		Convex Routing:	Stream	#1	13954.5	13942.0
	331.00	Subarea (UH) Added to	Stream	#2	0.0	339.3
6.333 I		Subarea (UH) Added to				
				+		+
6.417	1	Subarea (UH) Added to	Stream	#4	0.0	37.1
331.00 6.333		Stream #4 Added to:				
	1				37.1	
331.00 6.333	331.00	Stream #3 Added to:	Stream	#2	373.2	597.0
Dat	a: 08/11/2023	File name: EV2534CF.	RES		Pag	ge 13

		Zero Out:			
		++ Stream #2 Added to:	Stream #1	13942.0	14104.9
18.333 12720.50	12720.50	Zero Out:	Stream #2	597.0	0.0
12720.50	127.00	 Convex Routing:	Stream #1	14104.9	14088.2
	127.00	Subarea (UH) Added to	Stream #2	0.0	249.2
17.333	1	Stream #2 Added to:			
		+ Zero Out:	·		0.0
		Convex Routing:			
17.417		Subarea (UH) Added to			
		Convex Routing:	Stream #2	418.6	409.5
	12902.00	Stream #2 Added to:			
+-		++	·	409.5	
12902.00 17.500	129.00	Convex Routing:	Stream #1	14360.7	14350.0
50400.00 5.250	129.00	Subarea (UH) Added to	Stream #2	0.0	171.6
129.00 17.500	129.00	Stream #2 Added to:	Stream #1	14350.0	14393.4
129.00	129.00	Zero Out:			
·		++ Subarea (UH) Added to	Stream #2	0.0	103.0
16.333 I	1	Stream #2 Added to:			
17.500		Zero Out:			
		Convex Routing:	Stream #1	14433.2	14423.5
16.917		Subarea (UH) Added to			
Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODE	UVOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-MI	NUTE UNIT
		File name: EV2534CF.		Page	

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV2534CF.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                   | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 13305.00| Convex Routing: Stream #2| 1124.5
                                              1086.1
17.417 I
         | 13305.00
         133.00| Convex Routing: Stream #2| 1086.1 1076.1|
17.667 |
132.00
         133.00| Subarea (UH) Added to Stream #3| 0.0 518.3|
          1
16.667 |
133.00
         133.00| Stream #3 Added to: Stream #2| 1076.1 1428.3|
17.583 |
          | 133.00 | 133.00| Zero Out:
                                      518.3
                            Stream #3|
                                               0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 14423.5
                                              15851.81
         17.583
| 133.00 | 133.00| Zero Out:
                           Stream #2| 1428.3
                                               0.01
| 133.00 | 134.00| Convex Routing: | Stream #1| 15851.8
                                             15836.5|
17.750 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2| 0.0
                                              601.11
16.417 |
          | 134.00 | 134.00| Stream #2 Added to: Stream #1| 15836.5 | 16074.0|
17.750 I
| 134.00 | 134.00| Zero Out:
                       Stream #2| 601.1 0.0|
17.417 |
134.00
         134.00| Stream #2 Added to: Stream #1| 16074.0
                                             16933.81
17.667 |
          | 134.00 | 134.00 | Zero Out: | Stream #2|
                                       892.5
                                               0.01
| 134.00 | 134.00| View:
                            Stream #1|
                                              16933.81
17.667 | 14179.98| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
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END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV2534UF.DAT TIME/DATE OF STUDY: 01:04 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ***************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.856 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
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______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>>>
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.322 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.481
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

*******	******	*******	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 6	
>>>>STREAM NUMBER 2 CLEA	RED AND SET TO ZE	ERO<<<<	
=======================================	=========		======
******	******	******	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER 1	HYDROGRAPH<		

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+ 		+ * AES	FLOODSO	Cx E	PROGRAM RESU	LTS SUMMARY *
 INPUT FILE Page: 1 of						
	DOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	HYDROLOGIC/HYDRAULIC	PROCESS			
+ 10100.00	119.00	++ Subarea (UH) Added to	Stream	#1	0.0	14142.9
119.00	12603.00	Convex Routing:	Stream	#1	14142.9	14068.3
	and the second second	Subarea (UH) Added to	Stream	#2	0.0	93.0
		Stream #2 Added to:	Stream	#1	14068.3	14092.3
		Zero Out:				
· +		++				
18.250 L	1	Convex Routing: Subarea (UH) Added to				
16 250 I	1					
18.167						
	1	Zero Out:				
16.333		Subarea (UH) Added to				
126.00	126.00	++ Stream #2 Added to:	Stream	#1	14133.1	14145.4
18.167 126.00	126.00	Zero Out:	Stream	#2	66.6	0.0
	12720.50	Convex Routing:	Stream	#1	14145.4	14131.5
		Subarea (UH) Added to	Stream	#2	0.0	348.1
16.333 I	1	Subarea (UH) Added to				
+		++				
16.417 I	1	Subarea (UH) Added to				
16 333	1	Stream #4 Added to:				
331.00	331.00	Zero Out:	Stream	#4	38.3	0.0
331.00 16.333	331.00	Stream #3 Added to:	Stream	#2	382.9	613.3
Da	te: 08/11/2023	File name: EV2534UF.	RES		Pa	ge 13

		Zero Out:				
		++ Stream #2 Added to:				
18.333						
12720.50	127.00	 Convex Routing:	Stream	#1	14293.1	14275.2
		 Subarea (UH) Added to				
18.417		Stream #2 Added to:				14341.5
•		++				0.0
127.00 18.417	12902.00	Convex Routing:	Stream	#1	14341.5	14331.8
50220.00	1	Subarea (UH) Added to				
50347.00 5417	12902.00	Convex Routing:	Stream	#2	431.7	422.1
12902.00 17.417	12902.00	Stream #2 Added to:				
		++ Zero Out:	Stream	#2	422.1	0.0
12902.00 17.500	129.00	Convex Routing:	Stream	#1	14510.3	14500.0
50400.00 16.250	129.00	Subarea (UH) Added to	Stream	#2	0.0	177.9
129.00 17.500	129.00	Stream #2 Added to:	Stream	#1	14500.0	14543.1
129.00	129.00	Zero Out:				
+-		++ Subarea (UH) Added to				
16.333	1	Stream #2 Added to:				
17.500	1	Zero Out:				
1		Convex Routing:				
17.583	1	 Subarea (UH) Added to				
16.917 +	+-	 				
Notes: 1 = INTERVAL	BASIN MODEI	L VOLUME EXCEEDED; 2 =				
THE DESIGN ST	ORM	IMATES DO NOT EXTEND P.				EAK DAY OF
		+				
Date	e: 08/11/2023	File name: EV2534UF	RES		Pag	ge 14

					+		
UPSTREAM	DOWNSTREAM MAX. STORAG					UPSTREAM	DOWNSTREAM
NODE # PEAK (HR)	NODE # MODELED (AE	HYDROLOGI	C/HYDRAULIC TES				
+		-+	+				
17 417 I	13305.00		I.				
13305.00	133.00	Convex Ro	uting:	Stream	#2	1112.8	1102.2
	133.00	Subarea (UH) Added to	Stream	#3	0.0	531.1
16.667 133.00	133.00	Stream #3	Added to:	Stream	#2	1102.2	1458.0
17.500 133.00 	133.00	Zero Out:		Stream	#3	531.1	
					+-		
133.00 17.583	133.00	Stream #2		Stream	#1	14573.5	16030.5
133.00	133.00	Zero Out:	I	Stream	#2	1458.0	0.0
	134.00			Stream	#1	16030.5	16014.8
	134.00		UH) Added to	Stream	#2	0.0	620.3
16.417 134.00 17.750	134.00	Stream #2	Added to:	Stream	#1	16014.8	16250.1
	+-				+		
	134.00			Stream	#2	620.3	0.0
134.00 7.750	134.00	View:	I	Stream			16250.1
Notes: 1 =	BASIN MODEI RUNOFF ESTI	VOLUME E	+ XCEEDED; 2 = 	= TIME IS	AT	END OF 5-M	INUTE UNIT

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV5033CF.DAT TIME/DATE OF STUDY: 13:36 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408 3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.185 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

Date: 05/16/2023

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.821 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.308; 30-MINUTE = 0.363; 1-HOUR = 0.408
  3-HOUR = 0.754; 6-HOUR = 0.891; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV5033CF.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                   | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
+------
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 17029.5|
18.083 I
         | 119.00 12603.00| Convex Routing: Stream #1| 17029.5 16914.6|
18.083 L
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0 107.1|
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 16914.6 | 16942.5 |
18.083 I
| 12603.00 | 12603.00| Zero Out:
                           Stream #2| 107.1
                                              0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 16942.5
                                             16925.31
18.167
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                             277.81
16.250 I
          | 126.00 | 126.00| Stream #2 Added to: Stream #1| 16925.3 | 17000.3|
           18.167 I
| 126.00 | 126.00| Zero Out: | Stream #2| 277.8 | 0.0|
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                             81.1|
16.333 |
+-----
| 126.00 | 126.00 | Stream #2 Added to: Stream #1 | 17000.3 | 17015.6 |
18.167 |
         | 126.00 | 126.00| Zero Out:
                           Stream #2| 81.1
                                              0.01
               | 126.00 12720.50| Convex Routing: Stream #1| 17015.6
                                            17009.21
18.250 |
         320.00
        331.00| Subarea (UH) Added to Stream #2| 0.0 399.9|
16.333 |
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                              263.61
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 45.3|
16.417 |
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 399.9 | 441.4|
16.333 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                      45.3
                                              0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                       441.4
                                              705.0|
16.333
     Date: 05/16/2023 File name: EV5033CF.RES
                                       Page 12
```

		Zero Out:			
		 ++	+-		
331.00 18.250		Stream #2 Added to:	Stream #1	17009.2	17221.9
		Zero Out:	Stream #2	705.0	0.0
		Convex Routing:			
12710.00	1	Subarea (UH) Added to			
127.00	127.00	Stream #2 Added to:			
		+			
127.00	127.00	Zero Out:	Stream #2	306.8	0.0
127.00 18.333	12902.00	Convex Routing:	Stream #1	17284.3	17272.8
50220.00 16.333	50347.00	Subarea (UH) Added to			
50347.00		Convex Routing:			
12902.00	12902.00	Stream #2 Added to:	Stream #1	17272.8	17510.7
+-		++			
		Zero Out:			
12902.00 17.417	129.00	Convex Routing: Subarea (UH) Added to	Stream #1	17510.7	17498.0
50400.00 L6.250	129.00	Subarea (UH) Added to	Stream #2	0.0	210.5
129.00	1	Stream #2 Added to:			
129.00	129.00	Zero Out:			
+-		++			
16.333	1	Subarea (UH) Added to			
17.417	129.00	Stream #2 Added to: Zero Out:	Stream #1	1/331.9	1/601.2
	I	1			
129.00 17.500	1	Convex Routing:			
16.833	1	Subarea (UH) Added to			
Notes: 1 = NTERVAL	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-MI	NUTE UNIT

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++		SULTS SUMMARY *		
+				
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE		PEAK (CFS)		
+	+	+-		
132.00	n #2 1358.9	1335.6		
13305.00 133.00 Convex Routing: Stream	n #2 1335.6	1321.4		
17.583	n #3 0.0	617.3		
16.667	n #2 1321.4	1752.5		
17.500				
+	т			
133.00 133.00 Stream #2 Added to: Stream 17.500	n #1 17589.0	19341.5		
133.00 133.00 Zero Out: Stream	n #2 1752.5	0.0		
17.500 15984.93 3	n #1	19341.5		
++ Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF THE DESIGN STORM +				

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 133T * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV OCT 2022 ROKAMOTO ******************** FILE NAME: EV5033TF.DAT TIME/DATE OF STUDY: 10:48 10/26/2022 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< _____ WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.821 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744 3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987****************** FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) = 315.00

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```
CHANNEL LENGTH (FT) = 9760.05
                           MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                 212.00
 CHANNEL LENGTH(FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.71; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.744; 30-MINUTE = 0.744; 1-HOUR = 0.744
  3-HOUR = 0.959; 6-HOUR = 0.978; 24-HOUR = 0.987
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
```

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++ * AES FLOODSCx 1	PROGRAM RESU	LTS SUMMARY *
INPUT FILENAME: [EV5033TF.DAT] Page: 1 of		
+	+	+-
UPSTREAM DOWNSTREAM	UPSTREAM	DOWNSTREAM
TIME(2) TO MAX. STORAGE		
NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS	PEAK (CFS)	PEAK (CFS)
PEAK (HR) MODELED (AF) FOOTNOTES	+	
		·
\mid 13010.00 \qquad 132.00 \mid Subarea (UH) Added to Stream #2 16.833 \mid \mid		
132.00 13305.00 Convex Routing: Stream #2	2969.6	2885.2
17.167	1 2885 2	2858 71
17 222		
132.00 133.00 Subarea (UH) Added to Stream #3	0.0	1317.1
16.583		
17.333		
	+	+-
133.00 133.00 Zero Out: Stream #3	1317.1	0.01
133.00 133.00 Stream #2 Added to: Stream #1	0.0	3401.0
17.333	3401.0	0.01
133.00 133.00 View: Stream #1		3401.0
17.333 1235.39 3		
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AS INTERVAL	r end of 5-M	IINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS	AFTER THE P	PEAK DAY OF
THE DESIGN STORM		
+		

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 133U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV5033UF.DAT TIME/DATE OF STUDY: 13:36 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422 3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.185 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
  3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.328; 30-MINUTE = 0.381; 1-HOUR = 0.422
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.771; 6-HOUR = 0.897; 24-HOUR = 0.940
*****
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
_____
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
************************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
**********************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
```

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV5033UF.DAT ]
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|UPSTREAM DOWNSTREAM|
                                       | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 17458.9|
18.083 I
| 119.00 | 12603.00| Convex Routing: | Stream #1| 17458.9
                                                 17334.21
18.083 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0
16.250 |
| 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 17334.2
                                                  17361.5|
| 12603.00 | 12603.00| Zero Out:
                               Stream #2| 114.2
                                                    0.01
 | 12603.00 | 126.00 | Convex Routing: | Stream #1 | 17361.5
                                                  17342.01
           18.167 |
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                   297.31
16.250 I
           1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 17342.0
                                                 17415.5
            18.167 I
         126.00| Zero Out: Stream #2| 297.3
126.00
                                                     0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                     87.81
         126.00| Stream #2 Added to: Stream #1| 17415.5
126.00
                                                  17430.51
18.167
           1
| 126.00 | 126.00| Zero Out:
                               Stream #2| 87.8
                                                    0.01
                | 126.00 | 12720.50 | Convex Routing: | Stream #1 | 17430.5
                                                  17424.11
18.250 |
          320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0
                                                 422.71
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                                    279.41
16.333 |
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 48.2|
16.417 |
           | 331.00 | 331.00| Stream #4 Added to: Stream #2|
                                           422.7
                                                    466.81
16.333 I
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                          48.2
                                                    0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                                    746.3|
16.333
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```

		Zero Out:			
•		+ ++			
		Stream #2 Added to:	Stream #1	17424.1	17633.2
18.250 12720.50		Zero Out:	Stream #2	746.3	0.0
		 Convex Routing:			
	127.00	Subarea (UH) Added to	Stream #2	0.0	327.0
	127.00	Stream #2 Added to:			
127.00	127.00	++ Zero Out:		327.0	0.0
	12902.00	Convex Routing:	Stream #1	17691.6	17679.1
18.333 50220.00 16.333	50347.00	Subarea (UH) Added to	Stream #2	0.0	526.7
50347.00		Convex Routing:			
12902.00	12902.00	Stream #2 Added to:	Stream #1	17679.1	17841.0
+		 ++			
	12902.00	Zero Out:	Stream #2	517.4	0.0
 12902.00 7 417	129.00	Convex Routing:	Stream #1	17841.0	17829.6
50400.00 6.250	129.00	Subarea (UH) Added to	Stream #2	0.0	226.7
129.00	1	Stream #2 Added to:			
129.00	129.00	Zero Out:			
		+ ++			
16.333					
222.00 L7.417	129.00	Stream #2 Added to:	Stream #1	17883.0	17932.1
129.00	129.00	Zero Out:	Stream #2	128.8	0.0
129.00 L7.500	1	Convex Routing:	Stream #1	17932.1	17921.2
133.00 17.500		3	Stream #1		17921.2
+ Notes: 1	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-M	

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+		
* AES FLOODSCx	PROGRAM RESU	LTS SUMMARY *
INPUT FILENAME: [EV5033UF.DAT]		
Page: 2 of		
	-+	+-
UPSTREAM DOWNSTREAM	UPSTREAM	DOWNSTREAM
TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS	PEAK (CFS)	PEAK (CFS)
PEAK (HR) MODELED (AF) FOOTNOTES +	-+	
+		

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134C * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV5034CF.DAT TIME/DATE OF STUDY: 00:56 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397 3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.185 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE =
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
```

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```
3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.821 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.317 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.452
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.293; 30-MINUTE = 0.352; 1-HOUR = 0.397
  3-HOUR = 0.740; 6-HOUR = 0.887; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
_____
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
```

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		+				
		* AES	FLOODS	Cx P	ROGRAM RESU	ILTS SUMMARY *
INPUT FILEN	1	34CF.DAT]				
+-		++				DOWNSTREAM
	MAX. STORAG	GE HYDROLOGIC/HYDRAULIC				
PEAK (HR)	MODELED (A	F) FOOTNOTES				
+-		++ Subarea (UH) Added to				
10 002 1	1	Convex Routing:				
18.083		Subarea (UH) Added to				
16.250 I	1	Stream #2 Added to:				
18 083	1	Zero Out:				
12603.00	12003.00	Zero Out: 	stream	#∠	102.1	0.0
+-		++				
L8.167		Convex Routing:				
16.250 I	1	Subarea (UH) Added to				
L8.167	1	Stream #2 Added to:				
		Zero Out:				
L6.333	1	Subarea (UH) Added to				
+-						
8.167 I	1	Zero Out:				
		 Convex Routing:				
8.250		 Subarea (UH) Added to				
6.333 400.00	331.00	 Subarea (UH) Added to	Stream	#3	0.0	252.4
•		 		+		+
390.00	331.00	++ Subarea (UH) Added to	Stream	#4	0.0	43.4
6.417 331.00		Stream #4 Added to:	Stream	#2	384.3	424.2
16.333 331.00			Stream	#4	43.4	0.0
331.00 6.333	331.00	Stream #3 Added to:	Stream	#2	424.2	676.6
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		Zero Out:				
331.00	12720.50	++ Stream #2 Added to:				
18.250 12720.50		Zero Out:	Stream	#2	676.6	0.0
12720.50	127.00	Convex Routing:	Stream	#1	16898.9	16870.5
18.333 12710.00	127.00	Subarea (UH) Added to	Stream	#2	0.0	292.3
		Stream #2 Added to:				
+-	127.00	++ Zero Out:				
1 127.00	12902.00	Convex Routing:	Stream	#1	17014.8	17006.0
17.333 50220.00	50347.00	Subarea (UH) Added to	Stream	#2	0.0	471.2
16.333 50347.00	12902.00	Convex Routing:	Stream	#2	471.2	462.7
12902.00	12902.00	Stream #2 Added to:	Stream	#1	17006.0	17250.1
		++ Zero Out:				
12902.00	129.00	Convex Routing:	Stream	#1	17250.1	17236.3
50400.00 16.250		Subarea (UH) Added to	Stream	#2	0.0	199.3
129.00 17.417	129.00	Stream #2 Added to:	Stream	#1	17236.3	17290.5
129.00	129.00	Zero Out:				
	221.00	++ Subarea (UH) Added to	Stream	#2	0.0	116.2
222.00 17.417	129.00	Stream #2 Added to:	Stream	#1	17290.5	17339.9
	129.00	Zero Out:	Stream	#2	116.2	0.0
129.00	133.00	Convex Routing:	Stream	#1	17339.9	17326.6
13010.00	132.00	Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODEI RUNOFF ESTI ORM	VOLUME EXCEEDED; 2 =	AST 2 DA	AYS A	AFTER THE P	EAK DAY OF
		+				

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV5034CF.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                    | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: | Stream #2 | 1308.2
                                               1288.61
17.333 I
          | 13305.00
         133.00| Convex Routing: Stream #2| 1288.6 1275.1|
17.583 |
132.00
         133.00| Subarea (UH) Added to Stream #3|
                                      0.0 595.01
          1
16.667 |
133.00
         133.00| Stream #3 Added to: Stream #2| 1275.1 1699.6|
17.500 |
          | 133.00 | 133.00| Zero Out:
                                      595.0
                            Stream #3|
                                               0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 17326.6
                                              19026.21
         17.500 I
| 133.00 | 133.00| Zero Out:
                           Stream #2| 1699.6
                                               0.01
| 133.00 | 134.00| Convex Routing: | Stream #1| 19026.2
                                             19004.61
17.667 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2| 0.0
                                             691.11
16.417 |
          | 134.00 | 134.00 | Stream #2 Added to: Stream #1 | 19004.6 | 19294.4 |
17.667 |
| 134.00 | 134.00| Zero Out:
                        Stream #2| 691.1 0.0|
17.333 |
134.00
         134.00| Stream #2 Added to: Stream #1| 19294.4
                                              20328.61
17.583 |
          | 134.00 | 134.00 | Zero Out: Stream #2 | 1056.8
                                               0.01
| 134.00 | 134.00| View:
                             Stream #1|
                                              20328.61
17.583 | 16929.49| 3
|Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
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END OF FLOODSCX ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 134U * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV5034UF.DAT TIME/DATE OF STUDY: 00:56 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.185 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405 3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.821 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>>>
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.317 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.452
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.304; 30-MINUTE = 0.358; 1-HOUR = 0.405
  3-HOUR = 0.750; 6-HOUR = 0.890; 24-HOUR = 0.936
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

******	******	********	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 6	
>>>>STREAM NUMBER 2 CLEA	ARED AND SET TO ZE	ERO<<<<	
			======
*****	******	*******	*****
FLOW PROCESS FROM NODE	134.00 TO NODE	134.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER 1	L HYDROGRAPH<		

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1		* AE	S FLOODSO	Cx E	PROGRAM RESU	JLTS SUMMARY
Page: 1 of	NAME: [EV503	34UF.DAT]				
+ UPSTREAM	DOWNSTREAM	++				DOWNSTREAM
NODE #	MODELED (A)	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS			
+ 10100.00	119.00	++ Subarea (UH) Added t	o Stream	#1	0.0	16925.9
119.00	12603.00	Convex Routing:	Stream	#1	16925.9	16813.3
8.083	809.00	Subarea (UH) Added t				
12603.00	12603.00	Stream #2 Added to:	Stream	#1	16813.3	16841.3
		Zero Out:				
		 ++		+		
12603.00 8.167		Convex Routing:	Stream	#1	16841.3	16824.8
920.00	126.00	Subarea (UH) Added t	o Stream	#2	0.0	273.0
6.250 126.00 8.167	126.00	Stream #2 Added to:	Stream	#1	16824.8	16900.2
126.00		Zero Out:	Stream	#2	273.0	0.0
6.333		Subarea (UH) Added t				
+		++				,
8.167		Stream #2 Added to:				
126.00	126.00	Zero Out:	Stream	#2	79.6	0.0
126.00 8.250	12720.50	Convex Routing:	Stream	#1	16915.6	16909.0
	331.00	Subarea (UH) Added t	o Stream	#2	0.0	394.3
400.00 6.333 I	331.00	Subarea (UH) Added t				
+		++				
6.417 I	1	Subarea (UH) Added t				
6 333	1	Stream #4 Added to:				
331.00	331.00	Zero Out:	Stream	#4	44.6	0.0
		Stream #3 Added to:	Stream	#2	435.2	694.9

		Zero Out:				
+		-++ Stream #2 Added to:				
18.250 12720.50	12720.50	Zero Out:	Stream	#2	694.9	0.0
12720.50	127.00	 Convex Routing:	Stream	#1	17122.8	17092.6
	127.00	 Subarea (UH) Added to	Stream	#2	0.0	301.8
4 = 0 = 0		Stream #2 Added to:				
+		Zero Out:				
	12902.00	Convex Routing:	Stream	#1	17194.7	17186.5
	50347.00	Subarea (UH) Added to	Stream	#2	0.0	485.5
16.333 50347.00	12902.00	Convex Routing:	Stream	#2	485.5	476.9
17.333	12902.00	Stream #2 Added to:				
+		-++				0.0
12902.00 17.417	129.00	Convex Routing:	Stream	#1	17433.2	17420.3
50400.00		Subarea (UH) Added to	Stream	#2	0.0	206.5
129.00	129.00	Stream #2 Added to:	Stream	#1	17420.3	17474.2
		Zero Out:				
+		++ Subarea (UH) Added to				
16.333	1	Stream #2 Added to:				
17.417		Zero Out:				
1	1	 Convex Routing:				
17.500 13010.00	132.00	Subarea (UH) Added to				
+ Notes: 1 = INTERVAL 3 = THE DESIGN S	BASIN MODEI RUNOFF ESTI	VOLUME EXCEEDED; 2 =	TIME IS	S AT	END OF 5-M	INUTE UNIT
+						ge 14

	·+-				+		
UPSTREAM	DOWNSTREAM					UPSTREAM	DOWNSTREAM
NODE # PEAK (HR)	MAX. STORAG NODE # MODELED (AB	HYDROLOGI	C/HYDRAULIC TES				
+		-+	+				
17 333	13305.00		1				
13305.00	133.00	Convex Ro	uting:	Stream	#2	1319.5	1305.7
	133.00	Subarea (UH) Added t	o Stream	#3	0.0	609.6
16.667 133.00	133.00	Stream #3	Added to:	Stream	#2	1305.7	1734.4
17.500 133.00 	133.00	Zero Out:		Stream	#3	609.6	
	+-				+		
133.00 17.500	133.00	Stream #2		Stream	#1	17511.1	19245.5
133.00	133.00	Zero Out:	I	Stream	#2	1734.4	0.0
	134.00	Convex Ro		Stream	#1	19245.5	19223.5
	134.00		UH) Added t	o Stream	#2	0.0	712.5
17.667	134.00		Added to:				
					+		
134.00	134.00	Zero Out:		Stream	#2	712.5	0.0
17.667	134.00 16268.17	View: 3		Stream			19511.3
Notes: 1 =	BASIN MODEI RUNOFF ESTI	VOLUME E	+ XCEEDED; 2	= TIME IS	AT	END OF 5-M	INUTE UNIT

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 File name: EV5034UF.RES
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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

Michael Baker International 5 Hutton Centre Drive, Suite 500 Santa Ana, CA 92707

* RANCHO MISSION VIEJO - FREE DRAINING UH * ULTIMATE CONDITION - REGIONAL NODE 119 * 5-YR EV APRIL 2019 FKAZI ******************* FILE NAME: EV05119F.DAT TIME/DATE OF STUDY: 11:53 04/10/2019 ** INPUT SUMMARY ** ****************** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.345; 30-MINUTE = 0.395; 1-HOUR = 0.435 3-HOUR = 0.785; 6-HOUR = 0.904; 24-HOUR = 0.944***************** FLOW PROCESS FROM NODE 119.00 TO NODE 119.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH< ______

Date: 06/12/2019

+	
* AES FLOODSCx INPUT FILENAME: [EV05119F.DAT] Page: 1 of	PROGRAM RESULTS SUMMARY *
UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS PEAK (HR) MODELED (AF) FOOTNOTES	UPSTREAM DOWNSTREAM PEAK (CFS) PEAK (CFS)
10100.00 119.00 Subarea (UH) Added to Stream #: 19.333	1 0.0 2406.9 1 2406.9
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAY: THE DESIGN STORM	AT END OF 5-MINUTE UNIT
· +	

END OF FLOODSCx ROUTING ANALYSIS

File name: EV05119F.RES Page 1 Date: 06/12/2019 File name: EV05119F.RES Page 2

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 126 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV05126F.DAT TIME/DATE OF STUDY: 14:07 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
**********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

File name: FV05126F.RFS

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

************************	*
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<>>>	_
	=

Date: 05/15/2023 File name: EV05126F.RES Page 3 Date: 05/15/2023 File name: EV05126F.RES Page 4

+		+		UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC			
		++ Subarea (UH) Added t	to Stream #1	0.0	2390.7
		Convex Routing:	Stream #1	2390.7	2362.7
9.417 810.00 6.250	12603.00	Subarea (UH) Added t	to Stream #2	0.0	36.6
12603.00	12603.00	Stream #2 Added to:	Stream #1	2362.7	2366.7
12603.00		Zero Out:			
		++ Convex Routing:	Stream #1	2366.7	2345.9
	126.00	 Subarea (UH) Added t	to Stream #2	0.0	65.4
126.00	126.00	Stream #2 Added to:	Stream #1	2345.9	2352.2
126.00	126.00	Zero Out:	Stream #2	65.4	0.0
.417 I		Subarea (UH) Added t			
126.00	126.00	Stream #2 Added to:	Stream #1	2352.2	2352.9
		Zero Out:	Stream #2	14.4	0.0
0.250	1954.26	View:	Stream #1	l .	2352.9
Notes: 1 =	BASIN MODE	L VOLUME EXCEEDED; 2	= TIME IS A		

S SUMMARY * S SUMMARY * S SUMMARY * DWNSTREAM EAK (CFS) 2390.7 2362.7 36.6 2366.7 0.0 +- 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 UTE UNIT K DAY OF	
DWNSTREAM EAK (CFS) +- 2390.7 2362.7 36.6 2366.7 0.0 +- 2345.9 65.4 2352.2 0.0 14.4 +- 2352.9 0.0 2352.9 +- UTE UNIT	
DWNSTREAM EAK (CFS) +- 2390.7 2362.7 36.6 2366.7 0.0 +- 2345.9 65.4 2352.2 0.0 14.4 +- 2352.9 0.0 2352.9 +- UTE UNIT	S SIIMMARY *
DWNSTREAM EAK (CFS) + 2390.7 2362.7 36.6 2366.7 0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 JTE UNIT K DAY OF	
DWNSTREAM EAK (CFS) + 2390.7 2362.7 36.6 2366.7 0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 JTE UNIT K DAY OF	+-
2390.7 2362.7 36.6 2366.7 0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 + UTE UNIT	
2390.7 2362.7 36.6 2366.7 0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 + UTE UNIT	
2390.7 2362.7 36.6 2366.7 0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 + UTE UNIT	
2362.7 36.6 2366.7 0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 + UTE UNIT	
36.6 2366.7 0.0 +- 2345.9 65.4 2352.2 0.0 14.4 +- 2352.9 0.0 2352.9 +- UTE UNIT	
2366.7 0.0	
0.0 + 2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 + UTE UNIT	
2345.9 65.4 2352.2 0.0 14.4 2352.9 0.0 2352.9 +	
2345.9 65.4 2352.2 0.0 14.4 + 2352.9 0.0 2352.9 + UTE UNIT	
65.4 2352.2 0.0 14.4	
2352.2 0.0 14.4 2352.9 0.0 2352.9 + UTE UNIT	
0.0 14.4 2352.9 0.0 2352.9 +- UTE UNIT	
14.4 + 2352.9 0.0 2352.9 + UTE UNIT K DAY OF	
2352.9 0.0 2352.9 +- UTE UNIT	
2352.9 0.0 2352.9 +- UTE UNIT K DAY OF	14.4
0.0 2352.9 +- JTE UNIT K DAY OF	+-
2352.9 +- UTE UNIT K DAY OF	2352.9
JTE UNIT K DAY OF	0.0
JTE UNIT	2352.9
K DAY OF	+-
	JTE UNIT
	C DAY OF
5	
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5	
5	
	5

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 127 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV MAY 2023 ROKAMOTO ******************** FILE NAME: EV05127F.DAT TIME/DATE OF STUDY: 14:07 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.203 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00******************* FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
______
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                          240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
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I		* AES	FLOODSO	Cx I	PROGRAM RESU	LTS SUMMARY *
INPUT FILE Page: 1 of	1	127F.DAT]				
		++				DOWNSTREAM
TIME(2) TO NODE #	MAX. STORAG	GE HYDROLOGIC/HYDRAULIC :	PROCESS		PEAK (CFS)	PEAK (CFS)
		F)				
10100.00 19.333		Subarea (UH) Added to	Stream	#1	0.0	2352.3
119.00	12603.00	Convex Routing:	Stream	#1	2352.3	2326.1
810.00 810.00	12603.00	Subarea (UH) Added to	Stream	#2	0.0	35.5
12603.00		Stream #2 Added to:	Stream	#1	2326.1	2330.2
	12603.00	Zero Out:				
•					+	+-
12603.00 19.250		Convex Routing:	Stream	#1	2330.2	2312.1
16.333	1	Subarea (UH) Added to				
126.00 19.250		Stream #2 Added to:	Stream	#1	2312.1	2318.3
		Zero Out:	Stream	#2	62.6	0.0
16.417	1	Subarea (UH) Added to				
+		++				
19.250		Stream #2 Added to:				
		Zero Out:				
19.583	1	Convex Routing:				
16.417						
16.333 I	1	Subarea (UH) Added to				
390.00	331.00	++ Subarea (UH) Added to				
16.500		Stream #4 Added to:	Stream	#2	167.7	174.7
16.417 331.00	331.00		Stream	#4	7.7	0.0
 331.00 16.333		Stream #3 Added to:	Stream	#2	174.7	271.4
Da	te: 05/15/2023	File name: EV05127F.	RES		Pa	age 7

		Zero Out:			
		++			Τ-
		Stream #2 Added to:	Stream #	1 2315	.1 2358.1
	12720.50	Zero Out:	Stream #	2 271	0.0
12720.50	127.00	Convex Routing:	Stream #	1 2358	.1 2355.6
		Subarea (UH) Added to	Stream #	2 0	.0 48.5
		Stream #2 Added to:	Stream #	1 2355	.6 2358.2
	+-			-+	+-
+-		++			
127.00	127.00	Zero Out:	Stream #	2 48	.5 0.0
127.00 19.583		View:	Stream #	1	2358.2
•				-+	+-
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF THE DESIGN STORM					
		'			

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 137 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV05137F.DAT TIME/DATE OF STUDY: 01:16 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.986 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.700 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.353 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.767
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.180 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.473; LOW LOSS FRACTION = 0.843
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
********************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE *USER ENTERED "LAG" TIME = 0.440 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.395; LOW LOSS FRACTION = 0.716 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ********************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1 _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO< _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV05137F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                              | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
19.333 I
        | 119.00 12603.00| Convex Routing: Stream #1| 2151.5 2135.2|
18.833 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2| 0.0
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 2135.2
                                        2139.81
18.833 |
| 12603.00 | 12603.00| Zero Out:
                        Stream #2| 29.6
                                        0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 2139.8
                                        2135.21
19.250
                                        47.31
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
16.333 I
        1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 2135.2
                                        2141.4|
         19.250 I
| 126.00 | 126.00 | Zero Out: | Stream #2| 47.3
                                        0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                        8.91
16.417 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 2141.4
                                        2142.2|
19.250 |
        | 126.00 | 126.00| Zero Out:
                       Stream #2| 8.9
                                        0.01
   I I
| 126.00 12720.50| Convex Routing: Stream #1| 2142.2
                                        2135.81
19.333
148.2|
16.417 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                         88.71
        16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 5.8|
16.500 I
        | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 148.2 | 153.5|
16.417 |
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                  5.8
                                        0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2 | 153.5
                                         238.3|
16.333
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```

12720.50 	++ Stream #2 Added to:				'
	Zero Out:				
	Convex Routing: Subarea (UH) Added to				
127.00	++ Zero Out:				
		Stream	#1	2189.7	2187.2
50347.00	Subarea (UH) Added to	Stream	#2	0.0	112.1
12902.00	Convex Routing:	Stream	#2	112.1	110.8
1	1				
 12902.00	++ Zero Out:				
129.00	Convex Routing:	Stream	#1	2236.2	2233.2
129.00	Subarea (UH) Added to	Stream	#2	0.0	29.0
129.00	Stream #2 Added to:	Stream	#1	2233.2	2237.3
	I				
	++				
 129.00	Stream #2 Added to:				
129.00	Zero Out:	Stream	#2	41.4	0.0
		Stream	#1	2248.3	2245.5
ASIN MODEI JNOFF ESTI	L VOLUME EXCEEDED; 2 =	TIME IS	S AT :	END OF 5-MI:	NUTE UNIT
	127.00 12902.00 12902.00 12902.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00				127.00 Zero Out: Stream #2 31.7

 	JAME• [EV/05]	*	AES FLOODSCx	PROGRAM RESU	ILTS SUMMARY
Page: 2 of				.+	+
UPSTREAM 1 UPSTREAM 1 UPSTREAM 1 UPSTREAM 1 UPSTREAM UPST	OOWNSTREAM MAX. STORAG	++ GE		UPSTREAM	DOWNSTREAM
		HYDROLOGIC/HYDRAUL F) FOOTNOTES 			
132.00	13305.00	++ Convex Routing:			
7.583 13305.00	133.00	Convex Routing:	Stream #2	275.6	274.3
7.833 132.00	133.00	Subarea (UH) Added	to Stream #3	0.0	143.6
		Stream #3 Added to	: Stream #2	274.3	377.8
.7.667 133.00	133.00	Zero Out:	Stream #3	143.6	0.0
		 		+	+
133.00	133.00	++ Stream #2 Added to	: Stream #1	2245.5	2556.9
.8.417 133.00		Zero Out:	Stream #2	377.8	0.0
133.00	134.00	 Convex Routing:	Stream #1	2556.9	2554.5
.8.583 133.00	134.00	Convex Routing: Subarea (UH) Added	to Stream #2	0.0	143.5
.6.417 134.00 .8.250	134.00	Stream #2 Added to	: Stream #1	2554.5	2591.3
· +·		++			
		Zero Out:			
		Subarea (UH) Added			
		Stream #2 Added to Zero Out:			
	I				
134.00	137.00	Convex Routing:		2727.6	2725.1
		++		+	104 5
134.00	1	Subarea (UH) Added			
137.00	1	Stream #2 Added to			
137.00	1			104.7	
137.00	137.00 2596.82		Stream #1	.	2765.8

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+	-+-
+	
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIX	1
INTERVAL	
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF	1
THE DESIGN STORM	
+	
+	

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 138 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV05138F.DAT TIME/DATE OF STUDY: 01:16 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE (CFS) = 0.00-----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.203 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<<<<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.986 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.700 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.353 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.767
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.180 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.473; LOW LOSS FRACTION = 0.843
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
********************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.440 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.395; LOW LOSS FRACTION = 0.716
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH (FT) = 4643.67
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.607 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.445; LOW LOSS FRACTION = 0.797
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*******************
FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
_____
```

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		+				
I		* AES	FLOODSO	Cx E	PROGRAM RESU	LTS SUMMARY
INPUT FILEN	-	138F.DAT]				
+	+-			+		+
+- UPSTREAM		++		ı	UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS		PEAK (CFS)	PEAK (CFS)
		 ++		+		+
10100.00 9 333	119.00	Subarea (UH) Added to	Stream	#1	0.0	2135.9
119.00	12603.00	Convex Routing:	Stream	#1	2135.9	2121.8
810.00	12603.00	Subarea (UH) Added to	Stream	#2	0.0	29.2
6.250 12603.00	12603.00	Stream #2 Added to:	Stream	#1	2121.8	2126.4
12603.00	12603.00	Zero Out:	Stream	#2	29.2	0.0
+-		++				
9.250		Convex Routing:				
		Subarea (UH) Added to: Stream #2 Added to:				
9 250 1		1				
126.00	126.00	Zero Out:	Stream	#2	46.2	0.0
6.417 I	1	Subarea (UH) Added to				
+-		++				
9.250	126.00	Stream #2 Added to: Zero Out:	Stream	#11	2127.9	2128.01
126.00 9.333	12720.50	Convex Routing: Subarea (UH) Added to	Stream	#1	2128.6	2122.4
6.417						
6.333 I	1	Subarea (UH) Added to				
		 ++		+		+
		Subarea (UH) Added to	Stream	#4	0.0	5.6
331.00	331.00	Stream #4 Added to:	Stream	#2	146.8	152.0
6.417 331.00	331.00		Stream	#4	5.6	0.0
331.00 6.333	331.00	Stream #3 Added to:	Stream	#2	152.0	236.1
		File name: EV05138F				ge 15

		Zero Out:				
+-		-++				
18.500	12720.50	Stream #2 Added to:	Stream	#1	2122.4	2177.1
12720.50	12720.50	Zero Out:	Stream	#2	236.1	0.0
12720.50	127.00	Convex Routing:	Stream	#1	2177.1	2174.8
	127.00	 Subarea (UH) Added to	Stream	#2	0.0	30.4
16.417 127.00	127.00	Stream #2 Added to:	Stream	#1	2174.8	2178.6
18.583 +	+-	I		+-		+-
		+	Stream	#21	30.4	0.0
		 Convex Routing:				
18.667						
16 500 1	1	Subarea (UH) Added to				
50347.00 16.583	12902.00	Convex Routing:	Stream	#2	110.6	109.4
12902.00 18.333		Stream #2 Added to:				
+-		++				·
						0.0
12902.00 18.417	129.00	Convex Routing:	Stream	#1	2227.2	2224.2
50400.00 16.250	129.00	Subarea (UH) Added to	Stream	#2	0.0	28.2
	129.00	Stream #2 Added to:	Stream	#1	2224.2	2228.3
129.00	129.00	Zero Out:				
•		 ++		+-		+-
210.00 16.333	129.00	Subarea (UH) Added to	Stream	#2	0.0	41.0
	129.00	Stream #2 Added to:	Stream	#1	2228.3	2239.3
	129.00	Zero Out:	Stream	#2	41.0	0.0
		Convex Routing:	Stream	#1	2239.3	2236.6
17.000	1	Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODEI	VOLUME EXCEEDED; 2 =	TIME IS	AT	END OF 5-N	MINUTE UNIT
		 +				
_	00/44/2000	FII.	DEC		_	
Date	e: 08/11/2023	File name: EV05138F.	KES		Pa	ge 16

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV05138F.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                  | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00| Convex Routing: | Stream #2|
                                     278.2 272.51
17.583 I
         | 13305.00
         133.00 | Convex Routing: Stream #2|
                                    272.5 271.1
17.833 |
           132.00
         133.00| Subarea (UH) Added to Stream #3|
                                    0.0 141.91
16.750 |
         133.00
        133.00| Stream #3 Added to: Stream #2|
                                     271.1 374.3|
17.667 |
         | 133.00 | 133.00| Zero Out:
                           Stream #3|
                                    141.9
                                             0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 2236.6
                                            2547.01
18.417
| 133.00 | 133.00 | Zero Out: | Stream #2| 374.3
                                            0.01
| 133.00 | 134.00| Convex Routing: | Stream #1| 2547.0
                                            2544.71
18.583 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2|
                                            140.91
         16.417 |
| 134.00 | 134.00 | Stream #2 Added to: Stream #1 | 2544.7
                                            2582.21
18.250 |
| 134.00 | 134.00| Zero Out:
                      Stream #2| 140.9 0.0|
18.083 |
134.00
         134.00| Stream #2 Added to: Stream #1|
                                    2582.2
                                            2717.1
18.250 |
         134.00| Zero Out: Stream #2|
| 134.00
                                            0.01
                                    135.7
| 134.00 | 137.00 | Convex Routing: | Stream #1 | 2717.1
                                            2714.7|
         | 134.00 | 137.00| Subarea (UH) Added to Stream #2| 0.0 | 103.1|
16.500 I
         | 137.00 | 137.00| Stream #2 Added to: Stream #1| 2714.7 | 2755.7|
          18.333 I
| 137.00 | 137.00 | Zero Out: | Stream #2|
                                     103.1
                                            0.01
| 137.00 | 138.00 | Convex Routing: | Stream #1 | 2755.7
                                            2753.6
18.500
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137.00 16.667	ı İ	1					
++					+		+-
138.00 18.500		•	•	Stream	#1	2753.6	2787.1
	138.00	Zero Out:		Stream	#2	75.5	0.0
18.500 +	+-	3		Stream			2787.1
INTERVAL	BASIN MODEL RUNOFF ESTI	VOLUME EXCE	EEDED; 2 =	PAST 2 DA		END OF 5-MINU	
+							

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 139 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 5-YR EV AUG 2023 ROKAMOTO ******************** FILE NAME: EV05139F.DAT TIME/DATE OF STUDY: 01:15 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 3.308 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.496; LOW LOSS FRACTION = 0.845 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.23; 30-MINUTE = 0.44; 1-HOUR = 0.62 3-HOUR = 1.15; 6-HOUR = 1.71; 24-HOUR = 3.02 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.253 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.424; LOW LOSS FRACTION = 0.818
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.313 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.483; LOW LOSS FRACTION = 0.944
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.331 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.167; LOW LOSS FRACTION = 0.352
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.284 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.447
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.447 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.472; LOW LOSS FRACTION = 0.863
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
 3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.370 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.491; LOW LOSS FRACTION = 0.953
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.453 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.362; LOW LOSS FRACTION = 0.671
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.454; LOW LOSS FRACTION = 0.878
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.286 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.213; LOW LOSS FRACTION = 0.446
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH (FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.986 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.789
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.700 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.375; LOW LOSS FRACTION = 0.691
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.353 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.406; LOW LOSS FRACTION = 0.767
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

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*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 2.180 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.473; LOW LOSS FRACTION = 0.843
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.440 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.395; LOW LOSS FRACTION = 0.716
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
***********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH(FT) = 4643.67 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.607 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.445; LOW LOSS FRACTION = 0.797
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
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5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 0.01 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 119.70; DOWNSTREAM ELEVATION(FT) =
                                                100.00
 CHANNEL LENGTH(FT) = 3107.78 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
______
 WATERSHED AREA = 428.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.345; LOW LOSS FRACTION = 0.606
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.18; 30-MINUTE = 0.41; 1-HOUR = 0.55
  3-HOUR = 0.92; 6-HOUR = 1.27; 24-HOUR = 2.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 7
```

Date: 08/11/2023 File name: EV05139F.RES Page 13 Date: 08/11/2023 File name: EV05139F.RES Page 14

>>>>STREAM	NUMBER 2 ADDE	ED TO STREAM NUMBE	R 1<<<<	

FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 0	5
>>>>STREAM	NUMBER 2 CLEA	ARED AND SET TO ZE	RO<<<< =================================	
*****	******	******	******	*****
FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 1	1
>>>>VIEW S	TREAM NUMBER 1	HYDROGRAPH<		
==========				

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV05139F.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                    | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
19.333 |
         | 119.00 12603.00| Convex Routing: Stream #1| 2131.1 2117.8|
18.833 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2| 0.0 | 29.1|
16.250 |
         | 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 2117.8
                                             2122.4
| 12603.00 | 12603.00| Zero Out:
                             Stream #2| 29.1
                                                0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 2122.4
                                                2117.41
19.250
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                               45.81
16.333 I
          1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 2117.4
                                             2123.7
19.250 I
          126.00| Zero Out: Stream #2| 45.8
1 126.00
                                               0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                8.51
16.417 |
126.00 126.00| Stream #2 Added to: Stream #1| 2123.7
                                                2124.4
19.250 |
          | 126.00 | 126.00| Zero Out:
                            Stream #2| 8.5
                                                0.0
         | 126.00 12720.50| Convex Routing: Stream #1| 2124.4 2118.4|
19.333 |
         331.00| Subarea (UH) Added to Stream #2| 0.0
320.00
                                             146.4|
16.417 I
                                                 87.41
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 5.6|
16.500 I
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 146.4 | 151.5 |
           16.417 |
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                        5.6
                                                0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2 | 151.5
                                                235.4|
16.333
      Date: 08/11/2023 File name: EV05139F.RES
                                         Page 16
```

			Zero Out:		
			++ Stream #2 Added to:		+-
35.4 (235.4	Stream #2	Zero Out:	12720.50	18.500 12720.50
			 Convex Routing:	127.00	
0.0 30	0.0	Stream #2	Subarea (UH) Added to		
71.5 2175	2171.5	Stream #1	Stream #2 Added to:	127.00	
			 ++		
30.0	30.0	Stream #2	Zero Out:	127.00	127.00
75.3 2173	2175.3	Stream #1	Convex Routing:	12902.00	 127.00 18.333
0.0 110	0.0	Stream #2	Subarea (UH) Added to	50347.00	
10.1 108	110.1	Stream #2	Convex Routing:	12902.00	50347.00 6.583
			Stream #2 Added to:		12902.00
			++ Zero Out:		+-
			Convex Routing:	129.00	12902.00
0.0 27	0.0	Stream #2	Subarea (UH) Added to	129.00	
			Stream #2 Added to:		
27.9	27.9	Stream #2	Zero Out:	129.00	8.417 129.00
			 ++		
0.0 40	0.0	Stream #2	Subarea (UH) Added to	129.00	210.00
25.6 2236	2225.6	Stream #1	Stream #2 Added to:	129.00	129.00
40.9	40.9	Stream #2	Zero Out:	129.00	
36.6 2233	2236.6	Stream #1	Convex Routing:	133.00	
			Subarea (UH) Added to		13010.00 7.000
	22 END 0	Stream #2 Stream #1 Stream #2TIME IS A	Zero Out: Convex Routing:	129.00 133.00 132.00 132.00 BASIN MODE:	129.00

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Date: 08/11/2023

 INPUT FILE	NAME: [EV05]		FLOODSO	Cx I	PROGRAM RESU	LTS SUMMARY
	+-					+
	DOWNSTREAM	++			UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES	PROCESS		PEAK (CFS)	PEAK (CFS)
+		++				
		Convex Routing: Convex Routing:				
13305.00 7.833	133.00	Convex Routing:	Stream	#2	271.5	270.1
132.00	133.00	Subarea (UH) Added to	Stream	#3	0.0	141.4
133.00		Stream #3 Added to:	Stream	#2	270.1	373.2
133.00	133.00	Zero Out:				
133.00	133.00	++ Stream #2 Added to:	Stream	#1	2233.8	2544.0
3.417 133.00		Zero Out:	Stream	#2	373.2	0.0
133.00	134.00	Convex Routing:	Stream	#1	2544.0	2541.7
	134.00	 Subarea (UH) Added to	Stream	#2	0.0	140.0
3.250 I	134.00	Stream #2 Added to:				
		 ++			+	+
134.00	134.00	Zero Out:	Stream	#2	140.0	0.0
	134.00	Subarea (UH) Added to				
134.00	134.00	Stream #2 Added to:	Stream	#1	2579.4	2713.9
3.250 134.00	134.00	Zero Out:	Stream	#2	135.3	0.0
134.00 8.417	137.00	Convex Routing:				
+						
6.500						
137.00 3.333 137.00	137.00				102.6	
		1				
137.00 3.500	138.00	Convex Routing:	Stream	#1	2752.7	2750.6

137.00 16.667	l.	Subarea (UH)					,
					+		+-
138.00				Stream	#1	2750.6	2784.1
18.500	1	1					
138.00	138.00	Zero Out:		Stream	#2	75.1	0.0
1 120 00	120 001	 		0+	#11	2704 1	2702 41
138.00 18.583	139.001	Convex Routi	ng:	Stream	#1	2/84.1	2/83.4
138.00	139.00	Subarea (UH)	Added to	Stream	#2	0.0	59.41
16.333		1					·
139.00	139.00	Stream #2 Ad	ded to:	${\tt Stream}$	#1	2783.4	2795.9
18.583	1	I					
+					+		+-
139.00				Stream	#21	59.4	0.01
		1			– 1		
139.00	139.00	View:		Stream	#1		2795.9
18.583							
+					+		
Notes: 1 =				TTME TO	ים דע	ID OF 5-MINI	TTE TINIT
INTERVAL	DIIOIN NODE	- voloile ence		111111 10	, 111 111	,D 01 0 MIN	,15 01111
3 =	RUNOFF EST:	IMATES DO NOT	EXTEND PA	AST 2 DA	AYS AFT	TER THE PEAR	C DAY OF
THE DESIGN ST	ORM		1				
+							

END OF FLOODSCX ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

Michael Baker International 5 Hutton Centre Drive, Suite 500 Santa Ana, CA 92707

* RANCHO MISSION VIEJO FREE DRAINING UH * ULTIMATE CONDITION - REGIONAL NODE 119 * 10-YR EV APRIL 2019 FKAZI ******************* FILE NAME: EV10119F.DAT TIME/DATE OF STUDY: 09:42 04/10/2019 ** INPUT SUMMARY ** ****************** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.345; 30-MINUTE = 0.395; 1-HOUR = 0.435 3-HOUR = 0.785; 6-HOUR = 0.904; 24-HOUR = 0.944***************** FLOW PROCESS FROM NODE 119.00 TO NODE 119.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH< ______

+			
	-+ * AES FLOODSCx	PROGRAM RESULT	'S SUMMARY *
INPUT FILENAME: [EV10119F.DAT]			
Page: 1 of			
+		+	+-
UPSTREAM DOWNSTREAM		UPSTREAM D	OWNSTREAM
TIME(2) TO MAX. STORAGE			
NODE # NODE # HYDROLOGIC/H		PEAK (CFS) P	PEAK (CFS)
PEAK (HR) MODELED (AF) FOOTNOTES	· ·	+	+-
10100.00 119.00 Subarea (UH)	Added to Stream #1	0.0	7195.7
18.333	Stream #1	I	7195.7
18.333 4873.32 3			
+		+	
Notes: 1 = BASIN MODEL VOLUME EXCE	·	T END OF 5-MIN	HITE HINTT
INTERVAL		.1 2112 01 0 11211	0112 01111
3 = RUNOFF ESTIMATES DO NOT	EXTEND PAST 2 DAYS	AFTER THE PEA	K DAY OF
THE DESIGN STORM	 		
	-+		

END OF FLOODSCx ROUTING ANALYSIS

Date: 06/12/2019 File name: EV10119F.RES Page 1 Date: 06/12/2019 File name: EV10119F.RES Page 2

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * MV PA-3 BODR 2022 - NODE 126 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV10126F.DAT TIME/DATE OF STUDY: 13:59 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 _____ FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.191 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

File name: EV10126F.RES

Page 2

Date: 05/15/2023

Date: 05/15/2023 File name: EV10126F.RES Page 1

```
_____
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
********************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 TS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
*************************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
*************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 11
 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
```

Date: 05/15/2023 File name: EV10126F.RES Page 3 Date: 05/15/2023 File name: EV10126F.RES Page 4

+	DOWNSTREAM	+	+				DOWNSTREAM
EVK (HB)	NODE #	HYDROLOGIC	C/HYDRAULIC 1				PEAK (CFS)
10100.00		•		Stream	#1	0.0	7138.1
	12603.00			Stream	#1	7138.1	7117.4
		Subarea (JH) Added to	Stream	#2	0.0	76.0
		Stream #2	Added to:	Stream	#1	7117.4	7126.0
							0.0
· +	126.00	Convex Ro	+ uting:				7106.1
		Subarea (Stream	#2	0.0	174.0
			Added to:	Stream	#1	7106.1	7121.2
8.500 126.00				Stream	#2	174.0	0.0
6.417			JH) Added to				
126.00	126.00	+ Stream #2	+ Added to:				
8.500 126.00	126.00	Zero Out:		Stream	#2	48.3	0.0
		Subarea (JH) Added to	Stream	#2	0.0	166.1
6.500 126.00 8.500	126.00 4921.02	3		Stream	#1	I	7123.8
NTERVAL	BASIN MODE	L VOLUME E	CCEEDED; 2 =				

Date: 05/15/2023 File name: EV10126F.RES

GRAM RESU	LTS SUMMARY *
	+-
IPSTREAM	DOWNSTREAM
EAK (CFS)	PEAK (CFS)
0.0	7138.1
7138.1	7117.4
0.0	76.0
7117.4	7126.0
76.0	0.0
	+-
7126.0	7106.1
0.0	174.0
7106.1	7121.2
174.0	0.0
0.0	48.3
7121.2	7123.8
48.3	0.0
0.0	166.1
	7123.8
	+-
ND OF 5-M	INUTE UNIT
TER THE PI	EAK DAY OF
Pa	ge 5

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 127 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV10127F.DAT TIME/DATE OF STUDY: 13:59 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.191 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
*********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
************************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
______
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                          240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
```

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+		+ * AES	FLOODSO	Cx E	PROGRAM RESU	LTS SUMMARY *
INPUT FILE	1					
+ UPSTREAM	DOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
		++ Subarea (UH) Added to	Stream	#1	0.0	6972.0
119.00 18.417	12603.00	Convex Routing:	Stream	#1	6972.0	6952.6
810.00		Subarea (UH) Added to	Stream	#2	0.0	72.7
	12603.00	Stream #2 Added to:	Stream	#1	6952.6	6961.1
		Zero Out:				
+		++				
18.500		Convex Routing:				
16.333	1	Subarea (UH) Added to				
126.00 18.500		Stream #2 Added to:	Stream	#1	6942.5	6957.6
		Zero Out:	Stream	#2	165.7	0.0
16.417	1	Subarea (UH) Added to				
+		++				
18.500		Stream #2 Added to:				
		Zero Out:				
18.583	1	Convex Routing:				
320.00 16.333	331.00	Subarea (UH) Added to	Stream	#2	0.0	283.1
400.00 16.333	1	Subarea (UH) Added to				
390.00	331.00	++ Subarea (UH) Added to				·
16.500 331.00		Stream #4 Added to:	Stream	#2	283.1	303.8
16.333 331.00	331.00		Stream	#4	23.5	0.0
 331.00 16.333		Stream #3 Added to:	Stream	#2	303.8	490.1
Da	te: 05/15/2023	File name: EV10127F.	RES		Pá	ige 7

	1	Zero Out:						
		 ++		+		+-		
		Stream #2 Added to:	Stream	#1	6929.4	7019.2		
18.583								
12720.50	12720.50	Zero Out:	Stream	#2	490.1	0.0		
	107.00				=	=======================================		
	127.00	Convex Routing:	Stream	#1	7019.2	7005.31		
18.667	127 001	Subarea (UH) Added to	Stroam	#21	0 0	160 /1		
16.500		Jubarea (on) Added to	beream	π4	0.0	100.1		
		Stream #2 Added to:	Stream	#1	7005.3	7017.0		
18.667								
•				+				
·		++	Q+	# O I	1.60 4	0.01		
1 12/.00	127.001	Zero Out:	stream	#2	160.4	0.01		
1 127 00	127 001	View:	Stream	#1 I		7017 01		
18.667			00100111	"-1		7017.01		
				+		+-		
+								
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT								
INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF								
THE DESIGN STORM								
+								

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 137 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV10137F.DAT TIME/DATE OF STUDY: 13:58 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.191 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.938 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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Date: 08/11/2023

```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 173.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.338 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.699
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.489 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.760
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 173.00; DOWNSTREAM ELEVATION(FT) =
                                              133.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE *USER ENTERED "LAG" TIME = 0.427 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.639 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ********************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1 _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO< _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV10137F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                               | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
18.333 I
        | 119.00 12603.00| Convex Routing: Stream #1| 6226.0 6212.8|
18.417 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0
                                        62.4|
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 6212.8
                                         6221.3|
18.417 I
| 12603.00 | 12603.00| Zero Out:
                        Stream #2| 62.4
                                         0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 6221.3
                                         6208.71
18.500 |
| 920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                        138.9|
16.333 I
         1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 6208.7
                                         6223.91
         18.500 I
       126.00| Zero Out: Stream #2| 138.9
126.00
                                        0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                         37.31
16.417 |
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 6223.9
                                         6226.51
18.500 |
        | 126.00 | 126.00| Zero Out:
                        Stream #2| 37.3
                                         0.01
   | 126.00 | 12720.50 | Convex Routing: | Stream #1 | 6226.5
                                         6189.81
18.583
251.3|
16.333 |
| 400.00 | 331.00| Subarea (UH) Added to Stream #3|
                                         163.41
         1
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 19.8|
16.500 I
        | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 251.3 | 268.7|
16.333 I
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                  19.8
                                         0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                   268.7
                                         432.1|
16.333
    Date: 08/11/2023 File name: EV10137F.RES
                                   Page 14
```

		Zero Out:			
		++ Stream #2 Added to:	Stream #1	6189.8	6279.9
12720.50		Zero Out:	Stream #2	432.1	0.0
	127.00	Convex Routing:			
		Subarea (UH) Added to	Stream #2	0.0	130.6
18.667		Stream #2 Added to:			
+-	127.00	++ Zero Out:			
		 Convex Routing:			
18.750 50220.00	50347.00	 Subarea (UH) Added to	Stream #2	0.0	283.2
	12902.00	Convex Routing:	Stream #2	283.2	278.9
		Stream #2 Added to:			
		+ ++ Zero Out:			
12902.00	129.00	Convex Routing:	Stream #1	6336.9	6329.3
50400.00	129.00	Subarea (UH) Added to	Stream #2	0.0	105.9
		Stream #2 Added to:			
	1	Zero Out:			
+-		++ Subarea (UH) Added to			
		Stream #2 Added to:	Stream #1	6344.5	6371.9
	129.00	Zero Out:	Stream #2	76.2	0.0
129.00	133.00	Convex Routing:	Stream #1	6371.9	6367.3
13010.00	1	Subarea (UH) Added to			
	BASIN MODE:	L VOLUME EXCEEDED; 2 =	TIME IS A	r end of 5-1	MINUTE UNIT
		File name: EV10137F	DEC	Do	ige 15
Dati	0. 00/11/2020	The halle. Eviol3/1		ГС	.90 10

I		* AE	S FLOODSCx	PROGRAM RESU	JLTS SUMMARY
age: 2 of	:	137F.DAT]			
+		++			
	DOWNSTREAM MAX. STORAG	GE		UPSTREAM	DOWNSTREAM
		HYDROLOGIC/HYDRAULIC F) FOOTNOTES			
132.00	13305.00	++ Convex Routing:	Stream #	2 656.2	628.7
13305.00	133.00	Convex Routing:	Stream #	2 628.7	622.7
	133.00	Subarea (UH) Added t			
6.667 133.00	133.00	Stream #3 Added to:	Stream #	2 622.7	796.2
	133.00	Zero Out:			
+ 133 NN	133 001	++ Stream #2 Added to:	Stream #	11 6367 3	7140 5
133.00	133.00	Zero Out:	Stream #	2 796.2	0.0
133.00 8.167	134.00	Convex Routing:	Stream #	1 7140.5	7128.1
133.00	134.00	Convex Routing: Subarea (UH) Added t	o Stream #	2 0.0	377.0
6.417 134.00 8.083		Stream #2 Added to:	Stream #	1 7128.1	7232.9
+	+-	' 		-+	
134.00	134.00	Zero Out:	Stream #	2 377.0	0.0
= = 0 0 .		Subarea (UH) Added t			
7.500 134.00	134.00	Stream #2 Added to: Zero Out:	Stream #	1 7232.9	7566.0
8.083 134.00	134.00	Zero Out:	Stream #	2 391.6	0.0
134.00 8.250	137.00	Convex Routing:	Stream #	1 7566.0	
+ 134.00	137.00	++ Subarea (UH) Added t			248.7
6.500 137.00	137.00	Stream #2 Added to:	Stream #	1 7557.5	7641.6
	137.00	Zero Out:	Stream #	248.7	0.0
137.00	137.00 6006.71		Stream #	1	7641.6

+					
'	'			'	'
	+	+	+		
Notes: 1	= BASIN MODEL	VOLUME EXCEE	DED; 2 = TIME	E IS AT END OF	5-MINUTE UNIT
INTERVAL					
3	= RUNOFF ESTIM	ATES DO NOT	EXTEND PAST 2	2 DAYS AFTER TH	IE PEAK DAY OF
THE DESIGN	STORM				
+					

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 138 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV10138F.DAT TIME/DATE OF STUDY: 01:09 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.191 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
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 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
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 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
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*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
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 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
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*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
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******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
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 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
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******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
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 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
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 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
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*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
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******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
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*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
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******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
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 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
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******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
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******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
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 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
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 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.938 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
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 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
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*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
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******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.337 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.699
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.489 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.760
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.442 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.639
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH (FT) = 4643.67
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.560 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.717
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
_____
```

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I		* AES	FLOODSO	Cx F	ROGRAM RESU	LTS SUMMARY
INPUT FILEN	1	138F.DAT]				
	OOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC : F) FOOTNOTES				
	119.00	++ Subarea (UH) Added to	Stream	#1	0.0	6169.81
8.333 119.00	12603.00	Convex Routing:	Stream	#1	6169.8	6156.7
810.00	809.00	Subarea (UH) Added to	Stream	#2	0.0	61.7
6.250 12603.00	12603.00	Stream #2 Added to:	Stream	#1	6156.7	6165.3
12603.00	12603.00	Zero Out:	Stream	#2	61.7	0.0
+-		++ Convex Routing:				
8.500		Subarea (UH) Added to				
6.333 126.00	126.00	Stream #2 Added to:	Stream	#1	6153.2	6168.4
	126.00	Zero Out:	Stream	#2	137.0	0.0
6.417 I	1	 Subarea (UH) Added to 				
		 ++		+		+
126.00 8.500	126.00	Stream #2 Added to:	Stream	#1	6168.4	6171.0
		Zero Out:				
3 583 1	1	Convex Routing:				
320.00	331.00	Subarea (UH) Added to	Stream	#2	0.0	249.2
400.00 6.333		Subarea (UH) Added to				
+-		++				
6.500	1	·				
331.00		Stream #4 Added to: Zero Out:				
	1	Zero Out: Stream #3 Added to:			19.5 266.5	
0.555	I	I				

		Zero Out:				
	12720.50	++ Stream #2 Added to:				
12720.50	12720.50	Zero Out:	Stream	#2	428.3	0.0
12720.50	127.00	Convex Routing:	Stream	#1	6224.4	6209.3
18.667 12710.00	127.00	Subarea (UH) Added to	Stream	#2	0.0	128.7
		Stream #2 Added to:				
+-		++				
		Zero Out:				
18.750		Convex Routing:				
50220.00	50347.00	Subarea (UH) Added to				
1 50347.00	12902.001	Convex Routing:	Stream	#2	280.1	276.0
12902.00 17.833	12902.00	Stream #2 Added to:	Stream	#1	6209.9	6282.2
		++ Zero Out:				
		Convex Routing:	Stream	#1	6282.2	6277.9
17.917 50400.00	129.00	 Subarea (UH) Added to	Stream	#2	0.0	104.4
16.250 129.00	129.00	Stream #2 Added to:	Stream	#1	6277.9	6293.1
		Zero Out:				
+-		++				·
16.333		Subarea (UH) Added to				
17.917		Stream #2 Added to:				
1		Zero Out:				
129.00 18.000	133.00	Convex Routing:	Stream	#1	6320.6	6316.2
13010.00 17.000	132.00	Subarea (UH) Added to				
Notes: 1 = INTERVAL 3 = THE DESIGN ST +	BASIN MODEI RUNOFF ESTI	+ L VOLUME EXCEEDED; 2 =	AST 2 DA	AYS A	AFTER THE F	EAK DAY OF
		File name: EV10138F.	RES		Pa	ge 16

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV10138F.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                  | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00 | Convex Routing: | Stream #2|
                                       650.0 623.01
17.417 I
         | 13305.00
         133.00 | Convex Routing: Stream #2|
                                      623.0
                                            617.1|
17.833 |
132.00
         133.00| Subarea (UH) Added to Stream #3|
                                           307.71
16.667 |
          133.00
         133.00| Stream #3 Added to: Stream #2|
                                      617.1
                                           791.0|
17.750 |
          | 133.00 | 133.00| Zero Out:
                                      307.7
                           Stream #3|
                                              0.01
+------
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 6316.2
                                             7084.31
         17.917 |
| 133.00 | 133.00| Zero Out:
                          Stream #2|
                                     791.0
                                             0.01
| 133.00 | 134.00| Convex Routing: | Stream #1|
                                     7084.3
                                             7073.31
18.083 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2|
                                             373.01
          16.417 |
| 134.00 | 134.00 | Stream #2 Added to: Stream #1 | 7073.3
                                             7179.01
18.083 |
| 134.00 | 134.00| Zero Out:
                       Stream #2| 373.0
                                           0.01
388.4|
          17.500 I
134.00
         134.00| Stream #2 Added to: Stream #1|
                                     7179.0
                                             7510.21
18.083 |
         134.00| Zero Out: Stream #2|
| 134.00
                                             0.01
                                     388.4
| 134.00 | 137.00 | Convex Routing: | Stream #1|
                                      7510.2
                                             7501.31
         | 134.00 | 137.00| Subarea (UH) Added to Stream #2| 0.0
                                           241.81
16.500 I
         1
| 137.00 | 137.00 | Stream #2 Added to: Stream #1 | 7501.3
                                             7586.31
          18.250 I
| 137.00 | 137.00 | Zero Out: | Stream #2|
                                     241.8
                                             0.01
| 137.00 | 138.00| Convex Routing: | Stream #1|
                                     7586.3
                                             7576.6|
18.417
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137.00	138.00	Subarea (UH)) Added t	to Stream	#2	0.0	204.9
16.583	1	 					
+					+		+-
138.00				Stream	#1	7576.6	7645.4
18.417 138.00	138.00	Zero Out:		Stream	#2	204.9	0.0
		View:		Stream	#1		7645.4
18.417 +					+		+-
		+ L VOLUME EXCE		= TIME IS	AT E	CND OF 5-MINU	JTE UNIT
INTERVAL							
3 = THE DESIGN S		IMATES DO NO	r Extend	PAST 2 DA	AYS AF	TER THE PEAI	K DAY OF
+			 +				

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 139 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 10-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV10139F.DAT TIME/DATE OF STUDY: 01:08 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.320 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.746 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.33; 30-MINUTE = 0.63; 1-HOUR = 0.88 3-HOUR = 1.65; 6-HOUR = 2.45; 24-HOUR = 4.32 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.191 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.548 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.25; 30-MINUTE = 0.59; 1-HOUR = 0.78 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<-> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 905.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.231 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.750
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.318 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.905
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.306 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.297
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.260 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.385
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.394 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.778
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
 3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.446 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.899
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.324 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.593
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.212 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.826
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.268 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*********************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.938 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.727
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.637 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.618
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.337 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.699
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.489 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.760
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.442 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.639
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
***********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH(FT) = 4643.67 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.560 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.717
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 119.70; DOWNSTREAM ELEVATION(FT) =
                                                100.00
 CHANNEL LENGTH(FT) = 3107.78 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
______
 WATERSHED AREA = 428.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.258 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.207; LOW LOSS FRACTION = 0.540
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.26; 30-MINUTE = 0.59; 1-HOUR = 0.78
  3-HOUR = 1.31; 6-HOUR = 1.81; 24-HOUR = 3.03
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 7
```

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>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1	
**************************************	****
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<	
******************	****
FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 11	
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<	

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV10139F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                                      | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 6152.5|
18.333 I
          | 119.00 12603.00| Convex Routing: Stream #1| 6152.5 6138.9|
18.417 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0 61.5|
16.250 |
          | 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 6138.9
                                                  6147.5|
| 12603.00 | 12603.00| Zero Out:
                              Stream #2| 61.5
                                                  0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 6147.5
                                                  6135.71
18.500 |
920.00 905.00| Subarea (UH) Added to Stream #2| 0.0
                                                 136.4|
16.333 I
           1
126.00
          126.00| Stream #2 Added to: Stream #1|
                                         6135.7 6150.8
18.500 I
           126.00| Zero Out: Stream #2| 136.4
1 126.00
                                                  0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                  36.61
16.417 |
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 6150.8
                                                  6153.41
18.500 |
          | 126.00 | 126.00| Zero Out:
                             Stream #2| 36.6
                                                  0.0
          | 126.00 12720.50| Convex Routing: Stream #1| 6153.4
                                                6116.51
18.583 |
          320.00
           331.00| Subarea (UH) Added to Stream #2| 0.0
                                                248.5|
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3|
                                                   161.3|
16.333 I
| 390.00 | 331.00| Subarea (UH) Added to Stream #4| 0.0 | 19.4|
16.500 I
           | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 248.5 | 265.7 |
           16.333 |
| 331.00 | 331.00 | Zero Out: | Stream #4|
                                          19.4
                                                  0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                          265.7
                                                   427.0|
16.333
      Date: 08/11/2023 File name: EV10139F.RES
                                           Page 16
```

1	1	Zero Out:			
331.00	12720.50	++ Stream #2 Added to:			·
18.583 12720.50		Zero Out:	Stream #2	427.0	0.0
		Convex Routing:			
		Subarea (UH) Added to	Stream #2	0.0	128.0
		Stream #2 Added to:			
127.00	127.00	++ Zero Out:			
		Convex Routing:	Stream #1	6203.5	6192.9
	50347.00	Subarea (UH) Added to	Stream #2	0.0	279.1
	12902.00	Convex Routing:	Stream #2	279.1	275.1
16.500 12902.00 17.833	12902.00	Stream #2 Added to:	Stream #1	6192.9	6266.3
+-	12902.00	Zero Out:			
12902.00	129.00	Convex Routing:	Stream #1	6266.3	6262.0
50400.00	129.00	Convex Routing: Subarea (UH) Added to	Stream #2	0.0	103.8
		Stream #2 Added to:	Stream #1	6262.0	6277.2
		Zero Out:			
+-		++ Subarea (UH) Added to			
129.00	129.00	Stream #2 Added to:	Stream #1	6277.2	6304.8
129.00	129.00	Zero Out:	Stream #2	75.3	0.0
129.00	133.00	Convex Routing:	Stream #1	6304.8	6300.4
17.000 I		Subarea (UH) Added to			
+- Notes: 1 = NTERVAL	BASIN MODE: RUNOFF EST:	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-MIN	NUTE UNIT
		File name: EV10139F	.RES	Page	17

+		* AFS	FLOODSC		PROGRAM RESIII	LTS SUMMARY *
	1					
	OOWNSTREAM	+			UPSTREAM	
DEAK (IID) I	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+-		Convex Routing:				
13305.00	133.00	Convex Routing:	Stream	#2	620.9	615.2
	133.00	Subarea (UH) Added to	Stream	#3	0.0	306.8
		Stream #3 Added to:	Stream	#2	615.2	788.6
	1	Zero Out:				
133.00		Stream #2 Added to:	Stream	#1	6300.4	7066.9
17.917 133.00	133.00	Zero Out:	Stream	#2	788.6	0.0
	134.00	Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	371.4
16.417 134.00 18.083	134.00	Stream #2 Added to:				7161.5
		Zero Out:				0.0
13500.00 17.500	134.00	Subarea (UH) Added to	Stream	#2	0.0	387.3
	134.00	Stream #2 Added to:	Stream	#1	7161.5	7492.1
134.00	134.00	Zero Out:	Stream	#2	387.3	0.0
134.00 18.250 +		Convex Routing:				
		++ Subarea (UH) Added to				·
16.500	1	Stream #2 Added to:				
18.250		I			240.9	
	1	Convex Routing:				
Date	e: 08/11/2023	File name: EV10139F.	RES		Pag	e 19

137.00 16.583		Subarea (UH)					
					+-		+-
138.00		·		Stream	#1	7558.4	7627.3
18.417							
138.00	138.00	Zero Out:		Stream	#2	204.1	0.0
138.00	139.00	Convex Routin	ng:	Stream	#1	7627.3	7624.1
18.500 138.00		Subarea (UH)	Added to	Stream	#2	0.0	127.3
16.333 139.00 18.500		Stream #2 Add	ded to:	Stream	#1	7624.1	7646.5
+					+-		+-
139.00		Zero Out:		Stream	#2	127.3	0.0
139.00	139.00	View:		Stream	#1		7646.5
18.500							
++-					+-		+-
Notes: 1 =				TIME IS	AT	END OF 5-MI	NUTE UNIT
INTERVAL							
		IMATES DO NOT	EXTEND PA	ST 2 DA	AYS A	FTER THE PE	AK DAY OF
THE DESIGN ST			 				

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

Michael Baker International 5 Hutton Centre Drive, Suite 500 Santa Ana, CA 92707

* RANCHO MISSION VIEJO - FREE DRAINING UH * ULTIMATE CONDITION - REGIONAL NODE 119 * 25-YR EV APRIL 2019 FKAZI ******************* FILE NAME: EV25119F.DAT TIME/DATE OF STUDY: 09:31 04/10/2019 ** INPUT SUMMARY ** ****************** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.345; 30-MINUTE = 0.395; 1-HOUR = 0.435 3-HOUR = 0.785; 6-HOUR = 0.904; 24-HOUR = 0.944***************** FLOW PROCESS FROM NODE 119.00 TO NODE 119.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH< ______

+	
* AES FLOODSCX INPUT FILENAME: [EV25119F.DAT] Page: 1 of	PROGRAM RESULTS SUMMARY *
++ UPSTREAM DOWNSTREAM TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/HYDRAULIC PROCESS PEAK (HR) MODELED (AF) FOOTNOTES	UPSTREAM DOWNSTREAM PEAK (CFS) PEAK (CFS)
10100.00	0.0 14918.1
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAY THE DESIGN STORM +	

END OF FLOODSCx ROUTING ANALYSIS

Date: 06/12/2019 File name: EV25119F.RES Page 1 Date: 06/12/2019 File name: EV25119F.RES Page 2

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 126 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV25126F.DAT TIME/DATE OF STUDY: 13:46 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.187 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
*******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
**********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

File name: FV25126F.RFS

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Date: 05/15/2023

Date: 05/15/2023 File name: EV25126F.RES Page 1

```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
*******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

*******	******	*********
FLOW PROCESS FROM NODE	126.00 TO NODE	126.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1	HYDROGRAPH<	

Date: 05/15/2023 File name: EV25126F.RES Page 3 Date: 05/15/2023 File name: EV25126F.RES Page 4

UPSTREAM	DOWNSTREAM			I	UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULI F) FOOTNOTES				
10100.00		++ Subarea (UH) Added				
		Convex Routing:	Stream	#1	14851.0	14759.8
		Subarea (UH) Added	to Stream	#2	0.0	105.3
	12603.00	Stream #2 Added to:	Stream	#1	14759.8	14782.8
	1	Zero Out:				
12603.00	126.00	++ Convex Routing:	Stream	#1	14782.8	14758.6
3.250		 Subarea (UH) Added				
	126.00	Stream #2 Added to:	Stream	#1	14758.6	14819.2
3.167 126.00	 126.00	Zero Out:	Stream	#2	268.4	0.0
3 3 3 3 1	1	 Subarea (UH) Added 				
126.00	126.00	++ Stream #2 Added to:				
3.167 126.00	126.00	Zero Out:	Stream	#2	77.5	0.0
3.167	126.00 11962.42	3	Stream	#1		14831.0
Notes: 1 = TERVAL 3 = HE DESIGN S'	BASIN MODE RUNOFF EST	L VOLUME EXCEEDED; 2) PAST 2 DA	YS		EAK DAY OF

Date: 05/15/2023 File name: EV25126F.RES Page 5

UMMARY *
+-
STREAM
(CFS)
+-
4851.0
4759.8
105.3
4782.8
0.0
+-
4758.6
268.4
4819.2
0.0
77.5
+-
4831.0
0.0
4831.0
+-
UNIT
AY OF

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 127 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV25127F.DAT TIME/DATE OF STUDY: 13:45 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 _____ FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< _____ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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Date: 05/15/2023 File name: EV25127F.RES Page 1

```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
______
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                          240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
```

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+		* AES	FLOODS	Cx I	PROGRAM RESU	LTS SUMMARY *
INPUT FILE Page: 1 of	1	127F.DAT]				
UPSTREAM TIME (2) TO	DOWNSTREAM MAX. STORAG	++ GE			UPSTREAM	DOWNSTREAM
DEAK (HR)	MODELED (A)	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+		Subarea (UH) Added to				
119.00	12603.00	Convex Routing:	Stream	#1	14692.6	14604.2
	12603.00	Subarea (UH) Added to	Stream	#2	0.0	102.7
	12603.00	Stream #2 Added to:	Stream	#1	14604.2	14627.5
		Zero Out:				
		 ++			·	+-
12603.00 18.250		Convex Routing:	Stream	#1	14627.5	14604.1
920.00		Subarea (UH) Added to	Stream	#2	0.0	261.5
10.230 126.00 18.167		Stream #2 Added to:	Stream	#1	14604.1	14664.8
		Zero Out:	Stream	#2	261.5	0.0
16.333	1	Subarea (UH) Added to				
+		++				
18.167	1					
		Zero Out:				
18.333	1	Convex Routing:				
320.00 16.333	331.00	Subarea (UH) Added to	Stream	#2	0.0	378.8
400.00 16.333		Subarea (UH) Added to				
390.00		++ Subarea (UH) Added to				
16.417 331.00	331.00	Stream #4 Added to:	Stream	#2	378.8	416.7
16.333	331.00	Zero Out:	Stream	#4	41.9	0.0
 331.00 16.333		Stream #3 Added to:	Stream	#2	416.7	668.8
Dat	e: 05/15/2023	File name: EV25127F	RES		Pa	age 7

1		Zero Out:				
		++				
331.00 12	720.50	Stream #2 Added to:	Stream	#1	14662.6	14821.0
18.333		1				
12720.50 12	720.50	Zero Out:	Stream	#2	668.8	0.0
1		1				
	127.00	Convex Routing:	Stream	#1	14821.0	14799.6
18.417						
		Subarea (UH) Added to	Stream	#2	0.0	285.3
16.500		Stream #2 Added to:	C+	ш1 і	14700 6	14064 41
18.417	127.001	Stream #2 Added to:	Stream	# 1	14/99.0	14004.4
	 +-	 		+		
						·
127.00	127.00	Zero Out:	Stream	#2	285.3	0.0
1						
129.00	129.00	View:	Stream	#1		14864.4
18.417 122	293.23	3				
•				+		
+						
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT						
INTERVAL						
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF						
THE DESIGN STORM	=	 				

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 137 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV25137F.DAT TIME/DATE OF STUDY: 01:03 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ***************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00******************** FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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```
*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.856 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
*****************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.322 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.481
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*****************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.350 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.463
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE *USER ENTERED "LAG" TIME = 0.418 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.467 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ********************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1 _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO< _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV25137F.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 13888.7|
18.167 I
        | 119.00 | 12603.00| Convex Routing: | Stream #1| | 13888.7
                                        13815.91
18.083 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2| 0.0
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 13815.9
                                        13840.3|
18.083 |
| 12603.00 | 12603.00| Zero Out:
                         Stream #2| 89.3
                                          0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 13840.3
                                         13822.51
18.250
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                         225.4|
16.250 I
         I I
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 13822.5
                                        13883.61
         18.167 I
| 126.00 | 126.00| Zero Out: | Stream #2| | 225.4
                                         0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                           63.51
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 13883.6
18.167
        1
| 126.00 | 126.00| Zero Out:
                         Stream #2| 63.5
                                          0.01
   | 126.00 12720.50| Convex Routing: Stream #1| 13896.1
                                        13883.71
18.333
336.91
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                          222.01
         16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 36.8|
16.417 |
         | 331.00 | 331.00 | Stream #4 Added to: Stream #2| | 336.9 | 370.6|
16.333 I
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                   36.8
                                          0.01
| 331.00 | 331.00| Stream #3 Added to: Stream #2|
                                   370.6
                                          592.6
16.333
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```

1	1	Zero Out:				
+-						
12720.50	12720.50	Zero Out:	Stream	#2	592.6	0.0
12720.50	127.00	Convex Routing:				
		Subarea (UH) Added to	Stream	#2	0.0	246.8
		Stream #2 Added to:				
+-		++				
127.00	127.00	Zero Out:	Stream	#2	246.8	0.0
	12902.00	Convex Routing:	Stream	#1	14133.9	14126.9
		Subarea (UH) Added to	Stream	#2	0.0	415.1
50347.00	12902.00	Convex Routing:	Stream	#2	415.1	406.0
12902.00		Stream #2 Added to:				
+-		++				
		Zero Out:				
17.500	129.00	Convex Routing: Subarea (UH) Added to	Stream	#1	14314.2	14303.31
16.250	129.00	Stream #2 Added to:	Stream	#2	0.0	169.81
17.500 I						
129.00	1	Zero Out:				
		++ Subarea (UH) Added to				
16.333		Stream #2 Added to:				
17.500		Zero Out:				
129.00	1	 Convex Routing:				14376.8
17.583		Subarea (UH) Added to				
16.917 I	1	Subarea (UH) Added CC				
Notes: 1 = INTERVAL	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS	AT	END OF 5-M	INUTE UNIT
		+				
Date	e: 08/11/2023	File name: EV25137F	.RES		Pag	e 15

I		*	AES FLOODSC	x F	ROGRAM RESU	LTS SUMMARY
age: 2 of		37F.DAT]		+		
+ UPSTREAM	DOWNSTREAM	++				DOWNSTREAM
NODE #		GE HYDROLOGIC/HYDRAU: F) FOOTNOTES 				
+ 132.00	13305.00	++ Convex Routing:	Stream	#2	1116.2	1078.6
		Convex Routing:	Stream	#2	1078.6	1068.8
	133.00	Subarea (UH) Added				
133.00	133.00	Stream #3 Added to	o: Stream	#2	1068.8	1420.3
133.00	133.00	Zero Out:	Stream	#3	514.6	0.0
+ 1 133.00	133.001	++ Stream #2 Added to	o: Stream	#11	14376.8	15797.1
7.583 133.00	133.00	Zero Out:	Stream	#2	1420.3	0.0
	I					
7.750 133.00	134.00	Convex Routing: Subarea (UH) Added	d to Stream	#2	0.0	595.7
134.00 7.750	134.00	Stream #2 Added to	o: Stream	#1	15782.0	16020.1
+		++				
		Zero Out:				
13500.00 7.417	134.00	Subarea (UH) Added	d to Stream	#2	0.0	887.4
134.00		Stream #2 Added to	o: Stream	#1	16020.1	16876.6
	134.00	Zero Out:	Stream	#2	887.4	0.0
134.00 7.833	T.	Convex Routing:	Stream		16876.6	16859.4
134.00	137.00	++ Subarea (UH) Added	d to Stream	#2	0.0	381.8
6.500 137.00	137.00	Stream #2 Added to	o: Stream	#1	16859.4	17034.9
7.833 137.00	137.00		Stream	#2	381.8	0.0
127.00	137.00	View:	Stream	#1।		17034.9

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+	-+-
+	
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIX	1
INTERVAL	
3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF	1
THE DESIGN STORM	
+	
+	

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 138 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV25138F.DAT TIME/DATE OF STUDY: 01:02 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.187 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
-----
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

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ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.856 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.322 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.481
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.350 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.463
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH (FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.467
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH (FT) = 4643.67
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.526 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.525
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
_____
```

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		* AES	FLOODS	JX P	ROGRAM RESU	LTS SUMMARY
INPUT FILE	1	138F.DAT]				
UPSTREAM	DOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES			, ,	, , ,
	119.00	++ Subarea (UH) Added to	Stream	#1	0.0	13825.6
8.167 119.00	12603.00	Convex Routing:	Stream	#1	13825.6	13753.2
810.00	12603.00	Subarea (UH) Added to	Stream	#2	0.0	88.4
6.250 12603.00 8.083	12603.00	Stream #2 Added to:	Stream	#1	13753.2	13777.7
12603.00	12603.00	Zero Out:				
+- 12603.00	126.00	++ Convex Routing:				
3.250 920.00 6.250	126.00	Subarea (UH) Added to	Stream	#2	0.0	223.2
126.00 126.00 1.167		Stream #2 Added to:	Stream	#1	13760.9	13821.5
126.00	126.00	Zero Out:	Stream	#2	223.2	0.0
600.00 6.333		Subarea (UH) Added to				
126.00	126.00	++ Stream #2 Added to:				
3.167 126.00	126.00	Zero Out:	Stream	#2	62.7	0.0
126.00 3.333		Convex Routing:	Stream	#1	13834.1	13822.2
320.00	331.00	Subarea (UH) Added to	Stream	#2	0.0	334.3
400.00	331.00	Subarea (UH) Added to				
390.00		++ Subarea (UH) Added to				
		Stream #4 Added to:	Stream	#2	334.3	367.6
	331.00		Stream	#4	36.5	0.0
331.00 3.333		Stream #3 Added to:	Stream	#2	367.6	587.6

331.00	331.00	Zero Out:	Stream	#3	220.0	0.0
331.00	12720.50	++ Stream #2 Added to:	Stream	#1	13822.2	13986.0
18.333 12720.50		Zero Out:	Stream	#2	587.6	0.0
12720.50 18.417	127.00	Convex Routing:	Stream	#1	13986.0	13970.1
12710.00	127.00	Subarea (UH) Added to	Stream	#2	0.0	244.1
127.00	127.00	Stream #2 Added to:	Stream	#1	13970.1	14084.7
		 ++		+-		+
		Zero Out:	Stream	#2	244.1	0.0
127.00		Convex Routing:	Stream	#1	14084.7	14077.6
		Subarea (UH) Added to				
50347.00 16.417	12902.00	Convex Routing:	Stream	#2	411.1	402.0
12902.00	12902.00	Stream #2 Added to:	Stream	#1	14077.6	14264.8
12902.00	12902.00	Zero Out:	Stream	#2	402.0	0.0
12902.00 17.500	129.00	Convex Routing:	Stream	#1	14264.8	14253.7
50400.00 5.250	129.00	Subarea (UH) Added to	Stream	#2	0.0	167.8
	129.00	Stream #2 Added to:	Stream	#1	14253.7	14297.4
129.00	129.00	Zero Out:				
+-		++				
16.333		Subarea (UH) Added to				
17.500		Stream #2 Added to:				
		Zero Out:				
17.583		Convex Routing:				
16.917		Subarea (UH) Added to				
+- Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS	AT	END OF 5-M	INUTE UNIT
		+				
Date	e: 08/11/2023	File name: EV25138F.	RES		Pag	je 16

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV25138F.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                               | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
1070.1
17.417 |
        | 13305.00
        133.00| Convex Routing: Stream #2| 1070.1 1060.5|
17.667
          1
132.00
        133.00| Subarea (UH) Added to Stream #3| 0.0 510.6|
16.667
        | 133.00 | 133.00 | Stream #3 Added to: Stream #2| 1060.5 | 1410.9|
17.583 |
        | 133.00 | 133.00| Zero Out:
                        Stream #3| 510.6
                                         0.01
+-----
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 14327.3 | 15738.2 |
17.583
| 133.00 | 133.00 | Zero Out: | Stream #2| 1410.9 | 0.0|
| 133.00 | 134.00| Convex Routing: | Stream #1| 15738.2
                                       15723.3|
17.750 I
         133.00
        134.00| Subarea (UH) Added to Stream #2| 0.0
                                       589.71
         16.417 |
| 134.00 | 134.00| Stream #2 Added to: Stream #1| 15723.3 | 15962.1|
17.750 |
| 134.00 | 134.00| Zero Out: Stream #2| 589.7 0.0|
17.417 |
134.00
        134.00| Stream #2 Added to: Stream #1| 15962.1 16814.5|
17.667
        | 134.00 | 134.00| Zero Out: | Stream #2| 882.0 | 0.0|
| 134.00 | 137.00 | Convex Routing: | Stream #1 | 16814.5
        | 134.00 | 137.00| Subarea (UH) Added to Stream #2| 0.0 | 378.2|
16.500 I
        | 137.00 | 137.00| Stream #2 Added to: Stream #1| 16797.5 | 16973.4|
         1
17.833 I
| 137.00 | 137.00 | Zero Out: Stream #2| 378.2
                                       0.01
18.000
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```

137.00 16.583	1		1						
++	+						+		+-
138.00 18.000					:	Stream	#1	16957.4	17127.7
138.00	138.00	Zero Out	:			Stream	#2	349.9	0.0
 138.00 18.000	14515.08	3				Stream			17127.7
+ Notes: 1 = INTERVAL	BASIN MODE: RUNOFF EST TORM	+ L VOLUME	EXCE	-+ EDED; : EXTEN	2 = D PA	TIME IS	S AT E	END OF 5-MIN	NUTE UNIT

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 139 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 25-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV25139F.DAT TIME/DATE OF STUDY: 01:01 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.119 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.433 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.42; 30-MINUTE = 0.78; 1-HOUR = 1.08 3-HOUR = 2.02; 6-HOUR = 3.00; 24-HOUR = 5.30*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.187 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.412 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.222 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.488
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.301 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.759
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.293 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.268
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.248 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.346
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.373 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.507
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
 3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

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```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.643
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.296 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.518
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.203 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.624
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.257 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.356
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*****************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.856 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.567
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.589 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.409
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.322 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.481
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.350 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.463
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH (FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.418 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.467
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH(FT) = 4643.67 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.526 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.525
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
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```

```
5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 119.70; DOWNSTREAM ELEVATION(FT) =
                                                100.00
 CHANNEL LENGTH(FT) = 3107.78 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
______
 WATERSHED AREA = 428.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.247 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.207; LOW LOSS FRACTION = 0.508
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.34; 30-MINUTE = 0.72; 1-HOUR = 0.95
  3-HOUR = 1.59; 6-HOUR = 2.20; 24-HOUR = 3.68
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 7
```

>>>>STREAM	NUMBER 2 ADDE	ED TO STREAM NUMBE	R 1<<<<	

FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 0	5
>>>>STREAM	NUMBER 2 CLEA	ARED AND SET TO ZE	RO<<<< =================================	
*****	******	*******	******	*****
FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 1	1
>>>>VIEW S	TREAM NUMBER 1	HYDROGRAPH<		
==========				

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* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV25139F.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                     | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 | 13807.2|
18.167 I
          | 119.00 12603.00| Convex Routing: Stream #1| 13807.2 13735.3|
18.083 |
| 810.00 | 12603.00| Subarea (UH) Added to Stream #2| 0.0 | 88.1|
16.250 |
          | 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 13735.3 | 13759.8 |
| 12603.00 | 12603.00| Zero Out:
                             Stream #2| 88.1
                                                 0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 13759.8
                                              13743.21
18.250
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0 222.4|
16.250 I
          1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 13743.2 | 13803.8|
18.167 |
          1 126.00
         126.00| Zero Out: Stream #2| 222.4 0.0|
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                62.51
16.333 |
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 13803.8
                                              13816.4
18.167
          | 126.00 | 126.00| Zero Out: | Stream #2| 62.5
                                                 0.01
               | 126.00 12720.50| Convex Routing: Stream #1| 13816.4
                                              13804.51
18.333 |
         320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0 333.3|
16.333 I
                                                 219.3|
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
16.333 |
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 36.4|
16.417 |
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 333.3 | 366.6 |
           16.333 |
| 331.00 331.00| Zero Out: Stream #4|
                                        36.4
                                                 0.01
| 331.00 | 331.00| Stream #3 Added to: Stream #2|
                                         366.6
                                                 585.8|
16.333
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	++				
1	Stream #2 Added to:	Stream			,
	Zero Out:	Stream	#2	585.8	0.0
127.00	Convex Routing:	Stream	#1	13968.4	13952.7
	Subarea (UH) Added to	Stream	#2	0.0	243.2
127.00	Stream #2 Added to:	Stream	#1	13952.7	14070.5
			+-		+
127.00	Zero Out:	Stream	#2	243.2	0.0
		Stream	#1	14070.5	14063.5
0347.00	Subarea (UH) Added to	Stream	#2	0.0	409.7
2902.00	Convex Routing:	Stream	#2	409.7	400.6
	++				
129.00	Convex Routing:	Stream	#1	14250.6	14239.6
129.00	Subarea (UH) Added to	Stream	#2	0.0	167.1
129.00	Stream #2 Added to:				
129.00	Zero Out:	Stream	#2	167.1	0.0
			+-		
129.00	Subarea (UH) Added to	Stream	#2	0.0	100.9
129.00	Stream #2 Added to:	Stream	#1	14283.2	14323.3
129.00	Zero Out:	Stream	#2	100.9	0.0
133.00	Convex Routing:	Stream	#1	14323.3	14313.2
132.00	Subarea (UH) Added to			0.0	
	127.00 127.00 127.00 127.00 127.00 2902.00 0347.00 2902.00 12902.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00 129.00	127.00 Convex Routing:	127.00 Convex Routing: Stream 127.00 Subarea (UH) Added to Stream 127.00 Stream #2 Added to: Stream 127.00 Zero Out: Stream 2902.00 Convex Routing: Stream 1	127.00 Convex Routing: Stream #1	127.00 Convex Routing: Stream #1 13968.4 127.00 Subarea (UH) Added to Stream #2 0.0 127.00 Stream #2 Added to: Stream #1 13952.7 1

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+		·+				
 INPUT FILENAME Page: 2 of	1	39F.DAT]				LTS SUMMARY *
		·		+		+-
UPSTREAM DOWN				ı	UPSTREAM	DOWNSTREAM
NODE # NO	ODE #	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+		++				
		Convex Routing: Convex Routing:				
17.667 I	1	1				
132.00 16.667	133.00	Subarea (UH) Added to	Stream	#3	0.0	509.3
133.00	133.00	Stream #3 Added to:	Stream	#2	1057.9	1408.2
		Zero Out:				
		 ++		+		+-
133.00 17.583		Stream #2 Added to:	Stream	#1	14313.2	15721.4
		Zero Out:	Stream	#2	1408.2	0.0
	134.00	Convex Routing:	Stream	#1	15721.4	15706.5
	134.00	Subarea (UH) Added to	Stream	#2	0.0	587.7
17.750	1	Stream #2 Added to:				15945.5
+		 ++				+-
134.00	134.00	Zero Out:	Stream	#2	587.7	0.0
13500.00 17.417	134.00	Subarea (UH) Added to	Stream	#2	0.0	880.4
134.00	134.00	Stream #2 Added to:	Stream	#1	15945.5	16796.8
17.667 134.00		Zero Out:	Stream	#2	880.4	0.0
17.833 I	137.00	Convex Routing:				
+		· ·-++		+		+-
134.00 16.500	137.00	Subarea (UH) Added to	Stream	#2	0.0	377.0
137.00	137.00	Stream #2 Added to:	Stream	#1	16779.8	16955.9
137.00	137.00	Zero Out:	Stream	#2	377.0	0.0
137.00 18.000		Convex Routing:	Stream	#1	16955.9	16939.9
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16.583	T.	1					348.8
		+					'
138.00	138.00	Stream #2 Ad	ded to:	Stream	#1	16939.9	17110.3
18.000		- 1		~.		240.0	0.01
138.00	138.00	Zero Out:		Stream	#2	348.8	0.01
138.00	139.00	Convex Routi	ng:	Stream	#1	17110.3	17108.0
18.000	l i	1	-				
		Subarea (UH)	Added to	Stream	#2	0.0	176.3
16.333		Stream #2 Ad	ded to:	Stream	#1 I	17108 0	17161 31
18.000	133.001	beream #2 na	aca co.	beream	11 1	17100.0	1/101.5
					+-		+-
		Zero Out:		Stream	#21	176 3	0.01
133.00	133.001	l		Deream	πΔ	170.5	0.01
139.00	139.00	View:		Stream	#1		17161.3
18.000							
					+-		+-
		L VOLUME EXCE		TIME IS	S AT	END OF 5-M	INUTE UNIT
INTERVAL							
		IMATES DO NOT	EXTEND PA	AST 2 DA	AYS A	FTER THE P	EAK DAY OF
THE DESIGN S	TOKM 		 				

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

Michael Baker International 5 Hutton Centre Drive, Suite 500 Santa Ana, CA 92707

* RANCHO MISSION VIEJO * ULTIMATE CONDITION - UH FREE DRAINING REGIONAL NODE 119 * 50-YR EV APRIL 2019 FKAZI ******************* FILE NAME: EV50119F.DAT TIME/DATE OF STUDY: 09:16 04/10/2019 ** INPUT SUMMARY ** ****************** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.345; 30-MINUTE = 0.395; 1-HOUR = 0.435 3-HOUR = 0.785; 6-HOUR = 0.904; 24-HOUR = 0.944****************** FLOW PROCESS FROM NODE 119.00 TO NODE 119.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH< ______

+			
	-+ * AES FLOODSCx	PROGRAM RESULT	IS SUMMARY *
INPUT FILENAME: [EV50119F.DAT]			
Page: 1 of			
		+	+-
UPSTREAM DOWNSTREAM		UPSTREAM	DOWNSTREAM
TIME(2) TO MAX. STORAGE NODE # NODE # HYDROLOGIC/H PEAK (HR) MODELED (AF) FOOTNOTES	YDRAULIC PROCESS	PEAK (CFS)	PEAK (CFS)
+	·	+	+-
10100.00 119.00 Subarea (UH)		0.0	17849.8
119.00 119.00 View:	Stream #1		17849.8
18.083 14162.91 3			
		+	+-
Notes: 1 = BASIN MODEL VOLUME EXCE	EDED; 2 = TIME IS A	T END OF 5-MI	NUTE UNIT
3 = RUNOFF ESTIMATES DO NOT	EXTEND PAST 2 DAYS	AFTER THE PE	AK DAY OF
THE DESIGN STORM			
+			

END OF FLOODSCx ROUTING ANALYSIS

Date: 06/12/2019 File name: EV50119F.RES Page 1 Date: 06/12/2019 File name: EV50119F.RES Page 2

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 126 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV50126F.DAT TIME/DATE OF STUDY: 13:37 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432 3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

```
CHANNEL LENGTH (FT) = 3157.79
                           MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
-----
FLOW PROCESS FROM NODE 810.00 TO NODE 12603.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.185 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
._____
******************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
______
**********************
 FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) =
                                                 286.00
 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
************************
 FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
```

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Date: 05/15/2023

Date: 05/15/2023 File name: EV50126F.RES Page 1

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.341; 30-MINUTE = 0.392; 1-HOUR = 0.432
  3-HOUR = 0.782; 6-HOUR = 0.902; 24-HOUR = 0.943
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

***************	******
FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CO	DE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<	

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UPSTREAM	DOWNSTREAM				UPSTREAM	DOWNSTREAM
NODE #	NODE #	GE HYDROLOGIC/HYDRAU F) FOOTNOTES 				
10100.00		++ Subarea (UH) Adde				
		Convex Routing:	Stream	#1	17769.8	17639.4
		Subarea (UH) Adde	d to Stream	#2	0.0	119.0
	12603.00	Stream #2 Added t	o: Stream	#1	17639.4	17666.3
	1	Zero Out:				
+		++ Convex Routing:				
8.167						
6.250 I		Subarea (UH) Adde				
3.167						
126.00		Zero Out:				
6 333 I	1	Subarea (UH) Adde 				
126.00	126.00	++ Stream #2 Added t	o: Stream	#1	17717.6	17732.5
3.167 126.00	126.00	Zero Out:	Stream	#2	92.3	0.0
8.167	126.00 14304.87		Stream	#1		17732.5
Notes: 1 = NTERVAL	BASIN MODE: RUNOFF EST	L VOLUME EXCEEDED;	ND PAST 2 DA	AYS		EAK DAY OF

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0.0 .7732.5 + E UNIT	
TISTREAM (CFS) + + + +	
TISTREAM (CFS) + + + +	CIIMMADV *
(CFS) +	COUNTAIN "
(CFS) +	
(CFS)	
7769.8 7639.4 119.0 7666.3 0.0 7644.9 310.4 7717.6 0.0 92.3 + 7732.5 0.0 7732.5 +	
7769.8 7639.4 119.0 7666.3 0.0 7644.9 310.4 7717.6 0.0 92.3 7732.5 0.0 7732.5 CUNIT	
7639.4 119.0 7666.3 0.0 + 7644.9 310.4 7717.6 0.0 92.3 + 7732.5 0.0 7732.5 + E UNIT	
119.0 .7666.3 0.0 .7644.9 310.4 .7717.6 0.0 92.3 .7732.5 0.0 .7732.5 .7732.5 .7732.5 .7732.7	
7666.3 0.0 + 7644.9 310.4 -7717.6 0.0 92.3 + -7732.5 0.0 -7732.5 + E UNIT	
0.0 +- 7644.9 310.4 -7717.6 0.0 92.3 +7732.5 0.0 -7732.5 +-	
7644.9 310.4 7717.6 0.0 92.3 + 7732.5 0.0 7732.5 + E UNIT	
7644.9 310.4 7717.6 0.0 92.3 + 7732.5 0.0 7732.5 + E UNIT	
310.4 .7717.6 0.0 92.3 .7732.5 0.0 .7732.5 +	
7717.6 0.0 92.3 + 7732.5 0.0 -7732.5 + E UNIT	
0.0 92.3 +	
92.3 +- .7732.5 0.0 .7732.5 +- E UNIT	
7732.5 0.0 7732.5 + E UNIT	
0.0 0.0 .7732.5 + E UNIT	
0.0 .7732.5 + E UNIT	
7732.5 +- E UNIT	17732.5
UNIT	0.0
E UNIT	17732.5
DAY OF	+-
	E UNIT
	DAY OF

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 BODR 2022 - NODE 127 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV MAY 2023 ROKAMOTO ******************* FILE NAME: EV50127F.DAT TIME/DATE OF STUDY: 13:36 05/15/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.185 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< ._____ ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ********************** FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

File name: FV50127F.RFS

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Date: 05/15/2023

```
______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
 3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
______
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
```

```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                          240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.333; 30-MINUTE = 0.385; 1-HOUR = 0.425
  3-HOUR = 0.775; 6-HOUR = 0.899; 24-HOUR = 0.941
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 11
______
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
_____
______
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		+ + 2EC		·	DOCDAM DECL	THE CUMMARY
	=	* AES	FLOODSC	X I	PROGRAM RESU	LTS SUMMARY
	+-					+
UPSTREAM	DOWNSTREAM				UPSTREAM	DOWNSTREAM
NODE # PEAK (HR)	NODE # MODELED (A)	GE HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
+		++ Subarea (UH) Added to				
8 083 1	1	Convex Routing:				
18.083						
6.250 I	1	Stream #2 Added to:				
8 083 1	ĺ	Zero Out:				
		zero out: 				
+		++				
8.167	1	Convex Routing:				
6.250 I		Subarea (UH) Added to				
8.167		Stream #2 Added to:				
	1	Zero Out:				
6.333	1	Subarea (UH) Added to				
+		++				
8.167	1	Stream #2 Added to:				
		Zero Out:				
8.250		Convex Routing:				
320.00 6.333	331.00	Subarea (UH) Added to	Stream	#2	0.0	429.0
400.00	1	Subarea (UH) Added to				
+-		++			0 0	
390.00 6.417		Subarea (UH) Added to				
331.00 6.333	T.	Stream #4 Added to:				
331.00	1				49.0	
331.00	331.00	Stream #3 Added to:	Stream	#2	473.9	757.7
Da	te: 05/15/2023	File name: EV50127F	.RES		Pa	age 7

	1	Zero Out:				
•		++				
	12720.50	Stream #2 Added to:	Stream	#1	17542.2	17750.2
		Zero Out:	Stream	#2	757.7	0.0
12720.50 18.250	127.00	Convex Routing:	Stream	#1	17750.2	17714.6
		Subarea (UH) Added to	o Stream	#2	0.0	332.8
		Stream #2 Added to:	Stream	#1	17714.6	17807.5
	, +-	· · · · · · · · · · · · · · · · · · ·		+		+-
+-		++ Zero Out:				
 127.00 18.250		View:	Stream	#1		17807.5
++ Notes: 1 = INTERVAL 3 = THE DESIGN S	BASIN MODE	L VOLUME EXCEEDED; 2	= TIME IS	AT I	END OF 5-MI	NUTE UNIT

END OF FLOODSCx ROUTING ANALYSIS

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F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 137 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV50137F.DAT TIME/DATE OF STUDY: 00:55 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.185 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
_____
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
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```
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                               240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                               215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                               213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.821 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.317 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.452
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394
  3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE *USER ENTERED "LAG" TIME = 0.397 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.440 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.291; 30-MINUTE = 0.350; 1-HOUR = 0.394 3-HOUR = 0.738; 6-HOUR = 0.886; 24-HOUR = 0.933 ********************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1 _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO< _____ ******************* FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 11 >>>>VIEW STREAM NUMBER 1 HYDROGRAPH<

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV50137F.DAT ]
Page: 1 of |
|UPSTREAM DOWNSTREAM|
                               | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
18.083 |
        | 119.00 12603.00| Convex Routing: Stream #1| 16623.0
                                       16514.4
18.083 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0
                                       101.21
16.250
| 12603.00 | 12603.00| Stream #2 Added to: Stream #1| 16514.4
                                        16542.9|
18.083 I
| 12603.00 | 12603.00| Zero Out:
                        Stream #2| 101.2
                                         0.01
| 12603.00 | 126.00| Convex Routing: | Stream #1| 16542.9
                                        16528.41
18.167
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                        262.0|
16.250 I
        1
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 16528.4
                                       16604.91
         18.167 I
| 126.00 | 126.00| Zero Out: | Stream #2| 262.0
                                      0.01
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                        76.01
+-----
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 16604.9
                                        16620.61
18.167
        1
| 126.00 | 126.00| Zero Out:
                        Stream #2| 76.0
                                         0.01
   | 126.00 | 12720.50 | Convex Routing: | Stream #1 | 16620.6
                                       16613.41
18.250
381.7|
16.333 I
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
                                         250.41
        1
16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 43.0|
16.417 |
        | 331.00 | 331.00 | Stream #4 Added to: Stream #2| 381.7 | 421.3|
16.333 I
         | 331.00 | 331.00 | Zero Out: | Stream #4|
                                 43.0
                                         0.01
| 331.00 | 331.00| Stream #3 Added to: Stream #2|
                                  421.3
                                         671.7|
16.333
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```

	1	Zero Out:			
•		++		-+	
331.00 18.250		Stream #2 Added to:	Stream #3	1 16613.4	16830.1
		Zero Out:	Stream #2	2 671.7	0.0
		Convex Routing:			
12710.00	127.00	Subarea (UH) Added to			
127.00	127.00	Stream #2 Added to:			
		+ ++		-+	
127.00	127.00	Zero Out:	Stream #2	289.6	0.0
 127.00 17.333	12902.00	Convex Routing:	Stream #	1 16958.3	16949.3
50220.00 6.333	50347.00	Subarea (UH) Added to	Stream #2	2 0.0	467.4
50347.00		Convex Routing:			
12902.00	12902.00	Stream #2 Added to:	Stream #	16949.3	17192.6
+		 ++		-+	
		Zero Out:	Stream #2	2 458.9	0.0
12902.00	129.00	Convex Routing: Subarea (UH) Added to	Stream #	17192.6	17178.5
50400.00 6.250	129.00	Subarea (UH) Added to	Stream #2	2 0.0	197.3
129.00	1	Stream #2 Added to:			
129.00	129.00	Zero Out:			
•		 ++		-+	
		Subarea (UH) Added to	Stream #2	2 0.0	115.3
222.00	129.00	Stream #2 Added to:	Stream #3	17232.8	17282.3
129.00	129.00	Zero Out:	Stream #2	2 115.3	0.0
129.00	133.00	Convex Routing:	Stream #:	17282.3	17268.7
16.833 I	1	Subarea (UH) Added to			
Notes: 1 = INTERVAL	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS A	AT END OF 5-1	MINUTE UNIT

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			* AES FLOODS	Cx E	ROGRAM RESU	ULTS SUMMARY
age: 2 of		137F.DAT]				
+ UPSTREAM	DOWNSTREAM	++				DOWNSTREAM
NODE #		GE HYDROLOGIC/HYDRA F) FOOTNOTES 				
+ 132.00	13305.00	++ Convex Routing:	Stream	#2	1298.9	1279.7
		Convex Routing:	Stream	#2	1279.7	1266.5
	133.00	Subarea (UH) Adde				
5.667 133.00	133.00	Stream #3 Added	to: Stream	#2	1266.5	1689.5
133.00	133.00	Zero Out: 	Stream	#3	590.9	0.0
+ 133.00	133.001	++ Stream #2 Added	to: Stream	#1।	17268.7	18958.1
7.500 133.00	133.00	Zero Out:	Stream	#2	1689.5	0.0
	I					
7.667 133.00	134.00	Convex Routing:	ed to Stream	#2	0.0	685.1
134.00	134.00	Stream #2 Added	to: Stream	#1	18936.6	19227.1
+		+				
		Zero Out:				
13500.00 7.333	134.00	Subarea (UH) Adde	ed to Stream	#2	0.0	1050.7
134.00		Stream #2 Added	to: Stream	#1	19227.1	20257.0
	134.00	Zero Out:	Stream	#2	1050.7	0.0
134.00 7.750	T.	Convex Routing:	Stream		20257.0	20233.8
	137.00	++ Subarea (UH) Add	ed to Stream	#2	0.0	442.3
6.500 137.00		Stream #2 Added	to: Stream	#1	20233.8	20445.7
7.750 137.00	137.00		Stream	#2	442.3	0.0
137.00	137.00	View:	Stream	#1		20445.7

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+		+			+		+-
					'		
	-+	+	+				
Notes: 1	= BASIN	MODEL VOLU	ME EXCEEDED;	2 = TIME	IS AT END O	F 5-MINUTE UN	1IT
INTERVAL							
3	= RUNOFI	F ESTIMATES	DO NOT EXTEN	D PAST 2	DAYS AFTER	THE PEAK DAY	OF
THE DESIGN	STORM						
+							

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 138 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV50138F.DAT TIME/DATE OF STUDY: 00:54 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932***************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.185 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392 3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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______
 WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

```
FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<<<<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
```

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```
*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                  215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.821 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

```
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.317 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.452
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.397 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.440
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH (FT) = 4643.67
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.513 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.495
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
5-MINUTE = 0.287; 30-MINUTE = 0.348; 1-HOUR = 0.392
  3-HOUR = 0.734; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 11
>>>>VIEW STREAM NUMBER 1 HYDROGRAPH<
______
_____
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•		++			IIDCEDEAM	DOMNOMBEAM
UPSTREAM IME(2) TO		GE		- 1	UPSTREAM	DOWNSTREAM
NODE #	NODE # MODELED (A)	HYDROLOGIC/HYDRAULIC : F) FOOTNOTES				
+-		++				
8.083	119.001	Subarea (UH) Added to	stream	#1	0.0	10347.91
119.00 8.083	12603.00	Convex Routing:	Stream	#1	16547.9	16440.3
810.00	809.00	Subarea (UH) Added to	Stream	#2	0.0	100.2
12603.00 8.083		Stream #2 Added to:	Stream	#1	16440.3	16468.9
12603.00	12603.00	Zero Out:				
+	 +-	 		+		+
		++ Convex Routing:	Stream	#11	16468.9	16454.81
8.167		 Subarea (UH) Added to				
		Stream #2 Added to:				
8.167						
126.00	126.00	Zero Out:	Stream	#2	259.4	0.0
6.333	1	Subarea (UH) Added to				
+-		++				
8.167						
	1	Zero Out:				
126.00 8.250	12720.50	Convex Routing:	Stream	#1	16547.4	16540.3
320.00	331.00	Subarea (UH) Added to	Stream	#2	0.0	378.7
400.00 6.333	331.00	Subarea (UH) Added to				
						,
390.00 6.417	331.00	Subarea (UH) Added to	Stream	#4	0.0	42.6
331.00 6.333	331.00	Stream #4 Added to:	Stream	#2	378.7	418.0
331.00		Zero Out:	Stream	#4	42.6	0.0
331.00 6.333	331.00	Stream #3 Added to:	Stream	#2	418.0	666.2

		Zero Out:				
		++ Stream #2 Added to:				
18.250 12720.50	12720.50	Zero Out:	Stream	#2	666.2	0.0
12720.50	127.00	Convex Routing:	Stream	#1	16757.8	16739.3
		Subarea (UH) Added to				
17.250	1	Stream #2 Added to:				16899.2
·		++ Zero Out:	Stream	#2		
	12902.00	Convex Routing:	Stream	#1	16899.2	16890.0
4 6 000 1		Subarea (UH) Added to				
16.333 50347.00 16.417	12902.00	Convex Routing:	Stream	#2	463.0	454.8
12902.00	12902.00	Stream #2 Added to:				
12902.00	12902.00	Zero Out:	Stream	#2	454.8	0.0
12902.00 17.417	129.00	Convex Routing:	Stream	#1	17132.2	17117.8
50400.00	129.00	Subarea (UH) Added to	Stream	#2	0.0	195.1
129.00	129.00	Stream #2 Added to:	Stream	#1	17117.8	17172.2
		Zero Out:				
		++ Subarea (UH) Added to	Stream	#21	0.0	114.2
16.333	1	Stream #2 Added to:				
17.417		Zero Out:				
129.00	133.00	 Convex Routing:	Stream	#1	17221.8	17207.8
17.500 13010.00 16.833	132.00	Subarea (UH) Added to	Stream	#2	0.0	1288.9
++- Notes: 1 = INTERVAL 3 = THE DESIGN ST	BASIN MODEI RUNOFF ESTI	VOLUME EXCEEDED; 2 =	TIME IS	S AT	END OF 5-M	INUTE UNIT
		File name: EV50138F				ge 16

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV50138F.DAT ]
Page: 2 of
|UPSTREAM DOWNSTREAM|
                                  | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 132.00 | 13305.00| Convex Routing: Stream #2| | 1288.9 | 1270.3|
17.333 I
         | 13305.00
         133.00| Convex Routing: Stream #2| 1270.3 1257.2|
17.583 |
132.00
         133.00| Subarea (UH) Added to Stream #3| 0.0 586.4|
16.667
         | 133.00 | 133.00 | Stream #3 Added to: Stream #2 | 1257.2 | 1678.4 |
17.500 |
         | 133.00 | 133.00| Zero Out:
                           Stream #3| 586.4
                                             0.01
+-----
| 133.00 | 133.00 | Stream #2 Added to: Stream #1 | 17207.8
17.500 |
| 133.00 | 133.00 | Zero Out: | Stream #2| 1678.4
                                             0.01
| 133.00 | 134.00| Convex Routing: | Stream #1| 18886.2
                                           18864.91
17.667 I
          1 133.00
         134.00| Subarea (UH) Added to Stream #2| 0.0
                                           678.41
         16.417 |
| 134.00 | 134.00| Stream #2 Added to: Stream #1| 18864.9 | 19156.1|
17.667 |
| 134.00 | 134.00| Zero Out: Stream #2| 678.4 | 0.0|
17.333 |
134.00
         134.00| Stream #2 Added to: Stream #1| 19156.1
                                            20181.31
17.583 |
         | 134.00 | 134.00 | Zero Out: Stream #2| 1044.3
                                            0.01
| 134.00 | 137.00 | Convex Routing: | Stream #1 | 20181.3
         | 134.00 | 137.00| Subarea (UH) Added to Stream #2| 0.0 | 438.3|
16.500 I
         | 137.00 | 137.00| Stream #2 Added to: Stream #1| 20158.2 | 20370.6|
          17.750 I
| 137.00 | 137.00 | Zero Out: Stream #2| 438.3
                                            0.01
| 137.00 | 138.00 | Convex Routing: | Stream #1 | 20370.6
                                            20354.5|
17.833
      Date: 08/11/2023 File name: EV50138F.RES Page 18
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16.583	138.00 Subarea						
·			+-		+-		
	138.00 Stream =		Stream #1	20354.5	20571.6		
	138.00 Zero Out	t:	Stream #2	410.7	0.0		
17.833 17.	 138.00 View: 325.77 3		Stream #1		20571.6		
					Ψ-		
Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT INTERVAL 3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF THE DESIGN STORM +							
		+					

END OF FLOODSCx ROUTING ANALYSIS

F L O O D R O U T I N G A N A L Y S I S USING COUNTY HYDROLOGY MANUAL OF ORANGE (1986)

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Analysis prepared by:

********************** DESCRIPTION OF STUDY ***************** * RMV PA-3 ROMP AMENDMENT 2022 - NODE 139 * REGIONAL UNIT HYDROGRAPH - FREE DRAINING MODEL * 50-YR EV AUG 2023 ROKAMOTO ******************* FILE NAME: EV50139F.DAT TIME/DATE OF STUDY: 00:54 08/11/2023 ** INPUT SUMMARY ** FLOW PROCESS FROM NODE 10100.00 TO NODE 119.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1< _____ WATERSHED AREA = 49495.699 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 2.043 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.298; LOW LOSS FRACTION = 0.399 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.46; 30-MINUTE = 0.87; 1-HOUR = 1.21 3-HOUR = 2.28; 6-HOUR = 3.40; 24-HOUR = 5.99*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932****************** FLOW PROCESS FROM NODE 119.00 TO NODE 12603.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD< ______ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 341.63; DOWNSTREAM ELEVATION(FT) = 312.40

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CHANNEL LENGTH (FT) = 3157.79 MANNING'S FACTOR = 0.030CONSTANT LOSS RATE(CFS) = 0.00 -----FLOW PROCESS FROM NODE 810.00 TO NODE 809.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<< ______ WATERSHED AREA = 171.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE *USER ENTERED "LAG" TIME = 0.185 HOURS VALLEY (DEVELOPED) S-GRAPH SELECTED MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.174; LOW LOSS FRACTION = 0.391 SPECIFIED PEAK RAINFALL DEPTHS (INCH): 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12*USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS: 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391 3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932 ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 7 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1< -----****************** FLOW PROCESS FROM NODE 12603.00 TO NODE 12603.00 IS CODE = 6 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<> ______ ******************* FLOW PROCESS FROM NODE 12603.00 TO NODE 126.00 IS CODE = 5.2 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>> _____ THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS (Reference: the National Engineering Handbook, Hydrology, Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce). ASSUMED REGULAR CHANNEL INFORMATION: BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00UPSTREAM ELEVATION(FT) = 312.40; DOWNSTREAM ELEVATION(FT) = 286.00 CHANNEL LENGTH(FT) = 3046.70 MANNING'S FACTOR = 0.030 CONSTANT LOSS RATE (CFS) = 0.00************************ FLOW PROCESS FROM NODE 920.00 TO NODE 126.00 IS CODE = 1 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<

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```
WATERSHED AREA = 553.800 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.219 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.254; LOW LOSS FRACTION = 0.457
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
*****************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
*****************
 FLOW PROCESS FROM NODE 600.00 TO NODE 126.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 218.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.295 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.290; LOW LOSS FRACTION = 0.732
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
______
******************
 FLOW PROCESS FROM NODE 126.00 TO NODE 126.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
```

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FLOW PROCESS FROM NODE 126.00 TO NODE 12720.50 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 286.00; DOWNSTREAM ELEVATION(FT) =
 CHANNEL LENGTH (FT) = 4077.05 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 320.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 712.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.100; LOW LOSS FRACTION = 0.252
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 400.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
_____
 WATERSHED AREA = 462.500 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.135; LOW LOSS FRACTION = 0.326
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 390.00 TO NODE 331.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #4<<<<
_____
 WATERSHED AREA = 117.200 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
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*USER ENTERED "LAG" TIME = 0.366 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.283; LOW LOSS FRACTION = 0.475
SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
 3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
_____
>>>>STREAM NUMBER 4 ADDED TO STREAM NUMBER 2<<<<
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 4 CLEARED AND SET TO ZERO<>
______
*************************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 7
______
>>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 331.00 IS CODE = 6
>>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 331.00 TO NODE 12720.50 IS CODE = 7
>>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12720.50 TO NODE 12720.50 IS CODE = 6
>>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
FLOW PROCESS FROM NODE 12720.50 TO NODE 127.00 IS CODE = 5.2
>>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 258.00; DOWNSTREAM ELEVATION(FT) =
                                              240.00
 CHANNEL LENGTH (FT) = 3114.00 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 12710.00 TO NODE 127.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 935.000 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.410 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.294; LOW LOSS FRACTION = 0.610
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 127.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 127.00 TO NODE 12902.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 240.00; DOWNSTREAM ELEVATION(FT) =
                                              215.00
 CHANNEL LENGTH(FT) = 3242.32 MANNING'S FACTOR = 0.030
```

THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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CONSTANT LOSS RATE (CFS) = 0.00
 FLOW PROCESS FROM NODE 50220.00 TO NODE 50347.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1120.700 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.304 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.217; LOW LOSS FRACTION = 0.490
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 50347.00 TO NODE 12902.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 20.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 313.00; DOWNSTREAM ELEVATION(FT) =
                                                 215.00
 CHANNEL LENGTH (FT) = 2700.00
                         MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 12902.00 TO NODE 12902.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
FLOW PROCESS FROM NODE 12902.00 TO NODE 129.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
```

```
ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 215.00; DOWNSTREAM ELEVATION(FT) =
                                                213.00
 CHANNEL LENGTH (FT) = 1663.10 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 50400.00 TO NODE 129.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 417.100 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.200 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.272; LOW LOSS FRACTION = 0.598
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
______
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 221.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 213.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.255 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.128; LOW LOSS FRACTION = 0.337
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
```

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THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO

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```
3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 222.00 TO NODE 129.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
*******************
 FLOW PROCESS FROM NODE 129.00 TO NODE 129.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 129.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <<->
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 213.00; DOWNSTREAM ELEVATION(FT) = 212.00
 CHANNEL LENGTH(FT) = 1389.52 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
******************
 FLOW PROCESS FROM NODE 13010.00 TO NODE 132.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 4924.400 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.821 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.244; LOW LOSS FRACTION = 0.538
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 13305.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
```

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```
ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 427.51; DOWNSTREAM ELEVATION(FT) =
                                                   315.00
 CHANNEL LENGTH(FT) = 9760.05 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE(CFS) = 0.00
FLOW PROCESS FROM NODE 13305.00 TO NODE 133.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #2 BY THE CONVEX METHOD <>>>
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 2 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 50.00 CHANNEL Z = 3.00
 UPSTREAM ELEVATION(FT) = 315.00; DOWNSTREAM ELEVATION(FT) =
                                                   212.00
 CHANNEL LENGTH (FT) = 6877.24 MANNING'S FACTOR = 0.040
 CONSTANT LOSS RATE (CFS) = 0.00
______
******************
 FLOW PROCESS FROM NODE 132.00 TO NODE 133.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #3<
______
 WATERSHED AREA = 1713.900 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.572 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.225; LOW LOSS FRACTION = 0.383
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 3 ADDED TO STREAM NUMBER 2<<<<
_____
************************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 3 CLEARED AND SET TO ZERO<
```

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```
______
******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
*******************
 FLOW PROCESS FROM NODE 133.00 TO NODE 133.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH(FT) = 200.00 CHANNEL Z = 5.00
 UPSTREAM ELEVATION(FT) = 212.00; DOWNSTREAM ELEVATION(FT) = 170.00
 CHANNEL LENGTH(FT) = 6461.31 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
_____
*****
 FLOW PROCESS FROM NODE 133.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 1691.600 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.317 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.243; LOW LOSS FRACTION = 0.452
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
_____
```

```
*************************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<>
_____
******************
 FLOW PROCESS FROM NODE 13500.00 TO NODE 134.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
_____
 WATERSHED AREA = 3859.700 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 1.289 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.284; LOW LOSS FRACTION = 0.431
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 7
______
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<>
______
******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 134.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
______
*******************
 FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 200.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 170.00; DOWNSTREAM ELEVATION(FT) =
                                              135.00
 CHANNEL LENGTH(FT) = 6064.09 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE(CFS) = 0.00
*************************
```

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```
FLOW PROCESS FROM NODE 134.00 TO NODE 137.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1191.900 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.397 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.237; LOW LOSS FRACTION = 0.440
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
***********************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 137.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 5.2
______
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD<
_____
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 135.00; DOWNSTREAM ELEVATION(FT) = 119.70
 CHANNEL LENGTH(FT) = 4643.67 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
_____
FLOW PROCESS FROM NODE 137.00 TO NODE 138.00 IS CODE = 1
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<<<<
______
 WATERSHED AREA = 1303.500 ACRES; BASEFLOW = 0.000 CFS/SOUARE-MILE
 *USER ENTERED "LAG" TIME = 0.513 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) = 0.267; LOW LOSS FRACTION = 0.495
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
```

```
3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 7
 >>>>STREAM NUMBER 2 ADDED TO STREAM NUMBER 1<
______
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 138.00 IS CODE = 6
 >>>>STREAM NUMBER 2 CLEARED AND SET TO ZERO<
_____
******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 5.2
 >>>>MODEL CHANNEL ROUTING OF STREAM #1 BY THE CONVEX METHOD <>>>
______
 THE MODIFIED C-ROUTING COEFFICIENT IS ESTIMATED IN ORDER TO
 ROUTE THE STREAM 1 INFLOW HYDROGRAPH BY 5-MINUTE INTERVALS
 (Reference: the National Engineering Handbook, Hydrology,
 Chapter 17, page 17-52, August, 1972, U.S. Department of Commerce).
 ASSUMED REGULAR CHANNEL INFORMATION:
 BASEWIDTH (FT) = 100.00 CHANNEL Z = 4.00
 UPSTREAM ELEVATION(FT) = 119.70; DOWNSTREAM ELEVATION(FT) =
                                                100.00
 CHANNEL LENGTH(FT) = 3107.78 MANNING'S FACTOR = 0.030
 CONSTANT LOSS RATE (CFS) = 0.00
______
*******************
 FLOW PROCESS FROM NODE 138.00 TO NODE 139.00 IS CODE = 1
______
 >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #2<
______
 WATERSHED AREA = 428.000 ACRES; BASEFLOW = 0.000 CFS/SQUARE-MILE
 *USER ENTERED "LAG" TIME = 0.244 HOURS
 VALLEY (DEVELOPED) S-GRAPH SELECTED
 MAXIMUM WATERSHED LOSS RATE (INCH/HOUR) = 0.207; LOW LOSS FRACTION = 0.487
 SPECIFIED PEAK RAINFALL DEPTHS (INCH):
 5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06
  3-HOUR = 1.78; 6-HOUR = 2.47; 24-HOUR = 4.12
 *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
 5-MINUTE = 0.286; 30-MINUTE = 0.348; 1-HOUR = 0.391
  3-HOUR = 0.733; 6-HOUR = 0.885; 24-HOUR = 0.932
******************
 FLOW PROCESS FROM NODE 139.00 TO NODE 139.00 IS CODE = 7
```

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5-MINUTE = 0.37; 30-MINUTE = 0.80; 1-HOUR = 1.06

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>>>>STREAM	NUMBER 2 ADDE	ED TO STREAM NUMBE	R 1<<<<	

FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 0	5
>>>>STREAM	NUMBER 2 CLEA	ARED AND SET TO ZE	RO<<<< =================================	
*****	******	******	******	*****
FLOW PROCESS	S FROM NODE	139.00 TO NODE	139.00 IS CODE = 1	1
>>>>VIEW S	TREAM NUMBER 1	HYDROGRAPH<		
==========				

```
* AES FLOODSCx PROGRAM RESULTS SUMMARY *
|INPUT FILENAME: [EV50139F.DAT ]
Page: 1 of
|UPSTREAM DOWNSTREAM|
                                     | UPSTREAM DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|
| NODE # NODE # | HYDROLOGIC/HYDRAULIC PROCESS | PEAK (CFS) | PEAK (CFS) |
PEAK (HR) | MODELED (AF) | FOOTNOTES |
| 10100.00 | 119.00| Subarea (UH) Added to Stream #1| 0.0 16526.1|
18.083 I
          | 119.00 | 12603.00| Convex Routing: Stream #1| 16526.1 | 16419.0|
18.083 |
| 810.00 809.00| Subarea (UH) Added to Stream #2| 0.0 99.8|
16.250 |
          | 12603.00 | 12603.00 | Stream #2 Added to: Stream #1 | 16419.0 | 16447.6 |
| 12603.00 | 12603.00| Zero Out:
                             Stream #2| 99.8
                                                 0.01
| 12603.00 | 126.00 | Convex Routing: | Stream #1 | 16447.6
                                              16433.71
18.167
920.00 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                258.4|
16.250 I
          | 126.00 | 126.00| Stream #2 Added to: Stream #1| 16433.7 | 16510.7|
18.167 |
          1 126.00
         126.00| Zero Out: Stream #2| 258.4 0.0|
| 600.00 | 126.00| Subarea (UH) Added to Stream #2| 0.0
                                                74.81
16.333 |
| 126.00 | 126.00| Stream #2 Added to: Stream #1| 16510.7
                                                16526.41
18.167 |
          | 126.00 | 126.00 | Zero Out: | Stream #2 | 74.8
                                                 0.01
                | 126.00 12720.50| Convex Routing: Stream #1| 16526.4
                                               16519.31
18.250 |
         320.00
          331.00| Subarea (UH) Added to Stream #2| 0.0 377.6|
16.333 I
                                                 247.41
| 400.00 | 331.00| Subarea (UH) Added to Stream #3| 0.0
16.333 I
| 390.00 331.00| Subarea (UH) Added to Stream #4| 0.0 42.5|
16.417 |
          | 331.00 | 331.00 | Stream #4 Added to: Stream #2 | 377.6 | 416.8 |
16.333 |
           | 331.00 331.00| Zero Out: Stream #4|
                                        42.5
                                                 0.01
| 331.00 | 331.00 | Stream #3 Added to: Stream #2|
                                         416.8
                                               664.2|
16.333
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```

	1	Zero Out:			
•		++			
	12720.50	Stream #2 Added to:	Stream #1	16519.3	16737.0
	12720.50	Zero Out:	Stream #2	664.2	0.0
	127.00	Convex Routing:			
1 12710.00	127.00	Subarea (UH) Added to			
127.00	127.00	Stream #2 Added to:			
		+ ++	+		+
127.00	127.00	Zero Out:	Stream #2	285.6	0.0
 127.00 17.333	12902.00	Convex Routing:	Stream #1	16882.2	16872.9
50220.00 6.333	50347.00	Subarea (UH) Added to	Stream #2	0.0	461.4
50347.00		Convex Routing:			
12902.00	12902.00	Stream #2 Added to:	Stream #1	16872.9	17114.8
+		 ++	+		
		Zero Out:	Stream #2	453.2	0.0
1 12902.00	129.00	Convex Routing: Subarea (UH) Added to	Stream #1	17114.8	17100.4
50400.00 6.250	129.00	Subarea (UH) Added to	Stream #2	0.0	194.3
129.00	1	Stream #2 Added to:			
129.00	129.00	Zero Out:			
		 ++	+		
		Subarea (UH) Added to	Stream #2	0.0	113.9
222.00	129.00	Stream #2 Added to:	Stream #1	17154.9	17204.4
129.00	129.00	Zero Out:	Stream #2	113.9	0.0
129.00	133.00	Convex Routing:	Stream #1	17204.4	17190.4
16.833 I	1	Subarea (UH) Added to			
Notes: 1 =	BASIN MODE	L VOLUME EXCEEDED; 2 =	TIME IS AT	END OF 5-M	MINUTE UNIT

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+		+ * AES	FLOODS	 Cx 1	PROGRAM RESU	ILTS SUMMARY *
INPUT FILE	1	139F.DAT]				+-
+	DOWNSTREAM	++				DOWNSTREAM
NODE #	NODE #	HYDROLOGIC/HYDRAULIC F) FOOTNOTES				
132.00	13305.00	++ Convex Routing:	Stream	#2	1285.6	1267.3
17.333 13305.00	133.00	 Convex Routing:	Stream	#2	1267.3	1254.1
	133.00	Subarea (UH) Added to	Stream	#3	0.0	585.0
		Stream #3 Added to:	Stream	#2	1254.1	1675.5
	133.00	Zero Out:				
+		++			'	
17.500		Stream #2 Added to:				
	1	Zero Out:				
17.667		Convex Routing:				
133.00 16.417		Subarea (UH) Added to	Stream	#2	0.0	676.2
17.583	1	Stream #2 Added to:				19136.1
+		++ Zero Out:				0.0
13500.00	134.00	 Subarea (UH) Added to	Stream	#2	0.0	1042.4
	134.00	Stream #2 Added to:	Stream	#1	19136.1	20160.2
17.583 134.00	134.00	Zero Out:	Stream	#2	1042.4	0.0
 134.00 17.750	137.00	Convex Routing:				
+						·
134.00 16.500		Subarea (UH) Added to				
17.750 I	1					
137.00	1				437.0	
137.00 17.833	138.00	Convex Routing:	Stream	#1	20349.6	20333.8
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16.583	1	Subarea (UH)					
					+-		+-
138.00	138.00	Stream #2 Add	'	Stream	#1	20333.8	20551.0
17.833 138.00	,	Zero Out:		Stream	#2	409.5	0.0
138.00 17.917	139.00	Convex Routin	ng:	Stream	#1	20551.0	20541.9
		Subarea (UH)	Added to	Stream	#2	0.0	200.9
139.00 17.917	139.00	Stream #2 Add					
+		+	-+				
139.00	139.00	Zero Out:		Stream	#2	200.9	0.0
139.00		View:		Stream	#1		20605.5
+	+-				+-		+-
		L VOLUME EXCE		TIME IS	AT :	END OF 5-M	INUTE UNIT
THE DESIGN S	TORM	IMATES DO NOT		AST 2 DA	AYS A	FTER THE P	EAK DAY OF

END OF FLOODSCx ROUTING ANALYSIS

----+