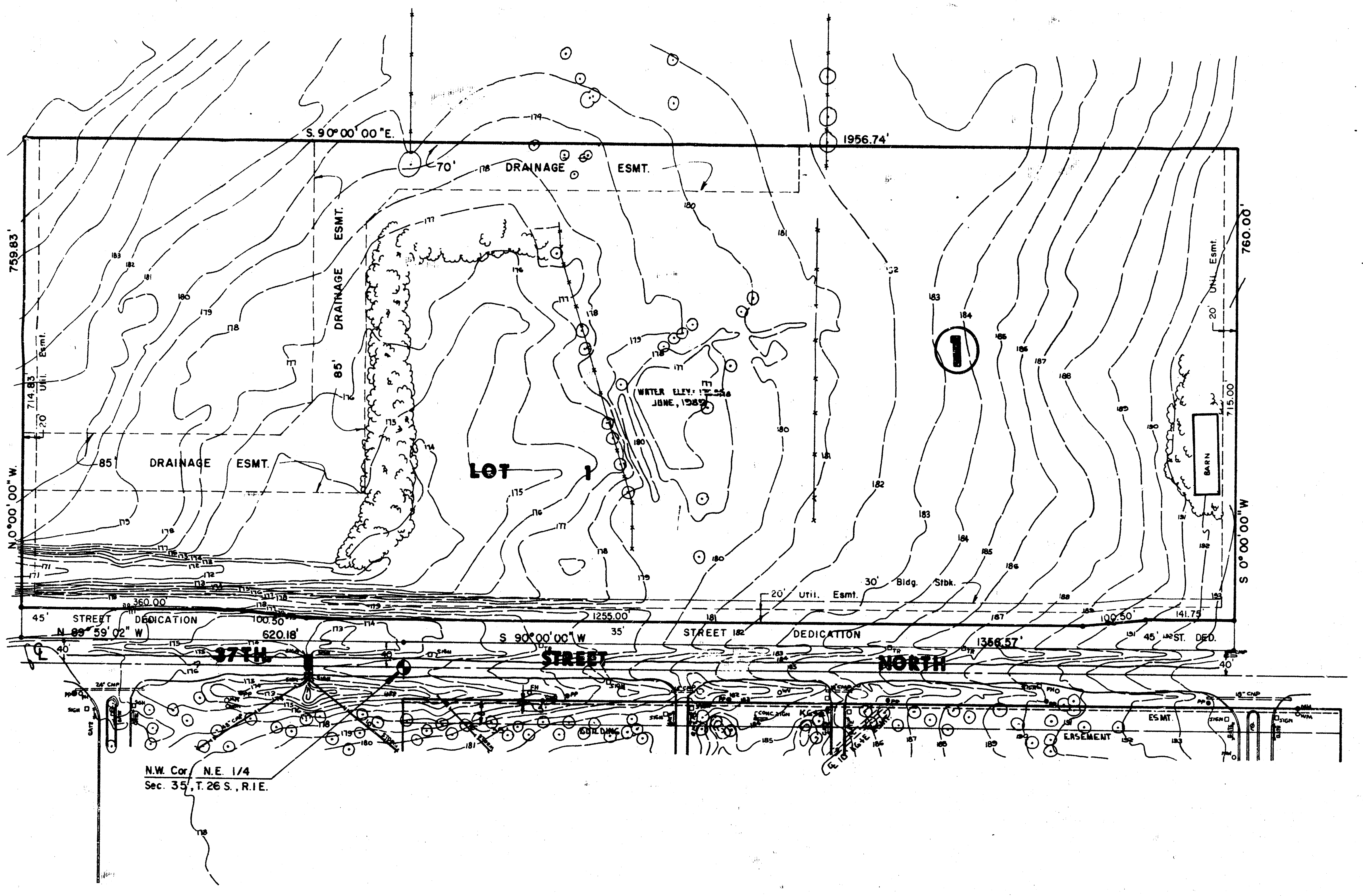
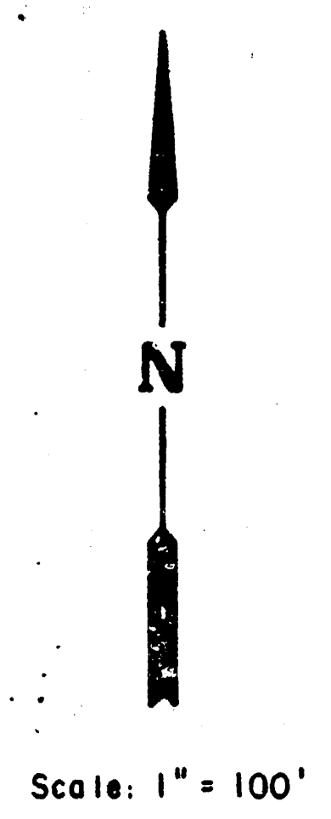
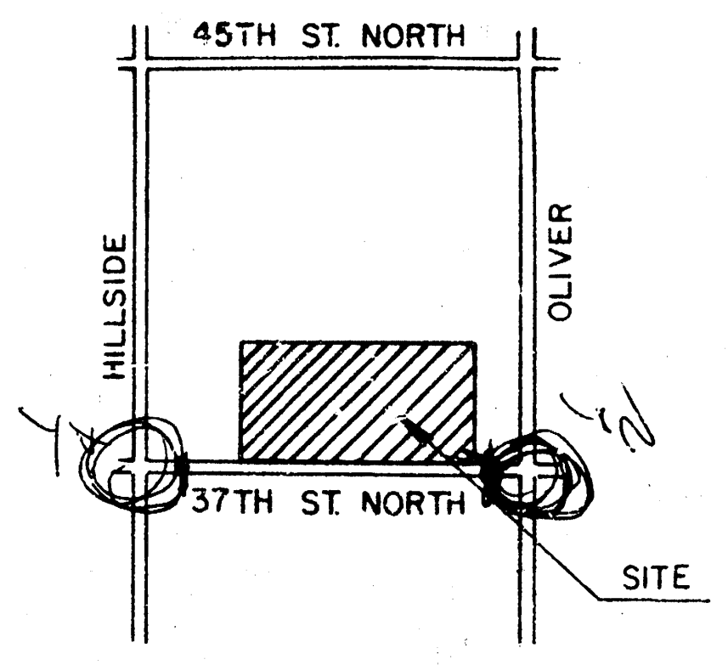
PRELIMINARY PLAT OF

KOCH OFFICE PARK THIRD ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS







DRAINAGE & UTILITY CONCEPT

KOCH OFFICE PARK THIRD ADDITION

KOCH INDUSTRIES
4111 E. 37TH ST. NORTH
67226 PH. 832-5400

Design
Drawn by DLM
Checked by
Date OCT. 1989
Job no.

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
636-5566

Sheet 1 of 1

MID-KANSAS ENGINEERING
CONSULTANTS, P.A.
3500 N. Rock Road, #800
Wichita, KS 67226

LETTER OF TRANSMITTAL

PROJECT: Koch Office Park 3rd Addition

PROJECT #: DATE: 11/29/89

TO:
Vicky Huang
City Engineering Department
455 North Main - 7th Floor
Wichita, KS 67202

We are sending you the following items: X Attached
__Under separate cover via______

__Prints __Specifications __Legal Descriptions

__Tracing __Petitions __Correspondence __Other

COMMENTS: One copy of the drainage basin affecting the referenced plat. Also one copy each of the computer runs showing that the Koch parking lot affects the basin runoff by about 20 cfs or five (5) percent.

__For Your Approval
X For Your Use
__Approved as Noted

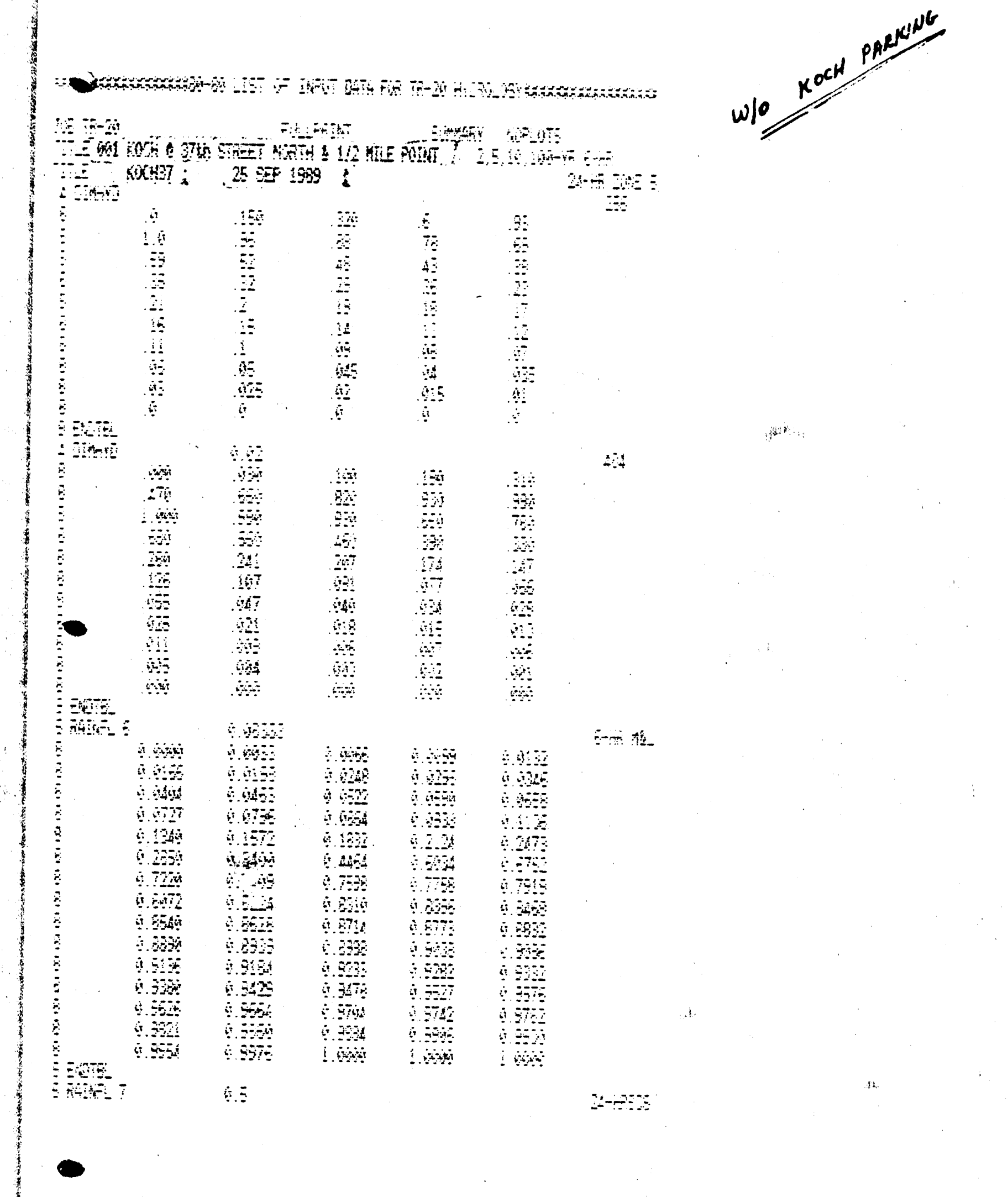
__As Requested
__For Your Files
__For Review and Comment

REMARKS:

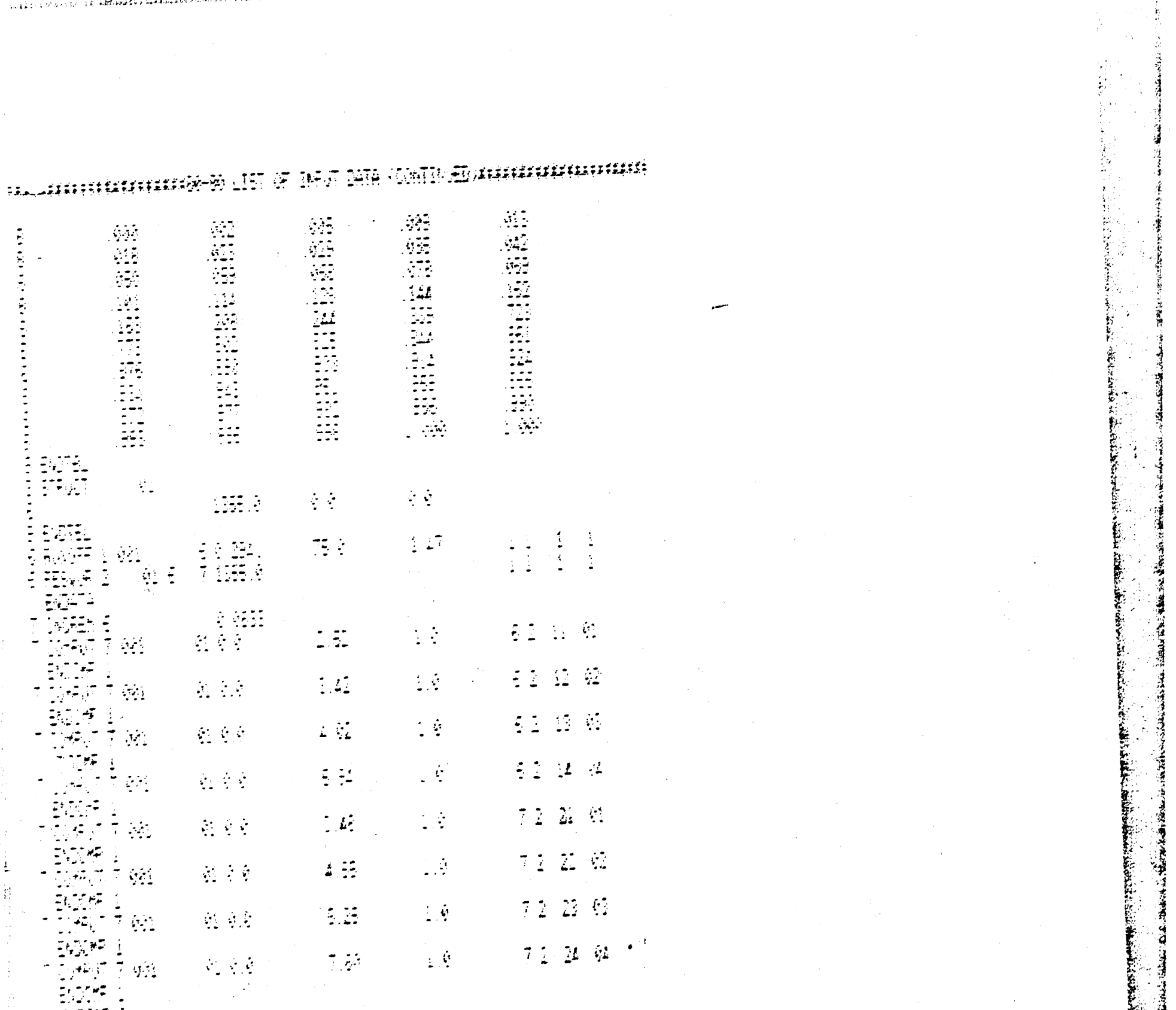
RECEIVED
NOV 29 1989
ENGINEERING DIVISION

Signed: Kenneth H. Bengtson
Kenneth H. Bengtson, P.E.
President

KHB/mrn


W/O KOCH PARKING

```
****************80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY*****************
JOB TR-20              FULLPRINT          SUMMARY  NOPLOTS
TITLE 001 KOCH @ 37th STREET NORTH & 1/2 MILE POINT    2,5,10,100-YR 6-HR
TITLE     KOCH37        25 SEP 1989                       24-HR ZONE 5
```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****************80-80 LIST OF INPUT DATA (CONTINUED)*****************
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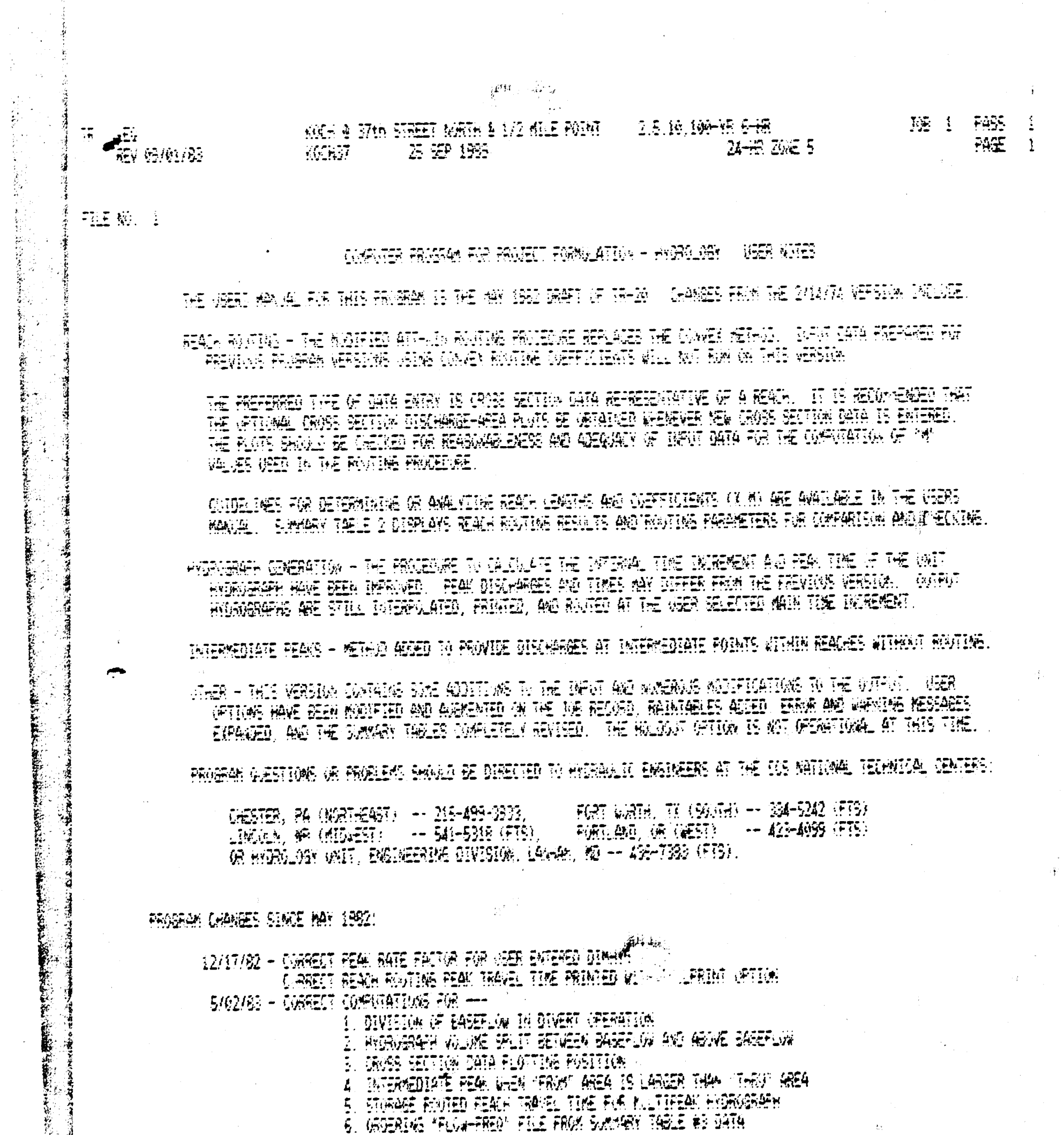
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TR-20                 KOCH @ 37th STREET NORTH & 1/2 MILE POINT    2,5,10,100-YR 6-HR     JOB 1  PASS 1
 REV 09/01/83         KOCH37        25 SEP 1989                    24-HR ZONE 5                  PAGE 1

FILE NO. 1

                COMPUTER PROGRAM FOR PROJECT FORMULATION - HYDROLOGY   USER NOTES

     THE USERS MANUAL FOR THIS PROGRAM IS THE MAY 1982 DRAFT OF TR-20.  CHANGES FROM THE 2/14/74 VERSION INCLUDE:

     REACH ROUTING - THE MODIFIED ATT-KIN ROUTING PROCEDURE REPLACES THE CONVEX METHOD.  INPUT DATA PREPARED FOR
       PREVIOUS PROGRAM VERSIONS USING CONVEX ROUTING COEFFICIENTS WILL NOT RUN ON THIS VERSION.

       THE PREFERRED TYPE OF DATA ENTRY IS CROSS SECTION DATA REPRESENTATIVE OF A REACH.  IT IS RECOMMENDED THAT
       THE OPTIONAL CROSS SECTION DISCHARGE-AREA PLOTS BE OBTAINED WHENEVER NEW CROSS SECTION DATA IS ENTERED.
       THE PLOTS SHOULD BE CHECKED FOR REASONABLENESS AND ADEQUACY OF INPUT DATA FOR THE COMPUTATION OF "M"
       VALUES USED IN THE ROUTING PROCEDURE.

       GUIDELINES FOR DETERMINING OR ANALYZING REACH LENGTHS AND COEFFICIENTS (X,M) ARE AVAILABLE IN THE USERS
       MANUAL.  SUMMARY TABLE 2 DISPLAYS REACH ROUTING RESULTS AND ROUTING PARAMETERS FOR COMPARISON AND CHECKING.

     HYDROGRAPH GENERATION - THE PROCEDURE TO CALCULATE THE INTERNAL TIME INCREMENT AND PEAK TIME OF THE UNIT
       HYDROGRAPH HAVE BEEN IMPROVED.  PEAK DISCHARGES AND TIMES MAY DIFFER FROM THE PREVIOUS VERSION.  OUTPUT
       HYDROGRAPHS ARE STILL INTERPOLATED, PRINTED, AND ROUTED AT THE USER SELECTED MAIN TIME INCREMENT.

     INTERMEDIATE PEAKS - METHOD ADDED TO PROVIDE DISCHARGES AT INTERMEDIATE POINTS WITHIN REACHES WITHOUT ROUTING.

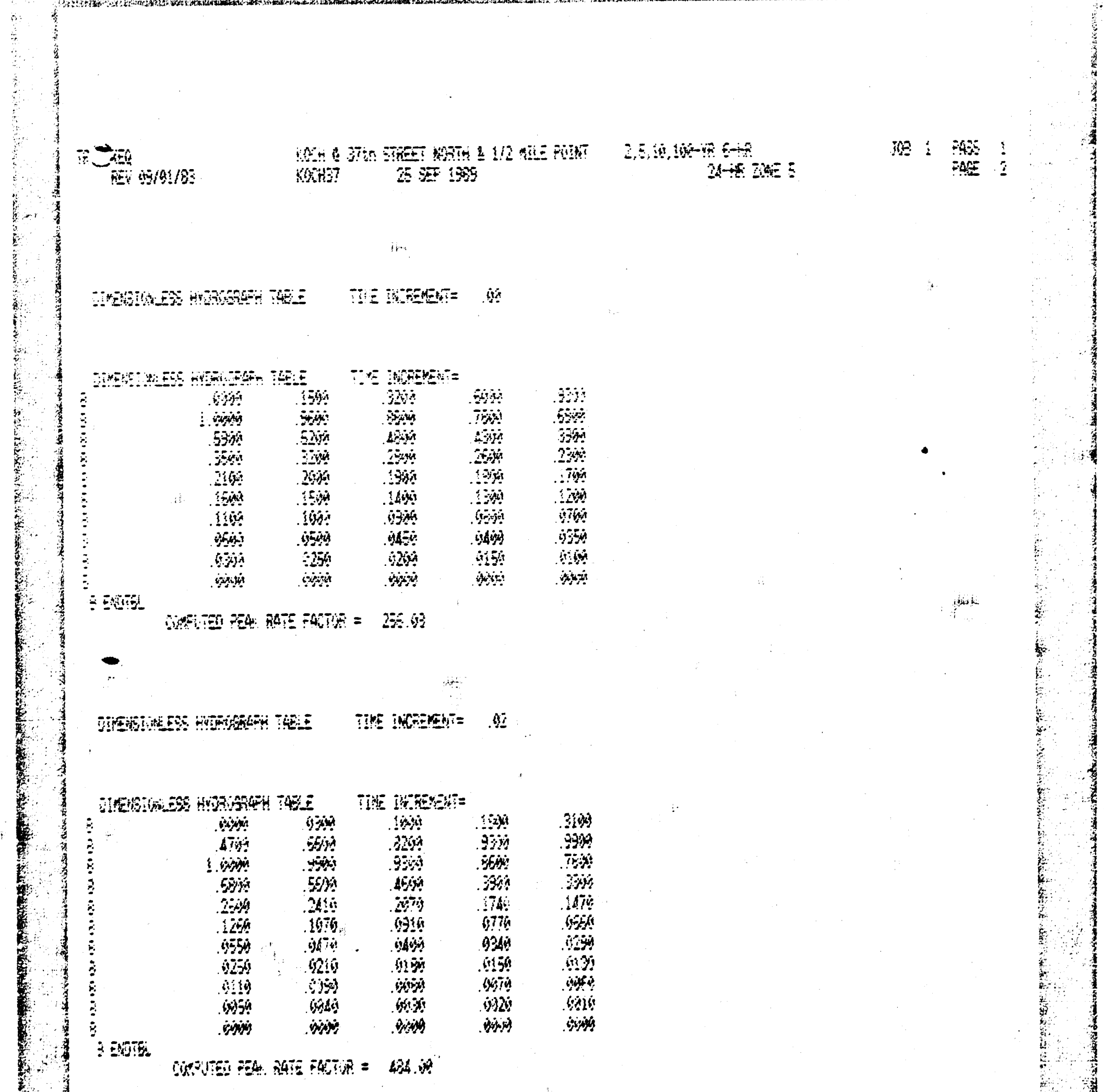
     OTHER - THIS VERSION CONTAINS SOME ADDITIONS TO THE INPUT AND NUMEROUS MODIFICATIONS TO THE OUTPUT.  USER
       OPTIONS HAVE BEEN MODIFIED AND AUGMENTED ON THE JOB RECORD, RAINTABLES ADDED, ERROR AND WARNING MESSAGES
       EXPANDED, AND THE SUMMARY TABLES COMPLETELY REVISED.  THE HOLDOUT OPTION IS NOT OPERATIONAL AT THIS TIME.

     PROGRAM QUESTIONS OR PROBLEMS SHOULD BE DIRECTED TO HYDRAULIC ENGINEERS AT THE SCS NATIONAL TECHNICAL CENTERS:

        CHESTER, PA (NORTHEAST)  -- 215-499-3933,      FORT WORTH, TX (SOUTH) -- 334-5242 (FTS)
        LINCOLN, NE (MIDWEST)    -- 541-5318 (FTS),    PORTLAND, OR (WEST)    -- 423-4099 (FTS)
        OR HYDROLOGY UNIT, ENGINEERING DIVISION, LANHAM, MD -- 436-7383 (FTS).

PROGRAM CHANGES SINCE MAY 1982:

     12/17/82 - CORRECT PEAK RATE FACTOR FOR USER ENTERED DIMHYD
                CORRECT REACH ROUTING PEAK TRAVEL TIME PRINTED WITH FULLPRINT OPTION
      5/02/83 - CORRECT COMPUTATIONS FOR ---
                   1. DIVISION OF BASEFLOW IN DIVERT OPERATION
                   2. HYDROGRAPH VOLUME SPLIT BETWEEN BASEFLOW AND ABOVE BASEFLOW
                   3. CROSS SECTION DATA PLOTTING POSITION
                   4. INTERMEDIATE PEAK WHEN "FROM" AREA IS LARGER THAN "THRU" AREA
                   5. STORAGE ROUTED REACH TRAVEL TIME FOR MULTIPEAK HYDROGRAPH
                   6. ORDERING "FLOW-FREQ" FILE FROM SUMMARY TABLE #3 DATA
```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TR-20                 KOCH @ 37th STREET NORTH & 1/2 MILE POINT    2,5,10,100-YR 6-HR     JOB 1  PASS 1
 REV 09/01/83         KOCH37        25 SEP 1989                    24-HR ZONE 5                  PAGE 2

DIMENSIONLESS HYDROGRAPH TABLE     TIME INCREMENT=   .02

9 ENDTBL
     COMPUTED PEAK RATE FACTOR =  256.00

DIMENSIONLESS HYDROGRAPH TABLE     TIME INCREMENT=   .02

9 ENDTBL
     COMPUTED PEAK RATE FACTOR =  484.00
```

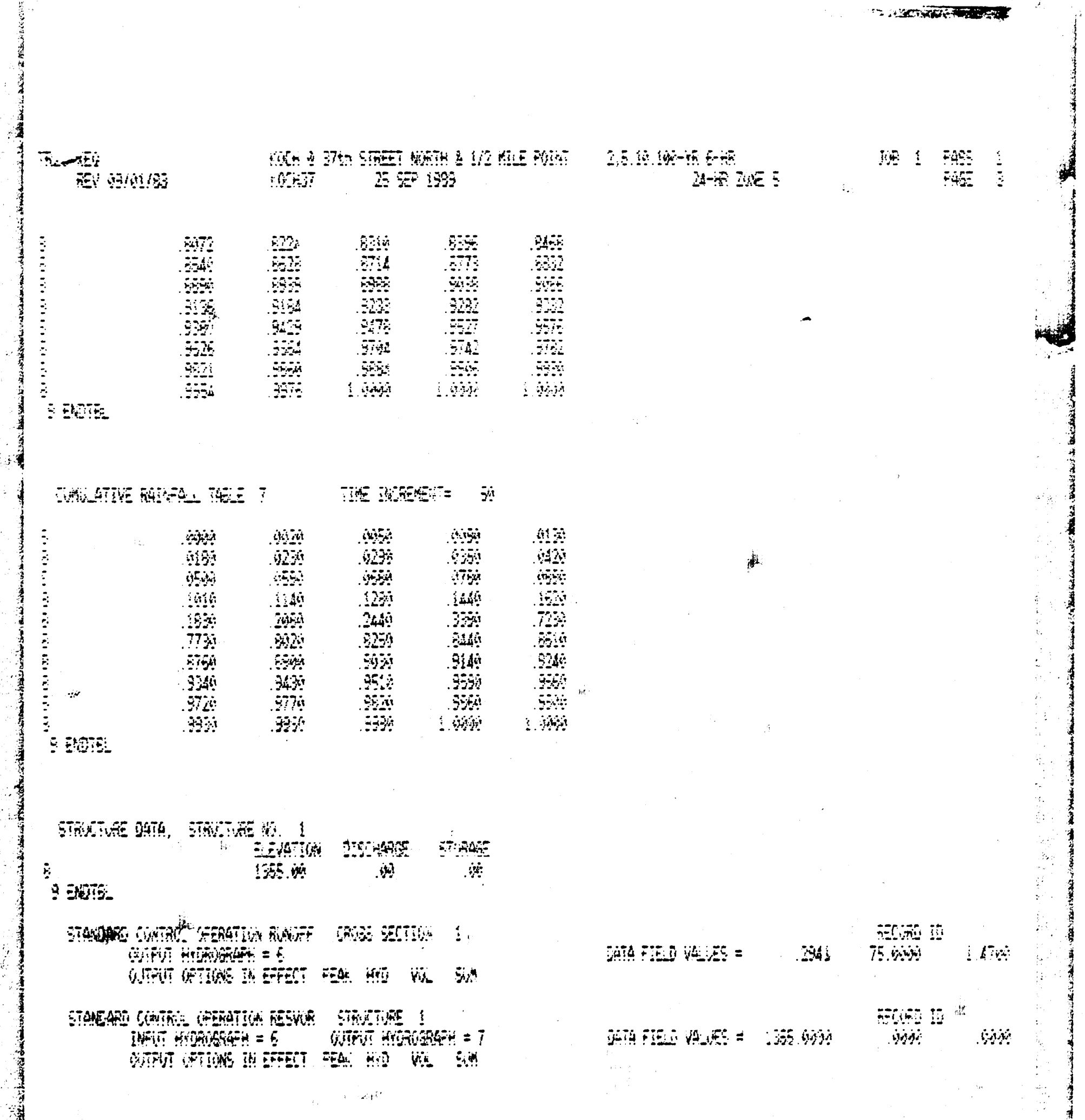
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TR-20                 KOCH @ 37th STREET NORTH & 1/2 MILE POINT    2,5,10,100-YR 6-HR     JOB 1  PASS 1
 REV 09/01/83         KOCH37        25 SEP 1989                    24-HR ZONE 5                  PAGE 3

9 ENDTBL

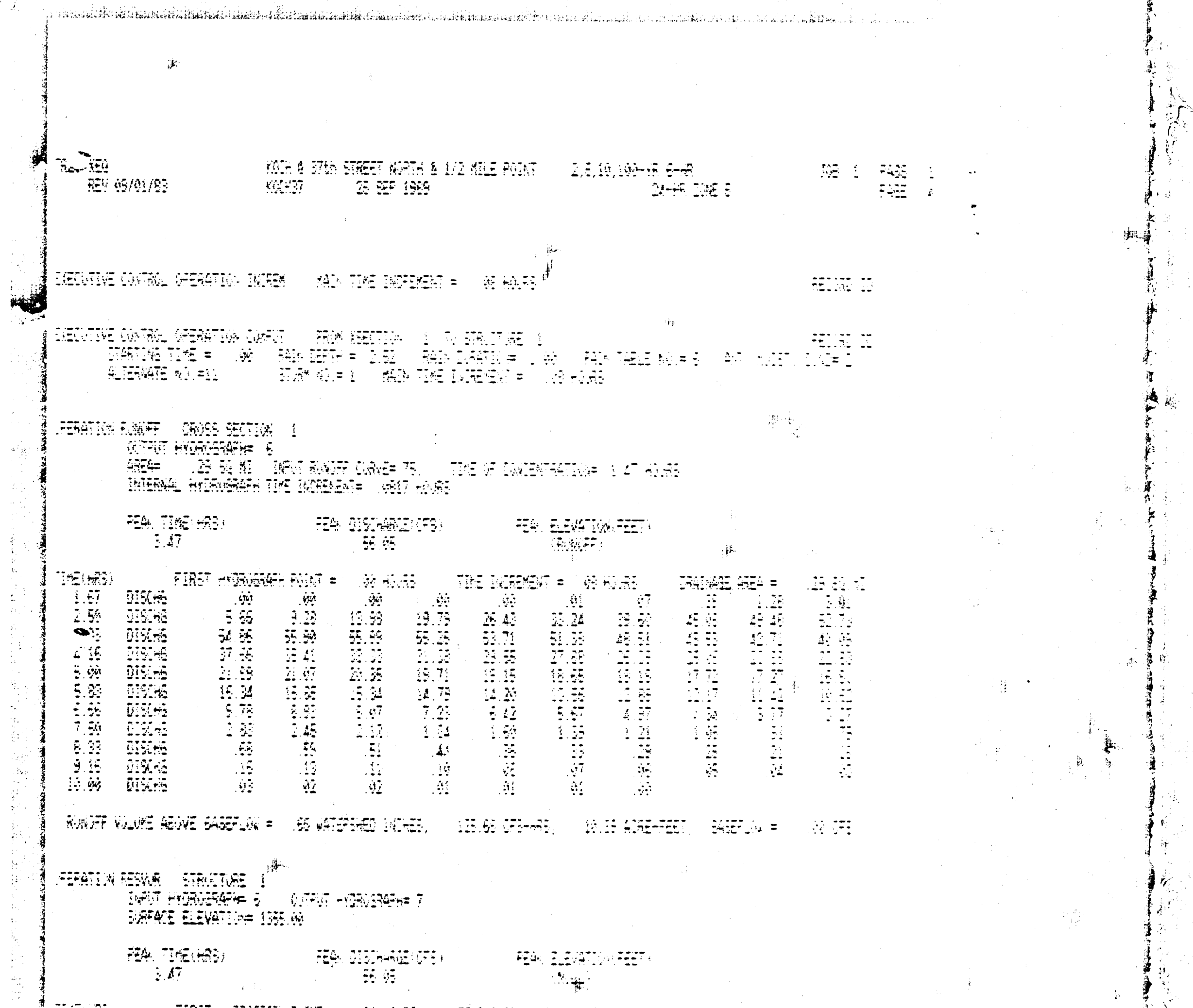
CUMULATIVE RAINFALL TABLE  7        TIME INCREMENT=   .50

9 ENDTBL

STRUCTURE DATA, STRUCTURE NO.  1
          ELEVATION   DISCHARGE   STORAGE
9 ENDTBL

STANDARD CONTROL OPERATION RUNOFF   CROSS SECTION  1
   OUTPUT HYDROGRAPH = 6
   OUTPUT OPTIONS IN EFFECT  PEAK  HYD  VOL  SUM

STANDARD CONTROL OPERATION RESVOR   STRUCTURE  1
   INPUT HYDROGRAPH = 6       OUTPUT HYDROGRAPH = 7
   OUTPUT OPTIONS IN EFFECT  PEAK  HYD  VOL  SUM
```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TR-20                 KOCH @ 37th STREET NORTH & 1/2 MILE POINT    2,5,10,100-YR 6-HR     JOB 1  PASS 1
 REV 09/01/83         KOCH37        25 SEP 1989                    24-HR ZONE 5                  PAGE 4

EXECUTIVE CONTROL OPERATION INCREM      MAIN TIME INCREMENT =   .05 HOURS

EXECUTIVE CONTROL OPERATION COMPUT

OPERATION RUNOFF   CROSS SECTION  1

OPERATION RESVOR   STRUCTURE  1
   INPUT HYDROGRAPH = 6       OUTPUT HYDROGRAPH = 7
```