ADOT PIT DIVERSION CHANNEL
(GILA DRAIN PHASE I)

SURFACE WATER HYDROLOGY REPORT
CITY OF TEMPE PROJECT NUMBER 82006

PREPARED FOR:

CITY OF TEMPE

ENGINEERING DEPARTMENT

PREPARED BY:

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CONSULTING ENGINEERS

APRIL, 1983

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EVANS, KUHN & ASSOCIATES, INC.

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Project Description 1
1.2 Purpose 1
1.3 Study Approach 1

2.0 WATERSHED DESCRIPTION

2.1 Topography 3
2.2 Vegetation 3
2.3 Runoff Characteristics 3

3.0 PRECIPITATION DATA 4

4.0 HYDROLOGY

4.1 Synthesis of Hydrographs 5
4.2 Drainage Areas 5
4.3 Curve Numbers 6
4.4 Time of Concentrations 6
4.5 Retention Ordinances 6

5.0 COMPUTER MODELING OF CULVERTS AND BASINS

5.1 Interstate 10 Culverts 8
5.2 Detention Basins 8
5.3 Retention Basins 9

6.0 PROPOSED DRAINAGE FACILITIES

6.1 Proposed Diversion Channel 10
6.2 Proposed Storm Drain 10
6.3 Proposed Pit Modifications 10

7.0 CONCLUSIONS 12

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TABLE OF CONTENTS

PLATE I	PROJECT MAP	13
PLATE II	DRAINAGE AREA MAP	14
TABLE I	HYDROLOGIC PARAMETERS	15
TABLE II	DETENTION BASIN SUMMARY	17
TABLE III	RETENTION BASIN SUMMARY	18
FIGURE I a,b,c,d	DIVERT HYDROGRAPH EXAMPLE	20
FIGURE II a,b,c,d	DETENTION BASIN EXAMPLE	24
FIGURE III a,b,c,d	RETENTION BASIN EXAMPLE	28
EXHIBIT #1	DRAINAGE AREA SCHEMATIC	
EXHIBIT #2	TR-20 SCHEMATIC	
EXHIBIT #3	CULVERT AND DIVERSION CHANNEL SCHEMATIC	
EXHIBIT #4	STORM DRAIN SCHEMATIC (Not Included)	
APPENDIX I	PRECIPITATION DOCUMENTATION	
APPENDIX II	TR-20 DOCUMENTATION	
APPENDIX III	SOIL DOCUMENTATION	
APPENDIX IV	STORM DRAIN DOCUMENTATION	
APPENDIX V	TR-20 COMPUTER INPUT-OUTPUT	

1.0 INTRODUCTION

1.1 Project Description

This report was prepared by Evans, Kuhn & Associates, Inc., under contract with the City of Tempe, Public Works Department. The project shall be known as the ADOT Pit Diversion Channel (Gila Drain Phase I) and shall consist of two engineering phases. Phase I constitutes this engineering report which documents a detailed surface water runoff analysis for the study area and provides preliminary sizing of the proposed drainage facilities. Phase II includes final engineered plans, specifications and estimates for construction of the Diversion Channel from just north of Warner Road to the Pit and modifications of the Pit.

1.2 Purpose

The purpose of this report is to determine the peak discharges and associated volumes capable of reaching, by means of a proposed diversion channel and storm drain, the existing ADOT Pit (see Plate I). The TR-20 computer program was used to establish the existing peak flow-volume relationships of the watershed. Included in the TR-20 computer model were the affects of the Interstate 10 system and the proposed drainage improvements.

Using the peak rates of discharge for the designated rainfalls, the proposed diversion channel and storm drain system were sized accordingly. This report also serves to document the engineering parameters and methods used in completing this drainage study report.

1.3 Study Approach

Meetings were held with technical representatives from the City of Tempe (COT) and the Flood Control District of Maricopa County (FCDMC) which allowed for the exchange of ideas and discussions of the study approach. Various engineering plans and reports were collected and reviewed from ADOT, COT and the FCDMC. The acquired data was evaluated with respect to being

1.3 Study Approach - Continued

capable of influencing or controlling surface water drainage patterns or parameters. Once the office data was digested, numerous field visits took place in order to become familiar with the watershed.

In order to ascertain the hydraulic operating conditions of the many I-10 culverts, a survey crew was required to gather inlet-outlet and topographic conditions of the culverts. Once these tasks were completed, the analysis and computer coding of the watershed for input to the TR-20 computer program began. Results of computer model were then used to finalize certain design decisions for the proposed diversion channel and storm drain system.

The details of accomplishing these tasks are expanded on and documented in the remaining portions of this report.

2.0 WATERSHED DESCRIPTION

2.1 Topography

The watershed is composed of approximately 5.5 square miles and, under existing conditions, ultimately drains to the Gila River. The topography of the watershed is controlled by South Mountain. South Mountain is a typical rugged desert mountain, sharp in relief and steep sloped with alluvial fans. Most of the watershed lies on a gentle sloping terrain reflective of South Mountians alluvial fans (see Plate II).

2.2 Vegetation

Natural vegetation is sparse with plant species being typical to desert areas where average rainfall is less than ten (10) inches. The natural vegetation is predominantly limited to the following: creosote bushes, various cacti and mesquite trees. Annual grasses generally occur after winter rains.

2.3 Runoff Characteristics

Runoff generally occurs only during and immediately following heavy precipitation. There are no natural water sources that flow continuously. Many of the drainage subareas are controlled by man-made topographical features which tend to collect and concentrate flows. The results of these concentrated flows are the formation of channels that remain as dry washes once flow subsides. For the watershed studied in this report, runoff characteristics are also controlled or influenced by urbanization and the interstate 10 freeway structure. Urbanization of a watershed changes its response to precipitation. The most common effects being, reduced infiltration of rainfall and decreased travel time, which can result in significantly higher peak rates of runoff. The interstate 10 freeway structure is a raised structure which detains the natural flow of runoff and then releases the runoff in a concentrated flow pattern via its culverts.

3.0 PRECIPITATION DATA

All precipitation values were interpreted from the U.S. Department of Commerce's publication entitled "NOAA Atlas 2, Precipitation - Frequency Atlas of the Western United States, Volume VIII - Arizona", dated 1973. The NOAA Atlas gives precipitation values for return intervals of 2, 5, 10, 25, 50 and 100 years for 6 and 24 hour durations. Procedures to determine precipitation values for various return interval storms and rainfall durations based on the NOAA Atlas are outlined in the ADOT Publication entitled "Addendum to Hydrologic Design For Highway Drainage In Arizona" dated April 1975. Appendix I documents the procedures used for this study which produced the following rainfall values:

Return Interval	Duration	Amount Inches
10 year	2 hour	1.75
50 year	6 hour	2.90
100 year	1 hour	2.65
100 year	24 hour	3.85

The Soil Conservation Service (SCS) Type II rainfall distribution was used by the TR-20 computer program in computing all rainfall-runoff relationships. The Type II distribution is a dimensionless rainfall distribution based on U. S. Weather Bureau technical papers. The Type II rainfall distribution is used for the State of Arizona for areas less than 400 square miles, rainfall durations up to 24 hours and return intervals of 1 to 100 years.

4.0 HYDROLOGY

4.1 Synthesis of Hydrographs

The SCS Technical Release No. 20 (TR-20) computer program was used to synthesize peak flows and associated volumes for the following return interval storms and rainfall durations:

Return Interval	Storm Duration	Rainfall
10 year	2 hour	1.75 inches
50 year	6 hour	2.90 inches
100 year	1 hour	2.65 inches
100 year	24 hour	3.85 inches

The TR-20 computer program computes surface water runoff resulting from any inputed synthetic or natural rainstorm. It will take into account conditions having a bearing on runoff and is capable of routing the runoff flow through stream channels and reservoirs. The program can then be used to combine the routed hydrograph with those from other tributaries. A more detailed TR-20 computer program description is given in Appendix II. The results of the TR-20 computer program are given in Appendix V.

4.2 Drainage Areas

The drainage boundaries for 47 areas were determined by the following data or methods:

1. USGS Quadrangle Maps - Lone Butte and Guadalupe
2. ADOT As-Built drawings for I-10.
3. Tempe Improvement District 140 and 147 As-Builts
4. Tempe, Phoenix and Maricopa County Zoning Maps
5. Aerial Photos
6. Drainage Report for the Koll/Elliot Subdivision prepared by Evans, Kuhn & Associates.
7. Various Drainage Reports for Awautukee prepared by WBC/SP Group.
8. Numerous field investigations.

Drainage areas were determind by planimetering 2000 scale USGS Quadrangle Maps. Table I lists the drainage areas and their associated sizes which were modeled by the TR-20 computer program. Exhibit #I - Drainage Area Schematic displays the physical relationship of the computer modeled subareas on the watershed.

4.3 Curve Numbers

Weighted curve numbers for each drainage area were based on combinations of the following factors: terrain, slopes, soil type, development and zoning. Generally the terrain, slope and soil types controlled the drainage area extending into South Mountain; soil type and type of development controlled the drainage areas between South Mountain and I-10, and the area north of Elliot Road and east of I-10; the soil type and zoning controlled the remaining area which is that portion east of I-10 and south of Elliot Road. Once these factors were identified, the actual weighted curve numbers were generated by using the Lone Butte and Guadalupe Quadrangle Maps for terrain and slope considerations, the Soils Associations Map of Maricopa County for soil types (see Appendix III) and the SCS Technical Release No. 55 "Urban Hydrology for Small Watersheds" for development and zoning factors. Table I lists the drainage areas and their associated curve numbers which were modeled by the TR-20 computer program.

4.4 Time of Concentrations

The time of concentration is the time it takes for runoff to travel from the hydraulically most distant part of the watershed to the point of reference. Generally for this study, the time of concentration was computed by estimating the travel time as a form of overland flow, channel flow, or storm drain flow depending on the particular drainage area. The time of concentrations and their associated drainage areas, which were modeled by the TR-20 computer program, are listed in Table I.

4.5 Retention Ordinances

There are three jurisdictional agencies within the watershed and all three have different ordinances establishing procedures for addressing storm water runoff (See Plate I). The agencies and their respective criteria are as follows:

1. City of Phoenix - Retention of 10 year - 2 hour rainfall (1.6 inches).
2. Maricopa County - Detention of 100 year - 2 hour post-development runoff
3. City of Tempe - Retention of 100 year - 1 hour rainfall (2.4 inches)

4.5 Retention Ordinances - Continued

Personnel from the City of Phoenix and Maricopa County Flood Control District have indicated that, in practice, there exists considerable difficulty in enforcing onsite retention storage regulations. Generally, problems have been encountered on residential lots because owners have filled in the designated retention area. The problemm usually does not occur with industrial and commercial areas or large subdivisions which provide a large retention basin area.

The Ahwautukee development occupies the majority of County lands within the drainage area. Portions of the Ahwautukee development have met their retention requirements by use of the onsite golf course lake system. The lake system is also used to provide irrigation to the golf course. A March 11, 1983 field investigation by this office found numerous fish along 56th Street approximately 1/2 mile south of Elliot Road. Heavy rainfall was reported in this area the previous week and evidence of storm water runoff was found. A logical runoff flow pattern was investigated which led to the Ahwautukee lakes. The fish are believed to have originated at the Ahwautukee lakes, thus confirming its negligible effect in heavy rainfall events.

The drainage area within the City of Phoenix is composed mostly of existing or land zoned for single family residential use. Since onsite retention cannot be assured for single family residential, the TR-20 computer model did not account for retention basins in this area.

The decision was made not to computer model the City of Phoenix's or Maricopa County's retention requirements because of the unknown factors associated with Phoenix's residential areas and the lake system located within the County. This decision allows for a conservative study and conservative design approach for the diversion channel.

City of Tempe representatives indicated that their 100 year - 1 hour retention requirement in this area is strictly enforced. The computer model was set up to account for retention basins based on existing development or zoning.

5.0 COMPUTER MODELING OF CULVERTS AND BASINS

5.1 Interstate 10 Culverts

The Interstate 10 freeway lies normal to the watershed's runoff patterns and dissects the entire watershed (see Plate II). The I- 10 freeway is elevated within the watershed and should runoff occur, it is intercepted by the elevated freeway. Once the runoff is intercepted, runoff is released on the downstream side as concentrated flows via the I-10 culverts or diverted to the south along the upstream side of I-10 or combinations of both (see Exhibit #3). In order to ascertain the hydraulic parameters of the I-10 culverts, ADOT as-built drawings were obtained and field surveys were completed by this office. The field surveys enabled the capacity of the culverts to be determined before a weir overflow condition would occur. Culvert capacities were determined by use of the U.S. Department of Commerce, Bureau of Public Roads publication entitled "Hydraulic Engineering Circular No. 5 - Hydraulic Charts for the Selection of Highway Culverts." All weir calculations were based on field survey data. Once both culvert and weir hydraulic calculations were completed, they were inputed and modeled by the TR-20 computer program by use of the DIVERT command. Figure I gives a detailed example of how the DIVERT command works for a particular location along Interstate 10.

5.2 Detention Basins

Detention basins were computer modeled by the reservoir routing command - RESVOR. The stage-storage-discharge relationship of each detention basin was determined and modeled by the TR-20 computer program (see Exhibit #2). Detention basins differ from retention basins, in that a detention basin eventually releases all inflow, whereas a retention basin captures or retains a certain amount of inflow. Major detention basins were computer modeled at the following locations:

- northwest corner of Elliot Road and I-10
- northwest corner of Warner Road and I-10
- 4 basins north of Elliot Road, east and adjacent to I-10 (COT's I.D. #140)

5.2 Detention Basins - Continued

Table II lists the results of the TR-20 computer model for the peak inflow hydrograph and peak outflow hydrograph modeling the above referenced basins. Figure II gives a detailed example of the RESVOR command when modeling a detention basin.

5.3 Retention Basins

As with the detention basins, the retention basins were computer modeled by the reservoir routing command - RESVOR. Retention basins were modeled only for the drainage areas within the City of Tempe to retain 80% of the volume of runoff associated with the 100 year-1 hour rainfall event of 2.40 inches, assuming fully developed conditions. Once the volume capacity of the basin is reached, the stage-storage-discharge relationship controls the outgoing hydrograph. Table III lists the results of the TR-20 computer model for the peak inflow and outflow hydrograph modeling each basin. Figure III gives a detailed example of the RESVOR command when modeling a retention basin.

6.0 Proposed Drainage Facilities

6.1 Proposed Diversion Channel

The watershed was computer modeled as if the proposed diversion channel existed. The diversion channel lies east and adjacent to I-10, and starts south of Elliot Road and ends at the existing ADOT pit as shown on Exhibit #3. When constructed, the diversion channel will convey surface water runoff directly to the ADOT pit. Peak discharges from the results of the TR-20 computer program were used to determine preliminary channel sizes and construction alternatives (see Exhibit #3). A cost estimate for three channel alternatives was prepared under seperate cover and submitted concurrently with this report.

6.2 Proposed Storm Drain

The watershed was computer modeled as if the proposed storm drain system existed. The storm drain connects to an existing storm drain south of Elliot Road in 56th Street and continues south in 56th Street until it is directly east of the pit whereas the storm drain turns and continues on to enter the pit, as shown on Exhibit #4. The design of the storm drain extension was in accordance with City of Tempe requirements to drain paved areas within the major street right of way for a 100 year rainfall event. See Appendix IV for design documentation. A cost estimate was prepared under seperate cover for the storm drain extension and submitted concurrently with this report.

6.3 Proposed Pit Modifications

A borrow pit was excavated on the east side of I-10 south of Warner Road during construction of Interstate 10 (see Plate I). The exact dimensions and capacity of the pit will be determined in the Phase II - Design portion of this contract. At this time the pit is thought to have the capacity to hold the runoff volume anticipated from the TR-20 computer modeled watershed from the four modeled rainfall events. The projected runoff volumes are as follows:

6.3 Proposed Pit Modifications- Continued

Return Interval	Rainfall Duration	Runoff Volume
10 year	2 hour	104 Acre Feet
50 year	6 hour	305 Acre Feet
100 year	1 hour	252 Acre Feet
100 year	24 hour	505 Acre Feet

The pit will need to be modified in order to react as designed to the inflow of storm water. It is expected that a concrete drop structure with an energy dissipator will be required for the diversion channel. The storm drain system is expected to enter the pit by its own pipe drop structure. The design of side slopes will be coordinated with the geotechnical consultant in order to allow for stability under empty and full conditions. Means for disposing of the captured storm water runoff will be addressed in detail in Phase II. At this time disposal by percolation via drywells and/or a pump system discharging into the existing Salt River Water Users Association's Highland Canal are being considered.

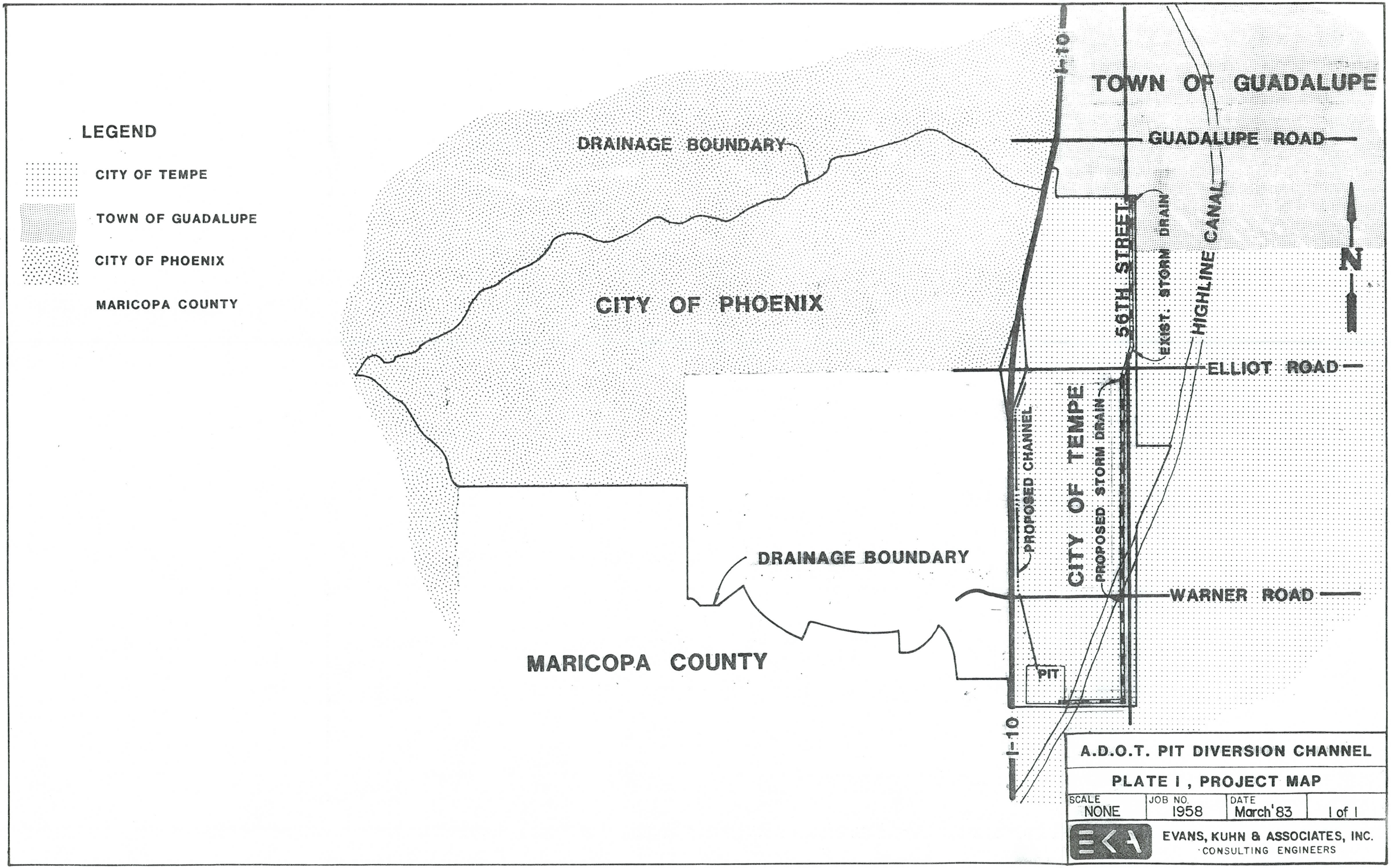
7.0 Conclusions

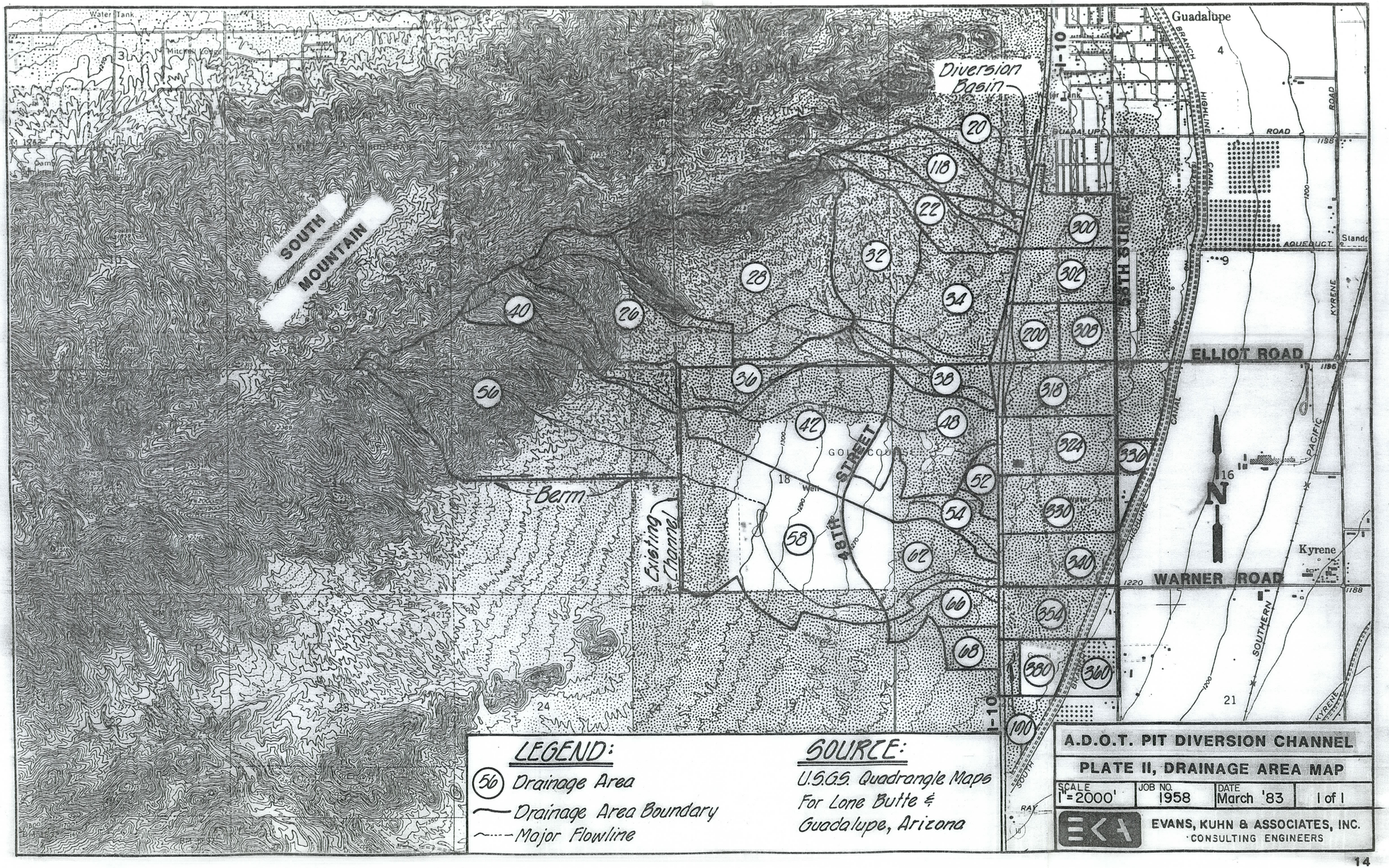
This surface water hydrology report establishes the peak discharge and volumes generated by the watershed for the following return interval and rainfall duration events:

Return Interval	Rainfall Duration
10 year	2 hour
50 year	6 hour
100 year	1 hour
100 year	24 hour

The peak flows and runoff volumes were produced by modeling the many subareas within the watershed using the TR-20 computer program. The existing Interstate 10 freeway was computer modeled along with existing or proposed detention and retention basins as documented in this report. Peak discharges from the four (4) rainfall runoff events were generated for the proposed diversion channel, which was computer modeled to intercept and convey flow to the existing pit. Peak rates of discharge were also computed for the proposed storm drain system in 56th Street which also conveys flow to the pit. As documented in this report the storm drain system was designed to convey the peak discharge associated with the 100 year rainfall runoff event. The 100 year-24 hour storm event was determined to be capable of 505 acre feet which was the maximum volume of runoff produced by the four (4) computer modeled return frequency storms. It is estimated that the existing pit volume exceeds the 505 acre feet.

It is not within the scope of this report (Phase I of City of Tempe Project No. 82006) to provide engineered plans to modify the ADOT pit, construct the diversion channel and drop structure or construct the storm drain extension. No problems were identified that would prevent the concepts presented in this report from becoming a reality in the near future. The preliminary design and ideas presented in this report are considered adequate enough to allow for a controlled approach in finalizing drainage solutions.


LEGEND
CITY OF TEMPE
TOWN OF GUADALUPE
CITY OF PHOENIX
MARICOPA COUNTY
DRAINAGE BOUNDARY
CITY OF PHOENIX
TOWN OF GUADALUPE
GUADALUPE ROAD
I-10
56TH STREET
EXIST. STORM DRAIN
HIGHLINE CANAL
N
ELLIOT ROAD
PROPOSED CHANNEL
CITY OF TEMPE
PROPOSED STORM DRAIN
DRAINAGE BOUNDARY
WARNER ROAD
PIT
MARICOPA COUNTY
I-10
A.D.O.T. PIT DIVERSION CHANNEL
PLATE I , PROJECT MAP
SCALE NONE
JOB NO. 1958
DATE March'83
I of I
EVANS, KUHN & ASSOCIATES, INC.
CONSULTING ENGINEERS


SOUTH MOUNTAIN
Diversion Basin
Berm
Existing Channel
48TH STREET
55TH STREET
ELLIOT ROAD
WARNER ROAD
I-10
Guadalupe
Kyrene
GOLF COURSE
HIGHLINE CANAL
SOUTHERN PACIFIC
KYRENE
20
118
22
300
32
28
302
34
40
26
200
303
36
38
318
56
42
48
324
336
52
54
330
58
62
340
66
354
68
380
360
100
LEGEND:
56 Drainage Area
Drainage Area Boundary
Major Flowline
SOURCE:
U.S.G.S. Quadrangle Maps
For Lone Butte &
Guadalupe, Arizona
A.D.O.T. PIT DIVERSION CHANNEL
PLATE II, DRAINAGE AREA MAP
SCALE 1"=2000'
JOB NO. 1958
DATE March '83
1 of 1
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CONSULTING ENGINEERS

TABLE I - HYDROLOGIC PARAMETERS

Drainage Area I.D.	Area (Sq.Mi.)	Weighted Curve Number	Time of Concentration (Hrs.)
116	0.030	82	0.57
118	0.126	87	0.42
20	0.024	90	0.22
22	0.138	87	0.42
128	0.009	82	0.15
132	0.011	82	0.15
138	0.015	82	0.28
26	0.282	90	0.28
28	0.537	89	0.47
32	0.220	85	0.38
34	0.220	87	0.44
200	0.061	90	0.69
208	0.004	98	0.17
146	0.013	82	0.31
36	0.137	75	0.56
38	0.082	88	0.33
150	0.019	82	0.28
40	0.192	90	0.24
42	0.316	75	0.53
48	0.205	74	0.65
156	0.009	82	0.22
52	0.034	80	0.18
162	0.019	82	0.47
54	0.105	75	0.45
168	0.009	82	0.25
56	0.673	88	0.34
58	0.517	72	0.78
62	0.189	74	0.59
174	0.014	82	0.18
66	0.080	79	0.52
180	0.019	82	0.11
68	0.080	82	0.30
190	0.029	82	0.32
300	0.089	90	0.51
302	0.106	90	0.56
308	0.041	90	0.30
312	0.016	98	0.38
318	0.120	90	0.59
324	0.120	90	0.59
330	0.120	90	0.59

TABLE I - HYDROLOGIC PARAMETERS (cont.)

Drainage Area I.D.	Area (Sq.Mi.)	Weighted Curve Number	Time of Concentration (Hrs.)
336	0.034	90	0.41
340	0.120	90	0.59
344	0.023	98	0.46
354	0.115	90	0.58
360	0.061	90	0.30
364	0.008	98	0.31
380	0.057	74	0.16

TABLE II - DETENTION BASIN SUMMARY

RESVOR I.D.NO.	STORM	PEAK INFLOW (cfs)	PEAK OUTFLOW (cfs)	PEAK ELEV.
1	10 yr-2 hr	36.6	20.6	66.28
	50 yr-6 hr	130.7	40.5	68.47
	100 yr-1 hr	269.4	53.2	70.28
	100 yr-24 hr	215.5	53.4	70.31
2	10 yr-2 hr	46.4	35.3	65.74
	50 yr-6 hr	130.2	70.0	68.63
	100 yr-1 hr	179.4	80.2	69.90
	100 yr-24 hr	170.0	84.5	70.56
3	10 yr-2 hr	36.2	31.0	61.82
	50 yr-6 hr	71.8	59.2	65.87
	100 yr-1 hr	80.1	56.3	65.38
	100 yr-24 hr	86.0	84.3	66.04
4	10 yr-2 hr	31.0	27.2	57.61
	50 yr-6 hr	60.8	54.2	59.62
	100 yr-1 hr	136.0	59.7	60.14
	100 yr-24 hr	123.0	68.2	60.85
5	10 yr-2 hr	286.4	253.6	64.02
	50 yr-6 hr	911.9	606.0	66.37
	100 yr-1 hr	1865.2	1076.4	68.58
	100 yr-24 hr	1442.0	953.7	67.98
21	10 yr-2 hr	176.6	176.2	36.47
	50 yr-6 hr	611.3	607.9	38.94
	100 yr-1 hr	1211.4	1210.6	40.80
	100 yr-24 hr	1031.5	1026.4	40.39

TABLE III - RETENTION BASIN SUMMARY

RESVOR I.D.NO.	STORM	PEAK INFLOW (cfs)	PEAK OUTFLOW (cfs)	PEAK ELEV.
7	10 yr-2 hr	23.6	0.0	0.0 *
	50 yr-6 hr	73.0	6.7	3.01
	100 yr-1 hr	149.2	0.0	0.0
	100 yr-24 hr	111.7	13.7	3.03
8	10 yr-2 hr	27.4	0.0	0.0 *
	50 yr-6 hr	83.4	6.6	3.01
	100 yr-1 hr	167.1	0.0	0.0 *
	100 yr-24 hr	129.8	15.8	3.03
9	10 yr-2 hr	12.1	0.0	0.0 *
	50 yr-6 hr	39.6	4.9	3.01
	100 yr-1 hr	95.6	0.0	0.0 *
	100 yr-24 hr	61.3	7.8	3.02
10	10 yr-2 hr	14.9	0.0	0.0 *
	50 yr-6 hr	43.31	4.7	3.01
	100 yr-1 hr	83.1	0.0	0.0 *
	100 yr-24 hr	66.2	10.9	3.02
11	10 yr-2 hr	30.6	0.0	0.0 *
	50 yr-6 hr	92.5	6.0	3.01
	100 yr-1 hr	184.7	0.0	0.0 *
	100 yr-24 hr	140.2	16.7	3.04
12	10 yr-2 hr	30.6	0.0	0.0 *
	50 yr-6 hr	92.5	6.0	3.01
	100 yr-1 hr	184.7	0.0	0.0 *
	100 yr-24 hr	140.2	16.7	3.04
13	10 yr-2 hr	30.6	0.0	0.0 *
	50 yr-6 hr	92.5	6.0	3.01
	100 yr-1 hr	184.7	0.0	0.0 *
	100 yr-24 hr	140.2	16.7	3.04
14	10 yr-2 hr	9.4	0.0	0.0 *
	50 yr-6 hr	30.4	3.6	3.01
	100 yr-1 hr	65.6	0.0	0.0 *
	100 yr-24 hr	46.9	6.4	3.01

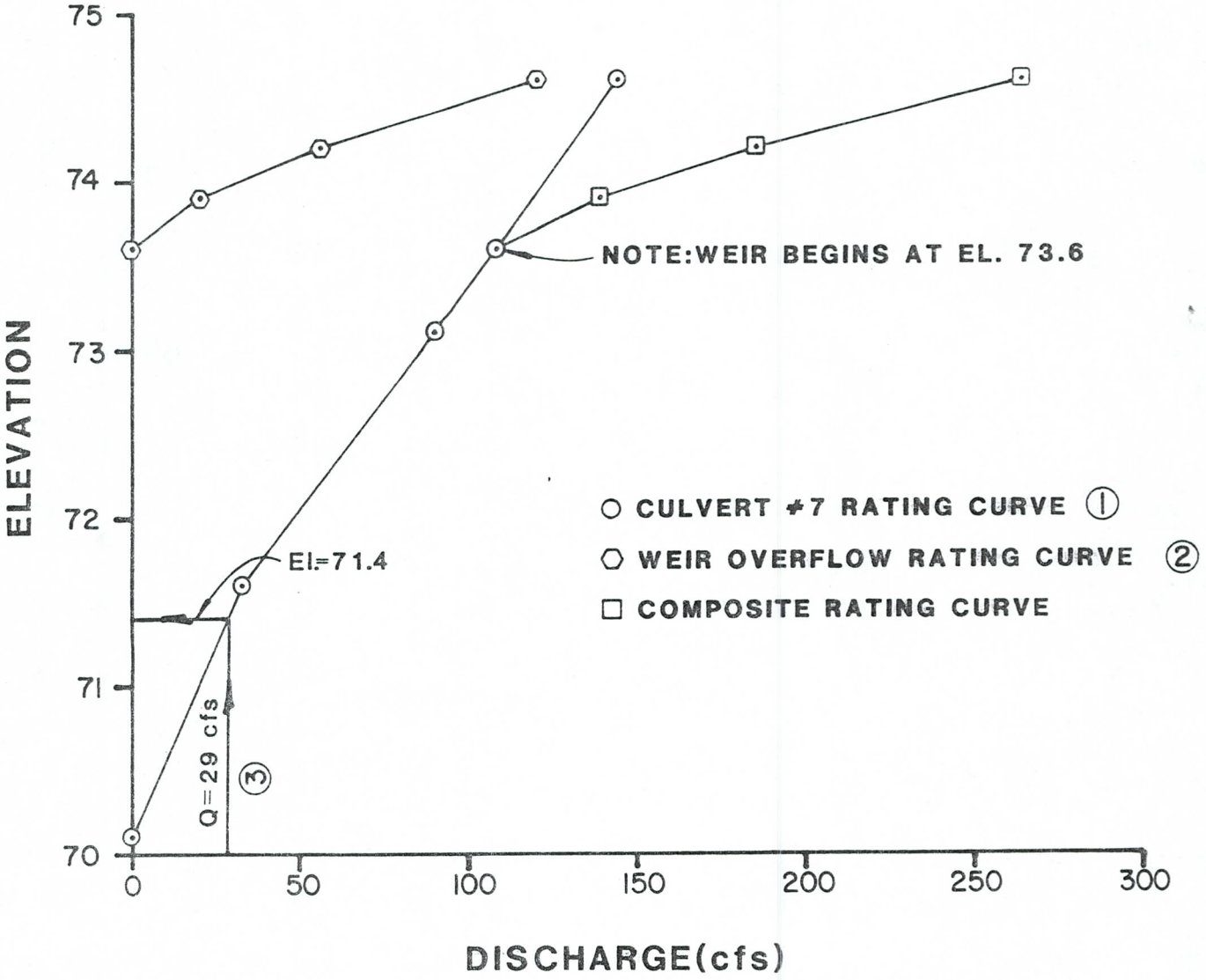
TABLE III - RETENTION BASIN SUMMARY - (cont)

RESVOR I.D.NO.	STORM	PEAK INFLOW (cfs)	PEAK OUTFLOW (cfs)	PEAK ELEV.
15	10 yr-2 hr	30.6	0.0	0.0 *
	10 yr-6 hr	92.5	6.0	3.01
	100 yr-1 hr	184.7	0.0	0.0 *
	100 yr-24 hr	140.2	16.7	3.04
16	10 yr-2 hr	29.5	0.0	0.0 *
	10 yr-6 hr	89.3	6.3	3.01
	100 yr-1 hr	180.0	0.0	0.0 *
	100 yr-24 hr	135.8	16.5	3.03
17	10 yr-2 hr	18.0	0.0	0.0 *
	50 yr-6 hr	58.9	5.9	3.01
	100 yr-1 hr	142.2	0.0	0.0 *
	100 yr-24 hr	91.2	9.9	3.02

* TR-20 COMPUTES PEAK ELEVATION @ PEAK DISCHARGE; SINCE NO OUTFLOW OCCURS, ELEVATION IS PRINTED OUT AS ZERO.

FIGURE Ia - DIVERT HYDROGRAPH EXAMPLE

10 YR. - 2 HR. RAINFALL



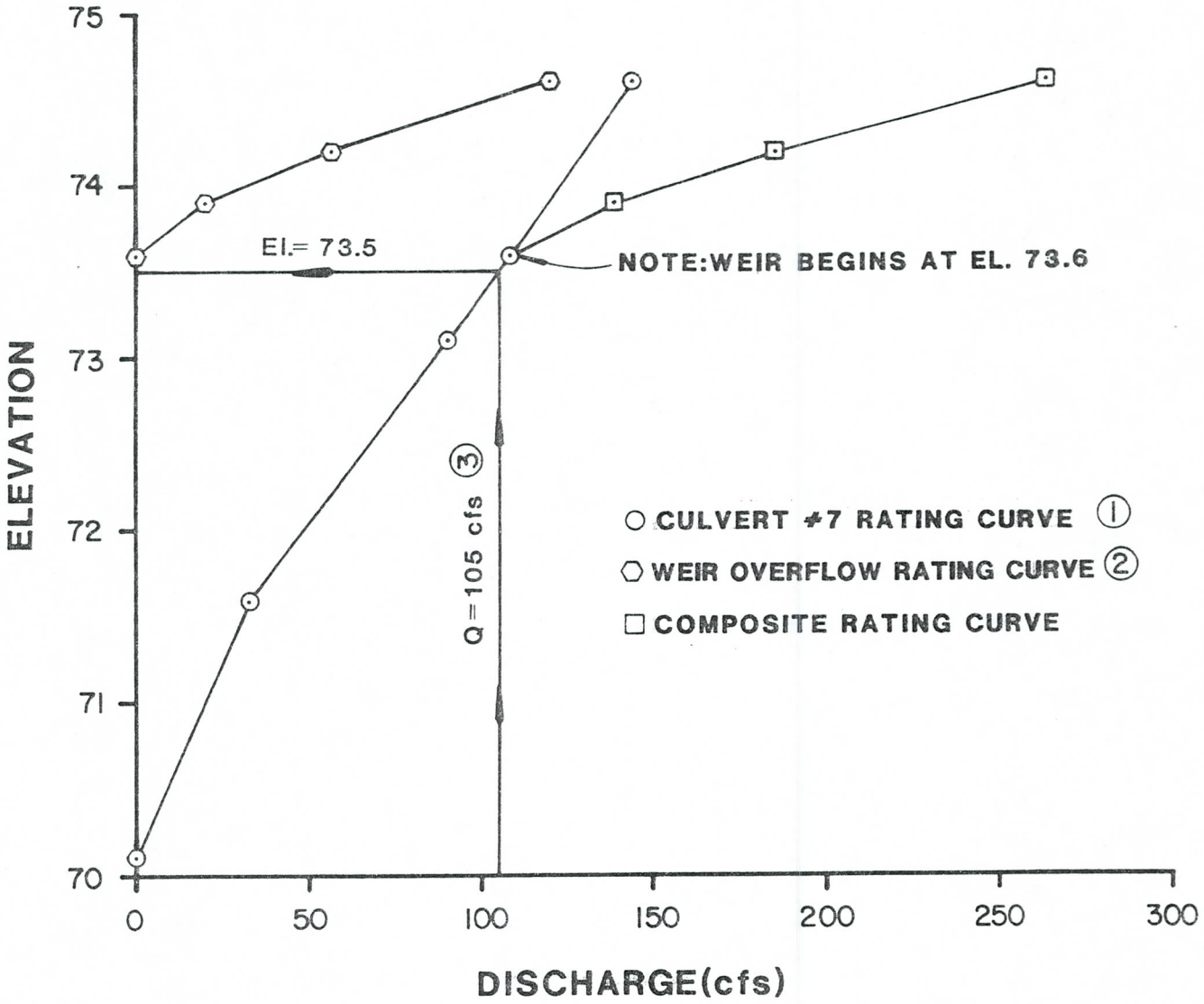
① XSECTN 87 IN TR-20 COMPUTER MODEL

② XSECTN 89 IN TR-20 COMPUTER MODEL

③ PEAK INFLOW FOR ADDHYD 221 IN TR-20 COMPUTER MODEL

FIGURE Ib - DIVERT HYDROGRAPH EXAMPLE

50 YR. - 6 HR. RAINFALL



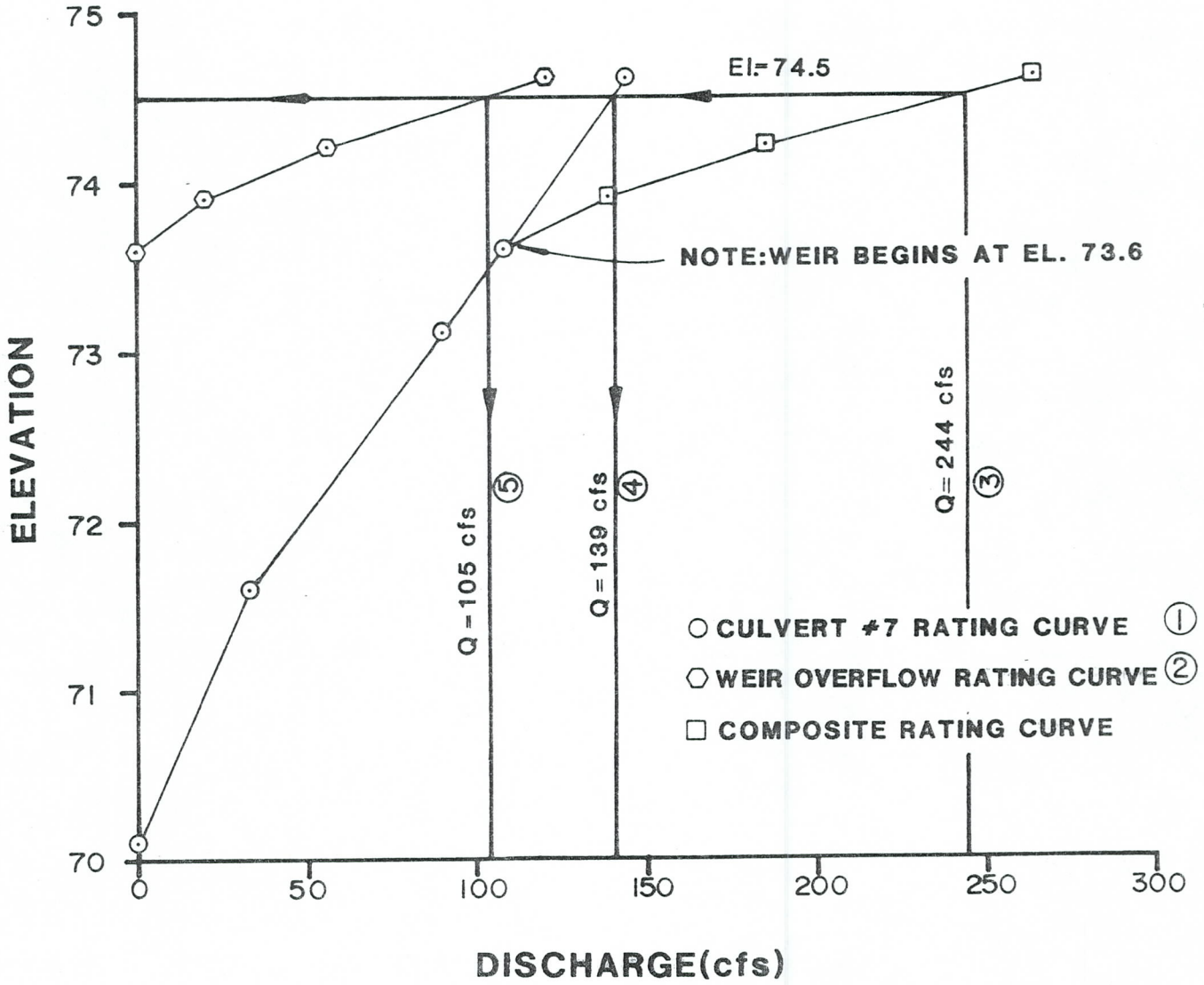
① XSECTN 87 IN TR-20 COMPUTER MODEL

② XSECTN 89 IN TR-20 COMPUTER MODEL

③ PEAK INFLOW FOR ADDHYD 221 IN TR-20 COMPUTER MODEL

FIGURE Ic - DIVERT HYDROGRAPH EXAMPLE

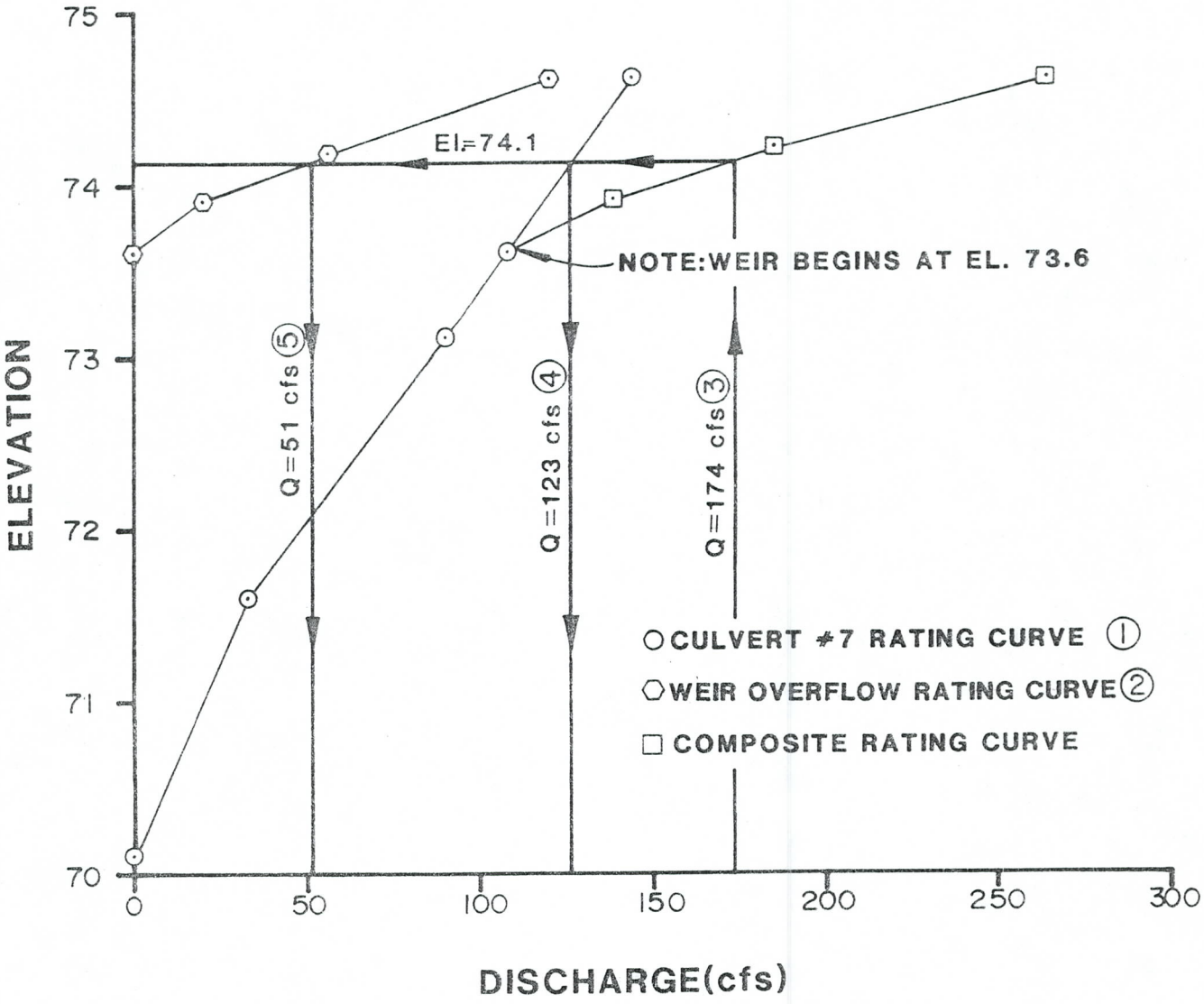
100 YR. - 1 HR. RAINFALL



1. XSECTN 87 IN TR-20 COMPUTER MODEL
2. XSECTN 89 IN TR-20 COMPUTER MODEL
3. PEAK INFLOW FOR ADDHYD 221 IN TR-20 COMPUTER MODEL
4. PEAK OUTFLOW FOR XSECTN 87
5. PEAK OUTFLOW FOR XSECTN 89

FIGURE Id - DIVERT HYDROGRAPH EXAMPLE

100 YR. - 24 HR. RAINFALL



① XSECTN 87 IN TR-20 COMPUTER MODEL

② XSECTN 89 IN TR-20 COMPUTER MODEL

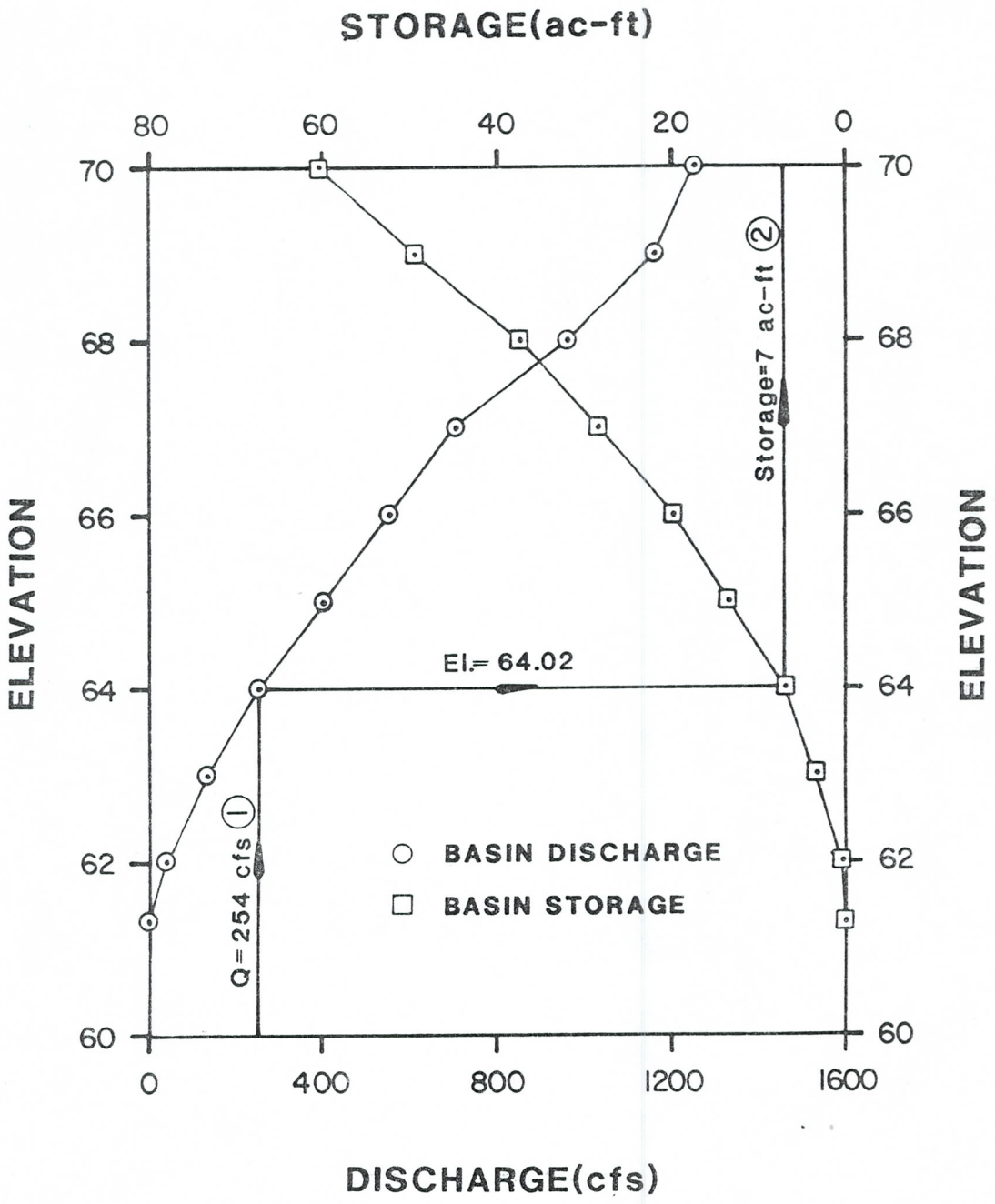
③ PEAK INFLOW FOR ADDHYD 221 IN TR-20 COMPUTER MODEL

④ PEAK OUTFLOW FOR XSECTN 87

⑤ PEAK OUTFLOW FOR XSECTN 89

FIGURE IIa - DETENTION BASIN EXAMPLE

10 YR. - 2 HR. RAINFALL

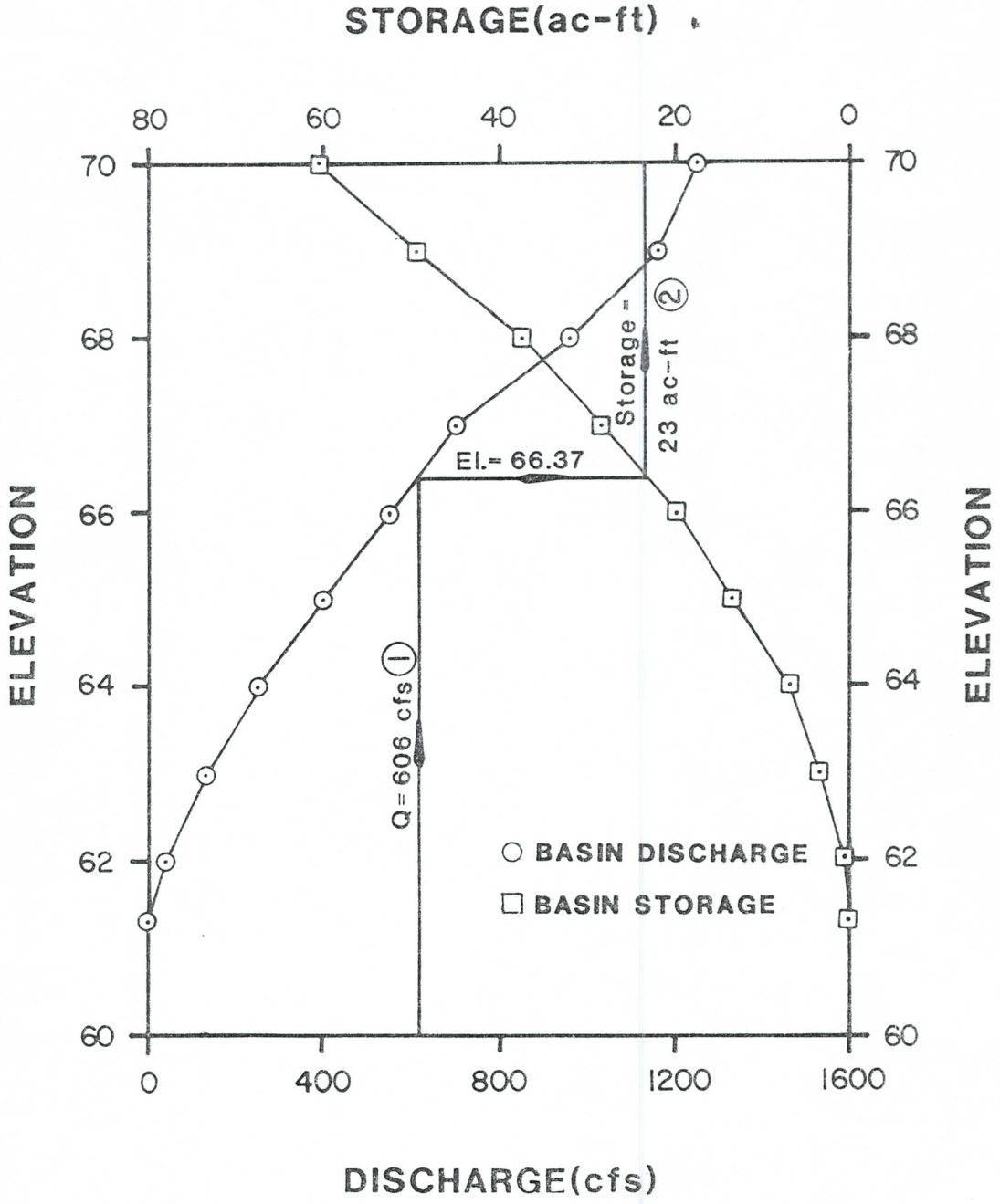


① PEAK OUTFLOW FOR RESVOR 5 IN TR-20 COMPUTER MODEL

② BASIN STORAGE FOR RESVOR 5 IN TR-20 COMPUTER MODEL

FIGURE IIb - DETENTION BASIN EXAMPLE

50 YR. - 6 HR. RAINFALL

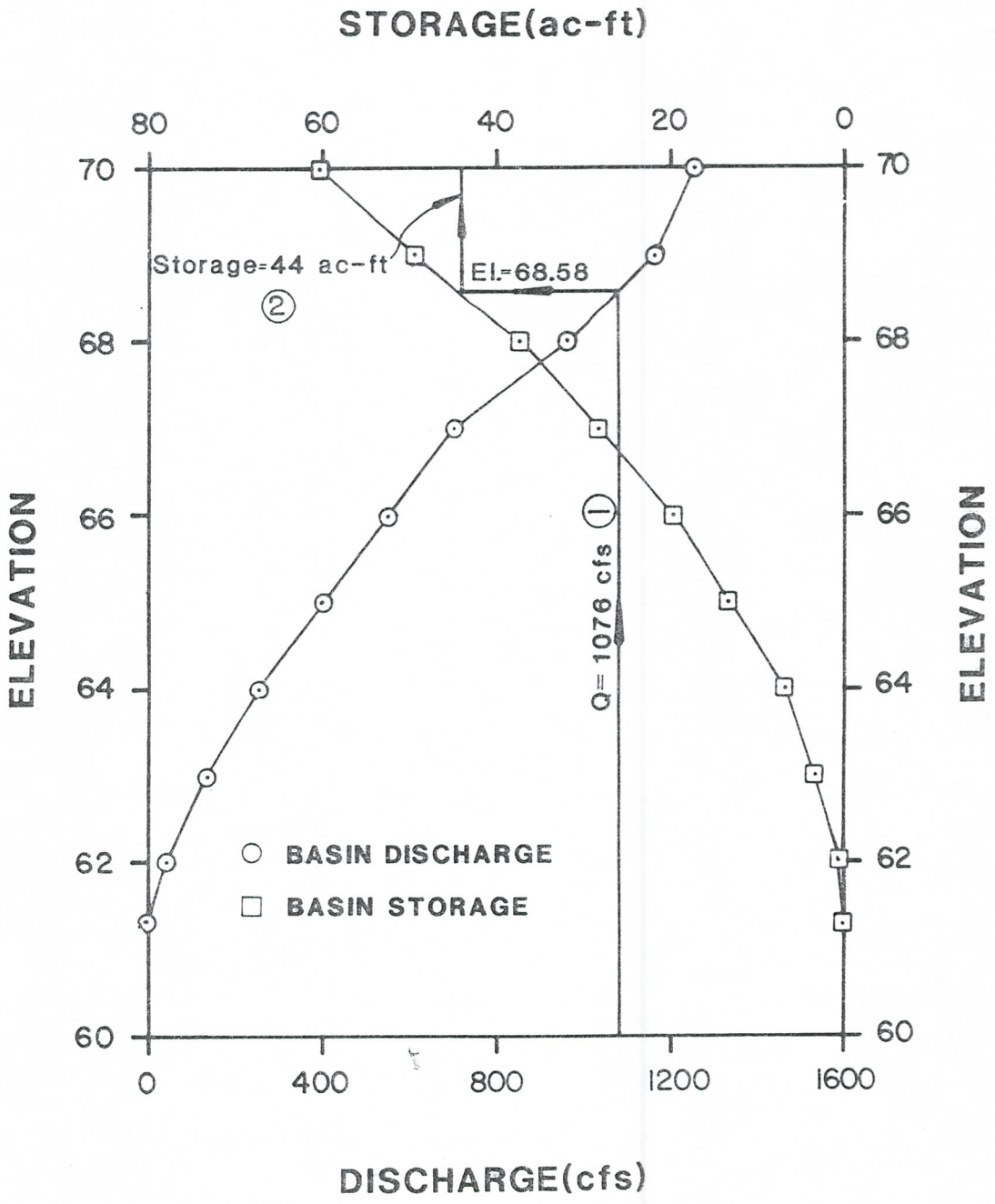


① PEAK OUTFLOW FOR RESVOR 5 IN TR-20 COMPUTER MODEL

② BASIN STORAGE FOR RESVOR 5 IN TR-20 COMPUTER MODEL

FIGURE IIc - DETENTION BASIN EXAMPLE

100 YR. - 1 HR. RAINFALL

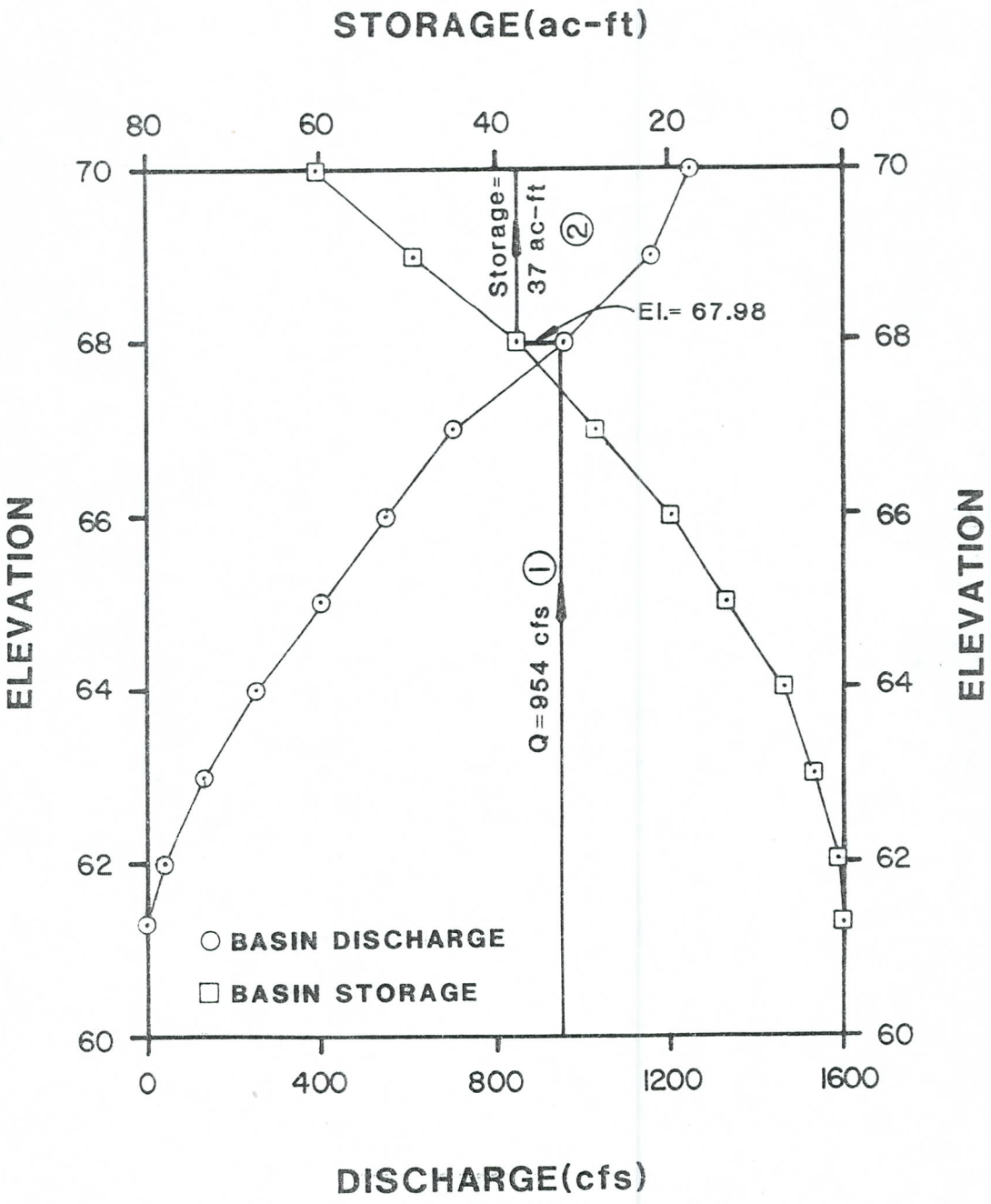


① PEAK OUTFLOW FOR RESVOR 5 IN TR-20 COMPUTER MODEL

② BASIN STORAGE FOR RESVOR 5 IN TR-20 COMPUTER MODEL

FIGURE IId - DETENTION BASIN EXAMPLE

100 YR. - 24 HR. RAINFALL

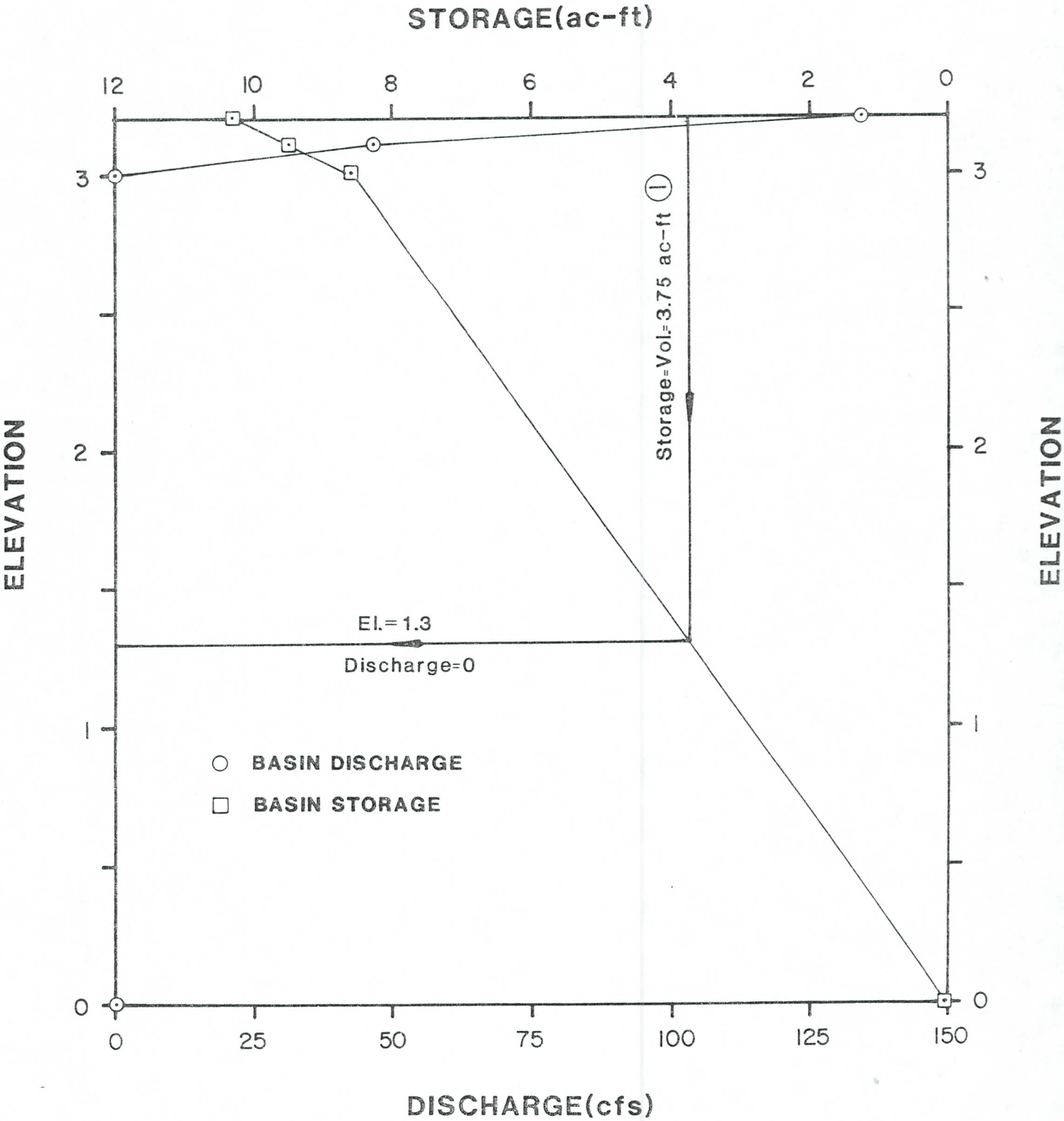


① PEAK OUTFLOW FOR RESVOR 5 IN TR-20 COMPUTER MODEL

② BASIN STORAGE FOR RESVOR 5 IN TR-20 COMPUTER MODEL

FIGURE IIIa - RETENTION BASIN EXAMPLE

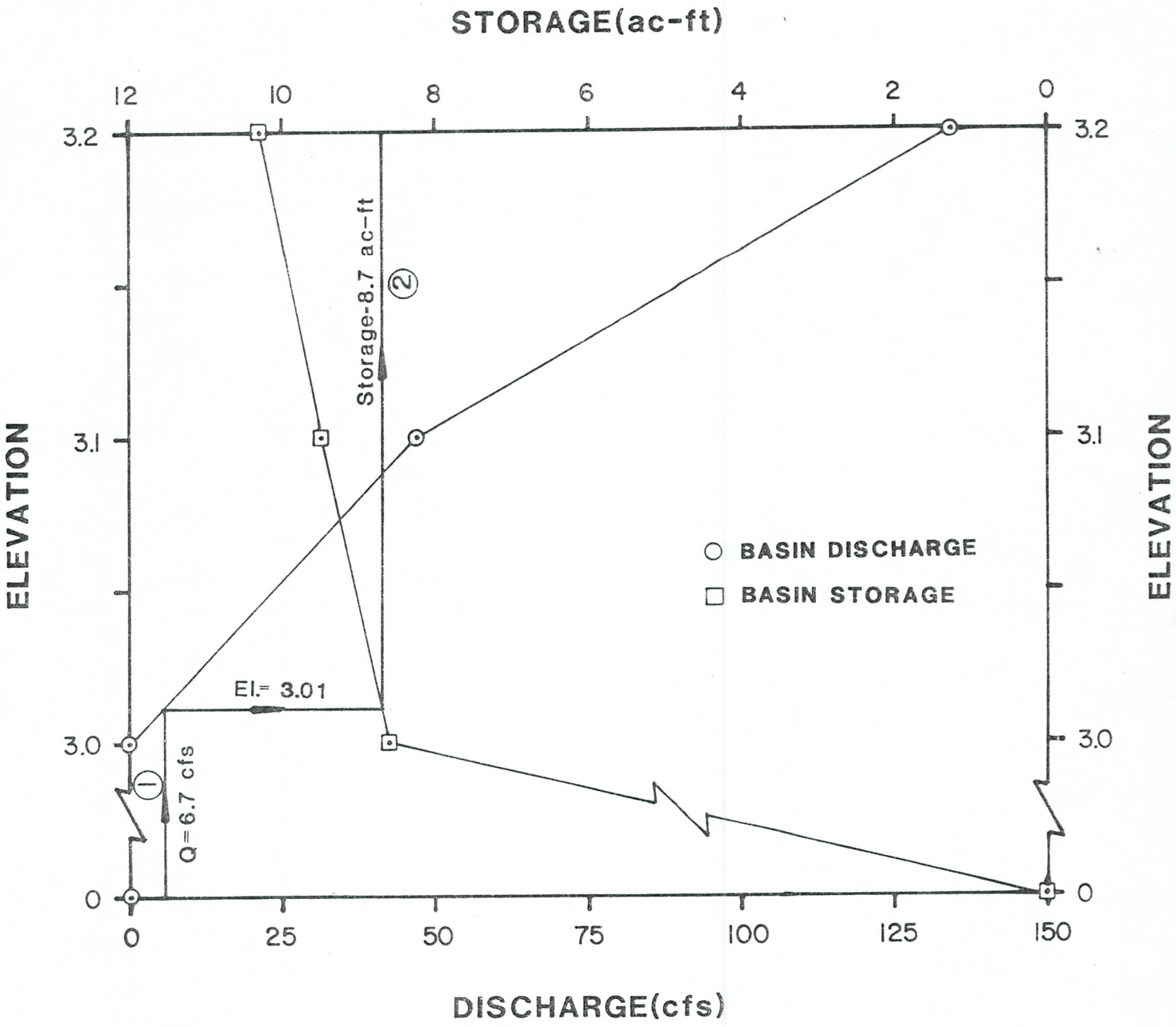
10 YR. - 2 HR. RAINFALL



(1) BASIN STORAGE EQUALS STORM VOLUME FOR RESVOR 7 IN TR-20 COMPUTER MODEL

FIGURE IIIb - RETENTION BASIN EXAMPLE

50 YR. - 6 HR. RAINFALL

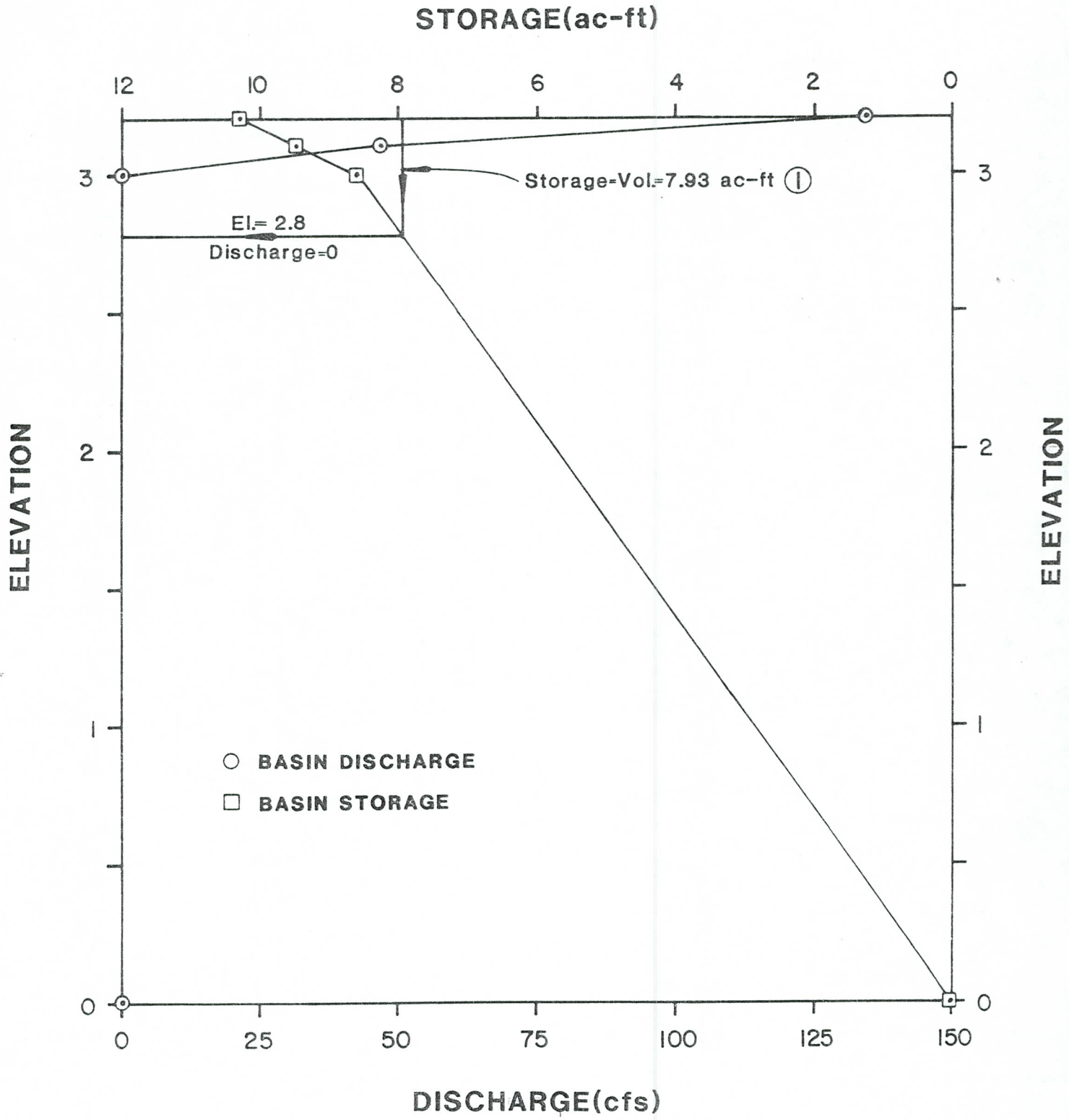


① PEAK OUTFLOW FOR RESVOR 7 IN TR-20 COMPUTER MODEL

② BASIN STORAGE FOR RESVOR 7 IN TR-20 COMPUTER MODEL

FIGURE IIIc - RETENTION BASIN EXAMPLE

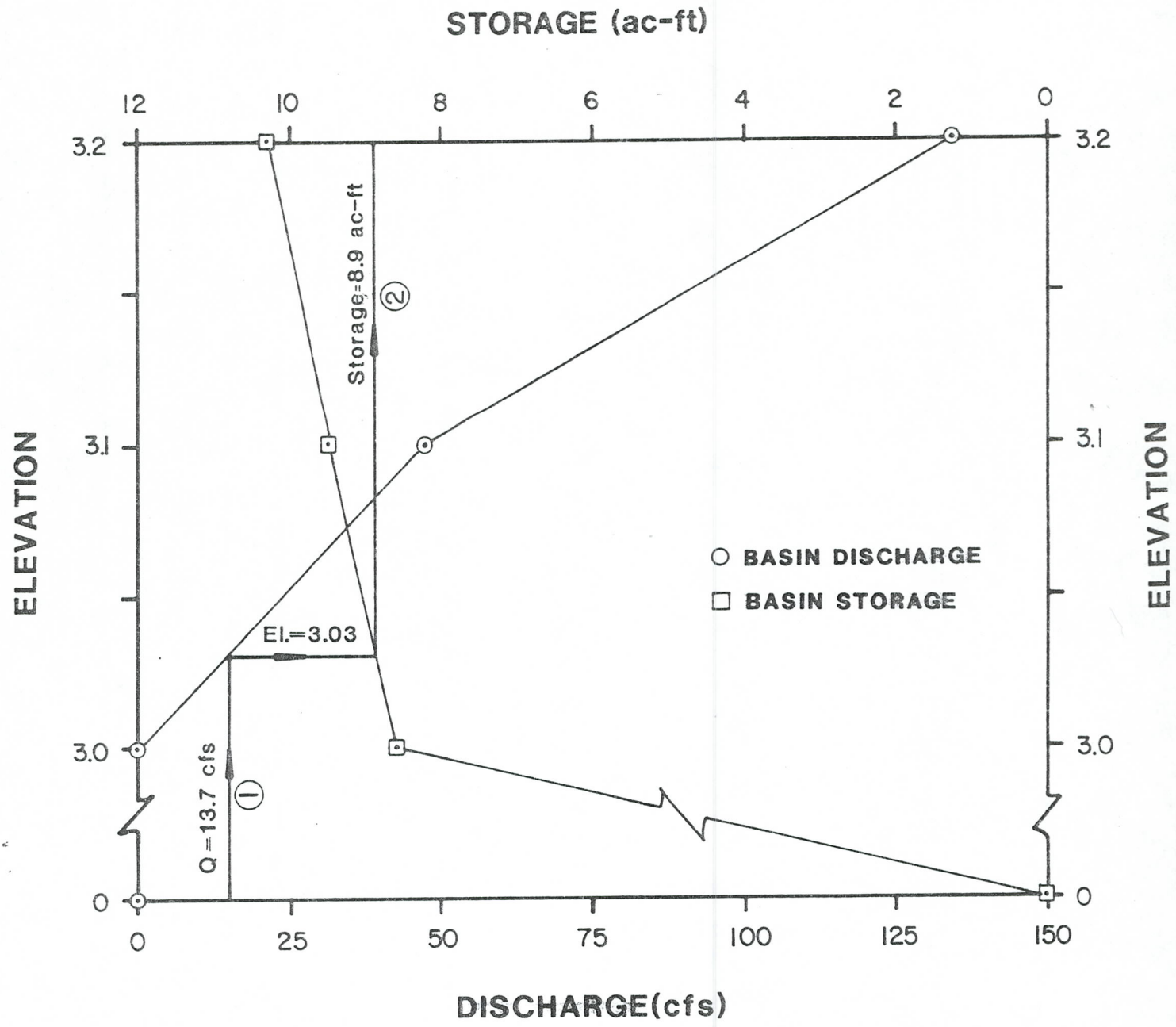
100 YR. - 1 HR. RAINFALL



(1) BASIN STORAGE EQUALS STORM VOLUME FOR RESVOR 7 IN TR-20 COMPUTER MODEL

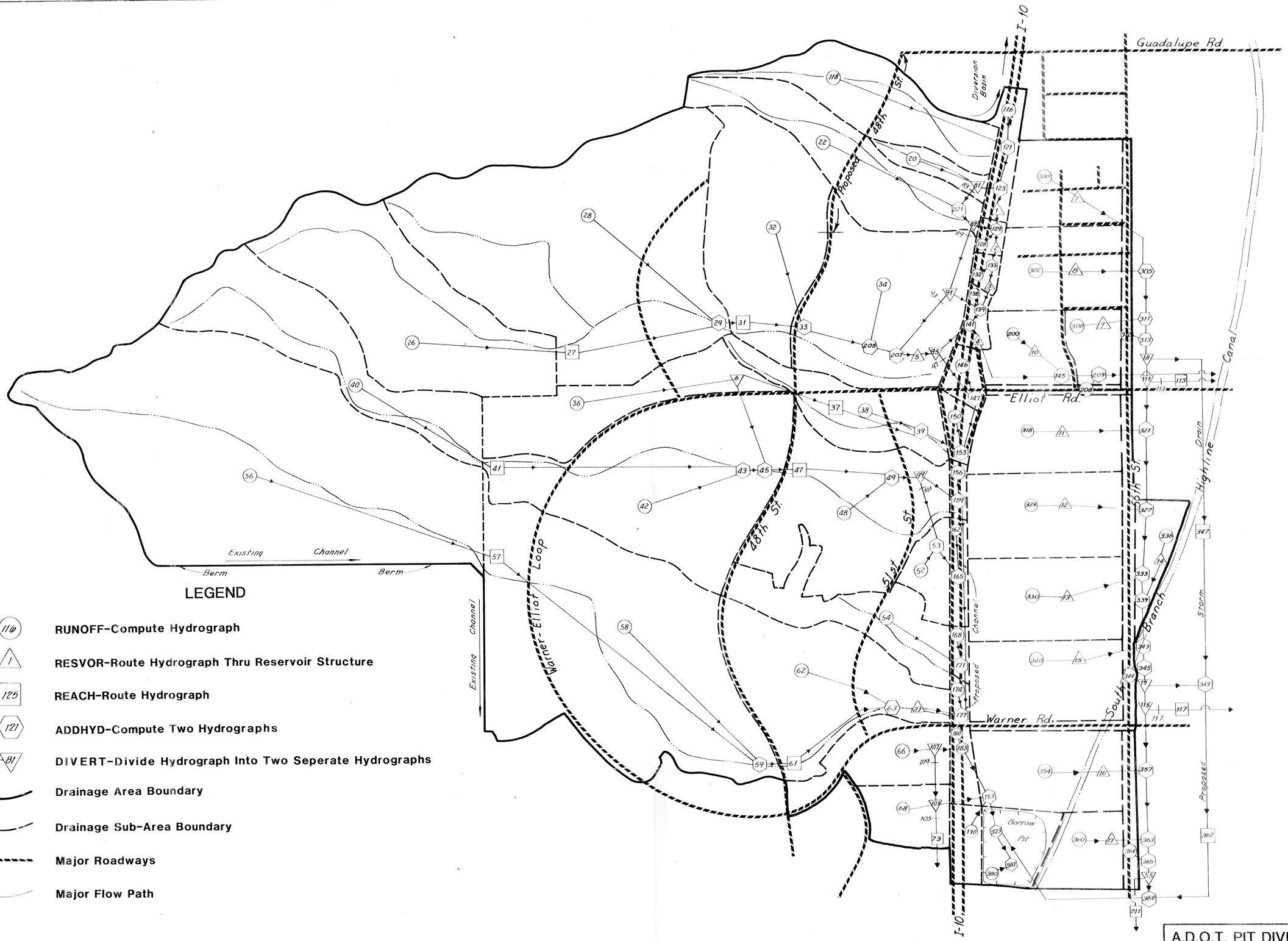
FIGURE IIId - RETENTION BASIN EXAMPLE

100 YR. - 24 HR. RAINFALL



① PEAK OUTFLOW FOR RESVOR 7 IN TR-20 COMPUTER MODEL

② BASIN STORAGE FOR RESVOR 7 IN TR-20 COMPUTER MODEL



LEGEND

- (116) RUNOFF-Compute Hydrograph
- (1) RESVOR-Route Hydrograph Thru Reservoir Structure
- [125] REACH-Route Hydrograph
- (121) ADDHYD-Compute Two Hydrographs
- 83 / 81 DIVERT-Divide Hydrograph Into Two Seperate Hydrographs
- Drainage Area Boundary
- Drainage Sub-Area Boundary
- Major Roadways
- Major Flow Path

A.D.O.T. PIT DIVERSION CHANNEL

EXHIBIT #1, DRAINAGE AREA SCHEMATIC

DESIGN J.E.A.	SCALE	JOB NO.	DATE	SHEET
DRAWN S.E.	1"=700'	1958	Mar. 1983	1 OF 1
CHECK D.E.W.				

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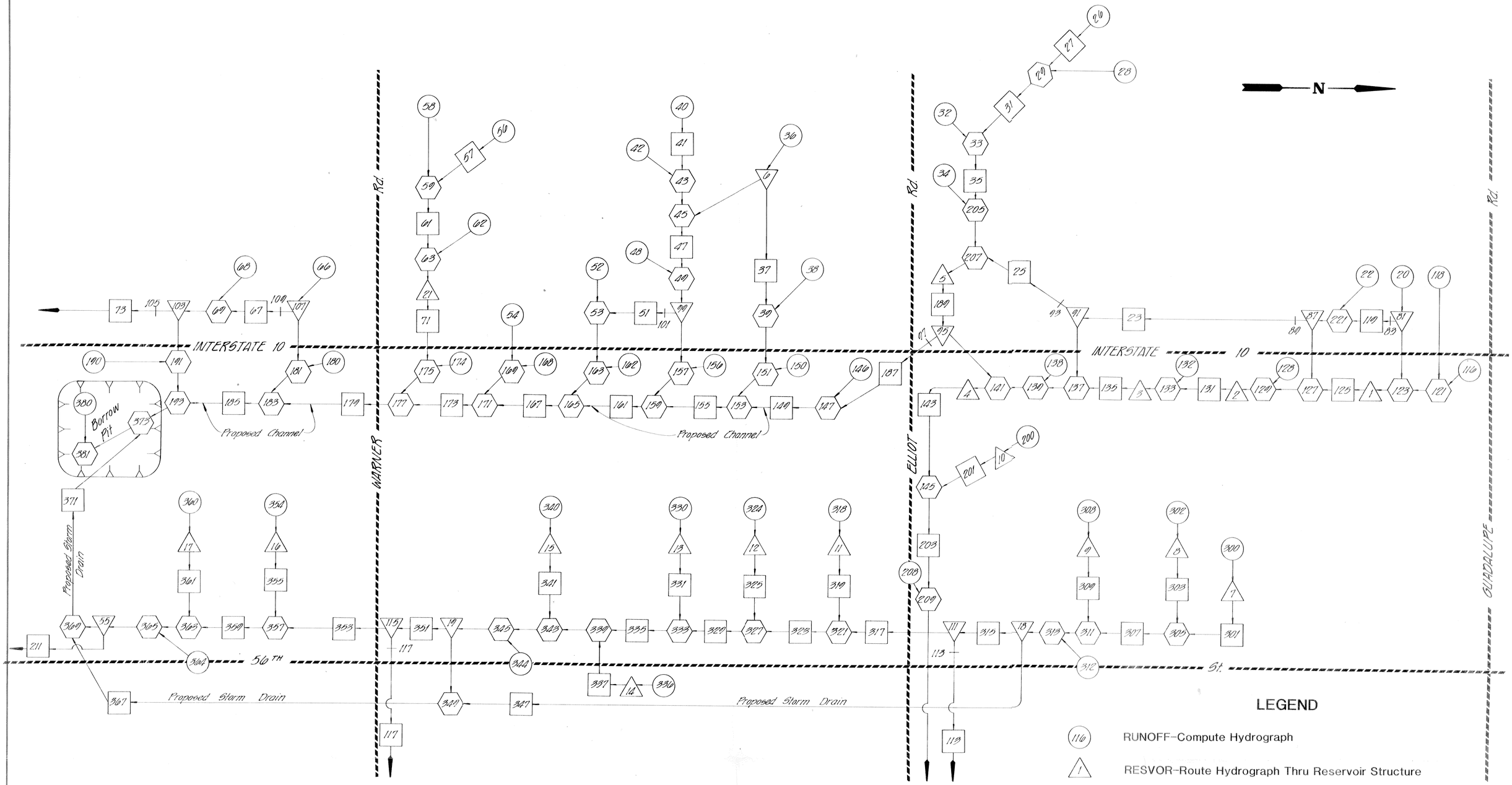
CONSULTING ENGINEERS



LEGEND

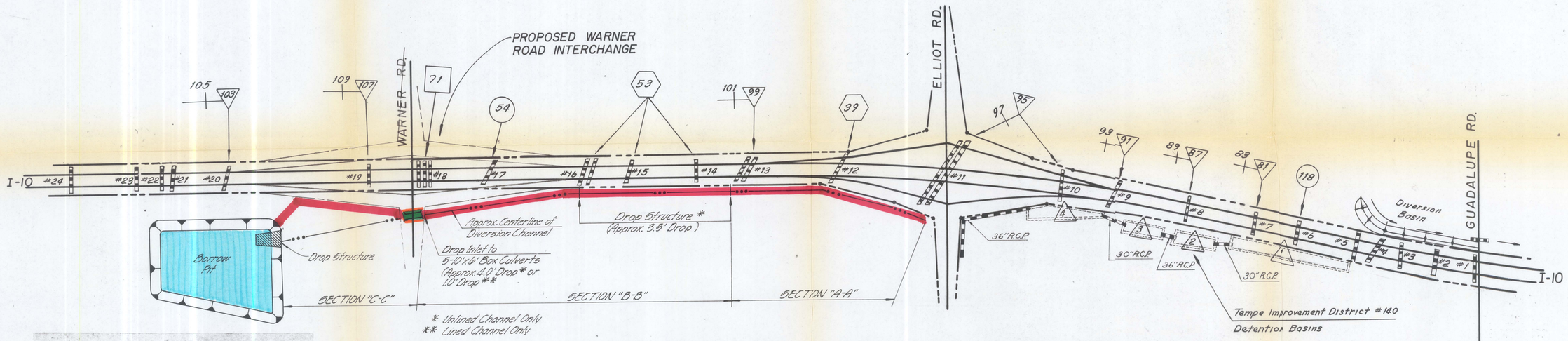
- (116) RUNOFF–Compute Hydrograph
- (1) RESVOR–Route Hydrograph Thru Reservoir Structure
- [125] REACH–Route Hydrograph
- (121) ADDHYD–Combine Two Hydrographs
- 83 / (81) DIVERT–Divide Hydrograph Into Two Seperate Hydrographs

A.D.O.T. PIT DIVERSION CHANNEL

EXHIBIT #2, TR-20 SCHEMATIC

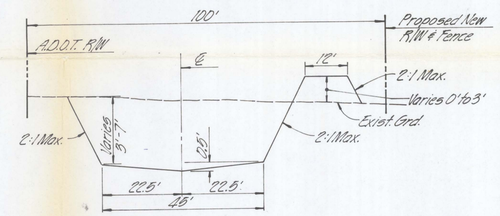
DESIGN J.F.A. / DRAWN M.A.E. / CHECK D.E.W.	SCALE	JOB NO.	DATE	SHEET
	NONE	1958	MARCH'83	1 OF 1

EVANS, KUHN & ASSOCIATES, INC.
CONSULTING ENGINEERS

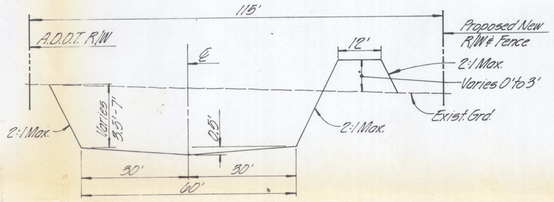


PRELIMINARY CROSS SECTIONS

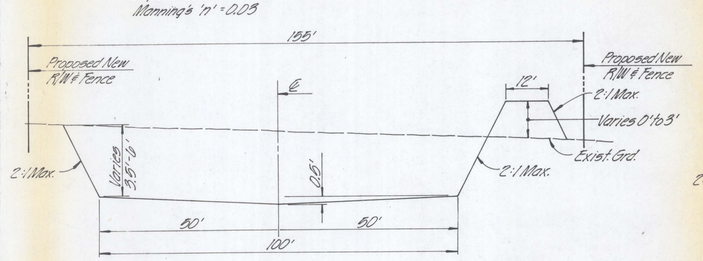
UNLINED CHANNEL



SECTION "A-A" (Looking North)
Slope = 0.20%
Manning's 'n' = 0.03

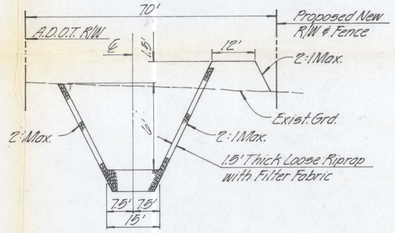


SECTION "B-B" (Looking North)
Slope = 0.20%
Manning's 'n' = 0.03

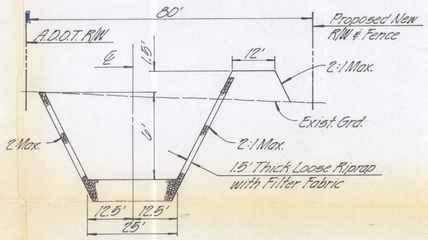


SECTION "C-C" (Looking North)
Slope = 0.15%
Manning's = 0.03

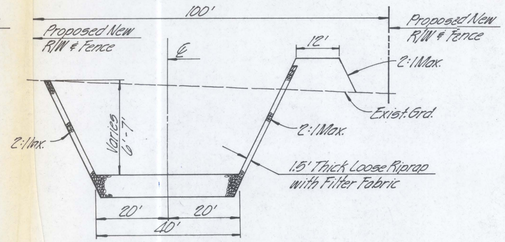
LINED CHANNEL



SECTION "A-A" (Looking North)
Slope = 0.30%
Manning's 'n' = 0.035



SECTION "B-B" (Looking North)
Slope = 0.30%
Manning's 'n' = 0.035



SECTION "C-C" (Looking North)
Slope = 0.30%
Manning's 'n' = 0.035

LEGEND

- 125 — REACH-Route Hydrograph
- 1 — RESVOR-Route Hydrograph Thru Reservoir Structure
- 116 — RUNOFF-Compute Hydrograph
- 121 — ADDHYD-Compute Two Hydrographs
- 83 / 81 — DIVERT-Divide Hydrograph Into Two Seperate Hydrographs
- Existing A.D.O.T. Right Of Way
- Approximate Proposed A.D.O.T. Right Of Way

EXISTING CULVERTS

#1 54" C.M.P. (ADOT STA. 612 + 00)
Upstream Contributing Drainage Area Diverted North by Diversion Basin, No Culvert Modeled.

#2 30" C.M.P. (ADOT STA. 616 + 00)
Upstream Contributing Drainage Area Diverted North by Diversion Basin, No Culvert Modeled.

#3 24" C.M.P. (ADOT STA. 619 + 65)
Upstream Contributing Drainage Area Diverted North by Diversion Basin, No Culvert Modeled.

#4 36" C.M.P. (ADOT STA. 622 + 50)
Upstream Contributing Drainage Area Diverted North by Diversion Basin, No Culvert Modeled.

#5 24" C.M.P. (ADOT STA. 623 + 50)
Upstream Contributing Drainage Area Diverted North by Diversion Basin, No Culvert Modeled.

#6 10' x 3' BOX CULVERT (ADOT STA. 629 + 35)
Culvert Capacity Exceeds Peak Flow, No Culvert Modeled.

#7 36" C.M.P. (ADOT STA. 635 + 00)
Peak Flow Exceeds Culvert Capacity, Weir Flow To The South Occurs, Culvert Modeled by DIVERT.

#8 6' x 3' BOX CULVERT (ADOT STA. 641 + 00)
Peak Flow Exceeds Culvert Capacity, Weir Flow To The South Occurs, Culvert Modeled by DIVERT.

#9 42" C.M.P. (ADOT STA. 649 + 30)
Peak Flow Exceeds Culvert Capacity, Weir Flow To The South Occurs, Culvert Modeled by DIVERT.

#10 6' x 3' BOX CULVERT (ADOT STA. 654 + 50)
Culvert Modeled by DIVERT.

#11 2 - 10' x 4' BOX CULVERTS (ADOT STA. 666 + 00)
Culvert Modeled by DIVERT.

#12 10' x 4' BOX CULVERT (ADOT STA. 676 + 00)
Culvert Capacity Exceeds Peak Flow, No Culvert Modeled.

#13 2 - 10' x 3' BOX CULVERTS (ADOT STA. 686 + 00)
Peak Flow Exceeds Culvert Capacity, Weir Flow To The South Occurs, Culvert Modeled by DIVERT.

#14 42" C.M.P. (ADOT STA. 690 + 85)
#15 48" C.M.P. (ADOT STA. 697 + 38)
#16 2 - 10' x 4' BOX CULVERTS (ADOT STA. 701 + 50)
Combined Culvert Capacities Exceed Peak Flows, No Culverts Modeled.

#17 10' x 4' BOX CULVERT (ADOT STA. 712 + 00)
Culvert Capacity Exceeds Peak Flow, No Culvert Modeled.

#18 3 - 10' x 5' BOX CULVERTS (ADOT STA. 718 + 00)
Channel Storage and Culvert Capacity Modeled By RESVOR.

#19 72" x 44" C.M.P. ARCH (ADOT STA. 723 + 50)
Peak Flow Exceeds Culvert Capacity, Weir Flow To The South Occurs, Culvert Modeled by DIVERT.

#20 10' x 3' BOX CULVERT (ADOT STA. 738 + 00)
Peak Flow Exceeds Culvert Capacity, Weir Flow To The South Occurs, Culvert Modeled by DIVERT.

#21 42" R.C.P. (ADOT STA. 743 + 00)
Flow Unable to Reach Proposed Channel, No Culvert Modeled.

#22 24" R.C.P. (ADOT STA. 743 + 50)
Flow Unable to Reach Proposed Channel, No Culvert Modeled.

#23 36" R.C.P. (ADOT STA. 746 + 78)
Flow Unable to Reach Proposed Channel, No Culvert Modeled.

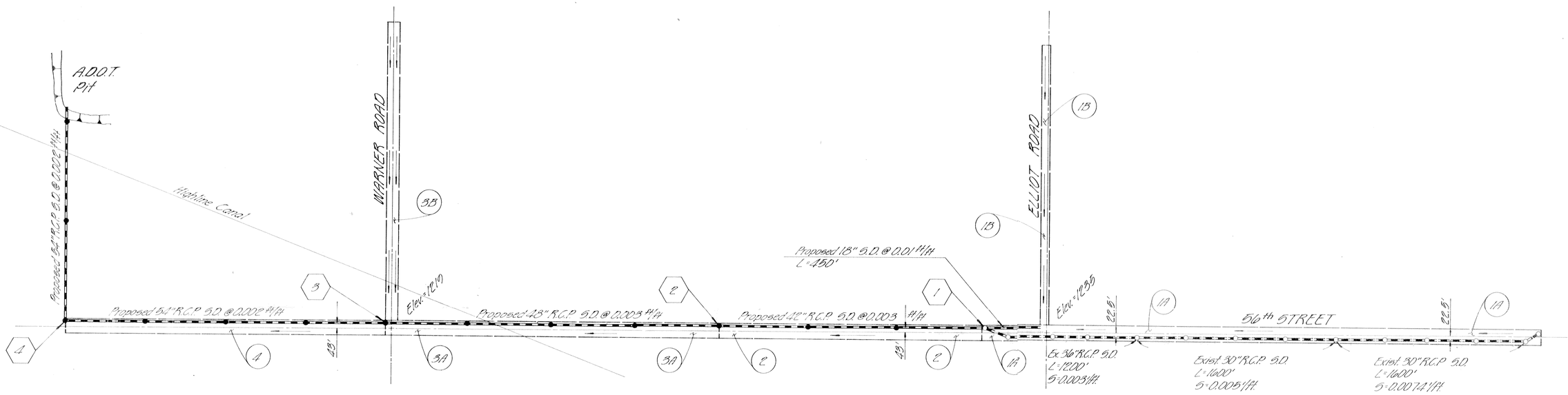
#24 24" R.C.P. (ADOT STA. 753 + 30)
Flow Unable to Reach Proposed Channel, No Culvert Modeled.

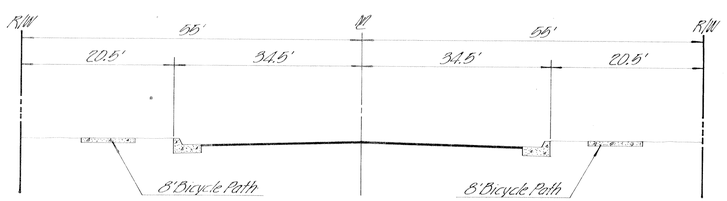
A.D.O.T. PIT DIVERSION CHANNEL

EXHIBIT #3, CULVERT & CHANNEL SCHEMATIC

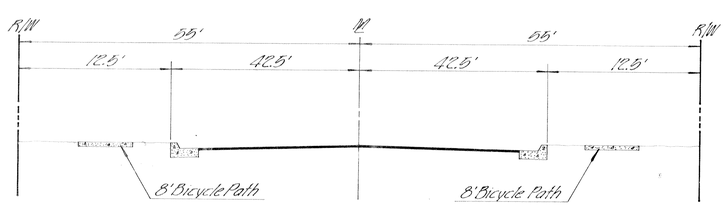
DESIGN J.F.A.	SCALE	JOB NO.	DATE	SHEET
DRAWN G.G.K.	1" = 500'	1958	MARCH '83	1 OF 1
CHECK D.E.W.				

EVANS, KUHN & ASSOCIATES, INC.
CONSULTING ENGINEERS





ULTIMATE MAJOR STREET CROSS SECTION FOR 56th STREET & WARNER ROAD



ULTIMATE MAJOR STREET CROSS SECTION FOR ELLIOT ROAD

LEGEND

- Existing Storm Drain
- Proposed Storm Drain
- Existing Storm Drain Manhole
- Proposed Storm Drain Manhole
- (1A) Drainage Area
- (1) Concentration Point
- Street Flow Path

A.D.O.T. PIT DIVERSION CHANNEL

EXHIBIT #4, STORM DRAIN SCHEMATIC

DESIGN J.F.A. / DRAWN D.L.S. / CHECK D.E.W.	SCALE	JOB NO.	DATE	SHEET
	NONE	1958	MAR. '83	1 OF 1

EKA EVANS, KUHN & ASSOCIATES, INC.
CONSULTING ENGINEERS

ADDENDUM to "HYDROLOGIC DESIGN FOR HIGHWAY DRAINAGE IN ARIZONA" April 1975

Steps to be used to determine precipitation values for various durations and return periods.

STEP 1. From the precipitation maps in * ~~the manual "Hydrologic Design for Highway Drainage in Arizona"~~, determine the precipitation values for the 6 and 24 hour duration storms for return periods of 2, 5, 10, 25, 50 and 100 years. Tabulate these values in Table 1 in the column headed 'Map Values'

* NOAA ATLAS 2, PRECIPITATION - FREQUENCY ATLAS OF THE WESTERN UNITED STATES, VOLUME VIII - ARIZONA, 1973

TABLE 1

LOCATION
48TH ST. & ELLIOT RD.
LATITUDE 111°59°
LONGITUDE 33°21'

Return Period (Years)			Precipitation Values (inches)			
			6 hour duration		24 hour duration	
	1 hour	2 hr	Map Value	Corrected Value	Map Value	Corrected Value
2	0.9		1.15	1.15	1.40	1.40
5			1.70	1.70	2.00	2.00
10	1.60	1.75	2.00	2.05	2.40	2.40
25			2.60	2.50	3.10	2.95
50			2.90	2.90	3.40	3.40
100	2.65	3.30	3.30	3.30	3.90	3.85

NOTE: There is a possibility of making an error while reading the maps because, (1) a site is not easy to locate precisely on a series of 12 maps, (2) there may be some slight registration differences in printing, and (3) precise interpolation between isolines is difficult. In order to minimize any errors in reading the maps, these values should be plotted on the diagram "Precipitation Depth versus Return Period" Fig. 1.

STEP 2. Plot these values on the diagram "Precipitation Depth versus Return Period" Fig. 1.

STEP 3. Draw a line of best fit through the 6 hour precipitation values and another line through the 24 hour precipitation values.

STEP 4. Tabulate the values represented by the lines of best fit, obtained in Step 3, in the column of Table 1 entitled "Corrected Value".

NOTE: The 1 hour precipitation value is needed to determine the 2 and 3 hour values as well as the 5, 10, 15 and 30 minute values.

STEP 5. Using the 6 and 24 hour values for the 2 year and 100 year return periods, from Table 1 (corrected values), solve the following equations to determine the 1 hour values:

$$Y_2 = -0.011 + 0.942 \ (X_1^2/X_2)$$
$$Y_2 = -0.011 + 0.942(1.15^2/1.40) = 0.88''$$
$$Y_{100} = 0.494 + 0.755 \ (X_3^2/X_4)$$
$$Y_{100} = 0.494 + 0.755(3.30^2/3.85) = 2.63''$$

where Y_2 = 2 year 1 hour value
Y_{100} = 100 year 1 hour value
X_1 = 2 year 6 hour value from Table 1
X_2 = 2 year 24 hour value from Table 1
X_3 = 100 year 6 hour value from Table 1
X_4 = 100 year 24 hour value from Table 1

STEP 6. To determine 1 hour precipitation values for the other return periods, first plot the 2 year 1 hour value and the 100 year 1 hour value on Figure 1. Connect the two points by a straight line. The values on this line will give the 1 hour precipitation values for the various return periods.

STEP 7. To determine the 2 and 3 hour precipitation values, use the following formulae with data for the appropriate return period from Table 1 (corrected values):

2 hour = 0.341 (6 hour) + 0.659 (1 hour)
3 hour = 0.569 (6 hour) + 0.431 (1 hour)
10 YEAR - 2HR = 0.341(2.05") + 0.659(1.60") = 1.75"

An alternate method in lieu of the above equations is to use Fig. 2-2 (revised 4-75). SEE FIG. 2-2 FOR CHECK.

Project No. EKA 1958 Station _____

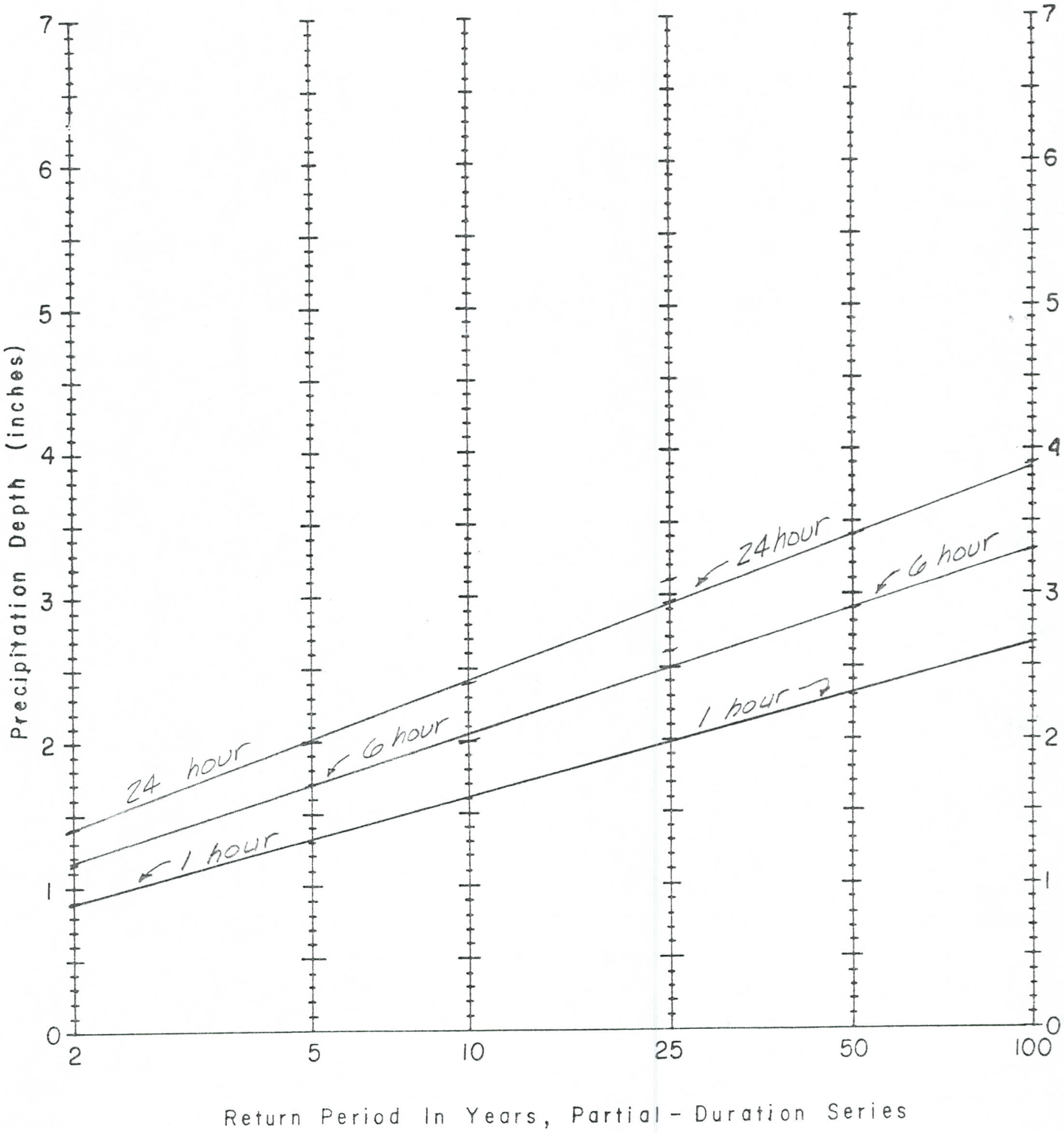
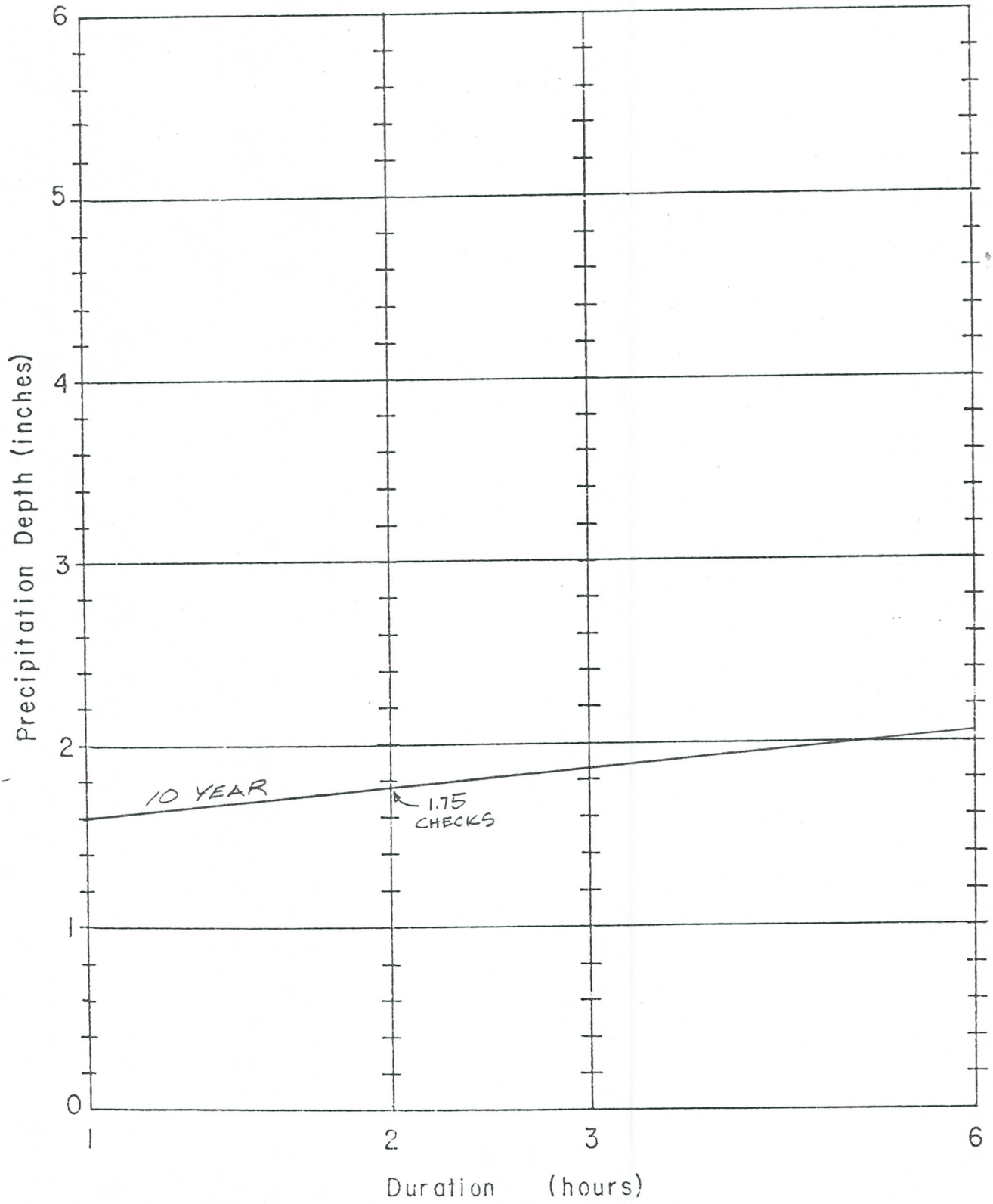


Figure 1 Precipitation Depth Versus Return Period for Partial – Duration Series

Figure 2-2 (revised 4-75)

Precipitation Depth — Duration Diagram (1—6 hours)



TECHNICAL RELEASE #20

UNDERSTANDING THE TR-20 COMPUTER PROGRAM

GENERAL BACKGROUND:

The TR-20 computer program was developed by the Hydrology Branch of the Soil Conservation Service (SCS) in cooperation with the Hydrograph Laboratory of ARS through a contract with C-E-I-R, Inc. The program was developed primarily to improve the quality of watershed projects and at the same time reduce overall project costs by providing a means of analyzing more alternative systems of structural measures. It is not anticipated that the use of the program will materially reduce the cost of watershed planning, but should produce a work plan which, when installed, will be more effective for the cost.

The program computes surface runoff resulting from any synthetic or natural rainstorm. It will take into account conditions having a bearing on runoff and will route the flow through stream channels and reservoirs. It will combine the routed hydrograph with those from other tributaries and print out the peak discharges, their time of occurrence and the water surface elevation for each at any desired cross-section or structure. In addition, it will print out the coordinates of the routed hydrograph together with the corresponding elevation of each, if requested. The program provides for the continuous analysis of nine different storms over a watershed under present conditions, and with various combinations of land treatment floodwater-retarding structures and channel improvement. It will perform these routings through as many as 120 reaches and 60 structures in any one continuous run.

UNDERSTANDING THE COMPUTER PRINTOUT SHEETS:

The following explanations clarify the tabular data as encountered in the TR-20 printout.

EXECUTIVE CONTROL CARDS

CTABLE: Routing-Coefficient Table, C vs. Velocity - This is a preprinted table. It can be prepunched on a permanent set of cards and must be included in every watershed job. These data are used by the computer for its REACH subroutine. They are part of the convex routing procedures which the computer uses in routing through stream reaches. The convex routing procedure is described in Chapter 17, NEH 4.

XSECTN: Stream-Cross-Section Data - The stream-cross-section table relates the water surface elevation to discharge in csm or cfs and to the cross-sectional end area in square feet. These data may be the water surface at a surveyed cross-section, an average of two or more surveyed cross-sections, or obtained from water surface profiles. The important consideration is that the cross-section data should represent the hydraulic conditions for the reach through which the flood routing is to be performed.

STRUCT: Structure Data - The structure data tables relate the water surface elevations to spillway or culvert discharge and storage. Structures can be numbered from 01 to 60. No more than 60 structures can be included in a job. The structure table can model an existing inflow-outflow relationship or can be used to model a proposed design inflow-outflow relationship. The designed structures many times are used to detain flood flows in order to reduce the peak flows.

Executive Control Cards (cont)

DIMHYD: Dimensionless-Hydrograph Table, Discharge vs. Time - This is a preprinted table; it can be prepunched on a permanent set of cards and must be included in every watershed job. The computer uses these data in RUNOFF subroutines for developing inflow hydrographs to structures and for local inflow hydrographs from intervening areas draining into a stream reach. The dimensionless hydrograph is described in Chapter 16, NEH 4.

RAINFL: Rainfall Table -The rainfall table is a listing of dimensionless units modeling a specific storm duration. Rainfall values are input on the computer card and printed out in Summary Table 1.

STANDARD CONTROL INSTRUCTIONS

The following explanations identify the meanings of the control words used for investigating the hydrologic parameters of the watershed.

RUNOFF: Instruction for the machine to develop an inflow hydrograph to a structure or routing reach; or to develop a hydrograph for the local intervening area contributing to a routing reach.

RESVOR: Instruction for the machine to route the inflow hydrograph through a structure, using the storage-indication method.

REACH: Instruction for the machine to route the inflow hydrograph through a stream reach, using the convex routing procedure.

ADDHYD: Instruction for the machine to combine two hydrographs.

DIVERT: Instructions to divide an inflow hydrograph into two separate outflow hydrographs.

Standard Control Instructions - (cont.)

SAVMOV:	Instructions for the machine to set a hydrograph aside in machine memory for subsequent consideration. It can be recalled by a SAVMOV instruction or by ADDHYD, REACH, or RESVOR, depending on its location and the next step in the control sequence.
ENDJOB:	Instructions to signify the conclusion of computer processing for a given watershed.

The following identifies the headings used in Summary Table 1.

Summary Table 1

ALT:	Alternate controls the numerical location in Summary Table 3.
STORM:	Controls the numerical location in Summary Table 3.
ID:	Refers to the identification number used to model a RUNOFF, REACH, ADDHYD, etc. command.
DA SQ-MI:	Refers to the drainage area in square miles at a specified location.
RAINTBLE:	Refers to the input rainfall table.
AMC:	Refers to the antecedent moisture condition modeled.
DELTA-T HRS:	Refers to the time increments of outflow hydrograph.
TZERO HRS:	Refers to the time specified for the beginning of the storm.
PRECIP IN.:	Refers to the total amount of rainfall in inches.
PRECIP. DURATION:	Refers to rainfall duration in hours.
PEAK-Q CFS:	Refers to peak discharge in cubic feet per second (cfs) at a specified location.

Summary Table 1 - (cont.)

PEAK TIME:	Refers to the time in hours when the peak discharge occurs.
PEAK ELEV:	Refers to the peak elevation of the peak discharge for a given cross-section.
RUNOFF IN.:	Refers to the runoff in inches over a given drainage area.
CSM:	Refers to the peak discharge (cfs) divided by the drainage area in square miles.

Source:

Soil Conservation Service
TR-20
COMPUTER PROGRAM FOR PROJECT
FORMULATION, HYDROLOGY

HYDROLOGIC SOIL GROUP

Soils within the drainage area are classified as Hyperthermic and consist of the three soil associations listed below and are shown on the Soil Association Plan on page 2.

Soils from Recent Alluvium
1. Gilman - Estrella - Avondale
2. Antho - Valencia

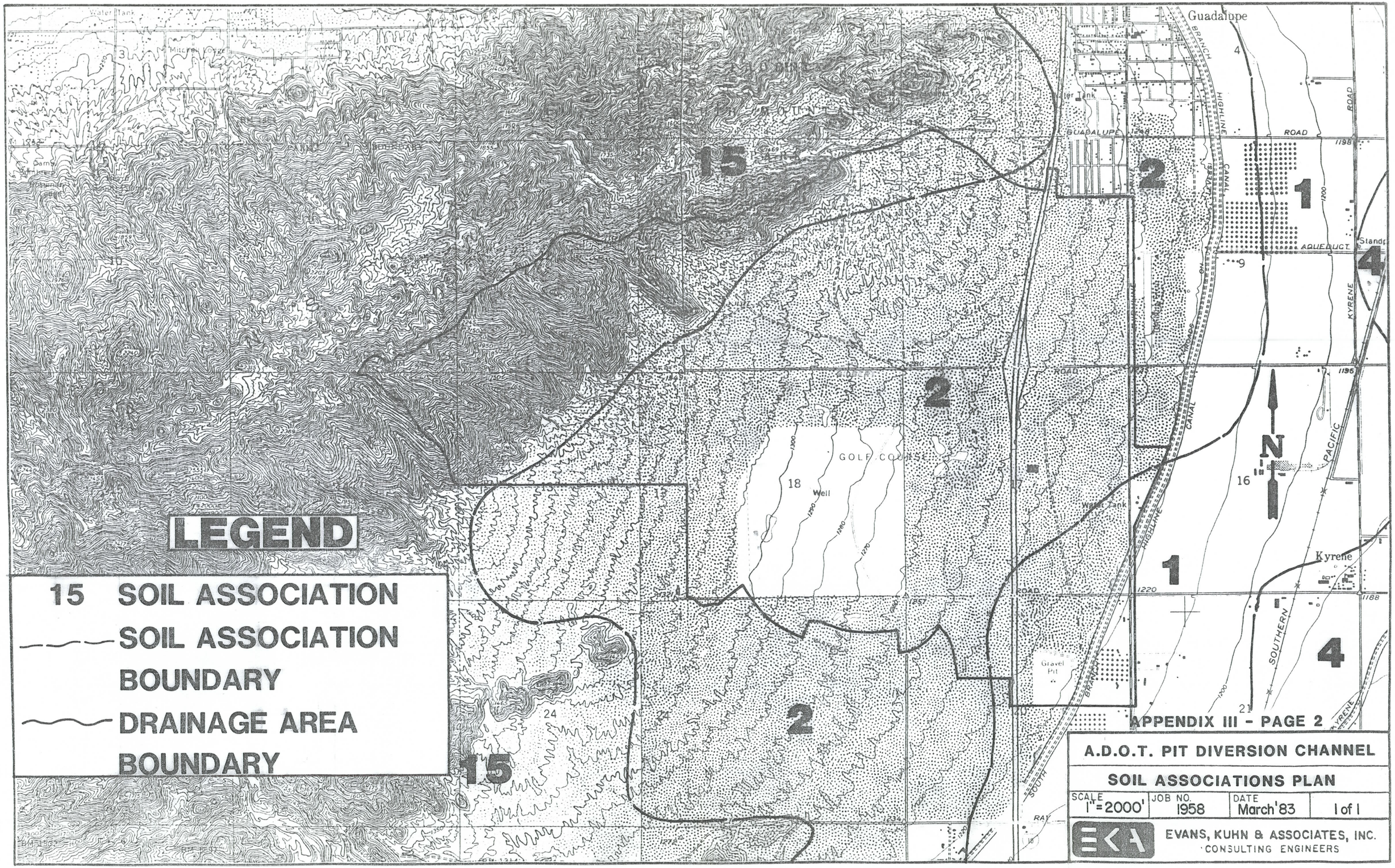
Hydrologic Soil Group B

Soils of Mountains and Low Hills
15. Cherioni - Gachado - Rock Outcrop

Hydrologic Soil Group D

Source: Maricopa County Planning Department
Soil Associations Map
February 1977

Soil Conservation Service
TR 55, Table B.1
NEH 4, Table 7.1



APPENDIX III - PAGE 2

A.D.O.T. PIT DIVERSION CHANNEL			
SOIL ASSOCIATIONS PLAN			
SCALE 1"=2000'	JOB NO. 1958	DATE March '83	1 of 1

EVANS, KUHN & ASSOCIATES, INC.
CONSULTING ENGINEERS

STORM DRAIN DOCUMENTATION

The storm drain was sized to carry runoff from the 100 year storm falling on the paved area (pavement and bike path) for the ultimate major street section. See Exhibit #4 for proposed storm drain size and location and typical street sections. Calculations are based on City of Tempe, Public Works Department, Drainage Criteria, dated 3-15-80.

DRAINAGE AREA 1A:

56th Street from Carmen Street to 460' south of the intersection with Elliot Road.

L = 4450' (C.O.T. I.D. #140 As-Builts)
Width = 69' pavement + (2)(8') bike path = 85'
A = (4450)(85)/43560 = 8.7 Ac.
C = 0.95 (C.O.T. Table #2)
Tc= Pipe time and overland flow time

Existing Pipe Time (C.O.T. Fig.III)

- Ex 30" RCP, L=1600', S=0.0074 ft/ft
  V = 7.8 fps Tc = 1600/(7.8)(60)=3.4 min
- EX 30" RCP, L=1600', S=0.005 ft/ft
  V = 6.3 fps Tc = 1600/(6.3)(60)=4.2 min
- EX 36" RCP, L=1200', S=0.003 ft/ft
  V= 5.6 fps Tc = 1200/(5.6)(60)=3.6 min

Tc = 3.4 + 4.2 + 3.6 +10 = 21.2 min.
i = 4.7 in/hr (C.O.T. Fig. II)
Q1A = CiA = (0.95)(4.7)(8.7) = 38.8 cfs

DRAINAGE AREA 1B:

South half of Elliot Road from Interstate 10 to 56th Street

L = 2300' (C.O.T. I.D #140 As-Builts)
Width = 42.5' pavement + 8' bike path = 50.5'
A = (2300)(50.5)/43560 = 2.7 Ac.
C = 0.95 (C.O.T. Table #2)
i = 4.7 in/hr
Q = C i A = (0.95)(4.7)(2.7) = 12.1 cfs

CONCENTRATION POINT # 1:

56th Street, 460' South of Elliot Road, Existing 36" Storm Drain Ends.

- Capacity of Existing 36" RCP
  Qpipe = 40 cfs (Fig. III), Q1A = 38.8 cfs
  Existing pipe will carry 56th Street runoff
- Extend 18" RCP north from existing manhole to intersection of 56th Street and Elliot Road to intercept runoff from south half of Elliot

Concentration Point #1 - Continued

18" RCP @ 0.01 ft/ft, Qpipe = 12 cfs = Q1B (Fig.III)
- Q1 = Q1A + Q1B = 38.8 + 12.1 = 50.9 cfs
Extend 42" RCP @ 0.003 ft/ft South of C.P. #1
Qpipe = 59 cfs (Fig.III), Q1 = 50.9 cfs

DRAINAGE AREA 2:

56th Street, from 460' South of Elliot Road to 1/2 mile south of Elliot Road

L = 2180' (USGS Quad Map)
W = 85'
A = 8.7 + 2.7 + (2180)(85)/43560 = 15.7 Ac.
C = 0.95 (C.O.T. Table #2)
V = 6.2 fps (C.O.T. Fig. III)
Tc= 21.2 + 2180/(6.2)(60) = 27.1 min
i = 4.0 in/hr (C.O.T. Fig II)
Q2 = CiA = (0.95)(4.0)(15.7) = 59.7 cfs

CONCENTRATION POINT #2:

56th Street, 1/2 mile south of Elliot Road

Qpipe = 59 cfs (Fig. III), Q2 = 59.7 cfs
Extend 48" RCP @ 0.003 ft/ft South of C.P.#2

DRAINAGE AREA 3A:

56th Street from 1/2 mile South of Elliot Road to Warner Road

L = 2640' (USGS Quad Map)
W = 85'
A = 15.7 + (2640)(85)/43560 = 20.9 Ac
C = 0.95 (C.O.T. Table #2)
V = 6.7 fps (C.O.T. Fig. III)
Tc = 27.1 + 2640/(6.7)(60) = 33.7 min.
i = 3.5 in/hr (C.O.T. Fig. II)
Q3A = CiA = (0.95)(3.5)(20.9) = 69.5 cfs

DRAINAGE AREA 3B:

Warner Road from Interstate 10 to 56th Street

L = 2400' (USGS Quad Map)
W = 85'
A = (2400)(85)/43560 = 4.7 Ac
C = 0.95 (C.O.T. Table #2)
i = 3.5 in/hr
Q3B = CiA = (0.95)(3.5)(4.7) = 15.6 cfs

CONCENTRATION POINT #3:

56th Street @ Warner Road

Q3 = Q3A + Q3B = 69.5 + 15.6 = 85.1

Qpipe = 85 cfs (Fig. III), Q3 = 85.1 cfs

Extend 54" RCP @ 0.002 ft/ft South of Warner Road

DRAINAGE AREA 4:

56th Street from Warner Road to 1/2 mile South of Warner

L = 2640' (USGS Quad Map)

W = 85'

A = 20.9 + 4.7 + (2640)(85)/43560 = 30.8 Ac

C = 0.95 (C.O.T. Table #2)

V = 7.3 fps (C.O.T. Fig. III)

Tc = 33.7 + (2640)/(7.3)(60) = 39.7

i = 3.2 in/hr (C.O.T. Fig. II)

Q = CiA = (0.95)(3.2)(30.8) = 93.6 cfs

CONCENTRATION POINT #4:

56th Street, 1/2 mile South of Warner Road

Qpipe = 95 cfs (Fig. III), Q4 = 93.6 cfs

Extend 54" RCP @ 0.002 ft/ft to ADOT Pit

ADOT PIT DIVERSION CHANNEL EKA NO. 195P MAR 1993

TR-20 HYDROLOGY

EXECUTIVE CONTROL CARD OPERATION LIST

```
LISTING OF DATA IN CORE

  0 ADOT PIT DIVERSION CHANNEL  EKA NO. 1958

                    VELOCITY INCREMENT
1 CTABLE                .2000

8              0.0000    .0800    .1800    .2500    .3200
8              .3700    .4100    .4500    .4900    .5100
8              .5400    .5700    .5900    .6100    .6300
8              .6500    .6600    .6700    .6900    .7000
8              .7100    .7200    .7300    .7400    .7500
8              .7600    .7700    .7700    .7800    .7900
8              .7900    .8000    .8100    .8100    .8200
8              .8200    .8300    .8300    .8400    .8400
8              .8400    .8500    .8500    .8600    .8600
8              .8600    .8600    .8700    .8700    .8700
8              .8800    .8800    .8800    .8900    .8900
8              .8900    .8900    .8900    .8900    .9000
8              .9000    .9000    .9000    .9000    .9100
8              .9100    .9100    .9100    .9100    .9100
8              .9200    .9200    .9200    .9200    .9200
8              .9200    .9200    .9200    .9300    .9300
9 ENDTBL

      XSECTN NO.      DRAINAGE AREA
2 XSECTN     81            1.0000

                     ELEVATION   DISCHARGE    END AREA
8                    73.7000      0.0000       0.0000
8                    75.2000     10.0000       3.5000      Culvert #7
8                    76.7000     32.0000       7.0000
8                    77.7000     45.0000      10.0000
9 ENDTBL

      XSECTN NO.      DRAINAGE AREA
2 XSECTN     83            1.0000

                     ELEVATION   DISCHARGE    END AREA
8                    76.7000      0.0000       0.0000
8                    77.0000     25.0000      15.0000      Weir at Culvert #7
8                    77.3000     70.0000      30.0000
8                    77.7000    150.0000      50.0000
9 ENDTBL

      XSECTN NO.      DRAINAGE AREA
2 XSECTN     87            1.0000

                     ELEVATION   DISCHARGE    END AREA
8                    70.1000      0.0000       0.0000      Culvert #8
8                    71.6000     33.0000       9.0000
```

XSECTN 87(Cont.)

```
8                    73.1000     90.0000     18.0000
8                    73.6000    108.0000     21.0000
8                    74.6000    144.0000     27.0000
9 ENDTBL

          XSECTN NO.        DRAINAGE AREA
2 XSECTN     89                 1.0000

                        ELEVATION   DISCHARGE    END AREA
8                        73.6000      0.0000      0.0000
8                        73.9000     20.0000     12.0000     Weir at Culvert #8
8                        74.2000     56.0000     24.0000
8                        74.6000    120.0000     40.0000
9 ENDTBL

          XSECTN NO.        DRAINAGE AREA
2 XSECTN     91                 1.0000

                        ELEVATION   DISCHARGE    END AREA
8                        65.5000      0.0000      0.0000
8                        67.3000     15.0000     18.0000     Culvert #9
8                        68.3000     34.0000     30.0000
9 ENDTBL

          XSECTN NO.        DRAINAGE AREA
2 XSECTN     93                 1.0000

                        ELEVATION   DISCHARGE    END AREA
8                        67.3000      0.0000      0.0000
8                        67.6000     20.0000     12.0000     Weir at Culvert #9
8                        67.9000     56.0000     24.0000
8                        68.3000    120.0000     40.0000
9 ENDTBL

          XSECTN NO.        DRAINAGE AREA
2 XSECTN     95                 1.0000

                        ELEVATION   DISCHARGE    END AREA
8                        65.5000      0.0000      0.0000
8                        66.5000     16.0000      6.0000
8                        67.5000     51.0000     12.0000     Culvert #10
8                        68.5000     90.0000     18.0000
8                        69.5000    120.0000     24.0000
8                        70.5000    150.0000     30.0000
8                        71.5000    210.0000     36.0000
9 ENDTBL

          XSECTN NO.        DRAINAGE AREA
2 XSECTN     97                 1.0000

                        ELEVATION   DISCHARGE    END AREA
8                        61.5000      0.0000      0.0000
8                        62.5000     30.0000     20.0000
8                        63.5000    180.0000     40.0000
8                        64.5000    320.0000     60.0000     Culvert #11
8                        65.5000    480.0000     80.0000
8                        66.5000    600.0000    100.0000
8                        67.5000    740.0000    120.0000
8                        68.5000    940.0000    140.0000
8                        69.5000   1060.0000    160.0000
8                        70.5000   1160.0000    180.0000
```

```
8                    71.5000   1280.0000    200.0000
9 ENDTBL
```



```
        XSECTN NO.      DRAINAGE AREA
2 XSECTN    99            1.0000

                      ELEVATION   DISCHARGE    END AREA
8                      48.1000      0.0000      0.0000
8                      49.6000     92.0000     30.0000
8                      51.1000    264.0000     60.0000
8                      52.6000    424.0000     90.0000
8                      54.1000    540.0000    120.0000
8                      55.6000    650.0000    150.0000
9 ENDTBL
```

Culvert #13

```
        XSECTN NO.      DRAINAGE AREA
2 XSECTN   101            1.0000

                      ELEVATION   DISCHARGE    END AREA
8                      52.6000      0.0000      0.0000
8                      53.4000     55.0000     21.0000
8                      54.1000    155.0000     42.0000
8                      54.9000    284.0000     63.0000
8                      55.6000    436.0000     84.0000
9 ENDTBL
```

Weir at Culvert #13

```
        XSECTN NO.      DRAINAGE AREA
2 XSECTN   103            1.0000

                      ELEVATION   DISCHARGE    END AREA
8                      29.4000      0.0000      0.0000
8                      30.9000     46.0000     15.0000
8                      32.4000    132.0000     30.0000
8                      33.9000    212.0000     45.0000
9 ENDTBL
```

Culvert #20

```
        XSECTN NO.      DRAINAGE AREA
2 XSECTN   105            1.0000

                      ELEVATION   DISCHARGE    END AREA
8                      31.0000      0.0000      0.0000
8                      31.1000      5.0000      5.0000
8                      31.2000     12.0000      9.0000
8                      31.3000     23.0000     14.0000
8                      31.5000     49.0000     23.0000
8                      32.0000    138.0000     46.0000
9 ENDTBL
```

Weir at Culvert #20

```
        XSECTN NO.      DRAINAGE AREA
2 XSECTN   107            1.0000

                      ELEVATION   DISCHARGE    END AREA
8                      34.6000      0.0000      0.0000
8                      36.4000     33.0000      9.0000
8                      37.4000     62.0000     13.0000
9 ENDTBL
```

Culvert #19

```
        XSECTN NO.      DRAINAGE AREA
2 XSECTN   109            1.0000
```

XSECTN 109(Cont.)

	ELEVATION	DISCHARGE	END AREA
8	36.4000	0.0000	0.0000
8	36.7000	22.0000	14.0000
8	37.0000	63.0000	27.0000
8	37.4000	135.0000	45.0000

9 ENDTBL

Weir at Culvert #19

6

XSECTN NO.	DRAINAGE AREA
2 XSECTN 111	1.0000

	ELEVATION	DISCHARGE	END AREA
8	33.6600	0.0000	0.0000
8	34.2400	35.0000	13.1000
8	34.3600	54.0000	20.2000
8	34.5300	116.0000	37.7000

9 ENDTBL

56th Street South of Elliot Rd.

XSECTN NO.	DRAINAGE AREA
2 XSECTN 113	1.0000

	ELEVATION	DISCHARGE	END AREA
8	33.8200	0.0000	0.0000
8	34.2400	55.0000	17.6000
8	34.4000	141.0000	31.1000
8	34.5200	206.0000	42.2000

9 ENDTBL

Elliot Road East of 56th St.

XSECTN NO.	DRAINAGE AREA
2 XSECTN 115	1.0000

	ELEVATION	DISCHARGE	END AREA
8	18.4000	0.0000	0.0000
8	18.9800	35.0000	13.1000
8	19.1000	54.0000	20.2000
8	19.2600	116.0000	37.7000

9 ENDTBL

56th Street South of Warner Rd.

XSECTN NO.	DRAINAGE AREA
2 XSECTN 117	1.0000

	ELEVATION	DISCHARGE	END AREA
8	18.1400	0.0000	0.0000
8	18.7200	35.0000	13.1000
8	18.8400	54.0000	20.2000
8	19.0100	116.0000	37.7000

9 ENDTBL

Warner Road East of 56th St.

STRUCT NO.
3 STRUCT 1

	ELEVATION	DISCHARGE	STORAGE
8	64.4000	0.0000	0.0000
8	65.4000	10.0000	1.2140
8	66.4000	22.0000	2.5970
8	67.4000	33.0000	4.1510
8	68.4000	40.0000	5.8770
8	69.4000	47.0000	7.7770
8	70.4000	54.0000	9.8520
8	71.4000	60.0000	12.1040
8	72.4000	65.0000	14.5350
8	73.4000	68.0000	17.1470

C.O.T. I.D. #140 Det. Basin

STRUCT 1(Cont.)

```
8                    74.1000     70.0000     19.0810
9 ENDTBL

        STRUCT NO.
3 STRUCT      2

                     ELEVATION   DISCHARGE   STORAGE
8                     63.0000      0.0000     0.0000
8                     64.0000     11.0000      .8130
8                     65.0000     25.0000     1.6930
8                     66.0000     39.0000     2.6420   C.O.T. I.D. #140 Det. Basin
8                     67.0000     55.0000     3.6610
8                     68.0000     65.0000     4.7520
8                     69.0000     73.0000     5.9160
8                     70.0000     81.0000     7.1550
8                     70.8000     86.0000     8.2030
9 ENDTBL

        STRUCT NO.
3 STRUCT      3

                     ELEVATION   DISCHARGE   STORAGE
8                     59.0000      0.0000     0.0000
8                     60.0000     10.0000      .7260
8                     61.0000     22.0000     1.5170
8                     62.0000     33.0000     2.3750
8                     63.0000     40.0000     3.3010   C.O.T. I.D. #140 Det. Basin
8                     64.0000     47.0000     4.2960
8                     65.0000     54.0000     5.3620
8                     66.0000     60.0000     6.5010
8                     66.1000    125.0000     6.6150
8                     66.2000    250.0000     6.7290
9 ENDTBL

        STRUCT NO.
3 STRUCT      4

                     ELEVATION   DISCHARGE   STORAGE
8                     56.0000      0.0000     0.0000
8                     57.0000     15.0000     1.4200
8                     58.0000     35.0000     2.9450
8                     59.0000     48.0000     4.5810   C.O.T. I.D. #140 Det. Basin
8                     60.0000     58.0000     6.3290
8                     61.0000     70.0000     8.1990
8                     62.0000     78.0000    10.1600
8                     63.0000     85.0000    12.2430
8                     64.0000     93.0000    14.4370
9 ENDTBL

        STRUCT NO.
3 STRUCT      5

                     ELEVATION   DISCHARGE   STORAGE
8                     61.3000      0.0000     0.0000
8                     62.0000     40.0000      .1500
8                     63.0000    130.0000     3.2400
8                     64.0000    250.0000     6.9200   Koll/Elliot Det. Basin
8                     65.0000    400.0000    13.4200
8                     66.0000    550.0000    19.9300
8                     67.0000    700.0000    28.6600
8                     68.0000    960.0000    37.3700
8                     69.0000   1160.0000    49.5800
```

STRUCT 5(Cont.)

```
8                    70.0000    1250.0000     60.2300
9 ENDTBL

        STRUCT NO.
3 STRUCT        7
                    ELEVATION   DISCHARGE     STORAGE
8                     0.0000      0.0000      0.0000
8                     3.0000       .0001      8.6000
8                     3.1000     47.0000      9.5000
8                     3.2000    134.0000     10.3000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT        8
                    ELEVATION   DISCHARGE     STORAGE
8                     0.0000      0.0000      0.0000
8                     3.0000       .0001     10.3000
8                     3.1000     47.0000     11.3000
8                     3.2000    134.0000     12.4000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT        9
                    ELEVATION   DISCHARGE     STORAGE
8                     0.0000      0.0000      0.0000
8                     3.0000       .0001      3.9000
8                     3.1000     47.0000      4.3000
8                     3.2000    134.0000      4.7000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT       10
                    ELEVATION   DISCHARGE     STORAGE
8                     0.0000      0.0000      0.0000
8                     3.0000       .0001      5.9000
8                     3.1000     47.0000      6.5000
8                     3.2000    134.0000      7.1000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT       11
                    ELEVATION   DISCHARGE     STORAGE
8                     0.0000      0.0000      0.0000
8                     3.0000       .0001     11.7000
8                     3.1000     47.0000     12.9000
8                     3.2000    134.0000     14.0000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT       12
                    ELEVATION   DISCHARGE     STORAGE
8                     0.0000      0.0000      0.0000
8                     3.0000       .0001     11.7000
8                     3.1000     47.0000     12.9000
```

Retention Basin

STRUCT 12(Cont.)

```
8                    3.2000     134.0000     14.0000
9 ENDTBL
```

7

```
        STRUCT NO.
3 STRUCT      13
                    ELEVATION   DISCHARGE   STORAGE
8                     0.0000      0.0000     0.0000
8                     3.0000      .0001     11.7000
8                     3.1000    47.0000     12.9000
8                     3.2000   134.0000     14.0000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT      14
                    ELEVATION   DISCHARGE   STORAGE
8                     0.0000      0.0000     0.0000
8                     3.0000      .0001      3.3000
8                     3.1000    47.0000      3.6000
8                     3.2000   134.0000      4.0000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT      15
                    ELEVATION   DISCHARGE   STORAGE
8                     0.0000      0.0000     0.0000
8                     3.0000      .0001     11.7000
8                     3.1000    47.0000     12.9000
8                     3.2000   134.0000     14.0000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT      16
                    ELEVATION   DISCHARGE   STORAGE
8                     0.0000      0.0000     0.0000
8                     3.0000      .0001     11.2000
8                     3.1000    47.0000     12.3000
8                     3.2000   134.0000     13.4000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT      17
                    ELEVATION   DISCHARGE   STORAGE
8                     0.0000      0.0000     0.0000
8                     3.0000      .0001      5.9000
8                     3.1000    47.0000      6.5000
8                     3.2000   134.0000      7.1000
9 ENDTBL
```

Retention Basin

```
        STRUCT NO.
3 STRUCT      21
                    ELEVATION   DISCHARGE   STORAGE
8                    35.0000      0.0000     0.0000
8                    36.0000    120.0000      .1600
8                    37.0000    240.0000      .5500
```

Channel Storage

STRUCT 21(Cont.)

```
8                    38.0000    400.0000     1.0700
8                    39.0000    620.0000     1.7900
8                    40.0000    850.0000     2.7700
8                    41.0000   1300.0000     3.9100
9 ENDTBL

                TIME INCREMENT
4 DIMHYD

8            0.0000     .0300     .1000     .1900     .3100
8             .4700     .6600     .8200     .9300     .9900
8            1.0000     .9900     .9300     .8600     .7800
8             .6800     .5600     .4600     .3900     .3300
8             .2800     .2410     .2070     .1740     .1470
8             .1260     .1070     .0910     .0770     .0660
8             .0550     .0470     .0400     .0340     .0290
8             .0250     .0210     .0180     .0150     .0130
8             .0110     .0090     .0080     .0070     .0060
8             .0050     .0040     .0030     .0020     .0010
8            0.0000    0.0000    0.0000    0.0000    0.0000
9 ENDTBL

COMPUTED PEAK K FACTOR =  484.00

                TIME INCREMENT
5 RAINFL 1                .0400

8            0.0000     .0300     .0700     .1200     .1800
8             .2400     .3200     .3600     .4000     .4300
8             .4600     .5000     .5400     .5700     .5900
8             .6100     .6300     .6600     .6800     .7100
8             .7300     .7500     .7600     .7700     .7800
8             .8000     .8100     .8200     .8300     .8400     2 HOUR
8             .8500     .8600     .8700     .8800     .8900
8             .8900     .9000     .9100     .9200     .9200
8             .9300     .9300     .9400     .9500     .9600
8             .9600     .9700     .9800     .9900     .9900
8            1.0000    1.0000    1.0000    1.0000    1.0000
9 ENDTBL

                TIME INCREMENT
5 RAINFL 2                .0333

8            0.0000     .0160     .0320     .0480     .0640
8             .0800     .0960     .1120     .1300     .1500
8             .1900     .2170     .2600     .3200     .4000
8             .5100     .6200     .7000     .7590     .8000     1 HOUR
8             .8370     .8610     .8820     .9000     .9180
8             .9300     .9410     .9600     .9710     .9830
8            1.0000    1.0000    1.0000    1.0000    1.0000
9 ENDTBL

                TIME INCREMENT
5 RAINFL 3                .5000

8            0.0000     .0030     .0110     .0160     .0220
8             .0280     .0350     .0410     .0480     .0560
8             .0630     .0710     .0800     .0890     .0980     24 HOUR
8             .1090     .1200     .1330     .1470     .1630
8             .1910     .2040     .2350     .2830     .6630
8             .7350     .7720     .7990     .8200     .8380
```

RAINFL 3(Cont.)

```
8          .8540     .8680     .8800     .8910     .9020
8          .9120     .9210     .9290     .9370     .9450
8          .9520     .9590     .9650     .9720     .9783
8          .9840     .9890     .9950    1.0000    1.0000
9 ENDTBL
```

```
                TIME INCREMENT
5 RAINFL 4              .0200
8          0.0000     .0080     .0162     .0246     .0330
8          .0420     .0520     .0630     .0740     .0860
8          .0990     .1120     .1260     .1420     .1600
8          .1800     .2050     .2550     .3450     .4370
8          .5300     .6030     .6330     .6600     .6840
8          .7050     .7240     .7420     .7590     .7750
8          .7900     .8040     .8180     .8310     .8440
8          .8560     .8670     .8790     .8900     .9000
8          .9100     .9200     .9280     .9390     .9480
8          .9570     .9660     .9740     .9830     .9920
8          1.0000    1.0000    1.0000    1.0000    1.0000
9 ENDTBL
```

6 HOUR

STANDARD CONTROL INSTRUCTIONS

2	6	RUNOFF	1	116			6	.0300	82.0000	.57001	0	0	0	0	1
3	6	RUNOFF	1	118			5	.1260	87.0000	.42001	0	0	0	0	1
4	6	ADDHYD	4	121	5	6	1			1	0	0	0	0	1
5	6	RUNOFF	1	20			5	.0240	90.0000	.22001	0	0	0	0	1
6	6	DIVERT	6	81	5	6	2	0.0000	.9800	83.00001	0	0	0	0	1
7	6	ADDHYD	4	123	1	6	5			1	0	0	0	0	1
8	6	RESVOR	2		1	5	6	64.4000		1	0	0	1	0	1
9	6	REACH	3	125	6		1	500.0000	.7100	0.00001	0	0	0	0	1
10	6	REACH	3	119	2		7	500.0000	.7100	0.00001	0	0	0	0	1
11	6	RUNOFF	1	22			5	.1380	87.0000	.42001	0	0	0	0	1
12	6	ADDHYD	4	221	5	7	6			1	0	0	0	0	1
13	6	DIVERT	6	87	6	5	2	0.0000	.9300	89.00001	0	0	0	0	1
14	6	ADDHYD	4	127	5	1	6			1	0	0	0	0	1
15	6	RUNOFF	1	128			5	.0090	82.0000	.15001	0	0	0	0	1
16	6	ADDHYD	4	129	5	6	7			1	0	0	0	0	1
17	6	RESVOR	2		2	7	5	63.0000		1	0	0	1	0	1
18	6	REACH	3	131	5		6	500.0000	.7100	0.00001	0	0	0	0	1
19	6	RUNOFF	1	132			5	.0110	82.0000	.15001	0	0	0	0	1
20	6	ADDHYD	4	133	5	6	7			1	0	0	0	0	1
21	6	RESVOR	2		3	7	5	59.0000		1	0	0	1	0	1
22	6	REACH	3	135	5		1	900.0000	.7100	0.00001	0	0	0	0	1
23	6	REACH	3	23	2		5	760.0000	.7100	0.00001	0	0	0	0	1
24	6	DIVERT	6	91	5	6	2	0.0000	.5700	93.00001	0	0	0	0	1
25	6	ADDHYD	4	137	1	6	7			1	0	0	0	0	1
26	6	RUNOFF	1	138			5	.0150	82.0000	.28001	0	0	0	0	1
27	6	ADDHYD	4	139	5	7	1			1	0	0	0	0	1
28	6	RUNOFF	1	26			5	.2820	90.0000	.28001	0	0	0	0	1
29	6	REACH	3	27	5		6	3250.0000	.7400	0.00001	0	0	0	0	1
30	6	RUNOFF	1	28			5	.5370	89.0000	.47001	0	0	0	0	1
31	6	ADDHYD	4	29	5	6	7			1	0	0	0	0	1
32	6	REACH	3	31	7		6	1100.0000	.7100	0.00001	0	0	0	0	1
33	6	RUNOFF	1	32			5	.2200	85.0000	.35001	0	0	0	0	1
34	6	ADDHYD	4	33	5	6	7			1	0	0	0	0	1
35	6	REACH	3	35	7		5	2400.0000	.7100	0.00001	0	0	0	0	1
36	6	RUNOFF	1	34			6	.2200	87.0000	.44001	0	0	0	0	1
37	6	ADDHYD	4	205	5	6	7			1	0	0	0	0	1
38	6	REACH	3	25	2		5	400.0000	.7100	0.00001	0	0	0	0	1
39	6	ADDHYD	4	207	5	7	6			1	0	0	0	0	1
40	6	RESVOR	2		5	6	5	61.3000		1	0	0	1	0	1
41	6	REACH	3	189	5		7	50.0000	.7100	0.00001	0	0	0	0	1
42	6	DIVERT	6	95	7	6	2	0.0000	.0200	97.00001	0	0	0	0	1
43	6	ADDHYD	4	141	1	6	5			1	0	0	0	0	1
44	6	RESVOR	2		4	5	6	56.0000		1	0	0	1	0	1
45	6	REACH	3	143	6		7	2000.0000	.7100	0.00001	0	0	0	0	1
46	6	RUNOFF	1	200			5	.0610	90.0000	.69001	0	0	0	0	1
47	6	RESVOR	2		10	5	6	0.0000		1	0	0	1	0	1
48	6	REACH	3	201	6		5	10.0000	.7100	0.00001	0	0	0	0	1
49	6	ADDHYD	4	145	5	7	6			1	0	0	0	0	1
50	6	REACH	3	203	6		5	850.0000	.7100	0.00001	0	0	0	0	1
51	6	RUNOFF	1	208			6	.0040	98.0000	.17001	0	0	0	0	1
52	6	ADDHYD	4	209	5	6	7			1	0	0	0	0	1
53	6	REACH	3	137	2		7	200.0000	.7100	0.00001	0	0	0	0	1
54	6	RUNOFF	1	146			6	.0130	82.0000	.31001	0	0	0	0	1
55	6	ADDHYD	4	147	7	6	5			1	0	0	0	0	1
56	6	REACH	3	149	5		1	1400.0000	.7100	0.00001	0	0	0	0	1
57	6	RUNOFF	1	36			5	.1370	75.0000	.55001	0	0	0	0	1
	6	DIVERT	6		6	5	7	2	60.0000	.9300	0.00001	0	0	0	0	1
	6	REACH	3	37	7		6	2600.0000	.6900	0.00001	0	0	0	0	1
	6	RUNOFF	1	38			5	.0820	88.0000	.33001	0	0	0	0	1

Standard Control Instructions(Cont.)

6	ADDHYD	4	39	5	6	7				1	0	0	0	0	1
6	RUNOFF	1	150			5	.0190	82.0000	.28001	0	0	0	0	0	1
6	ADDHYD	4	151	5	7	6				1	0	0	0	0	1
6	ADDHYD	4	153	1	6	5				1	0	0	0	0	1
6	REACH	3	155	5		1	1200.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	40			5	.1920	90.0000	.24001	0	0	0	0	0	1
6	REACH	3	41	5		6	5000.0000	.6800	0.00001	0	0	0	0	0	1
6	RUNOFF	1	42			5	.3160	75.0000	.53001	0	0	0	0	0	1
6	ADDHYD	4	43	5	6	7				1	0	0	0	0	1
6	ADDHYD	4	45	7	2	5				1	0	0	0	0	1
6	REACH	3	47	5		6	3000.0000	.6800	0.00001	0	0	0	0	0	1
6	RUNOFF	1	48			5	.2050	74.0000	.65001	0	0	0	0	0	1
6	ADDHYD	4	49	5	6	7				1	0	0	0	0	1
6	DIVERT	6	99	7	6	2	0.0000	.9700	101.00001	0	0	0	0	0	1
6	RUNOFF	1	156			5	.0090	82.0000	.22001	0	0	0	0	0	1
6	ADDHYD	4	157	5	6	7				1	0	0	0	0	1
6	ADDHYD	4	159	1	7	5				1	0	0	0	0	1
6	REACH	3	161	5		1	2400.0000	.7100	0.00001	0	0	0	0	0	1
6	REACH	3	51	2		7	2000.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	52			5	.0340	80.0000	.18001	0	0	0	0	0	1
6	ADDHYD	4	53	5	7	6				1	0	0	0	0	1
6	RUNOFF	1	162			5	.0190	82.0000	.47001	0	0	0	0	0	1
6	ADDHYD	4	163	5	6	7				1	0	0	0	0	1
6	ADDHYD	4	165	1	7	5				1	0	0	0	0	1
6	REACH	3	167	5		1	1200.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	54			5	.1050	75.0000	.45001	0	0	0	0	0	1
6	RUNOFF	1	168			6	.0090	82.0000	.25001	0	0	0	0	0	1
6	ADDHYD	4	169	5	6	7				1	0	0	0	0	1
6	ADDHYD	4	171	1	7	5				1	0	0	0	0	1
6	REACH	3	173	5		1	900.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	56			5	.6730	88.0000	.34001	0	0	0	0	0	1
6	REACH	3	57	5		6	6000.0000	.6800	0.00001	0	0	0	0	0	1
6	RUNOFF	1	58			5	.5170	72.0000	.78001	0	0	0	0	0	1
6	ADDHYD	4	59	5	6	7				1	0	0	0	0	1
6	REACH	3	61	7		6	2900.0000	.6800	0.00001	0	0	0	0	0	1
6	RUNOFF	1	62			5	.1890	74.0000	.59001	0	0	0	0	0	1
6	ADDHYD	4	63	5	6	7				1	0	0	0	0	1
6	RESVOR	2	21	7		6	35.0000			1	0	0	1	0	1
6	REACH	3	71	6		7	200.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	174			5	.0140	82.0000	.18001	0	0	0	0	0	1
6	ADDHYD	4	175	5	7	6				1	0	0	0	0	1
6	ADDHYD	4	177	1	6	5				1	0	0	0	0	1
6	REACH	3	179	5		1	1250.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	66			5	.0800	79.0000	.52001	0	0	0	0	0	1
6	DIVERT	6	107	5	6	2	0.0000	.8800	109.00001	0	0	0	0	0	1
6	RUNOFF	1	180			5	.0190	82.0000	.11001	0	0	0	0	0	1
6	ADDHYD	4	181	5	6	7				1	0	0	0	0	1
6	ADDHYD	4	183	1	7	5				1	0	0	0	0	1
6	REACH	3	185	5		1	50.0000	.7100	0.00001	0	0	0	0	0	1
6	REACH	3	67	2		6	1500.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	68			5	.0800	82.0000	.30001	0	0	0	0	0	1
6	ADDHYD	4	69	5	6	7				1	0	0	0	0	1
6	DIVERT	6	103	7	6	5	0.0000	.8600	105.00001	0	0	0	0	0	1
6	REACH	3	73	5		3	10.0000	.7100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	190			5	.0290	82.0000	.32001	0	0	0	0	0	1
6	ADDHYD	4	191	5	6	7				1	0	0	0	0	1
6	ADDHYD	4	193	1	7	3				1	0	0	0	0	1
6	RUNOFF	1	300			5	.0890	90.0000	.51001	0	0	0	0	0	1
6	RESVOR	2		7	5	6	0.0000			1	0	0	1	0	1
6	REACH	3	301	6		2	1350.0000	.6100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	302			5	.1060	90.0000	.56001	0	0	0	0	0	1
6	RESVOR	2		8	5	6	0.0000			1	0	0	1	0	1
6	REACH	3	303	6		5	10.0000	.7100	0.00001	0	0	0	0	0	1
6	ADDHYD	4	305	5	2	6				1	0	0	0	0	1
6	REACH	3	307	6		2	1250.0000	.6100	0.00001	0	0	0	0	0	1
6	RUNOFF	1	308			5	.0410	90.0000	.30001	0	0	0	0	0	1

Standard Control Instructions(Cont.)

```
6 RESVOR 2      9 5    6      0.0000                          1 0 0 1 0 1
6 REACH  3 309    6    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 311    5 2 6                                      1 0 0 0 0 1
6 RUNOFF 1 312         5       .0160      98.0000       .38001 0 0 0 0 1
6 ADDHYD 4 313    5 6 7                                      1 0 0 0 0 1
6 DIVERT 6     18 7 2 5     40.0000       1.0000      0.00001 0 0 0 0 1
6 REACH  3 315    5    6     10.0000        .7100      0.00001 0 0 0 0 1
6 DIVERT 6 111    6 5 4      0.0000        .5000    113.00001 0 0 0 0 1
6 REACH  3 113    4    6     10.0000        .7100      0.00001 0 0 0 0 1
6 REACH  3 317    5    6   1300.0000        .6100      0.00001 0 0 0 0 1
6 RUNOFF 1 318         5       .1200      90.0000       .59001 0 0 0 0 1
6 RESVOR 2     11 5    7      0.0000                          1 0 0 1 0 1
6 REACH  3 319    7    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 321    5 6 7                                      1 0 0 0 0 1
6 REACH  3 323    7    6   1350.0000        .6100      0.00001 0 0 0 0 1
6 RUNOFF 1 324         5       .1200      90.0000       .59001 0 0 0 0 1
6 RESVOR 2     12 5    7      0.0000                          1 0 0 1 0 1
6 REACH  3 325    7    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 327    5 6 7                                      1 0 0 0 0 1
6 REACH  3 329    7    6   1300.0000        .6100      0.00001 0 0 0 0 1
6 RUNOFF 1 330         5       .1200      90.0000       .59001 0 0 0 0 1
6 RESVOR 2     13 5    7      0.0000                          1 0 0 1 0 1
6 REACH  3 331    7    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 333    5 6 7                                      1 0 0 0 0 1
6 REACH  3 335    7    6   1350.0000        .6100      0.00001 0 0 0 0 1
6 RUNOFF 1 336         5       .0340      90.0000       .41001 0 0 0 0 1
6 RESVOR 2     14 5    7      0.0000                          1 0 0 1 0 1
6 REACH  3 337    7    5   1300.0000        .6100      0.00001 0 0 0 0 1
6 ADDHYD 4 339    5 6 7                                      1 0 0 0 0 1
6 RUNOFF 1 340         5       .1200      90.0000       .59001 0 0 0 0 1
6 RESVOR 2     15 5    6      0.0000                          1 0 0 1 0 1
6 REACH  3 341    6    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 343    5 7 6                                      1 0 0 0 0 1
6 RUNOFF 1 344         5       .0230      98.0000       .46001 0 0 0 0 1
6 ADDHYD 4 345    5 6 7                                      1 0 0 0 0 1
6 DIVERT 6     19 7 5 4     46.0000        .9400      0.00001 0 0 0 0 1
6 REACH  3 347    2    6   5280.0000        .7700      0.00001 0 0 0 0 1
6 ADDHYD 4 349    5 6 2                                      1 0 0 0 0 1
6 REACH  3 351    4    5     10.0000        .7100      0.00001 0 0 0 0 1
6 DIVERT 6 115    5 6 4      0.0000        .3600    117.00001 0 0 0 0 1
6 REACH  3 117    4    5     10.0000        .7100      0.00001 0 0 0 0 1
6 REACH  3 353    6    7   1250.0000        .6500      0.00001 0 0 0 0 1
6 RUNOFF 1 354         5       .1150      90.0000       .58001 0 0 0 0 1
6 RESVOR 2     16 5    6      0.0000                          1 0 0 1 0 1
6 REACH  3 355    6    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 357    5 7 6                                      1 0 0 0 0 1
6 REACH  3 359    6    7   1350.0000        .6500      0.00001 0 0 0 0 1
6 RUNOFF 1 360         5       .0610      90.0000       .30001 0 0 0 0 1
6 RESVOR 2     17 5    6      0.0000                          1 0 0 1 0 1
6 REACH  3 361    6    5     10.0000        .7100      0.00001 0 0 0 0 1
6 ADDHYD 4 363    5 7 6                                      1 0 0 0 0 1
6 RUNOFF 1 364         5       .0080      98.0000       .31001 0 0 0 0 1
6 ADDHYD 4 365    5 6 7                                      1 0 0 0 0 1
6 DIVERT 6     55 7 5 4      5.0000        .5100      0.00001 0 0 0 0 1
6 REACH  3 211    4    7     10.0000        .7100      0.00001 0 0 0 0 1
6 REACH  3 367    2    6   2600.0000        .7700      0.00001 0 0 0 0 1
6 ADDHYD 4 369    5 6 7                                      1 0 0 0 0 1
6 REACH  3 371    7    6   1700.0000        .7700      0.00001 0 0 0 0 1
6 ADDHYD 4 373    6 3 7                                      1 0 0 0 0 1
6 RUNOFF 1 380         5       .0570      74.0000       .16001 0 0 0 0 1
6 ADDHYD 4 381    5 7 6                                      1 0 0 0 0 1
  ENDATA

END OF LISTING
```

```
                                                                                                PASS=  1
EXECUTIVE CONTROL CARD              OPERATION  INCREM,     MAIN TIME INCREMENT=    .10
EXECUTIVE CONTROL CARD 10YR,2HR     OPERATION  COMPUT,     FROM XSECIN/STRUCT 116/  0      TO XSECIN/STRUCT 381/  0
        STARTING TIME=  0.00        RAIN DEPTH=  1.75      RAIN DURATION=  2.00      RAIN TABLE NO.= 1      SOIL CONDITION= 2
        ALTERNATE NO.= 1            STORM NO.= 2

 ENDCMP
```

```
EXECUTIVE CONTROL CARD 50YR,6HR    OPERATION  COMPUT,      FROM XSECTN/STRUCT 116/  0      TO XSECTN/STRUCT 381/  0      PASS=  2
        STARTING TIME=  0.00       RAIN DEPTH=  2.90       RAIN DURATION=  6.00       RAIN TABLE NO.= 4       SOIL CONDITION= 2
        ALTERNATE NO.= 2           STORM NO.= 3

  ENDCMP
```

```
EXECUTIVE CONTROL CARD 100YR1HR    OPERATION  COMPUT,      FROM XSECTN/STPUCT 116/  0      TO XSECTN/STRUCT 391/  0
                                                                                                          PASS=  3
        STARTING TIME=  0.00       RAIN DEPTH=  2.65      RAIN DURATION=  1.00      RAIN TABLE NO.= 2      SOIL CONDITION= 2
        ALTERNATE NO.= 3           STORM NO.= 1

 ENDCMP
```

```
EXECUTIVE CONTROL CARD 100Y24HR    OPERATION  COMPUT,      FROM XSECTN/STRUCT 116/  0      TO XSECTN/STRUCT 391/  0      PASS=  4
        STARTING TIME=  0.00      RAIN DEPTH=  3.35      RAIN DURATION=  1.00      RAIN TABLE NO.= 3      SOIL CONDITION= 2
        ALTERNATE NO.= 3          STORM NO.= 4

 ENDCMP
```

SUMMARY TABLE 1

ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP IN.	PRECIP DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
1	2	116	.03	1	2	.10	0.00	1.75	2.00	4.15	1.76	0.00	.44	138.21
1	2	118	.13	1	2	.10	0.00	1.75	2.00	26.86	1.17	0.00	.61	213.17
1	2	121	.16	1	2	.10	0.00	1.75	2.00	30.16	1.19	0.00	.58	193.36
1	2	20	.02	1	2	.10	0.00	1.75	2.00	7.34	1.04	0.00	.69	305.71
1	2	81	.02	1	2	.10	0.00	1.75	2.00	7.34	1.04	0.00	.71	311.95
1	2	123	.18	1	2	.10	0.00	1.75	2.00	36.61	1.14	0.00	.60	203.95
1	2	-1	.18	1	2	.10	0.00	1.75	2.00	20.58	2.31	66.28	.60	114.63
1	2	125	.18	1	2	.10	0.00	1.75	2.00	20.57	2.34	0.00	.60	114.57
1	2	119	.00	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	22	.14	1	2	.10	0.00	1.75	2.00	29.42	1.17	0.00	.61	213.17
1	2	221	.14	1	2	.10	0.00	1.75	2.00	29.42	1.17	0.00	.61	212.43
1	2	87	.13	1	2	.10	0.00	1.75	2.00	29.42	1.17	0.00	.65	228.42
1	2	127	.31	1	2	.10	0.00	1.75	2.00	45.27	1.73	0.00	.62	146.82
1	2	128	.01	1	2	.10	0.00	1.75	2.00	1.48	1.02	0.00	.33	164.56
1	2	129	.32	1	2	.10	0.00	1.75	2.00	46.44	1.72	0.00	.61	146.36
1	2	-2	.32	1	2	.10	0.00	1.75	2.00	35.30	2.51	65.74	.61	111.25
1	2	131	.32	1	2	.10	0.00	1.75	2.00	35.29	2.54	0.00	.61	111.21
1	2	132	.01	1	2	.10	0.00	1.75	2.00	1.81	1.02	0.00	.33	164.56
1	2	133	.33	1	2	.10	0.00	1.75	2.00	36.19	2.46	0.00	.61	110.22
1	2	-3	.33	1	2	.10	0.00	1.75	2.00	30.98	3.49	61.82	.60	94.37
1	2	135	.33	1	2	.10	0.00	1.75	2.00	30.96	3.54	0.00	.60	94.29
1	2	23	.01	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	91	.01	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	137	.33	1	2	.10	0.00	1.75	2.00	30.96	3.54	0.00	.59	92.73
1	2	138	.02	1	2	.10	0.00	1.75	2.00	2.27	1.64	0.00	.37	151.32
1	2	139	.35	1	2	.10	0.00	1.75	2.00	30.96	3.54	0.00	.59	88.74
1	2	26	.28	1	2	.10	0.00	1.75	2.00	84.10	1.07	0.00	.72	298.21
1	2	27	.28	1	2	.10	0.00	1.75	2.00	80.50	1.22	0.00	.72	285.46
1	2	28	.54	1	2	.10	0.00	1.75	2.00	133.48	1.18	0.00	.73	248.57
1	2	29	.82	1	2	.10	0.00	1.75	2.00	213.69	1.20	0.00	.73	260.92
1	2	31	.82	1	2	.10	0.00	1.75	2.00	210.05	1.27	0.00	.73	256.48
1	2	32	.22	1	2	.10	0.00	1.75	2.00	40.13	1.15	0.00	.51	182.41
1	2	33	1.04	1	2	.10	0.00	1.75	2.00	248.53	1.24	0.00	.68	239.20
1	2	35	1.04	1	2	.10	0.00	1.75	2.00	244.27	1.40	0.00	.68	235.10
1	2	34	.22	1	2	.10	0.00	1.75	2.00	46.62	1.15	0.00	.62	211.93
1	2	205	1.26	1	2	.10	0.00	1.75	2.00	286.44	1.39	0.00	.67	227.51
1	2	25	.00	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	207	1.26	1	2	.10	0.00	1.75	2.00	286.44	1.39	0.00	.67	226.76
1	2	-5	1.26	1	2	.10	0.00	1.75	2.00	253.55	1.95	64.02	.67	200.73
1	2	189	1.26	1	2	.10	0.00	1.75	2.00	253.52	1.95	0.00	.67	200.70
1	2	95	.03	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	141	.37	1	2	.10	0.00	1.75	2.00	30.96	3.54	0.00	.55	82.75
1	2	-4	.37	1	2	.10	0.00	1.75	2.00	27.19	4.33	57.61	.55	72.69
1	2	143	.37	1	2	.10	0.00	1.75	2.00	27.17	4.46	0.00	.55	72.62
1	2	200	.06	1	2	.10	0.00	1.75	2.00	14.94	1.33	0.00	.35	244.93
1	2	-10	.06	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	201	.06	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
1	2	145	.44	1	2	.10	0.00	1.75	2.00	27.17	4.46	0.00	.47	62.44
1	2	203	.44	1	2	.10	0.00	1.75	2.00	27.15	4.51	0.00	.47	62.40
1	2	208	.00	1	2	.10	0.00	1.75	2.00	3.15	.53	0.00	1.26	737.04
1	2	209	.44	1	2	.10	0.00	1.75	2.00	27.15	4.51	0.00	.48	61.83
1	2	137	1.24	1	2	.10	0.00	1.75	2.00	253.41	1.96	0.00	.69	204.71
1	2	146	.01	1	2	.10	0.00	1.75	2.00	1.95	1.65	0.00	.38	150.90
1	2	147	1.25	1	2	.10	0.00	1.75	2.00	254.67	1.96	0.00	.68	203.59
1	2	149	1.25	1	2	.10	0.00	1.75	2.00	253.97	2.04	0.00	.58	203.03
1	2	36	.14	1	2	.10	0.00	1.75	2.00	10.23	1.32	0.00	.23	74.67
1	2	-6	.13	1	2	.10	0.00	1.75	2.00	10.23	1.32	0.00	.25	80.29
1	2	37	.13	1	2	.10	0.00	1.75	2.00	9.94	2.01	0.00	.25	77.98
1	2	38	.08	1	2	.10	0.00	1.75	2.00	20.22	1.10	0.00	.63	246.61

10 Yr.-2 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	1	2	39	.21	1	2	.10	0.00	1.75	2.00	25.57	1.70	0.00	.40	122.09
	1	2	150	.02	1	2	.10	0.00	1.75	2.00	2.87	1.64	0.00	.37	151.32
	1	2	151	.23	1	2	.10	0.00	1.75	2.00	28.42	1.59	0.00	.40	124.43
	1	2	153	1.48	1	2	.10	0.00	1.75	2.00	276.27	2.01	0.00	.64	186.75
	1	2	155	1.48	1	2	.10	0.00	1.75	2.00	276.15	2.07	0.00	.64	186.67
	1	2	40	.19	1	2	.10	0.00	1.75	2.00	57.87	1.05	0.00	.71	301.38
1	1	2	41	.19	1	2	.10	0.00	1.75	2.00	53.56	1.38	0.00	.71	278.96
2	1	2	42	.32	1	2	.10	0.00	1.75	2.00	24.00	1.80	0.00	.22	75.94
3	1	2	43	.51	1	2	.10	0.00	1.75	2.00	70.30	1.43	0.00	.41	138.38
4	1	2	45	.52	1	2	.10	0.00	1.75	2.00	70.30	1.43	0.00	.40	135.82
5	1	2	47	.52	1	2	.10	0.00	1.75	2.00	68.76	1.39	0.00	.40	132.85
6	1	2	48	.21	1	2	.10	0.00	1.75	2.00	13.21	1.90	0.00	.22	64.43
7	1	2	49	.72	1	2	.10	0.00	1.75	2.00	81.73	1.96	0.00	.35	113.11
8	1	2	99	.70	1	2	.10	0.00	1.75	2.00	81.73	1.96	0.00	.36	116.60
9	1	2	156	.01	1	2	.10	0.00	1.75	2.00	1.40	1.61	0.00	.35	155.26
10	1	2	157	.71	1	2	.10	0.00	1.75	2.00	82.50	1.96	0.00	.36	116.21
11	1	2	159	2.19	1	2	.10	0.00	1.75	2.00	358.15	2.03	0.00	.55	163.59
12	1	2	161	2.19	1	2	.10	0.00	1.75	2.00	357.05	2.18	0.00	.55	163.09
13	1	2	51	.02	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
14	1	2	52	.03	1	2	.10	0.00	1.75	2.00	4.71	1.60	0.00	.28	138.53
15	1	2	53	.06	1	2	.10	0.00	1.75	2.00	4.71	1.60	0.00	.18	84.59
16	1	2	162	.02	1	2	.10	0.00	1.75	2.00	2.72	1.71	0.00	.42	143.23
17	1	2	163	.07	1	2	.10	0.00	1.75	2.00	7.32	1.61	0.00	.24	98.08
18	1	2	165	2.26	1	2	.10	0.00	1.75	2.00	361.55	2.17	0.00	.54	159.70
19	1	2	167	2.26	1	2	.10	0.00	1.75	2.00	360.70	2.25	0.00	.54	159.33
20	1	2	96	.11	1	2	.10	0.00	1.75	2.00	8.30	1.75	0.00	.21	79.09
21	1	2	168	.01	1	2	.10	0.00	1.75	2.00	1.38	1.62	0.00	.36	152.93
22	1	2	169	.11	1	2	.10	0.00	1.75	2.00	9.59	1.73	0.00	.22	84.11
23	1	2	171	2.38	1	2	.10	0.00	1.75	2.00	367.69	2.24	0.00	.52	154.63
24	1	2	173	2.38	1	2	.10	0.00	1.75	2.00	366.89	2.25	0.00	.52	154.29
25	1	2	55	.67	1	2	.10	0.00	1.75	2.00	165.14	1.11	0.00	.63	245.38
26	1	2	57	.67	1	2	.10	0.00	1.75	2.00	151.78	1.54	0.00	.64	225.53
27	1	2	58	.52	1	2	.10	0.00	1.75	2.00	24.55	2.08	0.00	.19	47.49
28	1	2	59	1.19	1	2	.10	0.00	1.75	2.00	167.07	2.00	0.00	.44	140.40
29	1	2	61	1.19	1	2	.10	0.00	1.75	2.00	165.67	2.17	0.00	.44	139.22
30	1	2	62	.19	1	2	.10	0.00	1.75	2.00	12.48	1.84	0.00	.21	66.01
31	1	2	65	1.38	1	2	.10	0.00	1.75	2.00	176.55	2.16	0.00	.41	128.02
32	1	2	21	1.38	1	2	.10	0.00	1.75	2.00	176.20	2.17	36.47	.41	127.78
33	1	2	71	1.38	1	2	.10	0.00	1.75	2.00	176.13	2.17	0.00	.41	127.72
34	1	2	174	.01	1	2	.10	0.00	1.75	2.00	2.23	1.59	0.00	.34	159.45
35	1	2	175	1.39	1	2	.10	0.00	1.75	2.00	177.36	2.16	0.00	.41	127.32
36	1	2	177	3.77	1	2	.10	0.00	1.75	2.00	543.30	2.25	0.00	.48	144.08
37	1	2	179	3.77	1	2	.10	0.00	1.75	2.00	541.30	2.32	0.00	.48	143.55
38	1	2	66	.08	1	2	.10	0.00	1.75	2.00	8.90	1.76	0.00	.32	111.22
39	1	2	107	.07	1	2	.10	0.00	1.75	2.00	8.90	1.76	0.00	.37	126.38
40	1	2	180	.02	1	2	.10	0.00	1.75	2.00	3.26	1.00	0.00	.32	171.37
41	1	2	181	.09	1	2	.10	0.00	1.75	2.00	11.46	1.66	0.00	.36	128.18
42	1	2	183	3.86	1	2	.10	0.00	1.75	2.00	548.88	2.30	0.00	.48	142.19
43	1	2	185	3.86	1	2	.10	0.00	1.75	2.00	548.78	2.31	0.00	.48	142.16
44	1	2	67	.01	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
45	1	2	68	.08	1	2	.10	0.00	1.75	2.00	12.11	1.65	0.00	.38	151.37
46	1	2	69	.09	1	2	.10	0.00	1.75	2.00	12.11	1.65	0.00	.34	135.15
47	1	2	103	.08	1	2	.10	0.00	1.75	2.00	12.11	1.65	0.00	.40	157.15
48	1	2	73	.01	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
49	1	2	190	.03	1	2	.10	0.00	1.75	2.00	4.35	1.66	0.00	.37	150.11
50	1	2	191	.11	1	2	.10	0.00	1.75	2.00	16.46	1.65	0.00	.39	155.22
51	1	2	193	3.97	1	2	.10	0.00	1.75	2.00	557.91	2.30	0.00	.48	140.66
52	1	2	300	.09	1	2	.10	0.00	1.75	2.00	27.62	1.15	0.00	.79	265.38
53	1	2	-7	.09	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
54	1	2	301	.09	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
55	1	2	302	.11	1	2	.10	0.00	1.75	2.00	27.37	1.22	0.00	.91	258.25
56	1	2	-8	.11	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
57	1	2	303	.11	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
	1	2	305	.20	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
	1	2	307	.20	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
	1	2	308	.04	1	2	.10	0.00	1.75	2.00	12.06	1.08	0.00	.73	294.23

10 Yr.-2 Hr.

20

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	1	2	-9	.04	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
	1	2	309	.04	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
	1	2	311	.24	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
	1	2	312	.02	1	2	.10	0.00	1.75	2.00	9.99	.65	0.00	1.37	624.61
	1	2	313	.25	1	2	.10	0.00	1.75	2.00	9.99	.65	0.00	.09	39.66
	1	2	-18	.25	1	2	.10	0.00	1.75	2.00	9.99	.65	0.00	.09	39.66
1	1	2	315	0.00	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	I
2	1	2	111	0.00	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	I
3	1	2	113	0.00	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	I
4	1	2	317	0.00	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	I
5	1	2	318	.12	1	2	.10	0.00	1.75	2.00	30.64	1.24	0.00	.82	255.37
6	1	2	-11	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
7	1	2	319	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
8	1	2	321	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
9	1	2	323	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
10	1	2	324	.12	1	2	.10	0.00	1.75	2.00	30.64	1.24	0.00	.82	255.37
11	1	2	-12	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
12	1	2	325	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
13	1	2	327	.24	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
14	1	2	329	.24	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
15	1	2	330	.12	1	2	.10	0.00	1.75	2.00	30.64	1.24	0.00	.82	255.37
16	1	2	-13	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
17	1	2	331	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
18	1	2	333	.36	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
19	1	2	335	.36	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
20	1	2	336	.03	1	2	.10	0.00	1.75	2.00	9.43	1.13	0.00	.77	277.35
21	1	2	-14	.03	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
22	1	2	337	.03	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
23	1	2	339	.39	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
24	1	2	340	.12	1	2	.10	0.00	1.75	2.00	30.64	1.24	0.00	.82	255.37
25	1	2	-15	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
26	1	2	341	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
27	1	2	343	.51	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
28	1	2	344	.02	1	2	.10	0.00	1.75	2.00	13.48	.75	0.00	1.39	586.02
29	1	2	345	.54	1	2	.10	0.00	1.75	2.00	13.48	.75	0.00	.06	25.10
30	1	2	-19	.50	1	2	.10	0.00	1.75	2.00	13.48	.75	0.00	.06	26.70
31	1	2	347	.25	1	2	.10	0.00	1.75	2.00	9.40	.95	0.00	.09	37.32
32	1	2	349	.76	1	2	.10	0.00	1.75	2.00	21.65	.89	0.00	.07	28.61
33	1	2	351	.03	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
34	1	2	115	.01	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
35	1	2	117	.02	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
36	1	2	353	.01	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
37	1	2	354	.12	1	2	.10	0.00	1.75	2.00	29.54	1.24	0.00	.81	256.90
38	1	2	-16	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
39	1	2	355	.12	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
40	1	2	357	.13	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
41	1	2	359	.13	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
42	1	2	360	.06	1	2	.10	0.00	1.75	2.00	17.95	1.08	0.00	.73	294.23
43	1	2	-17	.06	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
44	1	2	361	.06	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
45	1	2	363	.19	1	2	.10	0.00	1.75	2.00	0.00	0.00	0.00	0.00	0.00
46	1	2	364	.01	1	2	.10	0.00	1.75	2.00	5.43	.63	0.00	1.33	679.00
47	1	2	365	.20	1	2	.10	0.00	1.75	2.00	5.43	.63	0.00	.05	27.77
48	1	2	-55	.10	1	2	.10	0.00	1.75	2.00	5.08	.65	0.00	.11	50.88
49	1	2	211	.10	1	2	.10	0.00	1.75	2.00	.38	.61	0.00	.00	3.93
50	1	2	367	.76	1	2	.10	0.00	1.75	2.00	21.41	1.02	0.00	.07	28.29
51	1	2	369	.86	1	2	.10	0.00	1.75	2.00	25.34	1.02	0.00	.08	29.59
52	1	2	371	.86	1	2	.10	0.00	1.75	2.00	25.08	1.11	0.00	.08	29.29
53	1	2	373	4.82	1	2	.10	0.00	1.75	2.00	568.78	2.28	0.00	.41	117.93
54	1	2	380	.06	1	2	.10	0.00	1.75	2.00	4.80	1.51	0.00	.14	84.13
55	1	2	381	4.88	1	2	.10	0.00	1.75	2.00	571.38	2.28	0.00	.40	117.09
56	2	3	116	.03	4	2	.10	0.00	2.90	6.00	14.88	2.72	0.00	1.30	495.96
57	2	3	118	.13	4	2	.10	0.00	2.90	6.00	95.83	2.61	0.00	1.65	760.52
	2	3	121	.16	4	2	.10	0.00	2.90	6.00	109.53	2.62	0.00	1.58	702.45
	2	3	20	.02	4	2	.10	0.00	2.90	6.00	24.50	2.48	0.00	1.39	1020.98
	2	3	81	.02	4	2	.10	0.00	2.90	6.00	24.50	2.48	0.00	1.93	1041.81

10 Yr.-2 Hr.

50 Yr.-6 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HR	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CF	PEAK-TIME	PEAK-ELEV	RUNOFF IN	CSM
	2	3	123	.18	4	2	.10	0.00	2.90	6.00	130.71	2.59	0.00	1.63	728.09
	2	3	-1	.18	4	2	.10	0.00	2.90	6.00	40.51	3.55	68.47	1.63	225.64
	2	3	125	.18	4	2	.10	0.00	2.90	6.00	40.50	3.58	0.00	1.63	225.60
	2	3	119	.00	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
	2	3	22	.14	4	2	.10	0.00	2.90	6.00	104.95	2.61	0.00	1.65	760.52
	2	3	221	.14	4	2	.10	0.00	2.90	6.00	104.95	2.61	0.00	1.64	757.89
1	2	3	87	.13	4	2	.10	0.00	2.90	6.00	104.95	2.61	0.00	1.77	814.93
2	2	3	127	.31	4	2	.10	0.00	2.90	6.00	131.82	2.65	0.00	1.69	427.55
3	2	3	128	.01	4	2	.10	0.00	2.90	6.00	6.38	2.47	0.00	1.29	708.48
4	2	3	129	.32	4	2	.10	0.00	2.90	6.00	136.17	2.64	0.00	1.67	429.14
5	2	3	-2	.32	4	2	.10	0.00	2.90	6.00	70.03	3.75	68.63	1.67	220.69
6	2	3	131	.32	4	2	.10	0.00	2.90	6.00	70.02	3.78	0.00	1.67	220.66
7	2	3	132	.01	4	2	.10	0.00	2.90	6.00	7.79	2.47	0.00	1.29	708.48
8	2	3	133	.33	4	2	.10	0.00	2.90	6.00	71.76	3.71	0.00	1.66	218.57
9	2	3	-3	.33	4	2	.10	0.00	2.90	6.00	59.22	6.07	65.87	1.66	180.39
10	2	3	135	.33	4	2	.10	0.00	2.90	6.00	59.21	6.11	0.00	1.66	180.35
11	2	3	23	.01	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
12	2	3	91	.01	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
13	2	3	137	.33	4	2	.10	0.00	2.90	6.00	59.21	6.11	0.00	1.63	177.37
14	2	3	138	.02	4	2	.10	0.00	2.90	6.00	9.65	2.55	0.00	1.30	643.04
15	2	3	139	.35	4	2	.10	0.00	2.90	6.00	60.76	5.97	0.00	1.62	174.18
16	2	3	26	.28	4	2	.10	0.00	2.90	6.00	277.27	2.51	0.00	1.89	983.24
17	2	3	27	.28	4	2	.10	0.00	2.90	6.00	262.97	2.68	0.00	1.89	932.52
18	2	3	28	.54	4	2	.10	0.00	2.90	6.00	431.46	2.63	0.00	1.81	803.45
19	2	3	29	.82	4	2	.10	0.00	2.90	6.00	689.65	2.65	0.00	1.84	842.07
20	2	3	31	.82	4	2	.10	0.00	2.90	6.00	673.00	2.72	0.00	1.84	821.73
21	2	3	32	.22	4	2	.10	0.00	2.90	6.00	154.73	2.60	0.00	1.50	703.31
22	2	3	33	1.04	4	2	.10	0.00	2.90	6.00	813.03	2.69	0.00	1.76	782.51
23	2	3	35	1.04	4	2	.10	0.00	2.90	6.00	783.88	2.84	0.00	1.76	754.46
24	2	3	34	.22	4	2	.10	0.00	2.90	6.00	162.93	2.62	0.00	1.65	740.60
25	2	3	205	1.26	4	2	.10	0.00	2.90	6.00	911.85	2.82	0.00	1.74	724.26
26	2	3	25	.00	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
27	2	3	207	1.26	4	2	.10	0.00	2.90	6.00	911.85	2.82	0.00	1.74	721.87
28	2	3	-5	1.26	4	2	.10	0.00	2.90	6.00	605.99	3.17	66.37	1.74	479.74
29	2	3	189	1.26	4	2	.10	0.00	2.90	6.00	605.82	3.17	0.00	1.74	479.60
30	2	3	95	.03	4	2	.10	0.00	2.90	6.00	14.80	3.17	0.00	.53	585.92
31	2	3	141	.37	4	2	.10	0.00	2.90	6.00	60.76	5.97	0.00	1.55	162.42
32	2	3	-4	.37	4	2	.10	0.00	2.90	6.00	54.20	7.26	59.62	1.55	144.89
33	2	3	143	.37	4	2	.10	0.00	2.90	6.00	54.19	7.39	0.00	1.55	144.85
34	2	3	200	.06	4	2	.10	0.00	2.90	6.00	43.33	2.76	0.00	1.89	710.32
35	2	3	-10	.06	4	2	.10	0.00	2.90	6.00	4.68	6.43	3.01	.08	76.70
36	2	3	201	.06	4	2	.10	0.00	2.90	6.00	4.68	6.43	0.00	.08	76.70
37	2	3	145	.44	4	2	.10	0.00	2.90	6.00	57.15	6.48	0.00	1.34	131.36
38	2	3	203	.44	4	2	.10	0.00	2.90	6.00	57.08	6.54	0.00	1.34	131.20
39	2	3	208	.00	4	2	.10	0.00	2.90	6.00	5.57	2.39	0.00	2.66	1391.89
40	2	3	209	.44	4	2	.10	0.00	2.90	6.00	57.08	6.54	0.00	1.35	130.00
41	2	3	187	1.24	4	2	.10	0.00	2.90	6.00	590.48	3.15	0.00	1.76	477.00
42	2	3	146	.01	4	2	.10	0.00	2.90	6.00	8.18	2.57	0.00	1.30	629.00
43	2	3	147	1.25	4	2	.10	0.00	2.90	6.00	593.43	3.18	0.00	1.76	474.40
44	2	3	149	1.25	4	2	.10	0.00	2.90	6.00	589.92	3.28	0.00	1.76	471.59
45	2	3	36	.14	4	2	.10	0.00	2.90	6.00	41.78	2.77	0.00	.89	304.99
46	2	3	-6	.13	4	2	.10	0.00	2.90	6.00	41.73	2.77	0.00	.96	327.95
47	2	3	37	.13	4	2	.10	0.00	2.90	6.00	39.73	2.78	0.00	.96	311.82
48	2	3	38	.08	4	2	.10	0.00	2.90	6.00	70.45	2.56	0.00	1.73	859.11
49	2	3	39	.21	4	2	.10	0.00	2.90	6.00	86.59	2.64	0.00	1.26	413.47
50	2	3	150	.02	4	2	.10	0.00	2.90	6.00	12.22	2.55	0.00	1.30	643.04
51	2	3	151	.23	4	2	.10	0.00	2.90	6.00	98.09	2.62	0.00	1.26	429.46
52	2	3	153	1.48	4	2	.10	0.00	2.90	6.00	648.63	3.24	0.00	1.68	438.47
53	2	3	155	1.48	4	2	.10	0.00	2.90	6.00	645.35	3.32	0.00	1.68	436.25
54	2	3	40	.19	4	2	.10	0.00	2.90	6.00	193.61	2.49	0.00	1.39	1008.36
55	2	3	41	.19	4	2	.10	0.00	2.90	6.00	170.85	2.34	0.00	1.89	889.83
56	2	3	42	.32	4	2	.10	0.00	2.90	6.00	98.75	2.75	0.00	.39	312.49
57	2	3	43	.51	4	2	.10	0.00	2.90	6.00	267.07	2.82	0.00	1.27	525.72
	2	3	45	.52	4	2	.10	0.00	2.90	6.00	267.07	2.82	0.00	1.25	515.98
	2	3	47	.52	4	2	.10	0.00	2.90	6.00	251.32	3.04	0.00	1.25	485.56
	2	3	48	.21	4	2	.10	0.00	2.90	6.00	53.78	2.86	0.00	.84	262.35

50 Yr.-6 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	2	3	49	.72	4	2	.10	0.00	2.90	6.00	300.25	3.03	0.00	1.13	415.52
	2	3	99	.70	4	2	.10	0.00	2.90	6.00	300.25	3.03	0.00	1.17	428.37
	2	3	156	.01	4	2	.10	0.00	2.90	6.00	6.08	2.51	0.00	1.30	675.40
	2	3	157	.71	4	2	.10	0.00	2.90	6.00	302.41	3.02	0.00	1.17	425.98
	2	3	159	2.19	4	2	.10	0.00	2.90	6.00	907.52	3.16	0.00	1.52	414.54
	2	3	161	2.19	4	2	.10	0.00	2.90	6.00	896.35	3.32	0.00	1.52	409.44
1	2	3	51	.02	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
2	2	3	52	.03	4	2	.10	0.00	2.90	6.00	21.07	2.49	0.00	1.17	619.75
3	2	3	53	.06	4	2	.10	0.00	2.90	6.00	21.07	2.49	0.00	.72	378.46
4	2	3	162	.02	4	2	.10	0.00	2.90	6.00	10.23	2.67	0.00	1.30	538.43
5	2	3	163	.07	4	2	.10	0.00	2.90	6.00	29.79	2.52	0.00	.36	398.86
6	2	3	165	2.26	4	2	.10	0.00	2.90	6.00	906.84	3.32	0.00	1.49	600.57
7	2	3	167	2.26	4	2	.10	0.00	2.90	6.00	899.68	3.41	0.00	1.49	397.40
8	2	3	54	.11	4	2	.10	0.00	2.90	6.00	35.80	2.70	0.00	.89	340.95
9	2	3	168	.01	4	2	.10	0.00	2.90	6.00	5.93	2.53	0.00	1.30	658.80
10	2	3	169	.11	4	2	.10	0.00	2.90	6.00	40.29	2.67	0.00	.93	353.45
11	2	3	171	2.38	4	2	.10	0.00	2.90	6.00	918.22	3.41	0.00	1.47	396.15
12	2	3	173	2.38	4	2	.10	0.00	2.90	6.00	912.53	3.47	0.00	1.47	383.75
13	2	3	56	.67	4	2	.10	0.00	2.90	6.00	572.59	2.56	0.00	1.73	850.80
14	2	3	57	.67	4	2	.10	0.00	2.90	6.00	501.70	2.99	0.00	1.73	745.47
15	2	3	58	.52	4	2	.10	0.00	2.90	6.00	103.80	2.99	0.00	.75	200.78
16	2	3	59	1.19	4	2	.10	0.00	2.90	6.00	605.50	2.95	0.00	1.30	508.83
17	2	3	61	1.19	4	2	.10	0.00	2.90	6.00	574.34	3.21	0.00	1.30	482.64
18	2	3	62	.19	4	2	.10	0.00	2.90	6.00	51.91	2.81	0.00	.84	274.65
19	2	3	63	1.38	4	2	.10	0.00	2.90	6.00	611.31	3.21	0.00	1.24	443.30
20	2	3	-21	1.38	4	2	.10	0.00	2.90	6.00	607.88	3.24	38.94	1.24	440.81
21	2	3	79	1.38	4	2	.10	0.00	2.90	6.00	604.72	3.25	0.00	1.24	438.52
22	2	3	174	.01	4	2	.10	0.00	2.90	6.00	9.75	2.49	0.00	1.30	696.66
23	2	3	175	1.39	4	2	.10	0.00	2.90	6.00	607.48	3.25	0.00	1.24	436.09
24	2	3	177	3.77	4	2	.10	0.00	2.90	6.00	1484.64	3.35	0.00	1.38	393.71
25	2	3	179	3.77	4	2	.10	0.00	2.90	6.00	1468.61	3.43	0.00	1.38	389.46
26	2	3	66	.08	4	2	.10	0.00	2.90	6.00	33.99	2.72	0.00	1.11	424.89
27	2	3	107	.07	4	2	.10	0.00	2.90	6.00	33.24	2.73	0.00	1.26	472.23
28	2	3	180	.02	4	2	.10	0.00	2.90	6.00	13.72	2.43	0.00	1.29	722.06
29	2	3	181	.09	4	2	.10	0.00	2.90	6.00	40.52	2.61	0.00	1.27	453.19
30	2	3	183	3.86	4	2	.10	0.00	2.90	6.00	1487.95	3.43	0.00	1.38	385.45
31	2	3	185	3.86	4	2	.10	0.00	2.90	6.00	1487.21	3.43	0.00	1.38	385.26
32	2	3	67	.01	4	2	.10	0.00	2.90	6.00	.48	2.79	0.00	.01	49.54
33	2	3	68	.08	4	2	.10	0.00	2.90	6.00	50.74	2.56	0.00	1.30	634.28
34	2	3	69	.09	4	2	.10	0.00	2.90	6.00	50.72	2.56	0.00	1.16	566.09
35	2	3	103	.08	4	2	.10	0.00	2.90	6.00	47.73	2.56	0.00	1.34	619.37
36	2	3	73	.01	4	2	.10	0.00	2.90	6.00	3.03	2.57	0.00	.06	241.57
37	2	3	190	.03	4	2	.10	0.00	2.90	6.00	18.06	2.57	0.00	1.30	622.59
38	2	3	191	.11	4	2	.10	0.00	2.90	6.00	65.75	2.56	0.00	1.33	619.93
39	2	3	193	3.97	4	2	.10	0.00	2.90	6.00	1508.13	3.42	0.00	1.38	380.23
40	2	3	300	.09	4	2	.10	0.00	2.90	6.00	72.95	2.65	0.00	1.39	819.61
41	2	3	-7	.09	4	2	.10	0.00	2.90	6.00	6.65	6.32	3.01	.08	74.73
42	2	3	301	.09	4	2	.10	0.00	2.90	6.00	6.15	6.47	0.00	.08	69.12
43	2	3	302	.11	4	2	.10	0.00	2.90	6.00	83.82	2.68	0.00	1.39	790.77
44	2	3	-8	.11	4	2	.10	0.00	2.90	6.00	6.62	6.41	3.01	.07	62.41
45	2	3	303	.11	4	2	.10	0.00	2.90	6.00	6.62	6.41	0.00	.07	62.41
46	2	3	305	.20	4	2	.10	0.00	2.90	6.00	12.72	6.44	0.00	.07	65.24
47	2	3	307	.20	4	2	.10	0.00	2.90	6.00	11.91	6.58	0.00	.07	61.06
48	2	3	308	.04	4	2	.10	0.00	2.90	6.00	39.59	2.52	0.00	1.39	965.50
49	2	3	-9	.04	4	2	.10	0.00	2.90	6.00	4.89	6.03	3.01	.10	119.31
50	2	3	309	.04	4	2	.10	0.00	2.90	6.00	4.89	6.03	0.00	.10	119.31
51	2	3	311	.24	4	2	.10	0.00	2.90	6.00	12.42	6.55	0.00	.08	52.63
52	2	3	312	.02	4	2	.10	0.00	2.90	6.00	19.85	2.53	0.00	2.56	1240.90
53	2	3	313	.25	4	2	.10	0.00	2.90	6.00	19.85	2.53	0.00	.24	78.79
54	2	3	-18	.25	4	2	.10	0.00	2.90	6.00	19.85	2.53	0.00	.24	78.79
55	2	3	315	0.00	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	I
56	2	3	111	0.00	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	I
57	2	3	113	0.00	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	I
	2	3	317	0.00	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	I
	2	3	318	.12	4	2	.10	0.00	2.90	6.00	92.50	2.70	0.00	1.29	770.83
	2	3	-11	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	3.01	.06	50.34

50 Yr.-6 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	2	3	319	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	0.00	.06	50.34
	2	3	321	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	0.00	.06	50.34
	2	3	323	.12	4	2	.10	0.00	2.90	6.00	5.69	6.54	0.00	.06	47.42
	2	3	324	.12	4	2	.10	0.00	2.90	6.00	92.50	2.70	0.00	1.89	770.83
	2	3	-12	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	3.01	.06	50.34
	2	3	325	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	0.00	.06	50.34
1	2	3	327	.24	4	2	.10	0.00	2.90	6.00	11.30	6.58	0.00	.06	47.09
2	2	3	329	.24	4	2	.10	0.00	2.90	6.00	10.76	6.72	0.00	.06	44.84
3	2	3	330	.12	4	2	.10	0.00	2.90	6.00	92.50	2.70	0.00	1.89	770.83
4	2	3	-13	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	3.01	.06	50.34
5	2	3	331	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	0.00	.06	50.34
6	2	3	333	.36	4	2	.10	0.00	2.90	6.00	15.78	6.56	0.00	.06	43.83
7	2	3	335	.36	4	2	.10	0.00	2.90	6.00	15.13	6.81	0.00	.06	42.03
8	2	3	336	.03	4	2	.10	0.00	2.90	6.00	30.43	2.59	0.00	1.89	894.98
9	2	3	-14	.03	4	2	.10	0.00	2.90	6.00	3.56	6.15	3.01	.07	104.57
10	2	3	337	.03	4	2	.10	0.00	2.90	6.00	3.11	6.31	0.00	.07	91.55
11	2	3	339	.39	4	2	.10	0.00	2.90	6.00	15.65	6.78	0.00	.06	39.72
12	2	3	340	.12	4	2	.10	0.00	2.90	6.00	92.50	2.70	0.00	1.89	770.83
13	2	3	-15	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	3.01	.06	50.34
14	2	3	341	.12	4	2	.10	0.00	2.90	6.00	6.04	6.49	0.00	.06	50.34
15	2	3	343	.51	4	2	.10	0.00	2.90	6.00	20.23	6.72	0.00	.06	39.35
16	2	3	344	.02	4	2	.10	0.00	2.90	6.00	27.26	2.58	0.00	2.66	1185.42
17	2	3	345	.54	4	2	.10	0.00	2.90	6.00	27.26	2.58	0.00	.17	50.77
18	2	3	-19	.50	4	2	.10	0.00	2.90	6.00	27.26	2.58	0.00	.18	54.01
19	2	3	347	.25	4	2	.10	0.00	2.90	6.00	19.13	2.78	0.00	.24	75.91
20	2	3	349	.76	4	2	.10	0.00	2.90	6.00	43.77	2.66	0.00	.20	57.84
21	2	3	351	.03	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
22	2	3	115	.01	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
23	2	3	117	.02	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
24	2	3	353	.01	4	2	.10	0.00	2.90	6.00	0.00	0.00	0.00	0.00	0.00
25	2	3	354	.12	4	2	.10	0.00	2.90	6.00	89.25	2.70	0.00	1.89	776.05
26	2	3	-16	.12	4	2	.10	0.00	2.90	6.00	6.25	6.46	3.01	.06	54.36
27	2	3	355	.12	4	2	.10	0.00	2.90	6.00	6.25	6.46	0.00	.06	54.36
28	2	3	357	.13	4	2	.10	0.00	2.90	6.00	6.25	6.46	0.00	.06	49.38
29	2	3	359	.13	4	2	.10	0.00	2.90	6.00	5.95	6.55	0.00	.06	47.03
30	2	3	360	.06	4	2	.10	0.00	2.90	6.00	58.90	2.53	0.00	1.89	965.50
31	2	3	417	.06	4	2	.10	0.00	2.90	6.00	5.91	6.13	3.01	.08	96.81
32	2	3	361	.06	4	2	.10	0.00	2.90	6.00	5.91	6.13	0.00	.08	96.81
33	2	3	363	.19	4	2	.10	0.00	2.90	6.00	7.46	6.47	0.00	.06	39.78
34	2	3	364	.01	4	2	.10	0.00	2.90	6.00	10.43	2.49	0.00	2.66	1304.15
35	2	3	365	.20	4	2	.10	0.00	2.90	6.00	10.43	2.49	0.00	.17	53.34
36	2	3	-55	.10	4	2	.10	0.00	2.90	6.00	5.10	6.75	0.00	.27	51.02
37	2	3	211	.10	4	2	.10	0.00	2.90	6.00	5.43	2.49	0.00	.06	56.69
38	2	3	367	.76	4	2	.10	0.00	2.90	6.00	43.03	2.75	0.00	.20	56.87
39	2	3	369	.86	4	2	.10	0.00	2.90	6.00	48.08	2.78	0.00	.21	56.13
40	2	3	371	.86	4	2	.10	0.00	2.90	6.00	47.18	2.36	0.00	.21	55.08
41	2	3	373	4.82	4	2	.10	0.00	2.90	6.00	1529.39	3.42	0.00	1.17	317.11
42	2	3	380	.06	4	2	.10	0.00	2.90	6.00	24.01	2.51	0.00	.84	421.21
43	2	3	381	4.88	4	2	.10	0.00	2.90	6.00	1536.99	3.43	0.00	1.17	314.96
44	3	1	116	.03	2	2	.10	0.00	2.65	1.00	31.44	.95	0.00	1.11	1048.08
45	3	1	118	.13	2	2	.10	0.00	2.65	1.00	209.84	.32	0.00	1.43	1665.41
46	3	1	121	.16	2	2	.10	0.00	2.65	1.00	237.55	.33	0.00	1.37	1522.74
47	3	1	20	.02	2	2	.10	0.00	2.65	1.00	63.54	.58	0.00	1.66	2647.41
48	3	1	81	.02	2	2	.10	0.00	2.65	1.00	34.52	.58	0.00	1.30	1467.49
49	3	1	123	.13	2	2	.10	0.00	2.65	1.00	269.42	.32	0.00	1.36	1500.75
50	3	1	-1	.18	2	2	.10	0.00	2.65	1.00	53.19	1.37	70.28	1.36	296.29
51	3	1	125	.18	2	2	.10	0.00	2.65	1.00	53.12	1.40	0.00	1.36	295.92
52	3	1	119	.00	2	2	.10	0.00	2.65	1.00	26.63	.70	0.00	19.39	55471.19
53	3	1	22	.14	2	2	.10	0.00	2.65	1.00	229.83	.32	0.00	1.43	1665.41
54	3	1	221	.14	2	2	.10	0.00	2.65	1.00	243.71	.30	0.00	1.50	1759.88
55	3	1	87	.13	2	2	.10	0.00	2.65	1.00	139.32	.30	0.00	1.20	1091.77
56	3	1	127	.31	2	2	.10	0.00	2.65	1.00	170.61	.38	0.00	1.29	553.36
57	3	1	128	.01	2	2	.10	0.00	2.65	1.00	19.16	.54	0.00	1.09	2128.90
	3	1	129	.32	2	2	.10	0.00	2.65	1.00	179.40	.34	0.00	1.29	565.37
	3	1	-2	.32	2	2	.10	0.00	2.65	1.00	80.23	1.45	69.90	1.29	252.85
	3	1	131	.32	2	2	.10	0.00	2.65	1.00	80.09	1.48	0.00	1.29	252.41

50 Yr.-6 Hr.

100 Yr.-1 Hr.

24

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	3	1	132	.01	2	2	.10	0.00	2.65	1.00	23.42	.64	0.00	1.39	2128.90
	3	1	133	.33	2	2	.10	0.00	2.65	1.00	80.09	1.48	0.00	1.29	243.96
	3	1	-3	.33	2	2	.10	0.00	2.65	1.00	56.31	3.12	65.33	1.29	171.51
	3	1	135	.33	2	2	.10	0.00	2.65	1.00	56.29	3.18	0.00	1.29	171.47
	3	1	23	.01	2	2	.10	0.00	2.65	1.00	96.79	.34	0.00	5.30	9984.63
	3	1	91	.01	2	2	.10	0.00	2.65	1.00	26.18	.34	0.00	3.39	4738.07
1	3	1	137	.33	2	2	.10	0.00	2.65	1.00	56.29	3.18	0.00	1.32	168.63
2	3	1	138	.02	2	2	.10	0.00	2.65	1.00	24.22	.73	0.00	1.11	1614.63
3	3	1	139	.35	2	2	.10	0.00	2.65	1.00	56.50	.83	0.00	1.31	161.98
4	3	1	26	.28	2	2	.10	0.00	2.65	1.00	630.83	.72	0.00	1.66	2414.28
5	3	1	27	.28	2	2	.10	0.00	2.65	1.00	585.99	.90	0.00	1.66	2077.99
6	3	1	28	.54	2	2	.10	0.00	2.65	1.00	920.20	.34	0.00	1.59	1713.60
7	3	1	29	.82	2	2	.10	0.00	2.65	1.00	1483.20	.87	0.00	1.61	1810.99
8	3	1	31	.82	2	2	.10	0.00	2.65	1.00	1420.79	.94	0.00	1.61	1734.79
9	3	1	32	.22	2	2	.10	0.00	2.65	1.00	348.63	.30	0.00	1.30	1584.67
10	3	1	33	1.04	2	2	.10	0.00	2.65	1.00	1703.82	.92	0.00	1.55	1639.86
11	3	1	35	1.04	2	2	.10	0.00	2.65	1.00	1593.82	1.08	0.00	1.55	1534.00
12	3	1	34	.22	2	2	.10	0.00	2.65	1.00	352.84	.84	0.00	1.44	1603.84
13	3	1	205	1.26	2	2	.10	0.00	2.65	1.00	1832.84	1.05	0.00	1.53	1455.79
14	3	1	25	.00	2	2	.10	0.00	2.65	1.00	65.81	.87	0.00	7.35	15787.96
15	3	1	207	1.26	2	2	.10	0.00	2.65	1.00	1865.23	1.04	0.00	1.55	1476.63
16	3	1	-5	1.26	2	2	.10	0.00	2.65	1.00	1076.40	1.35	68.59	1.55	852.14
17	3	1	189	1.26	2	2	.10	0.00	2.65	1.00	1075.88	1.36	0.00	1.55	851.73
18	3	1	95	.03	2	2	.10	0.00	2.65	1.00	99.18	1.36	0.00	4.07	3925.68
19	3	1	141	.37	2	2	.10	0.00	2.65	1.00	135.97	1.38	0.00	1.50	363.48
20	3	1	-4	.37	2	2	.10	0.00	2.65	1.00	59.70	1.96	60.14	1.50	159.60
21	3	1	143	.37	2	2	.10	0.00	2.65	1.00	59.55	2.12	0.00	1.50	159.20
22	3	1	200	.06	2	2	.10	0.00	2.65	1.00	83.05	1.00	0.00	1.66	1361.53
23	3	1	-10	.06	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
24	3	1	201	.06	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
25	3	1	145	.44	2	2	.10	0.00	2.65	1.00	59.55	2.12	0.00	1.29	136.88
26	3	1	203	.44	2	2	.10	0.00	2.65	1.00	59.46	2.17	0.00	1.29	136.66
27	3	1	208	.00	2	2	.10	0.00	2.65	1.00	16.19	.62	0.00	2.39	4048.56
28	3	1	209	.44	2	2	.10	0.00	2.65	1.00	59.46	2.17	0.00	1.30	135.41
29	3	1	187	1.24	2	2	.10	0.00	2.65	1.00	975.19	1.37	0.00	1.50	787.77
30	3	1	146	.01	2	2	.10	0.00	2.65	1.00	19.49	.75	0.00	1.11	1498.85
31	3	1	147	1.25	2	2	.10	0.00	2.65	1.00	976.64	1.36	0.00	1.49	780.75
32	3	1	149	1.25	2	2	.10	0.00	2.65	1.00	966.92	1.46	0.00	1.49	772.98
33	3	1	36	.14	2	2	.10	0.00	2.65	1.00	95.31	.97	0.00	.74	695.68
34	3	1	-6	.13	2	2	.10	0.00	2.65	1.00	60.77	1.15	0.00	.65	476.96
35	3	1	37	.13	2	2	.10	0.00	2.65	1.00	59.99	1.26	0.00	.65	470.83
36	3	1	38	.08	2	2	.10	0.00	2.65	1.00	161.94	.75	0.00	1.51	1974.82
37	3	1	39	.21	2	2	.10	0.00	2.65	1.00	183.16	.80	0.00	.98	874.64
38	3	1	150	.02	2	2	.10	0.00	2.65	1.00	30.68	.73	0.00	1.11	1614.63
39	3	1	151	.23	2	2	.10	0.00	2.65	1.00	211.07	.79	0.00	.99	924.08
40	3	1	153	1.48	2	2	.10	0.00	2.65	1.00	1030.90	1.43	0.00	1.41	696.88
41	3	1	155	1.48	2	2	.10	0.00	2.65	1.00	1021.12	1.51	0.00	1.41	690.27
42	3	1	40	.19	2	2	.10	0.00	2.65	1.00	499.23	.69	0.00	1.66	2600.18
43	3	1	41	.19	2	2	.10	0.00	2.65	1.00	362.81	1.06	0.00	1.66	1889.63
44	3	1	42	.32	2	2	.10	0.00	2.65	1.00	232.17	.95	0.00	.74	734.73
45	3	1	43	.51	2	2	.10	0.00	2.65	1.00	585.75	1.03	0.00	1.09	1153.05
46	3	1	45	.52	2	2	.10	0.00	2.65	1.00	619.17	1.02	0.00	1.11	1196.26
47	3	1	47	.52	2	2	.10	0.00	2.65	1.00	554.69	1.25	0.00	1.11	1071.68
48	3	1	48	.21	2	2	.10	0.00	2.65	1.00	124.26	1.04	0.00	.70	606.17
49	3	1	49	.72	2	2	.10	0.00	2.65	1.00	654.31	1.22	0.00	.99	905.51
50	3	1	99	.70	2	2	.10	0.00	2.65	1.00	522.58	1.23	0.00	.93	745.58
51	3	1	156	.01	2	2	.10	0.00	2.65	1.00	16.20	.70	0.00	1.11	1799.63
52	3	1	157	.71	2	2	.10	0.00	2.65	1.00	523.90	1.22	0.00	.93	737.98
53	3	1	159	2.19	2	2	.10	0.00	2.65	1.00	1472.45	1.40	0.00	1.26	672.59
54	3	1	161	2.19	2	2	.10	0.00	2.65	1.00	1454.20	1.36	0.00	1.26	664.25
55	3	1	51	.02	2	2	.10	0.00	2.65	1.00	117.41	1.36	0.00	2.34	5416.11
56	3	1	52	.03	2	2	.10	0.00	2.65	1.00	57.61	.57	0.00	.98	1694.44
57	3	1	53	.06	2	2	.10	0.00	2.65	1.00	117.89	1.35	0.00	1.71	2117.43
	3	1	162	.02	2	2	.10	0.00	2.65	1.00	22.51	.87	0.00	1.11	1134.91
	3	1	163	.07	2	2	.10	0.00	2.65	1.00	124.78	1.35	0.00	1.55	1670.90
	3	1	165	2.26	2	2	.10	0.00	2.65	1.00	1520.75	1.49	0.00	1.27	671.74

100 Yr.-1 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM	
	3	1	167	2.26	2	2	.10	0.00	2.65	1.00	1499.71	1.57	0.00	1.27	662.44	
	3	1	54	.11	2	2	.10	0.00	2.65	1.00	83.78	.35	0.00	.74	797.90	
	3	1	168	.01	2	2	.10	0.00	2.65	1.00	15.48	.72	0.00	1.11	1719.72	
	3	1	169	.11	2	2	.10	0.00	2.65	1.00	93.22	.36	0.00	.77	817.76	
	3	1	171	2.38	2	2	.10	0.00	2.65	1.00	1507.91	1.56	0.00	1.24	634.14	
	3	1	173	2.38	2	2	.10	0.00	2.65	1.00	1495.40	1.62	0.00	1.24	628.87	
1	3	1	56	.67	2	2	.10	0.00	2.65	1.00	1311.38	.76	0.00	1.51	1948.56	
2	3	1	57	.67	2	2	.10	0.00	2.65	1.00	1027.18	1.21	0.00	1.51	1526.27	
3	3	1	58	.52	2	2	.10	0.00	2.65	1.00	238.03	1.14	0.00	.61	460.41	
4	3	1	59	1.19	2	2	.10	0.00	2.65	1.00	1260.68	1.20	0.00	1.12	1059.39	
5	3	1	61	1.19	2	2	.10	0.00	2.65	1.00	1161.15	1.43	0.00	1.12	975.75	
6	3	1	62	.19	2	2	.10	0.00	2.65	1.00	121.30	1.00	0.00	.69	641.79	
7	3	1	63	1.38	2	2	.10	0.00	2.65	1.00	1211.38	1.42	0.00	1.06	878.45	
8	3	1	-21	1.38	2	2	.10	0.00	2.65	1.00	1210.56	1.44	40.80	1.06	877.85	
9	3	1	71	1.38	2	2	.10	0.00	2.65	1.00	1195.28	1.45	0.00	1.06	866.77	
10	3	1	174	.01	2	2	.10	0.00	2.65	1.00	26.42	.67	0.00	1.10	1887.32	
11	3	1	175	1.39	2	2	.10	0.00	2.65	1.00	1195.33	1.45	0.00	1.06	858.10	
12	3	1	177	3.77	2	2	.10	0.00	2.65	1.00	2627.17	1.52	0.00	1.18	696.69	
13	3	1	179	3.77	2	2	.10	0.00	2.65	1.00	2579.47	1.61	0.00	1.18	684.05	
14	3	1	66	.08	2	2	.10	0.00	2.65	1.00	75.54	.92	0.00	.94	944.24	
15	3	1	107	.07	2	2	.10	0.00	2.65	1.00	40.52	.92	0.00	.77	575.60	
16	3	1	180	.02	2	2	.10	0.00	2.65	1.00	45.67	.61	0.00	1.07	2403.58	
17	3	1	181	.09	2	2	.10	0.00	2.65	1.00	65.82	.56	0.00	.83	736.29	
18	3	1	183	3.86	2	2	.10	0.00	2.65	1.00	2588.60	1.61	0.00	1.17	670.57	
19	3	1	185	3.86	2	2	.10	0.00	2.65	1.00	2586.52	1.61	0.00	1.17	670.03	
20	3	1	67	.01	2	2	.10	0.00	2.65	1.00	32.42	1.02	0.00	2.23	3376.92	
21	3	1	68	.08	2	2	.10	0.00	2.65	1.00	124.20	.75	0.00	1.11	1552.49	
22	3	1	69	.09	2	2	.10	0.00	2.65	1.00	128.26	.78	0.00	1.23	1431.44	
23	3	1	103	.08	2	2	.10	0.00	2.65	1.00	69.96	.78	0.00	.95	907.96	
24	3	1	73	.01	2	2	.10	0.00	2.65	1.00	58.29	.78	0.00	2.94	4647.09	100 Yr.-1 Hr.
25	3	1	190	.03	2	2	.10	0.00	2.65	1.00	42.60	.76	0.00	1.11	1468.96	
26	3	1	191	.11	2	2	.10	0.00	2.65	1.00	112.49	.77	0.00	.99	1060.67	
27	3	1	193	3.97	2	2	.10	0.00	2.65	1.00	2588.16	1.61	0.00	1.16	652.53	
28	3	1	300	.09	2	2	.10	0.00	2.65	1.00	149.23	.37	0.00	1.67	1676.74	
29	3	1	-7	.09	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
30	3	1	301	.09	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
31	3	1	302	.11	2	2	.10	0.00	2.65	1.00	167.14	.91	0.00	1.66	1576.81	
32	3	1	-8	.11	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
33	3	1	303	.11	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
34	3	1	305	.20	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
35	3	1	307	.20	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
36	3	1	308	.04	2	2	.10	0.00	2.65	1.00	95.57	.73	0.00	1.66	2331.05	
37	3	1	-9	.04	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
38	3	1	309	.04	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
39	3	1	311	.24	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
40	3	1	312	.02	2	2	.10	0.00	2.65	1.00	44.40	.75	0.00	2.41	2775.20	
41	3	1	313	.25	2	2	.10	0.00	2.65	1.00	44.40	.75	0.00	.15	176.20	
42	3	1	-18	.25	2	2	.10	0.00	2.65	1.00	40.70	.75	0.00	.15	161.53	
43	3	1	315	0.00	2	2	.10	0.00	2.65	1.00	3.70	.76	0.00	.15	R	
44	3	1	111	0.00	2	2	.10	0.00	2.65	1.00	1.44	.76	0.00	.15	R	
45	3	1	113	0.00	2	2	.10	0.00	2.65	1.00	2.26	.76	33.84	.15	R	
46	3	1	317	0.00	2	2	.10	0.00	2.65	1.00	1.05	.37	0.00	.15	R	
47	3	1	318	.12	2	2	.10	0.00	2.65	1.00	184.67	.93	0.00	1.66	1538.95	
48	3	1	-11	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
49	3	1	319	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
50	3	1	321	.12	2	2	.10	0.00	2.65	1.00	1.05	.37	0.00	.00	8.72	
51	3	1	323	.12	2	2	.10	0.00	2.65	1.00	.82	.29	0.00	.00	6.80	
52	3	1	324	.12	2	2	.10	0.00	2.65	1.00	184.67	.93	0.00	1.66	1538.95	
53	3	1	-12	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
54	3	1	325	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
55	3	1	327	.24	2	2	.10	0.00	2.65	1.00	.82	.29	0.00	.00	3.40	
56	3	1	329	.24	2	2	.10	0.00	2.65	1.00	.66	1.11	0.00	.00	2.77	
57	3	1	330	.12	2	2	.10	0.00	2.65	1.00	184.67	.93	0.00	1.66	1538.95	
	3	1	-13	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
	3	1	331	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00	
	3	1	333	.36	2	2	.10	0.00	2.65	1.00	.66	1.11	0.00	.00	1.85	

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	3	1	335	.36	2	2	.10	0.00	2.65	1.00	.56	1.23	0.00	.00	1.55
	3	1	336	.03	2	2	.10	0.00	2.65	1.00	65.61	.80	0.00	1.67	1929.75
	3	1	-14	.03	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
	3	1	337	.03	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
	3	1	339	.39	2	2	.10	0.00	2.65	1.00	.56	1.23	0.00	.00	1.43
	3	1	340	.12	2	2	.10	0.00	2.65	1.00	134.67	.73	0.00	1.66	1538.95
1	3	1	-15	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
2	3	1	341	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
3	3	1	343	.51	2	2	.10	0.00	2.65	1.00	.56	1.23	0.00	.00	1.09
4	3	1	344	.02	2	2	.10	0.00	2.65	1.00	57.96	.81	0.00	2.42	2520.17
5	3	1	345	.54	2	2	.10	0.00	2.65	1.00	57.96	.81	0.00	.10	107.94
6	3	1	-19	.50	2	2	.10	0.00	2.65	1.00	46.54	.85	0.00	.10	92.20
7	3	1	347	.25	2	2	.10	0.00	2.65	1.00	38.11	1.02	0.00	.15	151.23
8	3	1	349	.76	2	2	.10	0.00	2.65	1.00	81.13	.95	0.00	.12	107.20
9	3	1	351	.03	2	2	.10	0.00	2.65	1.00	11.96	.81	0.00	.11	371.35
10	3	1	115	.01	2	2	.10	0.00	2.65	1.00	4.25	.81	0.00	.11	366.76
11	3	1	117	.02	2	2	.10	0.00	2.65	1.00	7.71	.81	18.27	.11	373.93
12	3	1	353	.01	2	2	.10	0.00	2.65	1.00	3.23	.90	0.00	.11	278.62
13	3	1	354	.12	2	2	.10	0.00	2.65	1.00	180.00	.92	0.00	1.66	1565.25
14	3	1	-16	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
15	3	1	355	.12	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
16	3	1	357	.13	2	2	.10	0.00	2.65	1.00	3.23	.70	0.00	.01	25.53
17	3	1	359	.13	2	2	.10	0.00	2.65	1.00	2.63	1.01	0.00	.01	20.74
18	3	1	360	.06	2	2	.10	0.00	2.65	1.00	142.19	.73	0.00	1.66	2331.05
19	3	1	-17	.06	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
20	3	1	361	.06	2	2	.10	0.00	2.65	1.00	0.00	0.00	0.00	0.00	0.00
21	3	1	363	.19	2	2	.10	0.00	2.65	1.00	2.63	1.01	0.00	.01	13.99
22	3	1	364	.01	2	2	.10	0.00	2.65	1.00	25.14	.71	0.00	2.42	3142.86
23	3	1	365	.20	2	2	.10	0.00	2.65	1.00	25.24	.71	0.00	.11	129.06
24	3	1	-55	.10	2	2	.10	0.00	2.65	1.00	5.32	1.15	0.00	.08	53.31
25	3	1	211	.10	2	2	.10	0.00	2.65	1.00	20.24	.71	0.00	.13	211.21
26	3	1	367	.76	2	2	.10	0.00	2.65	1.00	79.38	1.07	0.00	.12	104.89
27	3	1	369	.86	2	2	.10	0.00	2.65	1.00	84.38	1.07	0.00	.11	98.51
28	3	1	371	.86	2	2	.10	0.00	2.65	1.00	82.06	1.14	0.00	.11	95.80
29	3	1	373	4.82	2	2	.10	0.00	2.65	1.00	2615.21	1.60	0.00	.98	542.25
30	3	1	380	.06	2	2	.10	0.00	2.65	1.00	69.08	.67	0.00	.68	1211.85
31	3	1	381	4.88	2	2	.10	0.00	2.65	1.00	2615.21	1.60	0.00	.97	535.91
32	3	4	116	.03	3	2	.10	0.00	3.85	24.00	27.03	12.18	0.00	2.07	901.12
33	3	4	118	.13	3	2	.10	0.00	3.85	24.00	157.07	12.09	0.00	2.50	1246.61
34	3	4	121	.16	3	2	.10	0.00	3.85	24.00	182.75	12.10	0.00	2.41	1171.49
35	3	4	20	.02	3	2	.10	0.00	3.85	24.00	38.27	11.98	0.00	2.78	1594.71
36	3	4	81	.02	3	2	.10	0.00	3.85	24.00	32.50	11.28	0.00	2.77	1381.82
37	3	4	123	.18	3	2	.10	0.00	3.85	24.00	215.50	12.08	0.00	2.46	1200.43
38	3	4	-1	.18	3	2	.10	0.00	3.85	24.00	53.35	12.75	70.31	2.46	297.21
39	3	4	125	.18	3	2	.10	0.00	3.85	24.00	53.32	12.78	0.00	2.46	296.99
40	3	4	119	.00	3	2	.10	0.00	3.85	24.00	5.09	11.95	0.00	2.94	10609.46
41	3	4	22	.14	3	2	.10	0.00	3.85	24.00	172.03	12.09	0.00	2.50	1246.61
42	3	4	221	.14	3	2	.10	0.00	3.85	24.00	174.03	12.08	0.00	2.50	1256.72
43	3	4	87	.13	3	2	.10	0.00	3.85	24.00	123.24	12.08	0.00	2.49	956.92
44	3	4	127	.31	3	2	.10	0.00	3.85	24.00	163.01	12.16	0.00	2.47	528.72
45	3	4	128	.01	3	2	.10	0.00	3.85	24.00	11.87	11.97	0.00	2.07	1319.38
46	3	4	129	.32	3	2	.10	0.00	3.85	24.00	170.03	12.10	0.00	2.46	535.85
47	3	4	-2	.32	3	2	.10	0.00	3.85	24.00	84.48	12.92	70.56	2.46	266.26
48	3	4	131	.32	3	2	.10	0.00	3.85	24.00	84.47	12.95	0.00	2.46	266.20
49	3	4	132	.01	3	2	.10	0.00	3.85	24.00	14.51	11.97	0.00	2.07	1319.38
50	3	4	133	.33	3	2	.10	0.00	3.85	24.00	86.04	12.95	0.00	2.45	262.07
51	3	4	-3	.33	3	2	.10	0.00	3.85	24.00	84.34	13.31	66.04	2.44	256.89
52	3	4	135	.33	3	2	.10	0.00	3.85	24.00	81.46	13.21	0.00	2.44	248.11
53	3	4	23	.01	3	2	.10	0.00	3.85	24.00	47.57	12.12	0.00	2.55	4907.17
54	3	4	91	.01	3	2	.10	0.00	3.85	24.00	19.45	12.12	0.00	2.55	3520.46
55	3	4	137	.33	3	2	.10	0.00	3.85	24.00	81.46	13.21	0.00	2.45	244.01
56	3	4	138	.02	3	2	.10	0.00	3.85	24.00	17.57	12.02	0.00	2.07	1171.29
57	3	4	139	.35	3	2	.10	0.00	3.85	24.00	82.73	13.21	0.00	2.43	237.17
	3	4	26	.28	3	2	.10	0.00	3.85	24.00	430.94	12.01	0.00	2.78	1529.17
	3	4	27	.28	3	2	.10	0.00	3.85	24.00	411.26	12.17	0.00	2.77	1458.35
	3	4	28	.54	3	2	.10	0.00	3.85	24.00	683.86	12.11	0.00	2.68	1273.48

100 Yr.-1 Hr.

100 Yr.-24 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	3	4	29	.82	3	2	.10	0.00	3.85	24.00	1082.54	12.13	0.00	2.71	1321.78
	3	4	31	.82	3	2	.10	0.00	3.85	24.00	1052.85	12.20	0.00	2.71	1285.53
	3	4	32	.22	3	2	.10	0.00	3.85	24.00	264.65	12.07	0.00	2.32	1202.95
	3	4	33	1.04	3	2	.10	0.00	3.85	24.00	1286.88	12.17	0.00	2.63	1238.57
	3	4	35	1.04	3	2	.10	0.00	3.85	24.00	1235.57	12.32	0.00	2.63	1189.19
	3	4	34	.22	3	2	.10	0.00	3.85	24.00	268.31	12.09	0.00	2.49	1219.59
1	3	4	205	1.26	3	2	.10	0.00	3.85	24.00	1431.64	12.28	0.00	2.60	1137.12
2	3	4	25	.00	3	2	.10	0.00	3.85	24.00	26.55	12.13	0.00	2.59	6369.70
3	3	4	207	1.26	3	2	.10	0.00	3.85	24.00	1441.98	12.27	0.00	2.60	1141.56
4	3	4	-5	1.26	3	2	.10	0.00	3.85	24.00	953.68	12.38	67.98	2.60	754.99
5	3	4	189	1.26	3	2	.10	0.00	3.85	24.00	953.08	12.59	0.00	2.60	754.51
6	3	4	95	.03	3	2	.10	0.00	3.85	24.00	77.45	12.59	0.00	3.21	3065.61
7	3	4	141	.37	3	2	.10	0.00	3.85	24.00	123.01	12.61	0.00	2.48	328.81
8	3	4	-4	.37	3	2	.10	0.00	3.85	24.00	68.16	15.19	60.85	2.47	182.19
9	3	4	143	.37	3	2	.10	0.00	3.85	24.00	68.14	15.32	0.00	2.47	182.14
10	3	4	200	.06	3	2	.10	0.00	3.85	24.00	66.19	12.24	0.00	2.77	1085.06
11	3	4	-10	.06	3	2	.10	0.00	3.85	24.00	10.85	13.51	3.02	.96	177.90
12	3	4	201	.06	3	2	.10	0.00	3.85	24.00	10.85	13.51	0.00	.96	177.90
13	3	4	145	.44	3	2	.10	0.00	3.85	24.00	72.93	15.12	0.00	2.26	167.62
14	3	4	203	.44	3	2	.10	0.00	3.85	24.00	72.92	15.17	0.00	2.26	167.60
15	3	4	208	.00	3	2	.10	0.00	3.85	24.00	7.69	11.95	0.00	3.61	1922.99
16	3	4	209	.44	3	2	.10	0.00	3.85	24.00	73.21	15.14	0.00	2.27	166.73
17	3	4	187	1.24	3	2	.10	0.00	3.85	24.00	873.79	12.60	0.00	2.59	705.86
18	3	4	146	.01	3	2	.10	0.00	3.85	24.00	14.74	12.05	0.00	2.07	1133.66
19	3	4	147	1.25	3	2	.10	0.00	3.85	24.00	877.53	12.60	0.00	2.59	701.51
20	3	4	149	1.25	3	2	.10	0.00	3.85	24.00	865.78	12.69	0.00	2.59	692.12
21	3	4	36	.14	3	2	.10	0.00	3.85	24.00	91.70	12.19	0.00	1.55	669.32
22	3	4	-6	.13	3	2	.10	0.00	3.85	24.00	60.27	12.35	0.00	1.55	473.02
23	3	4	37	.13	3	2	.10	0.00	3.85	24.00	59.88	12.48	0.00	1.55	469.97
24	3	4	38	.08	3	2	.10	0.00	3.85	24.00	113.22	12.04	0.00	2.59	1380.71
25	3	4	39	.21	3	2	.10	0.00	3.85	24.00	158.49	12.09	0.00	1.95	756.86
26	3	4	150	.02	3	2	.10	0.00	3.85	24.00	22.25	12.03	0.00	2.07	1171.29
27	3	4	151	.23	3	2	.10	0.00	3.85	24.00	180.21	12.09	0.00	1.96	788.99
28	3	4	153	1.48	3	2	.10	0.00	3.85	24.00	949.41	12.66	0.00	2.49	641.79
29	3	4	155	1.48	3	2	.10	0.00	3.85	24.00	939.76	12.74	0.00	2.49	635.26
30	3	4	40	.19	3	2	.10	0.00	3.85	24.00	300.79	11.98	0.00	2.78	1566.62
31	3	4	41	.19	3	2	.10	0.00	3.85	24.00	264.60	12.33	0.00	2.77	1378.13
32	3	4	42	.32	3	2	.10	0.00	3.85	24.00	214.79	12.18	0.00	1.55	679.71
33	3	4	43	.51	3	2	.10	0.00	3.85	24.00	459.27	12.26	0.00	2.01	904.07
34	3	4	45	.52	3	2	.10	0.00	3.85	24.00	488.52	12.25	0.00	2.01	943.84
35	3	4	47	.52	3	2	.10	0.00	3.85	24.00	454.52	12.48	0.00	2.01	878.15
36	3	4	48	.21	3	2	.10	0.00	3.85	24.00	116.80	12.26	0.00	1.48	569.75
37	3	4	49	.72	3	2	.10	0.00	3.85	24.00	552.89	12.45	0.00	1.86	765.15
38	3	4	99	.70	3	2	.10	0.00	3.85	24.00	479.17	12.45	0.00	1.87	683.64
39	3	4	156	.01	3	2	.10	0.00	3.85	24.00	11.07	11.95	0.00	2.07	1230.20
40	3	4	157	.71	3	2	.10	0.00	3.85	24.00	481.79	12.45	0.00	1.87	678.66
41	3	4	159	2.19	3	2	.10	0.00	3.85	24.00	1362.87	12.65	0.00	2.29	622.54
42	3	4	161	2.19	3	2	.10	0.00	3.85	24.00	1341.86	12.79	0.00	2.29	612.94
43	3	4	51	.02	3	2	.10	0.00	3.85	24.00	66.23	12.57	0.00	1.57	3055.05
44	3	4	52	.03	3	2	.10	0.00	3.85	24.00	40.44	11.98	0.00	1.92	1189.36
45	3	4	53	.06	3	2	.10	0.00	3.85	24.00	74.14	12.57	0.00	1.78	1331.59
46	3	4	162	.02	3	2	.10	0.00	3.85	24.00	18.80	12.12	0.00	2.07	989.45
47	3	4	163	.07	3	2	.10	0.00	3.85	24.00	81.96	12.56	0.00	1.86	1097.47
48	3	4	165	2.26	3	2	.10	0.00	3.85	24.00	1374.09	12.74	0.00	2.27	606.95
49	3	4	167	2.26	3	2	.10	0.00	3.85	24.00	1361.72	12.32	0.00	2.27	601.49
50	3	4	54	.11	3	2	.10	0.00	3.85	24.00	77.13	12.13	0.00	1.55	734.55
51	3	4	168	.01	3	2	.10	0.00	3.85	24.00	10.81	12.01	0.00	2.07	1201.32
52	3	4	169	.11	3	2	.10	0.00	3.85	24.00	36.56	12.11	0.00	1.59	759.33
53	3	4	171	2.33	3	2	.10	0.00	3.85	24.00	1383.86	12.31	0.00	2.24	591.97
54	3	4	173	2.38	3	2	.10	0.00	3.85	24.00	1374.29	12.36	0.00	2.24	577.94
55	3	4	56	.67	3	2	.10	0.00	3.85	24.00	920.00	12.05	0.00	2.58	1367.01
56	3	4	57	.67	3	2	.10	0.00	3.85	24.00	802.56	12.46	0.00	2.58	1192.51
57	3	4	58	.52	3	2	.10	0.00	3.85	24.00	241.02	12.33	0.00	1.35	466.18
	3	4	59	1.19	3	2	.10	0.00	3.85	24.00	1029.85	12.45	0.00	2.05	865.42
	3	4	61	1.19	3	2	.10	0.00	3.85	24.00	970.62	12.56	0.00	2.05	815.64
	3	4	62	.19	3	2	.10	0.00	3.85	24.00	114.08	12.22	0.00	1.48	603.59

100 Yr.-24 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	3	4	63	1.38	3	2	.10	0.00	3.85	24.00	1031.50	12.65	0.00	1.97	748.01
	3	4	-21	1.38	3	2	.10	0.00	3.85	24.00	1026.35	12.67	40.39	1.97	744.27
	3	4	71	1.38	3	2	.10	0.00	3.85	24.00	1022.63	12.65	0.00	1.97	741.57
	3	4	174	.01	3	2	.10	0.00	3.85	24.00	17.94	11.98	0.00	2.07	1281.23
	3	4	175	1.39	3	2	.10	0.00	3.85	24.00	1025.06	12.69	0.00	1.97	735.87
	3	4	177	3.77	3	2	.10	0.00	3.85	24.00	2348.99	12.76	0.00	2.14	622.92
	3	4	179	3.77	3	2	.10	0.00	3.85	24.00	2321.22	12.84	0.00	2.14	615.56
2	3	4	66	.08	3	2	.10	0.00	3.85	24.00	66.08	12.16	0.00	1.84	826.03
3	3	4	107	.07	3	2	.10	0.00	3.85	24.00	38.85	12.16	0.00	1.84	551.86
4	3	4	180	.02	3	2	.10	0.00	3.85	24.00	26.25	11.96	0.00	2.05	1391.72
5	3	4	181	.09	3	2	.10	0.00	3.85	24.00	62.42	11.98	0.00	1.89	698.17
6	3	4	183	3.86	3	2	.10	0.00	3.85	24.00	2343.73	12.34	0.00	2.14	607.14
7	3	4	185	3.86	3	2	.10	0.00	3.85	24.00	2342.32	12.84	0.00	2.14	606.77
8	3	4	67	.01	3	2	.10	0.00	3.85	24.00	25.38	12.26	0.00	1.82	2643.81
9	3	4	68	.08	3	2	.10	0.00	3.85	24.00	91.29	12.04	0.00	2.07	1141.09
10	3	4	69	.09	3	2	.10	0.00	3.85	24.00	106.81	12.08	0.00	2.05	1192.05
11	3	4	103	.08	3	2	.10	0.00	3.85	24.00	63.71	12.08	0.00	2.05	826.87
12	3	4	73	.01	3	2	.10	0.00	3.85	24.00	43.09	12.08	0.00	2.03	3435.33
13	3	4	190	.03	3	2	.10	0.00	3.85	24.00	32.87	12.05	0.00	2.07	1133.28
14	3	4	191	.11	3	2	.10	0.00	3.85	24.00	96.39	12.07	0.00	2.06	908.82
15	3	4	193	3.97	3	2	.10	0.00	3.85	24.00	2361.08	12.84	0.00	2.13	595.28
16	3	4	300	.09	3	2	.10	0.00	3.85	24.00	111.74	12.13	0.00	2.77	1255.56
17	3	4	-7	.09	3	2	.10	0.00	3.85	24.00	13.69	13.41	3.03	.96	153.78
18	3	4	301	.09	3	2	.10	0.00	3.85	24.00	13.32	13.59	0.00	.96	149.68
19	3	4	302	.11	3	2	.10	0.00	3.85	24.00	129.80	12.15	0.00	2.78	1224.53
20	3	4	-8	.11	3	2	.10	0.00	3.85	24.00	15.82	13.52	3.03	.95	149.26
21	3	4	303	.11	3	2	.10	0.00	3.85	24.00	15.82	13.52	0.00	.95	149.26
22	3	4	305	.20	3	2	.10	0.00	3.85	24.00	29.12	13.35	0.00	.96	149.35
23	3	4	307	.20	3	2	.10	0.00	3.85	24.00	28.52	13.71	0.00	.96	146.27
24	3	4	308	.04	3	2	.10	0.00	3.85	24.00	61.26	12.32	0.00	2.77	1494.21
25	3	4	-9	.04	3	2	.10	0.00	3.85	24.00	7.84	12.93	3.02	.99	191.30
26	3	4	309	.04	3	2	.10	0.00	3.85	24.00	7.84	12.93	0.00	.99	191.30
27	3	4	311	.24	3	2	.10	0.00	3.85	24.00	33.43	13.68	0.00	.96	141.65
28	3	4	312	.02	3	2	.10	0.00	3.85	24.00	26.74	12.04	0.00	3.61	1671.44
29	3	4	313	.25	3	2	.10	0.00	3.85	24.00	35.48	13.67	0.00	1.13	140.81
30	3	4	-18	.25	3	2	.10	0.00	3.85	24.00	35.48	13.67	0.00	1.13	140.81
31	3	4	315	0.00	3	2	.10	0.00	3.85	24.00	0.00	0.00	0.00	0.00	I
32	3	4	111	0.00	3	2	.10	0.00	3.85	24.00	0.00	0.00	0.00	0.00	I
33	3	4	113	0.00	3	2	.10	0.00	3.85	24.00	0.00	0.00	0.00	0.00	I
34	3	4	317	0.00	3	2	.10	0.00	3.85	24.00	0.00	0.00	0.00	0.00	I
35	3	4	318	.12	3	2	.10	0.00	3.85	24.00	140.22	12.17	0.00	2.77	1168.50
36	3	4	-11	.12	3	2	.10	0.00	3.85	24.00	16.73	13.64	3.04	.94	139.42
37	3	4	319	.12	3	2	.10	0.00	3.85	24.00	16.73	13.64	0.00	.94	139.42
38	3	4	321	.12	3	2	.10	0.00	3.85	24.00	16.73	13.64	0.00	.94	139.42
39	3	4	323	.12	3	2	.10	0.00	3.85	24.00	16.46	13.81	0.00	.94	137.15
40	3	4	324	.12	3	2	.10	0.00	3.85	24.00	140.22	12.17	0.00	2.77	1168.50
41	3	4	-12	.12	3	2	.10	0.00	3.85	24.00	16.73	13.64	3.04	.94	139.42
42	3	4	325	.12	3	2	.10	0.00	3.85	24.00	16.73	13.64	0.00	.94	139.42
43	3	4	327	.24	3	2	.10	0.00	3.85	24.00	32.92	13.74	0.00	.94	137.16
44	3	4	329	.24	3	2	.10	0.00	3.85	24.00	32.43	13.90	0.00	.94	135.12
45	3	4	330	.12	3	2	.10	0.00	3.85	24.00	140.22	12.17	0.00	2.77	1168.50
46	3	4	-13	.12	3	2	.10	0.00	3.85	24.00	16.73	13.64	3.04	.94	139.42
47	3	4	331	.12	3	2	.10	0.00	3.85	24.00	16.73	13.54	0.00	.94	139.42
48	3	4	333	.36	3	2	.10	0.00	3.85	24.00	48.43	13.34	0.00	.94	134.53
49	3	4	335	.36	3	2	.10	0.00	3.85	24.00	47.75	14.00	0.00	.94	132.64
50	3	4	336	.03	3	2	.10	0.00	3.85	24.00	46.90	12.07	0.00	2.77	1379.50
51	3	4	-14	.03	3	2	.10	0.00	3.85	24.00	6.43	13.10	3.01	.95	139.02
52	3	4	337	.03	3	2	.10	0.00	3.85	24.00	5.88	13.28	0.00	.95	172.86
53	3	4	339	.39	3	2	.10	0.00	3.85	24.00	51.57	13.98	0.00	.94	130.90
54	3	4	340	.12	3	2	.10	0.00	3.85	24.00	140.22	12.17	0.00	2.77	1168.50
55	3	4	-15	.12	3	2	.10	0.00	3.85	24.00	16.73	13.54	3.04	.94	139.42
56	3	4	341	.12	3	2	.10	0.00	3.85	24.00	16.73	13.54	0.00	.94	139.42
57	3	4	343	.51	3	2	.10	0.00	3.85	24.00	67.07	13.23	0.00	.94	130.49
	3	4	344	.02	3	2	.10	0.00	3.85	24.00	36.21	12.08	0.00	3.51	1574.55
	3	4	345	.54	3	2	.10	0.00	3.85	24.00	69.70	13.92	0.00	1.06	129.80
	3	4	-19	.50	3	2	.10	0.00	3.85	24.00	46.02	15.05	0.00	1.06	91.16

21

100 Yr.-24 Hr.

Summary Table 1(Cont.)

	ALT	STORM	ID	DA SQ-MI.	RAIN TBLE	AMC	DELTA-T HRS.	TZERO HRS.	PRECIP. IN	PRECIP. DURATION	PEAK-Q CFS	PEAK-TIME	PEAK-ELEV	RUNOFF IN.	CSM
	3	4	347	.25	3	2	.10	0.00	3.85	24.00	34.99	13.94	0.00	1.13	138.86
	3	4	349	.76	3	2	.10	0.00	3.85	24.00	80.99	13.94	0.00	1.08	107.02
	3	4	351	.03	3	2	.10	0.00	3.85	24.00	23.70	13.92	0.00	1.09	735.57
	3	4	115	.01	3	2	.10	0.00	3.85	24.00	8.43	13.92	0.00	1.08	726.49
	3	4	117	.02	3	2	.10	0.00	3.85	24.00	15.27	13.92	18.39	1.10	740.68
	3	4	353	.01	3	2	.10	0.00	3.85	24.00	8.24	14.04	0.00	1.08	709.98
	3	4	354	.12	3	2	.10	0.00	3.85	24.00	135.78	12.17	0.00	2.77	1180.71
2	3	4	-16	.12	3	2	.10	0.00	3.85	24.00	16.45	13.60	3.03	.95	143.03
3	3	4	355	.12	3	2	.10	0.00	3.85	24.00	16.45	13.60	0.00	.95	143.03
4	3	4	357	.13	3	2	.10	0.00	3.85	24.00	22.83	13.93	0.00	.96	180.35
5	3	4	359	.13	3	2	.10	0.00	3.85	24.00	22.54	14.05	0.00	.96	178.04
6	3	4	360	.06	3	2	.10	0.00	3.85	24.00	91.15	12.02	0.00	2.77	1494.21
7	3	4	-17	.06	3	2	.10	0.00	3.85	24.00	9.91	13.13	3.02	.96	162.50
8	3	4	361	.06	3	2	.10	0.00	3.85	24.00	9.91	13.13	0.00	.96	162.50
9	3	4	363	.19	3	2	.10	0.00	3.85	24.00	28.80	14.02	0.00	.96	153.51
10	3	4	364	.01	3	2	.10	0.00	3.85	24.00	14.07	12.00	0.00	3.61	1759.33
11	3	4	365	.20	3	2	.10	0.00	3.85	24.00	29.64	14.01	0.00	1.07	151.53
12	3	4	-55	.10	3	2	.10	0.00	3.85	24.00	5.07	12.25	0.00	1.06	50.86
13	3	4	211	.10	3	2	.10	0.00	3.85	24.00	24.64	14.01	0.00	1.07	257.07
14	3	4	367	.76	3	2	.10	0.00	3.85	24.00	80.70	14.08	0.00	1.08	106.63
15	3	4	369	.86	3	2	.10	0.00	3.85	24.00	85.70	14.08	0.00	1.08	100.05
16	3	4	371	.86	3	2	.10	0.00	3.85	24.00	85.48	14.17	0.00	1.08	99.80
17	3	4	373	4.82	3	2	.10	0.00	3.85	24.00	2389.60	12.32	0.00	1.95	495.47
18	3	4	380	.06	3	2	.10	0.00	3.85	24.00	53.81	11.98	0.00	1.48	944.09
19	3	4	381	4.88	3	2	.10	0.00	3.85	24.00	2396.17	12.83	0.00	1.94	491.03

100 Yr.-24 Hr.

SUMMARY TABLE 3

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
	DISCHARGE,CFS									
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
XSEC/STRUC NO.-55										
ALTERNATE 1 10 Yr.	0.00	5.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	5.32	0.00	0.00	5.07	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-21										
ALTERNATE 1	0.00	176.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	607.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1210.56	0.00	0.00	1026.35	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-19										
ALTERNATE 1	0.00	13.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	27.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	46.54	0.00	0.00	46.02	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-18										
ALTERNATE 1	0.00	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	19.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	40.70	0.00	0.00	35.48	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-17										
ALTERNATE 2	0.00	0.00	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	9.91	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-16										
ALTERNATE 2	0.00	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.45	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-15										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-14										
ALTERNATE 2	0.00	0.00	3.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	6.43	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-13										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-12										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-11										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.-10										
ALTERNATE 2	0.00	0.00	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	10.85	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -9										
ALTERNATE 2	0.00	0.00	4.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00	0.00	0.00

XSEC/STRUC NO. -8.

Summary Table 3(Cont.)

XSEC/STRUC No. -8(Cont.)	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
ALTERNATE 2	0.00	0.00	6.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	15.82	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -7										
ALTERNATE 2	0.00	0.00	6.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	13.69	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -6										
ALTERNATE 1 10 Yr.	0.00	10.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	41.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	60.77	0.00	0.00	60.27	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -5										
ALTERNATE 1	0.00	253.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	605.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1076.40	0.00	0.00	953.68	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -4										
ALTERNATE 1	0.00	27.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	54.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	59.70	0.00	0.00	68.16	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -3										
ALTERNATE 1	0.00	30.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	59.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	56.31	0.00	0.00	84.34	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -2										
ALTERNATE 1	0.00	35.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	70.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	80.23	0.00	0.00	84.48	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. -1										
ALTERNATE 1	0.00	20.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	40.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	53.19	0.00	0.00	53.35	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 20										
ALTERNATE 1	0.00	7.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	63.54	0.00	0.00	38.27	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 22										
ALTERNATE 1	0.00	29.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	104.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	229.83	0.00	0.00	172.03	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 23										
ALTERNATE 3	96.79	0.00	0.00	47.57	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 25										
ALTERNATE 3	65.81	0.00	0.00	26.55	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 26										
ALTERNATE 1	0.00	84.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	277.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	680.83	0.00	0.00	430.94	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 27										
ALTERNATE 1	0.00	90.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	262.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	585.99	0.00	0.00	411.26	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 22										
ALTERNATE 1	0.00	133.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	431.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00

mmary Table 3(Cont.)

EC/STRUC No. 28(Cont.)	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
ALTERNATE 3	920.20	0.00	0.00	683.86	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 29										
ALTERNATE 1 10 Yr.	0.00	213.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	689.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	1483.20	0.00	0.00	1082.54	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 31										
ALTERNATE 1	0.00	210.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	673.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1420.79	0.00	0.00	1052.85	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 32										
ALTERNATE 1	0.00	40.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	154.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	348.63	0.00	0.00	264.65	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 33										
ALTERNATE 1	0.00	248.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	813.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1703.82	0.00	0.00	1286.88	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 34										
ALTERNATE 1	0.00	46.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	162.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	352.84	0.00	0.00	268.31	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 35										
ALTERNATE 1	0.00	244.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	783.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1593.82	0.00	0.00	1235.57	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 36										
ALTERNATE 1	0.00	10.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	41.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	95.31	0.00	0.00	91.70	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 37										
ALTERNATE 1	0.00	9.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	39.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	59.99	0.00	0.00	59.88	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 38										
ALTERNATE 1	0.00	20.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	70.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	161.94	0.00	0.00	113.22	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 39										
ALTERNATE 1	0.00	25.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	86.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	183.16	0.00	0.00	158.49	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 40										
ALTERNATE 1	0.00	57.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	193.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	499.23	0.00	0.00	300.79	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 41										
ALTERNATE 1	0.00	53.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	170.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	362.81	0.00	0.00	264.60	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 42										
ALTERNATE 1	0.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	98.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	232.17	0.00	0.00	214.79	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO. 43										
ALTERNATE 1 10 Yr.	0.00	70.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	267.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	585.75	0.00	0.00	459.27	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 45										
ALTERNATE 1	0.00	70.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	267.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	619.17	0.00	0.00	488.52	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 47										
ALTERNATE 1	0.00	68.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	251.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	554.69	0.00	0.00	454.52	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 48										
ALTERNATE 1	0.00	13.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	53.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	124.26	0.00	0.00	116.80	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 49										
ALTERNATE 1	0.00	81.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	300.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	654.31	0.00	0.00	552.89	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 51										
ALTERNATE 3	117.41	0.00	0.00	66.23	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 52										
ALTERNATE 1	0.00	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	21.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	57.61	0.00	0.00	40.44	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 53										
ALTERNATE 1	0.00	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	21.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	117.89	0.00	0.00	74.14	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 54										
ALTERNATE 1	0.00	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	35.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	83.78	0.00	0.00	77.13	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 56										
ALTERNATE 1	0.00	165.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	572.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1311.38	0.00	0.00	920.00	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 57										
ALTERNATE 1	0.00	151.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	501.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1027.18	0.00	0.00	802.56	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 58										
ALTERNATE 1	0.00	24.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	103.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	238.03	0.00	0.00	241.02	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 59										
ALTERNATE 1	0.00	167.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	605.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1260.63	0.00	0.00	1029.85	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 61										
ALTERNATE 1	0.00	165.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

XSEC/STRUC No. 61(Cont.)	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
ALTERNATE 2	0.00	0.00	574.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1161.15	0.00	0.00	970.62	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 62										
ALTERNATE 1 10 Yr.	0.00	12.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	51.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	121.30	0.00	0.00	114.08	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 63										
ALTERNATE 1	0.00	176.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	611.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1211.38	0.00	0.00	1031.50	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 66										
ALTERNATE 1	0.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	33.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	75.54	0.00	0.00	66.08	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 67										
ALTERNATE 2	0.00	0.00	.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	32.42	0.00	0.00	25.38	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 68										
ALTERNATE 1	0.00	12.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	50.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	124.20	0.00	0.00	91.29	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 69										
ALTERNATE 1	0.00	12.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	50.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	128.26	0.00	0.00	106.81	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 71										
ALTERNATE 1	0.00	176.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	604.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1195.28	0.00	0.00	1022.63	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 73										
ALTERNATE 2	0.00	0.00	3.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	58.29	0.00	0.00	43.09	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 81										
ALTERNATE 1	0.00	7.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	34.52	0.00	0.00	32.50	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 87										
ALTERNATE 1	0.00	29.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	104.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	139.32	0.00	0.00	123.24	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 91										
ALTERNATE 3	26.18	0.00	0.00	19.45	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 95										
ALTERNATE 2	0.00	0.00	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	99.18	0.00	0.00	77.45	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO. 99										
ALTERNATE 1	0.00	81.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	300.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	522.58	0.00	0.00	479.17	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.103										
ALTERNATE 1	0.00	12.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	47.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

XSEC/STRUC No. 103(Cont.)

		1 Hr.	2 Hr.	6 Hr.	24 Hr.						
ALTERNATE	3	69.96	0.00	0.00	63.71	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.107											
ALTERNATE	1 10 Yr.	0.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2 50 Yr.	0.00	0.00	33.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3 100 Yr.	40.52	0.00	0.00	38.85	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.111											
ALTERNATE	3	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.113											
ALTERNATE	3	2.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.115											
ALTERNATE	3	4.25	0.00	0.00	8.43	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.116											
ALTERNATE	1	0.00	4.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	14.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	31.44	0.00	0.00	27.03	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.117											
ALTERNATE	3	7.71	0.00	0.00	15.27	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.118											
ALTERNATE	1	0.00	26.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	95.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	209.84	0.00	0.00	157.07	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.119											
ALTERNATE	3	26.83	0.00	0.00	5.09	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.121											
ALTERNATE	1	0.00	30.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	109.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	237.55	0.00	0.00	182.75	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.123											
ALTERNATE	1	0.00	36.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	130.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	269.42	0.00	0.00	215.50	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.125											
ALTERNATE	1	0.00	20.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	40.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	53.12	0.00	0.00	53.32	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.127											
ALTERNATE	1	0.00	45.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	131.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	170.61	0.00	0.00	163.01	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.128											
ALTERNATE	1	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	19.16	0.00	0.00	11.87	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.129											
ALTERNATE	1	0.00	46.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	136.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	179.40	0.00	0.00	170.03	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.131											
ALTERNATE	1	0.00	35.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	2	0.00	0.00	70.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE	3	80.09	0.00	0.00	84.47	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO.132										
ALTERNATE 1 10 Yr.	0.00	1.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	7.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	23.42	0.00	0.00	14.51	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.133										
ALTERNATE 1	0.00	36.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	71.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	80.09	0.00	0.00	86.04	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.135										
ALTERNATE 1	0.00	30.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	59.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	56.29	0.00	0.00	81.46	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.137										
ALTERNATE 1	0.00	30.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	59.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	56.29	0.00	0.00	81.46	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.138										
ALTERNATE 1	0.00	2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	9.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	24.22	0.00	0.00	17.57	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.139										
ALTERNATE 1	0.00	30.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	60.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	56.50	0.00	0.00	82.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.141										
ALTERNATE 1	0.00	30.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	60.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	135.97	0.00	0.00	123.01	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.143										
ALTERNATE 1	0.00	27.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	54.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	59.55	0.00	0.00	68.14	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.145										
ALTERNATE 1	0.00	27.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	57.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	59.55	0.00	0.00	72.93	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.146										
ALTERNATE 1	0.00	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	8.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	19.49	0.00	0.00	14.74	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.147										
ALTERNATE 1	0.00	254.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	593.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	976.64	0.00	0.00	877.53	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.149										
ALTERNATE 1	0.00	253.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	599.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	966.92	0.00	0.00	865.79	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.150										
ALTERNATE 1	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	12.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	30.68	0.00	0.00	22.25	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO.151										
ALTERNATE 1 10 Yr.	0.00	28.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	98.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	211.07	0.00	0.00	130.21	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.153										
ALTERNATE 1	0.00	276.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	648.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1030.90	0.00	0.00	949.41	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.155										
ALTERNATE 1	0.00	276.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	645.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1021.12	0.00	0.00	939.76	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.156										
ALTERNATE 1	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	16.20	0.00	0.00	11.07	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.157										
ALTERNATE 1	0.00	82.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	302.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	523.90	0.00	0.00	481.79	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.159										
ALTERNATE 1	0.00	358.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	907.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1472.45	0.00	0.00	1362.87	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.161										
ALTERNATE 1	0.00	357.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	896.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1454.20	0.00	0.00	1341.86	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.162										
ALTERNATE 1	0.00	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	10.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	22.51	0.00	0.00	18.80	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.163										
ALTERNATE 1	0.00	7.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	29.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	124.78	0.00	0.00	81.96	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.165										
ALTERNATE 1	0.00	361.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	906.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1520.75	0.00	0.00	1374.09	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.167										
ALTERNATE 1	0.00	360.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	899.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1499.71	0.00	0.00	1361.72	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.168										
ALTERNATE 1	0.00	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	5.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	15.48	0.00	0.00	10.81	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.169										
ALTERNATE 1	0.00	9.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	40.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	93.22	0.00	0.00	86.56	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.171										

Summary Table 3(Cont.)

XSEC/STRUC No. 171(Cont.)	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
ALTERNATE 1 10 Yr.	0.00	367.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	918.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	1507.91	0.00	0.00	1383.86	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.173										
ALTERNATE 1	0.00	366.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	912.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1495.40	0.00	0.00	1374.29	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.174										
ALTERNATE 1	0.00	2.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	9.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	26.42	0.00	0.00	17.94	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.175										
ALTERNATE 1	0.00	177.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	607.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1195.33	0.00	0.00	1025.06	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.177										
ALTERNATE 1	0.00	543.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	1494.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	2627.17	0.00	0.00	2348.99	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.179										
ALTERNATE 1	0.00	541.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	1468.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	2579.47	0.00	0.00	2321.22	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.180										
ALTERNATE 1	0.00	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	13.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	45.67	0.00	0.00	26.25	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.181										
ALTERNATE 1	0.00	11.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	40.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	65.82	0.00	0.00	62.42	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.183										
ALTERNATE 1	0.00	548.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	1487.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	2588.60	0.00	0.00	2343.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.185										
ALTERNATE 1	0.00	548.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	1487.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	2586.52	0.00	0.00	2342.32	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.187										
ALTERNATE 1	0.00	253.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	590.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	975.19	0.00	0.00	873.79	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.189										
ALTERNATE 1	0.00	253.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	605.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1075.88	0.00	0.00	953.08	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.190										
ALTERNATE 1	0.00	4.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	18.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	42.60	0.00	0.00	32.87	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.191										
ALTERNATE 1	0.00	16.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

XSEC/STRUC No. 191(Cont.)	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
ALTERNATE 2	0.00	0.00	65.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	112.49	0.00	0.00	96.39	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.193										
ALTERNATE 110 Yr.	0.00	557.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 250 Yr.	0.00	0.00	1508.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	2588.16	0.00	0.00	2351.08	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.200										
ALTERNATE 1	0.00	14.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	43.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	83.05	0.00	0.00	66.19	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.201										
ALTERNATE 2	0.00	0.00	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	10.85	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.203										
ALTERNATE 1	0.00	27.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	57.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	59.46	0.00	0.00	72.92	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.205										
ALTERNATE 1	0.00	286.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	911.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1832.84	0.00	0.00	1431.64	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.207										
ALTERNATE 1	0.00	286.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	911.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1865.23	0.00	0.00	1441.98	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.208										
ALTERNATE 1	0.00	3.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	16.19	0.00	0.00	7.69	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.209										
ALTERNATE 1	0.00	27.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	57.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	59.46	0.00	0.00	73.21	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.211										
ALTERNATE 1	0.00	.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	5.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	20.24	0.00	0.00	24.64	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.221										
ALTERNATE 1	0.00	29.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	104.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	243.71	0.00	0.00	174.03	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.300										
ALTERNATE 1	0.00	23.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	72.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	149.23	0.00	0.00	111.74	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.301										
ALTERNATE 2	0.00	0.00	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	13.32	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.302										
ALTERNATE 1	0.00	27.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	87.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	167.14	0.00	0.00	129.80	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO.303										
ALTERNATE 2	0.00	0.00	6.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	15.82	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.305										
ALTERNATE 2	0.00	0.00	12.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	29.12	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.307										
ALTERNATE 2	0.00	0.00	11.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	28.52	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.308										
ALTERNATE 1 10 Yr.	0.00	12.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	39.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	95.57	0.00	0.00	61.26	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.309										
ALTERNATE 2	0.00	0.00	4.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.311										
ALTERNATE 2	0.00	0.00	12.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	33.43	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.312										
ALTERNATE 1	0.00	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	19.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	44.40	0.00	0.00	26.74	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.313										
ALTERNATE 1	0.00	9.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	19.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	44.40	0.00	0.00	35.48	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.315										
ALTERNATE 3	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.317										
ALTERNATE 3	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.318										
ALTERNATE 1	0.00	30.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	92.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	184.67	0.00	0.00	140.22	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.319										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.321										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	1.05	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.323										
ALTERNATE 2	0.00	0.00	5.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.82	0.00	0.00	16.46	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.324										
ALTERNATE 1	0.00	30.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	92.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	184.67	0.00	0.00	140.22	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.325										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO.327										
ALTERNATE 2	0.00	0.00	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.82	0.00	0.00	32.92	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.329										
ALTERNATE 2	0.00	0.00	10.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.66	0.00	0.00	32.43	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.330										
ALTERNATE 1 10 Yr.	0.00	30.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	92.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	184.67	0.00	0.00	140.22	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.331										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.333										
ALTERNATE 2	0.00	0.00	15.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.66	0.00	0.00	48.43	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.335										
ALTERNATE 2	0.00	0.00	15.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.56	0.00	0.00	47.75	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.336										
ALTERNATE 1	0.00	9.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	30.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	65.61	0.00	0.00	46.90	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.337										
ALTERNATE 2	0.00	0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	5.88	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.339										
ALTERNATE 2	0.00	0.00	15.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.56	0.00	0.00	51.57	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.340										
ALTERNATE 1	0.00	30.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	92.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	184.67	0.00	0.00	140.22	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.341										
ALTERNATE 2	0.00	0.00	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	0.00	0.00	0.00	16.73	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.343										
ALTERNATE 2	0.00	0.00	20.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	.56	0.00	0.00	67.07	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.344										
ALTERNATE 1	0.00	13.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	27.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	57.96	0.00	0.00	36.21	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.345										
ALTERNATE 1	0.00	13.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	27.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	57.96	0.00	0.00	69.70	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.347										
ALTERNATE 1	0.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	19.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	38.11	0.00	0.00	34.99	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

		1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO.349											
ALTERNATE 1	110 Yr.	0.00	21.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	50 Yr.	0.00	0.00	43.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	100 Yr.	31.13	0.00	0.00	80.99	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.351											
ALTERNATE 3		11.96	0.00	0.00	23.70	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.353											
ALTERNATE 3		3.23	0.00	0.00	8.24	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.354											
ALTERNATE 1		0.00	29.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	89.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		180.00	0.00	0.00	135.78	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.355											
ALTERNATE 2		0.00	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		0.00	0.00	0.00	16.45	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.357											
ALTERNATE 2		0.00	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		3.23	0.00	0.00	22.83	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.359											
ALTERNATE 2		0.00	0.00	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		2.63	0.00	0.00	22.54	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.360											
ALTERNATE 1		0.00	17.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	58.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		142.19	0.00	0.00	91.15	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.361											
ALTERNATE 2		0.00	0.00	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		0.00	0.00	0.00	9.91	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.363											
ALTERNATE 2		0.00	0.00	7.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		2.63	0.00	0.00	28.80	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.364											
ALTERNATE 1		0.00	5.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	10.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		25.14	0.00	0.00	14.07	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.365											
ALTERNATE 1		0.00	5.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	10.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		25.24	0.00	0.00	29.64	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.367											
ALTERNATE 1		0.00	21.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	43.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		79.38	0.00	0.00	80.70	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.369											
ALTERNATE 1		0.00	25.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	48.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		84.38	0.00	0.00	95.70	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.371											
ALTERNATE 1		0.00	25.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2		0.00	0.00	47.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3		32.06	0.00	0.00	85.48	0.00	0.00	0.00	0.00	0.00	0.00

Summary Table 3(Cont.)

14

	1 Hr.	2 Hr.	6 Hr.	24 Hr.						
XSEC/STRUC NO.373										
ALTERNATE 1 10 Yr.	0.00	568.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2 50 Yr.	0.00	0.00	1529.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3 100 Yr.	2615.21	0.00	0.00	2389.60	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.380										
ALTERNATE 1	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	24.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	69.08	0.00	0.00	53.81	0.00	0.00	0.00	0.00	0.00	0.00
XSEC/STRUC NO.381										
ALTERNATE 1	0.00	571.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 2	0.00	0.00	1536.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ALTERNATE 3	2615.21	0.00	0.00	2396.17	0.00	0.00	0.00	0.00	0.00	0.00

ENDJOB CARD ENCOUNTERED. END OF JOB.