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Expert Report
Stormwater Management Report for The Polo Club: Borough of Far Hills, NJ.

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STORMWATER MANAGEMENT REPORT

for

THE POLO CLUB
BOROUGH OF FAR HILLS, NEW JERSEY

Prepared By:
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1.0 INTRODUCTION

The Polo Club is a proposed 125 unit housing development planned for Lot 4/7, Block 6A in the Borough of Far Hills, Somerset County, New Jersey. The subject project site is located north of the New Jersey Transit Railroad (formerly the Erie-Lackawanna Railroad) track Right-of-Way, west of New Jersey State Highway Route No. 202 and south of Sunnybranch Road in the Borough of Far Hills. The tract encompasses approximately 18.9 acres.

This report has been prepared to present the Stormwater Management Plan developed for the proposed project. Specifically, this report has been prepared to present engineering data pertaining to the manner in which the design of surface drainage facilities for the project complies with Section 7-7 of the Land Development Design Ordinance of the Borough of Far Hills. In addition, the report addresses Somerset County's stormwater management requirements contained in their publication entitled "Handbook for Storm Water Detention Basins."

In addition to the above referenced Municipal and County requirements pertaining to the development of the Stormwater Management Plan, an additional consideration was employed in the design of the project. This additional consideration involved a desire on behalf of Borough officials to improve upon existing drainage conditions downstream of the project in the Railroad Avenue vicinity. This desired improvement was

conceptually planned to involve reducing flows tributary to the subject downstream area to a level significantly below that of the corresponding current levels. The improvement of existing conditions was desired because existing storm sewers have inadequate capacity to convey peak rates of flow from major storm events and, as a result, rather frequent flooding conditions are encountered downstream of the project. Therefore, at the request of the Borough of Far Hills, the Stormwater Management Plan, rather than maintaining existing flow rates, has been designed to attenuate peak flows below levels currently observed. As explained in a subsequent Section of this report, the Borough of Far Hills is planning to acquire additional adjacent land necessary to accomplish the desired improvement of existing conditions.

2.0 - METHODOLOGY AND DATA SOURCES

Stormwater management calculations and estimates employed for the development of the Stormwater Management Plan for The Polo Club were performed in accordance with standard engineering methodologies developed by the Soil Conservation Service, U.S. Department of Agricultre, as presented in their Technical Paper 149. This method is consistent with the criteria specified in the "Handbook for Storm Water Detention Basins" previously referenced in the introductiory section of this report.

The development of the Stormwater Management Plan

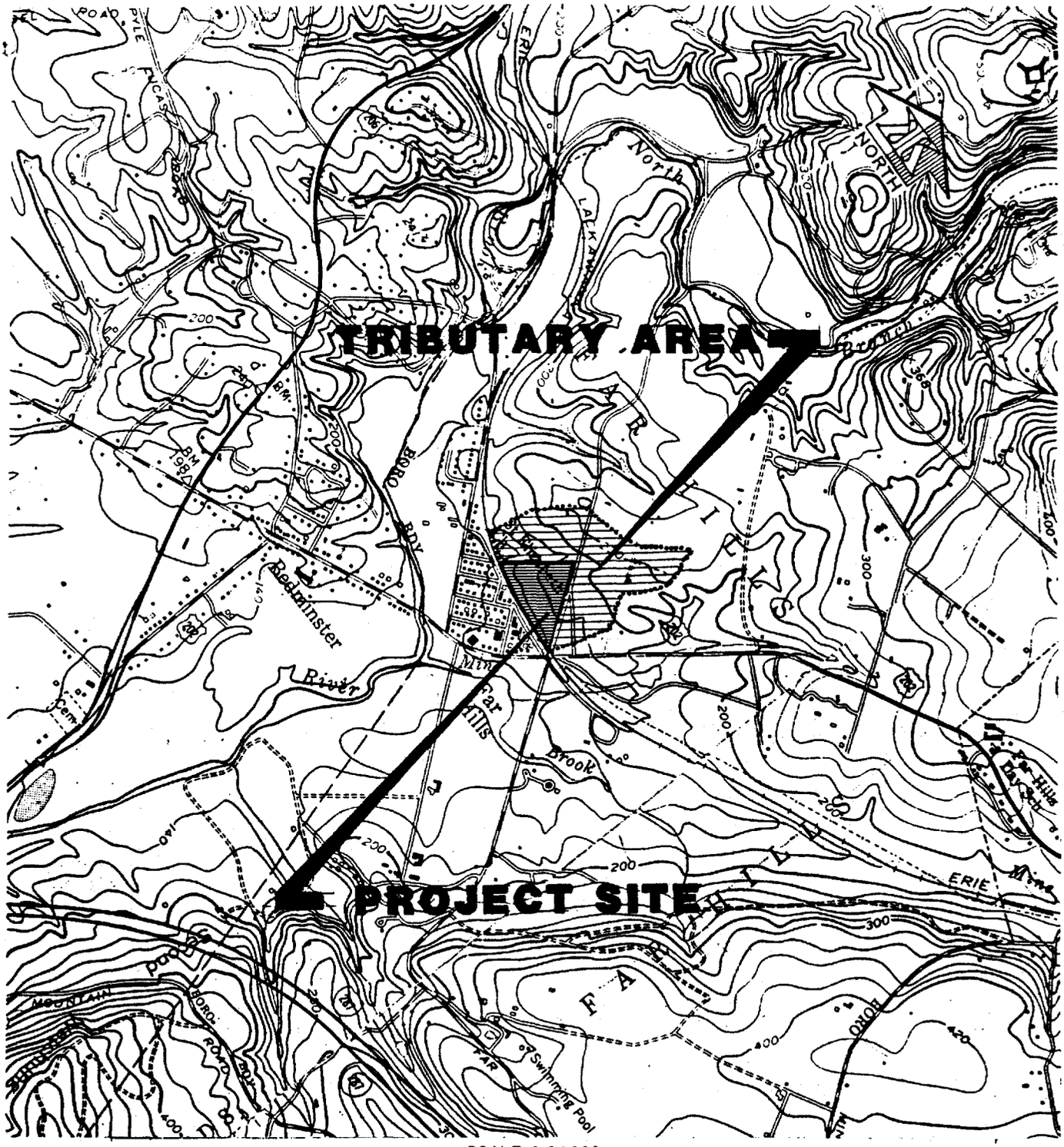
necessitated the determination of various hydrologic factors which affect the rate and volume of storm water runoff from the watershed area. Among the factors determined in the analysis were total tributary drainage area, hydrologic soil conditions, and nature of ground cover.

In determining the total tributary drainage area, available topographic mapping was supplemented by field reconnaissance. The topographic map referenced on the project's plans was used with respect to determining existing surface drainage directions on the project tract itself. In general, this topography reflects an undulating existing ground surface that is generally tributary to an existing watercourse or natural drainage channel near the westerly tract boundary. This existing westerly watercourse is the major source of runoff tributary to the previously referenced Railroad Avenue area where Borough officials wish to improve existing drainage conditions. Flow is conveyed under the New Jersey Transit Right-of-Way via a vintage existing stone and brick arch culvert. A small portion of the site currently drains easterly towards an existing drainage culvert on New Jersey State Highway Route 202. The site is situated such that lands north of Sunnybranch Road are upgradiant and, therefore, tributary to the subject tract. The majority of upgradiant lands are tributary to the existing drainage channel along the westerly portion of the tract. A small portion of the land north of the project is tributary to an existing storm drain that conveys

water across Sunnybranch Road. This flow is currently tributary to the existing drainage system crossing Route 202.

The site topography was supplemented by use of topography available through the U.S. Geological Survey. Figure 1 indicates the total drainage area determined to be tributary to the previously identified railroad culvert under existing conditions. This drainage area was estimated to be approximately 70 acres. In addition, approximately 1.25 off-site acres were estimated to be tributary to the existing storm drain crossing Sunnybranch Road. This 1.25 acre area combines with an estimated on-site area of 2.6 acres to result in a current total tributary area at the Route 202 culvert of 3.85 acres.

Soil conditions within the watershed area were based upon information available from the Soil Survey of Somerset County compiled by the Soil Conservation Service (U.S. Department of Agriculture). This report indicates that the majority of the soils in the tributary area belong to the Norton, Penn, Abbottstown and Lansdowne series and are, in general, clayey loams. These soils are categoried into "Hydrologic Soil Group C" by the Soil Conservation Service for the purposes of estimating runoff in accordance with the methodology referenced above. Figure No. 2 graphically illustrates the soil unit mapping as described above.



CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

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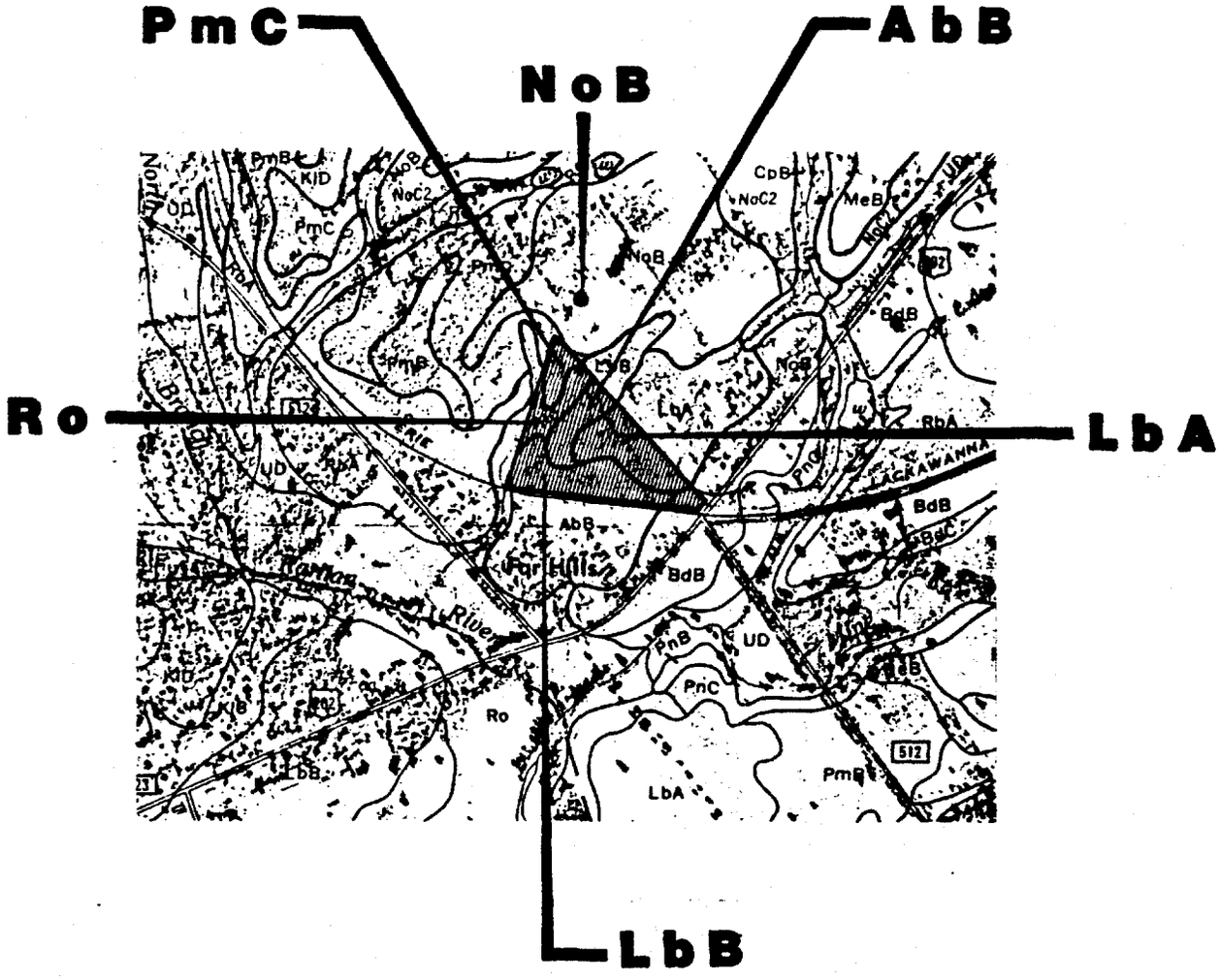
FIGURE 1

DRAINAGE AREA MAP

WESTERLY SYSTEM

NORTH



SOURCE:
SOIL SURVEY OF SOMERSET COUNTY U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE.

LEGEND

AbB - ABBOTTSTOWN
LbA - LANSDOANE
NoB - NORTON
PmC - PENN
Ro - ROWLAND

1 Mile
T — ¾ ½ ¼ 0
5000 4000 3000 2000 1000 0
5000 Feet
Scale 1:15 840

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FIGURE 2
SOIL CLASSIFICATIONS WITHIN TRIBUTARY AREA

3.0 - DETERMINATION OF PRE-DEVELOPMENT STORMWATER FLOWS

Employing the methodology and data sources described in the preceding section of this report, the peak flow rates and total storm volumes were determined consistent with the procedures described in the previously referenced "Handbook for Storm Water Detention Basins" published by Somerset County. This methodology specifies the establishment of an artifically low CN number for pre-development conditions; that is, for "Hydrologic Soil Group C" and wooded terrain, Soil Conservation service publications typically specify a CN number of 60. However, for establishing baseline existing conditions, Somerset County requires that the CN number be 55. We used the CN number consistent with the Somerset County requirements for the pre-development condition. We conservatively assign wood or forest land to the entire undeveloped watershed with respect to the determination of pre-development runoff rates and volume. Our field observations revealed that the watershed is a mixture of meadow as well as wood and forest land. However, since the wood and forest is assigned a lower CN value in the Handbook, we considered the entire undeveloped land as wood or forest land for the purpose of the analysis.

Under existing conditions, the time of concentration was estimated to be 22 minutes for the total watershed area draining to the existing railroad culvert and 14 minutes for the watershed area draining to the Route 202 culvert. Hydrographs were created for all storms specified in the subject Handbook (1, 2, 5, 10, 15, 25, 50 and 100 year

for the watershed area draining to the Route 202 culvert. Hydrographs were created for all storms specified in the subject Handbook (1, 2, 5, 10, 15, 25, 50 and 100 year frequencies) and the peaks of the hydrographs created are summarized on Table No. 1. Figure No. 3 contains a plotting of the 100 year hydrograph at the railroad culvert between the hours of 11:00 and 20:00. The computations themselves are contained in the appendices.

4.0 - DETERMINATION OF POST-DEVELOPMENT STORMWATER FLOWS

The impact of the project was modeled using the methodologies consistent with those presented in Section 2.0 of this report. Each watershed area (that tributary to Route 202 and that tributary to the existing railroad culvert) were evaluated independently.

The development of the project involves the installation of a storm sewer system and replacement of existing terrain with impervious surfaces such as roadways, roofs of buildings, sidewalks, driveways and parking areas. The storm sewer system proposed for the project will collect stormwater runoff from all improved areas of the project and convey the flow to the existing culverts (uunder the railroad and at Route 202).

With respect to the Stormwater Management Plan pertaining to maintaining or reducing existing flow rates at the Route 202 culvert, the drainage facilities for the project were designed to collect surface water from portions of the site currently

TABLE NO. 1

PEAK RATES OF RUNOFF UNDER EXISTING CONDITIONS

Storm Frequency	Tributary to Rt. 202 Culvert (cfs)	Tributary to Railroad Culvert (cfs)
1	0.12	1.89
2	0.47	7.85
5	1.75	26.62
10	3.55	52.35
15	4.21	62.04
25	5.42	79.09
50	6.69	97.39
100	9.42	137.16

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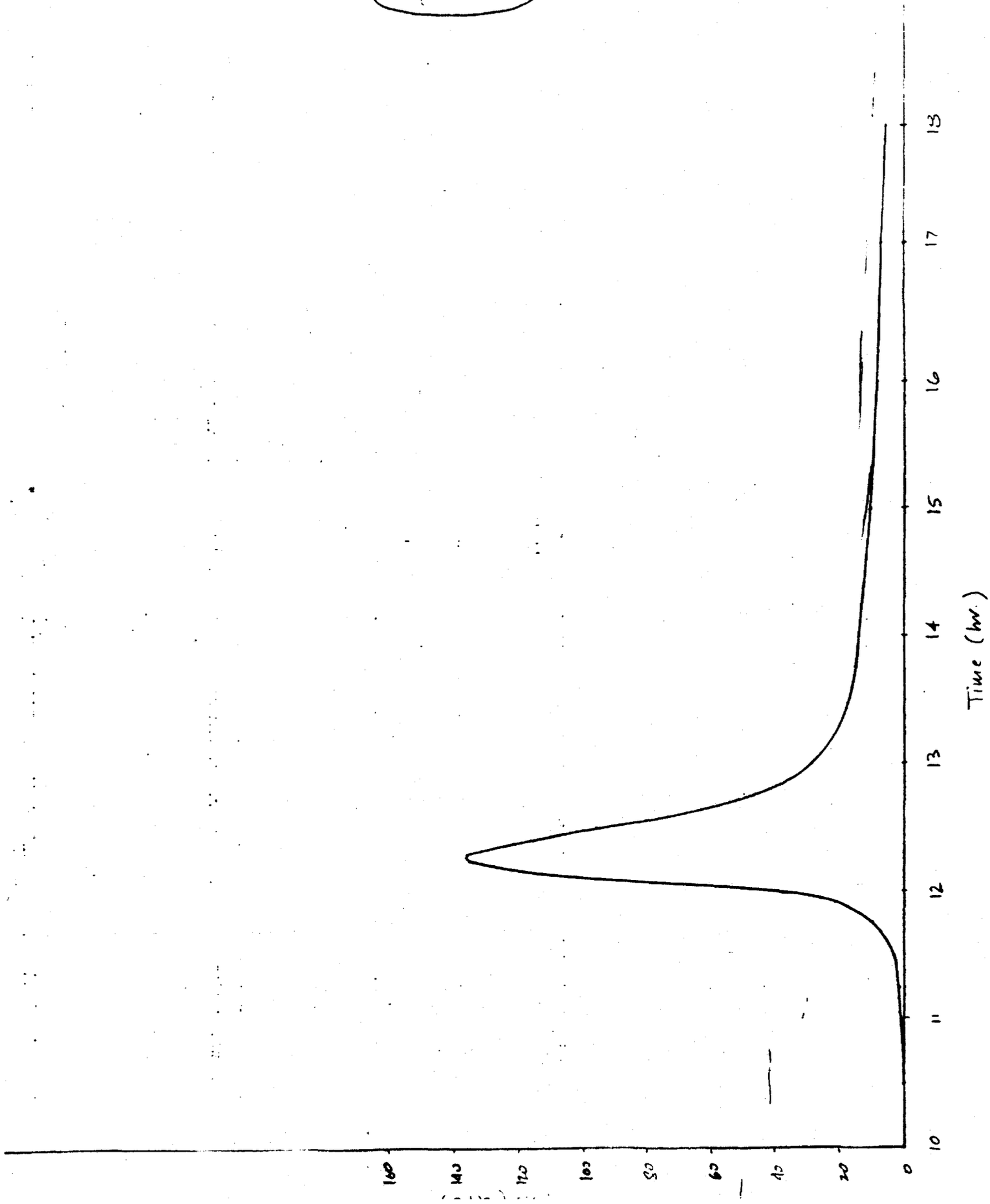

tributary to the Route 202 culvert and convey it to the westerly drainage system. In this manner, the tributary area to the existing Route 202 culvert is reduced from 3.85 acres to 1.05 acres. An estimated 0.35 acres tributary to Route 202 will be impervious subsequent to development. Using a CN number of 98 for impervious areas and a CN number of 64 for the remaining on-site tributary area, hydrographs were created for the post-development area tributary to the Route 202 culvert. Table No. 2 summarizes these hydrographs and an examination of Table No. 2 (versus Table No. 1) reveals that, as a result of the conveyance of a portion of the tributrary area westerly by the proposed storm sewer, the post-development flow at Route 202 will be less than the pre-development flow at the same point for all storms analyzed having a return period greater than ten years. Since the post-development peak rate from a ten-year storm at Route 202 was determined to be 3.6 cfs and the culvert has an estimated capacity of approximately 7 cfs, no adverse impact is anticipated. In fact it is noted that the diversion of tributary area increases the capacity of the culvert in terms of storm frequency. After the development as proposed, Route 202 culvert will be adequate for a 100 year storm whereas the subject culvert has only 25 year storm capacity at the present time.

With regard to the project's impact upon the westerly drainage system, the storm sewer system proposed for the project will collect stormwater runoff and discharge the

TABLE NO. 2

POST-DEVELOPMENT PEAK RATES OF RUNOFF AT ROUTE 202 CULVERT

Storm Frequency	Flow Rate (cfs)
1	0.98
2	1.55
5	2.59
10	3.60
15	3.94
25	4.52
50	5.11
100	6.30

majority of it into the proposed regional detention basin to be constructed along the westerly drainage channel. Approximately 72.7 acres will be tributary to the detention basin including the portion of the site referenced above that is currently tributary to the existing Route 202 culvert as well as the estimated 1.25 acres tributary to the existing culvert on Sunnybranch Road. Of the approximate 72.7 total acres tributary to the detention basin, it is estimated that 12.4 acres would be impervious surfaces resulting from the project. A CN nubmner of 98 was assigned to the impervious surfaces and a CN number of 64 was assigned to the remaining on-site tributary area (5.45 acres). In addition to the on-site area, of course, the remaining upstream watershed remains tributary. This area, which was estimated at 54.85 acres, was valued at a CN of 55.5 for the purpose of the hydrologic analysis.

The project is considered to have no impact with respect to reducing the overall watershed time of concentration to the railroad culvert. The time of concentration is a measurement of the hydraulically most distant point, which remains unchanged since the proposed development is in the lower reaches of the watershed and, as a result, the path of the hydraulically most distant point remains unaltered.

Hydrographs were developed for the subject storms for the total area tributary to the westerly drainage system under post-development conditions. The peaks of these hydrographs are summarized in Table No. 3 and an increase in the peak rate of

TABLE NO. 3

POST-DEVELOPMENT PEAK RATES OF RUNOFF AT RAILROAD CULVERT WITH STORMWATER DETENTION

Storm Frequency	Flow Rate (cfs)
1	11.71
2	26.76
5	60.33
10	96.51
15	109.44
25	131.75
50	154.86
100	203.05

runoff as a consequence of the development is apparent upon comparison of these values with the values presented in Table No. 1. To compensate for the increase in the peak rate of runoff generated by the development, stormwater management practices, such as a detention basin, are required. The next section of this report describes the stormwater detention basin designed for The Polo Club.

5.0 - STORMWATER DETENTION BASIN DESIGN

The preceding section of this report indicated that the proposed project will increase the peak rates of runoff tributary to the existing railroad culvert. Such an impact must be mitigated to comply with governing County Regulations and Municipal Ordinances. In addtion, the introductory section of this report described the downstream watershed area from the railroad culvert as an area which frequently floods and further described the Borough of Far Hills governing body's desire to reduce the quantity of storm water runoff tributary to this area. This section of this report will describe, in detail, the manner in which the proposed storm water detention basin addresses both the above referenced requirements.

The storm water detention basin has been designed in accordance with the criteria established in the referenced Somerset County Handbook. The basin was considered a major basin as defined in the Handbook. The criteria for major basins requires that the basin provide attenuation for all storms

referenced in Section 3.0 of this report. Accordingly, the hydrographs presented in Table No. 3 have been routed and the peak rates of outflow and maximum storage data pertaining to each routing are provided in Table No. 4. A comparison of the peak rates of outflow with respect to the existing pre-devlopment peak rates (Table No. 1) indicates that the basin is very effective for all storms with respect to reducing or attenuating flows below the pre-development (or existing) flows. Therefore, the proposed basin is considered to accomplish both of the goals stated in the introductory section of this report; that is, to compensate for the increase in peak runoff rates generated as a result of the development of the project and to provide an effective regional basin for the further protection of downstream areas. Figure No. 4 is a stage-discharge curve developed for the above referenced detention basin and Figure No. 5 is a 100-year hydrograph routing between the hours of 11:00 and 20:00.

In addition to the hydrologic and hydraulic design of the basin presented above, the County's Handbook contains numerous standards for the design and construction of the basin and the subject design has been developed to comply with all of these specified standards. Specifically, the emergency spillway has been designed to accommodate a storm having 11.0 inches of rainfall in a 24 hour period and the top of berm elevation has been set to allow sufficient freeboard for a 17 inch rainfall in a 24 hour period. Additionally, the bottom of the basin has

TABLE NO. 4

PROPOSED DETENTION BASIN DESIGN; DISCHARGES AND STORAGE DATA

Storm Frequency	max. out flows (cfs)	max. elevation (ft.)	max. storage (ac. ft.)
1	6.14	149.67	0.28
2	9.23	150.18	0.79
5	13.36	151.58	2.16
10	16.44	152.97	3.80
15	17.39	153.44	4.42
25	18.86	154.25	5.52
50	20.24	155.06	6.69
100	22.73	156.67	9.24

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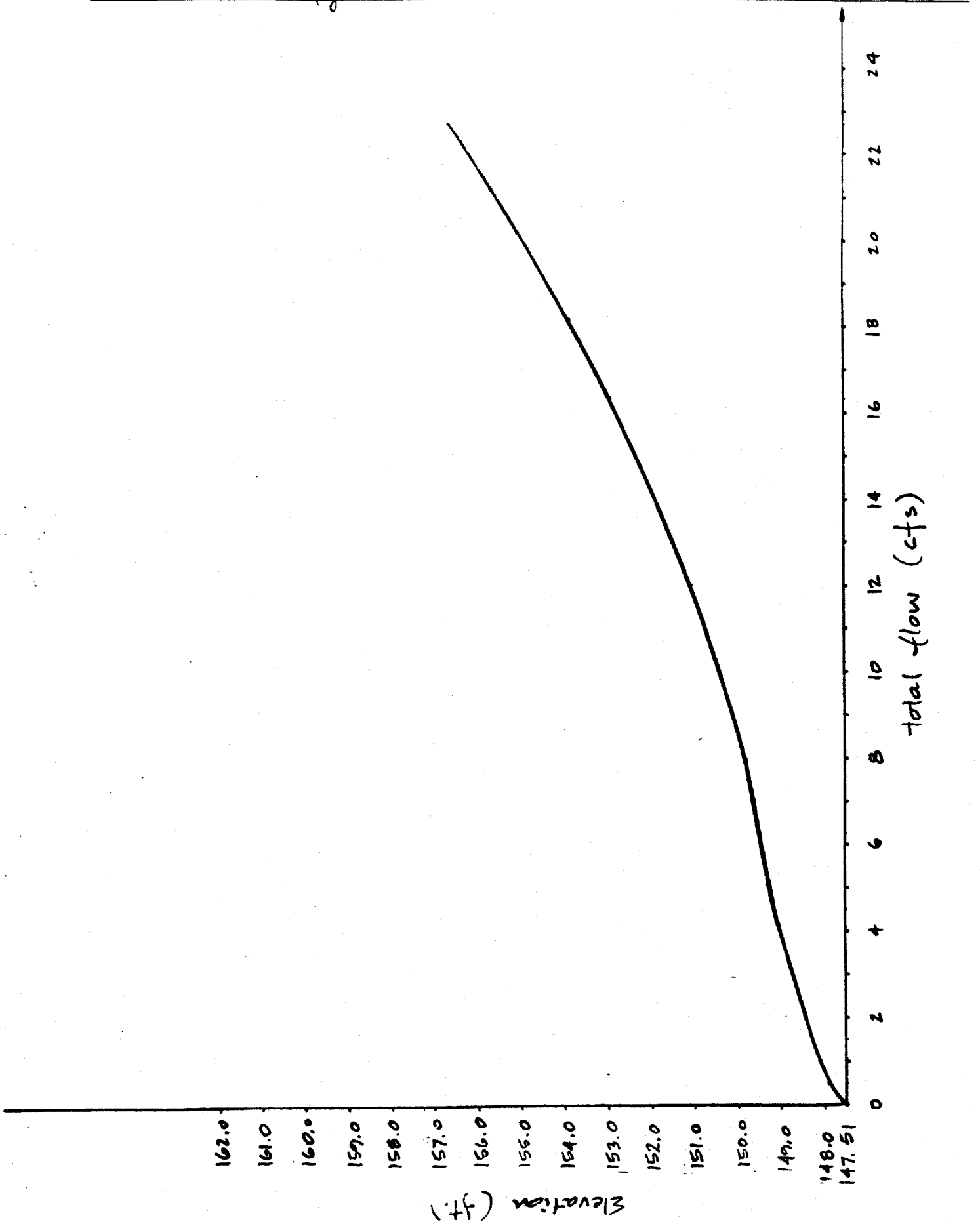
PROJ. NAME: Far Hills

SUBJECT: figure # 4



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PROJ. NAME: Far Hills

SUBJECT: Figure #5

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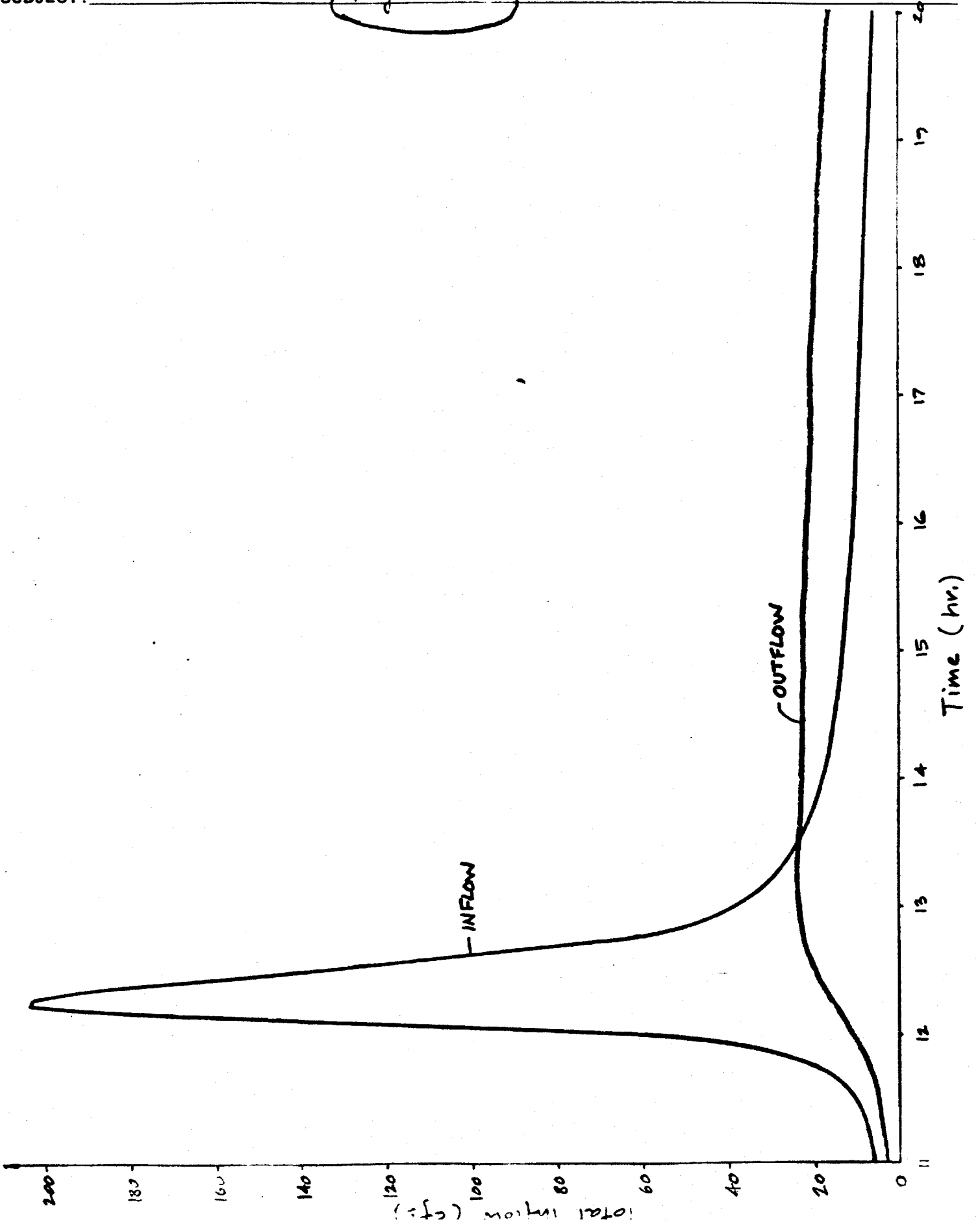

been designed to slope towards the lowflow channel at a minimum grade two percent.

CONCLUSIONS

In conclusion, the stormwater detention basin proposed for The Polo Club is very effective with respect to attenuating peak rates of runoff below currently anticipated rates of runoff. The Stormwater Management Plan developed for the project will reduce future flow rates tributary to both the existing culvert on Route 202 and the existing culvert at the railroad crossing. The detention basin proposed along the westerly drainage system not only serves to attenuate the increase peak flow generated by the project itself but also is very effective in terms of providing a significant degree of flood protection to downstream properties. The detention facility has been designed in strict compliance with the standards established by Somerset County.

APPENDIX A

Hydrographs before (RRE) and after (RRA) development for westerly drainage system.

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 1.89213 CFS

TOTAL RAINFALL DEPTH = 2.700 INCHES
TOTAL RUNOFF DEPTH = 0.122 INCHES

TOTAL VOLUME = 30742.871 CU FT OR 0.706 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 11.71333 CFS

TOTAL RAINFALL DEPTH = 2.700 INCHES
TOTAL RUNOFF DEPTH = 0.326 INCHES

TOTAL VOLUME = 85128.922 CU FT OR 1.954 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 7.84719 CFS

TOTAL RAINFALL DEPTH = 3.300 INCHES
TOTAL RUNOFF DEPTH = 0.281 INCHES

TOTAL VOLUME = 70690.227 CU FT OR 1.623 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES
WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 26.75922 CFS

TOTAL RAINFALL DEPTH = 3.300 INCHES
TOTAL RUNOFF DEPTH = 0.581 INCHES

HYDROGRAPH PRINT ROUTINE

FILE NAME : STORM[illegible]RRN.HYD 2e-NO. 464

BEGINNING TIME = 11 : 00. PEAK = 11.71

11 : 30	0.000	0.000	0.000	0.000	0.000	0.000
12 : 0	1.782	5.629	9.472	11.461	11.642	11.331
12 : 30	10.343	8.722	7.093	5.870	5.078	4.521
13 : 0	4.115	3.798	3.551	3.353	3.187	3.046
13 : 30	2.924	2.819	2.723	2.637	2.557	2.484
14 : 0	2.417	2.354	2.296	2.241	2.190	2.142
14 : 30	2.097	2.055	2.015	1.976	1.940	1.906
15 : 0	1.873	1.842	1.812	1.783	1.756	1.730
15 : 30	1.704	1.680	1.657	1.634	1.613	1.592
16 : 0	1.572	1.552	1.534	1.515	1.498	1.481
16 : 30	1.464	1.448	1.433	1.418	1.403	1.389
17 : 0	1.375	1.361	1.348	1.335	1.323	1.311
17 : 30	1.299	1.287	1.276	1.265	1.254	1.244
18 : 0	1.234	1.223	1.214	1.204	1.195	1.185
18 : 30	1.176	1.168	1.159	1.150	1.142	1.134
19 : 0	1.126	1.118	1.110	1.103	1.095	1.088
19 : 30	1.081	1.074	1.067	1.060	1.054	1.047
20 : 0	1.041	1.034	1.028	1.022	1.016	1.010
20 : 30	1.004	0.998	0.993	0.987	0.982	0.976
21 : 0	0.971	0.966	0.961	0.955	0.950	0.945
21 : 30	0.941	0.936	0.931	0.926	0.922	0.917
22 : 0	0.913	0.908	0.904	0.900	0.895	0.891
22 : 30	0.887	0.883	0.879	0.875	0.871	0.867
23 : 0	0.863	0.859	0.855	0.852	0.848	0.844
23 : 30	0.841	0.837	0.834	0.830	0.827	0.823
24 : 0	0.774	0.624	0.414	0.236	0.133	0.075
24 : 30	0.042	0.024	0.013	0.007	0.004	0.002
25 : 0	0.000	0.000	0.000	0.000	0.000	0.000

HYDROGRAPH PRINT ROUTINE

FILE NAME : B:\BSOPR.HYD

BEGINNING TIME : 11 : 59.

PEAK 7.65

11 : 30	0.000	0.000	0.000	0.000	0.000
12 : 0	0.421	1.936	4.247	6.233	7.367
12 : 30	7.389	6.638	5.546	4.692	4.136
13 : 0	3.446	3.217	3.033	2.882	2.757
13 : 30	2.549	2.465	2.390	2.321	2.257
14 : 0	2.144	2.094	2.047	2.002	1.961
14 : 30	1.885	1.850	1.816	1.785	1.755
15 : 0	1.699	1.673	1.648	1.624	1.601
15 : 30	1.558	1.538	1.518	1.499	1.481
16 : 0	1.447	1.430	1.414	1.399	1.384
16 : 30	1.355	1.341	1.328	1.315	1.303
17 : 0	1.278	1.267	1.255	1.244	1.234
17 : 30	1.213	1.203	1.193	1.184	1.174
18 : 0	1.156	1.148	1.139	1.131	1.122
18 : 30	1.106	1.099	1.091	1.084	1.077
19 : 0	1.062	1.056	1.049	1.042	1.036
19 : 30	1.023	1.017	1.011	1.005	0.999
20 : 0	0.987	0.982	0.976	0.971	0.966
20 : 30	0.955	0.950	0.945	0.940	0.935
21 : 0	0.926	0.921	0.916	0.912	0.907
21 : 30	0.899	0.894	0.890	0.886	0.882
22 : 0	0.874	0.870	0.866	0.862	0.858
22 : 0	0.030	0.030	0.030	0.030	0.029
22 : 30	0.029	0.029	0.029	0.029	0.028
23 : 0	0.028	0.028	0.028	0.028	0.028
23 : 30	0.027	0.027	0.027	0.027	0.027
24 : 0	0.027	0.018	0.009	0.001	0.000
24 : 30	0.000	0.000	0.000	0.000	0.000

11	30	[illegible]	[illegible]	0.000	0.000	[illegible]
12	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	30	22.480	17.655	16.125	12.658	[illegible]
13	0	7.822	7.039	6.433	5.979	[illegible]
13	30	5.064	4.847	4.658	4.489	[illegible]
14	0	4.066	3.948	3.838	3.736	[illegible]
14	30	3.468	3.390	3.316	3.247	[illegible]
15	0	[illegible]	[illegible]	2.917	2.858	[illegible]
15	30	2.757	2.714	2.673	2.633	[illegible]
16	0	2.523	2.489	2.456	2.424	2.393
16	30	2.335	2.307	2.280	2.254	2.229
17	0	2.180	2.157	2.134	2.112	2.091
17	30	2.050	2.030	2.011	1.992	1.974
18	0	1.938	1.921	1.904	1.888	1.872
18	30	1.841	1.826	1.812	1.797	1.783
19	0	1.756	1.743	1.730	1.717	1.705
19	30	1.681	1.669	1.657	1.646	1.635
20	0	1.613	1.603	1.592	1.582	1.572
20	30	1.552	1.543	1.534	1.524	1.515
21	0	1.497	1.489	1.480	1.472	1.463
21	30	1.447	1.439	1.431	1.424	1.416
22	0	1.401	1.394	1.387	1.379	1.372
22	30	1.359	1.352	1.345	1.339	1.332
23	0	1.320	1.313	1.307	1.301	1.295
23	30	1.283	1.277	1.272	1.266	1.260
24	0	1.247	1.174	0.947	0.628	0.358
24	30	0.113	0.064	0.036	0.020	0.011
25	0	0.002	0.001	0.000	0.000	0.000

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 26.62456 CFS

TOTAL RAINFALL DEPTH = 4.300 INCHES
TOTAL RUNOFF DEPTH = 0.654 INCHES

TOTAL VOLUME =164516.719 CU FT OR 3.777 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 60.33326 CFS

TOTAL RAINFALL DEPTH = 4.300 INCHES
TOTAL RUNOFF DEPTH = 1.108 INCHES

TOTAL VOLUME =289427.531 CU FT OR 6.644 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 52.34545 CFS

TOTAL RAINFALL DEPTH = 5.200 INCHES
TOTAL RUNOFF DEPTH = 1.081 INCHES

TOTAL VOLUME =271904.437 CU FT OR 6.242 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 96.51241 CFS

TOTAL RAINFALL DEPTH = 5.200 INCHES
TOTAL RUNOFF DEPTH = 1.665 INCHES

TOTAL VOLUME =[illegible] CU FT OR [illegible] AC-FT

[illegible]						
[illegible]						
[illegible]						

14	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	30	3.016	2.994	2.966	2.941	2.917
19	0	2.971	2.949	2.926	2.905	2.884
19	30	2.743	2.722	2.703	2.684	2.668
20	0	2.628	2.610	2.592	2.575	2.558
20	30	2.523	2.503	2.492	2.477	2.464
21	0	2.431	2.416	2.402	2.388	2.373
21	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	0	2.268	2.256	2.246	2.231	[illegible]
22	30	2.196	2.185	2.174	2.165	2.153
23	0	2.130	2.120	2.109	2.099	2.089
23	30	2.069	2.059	2.049	2.040	2.030
24	0	1.899	1.531	1.016	0.579	0.329
24	30	0.103	0.058	0.032	0.017	0.009
25	0	0.001	0.000	0.000	0.000	0.000

...DROGRAPH PRINT ROUTINE

...JARE...

...PEAK = 52.33

[illegible]	[illegible]	[illegible]	[illegible]	9.002	8.897	[illegible]
[illegible]	[illegible]	7.193	10.723	33.447	50.410	[illegible]
[illegible]	[illegible]	11.359	30.148	28.966	22.878	[illegible]
[illegible]	[illegible]	16.724	12.197	11.200	10.386	[illegible]
13	30	8.757	8.372	8.038	7.738	7.466
14	0	6.991	6.782	6.588	6.409	6.241
14	30	5.938	5.801	5.671	5.549	5.434
15	0	5.220	5.122	5.028	4.938	4.852
15	30	4.672	4.617	4.545	4.476	4.410
16	0	4.284	4.225	4.168	4.112	4.057
16	30	3.957	3.909	3.862	3.817	3.773
17	0	3.688	3.648	3.609	3.571	3.534
17	30	3.462	3.428	3.395	3.362	3.330
18	0	3.269	3.240	3.211	3.183	3.155
18	30	3.102	3.076	3.051	3.026	3.002
19	0	2.955	2.932	2.910	2.889	2.867
19	30	2.825	2.805	2.785	2.765	2.746
20	0	2.709	2.691	2.673	2.655	2.638
20	30	2.604	2.588	2.572	2.556	2.540
21	0	2.510	2.495	2.480	2.466	2.451
21	30	2.423	2.410	2.396	2.383	2.370
22	0	2.344	2.332	2.320	2.307	2.295
22	30	2.272	2.260	2.249	2.238	2.227
23	0	2.205	2.194	2.184	2.173	2.163
23	30	2.143	2.133	2.123	2.113	2.104
24	0	2.080	1.959	1.580	1.048	0.598
24	30	0.189	0.106	0.060	0.033	0.018
25	0	0.004	0.001	0.000	0.000	0.000

HYDROGRAPH PRINT ROUTINE

FILE NAME : [illegible]PRT.HYD [illegible]

BEGINNING TIME : 11 : 15 YEAR [illegible]

11	0	0.000	0.000	0.000	0.016	[illegible]
11	30	1.432	2.313	3.703	5.337	[illegible]
12	0	26.118	49.123	79.928	95.656	[illegible]
12	30	67.582	56.658	45.165	35.163	28.001
13	0	20.341	18.068	16.341	15.072	14.061
13	30	12.579	11.994	11.468	11.035	[illegible]
14	0	9.911	9.598	9.308	9.039	[illegible]
14	30	8.339	8.134	7.942	7.761	[illegible]
15	0	7.275	7.130	6.991	6.859	[illegible]
15	30	6.499	6.389	6.283	6.182	6.085
16	0	5.902	5.815	5.732	5.652	5.574
16	30	5.426	5.356	5.288	5.222	5.158
17	0	5.037	4.978	4.922	4.867	4.813
17	30	4.710	4.661	4.613	4.566	4.521
18	0	4.433	4.390	4.349	4.308	4.269
18	30	4.193	4.156	4.120	4.084	4.050
19	0	3.983	3.950	3.919	3.887	3.857
19	30	3.798	3.769	3.741	3.713	3.686
20	0	3.633	3.607	3.581	3.557	3.532
20	30	3.484	3.461	3.438	3.416	3.394
21	0	3.351	3.330	3.309	3.288	3.268
21	30	3.229	3.210	3.191	3.172	3.154
22	0	3.118	3.100	3.083	3.066	3.049
22	30	3.016	3.000	2.984	2.968	2.952
23	0	2.922	2.907	2.892	2.877	2.863
23	30	2.835	2.821	2.807	2.794	2.780
24	0	2.748	2.587	2.086	1.384	0.789
24	30	0.249	0.140	0.079	0.044	0.024
25	0	0.005	0.001	0.000	0.000	0.000

HYDROGRAPH PRINT ROUTINE

[redacted]

BEGINNING TIME [redacted] TIME [redacted]

[redacted]						
12 : 0	10.220	10.211	[redacted]	[redacted]	[redacted]	[redacted]
12 : 30	9.648	9.621	[redacted]	[redacted]	[redacted]	[redacted]
13 : 0	10.327	10.701	[redacted]	11.712	[redacted]	[redacted]
13 : 30	7.804	7.911	[redacted]	[redacted]	[redacted]	[redacted]
14 : 0	7.848	7.607	7.369	7.160	[redacted]	[redacted]
14 : 30	6.602	6.496	6.319	6.211	[redacted]	[redacted]
15 : 0	5.859	5.737	[redacted]	[redacted]	[redacted]	[redacted]
15 : 30	5.242	5.157	5.076	4.998	[redacted]	[redacted]
16 : 0	4.781	4.714	4.649	4.587	[redacted]	[redacted]
16 : 30	4.412	4.358	4.305	4.254	[redacted]	[redacted]
17 : 0	4.109	4.064	4.019	3.976	[redacted]	[redacted]
17 : 30	3.854	3.816	3.778	3.742	[redacted]	[redacted]
18 : 0	3.637	3.604	3.571	3.540	[redacted]	[redacted]
18 : 30	3.449	3.420	3.391	3.364	[redacted]	[redacted]
19 : 0	3.284	3.258	3.233	3.208	[redacted]	[redacted]
19 : 30	3.138	3.115	3.092	3.071	[redacted]	[redacted]
20 : 0	3.007	2.987	2.967	2.947	[redacted]	[redacted]
20 : 30	2.890	2.871	2.853	2.835	[redacted]	[redacted]
21 : 0	2.784	2.767	2.750	2.734	[redacted]	[redacted]
21 : 30	2.687	2.672	2.657	2.642	[redacted]	[redacted]
22 : 0	2.599	2.585	2.571	2.557	[redacted]	[redacted]
22 : 30	2.517	2.504	2.492	2.479	[redacted]	[redacted]
23 : 0	2.442	2.430	2.418	2.407	[redacted]	[redacted]
23 : 30	2.373	2.362	2.350	2.340	[redacted]	[redacted]
24 : 0	2.303	2.169	1.748	1.160	[redacted]	[redacted]
24 : 30	0.209	0.117	0.066	0.037	[redacted]	[redacted]
25 : 0	0.004	0.001	0.000	0.000	[redacted]	[redacted]

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 82.03867 CFS

TOTAL RAINFALL DEPTH = 5.500 INCHES
TOTAL RUNOFF DEPTH = 1.239 INCHES

TOTAL VOLUME =311647.750 CU FT OR 7.154 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 109.44460 CFS

TOTAL RAINFALL DEPTH = 5.500 INCHES
TOTAL RUNOFF DEPTH = 1.865 INCHES

TOTAL VOLUME =487095.562 CU FT OR 11.182 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 79.08527 CFS

TOTAL RAINFALL DEPTH = 5.999 INCHES
TOTAL RUNOFF DEPTH = 1.517 INCHES

TOTAL VOLUME =381633.937 CU FT OR 8.761 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 131.74744 CFS

TOTAL RAINFALL DEPTH = 5.999 INCHES
TOTAL RUNOFF DEPTH = 2.210 INCHES

TOTAL VOLUME =577141.937 CU FT OR 13.249 AC

[illegible]

FILE NAME : [illegible]

BEGINNING TIME : 10 : 30. [illegible]

10	0	0.000	0.000	0.000	0.000	[illegible]
[illegible]	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	30	3.636	5.174	8.274	13.013	17.472
12	0	57.007	91.449	108.562	103.391	88.024
12	30	63.165	50.245	39.051	31.106	26.013
13	0	19.963	18.039	16.628	15.528	14.624
13	30	13.213	12.651	12.149	11.693	11.282
14	0	10.557	10.256	9.938	9.662	[illegible]
14	30	8.937	8.725	8.525	8.336	8.157
15	0	7.826	7.673	7.528	7.389	7.256
15	30	7.007	6.891	6.780	6.672	6.569
16	0	6.375	6.283	6.194	6.108	6.025
16	30	5.868	5.793	5.720	5.650	5.582
17	0	5.451	5.389	5.328	5.269	5.212
17	30	5.101	5.049	4.997	4.947	4.898
18	0	4.803	4.758	4.713	4.669	4.627
18	30	4.545	4.505	4.466	4.428	4.391
19	0	4.319	4.284	4.249	4.216	4.183
19	30	4.119	4.088	4.057	4.027	3.998
20	0	3.941	3.913	3.885	3.858	3.832
20	30	3.780	3.755	3.731	3.706	3.682
21	0	3.636	3.613	3.590	3.568	3.546
21	30	3.504	3.483	3.463	3.442	3.422
22	0	3.383	3.364	3.346	3.327	3.309
22	30	3.273	3.255	3.238	3.221	3.204
23	0	3.171	3.155	3.139	3.123	3.107
23	30	3.077	3.062	3.047	3.032	3.017
24	0	2.821	2.274	1.509	0.861	0.453
24	30	0.153	0.086	0.048	0.026	0.013
25	0	0.001	0.000	0.000	0.000	0.000

[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		16.662	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		11.207	[illegible]	[illegible]	[illegible]	[illegible]
14	0	9.026	8.761	8.516	8.287	8.074
14	30	7.687	7.511	7.344	7.187	7.039
15	0	6.764	6.636	6.514	6.398	6.288
15	30	6.080	5.983	5.889	5.800	5.715
16	0	5.550	5.473	5.398	5.326	5.256
16	30	5.124	5.061	5.000	4.940	4.883
17	0	4.773	4.720	4.669	4.619	4.571
17	30	4.477	4.433	4.389	4.346	4.305
18	0	4.225	4.186	4.148	4.111	4.075
18	30	4.006	3.972	3.939	3.907	3.875
19	0	3.813	3.784	3.754	3.726	3.698
19	30	3.643	3.617	3.591	3.565	3.540
20	0	3.491	3.467	3.444	3.421	3.398
20	30	3.354	3.333	3.312	3.291	3.270
21	0	3.230	3.211	3.192	3.173	3.154
21	30	3.117	3.100	3.082	3.065	3.048
22	0	3.014	2.998	2.982	2.966	2.950
22	30	2.919	2.904	2.889	2.874	2.860
23	0	2.831	2.817	2.804	2.790	2.777
23	30	2.750	2.737	2.724	2.712	2.699
24	0	2.525	2.035	1.351	0.770	0.432
24	30	0.137	0.077	0.043	0.023	0.012
25	0	0.001	0.000	0.000	0.000	0.000

FILE NAME : [illegible]RNG.HYD

[illegible] TIME : [illegible] TIME [illegible]

[illegible]	: 0	0.000	0.000	0.001	0.013	[illegible]
[illegible]	: 30	[illegible]	[illegible]	[illegible]	0.786	[illegible]
[illegible]	: 0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	: 30	4.478	5.493	7.209	11.559	[illegible]
12	: 0	39.667	70.725	111.397	130.830	[illegible]
12	: 30	89.245	74.280	58.911	45.675	36.304
13	: 0	26.162	23.180	20.920	19.267	[illegible]
[illegible]	: 30	16.033	[illegible]	14.621	14.036	[illegible]
[illegible]	: 0	12.534	[illegible]	11.806	11.460	[illegible]
14	: 30	10.557	10.294	10.047	9.815	[illegible]
15	: 0	9.190	9.003	8.826	8.656	8.495
15	: 30	8.194	8.053	7.918	7.788	7.664
16	: 0	7.429	7.319	7.212	7.109	7.010
16	: 30	6.821	6.731	6.644	6.560	[illegible]
17	: 0	6.323	6.249	6.177	6.106	[illegible]
17	: 30	5.907	5.847	5.788	5.728	5.669
18	: 0	5.553	5.499	5.446	5.395	5.345
18	: 30	5.247	5.200	5.155	5.110	5.066
19	: 0	4.981	4.939	4.899	4.859	4.820
19	: 30	4.745	4.708	4.672	4.637	4.603
20	: 0	4.535	4.503	4.470	4.439	4.408
20	: 30	4.342	4.318	4.289	4.260	4.232
21	: 0	4.178	4.151	4.125	4.099	4.073
21	: 30	4.023	3.999	3.975	3.951	3.928
22	: 0	3.883	3.860	3.838	3.817	3.795
22	: 30	3.753	3.733	3.713	3.693	3.673
23	: 0	3.634	3.615	3.597	3.578	3.560
23	: 30	3.524	3.507	3.489	3.472	3.455
24	: 0	3.415	3.215	2.591	1.720	0.981
24	: 30	0.310	0.174	0.098	0.054	0.029
25	: 0	0.006	0.001	0.000	0.000	0.000

HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 97.39101 CFS

TOTAL RAINFALL DEPTH = 6.499 INCHES
TOTAL RUNOFF DEPTH = 1.613 INCHES

TOTAL VOLUME =455979.500 CU FT OR 10.468 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 154.86301 CFS

TOTAL RAINFALL DEPTH = 6.499 INCHES
TOTAL RUNOFF DEPTH = 2.568 INCHES

TOTAL VOLUME =670833.625 CU FT OR 15.400 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRE

TOTAL AREA = 70.00 ACRES

WEIGHTED CN = 55.00

LAG TIME=0.22

PEAK = 137.15733 CFS

TOTAL RAINFALL DEPTH = 7.499 INCHES
TOTAL RUNOFF DEPTH = 2.447 INCHES

TOTAL VOLUME =615567.875 CU FT OR 14.131 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. RRA

TOTAL AREA = 72.70 ACRES

WEIGHTED CN = 63.39

LAG TIME=0.22

PEAK = 203.05450 CFS

TOTAL RAINFALL DEPTH = 7.499 INCHES
TOTAL RUNOFF DEPTH = 3.321 INCHES
TOTAL VOLUME = 867344.25 CU FT OR 19.911 AC-FT

BEGINNING TIME = 9 : 42. PEAK = 154.86

9	: 30	0.000	0.000	0.000	0.000	0.004
10	: 0	0.076	0.160	0.277	0.413	0.567
10	: 30	0.926	1.134	1.363	1.617	1.900
11	: 0	2.573	2.978	3.442	3.979	4.609
11	: 30	6.271	7.506	10.026	15.083	22.526
12	: 0	48.772	85.099	132.168	153.919	144.482
12	: 30	103.296	86.676	67.784	52.448	41.615
13	: 0	29.898	26.456	23.853	21.951	20.474
13	: 30	18.241	17.372	16.622	15.952	15.345
14	: 0	14.290	13.826	13.399	13.003	12.635
14	: 30	11.972	11.671	11.389	11.123	10.872
15	: 0	10.410	10.196	9.993	9.800	9.616
15	: 30	9.272	9.111	8.957	8.810	8.668
16	: 0	8.401	8.274	8.153	8.035	7.922
16	: 30	7.707	7.605	7.506	7.410	7.318
17	: 0	7.140	7.056	6.973	6.893	6.816
17	: 30	6.667	6.595	6.525	6.457	6.391
18	: 0	6.264	6.203	6.143	6.084	6.027
18	: 30	5.916	5.863	5.811	5.760	5.710
19	: 0	5.613	5.566	5.520	5.475	5.431
19	: 30	5.346	5.304	5.263	5.223	5.184
20	: 0	5.107	5.070	5.034	4.998	4.963
20	: 30	4.894	4.860	4.828	4.795	4.763
21	: 0	4.701	4.671	4.641	4.612	4.583
21	: 30	4.526	4.499	4.471	4.445	4.418
22	: 0	4.367	4.341	4.316	4.292	4.267
22	: 30	4.220	4.197	4.174	4.151	4.129
23	: 0	4.085	4.064	4.042	4.022	4.001
23	: 30	3.960	3.941	3.921	3.901	3.882
24	: 0	3.836	3.612	2.911	1.932	1.102
24	: 30	0.348	0.195	0.110	0.061	0.033
25	: 0	0.007	0.002	0.000	0.000	0.000

HYDROGRAPH PRINT ROUTING

FILE NAME : S10357.PRE.HYD 26-JUN-84

BEGINNING TIME 11 : 0. PEAK = 11.39

11	0	0.000	0.000	0.000	0.009	0.066
11	30	0.531	1.024	2.026	4.119	7.609
12	0	22.949	46.433	78.693	96.311	93.769
12	30	70.793	59.818	47.916	37.493	30.025
13	0	21.914	19.517	17.691	16.341	15.285
13	30	13.681	13.054	12.513	12.028	11.589
14	0	10.822	10.485	10.144	9.865	9.617
14	30	9.131	8.911	8.704	8.509	8.325
15	0	7.985	7.828	7.679	7.536	7.400
15	30	7.146	7.028	6.914	6.804	6.699
16	0	6.501	6.407	6.317	6.230	6.146
16	30	5.985	5.909	5.836	5.764	5.695
17	0	5.563	5.500	5.438	5.378	5.320
17	30	5.209	5.155	5.103	5.052	5.002
18	0	4.907	4.860	4.815	4.771	4.728
18	30	4.645	4.605	4.566	4.527	4.490
19	0	4.417	4.381	4.347	4.313	4.280
19	30	4.215	4.183	4.153	4.122	4.093
20	0	4.035	4.007	3.979	3.952	3.925
20	30	3.873	3.848	3.823	3.798	3.774
21	0	3.727	3.704	3.681	3.659	3.637
21	30	3.594	3.573	3.552	3.531	3.511
22	0	3.472	3.453	3.434	3.415	3.397
22	30	3.360	3.343	3.325	3.308	3.291
23	0	3.257	3.241	3.225	3.209	3.193
23	30	3.162	3.147	3.132	3.117	3.102
24	0	3.067	2.888	2.328	1.545	0.881
24	30	0.278	0.156	0.088	0.049	0.026
25	0	0.006	0.001	0.000	0.000	0.000

HYDROGRAPH ROUTING

FILE NAME : STO:850:RRE.HYD 15-NOV-84

BEGINNING TIME = 10 : 37. PERA 137.16

10	30	0.000	0.000	0.000	0.011	0.059
11	0	0.307	0.626	0.947	1.334	1.717
11	30	3.002	5.785	5.828	9.552	13.310
12	0	37.734	70.366	113.933	135.978	151.018
12	30	95.593	80.061	63.776	49.624	39.366
13	0	28.667	25.455	23.016	21.224	19.818
13	30	17.707	16.881	16.168	15.529	14.951
14	0	13.944	13.502	13.093	12.715	12.365
14	30	11.727	11.439	11.168	10.913	10.672
15	0	10.228	10.023	9.828	9.642	9.465
15	30	9.134	8.979	8.831	8.688	8.552
16	0	8.294	8.172	8.054	7.941	7.831
16	30	7.624	7.525	7.429	7.336	7.247
17	0	7.075	6.993	6.913	6.836	6.760
17	30	6.616	6.546	6.479	6.413	6.349
18	0	6.225	6.165	6.107	6.050	5.994
18	30	5.887	5.835	5.784	5.735	5.686
19	0	5.592	5.546	5.501	5.458	5.415
19	30	5.331	5.291	5.251	5.212	5.174
20	0	5.099	5.063	5.027	4.992	4.958
20	30	4.891	4.858	4.826	4.794	4.763
21	0	4.702	4.673	4.644	4.615	4.587
21	30	4.531	4.504	4.477	4.451	4.425
22	0	4.375	4.350	4.326	4.302	4.278
22	30	4.231	4.209	4.186	4.164	4.142
23	0	4.099	4.078	4.057	4.037	4.016
23	30	3.977	3.957	3.938	3.919	3.900
24	0	3.855	3.630	2.926	1.942	1.107
24	30	0.350	0.196	0.111	0.061	0.033
25	0	0.007	0.002	0.000	0.000	0.000

HYDROGRAPH PRINT ROUTINE

FILE NAME = [illegible]

BEGINNING TIME = 9 : 1. PEAK = 205.05

9	0	0.000	0.001	0.008	0.036	0.094
9	30	0.285	0.405	0.537	0.680	0.833
10	0	1.173	1.361	1.564	1.782	2.016
10	30	2.552	2.856	3.190	3.558	3.967
11	0	4.934	5.514	6.176	6.941	7.836
11	30	10.182	11.924	15.533	22.753	33.164
12	0	68.210	115.476	175.722	202.083	187.860
12	30	132.280	109.128	86.004	66.337	52.487
13	0	37.528	33.142	29.830	27.421	25.553
13	30	22.733	21.638	20.693	19.848	19.084
14	0	17.755	17.173	16.635	16.138	15.675
14	30	14.842	14.465	14.110	13.777	13.462
15	0	12.883	12.615	12.361	12.119	11.888
15	30	11.458	11.257	11.064	10.879	10.702
16	0	10.368	10.210	10.058	9.911	9.770
16	30	9.501	9.324	9.250	9.131	7.015
17	0	8.794	8.688	8.585	8.486	8.389
17	30	8.203	8.114	8.027	7.942	7.860
18	0	7.701	7.625	7.550	7.477	7.406
18	30	7.268	7.202	7.137	7.074	7.011
19	0	6.891	6.833	6.776	6.720	6.665
19	30	6.558	6.507	6.456	6.406	6.357
20	0	6.262	6.216	6.171	6.126	6.083
20	30	5.997	5.956	5.915	5.875	5.835
21	0	5.758	5.720	5.683	5.647	5.611
21	30	5.541	5.507	5.473	5.440	5.407
22	0	5.343	5.312	5.281	5.250	5.220
22	30	5.161	5.133	5.104	5.076	5.048
23	0	4.994	4.968	4.941	4.915	4.890
23	30	4.840	4.815	4.791	4.767	4.743
24	0	4.686	4.412	3.556	2.360	1.346
24	30	0.425	0.239	0.135	0.074	0.040
25	0	0.009	0.002	0.000	0.000	0.000

APPENDIX B

Hydrograph routing for
westerly drainage system.

```
---STANDARD ROUTE---
HYDROGRAPH NO. RRA
HYDROGRAPH NO. RRAD

A(   1)=       0.00
D(   1)=       0.50

A(   2)=     300.00
D(   2)=       0.50

A(   3)=    2720.00
D(   3)=       0.50

A(   4)=   10880.00
D(   4)=       1.00

A(   5)=   36160.00
D(   5)=       2.00

A(   6)=   50720.00
D(   6)=       2.00

A(   7)=   60000.00
D(   7)=       2.00

A(   8)=   69600.00
D(   8)=       2.00

A(   9)=   80800.00
D(   9)=      10.00

A(  10)=   90000.00
D(  10)=       0.00

DIAM =        18.00
NUMBER_OF_PIPES =          1.00
LENGTH OF WEIR =       100.00
LENGTH OF SECOND WEIR =          0.00
HEIGHT OF WEIR =         9.30
WEIR COEFF OF LOW WEIR =         2.80
DISCHARGE ELE =      147.40
DET_BASIN INV =      147.50
LENGTH OF PIPE =       100.00
PEAK =         6.14CFS,      WSEL =      149.47
HYD  --  ERROR 43
  IN    'ROUT   ' AT 459
  FROM '.MAIN.' AT 58

HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

---HYDROGRAPH DELETE ROUTINE---
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA
HYDROGRAPH NO. OUT
HYD  --  EXITING DUE TO ERROR 29
FCS -26, 0 85030UT 1
  IN    'DELET  ' AT 15
  FROM '.MAIN.' AT 62
```

1 yr. storm, $P_{24} = 2.7''$

0123456789012345678 ** RSX-11M V3.1 ** 26-NOV-84 13:14:3 DK3:
0123456789012345678 ** RSX-11M V3.1 ** 26-NOV-84 13:14:3 DK3:
0123456789012345678 ** RSX-11M V3.1 ** 26-NOV-84 13:14:3 DK3:

STANDARD ROUTING PROCEDURE

P24 = 2.7"

OUTPUT FILE : SY0:[50,3]RRAD.. 26-NOV-84

TIME	INFLOW	AVG	ELEV	QPIPE	QWEIR	STORAGE	QTOTAL
** 12.	0.000						
12 0.	0.180	0.090	147.696	0.104	0.000	0.000	0.104
12 5.	1.782	0.981	148.113	0.996	0.000	0.003	0.996
12 10.	5.629	3.706	148.477	2.237	0.000	0.018	2.237
12 15.	9.472	7.551	148.727	3.224	0.000	0.031	3.224
12 20.	11.461	10.467	149.010	3.564	0.000	0.100	3.564
12 25.	11.642	11.552	149.181	4.325	0.000	0.132	4.325
12 30.	11.331	11.487	149.301	5.161	0.000	0.198	5.161
12 35.	10.343	10.837	149.384	5.672	0.000	0.236	5.672
12 40.	8.722	9.533	149.436	5.972	0.000	0.261	5.972
12 45.	7.023	7.908	149.461	6.110	0.000	0.274	6.110
12 50.	5.870	6.482	149.466	6.137	0.000	0.277	6.137
12 55.	5.078	5.474	149.458	6.089	0.000	0.272	6.089
13 0.	4.521	4.800	149.441	5.997	0.000	0.264	5.997
13 5.	4.115	4.318	149.418	5.872	0.000	0.253	5.872
13 10.	3.795	3.956	149.392	5.723	0.000	0.240	5.723
13 15.	3.551	3.624	149.36	5.533	0.000	0.226	5.533
13 20.	3.353	3.452	149.333	5.366	0.000	0.212	5.366
13 25.	3.187	3.270	149.301	5.16	0.000	0.199	5.166
13 30.	3.04	3.116	149.262	4.954	0.000	0.185	174
13 35.	2.92	2.980	149.217	.732	0.000	0.171	.484
	2.81	2.87		4.504	0.000	.14	.304

14	0.	2.110	2.121	148.291	2.115	0.000	0.115	2.115
14	5.	2.097	2.110	148.285	2.103	0.000	0.115	2.103
14	10.	2.084	2.098	148.279	2.091	0.000	0.115	2.091
14	15.	2.072	2.086	148.273	2.079	0.000	0.114	2.079
14	20.	2.060	2.074	148.267	2.067	0.000	0.114	2.067
14	25.	2.048	2.062	148.261	2.055	0.000	0.113	2.055
14	30.	2.036	2.050	148.255	2.043	0.000	0.113	2.043
14	35.	2.025	2.038	148.249	2.031	0.000	0.113	2.031
14	40.	2.013	2.027	148.243	2.020	0.000	0.112	2.020
14	45.	2.002	2.015	148.237	2.008	0.000	0.112	2.008
14	50.	1.991	2.004	148.231	1.997	0.000	0.111	1.997
14	55.	1.980	1.993	148.225	1.986	0.000	0.111	1.986
15	0.	1.969	1.982	148.219	1.975	0.000	0.110	1.975
15	5.	1.958	1.971	148.213	1.964	0.000	0.110	1.964
15	10.	1.947	1.960	148.207	1.953	0.000	0.109	1.953
15	15.	1.936	1.950	148.201	1.943	0.000	0.109	1.943
15	20.	1.926	1.939	148.195	1.932	0.000	0.108	1.932
15	25.	1.915	1.929	148.189	1.922	0.000	0.108	1.922
15	30.	1.905	1.918	148.183	1.912	0.000	0.107	1.912
15	35.	1.895	1.908	148.177	1.902	0.000	0.107	1.902
15	40.	1.885	1.898	148.171	1.892	0.000	0.106	1.892
15	45.	1.875	1.888	148.165	1.882	0.000	0.106	1.882
15	50.	1.865	1.878	148.159	1.872	0.000	0.105	1.872
15	55.	1.856	1.868	148.153	1.862	0.000	0.105	1.862
16	0.	1.846	1.858	148.147	1.852	0.000	0.104	1.852
16	5.	1.837	1.848	148.141	1.843	0.000	0.104	1.843
16	10.	1.828	1.839	148.135	1.833	0.000	0.103	1.833
16	15.	1.819	1.830	148.129	1.824	0.000	0.103	1.824
16	20.	1.810	1.821	148.123	1.815	0.000	0.102	1.815
16	25.	1.801	1.812	148.117	1.806	0.000	0.102	1.806
16	30.	1.792	1.803	148.111	1.797	0.000	0.101	1.797
16	35.	1.784	1.795	148.105	1.788	0.000	0.101	1.788
16	40.	1.775	1.786	148.099	1.779	0.000	0.100	1.779
16	45.	1.767	1.778	148.093	1.771	0.000	0.100	1.771
16	50.	1.759	1.769	148.087	1.762	0.000	0.099	1.762
16	55.	1.751	1.761	148.081	1.754	0.000	0.099	1.754
17	0.	1.743	1.753	148.075	1.746	0.000	0.098	1.746
17	5.	1.735	1.745	148.069	1.738	0.000	0.098	1.738
17	10.	1.727	1.737	148.063	1.730	0.000	0.097	1.730
17	15.	1.719	1.729	148.057	1.722	0.000	0.097	1.722
17	20.	1.712	1.721	148.051	1.714	0.000	0.096	1.714
17	25.	1.704	1.714	148.045	1.707	0.000	0.096	1.707
17	30.	1.697	1.706	148.039	1.699	0.000	0.096	1.699
17	35.	1.690	1.699	148.033	1.692	0.000	0.095	1.692
17	40.	1.683	1.692	148.027	1.685	0.000	0.095	1.685
17	45.	1.676	1.685	148.021	1.678	0.000	0.094	1.678
17	50.	1.669	1.678	148.015	1.671	0.000	0.094	1.671
17	55.	1.662	1.671	148.009	1.664	0.000	0.093	1.664
18	0.	1.655	1.664	148.003	1.657	0.000	0.093	1.657
18	5.	1.649	1.658	147.997	1.651	0.000	0.093	1.651
18	10.	1.642	1.651	147.991	1.644	0.000	0.092	1.644
18	15.	1.636	1.645	147.985	1.638	0.000	0.092	1.638
18	20.	1.630	1.638	147.979	1.631	0.000	0.091	1.631
18	25.	1.624	1.632	147.973	1.625	0.000	0.091	1.625
18	30.	1.618	1.626	147.967	1.619	0.000	0.091	1.619
18	35.	1.612	1.620	147.961	1.613	0.000	0.090	1.613
18	40.	1.606	1.614	147.955	1.607	0.000	0.090	1.607
18	45.	1.600	1.608	147.949	1.601	0.000	0.089	1.601
18	50.	1.594	1.602	147.943	1.595	0.000	0.089	1.595
18	55.	1.589	1.596	147.937	1.589	0.000	0.089	1.589
19	0.	1.583	1.591	147.931	1.583	0.000	0.088	1.583
19	5.	1.578	1.585	147.925	1.578	0.000	0.088	1.578
19	10.	1.572	1.580	147.919	1.572	0.000	0.087	1.572

19	10.	1.077	1.079	148.141	1.079	0.000	0.004	1.079
19	15.	1.074	1.076	148.141	1.079	0.000	0.004	1.079
19	20.	1.072	1.074	148.140	1.077	0.000	0.004	1.077
19	25.	1.069	1.071	148.137	1.074	0.000	0.004	1.074
19	30.	1.067	1.069	148.137	1.069	0.000	0.004	1.069
19	35.	1.064	1.067	148.134	1.069	0.000	0.004	1.069
19	40.	1.064	1.066	148.133	1.064	0.000	0.004	1.064
19	45.	1.061	1.064	148.131	1.067	0.000	0.004	1.067
19	50.	1.064	1.062	148.129	1.059	0.000	0.004	1.059
19	55.	1.059	1.061	148.128	1.064	0.000	0.003	1.064
20	0.	1.062	1.059	148.125	1.059	0.000	0.003	1.059
20	5.	1.056	1.059	148.125	1.059	0.000	0.003	1.059
20	10.	1.059	1.056	148.122	1.059	0.000	0.003	1.059
20	15.	1.056	1.056	148.122	1.056	0.000	0.003	1.056
20	20.	1.053	1.053	148.119	1.056	0.000	0.003	1.056
20	25.	1.053	1.053	148.119	1.053	0.000	0.003	1.053
20	30.	1.050	1.050	148.116	1.053	0.000	0.003	1.053
20	35.	1.050	1.050	148.116	1.050	0.000	0.003	1.050
20	40.	1.047	1.047	148.113	1.050	0.000	0.003	1.050
20	45.	1.047	1.047	148.113	1.047	0.000	0.003	1.047
20	50.	1.044	1.044	148.110	1.047	0.000	0.003	1.047
20	55.	1.044	1.044	148.110	1.044	0.000	0.003	1.044
21	0.	1.041	1.041	148.107	1.044	0.000	0.003	1.044
21	5.	1.041	1.041	148.107	1.041	0.000	0.003	1.041
21	10.	1.038	1.038	148.104	1.041	0.000	0.003	1.041
21	15.	1.038	1.038	148.104	1.038	0.000	0.003	1.038
21	20.	1.035	1.035	148.101	1.038	0.000	0.003	1.038
21	25.	1.035	1.035	148.101	1.035	0.000	0.003	1.035
21	30.	1.032	1.032	148.098	1.035	0.000	0.003	1.035
21	35.	1.032	1.032	148.098	1.032	0.000	0.003	1.032
21	40.	1.029	1.029	148.095	1.032	0.000	0.003	1.032
21	45.	1.029	1.029	148.095	1.029	0.000	0.003	1.029
21	50.	1.026	1.026	148.092	1.029	0.000	0.003	1.029
21	55.	1.026	1.026	148.092	1.026	0.000	0.003	1.026
22	0.	1.023	1.023	148.089	1.026	0.000	0.003	1.026
22	5.	1.023	1.023	148.089	1.023	0.000	0.003	1.023
22	10.	1.020	1.020	148.086	1.023	0.000	0.003	1.023
22	15.	1.020	1.020	148.086	1.020	0.000	0.003	1.020
22	20.	1.017	1.017	148.083	1.020	0.000	0.003	1.020
22	25.	1.017	1.017	148.083	1.017	0.000	0.003	1.017
22	30.	1.014	1.014	148.080	1.017	0.000	0.003	1.017
22	35.	1.014	1.014	148.080	1.014	0.000	0.003	1.014
22	40.	1.011	1.011	148.077	1.014	0.000	0.003	1.014
22	45.	1.011	1.011	148.077	1.011	0.000	0.003	1.011
22	50.	1.008	1.008	148.074	1.011	0.000	0.003	1.011
22	55.	1.008	1.008	148.074	1.008	0.000	0.003	1.008
23	0.	1.005	1.005	148.071	1.008	0.000	0.003	1.008
23	5.	1.005	1.005	148.071	1.005	0.000	0.003	1.005
23	10.	1.002	1.002	148.068	1.005	0.000	0.003	1.005
23	15.	1.002	1.002	148.068	1.002	0.000	0.003	1.002
23	20.	0.999	0.999	148.065	1.002	0.000	0.003	1.002
23	25.	0.999	0.999	148.065	0.999	0.000	0.003	0.999
23	30.	0.996	0.996	148.062	0.999	0.000	0.003	0.999
23	35.	0.996	0.996	148.062	0.996	0.000	0.003	0.996
23	40.	0.993	0.993	148.059	0.996	0.000	0.003	0.996
23	45.	0.993	0.993	148.059	0.993	0.000	0.003	0.993
23	50.	0.990	0.990	148.056	0.993	0.000	0.003	0.993
23	55.	0.990	0.990	148.056	0.990	0.000	0.003	0.990
24	0.	0.987	0.987	148.053	0.990	0.000	0.003	0.990
24	5.	0.987	0.987	148.053	0.987	0.000	0.003	0.987
24	10.	0.984	0.984	148.050	0.987	0.000	0.003	0.987
24	15.	0.984	0.984	148.050	0.984	0.000	0.003	0.984
24	20.	0.981	0.981	148.047	0.984	0.000	0.003	0.984
24	25.	0.981	0.981	148.047	0.981	0.000	0.003	0.981
24	30.	0.978	0.978	148.044	0.981	0.000	0.003	0.981
24	35.	0.978	0.978	148.044	0.978	0.000	0.003	0.978
24	40.	0.975	0.975	148.041	0.978	0.000	0.003	0.978
24	45.	0.975	0.975	148.041	0.975	0.000	0.003	0.975
24	50.	0.972	0.972	148.038	0.975	0.000	0.003	0.975
24	55.	0.972	0.972	148.038	0.972	0.000	0.003	0.972
25	0.	0.969	0.969	148.035	0.972	0.000	0.003	0.972
25	5.	0.969	0.969	148.035	0.969	0.000	0.003	0.969
25	10.	0.966	0.966	148.032	0.969	0.000	0.003	0.969
25	15.	0.966	0.966	148.032	0.966	0.000	0.003	0.966
25	20.	0.963	0.963	148.029	0.966	0.000	0.003	0.966
25	25.	0.963	0.963	148.029	0.963	0.000	0.003	0.963
25	30.	0.960	0.960	148.026	0.963	0.000	0.003	0.963
25	35.	0.960	0.960	148.026	0.960	0.000	0.003	0.960
25	40.	0.957	0.957	148.023	0.960	0.000	0.003	0.960
25	45.	0.957	0.957	148.023	0.957	0.000	0.003	0.957
25	50.	0.954	0.954	148.020	0.957	0.000	0.003	0.957
25	55.	0.954	0.954	148.020	0.954	0.000	0.003	0.954
26	0.	0.951	0.951	148.017	0.954	0.000	0.003	0.954
26	5.	0.951	0.951	148.017	0.951	0.000	0.003	0.951
26	10.	0.948	0.948	148.014	0.951	0.000	0.003	0.951
26	15.	0.948	0.948	148.014	0.948	0.000	0.003	0.948
26	20.	0.945	0.945	148.011	0.948	0.000	0.003	0.948
26	25.	0.945	0.945	148.011	0.945	0.000	0.003	0.945
26	30.	0.942	0.942	148.008	0.945	0.000	0.003	0.945
26	35.	0.942	0.942	148.008	0.942	0.000	0.003	0.942
26	40.	0.939	0.939	148.005	0.942	0.000	0.003	0.942
26	45.	0.939	0.939	148.005	0.939	0.000	0.003	0.939
26	50.	0.936	0.936	148.002	0.939	0.000	0.003	0.939
26	55.	0.936	0.936	148.002	0.936	0.000	0.003	0.936
27	0.	0.933	0.933	147.999	0.936	0.000	0.003	0.936
27	5.	0.933	0.933	147.999	0.933	0.000	0.003	0.933
27	10.	0.930	0.930	147.996	0.933	0.000	0.003	0.933
27	15.	0.930	0.930	147.996	0.930	0.000	0.003	0.930
27	20.	0.927	0.927	147.993	0.930	0.000	0.003	0.930
27	25.	0.927	0.927	147.993	0.927	0.000	0.003	0.927
27	30.	0.924	0.924	147.990	0.927	0.000	0.003	0.927
27	35.	0.924	0.924	147.990	0.924	0.000	0.003	0.924
27	40.	0.921	0.921	147.987	0.924	0.000	0.003	0.924
27	45.	0.921	0.921	147.987	0.921	0.000	0.003	0.921
27	50.	0.918	0.918	147.984	0.921	0.000	0.003	0.921
27	55.	0.918	0.918	147.984	0.918	0.000	0.003	0.918
28	0.	0.915	0.915	147.981	0.918	0.000	0.003	0.918
28	5.	0.915	0.915	147.981	0.915	0.000	0.003	0.915
28	10.	0.912	0.912	147.978	0.915	0.000	0.003	0.915
28	15.	0.912	0.912	147.978	0.912	0.000	0.003	0.912
28	20.	0.909	0.909	147.975	0.912	0.000	0.003	0.912
28	25.	0.909	0.909	147.975	0.909	0.000	0.003	0.909
28	30.	0.906	0.906	147.972	0.909	0.000	0.003	0.909
28	35.	0.906	0.906	147.972	0.906	0.000	0.003	0.906
28	40.	0.903	0.903	147.969	0.906	0.000	0.003	0.906
28	45.	0.903	0.903	147.969	0.903	0.000	0.003	0.903
28	50.	0.900	0.900	147.966	0.903	0.000	0.003	0.903
28	55.	0.900	0.900	147.966	0.900	0.000	0.003	0.900
29	0.	0.897	0.897	147.963	0.900	0.000	0.003	0.900
29	5.	0.897	0.897	147.963	0.897	0.000	0.003	0.897
29	10.	0.894	0.894	147.960	0.897	0.000	0.003	0.897
29	15.	0.894	0.894	147.960	0.894	0.000	0.003	0.894
29	20.	0.891	0.891	147.957	0.894	0.000	0.003	0.894
29	25.	0.891	0.891	147.957	0.891	0.000	0.003	0.891
29	30.	0.888	0.888	147.954	0.891	0.000	0.003	0.891
29	35.	0.888	0.888	147.954	0.888	0.000	0.003	0.888
29	40.	0.885	0.885	147.951	0.888	0.000	0.003	0.888
29	45.	0.885	0.885	147.951	0.885	0.000	0.003	0.885
29	50.	0.882	0.882	147.948	0.885	0.000	0.003	0.885
29	55.	0.882	0.882	147.948	0.882	0.000	0.003	0.882
30	0.	0.879	0.879	147.945	0.882	0.000	0.003	0.882
30	5.	0.879	0.879	147.945	0.879	0.000	0.003	0.879
30	10.	0.876	0.876	147.942	0.879	0.000	0.003	0.879
30	15.	0.876	0.876	147.942	0.876	0.000	0.003	0.876
30	20.	0.873	0.873	147.939	0.876	0.000	0.003	0.876
30	25.	0.873	0.873	147.939	0.873	0.000	0.003	0.873
30	30.	0.870	0.870	147.936	0.873	0.000	0.003	0.873
30	35.	0.870	0.870	147.936	0.870	0.000	0.003	0.870
30	40.	0.867	0.867	147.933	0.870	0.000	0.003	0.870
30	45.	0.867	0.867	147.933	0.867	0.000	0.003	0.867
30	50.	0.864	0.864	147.930	0.867	0.000	0.003	0.867
30	55.	0.864	0.864	147.930	0.864	0.000	0.003	0.864
31	0.	0.861	0.861	147.927	0.864	0.000	0.003	0.864
31	5.	0.861	0.861	147.927	0.861	0.000	0.003	0.861
31	10.	0.858	0.858	147.924	0.861	0.000	0.003	0.861
31	15.	0.858	0.858	147.924	0.858	0.000	0.003	0.858
31	20.	0.855	0.855	147.921	0.858	0.000	0.003	0.858
31	25.	0.855	0.855	147.921	0.855	0.000	0.003	0.855
31	30.	0.852	0.852	147.918	0.855	0.000	0.003	0.855
31	35.	0.852	0.852	147.918	0.852	0.000	0.003	0.852
31	40.	0.849	0.849	147.915	0.852	0.000	0.003	0.852
31	45.	0.849	0.849	147.915	0.849	0.000	0.003	0.849
31	50.	0.846	0.846	147.912	0.849	0.000	0.003	0.849
31	55.	0.846	0.846	147.912	0.846	0.000	0.003	0.846
32	0.	0.843	0.843	147.909	0.846	0.000	0.003	0.846
32	5.	0.843	0.843	147.909	0.843	0.000	0.003	0.843
32	10.	0.840	0.840	147.906	0.843	0.000	0.003	0.843
32	15.	0.840	0.840	147.906	0.840	0.000	0.003	0.840
32	20.	0.837	0.837	147.903	0.840	0.000	0.003	0.840
32	25.	0.837	0.837	147.903	0.837	0.000	0.003	0.837
32	30.	0.834	0.834	147.900	0.837	0.000	0.003	0.837
32	35.	0.834	0.834	147.900	0.834	0.000	0.003	0.834
32	40.	0.831	0.831	147.897	0.834	0.000	0.003	0.834
32	45.	0.831	0.831	147.897	0.831	0.000	0.003	0.831
32	50.	0.828	0.828	147.894	0.831	0.000	0.003	0.831
32	55.	0.828	0.828	147.894	0.828	0.000	0.003	0.828
33	0.	0.825	0.825	147.891	0.828	0.000	0.003	0.828
33	5.	0.825	0.825	147.891	0.825	0.000	0.003	0.825
33	10.	0.822	0.822	147.888	0.825	0.000	0.003	0.825
33	15.	0.822	0.822	147.888	0.822	0.000	0.003	0.822
33	20.	0.819	0.819	147.885	0.822	0.000	0.003	0.822
33	25.	0.819	0.819	147.885	0.819	0.000	0.003	0.819
33	30.	0.816	0.816	147.882	0.819	0.000	0.003	0.819
33	35.	0.816	0.816	147.882	0.816	0.000	0.003	0.816
33	40.	0.813	0.813	147.879	0.816	0.000	0.003	0.816
33	45.	0.813	0.813	147.879	0.813	0.000	0.003	0.813
33	50.	0.810	0.810	147.876	0.813	0.000	0.003	0.813
33	55.	0.810	0.810	147.876	0.810	0.000	0.003	0.810
34	0.	0.807	0.807	147.873	0.810	0.000	0.003	0.810
34	5.	0.807	0.807	147.873	0.807	0.000	0.003	0.807
34	10.	0.804	0.804	147.870	0.807	0.000	0.003	0.807
34	15.	0.804	0.804	147.870	0.804	0.000	0.003	0.804
34	20.	0.801	0.801	147.867	0.804	0.000	0.003	0.804
34	25.	0.801	0.801	147.867	0.801	0.000	0.003	0.801
34	30.	0.798	0.798	147.864	0.801	0.000	0.003	0.801
34	35.	0.798	0.798	147.864	0.798	0.000	0.003	0.798
34	40.	0.795	0.795	147.861	0.798	0.000	0.003	0.798
34	45.	0.795	0.795	147.861	0.795	0.000	0.003	0.795
34	50.	0.792	0.792	147.858	0.795	0.000	0.003	0.795
34	55.	0.792	0.792	147.858	0.792	0.000	0.003	0.792
35	0.	0.789	0.789	147.855	0.792	0.000	0.003	0.792
35	5.	0.789	0.789	147.855	0.789	0.000	0.003	0.789
35	10.	0.786	0.786	147.852	0.789	0.000	0.003	0.789
35	15.	0.786	0.786	147.852	0.786	0.000	0.003	0.786
35	20.	0.783	0.783	147.849	0.786	0.000	0.003	0.786
35	25.	0.783	0.783	147.849	0.783	0.000	0.003	0.783
35	30.	0.780	0.780	147.846	0.783	0.000	0.003	0.783
35	35.	0.780	0.780	147.846	0.780	0.000	0.003	0.780
35	40.	0.777	0.777	147.843	0.780	0.000	0.003	0.780
35	45.	0.777	0.777	147.843	0.777	0.000	0.003	0.777
35	50.	0.774	0.774	147.840	0.777	0.000	0.003	0.777
35	55.	0.774	0.774	147.840	0.774	0.000	0.003	0.774
36	0.	0.771	0.771	147.837	0.774	0.000	0.003	0.774
36	5.	0.771	0.771	147.837	0.771	0.000	0.003	0.771
36	10.	0.768	0.768	147.834	0.771	0.000	0.003	0.771
36	15.	0.768	0.768	147.834	0.768	0.000	0.003	0.768
36	20.	0.765	0.765	147.831	0.768	0.000	0.003	0.768
36	25.	0.765	0.765	147.831	0.765	0.000	0.003	0.765
36	30.	0.762	0.762	147.828	0.765	0.000	0.003	0.765
36	35.	0.762	0.762	147.828	0.762	0.000	0.003	0.762
36	40.	0.759	0.759	147.825	0.762	0.000	0.003	0.762
36	45.	0.759	0.759	147.825	0.759	0.000	0.003	0.759
36	50.	0.756	0.756	147.822	0.759	0.000	0.003	0.759
36	55.	0.756	0.756	147.822	0.756	0.000	0.003	0.756
37	0.	0.753	0.753	147.819	0.756	0.000	0.003	0.756
37	5.	0.753	0.753	147.819	0.753	0.000	0.003	0.753
37	10.	0.750	0.750	147.816	0.753	0.000	0.003	0.753
37	15.	0.750	0.750	147.816	0.750	0.000	0.003	0.750
37	20.	0.747	0.747	147.813	0.750	0.000	0.003	0.750
37	25.	0.747	0.747	147.813	0.747	0.000	0.003	0.747
37	30.	0.744	0.744	147.810	0.747	0.000	0.003	0.747
37	35.	0.744	0.744	147.810	0.744	0.000	0.003	0.744
37	40.	0.741	0.741	147.807	0.744	0.000	0.003	0.744
37	45.	0.741	0.741	147.807	0.741	0.000	0.003	0.741
37	50.	0.738	0.738	147.804	0.741	0.000	0.003	0.741
37	55.	0.738	0.738	147.804	0.738	0.000	0.003	0.738
38	0.	0.735	0.735	147.801	0.738	0.000	0.003	0.738
38	5.	0.735	0.735	147.801	0.735	0.000	0.003	0.735
38	10.	0.732	0.732	147.798	0.735	0.000	0.003	0.735
38	15.	0.732	0.732	147.798	0.732	0.000	0.003	0.732
38	20.	0.729	0.729	147.795	0.732	0.000	0.003	0.732
38	25.	0.729	0.729	147.795	0.729	0.000	0.003	0.729
38	30.	0.726	0.726	147.792	0.729	0.000	0.003	0.729
38	35.	0.726	0.726	147.792	0.726	0.000	0.003	0.726
38	40.	0.723	0.723	147.789	0.726	0.000	0.003	0.726
38	45.	0.723	0.723	147.789	0.723	0.000	0.003	0.723
38	50.	0.720	0.720	147.786	0.723	0.000	0.003	0.723
38	55.	0.720	0.720	147.786	0.720	0.000	0.003	0.720
39	0.	0.717	0.717	147.783	0.720	0.000	0.003	0.720
39	5.	0.717	0.717	147.783	0.717	0.000	0.003	0.717
39	10.	0.714	0.714	147.780	0.717	0.000	0.003	0.717
39	15.	0.714	0.714	147.780	0.714	0.000	0.003	0.714
39	20.	0.711	0.711	147.777	0.714	0.000	0.003	0.714
39	25.	0.711	0.711	147.777	0.711	0.000	0.003	0.711
39	30.	0.708	0.708	147.774	0.711	0.000	0.003	0.711
39	35.	0.708	0.708	147.774	0.708	0.000	0.003	0.708
39	40.	0.705	0.705	147.771	0.708	0.000	0.003	0.708
39	45.	0.705	0.705	147.771	0.705	0.000	0.003	0.705
39	50.	0.702	0.702	147.768	0.705	0.000	0.003	0.705
39	55.	0.702	0.702	147.768	0.702	0.000	0.003	0.702
40	0.	0.699	0.699	147.765	0.702	0.000	0.003	0.702
40	5.	0.699	0.699	147.765	0.699	0.000	0.003	0.699
40	10.	0.696	0.696	147.762	0.699	0.000	0.003	0.699
40	15.	0.696	0.696	147.762	0.696	0.000	0.003	0.696
40	20.	0.693	0.693	147.759	0.696	0.000	0.003	0.696
40	25.	0.693	0.693	147.759	0.693	0.000	0.003	0.693
40	30.	0.690	0.690	147.756	0.693	0.000	0.003	0.693
40	35.	0.690	0.690	147.756	0.690	0.000	0.003	0.690
40	40.	0.687	0.687	147.753	0.690	0.000	0.003	0.690
40	45.	0.687	0.687	147.753	0.687	0.000	0.003	0.687
40	50.	0.684	0.684	147.750	0.687	0.000	0.003	0.687
40	55.	0.684	0.684	147.750	0.684	0.000	0.003	0.684
41	0.	0.681	0.681	147.747	0.684	0.000	0.003	0.684
41	5.	0.681	0.681	147.747	0.681	0.000	0.003	0.681
41	10.	0.678	0.678	147.744	0.681	0.000	0.003	0.681
41	15.	0.678	0.678	147.744	0.678	0.000	0.003	0.678
41	20.	0.675	0.675	147.741	0.678	0.000	0.003	0.678
41	25.	0.675	0.675	147.741	0.675	0.000	0.003	0.675
41	30.	0.672	0.672	147.738	0.675	0.000	0.003	0.675
41	35.	0.672	0.672	147.738	0.672	0.000	0.003	0.672
41	40.	0.669	0.669	147.735	0.672	0.000	0.003	0.672
41	45.	0.669	0.669	147.735	0.669	0.000	0.003	0.669
41	50.	0.666	0.666	147.732	0.669	0.000	0.003	0.669
41	55.	0.666	0.666	147.732	0.666	0.000	0.003	0.666
42	0.	0.663	0.663	147.729	0.666	0.000	0.003	0.666
42	5.	0.663	0.663	147.729	0.663	0.000	0.003	0.663
42	10.	0.660	0.660	147.726	0.663	0.000	0.003	0.663
42	15.	0.660	0.660	147.726	0.660	0.000	0.003	0.660
42	20.	0.657	0.657	147.723	0.660	0.000	0.003	0.660
42	25.	0.657	0.657	147.723	0.657	0.000	0.003	0.657
42	30.	0.654	0.654	147.720	0.657	0.000	0.003	0.657
42	35.	0.654	0.654	147.720	0.654	0.000	0.003	0.654
42	40.	0.651	0.651	147.717	0.654	0.000	0.003	0.654
42	45.	0.651	0.651	147.717	0.651	0.000	0.003	0.651
42	50.	0.648	0.648	147.714	0.651	0.000	0.003	0.651
42	55.	0.648	0.648	147.714	0.648	0.000	0.003	0.648
43	0.	0.645	0.645	147.711	0.648	0.000	0.003	0.648
43	5.	0.645	0.645	147.711	0.645	0.000	0.003	0.645
43	10.	0.642	0.642	147.708	0.645	0.000	0.003	0.645
43	15.	0.642	0.642	147.708	0.642	0.000	0.003	0.642
43	20.	0.639	0.639	147.705	0.642	0.000	0.003	0.642
43	25.	0.639	0.639	147.705	0.639	0.000	0.003	0.639
43	30.	0.636	0.636	147.702	0.639	0.000	0.003	0.639
43	35.	0.636	0.636	147.702	0.636	0.000	0.003	0.636
43	40.	0.633	0.633	147.699	0.636	0.000	0.003	0.636
43	45.	0.633	0.633	147.699	0.633	0.000	0.003	0.633
43	50.	0.630	0.630	147.696	0.633	0.000	0.003	0.633
43	55.	0.630	0.630	147.696	0.630	0.000	0.003	0.630
44	0.	0.627	0.627	147.693	0.630	0.000	0.003	0.630
44	5.	0.627	0.627	147.693	0.627	0.000	0.003	0.627
44	10.	0.624	0.624	147.690	0.627	0.000	0.003	0.627
44	15.	0.624	0.624	147.690	0.624	0.000	0.003	0.624
44	20.	0.621	0.621	147.687	0.624	0.000	0.003	0.624
44	25.	0.621	0.621	147.687	0.621	0.000	0.003	0.621
44	30.	0.618	0.618	147.684	0.621	0.000	0.003	0.621
44	35.	0.618	0.618	147.684	0.618	0.000	0.003	0.618
44	40.	0.615	0.615	147.681	0.618	0.000	0.003	0.

```
HYDROGRAPH NO. RRA
HYDROGRAPH NO. RRAO

A(   1)=       0.00
D(   1)=       0.50

A(   2)=     300.00
D(   2)=       0.50

A(   3)=    2720.00
D(   3)=       0.50

A(   4)=   10880.00
D(   4)=       1.00

A(   5)=   36160.00
D(   5)=       2.00

A(   6)=   50720.00
D(   6)=       2.00

A(   7)=   60000.00
D(   7)=       2.00

A(   8)=   69600.00
D(   8)=       2.00

A(   9)=   80800.00
D(   9)=      10.00

A(  10)=   90000.00
D(  10)=       0.00

DIAM =        18.00
NUMBER OF PIPES =          1.00
LENGTH OF WEIR =       100.00
LENGTH OF SECOND WEIR =          0.00
HEIGHT OF WEIR =         9.30
WEIR COEFF OF LOW WEIR =          2.80
DISCHARGE ELE =       147.40
DET BASIN INV =       147.50
LENGTH OF PIPE =       100.00
PEAK =         9.23CFS,      WSEL =       150.18
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA


---HYDROGRAPH DELETE ROUTINE---
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA
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2yr. storm, P24 = 3.3"

STANDARD ROUTING PROCEDURE

P24 = 3.3"

OUTPUT FILE : STO.850CNR.OUT

TIME	INFLOW	AVG	ELEV	ORIFICE	WEIR	[illegible]	[illegible]
** 48.	0.000						
11 45.	0.000	0.000	147.505	0.000	0.000	0.000	0.0
11 50.	0.030	0.015	147.581	0.017	0.000	0.0[illegible]	0.0
11 55.	0.341	0.185	147.778	0.212	0.000	0.0[illegible]	0.2
12 0.	2.096	1.218	148.161	1.144	0.000	0.0[illegible]	1.1
12 5.	8.172	5.134	148.594	2.650	0.000	0.0[illegible]	2.6
12 10.	18.096	13.134	148.994	3.572	0.000	0.0[illegible]	3.5
12 15.	25.156	21.626	149.336	5.383	0.000	0.314	5.3
12 20.	26.644	25.900	149.598	6.812	0.000	0.388	6.8
12 25.	24.615	25.629	149.792	7.700	0.000	0.437	7.7
12 30.	22.480	23.547	149.934	8.294	0.000	0.[illegible]	8.2
12 35.	19.656	21.068	150.040	8.706	0.000	0.670	8.7
12 40.	16.123	17.890	150.114	8.985	0.000	0.[illegible]	8.9
12 45.	12.838	14.481	150.158	9.145	0.000	0.770	9.1
12 50.	10.442	11.640	150.177 ✓	9.217	0.000	0.787	9.2
12 55.	8.899	9.671	150.181	9.230	0.000	0.790	9.2
13 0.	7.822	8.360	150.174	9.205	0.000	0.784	9.2
13 5.	7.039	7.430	150.160	9.154	0.000	0.772	9.1
13 10.	6.435	6.737	150.141	9.084	0.000	0.755	9.0
13 15.	5.979	6.207	150.118	8.999	0.000	0.736	8.9
13 20.	5.617	5.798	150.092	8.905	0.000	0.714	8.9
13 25.	5.318	5.468	150.065	8.801	0.000	0.691	8.8
13 30.	5.064	5.191	150.035	8.689	0.000	0.666	8.6

14	30.	3.466	3.[illegible]	[illegible]	[illegible]	0.000	[illegible]
14	35.	3.393	3.429	149.[illegible]	[illegible]	0.000	[illegible]
14	40.	3.316	3.353	149.534	[illegible]	0.000	[illegible]
14	45.	3.247	3.282	149.495	6.288	0.000	0.[illegible]
14	50.	3.181	3.214	149.456	6.080	0.000	0.[illegible]
14	55.	3.118	3.150	149.[illegible]	[illegible]	0.000	[illegible]
15	0.	3.059	3.089	149.379	5.843	0.000	0.[illegible]
15	5.	3.003	3.031	149.341	5.417	0.000	0.216
15	10.	2.949	2.976	149.305	5.188	0.000	0.200
15	15.	2.898	2.923	149.269	4.955	0.000	0.185
15	20.	2.849	2.873	149.235	4.721	0.000	0.173
15	25.	2.802	2.825	149.203	4.486	0.000	0.163
15	30.	2.757	2.779	149.172	4.253	0.000	0.147
15	35.	2.714	2.736	149.144	4.025	0.000	0.139
15	40.	2.673	2.693	149.118	3.805	0.000	0.131
15	45.	2.633	2.653	149.095	3.598	0.000	0.123
15	50.	2.595	2.614	149.074	3.403	0.000	0.117
15	55.	2.558	2.577	149.054	3.473	0.000	0.111
16	0.	2.523	2.541	149.029	3.543	0.000	0.105
16	5.	2.489	2.506	149.001	3.570	0.000	0.097
16	10.	2.456	2.472	148.971	3.569	0.000	0.090
16	15.	2.424	2.440	148.937	3.544	0.000	0.082
16	20.	2.393	2.409	148.902	3.497	0.000	0.074
16	25.	2.364	2.379	148.866	3.434	0.000	0.067
16	30.	2.335	2.349	148.828	3.353	0.000	0.060
16	35.	2.307	2.321	148.790	3.259	0.000	0.053
16	40.	2.280	2.294	148.752	3.154	0.000	0.047
16	45.	2.254	2.267	148.715	3.044	0.000	0.041
16	50.	2.229	2.241	148.676	2.922	0.000	0.036
16	55.	2.204	2.216	148.640	2.804	0.000	0.031
17	0.	2.180	2.192	148.605	2.686	0.000	0.028
17	5.	2.157	2.169	148.571	2.570	0.000	0.024
17	10.	2.134	2.146	148.541	2.463	0.000	0.022
17	15.	2.112	2.123	148.513	2.364	0.000	0.020
17	20.	2.091	2.102	148.490	2.282	0.000	0.018
17	25.	2.070	2.080	148.470	2.209	0.000	0.017
17	30.	2.050	2.060	148.456	2.159	0.000	0.016
17	35.	2.030	2.040	148.443	2.115	0.000	0.016
17	40.	2.011	2.020	148.434	2.081	0.000	0.015
17	45.	1.992	2.001	148.426	2.053	0.000	0.015
17	50.	1.974	1.983	148.418	2.025	0.000	0.014
17	55.	1.956	1.965	148.412	2.003	0.000	0.014
18	0.	1.938	1.947	148.406	1.980	0.000	0.014
18	5.	1.921	1.930	148.401	1.964	0.000	0.013
18	10.	1.904	1.913	148.395	1.941	0.000	0.013
18	15.	1.888	1.896	148.390	1.924	0.000	0.013
18	20.	1.872	1.880	148.386	1.908	0.000	0.013
18	25.	1.856	1.864	148.381	1.891	0.000	0.012
18	30.	1.841	1.849	148.376	1.874	0.000	0.012
18	35.	1.826	1.834	148.372	1.857	0.000	0.012
18	40.	1.812	1.819	148.367	1.841	0.000	0.012
18	45.	1.797	1.804	148.364	1.829	0.000	0.012
18	50.	[illegible]	1.790	[illegible]	[illegible]	0.000	[illegible]
			1.776			0.0	0.

			1.775	148.313	1.757	0.000		
			1.771	148.312	1.741	0.000		
		1.705	1.711	148.310	1.729	0.000		
		1.693	1.699	148.308	1.718	0.000		
		1.681	1.687	148.306	1.702	0.000		
		1.669	1.675	148.304	1.691	0.000		
			1.663	148.302	1.680	0.000		
			1.652	148.300	1.669	0.000		
		1.633	1.640	148.298	1.658	0.000		
		1.623	1.629	148.296	1.641	0.000		
		1.613	1.619	148.294	1.630	0.000		
		1.603	1.608	148.292	1.625	0.000		
20	10.	1.592	1.597	148.291	1.608	0.000	0.009	1.6
20	15.	1.582	1.587	148.288	1.597	0.000	0.009	1.5
20	20.	1.572	1.577	148.286	1.592	0.000	0.009	1.5
20	25.	1.562	1.567	148.283	1.581	0.000	0.009	1.5
20	30.	1.552	1.557	148.280	1.570	0.000	0.008	1.5
20	35.	1.543	1.548	148.287	1.559	0.000	0.008	1.5
20	40.	1.534	1.538	148.283	1.548	0.000	0.008	1.5
20	45.	1.524	1.529	148.280	1.537	0.000	0.008	1.5
20	50.	1.515	1.520	148.279	1.532	0.000	0.009	1.5
20	55.	1.506	1.511	148.276	1.521	0.000	0.008	1.5
21	0.	1.497	1.502	148.272	1.510	0.000	0.008	1.5
21	5.	1.489	1.493	148.271	1.505	0.000	0.008	1.5
21	10.	1.480	1.484	148.268	1.494	0.000	0.008	1.4
21	15.	1.472	1.476	148.265	1.483	0.000	0.007	1.4
21	20.	1.463	1.468	148.263	1.478	0.000	0.007	1.4
21	25.	1.455	1.459	148.260	1.467	0.000	0.007	1.4
21	30.	1.447	1.451	148.258	1.462	0.000	0.007	1.4
21	35.	1.439	1.443	148.255	1.451	0.000	0.007	1.4
21	40.	1.431	1.435	148.252	1.440	0.000	0.007	1.4
21	45.	1.424	1.427	148.250	1.435	0.000	0.007	1.4
21	50.	1.416	1.420	148.249	1.430	0.000	0.007	1.4
21	55.	1.409	1.412	148.246	1.419	0.000	0.007	1.4
22	0.	1.401	1.405	148.244	1.413	0.000	0.007	1.4
22	5.	1.394	1.397	148.241	1.403	0.000	0.007	1.4
22	10.	1.387	1.390	148.239	1.398	0.000	0.007	1.3
22	15.	1.379	1.383	148.238	1.392	0.000	0.006	1.3
22	20.	1.372	1.376	148.234	1.382	0.000	0.006	1.3
22	25.	1.366	1.369	148.233	1.376	0.000	0.006	1.37
22	30.	1.359	1.362	148.230	1.366	0.000	0.006	1.36
22	35.	1.352	1.355	148.228	1.360	0.000	0.006	1.36
22	40.	1.345	1.349	148.227	1.355	0.000	0.006	1.35
22	45.	1.339	1.342	148.225	1.350	0.000	0.006	1.35
22	50.	1.332	1.336	148.223	1.345	0.000	0.006	1.34
22	55.	1.326	1.329	148.220	1.334	0.000	0.006	1.33
23	0.	1.320	1.323	148.219	1.329	0.000	0.006	1.33
23	5.	1.313	1.316	148.217	1.324	0.000	0.006	1.32
23	10.	1.307	1.310	148.214	1.313	0.000	0.006	1.31
23	15.	1.301	1.304	148.212	1.308	0.000	0.006	1.30
23	20.	1.295	1.298	148.211	1.303	0.000	0.006	1.30
23	25.	1.289	1.292	148.209	1.297	0.000	0.006	1.29
23	30.	1.283	1.286	148.207	1.292	0.000	0.006	1.29
23	35.	1.277	1.280	148.206	1.287	0.000	0.005	1.28
23	40.	1.272	1.275	148.203	1.277	0.000	0.005	1.27
23	45.	1.266	1.269	148.203	1.277	0.000	0.005	1.27
23	50.	1.260	1.263	148.200	1.266	0.000	0.005	1.26
23	55.	1.255	1.258	148.198	1.261	0.000	0.005	1.26
24	0.	1.247	1.251	148.196	1.256	0.000	0.005	1.25
24	5.	1.174	1.211	148.188	1.230	0.000	0.005	1.23
24	10.	0.947	1.061	148.157	1.129	0.000	0.004	1.12
24	15.	0.628	0.788	148.040	0.897	0.000	0.003	0.89
24	20.	0.3	0.472	147.926	0.456		0.001	0
24	25.	0.	0.	147.791	0.		0.001	

STANDARD ROUTING PROCEDURE

PK 24 = 4.3"

OUTPUT FILL : STO:6000KHAS.

26-NOV-84

TIME	INFLOW	AVG	ELEV	QPIPE	QWEIR	STOR.	QTC
26.	0.000						
11 30.	0.007	0.004	147.541	0.00[illegible]	0.000	0.000	0.0
11 35.	0.098	0.053	[illegible]	0.060	0.000	0.000	0.0
11 40.	0.513	0.306	147.855	0.347	0.000	0.001	0.3
11 45.	1.577	1.045	148.120	1.015	0.000	0.003	1.0
11 50.	3.516	2.547	148.356	1.802	0.000	0.011	1.8
11 55.	6.599	5.058	148.629	2.769	0.000	0.030	2.7
12 0.	12.778	9.688	148.906	3.504	0.000	0.075	3.5
12 5.	27.414	20.096	149.268	4.945	0.000	0.[illegible]	4.9
12 10.	47.837	37.626	149.681	7.208	0.000	0.[illegible]	7.[illegible]
12 15.	[illegible]	53.640	150.094	8.912	0.000	0.716	8.9
12 20.	58.491	56.967	150.481	10.256	0.000	1.056	10.2
12 25.	51.130	54.810	150.805	11.256	0.000	1.359	11.2
12 30.	44.824	47.977	151.059	11.984	0.000	1.610	11.9
12 35.	38.060	41.442	151.256	12.516	0.000	1.811	12.4
12 40.	30.609	34.335	151.397	12.887	0.000	1.960	12.8
12 45.	24.000	27.305	151.489	13.122	0.000	2.056	13.
12 50.	19.265	21.633	151.543	13.258	0.000	2.117	13.
12 55.	16.224	17.744	151.571	13.327	0.000	2.147	13.
13 0.	14.116	15.170	151.582	13.357	0.000	2.160	13.
13 5.	12.592	13.354	151.582 ✓	13.357	0.000	2.160	13.
13 10.	11.429	12.010	151.574	13.33[illegible]	0.000	2.1[illegible]	13.
13 15.	10.566	10.997	151.560	13.30[illegible]	0.000	2.13[illegible]	[illegible]

```
HYDROGRAPH NO. RRA
HYDROGRAPH NO. RRA0

A(   1)=       0.00
D(   1)=       0.50

A(   2)=     300.00
D(   2)=       0.50

A(   3)=    2720.00
D(   3)=       0.50

A(   4)=   10880.00
D(   4)=       1.00

A(   5)=   36160.00
D(   5)=       2.00

A(   6)=   50720.00
D(   6)=       2.00

A(   7)=   60000.00
D(   7)=       2.00

A(   8)=   69600.00
D(   8)=       2.00

A(   9)=   80800.00
D(   9)=      10.00

A(  10)=   90000.00
D(  10)=       0.00

DIAM =       18.00
NUMBER OF PIPES =        1.00
LENGTH OF WEIR =      100.00
LENGTH OF SECOND WEIR =        0.00
HEIGHT OF WEIR =        9.30
WEIR COEFF OF LOW WEIR =        2.80
DISCHARGE ELE =      147.40
DET BASIN INV =      147.50
LENGTH OF PIPE =      100.00
PEAK =       13.36CFS,      WSEL =      151.58
HYD  --  ERROR 43
 IN --'ROUT  ' AT 459
  FROM '.MAIN.' AT 58

HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

---HYDROGRAPH DELETE ROUTINE---
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

RUN COMPLETE.
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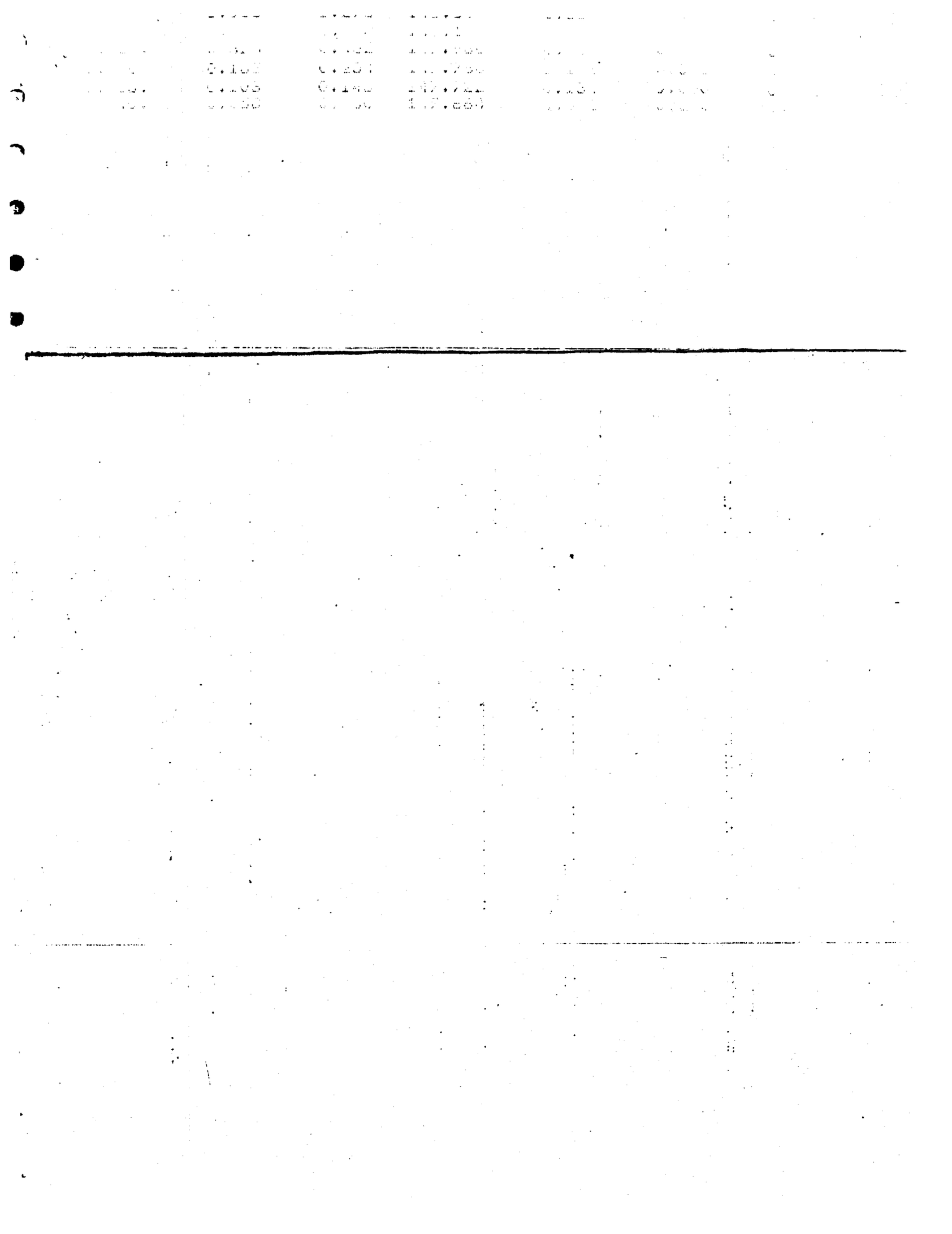
5yr. storm, P24 = 4.3"

14	25.	6.070	6.171	151.100	12.096	0.000	1.[illegible]
14	30.	5.959	6.013	151.059	11.984	0.000	1.[illegible]
14	35.	5.797	5.868	151.018	11.867	0.000	1.[illegible]
14	40.	5.688	5.731	150.976	11.749	0.000	1.[illegible]
14	45.	5.588	5.601	150.935	11.629	0.000	1.[illegible]
14	50.	5.492	5.477	150.891	11.506	0.000	1.[illegible]
14	55.	5.307	5.364	150.848	11.382	0.000	1.[illegible]
15	0.	5.201	5.254	150.804	11.254	0.000	1.[illegible]
15	5.	5.099	5.150	150.761	11.126	0.000	1.[illegible]
15	10.	5.003	5.051	150.718	10.996	0.000	1.[illegible]
15	15.	4.911	4.952	150.674	10.863	0.000	1.[illegible]
15	20.	4.823	4.867	150.631	10.729	0.000	1.[illegible]
15	25.	4.740	4.782	150.587	10.593	0.000	1.155
15	30.	4.660	4.700	150.544	10.457	0.000	1.113
15	35.	4.583	4.621	150.501	10.319	0.000	1.074
15	40.	4.509	4.546	150.458	10.179	0.000	1.035
15	45.	4.439	4.474	150.415	10.037	0.000	0.996
15	50.	4.371	4.405	150.372	9.895	0.000	0.957
15	55.	4.306	4.338	150.330	9.751	0.000	0.920
16	0.	4.243	4.274	150.287	9.605	0.000	0.882
16	5.	4.182	4.213	150.245	9.459	0.000	0.846
16	10.	4.124	4.153	150.204	9.313	0.000	0.813
16	15.	4.068	4.096	150.163	9.165	0.000	0.778
16	20.	4.013	4.040	150.122	9.015	0.000	0.740
16	25.	3.961	3.987	150.082	8.865	0.000	0.705
16	30.	3.910	3.935	150.042	8.715	0.000	0.672
16	35.	3.860	3.885	150.003	8.563	0.000	0.639
16	40.	3.813	3.837	149.964	8.411	0.000	0.607
16	45.	3.767	3.790	149.924	8.253	0.000	0.576
16	50.	3.722	3.744	149.885	8.094	0.000	0.543
16	55.	3.678	3.700	149.846	7.930	0.000	0.516
17	0.	3.636	3.657	149.806	7.762	0.000	0.487
17	5.	3.595	3.616	149.766	7.591	0.000	0.459
17	10.	3.556	3.575	149.727	7.415	0.000	0.432
17	15.	3.517	3.536	149.687	7.236	0.000	0.406
17	20.	3.479	3.498	149.648	7.052	0.000	0.381
17	25.	3.443	3.461	149.609	6.865	0.000	0.357
17	30.	3.407	3.425	149.570	6.673	0.000	0.334
17	35.	3.372	3.390	149.531	6.478	0.000	0.312
17	40.	3.338	3.355	149.493	6.281	0.000	0.291
17	45.	3.305	3.322	149.455	6.078	0.000	0.271
17	50.	3.273	3.289	149.419	5.874	0.000	0.253
17	55.	3.242	3.258	149.383	5.667	0.000	0.235
18	0.	3.211	3.227	149.348	5.458	0.000	0.219
18	5.	3.182	3.197	149.314	5.249	0.000	0.203
18	10.	3.152	3.167	149.282	5.042	0.000	0.191
18	15.	3.124	3.138	149.251	4.835	0.000	0.178
18	20.	3.096	3.110	149.223	4.634	0.000	0.167
18	25.	3.069	3.082	149.196	4.4[illegible]	0.000	0.157
18	30.	3.043	3.055	149.171	4.[illegible]	0.000	0.148
18	35.	3.018	3.029	149.[illegible]	4.0[illegible]	0.000	[illegible]
[illegible]	[illegible]	2.99[illegible]	[illegible]	[illegible]	3.8[illegible]	[illegible]	[illegible]



```
---RANDOM ROUTING PROCEDURE---
HYDROGRAPH NO. RRA
HYDROGRAPH NO. RRAO

P(   1)=       0.00
D(   1)=       0.50

A(   2)=     300.00
D(   2)=       0.50

A(   3)=    2720.00
D(   3)=       0.50

A(   4)=   10880.00
D(   4)=       1.00

A(   5)=   36160.00
D(   5)=       2.00

A(   6)=   50720.00
D(   6)=       2.00

A(   7)=   60000.00
D(   7)=       2.00

A(   8)=   69600.00
D(   8)=       2.00

A(   9)=   80800.00
D(   9)=      10.00

A(  10)=   90000.00
D(  10)=       0.00

DIAM =       18.00
NUMBER OF PIPES =        1.00
LENGTH OF WEIR =       100.00
LENGTH OF SECOND WEIR =          0.00
HEIGHT OF WEIR =        9.30
WEIR COEFF OF LOW WEIR =         2.80
DISCHARGE ELE =      147.40
DET BASIN INV =      147.50
LENGTH OF PIPE =       100.00
PEAK =       16.44CFS,      WSEL =      152.97
HYD  --  ERROR 43
  IN   'ROUT   ' AT 459
   FROM '.MAIN.' AT 58

HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

---HYDROGRAPH DELETE ROUTINE---
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

RUN COMPLETE.
```

10 yr. Storm, P24 = 5.2"

STANDARD ROUTING PROCEDURE

PK 24 = 5.2"

OUTPUT FILE : SYC:8503RRA0&. 26-NOV-84

TIME	INFLOW	AVG	ELEV	QPIPE	QWEIR	STORAGE	QT(
** 33.	0.000						
11 15.	0.016	0.008	147.561	0.009	0.000	0.000	0.(
11 20.	0.189	0.102	147.707	0.117	0.000	0.000	0..
11 25.	0.692	0.440	147.924	0.492	0.000	0.001	0..
11 30.	1.432	1.062	148.120	1.015	0.000	0.003	1.(
11 35.	2.313	1.872	148.269	1.499	0.000	0.008	1..
11 40.	3.703	3.008	148.445	2.120	0.000	0.016	2..
11 45.	6.337	5.020	148.655	2.854	0.000	0.033	2.8
11 50.	10.366	8.352	148.876	3.453	0.000	0.069	3.4
11 55.	15.952	13.159	149.130	3.908	0.000	0.134	3.9
12 0.	26.118	21.035	149.405	5.296	0.000	0.246	5.2
12 5.	49.123	37.620	149.766	7.591	0.000	0.459	7.5
12 10.	79.928	64.525	150.244	9.455	0.000	0.845	9.4
12 15.	95.656	87.792	150.824	11.311	0.000	1.377	11.3
12 20.	91.643	93.650	151.378	12.838	0.000	1.940	12.8
12 25.	78.407	85.025	151.827	13.953	0.000	2.433	13.9
12 30.	67.582	72.994	152.174	14.757	0.000	2.836	14.7
12 35.	56.658	62.120	152.445	15.355	0.000	3.160	15.3
12 40.	45.165	50.911	152.645	15.781	0.000	3.404	15.7
12 45.	35.163	40.164	152.779	16.061	0.000	3.571	16.(
12 50.	28.051	31.607	152.864	16.237	0.000	3.677	16.3
12 55.	23.491	25.771	152.916	16.343	0.000	3.743	16.3
13 0.	20.341	21.916	152.946	16.405	0.000	3.781	16.4

[illegible]							
13 20.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13 25.	13.267	13.671	152.957	16.381	0.000	[illegible]	[illegible]
13 30.	13.079	12.923	152.918	16.347	0.000	3.7[illegible]	[illegible]
13 35.	11.994	12.266	152.896	16.301	0.000	3.71	[illegible]
13 40.	[illegible]	11.741	152.871	16.701	0.000	[illegible]	[illegible]
13 45.	[illegible]	11.2[illegible]	152.844	[illegible]	0.000	[illegible]	[illegible]
13 50.	[illegible]	10.531	152.814	16.131	0.000	[illegible]	[illegible]
13 55.	10.353	10.[illegible]	152.783	16.071	0.000	[illegible]	[illegible]
14 0.	[illegible]	[illegible]	[illegible]	[illegible]	0.000	[illegible]	[illegible]
14 5.	9.598	9.754	152.716	15.931	0.000	3.[illegible]	[illegible]
14 10.	9.308	9.453	152.680	15.856	0.000	3.[illegible]	[illegible]
14 15.	9.039	9.174	152.643	15.777	0.000	3.[illegible]	[illegible]
14 20.	8.790	8.914	152.604	15.696	0.000	3.[illegible]	[illegible]
14 25.	[illegible]	[illegible]	[illegible]	[illegible]	0.000	[illegible]	[illegible]
14 30.	[illegible]	[illegible]	[illegible]	[illegible]	0.000	[illegible]	[illegible]
14 35.	8.134	8.237	152.484	15.440	0.000	3.206	[illegible]
14 40.	7.942	8.038	152.443	15.351	0.000	3.153	[illegible]
14 45.	7.761	7.852	152.401	15.258	0.000	3.107	[illegible]
14 50.	7.590	7.676	152.357	15.164	0.000	[illegible]	[illegible]
14 55.	7.429	7.510	152.313	15.067	0.000	[illegible]	[illegible]
15 0.	7.275	7.352	152.270	14.970	0.000	[illegible]	[illegible]
15 5.	7.130	7.203	152.225	14.870	0.000	[illegible]	[illegible]
15 10.	6.991	7.061	152.180	14.769	0.000	[illegible]	[illegible]
15 15.	6.859	6.925	152.134	14.667	0.000	[illegible]	[illegible]
15 20.	6.734	6.796	152.088	14.562	0.000	[illegible]	[illegible]
15 25.	6.613	6.673	152.043	14.458	0.000	[illegible]	[illegible]
15 30.	6.499	6.556	151.996	14.349	0.000	[illegible]	[illegible]
15 35.	6.389	6.444	151.949	14.241	0.000	[illegible]	[illegible]
15 40.	6.283	6.336	151.903	14.132	0.000	[illegible]	[illegible]
15 45.	6.182	6.233	151.855	14.020	0.000	[illegible]	[illegible]
15 50.	6.085	6.134	151.808	13.907	0.000	[illegible]	[illegible]
15 55.	5.992	6.038	151.760	13.793	0.000	[illegible]	[illegible]
16 0.	5.902	5.947	151.712	13.676	0.000	[illegible]	[illegible]
16 5.	5.815	5.859	151.665	13.560	0.000	[illegible]	[illegible]
16 10.	5.732	5.774	151.616	13.440	0.000	[illegible]	[illegible]
16 15.	5.652	5.692	151.568	13.321	0.000	[illegible]	[illegible]
16 20.	5.574	5.613	151.519	13.199	0.000	[illegible]	[illegible]
16 25.	5.499	5.536	151.471	13.077	0.000	[illegible]	[illegible]
16 30.	5.426	5.462	151.422	12.952	0.000	[illegible]	[illegible]
16 35.	5.356	5.391	151.374	12.828	0.000	[illegible]	[illegible]
16 40.	5.288	5.322	151.325	12.700	0.000	[illegible]	[illegible]
16 45.	5.222	5.255	151.277	12.574	0.000	[illegible]	[illegible]
16 50.	5.158	5.190	151.228	12.443	0.000	[illegible]	[illegible]
16 55.	5.097	5.128	151.180	12.313	0.000	[illegible]	[illegible]
17 0.	5.037	5.067	151.132	12.183	0.000	[illegible]	[illegible]
17 5.	4.978	5.007	151.084	12.051	0.000	[illegible]	[illegible]
17 10.	4.922	4.950	151.035	11.917	0.000	[illegible]	[illegible]
17 15.	4.867	4.894	150.987	11.783	0.000	[illegible]	[illegible]
17 20.	4.813	4.840	150.939	11.646	0.000	[illegible]	[illegible]
17 25.	4.761	4.787	150.892	11.510	0.000	[illegible]	[illegible]
17 30.	4.710	4.736	150.845	11.372	0.000	[illegible]	[illegible]
17 35.	4.661	4.686	150.798	11.234	0.000	[illegible]	[illegible]
17 40.	4.613	4.637	150.751	11.094	0.000	[illegible]	[illegible]
17 45.	4.566	4.590	150.704	10.954	0.000	[illegible]	[illegible]
17 50.	4.521	4.543	150.658	10.812	0.000	[illegible]	[illegible]
17 55.	4.476	4.498	150.612	10.670	0.000	[illegible]	[illegible]
18 0.	4.433	4.454	150.567	10.528	0.000	[illegible]	[illegible]
18 5.	4.390	4.412	150.521	10.384	0.000	[illegible]	[illegible]
18 10.	4.349	[illegible]	150.477	10.240	0.000	[illegible]	[illegible]
18 15.	4.308	4.329	150.432	10.094	0.000	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	9.948	0.000	[illegible]	[illegible]
[illegible]	4.230	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]								
[illegible]								
[illegible]								

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

```
---STANDARD ROUTING PROCEDURE---
HYDROGRAPH NO. RRA
HYDROGRAPH NO. RRAO

A(   1)=       0.00
D(   1)=       0.50

A(   2)=     300.00
D(   2)=       0.50

A(   3)=    2720.00
D(   3)=       0.50

A(   4)=   10880.00
D(   4)=       1.00

A(   5)=   36160.00
D(   5)=       2.00

A(   6)=   50720.00
D(   6)=       2.00

A(   7)=   60000.00
D(   7)=       2.00

A(   8)=   69600.00
D(   8)=       2.00

A(   9)=   80800.00
D(   9)=      10.00

A(  10)=   90000.00
D(  10)=       0.00

DIAM =       18.00
NUMBER OF PIPES =        1.00
LENGTH OF WEIR =      100.00
LENGTH OF SECOND WEIR =         0.00
HEIGHT OF WEIR =        9.30
WEIR COEFF OF LOW WEIR =        2.80
DISCHARGE ELE =      147.40
DET BASIN INV =      147.50
LENGTH OF PIPE =      100.00
PEAK =       17.38CFS,      WSEL =      153.44
HYD  --  ERROR 43
  IN  "ROUT "  AT 459
  FROM ".MAIN." AT 58

HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

---HYDROGRAPH DELETE ROUTINE---
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA
```

15 yr. storm $P_{24} = 5.5''$

13	20.	13.328	14.078	153.437	17.371	0.000	4.4[illegible]
13	25.	14.624	15.076	153.425	17.347	0.000	4.[illegible]
13	30.	13.861	14.243	153.409	17.318	0.000	4.[illegible]
13	35.	13.212	13.536	153.389	17.270	0.000	4.[illegible]
13	40.	12.651	12.932	153.366	17.235	0.000	4.[illegible]
13	45.	12.149	12.400	153.341	17.186	0.000	4.288
13	50.	11.695	11.922	153.313	17.132	0.000	4.252
13	55.	11.282	11.489	153.284	17.075	0.000	4.214
14	0.	10.904	11.093	153.252	17.014	0.000	4.173
14	5.	10.557	10.730	153.219	16.949	0.000	4.130
14	10.	10.236	10.396	153.184	16.880	0.000	4.085
14	15.	9.938	10.087	153.148	16.809	0.000	4.039
14	20.	9.662	9.800	153.110	16.734	0.000	3.990
14	25.	9.404	9.533	153.073	16.659	0.000	3.942
14	30.	9.163	9.284	153.032	16.578	0.000	3.890
14	35.	8.937	9.050	152.992	16.497	0.000	3.839
14	40.	8.725	8.831	152.951	16.414	0.000	3.787
14	45.	8.525	8.625	152.908	16.328	0.000	3.733
14	50.	8.336	8.430	152.866	16.241	0.000	3.680
14	55.	8.157	8.246	152.822	16.150	0.000	3.624
15	0.	7.987	8.072	152.778	16.059	0.000	3.569
15	5.	7.826	7.907	152.733	15.967	0.000	3.514
15	10.	7.673	7.750	152.688	15.872	0.000	3.457
15	15.	7.528	7.600	152.642	15.775	0.000	3.401
15	20.	7.389	7.458	152.595	15.677	0.000	3.343
15	25.	7.256	7.322	152.549	15.578	0.000	3.286
15	30.	7.129	7.192	152.502	15.477	0.000	3.229
15	35.	7.007	7.068	152.454	15.375	0.000	3.171
15	40.	6.891	6.949	152.407	15.272	0.000	3.114
15	45.	6.780	6.835	152.359	15.168	0.000	3.056
15	50.	6.672	6.726	152.311	15.061	0.000	2.998
15	55.	6.569	6.621	152.263	14.955	0.000	2.941
16	0.	6.470	6.520	152.214	14.846	0.000	2.883
16	5.	6.375	6.422	152.165	14.736	0.000	2.825
16	10.	6.283	6.329	152.116	14.625	0.000	2.767
16	15.	6.194	6.238	152.068	14.515	0.000	2.711
16	20.	6.108	6.151	152.019	14.402	0.000	2.653
16	25.	6.025	6.067	151.969	14.288	0.000	2.596
16	30.	5.945	5.985	151.920	14.173	0.000	2.539
16	35.	5.868	5.906	151.871	14.057	0.000	2.483
16	40.	5.793	5.830	151.821	13.939	0.000	2.426
16	45.	5.720	5.756	151.772	13.820	0.000	2.370
16	50.	5.650	5.685	151.723	13.702	0.000	2.315
16	55.	5.582	5.616	151.673	13.580	0.000	2.259
17	0.	5.515	5.549	151.623	13.457	0.000	2.204
17	5.	5.451	5.483	151.574	13.335	0.000	2.150
17	10.	5.389	5.420	151.524	13.211	0.000	2.096
17	15.	5.328	5.358	151.474	13.084	0.000	2.042
17	20.	5.269	5.299	151.425	12.958	0.000	1.989
17	25.	5.212	5.240	151.375	12.830	0.000	1.936
17	30.	5.156	5.184	151.326	12.702	0.000	1.884
		[illegible]	5.129	151.276	12.572	0.000	1.833
		[illegible]	5.075	[illegible]	12.441	[illegible]	[illegible]

STANDARD ROUTING PROCEDURE

PK 24 = 5.5

PLOT FILE : [illegible]

TIME	INFLOW	AVG	ELEV	ORIFICE	WEIR	STORAGE	QTL
** 25.	0.000						
10 30.	0.000	0.000	147.505	0.000	0.000	0.00	0.0
10 35.	0.005	0.003	147.534	0.003	0.000	0.00	0.0
10 40.	0.033	0.019	147.591	0.021	0.000	0.00	0.0
10 45.	0.103	0.068	147.667	0.075	0.000	0.00	0.1
10 50.	0.223	0.163	147.754	0.177	0.000	0.001	0.1
10 55.	0.387	0.305	147.844	0.325	0.000	0.001	0.3
11 0.	0.587	0.487	147.932	0.511	0.000	0.001	0.5
11 5.	0.826	0.706	148.021	0.731	0.000	0.002	0.7
11 10.	1.105	0.965	148.091	0.929	0.000	0.003	0.9
11 15.	1.434	1.270	148.165	1.154	0.000	0.004	1.1
11 20.	1.824	1.629	148.246	1.419	0.000	0.007	1.4
11 25.	2.292	2.058	148.332	1.718	0.000	0.010	1.7
11 30.	2.863	2.577	148.428	2.059	0.000	0.013	2.0
11 35.	3.636	3.250	148.538	2.452	0.000	0.023	2.4
11 40.	5.174	4.405	148.659	2.869	0.000	0.034	2.8
11 45.	8.274	6.724	148.823	3.339	0.000	0.059	3.3
11 50.	13.013	10.643	149.043	3.513	0.000	0.108	3.5
11 55.	19.473	16.243	149.282	5.042	0.000	0.191	5.0
12 0.	31.047	25.260	149.554	6.596	0.000	0.325	6.5
12 5.	57.007	44.027	149.925	8.257	0.000	0.577	8.2
12 10.	91.449	74.228	150.447	10.143	0.000	1.025	10.1
12 15.	108.562	100.006	151.086	12.057	0.000	1.437	12.0

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	5.	4.603	4.617	150.553	11.771	0.000	[illegible]	11.7
18	10.	4.758	4.780	150.732	11.632	0.000	1.4[illegible]	11.6
18	15.	4.713	4.735	150.687	11.496	0.000	1.4[illegible]	11.4
18	20.	4.669	4.691	150.640	11.358	0.000	[illegible]	11.3
18	25.	4.627	4.649	150.592	11.218	0.000	[illegible]	11.2
18	30.	4.585	4.606	150.548	11.080	0.000	[illegible]	[illegible]
18	35.	4.545	4.565	150.498	10.936	0.000	1.[illegible]	[illegible]
18	40.	4.505	4.525	150.453	10.796	0.000	[illegible]	10.7
18	45.	4.466	4.486	150.406	10.658	0.000	1.[illegible]	10.6
18	50.	4.428	4.447	150.361	10.510	0.000	1.1[illegible]	10.5
18	55.	4.391	4.410	150.316	10.366	0.000	1.0[illegible]	10.3
19	0.	4.354	4.373	150.471	10.222	0.000	1.0[illegible]	10.2
19	5.	4.319	4.337	150.427	10.076	0.000	1.0[illegible]	10.0
19	10.	4.284	4.301	150.385	9.932	0.000	0.9[illegible]	9.9
19	15.	4.249	4.267	150.340	9.786	0.000	0.929	9.7
19	20.	4.216	4.233	150.297	9.640	0.000	0.891	9.5
19	25.	4.183	4.199	150.255	9.492	0.000	0.854	9.4
19	30.	4.151	4.167	150.213	9.346	0.000	0.818	9.3
19	35.	4.119	4.135	150.172	9.198	0.000	0.782	9.1
19	40.	4.088	4.103	150.132	9.050	0.000	0.748	9.0
19	45.	4.057	4.072	150.092	8.904	0.000	0.714	8.9
19	50.	4.027	4.042	150.053	8.756	0.000	0.681	8.7
19	55.	3.998	4.013	150.014	8.608	0.000	0.649	8.6
20	0.	3.969	3.983	149.976	8.461	0.000	0.619	8.4
20	5.	3.941	3.955	149.938	8.311	0.000	0.587	8.3
20	10.	3.913	3.927	149.901	8.159	0.000	0.558	8.1
20	15.	3.885	3.899	149.863	8.003	0.000	0.529	8.0
20	20.	3.858	3.872	149.825	7.843	0.000	0.501	7.8
20	25.	3.832	3.845	149.788	7.683	0.000	0.474	7.6
20	30.	3.806	3.819	149.750	7.520	0.000	0.448	7.5
20	35.	3.780	3.793	149.713	7.352	0.000	0.422	7.3
20	40.	3.755	3.768	149.676	7.184	0.000	0.399	7.1
20	45.	3.731	3.743	149.639	7.013	0.000	0.375	7.0
20	50.	3.706	3.718	149.603	6.839	0.000	0.353	6.8
20	55.	3.682	3.694	149.568	6.663	0.000	0.332	6.6
21	0.	3.659	3.671	149.532	6.484	0.000	0.312	6.4
21	5.	3.636	3.647	149.498	6.306	0.000	0.293	6.3
21	10.	3.613	3.624	149.464	6.125	0.000	0.276	6.1
21	15.	3.590	3.602	149.431	5.943	0.000	0.259	5.9
21	20.	3.568	3.579	149.399	5.762	0.000	0.243	5.7
21	25.	3.546	3.557	149.369	5.582	0.000	0.229	5.5
21	30.	3.525	3.536	149.339	5.403	0.000	0.215	5.4
21	35.	3.504	3.514	149.311	5.225	0.000	0.203	5.2
21	40.	3.483	3.493	149.284	5.052	0.000	0.191	5.0
21	45.	3.463	3.473	149.258	4.882	0.000	0.181	4.8
21	50.	3.442	3.452	149.235	4.718	0.000	0.172	4.7
21	55.	3.422	3.432	149.213	4.563	0.000	0.163	4.5
22	0.	3.403	3.413	149.193	4.413	0.000	0.156	4.4
22	5.	3.383	3.393	149.174	4.273	0.000	0.150	4.2
22	10.	3.364	3.374	149.158	4.140	0.000	0.144	4.1
22	15.	3.346	3.355	149.143	4.020	0.000	0.139	4.0
22	20.	3.327	3.336	149.130	3.910	0.000	0.134	3.9
22	25.	3.309	3.318	149.118	3.809	0.000	0.131	3.8
22	30.	3.291	3.300	149.108	3.720	0.000	0.127	3.7
22	35.	3.273	3.282	149.099	3.639	0.000	0.125	3.6
22	40.	3.255	3.264	149.092	3.570	0.000	0.122	3.5
22	45.	3.238	3.247	149.085	3.507	0.000	0.120	3.5
22	50.	3.221	3.229	149.079	3.452	0.000	0.119	3.4
22	55.	3.204	3.212	149.074	3.403	0.000	0.117	3.4
23	0.	3.187	3.196	149.070	3.359	0.000	0.116	3.3
23	5.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	10.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	3.092	3.100	[illegible]	3.553	0.000	[illegible]	[illegible]
[illegible]	3.077	3.084	[illegible]	3.564	0.000	[illegible]	[illegible]
[illegible]	3.062	3.069	148.977	3.571	0.000	[illegible]	[illegible]
[illegible]	3.047	3.054	148.982	3.572	0.000	[illegible]	[illegible]
[illegible]	3.032	3.039	148.987	3.567	0.000	[illegible]	[illegible]
[illegible]	3.017	3.025	148.991	3.557	0.000	[illegible]	[illegible]
24 0.	2.997	3.007	148.934	3.541	0.000	[illegible]	[illegible]
24 5.	2.821	2.909	148.915	3.516	0.000	[illegible]	[illegible]
24 10.	2.274	2.548	148.885	3.469	0.000	[illegible]	[illegible]
24 15.	1.509	1.892	148.831	3.360	0.000	[illegible]	[illegible]
24 20.	0.861	1.185	148.748	3.141	0.000	0.046	3.1
24 25.	0.483	0.672	148.629	2.769	0.000	0.030	2.7
24 30.	0.272	0.378	148.448	2.131	0.000	0.018	2.1
24 35.	0.153	0.212	148.211	1.303	0.000	0.008	1.3
24 40.	0.086	0.119	147.849	0.334	0.000	0.001	0.3
24 45.	0.048	0.067	147.594	0.023	0.000	0.000	0.0

```
---STANDARD ROUTING PROCEDURE---
HYDROGRAPH NO. RRA
HYDROGRAPH NO. RRAO

A(    1)=       0.00
D(    1)=       0.50

A(    2)=     300.00
D(    2)=       0.50

A(    3)=    2720.00
D(    3)=       0.50

A(    4)=   10880.00
D(    4)=       1.00

A(    5)=   36160.00
D(    5)=       2.00

A(    6)=   50720.00
D(    6)=       2.00

A(    7)=   60000.00
D(    7)=       2.00

A(    8)=   69600.00
D(    8)=       2.00

A(    9)=   80800.00
D(    9)=      10.00

A(   10)=   90000.00
D(   10)=       0.00

DIAM =       18.00
NUMBER OF PIPES =         1.00
LENGTH OF WEIR =        100.00
LENGTH OF SECOND WEIR =         0.00
HEIGHT OF WEIR =         9.30
WEIR COEFF OF LOW WEIR =         2.80
DISCHARGE ELE =       147.40
DET BASIN INV =       147.50
LENGTH OF PIPE =       100.00
PEAK =       18.86CFS,      WSEL =      154.25
HYD  --  ERROR 43
  IN  'ROUT  ' AT 459
  FROM '.MAIN.' AT 58

HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA


---HYDROGRAPH DELETE ROUTINE---
HYDROGRAPH NO. 202E
HYDROGRAPH NO. 202A
HYDROGRAPH NO. RRE
HYDROGRAPH NO. RRA

RUN COMPLETE.
```

25yr. storm, P-24 = 6.0"

PK24 = 6.0"

	0.	0.001						
10	10.	0.004	0.001	147.517	0.001	0.000	0.000	0.0
10	15.	0.013	0.007	147.536	0.023	0.000	0.000	0.0
10	20.	0.034	0.024	147.619	0.037	0.000	0.001	0.0
10	25.	0.080	0.071	147.694	0.103	0.000	0.001	0.1
10	30.	0.203	0.144	147.776	0.210	0.000	0.001	0.2
10	35.	0.400	0.326	147.853	0.344	0.000	0.001	0.3
10	40.	0.572	0.486	147.931	0.507	0.000	0.001	0.5
10	45.	0.768	0.670	148.006	0.693	0.000	0.002	0.6
10	50.	0.989	0.878	148.069	0.864	0.000	0.002	0.8
10	55.	1.239	1.114	148.129	1.044	0.000	0.004	1.0
11	0.	1.522	1.381	148.195	1.251	0.000	0.005	1.2
11	5.	1.846	1.684	148.263	1.478	0.000	0.007	1.4
11	10.	2.217	2.031	148.335	1.729	0.000	0.010	1.7
11	15.	2.648	2.433	148.415	2.014	0.000	0.013	2.0
11	20.	3.156	2.902	148.502	2.326	0.000	0.019	2.3
11	25.	3.761	3.458	148.588	2.629	0.000	0.026	2.6
11	30.	4.498	4.130	148.671	2.908	0.000	0.035	2.9
11	35.	5.495	4.996	148.765	3.191	0.000	0.049	3.1
11	40.	7.509	6.502	148.883	3.466	0.000	0.071	3.4
11	45.	11.559	9.534	149.058	3.455	0.000	0.112	3.4
11	50.	17.612	14.586	149.266	4.931	0.000	0.184	4.9
11	55.	25.436	21.624	149.499	6.314	0.000	0.294	6.3

LAG TIME=0.14

PEAK = [redacted] CFS

TOTAL RAINFALL DEPTH = [redacted] INCHES

```
EDT 850304;1
*
10E50304
*
30HYD
*
303.3
*S/3.3/4.3/30
304.3
*^Z

40202E
*E>
82 LINES OUTPUT

>RUN HYD

INPUT OPTIONS :
>
 FILE [F] OR TT [T] ? F

COMMAND FILENAME ? 850304;1

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202E

TOTAL AREA =   3.85 ACRES

WEIGHTED CN =  55.00

LAG TIME=0.14

PEAK =   1.75218 CFS

TOTAL RAINFALL DEPTH =     4.299 INCHES
TOTAL RUNOFF DEPTH =     0.654 INCHES

TOTAL VOLUME =  9047.899 CU FT  OR      0.208 AC-FT

---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202A

TOTAL AREA =   1.05 ACRES

WEIGHTED CN =  75.33

LAG TIME=0.09

PEAK =   2.59256 CFS

TOTAL RAINFALL DEPTH =     4.300 INCHES
TOTAL RUNOFF DEPTH =     1.920 INCHES

TOTAL VOLUME =  7132.198 CU FT  OR      0.164 AC-FT
```

11 : 30	0.000	0.000	0.000	0.000	0.000	0.000
12 : 0	0.000	0.000	0.000	0.000	0.000	0.000
12 : 30	0.000	0.000	0.000	0.000	0.000	0.000
13 : 0	0.376	0.371	0.366	0.363	0.360	0.358
13 : 30	0.293	0.285	0.279	0.274	0.270	0.266
14 : 0	0.242	0.235	0.229	0.224	0.219	0.215
14 : 30	0.209	0.204	0.200	0.196	0.192	0.189
15 : 0	0.186	0.183	0.180	0.177	0.174	0.172
15 : 30	0.168	0.166	0.163	0.161	0.159	0.157
16 : 0	0.155	0.153	0.151	0.149	0.147	0.145
16 : 30	0.144	0.142	0.141	0.139	0.138	0.136
17 : 0	0.135	0.133	0.132	0.131	0.130	0.129
17 : 30	0.127	0.126	0.125	0.124	0.123	0.122
18 : 0	0.120	0.119	0.118	0.118	0.117	0.116
18 : 30	0.115	0.114	0.113	0.112	0.111	0.110
19 : 0	0.110	0.109	0.108	0.107	0.107	0.106
19 : 30	0.105	0.104	0.104	0.103	0.103	0.102
20 : 0	0.101	0.100	0.100	0.099	0.099	0.098
20 : 30	0.097	0.097	0.096	0.096	0.095	0.095
21 : 0	0.094	0.093	0.093	0.092	0.092	0.091
21 : 30	0.091	0.090	0.090	0.090	0.089	0.089
22 : 0	0.088	0.088	0.087	0.087	0.086	0.086
22 : 30	0.086	0.085	0.085	0.084	0.084	0.083
23 : 0	0.083	0.083	0.082	0.082	0.082	0.081
23 : 30	0.081	0.081	0.080	0.080	0.080	0.079
24 : 0	0.079	0.065	0.035	0.014	0.006	0.002
24 : 30	0.001	0.000	0.000	0.000	0.000	0.000

```
EDT 850304;1
*
1085-304
*
20H;D
*
304.3
#S/4,3/5.2/30
305.2
*"Z

402025
*EX
82 LINES OUTPUT

>RUN HYD

INPUT OPTIONS :
>
 FILE [F] OR TT [T] ? F

COMMAND FILENAME ? 850304;1


 ---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202E

 TOTAL AREA =   3.85 ACRES

 WEIGHTED CN =  55.00

LAG TIME=0.14

 PEAK =   3.54980 CFS

 TOTAL RAINFALL DEPTH =     5.199 INCHES
 TOTAL RUNOFF DEPTH =     1.081 INCHES

 TOTAL VOLUME = 14955.744 CU FT  OR      0.343 AC-FT
 ---SCS HYDROGRAPH PROCEDURE ---
 HYDROGRAPH NO. 202A

 TOTAL AREA =   1.05 ACRES

 WEIGHTED CN =  75.33

 LAG TIME=0.09

 PEAK =   3.59798 CFS

 TOTAL RAINFALL DEPTH =     5.200 INCHES
 TOTAL RUNOFF DEPTH =     2.642 INCHES

 TOTAL VOLUME =  9966.112 CU FT  OR      0.229 AC-FT
```

[illegible]						
12	30	0.436	0.420	0.351	0.391	[illegible]
13	0	0.233	0.219	0.207	0.196	[illegible]
13	30	0.171	0.164	0.158	0.152	[illegible]
14	0	[illegible]	[illegible]	0.130	0.126	[illegible]
14	30	0.117	0.114	0.112	0.109	[illegible]
15	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	30	0.092	0.090	0.089	0.087	[illegible]
16	0	0.084	0.082	0.081	0.080	0.079
16	30	0.077	0.076	0.075	0.074	0.073
17	0	0.071	0.071	0.070	0.069	0.068
17	30	0.067	0.066	0.065	0.065	0.064
18	0	0.063	0.062	0.062	0.061	0.060
18	30	0.059	0.059	0.058	0.058	0.057
19	0	0.056	0.056	0.055	0.055	0.055
19	30	0.054	0.053	0.053	0.052	0.052
20	0	0.051	0.051	0.051	0.050	0.050
20	30	0.049	0.049	0.049	0.048	0.048
21	0	0.047	0.047	0.047	0.046	0.046
21	30	0.045	0.045	0.045	0.045	0.044
22	0	0.044	0.044	0.043	0.043	0.043
22	30	0.042	0.042	0.042	0.042	0.042
23	0	0.041	0.041	0.041	0.040	0.040
23	30	0.040	0.040	0.039	0.039	0.039
24	0	0.039	0.026	-0.007	0.002	0.009
24	30	0.000	0.000	0.000	0.000	0.000

[illegible] : SYD [illegible] FT 26-NOV-84

BEGINNING TIME - 11 : 30. PEAK = 3.33

[illegible]	: 30	0.000	0.000	0.000	0.013	[illegible]
[illegible]	: 0	[illegible]	[illegible]	3.330	3.184	[illegible]
[illegible]	: 30	[illegible]	1.036	1.113	0.860	[illegible]
13	: 0	0.622	0.580	0.546	0.518	0.491
13	: 30	0.453	0.435	0.420	0.405	0.392
14	: 0	0.369	0.359	0.349	0.340	0.332
14	: 30	0.317	0.310	0.303	0.297	0.291
15	: 0	0.280	0.275	0.270	0.265	0.261
15	: 30	0.253	0.249	0.245	0.241	0.238
16	: 0	0.231	0.228	0.225	0.222	0.220
16	: 30	0.214	0.212	0.209	0.207	0.204
17	: 0	0.200	0.198	0.196	0.194	0.192
17	: 30	0.188	0.186	0.184	0.183	0.181
18	: 0	0.178	0.176	0.175	0.173	0.172
18	: 30	0.169	0.167	0.166	0.165	0.163
19	: 0	0.161	0.160	0.159	0.157	0.156
19	: 30	0.154	0.153	0.152	0.151	0.150
20	: 0	0.148	0.147	0.146	0.145	0.144
20	: 30	0.142	0.141	0.140	0.139	0.139
21	: 0	0.137	0.136	0.135	0.135	0.134
21	: 30	0.132	0.132	0.131	0.130	0.129
22	: 0	0.128	0.127	0.127	0.126	0.125
22	: 30	0.124	0.124	0.123	0.122	0.122
23	: 0	0.121	0.120	0.119	0.119	0.118
23	: 30	0.117	0.117	0.116	0.116	0.115
24	: 0	0.113	0.095	0.050	0.020	0.008
24	: 30	0.001	0.000	0.000	0.000	0.000

BEGINNING TIME						
7	30	0.000	0.000	0.000	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	0	0.013	0.014	0.016	[illegible]	[illegible]
9	30	0.023	0.025	0.027	[illegible]	[illegible]
10	0	0.037	0.040	0.044	[illegible]	[illegible]
10	30	0.060	0.065	0.071	[illegible]	[illegible]
11	0	0.102	0.113	0.126	[illegible]	[illegible]
11	30	0.219	0.387	0.567	[illegible]	[illegible]
12	0	3.457	2.817	1.849	[illegible]	[illegible]
12	30	0.624	0.465	0.398	[illegible]	[illegible]
13	0	0.288	0.272	0.258	[illegible]	[illegible]
13	30	0.215	0.207	0.199	[illegible]	[illegible]
14	0	0.175	0.170	0.165	[illegible]	[illegible]
14	30	0.149	0.146	0.142	[illegible]	[illegible]
15	0	0.131	0.129	0.126	[illegible]	[illegible]
15	30	0.118	0.116	0.114	0.112	[illegible]
16	0	0.107	0.105	0.104	0.103	[illegible]
16	30	0.098	0.097	0.096	[illegible]	[illegible]
17	0	0.091	0.090	0.089	[illegible]	[illegible]
17	30	0.085	0.085	0.084	[illegible]	[illegible]
18	0	0.080	0.080	0.079	[illegible]	[illegible]
18	30	0.076	0.075	0.075	0.074	0.074
19	0	0.072	0.072	0.071	0.070	0.070
19	30	0.069	0.068	0.068	0.067	0.067
20	0	0.066	0.065	0.065	0.064	0.064
20	30	0.063	0.063	0.062	0.062	0.061
21	0	0.060	0.060	0.060	0.059	0.059
21	30	0.058	0.058	0.058	0.057	0.057
22	0	0.056	0.056	0.056	0.055	0.055
22	30	0.054	0.054	0.054	0.053	0.053
23	0	0.053	0.052	0.052	0.052	0.051
23	30	0.051	0.051	0.050	0.050	0.050
24	0	0.033	0.009	0.002	0.001	0.000
24	30	0.000	0.000	0.000	0.000	0.000

```
EDIT 850304;1
*
10850404
*
20HYD
*
305.2
*3/5.2/5.5/30
305.5
*'Z

40202E
*EX
82 LINES OUTPUT

>RUN HYD

INPUT OPTIONS :
>

COMMAND FILENAME ? 850304;1


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202E

TOTAL AREA =   3.85 ACRES

WEIGHTED CN =  55.00

LAG TIME=0.14

PEAK =   4.21402 CFS

TOTAL RAINFALL DEPTH =     5.499 INCHES
TOTAL RUNOFF DEPTH =     1.239 INCHES

TOTAL VOLUME = 17142.529 CU FT  OR     0.394 AC-FT


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202A

TOTAL AREA =   1.05 ACRES

WEIGHTED CN =  75.33

LAG TIME=0.09

PEAK =   3.94216 CFS

TOTAL RAINFALL DEPTH =     5.500 INCHES
TOTAL RUNOFF DEPTH =     2.891 INCHES

TOTAL VOLUME = 10906.675 CU FT  OR     0.250 AC-FT
```

13 : 30	0.509	0.489	0.472	0.455	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14 : 30	0.355	[illegible]	0.339	0.332	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0.247	[illegible]
15 : 30	0.282	0.275	0.271	0.270	[illegible]
16 : 0	0.255	0.255	0.251	0.248	0.245
16 : 30	0.239	0.236	0.233	0.230	0.228
17 : 0	0.223	0.220	0.218	0.216	[illegible]
17 : 30	0.209	0.207	0.205	0.203	0.201
18 : 0	0.193	0.192	0.191	0.190	[illegible]
18 : 30	0.188	0.186	0.185	0.185	0.182
19 : 0	0.179	0.177	0.176	0.175	0.173
19 : 30	0.171	0.170	0.169	0.167	0.166
20 : 0	0.164	0.163	0.162	0.161	0.160
20 : 30	0.158	0.157	0.156	0.155	0.154
21 : 0	0.152	0.151	0.150	0.149	0.148
21 : 30	0.147	0.146	0.145	0.144	0.143
22 : 0	0.142	0.141	0.140	0.140	0.139
22 : 30	0.138	0.137	0.136	0.135	0.135
23 : 0	0.133	0.133	0.132	0.132	0.131
23 : 30	0.130	0.129	0.129	0.128	0.127
24 : 0	0.126	0.105	0.055	0.022	0.009
24 : 30	0.001	0.001	0.000	0.000	0.000

BEGINNING TIME 7 : 45.

[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	: 30	0.056	0.009	0.011	0.012	0.013
10	: 0	0.016	0.018	0.017	0.021	0.021
10	: 30	0.027	0.029	0.031	0.034	0.036
11	: 0	0.042	0.045	0.049	0.053	0.057
11	: 30	0.066	0.071	0.077	0.083	0.090
12	: 0	0.107	0.118	0.130	0.144	0.161
12	: 30	0.208	0.248	0.437	0.637	0.913
13	: 0	1.769	3.792	3.078	2.014	1.334
13	: 30	1.061	0.675	0.534	0.431	0.385
14	: 0	0.332	0.312	0.294	0.278	0.265
14	: 30	0.242	0.232	0.223	0.215	0.208
15	: 0	0.194	0.189	0.183	0.178	0.173
15	: 30	0.165	0.161	0.157	0.154	0.150
16	: 0	0.144	0.141	0.139	0.136	0.133
16	: 30	0.129	0.127	0.125	0.123	0.121
17	: 0	0.117	0.115	0.114	0.112	0.110
17	: 30	0.107	0.106	0.105	0.103	0.102
18	: 0	0.100	0.098	0.097	0.096	0.095
18	: 30	0.093	0.092	0.091	0.090	0.089
19	: 0	0.087	0.087	0.086	0.085	0.084
19	: 30	0.083	0.082	0.081	0.080	0.080
20	: 0	0.078	0.078	0.077	0.076	0.076
20	: 30	0.075	0.074	0.073	0.073	0.072
21	: 0	0.071	0.071	0.070	0.070	0.069
21	: 30	0.068	0.068	0.067	0.067	0.066
22	: 0	0.065	0.065	0.065	0.064	0.064
22	: 30	0.063	0.063	0.062	0.062	0.061
23	: 0	0.061	0.060	0.060	0.060	0.059
23	: 30	0.059	0.058	0.058	0.058	0.057
24	: 0	0.057	0.056	0.056	0.056	0.056
24	: 30	0.055	0.055	0.054	0.054	0.054
25	: 0	0.053	0.035	0.009	0.002	0.001
25	: 30	0.000	0.000	0.000	0.000	0.000

```
EDT 850304;1
*
1,850304
*
JOHYD
*
305.5
*5/5.5/6.0/30
306.0
*'Z

40202E
*EX
82 LINES OUTPUT

>RUN HYD

INPUT OPTIONS :
>
 FILE CFJ OR TT LTJ ? F

COMMAND FILENAME ? 850304;1


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202E

TOTAL AREA =   3.85 ACRES

WEIGHTED CN =  55.00

LAG TIME=0.14

PEAK =   5.41536 CFS

TOTAL RAINFALL DEPTH =     5.999 INCHES
TOTAL RUNOFF DEPTH =     1.517 INCHES

TOTAL VOLUME = 20991.436 CU FT  OR      0.482 AC-FT


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202A

TOTAL AREA =   1.05 ACRES

WEIGHTED CN =  75.33

LAG TIME=0.09

PEAK =   4.52304 CFS

TOTAL RAINFALL DEPTH =     6.000 INCHES
TOTAL RUNOFF DEPTH =     3.315 INCHES

TOTAL VOLUME = 12503.832 CU FT  OR      0.287 AC-FT
```

[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1	: 30	2.007	[illegible]	[illegible]	[illegible]	[illegible]
2	: 0	0.013	[illegible]	[illegible]	[illegible]	[illegible]
2	: 30	0.025	[illegible]	[illegible]	[illegible]	[illegible]
3	: 0	0.036	0.040	0.043	[illegible]	[illegible]
3	: 30	0.048	0.060	0.066	0.065	[illegible]
4	: 0	0.059	0.080	0.087	0.104	[illegible]
4	: 30	0.084	0.090	0.097	0.104	[illegible]
5	: 0	0.135	0.140	0.143	0.177	[illegible]
5	: 30	0.251	0.299	0.522	0.708	[illegible]
6	: 0	2.055	4.360	3.517	2.271	[illegible]
12	: 30	1.198	0.762	0.568	0.485	[illegible]
13	: 0	0.374	0.351	0.330	0.313	[illegible]
13	: 30	0.272	0.261	0.251	0.241	[illegible]
14	: 0	0.218	0.212	0.206	0.200	[illegible]
14	: 30	0.185	0.180	0.176	0.172	[illegible]
15	: 0	0.162	0.158	0.155	0.152	[illegible]
15	: 30	0.144	0.142	0.139	0.137	[illegible]
16	: 0	0.131	0.129	0.127	0.125	[illegible]
16	: 30	0.120	0.119	0.117	0.116	[illegible]
17	: 0	0.111	0.110	0.109	0.108	[illegible]
17	: 30	0.104	0.103	0.102	0.101	[illegible]
18	: 0	0.098	0.097	0.096	0.095	[illegible]
18	: 30	0.092	0.091	0.091	0.090	[illegible]
19	: 0	0.087	0.087	0.086	0.085	[illegible]
19	: 30	0.083	0.083	0.082	0.081	[illegible]
20	: 0	0.079	0.079	0.078	0.078	[illegible]
20	: 30	0.076	0.076	0.075	0.075	[illegible]
21	: 0	0.073	0.073	0.072	0.072	[illegible]
21	: 30	0.070	0.070	0.069	0.069	[illegible]
22	: 0	0.068	0.067	0.067	0.067	[illegible]
22	: 30	0.065	0.065	[illegible]	0.064	[illegible]
23	: 0	0.063	0.063	[illegible]	0.062	[illegible]
23	: 30	0.061	0.061	[illegible]	0.060	[illegible]
24	: 0	0.059	0.059	[illegible]	0.003	[illegible]
24	: 30	0.000	0.000	0.000	0.000	[illegible]

```
EDIT 850304;1
*
10850304
*
SMITH
*
306.0
*5/6.0/6.5/30
306.5
*^Z

402E2E
*FX
62 LINES OUTPUT

:RUN HYD

INPUT OPTIONS :
>
 FILE LFD OR TT CTD ? F

COMMAND FILENAME ? 850304;1


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202E

TOTAL AREA =   3.85 ACRES

WEIGHTED CN =  55.00

LAG TIME=0.14

PEAK =   6.69109 CFS

TOTAL RAINFALL DEPTH =     6.499 INCHES
TOTAL RUNOFF DEPTH =     1.813 INCHES

TOTAL VOLUME = 25083.811 CU FT  OR      0.576 AC-FT


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202A

TOTAL AREA =   1.05 ACRES

WEIGHTED CN =  75.33

LAG TIME=0.09

PEAK =   5.11100 CFS

TOTAL RAINFALL DEPTH =     6.500 INCHES
TOTAL RUNOFF DEPTH =     3.746 INCHES

TOTAL VOLUME = 14132.672 CU FT  OR      0.324 AC-FT
```

11	0	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	[illegible]
11	30	0.[illegible]	0.[illegible]	0.[illegible]	0.[illegible]	[illegible]
12	0	2.[illegible]	[illegible]	[illegible]	0.[illegible]	[illegible]
12	30	0.[illegible]	2.49	[illegible]	1.[illegible]	[illegible]
13	0	0.[illegible]	0.[illegible]	[illegible]	0.[illegible]	[illegible]
13	30	0.7[illegible]	0.[illegible]	[illegible]	0.[illegible]	[illegible]
14	0	0.570	0.554	0.[illegible]	0.524	[illegible]
14	30	0.48[illegible]	0.[illegible]	0.[illegible]	0.455	[illegible]
15	0	0.426	0.420	0.[illegible]	0.402	[illegible]
15	30	0.385	0.378	0.372	0.367	0.361
16	0	0.351	0.346	0.341	0.337	0.332
16	30	0.324	0.320	0.316	0.312	0.308
17	0	0.301	0.296	0.295	0.292	0.289
17	30	0.283	0.280	0.277	0.274	0.272
18	0	0.267	0.264	0.262	0.259	0.257
18	30	0.253	0.251	0.248	0.246	0.244
19	0	0.240	0.239	0.237	0.235	0.233
19	30	0.230	0.228	0.226	0.225	0.223
20	0	0.220	0.218	0.217	0.215	0.214
20	30	0.211	0.210	0.209	0.207	0.206
21	0	0.203	0.202	0.201	0.200	0.199
21	30	0.196	0.195	0.194	0.193	0.192
22	0	0.190	0.189	0.188	0.187	0.186
22	30	0.184	0.183	0.182	0.181	0.180
23	0	0.178	0.177	0.176	0.175	0.175
23	30	0.173	0.172	0.171	0.170	0.170
24	0	0.167	0.139	0.074	0.030	0.012
24	30	0.002	0.001	0.000	0.000	0.000

```
>EDT 850304;1
*
10150304
*
-20HYD
*
306.5
*S/6.5/7.5/30
307.5
*"Z

40202E
*EX
82 LINES OUTPUT

>RUN HYD

INPUT OPTIONS :
>
 FILE [F] OR TT [T] ? F

COMMAND FILENAME ? 850304;1


---SCS HYDROGRAPH PROCEDURE ---
HYDROGRAPH NO. 202E

 TOTAL AREA =   3.85 ACRES

 WEIGHTED CN =  55.00

 LAG TIME=0.14

 PEAK =   9.41995 CFS

 TOTAL RAINFALL DEPTH =    7.499 INCHES
 TOTAL RUNOFF DEPTH =     2.447 INCHES

 TOTAL VOLUME = 33864.516 CU FT  OR      0.777 AC-FT


 ---SCS HYDROGRAPH PROCEDURE ---
 HYDROGRAPH NO. 202A

 TOTAL AREA =   1.05 ACRES

 WEIGHTED CN =  75.33

 LAG TIME=0.09

 PEAK =   6.30156 CFS

 TOTAL RAINFALL DEPTH =    7.500 INCHES
 TOTAL RUNOFF DEPTH =     4.630 INCHES

 TOTAL VOLUME = 17466.598 CU FT  OR      0.401 AC-FT
```

HYDROGRAPH PRINT ROUTINE

FILE NAME : SYD\8003202A.HY 28-NOV-84

BEGINNING TIME : 10 : 30. PEAK = 9.42

10	30	0.000	0.000	0.000	0.001	0.008
11	0	0.035	0.053	0.075	0.101	0.133
11	30	0.219	0.285	0.474	0.655	1.371
12	0	3.129	6.894	9.413	7.878	4.111
12	30	4.319	3.294	2.304	1.640	1.042
13	0	1.276	1.185	1.112	1.052	0.999
13	30	0.912	0.875	0.841	0.811	0.783
14	0	0.734	0.713	0.692	0.674	0.656
14	30	0.624	0.610	0.596	0.583	0.571
15	0	0.548	0.537	0.527	0.518	0.509
15	30	0.491	0.483	0.476	0.468	0.461
16	0	0.447	0.441	0.435	0.429	0.423
16	30	0.412	0.407	0.402	0.397	0.392
17	0	0.383	0.379	0.375	0.371	0.367
17	30	0.359	0.355	0.352	0.348	0.345
18	0	0.338	0.335	0.332	0.329	0.326
18	30	0.320	0.317	0.315	0.312	0.309
19	0	0.304	0.302	0.300	0.297	0.295
19	30	0.290	0.288	0.286	0.284	0.282
20	0	0.278	0.276	0.274	0.272	0.270
20	30	0.267	0.265	0.263	0.262	0.260
21	0	0.257	0.255	0.253	0.252	0.250
21	30	0.247	0.246	0.244	0.243	0.242
22	0	0.239	0.238	0.236	0.235	0.234
22	30	0.231	0.230	0.229	0.227	0.226
23	0	0.224	0.223	0.222	0.221	0.220
23	30	0.217	0.216	0.215	0.214	0.213
24	0	0.210	0.175	0.093	0.037	0.015
24	30	0.002	0.001	0.000	0.000	0.000

6	0	0.030	0.0[illegible]	0.000	0.000	0.000
6	30	[illegible]	0.005	0.003	[illegible]	0.007
7	0	0.009	0.011	0.012	0.013	0.015
7	30	0.018	0.019	0.021	0.022	0.024
8	0	0.027	0.029	0.031	0.033	0.035
8	30	0.039	0.042	0.044	0.046	0.049
9	0	0.054	0.057	0.060	0.064	0.067
9	30	0.07[illegible]	0.078	0.0[illegible]2	0.087	0.091
10	0	0.102	0.107	0.114	0.120	0.127
10	30	0.144	0.153	0.163	0.174	0.187
11	0	0.217	0.235	0.257	0.281	0.311
11	30	0.390	0.461	0.797	1.140	1.423
12	0	2.941	6.[illegible]1	4.856	3.132	2.360
12	30	1.611	1.023	0.761	0.649	0.584
13	0	0.499	0.468	0.441	0.417	0.396
13	30	0.361	0.347	0.333	0.321	0.310
14	0	0.290	0.281	0.273	0.265	0.258
14	30	0.245	0.239	0.233	0.228	0.223
15	0	0.214	0.209	0.205	0.201	0.198
15	30	0.191	0.187	0.184	0.181	0.178
16	0	0.173	0.170	0.168	0.165	0.163
16	30	0.159	0.156	0.154	0.152	0.150
17	0	0.147	0.145	0.143	0.142	0.140
17	30	0.137	0.135	0.134	0.133	0.131
18	0	0.128	0.127	0.126	0.125	0.124
18	30	0.121	0.120	0.119	0.118	0.117
19	0	0.115	0.114	0.113	0.112	0.111
19	30	0.109	0.108	0.108	0.107	0.106
20	0	0.104	0.104	0.103	0.102	0.101
20	30	0.100	0.099	0.098	0.098	0.097
21	0	0.096	0.095	0.095	0.094	0.093
21	30	0.092	0.092	0.091	0.090	0.090
22	0	0.089	0.088	0.088	0.087	0.087
22	30	0.086	0.085	0.085	0.084	0.084
23	0	0.083	0.082	0.082	0.082	0.081
23	30	0.080	0.080	0.079	0.079	0.079
24	0	0.078	0.052	0.014	0.003	0.001
24	30	0.000	0.000	0.000	0.000	0.000