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```
                    MASTER DESIGN STORM SUMMARY


      Default Network Design Storm File, ID SEDGWICK.RNQ  Sedgwick24


                    Total
                    Depth     Rainfall
       Return Event  in        Type        RNF File      RNF ID
       ------------  ------   -------------- --------    ----------------
          2y24h     3.5000   Synthetic Curve  SCSTYPES   TypeII  24hr
          5y24h     4.5000   Synthetic Curve  SCSTYPES   TypeII  24hr
         10y24h     5.3000   Synthetic Curve  SCSTYPES   TypeII  24hr
         25y24h     6.1000   Synthetic Curve  SCS        SCSII
         50y24h     7.0000   Synthetic Curve  SCSTYPES   TypeII  24hr
         100y24     7.9000   Synthetic Curve  SCSTYPES   TypeII  24hr
         500y24     9.6000   Synthetic Curve  SCSTYPES   TypeII  24hr


       -------------------------------
       ICPM CALCULATION TOLERANCES
       -------------------------------
       Target Convergence=    .000 cfs +/-
       Max. Iterations   =      35 loops
       ICPM   Time Step  =    .0500 hrs
       Output Time Step   =    .0500 hrs
       ICPM Ending Time   =  35.0000 hrs
       -------------------------------


                    MASTER NETWORK SUMMARY
                  SCS Unit Hydrograph Method

              (*Node=Outfall;  +Node=Diversion; )
          (Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)
```

| | | Return | HYG Vol | | Qpeak | Qpeak | Max WSEL | Max Pond Storage |
Node ID	Type	Event	ac-ft	Trun	hrs	cfs	ft	ac-ft
BASIN A	AREA	2	.487		12.0500	6.66		
BASIN A	AREA	5	.809		12.0500	11.54		
BASIN A	AREA	10	1.093		12.0500	15.79		
BASIN A	AREA	25	1.394		12.0000	9.44		
BASIN A	AREA	50	1.749		12.0500	25.43		
BASIN A	AREA	100	2.116		12.0500	30.74		
BASIN A	AREA	500	2.836		12.0500	40.96		
BASIN B	AREA	2	1.369		12.0500	18.71		
BASIN B	AREA	5	2.274		12.0500	32.43		
BASIN B	AREA	10	3.072		12.0500	44.38		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft	Storage
BASIN B		AREA	25	3.919		12.0000	26.52			
BASIN B		AREA	50	4.915		12.0500	71.47			
BASIN B		AREA	100	5.948		12.0500	86.38			
BASIN B		AREA	500	7.969		12.0500	115.11			
BASIN C		AREA	2	7.881		12.0500	107.67			
BASIN C		AREA	5	13.084		12.0500	186.63			
BASIN C		AREA	10	17.678		12.0500	255.38			
BASIN C		AREA	25	22.550		12.0000	152.63			
BASIN C		AREA	50	28.285		12.0500	411.26			
BASIN C		AREA	100	34.226		12.0500	497.06			
BASIN C		AREA	500	45.861		12.0500	662.43			
BASIN D		AREA	2	1.344		12.0500	18.37			
BASIN D		AREA	5	2.232		12.0500	31.84			
BASIN D		AREA	10	3.015		12.0500	43.56			
BASIN D		AREA	25	3.846		12.0000	26.04			
BASIN D		AREA	50	4.825		12.0500	70.15			
BASIN D		AREA	100	5.838		12.0500	84.79			
BASIN D		AREA	500	7.823		12.0500	112.99			
POND A		POND	2	.854		12.0000	10.62			
POND A		POND	5	1.284		12.0000	16.66			
POND A		POND	10	1.654		12.0000	21.86			
POND A		POND	25	2.042		12.0000	12.85			
POND A		POND	50	2.494		12.0000	33.58			
POND A		POND	100	2.959		12.0000	40.01			
POND A		POND	500	3.863		12.0000	52.41			
POND A	OUT	POND	2	.256		21.9500	.22	1332.57	.768	
POND A	OUT	POND	5	.612		24.9500	.46	1332.82	1.106	
POND A	OUT	POND	10	.893		25.3500	.66	1333.05	1.423	
POND A	OUT	POND	25	1.219		16.3500	.98	1333.17	1.589	
POND A	OUT	POND	50	1.625		15.3500	1.63	1333.32	1.810	
POND A	OUT	POND	100	2.059		14.8000	2.40	1333.51	2.081	

                          MASTER NETWORK SUMMARY
                          SCS Unit Hydrograph Method

                    (*Node=Outfall; +Node=Diversion;)
              (Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
POND A	OUT	POND	500	2.922		14.5500	3.48	1333.88	2.624
POND A	OUT	POND	2	-.028		14.8000	-.11(-Q)		
POND A RAIN		AREA	2	.366		11.9000	5.82		
POND A RAIN		AREA	5	.475		11.9000	7.49		
POND A RAIN		AREA	10	.561		11.9000	8.83		
POND A RAIN		AREA	25	.648		11.6500	3.42		
POND A RAIN		AREA	50	.745		11.9000	11.67		
POND A RAIN		AREA	100	.843		11.9000	13.17		
POND A RAIN		AREA	500	1.027		11.9000	16.01		
POND B		POND	2	2.274		12.0000	25.41		
POND B		POND	5	3.714		12.0000	41.11		
POND B		POND	10	4.928		12.0000	54.70		
POND B		POND	25	6.267		12.0000	32.45		
POND B		POND	50	7.874		12.0000	85.55		
POND B		POND	100	9.527		12.0000	102.37		
POND B		POND	500	12.763		12.0000	134.91		
POND B	OUT	POND	2	1.363		18.4500	.84	1332.54	1.352
POND B	OUT	POND	5	2.497		15.8500	1.67	1332.78	1.941
POND B	OUT	POND	10	3.521		14.8000	2.42	1332.99	2.467
POND B	OUT	POND	25	4.777		13.1500	6.57	1333.10	2.767
POND B	OUT	POND	50	6.341		12.5000	13.20	1333.26	3.199
POND B	OUT	POND	100	7.960		12.4000	20.32	1333.43	3.664
POND B	OUT	POND	500	11.157		12.3000	39.95	1333.74	4.484
POND B RAIN		AREA	2	.676		11.9000	10.75		
POND B RAIN		AREA	5	.876		11.9000	13.84		
POND B RAIN		AREA	10	1.036		11.9000	16.30		
POND B RAIN		AREA	25	1.196		11.6500	6.31		
POND B RAIN		AREA	50	1.376		11.9000	21.55		
POND B RAIN		AREA	100	1.556		11.9000	24.32		
POND B RAIN		AREA	500	1.896		11.9000	29.56		

```
                              MASTER NETWORK SUMMARY
                              SCS Unit Hydrograph Method

                    (*Node=Outfall;  +Node=Diversion; )
            (Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)
```

								Max
		Return	HYG Vol		Qpeak	Qpeak	Max WSEL	Pond
Storage								
Node ID	Type	Event	ac-ft	Trun	hrs	cfs	ft	ac-ft
----------------	----	------	----------	--	---------	--------	--------	-----------
POND C	POND	2	11.357		12.0500	125.97		
POND C	POND	5	18.319		12.0500	210.30		
POND C	POND	10	24.437		12.0500	283.48		
POND C	POND	25	31.065		12.0000	174.13		
POND C	POND	50	38.926		12.0500	449.32		
POND C	POND	100	47.049		12.0500	543.63		
POND C	POND	500	62.943		12.0500	731.01		
POND C OUT	POND	2	.825		12.2000	1.57	1326.32	10.557
POND C OUT	POND	5	1.450		12.8000	5.46	1327.05	16.870
POND C OUT	POND	10	2.040		12.3000	9.76	1327.65	22.397
POND C OUT	POND	25	2.719		12.0500	10.54	1328.28	28.335
POND C OUT	POND	50	3.539		12.5000	17.92	1328.99	35.381
POND C OUT	POND	100	4.435		12.2500	28.88	1329.70	42.600
POND C OUT	POND	500	6.237		12.1500	44.99	1331.02	56.701
POND C RAIN	AREA	2	2.114		11.9000	33.59		
POND C RAIN	AREA	5	2.738		11.9000	43.24		
POND C RAIN	AREA	10	3.238		11.9000	50.95		
POND C RAIN	AREA	25	3.738		11.8500	19.73		
POND C RAIN	AREA	50	4.300		11.9000	67.34		
POND C RAIN	AREA	100	4.863		11.9000	76.01		
POND C RAIN	AREA	500	5.925		11.9000	92.38		
*POND D	POND	2	2.677		12.0000	24.06		
*POND D	POND	5	4.339		12.0000	39.86		
*POND D	POND	10	5.833		12.0000	53.63		
*POND D	POND	25	7.462		12.0000	41.12		
*POND D	POND	50	9.395		12.0500	94.13		
*POND D	POND	100	11.440		12.0500	113.73		
*POND D	POND	500	15.481		12.0500	155.57		
*POND D OUT	POND	2	.000		.0500	.00	1326.31	2.655
*POND D OUT	POND	5	.000		.0500	.00	1327.05	4.319
*POND D OUT	POND	10	.000		.0500	.00	1327.65	5.812

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
*POND D	OUT POND	25	.000		.0500	.00	1328.27	7.431
*POND D	OUT POND	50	.000		.0500	.00	1328.99	9.372
*POND D	OUT POND	100	.000		.0500	.00	1329.70	11.412
*POND D	OUT POND	500	.000		.0500	.00	1331.02	15.462
POND D RAIN	AREA	2	.507		11.9000	8.06		
POND D RAIN	AREA	5	.657		11.9000	10.38		
POND D RAIN	AREA	10	.777		11.9000	12.23		
POND D RAIN	AREA	25	.897		11.7500	4.73		
POND D RAIN	AREA	50	1.032		11.9000	16.16		
POND D RAIN	AREA	100	1.167		11.9000	18.24		
POND D RAIN	AREA	500	1.422		11.9000	22.17		

File.... C:\HAESTAD\PPKW\RAINFALL\SEDGWICK.RNQ
Title...

                         JOB TITLE NOT SPECIFIED
            Click Project Summary on the File Menu to enter title

                         DESIGN STORMS SUMMARY

 Design Storm File,ID = SEDGWICK.RNQ Sedgwick24

 Storm Tag Name   = 2y24h

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
 Storm Frequency   = 2 yr
 Total Rainfall Depth= 3.5000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

 Storm Tag Name   = 5y24h
 Description: Sedgwick County 5-yr 24 hour Duration

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
 Storm Frequency   = 5 yr
 Total Rainfall Depth= 4.5000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

 Storm Tag Name   = 10y24h

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
 Storm Frequency   = 10 yr
 Total Rainfall Depth= 5.3000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

 Storm Tag Name   = 25y24h
 Description: Sedgwick County - 25 year - 24hour

 Data Type, File, ID = Synthetic Storm SCS.RNF SCSII
 Storm Frequency   = 25 yr
 Total Rainfall Depth= 6.1000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= 1.0000 hrs End= 24.0000 hrs

File.... C:\HAESTAD\PPKW\RAINFALL\SEDGWICK.RNQ
Title...

                        JOB TITLE NOT SPECIFIED
            Click Project Summary on the File Menu to enter title

                        DESIGN STORMS SUMMARY

 Design Storm File,ID = SEDGWICK.RNQ   Sedgwick24

 Storm Tag Name   = 50y24h

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII   24hr
 Storm Frequency   = 50 yr
 Total Rainfall Depth= 7.0000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

 Storm Tag Name   = 100y24

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII   24hr
 Storm Frequency   = 100 yr
 Total Rainfall Depth= 7.9000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

 Storm Tag Name   = 500y24

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII   24hr
 Storm Frequency   = 500 yr
 Total Rainfall Depth= 9.6000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

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Type.... Design Storms                                Page 2.03
Name.... Sedgwick24                                   Event: 2 yr
File.... C:\HAESTAD\PPKW\RAINFALL\SEDGWICK.RNQ
Storm... TypeII  24hr   Tag: 2y24h
```

```
                    DESIGN STORMS SUMMARY

 Design Storm File,ID = SEDGWICK.RNQ  Sedgwick24


 Storm Tag Name      = 2y24h
 ------------------------------------------------------------------
 Data Type, File, ID = Synthetic Storm  SCSTYPES.RNF  TypeII  24hr
 Storm Frequency     = 2 yr
 Total Rainfall Depth= 3.5000 in
 Duration Multiplier =  1
 Resulting Duration  = 24.0000 hrs
 Resulting Start Time= .0000 hrs  Step= .1000 hrs  End= 24.0000 hrs


 Storm Tag Name      = 5y24h
 Description: Sedgwick County 5-yr 24 hour Duration
 ------------------------------------------------------------------
 Data Type, File, ID = Synthetic Storm  SCSTYPES.RNF  TypeII  24hr
 Storm Frequency     = 5 yr
 Total Rainfall Depth= 4.5000 in
 Duration Multiplier =  1
 Resulting Duration  = 24.0000 hrs
 Resulting Start Time= .0000 hrs  Step= .1000 hrs  End= 24.0000 hrs


 Storm Tag Name      = 10y24h
 ------------------------------------------------------------------
 Data Type, File, ID = Synthetic Storm  SCSTYPES.RNF  TypeII  24hr
 Storm Frequency     = 10 yr
 Total Rainfall Depth= 5.3000 in
 Duration Multiplier =  1
 Resulting Duration  = 24.0000 hrs
 Resulting Start Time= .0000 hrs  Step= .1000 hrs  End= 24.0000 hrs


 Storm Tag Name      = 25y24h
 Description: Sedgwick County - 25 year - 24hour
 ------------------------------------------------------------------
 Data Type, File, ID = Synthetic Storm  SCS.RNF  SCSII
 Storm Frequency     = 25 yr
 Total Rainfall Depth= 6.1000 in
 Duration Multiplier =  1
 Resulting Duration  = 24.0000 hrs
 Resulting Start Time= .0000 hrs  Step= 1.0000 hrs  End= 24.0000 hrs


 Storm Tag Name      = 50y24h
 ------------------------------------------------------------------
 Data Type, File, ID = Synthetic Storm  SCSTYPES.RNF  TypeII  24hr
 Storm Frequency     = 50 yr
 Total Rainfall Depth= 7.0000 in
 Duration Multiplier =  1
 Resulting Duration  = 24.0000 hrs
 Resulting Start Time= .0000 hrs  Step= .1000 hrs  End= 24.0000 hrs
```

                     DESIGN STORMS SUMMARY

 Design Storm File,ID = SEDGWICK.RNQ Sedgwick24

 Storm Tag Name   = 100y24

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
 Storm Frequency   = 100 yr
 Total Rainfall Depth= 7.9000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

 Storm Tag Name   = 500y24

 Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
 Storm Frequency   = 500 yr
 Total Rainfall Depth= 9.6000 in
 Duration Multiplier = 1
 Resulting Duration = 24.0000 hrs
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

File.... F:\HYDRO\PROJECTS\RUSSELL - 45TH & HOOVER\PONDPACK\PONDS1-24-07_SOUTHONLY.PPW

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sqr(A1*A2) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
1332.00	-----	1.3000	.0000	.000	.000
1333.00	-----	1.4000	4.0491	1.350	1.350
1334.00	-----	1.5000	4.3491	1.450	2.799
1335.00	-----	1.6000	4.6492	1.550	4.349

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2   = Lower and upper elevations of the increment
        Area1,Area2 = Areas computed for EL1, EL2, respectively
        Volume   = Incremental volume between EL1 and EL2

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sqr(A1*A2) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
1332.00	-----	2.4000	.0000	.000	.000
1333.00	-----	2.6000	7.4980	2.499	2.499
1334.00	-----	2.8000	8.0981	2.699	5.199
1335.00	-----	2.9000	8.5496	2.850	8.049

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

  Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

  where: EL1, EL2   = Lower and upper elevations of the increment
          Area1,Area2 = Areas computed for EL1, EL2, respectively
          Volume   = Incremental volume between EL1 and EL2

File.... F:\HYDRO\PROJECTS\RUSSELL - 45TH & HOOVER\PONDPACK\PONDS1-24-07_SOUTHONLY.PPW

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sqr(A1*A2) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
1325.00	-----	7.5000	.0000	.000	.000
1326.00	-----	8.2000	23.5422	7.847	7.847
1327.00	-----	8.9000	25.6428	8.548	16.395
1328.00	-----	9.6000	27.7434	9.248	25.643
1329.00	-----	10.0000	29.3980	9.799	35.442
1330.00	-----	10.5000	30.7470	10.249	45.691
1331.00	-----	11.0000	32.2471	10.749	56.440
1332.00	-----	11.5000	33.7472	11.249	67.689
1333.00	-----	12.0000	35.2473	11.749	79.438

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2   = Lower and upper elevations of the increment
       Area1,Area2   = Areas computed for EL1, EL2, respectively
       Volume   = Incremental volume between EL1 and EL2

```
Elevation   Planimeter    Area    A1+A2+sqr(A1*A2)  Volume    Volume Sum
   (ft)      (sq.in)     (acres)      (acres)       (ac-ft)    (ac-ft)
--------------------------------------------------------------------------
  1325.00     -----      1.8000        .0000          .000       .000
  1326.00     -----      2.1000       5.8442         1.948      1.948
  1327.00     -----      2.4000       6.7450         2.248      4.196
  1328.00     -----      2.6000       7.4980         2.499      6.696
  1329.00     -----      2.8000       8.0981         2.699      9.395
  1330.00     -----      3.0000       8.6983         2.899     12.295
  1331.00     -----      3.2000       9.2984         3.099     15.394
  1332.00     -----      3.4000       9.8985         3.299     18.694
  1333.00     -----      3.6000      10.4986         3.500     22.193
```

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2   = Lower and upper elevations of the increment
       Area1,Area2 = Areas computed for EL1, EL2, respectively
       Volume   = Incremental volume between EL1 and EL2

Index of Starting Page Numbers for ID Names