

GBA P.N. 12454

Mercer Parkway #1

7/10/2012

# DETENTION AND WATER QUALITY REPORT



**GBA**

This report summarizes the assumptions, calculations and design values that were made in designing the detention basin for the Mercer Parkway #1 (Sherman Towing) project.

The water quality volume was determined to be 4,120 cf per 405.247.C.2 of the Municipal Code.

The 2-year sedimentation volume was determined to be 465 cf from Figure 1 of appendix D to Chapter 405 of the Municipal Code.

The SCS hydrographs were developed for the 2-, 15-, 25-, and 100-year storms. Pre-development and post-development peak flows were developed using the drainage areas shown in Figure 1. Because the project is located in the Peruque Creek Watershed, the 100-year storm was used to design the detention facility. The pre-development peak flow was determined and the detention structures were designed so that the post-development peak flow would not exceed this. The PI factors were taken from City municipal code, section 405.230.C.6. All areas except grass were considered to be 100% impervious commercial/industrial.

Table 1 summarizes the values that were determined for design purposes. Table 2 summarizes the pre- and post-development flows for each design storm.

Figure 2 shows a detail of the outlet structure.

Peak flow and other supporting documents are included at the end of this report.

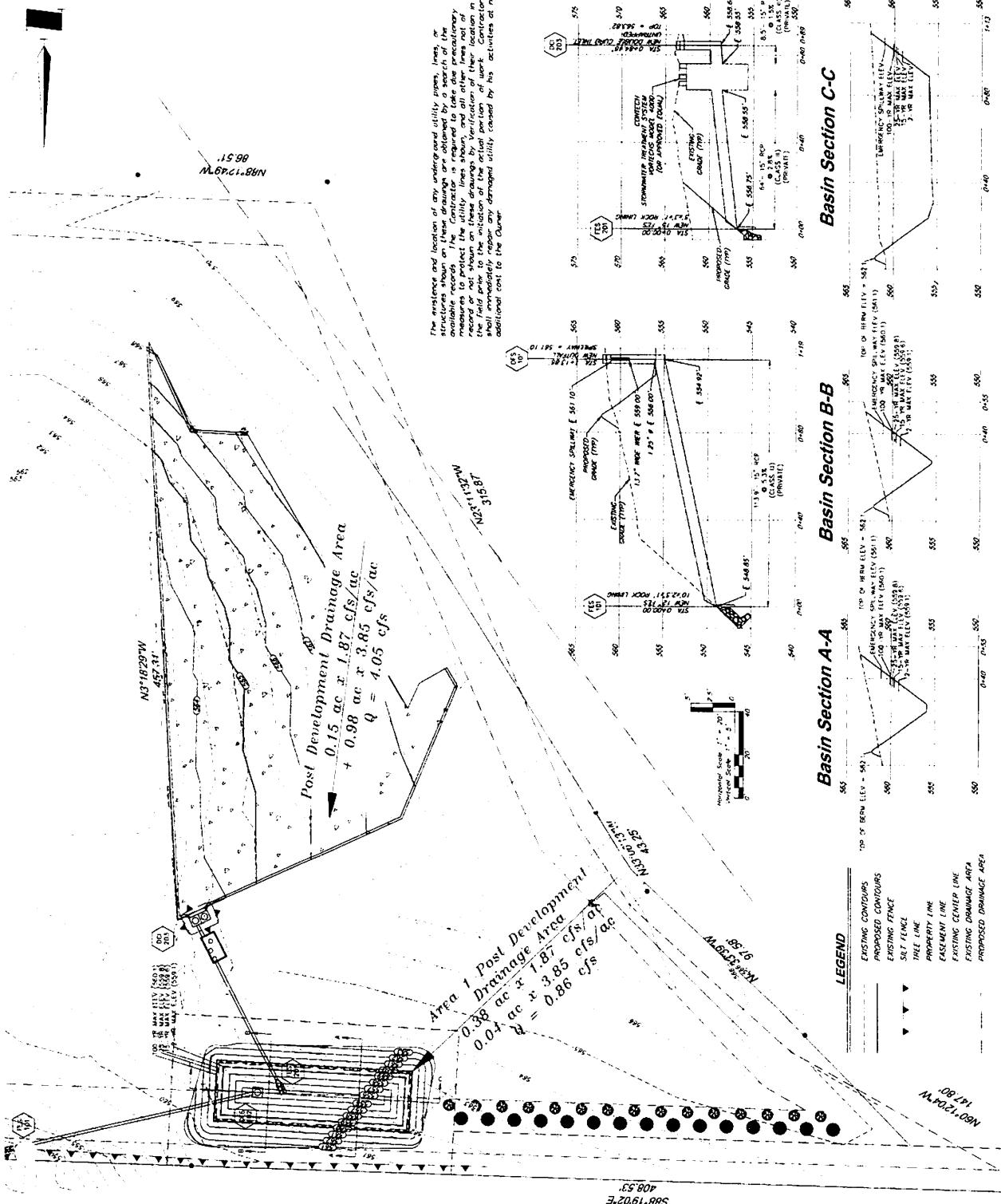
**Table 1 Design Summary (100-year)**

Total Runoff (cf)	40876.00
Total Runoff (acre-ft)	0.29
Area (acres)	1.55
Runoff (in)	2.24
Max. Stage	<b>560.10</b>
Max. Stage	<b>560.20</b> with low-flow orifice blocked
Max. Det. Volume (acre-ft)	0.16
Max. Det. Volume (cu ft)	7096.38
Detention Volume per Acre	4578.31
Max. Discharge (cfs)	<b>4.57</b>
Max. Discharge per Acre (cfs/acre)	2.95
<b>100-year peak runoff (cfs)</b>	<b>7.77</b>

	FL Elevation	
Water Quality dia (in)	1.25	556
Primary outlet width (in)	13.7	559
Emergency spillway width (ft)	26.09	561.10
Top elevation of berm		561.4
Top elevation of outlet structure		560.5

**Table 2 Peak Runoff**

	Interval, yrs / Q, cfs			
	2	15	25	100
Total Pre-development	1.69	2.90	3.58	4.57
Total Post-development	3.02	4.92	6.07	7.77
Peak Outflow from Detention	0.19	1.88	2.86	4.57



Basin Section C-C

*Basin Section B-B*

Basin Section A-A

CEC 10

**SECRET** **3 of 6**

Storage Area Name  
and Street Number Address  
1100 W. 20th  
Ogallala, SD  
**SECRET** **NUMBER P**

प्राचीन विजयप



2225 S Main, Ste 200  
O'Fallon, Missouri 63366

2225 S Main, Ste 200  
Off Fallon, Missouri 63366  
6 3 6 . 2 4 0 2 4 4 4  
[www.gbatteam.com](http://www.gbatteam.com)

3.7 W X 24" H CUI-OUT  
(FACE OR BOX OUT)

3.7 W X 24" H CUI-OUT  
(FACE OF BOX ONLY)

TRASH RACK WINGS (Typ) -

This technical drawing illustrates a trash rack with the following details:

- Dimensions:** The overall width is 10' 0" (120 inches), and the height is 10' 0" (120 inches).
- Material:** The trash rack is made of **1/2" x 1-1/2" STAINLESS STEEL**.
- Construction:** It features a **1/2" x 1-1/2" STAINLESS STEEL** frame with **1/2" x 1-1/2" STAINLESS STEEL** diagonal bracing.
- Bottom:** The bottom is constructed from **1/2" x 1-1/2" STAINLESS STEEL** bars spaced at **1-1/2"**.
- Top:** The top is made of **1/2" x 1-1/2" STAINLESS STEEL** bars spaced at **1-1/2"**.
- Hinges:** The rack is secured with **TRASH RACK HINGES (TPP)**.
- Base Extents:** The base extends **12"** past either end of the rack.

## OUTLET RISER STRUCTURE (NTS)

**Mercer Parkway #1**

**APPENDIX E - CALCULATIONS**

**NOTES**

- 1 TRASH RACKS SHALL BE STAINLESS STEEL, 1/2" THICK, STAINLESS STEEL PLATE, 1/4" THICK, AND STAINLESS STEEL ANCHORS. THE TOPS SHALL BE ROUNDED INSIDE A CLEAR DISTANCE OF 8' BETWEEN ROWS OF TRASH RACKS AND FLOR OF ROAD STRUCTURE. THE BOTTOM OF TRASH RACKS SHALL BE REINFORCED TO THE SIDE WALLS OF THE DITCH TURF WITH 10# GA REINFORCEMENT. THE OUTLET TURF WITH 10# GA REINFORCEMENT. THE OUTLET TURF SHALL BE LOCATED A MINIMUM OF 10' FROM THE OUTLET TURF OF THE PREVIOUS TRASH RACK. THE OUTLET TURF OF THE PREVIOUS TRASH RACK SHALL BE APPROXIMATELY 10' FROM THE OUTLET TURF OF THE CURRENT TRASH RACK. THE OUTLET TURF OF THE CURRENT TRASH RACK SHALL BE APPROXIMATELY 10' FROM THE OUTLET TURF OF THE PREVIOUS TRASH RACK.
- 2 TRASH RACKS SHALL BE STAINLESS STEEL, 1/2" THICK, STAINLESS STEEL PLATE, 1/4" THICK, AND STAINLESS STEEL ANCHORS. THE TOPS SHALL BE ROUNDED INSIDE A CLEAR DISTANCE OF 8' BETWEEN ROWS OF TRASH RACKS AND FLOR OF ROAD STRUCTURE. THE BOTTOM OF TRASH RACKS SHALL BE REINFORCED TO THE SIDE WALLS OF THE DITCH TURF WITH 10# GA REINFORCEMENT. THE OUTLET TURF WITH 10# GA REINFORCEMENT. THE OUTLET TURF SHALL BE LOCATED A MINIMUM OF 10' FROM THE OUTLET TURF OF THE PREVIOUS TRASH RACK. THE OUTLET TURF OF THE PREVIOUS TRASH RACK SHALL BE APPROXIMATELY 10' FROM THE OUTLET TURF OF THE CURRENT TRASH RACK. THE OUTLET TURF OF THE CURRENT TRASH RACK SHALL BE APPROXIMATELY 10' FROM THE OUTLET TURF OF THE PREVIOUS TRASH RACK.
- 3 TRASH RACKS SHALL BE STAINLESS STEEL, 1/2" THICK, STAINLESS STEEL PLATE, 1/4" THICK, AND STAINLESS STEEL ANCHORS. THE TOPS SHALL BE ROUNDED INSIDE A CLEAR DISTANCE OF 8' BETWEEN ROWS OF TRASH RACKS AND FLOR OF ROAD STRUCTURE. THE BOTTOM OF TRASH RACKS SHALL BE REINFORCED TO THE SIDE WALLS OF THE DITCH TURF WITH 10# GA REINFORCEMENT. THE OUTLET TURF WITH 10# GA REINFORCEMENT. THE OUTLET TURF SHALL BE LOCATED A MINIMUM OF 10' FROM THE OUTLET TURF OF THE PREVIOUS TRASH RACK. THE OUTLET TURF OF THE PREVIOUS TRASH RACK SHALL BE APPROXIMATELY 10' FROM THE OUTLET TURF OF THE CURRENT TRASH RACK. THE OUTLET TURF OF THE CURRENT TRASH RACK SHALL BE APPROXIMATELY 10' FROM THE OUTLET TURF OF THE PREVIOUS TRASH RACK.
- 4 INSTEAD OF TRASH RACKS, THE CONTRACTOR MAY USE STAINLESS STEEL GIRDERS SPACED A MAXIMUM OF 10' ON CENTER WITH THE FIRST ROW NO MORE THAN 24" FROM THE SIDE LINE.
- 5 CONTRACTOR IS TO ENSURE SHOT DOWNGEES, DETERING THE OVERHANG

The seal of the State of Missouri, featuring a circular design with "THE GREAT SEAL OF THE STATE OF MISSOURI" around the perimeter and a central figure.

PARSONS 2012

City of O'Fallon Commemorative  
June 2012  
City of O'Fallon Commemorative

PROJECT SHARE 9

6/26/2012

USA  
CRAVEN  
USA

Singer File

5 OF 6

گلستان شاعر احمد شفیعی کاظمی

**Peak flows:**

		Interval, yrs / Factor					
		Area, ac	2	15	25	50	100
Parks	5% impervious		1.09	1.87	2.31	2.61	2.95
Commercial and Industrial	100% impervious		2.39	3.85	4.75	5.38	6.08
		Q, cfs					
Area 1 Pre-development							
Parks		0.42	0.46	0.79	0.97	1.10	1.24
Commercial		0	0.00	0.00	0.00	0.00	0.00
Total		0.42	0.46	0.79	0.97	1.10	1.24
Area 1 Post-development							
Parks		0.38	0.41	0.71	0.87	0.99	1.12
Commercial		0.04	0.10	0.16	0.20	0.22	0.25
Total		0.42	0.51	0.87	1.07	1.21	1.37
Area 2 Pre-development							
Parks		1.13	1.23	2.11	2.61	2.95	3.33
Commercial and Industrial		0	0.00	0.00	0.00	0.00	0.00
Total		1.13	1.23	2.11	2.61	2.95	3.33
Area 2 Post-development							
Parks		0.15	0.16	0.28	0.35	0.39	0.44
Commercial and Industrial		0.98	2.34	3.77	4.66	5.27	5.96
Total		1.13	2.51	4.05	5.00	5.66	6.40
Total Pre-development		1.55	1.69	2.90	3.58	4.05	4.57
Total Post-development		1.55	3.02	4.92	6.07	6.88	7.77

**Rational C coefficient:****2 year sedimentation:**

Impervious	1.02	0.66	150 cf/ac/yr=>	232.5 1 yr	
Pervious	0.53	0.34		465 2 yr	
Total	1.55				

**Water quality volume:**

$$WQv = [(P)(Rv)(A)] / 12$$

Rv	0.643		
P	1.14		
A	1.55		
WQv	0.09	0.73	4125.79
	ac-ft	in	cf
	0.05		
	cfs		

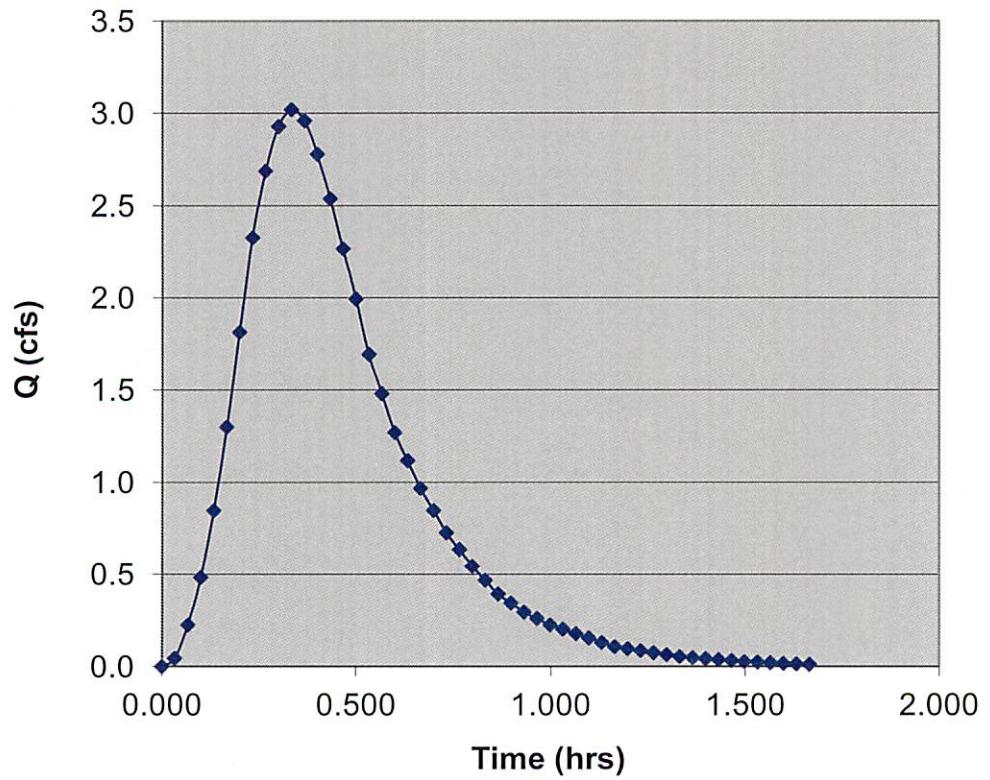
**Project Location**  
**Date** 11/29/11

### SCS Dimensionless Unit Hydrograph with 2-Year Peak Flow

	<b>Time to Peak (min)</b>		<b>Peak Q (cfs)</b>	
	<b>20</b>		<b>3.02</b>	
t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT <sup>3</sup> )
0	0.000	0.000	0.0	0
0.1	0.015	0.033	0.0	2.7
0.2	0.075	0.067	0.2	16.3
0.3	0.160	0.100	0.5	42.6
0.4	0.280	0.133	0.8	79.7
0.5	0.430	0.167	1.3	128.7
0.6	0.600	0.200	1.8	186.6
0.7	0.770	0.233	2.3	248.2
0.8	0.890	0.267	2.7	300.8
0.9	0.970	0.300	2.9	337.0
1	1.000	0.333	3.0	357.0
1.1	0.980	0.367	3.0	358.8
1.2	0.920	0.400	2.8	344.3
1.3	0.840	0.433	2.5	318.9
1.4	0.750	0.467	2.3	288.1
1.5	0.660	0.500	2.0	255.5
1.6	0.560	0.533	1.7	221.1
1.7	0.490	0.567	1.5	190.3
1.8	0.420	0.600	1.3	164.9
1.9	0.370	0.633	1.1	143.1
2	0.320	0.667	1.0	125.0
2.1	0.280	0.700	0.8	108.7
2.2	0.240	0.733	0.7	94.2
2.3	0.210	0.767	0.6	81.5
2.4	0.180	0.800	0.5	70.7
2.5	0.155	0.833	0.5	60.7
2.6	0.130	0.867	0.4	51.6
2.7	0.114	0.900	0.3	44.2
2.8	0.098	0.933	0.3	38.4
2.9	0.087	0.967	0.3	33.4
3	0.075	1.000	0.2	29.3
3.1	0.067	1.033	0.2	25.8
3.2	0.059	1.067	0.2	22.9
3.3	0.052	1.100	0.2	20.1
3.4	0.044	1.133	0.1	17.3
3.5	0.036	1.167	0.1	14.5
3.6	0.032	1.200	0.1	12.4
3.7	0.029	1.233	0.1	11.1
3.8	0.025	1.267	0.1	9.8
3.9	0.022	1.300	0.1	8.5
4	0.018	1.333	0.1	7.2
4.1	0.016	1.367	0.0	6.2
4.2	0.014	1.400	0.0	5.5

t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT <sup>3</sup> )
4.3	0.013	1.433	0.0	4.9
4.4	0.011	1.467	0.0	4.2
4.5	0.009	1.500	0.0	3.6
4.6	0.008	1.533	0.0	3.1
4.7	0.007	1.567	0.0	2.7
4.8	0.006	1.600	0.0	2.4
4.9	0.005	1.633	0.0	2.0
5	0.004	1.667	0.0	1.6
		Total		4908.2

### Hydrograph - SCS Distribution



**Project Location**  
**Date** 11/29/11

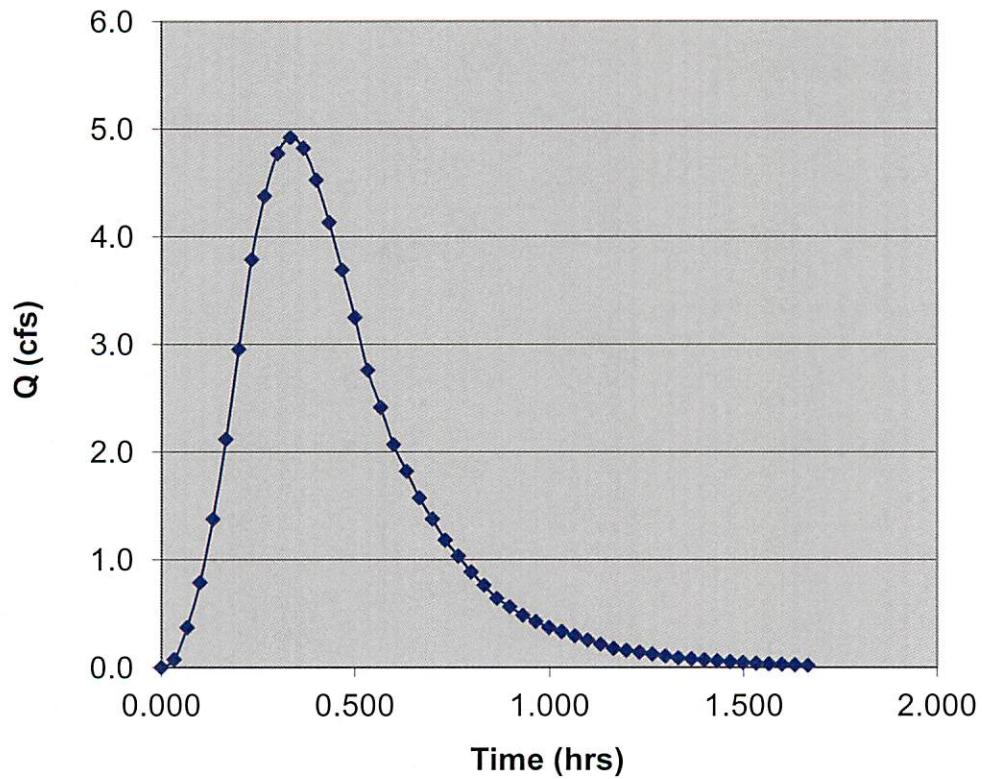
**SCS Dimensionless Unit Hydrograph with 15-Year Peak Flow**

Time to Peak (min)	Peak Q (cfs)
20	4.92

t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT^3)
0	0.000	0.000	0.0	0
0.1	0.015	0.033	0.1	4.4
0.2	0.075	0.067	0.4	26.6
0.3	0.160	0.100	0.8	69.4
0.4	0.280	0.133	1.4	129.9
0.5	0.430	0.167	2.1	209.6
0.6	0.600	0.200	3.0	304.1
0.7	0.770	0.233	3.8	404.4
0.8	0.890	0.267	4.4	490.0
0.9	0.970	0.300	4.8	549.1
1	1.000	0.333	4.9	581.5
1.1	0.980	0.367	4.8	584.5
1.2	0.920	0.400	4.5	560.9
1.3	0.840	0.433	4.1	519.6
1.4	0.750	0.467	3.7	469.4
1.5	0.660	0.500	3.2	416.2
1.6	0.560	0.533	2.8	360.1
1.7	0.490	0.567	2.4	310.0
1.8	0.420	0.600	2.1	268.6
1.9	0.370	0.633	1.8	233.2
2	0.320	0.667	1.6	203.7
2.1	0.280	0.700	1.4	177.1
2.2	0.240	0.733	1.2	153.5
2.3	0.210	0.767	1.0	132.8
2.4	0.180	0.800	0.9	115.1
2.5	0.155	0.833	0.8	98.9
2.6	0.130	0.867	0.6	84.1
2.7	0.114	0.900	0.6	72.0
2.8	0.098	0.933	0.5	62.6
2.9	0.087	0.967	0.4	54.5
3	0.075	1.000	0.4	47.7
3.1	0.067	1.033	0.3	42.0
3.2	0.059	1.067	0.3	37.4
3.3	0.052	1.100	0.3	32.8
3.4	0.044	1.133	0.2	28.2
3.5	0.036	1.167	0.2	23.6
3.6	0.032	1.200	0.2	20.2
3.7	0.029	1.233	0.1	18.1
3.8	0.025	1.267	0.1	15.9
3.9	0.022	1.300	0.1	13.8
4	0.018	1.333	0.1	11.7
4.1	0.016	1.367	0.1	10.1
4.2	0.014	1.400	0.1	9.0

t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT <sup>3</sup> )
4.3	0.013	1.433	0.1	8.0
4.4	0.011	1.467	0.1	6.9
4.5	0.009	1.500	0.0	5.8
4.6	0.008	1.533	0.0	5.0
4.7	0.007	1.567	0.0	4.4
4.8	0.006	1.600	0.0	3.8
4.9	0.005	1.633	0.0	3.2
5	0.004	1.667	0.0	2.7
Total				7996.1

### Hydrograph - SCS Distribution



**Project Location**  
**Date** 11/29/11

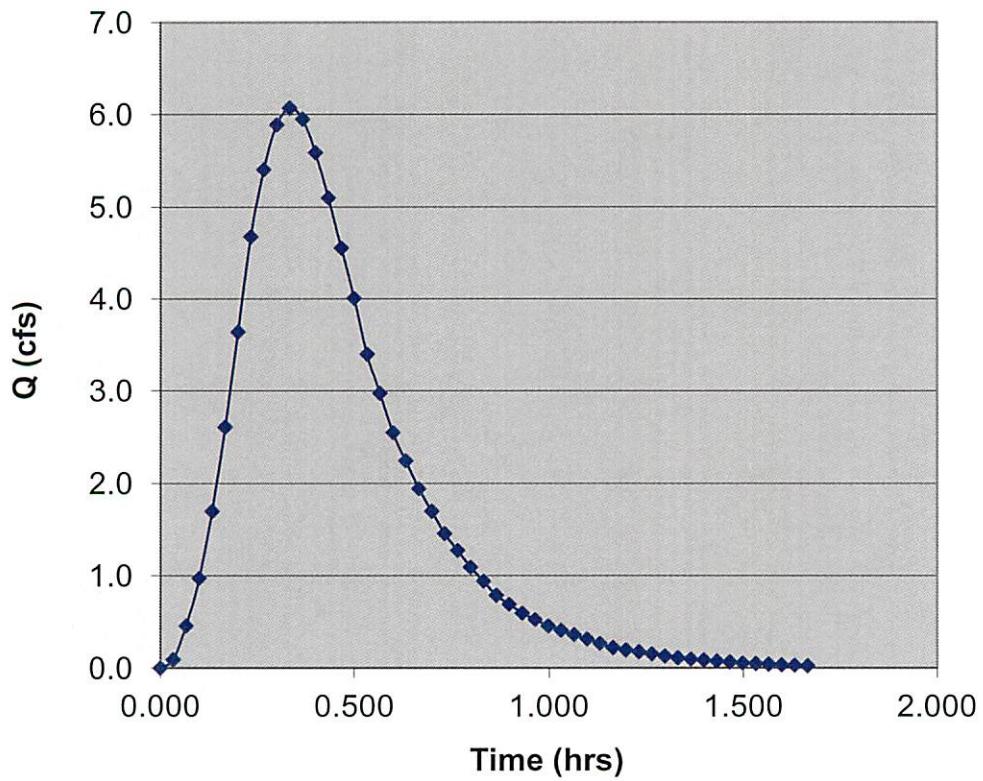
### SCS Dimensionless Unit Hydrograph with 25-Year Peak Flow

Time to Peak (min)	Peak Q (cfs)
20	6.07

t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT <sup>A3</sup> )
0	0.000	0.000	0.0	0
0.1	0.015	0.033	0.1	5.5
0.2	0.075	0.067	0.5	32.8
0.3	0.160	0.100	1.0	85.6
0.4	0.280	0.133	1.7	160.2
0.5	0.430	0.167	2.6	258.6
0.6	0.600	0.200	3.6	375.1
0.7	0.770	0.233	4.7	499.0
0.8	0.890	0.267	5.4	604.6
0.9	0.970	0.300	5.9	677.4
1	1.000	0.333	6.1	717.5
1.1	0.980	0.367	5.9	721.1
1.2	0.920	0.400	5.6	692.0
1.3	0.840	0.433	5.1	641.0
1.4	0.750	0.467	4.6	579.1
1.5	0.660	0.500	4.0	513.5
1.6	0.560	0.533	3.4	444.3
1.7	0.490	0.567	3.0	382.4
1.8	0.420	0.600	2.5	331.4
1.9	0.370	0.633	2.2	287.7
2	0.320	0.667	1.9	251.3
2.1	0.280	0.700	1.7	218.5
2.2	0.240	0.733	1.5	189.4
2.3	0.210	0.767	1.3	163.9
2.4	0.180	0.800	1.1	142.0
2.5	0.155	0.833	0.9	122.0
2.6	0.130	0.867	0.8	103.8
2.7	0.114	0.900	0.7	88.9
2.8	0.098	0.933	0.6	77.2
2.9	0.087	0.967	0.5	67.2
3	0.075	1.000	0.5	58.8
3.1	0.067	1.033	0.4	51.8
3.2	0.059	1.067	0.4	46.1
3.3	0.052	1.100	0.3	40.4
3.4	0.044	1.133	0.3	34.7
3.5	0.036	1.167	0.2	29.1
3.6	0.032	1.200	0.2	24.9
3.7	0.029	1.233	0.2	22.3
3.8	0.025	1.267	0.2	19.7
3.9	0.022	1.300	0.1	17.0
4	0.018	1.333	0.1	14.4
4.1	0.016	1.367	0.1	12.5
4.2	0.014	1.400	0.1	11.1

t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT <sup>3</sup> )
4.3	0.013	1.433	0.1	9.8
4.4	0.011	1.467	0.1	8.5
4.5	0.009	1.500	0.1	7.2
4.6	0.008	1.533	0.0	6.2
4.7	0.007	1.567	0.0	5.5
4.8	0.006	1.600	0.0	4.7
4.9	0.005	1.633	0.0	4.0
5	0.004	1.667	0.0	3.3
Total				9865.1

### Hydrograph - SCS Distribution

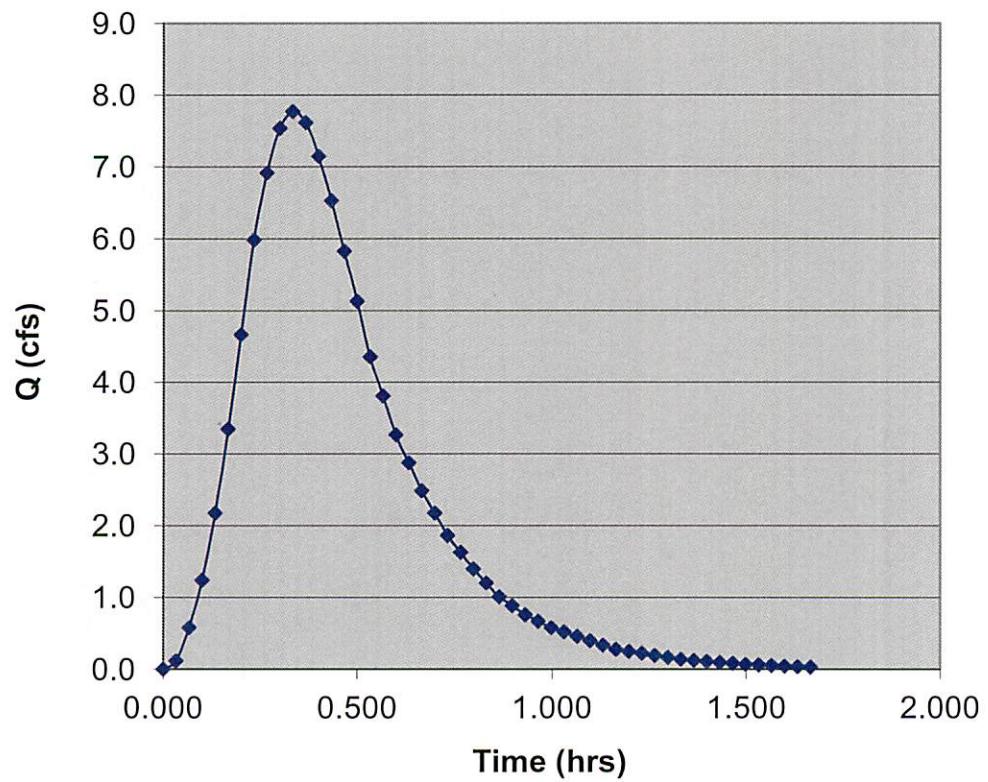


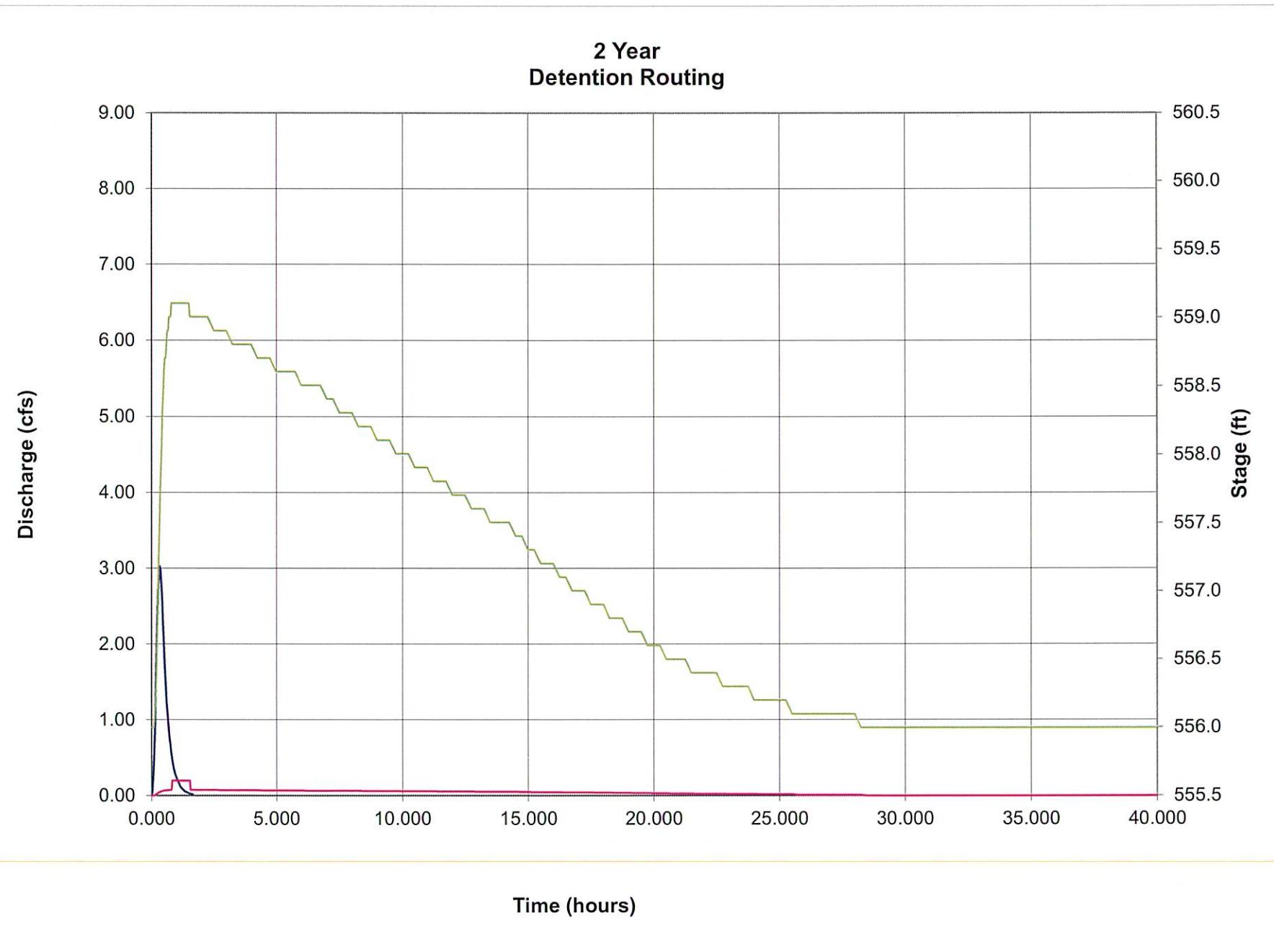
**Project****Location****Date** 11/29/11**SCS Dimensionless Unit Hydrograph with 100-Year Peak Flow**

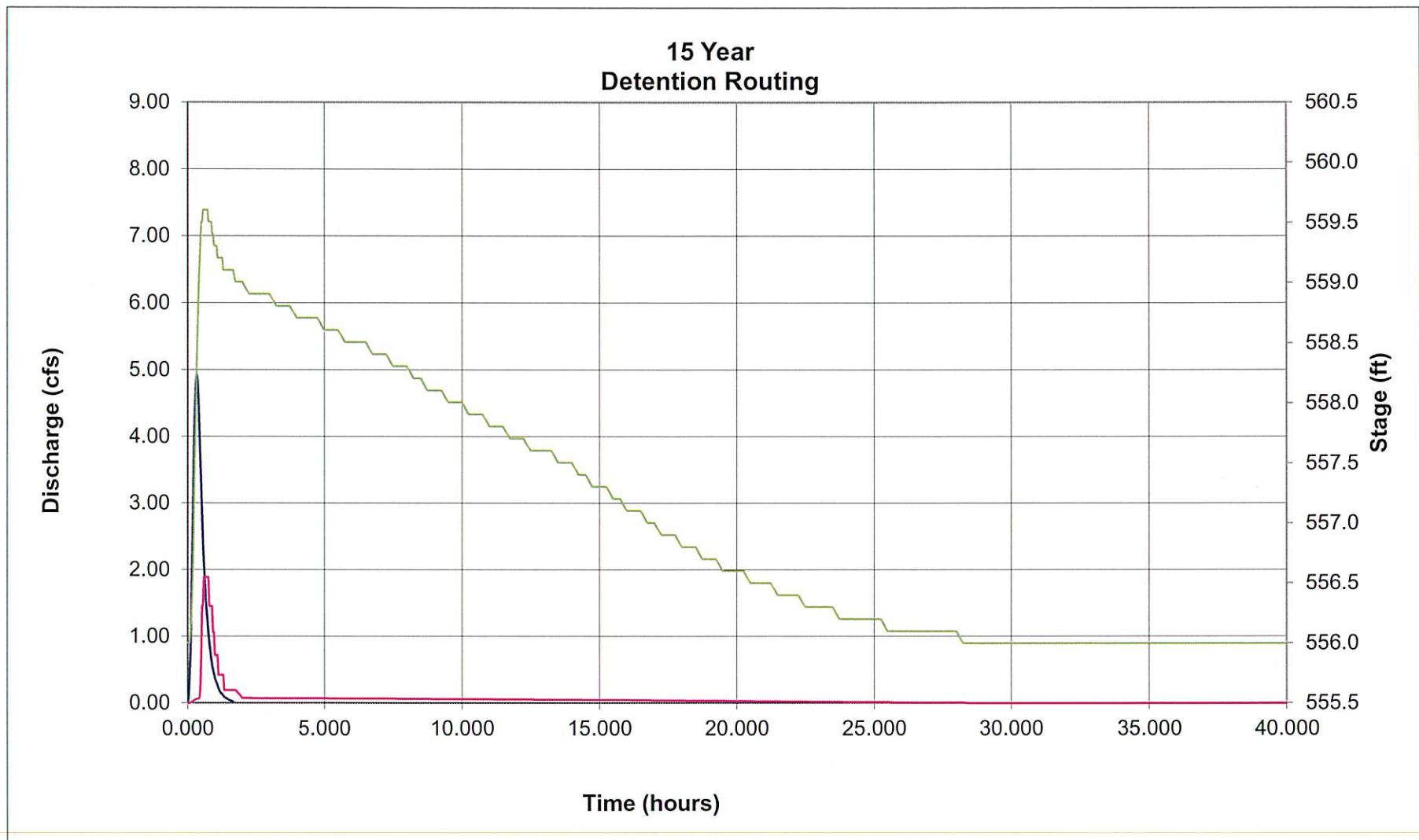
t/tp	Q/Qp	Time (hours)	Time to Peak (min)	Peak Q (cfs)	Runoff (FT <sup>3</sup> )
			20	7.77	
0	0.000	0.000	0.0	0.0	0
0.1	0.015	0.033	0.1	0.1	7.0
0.2	0.075	0.067	0.6	0.6	42.0
0.3	0.160	0.100	1.2	1.2	109.6
0.4	0.280	0.133	2.2	2.2	205.1
0.5	0.430	0.167	3.3	3.3	331.0
0.6	0.600	0.200	4.7	4.7	480.2
0.7	0.770	0.233	6.0	6.0	638.7
0.8	0.890	0.267	6.9	6.9	773.9
0.9	0.970	0.300	7.5	7.5	867.1
1	1.000	0.333	7.8	7.8	918.4
1.1	0.980	0.367	7.6	7.6	923.1
1.2	0.920	0.400	7.1	7.1	885.8
1.3	0.840	0.433	6.5	6.5	820.5
1.4	0.750	0.467	5.8	5.8	741.3
1.5	0.660	0.500	5.1	5.1	657.3
1.6	0.560	0.533	4.4	4.4	568.8
1.7	0.490	0.567	3.8	3.8	489.5
1.8	0.420	0.600	3.3	3.3	424.2
1.9	0.370	0.633	2.9	2.9	368.3
2	0.320	0.667	2.5	2.5	321.7
2.1	0.280	0.700	2.2	2.2	279.7
2.2	0.240	0.733	1.9	1.9	242.4
2.3	0.210	0.767	1.6	1.6	209.8
2.4	0.180	0.800	1.4	1.4	181.8
2.5	0.155	0.833	1.2	1.2	156.2
2.6	0.130	0.867	1.0	1.0	132.9
2.7	0.114	0.900	0.9	0.9	113.8
2.8	0.098	0.933	0.8	0.8	98.8
2.9	0.087	0.967	0.7	0.7	86.0
3	0.075	1.000	0.6	0.6	75.3
3.1	0.067	1.033	0.5	0.5	66.3
3.2	0.059	1.067	0.5	0.5	59.0
3.3	0.052	1.100	0.4	0.4	51.7
3.4	0.044	1.133	0.3	0.3	44.5
3.5	0.036	1.167	0.3	0.3	37.2
3.6	0.032	1.200	0.3	0.3	31.9
3.7	0.029	1.233	0.2	0.2	28.5
3.8	0.025	1.267	0.2	0.2	25.2
3.9	0.022	1.300	0.2	0.2	21.8
4	0.018	1.333	0.1	0.1	18.5
4.1	0.016	1.367	0.1	0.1	15.9
4.2	0.014	1.400	0.1	0.1	14.3

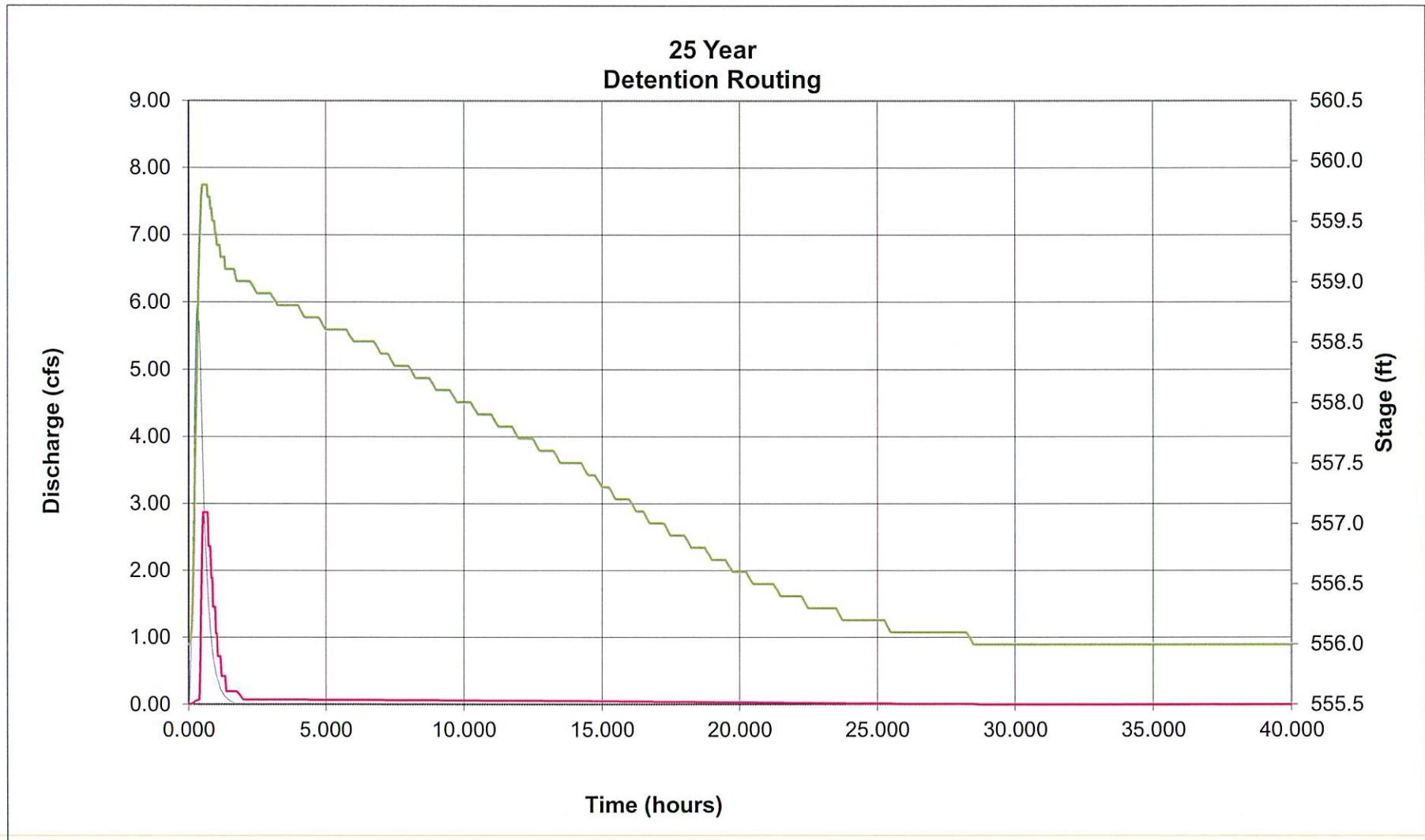
t/tp	Q/Qp	Time (hours)	Discharge (cfs)	Runoff (FT^3)
4.3	0.013	1.433	0.1	12.6
4.4	0.011	1.467	0.1	10.9
4.5	0.009	1.500	0.1	9.2
4.6	0.008	1.533	0.1	7.9
4.7	0.007	1.567	0.1	7.0
4.8	0.006	1.600	0.0	6.1
4.9	0.005	1.633	0.0	5.1
5	0.004	1.667	0.0	4.2
Total				12628.0

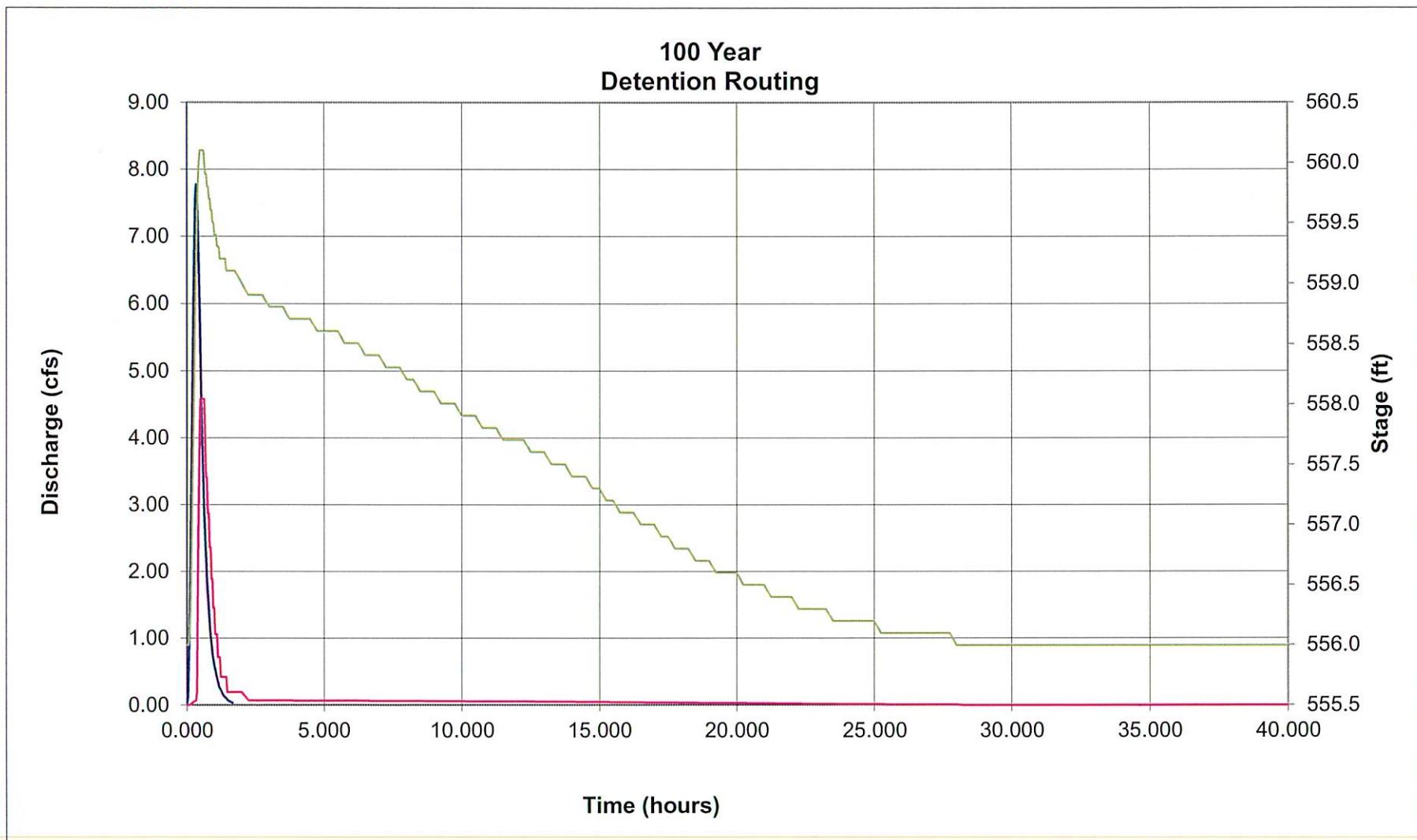
### Hydrograph - SCS Distribution











**Project****Location**

Date 11/29/11

**Stage/Volume Relationship**

Stage	Surface Area (sf)	Storage (cf)	Storage (acre-ft)
<b>556</b>	<b>260.46</b>	0	0.00
557	<b>711.14</b>	485.8	0.01
558	<b>1233.83</b>	1458.285	0.03
559	<b>1828.51</b>	2989.455	0.07
560	<b>2495.2</b>	5151.31	0.12
561	<b>3229.6</b>	8013.71	0.18
562	<b>4017.79</b>	11637.405	0.27

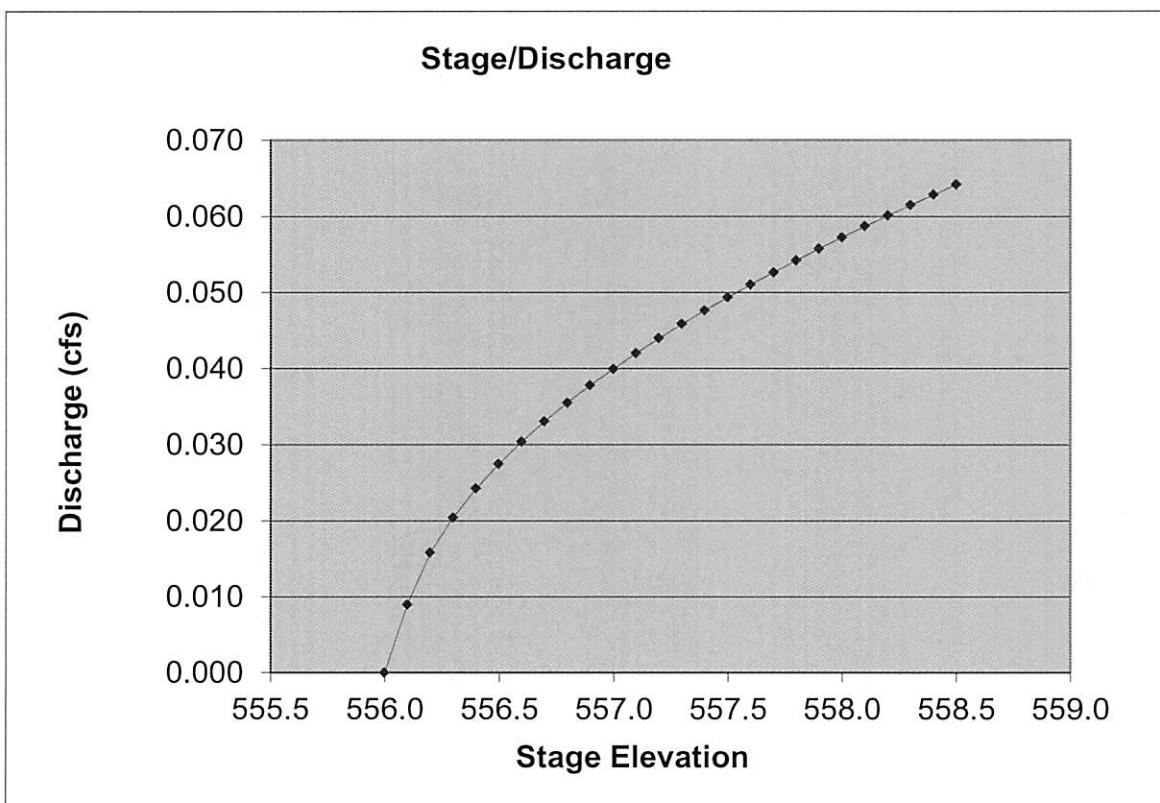
**Stage/Discharge Relationship**

$$Q=0.6 \cdot A_o \cdot (2 \cdot g \cdot h)^{0.5}$$

Orifice Plate

Diameter	Ao (sf)	FL Elev	W	H	FL Elev	TOTAL
1.25	0.008522115	556	13.7		559	Q
Stage	h	Q	h	Ao	Q	
556.0	0.00	0.00	0.00		0.00	0.000
556.1	0.05	0.01	0.00		0.00	0.009
556.2	0.15	0.02	0.00		0.00	0.016
556.3	0.25	0.02	0.00		0.00	0.020
556.4	0.35	0.02	0.00		0.00	0.024
556.5	0.45	0.03	0.00		0.00	0.027
556.6	0.55	0.03	0.00		0.00	0.030
556.7	0.65	0.03	0.00		0.00	0.033
556.8	0.75	0.04	0.00		0.00	0.035
556.9	0.85	0.04	0.00		0.00	0.038
557.0	0.95	0.04	0.00		0.00	0.040
557.1	1.05	0.04	0.00		0.00	0.042
557.2	1.15	0.04	0.00		0.00	0.044
557.3	1.25	0.05	0.00		0.00	0.046
557.4	1.35	0.05	0.00		0.00	0.048
557.5	1.45	0.05	0.00		0.00	0.049
557.6	1.55	0.05	0.00		0.00	0.051
557.7	1.65	0.05	0.00		0.00	0.053
557.8	1.75	0.05	0.00		0.00	0.054
557.9	1.85	0.06	0.00		0.00	0.056
558.0	1.95	0.06	0.00		0.00	0.057
558.1	2.05	0.06	0.00		0.00	0.059
558.2	2.15	0.06	0.00		0.00	0.060
558.3	2.25	0.06	0.00		0.00	0.062
558.4	2.35	0.06	0.00		0.00	0.063
558.5	2.45	0.06	0.00		0.00	0.064
558.6	2.55	0.07	0.00		0.00	0.066
558.7	2.65	0.07	0.00		0.00	0.067
558.8	2.75	0.07	0.00		0.00	0.068
558.9	2.85	0.07	0.00		0.00	0.069
559.0	2.95	0.07	0.0	0.000	0.00	0.070
559.1	3.05	0.07	0.1	0.114	0.12	0.195
559.2	3.15	0.07	0.1	0.228	0.35	0.420
559.3	3.25	0.07	0.2	0.343	0.64	0.713
559.4	3.35	0.08	0.2	0.457	0.98	1.058
559.5	3.45	0.08	0.3	0.571	1.37	1.450
559.6	3.55	0.08	0.3	0.685	1.81	1.884
559.7	3.65	0.08	0.4	0.799	2.28	2.355
559.8	3.75	0.08	0.4	0.913	2.78	2.861
559.9	3.85	0.08	0.5	1.028	3.32	3.399
560.0	3.95	0.08	0.5	1.142	3.89	3.969
560.1	4.05	0.08	0.6	1.256	4.48	4.567
560.2	4.15	0.08	0.6	1.370	5.11	5.193
560.3	4.25	0.08	0.7	1.484	5.76	5.846
560.4	4.35	0.09	0.7	1.598	6.44	6.524

560.5	4.45	0.09	0.8	1.713	7.14	7.227
560.6	4.55	0.09	0.8	1.827	7.87	7.954
560.7	4.65	0.09	0.9	1.941	8.62	8.704
560.8	4.75	0.09	0.9	2.055	9.39	9.476
560.9	4.85	0.09	1.0	2.169	10.18	10.270
561.0	4.95	0.09	1.0	2.283	10.99	11.085
561.1	5.05	0.09	1.1	2.398	11.83	11.921
561.2	5.15	0.09	1.1	2.512	12.68	12.777
561.3	5.25	0.09	1.2	2.626	13.56	13.652
561.4	5.35	0.09	1.2	2.740	14.45	14.547
561.5	5.45	0.10	1.3	2.854	15.36	15.461



## City of O'Fallon – Engineering Department

100 North Main Street  
O'Fallon, Missouri 63366  
www.ofallon.mo.us  
636.379.5556



## Commercial Construction Site Plan Application

(Please Type or Print)

### Subject Property Information:

Property Location: Mercer Parkway #1 Lot 2 Kemmar Court

Name of Proposed Site: Lot 2 Kemmar Court Commercial Construction Site Plan

Site Area: 2.01 acres

Grading Plan Permit # 00-42.05.02 Date 10/06/2011

Date of P&Z Approval: October 27, 2011

Current Zoning: I-2

### Contact Information:

#### Applicant:

Company: Sherman Towing, Inc.  
Contact Person: Dennis Sherman  
Address: 417 Loiselane Drive  
City/State/Zip: O'Fallon, MO 63366  
Phone: 636.240.4400  
Fax:  
E-mail:

#### Property Owner:

Company: Sherman Towing, Inc.  
Contact Person: Dennis Sherman  
Address: 417 Loiselane Drive  
City/State/Zip: O'Fallon, MO 63366  
Phone: 636.240.4400  
Fax:  
E-mail:

#### 24 hour Emergency Contact:

Company: Sherman Towing, Inc.  
Contact Person: Dennis Sherman  
Address: 417 Loiselane Drive  
City/State/Zip: O'Fallon, MO 63366  
Phone: 636.240.4400  
Fax:  
E-mail:

#### Engineer:

Company: GBA  
Contact Person: Matt Auld  
Address: 225 S. Main St., Suite 200  
City/State/Zip: O'Fallon, MO 63366  
Phone: 636.240.2444  
Fax: 636.978.7005  
E-mail: mauld@gbateam.com

This *Commercial Construction Site Plan Application and Checklist* outlines the items typically addressed with an initial submittal of a *Commercial Construction Site Plan*. This checklist is a guide to the generally required information on a *Commercial Construction Site Plan*, but may not be inclusive of all the information that may be required to meet City Code. Please refer to *Chapter 405: Subdivision and Land Development Code*, of the *O'Fallon Municipal Code* for specific plan requirements.

Dennis R. Sherman  
Applicant Signature

12-22-2011  
Date

Dennis R. Sherman  
Owner's Signature

12-22-2011  
Date

### OFFICE USE ONLY

Date of Initial Submittal: \_\_\_\_\_ Permit No.: \_\_\_\_\_ Application Fee Amount: \$ \_\_\_\_\_ Date Paid: \_\_\_\_\_

Escrow Amount (from approved Cost Estimate): \$ \_\_\_\_\_ Date Escrow received: \_\_\_\_\_

MDNR Land Disturbance Permit required for sites 1 acre and larger: Provided (Y) (N) (N/A), Expiration Date \_\_\_\_\_

Application (Approved/Denied) by: \_\_\_\_\_ Date: \_\_\_\_\_ Permit Expiration Date: \_\_\_\_\_