



## **APPENDIX B – HEC-HMS MODEL INPUTS**

- 1. Subbasin Lag Time Calculations**
2. Subbasin Parameters Table
3. NOAA Atlas 14 Point Precipitation Frequency Estimates
4. HEC-HMS Results Table



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C1-1</b>	<b>Tc:</b>	<b>1.3 hr</b>
		<b>Lag:</b>	<b>46 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	<b>1.5</b> 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	<b>Short grass, prairie: 0.15</b>
$n =$	<b>0.15</b> Manning's roughness coefficient
Elev Up =	<b>570</b> ft
Elev Down =	<b>560</b> ft
$L =$	<b>300</b> Length, ft
$S =$	<b>0.033</b> Slope, ft/ft
<b>T =</b>	<b>0.47</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>		<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	<b>Unpaved</b>		
Elev Up =	<b>560</b> ft		
Elev Down =	<b>355</b> ft		
$L =$	<b>5795</b> Length, ft		
$S =$	<b>0.035</b> Slope, ft/ft		
$V =$	<b>3.02</b> Velocity, fps (Use Figure 3-1 TR-55)		
<b>T =</b>	<b>0.53</b> Travel time, (hr)		



**Basin:** C1-1

**Page:** 2

<b>Segment:</b>	<b>3</b>	
Material =	Ditch	
n =	0.02	Manning's n
Elev Up =	355	ft
Elev Down =	341	ft
L =	2715	Length, ft
S =	0.005	Slope, ft/ft
Shape =	Trapezoidal	
Width =	5	ft
Height =	0.5	ft
z =	4	Side slope, 1:z
A =	3.5	Area, ft <sup>2</sup>
P <sub>w</sub> =	9.12	Wetted Perimeter, ft
R <sub>h</sub> =	0.38	Hydraulic Radius, ft
V =	2.76	Velocity, fps
<b>T =</b>	<b>0.27</b>	Travel time, (hr)

**Eq:** 
$$V = \frac{1.49r^{2/3}s^{1/2}}{n}$$



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<b>Basin:</b>	<b>C1-2</b>	<b>Tc:</b>	<b>1.3 hr</b>
		<b>Lag:</b>	<b>45 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	<u>1.52</u> 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	<u>Short grass, prairie: 0.15</u>
n =	<u>0.15</u> Manning's roughness coefficient
Elev Up =	<u>897</u> ft
Elev Down =	<u>889</u> ft
L =	<u>300</u> Length, ft
S =	<u>0.027</u> Slope, ft/ft
<b>T =</b>	<b><u>0.51</u></b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	<u>Paved</u>
Elev Up =	<u>889</u> ft
Elev Down =	<u>643</u> ft
L =	<u>5119</u> Length, ft
S =	<u>0.048</u> Slope, ft/ft
V =	<u>4.45</u> Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b><u>0.32</u></b> Travel time, (hr)



**Basin:** **C1-2**

**Page:** **2**

<b>Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.03	Manning's n
Elev Up =	643	ft
Elev Down =	304	ft
L =	10186	Length, ft
S =	0.033	Slope, ft/ft
Shape =	Trapezoidal	
Width =	40	ft
Height =	1	ft
z =	3	Side slope, 1:z
A =	43	Area, ft <sup>2</sup>
P <sub>w</sub> =	46.32	Wetted Perimeter, ft
R <sub>h</sub> =	0.93	Hydraulic Radius, ft
V =	8.6	Velocity, fps
<b>T =</b>	<b>0.33</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.033	Manning's n
Elev Up =	304	ft
Elev Down =	294	ft
L =	826	Length, ft
S =	0.012	Slope, ft/ft
Shape =	Trapezoidal	
Width =	5	ft
Height =	0.5	ft
z =	4	Side slope, 1:z
A =	3.5	Area, ft <sup>2</sup>
P <sub>w</sub> =	9.12	Wetted Perimeter, ft
R <sub>h</sub> =	0.38	Hydraulic Radius, ft
V =	2.59	Velocity, fps
<b>T =</b>	<b>0.09</b>	Travel time, (hr)



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<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C1-3</b>	<b>Tc:</b>	<b>1.7 hr</b>
		<b>Lag:</b>	<b>61 min</b>

**Sheet Flow:**

$$\text{Eq: } T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$$

$P_2 =$	1.54	2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15	
n =	0.15	Manning's roughness coefficient
Elev Up =	834	ft
Elev Down =	809	ft
L =	300	Length, ft
S =	0.083	Slope, ft/ft
<b>T =</b>	<b>0.32</b>	Travel time, (hr)

**Shallow Concentrated Flow:**

$$\text{Eq: } T = \frac{L}{V} * 3600$$

Surface =	Unpaved	
Elev Up =	809	ft
Elev Down =	763	ft
L =	853	Length, ft
S =	0.054	Slope, ft/ft
V =	3.75	Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.06</b>	Travel time, (hr)



Basin: **C1-3**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}s^{1/2}}{n}$	
Material =	Ditch	
n =	0.04	Manning's n
Elev Up =	763	ft
Elev Down =	321	ft
L =	9904	Length, ft
S =	0.045	Slope, ft/ft
Shape =	Trapezoidal	
Width =	12	ft
Height =	0.5	ft
z =	5	Side slope, 1:z
A =	7.25	Area, ft <sup>2</sup>
P <sub>w</sub> =	17.1	Wetted Perimeter, ft
R <sub>h</sub> =	0.42	Hydraulic Radius, ft
V =	4.43	Velocity, fps
<b>T =</b>	<b>0.621</b>	Travel time, (hr)

<b>Shallow Concentrated Flow:</b>		
<b>Eq:</b>	$T = \frac{L}{V} * 3600$	
Surface =	Unpaved	
Elev Up =	360	ft
Elev Down =	280	ft
L =	5000	Length, ft
S =	0.016	Slope, ft/ft
V =	2.04	Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.68</b>	Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
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<b>Basin:</b>	<b>C1-4</b>	<b>Tc:</b>	<b>1.4 hr</b>
		<b>Lag:</b>	<b>49 min</b>

**31.2**

$$\text{Eq: } T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$$

**P<sub>2</sub>** = 1.52 2-year, 24-hour rainfall (in), NOAA Atlas 14  
**Surface** = Short grass, prairie: 0.15  
**n** = 0.15 Manning's roughness coefficient  
**Elev Up** = 790 ft  
**Elev Down** = 772 ft  
**L** = 300 Length, ft  
**S** = 0.06 Slope, ft/ft  
**T** = **0.37** Travel time, (hr)

**Shallow Concentrated Flow:**

$$\text{Eq: } T = \frac{L}{V} * 3600$$

**Surface** = Unpaved  
**Elev Up** = 772 ft  
**Elev Down** = 660 ft  
**L** = 1355 Length, ft  
**S** = 0.083 Slope, ft/ft  
**V** = 4.65 Velocity, fps (Use Figure 3-1 TR-55)  
**T** = **0.08** Travel time, (hr)





**Basin:** **C1-4**

**Page:** **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.045	Manning's n
Elev Up =	660	ft
Elev Down =	289	ft
L =	9184	Length, ft
S =	0.040	Slope, ft/ft
Shape =	Trapezoidal	
Width =	20	ft
Height =	0.5	ft
z =	5	Side slope, 1:z
A =	11.25	Area, ft <sup>2</sup>
P <sub>w</sub> =	25.1	Wetted Perimeter, ft
R <sub>h</sub> =	0.45	Hydraulic Radius, ft
V =	3.89	Velocity, fps
<b>T =</b>	<b>0.66</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.045	Manning's n
Elev Up =	289	ft
Elev Down =	273	ft
L =	1658	Length, ft
S =	0.010	Slope, ft/ft
Shape =	Trapezoidal	
Width =	50	ft
Height =	0.5	ft
z =	20	Side slope, 1:z
A =	30	Area, ft <sup>2</sup>
P <sub>w</sub> =	70.02	Wetted Perimeter, ft
R <sub>h</sub> =	0.43	Hydraulic Radius, ft
V =	1.89	Velocity, fps
<b>T =</b>	<b>0.24</b>	Travel time, (hr)



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<b>Basin:</b>	<b>C4-1</b>	<b>Tc:</b>	<b>1.2 hr</b>
		<b>Lag:</b>	<b>44 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	<u>1.7</u> 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	<u>Short grass, prairie: 0.15</u>
n =	<u>0.15</u> Manning's roughness coefficient
Elev Up =	<u>1835</u> ft
Elev Down =	<u>1734</u> ft
L =	<u>300</u> Length, ft
S =	<u>0.337</u> Slope, ft/ft
<b>T =</b>	<b><u>0.17</u></b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	<u>Unpaved</u>
Elev Up =	<u>1734</u> ft
Elev Down =	<u>1399</u> ft
L =	<u>1799</u> Length, ft
S =	<u>0.186</u> Slope, ft/ft
V =	<u>6.96</u> Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b><u>0.07</u></b> Travel time, (hr)



Basin: **C4-1**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.05	Manning's n
Elev Up =	1399	ft
Elev Down =	835	ft
L =	5841	Length, ft
S =	0.097	Slope, ft/ft
Shape =	Trapezoidal	
Width =	30	ft
Height =	0.5	ft
z =	4	Side slope, 1:z
A =	16	Area, ft <sup>2</sup>
P <sub>w</sub> =	34.12	Wetted Perimeter, ft
R <sub>h</sub> =	0.47	Hydraulic Radius, ft
V =	5.61	Velocity, fps
<b>T =</b>	<b>0.289</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.05	Manning's n
Elev Up =	835	ft
Elev Down =	519	ft
L =	8615	Length, ft
S =	0.037	Slope, ft/ft
Shape =	Trapezoidal	
Width =	40	ft
Height =	0.5	ft
z =	3	Side slope, 1:z
A =	20.75	Area, ft <sup>2</sup>
P <sub>w</sub> =	43.16	Wetted Perimeter, ft
R <sub>h</sub> =	0.48	Hydraulic Radius, ft
V =	3.51	Velocity, fps
<b>T =</b>	<b>0.682</b>	Travel time, (hr)



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<b>Basin:</b>	<b>C4-2</b>	<b>Tc:</b>	<b>1.1 hr</b>
		<b>Lag:</b>	<b>40 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.72 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
$n =$	0.15 Manning's roughness coefficient
Elev Up =	1935 ft
Elev Down =	1852 ft
$L =$	300 Length, ft
$S =$	0.277 Slope, ft/ft
<b>T =</b>	<b>0.19</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	1852 ft
Elev Down =	1052 ft
$L =$	3826 Length, ft
$S =$	0.209 Slope, ft/ft
$V =$	7.37 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.14</b> Travel time, (hr)



Basin: **C4-2**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}s^{1/2}}{n}$	
Material =	Ditch	
n =	0.06	Manning's n
Elev Up =	1052	ft
Elev Down =	578	ft
L =	6898	Length, ft
S =	0.069	Slope, ft/ft
Shape =	Trapezoidal	
Width =	20	ft
Height =	0.5	ft
z =	6	Side slope, 1:z
A =	11.5	Area, ft <sup>2</sup>
P <sub>w</sub> =	26.08	Wetted Perimeter, ft
R <sub>h</sub> =	0.44	Hydraulic Radius, ft
V =	3.77	Velocity, fps
<b>T =</b>	<b>0.51</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}s^{1/2}}{n}$	
Material =	Ditch	
n =	0.05	Manning's n
Elev Up =	578	ft
Elev Down =	460	ft
L =	3336	Length, ft
S =	0.035	Slope, ft/ft
Shape =	Trapezoidal	
Width =	75	ft
Height =	0.5	ft
z =	2	Side slope, 1:z
A =	38	Area, ft <sup>2</sup>
P <sub>w</sub> =	77.24	Wetted Perimeter, ft
R <sub>h</sub> =	0.49	Hydraulic Radius, ft
V =	3.47	Velocity, fps
<b>T =</b>	<b>0.27</b>	Travel time, (hr)



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<b>Basin:</b>	<b>C5-1</b>	<b>Tc:</b>	<b>1.0 hr</b>
		<b>Lag:</b>	<b>36 min</b>

**31.2**

**Eq:**  $T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$

$P_2 =$  1.92 2-year, 24-hour rainfall (in), NOAA Atlas 14

Surface = Short grass and brush

$n =$  0.25 Manning's roughness coefficient

Elev Up = 2283 ft

Elev Down = 2220 ft

$L =$  300 Length, ft

$S =$  0.21 Slope, ft/ft

**T = 0.3** Travel time, (hr)

**Shallow Concentrated Flow:**

**Eq:**  $T = \frac{L}{V} * 3600$

Surface = Unpaved

Elev Up = 2220 ft

Elev Down = 1653 ft

$L =$  2384 Length, ft

$S =$  0.238 Slope, ft/ft

$V =$  7.87 Velocity, fps (Use Figure 3-1 TR-55)

**T = 0.08** Travel time, (hr)



Basin: **C5-1**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.06	Manning's n
Elev Up =	1653	ft
Elev Down =	1188	ft
L =	4573	Length, ft
S =	0.102	Slope, ft/ft
Shape =	Trapezoidal	
Width =	40	ft
Height =	0.5	ft
z =	9	Side slope, 1:z
A =	22.25	Area, ft <sup>2</sup>
P <sub>w</sub> =	49.06	Wetted Perimeter, ft
R <sub>h</sub> =	0.45	Hydraulic Radius, ft
V =	4.66	Velocity, fps
<b>T =</b>	<b>0.27</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.04	Manning's n
Elev Up =	1188	ft
Elev Down =	873	ft
L =	6321	Length, ft
S =	0.050	Slope, ft/ft
Shape =	Trapezoidal	
Width =	120	ft
Height =	0.5	ft
z =	2	Side slope, 1:z
A =	60.5	Area, ft <sup>2</sup>
P <sub>w</sub> =	122.24	Wetted Perimeter, ft
R <sub>h</sub> =	0.49	Hydraulic Radius, ft
V =	5.18	Velocity, fps
<b>T =</b>	<b>0.34</b>	Travel time, (hr)



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<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C5-2</b>	<b>Tc:</b>	<b>1.1 hr</b>
		<b>Lag:</b>	<b>38 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.73 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass and brush
n =	0.25 Manning's roughness coefficient
Elev Up =	1728 ft
Elev Down =	1664 ft
L =	300 Length, ft
S =	0.213 Slope, ft/ft
<b>T =</b>	<b>0.31</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	1630 ft
Elev Down =	1417 ft
L =	648 Length, ft
S =	0.329 Slope, ft/ft
V =	9.25 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.02</b> Travel time, (hr)





Basin: **C5-2**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}s^{1/2}}{n}$	
Material =	Ditch	
n =	0.045	Manning's n
Elev Up =	1417	ft
Elev Down =	792	ft
L =	4823	Length, ft
S =	0.130	Slope, ft/ft
Shape =	Trapezoidal	
Width =	20	ft
Height =	0.5	ft
z =	3	Side slope, 1:z
A =	10.75	Area, ft <sup>2</sup>
P <sub>w</sub> =	23.16	Wetted Perimeter, ft
R <sub>h</sub> =	0.46	Hydraulic Radius, ft
V =	7.11	Velocity, fps
<b>T =</b>	<b>0.188</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}s^{1/2}}{n}$	
Material =	Ditch	
n =	0.04	Manning's n
Elev Up =	792	ft
Elev Down =	432	ft
L =	8834	Length, ft
S =	0.041	Slope, ft/ft
Shape =	Trapezoidal	
Width =	100	ft
Height =	0.5	ft
z =	20	Side slope, 1:z
A =	55	Area, ft <sup>2</sup>
P <sub>w</sub> =	120.02	Wetted Perimeter, ft
R <sub>h</sub> =	0.46	Hydraulic Radius, ft
V =	4.49	Velocity, fps
<b>T =</b>	<b>0.547</b>	Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C5-3</b>	<b>Tc:</b>	<b>1.1 hr</b>
		<b>Lag:</b>	<b>41 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.73 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
$n =$	0.15 Manning's roughness coefficient
Elev Up =	441 ft
Elev Down =	431 ft
$L =$	300 Length, ft
$S =$	0.033 Slope, ft/ft
<b>T =</b>	<b>0.44</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	431 ft
Elev Down =	374 ft
$L =$	2216 Length, ft
$S =$	0.026 Slope, ft/ft
$V =$	2.6 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.24</b> Travel time, (hr)



Basin: **C5-3**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.045	Manning's n
Elev Up =	374	ft
Elev Down =	268	ft
L =	4620	Length, ft
S =	0.023	Slope, ft/ft
Shape =	Trapezoidal	
Width =	10	ft
Height =	0.5	ft
z =	5	Side slope, 1:z
A =	6.25	Area, ft <sup>2</sup>
P <sub>w</sub> =	15.1	Wetted Perimeter, ft
R <sub>h</sub> =	0.41	Hydraulic Radius, ft
V =	2.77	Velocity, fps
<b>T =</b>	<b>0.463</b>	Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C6-1</b>	<b>Tc:</b>	<b>0.8 hr</b>
		<b>Lag:</b>	<b>27 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.82 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
n =	0.15 Manning's roughness coefficient
Elev Up =	1741 ft
Elev Down =	1667 ft
L =	300 Length, ft
S =	0.247 Slope, ft/ft
<b>T =</b>	<b>0.19</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	1667 ft
Elev Down =	1378 ft
L =	897 Length, ft
S =	0.322 Slope, ft/ft
V =	9.15 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.03</b> Travel time, (hr)



Basin: **C6-1**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.06	Manning's n
Elev Up =	1407	ft
Elev Down =	1090	ft
L =	2101	Length, ft
S =	0.151	Slope, ft/ft
Shape =	Trapezoidal	
Width =	20	ft
Height =	0.5	ft
z =	3	Side slope, 1:z
A =	10.75	Area, ft <sup>2</sup>
P <sub>w</sub> =	23.16	Wetted Perimeter, ft
R <sub>h</sub> =	0.46	Hydraulic Radius, ft
V =	6.9	Velocity, fps
<b>T =</b>	<b>0.08</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.06	Manning's n
Elev Up =	1090	ft
Elev Down =	429	ft
L =	10109	Length, ft
S =	0.065	Slope, ft/ft
Shape =	Trapezoidal	
Width =	40	ft
Height =	1	ft
z =	2	Side slope, 1:z
A =	42	Area, ft <sup>2</sup>
P <sub>w</sub> =	44.47	Wetted Perimeter, ft
R <sub>h</sub> =	0.94	Hydraulic Radius, ft
V =	6.08	Velocity, fps
<b>T =</b>	<b>0.46</b>	Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C6-2</b>	<b>Tc:</b>	<b>1.1 hr</b>
		<b>Lag:</b>	<b>40 min</b>

**31.2**

**Eq:**  $T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$

**P<sub>2</sub>** = 1.68 2-year, 24-hour rainfall (in), NOAA Atlas 14

**Surface** = Short grass, prairie: 0.15

**n** = 0.15 Manning's roughness coefficient

**Elev Up** = 1320 ft

**Elev Down** = 1231 ft

**L** = 300 Length, ft

**S** = 0.297 Slope, ft/ft

**T** = **0.18** Travel time, (hr)

**Shallow Concentrated Flow:**

**Eq:**  $T = \frac{L}{V} * 3600$

**Surface** = Unpaved

**Elev Up** = 1231 ft

**Elev Down** = 784 ft

**L** = 1754 Length, ft

**S** = 0.255 Slope, ft/ft

**V** = 8.15 Velocity, fps (Use Figure 3-1 TR-55)

**T** = **0.06** Travel time, (hr)



Basin: **C6-2**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.04	Manning's n
Elev Up =	784	ft
Elev Down =	426	ft
L =	4323	Length, ft
S =	0.083	Slope, ft/ft
Shape =	Trapezoidal	
Width =	6	ft
Height =	0.5	ft
z =	5	Side slope, 1:z
A =	4.25	Area, ft <sup>2</sup>
P <sub>w</sub> =	11.1	Wetted Perimeter, ft
R <sub>h</sub> =	0.38	Hydraulic Radius, ft
V =	5.63	Velocity, fps
<b>T =</b>	<b>0.21</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.033	Manning's n
Elev Up =	426	ft
Elev Down =	250	ft
L =	8317	Length, ft
S =	0.021	Slope, ft/ft
Shape =	Trapezoidal	
Width =	5	ft
Height =	0.5	ft
z =	3	Side slope, 1:z
A =	3.25	Area, ft <sup>2</sup>
P <sub>w</sub> =	8.16	Wetted Perimeter, ft
R <sub>h</sub> =	0.4	Hydraulic Radius, ft
V =	3.55	Velocity, fps
<b>T =</b>	<b>0.65</b>	Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C6-3</b>	<b>Tc:</b>	<b>1.4 hr</b>
		<b>Lag:</b>	<b>51 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.54 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
$n =$	0.15 Manning's roughness coefficient
Elev Up =	579 ft
Elev Down =	558 ft
$L =$	300 Length, ft
$S =$	0.07 Slope, ft/ft
<b>T =</b>	<b>0.34</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	558 ft
Elev Down =	211 ft
$L =$	11180 Length, ft
$S =$	0.031 Slope, ft/ft
$V =$	2.84 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>1.09</b> Travel time, (hr)





<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C6-4</b>	<b>Tc:</b>	<b>1.3</b> hr
		<b>Lag:</b>	<b>46</b> min

**Sheet Flow:**

$$\text{Eq: } T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$$

$P_2 =$  1.52 2-year, 24-hour rainfall (in), NOAA Atlas 14

Surface = Short grass, prairie: 0.15

$n =$  0.15 Manning's roughness coefficient

Elev Up = 550 ft

Elev Down = 536 ft

$L =$  300 Length, ft

$S =$  0.047 Slope, ft/ft

**T = 0.41** Travel time, (hr)

**Shallow Concentrated Flow:**

$$\text{Eq: } T = \frac{L}{V} * 3600$$

Surface = Unpaved

Elev Up = 536 ft

Elev Down = 261 ft

$L =$  6928 Length, ft

$S =$  0.040 Slope, ft/ft

$V =$  3.23 Velocity, fps (Use Figure 3-1 TR-55)

**T = 0.6** Travel time, (hr)

**Channel Flow Segment:** 1

$$\text{Eq: } V = \frac{1.49r^{2/3} S^{1/2}}{n}$$

Material = Ditch

$n =$  0.033 Manning's n

Elev Up = 261 ft

Elev Down = 212 ft

$L =$  2427 Length, ft

$S =$  0.020 Slope, ft/ft

Shape = Trapezoidal

Width = 1 ft

Height = 0.5 ft

$z =$  50 Side slope, 1:z

$A =$  13 Area, ft<sup>2</sup>

$P_w =$  51.01 Wetted Perimeter, ft

$R_h =$  0.25 Hydraulic Radius, ft

$V =$  2.53 Velocity, fps

**T = 0.266** Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C6-5</b>	<b>Tc:</b>	<b>1.2 hr</b>
		<b>Lag:</b>	<b>44 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.65 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
n =	0.15 Manning's roughness coefficient
Elev Up =	1366 ft
Elev Down =	1294 ft
L =	300 Length, ft
S =	0.24 Slope, ft/ft
<b>T =</b>	<b>0.2</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	1294 ft
Elev Down =	1130 ft
L =	488 Length, ft
S =	0.336 Slope, ft/ft
V =	9.35 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.01</b> Travel time, (hr)



Basin: **C6-5**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.05	Manning's n
Elev Up =	1130	ft
Elev Down =	700	ft
L =	4746	Length, ft
S =	0.091	Slope, ft/ft
Shape =	Trapezoidal	
Width =	20	ft
Height =	1	ft
z =	5	Side slope, 1:z
A =	25	Area, ft <sup>2</sup>
P <sub>w</sub> =	30.2	Wetted Perimeter, ft
R <sub>h</sub> =	0.83	Hydraulic Radius, ft
V =	7.94	Velocity, fps
<b>T =</b>	<b>0.166</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.05	Manning's n
Elev Up =	700	ft
Elev Down =	530	ft
L =	3542	Length, ft
S =	0.048	Slope, ft/ft
Shape =	Trapezoidal	
Width =	40	ft
Height =	1	ft
z =	7	Side slope, 1:z
A =	47	Area, ft <sup>2</sup>
P <sub>w</sub> =	54.14	Wetted Perimeter, ft
R <sub>h</sub> =	0.87	Hydraulic Radius, ft
V =	5.95	Velocity, fps
<b>T =</b>	<b>0.165</b>	Travel time, (hr)



**Basin:** C6-5

**Page:** 3

**Shallow Concentrated Flow:**

**Eq:**  $T = \frac{L}{V} * 3600$

Surface = Unpaved

Elev Up = 530 ft

Elev Down = 268 ft

L = 7342 Length, ft

S = 0.036 Slope, ft/ft

V = 3.06 Velocity, fps (Use Figure 3-1 TR-55)

**T = 0.67** Travel time, (hr)



<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C7-1</b>	<b>Tc:</b>	<b>1.4 hr</b>
		<b>Lag:</b>	<b>52 min</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.58 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
n =	0.15 Manning's roughness coefficient
Elev Up =	734 ft
Elev Down =	727 ft
L =	300 Length, ft
S =	0.023 Slope, ft/ft
<b>T =</b>	<b>0.38</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>	
<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved
Elev Up =	727 ft
Elev Down =	559 ft
L =	1838 Length, ft
S =	0.091 Slope, ft/ft
V =	4.87 Velocity, fps (Use Figure 3-1 TR-55)
<b>T =</b>	<b>0.1</b> Travel time, (hr)



Basin: **C7-1**

Page: **2**

<b>Channel Flow Segment:</b>	<b>1</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.04	Manning's n
Elev Up =	559	ft
Elev Down =	413	ft
L =	3738	Length, ft
S =	0.039	Slope, ft/ft
Shape =	Trapezoidal	
Width =	40	ft
Height =	1	ft
z =	6	Side slope, 1:z
A =	46	Area, ft <sup>2</sup>
P <sub>w</sub> =	52.17	Wetted Perimeter, ft
R <sub>h</sub> =	0.88	Hydraulic Radius, ft
V =	6.76	Velocity, fps
<b>T =</b>	<b>0.15</b>	Travel time, (hr)

<b>Channel Flow Segment:</b>	<b>2</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.03	Manning's n
Elev Up =	413	ft
Elev Down =	270	ft
L =	6259	Length, ft
S =	0.023	Slope, ft/ft
Shape =	Trapezoidal	
Width =	8	ft
Height =	0.5	ft
z =	50	Side slope, 1:z
A =	16.5	Area, ft <sup>2</sup>
P <sub>w</sub> =	58.01	Wetted Perimeter, ft
R <sub>h</sub> =	0.28	Hydraulic Radius, ft
V =	3.22	Velocity, fps
<b>T =</b>	<b>0.54</b>	Travel time, (hr)



Basin: **C7-1**

Page: **3**

<b>Segment:</b>	<b>3</b>	
<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$	
Material =	Ditch	
n =	0.03	Manning's n
Elev Up =	270	ft
Elev Down =	257	ft
L =	2049	Length, ft
S =	0.006	Slope, ft/ft
Shape =	Trapezoidal	
Width =	8	ft
Height =	0.5	ft
z =	4	Side slope, 1:z
A =	5	Area, ft <sup>2</sup>
P <sub>w</sub> =	12.12	Wetted Perimeter, ft
R <sub>h</sub> =	0.41	Hydraulic Radius, ft
V =	2.12	Velocity, fps
<b>T =</b>	<b>0.27</b>	Travel time, (hr)



## **APPENDIX B – HEC-HMS MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. **Subbasin Parameters Table**
3. NOAA Atlas 14 Point Precipitation Frequency Estimates
4. HEC-HMS Results Table





BasinID	Area (mi <sup>2</sup> )	Initial Content	Saturated Content	Suction (in)	Conductivity (in/hr)
1-1	0.68	0.19	0.42	4.04	0.74
1-2	1.37	0.18	0.41	4.24	0.82
1-3	1.48	0.17	0.40	4.86	0.75
1-4	0.85	0.17	0.41	4.54	0.82
4-1	1.75	0.19	0.41	5.32	0.62
4-2	1.35	0.21	0.40	6.20	0.57
5-1	2.87	0.23	0.39	7.64	0.17
5-2	0.93	0.22	0.39	7.15	0.27
5-3	0.24	0.18	0.41	4.45	0.78
6-1	2.49	0.21	0.40	6.37	0.45
6-2	1.51	0.20	0.40	6.43	0.44
6-3	0.70	0.17	0.40	4.88	0.76
6-4	0.47	0.17	0.41	4.30	0.85
6-5	0.81	0.21	0.40	6.43	0.44
7-1	1.29	0.17	0.41	4.22	1.04



## **APPENDIX B – HEC-HMS MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. **NOAA Atlas 14 Point Precipitation Frequency Estimates**
4. HEC-HMS Results Table
5. HEC-HMS Hydrographs for SWMM Input



**NOAA Atlas 14, Volume 6, Version 2**  
**Location name: Gonzales, California, USA\***  
**Latitude: 36.5604°, Longitude: -121.3749°**  
**Elevation: 1460.57 ft\*\***  
\* source: ESRI Maps  
\*\* source: USGS



**POINT PRECIPITATION FREQUENCY ESTIMATES**

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF\\_tabular](#) | [PF\\_graphical](#) | [Maps\\_&\\_aerials](#)

**PF tabular**

<b>PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour)<sup>1</sup></b>										
<b>Duration</b>	<b>Average recurrence interval (years)</b>									
	<b>1</b>	<b>2</b>	<b>5</b>	<b>10</b>	<b>25</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>500</b>	<b>1000</b>
<b>5-min</b>	<b>1.12</b> (0.101-1.26)	<b>1.38</b> (1.24-1.55)	<b>1.74</b> (1.56-1.97)	<b>2.06</b> (1.82-2.35)	<b>2.52</b> (2.14-3.00)	<b>2.90</b> (2.40-3.55)	<b>3.32</b> (2.65-4.20)	<b>3.78</b> (2.92-4.94)	<b>4.44</b> (3.25-6.13)	<b>5.00</b> (3.50-7.22)
<b>10-min</b>	<b>0.804</b> (0.720-0.900)	<b>0.990</b> (0.888-1.11)	<b>1.25</b> (1.12-1.41)	<b>1.48</b> (1.31-1.68)	<b>1.81</b> (1.54-2.15)	<b>2.08</b> (1.72-2.55)	<b>2.38</b> (1.90-3.01)	<b>2.71</b> (2.09-3.55)	<b>3.19</b> (2.33-4.40)	<b>3.59</b> (2.51-5.17)
<b>15-min</b>	<b>0.648</b> (0.580-0.724)	<b>0.796</b> (0.716-0.896)	<b>1.01</b> (0.900-1.14)	<b>1.19</b> (1.06-1.36)	<b>1.46</b> (1.24-1.74)	<b>1.68</b> (1.38-2.06)	<b>1.92</b> (1.53-2.42)	<b>2.18</b> (1.68-2.86)	<b>2.57</b> (1.88-3.54)	<b>2.89</b> (2.03-4.17)
<b>30-min</b>	<b>0.440</b> (0.396-0.494)	<b>0.542</b> (0.486-0.608)	<b>0.686</b> (0.614-0.772)	<b>0.810</b> (0.718-0.924)	<b>0.992</b> (0.842-1.18)	<b>1.14</b> (0.942-1.40)	<b>1.31</b> (1.04-1.65)	<b>1.49</b> (1.15-1.94)	<b>1.75</b> (1.28-2.41)	<b>1.97</b> (1.38-2.84)
<b>60-min</b>	<b>0.308</b> (0.277-0.345)	<b>0.379</b> (0.340-0.426)	<b>0.479</b> (0.429-0.540)	<b>0.566</b> (0.501-0.645)	<b>0.693</b> (0.588-0.826)	<b>0.799</b> (0.659-0.977)	<b>0.913</b> (0.730-1.15)	<b>1.04</b> (0.801-1.36)	<b>1.22</b> (0.894-1.69)	<b>1.38</b> (0.964-1.98)
<b>2-hr</b>	<b>0.234</b> (0.211-0.263)	<b>0.288</b> (0.258-0.323)	<b>0.362</b> (0.324-0.408)	<b>0.426</b> (0.377-0.485)	<b>0.518</b> (0.440-0.617)	<b>0.594</b> (0.490-0.727)	<b>0.676</b> (0.540-0.853)	<b>0.764</b> (0.590-1.00)	<b>0.893</b> (0.654-1.23)	<b>1.00</b> (0.700-1.44)
<b>3-hr</b>	<b>0.198</b> (0.178-0.222)	<b>0.242</b> (0.218-0.273)	<b>0.305</b> (0.273-0.344)	<b>0.358</b> (0.317-0.409)	<b>0.436</b> (0.369-0.519)	<b>0.499</b> (0.412-0.610)	<b>0.566</b> (0.453-0.715)	<b>0.640</b> (0.494-0.837)	<b>0.746</b> (0.545-1.03)	<b>0.833</b> (0.584-1.20)
<b>6-hr</b>	<b>0.140</b> (0.126-0.156)	<b>0.172</b> (0.154-0.193)	<b>0.216</b> (0.193-0.243)	<b>0.254</b> (0.225-0.289)	<b>0.308</b> (0.261-0.367)	<b>0.352</b> (0.291-0.431)	<b>0.399</b> (0.319-0.505)	<b>0.451</b> (0.348-0.590)	<b>0.524</b> (0.383-0.723)	<b>0.584</b> (0.409-0.842)
<b>12-hr</b>	<b>0.092</b> (0.083-0.103)	<b>0.114</b> (0.102-0.128)	<b>0.144</b> (0.129-0.163)	<b>0.170</b> (0.151-0.194)	<b>0.208</b> (0.176-0.247)	<b>0.238</b> (0.196-0.291)	<b>0.270</b> (0.216-0.341)	<b>0.305</b> (0.235-0.399)	<b>0.354</b> (0.259-0.489)	<b>0.395</b> (0.277-0.569)
<b>24-hr</b>	<b>0.059</b> (0.055-0.065)	<b>0.074</b> (0.069-0.082)	<b>0.095</b> (0.088-0.105)	<b>0.113</b> (0.103-0.125)	<b>0.138</b> (0.123-0.158)	<b>0.159</b> (0.139-0.185)	<b>0.180</b> (0.155-0.214)	<b>0.204</b> (0.171-0.248)	<b>0.237</b> (0.192-0.300)	<b>0.265</b> (0.208-0.344)
<b>2-day</b>	<b>0.037</b> (0.035-0.041)	<b>0.047</b> (0.043-0.052)	<b>0.060</b> (0.056-0.067)	<b>0.072</b> (0.066-0.080)	<b>0.088</b> (0.078-0.100)	<b>0.101</b> (0.088-0.117)	<b>0.115</b> (0.098-0.136)	<b>0.130</b> (0.109-0.158)	<b>0.151</b> (0.122-0.190)	<b>0.168</b> (0.132-0.218)
<b>3-day</b>	<b>0.028</b> (0.026-0.030)	<b>0.035</b> (0.032-0.039)	<b>0.045</b> (0.042-0.050)	<b>0.054</b> (0.049-0.060)	<b>0.066</b> (0.059-0.076)	<b>0.076</b> (0.067-0.089)	<b>0.086</b> (0.074-0.103)	<b>0.098</b> (0.082-0.119)	<b>0.114</b> (0.092-0.143)	<b>0.126</b> (0.099-0.164)
<b>4-day</b>	<b>0.023</b> (0.021-0.025)	<b>0.029</b> (0.027-0.032)	<b>0.037</b> (0.034-0.041)	<b>0.044</b> (0.040-0.049)	<b>0.054</b> (0.048-0.062)	<b>0.062</b> (0.055-0.072)	<b>0.071</b> (0.061-0.084)	<b>0.080</b> (0.067-0.097)	<b>0.093</b> (0.075-0.117)	<b>0.103</b> (0.081-0.134)
<b>7-day</b>	<b>0.016</b> (0.014-0.017)	<b>0.020</b> (0.018-0.022)	<b>0.026</b> (0.024-0.028)	<b>0.030</b> (0.028-0.034)	<b>0.037</b> (0.033-0.043)	<b>0.043</b> (0.038-0.050)	<b>0.049</b> (0.042-0.058)	<b>0.055</b> (0.046-0.067)	<b>0.064</b> (0.051-0.080)	<b>0.071</b> (0.055-0.092)
<b>10-day</b>	<b>0.012</b> (0.011-0.013)	<b>0.016</b> (0.014-0.017)	<b>0.020</b> (0.019-0.022)	<b>0.024</b> (0.022-0.027)	<b>0.029</b> (0.026-0.034)	<b>0.034</b> (0.030-0.039)	<b>0.038</b> (0.033-0.045)	<b>0.043</b> (0.036-0.052)	<b>0.050</b> (0.040-0.063)	<b>0.055</b> (0.043-0.072)
<b>20-day</b>	<b>0.008</b> (0.007-0.008)	<b>0.010</b> (0.009-0.011)	<b>0.013</b> (0.012-0.014)	<b>0.015</b> (0.014-0.017)	<b>0.019</b> (0.017-0.021)	<b>0.021</b> (0.019-0.025)	<b>0.024</b> (0.021-0.029)	<b>0.027</b> (0.023-0.033)	<b>0.031</b> (0.025-0.039)	<b>0.034</b> (0.027-0.044)
<b>30-day</b>	<b>0.006</b> (0.006-0.007)	<b>0.008</b> (0.007-0.009)	<b>0.010</b> (0.009-0.011)	<b>0.012</b> (0.011-0.014)	<b>0.015</b> (0.013-0.017)	<b>0.017</b> (0.015-0.020)	<b>0.019</b> (0.016-0.023)	<b>0.021</b> (0.018-0.026)	<b>0.024</b> (0.020-0.031)	<b>0.027</b> (0.021-0.035)
<b>45-day</b>	<b>0.005</b> (0.005-0.006)	<b>0.006</b> (0.006-0.007)	<b>0.008</b> (0.008-0.009)	<b>0.010</b> (0.009-0.011)	<b>0.012</b> (0.011-0.014)	<b>0.014</b> (0.012-0.016)	<b>0.015</b> (0.013-0.018)	<b>0.017</b> (0.014-0.021)	<b>0.019</b> (0.016-0.024)	<b>0.021</b> (0.017-0.027)
<b>60-day</b>	<b>0.004</b> (0.004-0.005)	<b>0.006</b> (0.005-0.006)	<b>0.007</b> (0.007-0.008)	<b>0.009</b> (0.008-0.010)	<b>0.011</b> (0.009-0.012)	<b>0.012</b> (0.010-0.014)	<b>0.013</b> (0.011-0.016)	<b>0.015</b> (0.012-0.018)	<b>0.016</b> (0.013-0.021)	<b>0.018</b> (0.014-0.023)

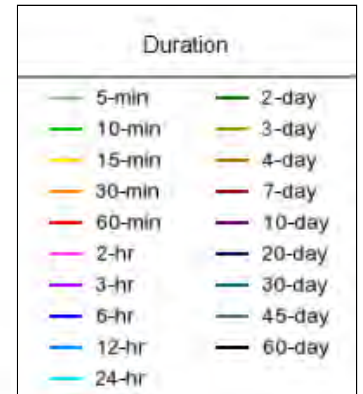
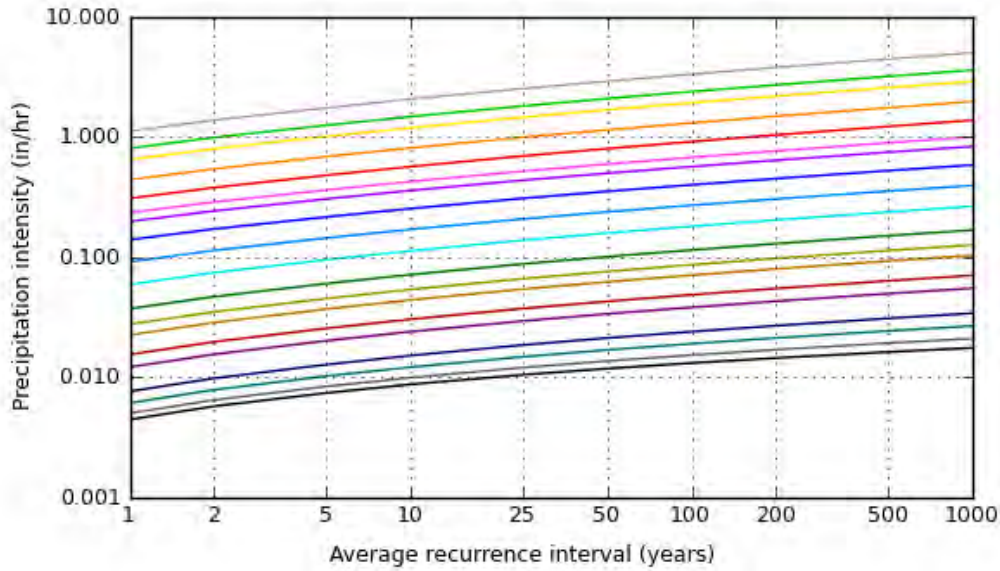
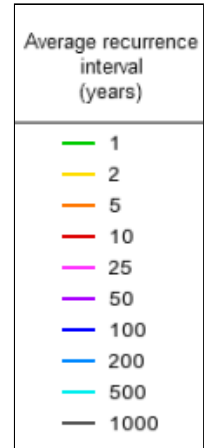
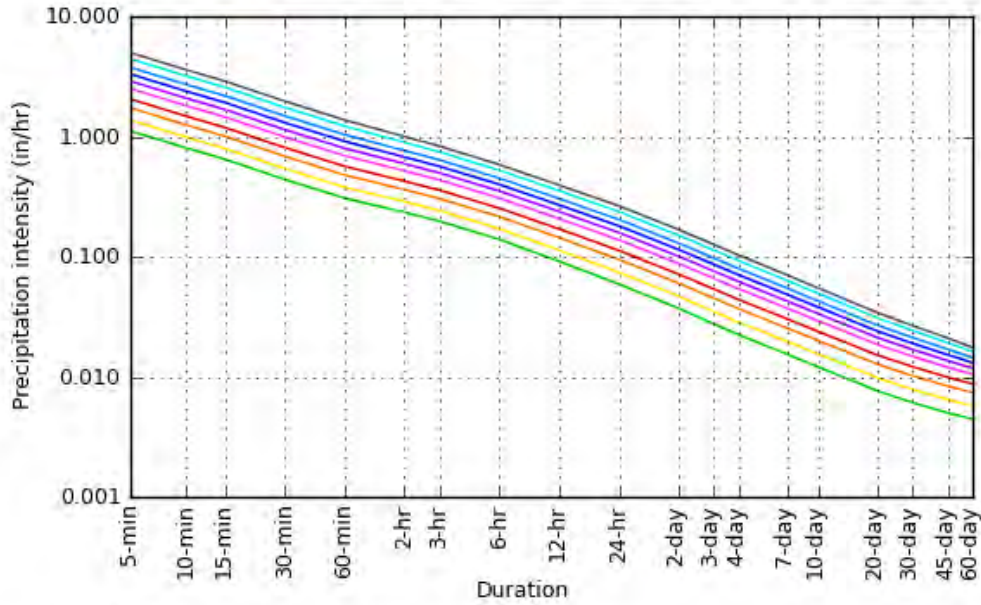
<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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**PF graphical**

PDS-based intensity-duration-frequency (IDF) curves

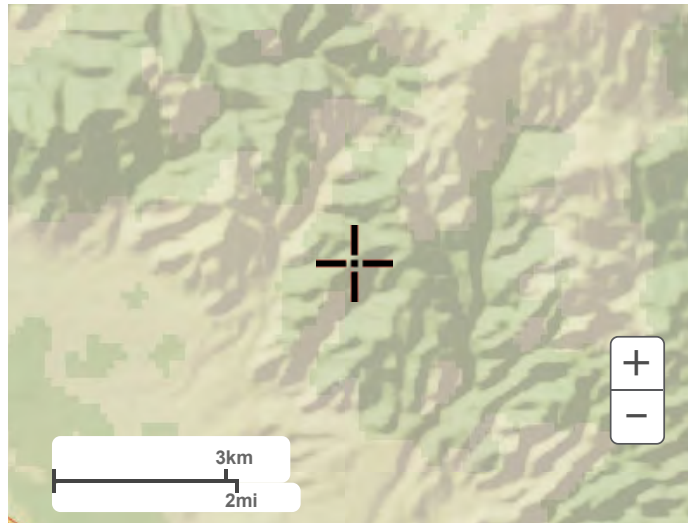
Latitude: 36.5604°, Longitude: -121.3749°



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**Maps & aerials**

**Small scale terrain**



Large scale terrain



Large scale map



Large scale aerial



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## **APPENDIX B – HEC-HMS MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. NOAA Atlas 14 Point Precipitation Frequency Estimates
4. **HEC-HMS Results Table**



Offsite HEC-HMS Output  
10-Year

October 2018

Hydrologic Element	Drainage Area (mi <sup>2</sup> )	Peak Discharge (cfs)	Time of Peak	Volume (in)
J-1-1	0.68	21	13Jun2009, 12:47	0.05
J-1-2	1.37	29.4	13Jun2009, 12:46	0.03
J-1-3	1.48	25.6	13Jun2009, 13:02	0.04
J-1-4	2.33	38.1	13Jun2009, 13:02	0.03
J-4-1	1.75	63.4	13Jun2009, 12:45	0.06
J-5-1	2.87	462.5	13Jun2009, 12:37	0.21
J-5-2	3.11	114.4	13Jun2009, 12:51	0.06
J-5-2.1	3.80	545	13Jun2009, 12:55	0.19
J-5-3	3.35	117	13Jun2009, 13:14	0.06
J-6-1	2.49	211.9	13Jun2009, 12:28	0.08
J-6-2	4.00	299.6	13Jun2009, 12:43	0.08
J-6-3	4.69	313.1	13Jun2009, 12:55	0.07
J-6-4	5.98	365.1	13Jun2009, 12:56	0.07
J-6-5	0.81	45.6	13Jun2009, 12:45	0.09
J-6-5.1	0.81	45.6	13Jun2009, 12:48	0.09
J-7-1	1.30	1.2	13Jun2009, 12:55	0
R-2-1	1.48	25.6	13Jun2009, 13:10	0.04
R-4-2	1.75	63.4	13Jun2009, 12:59	0.06
R-5-2	2.87	474	13Jun2009, 12:55	0.21
R-5-2.1	0.00	0	13Jun2009, 00:00	n/a
R-5-3	3.11	114.4	13Jun2009, 13:15	0.06
R-6-2	2.49	211.4	13Jun2009, 12:43	0.08
R-6-3	4.00	298.7	13Jun2009, 12:55	0.08
R-6-4	4.69	312.9	13Jun2009, 12:57	0.07
R-6-5.1	0.81	45.6	13Jun2009, 12:48	0.09
R-6-5.2	0.81	45.6	13Jun2009, 12:51	0.09
1-1	0.68	21	13Jun2009, 12:47	0.05
1-2	1.37	29.4	13Jun2009, 12:46	0.03
1-3	1.48	25.6	13Jun2009, 13:02	0.04
1-4	0.85	14.6	13Jun2009, 12:50	0.03
4-1	1.75	63.4	13Jun2009, 12:45	0.06
4-2	1.35	61.1	13Jun2009, 12:41	0.06
5-1	2.87	462.5	13Jun2009, 12:37	0.21
5-2	0.93	94.6	13Jun2009, 12:38	0.13
5-3	0.24	6.7	13Jun2009, 12:42	0.04
6-1	2.49	211.9	13Jun2009, 12:28	0.08
6-2	1.51	88.6	13Jun2009, 12:41	0.08
6-3	0.70	14.5	13Jun2009, 12:51	0.04
6-4	0.47	8.2	13Jun2009, 12:47	0.03
6-5	0.81	45.6	13Jun2009, 12:45	0.09
7-1	1.30	1.2	13Jun2009, 12:55	0





Offsite HEC-HMS Output  
25-Year

October 2018

Hydrologic Element	Drainage Area (mi <sup>2</sup> )	Peak Discharge (cfs)	Time of Peak	Volume (in)
J-1-1	0.68	367.3	13Jun2009, 12:27	0.14
J-1-2	1.37	367.3	13Jun2009, 12:27	0.14
J-1-3	1.48	366.3	13Jun2009, 12:41	0.14
J-1-4	2.33	153.8	13Jun2009, 12:41	0.14
J-4-1	1.75	520.2	13Jun2009, 12:41	0.14
J-5-1	2.87	518.9	13Jun2009, 12:52	0.14
J-5-2	3.11	35.2	13Jun2009, 12:51	0.09
J-5-2.1	3.80	554.1	13Jun2009, 12:52	0.13
J-5-3	3.35	553.8	13Jun2009, 12:53	0.13
J-6-1	2.49	78.2	13Jun2009, 12:45	0.15
J-6-2	4.00	78.2	13Jun2009, 12:45	0.15
J-6-3	4.69	78.2	13Jun2009, 12:48	0.15
J-6-4	5.98	78.2	13Jun2009, 12:48	0.15
J-6-5	0.81	78.2	13Jun2009, 12:50	0.15
J-6-5.1	0.81	23.6	13Jun2009, 12:47	0.08
J-7-1	1.30	654.4	13Jun2009, 12:53	0.13
R-2-1	1.48	701	13Jun2009, 12:37	0.33
R-4-2	1.75	701	13Jun2009, 12:37	0.33
R-5-2	2.87	700.2	13Jun2009, 12:59	0.33
R-5-2.1	0.00	159.7	13Jun2009, 12:39	0.23
R-5-3	3.11	808.9	13Jun2009, 12:57	0.31
R-6-2	2.49	120.5	13Jun2009, 12:45	0.11
R-6-3	4.00	120.5	13Jun2009, 12:45	0.11
R-6-4	4.69	120.4	13Jun2009, 12:57	0.11
R-6-5.1	0.81	111	13Jun2009, 12:41	0.11
R-6-5.2	0.81	0	13Jun2009, 00:00	n/a
1-1	0.68	217	13Jun2009, 12:49	0.11
1-2	1.37	216.8	13Jun2009, 13:09	0.11
1-3	1.48	15.2	13Jun2009, 12:42	0.09
1-4	0.85	224.3	13Jun2009, 13:09	0.11
4-1	1.75	61.5	13Jun2009, 13:02	0.09
4-2	1.35	61.5	13Jun2009, 13:02	0.09
5-1	2.87	61.4	13Jun2009, 13:08	0.09
5-2	0.93	40.5	13Jun2009, 12:50	0.08
5-3	0.24	97.6	13Jun2009, 12:59	0.09
6-1	2.49	73.9	13Jun2009, 12:46	0.08
6-2	1.51	73.9	13Jun2009, 12:46	0.08
6-3	0.70	39	13Jun2009, 12:53	0.05
6-4	0.47	39	13Jun2009, 12:53	0.05
6-5	0.81	42	13Jun2009, 12:47	0.1
7-1	1.30	42	13Jun2009, 12:47	0.1



Offsite HEC-HMS Output  
100-Year

October 2018

Hydrologic Element	Drainage Area (mi <sup>2</sup> )	Peak Discharge (cfs)	Time of Peak	Volume (in)
J-1-1	0.68	695.8	13Jun2009, 12:28	0.27
J-1-2	1.37	695.8	13Jun2009, 12:28	0.27
J-1-3	1.48	693.9	13Jun2009, 12:39	0.27
J-1-4	2.33	295.5	13Jun2009, 12:41	0.28
J-4-1	1.75	989	13Jun2009, 12:40	0.27
J-5-1	2.87	986.6	13Jun2009, 12:49	0.27
J-5-2	3.11	67.8	13Jun2009, 12:51	0.17
J-5-2.1	3.80	1054.4	13Jun2009, 12:49	0.26
J-5-3	3.35	1053.8	13Jun2009, 12:50	0.26
J-6-1	2.49	150.8	13Jun2009, 12:45	0.29
J-6-2	4.00	150.8	13Jun2009, 12:45	0.29
J-6-3	4.69	150.8	13Jun2009, 12:47	0.29
J-6-4	5.98	150.8	13Jun2009, 12:47	0.29
J-6-5	0.81	150.7	13Jun2009, 12:49	0.29
J-6-5.1	0.81	46.1	13Jun2009, 12:47	0.16
J-7-1	1.30	1250.3	13Jun2009, 12:50	0.25
R-2-1	1.48	1145.5	13Jun2009, 12:38	0.66
R-4-2	1.75	1145.5	13Jun2009, 12:38	0.66
R-5-2	2.87	1144.2	13Jun2009, 12:56	0.66
R-5-2.1	0.00	282.4	13Jun2009, 12:39	0.42
R-5-3	3.11	1360.2	13Jun2009, 12:54	0.6
R-6-2	2.49	229.2	13Jun2009, 12:44	0.2
R-6-3	4.00	229.2	13Jun2009, 12:44	0.2
R-6-4	4.69	229.1	13Jun2009, 12:55	0.2
R-6-5.1	0.81	209	13Jun2009, 12:40	0.22
R-6-5.2	0.81	0	13Jun2009, 00:00	n/a
1-1	0.68	416.8	13Jun2009, 12:48	0.21
1-2	1.37	416.5	13Jun2009, 13:05	0.21
1-3	1.48	29	13Jun2009, 12:42	0.17
1-4	0.85	434.2	13Jun2009, 13:04	0.21
4-1	1.75	118.3	13Jun2009, 13:02	0.17
4-2	1.35	118.3	13Jun2009, 13:02	0.17
5-1	2.87	118.3	13Jun2009, 13:07	0.17
5-2	0.93	79	13Jun2009, 12:50	0.16
5-3	0.24	190.1	13Jun2009, 12:58	0.17
6-1	2.49	142	13Jun2009, 12:46	0.16
6-2	1.51	142	13Jun2009, 12:46	0.16
6-3	0.70	90.6	13Jun2009, 12:53	0.13
6-4	0.47	90.6	13Jun2009, 12:53	0.13
6-5	0.81	79.2	13Jun2009, 12:47	0.19
7-1	1.30	79.2	13Jun2009, 12:47	0.19



## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. **Subbasin Lag Time Calculations**
2. Subbasin Parameters Table
3. 25-Year Existing Conditions Model
4. SWMM 10 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - No Offsite Flows
6. SWMM 25 Year Output Report - With Offsite Flows
7. SWMM 100 Year Output Report- No Offsite Flows



Existing Onsite -  
Time of Concentration  
Shallow Overland

Basin ID	Overland Flow						
	Manning N	P <sub>2</sub>	Upstream Elev (ft)	Downstream Elev (ft)	Length (ft)	Slope	Travel Time (hr)
C-151	0.15	1.58	276	271	300	0.017	0.6
C-481B	0.15	1.58	292	283	300	0.030	0.48
C-482	0.15	1.58	215	208	300	0.023	0.53
C-482A	0.15	1.58	290	280	300	0.033	0.46
C-483	0.15	1.58	206	200	300	0.020	0.56
C-484	0.15	1.58	282	274	300	0.027	0.5
C-485	0.15	1.58	162	157	300	0.017	0.6
C-485A	0.15	1.58	266	261	300	0.017	0.6
C-700	0.15	1.58	250	248	300	0.007	0.87
C-701	0.15	1.58	156	151	300	0.017	0.6
C-701A	0.15	1.58	210	206	300	0.013	0.66
C-701B	0.15	1.58	270	263	300	0.023	0.53
C-725-2	0.15	1.58	330	320	300	0.033	0.46
C-725B-2	0.15	1.58	330	317	300	0.043	0.41
C-726	0.15	1.58	420	410	300	0.033	0.46
C-744	0.15	1.58	281	275	300	0.020	0.56
C-792	0.15	1.58	190	186	300	0.013	0.66
C-792A	0.15	1.58	287	279	300	0.027	0.5



Existing Onsite -  
Time of Concentration  
Shallow Overland

Basin ID	Surface	Shallow Concentrated					
		Upstream Elev (ft)	Downstream Elev (ft)	Length (ft)	Slope	Velocity (ft/sec)	Travel Time (hr)
C-151	Unpaved	271	173	6018	0.016	2.040	0.82
C-481B	Unpaved	283	169	6659	0.017	2.100	0.88
C-482	Unpaved	208	157	2742	0.019	2.220	0.34
C-482A	Unpaved	280	208	3414	0.021	2.340	0.41
C-483	Unpaved	200	151	2870	0.017	2.100	0.38
C-484	Unpaved	274	154	6677	0.018	2.160	0.86
C-485	Unpaved	157	143	929	0.015	1.980	0.13
C-485A	Unpaved	261	160	5454	0.019	2.220	0.68
C-700	Unpaved	248	105	12250	0.012	1.770	1.92
C-701	Unpaved	151	122	2153	0.013	1.840	0.33
C-701A	Unpaved	206	116	6826	0.013	1.840	1.03
C-701B	Unpaved	263	155	6353	0.017	2.100	0.84
C-725-2	Unpaved	320	172	5556	0.027	2.650	0.58
C-725B-2	Unpaved	317	151	8517	0.019	2.220	1.07
C-726	Unpaved	410	151	11289	0.023	2.450	1.28
C-744	Unpaved	275	167	5838	0.018	2.160	0.75
C-792	Unpaved	186	156	2424	0.012	1.770	0.38
C-792A	Unpaved	279	191	4849	0.018	2.160	0.62



Existing Onsite -  
Time of Concentration  
Shallow Overland

Basin ID	Total	
	Time of Concentration (hr)	Time of Concentration (min)*
C-151	1.4	85
C-481B	1.4	82
C-482	0.9	52
C-482A	0.9	52
C-483	0.9	56
C-484	1.4	82
C-485	0.7	44
C-485A	1.3	77
C-700	2.8	167
C-701	0.9	56
C-701A	1.7	101
C-701B	1.4	82
C-725-2	1.0	62
C-725B-2	1.5	89
C-726	1.7	104
C-744	1.3	79
C-792	1.0	62
C-792A	1.1	67

\*Subsequent calculations uses rounded time of concentrations to the nearest 5-minutes



Time of Concentration - Overland Shallow Channel

<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>8/15/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	
<b>Basin:</b>	<b>C-830</b>	<b>Tc:</b>	<b>0.895 hr</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.43 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Cultivated soils, cover <20%: 0.06
$n =$	0.06 Manning's roughness coefficient
Elev Up =	131 ft
Elev Down =	130 ft
$L =$	300 Length, ft
$S =$	0.003 Slope, ft/ft
<b>T =</b>	<b>0.6</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>		<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Surface =	Unpaved		
Elev Up =	130 ft		
Elev Down =	129 ft		
$L =$	300 Length, ft		
$S =$	0.003 Slope, ft/ft		
$V =$	0.88 Velocity, fps (Use Figure 3-1 TR-55)		
<b>T =</b>	<b>0.09</b> Travel time, (hr)		

<b>Channel Flow Segment:</b>		<b>Eq:</b>	$V = \frac{1.49r^{2/3} S^{1/2}}{n}$
<b>1</b>			
Material =	Ditch		
$n =$	0.02 Manning's n		
Elev Up =	129 ft		
Elev Down =	121 ft		
$L =$	4247 Length, ft		
$S =$	0.002 Slope, ft/ft		
Shape =	Trapezoidal		
Width =	5 ft		
Height =	4 ft		
$z =$	2 Side slope, 1:z		
$A =$	52 Area, ft <sup>2</sup>		
$P_w =$	22.89 Wetted Perimeter, ft		
$R_h =$	2.27 Hydraulic Radius, ft		
$V =$	5.75 Velocity, fps		
<b>T =</b>	<b>0.205</b> Travel time, (hr)		



Time of Concentration - Overland Shallow Channel

<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C-701</b>	<b>Tc:</b>	<b>0.8</b> hr

**Sheet Flow:**

$$\text{Eq: } T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$$

$P_2 = 1.43$  2-year, 24-hour rainfall (in), NOAA Atlas 14

Surface = Cultivated soils, cover <20%: 0.06

$n = 0.06$  Manning's roughness coefficient

Elev Up = 143 ft

Elev Down = 140 ft

$L = 300$  Length, ft

$S = 0.01$  Slope, ft/ft

**$T = 0.37$**  Travel time, (hr)

**Shallow Concentrated Flow:**

$$\text{Eq: } T = \frac{L}{V} * 3600$$

Surface = Unpaved

Elev Up = 140 ft

Elev Down = 125 ft

$L = 2100$  Length, ft

$S = 0.007$  Slope, ft/ft

$V = 1.35$  Velocity, fps (Use Figure 3-1 TR-55)

**$T = 0.43$**  Travel time, (hr)





Time of Concentration - Overland Shallow Channel

<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>8/15/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C-801</b>	<b>Tc:</b>	<b>0.45 hr</b>

**31.2**

<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$	
$P_2 =$	<b>1.43</b>	2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Cultivated soils, cover <20%: 0.06	
$n =$	<b>0.06</b>	Manning's roughness coefficient
Elev Up =	<b>127</b>	ft
Elev Down =	<b>126.5</b>	ft
$L =$	<b>150</b>	Length, ft
$S =$	<b>0.003</b>	Slope, ft/ft
<b>T =</b>	<b>0.35</b>	Travel time, (hr)

**Shallow Concentrated Flow:**

Surface =	<b>Unpaved</b>	<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Elev Up =	<b>126.5</b>	ft	
Elev Down =	<b>125.5</b>	ft	
$L =$	<b>200</b>	Length, ft	
$S =$	<b>0.005</b>	Slope, ft/ft	
$V =$	<b>1.14</b>	Velocity, fps (Use Figure 3-1 TR-55)	
<b>T =</b>	<b>0.05</b>	Travel time, (hr)	

**Channel Flow Segment:**

<b>Channel Flow Segment:</b>	<b>1</b>	<b>Eq:</b>	$V = \frac{1.49r^{2/3} S^{1/2}}{n}$
Material =	<b>Ditch</b>		
$n =$	<b>0.02</b>	Manning's n	
Elev Up =	<b>125.5</b>	ft	
Elev Down =	<b>124.5</b>	ft	
$L =$	<b>300</b>	Length, ft	
$S =$	<b>0.003</b>	Slope, ft/ft	
Shape =	<b>Trapezoidal</b>		
Width =	<b>10</b>	ft	
Height =	<b>0.5</b>	ft	
$z =$	<b>50</b>	Side slope, 1:z	
$A =$	<b>17.5</b>	Area, ft <sup>2</sup>	
$P_w =$	<b>60.01</b>	Wetted Perimeter, ft	
$R_h =$	<b>0.29</b>	Hydraulic Radius, ft	
$V =$	<b>1.79</b>	Velocity, fps	
<b>T =</b>	<b>0.05</b>	Travel time, (hr)	



Time of Concentration - Overland Shallow Channel

<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C-808</b>	<b>Tc:</b>	<b>0.456 hr</b>

**Sheet Flow:**

<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$	
$P_2 =$	1.43	2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Cultivated soils, cover <20%: 0.06	
n =	0.06	Manning's roughness coefficient
Elev Up =	135	ft
Elev Down =	134.5	ft
L =	150	Length, ft
S =	0.003	Slope, ft/ft
<b>T =</b>	<b>0.35</b>	Travel time, (hr)

**Shallow Concentrated Flow:**

Surface =	Unpaved	<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Elev Up =	134.5	ft	
Elev Down =	133.5	ft	
L =	300	Length, ft	
S =	0.003	Slope, ft/ft	
V =	0.88	Velocity, fps (Use Figure 3-1 TR-55)	
<b>T =</b>	<b>0.09</b>	Travel time, (hr)	

**Channel Flow Segment:**

	<b>1</b>		<b>Eq:</b>	$V = \frac{1.49r^{2/3}S^{1/2}}{n}$
Material =	Ditch			
n =	0.02	Manning's n		
Elev Up =	133.5	ft		
Elev Down =	132.5	ft		
L =	400	Length, ft		
S =	0.003	Slope, ft/ft		
Shape =	Trapezoidal			
Width =	5	ft		
Height =	4	ft		
z =	2	Side slope, 1:z		
A =	52	Area, ft <sup>2</sup>		
P <sub>w</sub> =	22.89	Wetted Perimeter, ft		
R <sub>h</sub> =	2.27	Hydraulic Radius, ft		
V =	7.05	Velocity, fps		
<b>T =</b>	<b>0.016</b>	Travel time, (hr)		



Time of Concentration - Overland Shallow Channel

<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>6/21/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C-850</b>	<b>Tc:</b>	<b>0.57 hr</b>

<b>Sheet Flow:</b>	
<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$
$P_2 =$	1.43 2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15
$n =$	0.15 Manning's roughness coefficient
Elev Up =	137 ft
Elev Down =	136 ft
$L =$	75 Length, ft
$S =$	0.013 Slope, ft/ft
<b>T =</b>	<b>0.23</b> Travel time, (hr)

<b>Shallow Concentrated Flow:</b>			
Surface =	Paved	<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Elev Up =	136 ft		
Elev Down =	135 ft		
$L =$	300 Length, ft		
$S =$	0.003 Slope, ft/ft		
$V =$	1.11 Velocity, fps (Use Figure 3-1 TR-55)		
<b>T =</b>	<b>0.08</b> Travel time, (hr)		

<b>Channel Flow Segment:</b>			
	<b>1</b>	<b>Eq:</b>	$V = \frac{1.49r^{2/3} S^{1/2}}{n}$
Material =	Ditch		
$n =$	0.02 Manning's n		
Elev Up =	135 ft		
Elev Down =	127 ft		
$L =$	2189 Length, ft		
$S =$	0.004 Slope, ft/ft		
Shape =	Trapezoidal		
Width =	2 ft		
Height =	0.5 ft		
$z =$	2 Side slope, 1:z		
$A =$	1.5 Area, ft <sup>2</sup>		
$P_w =$	4.24 Wetted Perimeter, ft		
$R_h =$	0.35 Hydraulic Radius, ft		
$V =$	2.34 Velocity, fps		
<b>T =</b>	<b>0.26</b> Travel time, (hr)		



Time of Concentration - Overland Shallow Channel

<b>Project:</b>	<b>City of Gonzales</b>		
<b>Analysis:</b>	<b>Offsite Run On Analysis</b>		
<b>Prepared By:</b>	<b>BLJ</b>	<b>Date:</b>	<b>8/15/2018</b>
<b>Checked By:</b>	<b>AMD</b>	<b>Date:</b>	<b>9/1/2018</b>
<b>Basin:</b>	<b>C-860</b>	<b>Tc:</b>	<b>0.41 hr</b>

**Sheet Flow:**

<b>Eq:</b>	$T = \frac{0.007 * (nL)^{0.8}}{(P_2)^{0.5} S^{0.4}}$	
$P_2 =$	1.43	2-year, 24-hour rainfall (in), NOAA Atlas 14
Surface =	Short grass, prairie: 0.15	
$n =$	0.15	Manning's roughness coefficient
Elev Up =	152	ft
Elev Down =	142	ft
$L =$	75	Length, ft
$S =$	0.133	Slope, ft/ft
<b>T =</b>	<b>0.09</b>	Travel time, (hr)

**Shallow Concentrated Flow:**

Surface =	Paved	<b>Eq:</b>	$T = \frac{L}{V} * 3600$
Elev Up =	142	ft	
Elev Down =	139	ft	
$L =$	300	Length, ft	
$S =$	0.010	Slope, ft/ft	
$V =$	2.03	Velocity, fps (Use Figure 3-1 TR-55)	
<b>T =</b>	<b>0.04</b>	Travel time, (hr)	

**Channel Flow Segment:**

<b>Channel Flow Segment:</b>	<b>1</b>		<b>Eq:</b>	$V = \frac{1.49r^{2/3} S^{1/2}}{n}$
Material =	Ditch/Road			
$n =$	0.02	Manning's n		
Elev Up =	139	ft		
Elev Down =	130	ft		
$L =$	2375	Length, ft		
$S =$	0.004	Slope, ft/ft		
Shape =	Trapezoidal			
Width =	2	ft		
Height =	0.5	ft		
$z =$	2	Side slope, 1:z		
$A =$	1.5	Area, ft <sup>2</sup>		
$P_w =$	4.24	Wetted Perimeter, ft		
$R_h =$	0.35	Hydraulic Radius, ft		
$V =$	2.34	Velocity, fps		
<b>T =</b>	<b>0.28</b>	Travel time, (hr)		



## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. **Subbasin Parameters Table**
3. 25-Year Existing Conditions Model
4. SWMM 10 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - No Offsite Flows
6. SWMM 25 Year Output Report - With Offsite Flows
7. SWMM 100 Year Output Report- No Offsite Flows



Existing Onsite Flow Calculations  
Subbasin to Junction

Basin ID	Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year	
C-1001	J-1001	0.7	0.84		15	1.000	1.220	1.590	0.61	0.74	0.97
C-1002	J-1002	0.4	0.90		15	1.000	1.220	1.590	0.36	0.44	0.58
C-1003	J-1003	7.3	0.63		15	1.000	1.220	1.590	4.61	5.63	7.33
C-1004	J-1004	0.8	0.95		15	1.000	1.220	1.590	0.77	0.94	1.23
C-1005	J-1005	0.3	0.95		15	1.000	1.220	1.590	0.25	0.31	0.40
C-1006	J-1006	0.2	0.95		15	1.000	1.220	1.590	0.23	0.28	0.37
C-1007	J-1007	0.5	0.95		15	1.000	1.220	1.590	0.47	0.57	0.74
C-1008	J-1008	2.7	0.95		15	1.000	1.220	1.590	2.59	3.16	4.12
None	J-1009	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-1010	J-1010	5.7	0.95		15	1.000	1.220	1.590	5.45	6.65	8.67
C-1020	J-1020	29.4	0.88		15	1.000	1.220	1.590	25.85	31.53	41.10
C-1021	J-1021	0.4	0.95		15	1.000	1.220	1.590	0.41	0.50	0.65
C-1022	J-1022	0.7	0.92		15	1.000	1.220	1.590	0.66	0.81	1.06
C-1023	J-1023	0.5	0.94		15	1.000	1.220	1.590	0.49	0.60	0.78
C-1024	J-1024	24.7	0.59		15	1.000	1.220	1.590	14.60	17.81	23.21
C-1101	J-1101	5.2	0.95		15	1.000	1.220	1.590	4.90	5.98	7.80
C-1102	J-1102	8.9	0.95		15	1.000	1.220	1.590	8.50	10.37	13.51
C-120	J-120	1.0	0.54		15	1.000	1.220	1.590	0.56	0.68	0.89
C-121	J-121	7.0	0.58		15	1.000	1.220	1.590	4.09	4.99	6.50
C-122	J-122	0.6	0.62		15	1.000	1.220	1.590	0.39	0.48	0.62
C-123	J-123	1.0	0.51		15	1.000	1.220	1.590	0.53	0.64	0.84
C-124	J-124	0.2	0.90		15	1.000	1.220	1.590	0.22	0.27	0.35
C-124A	J-124A	1.5	0.79		15	1.000	1.220	1.590	1.21	1.47	1.92
C-124B	J-124B	1.1	0.76		15	1.000	1.220	1.590	0.80	0.98	1.27
C-125	J-125	0.4	0.93		15	1.000	1.220	1.590	0.34	0.41	0.54
C-126	J-126	2.1	0.88		15	1.000	1.220	1.590	1.86	2.27	2.95
None	J-127	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-127A	J-127A	1.2	0.95		15	1.000	1.220	1.590	1.19	1.45	1.88
C-128	J-128	1.0	0.81		15	1.000	1.220	1.590	0.82	1.00	1.30
C-129	J-129	1.0	0.50		15	1.000	1.220	1.590	0.48	0.58	0.76
C-130	J-130	2.5	0.63		15	1.000	1.220	1.590	1.60	1.95	2.54
C-131	J-131	0.4	0.41		15	1.000	1.220	1.590	0.17	0.21	0.27
C-141	J-141	3.5	0.53		15	1.000	1.220	1.590	1.83	2.23	2.91
None	J-142	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-142A	J-142A	6.9	0.52		15	1.000	1.220	1.590	3.54	4.32	5.62
C-142B	J-142B	0.7	0.48		15	1.000	1.220	1.590	0.36	0.44	0.57
C-143	J-143	0.7	0.69		15	1.000	1.220	1.590	0.47	0.57	0.75
C-144	J-144	2.8	0.53		15	1.000	1.220	1.590	1.46	1.78	2.32
C-145	J-145	2.9	0.56		15	1.000	1.220	1.590	1.64	2.00	2.61
C-146	J-146	2.9	0.52		15	1.000	1.220	1.590	1.50	1.83	2.38
C-147	J-147	0.9	0.51		15	1.000	1.220	1.590	0.47	0.58	0.76
C-148	J-148	1.6	0.60		15	1.000	1.220	1.590	0.97	1.19	1.55



Basin ID	Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year	
C-149	J-149	0.3	0.39		15	1.000	1.220	1.590	0.12	0.15	0.20
C-151	J-151	235.5	0.21		85	0.423	0.513	0.667	20.90	25.37	32.97
C-152	J-152	0.2	0.81		15	1.000	1.220	1.590	0.13	0.16	0.20
C-153	J-153	0.4	0.77		15	1.000	1.220	1.590	0.30	0.36	0.47
C-153A	J-153A	1.9	0.57		15	1.000	1.220	1.590	1.09	1.33	1.73
C-154	J-154	0.8	0.55		15	1.000	1.220	1.590	0.42	0.51	0.67
C-155	J-155	1.2	0.65		15	1.000	1.220	1.590	0.77	0.94	1.22
C-156	J-156	0.7	0.60		15	1.000	1.220	1.590	0.43	0.53	0.69
C-157	J-157	1.3	0.60		15	1.000	1.220	1.590	0.76	0.93	1.21
C-157-1	J-157-1	0.2	0.76		15	1.000	1.220	1.590	0.17	0.20	0.26
C-157-2	J-157-2	1.5	0.57		15	1.000	1.220	1.590	0.87	1.06	1.38
C-157-3	J-157-3	1.0	0.64		15	1.000	1.220	1.590	0.63	0.77	1.01
C-157-3A	J-157-3A	4.3	0.59		15	1.000	1.220	1.590	2.51	3.06	3.99
C-157-4	J-157-4	1.9	0.49		15	1.000	1.220	1.590	0.94	1.15	1.50
C-158	J-158	1.2	0.49		15	1.000	1.220	1.590	0.61	0.74	0.96
C-159	J-159	0.1	0.66		15	1.000	1.220	1.590	0.09	0.11	0.15
C-160	J-160	1.7	0.58		15	1.000	1.220	1.590	1.01	1.23	1.60
C-161	J-161	0.8	0.59		15	1.000	1.220	1.590	0.46	0.57	0.74
C-162	J-162	5.1	0.54		15	1.000	1.220	1.590	2.76	3.37	4.39
None	J-163	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run				1.00	1.00	1.00
C-201	J-201	8.9	0.61		15	1.000	1.220	1.590	5.41	6.60	8.60
C-202	J-202	3.9	0.57		15	1.000	1.220	1.590	2.22	2.71	3.54
C-203	J-203	4.0	0.57		15	1.000	1.220	1.590	2.30	2.80	3.65
C-204	J-204	3.4	0.59		15	1.000	1.220	1.590	2.02	2.46	3.21
C-205	J-205	2.5	0.60		15	1.000	1.220	1.590	1.52	1.86	2.42
None	J-206	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run				1.00	1.00	1.00
C-301	J-301	2.4	0.64		15	1.000	1.220	1.590	1.53	1.86	2.43
C-302	J-302	1.9	0.62		15	1.000	1.220	1.590	1.20	1.47	1.92
C-303	J-303	0.4	0.59		15	1.000	1.220	1.590	0.25	0.30	0.40
C-304	J-304	4.1	0.53		15	1.000	1.220	1.590	2.16	2.64	3.44
C-321	J-321	11.0	0.59		15	1.000	1.220	1.590	6.43	7.85	10.23
C-322	J-322	1.8	0.53		15	1.000	1.220	1.590	0.93	1.13	1.48
C-323	J-323	1.3	0.60		15	1.000	1.220	1.590	0.75	0.91	1.19
C-324	J-324	1.1	0.56		15	1.000	1.220	1.590	0.63	0.77	1.01
C-325	J-325	1.3	0.55		15	1.000	1.220	1.590	0.69	0.85	1.10
C-326	J-326	2.4	0.56		15	1.000	1.220	1.590	1.37	1.67	2.18
C-401	J-401	0.4	0.67		15	1.000	1.220	1.590	0.27	0.33	0.43
C-402	J-402	1.3	0.63		15	1.000	1.220	1.590	0.82	1.00	1.31
C-403	J-403	2.8	0.49		15	1.000	1.220	1.590	1.38	1.68	2.19
C-404	J-404	1.2	0.70		15	1.000	1.220	1.590	0.81	0.98	1.28
C-405	J-405	1.9	0.55		15	1.000	1.220	1.590	1.05	1.28	1.66
C-406	J-406	0.4	0.68		15	1.000	1.220	1.590	0.29	0.35	0.46



Basin ID	Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year	
C-407	J-407	1.2	0.60		15	1.000	1.220	1.590	0.70	0.85	1.11
C-451	J-451	2.7	0.63		15	1.000	1.220	1.590	1.68	2.06	2.68
None	J-452	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-453	J-453	3.1	0.51		15	1.000	1.220	1.590	1.59	1.94	2.53
C-454	J-454	3.4	0.51		15	1.000	1.220	1.590	1.74	2.13	2.77
C-455	J-455	2.4	0.58		15	1.000	1.220	1.590	1.39	1.70	2.21
C-455A	J-455A	1.7	0.60		15	1.000	1.220	1.590	1.00	1.22	1.59
C-456	J-456	0.5	0.54		15	1.000	1.220	1.590	0.28	0.34	0.44
C-457	J-457	0.9	0.55		15	1.000	1.220	1.590	0.49	0.60	0.78
C-458	J-458	0.6	0.55		15	1.000	1.220	1.590	0.31	0.38	0.49
C-459	J-459	0.8	0.57		15	1.000	1.220	1.590	0.48	0.58	0.76
C-460	J-460	0.5	0.84		15	1.000	1.220	1.590	0.45	0.54	0.71
C-461	J-461	0.6	0.68		15	1.000	1.220	1.590	0.39	0.48	0.62
C-462	J-462	2.1	0.59		15	1.000	1.220	1.590	1.23	1.50	1.96
C-462A	J-462A	2.8	0.53		15	1.000	1.220	1.590	1.48	1.80	2.35
C-463	J-463	0.7	0.65		15	1.000	1.220	1.590	0.45	0.54	0.71
C-464	J-464	2.1	0.57		15	1.000	1.220	1.590	1.20	1.47	1.91
C-465	J-465	0.3	0.68		15	1.000	1.220	1.590	0.17	0.21	0.27
C-466	J-466	0.4	0.60		15	1.000	1.220	1.590	0.23	0.28	0.37
None	J-481	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-481B	J-481B	134.4	0.20		80	0.433	0.526	0.684	11.63	14.13	18.38
C-482	J-482	63.1	0.20		50	0.541	0.659	0.861	6.83	8.32	10.87
C-482A	J-482A	109.4	0.21		50	0.541	0.659	0.861	12.44	15.15	19.79
Offsite HMS J-5-3	J-482B	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-483	J-483	56.2	0.20		55	0.451	0.548	0.714	5.07	6.16	8.03
C-484	J-484	254.3	0.22		80	0.346	0.418	0.538	19.37	23.39	30.09
Offsite HMS J-1-7	J-484A	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-485	J-485	19.5	0.20		45	0.344	0.416	0.535	1.34	1.62	2.09
C-485A	J-485A	160.7	0.20		80	0.433	0.526	0.684	13.91	16.89	21.97
C-490	J-490	2.2	0.59		15	1.000	1.220	1.590	1.30	1.59	2.07
C-491	J-491	2.9	0.52		15	1.000	1.220	1.590	1.52	1.86	2.42
C-492	J-492	4.5	0.55		15	1.000	1.220	1.590	2.50	3.05	3.98
None	J-493	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-494	J-494	4.0	0.61		15	1.000	1.220	1.590	2.47	3.01	3.92
C-495	J-495	4.3	0.52		15	1.000	1.220	1.590	2.21	2.70	3.51
C-501	J-501	2.0	0.53		15	1.000	1.220	1.590	1.03	1.26	1.64
C-502	J-502	6.4	0.55		15	1.000	1.220	1.590	3.48	4.25	5.54
C-503	J-503	4.0	0.53		15	1.000	1.220	1.590	2.11	2.58	3.36
C-601	J-601	6.7	0.54		15	1.000	1.220	1.590	3.67	4.47	5.83
C-602	J-602	2.2	0.57		15	1.000	1.220	1.590	1.26	1.54	2.01
C-603	J-603	5.8	0.54		15	1.000	1.220	1.590	3.13	3.82	4.98
None	J-604	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	





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C-701	J-701	110.3	0.21		55	0.507	0.618	0.807	11.75	14.31	18.68
C-701A	J-701A	246.5	0.20		100	0.392	0.475	0.615	19.34	23.44	30.34
C-701B	J-701B	298.1	0.20		80	0.433	0.526	0.684	25.80	31.34	40.76
Offsite HMS J-6-4	J-701C	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-702	J-702	11.5	0.85		15	1.000	1.220	1.590	9.75	11.90	15.51
None	J-702-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-702B	J-702B	1.9	0.95		15	1.000	1.220	1.590	1.84	2.25	2.93
C-703	J-703	9.9	0.28		15	1.000	1.220	1.590	2.81	3.42	4.46
C-704	J-704	6.1	0.76		15	1.000	1.220	1.590	4.59	5.60	7.29
C-705	J-705	7.8	0.34		15	1.000	1.220	1.590	2.68	3.27	4.27
C-706	J-706	10.5	0.25		15	1.000	1.220	1.590	2.65	3.23	4.21
C-707	J-707	5.7	0.29		15	1.000	1.220	1.590	1.65	2.01	2.62
C-708	J-708	13.1	0.54		15	1.000	1.220	1.590	7.10	8.66	11.28
C-709-1	J-709-1	11.2	0.57		15	1.000	1.220	1.590	6.34	7.74	10.09
C-709-2	J-709-2	0.4	0.85		15	1.000	1.220	1.590	0.35	0.43	0.56
C-709-3	J-709-3	1.8	0.95		15	1.000	1.220	1.590	1.75	2.13	2.78
C-710	J-710	12.0	0.70		15	1.000	1.220	1.590	8.42	10.27	13.38
C-711	J-711	6.3	0.65		15	1.000	1.220	1.590	4.07	4.96	6.47
C-712	J-712	6.3	0.56		15	1.000	1.220	1.590	3.53	4.30	5.61
C-713	J-713	17.1	0.52		15	1.000	1.220	1.590	8.99	10.96	14.29
None	J-714-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-714-2	J-714-2	0.4	0.22		15	1.000	1.220	1.590	0.08	0.10	0.13
C-714-3	J-714-3	8.0	0.73		15	1.000	1.220	1.590	5.86	7.15	9.32
None	J-715	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-715A	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-716	J-716	2.9	0.32		15	1.000	1.220	1.590	0.91	1.12	1.45
None	J-716A	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-717-1	J-717-1	12.0	0.57		15	1.000	1.220	1.590	6.90	8.42	10.98
None	J-718	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-719	J-719	28.9	0.90		15	1.000	1.220	1.590	25.99	31.70	41.32
C-720	J-720	13.0	0.79		15	1.000	1.220	1.590	10.28	12.55	16.35
C-721	J-721	15.3	0.39		15	1.000	1.220	1.590	5.99	7.31	9.52
C-722	J-722	18.1	0.34		15	1.000	1.220	1.590	6.12	7.46	9.73
None	J-723	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-723-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-725	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-725-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-725-2	J-725-2	248.8	0.21		60	0.473	0.576	0.752	24.71	30.09	39.29
Offsite HMS J-1-1	J-725-3	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-725A-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-725A-2	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-725A-3	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	



Basin ID	Node	Acres	Runoff Coefficient	Tc Calcd	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year	
C-725B-2	J-725B-2	550.2	0.20		90	0.413	0.501	0.650	45.39	55.08	71.47
C-726	J-726	432.0	0.21		105	0.382	0.463	0.598	34.68	41.98	54.27
C-730	J-730	6.8	0.82		15	1.000	1.220	1.590	5.60	6.83	8.90
None	J-730-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-731	J-731	1.4	0.91		15	1.000	1.220	1.590	1.30	1.59	2.07
C-732	J-732	0.9	0.95		15	1.000	1.220	1.590	0.86	1.04	1.36
None	J-732A	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-732B	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-733	J-733	0.6	0.95		15	1.000	1.220	1.590	0.58	0.70	0.92
C-734	J-734	0.8	0.95		15	1.000	1.220	1.590	0.73	0.89	1.15
C-735	J-735	0.9	0.95		15	1.000	1.220	1.590	0.89	1.09	1.42
None	J-736	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-737	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-737A-1	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-737A-2	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-740	J-740	0.1	0.95		15	1.000	1.220	1.590	0.10	0.12	0.16
C-741	J-741	3.4	0.95		15	1.000	1.220	1.590	3.28	4.00	5.21
C-742	J-742	2.1	0.95		15	1.000	1.220	1.590	2.02	2.46	3.21
None	J-743	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-744	J-744	260.0	0.21		80	0.433	0.526	0.684	23.62	28.70	37.33
None	J-745	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-750	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-751	J-751	2.7	0.95		15	1.000	1.220	1.590	2.61	3.19	4.15
C-752	J-752	1.2	0.95		15	1.000	1.220	1.590	1.17	1.43	1.86
C-753	J-753	2.6	0.90		15	1.000	1.220	1.590	2.38	2.90	3.79
C-754	J-754	8.2	0.89		15	1.000	1.220	1.590	7.25	8.85	11.53
C-760	J-760	14.9	0.59		15	1.000	1.220	1.590	8.83	10.77	14.03
None	J-761	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-762	J-762	1.4	0.34		15	1.000	1.220	1.590	0.47	0.58	0.75
C-770	J-770	4.8	0.91		15	1.000	1.220	1.590	4.39	5.36	6.98
None	J-771	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-772	J-772	0.6	0.57		15	1.000	1.220	1.590	0.35	0.43	0.56
None	J-773	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-774	J-774	0.9	0.70		15	1.000	1.220	1.590	0.63	0.77	1.00
C-775	J-775	1.1	0.59		15	1.000	1.220	1.590	0.63	0.77	1.00
None	J-776	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-777	J-777	1.4	0.72		15	1.000	1.220	1.590	0.99	1.21	1.58
C-778	J-778	1.2	0.48		15	1.000	1.220	1.590	0.57	0.70	0.91
C-779	J-779	15.5	0.92		15	1.000	1.220	1.590	14.36	17.52	22.83
C-780	J-780	0.3	0.63		15	1.000	1.220	1.590	0.18	0.23	0.29
C-781	J-781	2.6	0.60		15	1.000	1.220	1.590	1.60	1.95	2.54
C-782	J-782	0.9	0.56		15	1.000	1.220	1.590	0.49	0.60	0.78



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C-783	J-783	0.8	0.56		15	1.000	1.220	1.590	0.44	0.54	0.71
C-784	J-784	1.8	0.55		15	1.000	1.220	1.590	1.02	1.24	1.62
C-790	J-790	2.0	0.95		15	1.000	1.220	1.590	1.90	2.32	3.02
None	J-791	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-792	J-792	67.1	0.21		60	0.473	0.576	0.752	6.67	8.12	10.60
C-792A	J-792A	256.0	0.21		70	0.453	0.551	0.718	24.34	29.61	38.59
Offsite HMS J-1-4	J-792B	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-801	J-801	32.0	0.21		30	0.678	0.826	1.080	4.48	5.46	7.13
C-802	J-802	6.9	0.95		15	1.000	1.220	1.590	6.55	7.99	10.42
None	J-803	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-804	J-804	2.9	0.79		15	1.000	1.220	1.590	2.28	2.78	3.63
C-805	J-805	1.7	0.36		15	1.000	1.220	1.590	0.62	0.75	0.98
C-806	J-806	1.6	0.87		15	1.000	1.220	1.590	1.42	1.73	2.25
None	J-807	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-808	J-808	321.3	0.23		30	0.678	0.826	1.080	51.00	62.13	81.24
C-809	J-809	2.4	0.95		15	1.000	1.220	1.590	2.32	2.83	3.69
C-810	J-810	1.4	0.95		15	1.000	1.220	1.590	1.29	1.58	2.05
C-811	J-811	0.5	0.95		15	1.000	1.220	1.590	0.50	0.61	0.80
C-812	J-812	10.8	0.67		15	1.000	1.220	1.590	7.24	8.83	11.51
C-813	J-813	4.6	0.67		15	1.000	1.220	1.590	3.06	3.74	4.87
C-814	J-814	12.8	0.69		15	1.000	1.220	1.590	8.84	10.79	14.06
C-815	J-815	10.8	0.67		15	1.000	1.220	1.590	7.27	8.86	11.55
C-816	J-816	2.9	0.84		15	1.000	1.220	1.590	2.42	2.96	3.86
C-817	J-817	2.0	0.95		15	1.000	1.220	1.590	1.89	2.30	3.00
C-817-1	J-817-1	5.4	0.69		15	1.000	1.220	1.590	3.73	4.55	5.93
C-818	J-818	6.5	0.80		15	1.000	1.220	1.590	5.18	6.32	8.23
C-819	J-819	2.8	0.82		15	1.000	1.220	1.590	2.32	2.83	3.69
C-820	J-820	4.8	0.72		15	1.000	1.220	1.590	3.44	4.20	5.47
C-821	J-821	4.4	0.78		15	1.000	1.220	1.590	3.46	4.22	5.50
C-822	J-822	1.6	0.81		15	1.000	1.220	1.590	1.31	1.60	2.09
C-823	J-823	1.5	0.82		15	1.000	1.220	1.590	1.20	1.46	1.91
C-824	J-824	3.1	0.61		15	1.000	1.220	1.590	1.92	2.35	3.06
C-825	J-825	2.7	0.65		15	1.000	1.220	1.590	1.77	2.16	2.81
None	J-826	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-830	J-830	152.9	0.27		55	0.507	0.618	0.807	21.18	25.80	33.69
C-840	J-840	0.3	0.95		15	1.000	1.220	1.590	0.32	0.39	0.51
C-841	J-841	1.0	0.95		15	1.000	1.220	1.590	0.97	1.19	1.55
C-842	J-842	1.5	0.95		15	1.000	1.220	1.590	1.47	1.80	2.34
C-844	J-844	0.5	0.95		15	1.000	1.220	1.590	0.50	0.61	0.80
C-845	J-845	2.3	0.95		15	1.000	1.220	1.590	2.18	2.66	3.46
C-846	J-846	0.7	0.95		15	1.000	1.220	1.590	0.65	0.80	1.04
C-847	J-847	2.0	0.95		15	1.000	1.220	1.590	1.85	2.26	2.95



Basin ID	Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year	
C-850	J-850	26.0	0.59		35	0.644	0.784	1.025	9.84	11.99	15.67
C-860	J-860	17.7	0.59		25	0.785	0.957	1.250	8.24	10.04	13.11
None	J-868	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
None	J-869	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00	
C-870	J-870	6.1	0.77		15	1.000	1.220	1.590	4.70	5.74	7.47
C-871-1A	J-871-1A	29.6	0.71		15	1.000	1.220	1.590	21.02	25.64	33.42
C-871-1B	J-871-1B	23.9	0.69		15	1.000	1.220	1.590	16.52	20.16	26.27
C-871-1C	J-871-1C	7.7	0.69		15	1.000	1.220	1.590	5.28	6.44	8.39
C-900-1	J-900-1	17.0	0.52		15	1.000	1.220	1.590	8.85	10.79	14.07
C-901	J-901	1.4	0.92		15	1.000	1.220	1.590	1.30	1.59	2.07
C-902	J-902	1.9	0.95		15	1.000	1.220	1.590	1.82	2.22	2.89



Existing Onsite Flow Calculations  
Subbasin to Storage Basin

Basin ID	Discharge Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year
C-100	S-100	2.3	0.27	15	1.000	1.220	1.590	0.63	0.76	1.00
C-1000	S-1000	29.8	0.57	15	1.000	1.220	1.590	17.07	20.83	27.14
C-1100	S-1100	6.7	0.95	15	1.000	1.220	1.590	6.40	7.81	10.18
C-150	S-150	0.6	0.20	15	1.000	1.220	1.590	0.11	0.14	0.18
C-200	S-200	0.9	0.32	15	1.000	1.220	1.590	0.28	0.34	0.44
C-300	S-300	0.5	0.40	15	1.000	1.220	1.590	0.21	0.25	0.33
C-400	S-400	1.3	0.25	15	1.000	1.220	1.590	0.33	0.40	0.52
C-500	S-500	8.7	0.54	15	1.000	1.220	1.590	4.74	5.78	7.53
C-600	S-600	0.6	0.65	15	1.000	1.220	1.590	0.37	0.45	0.59



Existing Onsite Flow Calculations  
Subbasin to Outfall

Basin ID	Discharge Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year
C-700	O-700	723.0	0.21	170	0.304	0.367	0.470	46.10	55.67	71.41



## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. **25-Year Existing Conditions Model**
4. SWMM 10 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - No Offsite Flows
6. SWMM 25 Year Output Report - With Offsite Flows
7. SWMM 100 Year Output Report- No Offsite Flows



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J-1001	YES	116	126	10	50.00	15Minute	0.74
J-1002	YES	117	126	10	50.00	15Minute	0.44
J-1003	YES	117	128	11	0.00	15Minute	5.63
J-1004	YES	118	128	10	0.00	15Minute	0.94
J-1005	YES	120	130	10	0.00	15Minute	0.31
J-1006	YES	121	131	10	0.00	15Minute	0.28
J-1007	YES	122	132	10	0.00	15Minute	0.57
J-1008	YES	123	130	7	0.00	15Minute	3.16
J-1009	NO	126	131	5	0.00		1
J-1010	YES	132	133	0	0.00	15Minute	6.65
J-1020	YES	118	128	10	0.00	15Minute	31.53
J-1021	YES	119	129	10	0.00	15Minute	0.5
J-1022	YES	120	130	10	0.00	15Minute	0.81
J-1023	YES	122	131	9	0.00	15Minute	0.6
J-1024	YES	125	129	4	0.00	15Minute	17.81
J-1101	YES	130	132	1	0.00	15Minute	5.98
J-1102	YES	135	135	1	0.00	15Minute	10.37
J-120	YES	164	169	5	0.00	15Minute	0.68
J-121	YES	159	165	6	0.00	15Minute	4.99
J-122	YES	159	165	6	0.00	15Minute	0.48
J-123	YES	158	163	5	0.00	15Minute	0.64
J-124	YES	157	163	7	0.00	15Minute	0.27
J-124A	YES	161	166	5	0.00	15Minute	1.47
J-124B	YES	159	163	5	0.00	15Minute	0.98
J-125	YES	156	161	5	0.00	15Minute	0.41
J-126	YES	155	160	5	0.00	15Minute	2.27
J-127	NO	154	161	7	0.00		1
J-127A	YES	158	164	6	0.00	15Minute	1.45
J-128	YES	154	160	6	0.00	15Minute	1
J-129	YES	153	160	6	0.00	15Minute	0.58
J-130	YES	152	157	5	0.00	15Minute	1.95
J-131	YES	146	151	5	0.00	15Minute	0.21
J-141	YES	158	164	6	0.00	15Minute	2.23
J-142	NO	155	162	7	0.00		1
J-142A	YES	157	163	7	0.00	15Minute	4.32
J-142B	YES	156	162	7	0.00	15Minute	0.44
J-143	YES	155	167	12	0.00	15Minute	0.57
J-144	YES	155	161	7	0.00	15Minute	1.78
J-145	YES	154	160	6	0.00	15Minute	2
J-146	YES	153	158	6	0.00	15Minute	1.83
J-147	YES	152	157	5	0.00	15Minute	0.58
J-148	YES	151	157	6	0.00	15Minute	1.19
J-149	YES	146	148	3	0.00	15Minute	0.15
J-151	YES	182	186	4	20.00	85Minute	25.37





Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J-152	YES	166	174	8	0.00	15Minute	0.16
J-153	YES	165	173	7	0.00	15Minute	0.36
J-153A	YES	167	173	6	500.00	15Minute	1.33
J-154	YES	164	170	7	50.00	15Minute	0.51
J-155	YES	161	167	7	0.00	15Minute	0.94
J-156	YES	161	167	6	0.00	15Minute	0.53
J-157	YES	160	168	9	0.00	15Minute	0.93
J-157-1	YES	165	171	7	0.00	15Minute	0.2
J-157-2	YES	163	170	7	0.00	15Minute	1.06
J-157-3	YES	162	169	7	0.00	15Minute	0.77
J-157-3A	YES	165	173	8	0.00	15Minute	3.06
J-157-4	YES	161	168	7	0.00	15Minute	1.15
J-158	YES	159	168	9	0.00	15Minute	0.74
J-159	YES	159	167	8	0.00	15Minute	0.11
J-160	YES	155	166	11	0.00	15Minute	1.23
J-161	YES	155	165	10	0.00	15Minute	0.57
J-162	YES	154	164	10	0.00	15Minute	3.37
J-163	NO	153	166	13	0.00		1
J-201	YES	146	150	5	0.00	15Minute	6.6
J-202	YES	145	149	4	0.00	15Minute	2.71
J-203	YES	144	148	4	0.00	15Minute	2.8
J-204	YES	142	147	5	0.00	15Minute	2.46
J-205	YES	141	146	5	0.00	15Minute	1.86
J-206	NO	141	147	6	0.00		1
J-301	YES	143	147	5	0.00	15Minute	1.86
J-302	YES	141	145	4	0.00	15Minute	1.47
J-303	YES	140	144	4	0.00	15Minute	0.3
J-304	YES	137	141	5	0.00	15Minute	2.64
J-321	YES	138	143	5	0.00	15Minute	7.85
J-322	YES	138	141	3	0.00	15Minute	1.13
J-323	YES	137	140	3	0.00	15Minute	0.91
J-324	YES	135	139	5	0.00	15Minute	0.77
J-325	YES	134	139	6	0.00	15Minute	0.85
J-326	YES	132	139	7	0.00	15Minute	1.67
J-401	YES	144	147	3	0.00	15Minute	0.33
J-402	YES	143	146	4	0.00	15Minute	1
J-403	YES	133	142	9	0.00	15Minute	1.68
J-404	YES	133	139	5	0.00	15Minute	0.98
J-405	YES	130	135	6	0.00	15Minute	1.28
J-406	YES	127	133	6	0.00	15Minute	0.35
J-407	YES	123	130	6	0.00	15Minute	0.85
J-451	YES	144	148	5	0.00	15Minute	2.06
J-452	NO	142	152	10	0.00		1
J-453	YES	135	140	5	0.00	15Minute	1.94



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J-454	YES	131	137	5	0.00	15Minute	2.13
J-455	YES	130	135	5	0.00	15Minute	1.7
J-455A	YES	134	138	4	0.00	15Minute	1.22
J-456	YES	130	135	5	0.00	15Minute	0.34
J-457	YES	129	135	6	0.00	15Minute	0.6
J-458	YES	128	134	6	0.00	15Minute	0.38
J-459	YES	128	134	6	0.00	15Minute	0.58
J-460	YES	127	133	5	0.00	15Minute	0.54
J-461	YES	127	132	5	0.00	15Minute	0.48
J-462	YES	126	131	5	0.00	15Minute	1.5
J-462A	YES	128	134	6	0.00	15Minute	1.8
J-463	YES	126	131	5	0.00	15Minute	0.54
J-464	YES	125	131	6	0.00	15Minute	1.47
J-465	YES	124	131	7	0.00	15Minute	0.21
J-466	YES	124	131	7	0.00	15Minute	0.28
J-481	NO	157	157	0	0.00		1
J-481B	YES	165	167	2	0.00	80Minute	14.13
J-482	YES	145	158	13	200.00	50Minute	8.32
J-482A	YES	193	197	4	200.00	50Minute	15.15
J-482B	YES	269	273	4	0.00	S-482B-25y	1
J-483	YES	137	155	19	40.00	55Minute	6.16
J-484	YES	130	146	16	10000.00	80Minute	23.39
J-484A	YES	270	272	2	0.00	S-484A-25y	1
J-485	YES	127	143	16	0.00	45Minute	1.62
J-485A	YES	154	158	4	0.00	80Minute	16.89
J-490	YES	129	135	6	0.00	15Minute	1.59
J-491	YES	130	136	5	0.00	15Minute	1.86
J-492	YES	135	140	5	0.00	15Minute	3.05
J-493	NO	139	144	5	0.00		1
J-494	YES	140	145	5	0.00	15Minute	3.01
J-495	YES	130	133	3	0.00	15Minute	2.7
J-501	YES	146	157	11	0.00	15Minute	1.26
J-502	YES	143	152	9	0.00	15Minute	4.25
J-503	YES	139	148	9	0.00	15Minute	2.58
J-601	YES	146	151	5	0.00	15Minute	4.47
J-602	YES	146	151	5	0.00	15Minute	1.54
J-603	YES	143	144	2	0.00	15Minute	3.82
J-604	NO	142	143	0	0.00		1
J-701	YES	118	129	11	0.00	55Minute	14.31
J-701A	YES	116	128	12	0.00	100Minute	23.44
J-701B	YES	153	155	2	0.00	80Minute	31.34
J-701C	YES	220	224	4	0.00	S-701C-25y	1
J-702	YES	120	138	18	0.00	15Minute	11.9
J-702-1	NO	118	122	3	50.00		1



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J-702B	YES	120	135	15	0.00	15Minute	2.25
J-703	YES	121	136	15	0.00	15Minute	3.42
J-704	YES	121	136	15	0.00	15Minute	5.6
J-705	YES	121	133	12	0.00	15Minute	3.27
J-706	YES	121	135	13	50.00	15Minute	3.23
J-707	YES	121	138	17	0.00	15Minute	2.01
J-708	YES	122	132	10	0.00	15Minute	8.66
J-709-1	YES	124	137	14	0.00	15Minute	7.74
J-709-2	YES	124	137	13	0.00	15Minute	0.43
J-709-3	YES	124	137	13	0.00	15Minute	2.13
J-710	YES	125	133	9	0.00	15Minute	10.27
J-711	YES	125	134	9	0.00	15Minute	4.96
J-712	YES	125	134	9	0.00	15Minute	4.3
J-713	YES	125	134	10	0.00	15Minute	10.96
J-714-1	NO	125	141	16	0.00		1
J-714-2	YES	125	140	15	0.00	15Minute	0.1
J-714-3	YES	126	140	15	0.00	15Minute	7.15
J-715	NO	125	140	15	0.00		1
J-715A	NO	135	142	8	0.00		1
J-716	YES	126	140	13	0.00	15Minute	1.12
J-716A	NO	140	144	4	0.00		1
J-717-1	YES	128	142	14	0.00	15Minute	8.42
J-718	NO	128	142	14	0.00		1
J-719	YES	128	142	14	0.00	15Minute	31.7
J-720	YES	135	145	11	0.00	15Minute	12.55
J-721	YES	138	149	11	0.00	15Minute	7.31
J-722	YES	139	146	7	0.00	15Minute	7.46
J-723	NO	146	152	6	50.00		1
J-723-1	NO	144	150	6	0.00		1
J-725	NO	146	150	4	1000.00		1
J-725-1	NO	368	372	4	0.00		1
J-725-2	YES	176	180	4	0.00	60Minute	30.09
J-725-3	YES	339	343	4	0.00	S-725-3-25\}	1
J-725A-1	NO	148	152	4	0.00		1
J-725A-2	NO	148	152	4	0.00		1
J-725A-3	NO	147	151	4	0.00		1
J-725B-2	YES	148	159	11	100.00	90Minute	55.08
J-726	YES	145	152	7	100.00	105Minute	41.98
J-730	YES	140	145	5	0.00	15Minute	6.83
J-730-1	NO	131	139	8	0.00		1
J-731	YES	148	154	6	0.00	15Minute	1.59
J-732	YES	151	156	5	0.00	15Minute	1.04
J-732A	NO	155	157	2	0.00		1
J-732B	NO	161	164	3	0.00		1



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J-733	YES	152	156	5	0.00	15Minute	0.7
J-734	YES	154	158	4	0.00	15Minute	0.89
J-735	YES	158	165	7	0.00	15Minute	1.09
J-736	NO	159	164	5	0.00		1
J-737	NO	161	170	9	0.00		1
J-737A-1	NO	174	178	4	0.00		1
J-737A-2	NO	166	170	4	0.00		1
J-740	YES	149	156	7	0.00	15Minute	0.12
J-741	YES	149	156	7	0.00	15Minute	4
J-742	YES	156	162	6	0.00	15Minute	2.46
J-743	NO	159	165	6	0.00		1
J-744	YES	161	165	4	0.00	80Minute	28.7
J-745	NO	160	165	5	0.00		1
J-750	NO	127	132	5	0.00		1
J-751	YES	129	132	3	0.00	15Minute	3.19
J-752	YES	131	134	2	0.00	15Minute	1.43
J-753	YES	132	134	1	0.00	15Minute	2.9
J-754	YES	134	138	4	0.00	15Minute	8.85
J-760	YES	122	136	14	0.00	15Minute	10.77
J-761	NO	122	136	14	20.00		1
J-762	YES	123	136	13	20.00	15Minute	0.58
J-770	YES	135	144	10	0.00	15Minute	5.36
J-771	NO	135	144	9	0.00		1
J-772	YES	136	148	12	0.00	15Minute	0.43
J-773	NO	136	152	16	100.00		1
J-774	YES	136	148	11	0.00	15Minute	0.77
J-775	YES	137	149	12	0.00	15Minute	0.77
J-776	NO	138	149	11	0.00		1
J-777	YES	139	149	10	0.00	15Minute	1.21
J-778	YES	140	150	10	0.00	15Minute	0.7
J-779	YES	141	151	10	5000.00	15Minute	17.52
J-780	YES	143	152	9	0.00	15Minute	0.23
J-781	YES	143	152	9	0.00	15Minute	1.95
J-782	YES	144	152	8	0.00	15Minute	0.6
J-783	YES	145	151	5	500.00	15Minute	0.54
J-784	YES	146	151	5	500.00	15Minute	1.24
J-790	YES	139	142	4	0.00	15Minute	2.32
J-791	NO	139	153	13	0.00		1
J-792	YES	140	156	16	0.00	60Minute	8.12
J-792A	YES	190	192	2	0.00	70Minute	29.61
J-792B	YES	273	277	4	0.00	S-792B-25y	1
J-801	YES	115	123	8	0.00	30Minute	5.46
J-802	YES	116	124	9	50.00	15Minute	7.99
J-803	NO	116	126	10	0.00		1



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J-804	YES	116	124	8	50.00	15Minute	2.78
J-805	YES	116	120	4	181210.00	15Minute	0.75
J-806	YES	116	121	5	0.00	15Minute	1.73
J-807	NO	117	123	6	0.00		1
J-808	YES	117	119	2	305515.00	30Minute	62.13
J-809	YES	125	127	2	1000.00	15Minute	2.83
J-810	YES	126	129	3	0.00	15Minute	1.58
J-811	YES	127	131	4	1000.00	15Minute	0.61
J-812	YES	127	130	3	1500.00	15Minute	8.83
J-813	YES	126	131	5	0.00	15Minute	3.74
J-814	YES	128	132	4	2000.00	15Minute	10.79
J-815	YES	130	133	3	5000.00	15Minute	8.86
J-816	YES	131	134	3	5000.00	15Minute	2.96
J-817	YES	131	135	4	1500.00	15Minute	2.3
J-817-1	YES	131	134	4	1500.00	15Minute	4.55
J-818	YES	131	136	4	1000.00	15Minute	6.32
J-819	YES	132	135	3	1500.00	15Minute	2.83
J-820	YES	132	136	3	1000.00	15Minute	4.2
J-821	YES	132	136	3	500.00	15Minute	4.22
J-822	YES	133	136	3	500.00	15Minute	1.6
J-823	YES	133	136	4	500.00	15Minute	1.46
J-824	YES	132	138	6	0.00	15Minute	2.35
J-825	YES	130	130	0	0.00	15Minute	2.16
J-826	NO	125	138	13	0.00		1
J-830	YES	119	122	3	0.00	55Minute	25.8
J-840	YES	130	130	0	0.00	15Minute	0.39
J-841	YES	128	131	3	0.00	15Minute	1.19
J-842	YES	131	131	0	0.00	15Minute	1.8
J-844	YES	132	132	0	1000.00	15Minute	0.61
J-845	YES	132	133	1	0.00	15Minute	2.66
J-846	YES	131	135	4	0.00	15Minute	0.8
J-847	YES	134	135	1	0.00	15Minute	2.26
J-850	YES	125	126	1	5000.00	35Minute	11.99
J-860	YES	127	129	2	0.00	25Minute	10.04
J-868	NO	135	136	1	0.00		1
J-869	NO	135	137	2	0.00		1
J-870	YES	133	137	3	30.00	15Minute	5.74
J-871-1A	YES	137	138	1	1000.00	15Minute	25.64
J-871-1B	YES	141	144	3	1000.00	15Minute	20.16
J-871-1C	YES	145	148	2	1000.00	15Minute	6.44
J-900-1	YES	128	129	1	0.00	15Minute	10.79
J-901	YES	129	131	2	0.00	15Minute	1.59
J-902	YES	130	132	2	0.00	15Minute	2.22



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
C=737A1	J-151	J-737A-1	864.000	0.02	182.4	173.74	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.01001
C737-A2	J-737A-1	J-737A-2	788.000	0.02	173.7	165.86	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.01
C-737A-3	J-737A-2	J-744	672.000	0.02	165.9	161.3	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.00679
L-1001	J-1001	S-1000	234.000	0.013	115.6	114.7	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00385
L-1002	J-1002	J-1001	235.000	0.013	116.5	115.6	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00383
L-1003	J-1003	J-1002	229.000	0.013	117.1	116.5	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00262
L-1004	J-1004	J-1003	189.000	0.013	118	117.1	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00476
L-1005	J-1005	J-1004	496.000	0.013	120.1	118	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00423
L-1006	J-1006	J-1005	182.000	0.013	121.2	120.6	0.5	1	CIRCULAR	2.5	0	0	0	1		0.0033
L-1007	J-1007	J-1006	217.000	0.013	122	121.2	0.5	1	CIRCULAR	2	0	0	0	1		0.00369
L-1008	J-1008	J-1007	287.000	0.013	122.9	122	0.5	1	CIRCULAR	2	0	0	0	1		0.00314
L-1009	J-1009	J-1008	80.000	0.013	124	123.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00375
L-1010	J-1010	J-1009	203.000	0.013	124.8	124	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00394
L-1020	J-1020	J-1004	75.000	0.013	118.3	118	0.5	1	CIRCULAR	3	0	0	0	1		0.004
L-1021	J-1021	J-1020	364.000	0.013	118	118.3	0.5	1	CIRCULAR	3	0	0	0	1		-0.00082
L-1022	J-1022	J-1021	236.000	0.013	119.9	118.3	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00678
L-1023	J-1023	J-1022	430.000	0.013	121.7	119.9	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00419
L-1024	J-1024	J-1023	252.000	0.013	125.1	122.7	0.5	1	CIRCULAR	2	0	0	0	1		0.00952
L-1101	J-1101	S-1100	150.000	0.013	123.2	122.9	0.5	1	CIRCULAR	2	0	0	0	1		0.002
L-1102	J-1102	J-1101	632.000	0.013	125.1	123.2	0.5	1	CIRCULAR	2	0	0	0	1		0.00301
L-120	J-120	J-121	542.000	0.013	163.8	159.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00849
L-121	J-121	J-122	77.000	0.013	159.2	159.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0
L-122	J-122	J-123	188.000	0.013	159.2	158.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00426
L-123	J-123	J-124	26.000	0.013	158.4	156.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.06552
L-124	J-124	J-125	60.000	0.013	156.7	156.4	0.5	1	CIRCULAR	1.5	0	0	0	1		0.005
L-124A	J-124A	J-124B	328.000	0.013	161.2	158.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00701
L-124B	J-124B	J-124	28.000	0.013	158.9	156.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.07882
L-125	J-125	J-126	380.000	0.013	156.4	154.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00447
L-126	J-126	J-127	64.000	0.013	154.7	154	0.5	1	CIRCULAR	1.5	0	0	0	1		0.01094
L-127	J-127	J-128	18.000	0.013	153.5	153.2	0.5	1	CIRCULAR	2	0	0	0	1		0.01667
L-127A	J-127A	J-127	331.000	0.013	157.7	154.25	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01042
L-128	J-128	J-129	179.000	0.013	153.8	153.4	0.5	1	CIRCULAR	2	0	0	0	1		0.00223
L-129	J-129	J-130	301.000	0.013	153.4	151.8	0.5	1	CIRCULAR	2	0	0	0	1		0.00532
L-130	J-130	J-131	150.000	0.013	151.8	146.2	0.5	1	CIRCULAR	2.5	0	0	0	1		0.03736
L-131	J-131	S-150	77.000	0.013	141.6	141	0.5	1	IRREGULAR	0	0	0	0	1	XS_131	0.00753
L-141	J-141	J-142	236.000	0.013	157.7	155.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00847
L-142	J-142	J-143	41.000	0.013	155.2	155	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00488



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-142A	J-142A	J-142B	291.000	0.013	156.7	155.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00344
L-142B	J-142B	J-142	47.000	0.013	155.5	155.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00638
L-143	J-143	J-144	172.000	0.013	155	154.5	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00291
L-144	J-144	J-145	284.000	0.013	154.5	154.3	0.5	1	CIRCULAR	1.5	0	0	0	1		0.0007
L-145	J-145	J-146	261.000	0.013	154.2	152.8	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00536
L-146	J-146	J-147	254.000	0.013	152.6	151.6	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00394
L-147	J-147	J-148	76.000	0.013	151.6	151.3	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00395
L-148	J-148	J-149	137.000	0.013	151.3	148.3	0.5	1	CIRCULAR	2.5	0	0	0	1		0.0219
L-149	J-149	S-150	73.000	0.013	148.3	141	0.5	1	IRREGULAR	0	0	0	0	1	XS_149	0.1005
L-152	J-152	J-153	121.000	0.013	165.9	165.1	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00661
L-153	J-153	J-154	268.000	0.013	165.1	163.5	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00597
L-153A	J-153A	J-153	46.000	0.013	167.2	165.3	0.5	1	CIRCULAR	1.25	0	0	0	1		0.04134
L-154	J-154	J-155	260.000	0.013	163.5	161.2	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00885
L-156	J-155	J-156	57.000	0.013	160.8	160.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00175
L-157	J-157	J-158	203.000	0.013	159.6	159.2	0.5	1	CIRCULAR	2	0	0	0	1		0.00197
L-157.1	J-156	J-157	227.000	0.013	160.6	159.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00396
L-157-1	J-157-1	J-157-2	346.000	0.013	164.6	162.6	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00578
L-157-2	J-157-2	J-157-3	35.000	0.013	162.6	162.4	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00571
L-157-3	J-157-3	J-157-4	221.000	0.013	162.3	161.1	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00543
L-157-3A	J-157-3A	J-157-3	283.000	0.013	165.4	162.8	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00919
L-157-4	J-157-4	J-157	35.000	0.013	161	160.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00857
L-158	J-158	J-159	27.000	0.013	159.2	159.2	0.5	1	CIRCULAR	2	0	0	0	1		0
L-159	J-159	J-160	57.000	0.013	159.2	159	0.5	1	CIRCULAR	2	0	0	0	1		0.00351
L-160	J-160	J-161	206.000	0.013	155.3	154.9	0.5	1	CIRCULAR	2	0	0	0	1		0.00194
L-161	J-161	J-162	391.000	0.013	154.8	154	0.5	1	CIRCULAR	2	0	0	0	1		0.00205
L-162	J-162	J-163	162.000	0.013	153.9	152.8	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00679
L-163	J-163	S-100	200.000	0.013	152.8	151.2	0.5	1	CIRCULAR	2.5	0	0	0	1		0.008
L-201	J-201	J-202	262.000	0.013	145.8	144.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00344
L-202	J-202	J-203	259.000	0.013	144.9	143.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00386
L-203	J-203	J-204	259.000	0.013	143.9	142.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00579
L-204	J-204	J-205	263.000	0.013	142.4	141.4	0.5	1	CIRCULAR	2	0	0	0	1		0.0038
L-205	J-205	J-206	60.000	0.013	141.4	141.3	0.5	1	CIRCULAR	2	0	0	0	1		0.00167
L-206	J-206	S-200	68.000	0.013	141.3	135	0.5	1	CIRCULAR	2	0	0	0	1		0.09305
L-301	J-301	J-302	379.000	0.013	142.5	141	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00396
L-302	J-302	J-303	68.000	0.013	141	139.8	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01765
L-303	J-303	J-304	237.000	0.013	139.8	136.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01393
L-304	J-304	J-326	452.000	0.013	136.5	132	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00996



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-321	J-321	J-322	154.000	0.013	137.7	137.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0
L-322	J-322	J-323	102.000	0.013	137.7	136.5	0.5	1	CIRCULAR	1.5	0	0	0	1		0.01177
L-323	J-323	J-324	157.000	0.013	136.5	134.5	0.5	1	CIRCULAR	1.5	0	0	0	1		0.01274
L-324	J-324	J-325	101.000	0.013	134.5	133.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00792
L-325	J-325	J-326	198.000	0.013	133.7	132	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00859
L-326	J-326	S-300	112.000	0.013	132	123.2	0.5	1	CIRCULAR	2	0	0	0	1		0.07882
L-401	J-401	J-402	127.000	0.013	144.1	142.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0126
L-402	J-402	J-403	184.000	0.013	142.5	133.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0.05061
L-403	J-403	J-404	200.000	0.013	133.2	133.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0
L-404	J-404	J-405	185.000	0.013	133.2	129.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.02
L-405	J-405	J-406	61.000	0.013	129.5	127.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.03445
L-406	J-406	J-407	408.000	0.013	127.4	125.8	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00392
L-407	J-407	S-400	62.000	0.013	123.4	116	0.5	1	CIRCULAR	2.25	0	0	0	1		0.12021
L-451	J-451	J-452	390.000	0.013	143.6	141.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00538
L-452	J-452	J-453	434.000	0.013	141.5	134.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01521
L-453	J-453	J-454	401.000	0.013	134.9	131.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00873
L-454	J-454	J-455	263.000	0.013	131.4	130.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0038
L-455	J-455	J-456	37.000	0.013	130.4	130.3	0.5	1	CIRCULAR	1.5	0	0	0	1		0.0027
L-455A	J-455A	J-455	324.000	0.013	133.6	130.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00988
L-456	J-456	J-457	267.000	0.013	130	129	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00375
L-457	J-457	J-458	58.000	0.013	129	128.4	0.5	1	CIRCULAR	1.5	0	0	0	1		0.01035
L-458	J-458	J-459	224.000	0.013	128.4	127.8	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00268
L-459	J-459	J-460	130.000	0.013	127.8	127.3	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00385
L-460	J-460	J-461	68.000	0.013	127.3	127.1	0.5	1	CIRCULAR	2.25	0	0	0	1		0.00294
L-461	J-461	J-462	232.000	0.013	127.2	126.3	0.5	1	CIRCULAR	2.25	0	0	0	1		0.00388
L-462	J-462	J-463	43.000	0.013	126.3	126	0.5	1	CIRCULAR	2.25	0	0	0	1		0.00698
L-462A	J-462A	J-462	361.000	0.013	127.8	126.3	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00416
L-463	J-463	J-464	220.000	0.013	126	125	0.5	1	CIRCULAR	2.25	0	0	0	1		0.00455
L-464	J-464	J-465	97.000	0.013	125	124.3	0.5	1	CIRCULAR	2.25	0	0	0	1		0.00722
L-465	J-465	J-466	132.000	0.013	124.3	123.8	0.5	1	CIRCULAR	2.25	0	0	0	1		0.00379
L-466	J-466	J-407	91.000	0.013	123.8	123.4	0.5	1	CIRCULAR	2.25	0	0	0	1		0.0044
L-481	J-481	J-482	899.000	0.013	156.9	144.84	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.01346
L-481B	J-481B	J-481	1861.000	0.02	165.1	156.94	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.00439
L-482	J-482	J-483	1634.000	0.013	144.8	136.67	0.5	1	TRAPEZOIDAL	2	2	2	2	1		0.005
L-482B	J-482B	J-482A	3613.000	0.02	268.8	192.84	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.02104
L-483	J-483	J-484	1395.000	0.013	136.7	129.7	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.005
L-484	J-484	J-485	595.000	0.013	129.7	126.72	0.5	1	RECT_OPEN	5	10	2	0	1		0.00501





Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-484A	J-484A	J-484	7225.000	0.05	270	12.7	0.5	1	TRAPEZOIDAL	4	50	10	10	1		0.03564
L-485	J-485	J-702-1	1054.000	0.02	126.7	114.9	0.5	1	RECT_OPEN	5	10	0	0	1		0.01122
L-485B-2	J-485A	J-701B	1999.000	0.02	154.2	152.73	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.00075
L-490	J-490	J-460	238.000	0.013	128.7	127.3	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00588
L-491	J-491	J-490	277.000	0.013	130.3	128.7	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00578
L-492	J-492	J-491	265.000	0.013	135.1	130.3	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01812
L-493	J-493	J-492	219.000	0.013	139.4	135.1	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01964
L-494	J-494	J-493	64.000	0.013	140.2	139.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0125
L-495	J-495	J-490	282.000	0.013	129.8	128.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0039
L-501	J-501	J-502	263.000	0.013	135.3	143.1	0.5	1	CIRCULAR	1.25	0	0	0	1		-0.02967
L-502	J-502	J-503	245.000	0.013	143	139.3	0.5	1	CIRCULAR	1.5	0	0	0	1		0.0151
L-503	J-503	S-500	352.000	0.013	139.3	135	0.5	1	CIRCULAR	1.5	0	0	0	1		0.01222
L-601	J-601	J-602	71.000	0.013	145.8	145.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00423
L-602	J-602	J-603	802.000	0.013	145.5	142.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00374
L-603	J-603	J-604	99.000	0.013	142.5	142.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00303
L-604	J-604	S-600	52.000	0.013	142.2	134.6	0.5	1	CIRCULAR	1.25	0	0	0	1		0.14774
L-701	J-701A	O-700	7176.000	0.04	115.8	105.81	0.5	1	IRREGULAR	0	0	0	0	1	XS_701	0.00139
L-701A	J-701	J-701A	1764.000	0.04	117.9	115.78	0.5	1	IRREGULAR	0	0	0	0	1	XS_701	0.00118
L-701B	J-701B	J-701	2257.000	0.02	153	120.5	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.01442
L-701C	J-701C	J-701B	5233.000	0.02	220	153.04	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.0128
L-702	J-702	J-702-1	1483.000	0.05	119.5	118.36	0.5	1	IRREGULAR	0	0	0	0	1	XS_702	0.00079
L-702-1	J-702-1	J-701	1805.000	0.033	118.4	117.87	0.5	1	IRREGULAR	0	0	0	0	1	XS_702	0.00027
L-702B	J-702B	J-702	117.000	0.013	120.1	119.54	0.5	1	CIRCULAR	6	0	0	0	1		0.00436
L-703	J-703	J-702B	194.000	0.013	120.9	120.05	0.5	1	CIRCULAR	6	0	0	0	1		0.00433
L-704	J-704	J-703	1479.000	0.04	121.1	120.89	0.5	1	IRREGULAR	0	0	0	0	1	XS_704	0.00013
L-705	J-705	J-704	649.000	0.04	121.2	121.08	0.5	1	IRREGULAR	0	0	0	0	1	XS_705	0.0002
L-706	J-706	J-705	577.000	0.013	121.3	121.21	0.5	1	CIRCULAR	6	0	0	0	1		7.00E-05
L-707	J-707	J-706	133.000	0.013	121.3	121.25	0.5	1	IRREGULAR	0	0	0	0	1	XS_707	8.00E-05
L-708	J-708	J-707	916.000	0.05	121.6	121.26	0.5	1	IRREGULAR	0	0	0	0	1	XS_708	0.00034
L-709-1	J-709-1	J-708	478.000	0.013	123.6	121.93	0.5	1	CIRCULAR	6	0	0	0	1		0.00358
L-709-2	J-709-2	J-709-1	17.000	0.013	123.9	123.64	0.5	1	CIRCULAR	1.25	0	0	0	1		0.01353
L-709-3	J-709-3	J-709-2	83.000	0.013	124.4	123.87	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00639
L-710	J-710	J-709-1	307.000	0.05	124.5	123.64	0.5	1	IRREGULAR	0	0	0	0	1	XS_710	0.00283
L-711	J-711	J-710	128.000	0.013	124.5	124	0.5	1	CIRCULAR	6	0	0	0	1		0.00391
L-712	J-712	J-711	233.000	0.05	125	124.55	0.5	1	IRREGULAR	0	0	0	0	1	XS_712	0.00185
L-713	J-713	J-712	152.000	0.013	124.5	124	0.5	1	CIRCULAR	6	0	0	0	1		0.00329
L-714-1	J-714-1	J-713	529.000	0.06	124.9	124.72	0.5	1	IRREGULAR	0	0	0	0	1	XS_714_1	0.00038



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-714-2	J-714-2	J-714-1	102.000	0.013	125.4	124.92	0.5	1	CIRCULAR	2	0	0	0	1		0.0051
L-714-3	J-714-3	J-714-2	32.000	0.013	125.7	125.44	0.5	1	CIRCULAR	2	0	0	0	1		0.00906
L-715	J-715	J-826	342.000	0.04	125	124.92	0.5	1	IRREGULAR	0	0	0	0	1	XS_715	0.00023
L-715-1	J-826	J-714-1	314.000	0.04	125	124.92	0.5	1	IRREGULAR	0	0	0	0	1	XS_715	0.00025
L-715A	J-715A	J-715	458.000	0.013	134.6	125	0.5	1	CIRCULAR	0.5	0	0	0	1		0.0209
L-716	J-716	J-715	111.000	0.013	127.2	126.2	0.5	1	CIRCULAR	6	0	0	0	1		0.00901
L-716A	J-716A	J-716	467.000	0.04	140.3	131.52	0.5	1	TRAPEZOIDAL	0.5	30	2	2	1		0.0188
L-717-1	J-717-1	J-716	1047.000	0.06	127.5	126.35	0.5	1	IRREGULAR	0	0	0	0	1	XS_717_1	0.0011
L-718	J-718	J-717-1	55.000	0.013	127.7	127.5	0.5	1	CIRCULAR	6	0	0	0	2		0.004
L-719	J-719	J-718	66.000	0.013	128	127.72	0.5	1	CIRCULAR	6	0	0	0	2		0.00379
L-720	J-720	J-719	1405.000	0.08	134.8	127.97	0.5	1	IRREGULAR	0	0	0	0	1	XS_720	0.00487
L-721	J-721	J-720	493.000	0.013	138.1	134.81	0.5	1	CIRCULAR	4.5	0	0	0	2		0.00663
L-722	J-722	J-721	378.000	0.013	139.4	138.08	0.5	1	CIRCULAR	4.2	0	0	0	2		0.00339
L-723_1	J-723	J-723-1	524.534	0.05	145.7	144.344	0.5	1	TRAPEZOIDAL	5	15	5	5	1		0.00262
L-723_2	J-723-1	J-722	1900.757	0.05	144.3	139.36	0.5	1	TRAPEZOIDAL	5	15	5	5	1		0.00262
L-725	J-725	J-723	174.841	0.01	146.4	145.72	0.5	1	CIRCULAR	3.5	0	0	0	3		0.00395
L-725-1	J-725-1	J-725-2	6825.000	0.035	367.6	175.57	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.02814
L-725-2_1	J-725-2	J-725A-1	2787.619	0.035	175.6	148.391	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.00975
L-725-2_2	J-725A-2	J-725A-3	55.710	0.02	147.7	147.13	0.5	1	TRAPEZOIDAL	4	15	2	2	1		0.00978
L-725-2_3	J-725A-1	J-725A-2	73.156	0.01	148.4	147.675	0.5	1	CIRCULAR	2	0	0	0	2		0.00979
L-725-2_4	J-725A-3	J-725	73.574	0.01	147.1	146.41	0.5	1	CIRCULAR	2.5	0	0	0	2		0.00979
L-725-3	J-725-3	J-725-2	6004.000	0.05	338.6	175.57	0.5	1	TRAPEZOIDAL	4	50	10	10	1		0.02716
L-725B	J-725B-2	J-723-1	268.149	0.013	145	144.344	0.5	1	RECT_OPEN	5	10	0	0	1		0.00245
L-726	J-726	J-725	775.000	0.08	147.1	146.41	0.5	1	IRREGULAR	0	0	0	0	1	XS_726	0.00085
L-730	J-730	J-730-1	1510.000	0.013	139.6	130.78	0.5	1	IRREGULAR	0	0	0	0	1	XS_730	0.00581
L-730-1	J-730-1	J-702	719.000	0.04	130.8	119.54	0.5	1	IRREGULAR	0	0	0	0	1	XS_730	0.01563
L-731	J-731	J-730	2034.000	0.013	148.3	139.55	0.5	1	IRREGULAR	0	0	0	0	1	XS_731	0.0043
L-732	J-732	J-731	79.000	0.013	150.9	150.53	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00405
L-732A	J-732A	J-731	411.000	0.04	154.8	148.3	0.5	1	TRAPEZOIDAL	2.5	8	2	2	1		0.01591
L-732B	J-732B	J-732A	2829.000	0.04	160.7	154.84	0.5	1	TRAPEZOIDAL	2.8	8	2	2	1		0.00207
L-733	J-733	J-732	98.000	0.013	151.6	150.85	0.5	1	CIRCULAR	2	0	0	0	1		0.00725
L-734	J-734	J-733	211.000	0.013	152.7	151.56	0.5	1	CIRCULAR	2	0	0	0	1		0.00521
L-735	J-735	J-734	489.000	0.013	155	152.66	0.5	1	CIRCULAR	2	0	0	0	1		0.00476
L-736	J-736	J-735	65.000	0.013	155.3	154.99	0.5	1	CIRCULAR	2	0	0	0	1		0.004
L-737	J-737	J-736	142.000	0.013	155.6	155.25	0.5	1	CIRCULAR	2	0	0	0	1		0.00254
L-740	J-740	J-731	36.000	0.013	148.9	148.3	0.5	1	CIRCULAR	3	0	0	0	1		0.01667
L-741	J-741	J-740	32.000	0.013	149.2	148.9	0.5	1	CIRCULAR	3	0	0	0	1		0.00938



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-742	J-742	J-741	561.000	0.013	155.5	149.2	0.5	1	CIRCULAR	3	0	0	0	1		0.01123
L-743	J-743	J-742	258.000	0.013	159.3	155.5	0.5	1	CIRCULAR	3	0	0	0	1		0.01473
L-744	J-744	J-743	111.000	0.013	162.5	161.4	0.5	1	CIRCULAR	3	0	0	0	1		0.00991
L-745	J-745	J-743	72.000	0.013	160.1	159.3	0.5	1	CIRCULAR	3	0	0	0	1		0.01111
L-750	J-750	J-704	2037.000	0.013	126.9	121.08	0.5	1	TRAPEZOIDAL	6	2	2	2	1		0.00288
L-751	J-751	J-750	134.000	0.013	129.5	126.94	0.5	1	CIRCULAR	3	0	0	0	1		0.01873
L-752	J-752	J-751	367.000	0.02	131.3	129.45	0.5	1	TRAPEZOIDAL	2	20	2	2	1		0.00501
L-753	J-753	J-752	240.000	0.02	132.5	131.29	0.5	1	TRAPEZOIDAL	2	20	2	2	1		0.005
L-754	J-754	J-753	307.000	0.02	134	132.49	0.5	1	TRAPEZOIDAL	2	20	2	2	1		0.00498
L-760	J-760	J-707	160.000	0.013	122	121.26	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00488
L-761	J-761	J-760	37.000	0.013	122.2	122.04	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00486
L-762	J-762	J-761	87.000	0.013	122.7	122.22	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00494
L-770	J-770	J-718	353.000	0.013	134.6	128.2	0.5	1	CIRCULAR	1.5	0	0	0	1		0.01813
L-771	J-771	J-770	41.000	0.013	134.9	134.8	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00244
L-772	J-772	J-771	147.000	0.013	135.5	134.9	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00408
L-773	J-773	J-772	42.000	0.013	135.9	135.5	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00952
L-774	J-774	J-773	127.000	0.013	136.4	135.9	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00394
L-775	J-775	J-774	87.000	0.013	137.2	136.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00805
L-776	J-776	J-775	46.000	0.013	137.6	137.3	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00652
L-777	J-777	J-776	129.000	0.013	138.7	137.8	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00698
L-778	J-778	J-777	76.000	0.013	139.9	139.6	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00395
L-779	J-779	J-778	158.000	0.013	140.8	140.1	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00443
L-780	J-780	J-779	348.000	0.013	142.5	141	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00431
L-781	J-781	J-780	132.000	0.013	143.3	142.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00455
L-782	J-782	J-781	209.000	0.013	144.3	143.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00431
L-783	J-783	J-782	189.000	0.013	145.1	144.3	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00423
L-784	J-784	J-783	200.000	0.013	145.9	145.1	0.5	1	CIRCULAR	1.25	0	0	0	1		0.004
L-790	J-790	J-720	639.000	0.013	138.5	134.81	0.5	1	RECT_OPEN	4	8	0	0	2		0.00581
L-791	J-791	J-790	161.000	0.013	139.4	138.52	0.5	1	RECT_OPEN	4	8	0	0	1		0.00516
L-792	J-792	J-791	203.000	0.013	139.8	139.35	0.5	1	RECT_CLOSED	9	12	0	0	1		0.00207
L-792A	J-792A	J-792	2449.000	0.035	190.4	139.77	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.02066
L-792B	J-792B	J-792A	5144.000	0.035	273.4	190.36	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.01614
L-801	J-801	O-800	2565.000	0.02	115.5	110.37	0.5	1	TRAPEZOIDAL	5	10	2	2	1		0.00198
L-802	J-802	J-801	166.000	0.013	115.5	115.46	0.5	1	CIRCULAR	6	0	0	0	1		0.00024
L-803	J-803	J-802	368.000	0.03	115.8	115.5	0.5	1	TRAPEZOIDAL	4	15	2	2	1		0.00073
L-804	J-804	J-803	168.000	0.013	116.1	115.77	0.5	1	CIRCULAR	4	0	0	0	1		0.00179
L-805	J-805	J-804	233.000	0.05	116.2	116.07	0.5	1	CIRCULAR	3	0	0	0	1		0.00056



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-806	J-806	J-805	316.000	0.013	116.4	116.2	0.5	1	TRAPEZOIDAL	3	10	2	2	1		0.00073
L-807	J-807	J-806	200.000	0.05	116.6	116.43	0.5	1	TRAPEZOIDAL	3	10	2	2	1		0.0009
L-808	J-808	J-807	294.000	0.013	117.3	116.61	0.5	1	TRAPEZOIDAL	3	10	2	2	1		0.00241
L-809	J-809	J-808	5414.000	0.02	124.8	117.32	0.5	1	TRAPEZOIDAL	2	7	2	2	1		0.00138
L-810	J-810	J-809	384.000	0.013	125.9	124.8	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00286
L-811	J-811	J-810	307.000	0.013	126.8	125.9	0.5	1	CIRCULAR	1.5	0	0	0	1		0.003
L-812	J-812	J-811	67.000	0.013	126.4	126.2	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00299
L-813	J-813	J-812	173.000	0.013	126.9	126.4	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00289
L-814	J-814	J-813	203.000	0.013	128.2	127	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00591
L-815	J-815	J-814	372.000	0.013	129.8	128.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0043
L-816	J-816	J-815	377.000	0.013	130.7	129.8	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00239
L-817	J-817	J-817-1	84.000	0.013	131	130.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00357
L-817-1	J-817-1	J-816	83.000	0.013	130.7	130.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00241
L-818	J-818	J-817	211.000	0.013	131.6	131	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00284
L-819	J-819	J-818	168.000	0.013	131.9	131.6	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00179
L-820	J-820	J-819	138.000	0.013	132.2	131.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00217
L-821	J-821	J-820	63.000	0.013	132.4	132.2	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00317
L-822	J-822	J-821	236.000	0.013	133.4	132.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00381
L-823	J-823	J-822	138.000	0.013	134	133.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00435
L-824	J-869	J-824	388.000	0.013	132.4	131.5	0.5	1	CIRCULAR	1.75	0	0	0	1		0.00232
L-825	J-824	J-825	622.000	0.013	131.5	129.9	0.5	1	CIRCULAR	1.75	0	0	0	1		0.00257
L-826	J-825	J-826	48.000	0.013	129.9	126	0.5	1	CIRCULAR	1.75	0	0	0	1		0.08152
L-830	J-830	J-801	954.000	0.04	119.1	115.46	0.5	1	TRAPEZOIDAL	6	40	2	2	1		0.00384
L-840	J-840	J-811	106.000	0.013	127.9	127.6	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00283
L-841	J-841	J-840	165.000	0.013	128.5	127.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00364
L-842	J-842	J-841	174.000	0.013	129	128.5	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00287
L-842A	J-482A	J-482	2928.755	0.02	192.8	144.84	0.5	1	TRAPEZOIDAL	4	5	2	2	1		0.01639
L-844	J-844	J-842	275.000	0.013	129.4	129.1	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00109
L-845	J-845	J-844	91.000	0.013	129.7	129.4	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0033
L-846	J-846	J-845	446.000	0.013	131	129.7	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00291
L-847	J-847	J-846	154.000	0.013	131.5	131	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00325
L-850	J-850	J-809	100.000	0.013	125.2	124.8	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0036
L-860	J-860	J-810	99.000	0.013	126.5	125.9	0.5	1	CIRCULAR	1.25	0	0	0	1		0.00626
L-869	J-868	J-869	33.000	0.013	133.3	132.4	0.5	1	CIRCULAR	1.5	0	0	0	1		0.02728
L-870	J-870	J-823	317.000	0.013	133.1	132.4	0.5	1	CIRCULAR	1.5	0	0	0	1		0.00221
L-871	J-871-1A	J-870	400.000	0.013	135.1	133.1	0.5	1	CIRCULAR	1.25	0	0	0	1		0.005
L-871-1B	J-871-1B	J-871-1A	3386.000	0.013	141	136.7	0.5	1	TRAPEZOIDAL	0.5	2	2	2	1		0.00126



Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Elev. (ft)	Outlet Elev. (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
L-871-1C	J-871-1C	J-871-1B	2057.000	0.013	145.3	140.97	0.5	1	TRAPEZOIDAL	0.5	2	2	2	1		0.00208
L-900-1	J-900-1	O-900	81.000	0.013	127.7	127.6	0.5	1	CIRCULAR	1	0	0	0	1		0.00074
L-901	J-901	J-900-1	793.000	0.013	128.7	127.66	0.5	1	CIRCULAR	1	0	0	0	1		0.00134
L-902	J-902	J-901	283.000	0.013	130.2	128.72	0.5	1	CIRCULAR	1	0	0	0	1		0.00523



Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Storage Curve	Curve Name	Time Series	Scale Factor	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (fraction)
S-100	147	165	18	TABULAR	S_100	30Minute	0.34	0	0	0
S-1000	107	125	18	TABULAR	S_1000	30Minute	17.5	0	0	0
S-1100	123	133	11	TABULAR	S_1100	15Minute	10.18	0	0	0
S-150	141	162	21	TABULAR	S_150	15Minute	4.24	0	0	0
S-200	136	149	13	TABULAR	S_200	15Minute	0.44	0	0	0
S-300	123	141	18	TABULAR	S_300	15Minute	0.33	0	0	0
S-400	115	137	22	TABULAR	S_400	15Minute	0.52	0	0	0
S-500	133	144	11	TABULAR	S_500	15Minute	7.53	0	0	0
S-600	135	144	9	TABULAR	S_600	15Minute	0.59	0	0	0

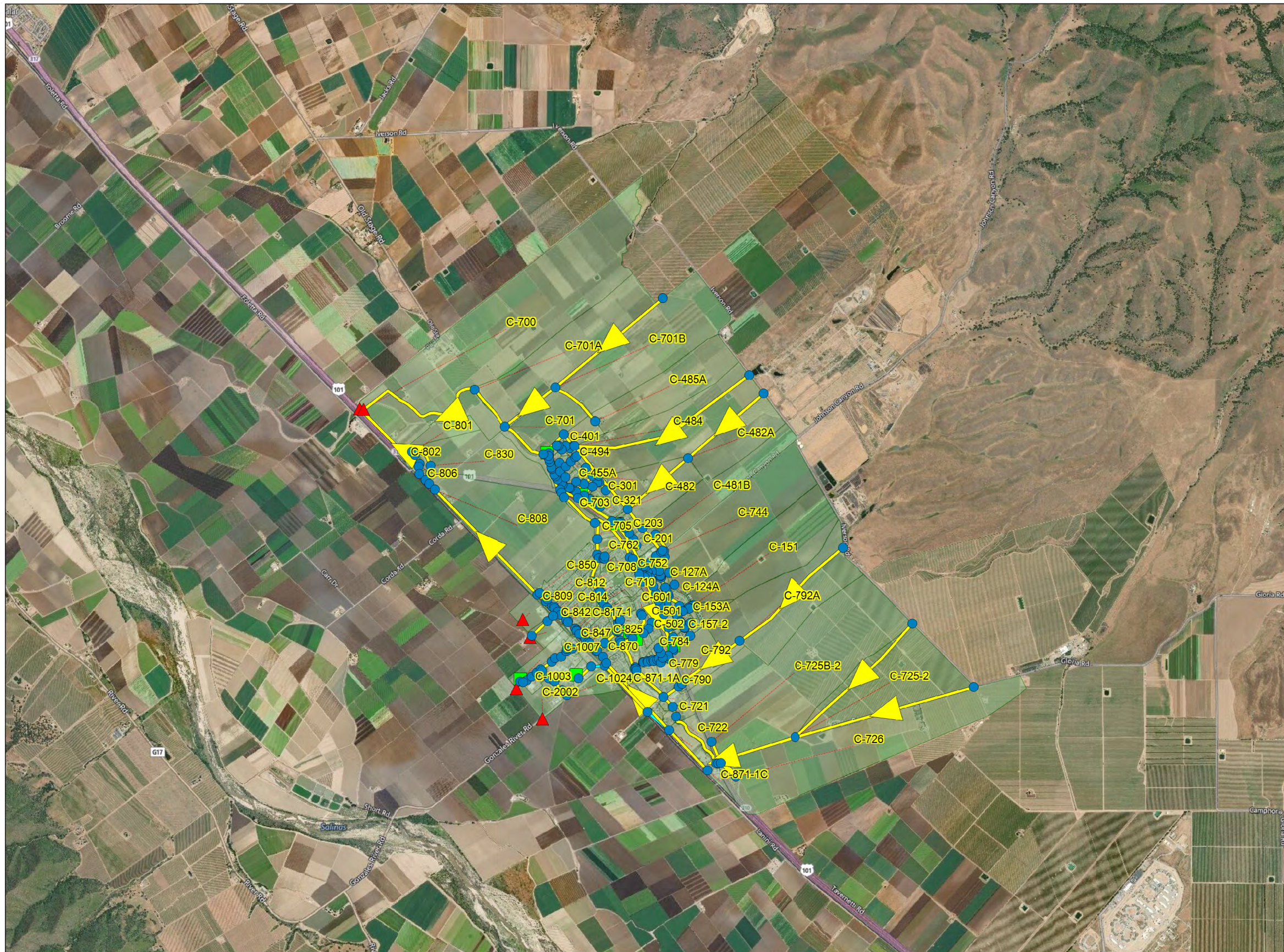


Name	Inlet Node	Outlet Node	Type	Height (ft)	Length (ft)	Side Slope (ft/ft)	Inlet Elev. (ft)	Discharge Coeff. (CFS)
J-871-1B	J-871-1B	J-871-2B	TRAPEZOIDAI	1.16	1800	50	141.59	2.65
W-100	S-100	J-732B	TRANSVERSE	12.08	20	2	162.05	2.4
W-1000	S-1000	O-1000	TRANSVERSE	10.00	6	2	107.1	2.65
W-1100	S-1100	J-1022	TRANSVERSE	8.00	6	2	122.5	2.65
W-150	S-150	J-732A	TRANSVERSE	15.77	5	2	156.74	2.4
W-200	S-200	J-730	TRANSVERSE	10.00	10	2	145.98	2.4
W-300	S-300	J-730-1	TRANSVERSE	14.73	12	2	138.12	2.4
W-400	S-400	J-702-1	TRANSVERSE	13.78	11.5	2	128.78	2.4
W-500	S-500	J-716A	TRANSVERSE	2.00	100	10	145.1	2.4
W-600	S-600	J-715A	TRANSVERSE	11.63	6	2	144.97	2.4
W-871-2A.1	J-871-2A	J-1102	TRAPEZOIDAI	1.31	100	50	137.13	2.65



Name	Inflows	Treatment	Invert Elev. (ft)	Rim Elev. (ft)	Time Series	Scale Factor
OF812	NO	NO	140	145		1.00
OF-J-725-2	NO	NO	140	148		1.00
OF-J-725B-2	YES	NO	0	0	50Minute	22.41
OF-J-792	YES	NO	174	176	60Minute	8.97
OF-VL	NO	NO	116	123		1.00
OF-VL-1	NO	NO	185	185		1.00



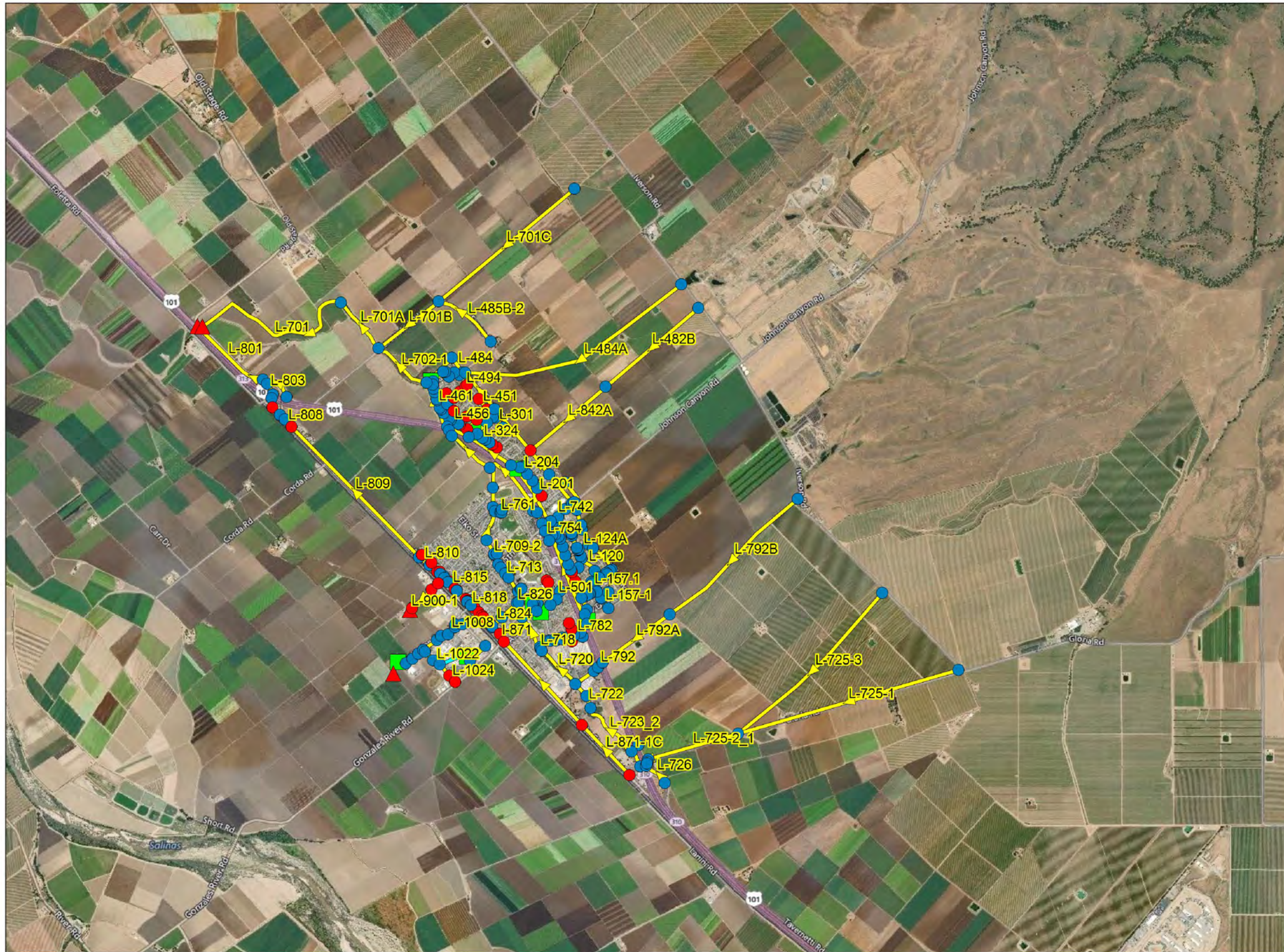


### Legend

- Junctions
- Visible
  - Flooding
  - ▲ Outfalls
  - Storages
  - Conduits
  - Weirs
  - Subcatchments



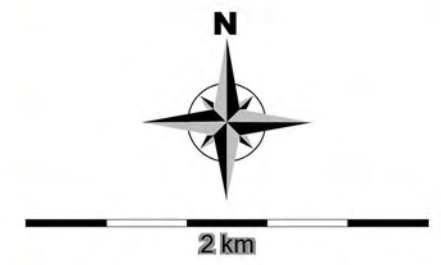
3 km

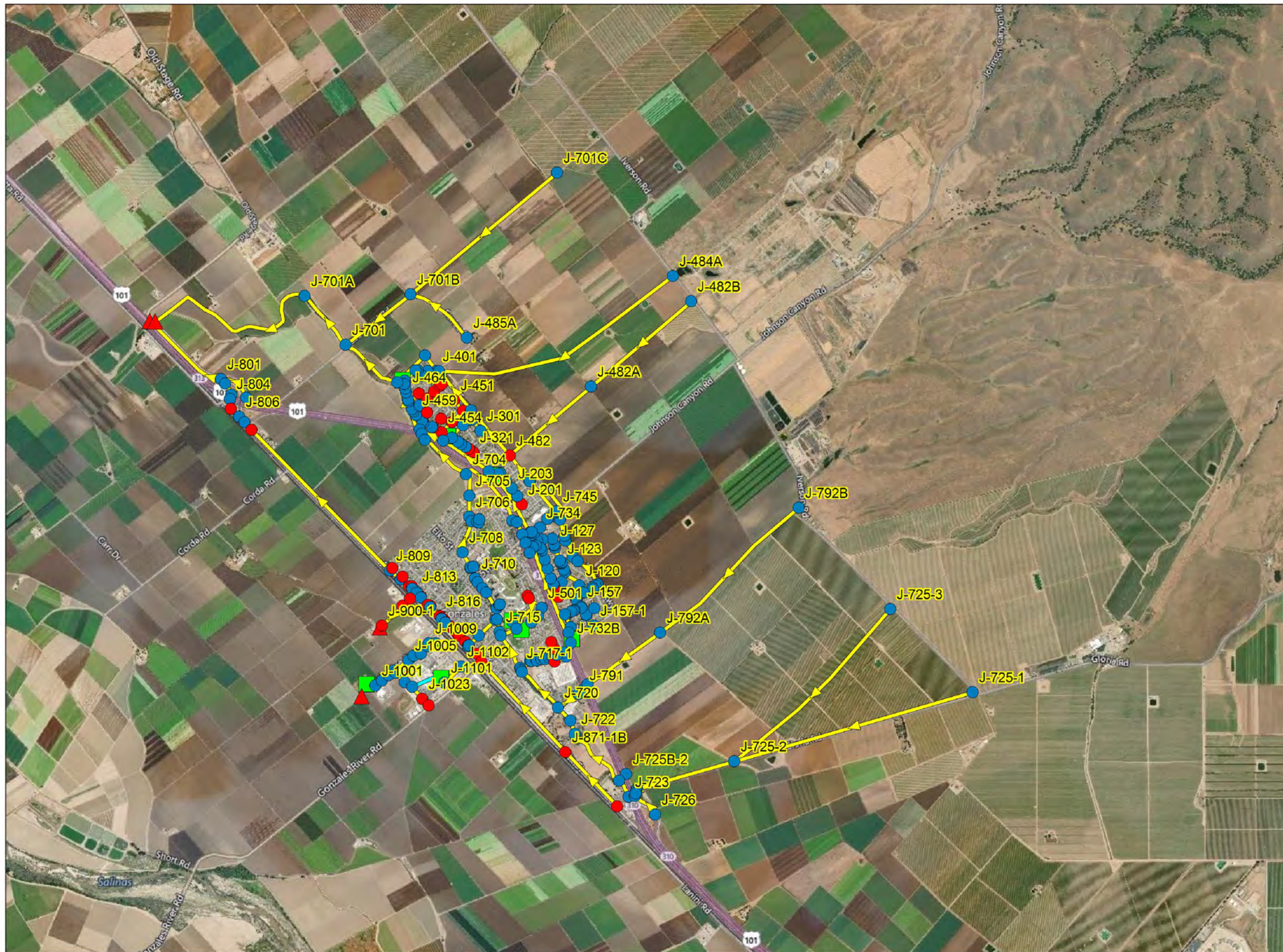


### Legend

Junctions

- Visible
- Flooding
- ▲ Outfalls
- Storages
- Conduits
- Weirs





### Legend

- Junctions
- Visible
  - Flooding
  - ▲ Outfalls
  - Storages
  - Conduits
  - Weirs



2 km



## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. 25-Year Existing Conditions Model
4. **SWMM 10 Year Output Report - No Offsite Flows**
5. SWMM 25 Year Output Report - No Offsite Flows
6. SWMM 25 Year Output Report - With Offsite Flows
7. SWMM 100 Year Output Report- No Offsite Flows

Gonzales Existing Conditions

\*\*\*\*\*  
 NOTE: The summary statistics displayed in this report are based on results found at every computational time step, not just on results from each reporting time step.  
 \*\*\*\*\*

\*\*\*\*\*  
 Analysis Options  
 \*\*\*\*\*

Flow Units ..... CFS  
 Process Models:  
   Rainfall/Runoff ..... NO  
   RDII ..... NO  
   Snowmelt ..... NO  
   Groundwater ..... NO  
   Flow Routing ..... YES  
   Ponding Allowed ..... YES  
   Water Quality ..... NO  
 Flow Routing Method ..... DYNWAVE  
 Starting Date ..... 06/13/2009 00:00:00  
 Ending Date ..... 06/14/2009 07:10:00  
 Antecedent Dry Days ..... 0.0  
 Report Time Step ..... 00:01:00  
 Routing Time Step ..... 1.00 sec  
 Variable Time Step ..... YES  
 Maximum Trials ..... 20  
 Number of Threads ..... 1  
 Head Tolerance ..... 0.005000 ft

	Volume acre-feet	Volume 10 <sup>6</sup> gal
Flow Routing Continuity	-----	-----
Dry Weather Inflow .....	0.000	0.000
Wet Weather Inflow .....	0.000	0.000
Groundwater Inflow .....	0.000	0.000
RDII Inflow .....	0.000	0.000
External Inflow .....	206.972	67.445
External Outflow .....	179.559	58.512
Flooding Loss .....	0.227	0.074
Evaporation Loss .....	0.000	0.000
Exfiltration Loss .....	0.000	0.000
Initial Stored Volume ....	0.004	0.001
Final Stored Volume .....	23.318	7.599
Continuity Error (%) .....	1.871	

\*\*\*\*\*  
 Highest Continuity Errors  
 \*\*\*\*\*  
 Node S-150 (39.77%)  
 Node J-701A (6.00%)  
 Node J-846 (4.63%)  
 Node S-500 (3.50%)  
 Node J-131 (3.35%)

\*\*\*\*\*  
 Time-Step Critical Elements  
 \*\*\*\*\*

67 Link L-741 (4.26%)  
 68 Link L-709-2 (2.11%)  
 69 Link L-127 (1.42%)

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 80

\*\*\*\*\*  
 Highest Flow Instability Indexes  
 \*\*\*\*\*  
 Link L-761 (2)  
 Link L-773 (2)  
 Link L-771 (2)  
 Link L-776 (2)  
 Link L-762 (1)

81  
 82

\*\*\*\*\*  
 Routing Time Step Summary  
 \*\*\*\*\*

85 Minimum Time Step : 0.37 sec  
 86 Average Time Step : 0.98 sec  
 87 Maximum Time Step : 1.00 sec  
 88 Percent in Steady State : 0.00  
 89 Average Iterations per Step : 2.25  
 90 Percent Not Converging : 0.59

91  
 92  
 93

\*\*\*\*\*  
 Node Depth Summary  
 \*\*\*\*\*

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J-1001	JUNCTION	0.19	3.64	119.24	0 00:50	3.64
J-1002	JUNCTION	0.20	4.31	120.81	0 00:48	4.30
J-1003	JUNCTION	0.22	5.28	122.38	0 00:50	5.24
J-1004	JUNCTION	0.21	5.56	123.56	0 00:50	5.51
J-1005	JUNCTION	0.10	5.11	125.21	0 00:45	3.69
J-1006	JUNCTION	0.08	2.69	123.89	0 00:49	2.68
J-1007	JUNCTION	0.07	3.31	125.31	0 00:48	2.22
J-1008	JUNCTION	0.06	1.67	124.57	0 00:50	1.66
J-1009	JUNCTION	0.03	0.73	126.53	0 00:45	0.72
J-1010	JUNCTION	0.03	0.58	132.78	0 00:45	0.57
J-1020	JUNCTION	0.24	6.51	124.81	0 00:49	6.48
J-1021	JUNCTION	0.22	6.50	125.50	0 00:51	6.46
J-1022	JUNCTION	0.21	6.72	126.92	0 00:55	6.72
J-1023	JUNCTION	0.15	10.58	132.28	0 00:45	5.63
J-1024	JUNCTION	0.09	14.38	139.48	0 00:45	3.14
J-1101	JUNCTION	0.04	0.70	130.90	0 00:45	0.70
J-1102	JUNCTION	0.05	1.04	135.54	0 00:45	1.04
J-120	JUNCTION	0.01	0.25	164.05	0 00:46	0.25
J-121	JUNCTION	0.10	4.91	164.11	0 00:41	3.33
J-122	JUNCTION	0.07	4.42	163.62	0 00:41	2.64
J-123	JUNCTION	0.04	2.63	161.03	0 00:44	2.13
J-124	JUNCTION	0.09	3.30	160.00	0 00:47	3.24
J-124A	JUNCTION	0.02	0.43	161.63	0 00:44	0.42
J-124B	JUNCTION	0.02	1.12	160.02	0 00:48	1.12
J-125	JUNCTION	0.08	3.59	159.99	0 00:43	2.94
J-126	JUNCTION	0.08	2.42	157.12	0 00:47	2.38
J-127	JUNCTION	0.09	1.99	155.99	0 00:47	1.99
J-127A	JUNCTION	0.02	0.36	158.06	0 00:45	0.36
J-128	JUNCTION	0.09	1.91	155.71	0 00:47	1.91
J-129	JUNCTION	0.07	1.37	154.77	0 00:48	1.37
J-130	JUNCTION	0.07	1.62	153.42	0 00:48	1.62

133	J-131	JUNCTION	0.55	0.59	146.79	0	09:43	0.59
134	J-141	JUNCTION	0.04	15.06	172.76	0	00:44	13.27
135	J-142	JUNCTION	0.10	16.86	172.06	0	00:44	15.61
136	J-142A	JUNCTION	0.08	16.63	173.33	0	00:44	16.44
137	J-142B	JUNCTION	0.09	16.93	172.43	0	00:44	15.95
138	J-143	JUNCTION	0.10	16.78	171.78	0	00:44	15.15
139	J-144	JUNCTION	0.14	14.84	169.34	0	00:44	13.37
140	J-145	JUNCTION	0.09	12.37	166.57	0	00:43	9.32
141	J-146	JUNCTION	0.09	7.38	160.18	0	00:43	5.78
142	J-147	JUNCTION	0.07	1.41	153.01	0	00:45	1.40
143	J-148	JUNCTION	0.05	0.91	152.21	0	00:45	0.91
144	J-149	JUNCTION	2.56	2.68	148.42	0	00:46	2.68
145	J-151	JUNCTION	0.16	0.68	183.07	0	04:15	0.68
146	J-152	JUNCTION	0.01	0.12	166.12	0	00:45	0.12
147	J-153	JUNCTION	0.02	0.46	165.56	0	00:45	0.46
148	J-153A	JUNCTION	0.01	0.28	167.48	0	00:45	0.28
149	J-154	JUNCTION	0.03	0.45	163.95	0	00:45	0.45
150	J-155	JUNCTION	0.15	1.18	161.88	0	00:48	1.18
151	J-156	JUNCTION	0.04	1.16	161.76	0	00:48	1.16
152	J-157	JUNCTION	0.09	1.96	161.56	0	00:48	1.96
153	J-157-1	JUNCTION	0.01	0.15	164.75	0	00:46	0.15
154	J-157-2	JUNCTION	0.02	0.57	163.17	0	00:46	0.57
155	J-157-3	JUNCTION	0.04	0.83	163.13	0	00:46	0.83
156	J-157-3A	JUNCTION	0.03	0.58	165.98	0	00:45	0.58
157	J-157-4	JUNCTION	0.05	1.10	162.10	0	00:47	1.10
158	J-158	JUNCTION	0.29	1.95	161.15	0	00:48	1.95
159	J-159	JUNCTION	0.07	1.33	160.73	0	00:48	1.33
160	J-160	JUNCTION	0.09	1.96	157.26	0	00:49	1.96
161	J-161	JUNCTION	0.09	1.87	156.67	0	00:50	1.87
162	J-162	JUNCTION	0.07	1.29	155.19	0	00:49	1.29
163	J-163	JUNCTION	0.06	1.19	153.99	0	00:50	1.19
164	J-201	JUNCTION	0.17	14.61	160.41	0	00:37	12.88
165	J-202	JUNCTION	0.17	11.58	156.48	0	00:45	11.58
166	J-203	JUNCTION	0.14	8.04	151.94	0	00:45	8.03
167	J-204	JUNCTION	0.07	1.86	144.26	0	00:45	1.86
168	J-205	JUNCTION	0.09	1.93	143.33	0	00:45	1.93
169	J-206	JUNCTION	0.03	0.64	141.94	0	00:46	0.63
170	J-301	JUNCTION	0.03	0.54	143.04	0	00:45	0.54
171	J-302	JUNCTION	0.03	0.57	141.57	0	00:46	0.57
172	J-303	JUNCTION	0.03	0.53	140.33	0	00:46	0.53
173	J-304	JUNCTION	0.04	0.90	137.40	0	00:46	0.90
174	J-321	JUNCTION	0.10	2.20	139.90	0	00:44	2.12
175	J-322	JUNCTION	0.05	1.13	138.83	0	00:45	1.12
176	J-323	JUNCTION	0.05	1.34	137.84	0	00:46	1.34
177	J-324	JUNCTION	0.07	2.52	137.02	0	00:44	2.20
178	J-325	JUNCTION	0.07	2.62	136.32	0	00:44	1.83
179	J-326	JUNCTION	0.04	0.77	132.77	0	00:48	0.77
180	J-401	JUNCTION	0.01	0.16	144.26	0	00:45	0.16
181	J-402	JUNCTION	0.01	0.23	142.73	0	00:45	0.23
182	J-403	JUNCTION	0.08	1.45	134.65	0	00:44	1.30
183	J-404	JUNCTION	0.03	0.56	133.76	0	00:45	0.55
184	J-405	JUNCTION	0.03	0.57	130.07	0	00:47	0.57
185	J-406	JUNCTION	0.06	4.18	131.58	0	00:45	1.84
186	J-407	JUNCTION	2.67	2.81	126.21	0	10:10	2.81
187	J-451	JUNCTION	0.03	0.56	144.16	0	00:45	0.55
188	J-452	JUNCTION	0.02	0.44	141.94	0	00:48	0.43
189	J-453	JUNCTION	0.06	14.70	149.60	0	00:47	6.66
190	J-454	JUNCTION	0.12	15.18	146.58	0	00:47	9.18
191	J-455	JUNCTION	0.13	13.96	144.36	0	00:47	8.57
192	J-455A	JUNCTION	0.04	13.97	147.57	0	00:46	5.44
193	J-456	JUNCTION	0.13	13.80	143.80	0	00:47	8.43
194	J-457	JUNCTION	0.12	11.82	140.82	0	00:47	7.95
195	J-458	JUNCTION	0.14	11.44	139.84	0	00:47	7.87
196	J-459	JUNCTION	0.13	9.22	137.02	0	00:47	6.82
197	J-460	JUNCTION	0.14	7.78	135.08	0	00:45	6.06
198	J-461	JUNCTION	0.22	7.63	134.73	0	00:45	5.62

199	J-462	JUNCTION	0.13	7.88	134.18	0	00:45	5.14
200	J-462A	JUNCTION	0.05	16.30	144.10	0	00:45	3.85
201	J-463	JUNCTION	0.30	7.21	133.21	0	00:45	4.66
202	J-464	JUNCTION	1.22	5.00	130.00	0	00:45	4.03
203	J-465	JUNCTION	1.87	4.23	128.53	0	00:47	3.51
204	J-466	JUNCTION	2.33	3.41	127.21	0	00:45	2.63
205	J-481	JUNCTION	0.07	0.31	157.25	0	04:06	0.31
206	J-481B	JUNCTION	0.14	0.60	165.71	0	04:03	0.60
207	J-482	JUNCTION	0.26	0.99	145.83	0	02:44	0.99
208	J-482A	JUNCTION	0.06	0.42	193.26	0	02:37	0.42
209	J-482B	JUNCTION	0.00	0.00	268.84	0	00:00	0.00
210	J-483	JUNCTION	0.17	0.82	137.49	0	02:46	0.82
211	J-484	JUNCTION	0.17	0.65	130.35	0	04:33	0.65
212	J-484A	JUNCTION	0.00	0.00	270.00	0	00:00	0.00
213	J-485	JUNCTION	0.20	0.73	127.45	0	04:35	0.73
214	J-485A	JUNCTION	0.26	1.15	155.38	0	04:06	1.15
215	J-490	JUNCTION	0.11	8.63	137.33	0	00:47	7.06
216	J-491	JUNCTION	0.09	13.76	144.06	0	00:43	6.59
217	J-492	JUNCTION	0.04	12.70	147.80	0	00:47	3.43
218	J-493	JUNCTION	0.02	0.46	139.86	0	00:47	0.44
219	J-494	JUNCTION	0.03	0.62	140.82	0	00:45	0.62
220	J-495	JUNCTION	0.08	7.73	137.53	0	00:47	6.30
221	J-501	JUNCTION	0.02	0.34	145.94	0	00:45	0.34
222	J-502	JUNCTION	1.12	1.19	144.19	0	02:53	1.19
223	J-503	JUNCTION	4.69	6.99	146.29	0	00:48	4.90
224	J-601	JUNCTION	0.08	15.31	161.11	0	00:42	5.73
225	J-602	JUNCTION	0.08	15.09	160.59	0	00:42	5.65
226	J-603	JUNCTION	1.10	4.25	146.75	0	00:42	3.49
227	J-604	JUNCTION	1.35	1.72	143.92	0	01:11	1.71
228	J-701	JUNCTION	0.59	1.28	119.55	0	04:37	1.28
229	J-701A	JUNCTION	0.80	1.37	117.15	0	08:10	1.37
230	J-701B	JUNCTION	0.46	0.97	153.70	0	04:13	0.97
231	J-701C	JUNCTION	0.00	0.00	220.00	0	00:00	0.00
232	J-702	JUNCTION	0.51	0.89	120.42	0	08:47	0.89
233	J-702-1	JUNCTION	0.87	1.62	119.98	0	05:08	1.62
234	J-702B	JUNCTION	1.36	2.74	122.78	0	09:12	2.74
235	J-703	JUNCTION	1.31	2.77	123.66	0	09:11	2.77
236	J-704	JUNCTION	1.15	2.59	123.67	0	09:11	2.59
237	J-705	JUNCTION	1.18	2.46	123.67	0	09:10	2.46
238	J-706	JUNCTION	1.94	3.99	125.24	0	07:40	3.99
239	J-707	JUNCTION	1.93	3.98	125.24	0	07:40	3.98
240	J-708	JUNCTION	1.34	3.31	125.24	0	07:40	3.31
241	J-709-1	JUNCTION	1.13	2.79	126.43	0	06:54	2.79
242	J-709-2	JUNCTION	0.91	2.56	126.43	0	06:54	2.56
243	J-709-3	JUNCTION	0.54	2.03	126.43	0	06:57	2.03
244	J-710	JUNCTION	0.63	1.94	126.45	0	06:54	1.94
245	J-711	JUNCTION	1.43	3.42	127.97	0	06:51	3.42
246	J-712	JUNCTION	1.27	3.16	128.14	0	06:50	3.16
247	J-713	JUNCTION	1.90	4.20	128.92	0	06:47	4.20
248	J-714-1	JUNCTION	1.70	4.00	128.92	0	06:47	4.00
249	J-714-2	JUNCTION	1.25	3.48	128.92	0	06:47	3.48
250	J-714-3	JUNCTION	1.05	3.19	128.92	0	06:47	3.19
251	J-715	JUNCTION	1.71	3.94	128.94	0	06:47	3.94
252	J-715A	JUNCTION	0.00	0.00	134.57	0	00:00	0.00
253	J-716	JUNCTION	2.00	3.86	130.09	0	06:15	3.86
254	J-716A	JUNCTION	0.00	0.00	140.30	0	00:00	0.00
255	J-717-1	JUNCTION	0.81	2.60	130.10	0	06:15	2.60
256	J-718	JUNCTION	0.96	2.72	130.44	0	06:00	2.72
257	J-719	JUNCTION	0.96	2.79	130.76	0	05:52	2.79
258	J-720	JUNCTION	0.37	0.95	135.76	0	05:12	0.95
259	J-721	JUNCTION	0.63	1.82	139.90	0	05:28	1.82
260	J-722	JUNCTION	0.74	2.22	141.58	0	05:26	2.22
261	J-723	JUNCTION	0.44	1.32	147.04	0	05:30	1.32
262	J-723-1	JUNCTION	0.59	1.78	146.13	0	05:18	1.78
263	J-725	JUNCTION	0.46	1.48	147.89	0	05:28	1.48
264	J-725-1	JUNCTION	0.00	0.00	367.57	0	00:00	0.00



265	J-725-2	JUNCTION	0.23	0.63	176.20	0	04:44	0.63
266	J-725-3	JUNCTION	0.00	0.00	338.57	0	00:00	0.00
267	J-725A-1	JUNCTION	0.36	1.01	149.41	0	04:57	1.01
268	J-725A-2	JUNCTION	0.09	0.29	147.96	0	05:25	0.29
269	J-725A-3	JUNCTION	0.24	0.80	147.93	0	05:25	0.80
270	J-725B-2	JUNCTION	0.14	0.56	148.21	0	04:30	0.56
271	J-726	JUNCTION	2.19	2.78	147.98	0	05:26	2.78
272	J-730	JUNCTION	0.23	0.77	140.32	0	04:25	0.77
273	J-730-1	JUNCTION	0.17	0.57	131.35	0	04:27	0.57
274	J-731	JUNCTION	0.32	0.96	149.26	0	04:23	0.96
275	J-732	JUNCTION	0.09	0.72	151.52	0	00:46	0.72
276	J-732A	JUNCTION	0.00	0.00	154.84	0	00:00	0.00
277	J-732B	JUNCTION	0.00	0.00	160.69	0	00:00	0.00
278	J-733	JUNCTION	0.02	0.42	152.22	0	00:46	0.42
279	J-734	JUNCTION	0.02	0.37	154.17	0	00:46	0.37
280	J-735	JUNCTION	0.01	0.27	158.47	0	00:45	0.27
281	J-736	JUNCTION	0.00	0.00	159.40	0	00:00	0.00
282	J-737	JUNCTION	0.00	0.00	161.30	0	00:00	0.00
283	J-737A-1	JUNCTION	0.16	0.68	174.42	0	04:17	0.68
284	J-737A-2	JUNCTION	0.16	0.68	166.54	0	04:20	0.68
285	J-740	JUNCTION	0.62	2.81	151.71	0	04:21	2.81
286	J-741	JUNCTION	0.74	3.47	152.67	0	04:21	3.47
287	J-742	JUNCTION	0.43	1.65	157.15	0	04:21	1.65
288	J-743	JUNCTION	0.44	1.90	161.20	0	04:20	1.90
289	J-744	JUNCTION	1.74	3.68	164.98	0	04:20	3.68
290	J-745	JUNCTION	0.10	1.10	161.20	0	04:20	1.10
291	J-750	JUNCTION	0.05	0.93	127.87	0	00:53	0.93
292	J-751	JUNCTION	0.05	0.85	130.30	0	00:51	0.85
293	J-752	JUNCTION	0.01	0.24	131.53	0	00:48	0.24
294	J-753	JUNCTION	0.01	0.24	132.73	0	00:46	0.24
295	J-754	JUNCTION	0.01	0.20	134.22	0	00:45	0.20
296	J-760	JUNCTION	1.26	3.20	125.24	0	07:40	3.20
297	J-761	JUNCTION	1.13	3.02	125.24	0	07:40	3.02
298	J-762	JUNCTION	0.84	2.59	125.24	0	07:40	2.59
299	J-770	JUNCTION	0.09	4.23	138.83	0	00:47	2.04
300	J-771	JUNCTION	0.17	4.53	139.43	0	00:47	2.69
301	J-772	JUNCTION	0.21	5.42	140.92	0	00:47	3.75
302	J-773	JUNCTION	0.63	6.26	141.76	0	00:47	4.61
303	J-774	JUNCTION	0.29	6.64	143.04	0	00:47	5.15
304	J-775	JUNCTION	0.38	8.05	145.25	0	00:47	6.81
305	J-776	JUNCTION	0.46	9.06	146.66	0	00:47	7.93
306	J-777	JUNCTION	0.56	10.29	148.99	0	00:47	9.51
307	J-778	JUNCTION	0.58	10.15	150.25	0	00:47	9.72
308	J-779	JUNCTION	0.69	11.65	152.65	0	01:13	11.65
309	J-780	JUNCTION	0.59	15.27	157.77	0	00:33	10.36
310	J-781	JUNCTION	0.55	17.20	160.50	0	00:33	9.65
311	J-782	JUNCTION	0.49	18.09	162.39	0	00:34	8.69
312	J-783	JUNCTION	0.44	7.91	153.01	0	01:14	7.91
313	J-784	JUNCTION	0.39	7.12	153.02	0	01:14	7.12
314	J-790	JUNCTION	0.08	0.39	138.91	0	03:42	0.39
315	J-791	JUNCTION	0.15	0.80	140.15	0	03:41	0.80
316	J-792	JUNCTION	0.14	0.78	140.55	0	03:41	0.78
317	J-792A	JUNCTION	0.17	0.80	191.16	0	03:38	0.80
318	J-792B	JUNCTION	0.00	0.00	273.36	0	00:00	0.00
319	J-801	JUNCTION	0.47	1.27	116.73	0	02:58	1.27
320	J-802	JUNCTION	0.87	1.73	117.23	0	02:33	1.73
321	J-803	JUNCTION	0.67	1.50	117.27	0	02:33	1.50
322	J-804	JUNCTION	0.85	1.75	117.82	0	02:30	1.75
323	J-805	JUNCTION	1.96	4.32	120.52	0	04:34	4.32
324	J-806	JUNCTION	1.74	4.76	121.19	0	09:46	4.13
325	J-807	JUNCTION	1.62	4.77	121.38	0	09:46	3.93
326	J-808	JUNCTION	1.18	3.22	120.54	0	04:26	3.22
327	J-809	JUNCTION	0.29	0.94	125.74	0	02:10	0.94
328	J-810	JUNCTION	1.44	12.54	138.44	0	00:11	9.75
329	J-811	JUNCTION	1.63	9.93	136.75	0	01:24	9.93
330	J-812	JUNCTION	2.05	10.37	136.97	0	01:27	10.37

331	J-813	JUNCTION	3.38	11.51	137.11	0	01:28	11.49
332	J-814	JUNCTION	2.21	9.28	137.48	0	01:50	9.28
333	J-815	JUNCTION	2.52	8.46	138.26	0	02:38	8.46
334	J-816	JUNCTION	2.88	8.53	139.33	0	03:17	8.53
335	J-817	JUNCTION	3.25	9.26	140.26	0	03:07	9.26
336	J-817-1	JUNCTION	3.24	9.09	139.79	0	03:17	9.09
337	J-818	JUNCTION	3.66	9.96	141.26	0	02:39	9.96
338	J-819	JUNCTION	3.50	10.14	142.04	0	02:40	10.14
339	J-820	JUNCTION	3.58	10.49	142.69	0	02:37	10.49
340	J-821	JUNCTION	3.61	10.66	143.06	0	02:36	10.66
341	J-822	JUNCTION	3.40	10.40	143.80	0	02:36	10.40
342	J-823	JUNCTION	4.77	11.78	144.28	0	02:35	11.78
343	J-824	JUNCTION	0.04	0.62	132.12	0	00:47	0.62
344	J-825	JUNCTION	0.02	0.40	130.30	0	00:46	0.40
345	J-826	JUNCTION	1.44	3.68	128.93	0	06:47	3.68
346	J-830	JUNCTION	0.06	0.41	119.53	0	02:48	0.41
347	J-840	JUNCTION	0.55	6.89	136.99	0	01:23	6.89
348	J-841	JUNCTION	2.73	9.35	137.29	0	01:23	9.35
349	J-842	JUNCTION	0.48	6.59	137.53	0	01:23	6.59
350	J-844	JUNCTION	0.38	5.73	137.73	0	01:24	5.73
351	J-845	JUNCTION	0.39	5.71	137.81	0	01:22	5.71
352	J-846	JUNCTION	1.49	10.30	141.30	0	00:43	6.88
353	J-847	JUNCTION	0.20	9.01	143.21	0	00:43	3.70
354	J-850	JUNCTION	0.27	2.60	127.76	0	02:08	2.60
355	J-860	JUNCTION	1.18	11.91	138.43	0	00:11	11.80
356	J-868	JUNCTION	0.00	0.00	135.10	0	00:00	0.00
357	J-869	JUNCTION	0.00	0.00	135.40	0	00:00	0.00
358	J-870	JUNCTION	4.29	11.52	144.62	0	02:33	11.52
359	J-871-1A	JUNCTION	2.44	8.71	145.41	0	02:39	8.70
360	J-871-1B	JUNCTION	1.25	5.77	146.74	0	02:34	5.77
361	J-871-1C	JUNCTION	0.21	2.47	147.72	0	00:59	2.47
362	J-900-1	JUNCTION	0.27	11.44	139.38	0	00:44	11.44
363	J-901	JUNCTION	0.29	12.00	140.72	0	00:39	12.00
364	J-902	JUNCTION	0.23	11.82	142.02	0	00:33	11.40
365	O-1000	OUTFALL	0.00	0.00	125.59	0	00:00	0.00
366	O-700	OUTFALL	0.31	0.47	106.28	0	08:10	0.47
367	O-800	OUTFALL	0.24	0.72	111.09	0	02:58	0.72
368	O-900	OUTFALL	0.07	1.00	128.60	0	00:34	1.00
369	S-100	STORAGE	4.71	4.86	152.06	0	08:53	4.86
370	S-1000	STORAGE	7.09	7.35	114.45	0	04:57	7.35
371	S-1100	STORAGE	0.11	4.43	126.93	0	00:55	4.43
372	S-150	STORAGE	5.58	5.79	146.79	0	13:22	5.79
373	S-200	STORAGE	4.13	4.27	139.97	0	05:11	4.27
374	S-300	STORAGE	8.48	8.74	131.94	0	13:17	8.74
375	S-400	STORAGE	10.96	11.31	126.21	0	10:18	11.31
376	S-500	STORAGE	10.55	10.84	144.18	0	03:41	10.84
377	S-600	STORAGE	8.83	9.00	143.57	0	01:11	9.00

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381 Node Inflow Summary  
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385			Maximum	Maximum		Lateral	
386			Total	Flow		Inflow	
387			Inflow	Balance	Time of Max	Volume	
388	Node	Type	Inflow	Inflow	Occurrence	Volume	
389	gal	Percent	Volume	Error	days hr:min	10^6 gal	10^6
			CFS	CFS			

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390	J-1001		JUNCTION	0.61	57.19	0	00:49	0.0135
	1.74	0.001						
391	J-1002		JUNCTION	0.36	56.67	0	00:50	0.00797
	1.73	-0.007						
392	J-1003		JUNCTION	4.61	56.38	0	00:50	0.102
	1.72	-0.012						
393	J-1004		JUNCTION	0.77	52.56	0	00:50	0.0171
	1.62	-0.029						
394	J-1005		JUNCTION	0.25	7.69	0	00:50	0.00554
	0.199	-0.120						
395	J-1006		JUNCTION	0.23	8.17	0	00:44	0.00509
	0.194	0.215						
396	J-1007		JUNCTION	0.47	8.51	0	00:46	0.0104
	0.188	0.013						
397	J-1008		JUNCTION	2.59	7.95	0	00:45	0.0574
	0.178	-0.018						
398	J-1009		JUNCTION	0.00	5.44	0	00:45	0
	0.121	0.046						
399	J-1010		JUNCTION	5.45	5.45	0	00:45	0.121
	0.121	-0.007						
400	J-1020		JUNCTION	25.85	45.11	0	00:45	0.573
	1.4	-0.019						
401	J-1021		JUNCTION	0.41	28.06	0	01:01	0.00908
	0.828	-0.006						
402	J-1022		JUNCTION	0.66	28.36	0	00:50	0.0146
	0.819	-0.008						
403	J-1023		JUNCTION	0.49	15.07	0	00:45	0.0109
	0.333	-0.298						
404	J-1024		JUNCTION	14.60	14.60	0	00:45	0.323
	0.323	0.256						
405	J-1101		JUNCTION	4.90	13.15	0	00:45	0.109
	0.297	0.069						
406	J-1102		JUNCTION	8.50	8.50	0	00:45	0.188
	0.188	-0.007						
407	J-120		JUNCTION	0.56	0.56	0	00:45	0.0124
	0.0124	-0.051						
408	J-121		JUNCTION	4.09	4.62	0	00:45	0.0906
	0.103	0.005						
409	J-122		JUNCTION	0.39	5.01	0	00:45	0.00864
	0.112	0.022						
410	J-123		JUNCTION	0.53	5.54	0	00:45	0.0117
	0.123	-0.027						
411	J-124		JUNCTION	0.22	7.04	0	00:48	0.00487
	0.173	-0.003						
412	J-124A		JUNCTION	1.21	1.21	0	00:45	0.0268
	0.0268	-0.025						
413	J-124B		JUNCTION	0.80	2.10	0	00:44	0.0177
	0.0445	0.014						
414	J-125		JUNCTION	0.34	7.33	0	00:48	0.00753
	0.18	0.010						
415	J-126		JUNCTION	1.86	9.01	0	00:47	0.0412
	0.221	-0.025						
416	J-127		JUNCTION	0.00	10.13	0	00:47	0
	0.248	-0.023						
417	J-127A		JUNCTION	1.19	1.19	0	00:45	0.0264
	0.0264	0.168						
418	J-128		JUNCTION	0.82	10.86	0	00:47	0.0182
	0.266	-0.007						
419	J-129		JUNCTION	0.48	11.30	0	00:47	0.0106
	0.277	0.018						
420	J-130		JUNCTION	1.60	12.73	0	00:47	0.0354
	0.312	-0.036						
421	J-131		JUNCTION	0.17	12.84	0	00:48	0.00377
	0.32	3.470						
422	J-141		JUNCTION	1.83	1.83	0	00:45	0.0405

	0.0405	0.054						
423	J-142		JUNCTION	0.00	5.86	0	00:45	0
	0.127	-0.050						
424	J-142A		JUNCTION	3.54	3.54	0	00:45	0.0784
	0.0784	0.157						
425	J-142B		JUNCTION	0.36	3.92	0	00:45	0.00797
	0.0863	-0.151						
426	J-143		JUNCTION	0.47	6.53	0	00:45	0.0104
	0.137	-0.024						
427	J-144		JUNCTION	1.46	8.13	0	00:45	0.0323
	0.17	-0.097						
428	J-145		JUNCTION	1.64	9.81	0	00:45	0.0363
	0.206	0.039						
429	J-146		JUNCTION	1.50	11.32	0	00:45	0.0332
	0.239	-0.008						
430	J-147		JUNCTION	0.47	11.80	0	00:45	0.0104
	0.25	0.003						
431	J-148		JUNCTION	0.97	12.18	0	00:45	0.0215
	0.271	-0.000						
432	J-149		JUNCTION	0.12	12.07	0	00:46	0.00266
	0.274	-0.102						
433	J-151		JUNCTION	20.90	20.90	0	04:15	2.62
	2.62	-0.002						
434	J-152		JUNCTION	0.13	0.13	0	00:45	0.00288
	0.00288	-0.011						
435	J-153		JUNCTION	0.30	1.52	0	00:45	0.00664
	0.0337	-0.038						
436	J-153A		JUNCTION	1.09	1.09	0	00:45	0.0241
	0.0241	0.013						
437	J-154		JUNCTION	0.42	1.90	0	00:45	0.0093
	0.043	0.088						
438	J-155		JUNCTION	0.77	2.66	0	00:46	0.0171
	0.06	0.003						
439	J-156		JUNCTION	0.43	2.88	0	00:46	0.00952
	0.0695	-0.068						
440	J-157		JUNCTION	0.76	8.34	0	00:47	0.0168
	0.2	-0.015						
441	J-157-1		JUNCTION	0.17	0.17	0	00:45	0.00377
	0.00377	0.049						
442	J-157-2		JUNCTION	0.87	1.03	0	00:45	0.0193
	0.023	0.004						
443	J-157-3		JUNCTION	0.63	4.03	0	00:46	0.014
	0.0926	-0.009						
444	J-157-3A		JUNCTION	2.51	2.51	0	00:45	0.0556
	0.0556	-0.001						
445	J-157-4		JUNCTION	0.94	4.94	0	00:46	0.0208
	0.113	0.023						
446	J-158		JUNCTION	0.61	8.85	0	00:48	0.0135
	0.213	0.082						
447	J-159		JUNCTION	0.09	8.93	0	00:48	0.00199
	0.215	-0.002						
448	J-160		JUNCTION	1.01	9.82	0	00:48	0.0224
	0.237	0.245						
449	J-161		JUNCTION	0.46	10.20	0	00:48	0.0102
	0.247	-0.750						
450	J-162		JUNCTION	2.76	12.51	0	00:49	0.0611
	0.31	0.158						
451	J-163		JUNCTION	0.00	12.50	0	00:49	0
	0.31	0.120						
452	J-201		JUNCTION	5.41	5.41	0	00:45	0.12
	0.12	-0.025						
453	J-202		JUNCTION	2.22	7.63	0	00:45	0.0492
	0.169	-0.014						
454	J-203		JUNCTION	2.30	9.93	0	00:45	0.0509
	0.22	-0.010						
455	J-204		JUNCTION	2.02	11.95	0	00:45	0.0447

	0.265	0.002					
456	J-205		JUNCTION	1.52	13.08	0 00:45	0.0337
	0.298	0.000					
457	J-206		JUNCTION	0.00	13.11	0 00:46	0
	0.298	-0.008					
458	J-301		JUNCTION	1.53	1.53	0 00:45	0.0339
	0.0339	-0.008					
459	J-302		JUNCTION	1.20	2.68	0 00:45	0.0266
	0.0605	0.003					
460	J-303		JUNCTION	0.25	2.90	0 00:46	0.00554
	0.066	0.002					
461	J-304		JUNCTION	2.16	4.98	0 00:45	0.0478
	0.114	-0.004					
462	J-321		JUNCTION	6.43	6.43	0 00:45	0.142
	0.142	-0.001					
463	J-322		JUNCTION	0.93	7.36	0 00:45	0.0206
	0.163	0.004					
464	J-323		JUNCTION	0.75	8.04	0 00:45	0.0166
	0.18	-0.001					
465	J-324		JUNCTION	0.63	8.32	0 00:47	0.014
	0.194	-0.003					
466	J-325		JUNCTION	0.69	8.97	0 00:46	0.0153
	0.209	-0.002					
467	J-326		JUNCTION	1.37	15.21	0 00:46	0.0303
	0.353	-0.011					
468	J-401		JUNCTION	0.27	0.27	0 00:45	0.00598
	0.00598	0.000					
469	J-402		JUNCTION	0.82	1.09	0 00:45	0.0182
	0.0241	-0.039					
470	J-403		JUNCTION	1.38	2.45	0 00:45	0.0306
	0.0547	0.019					
471	J-404		JUNCTION	0.81	3.32	0 00:44	0.0179
	0.0726	-0.001					
472	J-405		JUNCTION	1.05	4.26	0 00:45	0.0233
	0.0959	-0.004					
473	J-406		JUNCTION	0.29	4.61	0 00:46	0.00642
	0.102	0.349					
474	J-407		JUNCTION	0.70	27.60	0 00:47	0.0155
	0.659	0.477					
475	J-451		JUNCTION	1.68	1.68	0 00:45	0.0372
	0.0372	-0.055					
476	J-452		JUNCTION	0.00	1.65	0 00:45	0
	0.0372	0.059					
477	J-453		JUNCTION	1.59	3.20	0 00:49	0.0352
	0.0724	-0.023					
478	J-454		JUNCTION	1.74	4.68	0 00:49	0.0385
	0.111	-0.042					
479	J-455		JUNCTION	1.39	6.73	0 00:49	0.0308
	0.164	-0.003					
480	J-455A		JUNCTION	1.00	1.43	0 00:45	0.0221
	0.0223	-0.161					
481	J-456		JUNCTION	0.28	6.97	0 00:49	0.0062
	0.17	-0.011					
482	J-457		JUNCTION	0.49	7.39	0 00:49	0.0109
	0.181	-0.036					
483	J-458		JUNCTION	0.31	7.67	0 00:49	0.00687
	0.188	-0.022					
484	J-459		JUNCTION	0.48	8.09	0 00:48	0.0106
	0.199	-0.012					
485	J-460		JUNCTION	0.45	17.81	0 00:47	0.00997
	0.43	-0.006					
486	J-461		JUNCTION	0.39	18.18	0 00:47	0.00864
	0.439	0.007					
487	J-462		JUNCTION	1.23	20.67	0 00:47	0.0272
	0.499	-0.004					
488	J-462A		JUNCTION	1.48	2.73	0 00:45	0.0328

	0.033	-0.230						
489	J-463		JUNCTION	0.45	21.09	0	00:47	0.00997
	0.51	0.024						
490	J-464		JUNCTION	1.20	22.19	0	00:47	0.0266
	0.539	0.488						
491	J-465		JUNCTION	0.17	22.35	0	00:47	0.00377
	0.542	0.593						
492	J-466		JUNCTION	0.23	22.56	0	00:47	0.00509
	0.544	0.659						
493	J-481		JUNCTION	0.00	11.41	0	04:03	0
	1.37	0.015						
494	J-481B		JUNCTION	11.63	11.63	0	04:00	1.37
	1.37	-0.003						
495	J-482		JUNCTION	6.83	21.37	0	02:34	0.504
	2.8	0.061						
496	J-482A		JUNCTION	12.44	12.44	0	02:30	0.918
	0.918	-0.116						
497	J-482B		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
498	J-483		JUNCTION	5.07	25.82	0	02:45	0.412
	3.21	-0.043						
499	J-484		JUNCTION	19.37	40.76	0	04:00	2.29
	5.5	0.312						
500	J-484A		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
501	J-485		JUNCTION	1.34	35.82	0	04:33	0.089
	5.57	0.015						
502	J-485A		JUNCTION	13.91	13.91	0	04:00	1.64
	1.64	-0.035						
503	J-490		JUNCTION	1.30	9.38	0	00:47	0.0288
	0.222	-0.035						
504	J-491		JUNCTION	1.52	6.16	0	00:47	0.0337
	0.144	-0.025						
505	J-492		JUNCTION	2.50	4.93	0	00:45	0.0554
	0.11	-0.010						
506	J-493		JUNCTION	0.00	2.47	0	00:45	0
	0.0547	0.003						
507	J-494		JUNCTION	2.47	2.47	0	00:45	0.0547
	0.0547	-0.004						
508	J-495		JUNCTION	2.21	2.21	0	00:45	0.0489
	0.0489	-0.053						
509	J-501		JUNCTION	1.03	1.03	0	00:45	0.0228
	0.0228	0.042						
510	J-502		JUNCTION	3.48	4.49	0	00:45	0.0771
	0.102	2.462						
511	J-503		JUNCTION	2.11	6.54	0	00:45	0.0467
	0.148	3.134						
512	J-601		JUNCTION	3.67	3.67	0	00:45	0.0813
	0.0813	-0.009						
513	J-602		JUNCTION	1.26	4.93	0	00:45	0.0279
	0.109	-0.171						
514	J-603		JUNCTION	3.13	8.06	0	00:45	0.0693
	0.179	2.162						
515	J-604		JUNCTION	0.00	8.06	0	00:45	0
	0.175	0.458						
516	J-701		JUNCTION	11.75	133.02	0	05:02	0.954
	36.6	1.176						
517	J-701A		JUNCTION	19.34	175.52	0	05:20	2.86
	39	6.378						
518	J-701B		JUNCTION	25.80	38.70	0	04:00	3.05
	4.69	0.305						
519	J-701C		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
520	J-702		JUNCTION	9.75	75.79	0	08:36	0.216
	26	0.264						
521	J-702-1		JUNCTION	0.00	106.04	0	04:40	0

	31.5	1.719						
522	J-702B		JUNCTION	1.84	65.38	0	09:11	0.0408
	20.1	0.001						
523	J-703		JUNCTION	2.81	66.38	0	08:32	0.0622
	20.1	0.550						
524	J-704		JUNCTION	4.59	72.45	0	07:44	0.102
	20.1	0.376						
525	J-705		JUNCTION	2.68	75.19	0	07:34	0.0594
	19.7	-0.057						
526	J-706		JUNCTION	2.65	75.27	0	07:30	0.0587
	19.7	0.035						
527	J-707		JUNCTION	1.65	76.49	0	07:11	0.0365
	19.6	0.146						
528	J-708		JUNCTION	7.10	78.63	0	06:53	0.157
	19.4	0.001						
529	J-709-1		JUNCTION	6.34	78.65	0	06:51	0.14
	19.2	0.005						
530	J-709-2		JUNCTION	0.35	2.06	0	00:45	0.00775
	0.0468	0.018						
531	J-709-3		JUNCTION	1.75	1.75	0	00:45	0.0388
	0.0389	-0.039						
532	J-710		JUNCTION	8.42	78.69	0	06:48	0.186
	19.1	0.007						
533	J-711		JUNCTION	4.07	78.71	0	06:47	0.0901
	18.9	0.003						
534	J-712		JUNCTION	3.53	78.73	0	06:46	0.0782
	18.8	0.003						
535	J-713		JUNCTION	8.99	79.07	0	06:34	0.199
	18.7	0.126						
536	J-714-1		JUNCTION	0.00	80.49	0	06:18	0
	18.6	0.081						
537	J-714-2		JUNCTION	0.08	5.93	0	00:45	0.00177
	0.132	-0.071						
538	J-714-3		JUNCTION	5.86	5.86	0	00:45	0.13
	0.13	-0.005						
539	J-715		JUNCTION	0.00	82.72	0	06:07	0
	18.3	0.007						
540	J-715A		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
541	J-716		JUNCTION	0.91	84.47	0	05:50	0.0202
	18.5	0.705						
542	J-716A		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
543	J-717-1		JUNCTION	6.90	87.44	0	05:37	0.153
	18.4	-0.016						
544	J-718		JUNCTION	0.00	87.48	0	05:37	0
	18.3	-0.009						
545	J-719		JUNCTION	25.99	90.78	0	05:12	0.576
	17.7	0.017						
546	J-720		JUNCTION	10.28	90.82	0	05:08	0.228
	17.2	0.022						
547	J-721		JUNCTION	5.99	76.37	0	05:26	0.133
	13.8	0.003						
548	J-722		JUNCTION	6.12	76.60	0	05:18	0.136
	13.7	0.107						
549	J-723		JUNCTION	0.00	43.60	0	05:28	0
	7.5	0.031						
550	J-723-1		JUNCTION	0.00	76.66	0	05:11	0
	13.5	0.029						
551	J-725		JUNCTION	0.00	44.61	0	05:18	0
	7.5	0.033						
552	J-725-1		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
553	J-725-2		JUNCTION	24.71	24.71	0	03:00	2.19
	2.19	2.874						
554	J-725-3		JUNCTION	0.00	0.00	0	00:00	0

	0	0.000 gal						
555	J-725A-1		JUNCTION	0.00	10.57	0	04:44	0
	2.13	0.273						
556	J-725A-2		JUNCTION	0.00	11.06	0	05:21	0
	2.12	0.003						
557	J-725A-3		JUNCTION	0.00	11.04	0	05:21	0
	2.12	0.013						
558	J-725B-2		JUNCTION	45.39	45.39	0	04:30	6.03
	6.03	0.000						
559	J-726		JUNCTION	34.68	34.68	0	05:15	5.38
	5.38	-0.027						
560	J-730		JUNCTION	5.60	41.43	0	04:24	0.124
	5.73	-0.006						
561	J-730-1		JUNCTION	0.00	41.40	0	04:26	0
	5.73	0.103						
562	J-731		JUNCTION	1.30	41.44	0	04:22	0.0288
	5.61	0.017						
563	J-732		JUNCTION	0.86	2.92	0	00:46	0.019
	0.0678	0.005						
564	J-732A		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
565	J-732B		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
566	J-733		JUNCTION	0.58	2.11	0	00:46	0.0128
	0.0487	0.001						
567	J-734		JUNCTION	0.73	1.58	0	00:45	0.0162
	0.0359	0.026						
568	J-735		JUNCTION	0.89	0.89	0	00:45	0.0197
	0.0197	-0.047						
569	J-736		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
570	J-737		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
571	J-737A-1		JUNCTION	0.00	20.81	0	04:16	0
	2.62	-0.000						
572	J-737A-2		JUNCTION	0.00	20.71	0	04:18	0
	2.62	-0.001						
573	J-740		JUNCTION	0.10	41.44	0	04:21	0.00221
	5.51	-0.000						
574	J-741		JUNCTION	3.28	41.44	0	04:21	0.0726
	5.51	-0.002						
575	J-742		JUNCTION	2.02	41.45	0	04:20	0.0447
	5.43	0.001						
576	J-743		JUNCTION	0.00	41.44	0	04:20	0
	5.39	0.001						
577	J-744		JUNCTION	23.62	41.63	0	04:17	2.79
	5.41	0.442						
578	J-745		JUNCTION	0.00	0.03	0	03:59	0
	0.000819	0.015						
579	J-750		JUNCTION	0.00	11.91	0	00:51	0
	0.297	-1.757						
580	J-751		JUNCTION	2.61	12.44	0	00:48	0.0578
	0.297	-0.004						
581	J-752		JUNCTION	1.17	10.34	0	00:47	0.0259
	0.239	-0.009						
582	J-753		JUNCTION	2.38	9.39	0	00:45	0.0527
	0.213	0.001						
583	J-754		JUNCTION	7.25	7.25	0	00:45	0.161
	0.161	-0.002						
584	J-760		JUNCTION	8.83	9.30	0	00:45	0.196
	0.208	-0.025						
585	J-761		JUNCTION	0.00	0.54	0	00:17	0
	0.0123	0.030						
586	J-762		JUNCTION	0.47	0.50	0	00:41	0.0104
	0.0109	-0.079						
587	J-770		JUNCTION	4.39	13.63	0	00:45	0.0972



	0.568	0.306						
588	J-771		JUNCTION	0.00	9.25	0	00:45	0
	0.471	0.003						
589	J-772		JUNCTION	0.35	9.24	0	00:45	0.00775
	0.471	-0.004						
590	J-773		JUNCTION	0.00	8.89	0	00:45	0
	0.463	-0.020						
591	J-774		JUNCTION	0.63	8.89	0	00:45	0.014
	0.463	0.030						
592	J-775		JUNCTION	0.63	8.32	0	00:55	0.014
	0.449	0.010						
593	J-776		JUNCTION	0.00	7.99	0	01:14	0
	0.435	-0.007						
594	J-777		JUNCTION	0.99	7.99	0	01:14	0.0219
	0.435	0.003						
595	J-778		JUNCTION	0.57	7.69	0	01:30	0.0126
	0.413	0.002						
596	J-779		JUNCTION	14.36	15.73	0	00:45	0.318
	0.404	-0.010						
597	J-780		JUNCTION	0.18	4.22	0	02:08	0.00399
	0.0887	-0.052						
598	J-781		JUNCTION	1.60	4.22	0	02:08	0.0354
	0.0883	0.022						
599	J-782		JUNCTION	0.49	4.00	0	02:08	0.0109
	0.0589	-0.143						
600	J-783		JUNCTION	0.44	4.01	0	02:11	0.00975
	0.0436	-0.069						
601	J-784		JUNCTION	1.02	5.89	0	00:35	0.0226
	0.0248	-0.042						
602	J-790		JUNCTION	1.90	27.48	0	03:41	0.0421
	3.15	0.001						
603	J-791		JUNCTION	0.00	27.49	0	03:41	0
	3.11	0.001						
604	J-792		JUNCTION	6.67	27.66	0	03:36	0.591
	3.11	-0.005						
605	J-792A		JUNCTION	24.34	24.34	0	03:30	2.52
	2.52	0.023						
606	J-792B		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
607	J-801		JUNCTION	4.48	38.57	0	02:47	0.198
	7.61	0.104						
608	J-802		JUNCTION	6.55	17.56	0	02:30	0.145
	5.69	0.034						
609	J-803		JUNCTION	0.00	16.89	0	04:31	0
	5.55	0.006						
610	J-804		JUNCTION	2.28	16.89	0	04:31	0.0505
	5.54	-0.002						
611	J-805		JUNCTION	0.62	51.71	0	01:39	0.0137
	5.49	0.030						
612	J-806		JUNCTION	1.42	51.55	0	01:40	0.0314
	5.48	0.059						
613	J-807		JUNCTION	0.00	51.34	0	01:39	0
	5.45	0.000						
614	J-808		JUNCTION	51.00	68.39	0	01:30	2.26
	5.48	0.468						
615	J-809		JUNCTION	2.32	19.26	0	01:56	0.0514
	3.21	-0.399						
616	J-810		JUNCTION	1.29	13.78	0	01:16	0.0286
	2.65	-0.008						
617	J-811		JUNCTION	0.50	10.26	0	00:47	0.0111
	2.31	-0.007						
618	J-812		JUNCTION	7.24	11.72	0	00:45	0.16
	2.13	0.007						
619	J-813		JUNCTION	3.06	6.22	0	05:27	0.0678
	1.97	0.002						
620	J-814		JUNCTION	8.84	8.84	0	00:45	0.196

621	1.93	0.003	JUNCTION	7.27	10.74	0	00:45	0.161
	J-815							
622	1.74	0.005	JUNCTION	2.42	7.23	0	00:46	0.0536
	J-816							
623	1.55	-0.005	JUNCTION	1.89	6.23	0	00:47	0.0419
	J-817							
624	1.41	-0.002	JUNCTION	3.73	7.19	0	00:45	0.0826
	J-817-1							
625	1.49	0.002	JUNCTION	5.18	7.21	0	00:45	0.115
	J-818							
626	1.37	0.012	JUNCTION	2.32	6.17	0	00:45	0.0514
	J-819							
627	1.25	-0.004	JUNCTION	3.44	7.14	0	00:45	0.0762
	J-820							
628	1.2	-0.002	JUNCTION	3.46	5.63	0	00:45	0.0766
	J-821							
629	1.13	0.009	JUNCTION	1.31	4.10	0	00:45	0.029
	J-822							
630	1.05	-0.019	JUNCTION	1.20	6.88	0	00:16	0.0266
	J-823							
631	1.02	0.230	JUNCTION	1.92	1.92	0	00:45	0.0425
	J-824							
632	0.0425	0.056	JUNCTION	1.77	3.48	0	00:46	0.0392
	J-825							
633	0.0817	0.008	JUNCTION	0.00	81.86	0	06:10	0
	J-826							
634	18.4	0.011	JUNCTION	21.18	21.18	0	02:45	1.72
	J-830							
635	1.72	-0.027	JUNCTION	0.32	3.50	0	00:49	0.00709
	J-840							
636	0.172	-0.015	JUNCTION	0.97	3.23	0	00:51	0.0215
	J-841							
637	0.166	1.069	JUNCTION	1.47	2.50	0	00:55	0.0326
	J-842							
638	0.145	-0.007	JUNCTION	0.50	5.18	0	00:45	0.0111
	J-844							
639	0.112	-0.041	JUNCTION	2.18	4.68	0	00:45	0.0483
	J-845							
640	0.102	-0.157	JUNCTION	0.65	2.50	0	00:45	0.0144
	J-846							
641	0.0564	4.857	JUNCTION	1.85	1.85	0	00:45	0.041
	J-847							
642	0.041	-0.128	JUNCTION	9.84	9.84	0	01:45	0.509
	J-850							
643	0.509	-0.009	JUNCTION	8.24	8.24	0	01:15	0.304
	J-860							
644	0.304	-0.021	JUNCTION	0.00	0.00	0	00:00	0
	J-868							
645	0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
	J-869							
646	0	0.000 gal	JUNCTION	4.70	4.70	0	00:45	0.104
	J-870							
647	0.999	0.281	JUNCTION	21.02	24.58	0	00:45	0.466
	J-871-1A							
648	0.922	2.232	JUNCTION	16.52	19.88	0	00:45	0.366
	J-871-1B							
649	0.494	2.646	JUNCTION	5.28	5.28	0	00:45	0.117
	J-871-1C							
650	0.143	17.666	JUNCTION	8.85	10.31	0	00:45	0.196
	J-900-1							
651	0.26	-0.021	JUNCTION	1.30	3.12	0	00:45	0.0288
	J-901							
652	0.0692	0.106	JUNCTION	1.82	1.82	0	00:45	0.0403
	J-902							
653	0.0403	-0.153	OUTFALL	0.00	0.00	0	00:00	0
	O-1000							

0	0.000 gal						
654	O-700		OUTFALL	55.70	166.62	0	08:30 14
	50.7	0.000					
655	O-800		OUTFALL	0.00	37.26	0	02:58 0
	7.6	0.000					
656	O-900		OUTFALL	0.00	10.30	0	00:45 0
	0.26	0.000					
657	S-100		STORAGE	0.76	13.11	0	00:50 0.0168
	0.326	0.196					
658	S-1000		STORAGE	20.83	75.75	0	00:47 0.461
	2.2	0.003					
659	S-1100		STORAGE	7.81	20.74	0	00:45 0.173
	0.47	-0.037					
660	S-150		STORAGE	0.14	24.53	0	00:47 0.0031
	0.587	66.034					
661	S-200		STORAGE	0.34	13.42	0	00:46 0.00753
	0.306	0.537					
662	S-300		STORAGE	0.25	15.36	0	00:47 0.00554
	0.359	1.478					
663	S-400		STORAGE	0.40	27.88	0	00:47 0.00886
	0.662	0.512					
664	S-500		STORAGE	5.78	11.36	0	00:45 0.128
	0.269	3.623					
665	S-600		STORAGE	0.45	8.41	0	00:45 0.00997
	0.184	0.755					

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669 Node Surcharge Summary  
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672 Surcharging occurs when water rises above the top of the highest conduit.  
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674			Hours	Max. Height	Min. Depth
675	Node	Type	Surcharged	Above Crown	Below Rim
676				Feet	Feet
677	-----				
678	J-1001	JUNCTION	0.16	0.143	6.267
679	J-1002	JUNCTION	0.36	0.808	5.602
680	J-1003	JUNCTION	0.51	1.784	5.376
681	J-1004	JUNCTION	0.49	2.063	4.877
682	J-1005	JUNCTION	0.21	2.115	5.085
683	J-1006	JUNCTION	0.08	0.188	7.122
684	J-1007	JUNCTION	0.08	1.306	6.614
685	J-1020	JUNCTION	0.68	3.508	3.592
686	J-1021	JUNCTION	0.64	3.498	3.782
687	J-1023	JUNCTION	0.49	7.584	0.000
688	J-1024	JUNCTION	0.28	12.380	0.000
689	J-121	JUNCTION	0.33	3.658	0.592
690	J-122	JUNCTION	0.20	3.165	1.085
691	J-123	JUNCTION	0.16	1.381	2.449
692	J-124	JUNCTION	0.25	1.795	3.255
693	J-125	JUNCTION	0.22	2.090	1.340
694	J-126	JUNCTION	0.29	0.922	2.838
695	J-141	JUNCTION	0.10	13.565	0.000
696	J-142	JUNCTION	0.24	14.860	0.000
697	J-142A	JUNCTION	0.23	15.380	0.000
698	J-142B	JUNCTION	0.33	15.480	0.000
699	J-143	JUNCTION	0.36	15.278	0.000
700	J-144	JUNCTION	0.46	13.336	0.000
701	J-145	JUNCTION	0.23	10.772	0.000
702	J-146	JUNCTION	0.32	5.885	0.000
703	J-201	JUNCTION	0.45	13.360	0.000
704	J-202	JUNCTION	0.55	10.330	0.000
705	J-203	JUNCTION	0.54	6.785	0.000
706	J-321	JUNCTION	0.30	0.703	3.057

707	J-324	JUNCTION	0.13	1.021	2.359
708	J-325	JUNCTION	0.09	1.117	3.013
709	J-403	JUNCTION	0.04	0.198	7.542
710	J-406	JUNCTION	0.09	2.925	1.895
711	J-453	JUNCTION	0.14	13.450	0.000
712	J-454	JUNCTION	0.33	13.930	0.000
713	J-455	JUNCTION	0.34	12.458	0.000
714	J-455A	JUNCTION	0.13	12.720	0.000
715	J-456	JUNCTION	0.32	11.997	0.000
716	J-457	JUNCTION	0.47	10.320	0.000
717	J-458	JUNCTION	0.55	9.938	0.000
718	J-459	JUNCTION	0.59	7.716	0.000
719	J-460	JUNCTION	0.29	5.529	0.000
720	J-461	JUNCTION	0.24	5.275	0.000
721	J-462	JUNCTION	0.27	5.625	0.000
722	J-462A	JUNCTION	0.19	15.050	0.000
723	J-463	JUNCTION	0.23	4.960	0.000
724	J-464	JUNCTION	0.26	2.752	0.998
725	J-465	JUNCTION	0.28	1.980	2.570
726	J-466	JUNCTION	28.82	1.155	3.295
727	J-490	JUNCTION	0.39	7.130	0.000
728	J-491	JUNCTION	0.22	12.262	0.000
729	J-492	JUNCTION	0.07	11.450	0.000
730	J-495	JUNCTION	0.28	6.481	0.000
731	J-503	JUNCTION	30.36	5.492	2.068
732	J-601	JUNCTION	0.22	14.060	0.000
733	J-602	JUNCTION	0.24	13.838	0.000
734	J-603	JUNCTION	1.08	3.001	0.000
735	J-604	JUNCTION	30.22	0.467	0.000
736	J-709-2	JUNCTION	10.30	1.305	10.815
737	J-709-3	JUNCTION	5.35	0.777	10.913
738	J-714-2	JUNCTION	9.30	1.481	11.309
739	J-714-3	JUNCTION	6.50	1.191	11.489
740	J-741	JUNCTION	1.04	0.469	3.441
741	J-760	JUNCTION	13.65	1.701	11.169
742	J-761	JUNCTION	11.78	1.521	10.479
743	J-762	JUNCTION	7.50	1.091	10.509
744	J-770	JUNCTION	0.07	2.530	5.410
745	J-771	JUNCTION	1.69	3.031	4.819
746	J-772	JUNCTION	1.75	3.917	7.043
747	J-773	JUNCTION	1.71	4.365	9.755
748	J-774	JUNCTION	1.74	5.137	4.513
749	J-775	JUNCTION	1.92	6.697	3.663
750	J-776	JUNCTION	1.94	7.614	2.396
751	J-777	JUNCTION	1.81	8.141	0.109
752	J-778	JUNCTION	1.92	8.902	0.000
753	J-779	JUNCTION	1.93	10.396	0.000
754	J-780	JUNCTION	1.73	13.822	0.000
755	J-781	JUNCTION	1.70	15.851	0.000
756	J-782	JUNCTION	1.66	16.840	0.000
757	J-783	JUNCTION	1.62	6.661	0.000
758	J-784	JUNCTION	1.61	5.872	0.000
759	J-805	JUNCTION	9.70	1.323	0.000
760	J-806	JUNCTION	9.21	1.759	0.241
761	J-807	JUNCTION	8.88	1.771	1.499
762	J-808	JUNCTION	6.75	0.225	0.000
763	J-810	JUNCTION	12.15	11.037	0.000
764	J-811	JUNCTION	7.56	7.902	0.000
765	J-812	JUNCTION	14.25	8.872	0.000
766	J-813	JUNCTION	14.25	8.714	0.000
767	J-814	JUNCTION	14.18	8.029	0.000
768	J-815	JUNCTION	14.00	7.207	0.000
769	J-816	JUNCTION	14.15	7.283	0.000
770	J-817	JUNCTION	14.24	8.010	0.000
771	J-817-1	JUNCTION	14.28	7.843	0.000
772	J-818	JUNCTION	14.15	8.412	0.000

773	J-819	JUNCTION	14.16	8.886	0.000
774	J-820	JUNCTION	14.16	9.237	0.000
775	J-821	JUNCTION	14.14	9.306	0.000
776	J-822	JUNCTION	14.10	9.154	0.000
777	J-823	JUNCTION	14.09	9.030	0.000
778	J-840	JUNCTION	3.41	5.641	0.000
779	J-841	JUNCTION	30.93	7.540	0.000
780	J-842	JUNCTION	2.89	5.336	0.000
781	J-844	JUNCTION	2.53	4.479	0.000
782	J-845	JUNCTION	2.50	4.457	0.000
783	J-846	JUNCTION	3.22	9.045	0.000
784	J-847	JUNCTION	1.76	7.756	0.000
785	J-850	JUNCTION	2.45	1.351	0.000
786	J-860	JUNCTION	7.29	10.661	0.000
787	J-870	JUNCTION	14.12	10.016	0.000
788	J-871-1A	JUNCTION	12.72	7.455	0.000
789	J-871-1B	JUNCTION	8.60	5.265	0.000
790	J-871-1C	JUNCTION	2.70	1.972	0.000
791	J-900-1	JUNCTION	1.53	10.440	0.000
792	J-901	JUNCTION	1.06	11.000	0.000
793	J-902	JUNCTION	0.78	10.820	0.000

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797 Node Flooding Summary  
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800 Flooding refers to all water that overflows a node, whether it ponds or not.

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802		Maximum	Time of Max	Total	Maximum	
803		Rate	Occurrence	Flood	Ponded	
804	Hours	CFS	days hr:min	Volume	Depth	
805	Node	Flooded		10^6 gal	Feet	
806	-----					
807	J-1024	0.01	0 00:45	0.000	10.000	
808	J-142	0.01	0 00:44	0.000	10.000	
809	J-142A	0.01	0 00:45	0.000	10.000	
810	J-142B	0.01	0 00:44	0.000	10.000	
811	J-201	0.01	0 00:37	0.000	10.000	
812	J-453	0.01	0 00:47	0.000	10.000	
813	J-454	0.01	0 00:47	0.000	10.000	
814	J-455A	0.01	0 00:46	0.000	10.000	
815	J-462A	0.01	0 00:45	0.000	10.000	
816	J-601	0.01	0 00:42	0.000	10.000	
817	J-779	1.54	0 00:45	0.069	1.796	
818	J-782	0.01	0 00:34	0.000	10.000	
819	J-783	1.60	0 00:35	0.011	2.451	
820	J-784	1.61	0 00:35	0.010	2.512	
821	J-805	8.40	0 01:39	0.619	0.443	
822	J-808	6.75	0 02:11	0.582	0.225	
823	J-811	4.18	0 00:45	0.053	6.192	
824	J-812	5.25	0 00:13	0.082	6.992	
825	J-814	8.26	0 00:45	0.091	5.699	
826	J-815	13.10	0 00:45	0.214	5.527	
827	J-816	13.92	0 00:57	0.203	5.313	
828	J-817	13.76	0 00:45	0.064	5.410	
829	J-817-1	13.96	0 00:45	0.063	5.493	
830	J-818	13.60	0 00:14	0.047	5.752	
831	J-819	14.11	0 00:45	0.080	6.786	
832	J-820	14.09	0 00:45	0.056	7.107	
833	J-821	14.07	0 00:15	0.031	7.266	
834	J-822	14.08	0 00:16	0.035	7.824	
835	J-823	14.08	0 00:17	0.039	8.260	
836	J-844	2.53	0 00:45	0.037	4.479	
837	J-850	2.44	0 01:45	0.051	1.331	
838	J-870	13.91	0 00:17	0.014	8.046	

839	J-871-1A	12.72	24.58	0	00:45	0.439	7.455
840	J-871-1B	8.34	16.72	0	00:45	0.283	3.165
841	J-871-1C	1.89	2.09	0	00:42	0.017	0.222
842	J-900-1	0.01	0.01	0	00:45	0.000	10.000
843	J-901	0.22	1.66	0	00:45	0.005	10.000
844	J-902	0.01	0.66	0	00:33	0.000	10.000
845	S-600	4.34	3.73	0	01:11	0.069	0.000

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Storage Volume Summary  
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-----		Average	Avg	Evap	Exfil	Maximum	Max	Time of
-----		Max	Maximum	Pcnt	Pcnt	Volume	Pcnt	
-----		Volume	Occurrence	Outflow				
Storage Unit		1000 ft3	Full	Loss	Loss	1000 ft3	Full	days
hr:min	CFS							
-----								

853	S-100	41.626	7	0	0	43.507	7	0
854	08:53	0.00						
855	S-1000	281.801	26	0	0	294.420	27	0
856	04:57	0.00						
857	S-1100	0.120	0	0	0	7.811	15	0
858	00:55	18.87						
859	S-150	44.632	12	0	0	46.667	13	0
860	13:22	0.06						
861	S-200	39.013	17	0	0	40.683	18	0
862	05:11	0.00						
863	S-300	45.327	26	0	0	47.245	27	0
864	13:17	0.00						
865	S-400	83.749	22	0	0	87.532	23	0
866	10:18	0.13						
867	S-500	33.172	93	0	0	34.529	97	0
868	03:41	0.04						
869	S-600	14.786	97	0	0	15.195	100	0
870	01:11	0.00						

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Outfall Loading Summary  
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Outfall Node	Flow	Avg	Max	Total
	Freq	Flow	Flow	Volume
	Pcnt	CFS	CFS	10^6 gal
-----				
873	O-1000	0.00	0.00	0.000
874	O-700	100.00	59.65	166.62
875	O-800	99.45	9.23	37.26
876	O-900	15.17	2.40	10.30
877				0.260
878	System	53.65	71.29	185.85
879				58.526

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Link Flow Summary  
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889								
890			Maximum	Time of Max	Maximum	Max/	Max/	
891			Flow	Occurrence	Veloc	Full	Full	
892	Link	Type	CFS	days hr:min	ft/sec	Flow	Depth	
893								
894	C=737A1	CONDUIT	20.81	0 04:16	4.79	0.03	0.17	
895	C737-A2	CONDUIT	20.71	0 04:18	4.78	0.03	0.17	
896	C-737A-3	CONDUIT	20.60	0 04:20	0.91	0.03	0.55	
897	L-1001	CONDUIT	57.19	0 00:50	6.64	0.92	0.84	
898	L-1002	CONDUIT	56.68	0 00:50	5.89	0.91	1.00	
899	L-1003	CONDUIT	56.37	0 00:50	5.86	1.09	1.00	
900	L-1004	CONDUIT	52.56	0 00:50	5.46	0.76	1.00	
901	L-1005	CONDUIT	7.76	0 01:00	1.58	0.29	1.00	
902	L-1006	CONDUIT	7.48	0 00:50	3.73	0.32	1.00	
903	L-1007	CONDUIT	7.94	0 00:44	3.84	0.58	1.00	
904	L-1008	CONDUIT	8.07	0 00:46	3.65	0.64	0.92	
905	L-1009	CONDUIT	5.40	0 00:45	7.31	0.32	0.49	
906	L-1010	CONDUIT	5.44	0 00:45	7.46	0.29	0.43	
907	L-1020	CONDUIT	45.11	0 00:45	6.38	1.07	1.00	
908	L-1021	CONDUIT	28.06	0 01:01	3.97	0.96	1.00	
909	L-1022	CONDUIT	27.85	0 01:01	5.67	0.95	1.00	
910	L-1023	CONDUIT	15.07	0 00:45	3.07	0.62	1.00	
911	L-1024	CONDUIT	14.58	0 00:45	6.38	0.66	1.00	
912	L-1101	CONDUIT	13.11	0 00:45	10.88	0.26	0.67	
913	L-1102	CONDUIT	8.35	0 00:45	6.36	0.45	0.44	
914	L-120	CONDUIT	0.54	0 00:46	0.70	0.09	0.60	
915	L-121	CONDUIT	4.62	0 00:45	3.76	19.83	1.00	
916	L-122	CONDUIT	5.01	0 00:45	4.69	1.19	1.00	
917	L-123	CONDUIT	5.54	0 00:45	4.65	0.33	1.00	
918	L-124	CONDUIT	7.03	0 00:48	3.98	0.95	1.00	
919	L-124A	CONDUIT	1.30	0 00:44	3.99	0.24	0.60	
920	L-124B	CONDUIT	2.32	0 00:53	2.60	0.13	0.95	
921	L-125	CONDUIT	7.33	0 00:48	4.15	1.04	1.00	
922	L-126	CONDUIT	9.01	0 00:47	5.10	0.82	1.00	
923	L-127	CONDUIT	10.11	0 00:47	3.24	0.42	0.98	
924	L-127A	CONDUIT	1.17	0 00:45	2.25	0.18	0.64	
925	L-128	CONDUIT	10.86	0 00:47	3.94	1.02	0.82	
926	L-129	CONDUIT	11.29	0 00:48	4.51	0.68	0.75	
927	L-130	CONDUIT	12.69	0 00:48	9.24	0.16	0.35	
928	L-131	CHANNEL	12.84	0 00:49	1.86	0.00	0.20	
929	L-141	CONDUIT	2.00	0 00:56	3.20	0.21	1.00	
930	L-142	CONDUIT	6.06	0 00:45	3.43	0.83	1.00	
931	L-142A	CONDUIT	3.56	0 00:45	3.05	0.94	1.00	
932	L-142B	CONDUIT	4.00	0 00:45	3.26	0.77	1.00	
933	L-143	CONDUIT	6.67	0 00:45	3.77	1.18	1.00	
934	L-144	CONDUIT	8.17	0 00:45	4.62	2.93	1.00	
935	L-145	CONDUIT	9.82	0 00:45	5.56	1.28	1.00	
936	L-146	CONDUIT	11.33	0 00:45	6.59	1.57	0.97	
937	L-147	CONDUIT	11.23	0 00:45	5.09	0.44	0.46	
938	L-148	CONDUIT	11.96	0 00:46	8.37	0.20	0.33	
939	L-149	CHANNEL	12.02	0 00:46	2.29	0.00	0.16	
940	L-152	CONDUIT	0.13	0 00:45	0.53	0.01	0.19	
941	L-153	CONDUIT	1.49	0 00:45	3.32	0.18	0.30	
942	L-153A	CONDUIT	1.09	0 00:45	5.75	0.08	0.21	
943	L-154	CONDUIT	1.92	0 00:46	3.83	0.19	0.37	
944	L-156	CONDUIT	2.47	0 00:46	2.63	0.56	0.71	
945	L-157	CONDUIT	8.31	0 00:48	2.66	0.83	0.98	
946	L-157.1	CONDUIT	2.89	0 00:51	1.78	0.44	0.89	
947	L-157-1	CONDUIT	0.16	0 00:46	0.57	0.02	0.24	
948	L-157-2	CONDUIT	1.02	0 00:47	1.46	0.13	0.43	
949	L-157-3	CONDUIT	4.05	0 00:46	3.65	0.52	0.61	
950	L-157-3A	CONDUIT	2.46	0 00:45	4.56	0.40	0.45	
951	L-157-4	CONDUIT	4.88	0 00:47	4.33	0.50	0.65	
952	L-158	CONDUIT	8.85	0 00:48	3.21	0.45	0.82	
953	L-159	CONDUIT	8.93	0 00:48	4.78	0.47	0.57	
954	L-160	CONDUIT	9.79	0 00:49	3.23	0.98	0.93	

955	L-161	CONDUIT	10.15	0	00:50	3.94	0.99	0.76
956	L-162	CONDUIT	12.50	0	00:49	5.17	0.37	0.49
957	L-163	CONDUIT	12.48	0	00:50	6.03	0.34	0.44
958	L-201	CONDUIT	5.41	0	00:45	4.41	1.43	1.00
959	L-202	CONDUIT	7.63	0	00:45	6.22	1.90	1.00
960	L-203	CONDUIT	9.93	0	00:45	8.09	2.02	1.00
961	L-204	CONDUIT	11.61	0	00:46	3.78	0.83	0.95
962	L-205	CONDUIT	13.11	0	00:46	6.16	1.42	0.64
963	L-206	CONDUIT	13.10	0	00:46	5.96	0.20	0.66
964	L-301	CONDUIT	1.50	0	00:45	2.85	0.37	0.44
965	L-302	CONDUIT	2.66	0	00:46	5.08	0.31	0.44
966	L-303	CONDUIT	2.90	0	00:46	3.99	0.38	0.57
967	L-304	CONDUIT	4.95	0	00:46	5.78	0.77	0.66
968	L-321	CONDUIT	6.43	0	00:45	3.93	24.02	0.88
969	L-322	CONDUIT	7.30	0	00:45	5.48	0.64	0.81
970	L-323	CONDUIT	7.73	0	00:47	4.81	0.65	0.95
971	L-324	CONDUIT	8.32	0	00:47	4.71	0.89	1.00
972	L-325	CONDUIT	8.96	0	00:46	6.50	0.92	0.76
973	L-326	CONDUIT	15.13	0	00:47	6.54	0.24	0.69
974	L-401	CONDUIT	0.27	0	00:45	2.15	0.04	0.16
975	L-402	CONDUIT	1.08	0	00:45	1.43	0.07	0.59
976	L-403	CONDUIT	2.51	0	00:44	2.66	17.37	0.72
977	L-404	CONDUIT	3.24	0	00:45	6.22	0.35	0.45
978	L-405	CONDUIT	4.33	0	00:46	4.58	0.36	0.73
979	L-406	CONDUIT	4.42	0	00:47	4.01	1.09	0.84
980	L-407	CONDUIT	27.51	0	00:47	11.25	0.26	1.00
981	L-451	CONDUIT	1.65	0	00:45	3.95	0.35	0.39
982	L-452	CONDUIT	1.83	0	00:49	3.29	0.23	0.67
983	L-453	CONDUIT	3.20	0	00:49	3.15	0.53	1.00
984	L-454	CONDUIT	4.68	0	00:49	3.82	1.18	1.00
985	L-455	CONDUIT	6.73	0	00:49	3.81	1.23	1.00
986	L-455A	CONDUIT	1.29	0	00:56	1.36	0.20	1.00
987	L-456	CONDUIT	6.97	0	00:49	3.94	1.08	1.00
988	L-457	CONDUIT	7.40	0	00:49	4.18	0.69	1.00
989	L-458	CONDUIT	7.67	0	00:48	4.34	1.41	1.00
990	L-459	CONDUIT	8.09	0	00:48	4.58	1.24	1.00
991	L-460	CONDUIT	17.82	0	00:47	4.48	1.06	1.00
992	L-461	CONDUIT	18.18	0	00:47	4.57	0.94	1.00
993	L-462	CONDUIT	20.68	0	00:47	5.20	0.80	1.00
994	L-462A	CONDUIT	1.48	0	00:45	1.47	0.35	1.00
995	L-463	CONDUIT	21.09	0	00:47	5.30	1.01	1.00
996	L-464	CONDUIT	22.20	0	00:47	5.58	0.84	1.00
997	L-465	CONDUIT	22.35	0	00:47	5.62	1.17	1.00
998	L-466	CONDUIT	22.57	0	00:47	6.98	1.10	1.00
999	L-481	CONDUIT	11.34	0	04:06	2.42	0.01	0.16
1000	L-481B	CONDUIT	11.41	0	04:03	3.65	0.02	0.11
1001	L-482	CONDUIT	20.75	0	02:45	6.34	0.20	0.45
1002	L-482B	CONDUIT	0.00	0	00:00	0.00	0.00	0.05
1003	L-483	CONDUIT	25.81	0	02:48	6.83	0.04	0.16
1004	L-484	CONDUIT	35.50	0	04:33	5.14	0.03	0.14
1005	L-484A	CONDUIT	0.00	0	00:00	0.00	0.00	0.08
1006	L-485	CONDUIT	35.81	0	04:35	3.24	0.06	0.23
1007	L-485B-2	CONDUIT	13.36	0	04:08	1.77	0.07	0.27
1008	L-490	CONDUIT	9.38	0	00:47	5.31	1.16	1.00
1009	L-491	CONDUIT	6.16	0	00:47	3.73	0.77	1.00
1010	L-492	CONDUIT	4.76	0	00:47	5.30	0.55	1.00
1011	L-493	CONDUIT	2.46	0	00:47	4.55	0.27	0.68
1012	L-494	CONDUIT	2.47	0	00:45	4.93	0.34	0.43
1013	L-495	CONDUIT	2.21	0	00:45	1.89	0.55	1.00
1014	L-501	CONDUIT	1.02	0	00:45	2.77	0.16	0.46
1015	L-502	CONDUIT	4.45	0	00:45	5.13	0.34	0.90
1016	L-503	CONDUIT	6.04	0	00:48	4.21	0.52	1.00
1017	L-601	CONDUIT	3.67	0	00:45	2.99	0.87	1.00
1018	L-602	CONDUIT	4.93	0	00:45	4.02	1.25	1.00
1019	L-603	CONDUIT	8.06	0	00:45	7.32	2.27	1.00
1020	L-604	CONDUIT	7.96	0	00:45	7.03	0.32	1.00



1021	L-701	CHANNEL	111.12	0	08:10	>50.00	0.00	0.06
1022	L-701A	CHANNEL	158.18	0	05:24	>50.00	0.01	0.07
1023	L-701B	CONDUIT	37.07	0	04:13	6.03	0.04	0.17
1024	L-701C	CONDUIT	0.00	0	00:00	0.00	0.00	0.08
1025	L-702	CHANNEL	75.70	0	08:47	0.55	0.01	0.10
1026	L-702-1	CHANNEL	102.66	0	05:19	0.60	0.06	0.11
1027	L-702B	CONDUIT	65.38	0	09:12	6.36	0.23	0.39
1028	L-703	CONDUIT	65.38	0	09:11	5.17	0.23	0.46
1029	L-704	CHANNEL	66.38	0	08:32	1.06	0.01	0.18
1030	L-705	CHANNEL	72.45	0	07:44	3.88	0.00	0.15
1031	L-706	CONDUIT	75.19	0	07:34	5.18	2.13	0.53
1032	L-707	CHANNEL	75.27	0	07:30	0.47	0.01	0.25
1033	L-708	CHANNEL	76.49	0	07:11	1.50	0.00	0.23
1034	L-709-1	CONDUIT	78.63	0	06:53	6.43	0.31	0.50
1035	L-709-2	CONDUIT	2.02	0	00:45	2.75	0.27	1.00
1036	L-709-3	CONDUIT	1.71	0	00:45	2.19	0.33	1.00
1037	L-710	CHANNEL	78.65	0	06:51	2.14	0.00	0.14
1038	L-711	CONDUIT	78.69	0	06:48	6.93	1.05	0.45
1039	L-712	CHANNEL	78.71	0	06:47	3.13	0.02	0.32
1040	L-713	CONDUIT	78.73	0	06:46	4.34	0.45	0.61
1041	L-714-1	CHANNEL	79.07	0	06:34	>50.00	0.00	0.28
1042	L-714-2	CONDUIT	5.91	0	00:45	4.61	0.37	1.00
1043	L-714-3	CONDUIT	5.85	0	00:45	3.52	0.27	1.00
1044	L-715	CHANNEL	81.86	0	06:10	>50.00	0.00	0.21
1045	L-715-1	CHANNEL	80.49	0	06:18	2.19	0.00	0.21
1046	L-715A	CONDUIT	0.00	0	00:00	0.00	0.00	0.50
1047	L-716	CONDUIT	82.72	0	06:07	7.33	0.21	0.47
1048	L-716A	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1049	L-717-1	CHANNEL	84.47	0	05:50	1.63	0.00	0.20
1050	L-718	CONDUIT	87.44	0	05:37	6.29	0.16	0.44
1051	L-719	CONDUIT	87.48	0	05:37	3.61	0.17	0.46
1052	L-720	CHANNEL	90.78	0	05:12	2.15	0.00	0.21
1053	L-721	CONDUIT	76.36	0	05:27	9.20	0.24	0.31
1054	L-722	CONDUIT	76.37	0	05:26	5.79	0.40	0.48
1055	L-723_1	CONDUIT	43.56	0	05:30	1.24	0.07	0.31
1056	L-723_2	CONDUIT	76.60	0	05:18	1.58	0.12	0.40
1057	L-725	CONDUIT	43.60	0	05:28	4.04	0.18	0.40
1058	L-725-1	CONDUIT	0.00	0	00:00	0.00	0.00	0.08
1059	L-725-2_1	CONDUIT	10.57	0	04:44	1.96	0.03	0.21
1060	L-725-2_2	CONDUIT	11.04	0	05:21	1.45	0.01	0.14
1061	L-725-2_3	CONDUIT	11.06	0	05:21	6.45	0.19	0.32
1062	L-725-2_5	CONDUIT	11.03	0	05:22	3.45	0.10	0.46
1063	L-725-3	CONDUIT	0.00	0	00:00	0.00	0.00	0.08
1064	L-725B	CONDUIT	45.35	0	04:30	3.99	0.04	0.23
1065	L-726	CHANNEL	33.70	0	05:16	1.75	0.02	0.34
1066	L-730	CHANNEL	41.40	0	04:26	7.57	0.01	0.09
1067	L-730-1	CHANNEL	41.38	0	04:27	7.11	0.00	0.09
1068	L-731	CHANNEL	41.43	0	04:24	7.08	0.02	0.15
1069	L-732	CONDUIT	2.92	0	00:46	3.10	0.11	0.25
1070	L-732A	CONDUIT	0.00	0	00:00	0.00	0.00	0.19
1071	L-732B	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1072	L-733	CONDUIT	2.10	0	00:46	3.02	0.09	0.27
1073	L-734	CONDUIT	1.55	0	00:46	3.55	0.07	0.20
1074	L-735	CONDUIT	0.86	0	00:45	2.65	0.04	0.16
1075	L-736	CONDUIT	0.00	0	00:00	0.00	0.00	0.07
1076	L-737	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1077	L-740	CONDUIT	41.44	0	04:22	8.87	0.48	0.63
1078	L-741	CONDUIT	41.44	0	04:21	5.92	0.64	0.97
1079	L-742	CONDUIT	41.44	0	04:21	7.04	0.59	0.78
1080	L-743	CONDUIT	41.45	0	04:20	9.51	0.51	0.59
1081	L-744	CONDUIT	41.44	0	04:20	7.84	0.62	0.70
1082	L-745	CONDUIT	0.03	0	03:59	0.02	0.00	0.50
1083	L-750	CONDUIT	11.88	0	00:55	5.61	0.01	0.22
1084	L-751	CONDUIT	11.91	0	00:51	6.94	0.13	0.30
1085	L-752	CONDUIT	10.13	0	00:48	0.90	0.03	0.27
1086	L-753	CONDUIT	9.26	0	00:47	1.90	0.03	0.12

1087	L-754	CONDUIT	7.06	0	00:45	1.61	0.02	0.11
1088	L-760	CONDUIT	9.31	0	00:45	5.38	1.27	1.00
1089	L-761	CONDUIT	0.98	0	00:16	0.79	0.13	1.00
1090	L-762	CONDUIT	0.54	0	00:17	0.95	0.07	1.00
1091	L-770	CONDUIT	13.22	0	00:47	8.38	0.93	0.88
1092	L-771	CONDUIT	9.24	0	00:45	5.51	1.78	1.00
1093	L-772	CONDUIT	9.25	0	00:45	5.23	1.38	1.00
1094	L-773	CONDUIT	8.89	0	00:45	5.03	0.87	1.00
1095	L-774	CONDUIT	8.89	0	00:45	5.03	1.35	1.00
1096	L-775	CONDUIT	8.32	0	00:55	6.78	1.44	1.00
1097	L-776	CONDUIT	7.99	0	01:14	6.51	1.53	1.00
1098	L-777	CONDUIT	7.99	0	01:14	6.51	1.48	1.00
1099	L-778	CONDUIT	7.69	0	01:30	6.26	1.47	1.00
1100	L-779	CONDUIT	7.54	0	01:31	6.15	1.55	1.00
1101	L-780	CONDUIT	4.22	0	02:08	3.44	0.99	1.00
1102	L-781	CONDUIT	4.19	0	02:08	3.41	0.96	1.00
1103	L-782	CONDUIT	3.99	0	02:08	3.25	0.94	1.00
1104	L-783	CONDUIT	3.93	0	02:08	3.20	0.93	1.00
1105	L-784	CONDUIT	5.32	0	00:35	5.32	1.30	1.00
1106	L-790	CONDUIT	27.48	0	03:42	2.88	0.03	0.16
1107	L-791	CONDUIT	27.48	0	03:41	5.75	0.07	0.15
1108	L-792	CONDUIT	27.49	0	03:41	2.89	0.03	0.09
1109	L-792A	CONDUIT	22.94	0	03:39	4.42	0.04	0.20
1110	L-792B	CONDUIT	0.00	0	00:00	0.00	0.00	0.10
1111	L-801	CONDUIT	37.26	0	02:58	3.13	0.05	0.20
1112	L-802	CONDUIT	17.47	0	02:30	4.98	0.27	0.25
1113	L-803	CONDUIT	16.91	0	04:34	0.61	0.07	0.40
1114	L-804	CONDUIT	16.89	0	04:31	3.64	0.28	0.41
1115	L-805	CONDUIT	16.89	0	04:31	2.82	4.12	0.79
1116	L-806	CONDUIT	51.58	0	01:39	1.07	0.22	1.00
1117	L-807	CONDUIT	51.26	0	01:40	1.07	0.74	1.00
1118	L-808	CONDUIT	51.34	0	01:39	1.52	0.12	1.00
1119	L-809	CONDUIT	18.97	0	02:10	1.80	0.25	0.74
1120	L-810	CONDUIT	13.79	0	01:16	9.31	2.45	0.81
1121	L-811	CONDUIT	8.95	0	02:33	5.06	1.56	1.00
1122	L-812	CONDUIT	6.91	0	04:27	3.91	1.15	1.00
1123	L-813	CONDUIT	6.22	0	05:27	3.52	1.42	1.00
1124	L-814	CONDUIT	6.22	0	05:27	5.07	1.25	1.00
1125	L-815	CONDUIT	5.61	0	05:49	4.57	1.32	1.00
1126	L-816	CONDUIT	4.76	0	13:19	3.88	1.43	1.00
1127	L-817	CONDUIT	4.28	0	01:05	3.49	1.11	1.00
1128	L-817-1	CONDUIT	5.07	0	00:52	4.13	2.26	1.00
1129	L-818	CONDUIT	4.85	0	01:08	3.95	1.41	1.00
1130	L-819	CONDUIT	4.00	0	14:13	3.26	1.46	1.00
1131	L-820	CONDUIT	4.14	0	00:56	3.37	1.37	1.00
1132	L-821	CONDUIT	3.77	0	00:48	3.07	1.04	1.00
1133	L-822	CONDUIT	3.44	0	14:23	2.84	0.86	1.00
1134	L-823	CONDUIT	3.33	0	00:16	2.85	0.78	1.00
1135	L-824	CONDUIT	0.00	0	00:00	0.00	0.00	0.18
1136	L-825	CONDUIT	1.80	0	00:47	3.09	0.22	0.29
1137	L-826	CONDUIT	3.46	0	00:46	9.57	0.08	0.50
1138	L-830	CONDUIT	20.51	0	02:48	0.60	0.01	0.14
1139	L-840	CONDUIT	3.50	0	00:49	2.85	0.35	1.00
1140	L-841	CONDUIT	3.23	0	00:51	2.63	0.51	1.00
1141	L-842	CONDUIT	2.50	0	00:55	2.04	0.33	1.00
1142	L-842A	CONDUIT	11.60	0	02:37	2.60	0.01	0.18
1143	L-844	CONDUIT	1.71	0	01:42	2.93	0.43	1.00
1144	L-845	CONDUIT	4.68	0	00:45	3.81	2.19	1.00
1145	L-846	CONDUIT	2.50	0	00:45	2.04	0.78	1.00
1146	L-847	CONDUIT	1.85	0	00:45	2.43	0.20	1.00
1147	L-850	CONDUIT	6.78	0	02:08	5.95	1.75	0.88
1148	L-860	CONDUIT	8.24	0	01:15	6.71	1.61	1.00
1149	L-869	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1150	L-870	CONDUIT	3.61	0	00:42	2.04	0.79	1.00
1151	L-871	CONDUIT	2.92	0	03:14	2.38	0.48	1.00
1152	L-871-1B	CONDUIT	3.49	0	00:31	2.33	1.14	1.00

1153	L-871-1C	CONDUIT	3.39	0	00:43	2.26	0.87	1.00
1154	L-900-1	CONDUIT	10.30	0	00:45	13.12	4.46	1.00
1155	L-901	CONDUIT	2.37	0	00:52	3.01	2.12	1.00
1156	L-902	CONDUIT	1.82	0	00:45	2.32	0.71	1.00
1157	W-100	WEIR	0.00	0	00:00			0.00
1158	W-1000	WEIR	0.00	0	00:00			0.00
1159	W-1100	WEIR	18.87	0	01:01			0.55
1160	W-150	WEIR	0.00	0	00:00			0.00
1161	W-200	WEIR	0.00	0	00:00			0.00
1162	W-300	WEIR	0.00	0	00:00			0.00
1163	W-400	WEIR	0.00	0	00:00			0.00
1164	W-500	WEIR	0.00	0	00:00			0.00
1165	W-600	WEIR	0.00	0	00:00			0.00

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Flow Classification Summary  
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Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----									
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl	
1177	C=737A1	1.00	0.00	0.14	0.00	0.56	0.30	0.00	0.00	0.54	0.00
1178	C737-A2	1.00	0.00	0.00	0.00	0.69	0.31	0.00	0.00	0.54	0.00
1179	C-737A-3	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1180	L-1001	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1181	L-1002	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	0.91	0.00
1182	L-1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1183	L-1004	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1184	L-1005	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.11	0.00
1185	L-1006	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1186	L-1007	1.00	0.00	0.86	0.00	0.14	0.00	0.00	0.00	0.92	0.00
1187	L-1008	1.00	0.86	0.01	0.00	0.12	0.00	0.00	0.00	0.92	0.00
1188	L-1009	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1189	L-1010	1.00	0.00	0.89	0.00	0.01	0.10	0.00	0.00	0.92	0.00
1190	L-1020	1.00	0.00	0.86	0.00	0.14	0.00	0.00	0.00	0.91	0.00
1191	L-1021	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1192	L-1022	1.00	0.00	0.87	0.00	0.13	0.00	0.00	0.00	0.91	0.00
1193	L-1023	1.00	0.87	0.01	0.00	0.13	0.00	0.00	0.00	0.98	0.00
1194	L-1024	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1195	L-1101	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.97	0.02	0.00
1196	L-1102	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.90	0.00
1197	L-120	1.00	0.00	0.82	0.00	0.18	0.00	0.00	0.00	1.00	0.00
1198	L-121	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1199	L-122	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.66	0.00
1200	L-123	1.00	0.00	0.00	0.00	0.86	0.14	0.00	0.00	0.31	0.00
1201	L-124	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1202	L-124A	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.00	0.00
1203	L-124B	1.00	0.00	0.88	0.00	0.12	0.00	0.00	0.00	0.99	0.00
1204	L-125	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09	0.00
1205	L-126	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.67	0.00
1206	L-127	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.24	0.00
1207	L-127A	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.08	0.00
1208	L-128	1.00	0.00	0.43	0.00	0.57	0.00	0.00	0.00	0.88	0.00
1209	L-129	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.00	0.00
1210	L-130	1.00	0.00	0.59	0.00	0.32	0.09	0.00	0.00	0.92	0.00
1211	L-131	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.06	0.00
1212	L-141	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.02	0.00
1213	L-142	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1214	L-142A	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1215	L-142B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1216	L-143	1.00	0.00	0.80	0.00	0.20	0.00	0.00	0.00	0.95	0.00
1217	L-144	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1218	L-145	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00

1219	L-146	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.08	0.00
1220	L-147	1.00	0.00	0.67	0.00	0.24	0.09	0.00	0.00	0.72	0.00
1221	L-148	1.00	0.00	0.00	0.00	0.04	0.09	0.00	0.87	0.00	0.00
1222	L-149	1.00	0.00	0.67	0.00	0.32	0.00	0.00	0.00	1.00	0.00
1223	L-152	1.00	0.87	0.01	0.00	0.11	0.00	0.00	0.00	1.00	0.00
1224	L-153	1.00	0.00	0.87	0.00	0.09	0.03	0.00	0.00	0.92	0.00
1225	L-153A	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1226	L-154	1.00	0.00	0.00	0.00	0.01	0.01	0.00	0.99	0.00	0.00
1227	L-156	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1228	L-157	1.00	0.00	0.78	0.00	0.22	0.00	0.00	0.00	0.92	0.00
1229	L-157.1	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.90	0.07	0.00
1230	L-157-1	1.00	0.00	0.87	0.00	0.13	0.00	0.00	0.00	1.00	0.00
1231	L-157-2	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.01	0.00
1232	L-157-3	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1233	L-157-3A	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1234	L-157-4	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.00	0.00
1235	L-158	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1236	L-159	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1237	L-160	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.00	0.00
1238	L-161	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1239	L-162	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.90	0.00
1240	L-163	1.00	0.00	0.70	0.00	0.22	0.01	0.00	0.07	0.93	0.00
1241	L-201	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.97	0.00
1242	L-202	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1243	L-203	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1244	L-204	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	0.97	0.00
1245	L-205	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.00	0.00
1246	L-206	1.00	0.00	0.82	0.00	0.17	0.01	0.00	0.00	0.99	0.00
1247	L-301	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.02	0.00
1248	L-302	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.91	0.00
1249	L-303	1.00	0.00	0.86	0.00	0.06	0.07	0.00	0.00	1.00	0.00
1250	L-304	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.87	0.00
1251	L-321	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1252	L-322	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.91	0.00
1253	L-323	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.10	0.00
1254	L-324	1.00	0.00	0.61	0.00	0.36	0.04	0.00	0.00	0.91	0.00
1255	L-325	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.00	0.00
1256	L-326	1.00	0.00	0.74	0.00	0.25	0.01	0.00	0.00	0.99	0.00
1257	L-401	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	1.00	0.00
1258	L-402	1.00	0.00	0.88	0.00	0.12	0.00	0.00	0.00	1.00	0.00
1259	L-403	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1260	L-404	1.00	0.00	0.26	0.00	0.57	0.16	0.00	0.00	0.64	0.00
1261	L-405	1.00	0.00	0.00	0.00	0.91	0.08	0.00	0.00	0.51	0.00
1262	L-406	1.00	0.00	0.33	0.00	0.58	0.00	0.00	0.09	0.92	0.00
1263	L-407	1.00	0.00	0.00	0.00	0.98	0.01	0.00	0.01	0.01	0.00
1264	L-451	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.91	0.00
1265	L-452	1.00	0.84	0.02	0.00	0.13	0.01	0.00	0.00	1.00	0.00
1266	L-453	1.00	0.81	0.03	0.00	0.16	0.00	0.00	0.00	0.99	0.00
1267	L-454	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.98	0.00
1268	L-455	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1269	L-455A	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	0.99	0.00
1270	L-456	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1271	L-457	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1272	L-458	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1273	L-459	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1274	L-460	1.00	0.00	0.76	0.00	0.24	0.00	0.00	0.00	0.91	0.00
1275	L-461	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.79	0.00
1276	L-462	1.00	0.00	0.76	0.00	0.24	0.00	0.00	0.00	0.90	0.00
1277	L-462A	1.00	0.76	0.07	0.00	0.17	0.00	0.00	0.00	0.98	0.00
1278	L-463	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.03	0.00
1279	L-464	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1280	L-465	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1281	L-466	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1282	L-481	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1283	L-481B	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1284	L-482	1.00	0.00	0.00	0.00	0.45	0.55	0.00	0.00	0.01	0.00

1285	L-482B	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1286	L-483	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	0.84	0.00
1287	L-484	1.00	0.00	0.00	0.00	0.74	0.26	0.00	0.00	0.73	0.00
1288	L-484A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1289	L-485	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.94	0.00
1290	L-485B-2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1291	L-490	1.00	0.76	0.07	0.00	0.16	0.00	0.00	0.00	0.97	0.00
1292	L-491	1.00	0.84	0.02	0.00	0.14	0.00	0.00	0.00	0.97	0.00
1293	L-492	1.00	0.86	0.02	0.00	0.04	0.08	0.00	0.00	0.99	0.00
1294	L-493	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	1.00	0.00
1295	L-494	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.91	0.00
1296	L-495	1.00	0.84	0.02	0.00	0.14	0.00	0.00	0.00	0.98	0.00
1297	L-501	1.00	0.00	0.79	0.00	0.18	0.03	0.00	0.01	0.99	0.00
1298	L-502	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.04	0.00
1299	L-503	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	0.01	0.00
1300	L-601	1.00	0.39	0.48	0.00	0.13	0.00	0.00	0.00	0.92	0.00
1301	L-602	1.00	0.00	0.39	0.00	0.61	0.00	0.00	0.00	0.98	0.00
1302	L-603	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1303	L-604	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.02	0.00
1304	L-701	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1305	L-701A	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.82	0.00
1306	L-701B	1.00	0.01	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00
1307	L-701C	1.00	0.01	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1308	L-702	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1309	L-702-1	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.04	0.00
1310	L-702B	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.00	0.00
1311	L-703	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1312	L-704	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1313	L-705	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1314	L-706	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1315	L-707	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1316	L-708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.00
1317	L-709-1	1.00	0.00	0.00	0.00	0.67	0.33	0.00	0.00	0.10	0.00
1318	L-709-2	1.00	0.00	0.13	0.00	0.87	0.00	0.00	0.00	0.14	0.00
1319	L-709-3	1.00	0.13	0.24	0.00	0.63	0.00	0.00	0.00	0.43	0.00
1320	L-710	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00
1321	L-711	1.00	0.00	0.00	0.00	0.46	0.54	0.00	0.00	0.00	0.00
1322	L-712	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.30	0.00
1323	L-713	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1324	L-714-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1325	L-714-2	1.00	0.00	0.21	0.00	0.78	0.02	0.00	0.00	0.24	0.00
1326	L-714-3	1.00	0.21	0.10	0.00	0.70	0.00	0.00	0.00	0.32	0.00
1327	L-715	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1328	L-715-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.00
1329	L-715A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1330	L-716	1.00	0.02	0.00	0.00	0.18	0.15	0.00	0.64	0.00	0.00
1331	L-716A	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1332	L-717-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.38	0.00
1333	L-718	1.00	0.00	0.00	0.00	0.53	0.47	0.00	0.00	0.00	0.00
1334	L-719	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.08	0.00
1335	L-720	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1336	L-721	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1337	L-722	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.03	0.00
1338	L-723_1	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1339	L-723_2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1340	L-725	1.00	0.00	0.00	0.00	0.59	0.41	0.00	0.00	0.00	0.00
1341	L-725-1	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1342	L-725-2_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.93	0.00
1343	L-725-2_2	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.94	0.00
1344	L-725-2_3	1.00	0.01	0.00	0.00	0.01	0.98	0.00	0.00	0.00	0.00
1345	L-725-2_5	1.00	0.00	0.02	0.00	0.59	0.38	0.00	0.00	0.30	0.00
1346	L-725-3	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1347	L-725B	1.00	0.00	0.40	0.00	0.58	0.02	0.00	0.00	0.98	0.00
1348	L-726	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1349	L-730	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1350	L-730-1	1.00	0.00	0.00	0.00	0.76	0.20	0.00	0.04	0.96	0.00

1351	L-731	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1352	L-732	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1353	L-732A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1354	L-732B	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1355	L-733	1.00	0.00	0.88	0.00	0.12	0.00	0.00	0.00	0.99	0.00
1356	L-734	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.97	0.00
1357	L-735	1.00	0.00	0.88	0.00	0.11	0.00	0.00	0.00	1.00	0.00
1358	L-736	1.00	0.88	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1359	L-737	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1360	L-740	1.00	0.00	0.00	0.00	0.46	0.54	0.00	0.00	0.48	0.00
1361	L-741	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.00	0.00
1362	L-742	1.00	0.00	0.00	0.00	0.71	0.29	0.00	0.00	1.00	0.00
1363	L-743	1.00	0.00	0.02	0.00	0.36	0.62	0.00	0.00	0.50	0.00
1364	L-744	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
1365	L-745	1.00	0.02	0.75	0.00	0.23	0.00	0.00	0.00	0.72	0.00
1366	L-750	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.96	0.00
1367	L-751	1.00	0.00	0.00	0.00	0.69	0.31	0.00	0.00	0.73	0.00
1368	L-752	1.00	0.00	0.43	0.00	0.57	0.00	0.00	0.00	1.00	0.00
1369	L-753	1.00	0.43	0.13	0.00	0.44	0.00	0.00	0.00	0.98	0.00
1370	L-754	1.00	0.56	0.17	0.00	0.28	0.00	0.00	0.00	0.99	0.00
1371	L-760	1.00	0.00	0.17	0.00	0.83	0.01	0.00	0.00	0.25	0.00
1372	L-761	1.00	0.17	0.09	0.00	0.74	0.00	0.00	0.00	0.28	0.00
1373	L-762	1.00	0.26	0.07	0.00	0.67	0.00	0.00	0.00	0.38	0.00
1374	L-770	1.00	0.41	0.31	0.00	0.20	0.05	0.00	0.04	0.93	0.00
1375	L-771	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.00	0.00
1376	L-772	1.00	0.00	0.77	0.00	0.23	0.00	0.00	0.00	0.91	0.00
1377	L-773	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1378	L-774	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	0.79	0.00
1379	L-775	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.00	0.00
1380	L-776	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.00	0.00
1381	L-777	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.00	0.00
1382	L-778	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.93	0.00	0.00
1383	L-779	1.00	0.00	0.80	0.00	0.20	0.00	0.00	0.00	0.91	0.00
1384	L-780	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.94	0.00
1385	L-781	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.93	0.00	0.00
1386	L-782	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.00	0.00
1387	L-783	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	0.94	0.00
1388	L-784	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.94	0.00
1389	L-790	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1390	L-791	1.00	0.00	0.00	0.00	0.55	0.44	0.00	0.00	0.01	0.00
1391	L-792	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.60	0.00
1392	L-792A	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.00	0.00
1393	L-792B	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1394	L-801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1395	L-802	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1396	L-803	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.35	0.00
1397	L-804	1.00	0.00	0.00	0.00	0.87	0.13	0.00	0.00	0.00	0.00
1398	L-805	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1399	L-806	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.14	0.00
1400	L-807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.16	0.00
1401	L-808	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.44	0.00
1402	L-809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.59	0.00
1403	L-810	1.00	0.00	0.00	0.00	0.79	0.21	0.00	0.00	0.01	0.00
1404	L-811	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.54	0.00
1405	L-812	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1406	L-813	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.51	0.00
1407	L-814	1.00	0.00	0.00	0.00	0.48	0.00	0.00	0.52	0.01	0.00
1408	L-815	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.39	0.00
1409	L-816	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1410	L-817	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.53	0.00
1411	L-817-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1412	L-818	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1413	L-819	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1414	L-820	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.53	0.00
1415	L-821	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.50	0.00
1416	L-822	1.00	0.00	0.00	0.00	0.47	0.00	0.00	0.53	0.01	0.00

1417	L-823	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.53	0.00
1418	L-824	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1419	L-825	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1420	L-826	1.00	0.36	0.44	0.00	0.15	0.01	0.00	0.04	0.96	0.00
1421	L-830	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.98	0.00
1422	L-840	1.00	0.00	0.00	0.00	0.47	0.00	0.00	0.53	0.32	0.00
1423	L-841	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1424	L-842	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.88	0.00
1425	L-842A	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1426	L-844	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1427	L-845	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1428	L-846	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1429	L-847	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	0.93	0.00
1430	L-850	1.00	0.00	0.47	0.00	0.52	0.01	0.00	0.00	0.54	0.00
1431	L-860	1.00	0.00	0.48	0.00	0.52	0.00	0.00	0.00	0.53	0.00
1432	L-869	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1433	L-870	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1434	L-871	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.56	0.00
1435	L-871-1B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00
1436	L-871-1C	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.84	0.00
1437	L-900-1	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1438	L-901	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.95	0.00
1439	L-902	1.00	0.00	0.83	0.00	0.17	0.00	0.00	0.00	0.96	0.00

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 Conduit Surcharge Summary  
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Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited	
1451	L-1001	0.01	0.16	0.01	0.01	0.01
1452	L-1002	0.16	0.36	0.16	0.01	0.16
1453	L-1003	0.36	0.51	0.36	0.30	0.36
1454	L-1004	0.49	0.49	0.51	0.01	0.43
1455	L-1005	0.30	0.30	0.71	0.01	0.01
1456	L-1006	0.08	0.08	0.21	0.01	0.01
1457	L-1007	0.08	0.08	0.21	0.01	0.01
1458	L-1008	0.01	0.01	0.08	0.01	0.01
1459	L-1020	0.60	0.68	0.60	0.28	0.60
1460	L-1021	0.64	0.64	0.68	0.01	0.39
1461	L-1022	0.66	0.66	0.72	0.01	0.41
1462	L-1023	0.54	0.54	0.66	0.01	0.01
1463	L-1024	0.28	0.28	0.49	0.01	0.01
1464	L-1101	0.01	0.01	0.44	0.01	0.01
1465	L-120	0.01	0.01	0.33	0.01	0.01
1466	L-121	0.20	0.33	0.20	2.58	0.20
1467	L-122	0.16	0.20	0.16	0.14	0.16
1468	L-123	0.16	0.16	0.33	0.01	0.01
1469	L-124	0.22	0.25	0.22	0.01	0.22
1470	L-124B	0.01	0.01	0.33	0.01	0.01
1471	L-125	0.22	0.22	0.29	0.12	0.20
1472	L-126	0.29	0.29	0.33	0.01	0.26
1473	L-127A	0.01	0.01	0.33	0.01	0.01
1474	L-128	0.01	0.01	0.01	0.07	0.01
1475	L-141	0.10	0.10	0.24	0.01	0.01
1476	L-142	0.35	0.35	0.36	0.01	0.20
1477	L-142A	0.23	0.23	0.33	0.01	0.03
1478	L-142B	0.37	0.37	0.43	0.01	0.11
1479	L-143	0.36	0.36	0.46	0.05	0.20
1480	L-144	0.23	0.46	0.23	0.79	0.23
1481	L-145	0.25	0.25	0.32	0.10	0.22
1482	L-146	0.01	0.32	0.01	0.28	0.01

1483	L-157.1	0.01	0.01	0.25	0.01	0.01
1484	L-201	0.45	0.45	0.55	0.27	0.33
1485	L-202	0.54	0.55	0.54	0.40	0.54
1486	L-203	0.28	0.54	0.28	0.49	0.28
1487	L-205	0.01	0.01	0.01	0.28	0.01
1488	L-206	0.01	0.01	30.42	0.01	0.01
1489	L-321	0.01	0.30	0.01	2.61	0.01
1490	L-323	0.01	0.01	0.13	0.01	0.01
1491	L-324	0.09	0.13	0.09	0.01	0.09
1492	L-325	0.01	0.09	0.01	0.01	0.01
1493	L-326	0.01	0.01	30.77	0.01	0.01
1494	L-402	0.01	0.01	0.04	0.01	0.01
1495	L-403	0.01	0.04	0.01	2.55	0.01
1496	L-405	0.01	0.01	0.09	0.01	0.01
1497	L-406	0.01	0.09	0.01	0.08	0.01
1498	L-407	29.08	29.08	30.61	0.01	0.01
1499	L-452	0.01	0.01	0.14	0.01	0.01
1500	L-453	0.14	0.14	0.33	0.01	0.01
1501	L-454	0.33	0.33	0.46	0.12	0.27
1502	L-455	0.32	0.34	0.32	0.24	0.32
1503	L-455A	0.13	0.13	0.46	0.01	0.01
1504	L-456	0.39	0.39	0.47	0.06	0.24
1505	L-457	0.47	0.47	0.55	0.01	0.07
1506	L-458	0.55	0.55	0.59	0.31	0.51
1507	L-459	0.59	0.59	0.67	0.25	0.47
1508	L-460	0.26	0.29	0.26	0.05	0.26
1509	L-461	0.24	0.24	0.27	0.01	0.16
1510	L-462	0.23	0.27	0.23	0.01	0.23
1511	L-462A	0.19	0.19	0.84	0.01	0.01
1512	L-463	0.23	0.23	0.26	0.01	0.19
1513	L-464	0.26	0.26	0.28	0.01	0.22
1514	L-465	0.16	0.28	28.82	0.14	0.16
1515	L-466	28.66	28.82	29.08	0.07	0.01
1516	L-490	0.39	0.39	0.67	0.17	0.22
1517	L-491	0.22	0.22	0.39	0.01	0.01
1518	L-492	0.07	0.07	0.27	0.01	0.01
1519	L-493	0.01	0.01	0.07	0.01	0.01
1520	L-495	0.28	0.28	0.45	0.01	0.01
1521	L-502	0.01	0.01	30.36	0.01	0.01
1522	L-503	30.36	30.36	30.71	0.01	0.01
1523	L-601	0.22	0.22	0.24	0.01	0.13
1524	L-602	0.24	0.24	1.08	0.15	0.16
1525	L-603	0.75	1.08	30.22	0.58	0.40
1526	L-604	30.22	30.22	30.93	0.01	0.01
1527	L-706	0.01	0.01	0.01	9.08	0.01
1528	L-709-2	10.30	10.30	12.54	0.01	0.01
1529	L-709-3	5.35	5.35	10.30	0.01	0.01
1530	L-711	0.01	0.01	0.01	1.52	0.01
1531	L-714-2	9.30	9.30	12.23	0.01	0.01
1532	L-714-3	6.50	6.50	9.30	0.01	0.01
1533	L-741	0.01	1.04	0.01	0.01	0.01
1534	L-742	0.01	0.01	1.04	0.01	0.01
1535	L-760	13.51	13.65	18.18	0.18	0.13
1536	L-761	11.78	11.78	13.65	0.01	0.01
1537	L-762	7.50	7.50	11.78	0.01	0.01
1538	L-770	0.01	0.15	4.60	0.01	0.01
1539	L-771	0.07	1.69	0.07	1.92	0.07
1540	L-772	1.69	1.75	1.69	1.58	1.69
1541	L-773	1.71	1.71	1.75	0.01	1.67
1542	L-774	1.71	1.74	1.71	1.60	1.70
1543	L-775	1.87	1.94	1.87	1.67	1.87
1544	L-776	1.92	2.03	1.92	1.83	1.92
1545	L-777	1.94	1.95	1.94	1.72	1.94
1546	L-778	1.81	1.92	1.81	1.70	1.81
1547	L-779	1.92	1.93	1.92	1.80	1.92
1548	L-780	1.75	1.75	1.93	0.01	0.06



1549	L-781	1.71	1.71	1.73	0.01	0.07
1550	L-782	1.66	1.66	1.70	0.01	0.06
1551	L-783	1.62	1.62	1.66	0.01	0.06
1552	L-784	1.61	1.61	1.62	0.01	0.01
1553	L-805	0.01	9.70	0.01	14.93	0.01
1554	L-806	9.21	9.21	9.70	0.01	0.04
1555	L-807	8.88	8.88	9.21	0.01	0.02
1556	L-808	6.75	6.75	8.88	0.01	0.01
1557	L-809	0.01	0.01	9.46	0.01	0.01
1558	L-810	0.01	12.15	0.01	7.27	0.01
1559	L-811	11.32	11.32	12.15	6.15	10.23
1560	L-812	11.32	11.32	14.25	3.87	0.01
1561	L-813	14.25	14.25	14.25	12.16	13.27
1562	L-814	14.18	14.18	14.30	9.18	11.79
1563	L-815	14.00	14.00	14.18	11.13	11.32
1564	L-816	13.99	14.15	14.00	11.46	11.70
1565	L-817	14.24	14.24	14.28	2.01	14.04
1566	L-817-1	14.15	14.15	14.28	14.27	0.01
1567	L-818	14.15	14.15	14.24	8.17	12.87
1568	L-819	14.14	14.16	14.15	13.32	13.57
1569	L-820	14.15	14.16	14.16	9.06	13.01
1570	L-821	14.15	14.16	14.16	0.80	11.18
1571	L-822	14.10	14.10	14.14	0.01	0.01
1572	L-823	14.08	14.09	14.10	0.01	0.01
1573	L-826	0.01	0.01	27.01	0.01	0.01
1574	L-840	3.41	3.41	7.56	0.01	0.01
1575	L-841	3.41	3.41	30.93	0.01	0.01
1576	L-842	2.89	2.89	30.93	0.01	0.01
1577	L-844	2.53	2.53	2.89	0.01	0.01
1578	L-845	2.50	2.50	2.53	0.54	0.72
1579	L-846	2.50	2.50	3.22	0.01	0.01
1580	L-847	1.76	1.76	3.22	0.01	0.01
1581	L-850	0.01	2.45	0.01	2.25	0.01
1582	L-860	7.29	7.29	12.45	0.57	0.88
1583	L-870	14.12	14.12	30.93	0.01	0.01
1584	L-871	12.72	12.72	14.20	0.01	0.01
1585	L-871-1B	8.60	8.60	13.72	0.31	0.33
1586	L-871-1C	2.69	2.69	8.60	0.01	0.01
1587	L-900-1	0.46	1.53	0.46	1.49	0.46
1588	L-901	1.06	1.06	1.53	0.84	0.88
1589	L-902	0.78	0.78	1.06	0.01	0.01
1590						
1591						
1592	Analysis begun on:	Thu Oct 25 16:04:28 2018				
1593	Analysis ended on:	Thu Oct 25 16:04:59 2018				
1594	Total elapsed time:	00:00:31				



## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. 25-Year Existing Conditions Model
4. SWMM 10 Year Output Report - No Offsite Flows
5. **SWMM 25 Year Output Report - No Offsite Flows**
6. SWMM 25 Year Output Report - With Offsite Flows
7. SWMM 100 Year Output Report- No Offsite Flows

5 Gonzales Existing Conditions  
 6 25-yr  
 7

8 \*\*\*\*\*  
 9 NOTE: The summary statistics displayed in this report are  
 10 based on results found at every computational time step,  
 11 not just on results from each reporting time step.  
 12 \*\*\*\*\*  
 13

14 \*\*\*\*\*

15 Analysis Options

16 \*\*\*\*\*

17 Flow Units ..... CFS

18 Process Models:

19 Rainfall/Runoff ..... NO

20 RDII ..... NO

21 Snowmelt ..... NO

22 Groundwater ..... NO

23 Flow Routing ..... YES

24 Ponding Allowed ..... YES

25 Water Quality ..... NO

26 Flow Routing Method ..... DYNWAVE

27 Starting Date ..... 06/13/2009 00:00:00

28 Ending Date ..... 06/14/2009 00:00:00

29 Antecedent Dry Days ..... 0.0

30 Report Time Step ..... 00:01:00

31 Routing Time Step ..... 1.00 sec

32 Variable Time Step ..... YES

33 Maximum Trials ..... 20

34 Number of Threads ..... 1

35 Head Tolerance ..... 0.005000 ft  
 36

37 \*\*\*\*\*

	Volume acre-feet	Volume 10 <sup>6</sup> gal
38 Flow Routing Continuity		
39 *****	-----	-----

41 Dry Weather Inflow .....	0.000	0.000
42 Wet Weather Inflow .....	0.000	0.000
43 Groundwater Inflow .....	0.000	0.000
44 RDII Inflow .....	0.000	0.000
45 External Inflow .....	238.203	77.622
46 External Outflow .....	200.549	65.352
47 Flooding Loss .....	0.515	0.168
48 Evaporation Loss .....	0.000	0.000
49 Exfiltration Loss .....	0.000	0.000
50 Initial Stored Volume ....	0.004	0.001
51 Final Stored Volume .....	34.060	11.099
52 Continuity Error (%) .....	1.295	

42 Wet Weather Inflow .....

43 Groundwater Inflow .....

44 RDII Inflow .....

45 External Inflow .....

46 External Outflow .....

47 Flooding Loss .....

48 Evaporation Loss .....

49 Exfiltration Loss .....

50 Initial Stored Volume ....

51 Final Stored Volume .....

52 Continuity Error (%) .....

53 \*\*\*\*\*

54 Highest Continuity Errors

55 \*\*\*\*\*

56 Node S-150 (38.19%)

57 Node J-701A (7.52%)

58 Node J-131 (6.63%)

59 Node J-725-2 (3.82%)

60 Node J-846 (3.80%)  
 61  
 62  
 63

64 \*\*\*\*\*

65 Time-Step Critical Elements  
 66

67 \*\*\*\*\*  
 68 Link L-741 (4.35%)  
 69 Link L-740 (3.96%)  
 70 Link L-127 (1.63%)  
 71  
 72

73 \*\*\*\*\*  
 74 Highest Flow Instability Indexes  
 75 \*\*\*\*\*  
 76 Link L-131 (5)  
 77 Link L-761 (4)  
 78 Link L-773 (3)  
 79 Link L-771 (3)  
 80 Link L-762 (3)  
 81  
 82

83 \*\*\*\*\*  
 84 Routing Time Step Summary  
 85 \*\*\*\*\*  
 86 Minimum Time Step : 0.45 sec  
 87 Average Time Step : 0.98 sec  
 88 Maximum Time Step : 1.00 sec  
 89 Percent in Steady State : 0.00  
 90 Average Iterations per Step : 2.40  
 91 Percent Not Converging : 1.06  
 92  
 93

94 \*\*\*\*\*  
 95 Node Depth Summary  
 96 \*\*\*\*\*  
 97

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J-1001	JUNCTION	0.26	4.14	119.74	0 00:44	4.08
J-1002	JUNCTION	0.29	5.22	121.72	0 00:44	5.12
J-1003	JUNCTION	0.33	6.71	123.81	0 00:43	6.37
J-1004	JUNCTION	0.32	7.31	125.31	0 00:43	6.92
J-1005	JUNCTION	0.17	12.78	132.88	0 00:42	5.21
J-1006	JUNCTION	0.14	10.88	132.08	0 00:43	4.30
J-1007	JUNCTION	0.12	9.64	131.64	0 00:43	4.10
J-1008	JUNCTION	0.11	10.15	133.05	0 00:44	3.85
J-1009	JUNCTION	0.05	1.49	127.29	0 00:47	1.48
J-1010	JUNCTION	0.04	0.64	132.84	0 00:44	0.63
J-1020	JUNCTION	0.38	8.31	126.61	0 00:43	8.03
J-1021	JUNCTION	0.35	7.99	126.99	0 00:51	7.95
J-1022	JUNCTION	0.35	8.23	128.43	0 00:56	8.18
J-1023	JUNCTION	0.28	18.93	140.63	0 00:40	7.20
J-1024	JUNCTION	0.17	14.38	139.48	0 00:42	5.27
J-1101	JUNCTION	0.05	0.90	131.10	0 00:47	0.90
J-1102	JUNCTION	0.07	1.17	135.67	0 00:45	1.17
J-120	JUNCTION	0.02	1.27	165.07	0 00:49	1.25
J-121	JUNCTION	0.17	11.34	170.54	0 00:43	5.76
J-122	JUNCTION	0.12	10.93	170.13	0 00:43	4.97
J-123	JUNCTION	0.08	10.42	168.82	0 00:43	4.11
J-124	JUNCTION	0.14	11.23	167.93	0 00:43	5.08
J-124A	JUNCTION	0.03	0.83	162.03	0 00:49	0.83
J-124B	JUNCTION	0.05	8.92	167.82	0 00:43	2.99
J-125	JUNCTION	0.13	10.11	166.51	0 00:43	4.52
J-126	JUNCTION	0.12	4.16	158.86	0 00:43	3.26
J-127	JUNCTION	0.12	3.72	157.72	0 00:43	2.48
J-127A	JUNCTION	0.03	0.40	158.10	0 00:45	0.39
J-128	JUNCTION	0.13	3.52	157.32	0 00:43	2.29
J-129	JUNCTION	0.10	1.66	155.06	0 00:47	1.66

133	J-130	JUNCTION	0.09	1.92	153.72	0	00:47	1.92
134	J-131	JUNCTION	1.25	1.36	147.56	0	06:31	1.36
135	J-141	JUNCTION	0.10	16.15	173.85	0	00:41	9.81
136	J-142	JUNCTION	0.19	16.86	172.06	0	00:41	12.17
137	J-142A	JUNCTION	0.16	16.63	173.33	0	00:41	12.87
138	J-142B	JUNCTION	0.18	16.93	172.43	0	00:41	12.48
139	J-143	JUNCTION	0.19	16.89	171.89	0	00:41	11.81
140	J-144	JUNCTION	0.22	15.26	169.76	0	00:41	10.99
141	J-145	JUNCTION	0.15	14.58	168.78	0	00:40	8.37
142	J-146	JUNCTION	0.14	8.48	161.28	0	00:40	5.75
143	J-147	JUNCTION	0.10	1.64	153.24	0	00:45	1.64
144	J-148	JUNCTION	0.06	1.04	152.34	0	00:45	1.04
145	J-149	JUNCTION	2.56	2.70	148.44	0	00:45	2.70
146	J-151	JUNCTION	0.23	0.76	183.15	0	04:15	0.76
147	J-152	JUNCTION	0.01	0.14	166.14	0	00:45	0.14
148	J-153	JUNCTION	0.03	0.51	165.61	0	00:45	0.51
149	J-153A	JUNCTION	0.02	0.31	167.51	0	00:45	0.31
150	J-154	JUNCTION	0.03	0.49	163.99	0	00:46	0.49
151	J-155	JUNCTION	0.17	1.80	162.50	0	00:49	1.80
152	J-156	JUNCTION	0.06	1.78	162.38	0	00:48	1.78
153	J-157	JUNCTION	0.12	2.45	162.05	0	00:48	2.45
154	J-157-1	JUNCTION	0.01	0.16	164.76	0	00:46	0.16
155	J-157-2	JUNCTION	0.03	0.67	163.27	0	00:46	0.67
156	J-157-3	JUNCTION	0.06	0.92	163.22	0	00:46	0.92
157	J-157-3A	JUNCTION	0.04	0.66	166.06	0	00:45	0.66
158	J-157-4	JUNCTION	0.07	1.43	162.43	0	00:48	1.42
159	J-158	JUNCTION	0.32	2.20	161.40	0	00:48	2.20
160	J-159	JUNCTION	0.09	1.55	160.95	0	00:49	1.54
161	J-160	JUNCTION	0.13	2.76	158.06	0	00:49	2.76
162	J-161	JUNCTION	0.13	2.36	157.16	0	00:49	2.35
163	J-162	JUNCTION	0.09	1.48	155.38	0	00:49	1.48
164	J-163	JUNCTION	0.09	1.35	154.15	0	00:49	1.35
165	J-201	JUNCTION	0.29	14.61	160.41	0	00:35	14.61
166	J-202	JUNCTION	0.29	13.90	158.80	0	00:42	13.48
167	J-203	JUNCTION	0.22	10.70	154.60	0	00:42	9.73
168	J-204	JUNCTION	0.10	4.49	146.89	0	00:42	2.50
169	J-205	JUNCTION	0.13	2.44	143.84	0	00:42	2.22
170	J-206	JUNCTION	0.04	0.75	142.05	0	00:45	0.74
171	J-301	JUNCTION	0.04	0.60	143.10	0	00:45	0.60
172	J-302	JUNCTION	0.04	0.65	141.65	0	00:46	0.65
173	J-303	JUNCTION	0.04	0.60	140.40	0	00:46	0.60
174	J-304	JUNCTION	0.06	1.07	137.57	0	00:47	1.07
175	J-321	JUNCTION	0.15	15.26	152.96	0	00:43	6.14
176	J-322	JUNCTION	0.08	12.83	150.53	0	00:43	4.76
177	J-323	JUNCTION	0.08	12.05	148.55	0	00:43	4.65
178	J-324	JUNCTION	0.10	9.27	143.77	0	00:43	4.51
179	J-325	JUNCTION	0.10	6.73	140.43	0	00:43	3.34
180	J-326	JUNCTION	0.88	0.93	132.93	0	06:39	0.93
181	J-401	JUNCTION	0.01	0.18	144.28	0	00:45	0.18
182	J-402	JUNCTION	0.02	0.25	142.75	0	00:45	0.25
183	J-403	JUNCTION	0.10	1.66	134.86	0	00:44	1.62
184	J-404	JUNCTION	0.04	0.58	133.78	0	00:45	0.58
185	J-405	JUNCTION	0.04	1.22	130.72	0	00:47	1.22
186	J-406	JUNCTION	0.09	3.91	131.31	0	00:42	2.61
187	J-407	JUNCTION	3.61	3.95	127.35	0	12:22	3.91
188	J-451	JUNCTION	0.05	14.70	158.30	0	00:46	6.04
189	J-452	JUNCTION	0.06	20.10	161.60	0	00:45	7.72
190	J-453	JUNCTION	0.17	14.70	149.60	0	00:43	13.86
191	J-454	JUNCTION	0.25	15.18	146.58	0	00:43	15.18
192	J-455	JUNCTION	0.26	14.70	145.10	0	00:45	14.36
193	J-455A	JUNCTION	0.12	13.97	147.57	0	00:42	11.28
194	J-456	JUNCTION	0.25	14.64	144.64	0	00:45	14.16
195	J-457	JUNCTION	0.23	13.68	142.68	0	00:45	13.17
196	J-458	JUNCTION	0.25	13.46	141.86	0	00:45	12.85
197	J-459	JUNCTION	0.23	11.97	139.77	0	00:45	11.29
198	J-460	JUNCTION	0.24	10.92	138.22	0	00:44	10.12

199	J-461	JUNCTION	0.32	10.13	137.23	0	00:44	9.32
200	J-462	JUNCTION	1.02	8.89	135.19	0	00:44	8.24
201	J-462A	JUNCTION	0.11	16.30	144.10	0	00:42	7.02
202	J-463	JUNCTION	1.27	8.02	134.02	0	00:44	7.37
203	J-464	JUNCTION	2.19	6.32	131.32	0	00:45	6.01
204	J-465	JUNCTION	2.84	5.14	129.44	0	00:44	4.86
205	J-466	JUNCTION	3.28	4.23	128.03	0	00:42	3.47
206	J-481	JUNCTION	0.10	0.34	157.28	0	04:06	0.34
207	J-481B	JUNCTION	0.21	0.67	165.78	0	04:03	0.67
208	J-482	JUNCTION	0.37	1.10	145.94	0	02:42	1.10
209	J-482A	JUNCTION	0.09	0.47	193.31	0	02:36	0.47
210	J-482B	JUNCTION	0.00	0.00	268.84	0	00:00	0.00
211	J-483	JUNCTION	0.25	0.92	137.59	0	02:46	0.92
212	J-484	JUNCTION	0.25	0.75	130.45	0	04:31	0.75
213	J-484A	JUNCTION	0.00	0.00	270.00	0	00:00	0.00
214	J-485	JUNCTION	0.28	0.83	127.55	0	04:33	0.83
215	J-485A	JUNCTION	0.38	1.30	155.53	0	04:06	1.30
216	J-490	JUNCTION	0.21	14.07	142.77	0	00:44	12.69
217	J-491	JUNCTION	0.18	15.45	145.75	0	00:40	13.16
218	J-492	JUNCTION	0.11	14.50	149.60	0	00:42	11.30
219	J-493	JUNCTION	0.06	14.70	154.10	0	00:44	7.64
220	J-494	JUNCTION	0.06	14.90	155.10	0	00:44	7.10
221	J-495	JUNCTION	0.16	13.08	142.88	0	00:42	12.21
222	J-501	JUNCTION	0.02	0.38	145.98	0	00:45	0.38
223	J-502	JUNCTION	1.27	1.42	144.42	0	02:10	1.41
224	J-503	JUNCTION	4.83	9.83	149.13	0	00:44	5.10
225	J-601	JUNCTION	0.16	15.31	161.11	0	00:39	10.53
226	J-602	JUNCTION	0.16	15.30	160.80	0	00:39	10.15
227	J-603	JUNCTION	1.15	5.59	148.09	0	00:45	5.56
228	J-604	JUNCTION	1.36	2.34	144.54	0	00:52	2.29
229	J-701	JUNCTION	0.72	1.35	119.62	0	04:26	1.35
230	J-701A	JUNCTION	0.96	1.52	117.30	0	07:28	1.52
231	J-701B	JUNCTION	0.53	1.05	153.78	0	04:12	1.05
232	J-701C	JUNCTION	0.00	0.00	220.00	0	00:00	0.00
233	J-702	JUNCTION	0.67	1.00	120.53	0	08:42	1.00
234	J-702-1	JUNCTION	1.11	1.77	120.13	0	05:05	1.77
235	J-702B	JUNCTION	1.84	3.09	123.13	0	09:08	3.09
236	J-703	JUNCTION	1.81	3.17	124.06	0	09:08	3.17
237	J-704	JUNCTION	1.64	2.99	124.07	0	09:08	2.99
238	J-705	JUNCTION	1.61	2.86	124.07	0	09:08	2.86
239	J-706	JUNCTION	2.59	4.44	125.69	0	07:38	4.44
240	J-707	JUNCTION	2.58	4.43	125.69	0	07:38	4.43
241	J-708	JUNCTION	1.94	3.76	125.69	0	07:38	3.76
242	J-709-1	JUNCTION	1.57	3.21	126.85	0	06:57	3.21
243	J-709-2	JUNCTION	1.35	3.04	126.91	0	06:50	2.98
244	J-709-3	JUNCTION	0.88	2.51	126.91	0	06:50	2.45
245	J-710	JUNCTION	0.95	2.36	126.87	0	06:56	2.36
246	J-711	JUNCTION	1.95	3.93	128.48	0	06:50	3.93
247	J-712	JUNCTION	1.77	3.65	128.63	0	06:49	3.65
248	J-713	JUNCTION	2.53	4.71	129.43	0	06:46	4.71
249	J-714-1	JUNCTION	2.33	4.51	129.43	0	06:46	4.51
250	J-714-2	JUNCTION	1.85	4.01	129.45	0	06:50	4.00
251	J-714-3	JUNCTION	1.59	3.72	129.45	0	06:50	3.70
252	J-715	JUNCTION	2.29	4.45	129.45	0	06:46	4.45
253	J-715A	JUNCTION	0.00	0.00	134.57	0	00:00	0.00
254	J-716	JUNCTION	2.44	4.32	130.55	0	06:15	4.32
255	J-716A	JUNCTION	0.00	0.00	140.30	0	00:00	0.00
256	J-717-1	JUNCTION	1.22	3.06	130.56	0	06:14	3.06
257	J-718	JUNCTION	1.37	3.16	130.88	0	06:02	3.16
258	J-719	JUNCTION	1.38	3.22	131.19	0	05:55	3.22
259	J-720	JUNCTION	0.51	1.03	135.84	0	05:10	1.03
260	J-721	JUNCTION	0.87	2.05	140.13	0	05:25	2.05
261	J-722	JUNCTION	1.03	2.54	141.90	0	05:23	2.54
262	J-723	JUNCTION	0.61	1.46	147.18	0	05:30	1.46
263	J-723-1	JUNCTION	0.83	1.97	146.32	0	05:01	1.97
264	J-725	JUNCTION	0.65	1.69	148.10	0	05:28	1.69

265	J-725-1	JUNCTION	0.00	0.00	367.57	0	00:00	0.00
266	J-725-2	JUNCTION	0.31	0.73	176.30	0	04:36	0.73
267	J-725-3	JUNCTION	0.00	0.00	338.57	0	00:00	0.00
268	J-725A-1	JUNCTION	0.48	1.13	149.52	0	04:06	1.13
269	J-725A-2	JUNCTION	0.13	0.50	148.18	0	05:26	0.50
270	J-725A-3	JUNCTION	0.33	1.03	148.16	0	05:27	1.03
271	J-725B-2	JUNCTION	0.20	0.64	148.29	0	04:30	0.64
272	J-726	JUNCTION	2.32	2.95	148.15	0	05:27	2.95
273	J-730	JUNCTION	0.32	0.84	140.39	0	04:24	0.84
274	J-730-1	JUNCTION	0.24	0.62	131.40	0	04:26	0.62
275	J-731	JUNCTION	0.43	1.05	149.35	0	04:21	1.05
276	J-732	JUNCTION	0.10	0.81	151.61	0	00:46	0.81
277	J-732A	JUNCTION	0.00	0.00	154.84	0	00:00	0.00
278	J-732B	JUNCTION	0.00	0.00	160.69	0	00:00	0.00
279	J-733	JUNCTION	0.03	0.47	152.27	0	00:46	0.47
280	J-734	JUNCTION	0.03	0.41	154.21	0	00:46	0.41
281	J-735	JUNCTION	0.02	0.30	158.50	0	00:45	0.30
282	J-736	JUNCTION	0.00	0.00	159.40	0	00:00	0.00
283	J-737	JUNCTION	0.00	0.00	161.30	0	00:00	0.00
284	J-737A-1	JUNCTION	0.24	0.77	174.51	0	04:17	0.77
285	J-737A-2	JUNCTION	0.24	0.76	166.62	0	04:20	0.76
286	J-740	JUNCTION	0.93	3.68	152.58	0	04:20	3.68
287	J-741	JUNCTION	1.12	4.75	153.95	0	04:20	4.75
288	J-742	JUNCTION	0.62	2.48	157.98	0	04:20	2.48
289	J-743	JUNCTION	0.64	2.20	161.50	0	04:18	2.20
290	J-744	JUNCTION	2.01	4.53	165.83	0	04:18	4.53
291	J-745	JUNCTION	0.18	1.40	161.50	0	04:18	1.40
292	J-750	JUNCTION	0.07	1.02	127.96	0	00:53	1.02
293	J-751	JUNCTION	0.07	0.97	130.42	0	00:50	0.97
294	J-752	JUNCTION	0.02	0.28	131.57	0	00:48	0.28
295	J-753	JUNCTION	0.02	0.27	132.76	0	00:46	0.27
296	J-754	JUNCTION	0.01	0.22	134.24	0	00:45	0.22
297	J-760	JUNCTION	1.89	3.65	125.69	0	07:38	3.65
298	J-761	JUNCTION	1.71	3.47	125.69	0	07:38	3.47
299	J-762	JUNCTION	1.33	3.04	125.69	0	07:38	3.04
300	J-770	JUNCTION	0.14	8.57	143.17	0	00:42	3.24
301	J-771	JUNCTION	0.25	8.20	143.10	0	00:42	3.88
302	J-772	JUNCTION	0.34	8.96	144.46	0	00:42	5.07
303	J-773	JUNCTION	0.77	9.76	145.26	0	00:42	5.93
304	J-774	JUNCTION	0.46	9.73	146.13	0	00:42	6.51
305	J-775	JUNCTION	0.62	10.99	148.19	0	00:42	8.07
306	J-776	JUNCTION	0.75	11.74	149.34	0	00:42	9.07
307	J-777	JUNCTION	0.92	12.11	150.81	0	00:42	10.52
308	J-778	JUNCTION	0.97	11.32	151.42	0	00:42	10.73
309	J-779	JUNCTION	1.15	12.83	153.83	0	01:19	12.83
310	J-780	JUNCTION	1.01	11.60	154.10	0	01:20	11.56
311	J-781	JUNCTION	0.94	10.89	154.19	0	01:20	10.86
312	J-782	JUNCTION	0.85	9.93	154.23	0	01:20	9.90
313	J-783	JUNCTION	0.77	9.13	154.23	0	01:21	9.13
314	J-784	JUNCTION	0.69	8.34	154.24	0	01:21	8.34
315	J-790	JUNCTION	0.12	0.44	138.96	0	03:41	0.44
316	J-791	JUNCTION	0.22	0.93	140.28	0	03:40	0.93
317	J-792	JUNCTION	0.21	0.91	140.68	0	03:40	0.91
318	J-792A	JUNCTION	0.25	0.89	191.25	0	03:38	0.89
319	J-792B	JUNCTION	0.00	0.00	273.36	0	00:00	0.00
320	J-801	JUNCTION	0.69	1.35	116.81	0	02:57	1.35
321	J-802	JUNCTION	1.24	1.77	117.27	0	02:33	1.77
322	J-803	JUNCTION	1.01	1.54	117.31	0	02:33	1.54
323	J-804	JUNCTION	1.24	1.78	117.85	0	04:12	1.78
324	J-805	JUNCTION	2.90	4.48	120.68	0	05:05	4.48
325	J-806	JUNCTION	2.68	5.12	121.55	0	12:15	4.26
326	J-807	JUNCTION	2.52	4.99	121.60	0	12:11	4.09
327	J-808	JUNCTION	1.88	3.38	120.70	0	05:00	3.38
328	J-809	JUNCTION	0.43	1.00	125.80	0	02:13	1.00
329	J-810	JUNCTION	2.27	10.58	136.48	0	01:24	10.58
330	J-811	JUNCTION	2.61	11.39	138.21	0	01:29	11.39

331	J-812	JUNCTION	3.16	11.83	138.43	0	01:29	11.83
332	J-813	JUNCTION	4.64	12.91	138.51	0	01:35	12.91
333	J-814	JUNCTION	3.64	10.68	138.88	0	02:04	10.68
334	J-815	JUNCTION	4.25	9.88	139.68	0	02:40	9.88
335	J-816	JUNCTION	4.90	9.97	140.77	0	03:23	9.97
336	J-817	JUNCTION	5.51	10.74	141.74	0	03:12	10.74
337	J-817-1	JUNCTION	5.41	10.55	141.25	0	03:22	10.55
338	J-818	JUNCTION	6.02	11.53	142.83	0	02:39	11.53
339	J-819	JUNCTION	5.95	11.78	143.68	0	02:40	11.78
340	J-820	JUNCTION	6.10	12.19	144.39	0	02:37	12.19
341	J-821	JUNCTION	6.15	12.38	144.78	0	02:36	12.38
342	J-822	JUNCTION	5.85	12.15	145.55	0	02:36	12.15
343	J-823	JUNCTION	7.17	13.54	146.04	0	02:35	13.54
344	J-824	JUNCTION	0.05	0.70	132.20	0	00:47	0.70
345	J-825	JUNCTION	0.03	0.45	130.35	0	00:46	0.45
346	J-826	JUNCTION	2.02	4.19	129.44	0	06:46	4.19
347	J-830	JUNCTION	0.09	0.46	119.58	0	02:48	0.46
348	J-840	JUNCTION	0.94	8.46	138.56	0	01:26	8.46
349	J-841	JUNCTION	3.14	11.08	139.02	0	01:21	11.08
350	J-842	JUNCTION	0.85	8.46	139.40	0	01:20	8.45
351	J-844	JUNCTION	0.69	7.71	139.71	0	01:23	7.71
352	J-845	JUNCTION	0.70	7.76	139.86	0	01:21	7.74
353	J-846	JUNCTION	1.82	11.26	142.26	0	00:40	8.97
354	J-847	JUNCTION	0.43	10.20	144.40	0	00:40	5.80
355	J-850	JUNCTION	0.43	3.25	128.41	0	02:11	3.25
356	J-860	JUNCTION	1.89	12.00	138.52	0	00:10	12.00
357	J-868	JUNCTION	0.00	0.00	135.10	0	00:00	0.00
358	J-869	JUNCTION	0.00	0.00	135.40	0	00:00	0.00
359	J-870	JUNCTION	6.76	13.28	146.38	0	02:33	13.28
360	J-871-1A	JUNCTION	4.43	10.43	147.13	0	02:39	10.43
361	J-871-1B	JUNCTION	2.47	6.98	147.95	0	02:39	6.98
362	J-871-1C	JUNCTION	0.60	2.83	148.08	0	01:20	2.83
363	J-900-1	JUNCTION	0.42	11.44	139.38	0	00:41	11.44
364	J-901	JUNCTION	0.44	12.00	140.72	0	00:23	12.00
365	J-902	JUNCTION	0.36	11.82	142.02	0	00:31	11.82
366	O-1000	OUTFALL	0.00	0.00	125.59	0	00:00	0.00
367	O-700	OUTFALL	0.35	0.51	106.32	0	07:28	0.51
368	O-800	OUTFALL	0.36	0.78	111.15	0	02:57	0.78
369	O-900	OUTFALL	0.09	1.00	128.60	0	00:32	1.00
370	S-100	STORAGE	5.15	5.37	152.57	0	17:14	5.37
371	S-1000	STORAGE	7.77	8.15	115.25	0	05:44	8.15
372	S-1100	STORAGE	0.21	5.89	128.39	0	00:57	5.89
373	S-150	STORAGE	6.27	6.56	147.56	0	10:00	6.56
374	S-200	STORAGE	4.60	4.79	140.49	0	05:11	4.79
375	S-300	STORAGE	9.36	9.73	132.93	0	11:02	9.73
376	S-400	STORAGE	11.85	12.32	127.22	0	11:59	12.32
377	S-500	STORAGE	10.65	11.00	144.34	0	02:09	11.00
378	S-600	STORAGE	8.80	9.00	143.57	0	01:00	9.00

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381 \*\*\*\*\*  
382 Node Inflow Summary  
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386			Maximum	Maximum		Lateral		
387			Total	Flow		Inflow		
388			Inflow	Total	Time of Max	Volume		
389	Node	Type	Volume	Inflow	Occurrence	Error	10^6 gal	10^6
390	gal	Percent	CFS	CFS	days hr:min			



391	J-1001		JUNCTION	0.74	63.63	0	00:48	0.0164
	2.08	0.030						
392	J-1002		JUNCTION	0.44	62.97	0	00:48	0.00975
	2.06	-0.012						
393	J-1003		JUNCTION	5.63	62.58	0	00:48	0.125
	2.05	-0.009						
394	J-1004		JUNCTION	0.94	57.76	0	00:50	0.0208
	1.93	-0.019						
395	J-1005		JUNCTION	0.31	10.28	0	00:46	0.00687
	0.242	-0.152						
396	J-1006		JUNCTION	0.28	9.98	0	00:46	0.0062
	0.236	0.220						
397	J-1007		JUNCTION	0.57	9.71	0	00:46	0.0126
	0.23	-0.019						
398	J-1008		JUNCTION	3.16	10.14	0	00:44	0.07
	0.217	-0.046						
399	J-1009		JUNCTION	0.00	6.82	0	00:44	0
	0.147	0.081						
400	J-1010		JUNCTION	6.65	6.65	0	00:45	0.147
	0.147	-0.004						
401	J-1020		JUNCTION	31.53	48.03	0	00:55	0.698
	1.67	-0.017						
402	J-1021		JUNCTION	0.50	30.27	0	01:07	0.0111
	0.967	-0.005						
403	J-1022		JUNCTION	0.81	43.75	0	00:52	0.0179
	0.968	0.890						
404	J-1023		JUNCTION	0.60	18.41	0	00:45	0.0133
	0.407	-0.298						
405	J-1024		JUNCTION	17.81	17.81	0	00:45	0.394
	0.394	0.247						
406	J-1101		JUNCTION	5.98	16.15	0	00:45	0.132
	0.362	0.072						
407	J-1102		JUNCTION	10.37	10.37	0	00:45	0.23
	0.23	-0.007						
408	J-120		JUNCTION	0.68	1.22	0	00:45	0.0151
	0.0156	-0.056						
409	J-121		JUNCTION	4.99	5.12	0	00:43	0.111
	0.126	0.000						
410	J-122		JUNCTION	0.48	5.56	0	00:43	0.0106
	0.136	0.024						
411	J-123		JUNCTION	0.64	6.14	0	00:43	0.0142
	0.15	-0.028						
412	J-124		JUNCTION	0.27	8.20	0	00:51	0.00598
	0.211	0.001						
413	J-124A		JUNCTION	1.47	1.47	0	00:45	0.0326
	0.0326	-0.022						
414	J-124B		JUNCTION	0.98	2.24	0	00:52	0.0217
	0.0543	0.002						
415	J-125		JUNCTION	0.41	8.54	0	00:50	0.00908
	0.22	0.013						
416	J-126		JUNCTION	2.27	10.57	0	00:45	0.0503
	0.27	-0.025						
417	J-127		JUNCTION	0.00	11.99	0	00:45	0
	0.302	-0.033						
418	J-127A		JUNCTION	1.45	1.45	0	00:45	0.0321
	0.0321	0.167						
419	J-128		JUNCTION	1.00	13.13	0	00:45	0.0221
	0.324	0.002						
420	J-129		JUNCTION	0.58	13.56	0	00:45	0.0128
	0.337	0.024						
421	J-130		JUNCTION	1.95	15.25	0	00:46	0.0432
	0.38	-0.059						
422	J-131		JUNCTION	0.21	15.41	0	00:47	0.00465
	0.407	7.100						

423	J-141		JUNCTION	2.23	2.23	0	00:45	0.0494
	0.0494	0.023						
424	J-142		JUNCTION	0.00	6.99	0	00:45	0
	0.155	-0.042						
425	J-142A		JUNCTION	4.32	4.32	0	00:45	0.0957
	0.0957	0.130						
426	J-142B		JUNCTION	0.44	4.76	0	00:45	0.00975
	0.105	-0.145						
427	J-143		JUNCTION	0.57	7.56	0	00:45	0.0126
	0.168	-0.026						
428	J-144		JUNCTION	1.78	9.34	0	00:45	0.0394
	0.207	-0.074						
429	J-145		JUNCTION	2.00	11.34	0	00:45	0.0443
	0.251	0.034						
430	J-146		JUNCTION	1.83	13.17	0	00:45	0.0405
	0.292	-0.007						
431	J-147		JUNCTION	0.58	13.75	0	00:45	0.0128
	0.305	0.002						
432	J-148		JUNCTION	1.19	14.87	0	00:45	0.0264
	0.331	-0.000						
433	J-149		JUNCTION	0.15	14.97	0	00:45	0.00332
	0.334	-0.118						
434	J-151		JUNCTION	25.37	25.37	0	04:15	3.18
	3.18	-0.002						
435	J-152		JUNCTION	0.16	0.16	0	00:45	0.00354
	0.00354	-0.011						
436	J-153		JUNCTION	0.36	1.85	0	00:45	0.00797
	0.041	-0.033						
437	J-153A		JUNCTION	1.33	1.33	0	00:45	0.0295
	0.0295	0.013						
438	J-154		JUNCTION	0.51	2.32	0	00:45	0.0113
	0.0523	0.066						
439	J-155		JUNCTION	0.94	3.19	0	00:46	0.0208
	0.0731	-0.008						
440	J-156		JUNCTION	0.53	3.47	0	00:49	0.0117
	0.0848	-0.057						
441	J-157		JUNCTION	0.93	10.10	0	00:48	0.0206
	0.244	-0.012						
442	J-157-1		JUNCTION	0.20	0.20	0	00:45	0.00443
	0.00443	0.054						
443	J-157-2		JUNCTION	1.06	1.25	0	00:45	0.0235
	0.0279	0.003						
444	J-157-3		JUNCTION	0.77	4.92	0	00:46	0.0171
	0.113	0.006						
445	J-157-3A		JUNCTION	3.06	3.06	0	00:45	0.0678
	0.0678	-0.001						
446	J-157-4		JUNCTION	1.15	6.03	0	00:46	0.0255
	0.138	0.017						
447	J-158		JUNCTION	0.74	10.73	0	00:48	0.0164
	0.26	0.068						
448	J-159		JUNCTION	0.11	10.82	0	00:48	0.00244
	0.262	-0.001						
449	J-160		JUNCTION	1.23	11.90	0	00:48	0.0272
	0.29	0.230						
450	J-161		JUNCTION	0.57	12.39	0	00:49	0.0126
	0.302	-0.698						
451	J-162		JUNCTION	3.37	15.34	0	00:48	0.0746
	0.378	0.127						
452	J-163		JUNCTION	0.00	15.32	0	00:49	0
	0.378	0.167						
453	J-201		JUNCTION	6.60	6.60	0	00:45	0.146
	0.146	-0.032						
454	J-202		JUNCTION	2.71	8.04	0	00:42	0.06
	0.204	-0.016						
455	J-203		JUNCTION	2.80	10.62	0	00:45	0.062
	0.266	-0.014						

456	J-204		JUNCTION	2.46	13.08	0	00:45	0.0545
	0.32	-0.001						
457	J-205		JUNCTION	1.86	14.94	0	00:45	0.0412
	0.361	-0.003						
458	J-206		JUNCTION	0.00	14.95	0	00:45	0
	0.361	-0.007						
459	J-301		JUNCTION	1.86	1.86	0	00:45	0.0412
	0.0412	-0.007						
460	J-302		JUNCTION	1.47	3.27	0	00:45	0.0326
	0.0738	0.002						
461	J-303		JUNCTION	0.30	3.54	0	00:46	0.00664
	0.0804	0.002						
462	J-304		JUNCTION	2.64	6.08	0	00:45	0.0585
	0.139	-0.091						
463	J-321		JUNCTION	7.85	7.85	0	00:45	0.174
	0.174	-0.002						
464	J-322		JUNCTION	1.13	8.98	0	00:45	0.025
	0.199	0.002						
465	J-323		JUNCTION	0.91	9.89	0	00:45	0.0202
	0.219	-0.004						
466	J-324		JUNCTION	0.77	10.66	0	00:45	0.0171
	0.236	-0.000						
467	J-325		JUNCTION	0.85	11.51	0	00:45	0.0188
	0.255	-0.033						
468	J-326		JUNCTION	1.67	18.95	0	00:45	0.037
	0.432	0.753						
469	J-401		JUNCTION	0.33	0.33	0	00:45	0.00731
	0.00731	0.000						
470	J-402		JUNCTION	1.00	1.33	0	00:45	0.0221
	0.0295	-0.034						
471	J-403		JUNCTION	1.68	2.99	0	00:45	0.0372
	0.0667	0.019						
472	J-404		JUNCTION	0.98	3.97	0	00:45	0.0217
	0.0884	0.001						
473	J-405		JUNCTION	1.28	5.27	0	00:45	0.0283
	0.117	-0.006						
474	J-406		JUNCTION	0.35	5.30	0	00:47	0.00775
	0.124	0.425						
475	J-407		JUNCTION	0.85	33.43	0	00:45	0.0188
	0.792	0.621						
476	J-451		JUNCTION	2.06	2.18	0	00:45	0.0456
	0.0457	-0.109						
477	J-452		JUNCTION	0.00	3.11	0	00:45	0
	0.0463	-0.015						
478	J-453		JUNCTION	1.94	3.97	0	00:59	0.043
	0.0893	-0.050						
479	J-454		JUNCTION	2.13	5.76	0	00:47	0.0472
	0.136	-0.040						
480	J-455		JUNCTION	1.70	7.88	0	00:49	0.0377
	0.2	-0.007						
481	J-455A		JUNCTION	1.22	1.92	0	00:42	0.027
	0.0273	-0.136						
482	J-456		JUNCTION	0.34	8.17	0	00:49	0.00753
	0.207	-0.011						
483	J-457		JUNCTION	0.60	8.70	0	00:49	0.0133
	0.221	-0.032						
484	J-458		JUNCTION	0.38	9.03	0	00:49	0.00842
	0.229	-0.011						
485	J-459		JUNCTION	0.58	9.54	0	00:49	0.0128
	0.242	-0.005						
486	J-460		JUNCTION	0.54	21.22	0	00:47	0.012
	0.525	-0.006						
487	J-461		JUNCTION	0.48	21.67	0	00:47	0.0106
	0.536	-0.018						
488	J-462		JUNCTION	1.50	24.82	0	00:45	0.0332
	0.611	0.470						

489	J-462A 0.0401	-0.264	JUNCTION	1.80	3.04	0	00:42	0.0399
490	J-463 0.621	0.369	JUNCTION	0.54	25.37	0	00:45	0.012
491	J-464 0.651	0.770	JUNCTION	1.47	26.83	0	00:45	0.0326
492	J-465 0.65	0.577	JUNCTION	0.21	27.05	0	00:45	0.00465
493	J-466 0.653	0.554	JUNCTION	0.28	27.33	0	00:45	0.0062
494	J-481 1.67	0.017	JUNCTION	0.00	13.88	0	04:03	0
495	J-481B 1.67	-0.002	JUNCTION	14.13	14.13	0	04:00	1.67
496	J-482 3.4	0.070	JUNCTION	8.32	26.11	0	02:34	0.614
497	J-482A 1.12	-0.112	JUNCTION	15.15	15.15	0	02:30	1.12
498	J-482B 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
499	J-483 3.9	-0.042	JUNCTION	6.16	31.57	0	02:45	0.5
500	J-484 6.67	0.512	JUNCTION	23.39	49.44	0	04:00	2.76
501	J-484A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
502	J-485 6.74	0.025	JUNCTION	1.62	43.78	0	04:31	0.108
503	J-485A 2	-0.029	JUNCTION	16.89	16.89	0	04:00	2
504	J-490 0.27	-0.047	JUNCTION	1.59	12.22	0	00:45	0.0352
505	J-491 0.175	-0.022	JUNCTION	1.86	7.93	0	00:45	0.0412
506	J-492 0.134	-0.011	JUNCTION	3.05	6.07	0	00:45	0.0676
507	J-493 0.0667	-0.011	JUNCTION	0.00	3.01	0	00:45	0
508	J-494 0.0667	-0.022	JUNCTION	3.01	3.01	0	00:45	0.0667
509	J-495 0.0598	-0.053	JUNCTION	2.70	2.70	0	00:45	0.0598
510	J-501 0.0279	-0.016	JUNCTION	1.26	1.26	0	00:45	0.0279
511	J-502 0.124	2.274	JUNCTION	4.25	5.48	0	00:45	0.0941
512	J-503 0.18	2.573	JUNCTION	2.58	8.02	0	00:45	0.0571
513	J-601 0.099	-0.010	JUNCTION	4.47	4.47	0	00:45	0.099
514	J-602 0.133	-0.147	JUNCTION	1.54	6.01	0	00:45	0.0341
515	J-603 0.218	1.771	JUNCTION	3.82	9.83	0	00:45	0.0846
516	J-604 0.214	0.371	JUNCTION	0.00	9.83	0	00:45	0
517	J-701 43.7	1.452	JUNCTION	14.31	165.71	0	04:56	1.16
518	J-701A 46.5	8.126	JUNCTION	23.44	215.67	0	05:10	3.46
519	J-701B 5.7	0.267	JUNCTION	31.34	47.08	0	04:00	3.7
520	J-701C 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
521	J-702 31.2	0.564	JUNCTION	11.90	92.43	0	08:32	0.264

522	J-702-1 37.8	2.526	JUNCTION	0.00	130.06	0	04:39	0
523	J-702B 24	0.009	JUNCTION	2.25	79.68	0	09:08	0.0498
524	J-703 24.2	1.159	JUNCTION	3.42	80.79	0	08:33	0.0757
525	J-704 24.4	0.909	JUNCTION	5.60	87.93	0	07:40	0.124
526	J-705 23.9	-0.033	JUNCTION	3.27	91.22	0	07:30	0.0724
527	J-706 23.8	0.070	JUNCTION	3.23	91.34	0	07:27	0.0715
528	J-707 23.8	0.255	JUNCTION	2.01	92.80	0	07:08	0.0445
529	J-708 23.5	0.022	JUNCTION	8.66	95.27	0	06:52	0.192
530	J-709-1 23.3	0.013	JUNCTION	7.74	95.38	0	06:50	0.171
531	J-709-2 0.0569	0.060	JUNCTION	0.43	2.53	0	00:45	0.00952
532	J-709-3 0.0472	-0.038	JUNCTION	2.13	2.13	0	00:45	0.0472
533	J-710 23.1	0.010	JUNCTION	10.27	95.49	0	06:46	0.227
534	J-711 22.9	0.005	JUNCTION	4.96	95.52	0	06:45	0.11
535	J-712 22.8	0.005	JUNCTION	4.30	95.54	0	06:43	0.0952
536	J-713 22.7	0.197	JUNCTION	10.96	95.98	0	06:32	0.243
537	J-714-1 22.5	0.151	JUNCTION	0.00	97.71	0	06:16	0
538	J-714-2 0.162	-0.056	JUNCTION	0.10	7.23	0	00:45	0.00221
539	J-714-3 0.159	-0.008	JUNCTION	7.15	7.15	0	00:45	0.158
540	J-715 22.2	0.007	JUNCTION	0.00	100.43	0	06:05	0
541	J-715A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
542	J-716 22.4	0.621	JUNCTION	1.12	102.46	0	05:50	0.0248
543	J-716A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
544	J-717-1 22.4	0.001	JUNCTION	8.42	105.92	0	05:35	0.186
545	J-718 22.2	-0.009	JUNCTION	0.00	105.98	0	05:35	0
546	J-719 21.5	0.012	JUNCTION	31.70	110.72	0	05:10	0.702
547	J-720 20.8	0.040	JUNCTION	12.55	110.81	0	05:04	0.278
548	J-721 16.7	0.004	JUNCTION	7.31	92.91	0	05:23	0.162
549	J-722 16.5	0.129	JUNCTION	7.46	93.29	0	05:01	0.165
550	J-723 9.06	0.039	JUNCTION	0.00	52.80	0	05:28	0
551	J-723-1 16.4	0.050	JUNCTION	0.00	93.68	0	04:37	0
552	J-725 9.06	0.027	JUNCTION	0.00	54.12	0	05:17	0
553	J-725-1 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
554	J-725-2 2.67	3.977	JUNCTION	30.09	30.09	0	03:00	2.67

555	J-725-3 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
556	J-725A-1 2.56	0.343	JUNCTION	0.00	13.51	0	04:36	0
557	J-725A-2 2.56	0.004	JUNCTION	0.00	13.97	0	04:51	0
558	J-725A-3 2.55	0.016	JUNCTION	0.00	13.95	0	04:51	0
559	J-725B-2 7.32	0.000	JUNCTION	55.08	55.08	0	04:30	7.32
560	J-726 6.51	-0.013	JUNCTION	41.98	41.98	0	05:15	6.51
561	J-730 6.96	-0.002	JUNCTION	6.83	50.52	0	04:22	0.151
562	J-730-1 6.96	0.103	JUNCTION	0.00	50.45	0	04:25	0
563	J-731 6.81	0.018	JUNCTION	1.59	50.53	0	04:20	0.0352
564	J-732 0.0824	0.004	JUNCTION	1.04	3.56	0	00:46	0.023
565	J-732A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
566	J-732B 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
567	J-733 0.0594	0.001	JUNCTION	0.70	2.58	0	00:46	0.0155
568	J-734 0.0439	0.024	JUNCTION	0.89	1.93	0	00:45	0.0197
569	J-735 0.0241	-0.042	JUNCTION	1.09	1.09	0	00:45	0.0241
570	J-736 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
571	J-737 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
572	J-737A-1 3.18	0.000	JUNCTION	0.00	25.27	0	04:16	0
573	J-737A-2 3.18	0.001	JUNCTION	0.00	25.15	0	04:18	0
574	J-740 6.7	-0.000	JUNCTION	0.12	50.53	0	04:20	0.00266
575	J-741 6.69	-0.002	JUNCTION	4.00	50.53	0	04:20	0.0886
576	J-742 6.6	0.001	JUNCTION	2.46	50.59	0	04:18	0.0545
577	J-743 6.55	0.001	JUNCTION	0.00	50.59	0	04:18	0
578	J-744 6.57	0.367	JUNCTION	28.70	50.61	0	04:17	3.39
579	J-745 0.0011	0.013	JUNCTION	0.00	0.08	0	04:04	0
580	J-750 0.363	-1.827	JUNCTION	0.00	14.63	0	00:51	0
581	J-751 0.363	0.000	JUNCTION	3.19	15.27	0	00:48	0.0707
582	J-752 0.292	-0.010	JUNCTION	1.43	12.65	0	00:47	0.0317
583	J-753 0.26	0.000	JUNCTION	2.90	11.48	0	00:45	0.0642
584	J-754 0.196	-0.002	JUNCTION	8.85	8.85	0	00:45	0.196
585	J-760 0.253	-0.028	JUNCTION	10.77	11.35	0	00:45	0.239
586	J-761 0.0148	-0.134	JUNCTION	0.00	0.68	0	00:16	0
587	J-762 0.0133	-0.083	JUNCTION	0.58	0.58	0	00:45	0.0128

588	J-770		JUNCTION	5.36	14.61	0	00:45	0.119
	0.694	0.324						
589	J-771		JUNCTION	0.00	9.36	0	00:42	0
	0.575	0.003						
590	J-772		JUNCTION	0.43	9.36	0	00:42	0.00952
	0.575	-0.002						
591	J-773		JUNCTION	0.00	9.03	0	00:56	0
	0.565	-0.022						
592	J-774		JUNCTION	0.77	9.03	0	00:57	0.0171
	0.566	0.024						
593	J-775		JUNCTION	0.77	8.58	0	01:07	0.0171
	0.549	0.011						
594	J-776		JUNCTION	0.00	8.27	0	01:21	0
	0.531	-0.018						
595	J-777		JUNCTION	1.21	8.27	0	01:21	0.0268
	0.532	0.026						
596	J-778		JUNCTION	0.70	7.95	0	01:35	0.0155
	0.505	-0.003						
597	J-779		JUNCTION	17.52	19.07	0	00:45	0.388
	0.49	-0.005						
598	J-780		JUNCTION	0.23	5.33	0	02:40	0.00509
	0.104	-0.012						
599	J-781		JUNCTION	1.95	5.32	0	02:40	0.0432
	0.105	0.008						
600	J-782		JUNCTION	0.60	5.25	0	02:40	0.0133
	0.0735	-0.068						
601	J-783		JUNCTION	0.54	5.53	0	02:42	0.012
	0.055	-0.073						
602	J-784		JUNCTION	1.24	4.58	0	00:32	0.0275
	0.0303	-0.122						
603	J-790		JUNCTION	2.32	33.55	0	03:41	0.0514
	3.83	0.002						
604	J-791		JUNCTION	0.00	33.55	0	03:40	0
	3.78	0.001						
605	J-792		JUNCTION	8.12	33.79	0	03:35	0.719
	3.78	-0.003						
606	J-792A		JUNCTION	29.61	29.61	0	03:30	3.06
	3.06	0.032						
607	J-792B		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
608	J-801		JUNCTION	5.46	43.78	0	02:47	0.242
	9.25	0.335						
609	J-802		JUNCTION	7.99	18.13	0	02:30	0.177
	6.92	0.091						
610	J-803		JUNCTION	0.00	17.42	0	05:04	0
	6.75	0.023						
611	J-804		JUNCTION	2.78	17.42	0	05:03	0.0616
	6.75	0.002						
612	J-805		JUNCTION	0.75	53.35	0	01:32	0.0166
	6.69	0.098						
613	J-806		JUNCTION	1.73	53.14	0	01:33	0.0383
	6.68	0.100						
614	J-807		JUNCTION	0.00	52.80	0	01:33	0
	6.64	0.017						
615	J-808		JUNCTION	62.12	81.08	0	01:30	2.75
	6.67	0.430						
616	J-809		JUNCTION	2.83	21.49	0	01:58	0.0627
	3.91	-0.272						
617	J-810		JUNCTION	1.58	14.65	0	01:30	0.035
	3.23	-0.005						
618	J-811		JUNCTION	0.61	11.03	0	00:47	0.0135
	2.84	-0.005						
619	J-812		JUNCTION	8.83	13.10	0	00:45	0.196
	2.61	0.007						
620	J-813		JUNCTION	3.74	6.42	0	05:16	0.0828
	2.42	0.001						

621	J-814		JUNCTION	10.79	10.79	0	00:45	0.239
	2.39	0.003						
622	J-815		JUNCTION	8.86	12.47	0	00:45	0.196
	2.16	0.004						
623	J-816		JUNCTION	2.96	8.39	0	00:53	0.0656
	1.91	-0.000						
624	J-817		JUNCTION	2.30	6.98	0	00:47	0.0509
	1.73	0.001						
625	J-817-1		JUNCTION	4.55	8.11	0	00:45	0.101
	1.83	0.002						
626	J-818		JUNCTION	6.32	8.22	0	00:45	0.14
	1.68	0.012						
627	J-819		JUNCTION	2.83	6.96	0	00:45	0.0627
	1.54	-0.003						
628	J-820		JUNCTION	4.20	8.13	0	00:45	0.093
	1.48	-0.002						
629	J-821		JUNCTION	4.22	6.27	0	00:45	0.0935
	1.39	0.010						
630	J-822		JUNCTION	1.60	4.38	0	00:45	0.0354
	1.29	-0.013						
631	J-823		JUNCTION	1.46	6.23	0	00:15	0.0323
	1.26	0.189						
632	J-824		JUNCTION	2.35	2.35	0	00:45	0.052
	0.052	0.054						
633	J-825		JUNCTION	2.16	4.26	0	00:45	0.0478
	0.0999	0.017						
634	J-826		JUNCTION	0.00	99.37	0	06:09	0
	22.3	0.012						
635	J-830		JUNCTION	25.80	25.80	0	02:45	2.1
	2.1	-0.024						
636	J-840		JUNCTION	0.39	3.94	0	00:50	0.00864
	0.211	-0.017						
637	J-841		JUNCTION	1.19	3.63	0	00:51	0.0264
	0.204	0.865						
638	J-842		JUNCTION	1.80	2.78	0	00:58	0.0399
	0.178	0.002						
639	J-844		JUNCTION	0.61	6.33	0	00:45	0.0135
	0.138	-0.034						
640	J-845		JUNCTION	2.66	5.72	0	00:45	0.0589
	0.125	-0.142						
641	J-846		JUNCTION	0.80	3.06	0	00:45	0.0177
	0.0688	3.947						
642	J-847		JUNCTION	2.26	2.26	0	00:45	0.0501
	0.0501	-0.117						
643	J-850		JUNCTION	11.99	11.99	0	01:45	0.62
	0.62	-0.010						
644	J-860		JUNCTION	10.04	10.04	0	01:15	0.371
	0.371	-0.017						
645	J-868		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
646	J-869		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
647	J-870		JUNCTION	5.74	5.74	0	00:45	0.127
	1.23	0.225						
648	J-871-1A		JUNCTION	25.64	29.66	0	00:45	0.568
	1.13	1.833						
649	J-871-1B		JUNCTION	20.16	23.42	0	00:45	0.447
	0.611	1.987						
650	J-871-1C		JUNCTION	6.44	6.44	0	00:45	0.143
	0.18	14.091						
651	J-900-1		JUNCTION	10.79	12.21	0	00:45	0.239
	0.31	-0.040						
652	J-901		JUNCTION	1.59	3.81	0	00:45	0.0352
	0.0844	0.141						
653	J-902		JUNCTION	2.22	2.22	0	00:45	0.0492
	0.0492	-0.113						



654	O-1000 0	0.000 gal	OUTFALL	0.00	0.00	0 00:00	0
655	O-700 55.8	0.000	OUTFALL	55.70	193.86	0 08:30	12.8
656	O-800 9.22	0.000	OUTFALL	0.00	42.28	0 02:57	0
657	O-900 0.306	0.000	OUTFALL	0.00	10.30	0 00:42	0
658	S-100 0.394	0.328	STORAGE	0.76	15.94	0 00:49	0.0168
659	S-1000 2.54	0.005	STORAGE	20.83	83.17	0 00:45	0.461
660	S-1100 0.539	-0.673	STORAGE	7.81	34.87	0 00:46	0.173
661	S-150 0.718	61.798	STORAGE	0.14	30.27	0 00:46	0.0031
662	S-200 0.369	0.495	STORAGE	0.34	15.26	0 00:45	0.00753
663	S-300 0.434	1.340	STORAGE	0.25	19.00	0 00:45	0.00554
664	S-400 0.795	0.431	STORAGE	0.40	33.45	0 00:46	0.00886
665	S-500 0.302	3.195	STORAGE	5.78	13.79	0 00:45	0.128
666	S-600 0.223	0.610	STORAGE	0.45	10.28	0 00:45	0.00997

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669 \*\*\*\*\*  
670 Node Surcharge Summary  
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673 Surcharging occurs when water rises above the top of the highest conduit.

674	-----				
675			Hours	Max. Height	Min. Depth
676			Surcharged	Above Crown	Below Rim
677	Node	Type		Feet	Feet
678	-----				
679	J-1001	JUNCTION	0.40	0.636	5.774
680	J-1002	JUNCTION	0.60	1.720	4.690
681	J-1003	JUNCTION	0.74	3.205	3.955
682	J-1004	JUNCTION	0.72	3.813	3.127
683	J-1005	JUNCTION	0.45	9.779	0.000
684	J-1006	JUNCTION	0.32	8.385	0.000
685	J-1007	JUNCTION	0.30	7.642	0.278
686	J-1008	JUNCTION	0.19	7.851	0.000
687	J-1020	JUNCTION	0.89	5.315	1.785
688	J-1021	JUNCTION	0.85	4.987	2.293
689	J-1022	JUNCTION	0.15	0.234	2.046
690	J-1023	JUNCTION	0.73	15.930	0.000
691	J-1024	JUNCTION	0.57	12.380	0.000
692	J-120	JUNCTION	0.01	0.015	3.735
693	J-121	JUNCTION	0.49	10.093	0.000
694	J-122	JUNCTION	0.34	9.685	0.000
695	J-123	JUNCTION	0.31	9.168	0.000
696	J-124	JUNCTION	0.38	9.727	0.000
697	J-124B	JUNCTION	0.22	7.669	0.000
698	J-125	JUNCTION	0.36	8.612	0.000
699	J-126	JUNCTION	0.43	2.663	1.097
700	J-127	JUNCTION	0.23	1.721	3.149
701	J-128	JUNCTION	0.19	1.515	2.575
702	J-141	JUNCTION	0.24	14.653	0.000
703	J-142	JUNCTION	0.36	14.860	0.000
704	J-142A	JUNCTION	0.35	15.380	0.000
705	J-142B	JUNCTION	0.47	15.480	0.000
706	J-143	JUNCTION	0.52	15.388	0.000

707	J-144	JUNCTION	0.64	13.756	0.000
708	J-145	JUNCTION	0.34	12.983	0.000
709	J-146	JUNCTION	0.48	6.976	0.000
710	J-156	JUNCTION	0.10	0.185	4.545
711	J-158	JUNCTION	0.19	0.204	6.606
712	J-161	JUNCTION	0.13	0.258	7.982
713	J-201	JUNCTION	0.64	13.360	0.000
714	J-202	JUNCTION	0.72	12.655	0.000
715	J-203	JUNCTION	0.72	9.451	0.000
716	J-204	JUNCTION	0.16	2.492	0.308
717	J-205	JUNCTION	0.16	0.436	2.434
718	J-321	JUNCTION	0.40	13.760	0.000
719	J-322	JUNCTION	0.14	11.330	0.000
720	J-323	JUNCTION	0.18	10.552	0.000
721	J-324	JUNCTION	0.28	7.774	0.000
722	J-325	JUNCTION	0.25	5.235	0.000
723	J-403	JUNCTION	0.19	0.410	7.330
724	J-406	JUNCTION	0.22	2.663	2.157
725	J-407	JUNCTION	21.50	0.296	2.484
726	J-451	JUNCTION	0.09	13.450	0.000
727	J-452	JUNCTION	0.17	18.850	0.000
728	J-453	JUNCTION	0.31	13.450	0.000
729	J-454	JUNCTION	0.50	13.930	0.000
730	J-455	JUNCTION	0.51	13.200	0.000
731	J-455A	JUNCTION	0.30	12.720	0.000
732	J-456	JUNCTION	0.48	12.842	0.000
733	J-457	JUNCTION	0.65	12.177	0.000
734	J-458	JUNCTION	0.72	11.963	0.000
735	J-459	JUNCTION	0.76	10.469	0.000
736	J-460	JUNCTION	0.45	8.670	0.000
737	J-461	JUNCTION	0.40	7.784	0.000
738	J-462	JUNCTION	0.45	6.644	0.000
739	J-462A	JUNCTION	0.32	15.050	0.000
740	J-463	JUNCTION	0.40	5.768	0.000
741	J-464	JUNCTION	0.46	4.067	0.000
742	J-465	JUNCTION	22.66	2.889	1.661
743	J-466	JUNCTION	22.94	1.976	2.474
744	J-490	JUNCTION	0.57	12.575	0.000
745	J-491	JUNCTION	0.36	13.950	0.000
746	J-492	JUNCTION	0.23	13.250	0.000
747	J-493	JUNCTION	0.15	13.450	0.000
748	J-494	JUNCTION	0.12	13.650	0.000
749	J-495	JUNCTION	0.44	11.830	0.000
750	J-503	JUNCTION	23.26	8.329	0.000
751	J-601	JUNCTION	0.43	14.060	0.000
752	J-602	JUNCTION	0.47	14.050	0.000
753	J-603	JUNCTION	1.32	4.337	0.000
754	J-604	JUNCTION	23.27	1.086	0.000
755	J-709-2	JUNCTION	12.13	1.792	10.328
756	J-709-3	JUNCTION	7.02	1.260	10.430
757	J-714-2	JUNCTION	10.74	2.015	10.775
758	J-714-3	JUNCTION	9.20	1.724	10.956
759	J-740	JUNCTION	0.97	0.678	3.252
760	J-741	JUNCTION	1.73	1.751	2.159
761	J-744	JUNCTION	0.56	0.331	0.000
762	J-760	JUNCTION	14.72	2.149	10.721
763	J-761	JUNCTION	13.90	1.969	10.031
764	J-762	JUNCTION	10.85	1.539	10.061
765	J-770	JUNCTION	0.24	6.875	1.065
766	J-771	JUNCTION	2.28	6.700	1.150
767	J-772	JUNCTION	2.30	7.460	3.500
768	J-773	JUNCTION	2.29	7.858	6.262
769	J-774	JUNCTION	2.30	8.225	1.425
770	J-775	JUNCTION	2.43	9.637	0.723
771	J-776	JUNCTION	2.45	10.291	0.000
772	J-777	JUNCTION	2.36	9.960	0.000

773	J-778	JUNCTION	2.44	10.070	0.000
774	J-779	JUNCTION	2.45	11.585	0.000
775	J-780	JUNCTION	2.30	10.147	0.000
776	J-781	JUNCTION	2.27	9.541	0.000
777	J-782	JUNCTION	2.22	8.676	0.000
778	J-783	JUNCTION	2.18	7.875	0.000
779	J-784	JUNCTION	2.18	7.087	0.000
780	J-805	JUNCTION	12.10	1.481	0.000
781	J-806	JUNCTION	11.61	2.118	0.000
782	J-807	JUNCTION	11.29	1.995	1.275
783	J-808	JUNCTION	9.19	0.385	0.000
784	J-810	JUNCTION	14.79	9.083	0.000
785	J-811	JUNCTION	9.86	9.361	0.000
786	J-812	JUNCTION	17.06	10.327	0.000
787	J-813	JUNCTION	17.06	10.108	0.000
788	J-814	JUNCTION	16.99	9.427	0.000
789	J-815	JUNCTION	16.81	8.627	0.000
790	J-816	JUNCTION	16.97	8.717	0.000
791	J-817	JUNCTION	17.06	9.491	0.000
792	J-817-1	JUNCTION	17.10	9.299	0.000
793	J-818	JUNCTION	16.98	9.984	0.000
794	J-819	JUNCTION	17.00	10.528	0.000
795	J-820	JUNCTION	16.98	10.936	0.000
796	J-821	JUNCTION	16.97	11.030	0.000
797	J-822	JUNCTION	16.92	10.905	0.000
798	J-823	JUNCTION	16.92	10.792	0.000
799	J-840	JUNCTION	4.10	7.209	0.000
800	J-841	JUNCTION	23.79	9.266	0.000
801	J-842	JUNCTION	3.54	7.212	0.000
802	J-844	JUNCTION	3.02	6.463	0.000
803	J-845	JUNCTION	2.98	6.511	0.000
804	J-846	JUNCTION	3.78	10.006	0.000
805	J-847	JUNCTION	2.23	8.951	0.000
806	J-850	JUNCTION	2.89	2.004	0.000
807	J-860	JUNCTION	9.55	10.750	0.000
808	J-870	JUNCTION	16.94	11.782	0.000
809	J-871-1A	JUNCTION	15.63	9.178	0.000
810	J-871-1B	JUNCTION	11.54	6.484	0.000
811	J-871-1C	JUNCTION	5.60	2.329	0.000
812	J-900-1	JUNCTION	1.84	10.440	0.000
813	J-901	JUNCTION	1.33	11.000	0.000
814	J-902	JUNCTION	0.93	10.820	0.000

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Node Flooding Summary  
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820

Flooding refers to all water that overflows a node, whether it ponds or not.

822

823					Total	Maximum
824		Maximum	Time of Max		Flood	Ponded
825	Hours	Rate	Occurrence		Volume	Depth
826	Node	Flooded	CFS	days hr:min	10 <sup>6</sup> gal	Feet
827	-----					
828	J-1023	0.01	2.02	0 00:40	0.000	10.000
829	J-1024	0.01	1.02	0 00:42	0.000	10.000
830	J-142	0.01	0.69	0 00:41	0.000	10.000
831	J-142A	0.01	0.09	0 00:41	0.000	10.000
832	J-142B	0.01	0.22	0 00:41	0.000	10.000
833	J-201	0.13	1.49	0 00:45	0.003	10.000
834	J-321	0.01	0.12	0 00:43	0.000	10.000
835	J-322	0.01	0.47	0 00:43	0.000	10.000
836	J-451	0.01	1.57	0 00:46	0.000	10.000
837	J-452	0.01	1.80	0 00:45	0.000	10.000
838	J-453	0.01	3.48	0 00:43	0.000	10.000

839	J-454	0.04	1.21	0	00:47	0.001	10.000
840	J-455	0.01	0.14	0	00:45	0.000	10.000
841	J-455A	0.01	1.57	0	00:42	0.000	10.000
842	J-462A	0.01	2.58	0	00:42	0.000	10.000
843	J-491	0.01	1.10	0	00:40	0.000	10.000
844	J-492	0.01	1.74	0	00:42	0.000	10.000
845	J-493	0.01	0.33	0	00:44	0.000	10.000
846	J-494	0.01	0.42	0	00:44	0.000	10.000
847	J-495	0.01	0.24	0	00:44	0.000	10.000
848	J-601	0.01	0.54	0	00:39	0.000	10.000
849	J-602	0.01	0.20	0	00:39	0.000	10.000
850	J-779	2.12	13.70	0	00:45	0.114	2.985
851	J-783	2.17	2.70	0	00:32	0.016	3.665
852	J-784	2.18	3.13	0	00:32	0.015	3.727
853	J-805	10.78	37.78	0	01:32	0.837	0.601
854	J-808	9.19	39.31	0	01:30	0.997	0.385
855	J-811	4.78	4.38	0	00:45	0.065	7.651
856	J-812	6.66	6.83	0	00:11	0.099	8.447
857	J-814	10.64	8.18	0	00:45	0.114	7.097
858	J-815	15.79	12.46	0	00:45	0.269	6.947
859	J-816	16.70	8.39	0	00:53	0.258	6.747
860	J-817	16.56	3.37	0	00:45	0.081	6.891
861	J-817-1	16.74	2.98	0	00:45	0.080	6.949
862	J-818	16.43	3.58	0	00:45	0.060	7.324
863	J-819	16.92	5.06	0	00:45	0.099	8.428
864	J-820	16.91	4.00	0	00:45	0.069	8.806
865	J-821	16.89	2.45	0	00:13	0.039	8.990
866	J-822	16.92	3.40	0	00:14	0.043	9.575
867	J-823	16.91	3.72	0	00:15	0.047	10.022
868	J-844	3.02	5.93	0	00:45	0.053	6.463
869	J-850	2.88	5.41	0	01:45	0.076	1.984
870	J-860	0.40	2.73	0	01:15	0.015	10.000
871	J-870	16.77	1.33	0	00:14	0.017	9.812
872	J-871-1A	15.63	29.66	0	00:45	0.540	9.178
873	J-871-1B	11.34	20.38	0	00:45	0.390	4.384
874	J-871-1C	4.81	3.18	0	00:45	0.034	0.579
875	J-900-1	0.16	1.91	0	00:45	0.004	10.000
876	J-901	0.34	2.39	0	00:45	0.013	10.000
877	J-902	0.01	0.18	0	00:31	0.000	10.000
878	S-500	0.69	2.00	0	02:11	0.024	0.000
879	S-600	4.24	5.49	0	01:00	0.108	0.000

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883 Storage Volume Summary  
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-----		Average	Avg	Evap	Exfil	Maximum	Max	Time of
		Max	Maximum	Pcnt	Pcnt	Volume	Pcnt	
		Volume	Occurrence	Outflow	Pcnt	1000 ft3	Full	days
887	Storage Unit	1000 ft3	Full	Loss	Loss	1000 ft3	Full	days
889	hr:min	CFS						
-----								
891	S-100	49.663	8	0	0	52.500	8	0
	17:14	0.00						
892	S-1000	321.267	29	0	0	339.774	31	0
	05:44	0.00						
893	S-1100	0.370	1	0	0	15.468	29	0
	00:57	29.88						
894	S-150	53.344	15	0	0	56.375	16	0

895	10:00	0.49	46.558	20	0	0	49.087	21	0
	S-200								
	05:11	0.00							
896	S-300		54.274	31	0	0	57.162	32	0
	11:02	0.01							
897	S-400		99.939	27	0	0	105.609	28	0
	11:59	0.52							
898	S-500		34.029	96	0	0	35.616	100	0
	02:09	0.04							
899	S-600		14.734	97	0	0	15.195	100	0
	01:00	0.00							

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 Outfall Loading Summary  
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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
O-1000	0.00	0.00	0.00	0.000
O-700	100.00	85.37	193.86	55.837
O-800	99.35	14.49	42.28	9.222
O-900	19.29	2.72	10.30	0.306
System	54.66	102.58	214.30	65.365

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 Link Flow Summary  
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Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
C=737A1	CONDUIT	25.27	0 04:16	5.07	0.04	0.19
C737-A2	CONDUIT	25.15	0 04:18	5.07	0.04	0.19
C-737A-3	CONDUIT	25.02	0 04:20	0.98	0.04	0.59
L-1001	CONDUIT	63.63	0 00:48	7.25	1.02	0.86
L-1002	CONDUIT	62.97	0 00:48	6.55	1.01	1.00
L-1003	CONDUIT	62.59	0 00:49	6.51	1.22	1.00
L-1004	CONDUIT	57.76	0 00:50	6.00	0.83	1.00
L-1005	CONDUIT	10.28	0 00:46	2.09	0.39	1.00
L-1006	CONDUIT	9.98	0 00:46	3.75	0.42	1.00
L-1007	CONDUIT	9.71	0 00:46	3.88	0.71	1.00
L-1008	CONDUIT	9.17	0 00:46	3.69	0.72	1.00
L-1009	CONDUIT	7.05	0 00:44	7.47	0.41	1.00
L-1010	CONDUIT	6.82	0 00:44	8.03	0.37	0.70
L-1020	CONDUIT	48.04	0 00:55	6.80	1.14	1.00
L-1021	CONDUIT	30.27	0 01:07	4.28	1.03	1.00
L-1022	CONDUIT	30.03	0 01:07	6.12	1.03	1.00
L-1023	CONDUIT	18.41	0 00:45	3.75	0.76	1.00
L-1024	CONDUIT	17.81	0 00:45	6.45	0.81	1.00
L-1101	CONDUIT	15.72	0 00:46	11.04	0.31	0.72
L-1102	CONDUIT	10.29	0 00:45	6.45	0.55	0.51
L-120	CONDUIT	1.63	0 00:56	1.84	0.27	1.00
L-121	CONDUIT	5.12	0 00:43	4.17	22.00	1.00
L-122	CONDUIT	5.56	0 00:43	4.69	1.32	1.00
L-123	CONDUIT	6.14	0 00:43	5.00	0.37	1.00
L-124	CONDUIT	8.20	0 00:50	4.64	1.10	1.00
L-124A	CONDUIT	1.52	0 00:54	4.00	0.28	0.83
L-124B	CONDUIT	2.63	0 00:58	2.79	0.15	1.00

955	L-125	CONDUIT	8.54	0	00:49	4.83	1.22	1.00
956	L-126	CONDUIT	10.57	0	00:45	5.98	0.96	1.00
957	L-127	CONDUIT	12.15	0	00:45	3.87	0.51	1.00
958	L-127A	CONDUIT	1.43	0	00:45	2.30	0.22	0.66
959	L-128	CONDUIT	12.99	0	00:45	4.40	1.21	0.92
960	L-129	CONDUIT	13.40	0	00:47	4.96	0.81	0.90
961	L-130	CONDUIT	15.21	0	00:47	10.86	0.19	0.42
962	L-131	CHANNEL	15.41	0	00:47	1.90	0.00	0.24
963	L-141	CONDUIT	2.23	0	00:45	3.16	0.23	1.00
964	L-142	CONDUIT	6.99	0	00:45	3.96	0.95	1.00
965	L-142A	CONDUIT	4.32	0	00:45	3.52	1.14	1.00
966	L-142B	CONDUIT	4.76	0	00:45	3.88	0.92	1.00
967	L-143	CONDUIT	7.57	0	00:45	4.28	1.34	1.00
968	L-144	CONDUIT	9.34	0	00:45	5.29	3.35	1.00
969	L-145	CONDUIT	11.34	0	00:45	6.42	1.47	1.00
970	L-146	CONDUIT	13.17	0	00:45	7.45	1.82	1.00
971	L-147	CONDUIT	13.69	0	00:45	5.16	0.53	0.54
972	L-148	CONDUIT	14.82	0	00:45	8.75	0.24	0.38
973	L-149	CHANNEL	14.95	0	00:45	2.45	0.00	0.18
974	L-152	CONDUIT	0.16	0	00:45	0.56	0.02	0.22
975	L-153	CONDUIT	1.82	0	00:45	3.53	0.22	0.33
976	L-153A	CONDUIT	1.33	0	00:45	5.77	0.10	0.24
977	L-154	CONDUIT	2.29	0	00:46	3.84	0.23	0.59
978	L-156	CONDUIT	3.02	0	00:50	2.64	0.69	1.00
979	L-157	CONDUIT	10.08	0	00:49	3.21	1.00	1.00
980	L-157.1	CONDUIT	3.47	0	00:49	1.96	0.52	1.00
981	L-157-1	CONDUIT	0.19	0	00:46	0.56	0.02	0.28
982	L-157-2	CONDUIT	1.24	0	00:47	1.54	0.16	0.50
983	L-157-3	CONDUIT	4.93	0	00:46	3.65	0.64	0.74
984	L-157-3A	CONDUIT	3.00	0	00:45	4.78	0.48	0.51
985	L-157-4	CONDUIT	5.93	0	00:46	4.34	0.61	0.92
986	L-158	CONDUIT	10.73	0	00:48	3.64	0.55	0.89
987	L-159	CONDUIT	10.82	0	00:49	4.95	0.57	0.66
988	L-160	CONDUIT	11.90	0	00:49	3.79	1.19	1.00
989	L-161	CONDUIT	12.39	0	00:49	4.37	1.21	0.85
990	L-162	CONDUIT	15.32	0	00:49	5.34	0.45	0.57
991	L-163	CONDUIT	15.29	0	00:50	6.30	0.42	0.50
992	L-201	CONDUIT	5.69	0	00:42	4.64	1.50	1.00
993	L-202	CONDUIT	8.04	0	00:42	6.55	2.00	1.00
994	L-203	CONDUIT	10.62	0	00:45	8.65	2.16	1.00
995	L-204	CONDUIT	13.08	0	00:45	4.16	0.94	1.00
996	L-205	CONDUIT	14.95	0	00:45	6.50	1.62	0.69
997	L-206	CONDUIT	14.92	0	00:45	6.49	0.23	0.69
998	L-301	CONDUIT	1.83	0	00:45	2.97	0.45	0.50
999	L-302	CONDUIT	3.25	0	00:46	5.29	0.38	0.50
1000	L-303	CONDUIT	3.53	0	00:46	4.10	0.46	0.66
1001	L-304	CONDUIT	6.00	0	00:47	5.78	0.93	0.80
1002	L-321	CONDUIT	7.85	0	00:45	4.44	29.32	1.00
1003	L-322	CONDUIT	8.98	0	00:45	5.48	0.79	1.00
1004	L-323	CONDUIT	9.89	0	00:45	5.60	0.83	1.00
1005	L-324	CONDUIT	10.66	0	00:45	6.04	1.14	1.00
1006	L-325	CONDUIT	11.52	0	00:45	7.57	1.18	0.81
1007	L-326	CONDUIT	18.76	0	00:45	7.63	0.30	0.73
1008	L-401	CONDUIT	0.33	0	00:45	2.28	0.05	0.17
1009	L-402	CONDUIT	1.32	0	00:45	1.71	0.09	0.60
1010	L-403	CONDUIT	2.99	0	00:45	3.10	20.69	0.73
1011	L-404	CONDUIT	4.01	0	00:45	6.22	0.44	0.71
1012	L-405	CONDUIT	4.97	0	00:47	4.68	0.41	0.99
1013	L-406	CONDUIT	5.30	0	00:47	4.66	1.31	0.87
1014	L-407	CONDUIT	33.06	0	00:46	11.54	0.31	1.00
1015	L-451	CONDUIT	2.32	0	00:55	4.05	0.49	1.00
1016	L-452	CONDUIT	2.92	0	01:00	3.33	0.37	1.00
1017	L-453	CONDUIT	3.97	0	00:59	3.24	0.66	1.00
1018	L-454	CONDUIT	5.33	0	00:49	4.35	1.34	1.00
1019	L-455	CONDUIT	7.88	0	00:49	4.46	1.44	1.00
1020	L-455A	CONDUIT	1.39	0	01:01	1.26	0.22	1.00

1021	L-456	CONDUIT	8.18	0	00:49	4.63	1.27	1.00
1022	L-457	CONDUIT	8.70	0	00:49	4.93	0.81	1.00
1023	L-458	CONDUIT	9.03	0	00:49	5.11	1.66	1.00
1024	L-459	CONDUIT	9.54	0	00:49	5.40	1.46	1.00
1025	L-460	CONDUIT	21.22	0	00:47	5.34	1.26	1.00
1026	L-461	CONDUIT	21.67	0	00:47	5.45	1.12	1.00
1027	L-462	CONDUIT	24.85	0	00:45	6.25	0.96	1.00
1028	L-462A	CONDUIT	1.80	0	00:45	1.53	0.43	1.00
1029	L-463	CONDUIT	25.41	0	00:45	6.39	1.22	1.00
1030	L-464	CONDUIT	26.85	0	00:45	6.75	1.02	1.00
1031	L-465	CONDUIT	27.06	0	00:45	6.81	1.42	1.00
1032	L-466	CONDUIT	27.34	0	00:45	7.93	1.33	1.00
1033	L-481	CONDUIT	13.80	0	04:06	2.61	0.01	0.18
1034	L-481B	CONDUIT	13.88	0	04:03	3.90	0.03	0.13
1035	L-482	CONDUIT	25.42	0	02:44	6.64	0.25	0.50
1036	L-482B	CONDUIT	0.00	0	00:00	0.00	0.00	0.06
1037	L-483	CONDUIT	31.58	0	02:47	7.18	0.04	0.19
1038	L-484	CONDUIT	43.38	0	04:32	5.51	0.04	0.16
1039	L-484A	CONDUIT	0.00	0	00:00	0.00	0.00	0.09
1040	L-485	CONDUIT	43.77	0	04:33	3.50	0.07	0.26
1041	L-485B-2	CONDUIT	16.27	0	04:07	1.89	0.09	0.29
1042	L-490	CONDUIT	12.22	0	00:45	6.92	1.52	1.00
1043	L-491	CONDUIT	7.93	0	00:45	4.49	0.99	1.00
1044	L-492	CONDUIT	6.07	0	00:45	5.33	0.70	1.00
1045	L-493	CONDUIT	3.04	0	00:44	4.59	0.34	1.00
1046	L-494	CONDUIT	3.01	0	00:45	5.03	0.42	1.00
1047	L-495	CONDUIT	2.70	0	00:45	2.20	0.67	1.00
1048	L-501	CONDUIT	1.24	0	00:45	2.88	0.20	0.56
1049	L-502	CONDUIT	5.45	0	00:45	5.20	0.42	0.97
1050	L-503	CONDUIT	8.02	0	00:45	4.54	0.69	1.00
1051	L-601	CONDUIT	4.47	0	00:45	3.64	1.06	1.00
1052	L-602	CONDUIT	6.01	0	00:45	4.90	1.52	1.00
1053	L-603	CONDUIT	9.83	0	00:45	8.01	2.76	1.00
1054	L-604	CONDUIT	9.83	0	00:45	8.01	0.40	1.00
1055	L-701	CHANNEL	140.67	0	07:28	27.70	0.01	0.06
1056	L-701A	CHANNEL	193.53	0	05:13	40.45	0.01	0.08
1057	L-701B	CONDUIT	45.22	0	04:12	6.44	0.04	0.19
1058	L-701C	CONDUIT	0.00	0	00:00	0.00	0.00	0.09
1059	L-702	CHANNEL	92.34	0	08:42	0.58	0.01	0.11
1060	L-702-1	CHANNEL	127.16	0	05:12	0.67	0.07	0.12
1061	L-702B	CONDUIT	79.68	0	09:08	6.66	0.28	0.44
1062	L-703	CONDUIT	79.68	0	09:08	5.34	0.29	0.52
1063	L-704	CHANNEL	80.79	0	08:33	1.13	0.01	0.20
1064	L-705	CHANNEL	87.92	0	07:40	3.92	0.00	0.18
1065	L-706	CONDUIT	91.22	0	07:30	5.41	2.59	0.60
1066	L-707	CHANNEL	91.34	0	07:27	0.50	0.01	0.27
1067	L-708	CHANNEL	92.80	0	07:08	1.56	0.00	0.26
1068	L-709-1	CONDUIT	95.27	0	06:52	6.52	0.38	0.58
1069	L-709-2	CONDUIT	2.52	0	00:45	2.82	0.34	1.00
1070	L-709-3	CONDUIT	2.10	0	00:45	2.21	0.41	1.00
1071	L-710	CHANNEL	95.37	0	06:48	2.15	0.00	0.17
1072	L-711	CONDUIT	95.49	0	06:46	6.96	1.28	0.52
1073	L-712	CHANNEL	95.52	0	06:45	3.13	0.03	0.37
1074	L-713	CONDUIT	95.54	0	06:43	4.55	0.55	0.70
1075	L-714-1	CHANNEL	95.98	0	06:32	>50.00	0.01	0.31
1076	L-714-2	CONDUIT	7.18	0	00:45	4.71	0.44	1.00
1077	L-714-3	CONDUIT	7.13	0	00:45	3.60	0.33	1.00
1078	L-715	CHANNEL	99.37	0	06:09	>50.00	0.00	0.24
1079	L-715-1	CHANNEL	97.71	0	06:16	>50.00	0.00	0.24
1080	L-715A	CONDUIT	0.00	0	00:00	0.00	0.00	0.50
1081	L-716	CONDUIT	100.43	0	06:05	7.36	0.25	0.55
1082	L-716A	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1083	L-717-1	CHANNEL	102.46	0	05:50	1.69	0.00	0.23
1084	L-718	CONDUIT	105.92	0	05:35	6.39	0.20	0.52
1085	L-719	CONDUIT	105.98	0	05:35	3.68	0.20	0.53
1086	L-720	CHANNEL	110.72	0	05:10	2.19	0.00	0.23

1087	L-721	CONDUIT	92.90	0	05:24	9.65	0.29	0.34
1088	L-722	CONDUIT	92.91	0	05:23	6.00	0.49	0.55
1089	L-723_1	CONDUIT	52.76	0	05:30	1.31	0.08	0.34
1090	L-723_2	CONDUIT	93.29	0	05:01	1.65	0.15	0.45
1091	L-725	CONDUIT	52.80	0	05:28	4.19	0.21	0.45
1092	L-725-1	CONDUIT	0.00	0	00:00	0.00	0.00	0.09
1093	L-725-2_1	CONDUIT	13.51	0	04:36	2.32	0.04	0.23
1094	L-725-2_2	CONDUIT	13.95	0	04:51	1.49	0.01	0.19
1095	L-725-2_3	CONDUIT	13.97	0	04:51	6.78	0.24	0.37
1096	L-725-2_5	CONDUIT	13.91	0	04:51	3.67	0.13	0.54
1097	L-725-3	CONDUIT	0.00	0	00:00	0.00	0.00	0.09
1098	L-725B	CONDUIT	55.04	0	04:30	4.33	0.05	0.26
1099	L-726	CHANNEL	40.43	0	05:17	1.81	0.02	0.39
1100	L-730	CHANNEL	50.45	0	04:25	8.05	0.01	0.10
1101	L-730-1	CHANNEL	50.43	0	04:26	7.40	0.01	0.10
1102	L-731	CHANNEL	50.52	0	04:22	7.47	0.02	0.16
1103	L-732	CONDUIT	3.56	0	00:46	3.25	0.14	0.27
1104	L-732A	CONDUIT	0.00	0	00:00	0.00	0.00	0.21
1105	L-732B	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1106	L-733	CONDUIT	2.57	0	00:46	3.15	0.12	0.31
1107	L-734	CONDUIT	1.91	0	00:46	3.71	0.09	0.22
1108	L-735	CONDUIT	1.06	0	00:45	2.81	0.05	0.18
1109	L-736	CONDUIT	0.00	0	00:00	0.00	0.00	0.08
1110	L-737	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1111	L-740	CONDUIT	50.53	0	04:20	9.95	0.59	0.67
1112	L-741	CONDUIT	50.53	0	04:20	7.15	0.78	1.00
1113	L-742	CONDUIT	50.53	0	04:20	7.47	0.71	0.91
1114	L-743	CONDUIT	50.59	0	04:18	9.52	0.62	0.78
1115	L-744	CONDUIT	50.59	0	04:18	8.10	0.76	0.83
1116	L-745	CONDUIT	0.08	0	04:04	0.02	0.00	0.60
1117	L-750	CONDUIT	14.54	0	00:55	5.73	0.01	0.25
1118	L-751	CONDUIT	14.63	0	00:51	7.27	0.16	0.33
1119	L-752	CONDUIT	12.42	0	00:48	0.96	0.04	0.31
1120	L-753	CONDUIT	11.32	0	00:47	2.04	0.03	0.14
1121	L-754	CONDUIT	8.64	0	00:45	1.73	0.02	0.12
1122	L-760	CONDUIT	11.36	0	00:45	6.43	1.55	1.00
1123	L-761	CONDUIT	1.13	0	00:16	0.85	0.15	1.00
1124	L-762	CONDUIT	0.68	0	00:16	0.97	0.09	1.00
1125	L-770	CONDUIT	14.61	0	00:45	8.38	1.03	0.96
1126	L-771	CONDUIT	9.36	0	00:42	5.54	1.80	1.00
1127	L-772	CONDUIT	9.36	0	00:42	5.29	1.39	1.00
1128	L-773	CONDUIT	9.03	0	00:56	5.11	0.88	1.00
1129	L-774	CONDUIT	9.03	0	00:56	5.11	1.37	1.00
1130	L-775	CONDUIT	8.58	0	01:07	6.99	1.48	1.00
1131	L-776	CONDUIT	8.27	0	01:20	6.74	1.59	1.00
1132	L-777	CONDUIT	8.27	0	01:21	6.74	1.53	1.00
1133	L-778	CONDUIT	7.95	0	01:35	6.48	1.52	1.00
1134	L-779	CONDUIT	7.80	0	01:45	6.36	1.60	1.00
1135	L-780	CONDUIT	5.33	0	02:40	4.35	1.26	1.00
1136	L-781	CONDUIT	5.32	0	02:40	4.34	1.22	1.00
1137	L-782	CONDUIT	5.25	0	02:40	4.28	1.24	1.00
1138	L-783	CONDUIT	5.23	0	02:40	4.26	1.24	1.00
1139	L-784	CONDUIT	5.52	0	02:42	4.53	1.35	1.00
1140	L-790	CONDUIT	33.54	0	03:41	3.19	0.04	0.17
1141	L-791	CONDUIT	33.55	0	03:41	6.11	0.08	0.17
1142	L-792	CONDUIT	33.55	0	03:40	3.04	0.03	0.10
1143	L-792A	CONDUIT	27.98	0	03:38	4.59	0.05	0.22
1144	L-792B	CONDUIT	0.00	0	00:00	0.00	0.00	0.11
1145	L-801	CONDUIT	42.28	0	02:57	3.27	0.06	0.21
1146	L-802	CONDUIT	18.02	0	02:30	5.21	0.27	0.26
1147	L-803	CONDUIT	17.44	0	05:12	0.62	0.07	0.41
1148	L-804	CONDUIT	17.42	0	05:04	3.69	0.29	0.41
1149	L-805	CONDUIT	17.42	0	05:03	2.89	4.25	0.80
1150	L-806	CONDUIT	53.17	0	01:32	1.11	0.22	1.00
1151	L-807	CONDUIT	52.73	0	01:33	1.10	0.76	1.00
1152	L-808	CONDUIT	52.80	0	01:33	1.60	0.12	1.00



1153	L-809	CONDUIT	21.17	0	02:13	1.72	0.28	0.75
1154	L-810	CONDUIT	14.65	0	01:30	9.58	2.61	0.83
1155	L-811	CONDUIT	9.58	0	02:36	5.42	1.67	1.00
1156	L-812	CONDUIT	7.14	0	05:00	4.04	1.19	1.00
1157	L-813	CONDUIT	6.42	0	05:16	3.63	1.47	1.00
1158	L-814	CONDUIT	6.42	0	05:16	5.23	1.29	1.00
1159	L-815	CONDUIT	5.85	0	06:02	4.77	1.38	1.00
1160	L-816	CONDUIT	4.90	0	07:37	4.00	1.47	1.00
1161	L-817	CONDUIT	4.47	0	01:08	3.64	1.16	1.00
1162	L-817-1	CONDUIT	5.41	0	00:50	4.41	2.41	1.00
1163	L-818	CONDUIT	5.23	0	01:07	4.26	1.52	1.00
1164	L-819	CONDUIT	4.05	0	01:41	3.30	1.49	1.00
1165	L-820	CONDUIT	4.45	0	00:55	3.62	1.48	1.00
1166	L-821	CONDUIT	4.01	0	00:49	3.27	1.10	1.00
1167	L-822	CONDUIT	3.28	0	02:41	2.89	0.82	1.00
1168	L-823	CONDUIT	3.52	0	00:15	3.02	0.83	1.00
1169	L-824	CONDUIT	0.00	0	00:00	0.00	0.00	0.20
1170	L-825	CONDUIT	2.21	0	00:47	3.23	0.27	0.33
1171	L-826	CONDUIT	4.24	0	00:46	9.97	0.09	0.54
1172	L-830	CONDUIT	25.05	0	02:48	0.67	0.01	0.15
1173	L-840	CONDUIT	3.94	0	00:50	3.21	0.40	1.00
1174	L-841	CONDUIT	3.63	0	00:51	2.95	0.57	1.00
1175	L-842	CONDUIT	2.78	0	00:58	2.26	0.36	1.00
1176	L-842A	CONDUIT	14.19	0	02:36	2.80	0.02	0.20
1177	L-844	CONDUIT	2.01	0	01:41	2.92	0.50	1.00
1178	L-845	CONDUIT	5.72	0	00:45	4.66	2.67	1.00
1179	L-846	CONDUIT	3.06	0	00:45	2.50	0.95	1.00
1180	L-847	CONDUIT	2.26	0	00:45	2.56	0.24	1.00
1181	L-850	CONDUIT	7.85	0	02:11	6.75	2.03	0.90
1182	L-860	CONDUIT	7.62	0	01:06	6.21	1.49	1.00
1183	L-869	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1184	L-870	CONDUIT	3.92	0	00:15	2.22	0.86	1.00
1185	L-871	CONDUIT	2.92	0	03:22	2.38	0.48	1.00
1186	L-871-1B	CONDUIT	3.50	0	00:27	2.33	1.15	1.00
1187	L-871-1C	CONDUIT	3.38	0	00:41	2.25	0.86	1.00
1188	L-900-1	CONDUIT	10.30	0	00:42	13.12	4.46	1.00
1189	L-901	CONDUIT	2.37	0	00:57	3.01	2.12	1.00
1190	L-902	CONDUIT	2.22	0	00:45	2.83	0.86	1.00
1191	W-100	WEIR	0.00	0	00:00			0.00
1192	W-1000	WEIR	0.00	0	00:00			0.00
1193	W-1100	WEIR	29.88	0	01:01			0.74
1194	W-150	WEIR	0.00	0	00:00			0.00
1195	W-200	WEIR	0.00	0	00:00			0.00
1196	W-300	WEIR	0.00	0	00:00			0.00
1197	W-400	WEIR	0.00	0	00:00			0.00
1198	W-500	WEIR	0.00	0	00:00			0.00
1199	W-600	WEIR	0.00	0	00:00			0.00

1200

1201

1202 \*\*\*\*\*

1203 Flow Classification Summary

1204 \*\*\*\*\*

1205

1206

Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----									
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl	
1211	C=737A1	1.00	0.00	0.00	0.00	0.51	0.49	0.00	0.00	0.40	0.00
1212	C737-A2	1.00	0.00	0.00	0.00	0.53	0.47	0.00	0.00	0.40	0.00
1213	C-737A-3	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1214	L-1001	1.00	0.00	0.75	0.00	0.13	0.00	0.00	0.12	0.88	0.00
1215	L-1002	1.00	0.75	0.05	0.00	0.20	0.00	0.00	0.00	0.88	0.00
1216	L-1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1217	L-1004	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1218	L-1005	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.14	0.00

1219	L-1006	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1220	L-1007	1.00	0.00	0.82	0.00	0.17	0.00	0.00	0.00	0.89	0.00
1221	L-1008	1.00	0.82	0.02	0.00	0.16	0.00	0.00	0.00	0.89	0.00
1222	L-1009	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.98	0.00	0.00
1223	L-1010	1.00	0.00	0.87	0.00	0.02	0.12	0.00	0.00	0.90	0.00
1224	L-1020	1.00	0.00	0.81	0.00	0.18	0.00	0.00	0.00	0.88	0.00
1225	L-1021	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.88	0.00
1226	L-1022	1.00	0.00	0.83	0.00	0.17	0.01	0.00	0.00	0.89	0.00
1227	L-1023	1.00	0.83	0.01	0.00	0.16	0.00	0.00	0.00	0.96	0.00
1228	L-1024	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1229	L-1101	1.00	0.00	0.00	0.00	0.04	0.01	0.00	0.96	0.02	0.00
1230	L-1102	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.87	0.00
1231	L-120	1.00	0.00	0.78	0.00	0.22	0.00	0.00	0.00	0.99	0.00
1232	L-121	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1233	L-122	1.00	0.00	0.00	0.00	0.87	0.13	0.00	0.00	0.56	0.00
1234	L-123	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.39	0.00
1235	L-124	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.83	0.00
1236	L-124A	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.00	0.00
1237	L-124B	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	0.99	0.00
1238	L-125	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.12	0.00
1239	L-126	1.00	0.00	0.00	0.00	0.94	0.06	0.00	0.00	0.57	0.00
1240	L-127	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.31	0.00
1241	L-127A	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.11	0.00
1242	L-128	1.00	0.00	0.21	0.00	0.79	0.00	0.00	0.00	0.84	0.00
1243	L-129	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.00	0.00
1244	L-130	1.00	0.00	0.47	0.00	0.44	0.09	0.00	0.00	0.93	0.00
1245	L-131	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.05	0.00
1246	L-141	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.95	0.02	0.00
1247	L-142	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1248	L-142A	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.01	0.00
1249	L-142B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1250	L-143	1.00	0.00	0.74	0.00	0.26	0.00	0.00	0.00	0.91	0.00
1251	L-144	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1252	L-145	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1253	L-146	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1254	L-147	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.64	0.00
1255	L-148	1.00	0.00	0.00	0.00	0.05	0.12	0.00	0.83	0.00	0.00
1256	L-149	1.00	0.00	0.58	0.00	0.42	0.00	0.00	0.00	0.99	0.00
1257	L-152	1.00	0.84	0.02	0.00	0.14	0.00	0.00	0.00	1.00	0.00
1258	L-153	1.00	0.00	0.84	0.00	0.11	0.05	0.00	0.00	0.89	0.00
1259	L-153A	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1260	L-154	1.00	0.00	0.00	0.00	0.02	0.01	0.00	0.98	0.01	0.00
1261	L-156	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.97	0.00	0.00
1262	L-157	1.00	0.00	0.71	0.00	0.29	0.00	0.00	0.00	0.89	0.00
1263	L-157.1	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.09	0.00
1264	L-157-1	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	1.00	0.00
1265	L-157-2	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.04	0.00
1266	L-157-3	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.00	0.00
1267	L-157-3A	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1268	L-157-4	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1269	L-158	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1270	L-159	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1271	L-160	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1272	L-161	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1273	L-162	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.59	0.00
1274	L-163	1.00	0.00	0.61	0.00	0.31	0.00	0.00	0.07	0.93	0.00
1275	L-201	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.95	0.00
1276	L-202	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1277	L-203	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1278	L-204	1.00	0.00	0.80	0.00	0.20	0.00	0.00	0.00	0.95	0.00
1279	L-205	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.00	0.00
1280	L-206	1.00	0.00	0.77	0.00	0.21	0.02	0.00	0.00	0.99	0.00
1281	L-301	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.03	0.00
1282	L-302	1.00	0.00	0.00	0.00	0.87	0.13	0.00	0.00	0.89	0.00
1283	L-303	1.00	0.63	0.20	0.00	0.09	0.08	0.00	0.00	1.00	0.00
1284	L-304	1.00	0.00	0.63	0.00	0.28	0.09	0.00	0.00	0.92	0.00

1285	L-321	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1286	L-322	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.14	0.00
1287	L-323	1.00	0.00	0.41	0.00	0.50	0.09	0.00	0.00	0.87	0.00
1288	L-324	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.14	0.00
1289	L-325	1.00	0.00	0.55	0.00	0.35	0.09	0.00	0.00	0.91	0.00
1290	L-326	1.00	0.00	0.00	0.00	0.98	0.01	0.00	0.00	0.06	0.00
1291	L-401	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	1.00	0.00
1292	L-402	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	1.00	0.00
1293	L-403	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1294	L-404	1.00	0.00	0.05	0.00	0.75	0.20	0.00	0.00	0.51	0.00
1295	L-405	1.00	0.00	0.01	0.00	0.90	0.10	0.00	0.00	0.69	0.00
1296	L-406	1.00	0.00	0.13	0.00	0.79	0.00	0.00	0.08	0.93	0.00
1297	L-407	1.00	0.00	0.00	0.00	0.97	0.01	0.00	0.01	0.01	0.00
1298	L-451	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.89	0.00
1299	L-452	1.00	0.80	0.02	0.00	0.16	0.02	0.00	0.00	0.99	0.00
1300	L-453	1.00	0.76	0.04	0.00	0.20	0.00	0.00	0.00	0.98	0.00
1301	L-454	1.00	0.00	0.76	0.00	0.24	0.00	0.00	0.00	0.97	0.00
1302	L-455	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1303	L-455A	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.98	0.00
1304	L-456	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1305	L-457	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1306	L-458	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.86	0.00
1307	L-459	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.08	0.00
1308	L-460	1.00	0.00	0.70	0.00	0.30	0.00	0.00	0.00	0.88	0.00
1309	L-461	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09	0.00
1310	L-462	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1311	L-462A	1.00	0.00	0.59	0.00	0.41	0.00	0.00	0.00	0.97	0.00
1312	L-463	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1313	L-464	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1314	L-465	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1315	L-466	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1316	L-481	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1317	L-481B	1.00	0.00	0.00	0.00	0.93	0.07	0.00	0.00	0.00	0.00
1318	L-482	1.00	0.00	0.00	0.00	0.29	0.71	0.00	0.00	0.02	0.00
1319	L-482B	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1320	L-483	1.00	0.00	0.00	0.00	0.62	0.38	0.00	0.00	0.79	0.00
1321	L-484	1.00	0.00	0.00	0.00	0.63	0.37	0.00	0.00	0.60	0.00
1322	L-484A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1323	L-485	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.93	0.00
1324	L-485B-2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.85	0.00
1325	L-490	1.00	0.70	0.10	0.00	0.20	0.00	0.00	0.00	0.96	0.00
1326	L-491	1.00	0.80	0.03	0.00	0.18	0.00	0.00	0.00	0.95	0.00
1327	L-492	1.00	0.82	0.02	0.00	0.06	0.09	0.00	0.00	0.98	0.00
1328	L-493	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.99	0.00
1329	L-494	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.89	0.00
1330	L-495	1.00	0.80	0.02	0.00	0.18	0.00	0.00	0.00	0.97	0.00
1331	L-501	1.00	0.00	0.73	0.00	0.25	0.02	0.00	0.01	0.99	0.00
1332	L-502	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.04	0.00
1333	L-503	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	0.02	0.00
1334	L-601	1.00	0.22	0.62	0.00	0.16	0.00	0.00	0.00	0.89	0.00
1335	L-602	1.00	0.00	0.22	0.00	0.78	0.00	0.00	0.00	0.97	0.00
1336	L-603	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1337	L-604	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.02	0.00
1338	L-701	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.01	0.00
1339	L-701A	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.78	0.00
1340	L-701B	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
1341	L-701C	1.00	0.02	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1342	L-702	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1343	L-702-1	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	0.04	0.00
1344	L-702B	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1345	L-703	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.00
1346	L-704	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1347	L-705	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1348	L-706	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1349	L-707	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1350	L-708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.00

1351	L-709-1	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.19	0.00
1352	L-709-2	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1353	L-709-3	1.00	0.00	0.16	0.00	0.84	0.00	0.00	0.00	0.23	0.00
1354	L-710	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.50	0.00
1355	L-711	1.00	0.00	0.00	0.00	0.36	0.64	0.00	0.00	0.00	0.00
1356	L-712	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.08	0.00
1357	L-713	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1358	L-714-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1359	L-714-2	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.01	0.00
1360	L-714-3	1.00	0.00	0.09	0.00	0.91	0.00	0.00	0.00	0.10	0.00
1361	L-715	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1362	L-715-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.06	0.00
1363	L-715A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1364	L-716	1.00	0.02	0.00	0.00	0.31	0.18	0.00	0.48	0.00	0.00
1365	L-716A	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1366	L-717-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.18	0.00
1367	L-718	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	0.00	0.00
1368	L-719	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1369	L-720	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1370	L-721	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1371	L-722	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1372	L-723_1	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1373	L-723_2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1374	L-725	1.00	0.00	0.00	0.00	0.77	0.22	0.00	0.00	0.00	0.00
1375	L-725-1	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1376	L-725-2_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1377	L-725-2_2	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.85	0.00
1378	L-725-2_3	1.00	0.01	0.00	0.00	0.01	0.97	0.00	0.00	0.00	0.00
1379	L-725-2_5	1.00	0.00	0.03	0.00	0.76	0.20	0.00	0.00	0.39	0.00
1380	L-725-3	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1381	L-725B	1.00	0.00	0.23	0.00	0.75	0.03	0.00	0.00	0.98	0.00
1382	L-726	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.83	0.00
1383	L-730	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1384	L-730-1	1.00	0.00	0.00	0.00	0.70	0.26	0.00	0.04	0.96	0.00
1385	L-731	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1386	L-732	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1387	L-732A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1388	L-732B	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1389	L-733	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	0.99	0.00
1390	L-734	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.95	0.00
1391	L-735	1.00	0.00	0.85	0.00	0.14	0.01	0.00	0.00	1.00	0.00
1392	L-736	1.00	0.85	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1393	L-737	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1394	L-740	1.00	0.00	0.00	0.00	0.31	0.69	0.00	0.00	0.32	0.00
1395	L-741	1.00	0.00	0.00	0.00	0.79	0.21	0.00	0.00	0.00	0.00
1396	L-742	1.00	0.00	0.00	0.00	0.66	0.34	0.00	0.00	0.95	0.00
1397	L-743	1.00	0.00	0.02	0.00	0.18	0.80	0.00	0.00	0.35	0.00
1398	L-744	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
1399	L-745	1.00	0.02	0.62	0.00	0.35	0.00	0.00	0.00	0.61	0.00
1400	L-750	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.95	0.00
1401	L-751	1.00	0.00	0.00	0.00	0.62	0.38	0.00	0.00	0.69	0.00
1402	L-752	1.00	0.00	0.26	0.00	0.74	0.00	0.00	0.00	1.00	0.00
1403	L-753	1.00	0.26	0.17	0.00	0.57	0.00	0.00	0.00	0.97	0.00
1404	L-754	1.00	0.43	0.22	0.00	0.36	0.00	0.00	0.00	0.99	0.00
1405	L-760	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.01	0.00
1406	L-761	1.00	0.00	0.03	0.00	0.97	0.00	0.00	0.00	0.06	0.00
1407	L-762	1.00	0.03	0.08	0.00	0.89	0.00	0.00	0.00	0.16	0.00
1408	L-770	1.00	0.21	0.41	0.00	0.26	0.07	0.00	0.05	0.89	0.00
1409	L-771	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1410	L-772	1.00	0.00	0.70	0.00	0.30	0.00	0.00	0.00	0.88	0.00
1411	L-773	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1412	L-774	1.00	0.00	0.00	0.00	0.98	0.00	0.00	0.02	0.73	0.00
1413	L-775	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1414	L-776	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1415	L-777	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1416	L-778	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00

1417	L-779	1.00	0.00	0.74	0.00	0.26	0.00	0.00	0.00	0.88	0.00
1418	L-780	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1419	L-781	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1420	L-782	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1421	L-783	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.90	0.00
1422	L-784	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1423	L-790	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1424	L-791	1.00	0.00	0.00	0.00	0.42	0.58	0.00	0.00	0.01	0.00
1425	L-792	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.48	0.00
1426	L-792A	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.05	0.00
1427	L-792B	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1428	L-801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1429	L-802	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1430	L-803	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1431	L-804	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.00	0.00
1432	L-805	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1433	L-806	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1434	L-807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1435	L-808	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.16	0.00
1436	L-809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.88	0.00
1437	L-810	1.00	0.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.00
1438	L-811	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.00
1439	L-812	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1440	L-813	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.25	0.00
1441	L-814	1.00	0.00	0.00	0.00	0.74	0.00	0.00	0.26	0.02	0.00
1442	L-815	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09	0.00
1443	L-816	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1444	L-817	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.27	0.00
1445	L-817-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1446	L-818	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1447	L-819	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1448	L-820	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.27	0.00
1449	L-821	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.23	0.00
1450	L-822	1.00	0.00	0.00	0.00	0.73	0.00	0.00	0.27	0.01	0.00
1451	L-823	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.27	0.00
1452	L-824	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1453	L-825	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.00	0.00
1454	L-826	1.00	0.16	0.59	0.00	0.20	0.01	0.00	0.04	0.96	0.00
1455	L-830	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.97	0.00
1456	L-840	1.00	0.00	0.00	0.00	0.72	0.00	0.00	0.28	0.50	0.00
1457	L-841	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1458	L-842	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.82	0.00
1459	L-842A	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.98	0.00
1460	L-844	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1461	L-845	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1462	L-846	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1463	L-847	1.00	0.00	0.79	0.00	0.20	0.00	0.00	0.00	0.89	0.00
1464	L-850	1.00	0.00	0.20	0.00	0.79	0.01	0.00	0.00	0.28	0.00
1465	L-860	1.00	0.00	0.21	0.00	0.79	0.00	0.00	0.00	0.28	0.00
1466	L-869	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1467	L-870	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1468	L-871	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.31	0.00
1469	L-871-1B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.45	0.00
1470	L-871-1C	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00
1471	L-900-1	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.00	0.00
1472	L-901	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1473	L-902	1.00	0.00	0.79	0.00	0.21	0.00	0.00	0.00	0.94	0.00

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 Conduit Surcharge Summary  
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Hours Full	Above Full	Capacity

1483	Conduit	Both Ends	Upstream	Dnstream	Normal Flow	Limited
1484						
1485	C-737A-3	0.01	0.01	0.83	0.01	0.01
1486	L-1001	0.01	0.40	0.01	0.13	0.01
1487	L-1002	0.40	0.60	0.40	0.11	0.40
1488	L-1003	0.60	0.74	0.60	0.55	0.60
1489	L-1004	0.72	0.72	0.74	0.01	0.67
1490	L-1005	0.55	0.55	0.91	0.01	0.01
1491	L-1006	0.32	0.32	0.45	0.01	0.01
1492	L-1007	0.30	0.30	0.44	0.01	0.01
1493	L-1008	0.23	0.23	0.30	0.01	0.01
1494	L-1009	0.01	0.01	0.19	0.01	0.01
1495	L-1020	0.81	0.89	0.81	0.59	0.81
1496	L-1021	0.85	0.85	0.89	0.30	0.57
1497	L-1022	0.87	0.87	0.92	0.28	0.58
1498	L-1023	0.77	0.77	0.87	0.01	0.01
1499	L-1024	0.57	0.57	0.73	0.01	0.01
1500	L-1101	0.01	0.01	0.69	0.01	0.01
1501	L-120	0.01	0.01	0.49	0.01	0.01
1502	L-121	0.34	0.49	0.34	2.61	0.34
1503	L-122	0.31	0.34	0.31	0.31	0.30
1504	L-123	0.31	0.31	0.46	0.01	0.01
1505	L-124	0.36	0.38	0.36	0.22	0.36
1506	L-124A	0.01	0.01	0.22	0.01	0.01
1507	L-124B	0.22	0.22	0.46	0.01	0.01
1508	L-125	0.36	0.36	0.43	0.28	0.34
1509	L-126	0.43	0.43	0.47	0.01	0.39
1510	L-127	0.19	0.23	0.19	0.01	0.19
1511	L-127A	0.01	0.01	0.47	0.01	0.01
1512	L-128	0.01	0.19	0.01	0.24	0.01
1513	L-141	0.24	0.24	0.36	0.01	0.01
1514	L-142	0.50	0.50	0.52	0.01	0.32
1515	L-142A	0.35	0.35	0.47	0.11	0.19
1516	L-142B	0.53	0.53	0.60	0.01	0.24
1517	L-143	0.52	0.52	0.64	0.19	0.32
1518	L-144	0.34	0.64	0.34	0.95	0.34
1519	L-145	0.37	0.37	0.48	0.23	0.34
1520	L-146	0.11	0.48	0.11	0.42	0.11
1521	L-156	0.10	0.10	0.10	0.01	0.09
1522	L-157	0.19	0.22	0.19	0.02	0.19
1523	L-157.1	0.14	0.14	0.37	0.01	0.01
1524	L-158	0.01	0.01	0.19	0.01	0.01
1525	L-160	0.13	0.22	0.13	0.22	0.13
1526	L-161	0.01	0.18	0.01	0.23	0.01
1527	L-201	0.64	0.64	0.72	0.38	0.45
1528	L-202	0.72	0.72	0.72	0.60	0.71
1529	L-203	0.39	0.72	0.39	0.67	0.39
1530	L-204	0.15	0.16	0.16	0.01	0.15
1531	L-205	0.01	0.16	0.01	0.39	0.01
1532	L-206	0.01	0.01	23.30	0.01	0.01
1533	L-321	0.14	0.40	0.14	2.64	0.14
1534	L-322	0.14	0.14	0.18	0.01	0.05
1535	L-323	0.18	0.18	0.28	0.01	0.02
1536	L-324	0.25	0.28	0.25	0.10	0.25
1537	L-325	0.01	0.25	0.01	0.12	0.01
1538	L-326	0.01	0.01	23.64	0.01	0.01
1539	L-402	0.01	0.01	0.19	0.01	0.01
1540	L-403	0.01	0.19	0.01	2.58	0.01
1541	L-405	0.01	0.01	0.22	0.01	0.01
1542	L-406	0.01	0.22	21.50	0.22	0.01
1543	L-407	22.66	22.66	23.50	0.01	0.01
1544	L-451	0.09	0.09	0.17	0.01	0.01
1545	L-452	0.17	0.17	0.31	0.01	0.01
1546	L-453	0.31	0.31	0.50	0.01	0.01
1547	L-454	0.50	0.50	0.63	0.27	0.42
1548	L-455	0.48	0.51	0.48	0.41	0.48

1549	L-455A	0.30	0.30	0.63	0.01	0.01
1550	L-456	0.56	0.56	0.65	0.26	0.41
1551	L-457	0.65	0.65	0.72	0.01	0.28
1552	L-458	0.72	0.72	0.76	0.46	0.68
1553	L-459	0.76	0.76	0.84	0.41	0.64
1554	L-460	0.42	0.45	0.42	0.23	0.42
1555	L-461	0.40	0.40	0.45	0.13	0.31
1556	L-462	0.40	0.45	0.40	0.01	0.40
1557	L-462A	0.32	0.32	1.00	0.01	0.01
1558	L-463	0.40	0.40	0.46	0.20	0.32
1559	L-464	0.46	0.46	22.66	0.03	0.34
1560	L-465	22.45	22.66	22.94	0.30	0.30
1561	L-466	22.64	22.94	22.66	0.24	0.01
1562	L-490	0.57	0.57	0.84	0.26	0.35
1563	L-491	0.36	0.36	0.57	0.01	0.07
1564	L-492	0.23	0.23	0.42	0.01	0.01
1565	L-493	0.15	0.15	0.23	0.01	0.01
1566	L-494	0.12	0.12	0.15	0.01	0.01
1567	L-495	0.44	0.44	0.63	0.01	0.01
1568	L-501	0.01	0.01	0.51	0.01	0.01
1569	L-502	0.01	0.01	23.26	0.01	0.01
1570	L-503	23.26	23.26	23.57	0.01	0.01
1571	L-601	0.43	0.43	0.47	0.05	0.25
1572	L-602	0.47	0.47	1.32	0.28	0.29
1573	L-603	1.16	1.32	23.27	0.76	0.73
1574	L-604	23.27	23.27	23.78	0.01	0.01
1575	L-706	0.01	0.01	0.01	11.22	0.01
1576	L-709-2	12.13	12.13	13.45	0.01	0.01
1577	L-709-3	7.02	7.02	12.13	0.01	0.01
1578	L-711	0.01	0.01	0.01	3.60	0.01
1579	L-714-2	10.73	10.73	13.31	0.01	0.01
1580	L-714-3	9.20	9.20	10.73	0.01	0.01
1581	L-740	0.01	0.97	0.01	0.01	0.01
1582	L-741	0.97	1.73	0.97	0.01	0.97
1583	L-742	0.01	0.01	1.73	0.01	0.01
1584	L-744	0.01	0.56	0.01	0.01	0.01
1585	L-760	14.52	14.72	18.86	0.30	0.27
1586	L-761	13.90	13.90	14.72	0.01	0.01
1587	L-762	10.85	10.85	13.90	0.01	0.01
1588	L-770	0.01	0.31	20.45	0.08	0.01
1589	L-771	0.24	2.28	0.24	2.43	0.24
1590	L-772	2.28	2.30	2.28	2.16	2.27
1591	L-773	2.29	2.29	2.30	0.01	2.23
1592	L-774	2.29	2.30	2.29	2.16	2.29
1593	L-775	2.40	2.45	2.40	2.23	2.40
1594	L-776	2.43	2.52	2.43	2.38	2.43
1595	L-777	2.45	2.46	2.45	2.31	2.45
1596	L-778	2.36	2.44	2.36	2.26	2.36
1597	L-779	2.44	2.45	2.44	2.39	2.44
1598	L-780	2.33	2.35	2.45	0.05	0.06
1599	L-781	2.27	2.28	2.30	0.05	0.06
1600	L-782	2.22	2.22	2.27	0.05	0.05
1601	L-783	2.18	2.18	2.22	0.05	0.05
1602	L-784	2.18	2.18	2.18	0.01	0.01
1603	L-805	0.01	12.10	0.01	17.70	0.01
1604	L-806	11.61	11.61	12.10	0.01	0.04
1605	L-807	11.29	11.29	11.61	0.01	0.02
1606	L-808	9.19	9.19	11.29	0.01	0.01
1607	L-809	0.01	0.01	11.87	0.01	0.01
1608	L-810	0.01	14.79	0.01	9.54	0.01
1609	L-811	13.92	13.92	14.79	8.42	12.79
1610	L-812	13.92	13.92	17.06	5.62	0.01
1611	L-813	17.06	17.06	17.06	14.80	15.98
1612	L-814	16.99	16.99	17.11	11.80	14.47
1613	L-815	16.80	16.81	16.99	13.86	14.03
1614	L-816	16.80	16.97	16.81	14.22	14.41

1615	L-817	17.06	17.06	17.10	2.35	16.92
1616	L-817-1	16.96	16.97	17.10	17.10	0.01
1617	L-818	16.98	16.98	17.06	12.87	16.14
1618	L-819	16.97	16.99	16.98	16.29	16.36
1619	L-820	16.98	16.98	16.99	12.43	16.25
1620	L-821	16.98	16.98	16.98	1.87	14.33
1621	L-822	16.92	16.92	16.97	0.01	0.01
1622	L-823	16.91	16.92	16.92	0.01	0.01
1623	L-826	0.01	0.01	21.60	0.01	0.01
1624	L-840	4.10	4.10	9.86	0.01	0.01
1625	L-841	4.10	4.10	23.79	0.01	0.01
1626	L-842	3.54	3.54	23.79	0.01	0.01
1627	L-844	3.02	3.02	3.54	0.01	0.01
1628	L-845	2.98	2.98	3.02	0.73	0.88
1629	L-846	2.98	2.98	3.78	0.01	0.01
1630	L-847	2.23	2.23	3.78	0.01	0.01
1631	L-850	0.01	2.89	0.01	2.66	0.01
1632	L-860	9.55	9.55	15.09	0.79	1.18
1633	L-870	16.94	16.94	23.78	0.01	0.01
1634	L-871	15.63	15.63	17.03	0.01	0.01
1635	L-871-1B	11.54	11.54	16.59	0.32	0.33
1636	L-871-1C	5.60	5.60	11.54	0.01	0.01
1637	L-900-1	0.65	1.84	0.65	1.79	0.65
1638	L-901	1.33	1.33	1.84	0.99	1.01
1639	L-902	0.93	0.93	1.33	0.01	0.01

1640  
1641

1642 Analysis begun on: Thu Oct 25 16:06:24 2018

1643 Analysis ended on: Thu Oct 25 16:06:47 2018

1644 Total elapsed time: 00:00:23





## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. 25-Year Existing Conditions Model
4. SWMM 10 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - No Offsite Flows
6. **SWMM 25 Year Output Report - With Offsite Flows**
7. SWMM 100 Year Output Report- No Offsite Flows

Gonzales Existing Conditions  
25-yr

\*\*\*\*\*  
NOTE: The summary statistics displayed in this report are  
based on results found at every computational time step,  
not just on results from each reporting time step.  
\*\*\*\*\*

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Analysis Options

\*\*\*\*\*

Flow Units ..... CFS

Process Models:

Rainfall/Runoff ..... NO  
RDII ..... NO  
Snowmelt ..... NO  
Groundwater ..... NO  
Flow Routing ..... YES  
Ponding Allowed ..... YES  
Water Quality ..... NO

Flow Routing Method ..... DYNWAVE

Starting Date ..... 06/13/2009 00:00:00

Ending Date ..... 06/14/2009 00:00:00

Antecedent Dry Days ..... 0.0

Report Time Step ..... 00:01:00

Routing Time Step ..... 1.00 sec

Variable Time Step ..... YES

Maximum Trials ..... 20

Number of Threads ..... 1

Head Tolerance ..... 0.005000 ft

\*\*\*\*\*

	Volume acre-feet	Volume 10 <sup>6</sup> gal
Flow Routing Continuity		
*****	-----	-----
Dry Weather Inflow .....	0.000	0.000
Wet Weather Inflow .....	0.000	0.000
Groundwater Inflow .....	0.000	0.000
RDII Inflow .....	0.000	0.000
External Inflow .....	317.357	103.416
External Outflow .....	272.079	88.661
Flooding Loss .....	0.515	0.168
Evaporation Loss .....	0.000	0.000
Exfiltration Loss .....	0.000	0.000
Initial Stored Volume ....	0.004	0.001
Final Stored Volume .....	40.891	13.325
Continuity Error (%) .....	1.221	

\*\*\*\*\*

Highest Continuity Errors

\*\*\*\*\*

Node S-150 (38.20%)

Node J-131 (6.63%)

Node J-701A (6.41%)

Node J-725-2 (5.13%)

Node J-846 (3.80%)

\*\*\*\*\*

Time-Step Critical Elements

67 \*\*\*\*\*  
 68 Link L-741 (4.35%)  
 69 Link L-740 (3.96%)  
 70 Link L-127 (1.63%)  
 71  
 72

73 \*\*\*\*\*  
 74 Highest Flow Instability Indexes  
 75 \*\*\*\*\*  
 76 Link L-761 (5)  
 77 Link L-131 (5)  
 78 Link L-762 (3)  
 79 Link L-773 (3)  
 80 Link L-771 (3)  
 81  
 82

83 \*\*\*\*\*  
 84 Routing Time Step Summary  
 85 \*\*\*\*\*  
 86 Minimum Time Step : 0.50 sec  
 87 Average Time Step : 0.98 sec  
 88 Maximum Time Step : 1.00 sec  
 89 Percent in Steady State : 0.00  
 90 Average Iterations per Step : 2.41  
 91 Percent Not Converging : 1.08  
 92  
 93

94 \*\*\*\*\*  
 95 Node Depth Summary  
 96 \*\*\*\*\*  
 97

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J-1001	JUNCTION	0.26	4.14	119.74	0 00:44	4.08
J-1002	JUNCTION	0.29	5.22	121.72	0 00:44	5.12
J-1003	JUNCTION	0.33	6.71	123.81	0 00:43	6.37
J-1004	JUNCTION	0.32	7.31	125.31	0 00:43	6.92
J-1005	JUNCTION	0.17	12.78	132.88	0 00:42	5.21
J-1006	JUNCTION	0.14	10.88	132.08	0 00:43	4.30
J-1007	JUNCTION	0.12	9.64	131.64	0 00:43	4.10
J-1008	JUNCTION	0.11	10.15	133.05	0 00:44	3.85
J-1009	JUNCTION	0.05	1.49	127.29	0 00:47	1.48
J-1010	JUNCTION	0.04	0.64	132.84	0 00:44	0.63
J-1020	JUNCTION	0.38	8.31	126.61	0 00:43	8.03
J-1021	JUNCTION	0.35	7.99	126.99	0 00:51	7.95
J-1022	JUNCTION	0.35	8.23	128.43	0 00:56	8.18
J-1023	JUNCTION	0.28	18.93	140.63	0 00:40	7.20
J-1024	JUNCTION	0.17	14.38	139.48	0 00:42	5.27
J-1101	JUNCTION	0.05	0.90	131.10	0 00:47	0.90
J-1102	JUNCTION	0.07	1.17	135.67	0 00:45	1.17
J-120	JUNCTION	0.02	1.27	165.07	0 00:49	1.25
J-121	JUNCTION	0.17	11.34	170.54	0 00:43	5.76
J-122	JUNCTION	0.12	10.93	170.13	0 00:43	4.97
J-123	JUNCTION	0.08	10.42	168.82	0 00:43	4.11
J-124	JUNCTION	0.14	11.23	167.93	0 00:43	5.08
J-124A	JUNCTION	0.03	0.83	162.03	0 00:49	0.83
J-124B	JUNCTION	0.05	8.92	167.82	0 00:43	2.99
J-125	JUNCTION	0.13	10.11	166.51	0 00:43	4.52
J-126	JUNCTION	0.12	4.16	158.86	0 00:43	3.26
J-127	JUNCTION	0.12	3.72	157.72	0 00:43	2.48
J-127A	JUNCTION	0.03	0.40	158.10	0 00:45	0.39
J-128	JUNCTION	0.13	3.52	157.32	0 00:43	2.29
J-129	JUNCTION	0.10	1.66	155.06	0 00:47	1.66

133	J-130	JUNCTION	0.09	1.92	153.72	0	00:47	1.92
134	J-131	JUNCTION	1.25	1.36	147.56	0	06:31	1.36
135	J-141	JUNCTION	0.10	16.15	173.85	0	00:41	9.81
136	J-142	JUNCTION	0.19	16.86	172.06	0	00:41	12.17
137	J-142A	JUNCTION	0.16	16.63	173.33	0	00:41	12.87
138	J-142B	JUNCTION	0.18	16.93	172.43	0	00:41	12.48
139	J-143	JUNCTION	0.19	16.89	171.89	0	00:41	11.81
140	J-144	JUNCTION	0.22	15.26	169.76	0	00:41	10.99
141	J-145	JUNCTION	0.15	14.58	168.78	0	00:40	8.37
142	J-146	JUNCTION	0.14	8.48	161.28	0	00:40	5.75
143	J-147	JUNCTION	0.10	1.64	153.24	0	00:45	1.64
144	J-148	JUNCTION	0.06	1.04	152.34	0	00:45	1.04
145	J-149	JUNCTION	2.56	2.70	148.44	0	00:45	2.70
146	J-151	JUNCTION	0.23	0.76	183.15	0	04:15	0.76
147	J-152	JUNCTION	0.01	0.14	166.14	0	00:45	0.14
148	J-153	JUNCTION	0.03	0.51	165.61	0	00:45	0.51
149	J-153A	JUNCTION	0.02	0.31	167.51	0	00:45	0.31
150	J-154	JUNCTION	0.03	0.49	163.99	0	00:46	0.49
151	J-155	JUNCTION	0.17	1.80	162.50	0	00:49	1.80
152	J-156	JUNCTION	0.06	1.78	162.38	0	00:48	1.78
153	J-157	JUNCTION	0.12	2.45	162.05	0	00:48	2.45
154	J-157-1	JUNCTION	0.01	0.16	164.76	0	00:46	0.16
155	J-157-2	JUNCTION	0.03	0.67	163.27	0	00:46	0.67
156	J-157-3	JUNCTION	0.06	0.92	163.22	0	00:46	0.92
157	J-157-3A	JUNCTION	0.04	0.66	166.06	0	00:45	0.66
158	J-157-4	JUNCTION	0.07	1.43	162.43	0	00:48	1.42
159	J-158	JUNCTION	0.32	2.20	161.40	0	00:48	2.20
160	J-159	JUNCTION	0.09	1.55	160.95	0	00:49	1.54
161	J-160	JUNCTION	0.13	2.76	158.06	0	00:49	2.76
162	J-161	JUNCTION	0.13	2.36	157.16	0	00:49	2.35
163	J-162	JUNCTION	0.09	1.48	155.38	0	00:49	1.48
164	J-163	JUNCTION	0.09	1.35	154.15	0	00:49	1.35
165	J-201	JUNCTION	0.29	14.61	160.41	0	00:35	14.61
166	J-202	JUNCTION	0.29	13.90	158.80	0	00:42	13.48
167	J-203	JUNCTION	0.22	10.70	154.60	0	00:42	9.73
168	J-204	JUNCTION	0.10	4.49	146.89	0	00:42	2.50
169	J-205	JUNCTION	0.13	2.44	143.84	0	00:42	2.22
170	J-206	JUNCTION	0.04	0.75	142.05	0	00:45	0.74
171	J-301	JUNCTION	0.04	0.60	143.10	0	00:45	0.60
172	J-302	JUNCTION	0.04	0.65	141.65	0	00:46	0.65
173	J-303	JUNCTION	0.04	0.60	140.40	0	00:46	0.60
174	J-304	JUNCTION	0.06	1.07	137.57	0	00:47	1.07
175	J-321	JUNCTION	0.15	15.26	152.96	0	00:43	6.14
176	J-322	JUNCTION	0.08	12.83	150.53	0	00:43	4.76
177	J-323	JUNCTION	0.08	12.05	148.55	0	00:43	4.65
178	J-324	JUNCTION	0.10	9.27	143.77	0	00:43	4.51
179	J-325	JUNCTION	0.10	6.73	140.43	0	00:43	3.34
180	J-326	JUNCTION	0.88	0.93	132.93	0	06:39	0.93
181	J-401	JUNCTION	0.01	0.18	144.28	0	00:45	0.18
182	J-402	JUNCTION	0.02	0.25	142.75	0	00:45	0.25
183	J-403	JUNCTION	0.10	1.66	134.86	0	00:44	1.62
184	J-404	JUNCTION	0.04	0.58	133.78	0	00:45	0.58
185	J-405	JUNCTION	0.04	1.22	130.72	0	00:47	1.22
186	J-406	JUNCTION	0.09	3.91	131.31	0	00:42	2.61
187	J-407	JUNCTION	3.61	3.87	127.27	0	12:25	3.85
188	J-451	JUNCTION	0.05	14.70	158.30	0	00:46	6.04
189	J-452	JUNCTION	0.06	20.10	161.60	0	00:45	7.72
190	J-453	JUNCTION	0.17	14.70	149.60	0	00:43	13.86
191	J-454	JUNCTION	0.25	15.18	146.58	0	00:43	15.18
192	J-455	JUNCTION	0.26	14.70	145.10	0	00:45	14.36
193	J-455A	JUNCTION	0.12	13.97	147.57	0	00:42	11.28
194	J-456	JUNCTION	0.25	14.64	144.64	0	00:45	14.16
195	J-457	JUNCTION	0.23	13.68	142.68	0	00:45	13.17
196	J-458	JUNCTION	0.25	13.46	141.86	0	00:45	12.85
197	J-459	JUNCTION	0.23	11.97	139.77	0	00:45	11.29
198	J-460	JUNCTION	0.24	10.92	138.22	0	00:44	10.12

199	J-461	JUNCTION	0.32	10.13	137.23	0	00:44	9.32
200	J-462	JUNCTION	1.02	8.89	135.19	0	00:44	8.24
201	J-462A	JUNCTION	0.11	16.30	144.10	0	00:42	7.02
202	J-463	JUNCTION	1.27	8.02	134.02	0	00:44	7.37
203	J-464	JUNCTION	2.19	6.32	131.32	0	00:45	6.01
204	J-465	JUNCTION	2.84	5.14	129.44	0	00:44	4.86
205	J-466	JUNCTION	3.28	4.23	128.03	0	00:42	3.44
206	J-481	JUNCTION	0.16	2.05	158.99	0	13:42	2.05
207	J-481B	JUNCTION	0.20	0.67	165.78	0	04:03	0.67
208	J-482	JUNCTION	1.04	14.12	158.96	0	13:39	14.12
209	J-482A	JUNCTION	0.23	2.09	194.93	0	13:15	2.09
210	J-482B	JUNCTION	0.13	2.00	270.84	0	13:08	2.00
211	J-483	JUNCTION	0.41	2.20	138.87	0	13:20	2.20
212	J-484	JUNCTION	0.41	1.66	131.36	0	14:11	1.66
213	J-484A	JUNCTION	0.03	0.30	270.30	0	13:15	0.30
214	J-485	JUNCTION	0.46	1.75	128.47	0	14:13	1.75
215	J-485A	JUNCTION	0.42	2.17	156.40	0	13:05	2.17
216	J-490	JUNCTION	0.21	14.07	142.77	0	00:44	12.69
217	J-491	JUNCTION	0.18	15.45	145.75	0	00:40	13.16
218	J-492	JUNCTION	0.11	14.50	149.60	0	00:42	11.30
219	J-493	JUNCTION	0.06	14.70	154.10	0	00:44	7.64
220	J-494	JUNCTION	0.06	14.90	155.10	0	00:44	7.10
221	J-495	JUNCTION	0.16	13.08	142.88	0	00:42	12.21
222	J-501	JUNCTION	0.02	0.38	145.98	0	00:45	0.38
223	J-502	JUNCTION	1.27	1.42	144.42	0	02:10	1.41
224	J-503	JUNCTION	4.83	9.83	149.13	0	00:44	5.10
225	J-601	JUNCTION	0.16	15.31	161.11	0	00:39	10.53
226	J-602	JUNCTION	0.16	15.30	160.80	0	00:39	10.15
227	J-603	JUNCTION	1.15	5.59	148.09	0	00:45	5.56
228	J-604	JUNCTION	1.36	2.34	144.54	0	00:52	2.29
229	J-701	JUNCTION	0.86	1.94	120.21	0	13:19	1.94
230	J-701A	JUNCTION	1.16	2.21	117.99	0	14:02	2.21
231	J-701B	JUNCTION	0.68	3.45	156.18	0	13:04	3.45
232	J-701C	JUNCTION	0.16	3.23	223.23	0	12:59	3.23
233	J-702	JUNCTION	0.75	1.00	120.53	0	08:42	1.00
234	J-702-1	JUNCTION	1.30	2.07	120.43	0	14:21	2.07
235	J-702B	JUNCTION	2.06	3.09	123.13	0	09:08	3.09
236	J-703	JUNCTION	2.03	3.17	124.06	0	09:08	3.17
237	J-704	JUNCTION	1.86	2.99	124.07	0	09:08	2.99
238	J-705	JUNCTION	1.81	2.86	124.07	0	09:08	2.86
239	J-706	JUNCTION	2.89	4.44	125.69	0	07:38	4.44
240	J-707	JUNCTION	2.88	4.43	125.69	0	07:38	4.43
241	J-708	JUNCTION	2.23	3.76	125.69	0	07:38	3.76
242	J-709-1	JUNCTION	1.79	3.21	126.85	0	06:57	3.21
243	J-709-2	JUNCTION	1.56	3.04	126.91	0	06:50	2.98
244	J-709-3	JUNCTION	1.07	2.51	126.91	0	06:50	2.45
245	J-710	JUNCTION	1.09	2.36	126.87	0	06:56	2.36
246	J-711	JUNCTION	2.19	3.93	128.48	0	06:50	3.93
247	J-712	JUNCTION	2.00	3.65	128.63	0	06:49	3.65
248	J-713	JUNCTION	2.83	4.71	129.43	0	06:46	4.71
249	J-714-1	JUNCTION	2.63	4.51	129.43	0	06:46	4.51
250	J-714-2	JUNCTION	2.15	4.01	129.45	0	06:50	4.00
251	J-714-3	JUNCTION	1.88	3.72	129.45	0	06:50	3.70
252	J-715	JUNCTION	2.58	4.45	129.45	0	06:46	4.45
253	J-715A	JUNCTION	0.00	0.00	134.57	0	00:00	0.00
254	J-716	JUNCTION	2.66	4.32	130.55	0	06:15	4.32
255	J-716A	JUNCTION	0.00	0.00	140.30	0	00:00	0.00
256	J-717-1	JUNCTION	1.43	3.06	130.56	0	06:14	3.06
257	J-718	JUNCTION	1.58	3.16	130.88	0	06:02	3.16
258	J-719	JUNCTION	1.60	3.22	131.19	0	05:55	3.22
259	J-720	JUNCTION	0.58	1.03	135.84	0	05:10	1.03
260	J-721	JUNCTION	0.92	2.05	140.13	0	05:25	2.05
261	J-722	JUNCTION	1.09	2.54	141.90	0	05:23	2.54
262	J-723	JUNCTION	0.67	1.46	147.18	0	05:30	1.46
263	J-723-1	JUNCTION	0.89	1.97	146.32	0	05:01	1.97
264	J-725	JUNCTION	0.71	1.69	148.10	0	05:28	1.69

265	J-725-1	JUNCTION	0.00	0.00	367.57	0	00:00	0.00
266	J-725-2	JUNCTION	0.41	0.73	176.30	0	04:36	0.73
267	J-725-3	JUNCTION	0.03	0.30	338.87	0	13:03	0.30
268	J-725A-1	JUNCTION	0.63	1.13	149.52	0	04:06	1.13
269	J-725A-2	JUNCTION	0.17	0.50	148.18	0	05:26	0.50
270	J-725A-3	JUNCTION	0.44	1.03	148.16	0	05:27	1.03
271	J-725B-2	JUNCTION	0.20	0.64	148.29	0	04:30	0.64
272	J-726	JUNCTION	2.32	2.95	148.15	0	05:27	2.95
273	J-730	JUNCTION	0.32	0.84	140.39	0	04:24	0.84
274	J-730-1	JUNCTION	0.24	0.62	131.40	0	04:26	0.62
275	J-731	JUNCTION	0.43	1.05	149.35	0	04:21	1.05
276	J-732	JUNCTION	0.10	0.81	151.61	0	00:46	0.81
277	J-732A	JUNCTION	0.00	0.00	154.84	0	00:00	0.00
278	J-732B	JUNCTION	0.00	0.00	160.69	0	00:00	0.00
279	J-733	JUNCTION	0.03	0.47	152.27	0	00:46	0.47
280	J-734	JUNCTION	0.03	0.41	154.21	0	00:46	0.41
281	J-735	JUNCTION	0.02	0.30	158.50	0	00:45	0.30
282	J-736	JUNCTION	0.00	0.00	159.40	0	00:00	0.00
283	J-737	JUNCTION	0.00	0.00	161.30	0	00:00	0.00
284	J-737A-1	JUNCTION	0.24	0.77	174.51	0	04:17	0.77
285	J-737A-2	JUNCTION	0.24	0.76	166.62	0	04:20	0.76
286	J-740	JUNCTION	0.93	3.68	152.58	0	04:20	3.68
287	J-741	JUNCTION	1.12	4.75	153.95	0	04:20	4.75
288	J-742	JUNCTION	0.62	2.48	157.98	0	04:20	2.48
289	J-743	JUNCTION	0.64	2.20	161.50	0	04:18	2.20
290	J-744	JUNCTION	2.01	4.53	165.83	0	04:18	4.53
291	J-745	JUNCTION	0.18	1.40	161.50	0	04:18	1.40
292	J-750	JUNCTION	0.07	1.02	127.96	0	00:53	1.02
293	J-751	JUNCTION	0.07	0.97	130.42	0	00:50	0.97
294	J-752	JUNCTION	0.02	0.28	131.57	0	00:48	0.28
295	J-753	JUNCTION	0.02	0.27	132.76	0	00:46	0.27
296	J-754	JUNCTION	0.01	0.22	134.24	0	00:45	0.22
297	J-760	JUNCTION	2.18	3.65	125.69	0	07:38	3.65
298	J-761	JUNCTION	2.00	3.47	125.69	0	07:38	3.47
299	J-762	JUNCTION	1.59	3.04	125.69	0	07:38	3.04
300	J-770	JUNCTION	0.14	8.57	143.17	0	00:42	3.24
301	J-771	JUNCTION	0.25	8.20	143.10	0	00:42	3.88
302	J-772	JUNCTION	0.34	8.96	144.46	0	00:42	5.07
303	J-773	JUNCTION	0.77	9.76	145.26	0	00:42	5.93
304	J-774	JUNCTION	0.46	9.73	146.13	0	00:42	6.51
305	J-775	JUNCTION	0.62	10.99	148.19	0	00:42	8.07
306	J-776	JUNCTION	0.75	11.74	149.34	0	00:42	9.07
307	J-777	JUNCTION	0.92	12.11	150.81	0	00:42	10.52
308	J-778	JUNCTION	0.97	11.32	151.42	0	00:42	10.73
309	J-779	JUNCTION	1.15	12.83	153.83	0	01:19	12.83
310	J-780	JUNCTION	1.01	11.60	154.10	0	01:20	11.56
311	J-781	JUNCTION	0.94	10.89	154.19	0	01:20	10.86
312	J-782	JUNCTION	0.85	9.93	154.23	0	01:20	9.90
313	J-783	JUNCTION	0.77	9.13	154.23	0	01:21	9.13
314	J-784	JUNCTION	0.69	8.34	154.24	0	01:21	8.34
315	J-790	JUNCTION	0.18	0.91	139.43	0	13:18	0.91
316	J-791	JUNCTION	0.36	1.94	141.29	0	13:18	1.94
317	J-792	JUNCTION	0.35	2.03	141.80	0	13:18	2.03
318	J-792A	JUNCTION	0.39	1.69	192.05	0	13:13	1.69
319	J-792B	JUNCTION	0.15	1.88	275.24	0	13:03	1.88
320	J-801	JUNCTION	0.69	1.35	116.81	0	02:57	1.35
321	J-802	JUNCTION	1.24	1.77	117.27	0	02:33	1.77
322	J-803	JUNCTION	1.01	1.54	117.31	0	02:33	1.54
323	J-804	JUNCTION	1.24	1.78	117.85	0	04:12	1.78
324	J-805	JUNCTION	2.90	4.48	120.68	0	05:05	4.48
325	J-806	JUNCTION	2.68	5.12	121.55	0	12:15	4.26
326	J-807	JUNCTION	2.52	4.99	121.60	0	12:11	4.09
327	J-808	JUNCTION	1.88	3.38	120.70	0	05:00	3.38
328	J-809	JUNCTION	0.43	1.00	125.80	0	02:13	1.00
329	J-810	JUNCTION	2.27	10.58	136.48	0	01:24	10.58
330	J-811	JUNCTION	2.61	11.39	138.21	0	01:29	11.39

331	J-812	JUNCTION	3.16	11.83	138.43	0	01:29	11.83
332	J-813	JUNCTION	4.64	12.91	138.51	0	01:35	12.91
333	J-814	JUNCTION	3.64	10.68	138.88	0	02:04	10.68
334	J-815	JUNCTION	4.25	9.88	139.68	0	02:40	9.88
335	J-816	JUNCTION	4.90	9.97	140.77	0	03:23	9.97
336	J-817	JUNCTION	5.51	10.74	141.74	0	03:12	10.74
337	J-817-1	JUNCTION	5.41	10.55	141.25	0	03:22	10.55
338	J-818	JUNCTION	6.02	11.53	142.83	0	02:39	11.53
339	J-819	JUNCTION	5.95	11.78	143.68	0	02:40	11.78
340	J-820	JUNCTION	6.10	12.19	144.39	0	02:37	12.19
341	J-821	JUNCTION	6.15	12.38	144.78	0	02:36	12.38
342	J-822	JUNCTION	5.85	12.15	145.55	0	02:36	12.15
343	J-823	JUNCTION	7.17	13.54	146.04	0	02:35	13.54
344	J-824	JUNCTION	0.05	0.70	132.20	0	00:47	0.70
345	J-825	JUNCTION	0.03	0.45	130.35	0	00:46	0.45
346	J-826	JUNCTION	2.32	4.19	129.44	0	06:46	4.19
347	J-830	JUNCTION	0.09	0.46	119.58	0	02:48	0.46
348	J-840	JUNCTION	0.94	8.46	138.56	0	01:26	8.46
349	J-841	JUNCTION	3.14	11.08	139.02	0	01:21	11.08
350	J-842	JUNCTION	0.85	8.46	139.40	0	01:20	8.45
351	J-844	JUNCTION	0.69	7.71	139.71	0	01:23	7.71
352	J-845	JUNCTION	0.70	7.76	139.86	0	01:21	7.74
353	J-846	JUNCTION	1.82	11.26	142.26	0	00:40	8.97
354	J-847	JUNCTION	0.43	10.20	144.40	0	00:40	5.80
355	J-850	JUNCTION	0.43	3.25	128.41	0	02:11	3.25
356	J-860	JUNCTION	1.89	12.00	138.52	0	00:10	12.00
357	J-868	JUNCTION	0.00	0.00	135.10	0	00:00	0.00
358	J-869	JUNCTION	0.00	0.00	135.40	0	00:00	0.00
359	J-870	JUNCTION	6.76	13.28	146.38	0	02:33	13.28
360	J-871-1A	JUNCTION	4.43	10.43	147.13	0	02:39	10.43
361	J-871-1B	JUNCTION	2.47	6.98	147.95	0	02:39	6.98
362	J-871-1C	JUNCTION	0.60	2.83	148.08	0	01:20	2.83
363	J-900-1	JUNCTION	0.42	11.44	139.38	0	00:41	11.44
364	J-901	JUNCTION	0.44	12.00	140.72	0	00:23	12.00
365	J-902	JUNCTION	0.36	11.82	142.02	0	00:31	11.82
366	O-1000	OUTFALL	0.00	0.00	125.59	0	00:00	0.00
367	O-700	OUTFALL	0.39	0.70	106.51	0	14:02	0.70
368	O-800	OUTFALL	0.36	0.78	111.15	0	02:57	0.78
369	O-900	OUTFALL	0.09	1.00	128.60	0	00:32	1.00
370	S-100	STORAGE	5.15	5.37	152.57	0	09:00	5.37
371	S-1000	STORAGE	7.77	8.15	115.25	0	05:44	8.15
372	S-1100	STORAGE	0.21	5.89	128.39	0	00:57	5.89
373	S-150	STORAGE	6.27	6.56	147.56	0	10:00	6.56
374	S-200	STORAGE	4.60	4.79	140.49	0	05:11	4.79
375	S-300	STORAGE	9.36	9.73	132.93	0	11:02	9.73
376	S-400	STORAGE	11.85	12.32	127.22	0	11:59	12.32
377	S-500	STORAGE	10.65	11.00	144.34	0	02:09	11.00
378	S-600	STORAGE	8.80	9.00	143.57	0	01:00	9.00

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381 \*\*\*\*\*  
382 Node Inflow Summary  
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386			Maximum	Maximum		Lateral		
387			Total	Flow		Inflow		
388			Inflow	Total	Time of Max	Volume		
389	Node	Type	Volume	Inflow	Occurrence	10^6 gal		10^6
390	gal	Percent	CFS	CFS	days hr:min			

391	J-1001		JUNCTION	0.74	63.63	0	00:48	0.0164
	2.08	0.030						
392	J-1002		JUNCTION	0.44	62.97	0	00:48	0.00975
	2.06	-0.012						
393	J-1003		JUNCTION	5.63	62.58	0	00:48	0.125
	2.05	-0.009						
394	J-1004		JUNCTION	0.94	57.76	0	00:50	0.0208
	1.93	-0.019						
395	J-1005		JUNCTION	0.31	10.28	0	00:46	0.00687
	0.242	-0.152						
396	J-1006		JUNCTION	0.28	9.98	0	00:46	0.0062
	0.236	0.220						
397	J-1007		JUNCTION	0.57	9.71	0	00:46	0.0126
	0.23	-0.019						
398	J-1008		JUNCTION	3.16	10.14	0	00:44	0.07
	0.217	-0.046						
399	J-1009		JUNCTION	0.00	6.82	0	00:44	0
	0.147	0.081						
400	J-1010		JUNCTION	6.65	6.65	0	00:45	0.147
	0.147	-0.004						
401	J-1020		JUNCTION	31.53	48.03	0	00:55	0.698
	1.67	-0.017						
402	J-1021		JUNCTION	0.50	30.27	0	01:07	0.0111
	0.967	-0.005						
403	J-1022		JUNCTION	0.81	43.75	0	00:52	0.0179
	0.968	0.890						
404	J-1023		JUNCTION	0.60	18.41	0	00:45	0.0133
	0.407	-0.298						
405	J-1024		JUNCTION	17.81	17.81	0	00:45	0.394
	0.394	0.247						
406	J-1101		JUNCTION	5.98	16.15	0	00:45	0.132
	0.362	0.072						
407	J-1102		JUNCTION	10.37	10.37	0	00:45	0.23
	0.23	-0.007						
408	J-120		JUNCTION	0.68	1.22	0	00:45	0.0151
	0.0156	-0.056						
409	J-121		JUNCTION	4.99	5.12	0	00:43	0.111
	0.126	0.000						
410	J-122		JUNCTION	0.48	5.56	0	00:43	0.0106
	0.136	0.024						
411	J-123		JUNCTION	0.64	6.14	0	00:43	0.0142
	0.15	-0.028						
412	J-124		JUNCTION	0.27	8.20	0	00:51	0.00598
	0.211	0.001						
413	J-124A		JUNCTION	1.47	1.47	0	00:45	0.0326
	0.0326	-0.022						
414	J-124B		JUNCTION	0.98	2.24	0	00:52	0.0217
	0.0543	0.002						
415	J-125		JUNCTION	0.41	8.54	0	00:50	0.00908
	0.22	0.013						
416	J-126		JUNCTION	2.27	10.57	0	00:45	0.0503
	0.27	-0.025						
417	J-127		JUNCTION	0.00	11.99	0	00:45	0
	0.302	-0.033						
418	J-127A		JUNCTION	1.45	1.45	0	00:45	0.0321
	0.0321	0.167						
419	J-128		JUNCTION	1.00	13.13	0	00:45	0.0221
	0.324	0.002						
420	J-129		JUNCTION	0.58	13.56	0	00:45	0.0128
	0.337	0.024						
421	J-130		JUNCTION	1.95	15.25	0	00:46	0.0432
	0.38	-0.059						
422	J-131		JUNCTION	0.21	15.41	0	00:47	0.00465
	0.407	7.101						



423	J-141		JUNCTION	2.23	2.23	0	00:45	0.0494
	0.0494	0.023						
424	J-142		JUNCTION	0.00	6.99	0	00:45	0
	0.155	-0.042						
425	J-142A		JUNCTION	4.32	4.32	0	00:45	0.0957
	0.0957	0.130						
426	J-142B		JUNCTION	0.44	4.76	0	00:45	0.00975
	0.105	-0.145						
427	J-143		JUNCTION	0.57	7.56	0	00:45	0.0126
	0.168	-0.026						
428	J-144		JUNCTION	1.78	9.34	0	00:45	0.0394
	0.207	-0.074						
429	J-145		JUNCTION	2.00	11.34	0	00:45	0.0443
	0.251	0.034						
430	J-146		JUNCTION	1.83	13.17	0	00:45	0.0405
	0.292	-0.007						
431	J-147		JUNCTION	0.58	13.75	0	00:45	0.0128
	0.305	0.002						
432	J-148		JUNCTION	1.19	14.87	0	00:45	0.0264
	0.331	-0.000						
433	J-149		JUNCTION	0.15	14.97	0	00:45	0.00332
	0.334	-0.118						
434	J-151		JUNCTION	25.37	25.37	0	04:15	3.18
	3.18	-0.002						
435	J-152		JUNCTION	0.16	0.16	0	00:45	0.00354
	0.00354	-0.011						
436	J-153		JUNCTION	0.36	1.85	0	00:45	0.00797
	0.041	-0.033						
437	J-153A		JUNCTION	1.33	1.33	0	00:45	0.0295
	0.0295	0.013						
438	J-154		JUNCTION	0.51	2.32	0	00:45	0.0113
	0.0523	0.066						
439	J-155		JUNCTION	0.94	3.19	0	00:46	0.0208
	0.0731	-0.008						
440	J-156		JUNCTION	0.53	3.47	0	00:49	0.0117
	0.0848	-0.057						
441	J-157		JUNCTION	0.93	10.10	0	00:48	0.0206
	0.244	-0.012						
442	J-157-1		JUNCTION	0.20	0.20	0	00:45	0.00443
	0.00443	0.054						
443	J-157-2		JUNCTION	1.06	1.25	0	00:45	0.0235
	0.0279	0.003						
444	J-157-3		JUNCTION	0.77	4.92	0	00:46	0.0171
	0.113	0.006						
445	J-157-3A		JUNCTION	3.06	3.06	0	00:45	0.0678
	0.0678	-0.001						
446	J-157-4		JUNCTION	1.15	6.03	0	00:46	0.0255
	0.138	0.017						
447	J-158		JUNCTION	0.74	10.73	0	00:48	0.0164
	0.26	0.068						
448	J-159		JUNCTION	0.11	10.82	0	00:48	0.00244
	0.262	-0.001						
449	J-160		JUNCTION	1.23	11.90	0	00:48	0.0272
	0.29	0.230						
450	J-161		JUNCTION	0.57	12.39	0	00:49	0.0126
	0.302	-0.698						
451	J-162		JUNCTION	3.37	15.34	0	00:48	0.0746
	0.378	0.127						
452	J-163		JUNCTION	0.00	15.32	0	00:49	0
	0.378	0.167						
453	J-201		JUNCTION	6.60	6.60	0	00:45	0.146
	0.146	-0.032						
454	J-202		JUNCTION	2.71	8.04	0	00:42	0.06
	0.204	-0.016						
455	J-203		JUNCTION	2.80	10.62	0	00:45	0.062
	0.266	-0.014						

456	J-204		JUNCTION	2.46	13.08	0	00:45	0.0545
	0.32	-0.001						
457	J-205		JUNCTION	1.86	14.94	0	00:45	0.0412
	0.361	-0.003						
458	J-206		JUNCTION	0.00	14.95	0	00:45	0
	0.361	-0.007						
459	J-301		JUNCTION	1.86	1.86	0	00:45	0.0412
	0.0412	-0.007						
460	J-302		JUNCTION	1.47	3.27	0	00:45	0.0326
	0.0738	0.002						
461	J-303		JUNCTION	0.30	3.54	0	00:46	0.00664
	0.0804	0.002						
462	J-304		JUNCTION	2.64	6.08	0	00:45	0.0585
	0.139	-0.091						
463	J-321		JUNCTION	7.85	7.85	0	00:45	0.174
	0.174	-0.002						
464	J-322		JUNCTION	1.13	8.98	0	00:45	0.025
	0.199	0.002						
465	J-323		JUNCTION	0.91	9.89	0	00:45	0.0202
	0.219	-0.004						
466	J-324		JUNCTION	0.77	10.66	0	00:45	0.0171
	0.236	-0.000						
467	J-325		JUNCTION	0.85	11.51	0	00:45	0.0188
	0.255	-0.033						
468	J-326		JUNCTION	1.67	18.95	0	00:45	0.037
	0.432	0.753						
469	J-401		JUNCTION	0.33	0.33	0	00:45	0.00731
	0.00731	0.000						
470	J-402		JUNCTION	1.00	1.33	0	00:45	0.0221
	0.0295	-0.034						
471	J-403		JUNCTION	1.68	2.99	0	00:45	0.0372
	0.0667	0.019						
472	J-404		JUNCTION	0.98	3.97	0	00:45	0.0217
	0.0884	0.001						
473	J-405		JUNCTION	1.28	5.27	0	00:45	0.0283
	0.117	-0.006						
474	J-406		JUNCTION	0.35	5.30	0	00:47	0.00775
	0.124	0.425						
475	J-407		JUNCTION	0.85	33.43	0	00:45	0.0188
	0.791	0.620						
476	J-451		JUNCTION	2.06	2.18	0	00:45	0.0456
	0.0457	-0.109						
477	J-452		JUNCTION	0.00	3.11	0	00:45	0
	0.0463	-0.015						
478	J-453		JUNCTION	1.94	3.97	0	00:59	0.043
	0.0893	-0.050						
479	J-454		JUNCTION	2.13	5.76	0	00:47	0.0472
	0.136	-0.040						
480	J-455		JUNCTION	1.70	7.88	0	00:49	0.0377
	0.2	-0.007						
481	J-455A		JUNCTION	1.22	1.92	0	00:42	0.027
	0.0273	-0.136						
482	J-456		JUNCTION	0.34	8.17	0	00:49	0.00753
	0.207	-0.011						
483	J-457		JUNCTION	0.60	8.70	0	00:49	0.0133
	0.221	-0.032						
484	J-458		JUNCTION	0.38	9.03	0	00:49	0.00842
	0.229	-0.011						
485	J-459		JUNCTION	0.58	9.54	0	00:49	0.0128
	0.242	-0.005						
486	J-460		JUNCTION	0.54	21.22	0	00:47	0.012
	0.525	-0.006						
487	J-461		JUNCTION	0.48	21.67	0	00:47	0.0106
	0.536	-0.018						
488	J-462		JUNCTION	1.50	24.82	0	00:45	0.0332
	0.61	0.470						

489	J-462A 0.0401	-0.264	JUNCTION	1.80	3.04	0	00:42	0.0399
490	J-463 0.62	0.369	JUNCTION	0.54	25.37	0	00:45	0.012
491	J-464 0.65	0.771	JUNCTION	1.47	26.83	0	00:45	0.0326
492	J-465 0.649	0.577	JUNCTION	0.21	27.05	0	00:45	0.00465
493	J-466 0.652	0.555	JUNCTION	0.28	27.33	0	00:45	0.0062
494	J-481 1.86	0.054	JUNCTION	0.00	44.52	0	13:16	0
495	J-481B 1.67	-0.062	JUNCTION	14.13	14.13	0	04:00	1.67
496	J-482 9.92	0.696	JUNCTION	8.32	221.45	0	13:13	0.614
497	J-482A 7.42	-0.333	JUNCTION	15.15	225.10	0	13:10	1.12
498	J-482B 6.29	-0.146	JUNCTION	224.33	224.33	0	13:09	6.29
499	J-483 10.2	-0.095	JUNCTION	6.16	147.34	0	13:41	0.5
500	J-484 14.2	0.762	JUNCTION	23.39	177.51	0	13:25	2.76
501	J-484A 1.23	-2.115	JUNCTION	39.02	39.02	0	12:53	1.23
502	J-485 14.2	0.022	JUNCTION	1.62	133.28	0	14:12	0.108
503	J-485A 2.13	0.191	JUNCTION	16.89	29.94	0	12:56	2
504	J-490 0.27	-0.047	JUNCTION	1.59	12.22	0	00:45	0.0352
505	J-491 0.175	-0.022	JUNCTION	1.86	7.93	0	00:45	0.0412
506	J-492 0.134	-0.011	JUNCTION	3.05	6.07	0	00:45	0.0676
507	J-493 0.0667	-0.011	JUNCTION	0.00	3.01	0	00:45	0
508	J-494 0.0667	-0.022	JUNCTION	3.01	3.01	0	00:45	0.0667
509	J-495 0.0598	-0.053	JUNCTION	2.70	2.70	0	00:45	0.0598
510	J-501 0.0279	-0.016	JUNCTION	1.26	1.26	0	00:45	0.0279
511	J-502 0.124	2.275	JUNCTION	4.25	5.48	0	00:45	0.0941
512	J-503 0.18	2.574	JUNCTION	2.58	8.02	0	00:45	0.0571
513	J-601 0.099	-0.010	JUNCTION	4.47	4.47	0	00:45	0.099
514	J-602 0.133	-0.147	JUNCTION	1.54	6.01	0	00:45	0.0341
515	J-603 0.218	1.772	JUNCTION	3.82	9.83	0	00:45	0.0846
516	J-604 0.214	0.371	JUNCTION	0.00	9.83	0	00:45	0
517	J-701 68.4	1.094	JUNCTION	14.31	590.32	0	13:04	1.16
518	J-701A 70.9	6.851	JUNCTION	23.44	514.87	0	13:24	3.46
519	J-701B 18.6	-2.120	JUNCTION	31.34	618.93	0	12:59	3.7
520	J-701C 13.6	6.536	JUNCTION	654.35	654.35	0	12:53	13.6
521	J-702 35.4	0.656	JUNCTION	11.90	92.43	0	08:32	0.264

522	J-702-1 49.6	2.511	JUNCTION	0.00	183.89	0	14:13	0
523	J-702B 28.1	0.014	JUNCTION	2.25	79.68	0	09:08	0.0498
524	J-703 28.5	1.395	JUNCTION	3.42	80.79	0	08:33	0.0757
525	J-704 28.8	1.211	JUNCTION	5.60	87.93	0	07:40	0.124
526	J-705 28.3	-0.017	JUNCTION	3.27	91.22	0	07:30	0.0724
527	J-706 28.2	0.087	JUNCTION	3.23	91.34	0	07:27	0.0715
528	J-707 28.2	0.305	JUNCTION	2.01	92.80	0	07:08	0.0445
529	J-708 27.9	0.048	JUNCTION	8.66	95.27	0	06:52	0.192
530	J-709-1 27.8	0.017	JUNCTION	7.74	95.38	0	06:50	0.171
531	J-709-2 0.0573	0.127	JUNCTION	0.43	2.53	0	00:45	0.00952
532	J-709-3 0.0474	-0.038	JUNCTION	2.13	2.13	0	00:45	0.0472
533	J-710 27.5	0.011	JUNCTION	10.27	95.49	0	06:46	0.227
534	J-711 27.3	0.006	JUNCTION	4.96	95.52	0	06:45	0.11
535	J-712 27.2	0.006	JUNCTION	4.30	95.54	0	06:43	0.0952
536	J-713 27.2	0.230	JUNCTION	10.96	95.98	0	06:32	0.243
537	J-714-1 27	0.196	JUNCTION	0.00	97.71	0	06:16	0
538	J-714-2 0.162	0.020	JUNCTION	0.10	7.23	0	00:45	0.00221
539	J-714-3 0.159	-0.008	JUNCTION	7.15	7.15	0	00:45	0.158
540	J-715 26.7	0.006	JUNCTION	0.00	100.43	0	06:05	0
541	J-715A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
542	J-716 26.9	0.590	JUNCTION	1.12	102.46	0	05:50	0.0248
543	J-716A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
544	J-717-1 26.9	0.023	JUNCTION	8.42	105.92	0	05:35	0.186
545	J-718 26.7	-0.007	JUNCTION	0.00	105.98	0	05:35	0
546	J-719 26	0.133	JUNCTION	31.70	110.72	0	05:10	0.702
547	J-720 25.3	-0.065	JUNCTION	12.55	111.55	0	13:19	0.278
548	J-721 17.7	0.009	JUNCTION	7.31	92.91	0	05:23	0.162
549	J-722 17.6	0.184	JUNCTION	7.46	93.29	0	05:01	0.165
550	J-723 10.1	0.058	JUNCTION	0.00	52.80	0	05:28	0
551	J-723-1 17.4	0.107	JUNCTION	0.00	93.68	0	04:37	0
552	J-725 10.1	0.045	JUNCTION	0.00	54.12	0	05:17	0
553	J-725-1 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
554	J-725-2 3.84	5.407	JUNCTION	30.09	33.95	0	13:03	2.67

555	J-725-3		JUNCTION	42.04	42.04	0	12:47	1.17
	1.17	-0.385						
556	J-725A-1		JUNCTION	0.00	13.51	0	04:36	0
	3.64	0.424						
557	J-725A-2		JUNCTION	0.00	13.97	0	04:51	0
	3.63	0.005						
558	J-725A-3		JUNCTION	0.00	13.95	0	04:51	0
	3.63	0.020						
559	J-725B-2		JUNCTION	55.08	55.08	0	04:30	7.32
	7.32	0.000						
560	J-726		JUNCTION	41.98	41.98	0	05:15	6.51
	6.51	-0.028						
561	J-730		JUNCTION	6.83	50.52	0	04:22	0.151
	6.96	-0.002						
562	J-730-1		JUNCTION	0.00	50.45	0	04:25	0
	6.96	0.097						
563	J-731		JUNCTION	1.59	50.53	0	04:20	0.0352
	6.81	0.018						
564	J-732		JUNCTION	1.04	3.56	0	00:46	0.023
	0.0824	0.004						
565	J-732A		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
566	J-732B		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
567	J-733		JUNCTION	0.70	2.58	0	00:46	0.0155
	0.0594	0.001						
568	J-734		JUNCTION	0.89	1.93	0	00:45	0.0197
	0.0439	0.024						
569	J-735		JUNCTION	1.09	1.09	0	00:45	0.0241
	0.0241	-0.042						
570	J-736		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
571	J-737		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
572	J-737A-1		JUNCTION	0.00	25.27	0	04:16	0
	3.18	0.000						
573	J-737A-2		JUNCTION	0.00	25.15	0	04:18	0
	3.18	0.001						
574	J-740		JUNCTION	0.12	50.53	0	04:20	0.00266
	6.7	-0.000						
575	J-741		JUNCTION	4.00	50.53	0	04:20	0.0886
	6.69	-0.002						
576	J-742		JUNCTION	2.46	50.59	0	04:18	0.0545
	6.6	0.001						
577	J-743		JUNCTION	0.00	50.59	0	04:18	0
	6.55	0.001						
578	J-744		JUNCTION	28.70	50.61	0	04:17	3.39
	6.57	0.367						
579	J-745		JUNCTION	0.00	0.08	0	04:04	0
	0.0011	0.013						
580	J-750		JUNCTION	0.00	14.63	0	00:51	0
	0.363	-1.830						
581	J-751		JUNCTION	3.19	15.27	0	00:48	0.0707
	0.363	0.000						
582	J-752		JUNCTION	1.43	12.65	0	00:47	0.0317
	0.292	-0.010						
583	J-753		JUNCTION	2.90	11.48	0	00:45	0.0642
	0.26	0.000						
584	J-754		JUNCTION	8.85	8.85	0	00:45	0.196
	0.196	-0.002						
585	J-760		JUNCTION	10.77	11.35	0	00:45	0.239
	0.253	0.031						
586	J-761		JUNCTION	0.00	0.68	0	00:16	0
	0.0149	-0.113						
587	J-762		JUNCTION	0.58	0.58	0	00:45	0.0128
	0.0133	-0.083						

588	J-770		JUNCTION	5.36	14.61	0	00:45	0.119
	0.694	0.324						
589	J-771		JUNCTION	0.00	9.36	0	00:42	0
	0.575	0.003						
590	J-772		JUNCTION	0.43	9.36	0	00:42	0.00952
	0.575	-0.002						
591	J-773		JUNCTION	0.00	9.03	0	00:56	0
	0.565	-0.022						
592	J-774		JUNCTION	0.77	9.03	0	00:57	0.0171
	0.566	0.024						
593	J-775		JUNCTION	0.77	8.58	0	01:07	0.0171
	0.549	0.011						
594	J-776		JUNCTION	0.00	8.27	0	01:21	0
	0.531	-0.018						
595	J-777		JUNCTION	1.21	8.27	0	01:21	0.0268
	0.532	0.026						
596	J-778		JUNCTION	0.70	7.95	0	01:35	0.0155
	0.505	-0.003						
597	J-779		JUNCTION	17.52	19.07	0	00:45	0.388
	0.49	-0.005						
598	J-780		JUNCTION	0.23	5.33	0	02:40	0.00509
	0.104	-0.012						
599	J-781		JUNCTION	1.95	5.32	0	02:40	0.0432
	0.105	0.008						
600	J-782		JUNCTION	0.60	5.25	0	02:40	0.0133
	0.0735	-0.068						
601	J-783		JUNCTION	0.54	5.53	0	02:42	0.012
	0.055	-0.073						
602	J-784		JUNCTION	1.24	4.58	0	00:32	0.0275
	0.0303	-0.122						
603	J-790		JUNCTION	2.32	92.56	0	13:18	0.0514
	7.3	0.003						
604	J-791		JUNCTION	0.00	92.56	0	13:18	0
	7.24	0.002						
605	J-792		JUNCTION	8.12	93.89	0	13:13	0.719
	7.25	0.051						
606	J-792A		JUNCTION	29.61	96.92	0	13:05	3.06
	6.54	0.162						
607	J-792B		JUNCTION	97.59	97.59	0	12:59	3.47
	3.47	-0.337						
608	J-801		JUNCTION	5.46	43.78	0	02:47	0.242
	9.25	0.335						
609	J-802		JUNCTION	7.99	18.13	0	02:30	0.177
	6.92	0.091						
610	J-803		JUNCTION	0.00	17.42	0	05:04	0
	6.75	0.023						
611	J-804		JUNCTION	2.78	17.42	0	05:03	0.0616
	6.75	0.002						
612	J-805		JUNCTION	0.75	53.35	0	01:32	0.0166
	6.69	0.087						
613	J-806		JUNCTION	1.73	53.14	0	01:33	0.0383
	6.68	0.098						
614	J-807		JUNCTION	0.00	52.80	0	01:33	0
	6.64	0.033						
615	J-808		JUNCTION	62.12	81.08	0	01:30	2.75
	6.67	0.430						
616	J-809		JUNCTION	2.83	21.49	0	01:58	0.0627
	3.91	-0.272						
617	J-810		JUNCTION	1.58	14.65	0	01:30	0.035
	3.23	-0.005						
618	J-811		JUNCTION	0.61	11.03	0	00:47	0.0135
	2.84	-0.005						
619	J-812		JUNCTION	8.83	13.10	0	00:45	0.196
	2.61	0.007						
620	J-813		JUNCTION	3.74	6.42	0	05:16	0.0828
	2.42	0.001						

621	J-814		JUNCTION	10.79	10.79	0	00:45	0.239
	2.39	0.003						
622	J-815		JUNCTION	8.86	12.47	0	00:45	0.196
	2.16	0.004						
623	J-816		JUNCTION	2.96	8.39	0	00:53	0.0656
	1.91	-0.000						
624	J-817		JUNCTION	2.30	6.98	0	00:47	0.0509
	1.73	0.001						
625	J-817-1		JUNCTION	4.55	8.11	0	00:45	0.101
	1.83	0.002						
626	J-818		JUNCTION	6.32	8.22	0	00:45	0.14
	1.68	0.012						
627	J-819		JUNCTION	2.83	6.96	0	00:45	0.0627
	1.54	-0.003						
628	J-820		JUNCTION	4.20	8.13	0	00:45	0.093
	1.48	-0.002						
629	J-821		JUNCTION	4.22	6.27	0	00:45	0.0935
	1.39	0.009						
630	J-822		JUNCTION	1.60	4.38	0	00:45	0.0354
	1.29	-0.013						
631	J-823		JUNCTION	1.46	6.23	0	00:15	0.0323
	1.26	0.188						
632	J-824		JUNCTION	2.35	2.35	0	00:45	0.052
	0.052	0.054						
633	J-825		JUNCTION	2.16	4.26	0	00:45	0.0478
	0.0999	0.017						
634	J-826		JUNCTION	0.00	99.37	0	06:09	0
	26.8	0.016						
635	J-830		JUNCTION	25.80	25.80	0	02:45	2.1
	2.1	-0.024						
636	J-840		JUNCTION	0.39	3.94	0	00:50	0.00864
	0.211	-0.017						
637	J-841		JUNCTION	1.19	3.63	0	00:51	0.0264
	0.204	0.865						
638	J-842		JUNCTION	1.80	2.78	0	00:58	0.0399
	0.178	0.002						
639	J-844		JUNCTION	0.61	6.33	0	00:45	0.0135
	0.138	-0.034						
640	J-845		JUNCTION	2.66	5.72	0	00:45	0.0589
	0.125	-0.142						
641	J-846		JUNCTION	0.80	3.06	0	00:45	0.0177
	0.0688	3.947						
642	J-847		JUNCTION	2.26	2.26	0	00:45	0.0501
	0.0501	-0.117						
643	J-850		JUNCTION	11.99	11.99	0	01:45	0.62
	0.62	-0.010						
644	J-860		JUNCTION	10.04	10.04	0	01:15	0.371
	0.371	-0.017						
645	J-868		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
646	J-869		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
647	J-870		JUNCTION	5.74	5.74	0	00:45	0.127
	1.23	0.225						
648	J-871-1A		JUNCTION	25.64	29.66	0	00:45	0.568
	1.13	1.833						
649	J-871-1B		JUNCTION	20.16	23.42	0	00:45	0.447
	0.611	1.987						
650	J-871-1C		JUNCTION	6.44	6.44	0	00:45	0.143
	0.18	14.091						
651	J-900-1		JUNCTION	10.79	12.21	0	00:45	0.239
	0.31	-0.040						
652	J-901		JUNCTION	1.59	3.81	0	00:45	0.0352
	0.0844	0.141						
653	J-902		JUNCTION	2.22	2.22	0	00:45	0.0492
	0.0492	-0.113						

654	O-1000 0	0.000 gal	OUTFALL	0.00	0.00	0	00:00	0
655	O-700 79.1	0.000	OUTFALL	55.70	335.01	0	14:02	12.8
656	O-800 9.22	0.000	OUTFALL	0.00	42.28	0	02:57	0
657	O-900 0.306	0.000	OUTFALL	0.00	10.30	0	00:42	0
658	S-100 0.394	0.328	STORAGE	0.76	15.94	0	00:49	0.0168
659	S-1000 2.54	0.005	STORAGE	20.83	83.17	0	00:45	0.461
660	S-1100 0.539	-0.673	STORAGE	7.81	34.87	0	00:46	0.173
661	S-150 0.718	61.801	STORAGE	0.14	30.27	0	00:46	0.0031
662	S-200 0.369	0.495	STORAGE	0.34	15.26	0	00:45	0.00753
663	S-300 0.434	1.340	STORAGE	0.25	19.00	0	00:45	0.00554
664	S-400 0.794	0.432	STORAGE	0.40	33.45	0	00:46	0.00886
665	S-500 0.302	3.195	STORAGE	5.78	13.79	0	00:45	0.128
666	S-600 0.223	0.610	STORAGE	0.45	10.28	0	00:45	0.00997

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670 Node Surcharge Summary  
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673 Surcharging occurs when water rises above the top of the highest conduit.  
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675			Hours	Max. Height	Min. Depth
676			Surcharged	Above Crown	Below Rim
677	Node	Type		Feet	Feet
678	-----				
679	J-1001	JUNCTION	0.40	0.636	5.774
680	J-1002	JUNCTION	0.60	1.720	4.690
681	J-1003	JUNCTION	0.74	3.205	3.955
682	J-1004	JUNCTION	0.72	3.813	3.127
683	J-1005	JUNCTION	0.45	9.779	0.000
684	J-1006	JUNCTION	0.32	8.385	0.000
685	J-1007	JUNCTION	0.30	7.642	0.278
686	J-1008	JUNCTION	0.19	7.851	0.000
687	J-1020	JUNCTION	0.89	5.315	1.785
688	J-1021	JUNCTION	0.85	4.987	2.293
689	J-1022	JUNCTION	0.15	0.234	2.046
690	J-1023	JUNCTION	0.73	15.930	0.000
691	J-1024	JUNCTION	0.57	12.380	0.000
692	J-120	JUNCTION	0.01	0.015	3.735
693	J-121	JUNCTION	0.49	10.093	0.000
694	J-122	JUNCTION	0.34	9.685	0.000
695	J-123	JUNCTION	0.31	9.168	0.000
696	J-124	JUNCTION	0.38	9.727	0.000
697	J-124B	JUNCTION	0.22	7.669	0.000
698	J-125	JUNCTION	0.36	8.612	0.000
699	J-126	JUNCTION	0.43	2.663	1.097
700	J-127	JUNCTION	0.23	1.721	3.149
701	J-128	JUNCTION	0.19	1.515	2.575
702	J-141	JUNCTION	0.24	14.653	0.000
703	J-142	JUNCTION	0.36	14.860	0.000
704	J-142A	JUNCTION	0.35	15.380	0.000
705	J-142B	JUNCTION	0.47	15.480	0.000
706	J-143	JUNCTION	0.52	15.388	0.000



707	J-144	JUNCTION	0.64	13.756	0.000
708	J-145	JUNCTION	0.34	12.983	0.000
709	J-146	JUNCTION	0.48	6.976	0.000
710	J-156	JUNCTION	0.10	0.185	4.545
711	J-158	JUNCTION	0.19	0.204	6.606
712	J-161	JUNCTION	0.13	0.258	7.982
713	J-201	JUNCTION	0.64	13.360	0.000
714	J-202	JUNCTION	0.72	12.655	0.000
715	J-203	JUNCTION	0.72	9.451	0.000
716	J-204	JUNCTION	0.16	2.492	0.308
717	J-205	JUNCTION	0.16	0.436	2.434
718	J-321	JUNCTION	0.40	13.760	0.000
719	J-322	JUNCTION	0.14	11.330	0.000
720	J-323	JUNCTION	0.18	10.552	0.000
721	J-324	JUNCTION	0.28	7.774	0.000
722	J-325	JUNCTION	0.25	5.235	0.000
723	J-403	JUNCTION	0.19	0.410	7.330
724	J-406	JUNCTION	0.22	2.663	2.157
725	J-407	JUNCTION	21.50	0.218	2.562
726	J-451	JUNCTION	0.09	13.450	0.000
727	J-452	JUNCTION	0.17	18.850	0.000
728	J-453	JUNCTION	0.31	13.450	0.000
729	J-454	JUNCTION	0.50	13.930	0.000
730	J-455	JUNCTION	0.51	13.200	0.000
731	J-455A	JUNCTION	0.30	12.720	0.000
732	J-456	JUNCTION	0.48	12.842	0.000
733	J-457	JUNCTION	0.65	12.177	0.000
734	J-458	JUNCTION	0.72	11.963	0.000
735	J-459	JUNCTION	0.76	10.469	0.000
736	J-460	JUNCTION	0.45	8.670	0.000
737	J-461	JUNCTION	0.40	7.784	0.000
738	J-462	JUNCTION	0.45	6.644	0.000
739	J-462A	JUNCTION	0.32	15.050	0.000
740	J-463	JUNCTION	0.40	5.768	0.000
741	J-464	JUNCTION	0.46	4.067	0.000
742	J-465	JUNCTION	22.66	2.889	1.661
743	J-466	JUNCTION	22.94	1.976	2.474
744	J-482	JUNCTION	0.94	10.120	0.000
745	J-490	JUNCTION	0.57	12.575	0.000
746	J-491	JUNCTION	0.36	13.950	0.000
747	J-492	JUNCTION	0.23	13.250	0.000
748	J-493	JUNCTION	0.15	13.450	0.000
749	J-494	JUNCTION	0.12	13.650	0.000
750	J-495	JUNCTION	0.44	11.830	0.000
751	J-503	JUNCTION	23.26	8.329	0.000
752	J-601	JUNCTION	0.43	14.060	0.000
753	J-602	JUNCTION	0.47	14.050	0.000
754	J-603	JUNCTION	1.32	4.337	0.000
755	J-604	JUNCTION	23.27	1.086	0.000
756	J-709-2	JUNCTION	16.17	1.792	10.328
757	J-709-3	JUNCTION	9.41	1.260	10.430
758	J-714-2	JUNCTION	14.52	2.015	10.775
759	J-714-3	JUNCTION	12.17	1.724	10.956
760	J-740	JUNCTION	0.97	0.678	3.252
761	J-741	JUNCTION	1.73	1.751	2.159
762	J-744	JUNCTION	0.56	0.331	0.000
763	J-760	JUNCTION	18.50	2.149	10.721
764	J-761	JUNCTION	18.01	1.969	10.031
765	J-762	JUNCTION	14.52	1.539	10.061
766	J-770	JUNCTION	0.24	6.875	1.065
767	J-771	JUNCTION	2.28	6.700	1.150
768	J-772	JUNCTION	2.30	7.460	3.500
769	J-773	JUNCTION	2.29	7.858	6.262
770	J-774	JUNCTION	2.30	8.225	1.425
771	J-775	JUNCTION	2.43	9.637	0.723
772	J-776	JUNCTION	2.45	10.291	0.000

773	J-777	JUNCTION	2.36	9.960	0.000
774	J-778	JUNCTION	2.44	10.070	0.000
775	J-779	JUNCTION	2.45	11.585	0.000
776	J-780	JUNCTION	2.30	10.147	0.000
777	J-781	JUNCTION	2.27	9.541	0.000
778	J-782	JUNCTION	2.22	8.676	0.000
779	J-783	JUNCTION	2.18	7.875	0.000
780	J-784	JUNCTION	2.18	7.087	0.000
781	J-805	JUNCTION	12.10	1.481	0.000
782	J-806	JUNCTION	11.61	2.118	0.000
783	J-807	JUNCTION	11.30	1.995	1.275
784	J-808	JUNCTION	9.19	0.385	0.000
785	J-810	JUNCTION	14.79	9.083	0.000
786	J-811	JUNCTION	9.86	9.361	0.000
787	J-812	JUNCTION	17.06	10.327	0.000
788	J-813	JUNCTION	17.06	10.108	0.000
789	J-814	JUNCTION	16.99	9.427	0.000
790	J-815	JUNCTION	16.81	8.627	0.000
791	J-816	JUNCTION	16.97	8.717	0.000
792	J-817	JUNCTION	17.06	9.491	0.000
793	J-817-1	JUNCTION	17.10	9.299	0.000
794	J-818	JUNCTION	16.98	9.984	0.000
795	J-819	JUNCTION	17.00	10.528	0.000
796	J-820	JUNCTION	16.98	10.936	0.000
797	J-821	JUNCTION	16.97	11.030	0.000
798	J-822	JUNCTION	16.92	10.905	0.000
799	J-823	JUNCTION	16.92	10.792	0.000
800	J-840	JUNCTION	4.10	7.209	0.000
801	J-841	JUNCTION	23.79	9.266	0.000
802	J-842	JUNCTION	3.54	7.212	0.000
803	J-844	JUNCTION	3.02	6.463	0.000
804	J-845	JUNCTION	2.98	6.511	0.000
805	J-846	JUNCTION	3.78	10.006	0.000
806	J-847	JUNCTION	2.23	8.951	0.000
807	J-850	JUNCTION	2.89	2.004	0.000
808	J-860	JUNCTION	9.55	10.750	0.000
809	J-870	JUNCTION	16.94	11.782	0.000
810	J-871-1A	JUNCTION	15.63	9.178	0.000
811	J-871-1B	JUNCTION	11.54	6.484	0.000
812	J-871-1C	JUNCTION	5.60	2.329	0.000
813	J-900-1	JUNCTION	1.84	10.440	0.000
814	J-901	JUNCTION	1.33	11.000	0.000
815	J-902	JUNCTION	0.93	10.820	0.000

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Node Flooding Summary

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Flooding refers to all water that overflows a node, whether it ponds or not.

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Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10 <sup>6</sup> gal	Maximum Ponded Depth Feet
J-1023	0.01	2.02	0 00:40	0.000	10.000
J-1024	0.01	1.02	0 00:42	0.000	10.000
J-142	0.01	0.69	0 00:41	0.000	10.000
J-142A	0.01	0.09	0 00:41	0.000	10.000
J-142B	0.01	0.22	0 00:41	0.000	10.000
J-201	0.13	1.49	0 00:45	0.003	10.000
J-321	0.01	0.12	0 00:43	0.000	10.000
J-322	0.01	0.47	0 00:43	0.000	10.000
J-451	0.01	1.57	0 00:46	0.000	10.000
J-452	0.01	1.80	0 00:45	0.000	10.000

839	J-453	0.01	3.48	0	00:43	0.000	10.000
840	J-454	0.04	1.21	0	00:47	0.001	10.000
841	J-455	0.01	0.14	0	00:45	0.000	10.000
842	J-455A	0.01	1.57	0	00:42	0.000	10.000
843	J-462A	0.01	2.58	0	00:42	0.000	10.000
844	J-482	0.93	117.04	0	13:13	0.403	1.200
845	J-491	0.01	1.10	0	00:40	0.000	10.000
846	J-492	0.01	1.74	0	00:42	0.000	10.000
847	J-493	0.01	0.33	0	00:44	0.000	10.000
848	J-494	0.01	0.42	0	00:44	0.000	10.000
849	J-495	0.01	0.24	0	00:44	0.000	10.000
850	J-601	0.01	0.54	0	00:39	0.000	10.000
851	J-602	0.01	0.20	0	00:39	0.000	10.000
852	J-779	2.12	13.70	0	00:45	0.114	2.985
853	J-783	2.17	2.70	0	00:32	0.016	3.665
854	J-784	2.18	3.13	0	00:32	0.015	3.727
855	J-805	10.78	37.78	0	01:32	0.837	0.601
856	J-808	9.19	39.31	0	01:30	0.997	0.385
857	J-811	4.78	4.38	0	00:45	0.065	7.651
858	J-812	6.66	6.83	0	00:11	0.099	8.447
859	J-814	10.64	8.18	0	00:45	0.114	7.097
860	J-815	15.79	12.46	0	00:45	0.269	6.947
861	J-816	16.70	8.39	0	00:53	0.258	6.747
862	J-817	16.56	3.37	0	00:45	0.081	6.891
863	J-817-1	16.74	2.98	0	00:45	0.080	6.949
864	J-818	16.43	3.58	0	00:45	0.060	7.324
865	J-819	16.92	5.06	0	00:45	0.099	8.428
866	J-820	16.91	4.00	0	00:45	0.069	8.806
867	J-821	16.89	2.45	0	00:13	0.039	8.990
868	J-822	16.92	3.40	0	00:14	0.043	9.575
869	J-823	16.91	3.72	0	00:15	0.047	10.022
870	J-844	3.02	5.93	0	00:45	0.053	6.463
871	J-850	2.88	5.41	0	01:45	0.076	1.984
872	J-860	0.40	2.73	0	01:15	0.015	10.000
873	J-870	16.77	1.33	0	00:14	0.017	9.812
874	J-871-1A	15.63	29.66	0	00:45	0.540	9.178
875	J-871-1B	11.34	20.38	0	00:45	0.390	4.384
876	J-871-1C	4.81	3.18	0	00:45	0.034	0.579
877	J-900-1	0.16	1.91	0	00:45	0.004	10.000
878	J-901	0.34	2.39	0	00:45	0.013	10.000
879	J-902	0.01	0.18	0	00:31	0.000	10.000
880	S-500	0.69	2.00	0	02:11	0.024	0.000
881	S-600	4.21	5.49	0	01:00	0.108	0.000

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885 Storage Volume Summary  
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889		Average	Avg	Evap	Exfil	Maximum	Max	Time of
890		Max	Maximum	Pcnt	Pcnt	Volume	Pcnt	
891	Storage Unit	Volume	Occurrence	Outflow	Loss	1000 ft3	Full	days
892	hr:min	1000 ft3	Full	Loss	Loss			
	CFS							
893	S-100	49.663	8	0	0	52.500	8	0
	09:00	0.00						
894	S-1000	321.267	29	0	0	339.774	31	0
	05:44	0.00						
895	S-1100	0.370	1	0	0	15.468	29	0

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896	00:57	29.88						
	S-150		53.344	15	0	0	56.375	16
	10:00	0.49						
897	S-200		46.558	20	0	0	49.087	21
	05:11	0.00						
898	S-300		54.274	31	0	0	57.162	32
	11:02	0.01						
899	S-400		99.940	27	0	0	105.609	28
	11:59	0.31						
900	S-500		34.029	96	0	0	35.616	100
	02:09	0.04						
901	S-600		14.734	97	0	0	15.195	100
	01:00	0.00						

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 Outfall Loading Summary  
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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
O-1000	0.00	0.00	0.00	0.000
O-700	100.00	120.98	335.01	79.145
O-800	99.35	14.49	42.28	9.222
O-900	19.29	2.72	10.30	0.306
System	54.66	138.19	346.43	88.673

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 Link Flow Summary  
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Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
C=737A1	CONDUIT	25.27	0 04:16	5.07	0.04	0.19
C737-A2	CONDUIT	25.15	0 04:18	5.07	0.04	0.19
C-737A-3	CONDUIT	25.02	0 04:20	0.98	0.04	0.59
L-1001	CONDUIT	63.63	0 00:48	7.25	1.02	0.86
L-1002	CONDUIT	62.97	0 00:48	6.55	1.01	1.00
L-1003	CONDUIT	62.59	0 00:49	6.51	1.22	1.00
L-1004	CONDUIT	57.76	0 00:50	6.00	0.83	1.00
L-1005	CONDUIT	10.28	0 00:46	2.09	0.39	1.00
L-1006	CONDUIT	9.98	0 00:46	3.75	0.42	1.00
L-1007	CONDUIT	9.71	0 00:46	3.88	0.71	1.00
L-1008	CONDUIT	9.17	0 00:46	3.69	0.72	1.00
L-1009	CONDUIT	7.05	0 00:44	7.47	0.41	1.00
L-1010	CONDUIT	6.82	0 00:44	8.03	0.37	0.70
L-1020	CONDUIT	48.04	0 00:55	6.80	1.14	1.00
L-1021	CONDUIT	30.27	0 01:07	4.28	1.03	1.00
L-1022	CONDUIT	30.03	0 01:07	6.12	1.03	1.00
L-1023	CONDUIT	18.41	0 00:45	3.75	0.76	1.00
L-1024	CONDUIT	17.81	0 00:45	6.45	0.81	1.00
L-1101	CONDUIT	15.72	0 00:46	11.04	0.31	0.72
L-1102	CONDUIT	10.29	0 00:45	6.45	0.55	0.51
L-120	CONDUIT	1.63	0 00:56	1.84	0.27	1.00
L-121	CONDUIT	5.12	0 00:43	4.17	22.00	1.00
L-122	CONDUIT	5.56	0 00:43	4.69	1.32	1.00
L-123	CONDUIT	6.14	0 00:43	5.00	0.37	1.00
L-124	CONDUIT	8.20	0 00:50	4.64	1.10	1.00

955	L-124A	CONDUIT	1.52	0	00:54	4.00	0.28	0.83
956	L-124B	CONDUIT	2.63	0	00:58	2.79	0.15	1.00
957	L-125	CONDUIT	8.54	0	00:49	4.83	1.22	1.00
958	L-126	CONDUIT	10.57	0	00:45	5.98	0.96	1.00
959	L-127	CONDUIT	12.15	0	00:45	3.87	0.51	1.00
960	L-127A	CONDUIT	1.43	0	00:45	2.30	0.22	0.66
961	L-128	CONDUIT	12.99	0	00:45	4.40	1.21	0.92
962	L-129	CONDUIT	13.40	0	00:47	4.96	0.81	0.90
963	L-130	CONDUIT	15.21	0	00:47	10.86	0.19	0.42
964	L-131	CHANNEL	15.41	0	00:47	1.90	0.00	0.24
965	L-141	CONDUIT	2.23	0	00:45	3.16	0.23	1.00
966	L-142	CONDUIT	6.99	0	00:45	3.96	0.95	1.00
967	L-142A	CONDUIT	4.32	0	00:45	3.52	1.14	1.00
968	L-142B	CONDUIT	4.76	0	00:45	3.88	0.92	1.00
969	L-143	CONDUIT	7.57	0	00:45	4.28	1.34	1.00
970	L-144	CONDUIT	9.34	0	00:45	5.29	3.35	1.00
971	L-145	CONDUIT	11.34	0	00:45	6.42	1.47	1.00
972	L-146	CONDUIT	13.17	0	00:45	7.45	1.82	1.00
973	L-147	CONDUIT	13.69	0	00:45	5.16	0.53	0.54
974	L-148	CONDUIT	14.82	0	00:45	8.75	0.24	0.38
975	L-149	CHANNEL	14.95	0	00:45	2.45	0.00	0.18
976	L-152	CONDUIT	0.16	0	00:45	0.56	0.02	0.22
977	L-153	CONDUIT	1.82	0	00:45	3.53	0.22	0.33
978	L-153A	CONDUIT	1.33	0	00:45	5.77	0.10	0.24
979	L-154	CONDUIT	2.29	0	00:46	3.84	0.23	0.59
980	L-156	CONDUIT	3.02	0	00:50	2.64	0.69	1.00
981	L-157	CONDUIT	10.08	0	00:49	3.21	1.00	1.00
982	L-157.1	CONDUIT	3.47	0	00:49	1.96	0.52	1.00
983	L-157-1	CONDUIT	0.19	0	00:46	0.56	0.02	0.28
984	L-157-2	CONDUIT	1.24	0	00:47	1.54	0.16	0.50
985	L-157-3	CONDUIT	4.93	0	00:46	3.65	0.64	0.74
986	L-157-3A	CONDUIT	3.00	0	00:45	4.78	0.48	0.51
987	L-157-4	CONDUIT	5.93	0	00:46	4.34	0.61	0.92
988	L-158	CONDUIT	10.73	0	00:48	3.64	0.55	0.89
989	L-159	CONDUIT	10.82	0	00:49	4.95	0.57	0.66
990	L-160	CONDUIT	11.90	0	00:49	3.79	1.19	1.00
991	L-161	CONDUIT	12.39	0	00:49	4.37	1.21	0.85
992	L-162	CONDUIT	15.32	0	00:49	5.34	0.45	0.57
993	L-163	CONDUIT	15.29	0	00:50	6.30	0.42	0.50
994	L-201	CONDUIT	5.69	0	00:42	4.64	1.50	1.00
995	L-202	CONDUIT	8.04	0	00:42	6.55	2.00	1.00
996	L-203	CONDUIT	10.62	0	00:45	8.65	2.16	1.00
997	L-204	CONDUIT	13.08	0	00:45	4.16	0.94	1.00
998	L-205	CONDUIT	14.95	0	00:45	6.50	1.62	0.69
999	L-206	CONDUIT	14.92	0	00:45	6.49	0.23	0.69
1000	L-301	CONDUIT	1.83	0	00:45	2.97	0.45	0.50
1001	L-302	CONDUIT	3.25	0	00:46	5.29	0.38	0.50
1002	L-303	CONDUIT	3.53	0	00:46	4.10	0.46	0.66
1003	L-304	CONDUIT	6.00	0	00:47	5.78	0.93	0.80
1004	L-321	CONDUIT	7.85	0	00:45	4.44	29.32	1.00
1005	L-322	CONDUIT	8.98	0	00:45	5.48	0.79	1.00
1006	L-323	CONDUIT	9.89	0	00:45	5.60	0.83	1.00
1007	L-324	CONDUIT	10.66	0	00:45	6.04	1.14	1.00
1008	L-325	CONDUIT	11.52	0	00:45	7.57	1.18	0.81
1009	L-326	CONDUIT	18.76	0	00:45	7.63	0.30	0.73
1010	L-401	CONDUIT	0.33	0	00:45	2.28	0.05	0.17
1011	L-402	CONDUIT	1.32	0	00:45	1.71	0.09	0.60
1012	L-403	CONDUIT	2.99	0	00:45	3.10	20.69	0.73
1013	L-404	CONDUIT	4.01	0	00:45	6.22	0.44	0.71
1014	L-405	CONDUIT	4.97	0	00:47	4.68	0.41	0.99
1015	L-406	CONDUIT	5.30	0	00:47	4.66	1.31	0.87
1016	L-407	CONDUIT	33.06	0	00:46	11.54	0.31	1.00
1017	L-451	CONDUIT	2.32	0	00:55	4.05	0.49	1.00
1018	L-452	CONDUIT	2.92	0	01:00	3.33	0.37	1.00
1019	L-453	CONDUIT	3.97	0	00:59	3.24	0.66	1.00
1020	L-454	CONDUIT	5.33	0	00:49	4.35	1.34	1.00

1021	L-455	CONDUIT	7.88	0	00:49	4.46	1.44	1.00
1022	L-455A	CONDUIT	1.39	0	01:01	1.26	0.22	1.00
1023	L-456	CONDUIT	8.18	0	00:49	4.63	1.27	1.00
1024	L-457	CONDUIT	8.70	0	00:49	4.93	0.81	1.00
1025	L-458	CONDUIT	9.03	0	00:49	5.11	1.66	1.00
1026	L-459	CONDUIT	9.54	0	00:49	5.40	1.46	1.00
1027	L-460	CONDUIT	21.22	0	00:47	5.34	1.26	1.00
1028	L-461	CONDUIT	21.67	0	00:47	5.45	1.12	1.00
1029	L-462	CONDUIT	24.85	0	00:45	6.25	0.96	1.00
1030	L-462A	CONDUIT	1.80	0	00:45	1.53	0.43	1.00
1031	L-463	CONDUIT	25.41	0	00:45	6.39	1.22	1.00
1032	L-464	CONDUIT	26.85	0	00:45	6.75	1.02	1.00
1033	L-465	CONDUIT	27.06	0	00:45	6.81	1.42	1.00
1034	L-466	CONDUIT	27.34	0	00:45	7.93	1.33	1.00
1035	L-481	CONDUIT	60.41	0	14:09	2.61	0.05	0.76
1036	L-481B	CONDUIT	13.88	0	04:03	3.90	0.03	0.28
1037	L-482	CONDUIT	147.34	0	13:41	12.28	1.43	1.00
1038	L-482B	CONDUIT	225.10	0	13:10	12.48	0.23	0.51
1039	L-483	CONDUIT	148.47	0	13:40	11.33	0.20	0.46
1040	L-484	CONDUIT	133.28	0	14:12	7.82	0.11	0.34
1041	L-484A	CONDUIT	29.16	0	13:15	1.41	0.01	0.23
1042	L-485	CONDUIT	133.10	0	14:14	6.98	0.22	0.38
1043	L-485B-2	CONDUIT	27.69	0	12:56	1.89	0.15	0.70
1044	L-490	CONDUIT	12.22	0	00:45	6.92	1.52	1.00
1045	L-491	CONDUIT	7.93	0	00:45	4.49	0.99	1.00
1046	L-492	CONDUIT	6.07	0	00:45	5.33	0.70	1.00
1047	L-493	CONDUIT	3.04	0	00:44	4.59	0.34	1.00
1048	L-494	CONDUIT	3.01	0	00:45	5.03	0.42	1.00
1049	L-495	CONDUIT	2.70	0	00:45	2.20	0.67	1.00
1050	L-501	CONDUIT	1.24	0	00:45	2.88	0.20	0.56
1051	L-502	CONDUIT	5.45	0	00:45	5.20	0.42	0.97
1052	L-503	CONDUIT	8.02	0	00:45	4.54	0.69	1.00
1053	L-601	CONDUIT	4.47	0	00:45	3.64	1.06	1.00
1054	L-602	CONDUIT	6.01	0	00:45	4.90	1.52	1.00
1055	L-603	CONDUIT	9.83	0	00:45	8.01	2.76	1.00
1056	L-604	CONDUIT	9.83	0	00:45	8.01	0.40	1.00
1057	L-701	CHANNEL	312.92	0	14:02	27.70	0.01	0.09
1058	L-701A	CHANNEL	511.37	0	13:24	40.45	0.02	0.12
1059	L-701B	CONDUIT	590.32	0	13:04	13.58	0.57	0.77
1060	L-701C	CONDUIT	614.77	0	12:59	13.37	0.63	0.80
1061	L-702	CHANNEL	92.34	0	08:42	0.58	0.01	0.12
1062	L-702-1	CHANNEL	181.48	0	14:25	0.81	0.10	0.16
1063	L-702B	CONDUIT	79.68	0	09:08	6.66	0.28	0.44
1064	L-703	CONDUIT	79.68	0	09:08	5.34	0.29	0.52
1065	L-704	CHANNEL	80.79	0	08:33	1.13	0.01	0.20
1066	L-705	CHANNEL	87.92	0	07:40	3.92	0.00	0.18
1067	L-706	CONDUIT	91.22	0	07:30	5.41	2.59	0.60
1068	L-707	CHANNEL	91.34	0	07:27	0.50	0.01	0.27
1069	L-708	CHANNEL	92.80	0	07:08	1.56	0.00	0.26
1070	L-709-1	CONDUIT	95.27	0	06:52	6.52	0.38	0.58
1071	L-709-2	CONDUIT	2.52	0	00:45	2.82	0.34	1.00
1072	L-709-3	CONDUIT	2.10	0	00:45	2.21	0.41	1.00
1073	L-710	CHANNEL	95.37	0	06:48	2.18	0.00	0.17
1074	L-711	CONDUIT	95.49	0	06:46	6.99	1.28	0.52
1075	L-712	CHANNEL	95.52	0	06:45	3.14	0.03	0.37
1076	L-713	CONDUIT	95.54	0	06:43	4.55	0.55	0.70
1077	L-714-1	CHANNEL	95.98	0	06:32	>50.00	0.01	0.31
1078	L-714-2	CONDUIT	7.18	0	00:45	4.71	0.44	1.00
1079	L-714-3	CONDUIT	7.13	0	00:45	3.60	0.33	1.00
1080	L-715	CHANNEL	99.37	0	06:09	>50.00	0.00	0.24
1081	L-715-1	CHANNEL	97.71	0	06:16	>50.00	0.00	0.24
1082	L-715A	CONDUIT	0.00	0	00:00	0.00	0.00	0.50
1083	L-716	CONDUIT	100.43	0	06:05	8.24	0.25	0.55
1084	L-716A	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1085	L-717-1	CHANNEL	102.46	0	05:50	1.69	0.00	0.23
1086	L-718	CONDUIT	105.92	0	05:35	6.39	0.20	0.52

1087	L-719	CONDUIT	105.98	0	05:35	3.90	0.20	0.53
1088	L-720	CHANNEL	110.72	0	05:10	2.28	0.00	0.23
1089	L-721	CONDUIT	92.90	0	05:24	9.65	0.29	0.34
1090	L-722	CONDUIT	92.91	0	05:23	6.00	0.49	0.55
1091	L-723_1	CONDUIT	52.76	0	05:30	1.31	0.08	0.34
1092	L-723_2	CONDUIT	93.29	0	05:01	1.65	0.15	0.45
1093	L-725	CONDUIT	52.80	0	05:28	4.19	0.21	0.45
1094	L-725-1	CONDUIT	0.00	0	00:00	0.00	0.00	0.09
1095	L-725-2_1	CONDUIT	13.51	0	04:36	2.32	0.04	0.23
1096	L-725-2_2	CONDUIT	13.95	0	04:51	1.49	0.01	0.19
1097	L-725-2_3	CONDUIT	13.97	0	04:51	6.78	0.24	0.37
1098	L-725-2_5	CONDUIT	13.91	0	04:51	4.38	0.13	0.54
1099	L-725-3	CONDUIT	33.95	0	13:03	1.66	0.01	0.11
1100	L-725B	CONDUIT	55.04	0	04:30	4.33	0.05	0.26
1101	L-726	CHANNEL	40.43	0	05:17	1.81	0.02	0.39
1102	L-730	CHANNEL	50.45	0	04:25	8.05	0.01	0.10
1103	L-730-1	CHANNEL	50.43	0	04:26	7.40	0.01	0.10
1104	L-731	CHANNEL	50.52	0	04:22	7.47	0.02	0.16
1105	L-732	CONDUIT	3.56	0	00:46	3.25	0.14	0.27
1106	L-732A	CONDUIT	0.00	0	00:00	0.00	0.00	0.21
1107	L-732B	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1108	L-733	CONDUIT	2.57	0	00:46	3.15	0.12	0.31
1109	L-734	CONDUIT	1.91	0	00:46	3.71	0.09	0.22
1110	L-735	CONDUIT	1.06	0	00:45	2.81	0.05	0.18
1111	L-736	CONDUIT	0.00	0	00:00	0.00	0.00	0.08
1112	L-737	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1113	L-740	CONDUIT	50.53	0	04:20	9.95	0.59	0.67
1114	L-741	CONDUIT	50.53	0	04:20	7.15	0.78	1.00
1115	L-742	CONDUIT	50.53	0	04:20	7.47	0.71	0.91
1116	L-743	CONDUIT	50.59	0	04:18	9.52	0.62	0.78
1117	L-744	CONDUIT	50.59	0	04:18	8.10	0.76	0.83
1118	L-745	CONDUIT	0.08	0	04:04	0.02	0.00	0.60
1119	L-750	CONDUIT	14.54	0	00:55	5.73	0.01	0.25
1120	L-751	CONDUIT	14.63	0	00:51	7.27	0.16	0.33
1121	L-752	CONDUIT	12.42	0	00:48	0.96	0.04	0.31
1122	L-753	CONDUIT	11.32	0	00:47	2.04	0.03	0.14
1123	L-754	CONDUIT	8.64	0	00:45	1.73	0.02	0.12
1124	L-760	CONDUIT	11.36	0	00:45	6.43	1.55	1.00
1125	L-761	CONDUIT	1.13	0	00:16	0.85	0.15	1.00
1126	L-762	CONDUIT	0.68	0	00:16	0.97	0.09	1.00
1127	L-770	CONDUIT	14.61	0	00:45	8.38	1.03	0.96
1128	L-771	CONDUIT	9.36	0	00:42	5.54	1.80	1.00
1129	L-772	CONDUIT	9.36	0	00:42	5.29	1.39	1.00
1130	L-773	CONDUIT	9.03	0	00:56	5.11	0.88	1.00
1131	L-774	CONDUIT	9.03	0	00:56	5.11	1.37	1.00
1132	L-775	CONDUIT	8.58	0	01:07	6.99	1.48	1.00
1133	L-776	CONDUIT	8.27	0	01:20	6.74	1.59	1.00
1134	L-777	CONDUIT	8.27	0	01:21	6.74	1.53	1.00
1135	L-778	CONDUIT	7.95	0	01:35	6.48	1.52	1.00
1136	L-779	CONDUIT	7.80	0	01:45	6.36	1.60	1.00
1137	L-780	CONDUIT	5.33	0	02:40	4.35	1.26	1.00
1138	L-781	CONDUIT	5.32	0	02:40	4.34	1.22	1.00
1139	L-782	CONDUIT	5.25	0	02:40	4.28	1.24	1.00
1140	L-783	CONDUIT	5.23	0	02:40	4.26	1.24	1.00
1141	L-784	CONDUIT	5.52	0	02:42	4.53	1.35	1.00
1142	L-790	CONDUIT	92.58	0	13:19	5.96	0.10	0.24
1143	L-791	CONDUIT	92.56	0	13:18	8.10	0.22	0.36
1144	L-792	CONDUIT	92.56	0	13:18	3.88	0.09	0.22
1145	L-792A	CONDUIT	93.89	0	13:13	6.26	0.17	0.46
1146	L-792B	CONDUIT	96.92	0	13:05	6.50	0.20	0.44
1147	L-801	CONDUIT	42.28	0	02:57	3.27	0.06	0.21
1148	L-802	CONDUIT	18.02	0	02:30	5.21	0.27	0.26
1149	L-803	CONDUIT	17.44	0	05:12	0.62	0.07	0.41
1150	L-804	CONDUIT	17.42	0	05:04	3.69	0.29	0.41
1151	L-805	CONDUIT	17.42	0	05:03	2.89	4.25	0.80
1152	L-806	CONDUIT	53.17	0	01:32	1.11	0.22	1.00

1153	L-807	CONDUIT	52.73	0	01:33	1.10	0.76	1.00
1154	L-808	CONDUIT	52.80	0	01:33	1.60	0.12	1.00
1155	L-809	CONDUIT	21.17	0	02:13	1.72	0.28	0.75
1156	L-810	CONDUIT	14.65	0	01:30	9.58	2.61	0.83
1157	L-811	CONDUIT	9.58	0	02:36	5.42	1.67	1.00
1158	L-812	CONDUIT	7.14	0	05:00	4.04	1.19	1.00
1159	L-813	CONDUIT	6.42	0	05:16	3.63	1.47	1.00
1160	L-814	CONDUIT	6.42	0	05:16	5.23	1.29	1.00
1161	L-815	CONDUIT	5.85	0	06:02	4.77	1.38	1.00
1162	L-816	CONDUIT	4.90	0	07:37	4.00	1.47	1.00
1163	L-817	CONDUIT	4.47	0	01:08	3.64	1.16	1.00
1164	L-817-1	CONDUIT	5.41	0	00:50	4.41	2.41	1.00
1165	L-818	CONDUIT	5.23	0	01:07	4.26	1.52	1.00
1166	L-819	CONDUIT	4.05	0	01:41	3.30	1.49	1.00
1167	L-820	CONDUIT	4.45	0	00:55	3.62	1.48	1.00
1168	L-821	CONDUIT	4.01	0	00:49	3.27	1.10	1.00
1169	L-822	CONDUIT	3.28	0	02:41	2.89	0.82	1.00
1170	L-823	CONDUIT	3.52	0	00:15	3.02	0.83	1.00
1171	L-824	CONDUIT	0.00	0	00:00	0.00	0.00	0.20
1172	L-825	CONDUIT	2.21	0	00:47	3.23	0.27	0.33
1173	L-826	CONDUIT	4.24	0	00:46	9.97	0.09	0.54
1174	L-830	CONDUIT	25.05	0	02:48	0.67	0.01	0.15
1175	L-840	CONDUIT	3.94	0	00:50	3.21	0.40	1.00
1176	L-841	CONDUIT	3.63	0	00:51	2.95	0.57	1.00
1177	L-842	CONDUIT	2.78	0	00:58	2.26	0.36	1.00
1178	L-842A	CONDUIT	220.55	0	13:15	8.51	0.26	0.76
1179	L-844	CONDUIT	2.01	0	01:41	2.92	0.50	1.00
1180	L-845	CONDUIT	5.72	0	00:45	4.66	2.67	1.00
1181	L-846	CONDUIT	3.06	0	00:45	2.50	0.95	1.00
1182	L-847	CONDUIT	2.26	0	00:45	2.56	0.24	1.00
1183	L-850	CONDUIT	7.85	0	02:11	6.75	2.03	0.90
1184	L-860	CONDUIT	7.62	0	01:06	6.21	1.49	1.00
1185	L-869	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1186	L-870	CONDUIT	3.92	0	00:15	2.22	0.86	1.00
1187	L-871	CONDUIT	2.92	0	03:22	2.38	0.48	1.00
1188	L-871-1B	CONDUIT	3.50	0	00:27	2.33	1.15	1.00
1189	L-871-1C	CONDUIT	3.38	0	00:41	2.25	0.86	1.00
1190	L-900-1	CONDUIT	10.30	0	00:42	13.12	4.46	1.00
1191	L-901	CONDUIT	2.37	0	00:57	3.01	2.12	1.00
1192	L-902	CONDUIT	2.22	0	00:45	2.83	0.86	1.00
1193	W-100	WEIR	0.00	0	00:00			0.00
1194	W-1000	WEIR	0.00	0	00:00			0.00
1195	W-1100	WEIR	29.88	0	01:01			0.74
1196	W-150	WEIR	0.00	0	00:00			0.00
1197	W-200	WEIR	0.00	0	00:00			0.00
1198	W-300	WEIR	0.00	0	00:00			0.00
1199	W-400	WEIR	0.00	0	00:00			0.00
1200	W-500	WEIR	0.00	0	00:00			0.00
1201	W-600	WEIR	0.00	0	00:00			0.00

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Flow Classification Summary  
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Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----									
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl	
1213	C=737A1	1.00	0.00	0.00	0.00	0.51	0.49	0.00	0.00	0.40	0.00
1214	C737-A2	1.00	0.00	0.00	0.00	0.53	0.47	0.00	0.00	0.40	0.00
1215	C-737A-3	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1216	L-1001	1.00	0.00	0.75	0.00	0.13	0.00	0.00	0.12	0.88	0.00
1217	L-1002	1.00	0.75	0.05	0.00	0.20	0.00	0.00	0.00	0.88	0.00
1218	L-1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00



1219	L-1004	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1220	L-1005	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.14	0.00
1221	L-1006	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1222	L-1007	1.00	0.00	0.82	0.00	0.17	0.00	0.00	0.00	0.89	0.00
1223	L-1008	1.00	0.82	0.02	0.00	0.16	0.00	0.00	0.00	0.89	0.00
1224	L-1009	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.98	0.00	0.00
1225	L-1010	1.00	0.00	0.87	0.00	0.02	0.12	0.00	0.00	0.90	0.00
1226	L-1020	1.00	0.00	0.81	0.00	0.18	0.00	0.00	0.00	0.88	0.00
1227	L-1021	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.88	0.00
1228	L-1022	1.00	0.00	0.83	0.00	0.17	0.01	0.00	0.00	0.89	0.00
1229	L-1023	1.00	0.83	0.01	0.00	0.16	0.00	0.00	0.00	0.96	0.00
1230	L-1024	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1231	L-1101	1.00	0.00	0.00	0.00	0.04	0.01	0.00	0.96	0.02	0.00
1232	L-1102	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.87	0.00
1233	L-120	1.00	0.00	0.78	0.00	0.22	0.00	0.00	0.00	0.99	0.00
1234	L-121	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1235	L-122	1.00	0.00	0.00	0.00	0.87	0.13	0.00	0.00	0.56	0.00
1236	L-123	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.39	0.00
1237	L-124	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.83	0.00
1238	L-124A	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.00	0.00
1239	L-124B	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	0.99	0.00
1240	L-125	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.12	0.00
1241	L-126	1.00	0.00	0.00	0.00	0.94	0.06	0.00	0.00	0.57	0.00
1242	L-127	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.31	0.00
1243	L-127A	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.11	0.00
1244	L-128	1.00	0.00	0.06	0.00	0.94	0.00	0.00	0.00	0.84	0.00
1245	L-129	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.00	0.00
1246	L-130	1.00	0.00	0.47	0.00	0.44	0.09	0.00	0.00	0.93	0.00
1247	L-131	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.05	0.00
1248	L-141	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.95	0.02	0.00
1249	L-142	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1250	L-142A	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.01	0.00
1251	L-142B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1252	L-143	1.00	0.00	0.74	0.00	0.26	0.00	0.00	0.00	0.91	0.00
1253	L-144	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1254	L-145	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1255	L-146	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1256	L-147	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.64	0.00
1257	L-148	1.00	0.00	0.00	0.00	0.05	0.12	0.00	0.83	0.00	0.00
1258	L-149	1.00	0.00	0.58	0.00	0.42	0.00	0.00	0.00	0.99	0.00
1259	L-152	1.00	0.84	0.02	0.00	0.14	0.00	0.00	0.00	1.00	0.00
1260	L-153	1.00	0.00	0.84	0.00	0.11	0.05	0.00	0.00	0.89	0.00
1261	L-153A	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1262	L-154	1.00	0.00	0.00	0.00	0.02	0.01	0.00	0.98	0.01	0.00
1263	L-156	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.97	0.00	0.00
1264	L-157	1.00	0.00	0.71	0.00	0.29	0.00	0.00	0.00	0.89	0.00
1265	L-157.1	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.09	0.00
1266	L-157-1	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	1.00	0.00
1267	L-157-2	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.04	0.00
1268	L-157-3	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.00	0.00
1269	L-157-3A	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1270	L-157-4	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1271	L-158	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1272	L-159	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1273	L-160	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1274	L-161	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1275	L-162	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.87	0.00
1276	L-163	1.00	0.00	0.61	0.00	0.31	0.00	0.00	0.07	0.93	0.00
1277	L-201	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.95	0.00
1278	L-202	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1279	L-203	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1280	L-204	1.00	0.00	0.80	0.00	0.20	0.00	0.00	0.00	0.95	0.00
1281	L-205	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.00	0.00
1282	L-206	1.00	0.00	0.77	0.00	0.21	0.02	0.00	0.00	0.99	0.00
1283	L-301	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.03	0.00
1284	L-302	1.00	0.00	0.00	0.00	0.87	0.13	0.00	0.00	0.89	0.00

1285	L-303	1.00	0.63	0.20	0.00	0.09	0.08	0.00	0.00	1.00	0.00
1286	L-304	1.00	0.00	0.63	0.00	0.28	0.09	0.00	0.00	0.92	0.00
1287	L-321	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1288	L-322	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.14	0.00
1289	L-323	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.87	0.00
1290	L-324	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.14	0.00
1291	L-325	1.00	0.00	0.55	0.00	0.36	0.09	0.00	0.00	0.91	0.00
1292	L-326	1.00	0.00	0.00	0.00	0.98	0.01	0.00	0.00	0.06	0.00
1293	L-401	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	1.00	0.00
1294	L-402	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	1.00	0.00
1295	L-403	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1296	L-404	1.00	0.00	0.05	0.00	0.74	0.20	0.00	0.00	0.51	0.00
1297	L-405	1.00	0.00	0.01	0.00	0.90	0.10	0.00	0.00	0.68	0.00
1298	L-406	1.00	0.00	0.13	0.00	0.79	0.00	0.00	0.08	0.93	0.00
1299	L-407	1.00	0.00	0.00	0.00	0.97	0.01	0.00	0.01	0.01	0.00
1300	L-451	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.89	0.00
1301	L-452	1.00	0.80	0.02	0.00	0.16	0.02	0.00	0.00	0.99	0.00
1302	L-453	1.00	0.76	0.04	0.00	0.20	0.00	0.00	0.00	0.98	0.00
1303	L-454	1.00	0.00	0.76	0.00	0.24	0.00	0.00	0.00	0.97	0.00
1304	L-455	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1305	L-455A	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.98	0.00
1306	L-456	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1307	L-457	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.89	0.00
1308	L-458	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.86	0.00
1309	L-459	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.08	0.00
1310	L-460	1.00	0.00	0.70	0.00	0.30	0.00	0.00	0.00	0.88	0.00
1311	L-461	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.08	0.00
1312	L-462	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1313	L-462A	1.00	0.00	0.59	0.00	0.41	0.00	0.00	0.00	0.97	0.00
1314	L-463	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1315	L-464	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1316	L-465	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1317	L-466	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1318	L-481	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.96	0.00
1319	L-481B	1.00	0.00	0.00	0.00	0.93	0.07	0.00	0.00	0.05	0.00
1320	L-482	1.00	0.00	0.00	0.00	0.17	0.83	0.00	0.00	0.02	0.00
1321	L-482B	1.00	0.00	0.51	0.00	0.34	0.16	0.00	0.00	0.45	0.00
1322	L-483	1.00	0.00	0.00	0.00	0.53	0.47	0.00	0.00	0.70	0.00
1323	L-484	1.00	0.00	0.00	0.00	0.44	0.56	0.00	0.00	0.39	0.00
1324	L-484A	1.00	0.00	0.51	0.00	0.49	0.00	0.00	0.00	0.50	0.00
1325	L-485	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.90	0.00
1326	L-485B-2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.81	0.00
1327	L-490	1.00	0.70	0.10	0.00	0.20	0.00	0.00	0.00	0.96	0.00
1328	L-491	1.00	0.80	0.03	0.00	0.18	0.00	0.00	0.00	0.95	0.00
1329	L-492	1.00	0.82	0.02	0.00	0.06	0.09	0.00	0.00	0.98	0.00
1330	L-493	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.99	0.00
1331	L-494	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.89	0.00
1332	L-495	1.00	0.80	0.02	0.00	0.18	0.00	0.00	0.00	0.97	0.00
1333	L-501	1.00	0.00	0.73	0.00	0.25	0.02	0.00	0.01	0.99	0.00
1334	L-502	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.04	0.00
1335	L-503	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	0.02	0.00
1336	L-601	1.00	0.22	0.62	0.00	0.16	0.00	0.00	0.00	0.89	0.00
1337	L-602	1.00	0.00	0.22	0.00	0.78	0.00	0.00	0.00	0.97	0.00
1338	L-603	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1339	L-604	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.02	0.00
1340	L-701	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.01	0.00
1341	L-701A	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.76	0.00
1342	L-701B	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
1343	L-701C	1.00	0.02	0.49	0.00	0.39	0.07	0.00	0.03	0.46	0.00
1344	L-702	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.79	0.00
1345	L-702-1	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	0.04	0.00
1346	L-702B	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1347	L-703	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.00
1348	L-704	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1349	L-705	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1350	L-706	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

1351	L-707	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1352	L-708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1353	L-709-1	1.00	0.00	0.00	0.00	0.94	0.06	0.00	0.00	0.21	0.00
1354	L-709-2	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1355	L-709-3	1.00	0.00	0.09	0.00	0.91	0.00	0.00	0.00	0.17	0.00
1356	L-710	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.34	0.00
1357	L-711	1.00	0.00	0.00	0.00	0.36	0.64	0.00	0.00	0.00	0.00
1358	L-712	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.02	0.00
1359	L-713	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1360	L-714-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1361	L-714-2	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1362	L-714-3	1.00	0.00	0.03	0.00	0.96	0.00	0.00	0.00	0.05	0.00
1363	L-715	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1364	L-715-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1365	L-715A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1366	L-716	1.00	0.02	0.00	0.00	0.43	0.21	0.00	0.33	0.00	0.00
1367	L-716A	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1368	L-717-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.14	0.00
1369	L-718	1.00	0.00	0.00	0.00	0.79	0.21	0.00	0.00	0.00	0.00
1370	L-719	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1371	L-720	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1372	L-721	1.00	0.00	0.00	0.00	0.02	0.98	0.00	0.00	0.01	0.00
1373	L-722	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.04	0.00
1374	L-723_1	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1375	L-723_2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1376	L-725	1.00	0.00	0.00	0.00	0.78	0.22	0.00	0.00	0.00	0.00
1377	L-725-1	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1378	L-725-2_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1379	L-725-2_2	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.83	0.00
1380	L-725-2_3	1.00	0.01	0.00	0.00	0.01	0.97	0.00	0.00	0.00	0.00
1381	L-725-2_5	1.00	0.00	0.03	0.00	0.70	0.27	0.00	0.00	0.13	0.00
1382	L-725-3	1.00	0.00	0.51	0.00	0.49	0.00	0.00	0.00	0.50	0.00
1383	L-725B	1.00	0.00	0.23	0.00	0.75	0.03	0.00	0.00	0.98	0.00
1384	L-726	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.83	0.00
1385	L-730	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1386	L-730-1	1.00	0.00	0.00	0.00	0.70	0.26	0.00	0.04	0.96	0.00
1387	L-731	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1388	L-732	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1389	L-732A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1390	L-732B	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1391	L-733	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	0.99	0.00
1392	L-734	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.95	0.00
1393	L-735	1.00	0.00	0.85	0.00	0.14	0.01	0.00	0.00	1.00	0.00
1394	L-736	1.00	0.85	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1395	L-737	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1396	L-740	1.00	0.00	0.00	0.00	0.31	0.69	0.00	0.00	0.32	0.00
1397	L-741	1.00	0.00	0.00	0.00	0.79	0.21	0.00	0.00	0.00	0.00
1398	L-742	1.00	0.00	0.00	0.00	0.66	0.34	0.00	0.00	0.95	0.00
1399	L-743	1.00	0.00	0.02	0.00	0.18	0.80	0.00	0.00	0.35	0.00
1400	L-744	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
1401	L-745	1.00	0.02	0.62	0.00	0.35	0.00	0.00	0.00	0.61	0.00
1402	L-750	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.95	0.00
1403	L-751	1.00	0.00	0.00	0.00	0.62	0.38	0.00	0.00	0.69	0.00
1404	L-752	1.00	0.00	0.26	0.00	0.74	0.00	0.00	0.00	1.00	0.00
1405	L-753	1.00	0.26	0.17	0.00	0.57	0.00	0.00	0.00	0.97	0.00
1406	L-754	1.00	0.43	0.22	0.00	0.36	0.00	0.00	0.00	0.99	0.00
1407	L-760	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1408	L-761	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1409	L-762	1.00	0.00	0.04	0.00	0.96	0.00	0.00	0.00	0.09	0.00
1410	L-770	1.00	0.18	0.45	0.00	0.26	0.07	0.00	0.05	0.89	0.00
1411	L-771	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1412	L-772	1.00	0.00	0.70	0.00	0.30	0.00	0.00	0.00	0.88	0.00
1413	L-773	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1414	L-774	1.00	0.00	0.00	0.00	0.98	0.00	0.00	0.02	0.73	0.00
1415	L-775	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1416	L-776	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00

1417	L-777	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1418	L-778	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1419	L-779	1.00	0.00	0.74	0.00	0.26	0.00	0.00	0.00	0.88	0.00
1420	L-780	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1421	L-781	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1422	L-782	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1423	L-783	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.90	0.00
1424	L-784	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1425	L-790	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.96	0.00
1426	L-791	1.00	0.00	0.00	0.00	0.23	0.77	0.00	0.00	0.01	0.00
1427	L-792	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.32	0.00
1428	L-792A	1.00	0.00	0.00	0.00	0.79	0.21	0.00	0.00	0.10	0.00
1429	L-792B	1.00	0.00	0.51	0.00	0.46	0.03	0.00	0.00	0.45	0.00
1430	L-801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1431	L-802	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1432	L-803	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1433	L-804	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.00	0.00
1434	L-805	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1435	L-806	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1436	L-807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1437	L-808	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.16	0.00
1438	L-809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.88	0.00
1439	L-810	1.00	0.00	0.00	0.00	0.72	0.28	0.00	0.00	0.00	0.00
1440	L-811	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.00
1441	L-812	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1442	L-813	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.25	0.00
1443	L-814	1.00	0.00	0.00	0.00	0.74	0.00	0.00	0.26	0.02	0.00
1444	L-815	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09	0.00
1445	L-816	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1446	L-817	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.27	0.00
1447	L-817-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1448	L-818	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1449	L-819	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1450	L-820	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.27	0.00
1451	L-821	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.23	0.00
1452	L-822	1.00	0.00	0.00	0.00	0.73	0.00	0.00	0.27	0.01	0.00
1453	L-823	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.27	0.00
1454	L-824	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1455	L-825	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.00	0.00
1456	L-826	1.00	0.11	0.64	0.00	0.20	0.01	0.00	0.04	0.96	0.00
1457	L-830	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.97	0.00
1458	L-840	1.00	0.00	0.00	0.00	0.72	0.00	0.00	0.28	0.50	0.00
1459	L-841	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1460	L-842	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.82	0.00
1461	L-842A	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.98	0.00
1462	L-844	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1463	L-845	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1464	L-846	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1465	L-847	1.00	0.00	0.79	0.00	0.20	0.00	0.00	0.00	0.89	0.00
1466	L-850	1.00	0.00	0.20	0.00	0.79	0.01	0.00	0.00	0.28	0.00
1467	L-860	1.00	0.00	0.21	0.00	0.79	0.00	0.00	0.00	0.28	0.00
1468	L-869	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1469	L-870	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1470	L-871	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.31	0.00
1471	L-871-1B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.45	0.00
1472	L-871-1C	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00
1473	L-900-1	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.00	0.00
1474	L-901	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1475	L-902	1.00	0.00	0.79	0.00	0.21	0.00	0.00	0.00	0.94	0.00

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1478 \*\*\*\*\*  
1479 Conduit Surcharge Summary  
1480 \*\*\*\*\*

1481 -----  
1482

		Hours Full			Hours Above Full	Hours Capacity
	Conduit	Both Ends	Upstream	Dnstream	Normal Flow	Limited
1483						
1484						
1485	C-737A-3	0.01	0.01	0.83	0.01	0.01
1486	L-1001	0.01	0.40	0.01	0.13	0.01
1487	L-1002	0.40	0.60	0.40	0.11	0.40
1488	L-1003	0.60	0.74	0.60	0.55	0.60
1489	L-1004	0.72	0.72	0.74	0.01	0.67
1490	L-1005	0.55	0.55	0.91	0.01	0.01
1491	L-1006	0.32	0.32	0.45	0.01	0.01
1492	L-1007	0.30	0.30	0.44	0.01	0.01
1493	L-1008	0.23	0.23	0.30	0.01	0.01
1494	L-1009	0.01	0.01	0.19	0.01	0.01
1495	L-1020	0.81	0.89	0.81	0.59	0.81
1496	L-1021	0.85	0.85	0.89	0.30	0.57
1497	L-1022	0.87	0.87	0.92	0.28	0.58
1498	L-1023	0.77	0.77	0.87	0.01	0.01
1499	L-1024	0.57	0.57	0.73	0.01	0.01
1500	L-1101	0.01	0.01	0.69	0.01	0.01
1501	L-120	0.01	0.01	0.49	0.01	0.01
1502	L-121	0.34	0.49	0.34	2.61	0.34
1503	L-122	0.31	0.34	0.31	0.31	0.30
1504	L-123	0.31	0.31	0.46	0.01	0.01
1505	L-124	0.36	0.38	0.36	0.22	0.36
1506	L-124A	0.01	0.01	0.22	0.01	0.01
1507	L-124B	0.22	0.22	0.46	0.01	0.01
1508	L-125	0.36	0.36	0.43	0.28	0.34
1509	L-126	0.43	0.43	0.47	0.01	0.39
1510	L-127	0.19	0.23	0.19	0.01	0.19
1511	L-127A	0.01	0.01	0.47	0.01	0.01
1512	L-128	0.01	0.19	0.01	0.24	0.01
1513	L-141	0.24	0.24	0.36	0.01	0.01
1514	L-142	0.50	0.50	0.52	0.01	0.32
1515	L-142A	0.35	0.35	0.47	0.11	0.19
1516	L-142B	0.53	0.53	0.60	0.01	0.24
1517	L-143	0.52	0.52	0.64	0.19	0.32
1518	L-144	0.34	0.64	0.34	0.95	0.34
1519	L-145	0.37	0.37	0.48	0.23	0.34
1520	L-146	0.11	0.48	0.11	0.42	0.11
1521	L-156	0.10	0.10	0.10	0.01	0.09
1522	L-157	0.19	0.22	0.19	0.02	0.19
1523	L-157.1	0.14	0.14	0.37	0.01	0.01
1524	L-158	0.01	0.01	0.19	0.01	0.01
1525	L-160	0.13	0.22	0.13	0.22	0.13
1526	L-161	0.01	0.18	0.01	0.23	0.01
1527	L-201	0.64	0.64	0.72	0.38	0.45
1528	L-202	0.72	0.72	0.72	0.60	0.71
1529	L-203	0.39	0.72	0.39	0.67	0.39
1530	L-204	0.15	0.16	0.16	0.01	0.15
1531	L-205	0.01	0.16	0.01	0.39	0.01
1532	L-206	0.01	0.01	23.30	0.01	0.01
1533	L-321	0.14	0.40	0.14	2.64	0.14
1534	L-322	0.14	0.14	0.18	0.01	0.05
1535	L-323	0.18	0.18	0.28	0.01	0.02
1536	L-324	0.25	0.28	0.25	0.10	0.25
1537	L-325	0.01	0.25	0.01	0.12	0.01
1538	L-326	0.01	0.01	23.64	0.01	0.01
1539	L-402	0.01	0.01	0.19	0.01	0.01
1540	L-403	0.01	0.19	0.01	2.58	0.01
1541	L-405	0.01	0.01	0.22	0.01	0.01
1542	L-406	0.01	0.22	21.50	0.22	0.01
1543	L-407	22.66	22.66	23.50	0.01	0.01
1544	L-451	0.09	0.09	0.17	0.01	0.01
1545	L-452	0.17	0.17	0.31	0.01	0.01
1546	L-453	0.31	0.31	0.50	0.01	0.01

1549	L-454	0.50	0.50	0.63	0.27	0.42
1550	L-455	0.48	0.51	0.48	0.41	0.48
1551	L-455A	0.30	0.30	0.63	0.01	0.01
1552	L-456	0.56	0.56	0.65	0.26	0.41
1553	L-457	0.65	0.65	0.72	0.01	0.28
1554	L-458	0.72	0.72	0.76	0.46	0.68
1555	L-459	0.76	0.76	0.84	0.41	0.64
1556	L-460	0.42	0.45	0.42	0.23	0.42
1557	L-461	0.40	0.40	0.45	0.13	0.31
1558	L-462	0.40	0.45	0.40	0.01	0.40
1559	L-462A	0.32	0.32	1.00	0.01	0.01
1560	L-463	0.40	0.40	0.46	0.20	0.32
1561	L-464	0.46	0.46	22.66	0.03	0.34
1562	L-465	22.45	22.66	22.94	0.30	0.30
1563	L-466	22.64	22.94	22.66	0.24	0.01
1564	L-481	0.01	0.01	0.94	0.01	0.01
1565	L-482	0.91	1.62	0.91	0.96	0.91
1566	L-490	0.57	0.57	0.84	0.26	0.35
1567	L-491	0.36	0.36	0.57	0.01	0.07
1568	L-492	0.23	0.23	0.42	0.01	0.01
1569	L-493	0.15	0.15	0.23	0.01	0.01
1570	L-494	0.12	0.12	0.15	0.01	0.01
1571	L-495	0.44	0.44	0.63	0.01	0.01
1572	L-501	0.01	0.01	0.51	0.01	0.01
1573	L-502	0.01	0.01	23.26	0.01	0.01
1574	L-503	23.26	23.26	23.57	0.01	0.01
1575	L-601	0.43	0.43	0.47	0.05	0.25
1576	L-602	0.47	0.47	1.32	0.28	0.29
1577	L-603	1.16	1.32	23.27	0.76	0.73
1578	L-604	23.27	23.27	23.78	0.01	0.01
1579	L-706	0.01	0.01	0.01	15.81	0.01
1580	L-709-2	16.17	16.17	17.30	0.01	0.01
1581	L-709-3	9.41	9.41	16.17	0.01	0.01
1582	L-711	0.01	0.01	0.01	3.60	0.01
1583	L-714-2	14.52	14.52	16.85	0.01	0.01
1584	L-714-3	12.17	12.17	14.52	0.01	0.01
1585	L-740	0.01	0.97	0.01	0.01	0.01
1586	L-741	0.97	1.73	0.97	0.01	0.97
1587	L-742	0.01	0.01	1.73	0.01	0.01
1588	L-744	0.01	0.56	0.01	0.01	0.01
1589	L-760	18.30	18.50	20.69	0.30	0.27
1590	L-761	18.01	18.01	18.50	0.01	0.01
1591	L-762	14.52	14.52	18.01	0.01	0.01
1592	L-770	0.01	0.31	20.45	0.08	0.01
1593	L-771	0.24	2.28	0.24	2.43	0.24
1594	L-772	2.28	2.30	2.28	2.16	2.27
1595	L-773	2.29	2.29	2.30	0.01	2.23
1596	L-774	2.29	2.30	2.29	2.16	2.29
1597	L-775	2.40	2.45	2.40	2.23	2.40
1598	L-776	2.43	2.52	2.43	2.38	2.43
1599	L-777	2.45	2.46	2.45	2.31	2.45
1600	L-778	2.36	2.44	2.36	2.26	2.36
1601	L-779	2.44	2.45	2.44	2.39	2.44
1602	L-780	2.33	2.35	2.45	0.05	0.06
1603	L-781	2.27	2.28	2.30	0.05	0.06
1604	L-782	2.22	2.22	2.27	0.05	0.05
1605	L-783	2.18	2.18	2.22	0.05	0.05
1606	L-784	2.18	2.18	2.18	0.01	0.01
1607	L-805	0.01	12.10	0.01	17.70	0.01
1608	L-806	11.61	11.61	12.10	0.01	0.04
1609	L-807	11.30	11.30	11.61	0.01	0.02
1610	L-808	9.19	9.19	11.30	0.01	0.01
1611	L-809	0.01	0.01	11.87	0.01	0.01
1612	L-810	0.01	14.79	0.01	9.54	0.01
1613	L-811	13.92	13.92	14.79	8.42	12.79
1614	L-812	13.92	13.92	17.06	5.62	0.01

1615	L-813	17.06	17.06	17.06	14.80	15.98
1616	L-814	16.99	16.99	17.11	11.80	14.47
1617	L-815	16.81	16.81	16.99	13.86	14.03
1618	L-816	16.80	16.97	16.81	14.22	14.41
1619	L-817	17.06	17.06	17.10	2.35	16.92
1620	L-817-1	16.96	16.97	17.10	17.10	0.01
1621	L-818	16.98	16.98	17.06	12.87	16.14
1622	L-819	16.97	16.99	16.98	16.28	16.36
1623	L-820	16.98	16.98	16.99	12.43	16.25
1624	L-821	16.98	16.98	16.98	1.87	14.33
1625	L-822	16.92	16.92	16.97	0.01	0.01
1626	L-823	16.91	16.91	16.92	0.01	0.01
1627	L-826	0.01	0.01	21.60	0.01	0.01
1628	L-840	4.10	4.10	9.86	0.01	0.01
1629	L-841	4.10	4.10	23.79	0.01	0.01
1630	L-842	3.54	3.54	23.79	0.01	0.01
1631	L-842A	0.01	0.01	0.94	0.01	0.01
1632	L-844	3.02	3.02	3.54	0.01	0.01
1633	L-845	2.98	2.98	3.02	0.73	0.88
1634	L-846	2.98	2.98	3.78	0.01	0.01
1635	L-847	2.23	2.23	3.78	0.01	0.01
1636	L-850	0.01	2.89	0.01	2.66	0.01
1637	L-860	9.55	9.55	15.09	0.79	1.18
1638	L-870	16.94	16.94	23.78	0.01	0.01
1639	L-871	15.63	15.63	17.03	0.01	0.01
1640	L-871-1B	11.54	11.54	16.59	0.32	0.33
1641	L-871-1C	5.60	5.60	11.54	0.01	0.01
1642	L-900-1	0.65	1.84	0.65	1.79	0.65
1643	L-901	1.33	1.33	1.84	0.99	1.01
1644	L-902	0.93	0.93	1.33	0.01	0.01

1645  
1646  
1647 Analysis begun on: Thu Oct 25 16:09:14 2018  
1648 Analysis ended on: Thu Oct 25 16:09:39 2018  
1649 Total elapsed time: 00:00:25



## **APPENDIX C – EXISTING SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. 25-Year Existing Conditions Model
4. SWMM 10 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - No Offsite Flows
6. SWMM 25 Year Output Report - With Offsite Flows
7. **SWMM 100 Year Output Report- No Offsite Flows**



Gonzales Existing Conditions  
25-yr

\*\*\*\*\*  
NOTE: The summary statistics displayed in this report are  
based on results found at every computational time step,  
not just on results from each reporting time step.  
\*\*\*\*\*

\*\*\*\*\*

Analysis Options

\*\*\*\*\*

Flow Units ..... CFS

Process Models:

Rainfall/Runoff ..... NO

RDII ..... NO

Snowmelt ..... NO

Groundwater ..... NO

Flow Routing ..... YES

Ponding Allowed ..... YES

Water Quality ..... NO

Flow Routing Method ..... DYNWAVE

Starting Date ..... 06/13/2009 00:00:00

Ending Date ..... 06/14/2009 07:10:00

Antecedent Dry Days ..... 0.0

Report Time Step ..... 00:01:00

Routing Time Step ..... 1.00 sec

Variable Time Step ..... YES

Maximum Trials ..... 20

Number of Threads ..... 1

Head Tolerance ..... 0.005000 ft

\*\*\*\*\*

	Volume acre-feet	Volume 10 <sup>6</sup> gal
	-----	-----
Flow Routing Continuity		
Dry Weather Inflow .....	0.000	0.000
Wet Weather Inflow .....	0.000	0.000
Groundwater Inflow .....	0.000	0.000
RDII Inflow .....	0.000	0.000
External Inflow .....	300.767	98.010
External Outflow .....	264.819	86.295
Flooding Loss .....	1.437	0.468
Evaporation Loss .....	0.000	0.000
Exfiltration Loss .....	0.000	0.000
Initial Stored Volume ....	0.004	0.001
Final Stored Volume .....	31.461	10.252
Continuity Error (%) .....	1.016	

\*\*\*\*\*

Highest Continuity Errors

\*\*\*\*\*

Node S-150 (36.94%)

Node J-1022 (-22.67%)

Node J-131 (10.22%)

Node S-1100 (8.55%)

Node J-701A (3.95%)

\*\*\*\*\*

Time-Step Critical Elements

67 \*\*\*\*\*  
 68 Link L-740 (6.60%)  
 69 Link L-741 (3.64%)  
 70 Link L-127 (1.61%)  
 71  
 72

73 \*\*\*\*\*  
 74 Highest Flow Instability Indexes  
 75 \*\*\*\*\*  
 76 Link L-761 (6)  
 77 Link L-762 (6)  
 78 Link L-840 (5)  
 79 Link L-773 (5)  
 80 Link L-771 (4)  
 81  
 82

83 \*\*\*\*\*  
 84 Routing Time Step Summary  
 85 \*\*\*\*\*  
 86 Minimum Time Step : 0.07 sec  
 87 Average Time Step : 0.97 sec  
 88 Maximum Time Step : 1.00 sec  
 89 Percent in Steady State : 0.00  
 90 Average Iterations per Step : 2.84  
 91 Percent Not Converging : 3.74  
 92  
 93

94 \*\*\*\*\*  
 95 Node Depth Summary  
 96 \*\*\*\*\*  
 97

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J-1001	JUNCTION	1.53	4.83	120.43	0 00:48	4.78
J-1002	JUNCTION	0.76	6.43	122.93	0 00:49	6.36
J-1003	JUNCTION	0.38	8.29	125.39	0 00:49	8.13
J-1004	JUNCTION	0.39	9.26	127.26	0 00:49	9.08
J-1005	JUNCTION	0.24	8.85	128.95	0 00:39	7.63
J-1006	JUNCTION	0.20	9.32	130.52	0 00:40	6.87
J-1007	JUNCTION	0.18	10.74	132.74	0 00:40	7.12
J-1008	JUNCTION	0.16	11.31	134.21	0 00:40	7.38
J-1009	JUNCTION	0.08	10.10	135.90	0 00:41	5.53
J-1010	JUNCTION	0.04	1.06	133.26	0 00:45	1.06
J-1020	JUNCTION	0.46	10.69	128.99	0 00:49	10.40
J-1021	JUNCTION	0.48	10.91	129.91	0 00:49	10.10
J-1022	JUNCTION	0.51	10.96	131.16	0 01:19	10.95
J-1023	JUNCTION	0.45	11.35	133.05	0 00:37	9.82
J-1024	JUNCTION	0.32	14.38	139.48	0 00:38	9.13
J-1101	JUNCTION	0.06	1.46	131.66	0 00:50	1.45
J-1102	JUNCTION	0.06	1.36	135.86	0 00:45	1.35
J-120	JUNCTION	0.10	15.00	178.80	0 00:42	11.06
J-121	JUNCTION	0.24	15.50	174.70	0 00:42	15.50
J-122	JUNCTION	0.20	14.86	174.06	0 00:42	14.40
J-123	JUNCTION	0.15	14.20	172.60	0 00:42	12.88
J-124	JUNCTION	0.21	14.86	171.56	0 00:42	13.46
J-124A	JUNCTION	0.09	14.60	175.80	0 00:42	9.56
J-124B	JUNCTION	0.11	12.95	171.85	0 00:42	11.49
J-125	JUNCTION	0.18	13.74	170.14	0 00:44	12.30
J-126	JUNCTION	0.15	10.85	165.55	0 00:44	8.75
J-127	JUNCTION	0.14	9.04	163.04	0 00:44	6.80
J-127A	JUNCTION	0.04	16.26	173.96	0 00:44	3.45
J-128	JUNCTION	0.14	8.55	162.35	0 00:44	6.30
J-129	JUNCTION	0.11	7.41	160.81	0 00:42	4.94

133	J-130	JUNCTION	0.08	4.46	156.26	0	00:44	3.82
134	J-131	JUNCTION	2.35	2.49	148.69	0	05:46	2.49
135	J-141	JUNCTION	0.17	16.31	174.01	0	00:38	14.15
136	J-142	JUNCTION	0.27	16.86	172.06	0	00:38	16.40
137	J-142A	JUNCTION	0.25	16.63	173.33	0	00:38	16.63
138	J-142B	JUNCTION	0.26	16.93	172.43	0	00:38	16.62
139	J-143	JUNCTION	0.27	17.10	172.10	0	00:38	15.99
140	J-144	JUNCTION	0.28	15.42	169.92	0	00:38	15.04
141	J-145	JUNCTION	0.20	15.87	170.07	0	00:37	11.71
142	J-146	JUNCTION	0.17	9.11	161.91	0	00:37	7.90
143	J-147	JUNCTION	0.09	1.86	153.46	0	00:45	1.86
144	J-148	JUNCTION	0.06	1.17	152.47	0	00:45	1.17
145	J-149	JUNCTION	2.92	2.95	148.69	0	05:51	2.95
146	J-151	JUNCTION	0.21	0.89	183.28	0	04:15	0.89
147	J-152	JUNCTION	0.01	0.15	166.15	0	00:45	0.15
148	J-153	JUNCTION	0.03	0.59	165.69	0	00:45	0.59
149	J-153A	JUNCTION	0.02	0.35	167.55	0	00:45	0.35
150	J-154	JUNCTION	0.03	0.58	164.08	0	00:48	0.58
151	J-155	JUNCTION	0.18	5.70	166.40	0	00:43	3.22
152	J-156	JUNCTION	0.07	5.02	165.62	0	00:43	3.13
153	J-157	JUNCTION	0.12	4.10	163.70	0	00:46	3.51
154	J-157-1	JUNCTION	0.01	0.20	164.80	0	00:47	0.20
155	J-157-2	JUNCTION	0.04	4.42	167.02	0	00:46	2.23
156	J-157-3	JUNCTION	0.06	4.24	166.54	0	00:46	2.50
157	J-157-3A	JUNCTION	0.04	0.78	166.18	0	00:45	0.78
158	J-157-4	JUNCTION	0.07	3.42	164.42	0	00:46	2.70
159	J-158	JUNCTION	0.32	2.81	162.01	0	00:47	2.74
160	J-159	JUNCTION	0.09	1.98	161.38	0	00:47	1.98
161	J-160	JUNCTION	0.14	4.48	159.78	0	00:48	4.46
162	J-161	JUNCTION	0.13	3.53	158.33	0	00:48	3.42
163	J-162	JUNCTION	0.09	1.84	155.74	0	00:48	1.83
164	J-163	JUNCTION	0.54	1.63	154.43	0	00:49	1.63
165	J-201	JUNCTION	0.35	14.61	160.41	0	00:32	14.61
166	J-202	JUNCTION	0.34	14.28	159.18	0	00:44	14.28
167	J-203	JUNCTION	0.26	11.11	155.01	0	00:38	11.02
168	J-204	JUNCTION	0.10	4.67	147.07	0	00:38	3.02
169	J-205	JUNCTION	0.12	2.50	143.90	0	00:38	2.49
170	J-206	JUNCTION	0.04	0.84	142.14	0	00:45	0.84
171	J-301	JUNCTION	0.04	0.71	143.21	0	00:45	0.71
172	J-302	JUNCTION	0.04	0.88	141.88	0	00:48	0.87
173	J-303	JUNCTION	0.04	3.41	143.21	0	00:46	1.67
174	J-304	JUNCTION	0.07	5.83	142.33	0	00:42	3.59
175	J-321	JUNCTION	0.19	15.26	152.96	0	00:38	13.06
176	J-322	JUNCTION	0.12	12.83	150.53	0	00:38	10.80
177	J-323	JUNCTION	0.12	12.47	148.97	0	00:38	9.70
178	J-324	JUNCTION	0.13	10.61	145.11	0	00:38	8.05
179	J-325	JUNCTION	0.79	7.67	141.37	0	00:38	5.64
180	J-326	JUNCTION	2.34	2.57	134.57	0	03:53	2.48
181	J-401	JUNCTION	0.01	0.21	144.31	0	00:45	0.21
182	J-402	JUNCTION	0.02	0.29	142.79	0	00:45	0.29
183	J-403	JUNCTION	0.10	3.95	137.15	0	00:46	2.35
184	J-404	JUNCTION	0.04	2.98	136.18	0	00:46	1.51
185	J-405	JUNCTION	0.06	5.14	134.64	0	00:41	3.74
186	J-406	JUNCTION	1.12	5.89	133.29	0	00:41	4.59
187	J-407	JUNCTION	4.92	5.20	128.60	0	03:56	5.14
188	J-451	JUNCTION	0.09	14.70	158.30	0	00:42	7.68
189	J-452	JUNCTION	0.11	20.10	161.60	0	00:41	8.98
190	J-453	JUNCTION	0.25	14.70	149.60	0	00:39	14.70
191	J-454	JUNCTION	0.33	15.18	146.58	0	00:39	15.18
192	J-455	JUNCTION	0.34	14.70	145.10	0	00:39	14.70
193	J-455A	JUNCTION	0.20	13.97	147.57	0	00:39	11.75
194	J-456	JUNCTION	0.33	15.00	145.00	0	00:39	14.67
195	J-457	JUNCTION	0.32	14.48	143.48	0	00:39	14.13
196	J-458	JUNCTION	0.44	14.37	142.77	0	00:39	13.99
197	J-459	JUNCTION	0.96	12.74	140.54	0	00:45	12.72
198	J-460	JUNCTION	1.41	11.70	139.00	0	00:44	11.67

199	J-461	JUNCTION	1.58	10.91	138.01	0	00:45	10.89
200	J-462	JUNCTION	2.32	9.88	136.18	0	00:45	9.80
201	J-462A	JUNCTION	0.84	16.30	144.10	0	00:38	8.88
202	J-463	JUNCTION	2.58	8.83	134.83	0	00:45	8.81
203	J-464	JUNCTION	3.50	7.09	132.09	0	00:45	7.06
204	J-465	JUNCTION	4.15	7.06	131.36	0	00:38	5.67
205	J-466	JUNCTION	4.59	5.20	129.00	0	00:38	4.76
206	J-481	JUNCTION	0.09	0.40	157.34	0	04:06	0.40
207	J-481B	JUNCTION	0.19	0.78	165.89	0	04:02	0.78
208	J-482	JUNCTION	0.33	1.25	146.09	0	02:41	1.25
209	J-482A	JUNCTION	0.08	0.55	193.39	0	02:36	0.55
210	J-482B	JUNCTION	0.00	0.00	268.84	0	00:00	0.00
211	J-483	JUNCTION	0.23	1.06	137.73	0	02:45	1.06
212	J-484	JUNCTION	0.23	0.90	130.60	0	04:29	0.90
213	J-484A	JUNCTION	0.00	0.00	270.00	0	00:00	0.00
214	J-485	JUNCTION	0.26	0.98	127.70	0	04:31	0.98
215	J-485A	JUNCTION	0.34	1.51	155.74	0	04:05	1.51
216	J-490	JUNCTION	0.30	14.32	143.02	0	00:41	14.21
217	J-491	JUNCTION	0.28	15.45	145.75	0	00:37	15.45
218	J-492	JUNCTION	0.20	14.50	149.60	0	00:39	14.50
219	J-493	JUNCTION	0.13	14.60	154.00	0	00:40	11.25
220	J-494	JUNCTION	0.13	14.90	155.10	0	00:40	10.94
221	J-495	JUNCTION	0.25	13.08	142.88	0	00:36	13.08
222	J-501	JUNCTION	0.02	0.47	146.07	0	00:46	0.46
223	J-502	JUNCTION	1.33	9.25	152.25	0	00:45	2.86
224	J-503	JUNCTION	4.93	9.09	148.39	0	00:41	5.30
225	J-601	JUNCTION	0.25	15.31	161.11	0	00:36	15.31
226	J-602	JUNCTION	0.25	15.30	160.80	0	00:36	14.95
227	J-603	JUNCTION	1.21	9.01	151.51	0	00:45	8.98
228	J-604	JUNCTION	1.40	4.48	146.68	0	00:49	4.44
229	J-701	JUNCTION	0.71	1.44	119.71	0	04:14	1.44
230	J-701A	JUNCTION	0.98	1.76	117.54	0	06:48	1.76
231	J-701B	JUNCTION	0.51	1.18	153.91	0	04:11	1.18
232	J-701C	JUNCTION	0.00	0.00	220.00	0	00:00	0.00
233	J-702	JUNCTION	0.64	1.15	120.68	0	08:38	1.15
234	J-702-1	JUNCTION	1.07	1.97	120.33	0	05:16	1.97
235	J-702B	JUNCTION	1.78	3.65	123.69	0	09:04	3.65
236	J-703	JUNCTION	1.76	3.82	124.71	0	09:04	3.82
237	J-704	JUNCTION	1.60	3.63	124.71	0	09:04	3.63
238	J-705	JUNCTION	1.58	3.51	124.72	0	09:04	3.51
239	J-706	JUNCTION	2.43	5.15	126.40	0	07:38	5.15
240	J-707	JUNCTION	2.42	5.14	126.40	0	07:38	5.14
241	J-708	JUNCTION	1.83	4.48	126.41	0	07:38	4.48
242	J-709-1	JUNCTION	1.52	3.93	127.57	0	07:03	3.93
243	J-709-2	JUNCTION	1.30	3.70	127.57	0	07:04	3.70
244	J-709-3	JUNCTION	0.92	3.17	127.57	0	07:06	3.17
245	J-710	JUNCTION	0.98	3.08	127.59	0	07:03	3.08
246	J-711	JUNCTION	1.88	4.68	129.23	0	06:50	4.68
247	J-712	JUNCTION	1.69	4.38	129.36	0	06:49	4.38
248	J-713	JUNCTION	2.39	5.52	130.24	0	06:45	5.52
249	J-714-1	JUNCTION	2.19	5.32	130.24	0	06:45	5.32
250	J-714-2	JUNCTION	1.74	4.80	130.24	0	06:45	4.80
251	J-714-3	JUNCTION	1.53	4.51	130.24	0	06:45	4.51
252	J-715	JUNCTION	2.19	5.25	130.25	0	06:45	5.25
253	J-715A	JUNCTION	0.00	0.00	134.57	0	00:00	0.00
254	J-716	JUNCTION	2.39	5.08	131.31	0	06:15	5.08
255	J-716A	JUNCTION	0.00	0.00	140.30	0	00:00	0.00
256	J-717-1	JUNCTION	1.20	3.82	131.32	0	06:15	3.81
257	J-718	JUNCTION	1.33	3.89	131.61	0	06:05	3.89
258	J-719	JUNCTION	1.33	3.95	131.92	0	05:58	3.95
259	J-720	JUNCTION	0.46	1.13	135.94	0	05:07	1.13
260	J-721	JUNCTION	0.81	2.43	140.51	0	05:25	2.43
261	J-722	JUNCTION	0.97	3.06	142.42	0	05:23	3.06
262	J-723	JUNCTION	0.56	1.68	147.40	0	05:32	1.68
263	J-723-1	JUNCTION	0.76	2.25	146.60	0	04:59	2.25
264	J-725	JUNCTION	0.61	2.01	148.42	0	05:29	2.01

265	J-725-1	JUNCTION	0.00	0.00	367.57	0	00:00	0.00
266	J-725-2	JUNCTION	0.29	0.87	176.44	0	04:24	0.87
267	J-725-3	JUNCTION	0.00	0.00	338.57	0	00:00	0.00
268	J-725A-1	JUNCTION	0.44	1.21	149.60	0	04:12	1.21
269	J-725A-2	JUNCTION	0.15	0.85	148.53	0	05:28	0.85
270	J-725A-3	JUNCTION	0.34	1.38	148.51	0	05:28	1.38
271	J-725B-2	JUNCTION	0.18	0.75	148.40	0	04:30	0.75
272	J-726	JUNCTION	2.28	3.25	148.45	0	05:30	3.25
273	J-730	JUNCTION	0.29	0.92	140.47	0	04:38	0.92
274	J-730-1	JUNCTION	0.21	0.67	131.45	0	04:40	0.67
275	J-731	JUNCTION	0.38	1.13	149.43	0	04:35	1.13
276	J-732	JUNCTION	0.09	0.93	151.73	0	00:46	0.93
277	J-732A	JUNCTION	0.00	0.00	154.84	0	00:00	0.00
278	J-732B	JUNCTION	0.00	0.00	160.69	0	00:00	0.00
279	J-733	JUNCTION	0.03	0.55	152.35	0	00:46	0.55
280	J-734	JUNCTION	0.02	0.47	154.27	0	00:46	0.47
281	J-735	JUNCTION	0.02	0.34	158.54	0	00:45	0.34
282	J-736	JUNCTION	0.00	0.00	159.40	0	00:00	0.00
283	J-737	JUNCTION	0.00	0.00	161.30	0	00:00	0.00
284	J-737A-1	JUNCTION	0.21	0.86	174.60	0	04:17	0.86
285	J-737A-2	JUNCTION	0.26	2.23	168.09	0	04:34	2.23
286	J-740	JUNCTION	0.92	4.71	153.61	0	04:34	4.71
287	J-741	JUNCTION	1.14	6.34	155.54	0	04:34	6.34
288	J-742	JUNCTION	0.75	7.39	162.89	0	03:44	6.24
289	J-743	JUNCTION	0.76	6.19	165.49	0	04:34	6.19
290	J-744	JUNCTION	2.04	13.37	174.67	0	03:55	6.76
291	J-745	JUNCTION	0.38	5.39	165.49	0	04:34	5.39
292	J-750	JUNCTION	0.07	1.15	128.09	0	00:53	1.15
293	J-751	JUNCTION	0.07	1.15	130.60	0	00:50	1.15
294	J-752	JUNCTION	0.02	0.32	131.61	0	00:48	0.32
295	J-753	JUNCTION	0.01	0.32	132.81	0	00:46	0.31
296	J-754	JUNCTION	0.01	0.26	134.28	0	00:45	0.26
297	J-760	JUNCTION	1.79	5.75	127.79	0	00:45	5.74
298	J-761	JUNCTION	1.66	5.60	127.82	0	00:45	5.55
299	J-762	JUNCTION	1.35	5.15	127.80	0	00:45	5.15
300	J-770	JUNCTION	0.16	9.61	144.21	0	00:38	5.36
301	J-771	JUNCTION	0.28	9.29	144.19	0	00:38	6.09
302	J-772	JUNCTION	0.38	9.38	144.88	0	00:38	7.30
303	J-773	JUNCTION	0.82	10.22	145.72	0	00:38	8.17
304	J-774	JUNCTION	0.52	10.30	146.70	0	00:38	8.75
305	J-775	JUNCTION	0.71	11.19	148.39	0	00:38	10.19
306	J-776	JUNCTION	0.85	11.85	149.45	0	00:38	11.01
307	J-777	JUNCTION	1.06	12.33	151.03	0	00:51	12.24
308	J-778	JUNCTION	1.12	12.67	152.77	0	01:19	12.62
309	J-779	JUNCTION	1.34	15.04	156.04	0	01:26	15.04
310	J-780	JUNCTION	1.20	13.89	156.39	0	01:26	13.84
311	J-781	JUNCTION	1.13	13.21	156.51	0	01:23	13.15
312	J-782	JUNCTION	1.03	12.25	156.55	0	01:25	12.22
313	J-783	JUNCTION	0.95	11.38	156.48	0	01:27	11.38
314	J-784	JUNCTION	0.87	10.59	156.49	0	01:28	10.59
315	J-790	JUNCTION	0.11	0.53	139.05	0	03:41	0.53
316	J-791	JUNCTION	0.21	1.13	140.48	0	03:40	1.13
317	J-792	JUNCTION	0.20	1.13	140.90	0	03:40	1.13
318	J-792A	JUNCTION	0.23	1.03	191.39	0	03:37	1.03
319	J-792B	JUNCTION	0.00	0.00	273.36	0	00:00	0.00
320	J-801	JUNCTION	0.68	1.49	116.95	0	02:56	1.49
321	J-802	JUNCTION	1.22	1.83	117.33	0	02:33	1.83
322	J-803	JUNCTION	0.99	1.60	117.37	0	02:33	1.60
323	J-804	JUNCTION	1.22	1.83	117.90	0	04:57	1.83
324	J-805	JUNCTION	2.92	4.75	120.95	0	05:15	4.75
325	J-806	JUNCTION	2.69	4.69	121.12	0	15:54	4.53
326	J-807	JUNCTION	2.53	4.59	121.20	0	15:46	4.37
327	J-808	JUNCTION	1.94	3.66	120.98	0	05:06	3.66
328	J-809	JUNCTION	0.42	1.08	125.88	0	02:18	1.08
329	J-810	JUNCTION	2.33	11.43	137.33	0	01:16	11.35
330	J-811	JUNCTION	2.76	13.16	139.98	0	01:23	13.16

331	J-812	JUNCTION	3.33	13.87	140.47	0	01:22	13.86
332	J-813	JUNCTION	4.84	15.08	140.68	0	01:22	15.08
333	J-814	JUNCTION	3.95	12.82	141.02	0	02:30	12.82
334	J-815	JUNCTION	4.67	11.99	141.79	0	02:42	11.99
335	J-816	JUNCTION	5.44	12.17	142.97	0	03:30	12.17
336	J-817	JUNCTION	6.10	13.05	144.05	0	03:13	13.05
337	J-817-1	JUNCTION	5.97	12.80	143.50	0	03:27	12.80
338	J-818	JUNCTION	6.67	14.07	145.37	0	02:38	14.07
339	J-819	JUNCTION	6.64	14.44	146.34	0	02:40	14.44
340	J-820	JUNCTION	6.82	14.95	147.15	0	02:36	14.95
341	J-821	JUNCTION	6.89	15.18	147.58	0	02:35	15.18
342	J-822	JUNCTION	6.63	14.96	148.36	0	02:35	14.96
343	J-823	JUNCTION	7.99	16.34	148.84	0	02:34	16.34
344	J-824	JUNCTION	0.04	0.81	132.31	0	00:46	0.81
345	J-825	JUNCTION	0.04	0.54	130.44	0	00:46	0.54
346	J-826	JUNCTION	1.92	5.00	130.25	0	06:45	5.00
347	J-830	JUNCTION	0.09	0.54	119.66	0	02:48	0.54
348	J-840	JUNCTION	1.09	10.25	140.35	0	01:22	10.22
349	J-841	JUNCTION	3.29	12.66	140.60	0	00:58	12.66
350	J-842	JUNCTION	1.00	10.74	141.68	0	01:13	10.69
351	J-844	JUNCTION	0.86	10.44	142.44	0	01:14	10.44
352	J-845	JUNCTION	0.88	10.75	142.85	0	01:12	10.70
353	J-846	JUNCTION	2.01	12.23	143.23	0	01:09	12.18
354	J-847	JUNCTION	0.62	9.32	143.52	0	00:36	9.09
355	J-850	JUNCTION	0.47	4.50	129.66	0	02:14	4.50
356	J-860	JUNCTION	1.95	12.00	138.52	0	00:09	12.00
357	J-868	JUNCTION	0.00	0.00	135.10	0	00:00	0.00
358	J-869	JUNCTION	0.00	0.00	135.40	0	00:00	0.00
359	J-870	JUNCTION	7.59	16.06	149.16	0	02:32	16.06
360	J-871-1A	JUNCTION	5.33	13.02	149.72	0	02:36	13.02
361	J-871-1B	JUNCTION	3.35	8.79	149.76	0	02:43	8.79
362	J-871-1C	JUNCTION	1.22	4.52	149.77	0	02:51	4.52
363	J-900-1	JUNCTION	0.43	11.44	139.38	0	00:36	11.44
364	J-901	JUNCTION	0.47	12.00	140.72	0	00:17	12.00
365	J-902	JUNCTION	0.39	11.82	142.02	0	00:39	11.82
366	O-1000	OUTFALL	0.00	0.00	125.59	0	00:00	0.00
367	O-700	OUTFALL	0.36	0.57	106.38	0	06:48	0.57
368	O-800	OUTFALL	0.35	0.87	111.24	0	02:56	0.87
369	O-900	OUTFALL	0.08	1.00	128.60	0	00:30	1.00
370	S-100	STORAGE	5.93	6.12	153.32	0	08:44	6.12
371	S-1000	STORAGE	9.52	9.90	117.00	0	04:55	9.90
372	S-1100	STORAGE	0.37	8.12	130.62	0	01:00	8.12
373	S-150	STORAGE	7.42	7.69	148.69	0	09:47	7.69
374	S-200	STORAGE	5.35	5.53	141.23	0	05:12	5.53
375	S-300	STORAGE	10.92	11.25	134.45	0	13:20	11.25
376	S-400	STORAGE	13.22	13.62	128.52	0	06:17	13.62
377	S-500	STORAGE	10.76	11.00	144.34	0	01:30	11.00
378	S-600	STORAGE	8.86	9.00	143.57	0	00:51	9.00

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381 \*\*\*\*\*  
382 Node Inflow Summary  
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386			Maximum	Maximum		Lateral		
387			Total	Flow		Inflow		
388			Inflow	Total	Time of Max	Volume		
389	Node	Type	Volume	Balance	Occurrence	Error	10^6 gal	10^6
390	gal	Percent	CFS	CFS	days hr:min			

391	J-1001		JUNCTION	0.97	72.56	0	00:48	0.0215
	2.9	0.389						
392	J-1002		JUNCTION	0.58	71.71	0	00:49	0.0128
	2.88	0.047						
393	J-1003		JUNCTION	7.33	71.25	0	00:49	0.162
	2.86	-0.008						
394	J-1004		JUNCTION	1.23	64.99	0	00:49	0.0272
	2.7	-0.023						
395	J-1005		JUNCTION	0.40	13.98	0	00:45	0.00886
	0.316	-0.136						
396	J-1006		JUNCTION	0.37	13.59	0	00:45	0.00819
	0.308	0.240						
397	J-1007		JUNCTION	0.74	13.22	0	00:45	0.0164
	0.3	-0.006						
398	J-1008		JUNCTION	4.12	12.49	0	00:45	0.0912
	0.283	-0.048						
399	J-1009		JUNCTION	0.00	8.45	0	00:45	0
	0.192	0.069						
400	J-1010		JUNCTION	8.67	8.67	0	00:45	0.192
	0.192	-0.002						
401	J-1020		JUNCTION	41.10	53.18	0	00:56	0.91
	2.36	-0.003						
402	J-1021		JUNCTION	0.65	40.16	0	01:37	0.0144
	1.45	0.030						
403	J-1022		JUNCTION	1.06	142.34	0	01:38	0.0235
	1.35	-18.484						
404	J-1023		JUNCTION	0.78	23.99	0	00:45	0.0173
	0.53	-0.233						
405	J-1024		JUNCTION	23.21	23.21	0	00:45	0.514
	0.514	0.274						
406	J-1101		JUNCTION	7.80	21.05	0	00:45	0.173
	0.472	0.071						
407	J-1102		JUNCTION	13.51	13.51	0	00:45	0.299
	0.299	-0.002						
408	J-120		JUNCTION	0.89	1.96	0	00:42	0.0197
	0.0208	-0.203						
409	J-121		JUNCTION	6.50	7.39	0	00:45	0.144
	0.165	0.010						
410	J-122		JUNCTION	0.62	7.27	0	00:43	0.0137
	0.175	0.016						
411	J-123		JUNCTION	0.84	8.03	0	00:43	0.0186
	0.194	-0.014						
412	J-124		JUNCTION	0.35	11.28	0	00:43	0.00775
	0.272	-0.001						
413	J-124A		JUNCTION	1.92	2.58	0	00:42	0.0425
	0.0426	-0.039						
414	J-124B		JUNCTION	1.27	3.19	0	00:45	0.0281
	0.0707	0.000						
415	J-125		JUNCTION	0.54	11.78	0	00:43	0.012
	0.284	0.017						
416	J-126		JUNCTION	2.95	14.62	0	00:44	0.0653
	0.349	-0.013						
417	J-127		JUNCTION	0.00	16.22	0	00:44	0
	0.391	-0.025						
418	J-127A		JUNCTION	1.88	1.88	0	00:45	0.0416
	0.0416	0.132						
419	J-128		JUNCTION	1.30	17.33	0	00:45	0.0288
	0.42	-0.002						
420	J-129		JUNCTION	0.76	18.18	0	00:44	0.0168
	0.437	0.021						
421	J-130		JUNCTION	2.54	20.68	0	00:44	0.0563
	0.493	-0.065						
422	J-131		JUNCTION	0.27	20.95	0	00:44	0.00598
	0.524	11.385						

423	J-141		JUNCTION	2.91	2.91	0	00:45	0.0645
	0.0646	-0.003						
424	J-142		JUNCTION	0.00	7.74	0	00:49	0
	0.199	-0.016						
425	J-142A		JUNCTION	5.62	5.62	0	00:45	0.124
	0.124	0.072						
426	J-142B		JUNCTION	0.57	5.26	0	00:49	0.0126
	0.134	-0.087						
427	J-143		JUNCTION	0.75	8.38	0	00:49	0.0166
	0.215	-0.017						
428	J-144		JUNCTION	2.32	10.39	0	00:45	0.0514
	0.266	-0.002						
429	J-145		JUNCTION	2.61	12.99	0	00:45	0.0578
	0.324	0.008						
430	J-146		JUNCTION	2.38	15.37	0	00:45	0.0527
	0.377	-0.003						
431	J-147		JUNCTION	0.76	16.13	0	00:45	0.0168
	0.394	0.003						
432	J-148		JUNCTION	1.55	17.64	0	00:45	0.0343
	0.428	0.037						
433	J-149		JUNCTION	0.20	17.81	0	00:45	0.00443
	0.447	1.498						
434	J-151		JUNCTION	32.97	32.97	0	04:15	4.14
	4.14	-0.001						
435	J-152		JUNCTION	0.20	0.20	0	00:45	0.00443
	0.00443	-0.010						
436	J-153		JUNCTION	0.47	2.39	0	00:45	0.0104
	0.0532	-0.027						
437	J-153A		JUNCTION	1.73	1.73	0	00:45	0.0383
	0.0383	0.010						
438	J-154		JUNCTION	0.67	3.02	0	00:45	0.0148
	0.068	0.038						
439	J-155		JUNCTION	1.22	4.16	0	00:46	0.027
	0.095	0.002						
440	J-156		JUNCTION	0.69	4.84	0	00:46	0.0153
	0.11	-0.052						
441	J-157		JUNCTION	1.21	13.23	0	00:47	0.0268
	0.317	-0.006						
442	J-157-1		JUNCTION	0.26	0.26	0	00:45	0.00576
	0.00576	0.007						
443	J-157-2		JUNCTION	1.38	1.62	0	00:45	0.0306
	0.0363	0.025						
444	J-157-3		JUNCTION	1.01	6.28	0	00:46	0.0224
	0.147	-0.137						
445	J-157-3A		JUNCTION	3.99	3.99	0	00:45	0.0884
	0.0884	0.278						
446	J-157-4		JUNCTION	1.50	7.57	0	00:47	0.0332
	0.18	0.008						
447	J-158		JUNCTION	0.96	14.13	0	00:47	0.0213
	0.339	0.042						
448	J-159		JUNCTION	0.15	14.27	0	00:47	0.00332
	0.342	0.000						
449	J-160		JUNCTION	1.60	15.69	0	00:47	0.0354
	0.377	0.196						
450	J-161		JUNCTION	0.74	16.22	0	00:48	0.0164
	0.393	-0.536						
451	J-162		JUNCTION	4.39	20.15	0	00:48	0.0972
	0.492	0.092						
452	J-163		JUNCTION	0.00	20.13	0	00:48	0
	0.492	0.481						
453	J-201		JUNCTION	8.60	8.60	0	00:45	0.19
	0.19	-0.013						
454	J-202		JUNCTION	3.54	8.05	0	00:37	0.0784
	0.249	0.004						
455	J-203		JUNCTION	3.65	11.07	0	00:45	0.0808
	0.33	-0.001						



456	J-204		JUNCTION	3.21	14.28	0	00:45	0.0711
	0.401	-0.001						
457	J-205		JUNCTION	2.42	16.70	0	00:45	0.0536
	0.455	-0.001						
458	J-206		JUNCTION	0.00	16.70	0	00:45	0
	0.455	-0.007						
459	J-301		JUNCTION	2.43	2.43	0	00:45	0.0538
	0.0538	-0.005						
460	J-302		JUNCTION	1.92	4.27	0	00:45	0.0425
	0.0963	0.005						
461	J-303		JUNCTION	0.40	4.84	0	00:46	0.00886
	0.105	-0.009						
462	J-304		JUNCTION	3.44	7.54	0	00:46	0.0762
	0.181	-0.041						
463	J-321		JUNCTION	10.23	10.23	0	00:45	0.227
	0.227	-0.001						
464	J-322		JUNCTION	1.48	11.71	0	00:45	0.0328
	0.259	0.004						
465	J-323		JUNCTION	1.19	12.90	0	00:45	0.0264
	0.286	-0.008						
466	J-324		JUNCTION	1.01	13.91	0	00:45	0.0224
	0.308	-0.014						
467	J-325		JUNCTION	1.10	15.01	0	00:45	0.0244
	0.333	0.316						
468	J-326		JUNCTION	2.18	24.59	0	00:45	0.0483
	0.562	1.189						
469	J-401		JUNCTION	0.43	0.43	0	00:45	0.00952
	0.00952	-0.001						
470	J-402		JUNCTION	1.31	1.73	0	00:45	0.029
	0.0385	-0.029						
471	J-403		JUNCTION	2.19	3.90	0	00:45	0.0485
	0.0871	0.013						
472	J-404		JUNCTION	1.28	5.18	0	00:45	0.0283
	0.115	0.001						
473	J-405		JUNCTION	1.66	6.49	0	00:47	0.0368
	0.152	-0.013						
474	J-406		JUNCTION	0.46	6.93	0	00:46	0.0102
	0.163	2.306						
475	J-407		JUNCTION	1.11	37.31	0	00:45	0.0246
	0.992	0.415						
476	J-451		JUNCTION	2.68	3.67	0	00:42	0.0594
	0.0596	-0.112						
477	J-452		JUNCTION	0.00	4.10	0	00:41	0
	0.0609	0.000						
478	J-453		JUNCTION	2.53	5.21	0	00:45	0.056
	0.117	-0.021						
479	J-454		JUNCTION	2.77	7.96	0	00:45	0.0613
	0.177	-0.006						
480	J-455		JUNCTION	2.21	8.14	0	00:45	0.0489
	0.246	0.017						
481	J-455A		JUNCTION	1.59	2.18	0	00:39	0.0352
	0.0355	-0.118						
482	J-456		JUNCTION	0.44	8.05	0	00:56	0.00975
	0.251	-0.008						
483	J-457		JUNCTION	0.78	8.56	0	00:56	0.0173
	0.269	-0.017						
484	J-458		JUNCTION	0.49	8.89	0	00:56	0.0109
	0.28	0.015						
485	J-459		JUNCTION	0.76	9.39	0	00:56	0.0168
	0.298	0.407						
486	J-460		JUNCTION	0.71	21.67	0	00:42	0.0157
	0.654	0.412						
487	J-461		JUNCTION	0.62	22.22	0	00:42	0.0137
	0.666	0.452						
488	J-462		JUNCTION	1.96	26.25	0	00:45	0.0434
	0.759	0.958						

489	J-462A 0.0529	1.976	JUNCTION	2.35	3.36	0	00:38	0.052
490	J-463 0.768	0.540	JUNCTION	0.71	26.97	0	00:45	0.0157
491	J-464 0.806	0.618	JUNCTION	1.91	28.87	0	00:45	0.0423
492	J-465 0.807	0.460	JUNCTION	0.27	29.14	0	00:45	0.00598
493	J-466 0.812	0.442	JUNCTION	0.37	29.51	0	00:45	0.00819
494	J-481 2.17	0.016	JUNCTION	0.00	18.08	0	04:03	0
495	J-481B 2.17	-0.003	JUNCTION	18.38	18.38	0	04:00	2.17
496	J-482 4.44	0.055	JUNCTION	10.87	34.24	0	02:33	0.803
497	J-482A 1.46	-0.116	JUNCTION	19.79	19.79	0	02:30	1.46
498	J-482B 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
499	J-483 5.09	-0.047	JUNCTION	8.03	41.41	0	02:45	0.652
500	J-484 8.64	0.213	JUNCTION	30.09	64.13	0	04:00	3.55
501	J-484A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
502	J-485 8.76	0.010	JUNCTION	2.09	57.21	0	04:29	0.139
503	J-485A 2.6	-0.030	JUNCTION	21.97	21.97	0	04:00	2.6
504	J-490 0.34	-0.026	JUNCTION	2.07	12.73	0	00:41	0.0458
505	J-491 0.227	-0.009	JUNCTION	2.42	9.40	0	00:45	0.0536
506	J-492 0.175	-0.009	JUNCTION	3.98	7.90	0	00:45	0.0881
507	J-493 0.0868	-0.017	JUNCTION	0.00	3.92	0	00:45	0
508	J-494 0.0868	-0.025	JUNCTION	3.92	3.92	0	00:45	0.0868
509	J-495 0.0777	-0.039	JUNCTION	3.51	3.51	0	00:45	0.0777
510	J-501 0.0363	-0.066	JUNCTION	1.64	1.64	0	00:45	0.0363
511	J-502 0.161	1.738	JUNCTION	5.54	7.15	0	00:45	0.123
512	J-503 0.235	1.992	JUNCTION	3.36	10.09	0	00:46	0.0744
513	J-601 0.129	-0.003	JUNCTION	5.83	5.83	0	00:45	0.129
514	J-602 0.171	-0.113	JUNCTION	2.01	6.88	0	00:42	0.0445
515	J-603 0.282	1.378	JUNCTION	4.98	11.56	0	00:45	0.11
516	J-604 0.278	0.280	JUNCTION	0.00	11.56	0	00:45	0
517	J-701 58.3	0.744	JUNCTION	18.68	215.38	0	04:49	1.52
518	J-701A 62.4	4.115	JUNCTION	30.34	273.13	0	04:52	4.48
519	J-701B 7.41	0.196	JUNCTION	40.76	61.36	0	04:00	4.81
520	J-701C 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
521	J-702 41.3	0.163	JUNCTION	15.51	120.38	0	08:29	0.344

522	J-702-1 50	1.154	JUNCTION	0.00	165.95	0	04:58	0
523	J-702B 31.9	0.000	JUNCTION	2.93	103.59	0	09:04	0.0649
524	J-703 32	0.377	JUNCTION	4.46	105.06	0	08:28	0.0988
525	J-704 32	0.264	JUNCTION	7.29	113.70	0	07:43	0.161
526	J-705 31.3	-0.048	JUNCTION	4.27	117.51	0	07:28	0.0946
527	J-706 31.2	0.024	JUNCTION	4.21	117.66	0	07:25	0.0932
528	J-707 31.1	0.098	JUNCTION	2.62	119.44	0	07:07	0.058
529	J-708 30.8	-0.001	JUNCTION	11.28	122.22	0	06:51	0.25
530	J-709-1 30.5	0.003	JUNCTION	10.09	122.48	0	06:47	0.223
531	J-709-2 0.0741	-0.014	JUNCTION	0.56	3.34	0	00:45	0.0124
532	J-709-3 0.0616	-0.046	JUNCTION	2.78	2.78	0	00:45	0.0616
533	J-710 30.2	0.005	JUNCTION	13.38	122.75	0	06:44	0.296
534	J-711 29.9	0.002	JUNCTION	6.47	122.79	0	06:43	0.143
535	J-712 29.8	0.002	JUNCTION	5.61	122.83	0	06:41	0.124
536	J-713 29.7	0.083	JUNCTION	14.29	123.37	0	06:30	0.316
537	J-714-1 29.4	0.053	JUNCTION	0.00	125.48	0	06:13	0
538	J-714-2 0.209	-0.083	JUNCTION	0.13	9.43	0	00:45	0.00288
539	J-714-3 0.206	-0.002	JUNCTION	9.32	9.32	0	00:45	0.206
540	J-715 29	0.002	JUNCTION	0.00	128.88	0	06:01	0
541	J-715A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
542	J-716 29.2	0.438	JUNCTION	1.45	131.76	0	05:46	0.0321
543	J-716A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
544	J-717-1 29.1	-0.011	JUNCTION	10.98	136.15	0	05:33	0.243
545	J-718 28.9	-0.009	JUNCTION	0.00	136.23	0	05:32	0
546	J-719 28	-0.003	JUNCTION	41.32	143.24	0	05:07	0.915
547	J-720 27.1	0.030	JUNCTION	16.35	143.26	0	05:05	0.362
548	J-721 21.7	0.002	JUNCTION	9.52	120.15	0	05:23	0.211
549	J-722 21.5	0.081	JUNCTION	9.73	120.89	0	04:59	0.215
550	J-723 11.8	0.024	JUNCTION	0.00	68.15	0	05:29	0
551	J-723-1 21.3	0.009	JUNCTION	0.00	121.33	0	04:30	0
552	J-725 11.8	0.018	JUNCTION	0.00	69.80	0	05:16	0
553	J-725-1 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
554	J-725-2 3.48	1.901	JUNCTION	39.29	39.29	0	03:00	3.48

555	J-725-3 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
556	J-725A-1 3.42	0.182	JUNCTION	0.00	18.78	0	04:24	0
557	J-725A-2 3.41	0.002	JUNCTION	0.00	19.03	0	04:36	0
558	J-725A-3 3.41	0.009	JUNCTION	0.00	18.99	0	04:35	0
559	J-725B-2 9.5	0.000	JUNCTION	71.47	71.47	0	04:30	9.5
560	J-726 8.41	-0.013	JUNCTION	54.27	54.27	0	05:15	8.41
561	J-730 9.05	-0.005	JUNCTION	8.90	59.90	0	04:36	0.197
562	J-730-1 9.05	0.093	JUNCTION	0.00	59.89	0	04:39	0
563	J-731 8.86	0.010	JUNCTION	2.07	59.90	0	04:34	0.0458
564	J-732 0.107	0.003	JUNCTION	1.36	4.66	0	00:46	0.0301
565	J-732A 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
566	J-732B 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
567	J-733 0.0773	-0.000	JUNCTION	0.92	3.36	0	00:46	0.0204
568	J-734 0.0569	0.021	JUNCTION	1.15	2.51	0	00:45	0.0255
569	J-735 0.0314	-0.038	JUNCTION	1.42	1.42	0	00:45	0.0315
570	J-736 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
571	J-737 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
572	J-737A-1 4.14	-0.008	JUNCTION	0.00	32.85	0	04:16	0
573	J-737A-2 4.14	0.010	JUNCTION	0.00	32.66	0	04:17	0
574	J-740 8.7	-0.000	JUNCTION	0.16	59.90	0	04:34	0.00354
575	J-741 8.7	-0.002	JUNCTION	5.21	59.90	0	04:34	0.115
576	J-742 8.58	-0.004	JUNCTION	3.21	59.90	0	04:34	0.0711
577	J-743 8.51	-0.002	JUNCTION	0.00	61.09	0	03:55	0
578	J-744 8.55	0.423	JUNCTION	37.33	65.81	0	03:56	4.41
579	J-745 0.00238	-1.454	JUNCTION	0.00	1.80	0	03:46	0
580	J-750 0.472	-1.927	JUNCTION	0.00	19.17	0	00:50	0
581	J-751 0.472	0.000	JUNCTION	4.15	20.02	0	00:47	0.0919
582	J-752 0.381	-0.011	JUNCTION	1.86	16.54	0	00:46	0.0412
583	J-753 0.339	-0.000	JUNCTION	3.79	15.00	0	00:45	0.0839
584	J-754 0.255	-0.003	JUNCTION	11.53	11.53	0	00:45	0.255
585	J-760 0.329	-0.022	JUNCTION	14.03	14.78	0	00:45	0.311
586	J-761 0.0189	-0.110	JUNCTION	0.00	0.90	0	00:09	0
587	J-762 0.0172	-0.235	JUNCTION	0.75	0.91	0	00:09	0.0166

588	J-770		JUNCTION	6.98	16.37	0	00:45	0.155
	0.904	0.301						
589	J-771		JUNCTION	0.00	9.83	0	01:03	0
	0.749	0.001						
590	J-772		JUNCTION	0.56	9.83	0	01:05	0.0124
	0.749	-0.002						
591	J-773		JUNCTION	0.00	9.56	0	01:05	0
	0.737	-0.019						
592	J-774		JUNCTION	1.00	9.56	0	01:05	0.0221
	0.737	0.020						
593	J-775		JUNCTION	1.00	9.11	0	01:12	0.0221
	0.715	0.009						
594	J-776		JUNCTION	0.00	8.77	0	01:26	0
	0.692	-0.016						
595	J-777		JUNCTION	1.58	8.77	0	01:28	0.035
	0.692	0.016						
596	J-778		JUNCTION	0.91	8.43	0	01:44	0.0202
	0.657	-0.002						
597	J-779		JUNCTION	22.83	24.65	0	00:45	0.506
	0.638	-0.008						
598	J-780		JUNCTION	0.29	5.69	0	03:16	0.00642
	0.133	-0.003						
599	J-781		JUNCTION	2.54	5.69	0	03:16	0.0563
	0.137	0.023						
600	J-782		JUNCTION	0.78	5.69	0	03:16	0.0173
	0.0994	-0.069						
601	J-783		JUNCTION	0.71	5.46	0	03:18	0.0157
	0.0751	-0.025						
602	J-784		JUNCTION	1.62	2.67	0	00:23	0.0359
	0.0398	-0.082						
603	J-790		JUNCTION	3.02	43.89	0	03:40	0.0669
	4.99	0.001						
604	J-791		JUNCTION	0.00	43.89	0	03:40	0
	4.93	0.000						
605	J-792		JUNCTION	10.60	44.25	0	03:35	0.939
	4.93	-0.006						
606	J-792A		JUNCTION	38.59	38.59	0	03:30	3.99
	3.99	0.018						
607	J-792B		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
608	J-801		JUNCTION	7.13	52.73	0	02:47	0.316
	12	0.150						
609	J-802		JUNCTION	10.42	19.65	0	01:20	0.231
	9	0.045						
610	J-803		JUNCTION	0.00	18.31	0	05:15	0
	8.77	0.010						
611	J-804		JUNCTION	3.63	18.31	0	05:14	0.0804
	8.77	-0.000						
612	J-805		JUNCTION	0.98	54.19	0	01:25	0.0217
	8.69	0.035						
613	J-806		JUNCTION	2.25	53.88	0	01:25	0.0498
	8.67	-0.001						
614	J-807		JUNCTION	0.00	53.24	0	01:25	0
	8.61	-0.038						
615	J-808		JUNCTION	81.24	102.00	0	01:30	3.6
	8.64	0.368						
616	J-809		JUNCTION	3.69	24.81	0	02:03	0.0817
	5.03	-0.217						
617	J-810		JUNCTION	2.05	15.29	0	01:50	0.0454
	4.14	-0.004						
618	J-811		JUNCTION	0.80	12.38	0	00:47	0.0177
	3.7	-0.003						
619	J-812		JUNCTION	11.51	15.57	0	00:45	0.255
	3.43	0.005						
620	J-813		JUNCTION	4.87	6.82	0	05:15	0.108
	3.18	0.001						

621	J-814		JUNCTION	14.06	14.87	0	00:45	0.311
	3.17	0.002						
622	J-815		JUNCTION	11.55	14.96	0	00:45	0.256
	2.88	0.003						
623	J-816		JUNCTION	3.86	10.65	0	00:48	0.0855
	2.53	-0.001						
624	J-817		JUNCTION	3.00	8.18	0	00:46	0.0664
	2.28	-0.000						
625	J-817-1		JUNCTION	5.93	9.64	0	00:45	0.131
	2.41	0.002						
626	J-818		JUNCTION	8.23	9.87	0	00:45	0.182
	2.22	0.011						
627	J-819		JUNCTION	3.69	8.25	0	00:45	0.0817
	2.03	-0.001						
628	J-820		JUNCTION	5.47	9.77	0	00:45	0.121
	1.95	-0.002						
629	J-821		JUNCTION	5.50	7.37	0	00:45	0.122
	1.83	0.010						
630	J-822		JUNCTION	2.09	4.97	0	00:45	0.0463
	1.71	-0.014						
631	J-823		JUNCTION	1.91	8.40	0	00:13	0.0423
	1.66	0.139						
632	J-824		JUNCTION	3.06	3.06	0	00:45	0.0678
	0.0678	0.051						
633	J-825		JUNCTION	2.81	5.56	0	00:45	0.0622
	0.131	0.029						
634	J-826		JUNCTION	0.00	127.58	0	06:05	0
	29.2	0.007						
635	J-830		JUNCTION	33.69	33.69	0	02:45	2.74
	2.74	-0.022						
636	J-840		JUNCTION	0.51	4.70	0	00:51	0.0113
	0.249	-0.019						
637	J-841		JUNCTION	1.55	4.82	0	01:10	0.0343
	0.267	0.659						
638	J-842		JUNCTION	2.34	4.17	0	01:12	0.0518
	0.232	-0.008						
639	J-844		JUNCTION	0.80	8.25	0	00:45	0.0177
	0.18	-0.030						
640	J-845		JUNCTION	3.46	7.45	0	00:45	0.0766
	0.163	-0.074						
641	J-846		JUNCTION	1.04	3.99	0	00:45	0.023
	0.0894	3.033						
642	J-847		JUNCTION	2.95	2.95	0	00:45	0.0653
	0.0653	-0.103						
643	J-850		JUNCTION	15.67	15.67	0	01:45	0.81
	0.81	-0.011						
644	J-860		JUNCTION	13.11	13.11	0	01:15	0.484
	0.484	-0.016						
645	J-868		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
646	J-869		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
647	J-870		JUNCTION	7.47	7.47	0	00:45	0.165
	1.64	0.167						
648	J-871-1A		JUNCTION	33.42	38.08	0	00:45	0.74
	1.5	1.340						
649	J-871-1B		JUNCTION	26.27	29.38	0	00:45	0.582
	0.794	1.192						
650	J-871-1C		JUNCTION	8.39	8.39	0	00:45	0.186
	0.225	9.536						
651	J-900-1		JUNCTION	14.07	15.49	0	00:45	0.312
	0.394	-0.029						
652	J-901		JUNCTION	2.07	4.30	0	00:45	0.0458
	0.108	0.036						
653	J-902		JUNCTION	2.89	2.89	0	00:45	0.064
	0.064	-0.039						

654	O-1000 0	0.000 gal	OUTFALL	0.00	0.00	0	00:00	0
655	O-700 73.9	0.000	OUTFALL	55.70	238.56	0	08:30	14
656	O-800 12	0.000	OUTFALL	0.00	50.87	0	02:56	0
657	O-900 0.371	0.000	OUTFALL	0.00	10.30	0	00:39	0
658	S-100 0.507	0.436	STORAGE	0.76	20.74	0	00:49	0.0168
659	S-1000 3.35	0.067	STORAGE	20.83	92.12	0	00:46	0.461
660	S-1100 0.871	9.355	STORAGE	7.81	106.50	0	00:49	0.173
661	S-150 0.915	58.570	STORAGE	0.14	38.73	0	00:45	0.0031
662	S-200 0.463	0.451	STORAGE	0.34	17.02	0	00:45	0.00753
663	S-300 0.56	1.110	STORAGE	0.25	24.61	0	00:45	0.00554
664	S-400 0.993	0.348	STORAGE	0.40	37.54	0	00:45	0.00886
665	S-500 0.356	2.624	STORAGE	5.78	15.63	0	00:46	0.128
666	S-600 0.287	0.474	STORAGE	0.45	12.01	0	00:45	0.00997

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669 \*\*\*\*\*  
670 Node Surcharge Summary  
671 \*\*\*\*\*

672  
673 Surcharging occurs when water rises above the top of the highest conduit.

674	-----				
675			Hours	Max. Height	Min. Depth
676	Node	Type	Surcharged	Above Crown	Below Rim
677				Feet	Feet
678	-----				
679	J-1001	JUNCTION	0.89	1.326	5.084
680	J-1002	JUNCTION	1.15	2.926	3.484
681	J-1003	JUNCTION	1.31	4.786	2.374
682	J-1004	JUNCTION	1.29	5.755	1.185
683	J-1005	JUNCTION	0.94	5.848	1.352
684	J-1006	JUNCTION	0.76	6.817	0.493
685	J-1007	JUNCTION	0.73	8.739	0.000
686	J-1008	JUNCTION	0.53	9.005	0.000
687	J-1009	JUNCTION	0.29	8.597	0.000
688	J-1020	JUNCTION	1.46	7.691	0.000
689	J-1021	JUNCTION	1.44	7.912	0.000
690	J-1022	JUNCTION	1.04	2.965	0.000
691	J-1023	JUNCTION	1.35	8.350	0.000
692	J-1024	JUNCTION	1.23	12.380	0.000
693	J-120	JUNCTION	0.24	13.750	0.000
694	J-121	JUNCTION	0.72	14.250	0.000
695	J-122	JUNCTION	0.53	13.607	0.000
696	J-123	JUNCTION	0.50	12.951	0.000
697	J-124	JUNCTION	0.60	13.358	0.000
698	J-124A	JUNCTION	0.22	13.350	0.000
699	J-124B	JUNCTION	0.39	11.703	0.000
700	J-125	JUNCTION	0.56	12.243	0.000
701	J-126	JUNCTION	0.65	9.351	0.000
702	J-127	JUNCTION	0.40	7.037	0.000
703	J-127A	JUNCTION	0.10	15.010	0.000
704	J-128	JUNCTION	0.36	6.547	0.000
705	J-129	JUNCTION	0.21	5.411	0.000
706	J-130	JUNCTION	0.11	1.965	0.525

707	J-141	JUNCTION	0.41	14.810	0.000
708	J-142	JUNCTION	0.60	14.860	0.000
709	J-142A	JUNCTION	0.58	15.380	0.000
710	J-142B	JUNCTION	0.71	15.480	0.000
711	J-143	JUNCTION	0.76	15.596	0.000
712	J-144	JUNCTION	0.85	13.916	0.000
713	J-145	JUNCTION	0.58	14.270	0.000
714	J-146	JUNCTION	0.72	7.605	0.000
715	J-155	JUNCTION	0.22	3.698	0.892
716	J-156	JUNCTION	0.31	3.416	1.314
717	J-157	JUNCTION	0.24	1.504	4.426
718	J-157-2	JUNCTION	0.06	2.925	2.525
719	J-157-3	JUNCTION	0.07	2.486	2.744
720	J-157-4	JUNCTION	0.25	1.820	3.800
721	J-158	JUNCTION	0.37	0.813	5.997
722	J-161	JUNCTION	0.32	1.427	6.813
723	J-201	JUNCTION	0.84	13.360	0.000
724	J-202	JUNCTION	0.92	13.030	0.000
725	J-203	JUNCTION	0.91	9.856	0.000
726	J-204	JUNCTION	0.33	2.675	0.125
727	J-205	JUNCTION	0.34	0.503	2.367
728	J-303	JUNCTION	0.08	2.155	0.965
729	J-304	JUNCTION	0.18	4.575	0.000
730	J-321	JUNCTION	0.65	13.760	0.000
731	J-322	JUNCTION	0.31	11.330	0.000
732	J-323	JUNCTION	0.35	10.973	0.000
733	J-324	JUNCTION	0.43	9.114	0.000
734	J-325	JUNCTION	0.40	6.173	0.000
735	J-326	JUNCTION	28.98	0.574	4.736
736	J-403	JUNCTION	0.36	2.698	5.042
737	J-404	JUNCTION	0.02	1.728	2.342
738	J-405	JUNCTION	0.22	3.886	0.654
739	J-406	JUNCTION	0.38	4.639	0.181
740	J-407	JUNCTION	29.73	1.555	1.225
741	J-451	JUNCTION	0.27	13.450	0.000
742	J-452	JUNCTION	0.35	18.850	0.000
743	J-453	JUNCTION	0.55	13.450	0.000
744	J-454	JUNCTION	0.77	13.930	0.000
745	J-455	JUNCTION	0.81	13.200	0.000
746	J-455A	JUNCTION	0.54	12.720	0.000
747	J-456	JUNCTION	0.78	13.200	0.000
748	J-457	JUNCTION	0.95	12.980	0.000
749	J-458	JUNCTION	1.03	12.868	0.000
750	J-459	JUNCTION	1.10	11.242	0.000
751	J-460	JUNCTION	0.87	9.446	0.000
752	J-461	JUNCTION	0.83	8.559	0.000
753	J-462	JUNCTION	1.44	7.635	0.000
754	J-462A	JUNCTION	0.83	15.050	0.000
755	J-463	JUNCTION	30.36	6.582	0.000
756	J-464	JUNCTION	30.53	4.839	0.000
757	J-465	JUNCTION	30.53	4.808	0.000
758	J-466	JUNCTION	30.52	2.950	1.500
759	J-490	JUNCTION	0.90	12.818	0.000
760	J-491	JUNCTION	0.70	13.950	0.000
761	J-492	JUNCTION	0.46	13.250	0.000
762	J-493	JUNCTION	0.32	13.349	0.000
763	J-494	JUNCTION	0.29	13.650	0.000
764	J-495	JUNCTION	0.77	11.830	0.000
765	J-502	JUNCTION	0.77	7.753	0.000
766	J-503	JUNCTION	30.48	7.589	0.000
767	J-601	JUNCTION	0.68	14.060	0.000
768	J-602	JUNCTION	0.71	14.050	0.000
769	J-603	JUNCTION	2.00	7.763	0.000
770	J-604	JUNCTION	30.51	3.228	0.000
771	J-709-2	JUNCTION	13.31	2.448	9.672
772	J-709-3	JUNCTION	10.69	1.919	9.771



773	J-714-2	JUNCTION	12.32	2.799	9.991
774	J-714-3	JUNCTION	11.15	2.509	10.171
775	J-740	JUNCTION	1.92	1.708	2.222
776	J-741	JUNCTION	2.72	3.339	0.571
777	J-742	JUNCTION	1.48	4.391	0.000
778	J-743	JUNCTION	1.14	1.090	0.000
779	J-744	JUNCTION	1.61	9.167	0.000
780	J-745	JUNCTION	1.38	2.391	0.000
781	J-760	JUNCTION	16.20	4.248	8.622
782	J-761	JUNCTION	15.30	4.102	7.898
783	J-762	JUNCTION	13.70	3.650	7.950
784	J-770	JUNCTION	0.42	7.915	0.025
785	J-771	JUNCTION	2.98	7.786	0.064
786	J-772	JUNCTION	2.98	7.883	3.077
787	J-773	JUNCTION	2.98	8.321	5.799
788	J-774	JUNCTION	2.99	8.799	0.851
789	J-775	JUNCTION	3.08	9.842	0.518
790	J-776	JUNCTION	3.10	10.400	0.000
791	J-777	JUNCTION	3.01	10.178	0.000
792	J-778	JUNCTION	3.09	11.419	0.000
793	J-779	JUNCTION	3.10	13.794	0.000
794	J-780	JUNCTION	3.02	12.444	0.000
795	J-781	JUNCTION	3.00	11.856	0.000
796	J-782	JUNCTION	2.96	10.999	0.000
797	J-783	JUNCTION	2.92	10.128	0.000
798	J-784	JUNCTION	2.91	9.340	0.000
799	J-805	JUNCTION	15.91	1.754	0.000
800	J-806	JUNCTION	15.42	1.690	0.310
801	J-807	JUNCTION	15.11	1.589	1.681
802	J-808	JUNCTION	13.02	0.660	0.000
803	J-810	JUNCTION	18.78	9.927	0.000
804	J-811	JUNCTION	13.27	11.131	0.000
805	J-812	JUNCTION	21.49	12.365	0.000
806	J-813	JUNCTION	21.49	12.283	0.000
807	J-814	JUNCTION	21.40	11.572	0.000
808	J-815	JUNCTION	21.19	10.742	0.000
809	J-816	JUNCTION	21.39	10.921	0.000
810	J-817	JUNCTION	21.52	11.801	0.000
811	J-817-1	JUNCTION	21.56	11.553	0.000
812	J-818	JUNCTION	21.45	12.517	0.000
813	J-819	JUNCTION	21.46	13.194	0.000
814	J-820	JUNCTION	21.45	13.701	0.000
815	J-821	JUNCTION	21.43	13.828	0.000
816	J-822	JUNCTION	21.38	13.710	0.000
817	J-823	JUNCTION	21.37	13.585	0.000
818	J-840	JUNCTION	4.93	9.001	0.000
819	J-841	JUNCTION	30.98	10.850	0.000
820	J-842	JUNCTION	4.37	9.494	0.000
821	J-844	JUNCTION	3.87	9.189	0.000
822	J-845	JUNCTION	3.81	9.497	0.000
823	J-846	JUNCTION	4.56	10.978	0.000
824	J-847	JUNCTION	2.81	8.074	0.000
825	J-850	JUNCTION	3.82	3.252	0.000
826	J-860	JUNCTION	12.93	10.750	0.000
827	J-870	JUNCTION	21.40	14.556	0.000
828	J-871-1A	JUNCTION	20.26	11.770	0.000
829	J-871-1B	JUNCTION	16.60	8.287	0.000
830	J-871-1C	JUNCTION	11.01	4.017	0.000
831	J-900-1	JUNCTION	2.36	10.440	0.000
832	J-901	JUNCTION	1.72	11.000	0.000
833	J-902	JUNCTION	1.25	10.820	0.000

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837 Node Flooding Summary

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840 Flooding refers to all water that overflows a node, whether it ponds or not.

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Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10 <sup>6</sup> gal	Maximum Ponded Depth Feet
J-1024	0.01	1.27	0 00:38	0.000	10.000
J-120	0.01	1.58	0 00:42	0.000	10.000
J-121	0.11	1.73	0 00:45	0.002	10.000
J-124A	0.01	1.74	0 00:42	0.000	10.000
J-127A	0.01	0.82	0 00:44	0.000	10.000
J-141	0.01	1.50	0 00:38	0.000	10.000
J-142	0.01	1.07	0 00:38	0.000	10.000
J-142A	0.14	1.79	0 00:45	0.003	10.000
J-142B	0.01	0.28	0 00:38	0.000	10.000
J-145	0.01	1.25	0 00:37	0.000	10.000
J-201	0.31	4.63	0 00:45	0.019	10.000
J-202	0.02	0.09	0 00:45	0.000	10.000
J-321	0.01	0.23	0 00:38	0.000	10.000
J-322	0.01	0.40	0 00:38	0.000	10.000
J-451	0.01	3.46	0 00:42	0.000	10.000
J-452	0.01	3.21	0 00:41	0.000	10.000
J-453	0.01	3.84	0 00:39	0.000	10.000
J-454	0.24	3.62	0 00:45	0.015	10.000
J-455	0.19	1.65	0 00:45	0.004	10.000
J-455A	0.01	1.85	0 00:39	0.000	10.000
J-456	0.01	0.08	0 00:39	0.000	10.000
J-462A	0.01	2.95	0 00:38	0.000	10.000
J-491	0.02	1.50	0 00:37	0.000	10.000
J-492	0.10	1.97	0 00:39	0.001	10.000
J-494	0.01	1.86	0 00:40	0.000	10.000
J-495	0.22	3.28	0 00:45	0.011	10.000
J-601	0.13	1.25	0 00:45	0.002	10.000
J-602	0.01	1.07	0 00:36	0.000	10.000
J-779	2.80	20.30	0 00:45	0.199	5.194
J-783	2.89	2.12	0 00:45	0.026	5.918
J-784	2.91	2.00	0 00:45	0.025	5.980
J-805	14.56	38.58	0 01:24	1.214	0.874
J-808	13.02	50.99	0 01:30	1.712	0.660
J-811	5.92	5.71	0 00:45	0.080	9.421
J-812	9.34	9.68	0 00:10	0.123	10.485
J-814	14.15	11.73	0 00:45	0.150	9.242
J-815	19.91	14.96	0 00:45	0.351	9.062
J-816	20.99	10.65	0 00:48	0.342	8.951
J-817	20.94	4.44	0 00:45	0.108	9.201
J-817-1	21.06	4.01	0 00:45	0.106	9.203
J-818	20.86	4.71	0 00:45	0.081	9.857
J-819	21.33	6.61	0 00:45	0.131	11.094
J-820	21.35	5.22	0 00:45	0.091	11.571
J-821	21.34	3.20	0 00:11	0.051	11.788
J-822	21.37	3.39	0 00:13	0.055	12.380
J-823	21.37	5.64	0 00:13	0.060	12.815
J-841	0.76	2.12	0 01:16	0.027	10.000
J-844	3.87	8.24	0 00:45	0.075	9.189
J-850	3.80	7.82	0 01:45	0.123	3.232
J-860	0.89	7.37	0 01:15	0.081	10.000
J-870	21.29	1.40	0 00:13	0.021	12.586
J-871-1A	20.26	38.08	0 00:45	0.693	11.770
J-871-1B	16.22	26.52	0 00:45	0.550	6.187
J-871-1C	10.13	5.28	0 00:45	0.096	2.267
J-900-1	0.33	5.19	0 00:45	0.023	10.000
J-901	0.54	2.88	0 00:45	0.025	10.000
J-902	0.21	0.66	0 00:45	0.002	10.000
S-500	1.30	4.02	0 01:30	0.079	0.000

905 S-600 4.28 10.46 0 00:51 0.172 0.000  
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 909 Storage Volume Summary  
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 913 Average Avg Evap Exfil Maximum Max Time of  
 Max Maximum  
 914 Volume Pcnt Pcnt Pcnt Volume Pcnt  
 Occurrence Outflow  
 915 Storage Unit 1000 ft3 Full Loss Loss 1000 ft3 Full days  
 hr:min CFS  
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Storage Unit	hr:min	CFS	Average Max Volume Occurrence	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume	Max Pcnt Full	Time of days
S-100	08:44	0.00	64.526	10	0	0	67.388	11	0
S-1000	04:55	0.11	426.465	39	0	0	446.952	41	0
S-1100	01:00	136.85	1.200	2	0	0	31.828	61	0
S-150	09:47	0.72	68.749	19	0	0	71.734	20	0
S-200	05:12	0.00	59.035	26	0	0	61.560	27	0
S-300	13:20	0.07	71.114	40	0	0	74.061	42	0
S-400	06:17	0.06	126.363	34	0	0	131.945	35	0
S-500	01:30	0.05	34.554	97	0	0	35.616	100	0
S-600	00:51	0.03	14.880	98	0	0	15.195	100	0

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 929 Outfall Loading Summary  
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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
O-1000	0.00	0.00	0.00	0.000
O-700	100.00	87.28	238.56	73.906
O-800	99.56	14.74	50.87	12.025
O-900	15.52	3.28	10.30	0.371
System	53.77	105.30	261.02	86.303

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 946 Link Flow Summary  
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Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
C=737A1	CONDUIT	32.85	0 04:16	5.55	0.05	0.22

955	C737-A2	CONDUIT	32.66	0	04:17	5.10	0.05	0.38
956	C-737A-3	CONDUIT	34.74	0	05:07	1.30	0.06	0.78
957	L-1001	CONDUIT	72.56	0	00:48	8.08	1.16	0.88
958	L-1002	CONDUIT	71.72	0	00:49	7.45	1.15	1.00
959	L-1003	CONDUIT	71.22	0	00:49	7.40	1.38	1.00
960	L-1004	CONDUIT	65.02	0	00:49	6.76	0.94	1.00
961	L-1005	CONDUIT	13.98	0	00:45	2.85	0.52	1.00
962	L-1006	CONDUIT	13.58	0	00:45	3.75	0.58	1.00
963	L-1007	CONDUIT	13.22	0	00:45	4.21	0.96	1.00
964	L-1008	CONDUIT	12.49	0	00:45	3.98	0.99	1.00
965	L-1009	CONDUIT	8.46	0	00:45	7.44	0.50	1.00
966	L-1010	CONDUIT	8.45	0	00:45	7.95	0.45	0.85
967	L-1020	CONDUIT	53.15	0	00:56	7.52	1.26	1.00
968	L-1021	CONDUIT	40.07	0	01:37	5.67	1.37	1.00
969	L-1022	CONDUIT	40.02	0	01:37	8.15	1.37	1.00
970	L-1023	CONDUIT	23.99	0	00:45	4.89	0.99	1.00
971	L-1024	CONDUIT	23.21	0	00:45	7.39	1.05	1.00
972	L-1101	CONDUIT	20.12	0	00:46	11.19	0.40	0.86
973	L-1102	CONDUIT	13.40	0	00:45	6.48	0.72	0.67
974	L-120	CONDUIT	1.57	0	01:02	1.78	0.26	1.00
975	L-121	CONDUIT	6.70	0	00:43	5.46	28.79	1.00
976	L-122	CONDUIT	7.27	0	00:43	5.92	1.73	1.00
977	L-123	CONDUIT	8.03	0	00:43	6.54	0.49	1.00
978	L-124	CONDUIT	11.27	0	00:43	6.38	1.52	1.00
979	L-124A	CONDUIT	1.92	0	00:45	4.03	0.35	1.00
980	L-124B	CONDUIT	3.19	0	00:45	2.60	0.18	1.00
981	L-125	CONDUIT	11.78	0	00:43	6.67	1.68	1.00
982	L-126	CONDUIT	14.62	0	00:44	8.27	1.33	1.00
983	L-127	CONDUIT	16.05	0	00:44	5.11	0.67	1.00
984	L-127A	CONDUIT	2.21	0	00:54	2.39	0.34	1.00
985	L-128	CONDUIT	17.44	0	00:44	5.55	1.63	1.00
986	L-129	CONDUIT	18.20	0	00:44	6.02	1.10	1.00
987	L-130	CONDUIT	20.69	0	00:44	12.19	0.26	0.54
988	L-131	CHANNEL	20.85	0	00:45	2.02	0.00	0.31
989	L-141	CONDUIT	2.91	0	00:45	3.10	0.30	1.00
990	L-142	CONDUIT	7.75	0	00:49	4.38	1.06	1.00
991	L-142A	CONDUIT	4.78	0	00:49	3.89	1.26	1.00
992	L-142B	CONDUIT	5.26	0	00:49	4.29	1.02	1.00
993	L-143	CONDUIT	8.38	0	00:49	4.74	1.48	1.00
994	L-144	CONDUIT	10.39	0	00:45	5.88	3.73	1.00
995	L-145	CONDUIT	12.99	0	00:45	7.35	1.69	1.00
996	L-146	CONDUIT	15.37	0	00:45	8.70	2.13	1.00
997	L-147	CONDUIT	16.10	0	00:45	5.23	0.62	0.61
998	L-148	CONDUIT	17.61	0	00:45	9.05	0.29	0.42
999	L-149	CHANNEL	17.80	0	00:45	2.64	0.00	0.22
1000	L-152	CONDUIT	0.20	0	00:45	0.58	0.02	0.25
1001	L-153	CONDUIT	2.36	0	00:45	3.77	0.29	0.39
1002	L-153A	CONDUIT	1.73	0	00:45	5.80	0.13	0.29
1003	L-154	CONDUIT	2.99	0	00:46	3.84	0.30	0.69
1004	L-156	CONDUIT	4.17	0	00:46	2.64	0.95	1.00
1005	L-157	CONDUIT	13.23	0	00:47	4.21	1.32	1.00
1006	L-157.1	CONDUIT	4.83	0	00:45	2.74	0.73	1.00
1007	L-157-1	CONDUIT	0.30	0	00:47	0.55	0.04	0.57
1008	L-157-2	CONDUIT	1.73	0	00:57	1.80	0.22	1.00
1009	L-157-3	CONDUIT	6.20	0	00:47	3.67	0.80	1.00
1010	L-157-3A	CONDUIT	4.13	0	00:45	4.97	0.67	0.79
1011	L-157-4	CONDUIT	7.57	0	00:47	4.36	0.78	1.00
1012	L-158	CONDUIT	14.13	0	00:47	4.51	0.73	1.00
1013	L-159	CONDUIT	14.22	0	00:47	5.16	0.75	0.82
1014	L-160	CONDUIT	15.56	0	00:48	4.95	1.56	1.00
1015	L-161	CONDUIT	16.22	0	00:48	5.31	1.59	0.93
1016	L-162	CONDUIT	20.13	0	00:48	5.57	0.60	0.69
1017	L-163	CONDUIT	20.08	0	00:49	6.67	0.55	0.59
1018	L-201	CONDUIT	5.70	0	00:37	4.64	1.50	1.00
1019	L-202	CONDUIT	8.05	0	00:37	6.56	2.01	1.00
1020	L-203	CONDUIT	11.07	0	00:45	9.02	2.25	1.00

1021	L-204	CONDUIT	14.28	0	00:45	4.54	1.02	1.00
1022	L-205	CONDUIT	16.70	0	00:45	7.00	1.81	0.71
1023	L-206	CONDUIT	16.68	0	00:45	6.99	0.26	0.71
1024	L-301	CONDUIT	2.41	0	00:46	3.15	0.59	0.62
1025	L-302	CONDUIT	4.45	0	00:46	5.42	0.52	0.85
1026	L-303	CONDUIT	4.54	0	00:51	4.23	0.60	1.00
1027	L-304	CONDUIT	7.48	0	00:46	6.10	1.16	1.00
1028	L-321	CONDUIT	10.23	0	00:45	5.79	38.21	1.00
1029	L-322	CONDUIT	11.71	0	00:45	6.63	1.03	1.00
1030	L-323	CONDUIT	12.90	0	00:45	7.30	1.09	1.00
1031	L-324	CONDUIT	13.91	0	00:45	7.87	1.49	1.00
1032	L-325	CONDUIT	15.01	0	00:45	8.89	1.54	0.92
1033	L-326	CONDUIT	24.36	0	00:45	8.95	0.38	1.00
1034	L-401	CONDUIT	0.43	0	00:45	2.47	0.06	0.20
1035	L-402	CONDUIT	1.72	0	00:45	2.17	0.12	0.62
1036	L-403	CONDUIT	3.90	0	00:45	3.46	27.03	1.00
1037	L-404	CONDUIT	4.93	0	00:47	6.21	0.54	1.00
1038	L-405	CONDUIT	6.50	0	00:46	5.30	0.54	1.00
1039	L-406	CONDUIT	6.94	0	00:46	5.87	1.72	0.95
1040	L-407	CONDUIT	37.14	0	00:45	11.90	0.35	1.00
1041	L-451	CONDUIT	2.68	0	00:45	4.11	0.57	1.00
1042	L-452	CONDUIT	2.68	0	00:45	3.34	0.34	1.00
1043	L-453	CONDUIT	5.20	0	00:45	4.23	0.86	1.00
1044	L-454	CONDUIT	5.25	0	00:56	4.28	1.32	1.00
1045	L-455	CONDUIT	7.76	0	00:56	4.39	1.42	1.00
1046	L-455A	CONDUIT	1.59	0	00:45	1.30	0.25	1.00
1047	L-456	CONDUIT	8.05	0	00:56	4.56	1.25	1.00
1048	L-457	CONDUIT	8.57	0	00:56	4.85	0.80	1.00
1049	L-458	CONDUIT	8.89	0	00:56	5.03	1.64	1.00
1050	L-459	CONDUIT	9.39	0	00:56	5.31	1.44	1.00
1051	L-460	CONDUIT	21.68	0	00:42	5.45	1.29	1.00
1052	L-461	CONDUIT	22.23	0	00:42	5.59	1.15	1.00
1053	L-462	CONDUIT	26.26	0	00:45	6.60	1.02	1.00
1054	L-462A	CONDUIT	2.35	0	00:45	1.91	0.56	1.00
1055	L-463	CONDUIT	26.97	0	00:45	6.78	1.29	1.00
1056	L-464	CONDUIT	28.87	0	00:45	7.26	1.10	1.00
1057	L-465	CONDUIT	29.14	0	00:45	7.33	1.53	1.00
1058	L-466	CONDUIT	29.51	0	00:45	8.08	1.44	1.00
1059	L-481	CONDUIT	17.99	0	04:06	2.89	0.01	0.20
1060	L-481B	CONDUIT	18.08	0	04:03	4.25	0.04	0.15
1061	L-482	CONDUIT	33.44	0	02:42	7.06	0.32	0.58
1062	L-482B	CONDUIT	0.00	0	00:00	0.00	0.00	0.07
1063	L-483	CONDUIT	41.46	0	02:47	7.67	0.06	0.22
1064	L-484	CONDUIT	56.69	0	04:30	6.03	0.05	0.19
1065	L-484A	CONDUIT	0.00	0	00:00	0.00	0.00	0.11
1066	L-485	CONDUIT	57.20	0	04:31	3.96	0.09	0.29
1067	L-485B-2	CONDUIT	21.24	0	04:07	2.06	0.12	0.34
1068	L-490	CONDUIT	12.73	0	00:41	7.20	1.58	1.00
1069	L-491	CONDUIT	9.39	0	00:45	5.31	1.18	1.00
1070	L-492	CONDUIT	7.10	0	00:48	5.79	0.82	1.00
1071	L-493	CONDUIT	3.92	0	00:45	4.65	0.43	1.00
1072	L-494	CONDUIT	3.92	0	00:45	5.08	0.54	1.00
1073	L-495	CONDUIT	2.76	0	00:40	2.25	0.68	1.00
1074	L-501	CONDUIT	1.64	0	00:47	2.91	0.26	0.69
1075	L-502	CONDUIT	6.88	0	00:46	5.27	0.53	1.00
1076	L-503	CONDUIT	10.09	0	00:46	5.71	0.87	1.00
1077	L-601	CONDUIT	5.11	0	00:42	4.16	1.22	1.00
1078	L-602	CONDUIT	6.88	0	00:42	5.60	1.74	1.00
1079	L-603	CONDUIT	11.56	0	00:45	9.42	3.25	1.00
1080	L-604	CONDUIT	11.56	0	00:45	9.42	0.47	1.00
1081	L-701	CHANNEL	193.55	0	06:48	>50.00	0.01	0.07
1082	L-701A	CHANNEL	244.34	0	04:52	>50.00	0.01	0.09
1083	L-701B	CONDUIT	59.13	0	04:11	7.02	0.06	0.22
1084	L-701C	CONDUIT	0.00	0	00:00	0.00	0.00	0.11
1085	L-702	CHANNEL	120.29	0	08:38	0.64	0.02	0.12
1086	L-702-1	CHANNEL	164.42	0	05:17	0.77	0.09	0.13

1087	L-702B	CONDUIT	103.59	0	09:05	7.07	0.37	0.51
1088	L-703	CONDUIT	103.59	0	09:04	5.61	0.37	0.62
1089	L-704	CHANNEL	105.06	0	08:28	1.23	0.01	0.25
1090	L-705	CHANNEL	113.69	0	07:43	3.94	0.00	0.21
1091	L-706	CONDUIT	117.51	0	07:28	5.73	3.33	0.71
1092	L-707	CHANNEL	117.66	0	07:25	0.51	0.01	0.32
1093	L-708	CHANNEL	119.44	0	07:07	1.64	0.01	0.30
1094	L-709-1	CONDUIT	122.22	0	06:51	6.64	0.48	0.70
1095	L-709-2	CONDUIT	3.34	0	00:45	2.93	0.44	1.00
1096	L-709-3	CONDUIT	2.78	0	00:45	2.27	0.54	1.00
1097	L-710	CHANNEL	122.48	0	06:47	2.17	0.00	0.21
1098	L-711	CONDUIT	122.75	0	06:44	6.90	1.64	0.65
1099	L-712	CHANNEL	122.79	0	06:43	3.11	0.04	0.44
1100	L-713	CONDUIT	122.83	0	06:41	4.93	0.70	0.82
1101	L-714-1	CHANNEL	123.37	0	06:30	>50.00	0.01	0.37
1102	L-714-2	CONDUIT	9.38	0	00:45	4.83	0.58	1.00
1103	L-714-3	CONDUIT	9.30	0	00:45	3.71	0.43	1.00
1104	L-715	CHANNEL	127.58	0	06:05	>50.00	0.01	0.28
1105	L-715-1	CHANNEL	125.48	0	06:13	>50.00	0.00	0.29
1106	L-715A	CONDUIT	0.00	0	00:00	0.00	0.00	0.50
1107	L-716	CONDUIT	128.88	0	06:01	7.71	0.32	0.68
1108	L-716A	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1109	L-717-1	CHANNEL	131.76	0	05:46	1.75	0.00	0.28
1110	L-718	CONDUIT	136.15	0	05:33	6.48	0.25	0.64
1111	L-719	CONDUIT	136.23	0	05:32	3.76	0.26	0.65
1112	L-720	CHANNEL	143.24	0	05:07	2.11	0.00	0.28
1113	L-721	CONDUIT	120.14	0	05:24	10.29	0.38	0.39
1114	L-722	CONDUIT	120.15	0	05:23	6.27	0.63	0.65
1115	L-723_1	CONDUIT	68.12	0	05:32	1.42	0.11	0.39
1116	L-723_2	CONDUIT	120.89	0	04:59	1.71	0.19	0.53
1117	L-725	CONDUIT	68.15	0	05:29	4.43	0.28	0.53
1118	L-725-1	CONDUIT	0.00	0	00:00	0.00	0.00	0.11
1119	L-725-2_1	CONDUIT	18.78	0	04:24	2.59	0.05	0.26
1120	L-725-2_2	CONDUIT	18.99	0	04:35	1.48	0.01	0.28
1121	L-725-2_3	CONDUIT	19.03	0	04:36	7.02	0.33	0.49
1122	L-725-2_5	CONDUIT	18.95	0	04:35	4.14	0.18	0.68
1123	L-725-3	CONDUIT	0.00	0	00:00	0.00	0.00	0.11
1124	L-725B	CONDUIT	71.42	0	04:30	4.86	0.06	0.30
1125	L-726	CHANNEL	51.85	0	05:17	1.87	0.03	0.48
1126	L-730	CHANNEL	59.89	0	04:39	8.48	0.01	0.11
1127	L-730-1	CHANNEL	59.89	0	04:40	8.08	0.01	0.12
1128	L-731	CHANNEL	59.90	0	04:36	7.79	0.03	0.18
1129	L-732	CONDUIT	4.65	0	00:46	3.45	0.18	0.32
1130	L-732A	CONDUIT	0.00	0	00:00	0.00	0.00	0.23
1131	L-732B	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1132	L-733	CONDUIT	3.36	0	00:46	3.31	0.15	0.36
1133	L-734	CONDUIT	2.48	0	00:46	3.92	0.11	0.26
1134	L-735	CONDUIT	1.38	0	00:45	3.02	0.06	0.20
1135	L-736	CONDUIT	0.00	0	00:00	0.00	0.00	0.09
1136	L-737	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1137	L-740	CONDUIT	59.90	0	04:34	11.54	0.70	0.69
1138	L-741	CONDUIT	59.90	0	04:34	8.47	0.93	1.00
1139	L-742	CONDUIT	59.90	0	04:34	8.47	0.85	1.00
1140	L-743	CONDUIT	59.90	0	04:34	9.53	0.74	1.00
1141	L-744	CONDUIT	61.09	0	03:55	9.27	0.92	1.00
1142	L-745	CONDUIT	1.80	0	03:46	0.32	0.03	1.00
1143	L-750	CONDUIT	18.99	0	00:54	5.93	0.02	0.30
1144	L-751	CONDUIT	19.17	0	00:50	7.77	0.21	0.38
1145	L-752	CONDUIT	16.26	0	00:48	1.06	0.05	0.37
1146	L-753	CONDUIT	14.80	0	00:47	2.25	0.04	0.16
1147	L-754	CONDUIT	11.28	0	00:45	1.91	0.03	0.14
1148	L-760	CONDUIT	14.78	0	00:45	8.37	2.02	1.00
1149	L-761	CONDUIT	0.94	0	00:15	0.94	0.13	1.00
1150	L-762	CONDUIT	0.81	0	00:09	0.99	0.11	1.00
1151	L-770	CONDUIT	16.37	0	00:45	9.33	1.16	1.00
1152	L-771	CONDUIT	9.83	0	01:04	5.82	1.90	1.00

1153	L-772	CONDUIT	9.83	0	01:03	5.56	1.47	1.00
1154	L-773	CONDUIT	9.56	0	01:05	5.41	0.93	1.00
1155	L-774	CONDUIT	9.56	0	01:05	5.41	1.45	1.00
1156	L-775	CONDUIT	9.11	0	01:12	7.43	1.57	1.00
1157	L-776	CONDUIT	8.77	0	01:28	7.15	1.68	1.00
1158	L-777	CONDUIT	8.77	0	01:26	7.15	1.63	1.00
1159	L-778	CONDUIT	8.43	0	01:44	6.87	1.61	1.00
1160	L-779	CONDUIT	8.26	0	01:44	6.73	1.69	1.00
1161	L-780	CONDUIT	5.69	0	03:16	4.64	1.34	1.00
1162	L-781	CONDUIT	5.69	0	03:16	4.64	1.31	1.00
1163	L-782	CONDUIT	5.69	0	03:16	4.64	1.34	1.00
1164	L-783	CONDUIT	5.69	0	03:16	4.64	1.35	1.00
1165	L-784	CONDUIT	5.46	0	03:18	4.45	1.34	1.00
1166	L-790	CONDUIT	43.89	0	03:41	3.66	0.05	0.19
1167	L-791	CONDUIT	43.89	0	03:40	6.62	0.11	0.21
1168	L-792	CONDUIT	43.89	0	03:40	3.24	0.04	0.13
1169	L-792A	CONDUIT	36.62	0	03:37	4.77	0.07	0.27
1170	L-792B	CONDUIT	0.00	0	00:00	0.00	0.00	0.13
1171	L-801	CONDUIT	50.87	0	02:56	3.48	0.07	0.24
1172	L-802	CONDUIT	19.32	0	01:26	5.51	0.29	0.27
1173	L-803	CONDUIT	18.34	0	05:20	0.63	0.07	0.43
1174	L-804	CONDUIT	18.31	0	05:15	3.74	0.30	0.43
1175	L-805	CONDUIT	18.31	0	05:14	3.00	4.47	0.81
1176	L-806	CONDUIT	53.90	0	01:25	1.12	0.23	1.00
1177	L-807	CONDUIT	53.22	0	01:25	1.11	0.77	1.00
1178	L-808	CONDUIT	53.24	0	01:25	1.69	0.12	1.00
1179	L-809	CONDUIT	24.40	0	02:18	1.62	0.32	0.77
1180	L-810	CONDUIT	15.29	0	01:50	9.85	2.72	0.86
1181	L-811	CONDUIT	10.37	0	02:41	5.87	1.80	1.00
1182	L-812	CONDUIT	7.63	0	04:36	4.32	1.27	1.00
1183	L-813	CONDUIT	6.82	0	05:15	3.86	1.56	1.00
1184	L-814	CONDUIT	6.82	0	05:15	5.56	1.37	1.00
1185	L-815	CONDUIT	6.22	0	06:36	5.06	1.47	1.00
1186	L-816	CONDUIT	5.17	0	08:07	4.21	1.55	1.00
1187	L-817	CONDUIT	4.88	0	01:12	3.98	1.27	1.00
1188	L-817-1	CONDUIT	5.88	0	00:50	4.79	2.62	1.00
1189	L-818	CONDUIT	5.87	0	01:08	4.78	1.70	1.00
1190	L-819	CONDUIT	4.39	0	01:45	3.58	1.61	1.00
1191	L-820	CONDUIT	4.97	0	00:56	4.05	1.65	1.00
1192	L-821	CONDUIT	4.44	0	00:50	3.62	1.22	1.00
1193	L-822	CONDUIT	3.81	0	21:34	3.30	0.96	1.00
1194	L-823	CONDUIT	4.00	0	21:35	3.37	0.94	1.00
1195	L-824	CONDUIT	0.00	0	00:00	0.00	0.00	0.23
1196	L-825	CONDUIT	2.88	0	00:47	3.52	0.36	0.38
1197	L-826	CONDUIT	5.54	0	00:46	10.48	0.12	0.60
1198	L-830	CONDUIT	32.80	0	02:48	0.78	0.02	0.17
1199	L-840	CONDUIT	4.71	0	00:51	3.83	0.47	1.00
1200	L-841	CONDUIT	4.30	0	00:52	3.50	0.68	1.00
1201	L-842	CONDUIT	4.17	0	01:12	3.39	0.54	1.00
1202	L-842A	CONDUIT	18.64	0	02:36	3.08	0.02	0.22
1203	L-844	CONDUIT	3.25	0	01:17	2.90	0.81	1.00
1204	L-845	CONDUIT	7.45	0	00:45	6.07	3.48	1.00
1205	L-846	CONDUIT	3.99	0	00:45	3.25	1.24	1.00
1206	L-847	CONDUIT	2.95	0	00:45	2.73	0.32	1.00
1207	L-850	CONDUIT	9.60	0	02:14	8.05	2.48	0.93
1208	L-860	CONDUIT	6.51	0	00:57	5.30	1.27	1.00
1209	L-869	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1210	L-870	CONDUIT	4.38	0	00:45	2.48	0.96	1.00
1211	L-871	CONDUIT	2.94	0	11:12	2.39	0.48	1.00
1212	L-871-1B	CONDUIT	3.51	0	00:22	2.34	1.15	1.00
1213	L-871-1C	CONDUIT	3.36	0	00:37	2.24	0.86	1.00
1214	L-900-1	CONDUIT	10.30	0	00:39	13.12	4.46	1.00
1215	L-901	CONDUIT	2.37	0	01:06	3.02	2.12	1.00
1216	L-902	CONDUIT	2.23	0	00:51	2.84	0.87	1.00
1217	W-100	WEIR	0.00	0	00:00			0.00
1218	W-1000	WEIR	0.00	0	00:00			0.00

1219	W-1100	WEIR	136.85	0	01:38	1.00
1220	W-150	WEIR	0.00	0	00:00	0.00
1221	W-200	WEIR	0.00	0	00:00	0.00
1222	W-300	WEIR	0.00	0	00:00	0.00
1223	W-400	WEIR	0.00	0	00:00	0.00
1224	W-500	WEIR	0.00	0	00:00	0.00
1225	W-600	WEIR	0.00	0	00:00	0.00

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1229 Flow Classification Summary

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	Adjusted	-----		Fraction of Time in Flow Class				-----			
	/Actual	Up	Down	Sub	Sup	Up	Down	Norm	Inlet		
Conduit	Length	Dry	Dry	Dry	Crit	Crit	Crit	Crit	Ltd	Ctrl	
-----											
1233											
1234											
1235											
1236											
1237	C=737A1	1.00	0.00	0.14	0.00	0.39	0.47	0.00	0.00	0.53	0.00
1238	C737-A2	1.00	0.00	0.00	0.00	0.57	0.42	0.00	0.00	0.57	0.00
1239	C-737A-3	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.95	0.00
1240	L-1001	1.00	0.00	0.00	0.00	0.92	0.00	0.00	0.08	0.00	0.00
1241	L-1002	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1242	L-1003	1.00	0.00	0.79	0.00	0.20	0.00	0.00	0.00	0.91	0.00
1243	L-1004	1.00	0.79	0.05	0.00	0.16	0.00	0.00	0.00	0.91	0.00
1244	L-1005	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09	0.00
1245	L-1006	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.00	0.00
1246	L-1007	1.00	0.00	0.86	0.00	0.14	0.00	0.00	0.00	0.92	0.00
1247	L-1008	1.00	0.86	0.01	0.00	0.13	0.00	0.00	0.00	0.92	0.00
1248	L-1009	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.01	0.00
1249	L-1010	1.00	0.00	0.89	0.00	0.02	0.08	0.00	0.00	0.93	0.00
1250	L-1020	1.00	0.84	0.01	0.00	0.15	0.00	0.00	0.00	0.91	0.00
1251	L-1021	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1252	L-1022	1.00	0.00	0.86	0.00	0.13	0.00	0.00	0.00	0.91	0.00
1253	L-1023	1.00	0.86	0.01	0.00	0.13	0.00	0.00	0.00	0.95	0.00
1254	L-1024	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.00	0.00
1255	L-1101	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.02	0.00
1256	L-1102	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.91	0.00
1257	L-120	1.00	0.00	0.82	0.00	0.18	0.00	0.00	0.00	0.99	0.00
1258	L-121	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1259	L-122	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.66	0.00
1260	L-123	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.29	0.00
1261	L-124	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1262	L-124A	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.00	0.00
1263	L-124B	1.00	0.00	0.88	0.00	0.12	0.00	0.00	0.00	0.98	0.00
1264	L-125	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.09	0.00
1265	L-126	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.66	0.00
1266	L-127	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.24	0.00
1267	L-127A	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.08	0.00
1268	L-128	1.00	0.00	0.08	0.00	0.92	0.00	0.00	0.00	0.88	0.00
1269	L-129	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.00	0.00
1270	L-130	1.00	0.00	0.58	0.00	0.36	0.05	0.00	0.00	0.96	0.00
1271	L-131	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.03	0.00
1272	L-141	1.00	0.00	0.00	0.00	0.04	0.01	0.00	0.95	0.02	0.00
1273	L-142	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1274	L-142A	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1275	L-142B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1276	L-143	1.00	0.00	0.79	0.00	0.21	0.00	0.00	0.00	0.92	0.00
1277	L-144	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1278	L-145	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.22	0.00
1279	L-146	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.81	0.00
1280	L-147	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.00	0.00
1281	L-148	1.00	0.00	0.67	0.00	0.24	0.00	0.00	0.09	0.91	0.00
1282	L-149	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.07	0.00
1283	L-152	1.00	0.87	0.02	0.00	0.11	0.00	0.00	0.00	1.00	0.00
1284	L-153	1.00	0.00	0.87	0.00	0.09	0.04	0.00	0.00	0.92	0.00



1285	L-153A	1.00	0.00	0.00	0.00	0.00	0.02	0.00	0.98	0.00	0.00
1286	L-154	1.00	0.00	0.00	0.00	0.02	0.01	0.00	0.97	0.01	0.00
1287	L-156	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1288	L-157	1.00	0.00	0.77	0.00	0.23	0.00	0.00	0.00	0.91	0.00
1289	L-157.1	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.90	0.06	0.00
1290	L-157-1	1.00	0.00	0.87	0.00	0.13	0.00	0.00	0.00	1.00	0.00
1291	L-157-2	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.01	0.00
1292	L-157-3	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.00	0.00
1293	L-157-3A	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.01	0.00
1294	L-157-4	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1295	L-158	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1296	L-159	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1297	L-160	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.90	0.00	0.00
1298	L-161	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.00	0.00
1299	L-162	1.00	0.00	0.70	0.00	0.24	0.07	0.00	0.00	0.91	0.00
1300	L-163	1.00	0.00	0.00	0.00	0.95	0.00	0.00	0.05	0.04	0.00
1301	L-201	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.95	0.00
1302	L-202	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1303	L-203	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1304	L-204	1.00	0.00	0.84	0.00	0.16	0.00	0.00	0.00	0.95	0.00
1305	L-205	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.00	0.00
1306	L-206	1.00	0.00	0.82	0.00	0.16	0.02	0.00	0.00	0.98	0.00
1307	L-301	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.02	0.00
1308	L-302	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.91	0.00
1309	L-303	1.00	0.70	0.16	0.00	0.07	0.07	0.00	0.00	0.99	0.00
1310	L-304	1.00	0.00	0.70	0.00	0.27	0.03	0.00	0.00	0.96	0.00
1311	L-321	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1312	L-322	1.00	0.00	0.00	0.00	0.91	0.08	0.00	0.00	0.90	0.00
1313	L-323	1.00	0.00	0.00	0.00	0.94	0.06	0.00	0.00	0.10	0.00
1314	L-324	1.00	0.00	0.65	0.00	0.32	0.03	0.00	0.00	0.92	0.00
1315	L-325	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.02	0.00
1316	L-326	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.02	0.00
1317	L-401	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	1.00	0.00
1318	L-402	1.00	0.00	0.88	0.00	0.12	0.00	0.00	0.00	1.00	0.00
1319	L-403	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1320	L-404	1.00	0.00	0.00	0.00	0.85	0.15	0.00	0.00	0.01	0.00
1321	L-405	1.00	0.00	0.47	0.00	0.48	0.04	0.00	0.00	0.95	0.00
1322	L-406	1.00	0.00	0.00	0.00	0.96	0.00	0.00	0.04	0.02	0.00
1323	L-407	1.00	0.00	0.00	0.00	0.98	0.01	0.00	0.01	0.01	0.00
1324	L-451	1.00	0.00	0.00	0.00	0.93	0.07	0.00	0.00	0.92	0.00
1325	L-452	1.00	0.84	0.02	0.00	0.13	0.01	0.00	0.00	0.98	0.00
1326	L-453	1.00	0.81	0.03	0.00	0.16	0.00	0.00	0.00	0.98	0.00
1327	L-454	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.97	0.00
1328	L-455	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00	0.00
1329	L-455A	1.00	0.00	0.85	0.00	0.15	0.00	0.00	0.00	0.98	0.00
1330	L-456	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1331	L-457	1.00	0.00	0.77	0.00	0.23	0.00	0.00	0.00	0.91	0.00
1332	L-458	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1333	L-459	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1334	L-460	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1335	L-461	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1336	L-462	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1337	L-462A	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.02	0.00
1338	L-463	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1339	L-464	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1340	L-465	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1341	L-466	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1342	L-481	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1343	L-481B	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.00	0.00
1344	L-482	1.00	0.00	0.00	0.00	0.44	0.56	0.00	0.00	0.01	0.00
1345	L-482B	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1346	L-483	1.00	0.00	0.00	0.00	0.69	0.31	0.00	0.00	0.84	0.00
1347	L-484	1.00	0.00	0.00	0.00	0.65	0.35	0.00	0.00	0.61	0.00
1348	L-484A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1349	L-485	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.95	0.00
1350	L-485B-2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.85	0.00

1351	L-490	1.00	0.00	0.75	0.00	0.25	0.00	0.00	0.00	0.96	0.00
1352	L-491	1.00	0.75	0.11	0.00	0.14	0.00	0.00	0.00	0.95	0.00
1353	L-492	1.00	0.85	0.02	0.00	0.06	0.06	0.00	0.00	0.98	0.00
1354	L-493	1.00	0.87	0.01	0.00	0.04	0.07	0.00	0.00	0.99	0.00
1355	L-494	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.91	0.00
1356	L-495	1.00	0.75	0.10	0.00	0.15	0.00	0.00	0.00	0.97	0.00
1357	L-501	1.00	0.00	0.78	0.00	0.21	0.01	0.00	0.00	0.99	0.00
1358	L-502	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.01	0.00
1359	L-503	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	0.01	0.00
1360	L-601	1.00	0.39	0.48	0.00	0.13	0.00	0.00	0.00	0.92	0.00
1361	L-602	1.00	0.00	0.39	0.00	0.61	0.00	0.00	0.00	0.97	0.00
1362	L-603	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
1363	L-604	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.02	0.00
1364	L-701	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1365	L-701A	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.85	0.00
1366	L-701B	1.00	0.01	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00
1367	L-701C	1.00	0.01	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1368	L-702	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.86	0.00
1369	L-702-1	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.03	0.00
1370	L-702B	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.00	0.00
1371	L-703	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.03	0.00
1372	L-704	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.07	0.00
1373	L-705	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1374	L-706	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1375	L-707	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1376	L-708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.25	0.00
1377	L-709-1	1.00	0.00	0.00	0.00	0.71	0.29	0.00	0.00	0.20	0.00
1378	L-709-2	1.00	0.00	0.11	0.00	0.89	0.00	0.00	0.00	0.12	0.00
1379	L-709-3	1.00	0.11	0.21	0.00	0.68	0.00	0.00	0.00	0.38	0.00
1380	L-710	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.58	0.00
1381	L-711	1.00	0.00	0.00	0.00	0.63	0.37	0.00	0.00	0.00	0.00
1382	L-712	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.00
1383	L-713	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1384	L-714-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1385	L-714-2	1.00	0.00	0.19	0.00	0.80	0.01	0.00	0.00	0.23	0.00
1386	L-714-3	1.00	0.19	0.09	0.00	0.72	0.00	0.00	0.00	0.30	0.00
1387	L-715	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1388	L-715-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.27	0.00
1389	L-715A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1390	L-716	1.00	0.02	0.00	0.00	0.36	0.07	0.00	0.55	0.00	0.00
1391	L-716A	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1392	L-717-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.36	0.00
1393	L-718	1.00	0.00	0.00	0.00	0.59	0.41	0.00	0.00	0.00	0.00
1394	L-719	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.05	0.00
1395	L-720	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1396	L-721	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1397	L-722	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.03	0.00
1398	L-723_1	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.99	0.00
1399	L-723_2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1400	L-725	1.00	0.00	0.00	0.00	0.61	0.39	0.00	0.00	0.00	0.00
1401	L-725-1	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1402	L-725-2_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.94	0.00
1403	L-725-2_2	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.84	0.00
1404	L-725-2_3	1.00	0.01	0.00	0.00	0.01	0.98	0.00	0.00	0.00	0.00
1405	L-725-2_5	1.00	0.00	0.01	0.00	0.60	0.38	0.00	0.00	0.30	0.00
1406	L-725-3	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1407	L-725B	1.00	0.00	0.40	0.00	0.58	0.02	0.00	0.00	0.99	0.00
1408	L-726	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.82	0.00
1409	L-730	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1410	L-730-1	1.00	0.00	0.00	0.00	0.76	0.21	0.00	0.03	0.97	0.00
1411	L-731	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1412	L-732	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1413	L-732A	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1414	L-732B	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1415	L-733	1.00	0.00	0.87	0.00	0.13	0.00	0.00	0.00	0.98	0.00
1416	L-734	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.95	0.00

1417	L-735	1.00	0.00	0.88	0.00	0.11	0.01	0.00	0.00	1.00	0.00
1418	L-736	1.00	0.88	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1419	L-737	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1420	L-740	1.00	0.00	0.00	0.00	0.46	0.54	0.00	0.00	0.48	0.00
1421	L-741	1.00	0.00	0.00	0.00	0.84	0.16	0.00	0.00	0.00	0.00
1422	L-742	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.93	0.00
1423	L-743	1.00	0.00	0.02	0.00	0.41	0.57	0.00	0.00	0.50	0.00
1424	L-744	1.00	0.02	0.00	0.00	0.05	0.00	0.00	0.93	0.00	0.00
1425	L-745	1.00	0.02	0.64	0.00	0.35	0.00	0.00	0.00	0.64	0.00
1426	L-750	1.00	0.00	0.00	0.00	0.96	0.03	0.00	0.00	0.96	0.00
1427	L-751	1.00	0.00	0.00	0.00	0.71	0.29	0.00	0.00	0.80	0.00
1428	L-752	1.00	0.00	0.42	0.00	0.58	0.00	0.00	0.00	1.00	0.00
1429	L-753	1.00	0.42	0.13	0.00	0.45	0.00	0.00	0.00	0.98	0.00
1430	L-754	1.00	0.55	0.17	0.00	0.28	0.00	0.00	0.00	0.99	0.00
1431	L-760	1.00	0.00	0.15	0.00	0.85	0.01	0.00	0.00	0.23	0.00
1432	L-761	1.00	0.15	0.09	0.00	0.77	0.00	0.00	0.00	0.26	0.00
1433	L-762	1.00	0.23	0.05	0.00	0.71	0.00	0.00	0.00	0.33	0.00
1434	L-770	1.00	0.38	0.31	0.00	0.28	0.00	0.00	0.03	0.92	0.00
1435	L-771	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.98	0.00	0.00
1436	L-772	1.00	0.00	0.74	0.00	0.26	0.00	0.00	0.00	0.89	0.00
1437	L-773	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.88	0.00
1438	L-774	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.01	0.77	0.00
1439	L-775	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1440	L-776	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1441	L-777	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1442	L-778	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1443	L-779	1.00	0.00	0.77	0.00	0.23	0.00	0.00	0.00	0.89	0.00
1444	L-780	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1445	L-781	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00	0.00
1446	L-782	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.00	0.00
1447	L-783	1.00	0.00	0.82	0.00	0.18	0.00	0.00	0.00	0.90	0.00
1448	L-784	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.90	0.00
1449	L-790	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1450	L-791	1.00	0.00	0.00	0.00	0.54	0.45	0.00	0.00	0.01	0.00
1451	L-792	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.59	0.00
1452	L-792A	1.00	0.00	0.00	0.00	0.94	0.06	0.00	0.00	0.07	0.00
1453	L-792B	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1454	L-801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1455	L-802	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.00	0.00
1456	L-803	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.12	0.00
1457	L-804	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.00	0.00
1458	L-805	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1459	L-806	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1460	L-807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.07	0.00
1461	L-808	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.21	0.00
1462	L-809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.82	0.00
1463	L-810	1.00	0.00	0.00	0.00	0.74	0.26	0.00	0.00	0.00	0.00
1464	L-811	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.30	0.00
1465	L-812	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1466	L-813	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.00
1467	L-814	1.00	0.00	0.00	0.00	0.72	0.00	0.00	0.28	0.02	0.00
1468	L-815	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.15	0.00
1469	L-816	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1470	L-817	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.29	0.00
1471	L-817-1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1472	L-818	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1473	L-819	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1474	L-820	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.29	0.00
1475	L-821	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.26	0.00
1476	L-822	1.00	0.00	0.00	0.00	0.71	0.00	0.00	0.29	0.01	0.00
1477	L-823	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.29	0.00
1478	L-824	1.00	0.72	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1479	L-825	1.00	0.71	0.00	0.00	0.22	0.06	0.00	0.00	0.82	0.00
1480	L-826	1.00	0.33	0.39	0.00	0.24	0.01	0.00	0.03	0.89	0.00
1481	L-830	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.98	0.00
1482	L-840	1.00	0.00	0.00	0.00	0.70	0.00	0.00	0.30	0.49	0.00

1483	L-841	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1484	L-842	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.83	0.00
1485	L-842A	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1486	L-844	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.00
1487	L-845	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1488	L-846	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.00
1489	L-847	1.00	0.00	0.81	0.00	0.19	0.00	0.00	0.00	0.89	0.00
1490	L-850	1.00	0.00	0.24	0.00	0.73	0.03	0.00	0.00	0.30	0.00
1491	L-860	1.00	0.00	0.25	0.00	0.75	0.00	0.00	0.00	0.30	0.00
1492	L-869	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1493	L-870	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1494	L-871	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.32	0.00
1495	L-871-1B	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.43	0.00
1496	L-871-1C	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.58	0.00
1497	L-900-1	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.00	0.00
1498	L-901	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.92	0.00
1499	L-902	1.00	0.00	0.83	0.00	0.17	0.00	0.00	0.00	0.95	0.00

1500  
1501

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Conduit Surcharge Summary  
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1503  
1504  
1505  
1506

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Conduit	----- Hours Full -----			Hours	Hours	
	Both Ends	Upstream	Dnstream	Above Full Normal Flow	Capacity Limited	
-----						
1511	C-737A-3	0.01	0.01	1.79	0.01	0.01
1512	L-1001	0.01	0.89	0.01	0.47	0.01
1513	L-1002	0.89	1.15	0.89	0.46	0.89
1514	L-1003	1.15	1.31	1.15	1.10	1.15
1515	L-1004	1.29	1.29	1.31	0.01	1.25
1516	L-1005	1.09	1.09	1.49	0.01	0.01
1517	L-1006	0.76	0.76	0.94	0.01	0.01
1518	L-1007	0.73	0.73	0.92	0.01	0.16
1519	L-1008	0.59	0.59	0.73	0.01	0.16
1520	L-1009	0.29	0.29	0.53	0.01	0.01
1521	L-1010	0.01	0.01	0.29	0.01	0.01
1522	L-1020	1.39	1.46	1.39	1.23	1.39
1523	L-1021	1.44	1.44	1.46	0.97	1.11
1524	L-1022	1.45	1.45	1.50	0.96	1.13
1525	L-1023	1.38	1.38	1.45	0.01	0.19
1526	L-1024	1.23	1.23	1.35	0.04	0.20
1527	L-1101	0.01	0.01	1.32	0.01	0.01
1528	L-120	0.24	0.24	0.72	0.01	0.01
1529	L-121	0.53	0.72	0.53	2.64	0.53
1530	L-122	0.50	0.53	0.50	0.48	0.50
1531	L-123	0.50	0.50	0.68	0.01	0.01
1532	L-124	0.56	0.60	0.56	0.39	0.56
1533	L-124A	0.22	0.22	0.39	0.01	0.01
1534	L-124B	0.39	0.39	0.68	0.01	0.01
1535	L-125	0.56	0.56	0.65	0.46	0.54
1536	L-126	0.65	0.65	0.70	0.22	0.61
1537	L-127	0.36	0.40	0.36	0.01	0.36
1538	L-127A	0.10	0.10	0.70	0.01	0.01
1539	L-128	0.21	0.36	0.21	0.42	0.21
1540	L-129	0.21	0.21	0.22	0.13	0.20
1541	L-130	0.01	0.11	0.01	0.01	0.01
1542	L-141	0.41	0.41	0.60	0.01	0.01
1543	L-142	0.74	0.74	0.76	0.17	0.55
1544	L-142A	0.58	0.58	0.71	0.29	0.34
1545	L-142B	0.77	0.77	0.82	0.03	0.41
1546	L-143	0.76	0.76	0.85	0.35	0.55
1547	L-144	0.58	0.85	0.58	1.27	0.57
1548	L-145	0.62	0.62	0.72	0.40	0.57

1549	L-146	0.29	0.72	0.29	0.67	0.29
1550	L-154	0.01	0.01	0.22	0.01	0.01
1551	L-156	0.31	0.31	0.31	0.01	0.27
1552	L-157	0.37	0.39	0.37	0.28	0.37
1553	L-157.1	0.33	0.33	0.58	0.01	0.01
1554	L-157-1	0.01	0.01	0.06	0.01	0.01
1555	L-157-2	0.06	0.06	0.12	0.01	0.01
1556	L-157-3	0.14	0.14	0.25	0.01	0.01
1557	L-157-3A	0.01	0.01	0.07	0.01	0.01
1558	L-157-4	0.24	0.27	0.24	0.01	0.24
1559	L-158	0.01	0.01	0.37	0.01	0.01
1560	L-160	0.32	0.40	0.32	0.40	0.32
1561	L-161	0.01	0.36	0.01	0.41	0.01
1562	L-201	0.84	0.84	0.92	0.62	0.69
1563	L-202	0.91	0.92	0.91	0.82	0.91
1564	L-203	0.63	0.91	0.63	0.88	0.63
1565	L-204	0.32	0.33	0.34	0.06	0.32
1566	L-205	0.01	0.34	0.01	0.63	0.01
1567	L-206	0.01	0.01	30.52	0.01	0.01
1568	L-302	0.01	0.01	0.08	0.01	0.01
1569	L-303	0.08	0.08	0.18	0.01	0.01
1570	L-304	0.01	0.18	29.56	0.18	0.01
1571	L-321	0.31	0.65	0.31	2.66	0.31
1572	L-322	0.31	0.31	0.35	0.02	0.25
1573	L-323	0.35	0.35	0.43	0.07	0.23
1574	L-324	0.40	0.43	0.40	0.28	0.40
1575	L-325	0.01	0.40	29.39	0.29	0.01
1576	L-326	28.98	28.98	30.85	0.01	0.01
1577	L-402	0.01	0.01	0.36	0.01	0.01
1578	L-403	0.02	0.36	0.02	2.62	0.02
1579	L-404	0.02	0.02	0.22	0.01	0.01
1580	L-405	0.22	0.22	0.38	0.01	0.01
1581	L-406	0.01	0.38	29.73	0.37	0.01
1582	L-407	30.32	30.32	30.72	0.01	0.01
1583	L-451	0.27	0.27	0.35	0.01	0.01
1584	L-452	0.35	0.35	0.55	0.01	0.01
1585	L-453	0.55	0.55	0.77	0.01	0.01
1586	L-454	0.77	0.77	0.92	0.46	0.59
1587	L-455	0.78	0.81	0.78	0.52	0.78
1588	L-455A	0.54	0.54	0.92	0.01	0.01
1589	L-456	0.87	0.87	0.95	0.47	0.54
1590	L-457	0.95	0.95	1.03	0.01	0.47
1591	L-458	1.03	1.03	1.10	0.73	0.85
1592	L-459	1.10	1.10	1.30	0.54	0.79
1593	L-460	0.86	0.87	0.86	0.41	0.85
1594	L-461	0.83	0.83	1.44	0.29	0.52
1595	L-462	1.44	1.44	30.36	0.12	0.75
1596	L-462A	0.83	0.83	30.79	0.01	0.01
1597	L-463	30.36	30.36	30.53	0.36	0.55
1598	L-464	30.53	30.53	30.53	0.23	0.57
1599	L-465	30.52	30.53	30.52	0.50	0.75
1600	L-466	30.32	30.52	30.32	0.41	0.58
1601	L-490	0.90	0.90	1.30	0.43	0.60
1602	L-491	0.70	0.70	0.90	0.20	0.25
1603	L-492	0.46	0.46	0.76	0.01	0.01
1604	L-493	0.32	0.32	0.46	0.01	0.01
1605	L-494	0.29	0.29	0.32	0.01	0.01
1606	L-495	0.77	0.77	0.96	0.01	0.01
1607	L-501	0.01	0.01	1.73	0.01	0.01
1608	L-502	0.77	0.77	30.48	0.01	0.01
1609	L-503	30.48	30.48	30.78	0.01	0.01
1610	L-601	0.67	0.68	0.71	0.25	0.45
1611	L-602	0.71	0.71	2.00	0.46	0.48
1612	L-603	1.86	2.00	30.51	0.99	0.96
1613	L-604	30.51	30.51	30.97	0.01	0.01
1614	L-706	0.01	0.01	0.01	13.16	0.01

1615	L-709-2	13.31	13.31	14.82	0.01	0.01
1616	L-709-3	10.69	10.69	13.31	0.01	0.01
1617	L-711	0.01	0.01	0.01	5.83	0.01
1618	L-714-2	12.32	12.32	15.04	0.01	0.01
1619	L-714-3	11.15	11.15	12.32	0.01	0.01
1620	L-740	0.01	1.92	0.01	0.01	0.01
1621	L-741	1.92	2.72	1.92	0.01	1.92
1622	L-742	1.48	1.48	2.72	0.01	0.01
1623	L-743	1.42	1.42	1.48	0.01	0.01
1624	L-744	1.14	1.61	1.14	0.01	1.14
1625	L-745	1.38	1.38	1.42	0.01	0.01
1626	L-760	16.00	16.20	19.67	0.49	0.53
1627	L-761	15.29	15.29	16.20	0.01	0.02
1628	L-762	13.70	13.70	15.29	0.01	0.01
1629	L-770	0.01	0.55	29.97	0.30	0.01
1630	L-771	0.42	2.98	0.42	3.07	0.42
1631	L-772	2.98	2.98	2.98	2.90	2.97
1632	L-773	2.98	2.98	2.98	0.01	2.97
1633	L-774	2.98	2.99	2.98	2.90	2.98
1634	L-775	3.03	3.10	3.03	2.96	3.03
1635	L-776	3.08	3.16	3.08	3.04	3.08
1636	L-777	3.10	3.11	3.10	3.01	3.10
1637	L-778	3.01	3.09	3.01	3.00	3.01
1638	L-779	3.09	3.10	3.09	2.99	3.09
1639	L-780	3.03	3.06	3.10	0.06	0.06
1640	L-781	3.00	3.01	3.02	0.05	0.06
1641	L-782	2.96	2.96	3.00	0.05	0.06
1642	L-783	2.92	2.92	2.96	0.05	0.05
1643	L-784	2.91	2.91	2.92	0.01	0.01
1644	L-805	0.01	15.91	0.01	22.08	0.01
1645	L-806	15.42	15.42	15.91	0.01	0.02
1646	L-807	15.11	15.11	15.42	0.01	0.05
1647	L-808	13.02	13.02	15.11	0.01	0.01
1648	L-809	0.01	0.01	15.68	0.01	0.01
1649	L-810	0.01	18.77	0.01	12.93	0.01
1650	L-811	17.80	17.80	18.77	11.63	16.54
1651	L-812	17.80	17.80	21.49	8.65	0.01
1652	L-813	21.49	21.49	21.49	18.99	20.38
1653	L-814	21.40	21.40	21.54	15.74	18.68
1654	L-815	21.19	21.19	21.40	18.47	18.38
1655	L-816	21.19	21.39	21.19	18.65	18.73
1656	L-817	21.52	21.52	21.56	13.52	21.38
1657	L-817-1	21.39	21.39	21.56	21.56	0.01
1658	L-818	21.45	21.45	21.52	18.35	21.26
1659	L-819	21.44	21.46	21.45	20.71	20.78
1660	L-820	21.45	21.45	21.46	18.21	21.33
1661	L-821	21.44	21.44	21.45	2.06	19.50
1662	L-822	21.38	21.38	21.43	0.01	0.01
1663	L-823	21.37	21.37	21.38	0.01	0.01
1664	L-826	0.01	0.01	29.49	0.01	0.01
1665	L-840	4.93	4.93	13.27	0.01	0.01
1666	L-841	4.93	4.93	30.98	0.01	0.01
1667	L-842	4.37	4.37	30.98	0.01	0.01
1668	L-844	3.87	3.87	4.37	0.01	0.01
1669	L-845	3.81	3.81	3.87	0.96	1.16
1670	L-846	3.81	3.81	4.56	0.18	0.01
1671	L-847	2.81	2.81	4.56	0.01	0.01
1672	L-850	0.01	3.82	0.01	3.55	0.01
1673	L-860	12.93	12.93	19.09	1.20	1.53
1674	L-870	21.40	21.40	30.97	0.01	0.09
1675	L-871	20.26	20.26	21.54	0.01	0.01
1676	L-871-1B	16.60	16.60	21.15	0.33	0.34
1677	L-871-1C	11.01	11.01	16.60	0.01	0.01
1678	L-900-1	0.86	2.36	0.86	2.34	0.86
1679	L-901	1.72	1.72	2.36	1.26	1.33
1680	L-902	1.25	1.25	1.72	0.01	0.01

1681  
1682  
1683 Analysis begun on: Thu Oct 25 15:57:36 2018  
1684 Analysis ended on: Thu Oct 25 15:58:09 2018  
1685 Total elapsed time: 00:00:33



## **APPENDIX D – PROPOSED SWMM MODEL INPUTS**

1. **Subbasin Lag Time Calculations**
2. Subbasin Parameters Table
3. SWMM 10 Year Output Report - No Offsite Flows
4. SWMM 25 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - With Offsite Flows
6. SWMM 100 Year Output Report - No Offsite Flows





Existing Basin ID	Proposed Basin ID	Overland Flow						
		Manning N	P <sub>2</sub>	Upstream Elev (ft)	Downstream Elev (ft)	Length (ft)	Slope	Travel Time (hr)
C-701	S43	0.15	1.58	156	151	300	0.017	0.6
C-482A	S45	0.15	1.58	290	280	300	0.033	0.46
C-481B	S46	0.15	1.58	292	283	300	0.030	0.48
C-744	S47	0.15	1.58	281	275	300	0.020	0.56
C-151	S48	0.15	1.58	276	271	300	0.017	0.6
C-792A	S49	0.15	1.58	287	279	300	0.027	0.5
C-792	S94	0.15	1.58	190	186	300	0.013	0.66
C-725B-2	S95	0.15	1.58	330	317	300	0.043	0.41
C-725B-2	S96	0.15	1.58	330	317	300	0.043	0.41



Existing Basin ID	Proposed Basin ID	Surface	Shallow Concentrated					
			Upstream Elev (ft)	Downstream Elev (ft)	Length (ft)	Slope	Velocity (ft/sec)	Travel Time (hr)
C-701	S43	Unpaved	151	122	1260	0.023	2.450	0.14
C-482A	S45	Unpaved	280	240	3400	0.012	1.770	0.53
C-481B	S46	Unpaved	283	240	3600	0.012	1.770	0.56
C-744	S47	Unpaved	275	240	3500	0.010	1.610	0.6
C-151	S48	Unpaved	271	240	3000	0.010	1.610	0.52
C-792A	S49	Unpaved	279	240	3300	0.012	1.770	0.52
C-792	S94	Unpaved	186	156	2300	0.013	1.840	0.35
C-725B-2	S95	Unpaved	179	151	2500	0.011	1.690	0.41
C-725B-2	S96	Unpaved	263	191	4000	0.018	2.160	0.51



Existing Basin ID	Proposed Basin ID	Time of Concentration (hr)	Time of Concentration (min)*
C-701	S43	0.7	44
C-482A	S45	1.0	59
C-481B	S46	1.0	62
C-744	S47	1.2	70
C-151	S48	1.1	67
C-792A	S49	1.0	61
C-792	S94	1.0	61
C-725B-2	S95	0.8	49
C-725B-2	S96	0.9	55

\*Use the Tc's here rounded to the nearest 5-minutes for Rational Method Calculations



## **APPENDIX D – PROPOSED SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. **Subbasin Parameters Table**
3. SWMM 10 Year Output Report - No Offsite Flows
4. SWMM 25 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - With Offsite Flows
6. SWMM 100 Year Output Report - No Offsite Flows



Basin ID	Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year
S2	J100	17.8	0.53	15	1.000	1.220	1.590	9.43	11.51	15.00
Offsite HMS J-6-5	J1000	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
Offsite HMS J-6-3	J1001	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
None	J1002	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S36 (channel)	J1003	36.4	0.20	15	1.000	1.220	1.590	7.28	8.88	11.58
S41	J1004	3.1	0.95	15	1.000	1.220	1.590	2.93	3.58	4.66
S43	J1005	57.0	0.35	45	0.344	0.416	0.535	6.92	8.36	10.75
None	J1006	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S4	J101	22.7	0.52	15	1.000	1.220	1.590	11.90	14.52	18.93
S1	J102	13.6	0.52	15	1.000	1.220	1.590	7.06	8.61	11.22
S3	J103	19.4	0.56	15	1.000	1.220	1.590	10.85	13.23	17.25
S6	J104	19.9	0.47	15	1.000	1.220	1.590	9.43	11.50	14.99
S5	J105	23.6	0.54	15	1.000	1.220	1.590	12.86	15.69	20.45
S9	J106	20.3	0.54	15	1.000	1.220	1.590	10.98	13.39	17.45
S10	J107	16.3	0.69	15	1.000	1.220	1.590	11.23	13.70	17.85
S29	J108	25.6	0.53	15	1.000	1.220	1.590	13.65	16.65	21.70
None	J109	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S7	J110	10.8	0.67	15	1.000	1.220	1.590	7.28	8.88	11.57
S8	J111	17.8	0.34	15	1.000	1.220	1.590	6.00	7.32	9.54
Offsite HMS J-7-1	J200	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S81	J2000	28.4	0.44	15	1.000	1.220	1.590	12.56	15.32	19.97
S82	J2001	20.4	0.51	15	1.000	1.220	1.590	10.28	12.54	16.35
None	J2002	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S92	J2003	13.2	0.52	15	1.000	1.220	1.590	6.91	8.42	10.98
None	J2004	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S11	J201	44.0	0.48	15	1.000	1.220	1.590	21.13	25.77	33.59
None	J203	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S12	J204	18.2	0.49	15	1.000	1.220	1.590	8.88	10.84	14.13
None	J206	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S15	J207	18.0	0.55	15	1.000	1.220	1.590	9.84	12.00	15.65
None	J208	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S17	J210	15.8	0.49	15	1.000	1.220	1.590	7.73	9.43	12.30
S18	J211	25.1	0.50	15	1.000	1.220	1.590	12.64	15.42	20.10
S30	J212	18.2	0.53	15	1.000	1.220	1.590	9.70	11.84	15.43
S34	J213	19.7	0.66	15	1.000	1.220	1.590	13.09	15.97	20.81
S35	J214	21.0	0.56	15	1.000	1.220	1.590	11.80	14.39	18.76
S31	J215	10.6	0.53	15	1.000	1.220	1.590	5.60	6.84	8.91
S32	J216	12.7	0.48	15	1.000	1.220	1.590	6.06	7.39	9.63
S33	J217	16.2	0.61	15	1.000	1.220	1.590	9.80	11.96	15.58
S39	J218	23.5	0.48	15	1.000	1.220	1.590	11.30	13.78	17.96
None	J219	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00



S13	J300	15.0	0.43	15	1.000	1.220	1.590	6.41	7.82	10.19
S14	J301	14.9	0.54	15	1.000	1.220	1.590	7.99	9.75	12.71
S16	J302	13.0	0.57	15	1.000	1.220	1.590	7.47	9.11	11.88
S19	J303	26.7	0.58	15	1.000	1.220	1.590	15.46	18.86	24.57
S20	J304	26.2	0.54	15	1.000	1.220	1.590	14.17	17.29	22.53
S21	J305	31.5	0.54	15	1.000	1.220	1.590	16.97	20.71	26.99
S28	J400	19.3	0.32	15	1.000	1.220	1.590	6.15	7.50	9.78
S26	J401	10.0	0.62	15	1.000	1.220	1.590	6.15	7.51	9.79
S27	J402	15.8	0.70	15	1.000	1.220	1.590	11.07	13.50	17.60
S66	J500	24.0	0.51	15	1.000	1.220	1.590	12.31	15.02	19.58
S67	J501	20.6	0.47	15	1.000	1.220	1.590	9.70	11.84	15.43
None	J502	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S77	J503	29.1	0.51	15	1.000	1.220	1.590	14.79	18.04	23.52
S78	J504	21.5	0.50	15	1.000	1.220	1.590	10.75	13.11	17.09
S79	J505	19.1	0.51	15	1.000	1.220	1.590	9.68	11.81	15.39
S76	J507	33.4	0.52	15	1.000	1.220	1.590	17.22	21.01	27.39
S85	J508	18.5	0.60	15	1.000	1.220	1.590	11.05	13.48	17.57
S86	J509	13.4	0.54	15	1.000	1.220	1.590	7.25	8.84	11.53
S91	J510	13.5	0.52	15	1.000	1.220	1.590	7.04	8.59	11.20
S69	J600	28.6	0.47	15	1.000	1.220	1.590	13.36	16.30	21.24
S68	J601	17.8	0.47	15	1.000	1.220	1.590	8.36	10.20	13.29
S74	J602	9.5	0.49	15	1.000	1.220	1.590	4.64	5.66	7.38
S75	J603	15.2	0.49	15	1.000	1.220	1.590	7.50	9.16	11.93
S73	J604	17.4	0.42	15	1.000	1.220	1.590	7.25	8.84	11.52
None	J605	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S70	J606	20.8	0.51	15	1.000	1.220	1.590	10.54	12.85	16.75
S71	J607	10.8	0.73	15	1.000	1.220	1.590	7.91	9.65	12.58
S72	J608	32.4	0.52	15	1.000	1.220	1.590	16.78	20.48	26.69
S88	J609	23.4	0.72	15	1.000	1.220	1.590	16.91	20.64	26.89
S87	J610	55.0	0.78	25	0.785	0.957	1.250	33.59	40.94	53.46
None	J611	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S90	J612	18.7	0.49	15	1.000	1.220	1.590	9.21	11.24	14.64
S50	J701	82.6	0.43	30	0.678	0.826	1.08	24.04	29.29	38.30
S51	J702	60.6	0.42	25	0.785	0.957	1.250	20.03	24.42	31.88
S52	J703	20.7	0.78	15	1.000	1.220	1.590	16.06	19.59	25.53
S55	J705	75.9	0.49	25	0.785	0.957	1.250	29.23	35.63	46.52
S57	J706	59.7	0.49	25	0.785	0.957	1.250	22.98	28.01	36.58
S61	J707	31.5	0.48	15	1.000	1.220	1.590	15.14	18.48	24.08
None	J708	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S53	J709	30.4	0.63	15	1.000	1.220	1.590	19.13	23.34	30.42
S56	J710	54.1	0.63	25	0.678	0.826	1.08	23.09	28.13	36.78
Offsite HMS J-5-3	J800	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S49	J801	39.7	0.20	60	0.473	0.576	0.752	3.75	4.57	5.97
S48	J802	136.2	0.20	70	0.453	0.551	0.718	12.33	15.00	19.55



S47	J803	135.3	0.20	70	0.453	0.551	0.718	12.26	14.91	19.43
None	J803a	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S46	J804	60.8	0.20	60	0.473	0.576	0.752	5.76	7.01	9.16
S45	J805	108.2	0.21	60	0.473	0.576	0.752	10.72	13.05	17.04
S44	J806	7.6	0.20	15	1.000	1.220	1.590	1.52	1.85	2.42
S54 (Channel)	J807	4.8	0.20	15	1.000	1.220	1.590	0.95	1.16	1.51
S23	J808	7.6	0.95	15	1.000	1.220	1.590	7.22	8.81	11.48
S23a	J808a	20.3	0.55	15	1.000	1.220	1.590	11.15	13.60	17.73
S24	J810	2.2	0.95	15	1.000	1.220	1.590	2.13	2.60	3.39
S24a	J810a	8.9	0.61	15	1.000	1.220	1.590	5.42	6.62	8.62
S25	J811	3.5	0.95	15	1.000	1.220	1.590	3.28	4.01	5.22
Offsite HMS J-1-1	J900	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
Offsite HMS J-1-2	J901	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
Offsite HMS J-1-4	J902	n/a	n/a	n/a	Enter Scale Factor of 1 for SWMM to run			1.00	1.00	1.00
S65	J903	2.6	0.92	15	1.000	1.220	1.590	2.40	2.93	3.82
S96	J904	176.8	0.21	55	0.507	0.618	0.807	18.74	22.82	29.81



Column1	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year
DAB-1	19.4	0.24	15	1.000	1.220	1.590	4.58	5.59	7.29
DAB-2	14.6	0.63	15	1.000	1.220	1.590	9.20	11.22	14.62
DAB-3	34.5	0.49	15	1.000	1.220	1.590	17.04	20.78	27.09
PDM-1	36.2	0.44	15	1.000	1.220	1.590	15.80	19.27	25.12
PDM-2	n/a	n/a	na/	n/a	n/a	n/a	1.00	1.00	1.00
PDM-3	18.2	0.57	15	1.000	1.220	1.590	10.30	12.56	16.37
PDM-4	7.4	0.94	15	1.000	1.220	1.590	6.98	8.51	11.10
PDM-5	14.3	0.56	15	1.000	1.220	1.590	8.00	9.76	12.72
VL-1	6.2	0.60	15	1.000	1.220	1.590	3.71	4.53	5.90
VL-2	25.9	0.68	15	1.000	1.220	1.590	17.48	21.33	27.79
VL-3	7.5	0.60	15	1.000	1.220	1.590	4.51	5.50	7.17
VL-4	14.1	0.55	15	1.000	1.220	1.590	7.74	9.44	12.30





Basin ID	Node	Acres	Runoff Coefficient	Tc Calced	10 Year Intensity <sup>1</sup>	25 Year Intensity <sup>1</sup>	100 Year Intensity <sup>1</sup>	Q 10 Year	Q 25 Year	Q 100 Year
S94	OF-J-792	61.0	0.26	60	0.473	0.576	0.752	7.46	9.09	11.86
S95	OF-J-725B-2	131.6	0.26	50	0.541	0.659	0.861	18.51	22.55	29.46



## **APPENDIX D – PROPOSED SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. **SWMM 10 Year Output Report - No Offsite Flows**
4. SWMM 25 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - With Offsite Flows
6. SWMM 100 Year Output Report - No Offsite Flows



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J100	YES	236	240	5	0	15Minute	11.39
J1000	YES	261	265	4	0	TS-1000-25yr	1.00
J1001	YES	239	243	4	0	TS-1001-25yr	1.00
J1002	NO	207	211	4	0		1.00
J1003	YES	169	173	4	0	15Minute	32.51
J1004	YES	147	151	4	0	15Minute	3.58
J1005	YES	140	144	4	0	45Minute	8.36
J1006	NO	121	125	4	100		1.00
J101	YES	221	225	5	0	15Minute	14.52
J102	YES	228	232	4	0	15Minute	8.61
J103	YES	210	215	5	100	15Minute	13.23
J104	YES	203	207	4	100	15Minute	11.50
J105	YES	185	190	6	0	15Minute	15.69
J106	YES	226	230	5	0	15Minute	13.39
J107	YES	203	207	5	100	15Minute	13.70
J108	YES	196	200	4	0	15Minute	16.65
J109	NO	193	197	5	100		1.00
J110	YES	192	198	7	0	15Minute	8.88
J111	YES	181	186	5	100	15Minute	7.32
J200	YES	256	260	5	0	TS-200-25yr	1.00
J2000	YES	172	176	4	0	15Minute	14.97
J2001	YES	166	170	4	0	15Minute	12.56
J2002	NO	157	161	4	0		1.00
J2003	YES	149	155	6	0	15Minute	8.44
J2004	NO	146	150	4	0		1.00
J201	YES	240	245	5	100	15Minute	25.71
J203	NO	235	239	4	0		1.00
J204	YES	222	227	6	100	15Minute	10.77
J206	NO	205	210	6	100		1.00
J207	YES	203	208	6	0	15Minute	12.00
J208	NO	195	200	6	0		1.00
J210	YES	193	198	6	100	15Minute	9.43
J211	YES	183	188	6	0	15Minute	15.42
J212	YES	177	182	6	0	15Minute	11.84
J213	YES	168	174	6	0	15Minute	15.96
J214	YES	161	167	6	0	15Minute	14.39
J215	YES	183	187	4	0	15Minute	6.84
J216	YES	178	182	4	100	15Minute	7.39
J217	YES	168	172	5	100	15Minute	11.96
J218	YES	157	163	6	100	15Minute	13.76
J219	YES	153	155	2	0	15Minute	21.33
J300	YES	279	283	4	0	15Minute	7.73
J301	YES	223	227	4	0	15Minute	9.65
J302	YES	211	215	5	0	15Minute	9.05



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J303	YES	192	196	5	0	15Minute	18.74
J304	YES	175	180	5	100	15Minute	17.22
J305	YES	163	167	4	0	15Minute	20.60
J400	YES	163	167	4	100	15Minute	7.50
J401	YES	162	166	4	0	15Minute	7.51
J402	YES	153	157	5	100	15Minute	13.50
J500	YES	281	285	4	0	15Minute	14.98
J501	YES	271	275	5	0	15Minute	11.81
J502	NO	246	250	4	0		1.00
J503	YES	235	240	5	100	15Minute	18.04
J504	YES	217	222	5	100	15Minute	13.11
J505	YES	200	205	5	100	15Minute	11.81
J507	YES	251	255	4	0	15Minute	21.00
J508	YES	218	222	5	0	15Minute	13.48
J509	YES	196	200	5	0	15Minute	8.84
J510	YES	172	177	6	0	15Minute	8.59
J600	YES	297	301	4	100	15Minute	16.29
J601	YES	293	297	5	0	15Minute	10.19
J602	YES	279	284	5	0	15Minute	5.66
J603	YES	260	265	6	0	15Minute	9.16
J604	YES	264	268	4	100	15Minute	8.71
J605	NO	258	260	2	0		1.00
J606	YES	304	308	4	0	15Minute	12.83
J607	YES	303	310	7	0	15Minute	9.64
J608	YES	256	260	5	0	15Minute	20.51
J609	YES	211	216	5	100	15Minute	20.63
J610	YES	191	196	6	100	25Minute	40.80
J611	NO	176	180	4	0		1.00
J612	YES	154	160	6	100	15Minute	11.23
J701	YES	195	199	5	0	30Minute	29.37
J702	YES	180	185	5	0	25Minute	24.46
J703	YES	178	183	6	0	15Minute	20.44
J704	YES	172	178	6	0	30Minute	43.78
J705	YES	173	178	5	0	25Minute	36.54
J706	YES	163	168	6	0	25Minute	27.91
J707	YES	161	167	6	0	15Minute	17.13
J708	YES	158	164	7	0	15Minute	34.75
J800	YES	278	282	4	0	TS-800-25yr	1.00
J801	YES	222	224	2	0	55Minute	4.52
J802	YES	217	219	2	0	70Minute	14.92
J803	YES	213	215	2	0	70Minute	14.93
J804	YES	210	212	2	0	55Minute	7.01
J805	YES	207	209	2	0	55Minute	13.05
J806	YES	201	205	4	0	15Minute	8.10



Name	Inflows	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft <sup>2</sup> )	Time Series	Scale Factor
J807	YES	153	157	4	100	15Minute	17.09
J808	YES	152	154	2	0	15Minute	19.70
J810	YES	151	153	2	0	15Minute	8.74
J811	YES	143	145	2	0	15Minute	12.63
J900	YES	356	358	2	0	TS-900-25yr	1.00
J901	YES	295	298	3	0	TS-901-25yr	1.00
J902	YES	260	262	2	0	TS-902-25yr	1.00
J903	YES	248	248	0	0	15Minute	2.93
J904	YES	183	190	7	100	55Minute	22.77



Column1	Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Offset (ft)	Outlet Offset (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
C1	VL-2	J1004		850.000	0.013	0	0	0	0	CIRCULAR	2.5	0	0	0	1		0.00706
C100	J100	J101		1109.000	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01353
C1000	J1000	J1001		2024.637	0.03	0	0	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.01087
C1001	J1001	J1002		1819.120	0.02	0	0	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.01759
C1002	J1002	J1003		3155.687	0.02	0	0	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.01204
C1003	J1003	J1004		1822.161	0.02	0	0	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.01207
C1004	J1004	J1005		660.751	0.02	0	0	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.01059
C1005	J1005	J1006		1561.536	0.02	0	0	0.5	1	TRAPEZOIDAL	4	8	2	2	1		0.01217
C1007	J1006	OF-VL		1764.000	0.04	0	0	0.5	1	IRREGULAR	0	0	0	0	1	XS_701	0.00296
C101	J101	J103		879.000	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01195
C102	J102	J103		1127.000	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01553
C103	J103	J105		1690.747	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.01538
C104	J104	J105		1230.000	0.013	0	1	0.5	1	CIRCULAR	2	0	0	0	1		0.01464
C105	J105	VL-1		60.000	0.013	0	0	0.5	1	CIRCULAR	4	0	0	0	1		0.08362
C106	J106	J107		1015.173	0.015	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.02266
C107	J107	J109		613.057	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.0155
C108	J108	J109		447.019	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.00671
C109	J109	J110		654.726	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.00382
C110	J110	J111		703.782	0.013	0	0.5	0.5	1	CIRCULAR	3	0	0	0	1		0.01208
C111	J111	VL-1		200.000	0.013	0	0.5	0.5	1	CIRCULAR	3.5	0	0	0	1		0.0075
C2	J-DAB-2	OF-DAB-2		258.000	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.01473
C200	J200	J201		869.037	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01669
C2000	J2000	J2001		851.152	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00646
C2001	J2001	DAB-3		904.231	0.013	0	0	0.5	1	RECT_CLOSED	2	5	0	0	1		0.01217
C2002	J2002	IF-J-725B-		2000.000	0.02	0	0	0	0	TRAPEZOIDAL	2	5	2	2	1		0.00418
C2003	J2003	PDM-4		448.081	0.013	0	0	0.5	1	RECT_CLOSED	3	5	0	0	1		0.0067
C2004	J2004	OF-J-725-		274.238	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00729
C202	J201	J204		683.264	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.02709
C203	J203	J204		806.787	0.013	0	1.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01488
C205	J204	J206		947.249	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01637
C206	J206	J207		153.041	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.02288
C207	J207	J208		507.435	0.013	0	0.5	0.5	1	CIRCULAR	3	0	0	0	1		0.01281
C209	J208	J210		431.132	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.00464
C210	J210	J211		883.077	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.01189
C211	J211	J212		785.637	0.013	0	0	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00764
C212	J212	J213		739.052	0.013	0	0	0.5	1	CIRCULAR	3.5	0	0	0	1		0.01083
C213	J213	J214		516.951	0.013	0	0	0.5	1	CIRCULAR	3.5	0	0	0	1		0.01548
C214	J214	J218		768.550	0.013	0	0	0.5	1	CIRCULAR	4.5	0	0	0	1		0.0052
C215	J215	J216		837.134	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.00597



Column1	Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Offset (ft)	Outlet Offset (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
	C216	J216	J217	775.425	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01225
	C217	J217	J218	788.100	0.013	0	2	0.5	1	CIRCULAR	2	0	0	0	1		0.01206
	C218	J218	VL-2	300.000	0.013	0	0	0.5	1	RECT_CLOSED	4.5	10	0	0	1		0.01167
	C300	J300	J301	787.898	0.013	0	0	0.5	1	CIRCULAR	1	0	0	0	1		0.07126
	C301	J301	J302	596.399	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.02012
	C302	J302	J303	1308.875	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01452
	C303	J303	J304	787.953	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.02031
	C304	J304	J305	779.715	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.01539
	C305	J305	VL-3	500.000	0.013	0	0	0.5	1	RECT_CLOSED	3	9	0	0	1		0.008
	C400	J400	J402	762.800	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01311
	C401	J401	J402	826.752	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01089
	C402	J402	VL-4	737.809	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01017
	C500	J500	J501	842.672	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01187
	C501	J501	J503	1419.131	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.02467
	C502	J502	J503	697.713	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.01505
	C503	J503	J504	924.346	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.01948
	C504	J504	J505	850.123	0.013	0	0	0.5	1	CIRCULAR	3	0	0	0	1		0.02
	C505	J505	PDM-5	584.610	0.013	0	0	0.5	1	RECT_CLOSED	2	5	0	0	1		0.00855
	C507	J507	J508	1308.918	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.02637
	C508	J508	J509	691.784	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.03182
	C509	J509	J510	1121.547	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.01917
	C510	J510	J2003	1111.495	0.013	0	0	0.5	1	RECT_CLOSED	2	5	0	0	1		0.02205
	C600	J600	J604	1355.000	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.02399
	C601	J601	J602	529.042	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.02363
	C602	J602	J603	823.127	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.0243
	C603	J603	PDM-2	495.499	0.013	0	0	0.5	1	RECT_CLOSED	2	5	0	0	1		0.01312
	C604	J604	PDM-2	442.264	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.02488
	C605	J605	J609	1633.506	0.01	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.02756
	C606	J606	J607	276.403	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.00362
	C607	J607	J608	1451.271	0.013	0	0.5	0.5	1	CIRCULAR	2	0	0	0	1		0.0324
	C608	J608	J609	1974.422	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.02229
	C609	J609	J610	534.368	0.013	0	0.5	0.5	1	CIRCULAR	3	0	0	0	1		0.03745
	C610	J610	PDM-3	699.224	0.013	0	0.5	0.5	1	CIRCULAR	3.5	0	0	0	1		0.02146
	C611	J611	J612	1209.830	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.01819
	C612	J612	PDM-4	551.114	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.01633
	C701	J701	J702	1719.796	0.013	0	0.5	0.5	1	CIRCULAR	2.5	0	0	0	1		0.00814
	C702	J702	J703	451.937	0.013	0	0.5	0.5	1	CIRCULAR	3	0	0	0	1		0.00774
	C703	J703	DAB-2	1043.854	0.013	0	0	0	0	CIRCULAR	3	0	0	0	1		0.01533
	C705	J705	J706	1799.521	0.013	0	0.5	0.5	1	CIRCULAR	3	0	0	0	1		0.00556



Column1	Name	Inlet Node	Outlet Node	Length (ft)	Roughness	Inlet Offset (ft)	Outlet Offset (ft)	Entry Loss Coeff.	Exit Loss Coeff.	Cross-Section	Geom1 (ft)	Geom2 (ft)	Geom3	Geom4	Barrels	Transect	Slope (ft/ft)
	C706	J706	DAB-2	300.000	0.013	0	0.5	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00667
	C707	J707	J708	674.411	0.013	0	0	0.5	1	CIRCULAR	3.5	0	0	0	1		0.00297
	C708	J708	DAB-1	508.846	0.013	0	0	0.5	1	RECT_CLOSED	3	5	0	0	1		0.00098
	C709	J709	J710	758.059	0.013	0	0	0.5	1	CIRCULAR	2.5	0	0	0	1		0.0066
	C710	J710	DAB-1	558.987	0.013	0	0	0.5	1	RECT_CLOSED	3	8	0	0	1		0.01342
	C800	J800	J806	3617.987	0.02	0	0	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.02129
	C801	J801	J802	1607.549	0.02	0	0	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.00311
	C802	J802	J803	980.965	0.02	0	0	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.00408
	C803	J803	J803a	959.184	0.02	0	2	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.00261
	C803a	J803a	J703	1754.736	0.013	0	0	0	0	CIRCULAR	2.5	0	0	0	1		0.01852
	C804	J804	J805	828.964	0.02	0	0	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.00362
	C805	J805	J806	642.817	0.02	0	0	0	0	TRAPEZOIDAL	2	5	2	2	1		0.00933
	C806	J806	J807	2967.642	0.02	0	0	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.01618
	C807	J807	J808	1107.111	0.013	0	0	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.0009
	C808a	J808a	J810a	923.619	0.013	0	0	0	0	CIRCULAR	2.5	0	0	0	1		0.00108
	C809	J808	J810	927.476	0.013	0	0	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.00108
	C810	J810	J811	988.923	0.013	0	0	0.5	1	TRAPEZOIDAL	4	6	2	2	1		0.00809
	C810a	J810a	VL-4	940.514	0.013	0	0	0	0	CIRCULAR	2.5	0	0	0	1		0.00372
	C811	J811	OF812	582.245	0.013	0	0	0.5	1	RECT_OPEN	5	10	0	0	1		0.00515
	C900	J900	J901	5040.807	0.02	0	0	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.0119
	C901	J901	J902	1794.769	0.02	0	0	0.5	1	TRAPEZOIDAL	2	5	2	2	1		0.02006
	C902	J902	J903	883.290	0.02	0	0	0.5	1	TRAPEZOIDAL	3	5	2	2	1		0.01812
	C903	J903	J904	3989.604	0.02	0	0	0.5	1	TRAPEZOIDAL	3	5	2	2	1		0.01429
	C904	J904	OF-J-792	1032.786	0.02	0	0	0.5	1	TRAPEZOIDAL	3	5	2	2	1		0.04578
	C-DAB-1	DAB-1	J807	500.000	0.013	0	0	0.5	1	CIRCULAR	1.21	0	0	0	1		0.009
	C-DAB-2	DAB-2	J-DAB-2	125.000	0.013	0	0	0.5	1	CIRCULAR	2.75	0	0	0	1		0.0056
	C-DAB-3	DAB-3	J2002	200.000	0.013	1.5	0	0.5	1	CIRCULAR	1.25	0	0	0	1		0.0025
	C-PDM-4	PDM-4	J2004	133.000	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.00752
	C-PDM-5	PDM-5	J-PDM-5	450.000	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.00956
	C-PDM-5i	J-PDM-5	J2002	1732.000	0.013	0	0	0.5	1	CIRCULAR	2	0	0	0	1		0.02004
	C-VL-4	VL-4	J811	200.000	0.013	0	0	0.5	1	CIRCULAR	1	0	0	0	1		0.01





Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Storage Curve	Curve Name	Time Series	Scale Factor	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (fraction)
VL-4	145	151	6	TABULAR	VL-4	15Minute	12.3	1.95	2.32	0.33
VL-3	159	165	6	TABULAR	VL-3	15Minute	7.17	1.95	2.32	0.33
VL-2	153	160	7	TABULAR	VL-2	15Minute	27.79	1.95	2.32	0.33
VL-1	179	185	6	TABULAR	VL-1	15Minute	5.9	1.95	2.32	0.33
PDM-5	195	200	5	TABULAR	PDM-5	15Minute	12.72	1.95	2.32	0.33
PDM-4	145	151	6	TABULAR	PDM-4	15Minute	11.1	1.95	2.32	0.33
PDM-3	175	181	6	TABULAR	PDM-3	15Minute	16.37	1.95	2.32	0.33
PDM-2	253	258	5	TABULAR	PDM-2		1	1.95	2.32	0.33
PDM-1	250	255	5	TABULAR	PDM-1	15Minute	25.12	1.95	2.32	0.33
DAB-3	155	161	6	TABULAR	DAB-3	15Minute	27.09	1.95	2.32	0.33
DAB-2	160	167	7	TABULAR	DAB-2	15Minute	14.62	1.95	2.32	0.33
DAB-1	158	162	5	TABULAR	DAB-1	15Minute	7.29	1.95	2.32	0.33

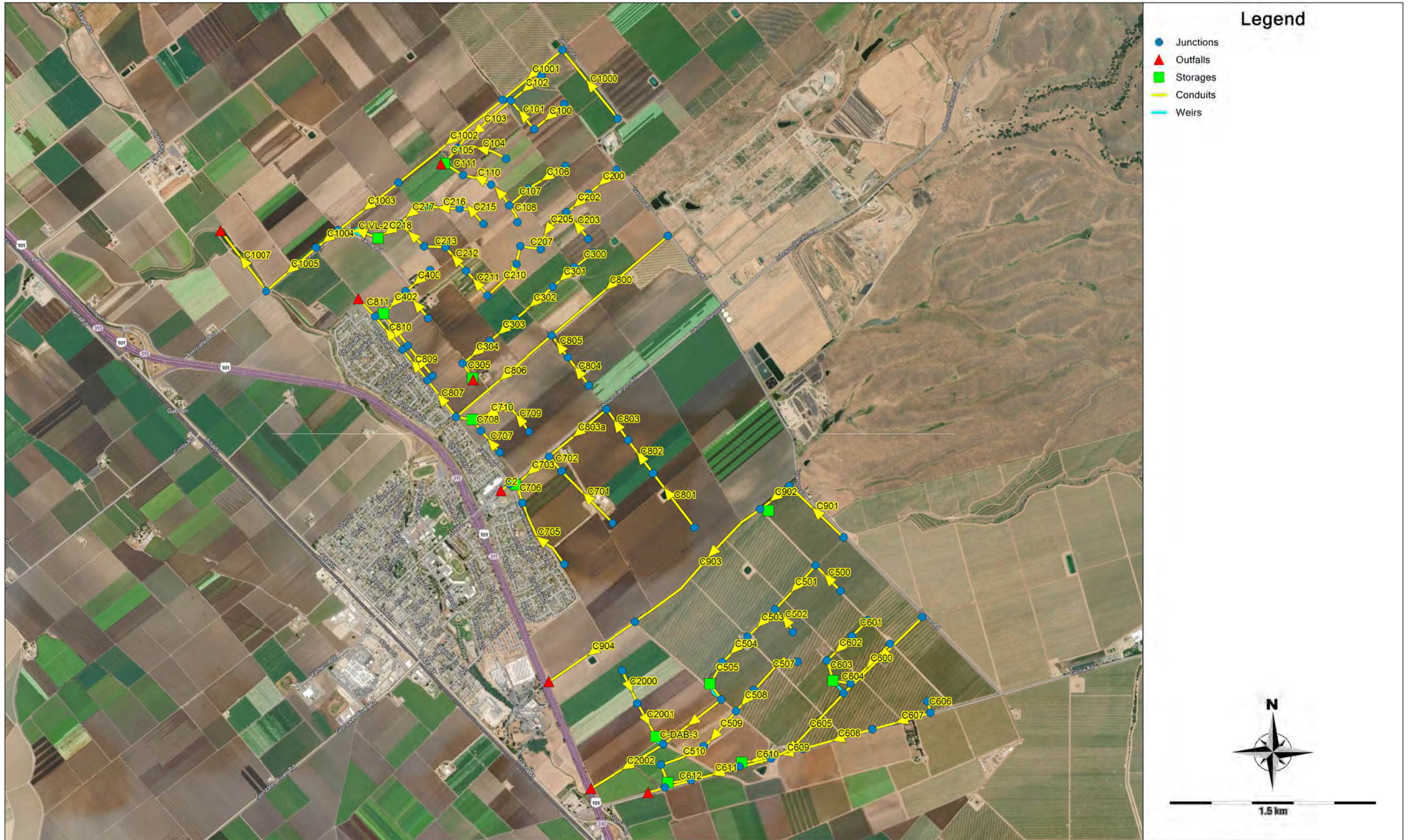


Name	Inlet Node	Outlet Node	Type	Height (ft)	Length (ft)	Side Slope (ft/ft)	Inlet Offset (ft)	Discharge Coeff. (CFS)
W-VL-3	VL-3	OF-VL-3	TRANSVERSE	0.25	25.00	0	5.25	3.33
W-VL-1	J105	VL-1	TRANSVERSE	0.50	30.00	0	5.5	3.33
W-PDM-4	PDM-4	J2004	TRAPEZOIDAL	2.00	3.00	2	4	3.33
W-PDM-3	PDM-3	J611	TRANSVERSE	0.25	1.00	0	5.75	3.33
W-PDM-1	PDM-1	J903	TRANSVERSE	0.25	1.00	0	4.75	3.33
W-J304	J304	VL-3	TRANSVERSE	0.50	30.00	0	4.5	3.33
W-J217	J217	VL-2	TRANSVERSE	0.50	30.00	0	3.5	3.33
W-DAB-3	DAB-3	J2002	TRANSVERSE	0.50	20.00	0	5.5	3.33
W-DAB-2	DAB-2	J-DAB-2	TRANSVERSE	1.00	28.00	0	6	3.33
W9	J508	PDM-4	TRANSVERSE	0.50	30.00	0	5.5	3.33
W8	PDM-2	J605	TRANSVERSE	0.25	1.00	0	4.75	3.33
W7	J702	DAB-2	TRANSVERSE	0.50	30.00	0	4.5	3.33
W6	J703	DAB-2	TRANSVERSE	0.50	30.00	0	4.5	3.33
W5	J208	VL-2	TRANSVERSE	0.50	30.00	0	4	3.33
W4	J214	VL-2	TRANSVERSE	0.50	30.00	0	6	3.33
W3	J305	VL-3	TRANSVERSE	0.50	30.00	0	3.5	3.33
W2	VL-2	J1004	TRANSVERSE	1.00	16.00	0	6	3.33
W11	J509	PDM-4	TRANSVERSE	0.50	30.00	0	5.5	3.33
W10	PDM-5	J-PDM-5	TRANSVERSE	1.30	20.00	0	3.7	3.33
W1	VL-1	OF-VL-1	TRANSVERSE	0.01	25.00	0	5.99	3.33
C-Overflow-71C	J710	DAB-1	TRANSVERSE	0.50	30.00	0	7.5	3.33



Name	Inflows	Treatment	Invert Elev. (ft)	Rim Elev. (ft)	Time Series	Scale Factor
OF812	NO	NO	140	145		1.00
OF-J-725-2	NO	NO	140	148		1.00
OF-J-725B-2	YES	NO	0	0	50Minute	22.41
OF-J-792	YES	NO	174	176	60Minute	8.97
OF-VL	NO	NO	116	123		1.00
OF-VL-1	NO	NO	185	185		1.00

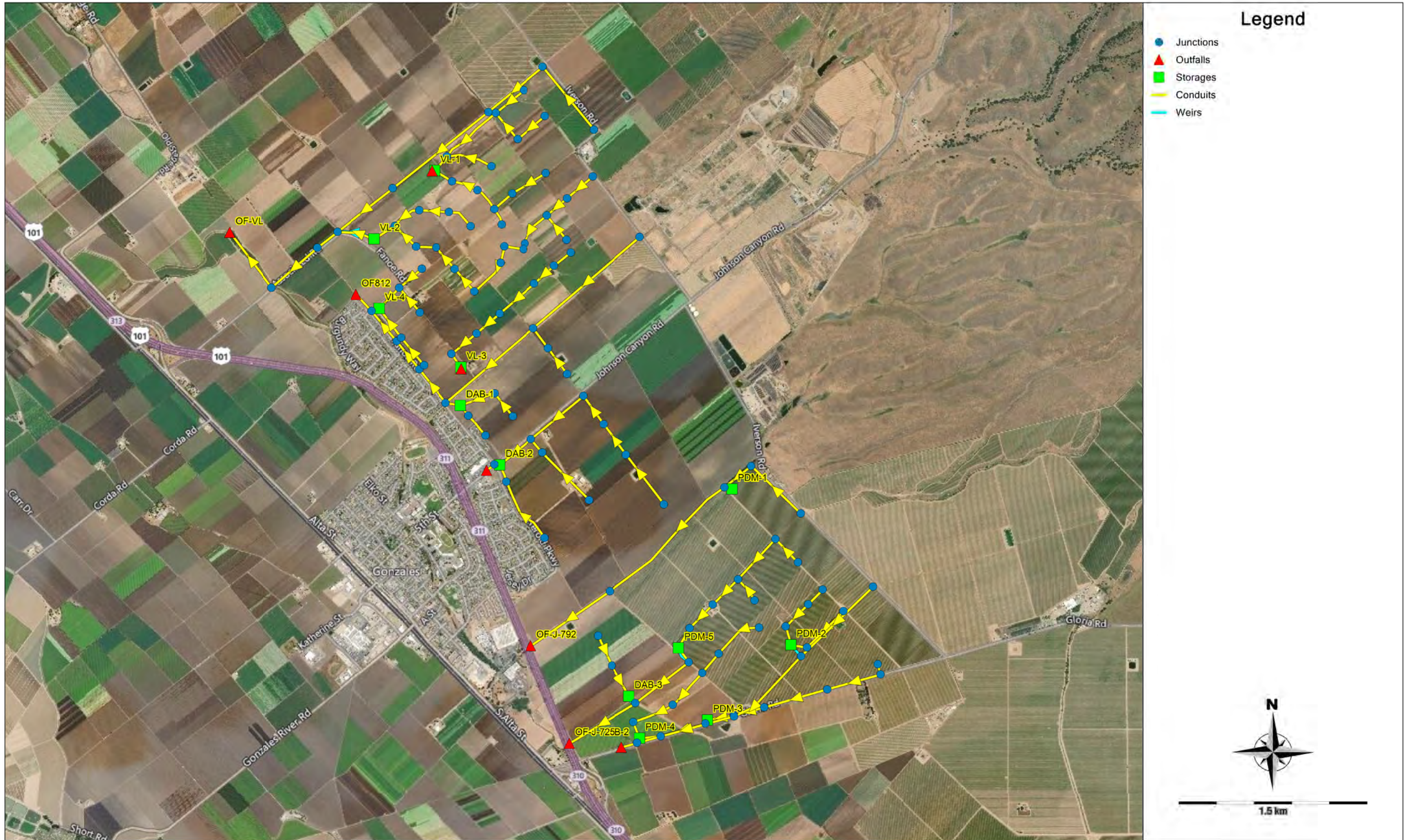
# Proposed Model in PCSWMM with Conduits Labeled



# Proposed Model in PCSWMM with Junctions Labeled



# Proposed Model in PCSWMM with Storage Basins and Outfalls Labeled



City of Gonzales Drainage Master Plan

\*\*\*\*\*  
 Element Count  
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Number of rain gages ..... 0  
 Number of subcatchments ... 0  
 Number of nodes ..... 122  
 Number of links ..... 119  
 Number of pollutants ..... 0  
 Number of land uses ..... 0

\*\*\*\*\*  
 Node Summary  
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Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J100	JUNCTION	235.50	4.50	0.0	Yes
J1000	JUNCTION	261.00	4.00	0.0	
J1001	JUNCTION	239.00	4.00	0.0	
J1002	JUNCTION	207.00	4.00	0.0	
J1003	JUNCTION	169.00	4.00	0.0	Yes
J1004	JUNCTION	147.00	4.00	0.0	Yes
J1005	JUNCTION	140.00	4.00	0.0	Yes
J1006	JUNCTION	121.00	16.72	100.0	
J101	JUNCTION	220.50	4.50	0.0	Yes
J102	JUNCTION	228.00	4.00	0.0	Yes
J103	JUNCTION	210.00	5.00	100.0	Yes
J104	JUNCTION	203.00	4.00	100.0	Yes
J105	JUNCTION	184.00	6.00	0.0	Yes
J106	JUNCTION	225.50	4.50	0.0	Yes
J107	JUNCTION	202.50	4.50	100.0	Yes
J108	JUNCTION	196.00	4.00	0.0	Yes
J109	JUNCTION	192.50	4.50	100.0	
J110	JUNCTION	190.00	5.00	0.0	Yes
J111	JUNCTION	181.00	5.00	100.0	Yes
J200	JUNCTION	255.50	4.50	0.0	
J2000	JUNCTION	171.50	4.50	0.0	Yes
J2001	JUNCTION	166.00	4.00	0.0	Yes
J2002	JUNCTION	156.00	4.00	0.0	
J2003	JUNCTION	148.00	5.00	0.0	Yes
J2004	JUNCTION	144.00	6.00	0.0	
J201	JUNCTION	240.50	4.50	100.0	Yes
J203	JUNCTION	235.00	4.00	0.0	
J204	JUNCTION	221.50	5.50	100.0	Yes
J206	JUNCTION	205.50	4.50	100.0	
J207	JUNCTION	202.00	6.00	0.0	Yes
J208	JUNCTION	195.00	5.00	0.0	
J210	JUNCTION	193.00	5.00	100.0	Yes
J211	JUNCTION	182.50	5.50	0.0	Yes
J212	JUNCTION	176.50	5.50	0.0	Yes
J213	JUNCTION	168.50	5.50	0.0	Yes
J214	JUNCTION	160.50	6.50	0.0	Yes
J215	JUNCTION	183.00	4.00	0.0	Yes
J216	JUNCTION	178.00	4.00	100.0	Yes
J217	JUNCTION	168.00	4.00	100.0	Yes
J218	JUNCTION	154.00	9.00	100.0	Yes
J300	JUNCTION	279.00	4.00	0.0	Yes
J301	JUNCTION	223.00	4.00	0.0	Yes
J302	JUNCTION	210.50	4.50	0.0	Yes

67	J303	JUNCTION	191.50	4.50	0.0	Yes
68	J304	JUNCTION	175.00	5.00	100.0	Yes
69	J305	JUNCTION	163.00	4.00	0.0	Yes
70	J400	JUNCTION	163.00	4.00	100.0	Yes
71	J401	JUNCTION	162.00	4.00	0.0	Yes
72	J402	JUNCTION	152.50	4.50	100.0	Yes
73	J500	JUNCTION	281.00	4.00	0.0	Yes
74	J501	JUNCTION	270.50	4.50	0.0	Yes
75	J502	JUNCTION	246.00	4.00	0.0	
76	J503	JUNCTION	235.00	5.00	100.0	Yes
77	J504	JUNCTION	217.00	5.00	100.0	Yes
78	J505	JUNCTION	200.00	5.00	100.0	Yes
79	J507	JUNCTION	251.00	4.00	0.0	Yes
80	J508	JUNCTION	216.00	6.00	0.0	Yes
81	J509	JUNCTION	194.00	6.00	0.0	Yes
82	J510	JUNCTION	172.50	4.50	0.0	Yes
83	J600	JUNCTION	297.00	4.00	100.0	Yes
84	J601	JUNCTION	293.00	4.00	0.0	Yes
85	J602	JUNCTION	280.00	4.00	0.0	Yes
86	J603	JUNCTION	259.50	5.50	0.0	Yes
87	J604	JUNCTION	264.00	4.00	100.0	Yes
88	J605	JUNCTION	258.00	2.00	0.0	
89	J606	JUNCTION	304.00	4.00	0.0	Yes
90	J607	JUNCTION	303.00	7.00	0.0	Yes
91	J608	JUNCTION	255.50	4.50	0.0	Yes
92	J609	JUNCTION	211.00	5.00	100.0	Yes
93	J610	JUNCTION	190.50	5.50	100.0	Yes
94	J611	JUNCTION	176.00	4.00	0.0	
95	J612	JUNCTION	154.00	6.00	100.0	Yes
96	J701	JUNCTION	194.50	4.50	0.0	Yes
97	J702	JUNCTION	180.00	5.00	0.0	Yes
98	J703	JUNCTION	176.00	5.00	0.0	Yes
99	J705	JUNCTION	173.00	5.00	0.0	Yes
100	J706	JUNCTION	162.50	5.50	0.0	Yes
101	J707	JUNCTION	160.00	5.00	0.0	Yes
102	J708	JUNCTION	158.00	6.00	0.0	
103	J709	JUNCTION	170.00	7.00	0.0	Yes
104	J710	JUNCTION	165.00	8.00	0.0	Yes
105	J800	JUNCTION	278.00	4.00	0.0	
106	J801	JUNCTION	222.00	2.00	0.0	Yes
107	J802	JUNCTION	217.00	2.00	0.0	Yes
108	J803	JUNCTION	213.00	2.00	0.0	Yes
109	J803a	JUNCTION	208.50	4.50	0.0	
110	J804	JUNCTION	210.00	2.00	0.0	Yes
111	J805	JUNCTION	207.00	2.00	0.0	Yes
112	J806	JUNCTION	201.00	4.00	0.0	Yes
113	J807	JUNCTION	153.00	4.00	100.0	Yes
114	J808	JUNCTION	152.00	4.00	0.0	Yes
115	J808a	JUNCTION	149.50	4.50	0.0	Yes
116	J810	JUNCTION	151.00	4.00	0.0	Yes
117	J810a	JUNCTION	148.50	4.50	0.0	Yes
118	J811	JUNCTION	143.00	5.00	0.0	Yes
119	J900	JUNCTION	356.00	2.00	0.0	
120	J901	JUNCTION	296.00	2.00	0.0	
121	J902	JUNCTION	260.00	3.00	0.0	
122	J903	JUNCTION	244.00	3.00	0.0	Yes
123	J904	JUNCTION	187.00	3.00	100.0	Yes
124	J-DAB-2	JUNCTION	159.30	5.60	0.0	
125	J-PDM-5	JUNCTION	190.70	5.30	0.0	
126	OF812	OUTFALL	140.00	5.00	0.0	
127	OF-DAB-2	OUTFALL	155.50	3.00	0.0	
128	OF-J-725-2	OUTFALL	142.00	2.50	0.0	
129	OF-J-725B-2	OUTFALL	147.65	2.00	0.0	Yes
130	OF-J-792	OUTFALL	139.77	3.00	0.0	Yes
131	OF-VL	OUTFALL	115.78	16.72	0.0	
132	OF-VL-1	OUTFALL	184.75	0.00	0.0	



133	OF-VL-3	OUTFALL	164.25	0.00	0.0	
134	DAB-1	STORAGE	157.50	4.50	0.0	Yes
135	DAB-2	STORAGE	160.00	7.00	0.0	Yes
136	DAB-3	STORAGE	155.00	6.00	0.0	Yes
137	PDM-1	STORAGE	250.00	5.00	0.0	Yes
138	PDM-2	STORAGE	253.00	5.00	0.0	
139	PDM-3	STORAGE	175.00	6.00	0.0	Yes
140	PDM-4	STORAGE	145.00	6.00	0.0	Yes
141	PDM-5	STORAGE	195.00	5.00	0.0	Yes
142	VL-1	STORAGE	180.00	5.00	0.0	Yes
143	VL-2	STORAGE	153.00	7.00	0.0	Yes
144	VL-3	STORAGE	159.00	5.50	0.0	Yes
145	VL-4	STORAGE	145.00	6.00	0.0	Yes

146  
147

148 \*\*\*\*\*  
149 Link Summary  
150 \*\*\*\*\*

151	Name	From Node	To Node	Type	Length	%Slope
	Roughness					

152

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153	C100	J100	J101	CONDUIT	1109.0	
	1.3527	0.0130				
154	C1000	J1000	J1001	CONDUIT	2024.6	
	1.0867	0.0300				
155	C1001	J1001	J1002	CONDUIT	1819.1	
	1.7594	0.0200				
156	C1002	J1002	J1003	CONDUIT	3155.7	
	1.2043	0.0200				
157	C1003	J1003	J1004	CONDUIT	1822.2	
	1.2074	0.0200				
158	C1004	J1004	J1005	CONDUIT	660.8	
	1.0595	0.0200				
159	C1005	J1005	J1006	CONDUIT	1561.5	
	1.2168	0.0200				
160	C1007	J1006	OF-VL	CONDUIT	1764.0	
	0.2959	0.0500				
161	C101	J101	J103	CONDUIT	879.0	
	1.1946	0.0130				
162	C102	J102	J103	CONDUIT	1127.0	
	1.5530	0.0130				
163	C103	J103	J105	CONDUIT	1690.7	
	1.5380	0.0130				
164	C104	J104	J105	CONDUIT	1230.0	
	1.4636	0.0130				
165	C105	J105	VL-1	CONDUIT	60.0	
	6.6815	0.0130				
166	C106	J106	J107	CONDUIT	1015.2	
	2.2662	0.0150				
167	C107	J107	J109	CONDUIT	613.1	
	1.5498	0.0130				
168	C108	J108	J109	CONDUIT	447.0	
	0.6711	0.0100				
169	C109	J109	J110	CONDUIT	654.7	
	0.3818	0.0100				
170	C110	J110	J111	CONDUIT	703.8	
	1.2078	0.0100				
171	C111	J111	VL-1	CONDUIT	200.0	
	0.2500	0.0130				
172	C2	J-DAB-2	OF-DAB-2	CONDUIT	258.0	
	1.4730	0.0130				
173	C200	J200	J201	CONDUIT	869.0	
	1.6687	0.0130				
174	C2000	J2000	J2001	CONDUIT	851.2	

175	0.6462 C2001	0.0130	J2001	DAB-3	CONDUIT	904.2
176	1.2166 C2002	0.0130	J2002	OF-J-725B-2	CONDUIT	2000.0
177	0.4175 C2003	0.0200	J2003	PDM-4	CONDUIT	448.1
178	0.6695 C2004	0.0130	J2004	OF-J-725-2	CONDUIT	274.2
179	0.7293 C202	0.0130	J201	J204	CONDUIT	683.3
180	2.7086 C203	0.0130	J203	J204	CONDUIT	806.8
181	1.4875 C205	0.0130	J204	J206	CONDUIT	947.2
182	1.6365 C206	0.0130	J206	J207	CONDUIT	153.0
183	2.2876 C207	0.0130	J207	J208	CONDUIT	507.4
184	1.2811 C209	0.0130	J208	J210	CONDUIT	431.1
185	0.4639 C210	0.0130	J210	J211	CONDUIT	883.1
186	1.1891 C211	0.0130	J211	J212	CONDUIT	785.6
187	0.7637 C212	0.0130	J212	J213	CONDUIT	739.1
188	1.0149 C213	0.0130	J213	J214	CONDUIT	517.0
189	1.5477 C214	0.0130	J214	J218	CONDUIT	768.5
190	0.8458 C215	0.0130	J215	J216	CONDUIT	837.1
191	0.5973 C216	0.0130	J216	J217	CONDUIT	775.4
192	1.2252 C217	0.0130	J217	J218	CONDUIT	788.1
193	1.5228 C218	0.0130	J218	VL-2	CONDUIT	100.0
194	1.0001 C300	0.0130	J300	J301	CONDUIT	787.9
195	7.1255 C301	0.0130	J301	J302	CONDUIT	596.4
196	2.0125 C302	0.0130	J302	J303	CONDUIT	1308.9
197	1.4518 C303	0.0130	J303	J304	CONDUIT	788.0
198	2.0310 C304	0.0130	J304	J305	CONDUIT	779.7
199	1.5392 C305	0.0130	J305	VL-3	CONDUIT	500.0
200	0.8000 C400	0.0130	J400	J402	CONDUIT	762.8
201	1.3111 C401	0.0130	J401	J402	CONDUIT	826.8
202	1.0887 C402	0.0130	J402	VL-4	CONDUIT	737.8
203	1.0166 C500	0.0130	J500	J501	CONDUIT	842.7
204	1.1868 C501	0.0130	J501	J503	CONDUIT	1419.1
205	2.4670 C502	0.0130	J502	J503	CONDUIT	697.7
206	1.5051 C503	0.0130	J503	J504	CONDUIT	924.3
207	1.9477 C504	0.0130	J504	J505	CONDUIT	850.1

208	2.0001 C505	0.0130	J505	PDM-5	CONDUIT	584.6
209	0.8553 C507	0.0130	J507	J508	CONDUIT	1308.9
210	2.6367 C508	0.0130	J508	J509	CONDUIT	691.8
211	3.1818 C509	0.0130	J509	J510	CONDUIT	1121.5
212	1.9173 C510	0.0130	J510	J2003	CONDUIT	1111.5
213	2.2048 C600	0.0130	J600	J604	CONDUIT	1355.0
214	2.3992 C601	0.0130	J601	J602	CONDUIT	529.0
215	2.3634 C602	0.0130	J602	J603	CONDUIT	823.1
216	2.4305 C603	0.0130	J603	PDM-2	CONDUIT	495.5
217	1.3119 C604	0.0130	J604	PDM-2	CONDUIT	442.3
218	2.4880 C605	0.0130	J605	J609	CONDUIT	1633.5
219	2.8784 C606	0.0100	J606	J607	CONDUIT	276.4
220	0.3618 C607	0.0130	J607	J608	CONDUIT	1451.3
221	3.2402 C608	0.0130	J608	J609	CONDUIT	1974.4
222	2.2291 C609	0.0130	J609	J610	CONDUIT	534.4
223	3.7454 C610	0.0130	J610	PDM-3	CONDUIT	699.2
224	2.1457 C611	0.0130	J611	J612	CONDUIT	1209.8
225	1.8187 C612	0.0130	J612	PDM-4	CONDUIT	551.1
226	1.6333 C701	0.0130	J701	J702	CONDUIT	1719.8
227	0.8141 C702	0.0130	J702	J703	CONDUIT	451.9
228	0.7745 C703	0.0130	J703	DAB-2	CONDUIT	1043.9
229	1.5330 C705	0.0130	J705	J706	CONDUIT	1799.5
230	0.5557 C706	0.0130	J706	DAB-2	CONDUIT	459.6
231	0.4352 C707	0.0100	J707	J708	CONDUIT	674.4
232	0.2966 C708	0.0130	J708	DAB-1	CONDUIT	508.8
233	0.0983 C709	0.0130	J709	J710	CONDUIT	758.1
234	0.6596 C710	0.0130	J710	DAB-1	CONDUIT	559.0
235	1.3418 C800	0.0130	J800	J806	CONDUIT	3618.0
236	2.1287 C801	0.0200	J801	J802	CONDUIT	1607.5
237	0.3110 C802	0.0200	J802	J803	CONDUIT	981.0
238	0.4078 C803	0.0200	J803	J803a	CONDUIT	959.2
239	0.2606 C803a	0.0200	J803a	J703	CONDUIT	1754.7
240	1.8524 C804	0.0130	J804	J805	CONDUIT	829.0

241	0.3619	0.0200						
	C805		J805	J806	CONDUIT		642.8	
242	0.9334	0.0200						
	C806		J806	J807	CONDUIT		2967.6	
243	1.6177	0.0200						
	C807		J807	J808	CONDUIT		1107.1	
244	0.0903	0.0130						
	C808a		J808a	J810a	CONDUIT		923.6	
245	0.1083	0.0130						
	C809		J808	J810	CONDUIT		927.5	
246	0.1078	0.0130						
	C810		J810	J811	CONDUIT		988.9	
247	0.8090	0.0130						
	C810a		J810a	VL-4	CONDUIT		940.5	
248	0.3721	0.0130						
	C811		J811	OF812	CONDUIT		582.2	
249	0.5153	0.0130						
	C900		J900	J901	CONDUIT		5040.8	
250	1.1904	0.0200						
	C901		J901	J902	CONDUIT		1794.8	
251	2.0062	0.0200						
	C902		J902	J903	CONDUIT		883.3	
252	1.8117	0.0200						
	C903		J903	J904	CONDUIT		3989.6	
253	1.4289	0.0200						
	C904		J904	OF-J-792	CONDUIT		1032.8	
254	4.5779	0.0200						
	C-DAB-1		DAB-1	J807	CONDUIT		500.0	
255	0.9000	0.0130						
	C-DAB-2		DAB-2	J-DAB-2	CONDUIT		125.0	
256	0.5600	0.0130						
	C-DAB-3		DAB-3	J2002	CONDUIT		200.0	
257	0.2500	0.0130						
	C-PDM-4		PDM-4	J2004	CONDUIT		133.0	
258	0.7519	0.0130						
	C-PDM-5		PDM-5	J-PDM-5	CONDUIT		450.0	
259	0.9556	0.0130						
	C-PDM-5a		J-PDM-5	J2002	CONDUIT		1732.0	
260	2.0039	0.0130						
	C-VL-2		VL-2	J1004	CONDUIT		850.0	
261	0.7059	0.0130						
	C-VL-4		VL-4	J811	CONDUIT		200.0	
262	1.0001	0.0130						
	W1		VL-1	OF-VL-1	WEIR			
263			VL-2	J1004	WEIR			
264			PDM-1	J903	WEIR			
265			DAB-2	J-DAB-2	WEIR			
266			DAB-3	J2002	WEIR			
267			PDM-2	J605	WEIR			
268			PDM-3	J611	WEIR			
269			PDM-4	J2004	WEIR			
270			PDM-5	J-PDM-5	WEIR			
271			VL-3	OF-VL-3	WEIR			

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Cross Section Summary  
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277	Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
278								
279								
280	C100	CIRCULAR	2.50	4.91	0.63	2.50	1	47.71
281	C1000	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	110.19
282	C1001	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	1153.17
283	C1002	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	954.06
284	C1003	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	955.32

285	C1004	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	894.87
286	C1005	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	959.03
287	C1007	XS_701	16.72	4292.45	10.30	410.01	1	32860.58
288	C101	CIRCULAR	2.50	4.91	0.63	2.50	1	44.83
289	C102	CIRCULAR	2.00	3.14	0.50	2.00	1	28.19
290	C103	CIRCULAR	3.00	7.07	0.75	3.00	1	82.72
291	C104	CIRCULAR	2.00	3.14	0.50	2.00	1	27.37
292	C105	CIRCULAR	4.00	12.57	1.00	4.00	1	371.30
293	C106	CIRCULAR	2.50	4.91	0.63	2.50	1	53.51
294	C107	CIRCULAR	2.50	4.91	0.63	2.50	1	51.06
295	C108	CIRCULAR	2.00	3.14	0.50	2.00	1	24.09
296	C109	CIRCULAR	3.00	7.07	0.75	3.00	1	53.58
297	C110	CIRCULAR	3.00	7.07	0.75	3.00	1	95.29
298	C111	CIRCULAR	3.50	9.62	0.88	3.50	1	50.30
299	C2	CIRCULAR	3.00	7.07	0.75	3.00	1	80.95
300	C200	CIRCULAR	2.50	4.91	0.63	2.50	1	52.99
301	C2000	CIRCULAR	2.00	3.14	0.50	2.00	1	18.19
302	C2001	RECT_CLOSED	2.00	10.00	0.71	5.00	1	100.75
303	C2002	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	102.45
304	C2003	RECT_CLOSED	3.00	15.00	0.94	5.00	1	134.39
305	C2004	CIRCULAR	2.50	4.91	0.63	2.50	1	35.03
306	C202	CIRCULAR	2.50	4.91	0.63	2.50	1	67.51
307	C203	CIRCULAR	2.00	3.14	0.50	2.00	1	27.59
308	C205	CIRCULAR	2.50	4.91	0.63	2.50	1	52.47
309	C206	CIRCULAR	2.50	4.91	0.63	2.50	1	62.04
310	C207	CIRCULAR	3.00	7.07	0.75	3.00	1	75.49
311	C209	CIRCULAR	3.00	7.07	0.75	3.00	1	45.43
312	C210	CIRCULAR	3.00	7.07	0.75	3.00	1	72.73
313	C211	CIRCULAR	3.50	9.62	0.88	3.50	1	87.92
314	C212	CIRCULAR	3.50	9.62	0.88	3.50	1	101.35
315	C213	CIRCULAR	3.50	9.62	0.88	3.50	1	125.17
316	C214	CIRCULAR	4.50	15.90	1.13	4.50	1	180.85
317	C215	CIRCULAR	2.00	3.14	0.50	2.00	1	17.48
318	C216	CIRCULAR	2.00	3.14	0.50	2.00	1	25.04
319	C217	CIRCULAR	2.00	3.14	0.50	2.00	1	27.92
320	C218	RECT_CLOSED	4.50	45.00	1.55	10.00	1	689.46
321	C300	CIRCULAR	1.00	0.79	0.25	1.00	1	9.51
322	C301	CIRCULAR	2.00	3.14	0.50	2.00	1	32.09
323	C302	CIRCULAR	2.50	4.91	0.63	2.50	1	49.42
324	C303	CIRCULAR	2.50	4.91	0.63	2.50	1	58.45
325	C304	CIRCULAR	3.00	7.07	0.75	3.00	1	82.75
326	C305	RECT_CLOSED	3.00	27.00	1.13	9.00	1	298.60
327	C400	CIRCULAR	2.00	3.14	0.50	2.00	1	25.90
328	C401	CIRCULAR	2.00	3.14	0.50	2.00	1	23.60
329	C402	CIRCULAR	2.50	4.91	0.63	2.50	1	41.36
330	C500	CIRCULAR	2.00	3.14	0.50	2.00	1	24.64
331	C501	CIRCULAR	2.50	4.91	0.63	2.50	1	64.42
332	C502	CIRCULAR	2.00	3.14	0.50	2.00	1	27.75
333	C503	CIRCULAR	3.00	7.07	0.75	3.00	1	93.08
334	C504	CIRCULAR	3.00	7.07	0.75	3.00	1	94.33
335	C505	RECT_CLOSED	2.00	10.00	0.71	5.00	1	84.47
336	C507	CIRCULAR	2.00	3.14	0.50	2.00	1	36.73
337	C508	CIRCULAR	2.00	3.14	0.50	2.00	1	40.35
338	C509	CIRCULAR	2.50	4.91	0.63	2.50	1	56.80
339	C510	RECT_CLOSED	2.00	10.00	0.71	5.00	1	135.62
340	C600	CIRCULAR	2.00	3.14	0.50	2.00	1	35.04
341	C601	CIRCULAR	2.00	3.14	0.50	2.00	1	34.78
342	C602	CIRCULAR	2.00	3.14	0.50	2.00	1	35.27
343	C603	RECT_CLOSED	2.00	10.00	0.71	5.00	1	104.62
344	C604	CIRCULAR	2.00	3.14	0.50	2.00	1	35.68
345	C605	CIRCULAR	2.00	3.14	0.50	2.00	1	49.90
346	C606	CIRCULAR	2.00	3.14	0.50	2.00	1	13.61
347	C607	CIRCULAR	2.00	3.14	0.50	2.00	1	40.72
348	C608	CIRCULAR	2.50	4.91	0.63	2.50	1	61.24
349	C609	CIRCULAR	3.00	7.07	0.75	3.00	1	129.08
350	C610	CIRCULAR	3.50	9.62	0.88	3.50	1	147.38

351	C611	CIRCULAR	2.00	3.14	0.50	2.00	1	30.51
352	C612	CIRCULAR	2.00	3.14	0.50	2.00	1	28.91
353	C701	CIRCULAR	2.50	4.91	0.63	2.50	1	37.01
354	C702	CIRCULAR	3.00	7.07	0.75	3.00	1	58.70
355	C703	CIRCULAR	3.00	7.07	0.75	3.00	1	82.58
356	C705	CIRCULAR	3.00	7.07	0.75	3.00	1	49.72
357	C706	CIRCULAR	3.50	9.62	0.88	3.50	1	86.28
358	C707	CIRCULAR	3.50	9.62	0.88	3.50	1	54.79
359	C708	RECT_CLOSED	3.00	15.00	0.94	5.00	1	51.48
360	C709	CIRCULAR	2.50	4.91	0.63	2.50	1	33.31
361	C710	RECT_CLOSED	3.00	24.00	1.09	8.00	1	336.77
362	C800	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1071.28
363	C801	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	88.43
364	C802	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	101.25
365	C803	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	80.95
366	C803a	CIRCULAR	2.50	4.91	0.63	2.50	1	55.83
367	C804	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	95.38
368	C805	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	153.19
369	C806	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	933.87
370	C807	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	339.50
371	C808a	CIRCULAR	2.50	4.91	0.63	2.50	1	13.50
372	C809	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	370.92
373	C810	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1016.01
374	C810a	CIRCULAR	2.50	4.91	0.63	2.50	1	25.02
375	C811	RECT_OPEN	5.00	50.00	2.50	10.00	1	755.70
376	C900	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	172.99
377	C901	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	224.58
378	C902	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	486.88
379	C903	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	432.38
380	C904	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	773.94
381	C-DAB-1	CIRCULAR	1.21	1.15	0.30	1.21	1	5.62
382	C-DAB-2	CIRCULAR	2.75	5.94	0.69	2.75	1	39.58
383	C-DAB-3	CIRCULAR	1.25	1.23	0.31	1.25	1	3.23
384	C-PDM-4	CIRCULAR	2.00	3.14	0.50	2.00	1	19.62
385	C-PDM-5	CIRCULAR	2.00	3.14	0.50	2.00	1	22.11
386	C-PDM-5a	CIRCULAR	2.00	3.14	0.50	2.00	1	32.02
387	C-VL-2	CIRCULAR	2.50	4.91	0.63	2.50	1	34.46
388	C-VL-4	CIRCULAR	1.00	0.79	0.25	1.00	1	3.56

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393 Transect Summary

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396 Transect XS\_701

397 Area:

398	0.0034	0.0184	0.0345	0.0507	0.0672
399	0.0839	0.1008	0.1180	0.1354	0.1531
400	0.1709	0.1888	0.2069	0.2252	0.2435
401	0.2621	0.2807	0.2995	0.3185	0.3376
402	0.3568	0.3762	0.3958	0.4156	0.4355
403	0.4556	0.4759	0.4963	0.5169	0.5376
404	0.5585	0.5796	0.6008	0.6221	0.6436
405	0.6653	0.6871	0.7091	0.7313	0.7536
406	0.7761	0.7988	0.8216	0.8447	0.8679
407	0.8915	0.9163	0.9425	0.9702	1.0000

408 Hrad:

409	0.0115	0.0375	0.0690	0.1001	0.1308
410	0.1609	0.1905	0.2197	0.2485	0.2778
411	0.3074	0.3369	0.3662	0.3953	0.4241
412	0.4527	0.4811	0.5092	0.5370	0.5645
413	0.5915	0.6181	0.6443	0.6702	0.6960
414	0.7218	0.7478	0.7736	0.7994	0.8250
415	0.8505	0.8759	0.9012	0.9263	0.9511
416	0.9758	1.0003	1.0240	1.0476	1.0709

417		1.0939	1.1170	1.1401	1.1631	1.1833
418		1.1867	1.1447	1.1069	1.0907	1.0000
419	Width:					
420		0.3358	0.4981	0.5052	0.5121	0.5190
421		0.5263	0.5341	0.5419	0.5496	0.5555
422		0.5601	0.5646	0.5689	0.5733	0.5777
423		0.5821	0.5865	0.5909	0.5955	0.6002
424		0.6053	0.6105	0.6160	0.6215	0.6270
425		0.6323	0.6373	0.6422	0.6471	0.6520
426		0.6568	0.6615	0.6663	0.6711	0.6759
427		0.6808	0.6857	0.6911	0.6965	0.7019
428		0.7075	0.7130	0.7184	0.7238	0.7308
429		0.7487	0.7984	0.8499	0.8923	1.0000

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NOTE: The summary statistics displayed in this report are  
based on results found at every computational time step,  
not just on results from each reporting time step.  
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Analysis Options

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Flow Units ..... CFS  
Process Models:  
  Rainfall/Runoff ..... NO  
  RDII ..... NO  
  Snowmelt ..... NO  
  Groundwater ..... NO  
  Flow Routing ..... YES  
  Ponding Allowed ..... NO  
  Water Quality ..... NO  
Flow Routing Method ..... DYNWAVE  
Starting Date ..... 06/13/2009 00:00:00  
Ending Date ..... 06/14/2009 00:00:00  
Antecedent Dry Days ..... 0.0  
Report Time Step ..... 00:01:00  
Routing Time Step ..... 5.00 sec  
Variable Time Step ..... YES  
Maximum Trials ..... 8  
Number of Threads ..... 4  
Head Tolerance ..... 0.005000 ft

*****		
	Volume	Volume
Flow Routing Continuity	acre-feet	10 <sup>6</sup> gal
*****		
	-----	-----
Dry Weather Inflow .....	0.000	0.000
Wet Weather Inflow .....	0.000	0.000
Groundwater Inflow .....	0.000	0.000
RDII Inflow .....	0.000	0.000
External Inflow .....	95.275	31.047
External Outflow .....	55.016	17.928
Flooding Loss .....	0.000	0.000
Evaporation Loss .....	0.000	0.000
Exfiltration Loss .....	40.020	13.041
Initial Stored Volume ....	0.001	0.000
Final Stored Volume .....	0.109	0.035
Continuity Error (%) .....	0.138	

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Highest Continuity Errors

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Node J1006 (2.55%)

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Time-Step Critical Elements  
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Link C105 (6.14%)

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Highest Flow Instability Indexes  
\*\*\*\*\*  
Link C1007 (16)

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Routing Time Step Summary  
\*\*\*\*\*  
Minimum Time Step : 0.75 sec  
Average Time Step : 4.89 sec  
Maximum Time Step : 5.00 sec  
Percent in Steady State : 0.00  
Average Iterations per Step : 2.00  
Percent Not Converging : 0.00

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Node Depth Summary  
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Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J100	JUNCTION	0.06	0.74	236.24	0 00:45	0.74
J1000	JUNCTION	0.00	0.00	261.00	0 00:00	0.00
J1001	JUNCTION	0.00	0.00	239.00	0 00:00	0.00
J1002	JUNCTION	0.00	0.00	207.00	0 00:00	0.00
J1003	JUNCTION	0.02	0.22	169.22	0 00:53	0.22
J1004	JUNCTION	0.11	0.70	147.70	0 01:12	0.70
J1005	JUNCTION	0.13	0.81	140.81	0 00:58	0.81
J1006	JUNCTION	0.25	0.71	121.71	0 02:34	0.71
J101	JUNCTION	0.09	1.22	221.72	0 00:46	1.22
J102	JUNCTION	0.05	0.67	228.67	0 00:45	0.67
J103	JUNCTION	0.11	1.40	211.40	0 00:47	1.40
J104	JUNCTION	0.06	0.80	203.80	0 00:45	0.80
J105	JUNCTION	0.16	3.67	187.67	0 00:30	3.67
J106	JUNCTION	0.06	0.76	226.26	0 00:45	0.76
J107	JUNCTION	0.09	1.15	203.65	0 00:46	1.15
J108	JUNCTION	0.08	1.20	197.20	0 00:45	1.19
J109	JUNCTION	0.15	2.11	194.61	0 00:47	2.11
J110	JUNCTION	0.11	1.43	191.43	0 00:47	1.43
J111	JUNCTION	0.57	3.28	184.28	0 00:49	3.28
J200	JUNCTION	0.00	0.00	255.50	0 00:00	0.00
J2000	JUNCTION	0.10	1.46	172.96	0 00:45	1.46
J2001	JUNCTION	0.04	0.58	166.58	0 00:46	0.58
J2002	JUNCTION	0.13	1.01	157.01	0 01:55	1.01
J2003	JUNCTION	0.08	1.16	149.16	0 00:48	1.15
J2004	JUNCTION	0.21	1.87	145.87	0 01:15	1.87
J201	JUNCTION	0.08	1.00	241.50	0 00:45	1.00
J203	JUNCTION	0.00	0.00	235.00	0 00:00	0.00
J204	JUNCTION	0.10	1.41	222.91	0 00:46	1.41
J206	JUNCTION	0.10	1.52	207.02	0 00:47	1.52
J207	JUNCTION	0.12	1.64	203.64	0 00:46	1.64
J208	JUNCTION	0.17	2.60	197.60	0 00:48	2.59
J210	JUNCTION	0.13	1.77	194.77	0 00:48	1.76



549	J211	JUNCTION	0.17	2.25	184.75	0	00:49	2.25
550	J212	JUNCTION	0.17	2.29	178.79	0	00:50	2.29
551	J213	JUNCTION	0.17	2.23	170.73	0	00:50	2.23
552	J214	JUNCTION	0.19	2.51	163.01	0	00:50	2.51
553	J215	JUNCTION	0.06	0.77	183.77	0	00:46	0.77
554	J216	JUNCTION	0.08	0.97	178.97	0	00:47	0.97
555	J217	JUNCTION	0.10	1.35	169.35	0	00:47	1.34
556	J218	JUNCTION	0.35	3.21	157.21	0	01:33	3.21
557	J300	JUNCTION	0.04	0.60	279.60	0	00:45	0.59
558	J301	JUNCTION	0.07	0.99	223.99	0	00:46	0.99
559	J302	JUNCTION	0.09	1.14	211.64	0	00:46	1.14
560	J303	JUNCTION	0.11	1.50	193.00	0	00:46	1.50
561	J304	JUNCTION	0.15	2.06	177.06	0	00:47	2.06
562	J305	JUNCTION	0.08	2.53	165.53	0	00:22	2.53
563	J400	JUNCTION	0.05	0.66	163.66	0	00:45	0.66
564	J401	JUNCTION	0.05	0.69	162.69	0	00:45	0.69
565	J402	JUNCTION	0.11	1.53	154.03	0	00:19	1.53
566	J500	JUNCTION	0.08	1.03	282.03	0	00:46	1.03
567	J501	JUNCTION	0.08	1.01	271.51	0	00:47	1.00
568	J502	JUNCTION	0.00	0.00	246.00	0	00:00	0.00
569	J503	JUNCTION	0.10	1.28	236.28	0	00:46	1.28
570	J504	JUNCTION	0.13	1.60	218.60	0	00:47	1.60
571	J505	JUNCTION	0.09	1.33	201.33	0	00:47	1.33
572	J507	JUNCTION	0.07	0.97	251.97	0	00:46	0.97
573	J508	JUNCTION	0.09	1.20	217.20	0	00:46	1.20
574	J509	JUNCTION	0.13	1.72	195.72	0	00:47	1.72
575	J510	JUNCTION	0.05	0.71	173.21	0	00:47	0.71
576	J600	JUNCTION	0.07	0.86	297.86	0	00:46	0.85
577	J601	JUNCTION	0.05	0.69	293.69	0	00:45	0.69
578	J602	JUNCTION	0.07	0.86	280.86	0	00:46	0.86
579	J603	JUNCTION	0.04	1.09	260.59	0	00:19	1.08
580	J604	JUNCTION	0.10	1.77	265.77	0	00:21	1.75
581	J605	JUNCTION	0.00	0.00	258.00	0	00:00	0.00
582	J606	JUNCTION	0.10	1.55	305.55	0	00:45	1.54
583	J607	JUNCTION	0.07	0.94	303.94	0	00:46	0.94
584	J608	JUNCTION	0.10	1.34	256.84	0	00:48	1.34
585	J609	JUNCTION	0.11	1.41	212.41	0	00:48	1.41
586	J610	JUNCTION	0.19	1.69	192.19	0	00:49	1.69
587	J611	JUNCTION	0.00	0.00	176.00	0	00:00	0.00
588	J612	JUNCTION	0.06	0.76	154.76	0	00:46	0.76
589	J701	JUNCTION	0.18	1.49	195.99	0	01:31	1.49
590	J702	JUNCTION	0.24	2.05	182.05	0	01:31	2.04
591	J703	JUNCTION	0.46	1.63	177.63	0	01:32	1.63
592	J705	JUNCTION	0.18	1.66	174.66	0	01:16	1.66
593	J706	JUNCTION	0.24	2.43	164.93	0	01:18	2.43
594	J707	JUNCTION	0.10	1.37	161.37	0	00:45	1.37
595	J708	JUNCTION	0.25	1.49	159.49	0	02:30	1.49
596	J709	JUNCTION	0.12	1.79	171.79	0	00:45	1.79
597	J710	JUNCTION	0.06	1.45	166.45	0	00:22	1.45
598	J800	JUNCTION	0.00	0.00	278.00	0	00:00	0.00
599	J801	JUNCTION	0.08	0.34	222.34	0	03:04	0.34
600	J802	JUNCTION	0.18	0.72	217.72	0	03:32	0.72
601	J803	JUNCTION	0.36	1.32	214.32	0	03:37	1.32
602	J803a	JUNCTION	0.34	1.21	209.71	0	03:38	1.21
603	J804	JUNCTION	0.09	0.43	210.43	0	03:01	0.43
604	J805	JUNCTION	0.14	0.62	207.62	0	03:02	0.62
605	J806	JUNCTION	0.10	0.45	201.45	0	03:10	0.45
606	J807	JUNCTION	0.24	0.97	153.97	0	03:19	0.97
607	J808	JUNCTION	0.30	1.05	153.05	0	03:25	1.05
608	J808a	JUNCTION	0.13	1.71	151.21	0	00:46	1.70
609	J810	JUNCTION	0.14	0.52	151.52	0	03:27	0.52
610	J810a	JUNCTION	0.12	1.43	149.93	0	00:48	1.43
611	J811	JUNCTION	0.14	0.54	143.54	0	03:29	0.54
612	J900	JUNCTION	0.00	0.00	356.00	0	00:00	0.00
613	J901	JUNCTION	0.00	0.00	296.00	0	00:00	0.00
614	J902	JUNCTION	0.00	0.00	260.00	0	00:00	0.00

615	J903	JUNCTION	0.01	0.14	244.14	0	00:55	0.14
616	J904	JUNCTION	0.08	0.41	187.41	0	02:48	0.41
617	J-DAB-2	JUNCTION	0.51	1.91	161.21	0	02:14	1.91
618	J-PDM-5	JUNCTION	0.15	1.27	191.97	0	00:57	1.27
619	OF812	OUTFALL	0.14	0.51	140.51	0	03:29	0.51
620	OF-DAB-2	OUTFALL	0.43	1.52	157.02	0	02:14	1.52
621	OF-J-725-2	OUTFALL	0.18	1.53	143.53	0	01:16	1.53
622	OF-J-725B-2	OUTFALL	0.10	0.82	148.47	0	01:55	0.82
623	OF-J-792	OUTFALL	0.08	0.41	140.18	0	02:48	0.41
624	OF-VL	OUTFALL	0.09	0.35	116.13	0	02:34	0.35
625	OF-VL-1	OUTFALL	0.00	0.00	184.75	0	00:00	0.00
626	OF-VL-3	OUTFALL	0.00	0.00	164.25	0	00:00	0.00
627	DAB-1	STORAGE	0.35	1.99	159.49	0	02:30	1.99
628	DAB-2	STORAGE	0.83	3.60	163.60	0	02:13	3.60
629	DAB-3	STORAGE	0.77	3.18	158.18	0	01:43	3.18
630	PDM-1	STORAGE	0.69	2.48	252.48	0	02:34	2.48
631	PDM-2	STORAGE	0.70	2.46	255.46	0	02:37	2.46
632	PDM-3	STORAGE	1.08	3.01	178.01	0	02:48	3.01
633	PDM-4	STORAGE	0.34	3.70	148.70	0	01:15	3.70
634	PDM-5	STORAGE	0.22	2.28	197.28	0	01:20	2.28
635	VL-1	STORAGE	0.96	3.01	183.01	0	02:40	3.01
636	VL-2	STORAGE	0.52	4.20	157.20	0	01:34	4.20
637	VL-3	STORAGE	0.81	2.69	161.69	0	02:39	2.69
638	VL-4	STORAGE	0.54	3.06	148.06	0	02:04	3.06

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641 \*\*\*\*\*  
642 Node Inflow Summary  
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				Maximum	Maximum			Lateral
				Total	Flow			Inflow
				Lateral	Total	Time of Max		
				Inflow	Balance	Occurrence		
				Volume	Error			Volume
Node	Percent	Type	CFS	CFS	days	hr:min	10^6 gal	10^6
gal								
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651	J100	JUNCTION	9.43	9.43	0	00:45	0.209	
	0.209							
652	J1000	JUNCTION	0.00	0.00	0	00:00	0	
	0							
653	J1001	JUNCTION	0.00	0.00	0	00:00	0	
	0							
654	J1002	JUNCTION	0.00	0.00	0	00:00	0	
	0							
655	J1003	JUNCTION	7.28	7.28	0	00:45	0.161	
	0.161							
656	J1004	JUNCTION	2.93	35.21	0	00:51	0.0649	
	2.68							
657	J1005	JUNCTION	6.92	37.43	0	02:15	0.46	
	3.13							
658	J1006	JUNCTION	0.00	37.50	0	01:04	0	
	3.14							
659	J101	JUNCTION	11.90	20.93	0	00:45	0.264	
	0.472							
660	J102	JUNCTION	7.06	7.06	0	00:45	0.156	
	0.156							
661	J103	JUNCTION	10.85	37.61	0	00:46	0.24	
	0.868							

662	J104		JUNCTION	9.43	9.43	0	00:45	0.209
	0.209	-1.462						
663	J105		JUNCTION	12.86	57.81	0	00:46	0.285
	1.36	0.207						
664	J106		JUNCTION	10.98	10.98	0	00:45	0.243
	0.243	-0.054						
665	J107		JUNCTION	11.23	21.84	0	00:45	0.249
	0.492	0.056						
666	J108		JUNCTION	13.65	13.65	0	00:45	0.302
	0.302	0.155						
667	J109		JUNCTION	0.00	35.08	0	00:46	0
	0.794	-0.065						
668	J110		JUNCTION	7.28	41.38	0	00:47	0.161
	0.955	0.172						
669	J111		JUNCTION	6.00	46.90	0	00:47	0.133
	1.09	-0.061						
670	J200		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
671	J2000		JUNCTION	12.56	12.56	0	00:45	0.278
	0.278	-0.014						
672	J2001		JUNCTION	10.28	22.23	0	00:45	0.228
	0.506	0.010						
673	J2002		JUNCTION	0.00	25.13	0	01:52	0
	1.44	0.061						
674	J2003		JUNCTION	6.91	46.56	0	00:47	0.153
	1.1	0.001						
675	J2004		JUNCTION	0.00	24.14	0	01:15	0
	1.26	-0.001						
676	J201		JUNCTION	21.13	21.13	0	00:45	0.468
	0.468	-0.002						
677	J203		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
678	J204		JUNCTION	8.88	29.16	0	00:45	0.197
	0.665	-0.003						
679	J206		JUNCTION	0.00	28.72	0	00:47	0
	0.665	-0.000						
680	J207		JUNCTION	9.84	37.95	0	00:46	0.218
	0.883	0.056						
681	J208		JUNCTION	0.00	38.01	0	00:47	0
	0.882	-0.047						
682	J210		JUNCTION	7.73	44.49	0	00:48	0.171
	1.05	0.002						
683	J211		JUNCTION	12.64	55.72	0	00:48	0.28
	1.33	-0.013						
684	J212		JUNCTION	9.70	64.07	0	00:48	0.215
	1.55	0.010						
685	J213		JUNCTION	13.09	74.38	0	00:50	0.29
	1.84	0.000						
686	J214		JUNCTION	11.80	84.35	0	00:49	0.261
	2.1	-0.105						
687	J215		JUNCTION	5.60	5.60	0	00:45	0.124
	0.124	-0.074						
688	J216		JUNCTION	6.06	11.39	0	00:45	0.134
	0.258	0.033						
689	J217		JUNCTION	9.80	20.15	0	00:46	0.217
	0.475	0.663						
690	J218		JUNCTION	11.30	113.34	0	00:49	0.25
	2.82	-0.036						
691	J300		JUNCTION	6.41	6.41	0	00:45	0.142
	0.142	-0.024						
692	J301		JUNCTION	7.99	14.29	0	00:45	0.177
	0.319	0.008						
693	J302		JUNCTION	7.47	21.25	0	00:45	0.165
	0.484	-0.026						
694	J303		JUNCTION	15.46	35.88	0	00:45	0.342
	0.827	0.109						

695	J304		JUNCTION	14.17	48.92	0	00:46	0.314
	1.14	0.001						
696	J305		JUNCTION	16.97	64.27	0	00:47	0.376
	1.52	-0.021						
697	J400		JUNCTION	6.15	6.15	0	00:45	0.136
	0.136	-0.736						
698	J401		JUNCTION	6.15	6.15	0	00:45	0.136
	0.136	-0.901						
699	J402		JUNCTION	11.07	22.96	0	00:45	0.245
	0.52	0.186						
700	J500		JUNCTION	12.31	12.31	0	00:45	0.273
	0.273	-0.004						
701	J501		JUNCTION	9.70	21.24	0	00:45	0.215
	0.487	-0.003						
702	J502		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
703	J503		JUNCTION	14.79	34.68	0	00:46	0.328
	0.815	-0.012						
704	J504		JUNCTION	10.75	44.80	0	00:46	0.238
	1.05	0.032						
705	J505		JUNCTION	9.68	53.50	0	00:47	0.214
	1.27	-0.010						
706	J507		JUNCTION	17.22	17.22	0	00:45	0.381
	0.381	-0.003						
707	J508		JUNCTION	11.05	27.21	0	00:45	0.245
	0.626	-0.013						
708	J509		JUNCTION	7.25	34.22	0	00:45	0.161
	0.787	0.000						
709	J510		JUNCTION	7.04	40.43	0	00:46	0.156
	0.943	0.008						
710	J600		JUNCTION	13.36	13.36	0	00:45	0.296
	0.296	-0.336						
711	J601		JUNCTION	8.36	8.36	0	00:45	0.185
	0.185	-0.002						
712	J602		JUNCTION	4.64	12.75	0	00:45	0.103
	0.288	-0.056						
713	J603		JUNCTION	7.50	19.75	0	00:46	0.166
	0.454	0.023						
714	J604		JUNCTION	7.25	19.72	0	00:45	0.161
	0.457	0.142						
715	J605		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
716	J606		JUNCTION	10.54	10.54	0	00:45	0.233
	0.233	-0.024						
717	J607		JUNCTION	7.91	18.21	0	00:45	0.175
	0.409	0.011						
718	J608		JUNCTION	16.78	33.65	0	00:45	0.372
	0.78	-0.004						
719	J609		JUNCTION	16.91	48.13	0	00:47	0.375
	1.15	0.289						
720	J610		JUNCTION	33.58	57.80	0	00:48	1.24
	2.39	0.301						
721	J611		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
722	J612		JUNCTION	9.21	9.21	0	00:45	0.204
	0.204	-0.214						
723	J701		JUNCTION	24.03	24.03	0	01:30	1.06
	1.07	-0.898						
724	J702		JUNCTION	20.02	37.66	0	01:30	0.739
	1.81	0.444						
725	J703		JUNCTION	16.06	47.46	0	01:31	0.356
	5.03	-0.074						
726	J705		JUNCTION	29.22	29.22	0	01:15	1.08
	1.08	-0.224						
727	J706		JUNCTION	22.97	51.25	0	01:15	0.848
	1.93	0.641						

728	J707		JUNCTION	15.14	15.14	0	00:45	0.335
	0.335	-0.375						
729	J708		JUNCTION	0.00	14.89	0	00:46	0
	0.337	0.361						
730	J709		JUNCTION	19.13	19.13	0	00:45	0.424
	0.424	-0.039						
731	J710		JUNCTION	23.08	30.78	0	01:15	0.852
	1.28	0.016						
732	J800		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
733	J801		JUNCTION	3.75	3.75	0	03:00	0.332
	0.332	-0.072						
734	J802		JUNCTION	12.33	15.37	0	03:30	1.27
	1.61	0.004						
735	J803		JUNCTION	12.26	27.19	0	03:30	1.27
	2.87	0.019						
736	J803a		JUNCTION	0.00	26.59	0	03:37	0
	2.87	0.055						
737	J804		JUNCTION	5.76	5.76	0	03:00	0.51
	0.51	0.000						
738	J805		JUNCTION	10.72	16.34	0	03:00	0.95
	1.46	-0.005						
739	J806		JUNCTION	1.52	16.22	0	03:02	0.0337
	1.49	-0.000						
740	J807		JUNCTION	0.95	21.29	0	03:10	0.021
	2.27	0.052						
741	J808		JUNCTION	7.22	20.82	0	03:21	0.16
	2.43	-0.004						
742	J808a		JUNCTION	11.15	11.15	0	00:45	0.247
	0.247	-0.097						
743	J810		JUNCTION	2.13	20.74	0	03:26	0.0472
	2.47	0.007						
744	J810a		JUNCTION	5.42	15.79	0	00:46	0.12
	0.367	-0.358						
745	J811		JUNCTION	3.28	24.67	0	03:27	0.0726
	3.12	0.004						
746	J900		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
747	J901		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
748	J902		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
749	J903		JUNCTION	2.40	2.40	0	00:45	0.0532
	0.0532	-0.600						
750	J904		JUNCTION	18.74	18.99	0	02:45	1.52
	1.58	0.024						
751	J-DAB-2		JUNCTION	0.00	41.17	0	02:14	0
	5.45	0.000						
752	J-PDM-5		JUNCTION	0.00	20.28	0	00:56	0
	1.1	-0.076						
753	OF812		OUTFALL	0.00	24.66	0	03:29	0
	3.12	0.000						
754	OF-DAB-2		OUTFALL	0.00	41.17	0	02:14	0
	5.45	0.000						
755	OF-J-725-2		OUTFALL	0.00	24.14	0	01:16	0
	1.26	0.000						
756	OF-J-725B-2		OUTFALL	18.51	36.84	0	02:30	1.37
	2.81	0.000						
757	OF-J-792		OUTFALL	7.46	25.01	0	02:50	0.661
	2.24	0.000						
758	OF-VL		OUTFALL	0.00	35.48	0	02:34	0
	3.06	0.000						
759	OF-VL-1		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						
760	OF-VL-3		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						



803	PDM-3		82.255	17	0	100	232.667	47	0
	02:48	10.10							
804	PDM-4		5.113	5	0	14	59.049	55	0
	01:15	26.98							
805	PDM-5		6.407	4	0	24	67.463	42	0
	01:20	24.91							
806	VL-1		75.705	18	0	100	242.856	58	0
	02:40	12.03							
807	VL-2		22.700	7	0	24	189.875	55	0
	01:34	37.64							
808	VL-3		43.813	13	0	100	148.488	45	0
	02:39	7.96							
809	VL-4		13.185	8	0	46	77.668	46	0
	02:04	7.69							

810  
811  
812 \*\*\*\*\*  
813 Outfall Loading Summary  
814 \*\*\*\*\*  
815

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF812	99.85	5.00	24.66	3.118
OF-DAB-2	59.30	14.26	41.17	5.450
OF-J-725-2	22.05	10.51	24.14	1.256
OF-J-725B-2	50.74	9.09	36.84	2.810
OF-J-792	69.07	5.08	25.01	2.236
OF-VL	97.95	4.76	35.48	3.057
OF-VL-1	0.00	0.00	0.00	0.000
OF-VL-3	0.00	0.00	0.00	0.000
System	49.87	48.70	164.10	17.926

833 \*\*\*\*\*  
834 Link Flow Summary  
835 \*\*\*\*\*

Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
C100	CONDUIT	9.19	0 00:45	5.19	0.19	0.39
C1000	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
C1001	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
C1002	CONDUIT	0.00	0 00:00	0.00	0.00	0.03
C1003	CONDUIT	5.36	0 00:53	1.39	0.01	0.11
C1004	CONDUIT	34.99	0 00:59	5.09	0.04	0.19
C1005	CONDUIT	37.50	0 01:04	7.96	0.04	0.17
C1007	CHANNEL	35.48	0 02:34	>50.00	0.00	0.03
C101	CONDUIT	20.45	0 00:47	7.87	0.46	0.52
C102	CONDUIT	6.88	0 00:45	6.47	0.24	0.39
C103	CONDUIT	36.90	0 00:47	9.76	0.45	0.65
C104	CONDUIT	9.17	0 00:45	7.35	0.34	0.64
C105	CONDUIT	60.25	0 00:48	15.32	0.16	0.48
C106	CONDUIT	10.76	0 00:45	6.27	0.20	0.38
C107	CONDUIT	21.61	0 00:46	7.85	0.42	0.55
C108	CONDUIT	13.62	0 00:45	6.14	0.57	0.69
C109	CONDUIT	34.63	0 00:47	7.99	0.65	0.59
C110	CONDUIT	41.43	0 00:48	7.95	0.43	0.70
C111	CONDUIT	46.50	0 00:49	5.83	0.92	0.77
C2	CONDUIT	41.17	0 02:14	9.86	0.51	0.57

862	C200	CONDUIT	0.00	0	00:00	0.00	0.00	0.10
863	C2000	CONDUIT	12.22	0	00:46	7.64	0.67	0.51
864	C2001	CONDUIT	21.99	0	00:46	5.31	0.22	0.63
865	C2002	CONDUIT	24.97	0	01:55	4.00	0.24	0.46
866	C2003	CONDUIT	46.18	0	00:48	5.49	0.34	0.68
867	C2004	CONDUIT	24.14	0	01:16	6.81	0.69	0.68
868	C202	CONDUIT	20.53	0	00:46	11.59	0.30	0.39
869	C203	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
870	C205	CONDUIT	28.72	0	00:47	10.50	0.55	0.55
871	C206	CONDUIT	28.73	0	00:47	8.81	0.46	0.63
872	C207	CONDUIT	38.01	0	00:47	8.70	0.50	0.62
873	C209	CONDUIT	37.58	0	00:48	6.88	0.83	0.73
874	C210	CONDUIT	44.44	0	00:49	8.84	0.61	0.67
875	C211	CONDUIT	55.60	0	00:49	8.46	0.63	0.65
876	C212	CONDUIT	63.45	0	00:50	10.25	0.63	0.61
877	C213	CONDUIT	74.39	0	00:50	10.75	0.59	0.68
878	C214	CONDUIT	84.49	0	00:50	10.67	0.47	0.50
879	C215	CONDUIT	5.43	0	00:46	4.21	0.31	0.43
880	C216	CONDUIT	10.92	0	00:47	7.46	0.44	0.47
881	C217	CONDUIT	19.96	0	00:47	9.25	0.72	0.65
882	C218	CONDUIT	112.15	0	00:49	6.24	0.16	0.82
883	C300	CONDUIT	6.35	0	00:45	9.57	0.67	0.79
884	C301	CONDUIT	14.01	0	00:46	9.47	0.44	0.48
885	C302	CONDUIT	21.04	0	00:46	8.01	0.43	0.53
886	C303	CONDUIT	35.61	0	00:47	11.33	0.61	0.61
887	C304	CONDUIT	48.51	0	00:47	13.53	0.59	0.55
888	C305	CONDUIT	64.73	0	00:47	9.19	0.22	0.49
889	C400	CONDUIT	6.03	0	00:45	5.66	0.23	0.40
890	C401	CONDUIT	6.01	0	00:45	5.45	0.25	0.41
891	C402	CONDUIT	22.80	0	00:47	9.23	0.55	0.67
892	C500	CONDUIT	11.85	0	00:46	7.53	0.48	0.50
893	C501	CONDUIT	20.76	0	00:47	11.46	0.32	0.40
894	C502	CONDUIT	0.00	0	00:00	0.00	0.00	0.20
895	C503	CONDUIT	34.67	0	00:47	10.32	0.37	0.48
896	C504	CONDUIT	44.55	0	00:47	13.04	0.47	0.49
897	C505	CONDUIT	53.74	0	00:48	8.29	0.64	0.73
898	C507	CONDUIT	16.53	0	00:46	11.16	0.45	0.48
899	C508	CONDUIT	27.18	0	00:46	11.15	0.67	0.73
900	C509	CONDUIT	33.84	0	00:47	14.37	0.60	0.48
901	C510	CONDUIT	40.21	0	00:47	8.67	0.30	0.46
902	C600	CONDUIT	12.75	0	00:46	10.10	0.36	0.42
903	C601	CONDUIT	8.20	0	00:45	8.76	0.24	0.34
904	C602	CONDUIT	12.56	0	00:46	10.00	0.36	0.42
905	C603	CONDUIT	19.73	0	00:46	8.08	0.19	0.57
906	C604	CONDUIT	19.87	0	00:46	12.26	0.56	0.65
907	C605	CONDUIT	0.00	0	00:00	0.00	0.00	0.35
908	C606	CONDUIT	10.43	0	00:45	5.10	0.77	0.62
909	C607	CONDUIT	17.59	0	00:46	12.27	0.43	0.47
910	C608	CONDUIT	32.62	0	00:48	12.42	0.53	0.53
911	C609	CONDUIT	47.93	0	00:48	15.72	0.37	0.45
912	C610	CONDUIT	57.73	0	00:49	13.42	0.39	0.46
913	C611	CONDUIT	0.00	0	00:00	0.00	0.00	0.19
914	C612	CONDUIT	8.89	0	00:46	8.03	0.31	0.69
915	C701	CONDUIT	23.56	0	01:31	7.56	0.64	0.61
916	C702	CONDUIT	37.52	0	01:31	7.98	0.64	0.63
917	C703	CONDUIT	47.39	0	01:32	13.48	0.57	0.77
918	C705	CONDUIT	28.83	0	01:16	6.58	0.58	0.60
919	C706	CONDUIT	50.16	0	01:18	7.99	0.58	0.64
920	C707	CONDUIT	14.89	0	00:46	4.77	0.27	0.36
921	C708	CONDUIT	14.52	0	00:48	3.56	0.28	0.58
922	C709	CONDUIT	18.63	0	00:46	8.80	0.56	0.45
923	C710	CONDUIT	34.79	0	00:24	9.68	0.10	0.37
924	C800	CONDUIT	0.00	0	00:00	0.00	0.00	0.06
925	C801	CONDUIT	3.62	0	03:04	1.25	0.04	0.26
926	C802	CONDUIT	15.05	0	03:32	2.11	0.15	0.51
927	C803	CONDUIT	26.59	0	03:37	3.43	0.33	0.54



928	C803a	CONDUIT	26.58	0	03:38	10.56	0.48	0.51
929	C804	CONDUIT	5.68	0	03:01	1.79	0.06	0.26
930	C805	CONDUIT	16.22	0	03:02	5.05	0.11	0.27
931	C806	CONDUIT	15.52	0	03:10	3.01	0.02	0.18
932	C807	CONDUIT	20.82	0	03:21	2.57	0.06	0.25
933	C808a	CONDUIT	10.64	0	00:47	3.29	0.79	0.63
934	C809	CONDUIT	20.74	0	03:26	3.50	0.06	0.20
935	C810	CONDUIT	20.73	0	03:28	5.57	0.02	0.13
936	C810a	CONDUIT	15.62	0	00:48	6.35	0.62	0.70
937	C811	CONDUIT	24.66	0	03:29	4.73	0.03	0.10
938	C900	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
939	C901	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
940	C902	CONDUIT	0.00	0	00:00	0.00	0.00	0.02
941	C903	CONDUIT	1.64	0	00:55	1.92	0.00	0.08
942	C904	CONDUIT	18.50	0	02:48	7.79	0.02	0.14
943	C-DAB-1	CONDUIT	5.78	0	03:14	6.44	1.03	0.90
944	C-DAB-2	CONDUIT	41.17	0	02:14	7.67	1.04	0.85
945	C-DAB-3	CONDUIT	5.04	0	01:43	4.63	1.56	0.90
946	C-PDM-4	CONDUIT	24.14	0	01:15	7.77	1.23	0.97
947	C-PDM-5	CONDUIT	20.28	0	00:56	7.82	0.92	0.81
948	C-PDM-5a	CONDUIT	20.36	0	00:58	12.05	0.64	0.56
949	C-VL-2	CONDUIT	29.82	0	01:29	9.24	0.87	0.64
950	C-VL-4	CONDUIT	4.06	0	02:38	6.81	1.14	0.77
951	W1	WEIR	0.00	0	00:00			0.00
952	W2	WEIR	0.00	0	00:00			0.00
953	W3	WEIR	0.00	0	00:00			0.00
954	W-DAB-2	WEIR	0.00	0	00:00			0.00
955	W-DAB-3	WEIR	0.00	0	00:00			0.00
956	W-PDM-2	WEIR	0.00	0	00:00			0.00
957	W-PDM-3	WEIR	0.00	0	00:00			0.00
958	W-PDM-4	WEIR	0.00	0	00:00			0.00
959	W-PDM-5	WEIR	0.00	0	00:00			0.00
960	W-VL-3	WEIR	0.00	0	00:00			0.00

\*\*\*\*\*  
Flow Classification Summary  
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Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----									
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl	
972	C100	1.00	0.80	0.02	0.00	0.05	0.13	0.00	0.00	1.00	0.00
973	C1000	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
974	C1001	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
975	C1002	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
976	C1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
977	C1004	1.00	0.00	0.00	0.00	0.84	0.16	0.00	0.00	0.84	0.00
978	C1005	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.89	0.00
979	C1007	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.01	0.00
980	C101	1.00	0.00	0.80	0.00	0.06	0.13	0.00	0.00	0.97	0.00
981	C102	1.00	0.00	0.00	0.00	0.00	0.05	0.00	0.95	0.02	0.00
982	C103	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.04	0.00
983	C104	1.00	0.00	0.00	0.00	0.02	0.02	0.00	0.96	0.02	0.00
984	C105	1.00	0.34	0.45	0.00	0.15	0.05	0.00	0.00	0.94	0.00
985	C106	1.00	0.00	0.83	0.00	0.04	0.13	0.00	0.00	1.00	0.00
986	C107	1.00	0.00	0.00	0.00	0.00	0.05	0.00	0.95	0.00	0.00
987	C108	1.00	0.00	0.00	0.00	0.02	0.04	0.00	0.94	0.00	0.00
988	C109	1.00	0.72	0.08	0.00	0.05	0.14	0.00	0.00	0.88	0.00
989	C110	1.00	0.64	0.09	0.00	0.19	0.08	0.00	0.01	0.96	0.00
990	C111	1.00	0.45	0.05	0.00	0.44	0.00	0.00	0.07	0.56	0.00
991	C2	1.00	0.01	0.00	0.00	0.40	0.60	0.00	0.00	0.00	0.00
992	C200	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
993	C2000	1.00	0.58	0.24	0.00	0.03	0.15	0.00	0.00	0.84	0.00

994	C2001	1.00	0.42	0.16	0.00	0.40	0.03	0.00	0.00	0.98	0.00
995	C2002	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00
996	C2003	1.00	0.00	0.00	0.00	0.89	0.11	0.00	0.00	0.16	0.00
997	C2004	1.00	0.01	0.00	0.00	0.80	0.19	0.00	0.00	0.00	0.00
998	C202	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
999	C203	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1000	C205	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1001	C206	1.00	0.00	0.82	0.00	0.04	0.15	0.00	0.00	0.89	0.00
1002	C207	1.00	0.00	0.00	0.00	0.00	0.04	0.00	0.96	0.00	0.00
1003	C209	1.00	0.80	0.01	0.00	0.08	0.11	0.00	0.00	0.88	0.00
1004	C210	1.00	0.79	0.01	0.00	0.06	0.14	0.00	0.00	0.96	0.00
1005	C211	1.00	0.00	0.79	0.00	0.07	0.14	0.00	0.00	0.89	0.00
1006	C212	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1007	C213	1.00	0.78	0.00	0.00	0.04	0.18	0.00	0.00	0.89	0.00
1008	C214	1.00	0.75	0.02	0.00	0.15	0.08	0.00	0.00	0.92	0.00
1009	C215	1.00	0.00	0.80	0.00	0.19	0.01	0.00	0.00	0.98	0.00
1010	C216	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1011	C217	1.00	0.00	0.00	0.00	0.03	0.03	0.00	0.93	0.06	0.00
1012	C218	1.00	0.70	0.06	0.00	0.23	0.02	0.00	0.00	0.83	0.00
1013	C300	1.00	0.00	0.83	0.00	0.04	0.13	0.00	0.00	1.00	0.00
1014	C301	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1015	C302	1.00	0.00	0.81	0.00	0.06	0.14	0.00	0.00	0.99	0.00
1016	C303	1.00	0.00	0.00	0.00	0.00	0.03	0.00	0.97	0.00	0.00
1017	C304	1.00	0.63	0.16	0.00	0.02	0.19	0.00	0.00	0.83	0.00
1018	C305	1.00	0.38	0.25	0.00	0.33	0.03	0.00	0.00	0.96	0.00
1019	C400	1.00	0.00	0.00	0.00	0.01	0.04	0.00	0.95	0.03	0.00
1020	C401	1.00	0.00	0.00	0.00	0.01	0.04	0.00	0.95	0.02	0.00
1021	C402	1.00	0.63	0.03	0.00	0.29	0.04	0.00	0.00	0.96	0.00
1022	C500	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1023	C501	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1024	C502	1.00	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1025	C503	1.00	0.80	0.00	0.00	0.04	0.15	0.00	0.00	0.97	0.00
1026	C504	1.00	0.50	0.30	0.00	0.01	0.19	0.00	0.00	0.83	0.00
1027	C505	1.00	0.50	0.00	0.00	0.46	0.04	0.00	0.00	0.18	0.00
1028	C507	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1029	C508	1.00	0.80	0.01	0.00	0.05	0.14	0.00	0.00	0.99	0.00
1030	C509	1.00	0.58	0.22	0.00	0.01	0.19	0.00	0.00	0.83	0.00
1031	C510	1.00	0.00	0.58	0.00	0.28	0.14	0.00	0.00	1.00	0.00
1032	C600	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.01	0.00
1033	C601	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1034	C602	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1035	C603	1.00	0.42	0.28	0.00	0.26	0.03	0.00	0.00	0.97	0.00
1036	C604	1.00	0.42	0.30	0.00	0.22	0.05	0.00	0.00	0.96	0.00
1037	C605	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1038	C606	1.00	0.00	0.82	0.00	0.08	0.09	0.00	0.00	0.89	0.00
1039	C607	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1040	C608	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1041	C609	1.00	0.00	0.00	0.00	0.00	0.04	0.00	0.96	0.01	0.00
1042	C610	1.00	0.39	0.28	0.00	0.24	0.02	0.00	0.08	0.94	0.00
1043	C611	1.00	0.78	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1044	C612	1.00	0.77	0.00	0.00	0.21	0.02	0.00	0.00	0.98	0.00
1045	C701	1.00	0.00	0.00	0.00	0.00	0.04	0.00	0.96	0.01	0.00
1046	C702	1.00	0.63	0.00	0.00	0.12	0.07	0.00	0.17	0.78	0.00
1047	C703	1.00	0.00	0.00	0.00	0.23	0.77	0.00	0.00	0.47	0.00
1048	C705	1.00	0.00	0.00	0.00	0.01	0.02	0.00	0.97	0.01	0.00
1049	C706	1.00	0.56	0.06	0.00	0.31	0.00	0.00	0.08	0.83	0.00
1050	C707	1.00	0.00	0.72	0.00	0.27	0.01	0.00	0.00	0.96	0.00
1051	C708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1052	C709	1.00	0.63	0.16	0.00	0.09	0.13	0.00	0.00	0.89	0.00
1053	C710	1.00	0.63	0.00	0.00	0.33	0.04	0.00	0.00	0.32	0.00
1054	C800	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1055	C801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1056	C802	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1057	C803	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1058	C803a	1.00	0.00	0.00	0.00	0.32	0.68	0.00	0.00	0.76	0.00
1059	C804	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

1060	C805	1.00	0.00	0.00	0.00	0.56	0.44	0.00	0.00	0.55	0.00
1061	C806	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.97	0.00
1062	C807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.94	0.00
1063	C808a	1.00	0.00	0.73	0.00	0.27	0.00	0.00	0.00	0.89	0.00
1064	C809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1065	C810	1.00	0.00	0.00	0.00	0.42	0.58	0.00	0.00	0.42	0.00
1066	C810a	1.00	0.00	0.00	0.00	0.96	0.04	0.00	0.00	0.97	0.00
1067	C811	1.00	0.00	0.00	0.00	0.64	0.36	0.00	0.00	0.00	0.00
1068	C900	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1069	C901	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1070	C902	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1071	C903	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1072	C904	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.01	0.00
1073	C-DAB-1	1.00	0.00	0.64	0.00	0.17	0.19	0.00	0.00	0.74	0.00
1074	C-DAB-2	1.00	0.00	0.40	0.00	0.21	0.39	0.00	0.00	0.41	0.00
1075	C-DAB-3	1.00	0.01	0.77	0.00	0.15	0.07	0.00	0.00	0.77	0.00
1076	C-PDM-4	1.00	0.00	0.77	0.00	0.13	0.09	0.00	0.00	0.81	0.00
1077	C-PDM-5	1.00	0.69	0.08	0.00	0.06	0.17	0.00	0.00	0.80	0.00
1078	C-PDM-5a	1.00	0.01	0.69	0.00	0.09	0.21	0.00	0.00	0.88	0.00
1079	C-VL-2	1.00	0.00	0.70	0.00	0.01	0.29	0.00	0.00	0.72	0.00
1080	C-VL-4	1.00	0.00	0.64	0.00	0.04	0.33	0.00	0.00	0.69	0.00

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 Conduit Surcharge Summary  
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Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
C103	0.01	0.01	0.19	0.01	0.01
C104	0.01	0.01	0.19	0.01	0.01
C2001	0.01	0.01	3.15	0.01	0.01
C2003	0.01	0.01	0.93	0.01	0.01
C402	0.01	0.01	2.21	0.01	0.01
C505	0.01	0.01	0.79	0.01	0.01
C603	0.01	0.01	2.98	0.01	0.01
C604	0.01	0.01	2.98	0.01	0.01
C612	0.01	0.01	1.58	0.01	0.01
C703	0.01	0.01	2.78	0.01	0.01
C810a	0.01	0.01	2.21	0.01	0.01
C-DAB-1	0.01	3.49	0.01	0.90	0.01
C-DAB-2	0.01	3.21	0.01	0.92	0.01
C-DAB-3	0.01	1.79	0.01	2.31	0.01
C-PDM-4	0.01	1.58	0.01	1.12	0.01
C-PDM-5	0.01	0.79	0.01	0.01	0.01
C-VL-2	0.01	2.24	0.01	0.01	0.01
C-VL-4	0.01	4.80	0.01	3.21	0.01

Analysis begun on: Fri Oct 19 08:15:31 2018  
 Analysis ended on: Fri Oct 19 08:15:33 2018  
 Total elapsed time: 00:00:02



## **APPENDIX D – PROPOSED SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. SWMM 10 Year Output Report - No Offsite Flows
4. **SWMM 25 Year Output Report - No Offsite Flows**
5. SWMM 25 Year Output Report - With Offsite Flows
6. SWMM 100 Year Output Report - No Offsite Flows

City of Gonzales Drainage Master Plan

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 Element Count  
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Number of rain gages ..... 0  
 Number of subcatchments ... 0  
 Number of nodes ..... 122  
 Number of links ..... 119  
 Number of pollutants ..... 0  
 Number of land uses ..... 0

\*\*\*\*\*  
 Node Summary  
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Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J100	JUNCTION	235.50	4.50	0.0	Yes
J1000	JUNCTION	261.00	4.00	0.0	
J1001	JUNCTION	239.00	4.00	0.0	
J1002	JUNCTION	207.00	4.00	0.0	
J1003	JUNCTION	169.00	4.00	0.0	Yes
J1004	JUNCTION	147.00	4.00	0.0	Yes
J1005	JUNCTION	140.00	4.00	0.0	Yes
J1006	JUNCTION	121.00	16.72	100.0	
J101	JUNCTION	220.50	4.50	0.0	Yes
J102	JUNCTION	228.00	4.00	0.0	Yes
J103	JUNCTION	210.00	5.00	100.0	Yes
J104	JUNCTION	203.00	4.00	100.0	Yes
J105	JUNCTION	184.00	6.00	0.0	Yes
J106	JUNCTION	225.50	4.50	0.0	Yes
J107	JUNCTION	202.50	4.50	100.0	Yes
J108	JUNCTION	196.00	4.00	0.0	Yes
J109	JUNCTION	192.50	4.50	100.0	
J110	JUNCTION	190.00	5.00	0.0	Yes
J111	JUNCTION	181.00	5.00	100.0	Yes
J200	JUNCTION	255.50	4.50	0.0	
J2000	JUNCTION	171.50	4.50	0.0	Yes
J2001	JUNCTION	166.00	4.00	0.0	Yes
J2002	JUNCTION	156.00	4.00	0.0	
J2003	JUNCTION	148.00	5.00	0.0	Yes
J2004	JUNCTION	144.00	6.00	0.0	
J201	JUNCTION	240.50	4.50	100.0	Yes
J203	JUNCTION	235.00	4.00	0.0	
J204	JUNCTION	221.50	5.50	100.0	Yes
J206	JUNCTION	205.50	4.50	100.0	
J207	JUNCTION	202.00	6.00	0.0	Yes
J208	JUNCTION	195.00	5.00	0.0	
J210	JUNCTION	193.00	5.00	100.0	Yes
J211	JUNCTION	182.50	5.50	0.0	Yes
J212	JUNCTION	176.50	5.50	0.0	Yes
J213	JUNCTION	168.50	5.50	0.0	Yes
J214	JUNCTION	160.50	6.50	0.0	Yes
J215	JUNCTION	183.00	4.00	0.0	Yes
J216	JUNCTION	178.00	4.00	100.0	Yes
J217	JUNCTION	168.00	4.00	100.0	Yes
J218	JUNCTION	154.00	9.00	100.0	Yes
J300	JUNCTION	279.00	4.00	0.0	Yes
J301	JUNCTION	223.00	4.00	0.0	Yes
J302	JUNCTION	210.50	4.50	0.0	Yes

67	J303	JUNCTION	191.50	4.50	0.0	Yes
68	J304	JUNCTION	175.00	5.00	100.0	Yes
69	J305	JUNCTION	163.00	4.00	0.0	Yes
70	J400	JUNCTION	163.00	4.00	100.0	Yes
71	J401	JUNCTION	162.00	4.00	0.0	Yes
72	J402	JUNCTION	152.50	4.50	100.0	Yes
73	J500	JUNCTION	281.00	4.00	0.0	Yes
74	J501	JUNCTION	270.50	4.50	0.0	Yes
75	J502	JUNCTION	246.00	4.00	0.0	
76	J503	JUNCTION	235.00	5.00	100.0	Yes
77	J504	JUNCTION	217.00	5.00	100.0	Yes
78	J505	JUNCTION	200.00	5.00	100.0	Yes
79	J507	JUNCTION	251.00	4.00	0.0	Yes
80	J508	JUNCTION	216.00	6.00	0.0	Yes
81	J509	JUNCTION	194.00	6.00	0.0	Yes
82	J510	JUNCTION	172.50	4.50	0.0	Yes
83	J600	JUNCTION	297.00	4.00	100.0	Yes
84	J601	JUNCTION	293.00	4.00	0.0	Yes
85	J602	JUNCTION	280.00	4.00	0.0	Yes
86	J603	JUNCTION	259.50	5.50	0.0	Yes
87	J604	JUNCTION	264.00	4.00	100.0	Yes
88	J605	JUNCTION	258.00	2.00	0.0	
89	J606	JUNCTION	304.00	4.00	0.0	Yes
90	J607	JUNCTION	303.00	7.00	0.0	Yes
91	J608	JUNCTION	255.50	4.50	0.0	Yes
92	J609	JUNCTION	211.00	5.00	100.0	Yes
93	J610	JUNCTION	190.50	5.50	100.0	Yes
94	J611	JUNCTION	176.00	4.00	0.0	
95	J612	JUNCTION	154.00	6.00	100.0	Yes
96	J701	JUNCTION	194.50	4.50	0.0	Yes
97	J702	JUNCTION	180.00	5.00	0.0	Yes
98	J703	JUNCTION	176.00	5.00	0.0	Yes
99	J705	JUNCTION	173.00	5.00	0.0	Yes
100	J706	JUNCTION	162.50	5.50	0.0	Yes
101	J707	JUNCTION	160.00	5.00	0.0	Yes
102	J708	JUNCTION	158.00	6.00	0.0	
103	J709	JUNCTION	170.00	7.00	0.0	Yes
104	J710	JUNCTION	165.00	8.00	0.0	Yes
105	J800	JUNCTION	278.00	4.00	0.0	
106	J801	JUNCTION	222.00	2.00	0.0	Yes
107	J802	JUNCTION	217.00	2.00	0.0	Yes
108	J803	JUNCTION	213.00	2.00	0.0	Yes
109	J803a	JUNCTION	208.50	4.50	0.0	
110	J804	JUNCTION	210.00	2.00	0.0	Yes
111	J805	JUNCTION	207.00	2.00	0.0	Yes
112	J806	JUNCTION	201.00	4.00	0.0	Yes
113	J807	JUNCTION	153.00	4.00	100.0	Yes
114	J808	JUNCTION	152.00	4.00	0.0	Yes
115	J808a	JUNCTION	149.50	4.50	0.0	Yes
116	J810	JUNCTION	151.00	4.00	0.0	Yes
117	J810a	JUNCTION	148.50	4.50	0.0	Yes
118	J811	JUNCTION	143.00	5.00	0.0	Yes
119	J900	JUNCTION	356.00	2.00	0.0	
120	J901	JUNCTION	296.00	2.00	0.0	
121	J902	JUNCTION	260.00	3.00	0.0	
122	J903	JUNCTION	244.00	3.00	0.0	Yes
123	J904	JUNCTION	187.00	3.00	100.0	Yes
124	J-DAB-2	JUNCTION	159.30	5.60	0.0	
125	J-PDM-5	JUNCTION	190.70	5.30	0.0	
126	OF812	OUTFALL	140.00	5.00	0.0	
127	OF-DAB-2	OUTFALL	155.50	3.00	0.0	
128	OF-J-725-2	OUTFALL	142.00	2.50	0.0	
129	OF-J-725B-2	OUTFALL	147.65	2.00	0.0	Yes
130	OF-J-792	OUTFALL	139.77	3.00	0.0	Yes
131	OF-VL	OUTFALL	115.78	16.72	0.0	
132	OF-VL-1	OUTFALL	184.75	0.00	0.0	

133	OF-VL-3	OUTFALL	164.25	0.00	0.0	
134	DAB-1	STORAGE	157.50	4.50	0.0	Yes
135	DAB-2	STORAGE	160.00	7.00	0.0	Yes
136	DAB-3	STORAGE	155.00	6.00	0.0	Yes
137	PDM-1	STORAGE	250.00	5.00	0.0	Yes
138	PDM-2	STORAGE	253.00	5.00	0.0	
139	PDM-3	STORAGE	175.00	6.00	0.0	Yes
140	PDM-4	STORAGE	145.00	6.00	0.0	Yes
141	PDM-5	STORAGE	195.00	5.00	0.0	Yes
142	VL-1	STORAGE	179.00	6.00	0.0	Yes
143	VL-2	STORAGE	153.00	7.00	0.0	Yes
144	VL-3	STORAGE	159.00	5.50	0.0	Yes
145	VL-4	STORAGE	145.00	6.00	0.0	Yes

146  
147

148 \*\*\*\*\*  
149 Link Summary  
150 \*\*\*\*\*

151	Name	From Node	To Node	Type	Length	%Slope
	Roughness					

152

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153	C100	J100	J101	CONDUIT	1109.0	
	1.3527	0.0130				
154	C1000	J1000	J1001	CONDUIT	2024.6	
	1.0867	0.0300				
155	C1001	J1001	J1002	CONDUIT	1819.1	
	1.7594	0.0200				
156	C1002	J1002	J1003	CONDUIT	3155.7	
	1.2043	0.0200				
157	C1003	J1003	J1004	CONDUIT	1822.2	
	1.2074	0.0200				
158	C1004	J1004	J1005	CONDUIT	660.8	
	1.0595	0.0200				
159	C1005	J1005	J1006	CONDUIT	1561.5	
	1.2168	0.0200				
160	C1007	J1006	OF-VL	CONDUIT	1764.0	
	0.2959	0.0500				
161	C101	J101	J103	CONDUIT	879.0	
	1.1946	0.0130				
162	C102	J102	J103	CONDUIT	1127.0	
	1.5530	0.0130				
163	C103	J103	J105	CONDUIT	1690.7	
	1.5380	0.0130				
164	C104	J104	J105	CONDUIT	1230.0	
	1.4636	0.0130				
165	C105	J105	VL-1	CONDUIT	60.0	
	8.3624	0.0130				
166	C106	J106	J107	CONDUIT	1015.2	
	2.2662	0.0150				
167	C107	J107	J109	CONDUIT	613.1	
	1.5498	0.0130				
168	C108	J108	J109	CONDUIT	447.0	
	0.6711	0.0100				
169	C109	J109	J110	CONDUIT	654.7	
	0.3818	0.0130				
170	C110	J110	J111	CONDUIT	703.8	
	1.2078	0.0130				
171	C111	J111	VL-1	CONDUIT	200.0	
	0.7500	0.0130				
172	C2	J-DAB-2	OF-DAB-2	CONDUIT	258.0	
	1.4730	0.0130				
173	C200	J200	J201	CONDUIT	869.0	
	1.6687	0.0130				
174	C2000	J2000	J2001	CONDUIT	851.2	

175	0.6462 C2001	0.0130	J2001	DAB-3	CONDUIT	904.2
176	1.2166 C2002	0.0130	J2002	OF-J-725B-2	CONDUIT	2000.0
177	0.4175 C2003	0.0200	J2003	PDM-4	CONDUIT	448.1
178	0.6695 C2004	0.0130	J2004	OF-J-725-2	CONDUIT	274.2
179	0.7293 C202	0.0130	J201	J204	CONDUIT	683.3
180	2.7086 C203	0.0130	J203	J204	CONDUIT	806.8
181	1.4875 C205	0.0130	J204	J206	CONDUIT	947.2
182	1.6365 C206	0.0130	J206	J207	CONDUIT	153.0
183	2.2876 C207	0.0130	J207	J208	CONDUIT	507.4
184	1.2811 C209	0.0130	J208	J210	CONDUIT	431.1
185	0.4639 C210	0.0130	J210	J211	CONDUIT	883.1
186	1.1891 C211	0.0130	J211	J212	CONDUIT	785.6
187	0.7637 C212	0.0130	J212	J213	CONDUIT	739.1
188	1.0825 C213	0.0130	J213	J214	CONDUIT	517.0
189	1.5477 C214	0.0130	J214	J218	CONDUIT	768.5
190	0.8458 C215	0.0130	J215	J216	CONDUIT	837.1
191	0.5973 C216	0.0130	J216	J217	CONDUIT	775.4
192	1.2252 C217	0.0130	J217	J218	CONDUIT	788.1
193	1.5228 C218	0.0130	J218	VL-2	CONDUIT	300.0
194	0.3333 C300	0.0130	J300	J301	CONDUIT	787.9
195	7.1255 C301	0.0130	J301	J302	CONDUIT	596.4
196	2.0125 C302	0.0130	J302	J303	CONDUIT	1308.9
197	1.4518 C303	0.0130	J303	J304	CONDUIT	788.0
198	2.0310 C304	0.0130	J304	J305	CONDUIT	779.7
199	1.5392 C305	0.0130	J305	VL-3	CONDUIT	500.0
200	0.8000 C400	0.0130	J400	J402	CONDUIT	762.8
201	1.3111 C401	0.0130	J401	J402	CONDUIT	826.8
202	1.0887 C402	0.0130	J402	VL-4	CONDUIT	737.8
203	1.0166 C500	0.0130	J500	J501	CONDUIT	842.7
204	1.1868 C501	0.0130	J501	J503	CONDUIT	1419.1
205	2.4670 C502	0.0130	J502	J503	CONDUIT	697.7
206	1.5051 C503	0.0130	J503	J504	CONDUIT	924.3
207	1.9477 C504	0.0130	J504	J505	CONDUIT	850.1



208	2.0001 C505	0.0130	J505	PDM-5	CONDUIT	584.6
209	0.8553 C507	0.0130	J507	J508	CONDUIT	1308.9
210	2.6367 C508	0.0130	J508	J509	CONDUIT	691.8
211	3.1818 C509	0.0130	J509	J510	CONDUIT	1121.5
212	1.9173 C510	0.0130	J510	J2003	CONDUIT	1111.5
213	2.2048 C600	0.0130	J600	J604	CONDUIT	1355.0
214	2.3992 C601	0.0130	J601	J602	CONDUIT	529.0
215	2.3634 C602	0.0130	J602	J603	CONDUIT	823.1
216	2.4305 C603	0.0130	J603	PDM-2	CONDUIT	495.5
217	1.3119 C604	0.0130	J604	PDM-2	CONDUIT	442.3
218	2.4880 C605	0.0130	J605	J609	CONDUIT	1633.5
219	2.8784 C606	0.0100	J606	J607	CONDUIT	276.4
220	0.3618 C607	0.0130	J607	J608	CONDUIT	1451.3
221	3.2402 C608	0.0130	J608	J609	CONDUIT	1974.4
222	2.2291 C609	0.0130	J609	J610	CONDUIT	534.4
223	3.7454 C610	0.0130	J610	PDM-3	CONDUIT	699.2
224	2.1457 C611	0.0130	J611	J612	CONDUIT	1209.8
225	1.8187 C612	0.0130	J612	PDM-4	CONDUIT	551.1
226	1.6333 C701	0.0130	J701	J702	CONDUIT	1719.8
227	0.8141 C702	0.0130	J702	J703	CONDUIT	451.9
228	0.7745 C703	0.0130	J703	DAB-2	CONDUIT	1043.9
229	1.5330 C705	0.0130	J705	J706	CONDUIT	1799.5
230	0.5557 C706	0.0130	J706	DAB-2	CONDUIT	465.0
231	0.4301 C707	0.0100	J707	J708	CONDUIT	674.4
232	0.2966 C708	0.0130	J708	DAB-1	CONDUIT	508.8
233	0.0983 C709	0.0130	J709	J710	CONDUIT	758.1
234	0.6596 C710	0.0130	J710	DAB-1	CONDUIT	559.0
235	1.3418 C800	0.0130	J800	J806	CONDUIT	3618.0
236	2.1287 C801	0.0200	J801	J802	CONDUIT	1607.5
237	0.3110 C802	0.0200	J802	J803	CONDUIT	981.0
238	0.4078 C803	0.0200	J803	J803a	CONDUIT	959.2
239	0.2606 C803a	0.0200	J803a	J703	CONDUIT	1754.7
240	1.8524 C804	0.0130	J804	J805	CONDUIT	829.0

241	0.3619	0.0200						
	C805		J805	J806	CONDUIT		642.8	
242	0.9334	0.0200						
	C806		J806	J807	CONDUIT		2967.6	
243	1.6177	0.0200						
	C807		J807	J808	CONDUIT		1107.1	
244	0.0903	0.0130						
	C808a		J808a	J810a	CONDUIT		923.6	
245	0.1083	0.0130						
	C809		J808	J810	CONDUIT		927.5	
246	0.1078	0.0130						
	C810		J810	J811	CONDUIT		988.9	
247	0.8090	0.0130						
	C810a		J810a	VL-4	CONDUIT		940.5	
248	0.3721	0.0130						
	C811		J811	OF812	CONDUIT		582.2	
249	0.5153	0.0130						
	C900		J900	J901	CONDUIT		5040.8	
250	1.1904	0.0200						
	C901		J901	J902	CONDUIT		1794.8	
251	2.0062	0.0200						
	C902		J902	J903	CONDUIT		883.3	
252	1.8117	0.0200						
	C903		J903	J904	CONDUIT		3989.6	
253	1.4289	0.0200						
	C904		J904	OF-J-792	CONDUIT		1032.8	
254	4.5779	0.0200						
	C-DAB-1		DAB-1	J807	CONDUIT		500.0	
255	0.9000	0.0130						
	C-DAB-2		DAB-2	J-DAB-2	CONDUIT		125.0	
256	0.5600	0.0130						
	C-DAB-3		DAB-3	J2002	CONDUIT		200.0	
257	0.2500	0.0100						
	C-PDM-4		PDM-4	J2004	CONDUIT		133.0	
258	0.7519	0.0130						
	C-PDM-5		PDM-5	J-PDM-5	CONDUIT		450.0	
259	0.9556	0.0130						
	C-PDM-5a		J-PDM-5	J2002	CONDUIT		1732.0	
260	2.0039	0.0130						
	C-VL-2		VL-2	J1004	CONDUIT		850.0	
261	0.6471	0.0130						
	C-VL-4		VL-4	J811	CONDUIT		200.0	
262	1.0001	0.0130						
	W1		VL-1	OF-VL-1	WEIR			
263			VL-2	J1004	WEIR			
264			PDM-1	J903	WEIR			
265			DAB-3	J2002	WEIR			
266			PDM-5	J-PDM-5	WEIR			
267			DAB-2	J-DAB-2	WEIR			
268			PDM-2	J605	WEIR			
269			PDM-3	J611	WEIR			
270			PDM-4	J2004	WEIR			
271			VL-3	OF-VL-3	WEIR			

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Cross Section Summary  
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277	Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
278								
279								
280	C100	CIRCULAR	2.50	4.91	0.63	2.50	1	47.71
281	C1000	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	110.19
282	C1001	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	1153.17
283	C1002	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	954.06
284	C1003	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	955.32

285	C1004	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	894.87
286	C1005	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	959.03
287	C1007	XS_701	16.72	4292.45	10.30	410.01	1	32860.58
288	C101	CIRCULAR	2.50	4.91	0.63	2.50	1	44.83
289	C102	CIRCULAR	2.00	3.14	0.50	2.00	1	28.19
290	C103	CIRCULAR	3.00	7.07	0.75	3.00	1	82.72
291	C104	CIRCULAR	2.00	3.14	0.50	2.00	1	27.37
292	C105	CIRCULAR	4.00	12.57	1.00	4.00	1	415.39
293	C106	CIRCULAR	2.50	4.91	0.63	2.50	1	53.51
294	C107	CIRCULAR	2.50	4.91	0.63	2.50	1	51.06
295	C108	CIRCULAR	2.00	3.14	0.50	2.00	1	24.09
296	C109	CIRCULAR	3.00	7.07	0.75	3.00	1	41.22
297	C110	CIRCULAR	3.00	7.07	0.75	3.00	1	73.30
298	C111	CIRCULAR	3.50	9.62	0.88	3.50	1	87.13
299	C2	CIRCULAR	3.00	7.07	0.75	3.00	1	80.95
300	C200	CIRCULAR	2.50	4.91	0.63	2.50	1	52.99
301	C2000	CIRCULAR	2.50	4.91	0.63	2.50	1	32.97
302	C2001	RECT_CLOSED	2.00	10.00	0.71	5.00	1	100.75
303	C2002	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	102.45
304	C2003	RECT_CLOSED	3.00	15.00	0.94	5.00	1	134.39
305	C2004	CIRCULAR	2.50	4.91	0.63	2.50	1	35.03
306	C202	CIRCULAR	2.50	4.91	0.63	2.50	1	67.51
307	C203	CIRCULAR	2.00	3.14	0.50	2.00	1	27.59
308	C205	CIRCULAR	2.50	4.91	0.63	2.50	1	52.47
309	C206	CIRCULAR	2.50	4.91	0.63	2.50	1	62.04
310	C207	CIRCULAR	3.00	7.07	0.75	3.00	1	75.49
311	C209	CIRCULAR	3.00	7.07	0.75	3.00	1	45.43
312	C210	CIRCULAR	3.00	7.07	0.75	3.00	1	72.73
313	C211	CIRCULAR	3.50	9.62	0.88	3.50	1	87.92
314	C212	CIRCULAR	3.50	9.62	0.88	3.50	1	104.68
315	C213	CIRCULAR	3.50	9.62	0.88	3.50	1	125.17
316	C214	CIRCULAR	4.50	15.90	1.13	4.50	1	180.85
317	C215	CIRCULAR	2.00	3.14	0.50	2.00	1	17.48
318	C216	CIRCULAR	2.00	3.14	0.50	2.00	1	25.04
319	C217	CIRCULAR	2.00	3.14	0.50	2.00	1	27.92
320	C218	RECT_CLOSED	4.50	45.00	1.55	10.00	1	398.05
321	C300	CIRCULAR	1.00	0.79	0.25	1.00	1	9.51
322	C301	CIRCULAR	2.00	3.14	0.50	2.00	1	32.09
323	C302	CIRCULAR	2.50	4.91	0.63	2.50	1	49.42
324	C303	CIRCULAR	2.50	4.91	0.63	2.50	1	58.45
325	C304	CIRCULAR	3.00	7.07	0.75	3.00	1	82.75
326	C305	RECT_CLOSED	3.00	27.00	1.13	9.00	1	298.60
327	C400	CIRCULAR	2.00	3.14	0.50	2.00	1	25.90
328	C401	CIRCULAR	2.00	3.14	0.50	2.00	1	23.60
329	C402	CIRCULAR	2.50	4.91	0.63	2.50	1	41.36
330	C500	CIRCULAR	2.00	3.14	0.50	2.00	1	24.64
331	C501	CIRCULAR	2.50	4.91	0.63	2.50	1	64.42
332	C502	CIRCULAR	2.00	3.14	0.50	2.00	1	27.75
333	C503	CIRCULAR	3.00	7.07	0.75	3.00	1	93.08
334	C504	CIRCULAR	3.00	7.07	0.75	3.00	1	94.33
335	C505	RECT_CLOSED	2.00	10.00	0.71	5.00	1	84.47
336	C507	CIRCULAR	2.00	3.14	0.50	2.00	1	36.73
337	C508	CIRCULAR	2.00	3.14	0.50	2.00	1	40.35
338	C509	CIRCULAR	2.50	4.91	0.63	2.50	1	56.80
339	C510	RECT_CLOSED	2.00	10.00	0.71	5.00	1	135.62
340	C600	CIRCULAR	2.00	3.14	0.50	2.00	1	35.04
341	C601	CIRCULAR	2.00	3.14	0.50	2.00	1	34.78
342	C602	CIRCULAR	2.00	3.14	0.50	2.00	1	35.27
343	C603	RECT_CLOSED	2.00	10.00	0.71	5.00	1	104.62
344	C604	CIRCULAR	2.00	3.14	0.50	2.00	1	35.68
345	C605	CIRCULAR	2.00	3.14	0.50	2.00	1	49.90
346	C606	CIRCULAR	2.00	3.14	0.50	2.00	1	13.61
347	C607	CIRCULAR	2.00	3.14	0.50	2.00	1	40.72
348	C608	CIRCULAR	2.50	4.91	0.63	2.50	1	61.24
349	C609	CIRCULAR	3.00	7.07	0.75	3.00	1	129.08
350	C610	CIRCULAR	3.50	9.62	0.88	3.50	1	147.38

351	C611	CIRCULAR	2.00	3.14	0.50	2.00	1	30.51
352	C612	CIRCULAR	2.00	3.14	0.50	2.00	1	28.91
353	C701	CIRCULAR	2.50	4.91	0.63	2.50	1	37.01
354	C702	CIRCULAR	3.00	7.07	0.75	3.00	1	58.70
355	C703	CIRCULAR	3.00	7.07	0.75	3.00	1	82.58
356	C705	CIRCULAR	3.00	7.07	0.75	3.00	1	49.72
357	C706	CIRCULAR	3.50	9.62	0.88	3.50	1	85.78
358	C707	CIRCULAR	3.00	7.07	0.75	3.00	1	36.32
359	C708	RECT_CLOSED	3.00	15.00	0.94	5.00	1	51.48
360	C709	CIRCULAR	2.50	4.91	0.63	2.50	1	33.31
361	C710	RECT_CLOSED	3.00	24.00	1.09	8.00	1	336.77
362	C800	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1071.28
363	C801	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	88.43
364	C802	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	101.25
365	C803	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	80.95
366	C803a	CIRCULAR	2.50	4.91	0.63	2.50	1	55.83
367	C804	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	95.38
368	C805	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	153.19
369	C806	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	933.87
370	C807	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	339.50
371	C808a	CIRCULAR	2.50	4.91	0.63	2.50	1	13.50
372	C809	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	370.92
373	C810	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1016.01
374	C810a	CIRCULAR	2.50	4.91	0.63	2.50	1	25.02
375	C811	RECT_OPEN	5.00	50.00	2.50	10.00	1	755.70
376	C900	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	172.99
377	C901	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	224.58
378	C902	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	486.88
379	C903	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	432.38
380	C904	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	773.94
381	C-DAB-1	CIRCULAR	1.21	1.15	0.30	1.21	1	5.62
382	C-DAB-2	CIRCULAR	2.75	5.94	0.69	2.75	1	39.58
383	C-DAB-3	CIRCULAR	1.25	1.23	0.31	1.25	1	4.20
384	C-PDM-4	CIRCULAR	2.00	3.14	0.50	2.00	1	19.62
385	C-PDM-5	CIRCULAR	2.00	3.14	0.50	2.00	1	22.11
386	C-PDM-5a	CIRCULAR	2.00	3.14	0.50	2.00	1	32.02
387	C-VL-2	CIRCULAR	2.50	4.91	0.63	2.50	1	32.99
388	C-VL-4	CIRCULAR	1.00	0.79	0.25	1.00	1	3.56

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392 \*\*\*\*\*

393 Transect Summary

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395

396 Transect XS\_701

397 Area:

398	0.0034	0.0184	0.0345	0.0507	0.0672
399	0.0839	0.1008	0.1180	0.1354	0.1531
400	0.1709	0.1888	0.2069	0.2252	0.2435
401	0.2621	0.2807	0.2995	0.3185	0.3376
402	0.3568	0.3762	0.3958	0.4156	0.4355
403	0.4556	0.4759	0.4963	0.5169	0.5376
404	0.5585	0.5796	0.6008	0.6221	0.6436
405	0.6653	0.6871	0.7091	0.7313	0.7536
406	0.7761	0.7988	0.8216	0.8447	0.8679
407	0.8915	0.9163	0.9425	0.9702	1.0000

408 Hrad:

409	0.0115	0.0375	0.0690	0.1001	0.1308
410	0.1609	0.1905	0.2197	0.2485	0.2778
411	0.3074	0.3369	0.3662	0.3953	0.4241
412	0.4527	0.4811	0.5092	0.5370	0.5645
413	0.5915	0.6181	0.6443	0.6702	0.6960
414	0.7218	0.7478	0.7736	0.7994	0.8250
415	0.8505	0.8759	0.9012	0.9263	0.9511
416	0.9758	1.0003	1.0240	1.0476	1.0709

417		1.0939	1.1170	1.1401	1.1631	1.1833
418		1.1867	1.1447	1.1069	1.0907	1.0000
419	Width:					
420		0.3358	0.4981	0.5052	0.5121	0.5190
421		0.5263	0.5341	0.5419	0.5496	0.5555
422		0.5601	0.5646	0.5689	0.5733	0.5777
423		0.5821	0.5865	0.5909	0.5955	0.6002
424		0.6053	0.6105	0.6160	0.6215	0.6270
425		0.6323	0.6373	0.6422	0.6471	0.6520
426		0.6568	0.6615	0.6663	0.6711	0.6759
427		0.6808	0.6857	0.6911	0.6965	0.7019
428		0.7075	0.7130	0.7184	0.7238	0.7308
429		0.7487	0.7984	0.8499	0.8923	1.0000

\*\*\*\*\*  
NOTE: The summary statistics displayed in this report are  
based on results found at every computational time step,  
not just on results from each reporting time step.  
\*\*\*\*\*

\*\*\*\*\*  
Analysis Options  
\*\*\*\*\*  
Flow Units ..... CFS  
Process Models:  
  Rainfall/Runoff ..... NO  
  RDII ..... NO  
  Snowmelt ..... NO  
  Groundwater ..... NO  
  Flow Routing ..... YES  
  Ponding Allowed ..... NO  
  Water Quality ..... NO  
Flow Routing Method ..... DYNWAVE  
Starting Date ..... 06/13/2009 00:00:00  
Ending Date ..... 06/14/2009 00:00:00  
Antecedent Dry Days ..... 0.0  
Report Time Step ..... 00:01:00  
Routing Time Step ..... 5.00 sec  
Variable Time Step ..... YES  
Maximum Trials ..... 8  
Number of Threads ..... 4  
Head Tolerance ..... 0.005000 ft

*****			
	Volume	Volume	
Flow Routing Continuity	acre-feet	10^6 gal	
*****			
	-----	-----	
465	Dry Weather Inflow .....	0.000	0.000
466	Wet Weather Inflow .....	0.000	0.000
467	Groundwater Inflow .....	0.000	0.000
468	RDII Inflow .....	0.000	0.000
469	External Inflow .....	116.137	37.845
470	External Outflow .....	68.901	22.452
471	Flooding Loss .....	0.000	0.000
472	Evaporation Loss .....	0.000	0.000
473	Exfiltration Loss .....	46.983	15.310
474	Initial Stored Volume ....	0.001	0.000
475	Final Stored Volume .....	0.109	0.036
476	Continuity Error (%) .....	0.125	

\*\*\*\*\*  
Highest Continuity Errors  
\*\*\*\*\*  
Node J1006 (2.02%)

483  
 484  
 485 \*\*\*\*\*  
 486 Time-Step Critical Elements  
 487 \*\*\*\*\*  
 488 Link C105 (6.97%)  
 489 Link C-DAB-2 (5.31%)  
 490 Link C-PDM-4 (1.50%)

491  
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 493 \*\*\*\*\*  
 494 Highest Flow Instability Indexes  
 495 \*\*\*\*\*  
 496 Link C1007 (15)

497  
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 499 \*\*\*\*\*  
 500 Routing Time Step Summary  
 501 \*\*\*\*\*  
 502 Minimum Time Step : 0.50 sec  
 503 Average Time Step : 4.83 sec  
 504 Maximum Time Step : 5.00 sec  
 505 Percent in Steady State : -0.00  
 506 Average Iterations per Step : 2.01  
 507 Percent Not Converging : 0.11

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 509  
 510 \*\*\*\*\*  
 511 Node Depth Summary  
 512 \*\*\*\*\*

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
519	J100	0.07	0.83	236.33	0 00:45	0.83
520	J1000	0.00	0.00	261.00	0 00:00	0.00
521	J1001	0.00	0.00	239.00	0 00:00	0.00
522	J1002	0.00	0.00	207.00	0 00:00	0.00
523	J1003	0.02	0.25	169.25	0 00:53	0.25
524	J1004	0.14	0.83	147.83	0 01:13	0.83
525	J1005	0.15	0.94	140.94	0 00:55	0.94
526	J1006	0.27	0.79	121.79	0 02:28	0.79
527	J101	0.11	1.38	221.88	0 00:46	1.38
528	J102	0.06	0.75	228.75	0 00:45	0.75
529	J103	0.14	1.58	211.58	0 00:47	1.58
530	J104	0.08	0.90	203.90	0 00:45	0.90
531	J105	0.17	3.76	187.76	0 00:27	3.76
532	J106	0.07	0.84	226.34	0 00:45	0.84
533	J107	0.11	1.27	203.77	0 00:46	1.27
534	J108	0.10	1.53	197.53	0 00:47	1.53
535	J109	0.21	4.50	197.00	0 00:46	3.37
536	J110	0.16	1.96	191.96	0 00:48	1.96
537	J111	0.45	2.77	183.77	0 00:48	2.76
538	J200	0.00	0.00	255.50	0 00:00	0.00
539	J2000	0.11	1.39	172.89	0 00:45	1.39
540	J2001	0.05	0.66	166.66	0 00:46	0.66
541	J2002	0.16	1.06	157.06	0 01:35	1.06
542	J2003	0.13	1.59	149.59	0 01:14	1.59
543	J2004	0.26	2.24	146.24	0 01:17	2.24
544	J201	0.09	1.13	241.63	0 00:45	1.13
545	J203	0.00	0.00	235.00	0 00:00	0.00
546	J204	0.13	1.61	223.11	0 00:47	1.61
547	J206	0.13	1.79	207.29	0 00:47	1.79
548	J207	0.15	1.85	203.85	0 00:46	1.85

549	J208	JUNCTION	0.22	4.10	199.10	0	00:47	3.73
550	J210	JUNCTION	0.16	2.06	195.06	0	00:49	2.06
551	J211	JUNCTION	0.20	2.63	185.13	0	00:50	2.63
552	J212	JUNCTION	0.20	2.54	179.04	0	00:50	2.54
553	J213	JUNCTION	0.20	2.62	171.12	0	00:50	2.62
554	J214	JUNCTION	0.22	2.80	163.30	0	00:49	2.80
555	J215	JUNCTION	0.07	0.85	183.85	0	00:45	0.85
556	J216	JUNCTION	0.09	1.11	179.11	0	00:46	1.11
557	J217	JUNCTION	0.12	1.59	169.59	0	00:48	1.59
558	J218	JUNCTION	0.41	3.66	157.66	0	01:31	3.66
559	J300	JUNCTION	0.05	0.69	279.69	0	00:45	0.68
560	J301	JUNCTION	0.09	1.12	224.12	0	00:46	1.12
561	J302	JUNCTION	0.11	1.28	211.78	0	00:46	1.28
562	J303	JUNCTION	0.14	1.71	193.21	0	00:46	1.71
563	J304	JUNCTION	0.19	2.42	177.42	0	00:47	2.42
564	J305	JUNCTION	0.09	2.58	165.58	0	00:20	2.58
565	J400	JUNCTION	0.06	0.73	163.73	0	00:45	0.73
566	J401	JUNCTION	0.07	0.77	162.77	0	00:45	0.77
567	J402	JUNCTION	0.13	1.63	154.13	0	00:46	1.63
568	J500	JUNCTION	0.09	1.17	282.17	0	00:46	1.17
569	J501	JUNCTION	0.09	1.13	271.63	0	00:47	1.13
570	J502	JUNCTION	0.00	0.00	246.00	0	00:00	0.00
571	J503	JUNCTION	0.12	1.45	236.45	0	00:46	1.45
572	J504	JUNCTION	0.15	1.82	218.82	0	00:47	1.82
573	J505	JUNCTION	0.11	1.55	201.55	0	00:47	1.55
574	J507	JUNCTION	0.09	1.10	252.10	0	00:46	1.10
575	J508	JUNCTION	0.11	1.41	217.41	0	00:45	1.41
576	J509	JUNCTION	0.15	2.02	196.02	0	00:47	2.02
577	J510	JUNCTION	0.06	0.81	173.31	0	00:47	0.80
578	J600	JUNCTION	0.08	0.96	297.96	0	00:46	0.96
579	J601	JUNCTION	0.06	0.78	293.78	0	00:45	0.77
580	J602	JUNCTION	0.08	0.97	280.97	0	00:46	0.97
581	J603	JUNCTION	0.05	1.16	260.66	0	00:17	1.16
582	J604	JUNCTION	0.11	1.90	265.90	0	00:19	1.90
583	J605	JUNCTION	0.00	0.00	258.00	0	00:00	0.00
584	J606	JUNCTION	0.13	1.92	305.92	0	00:45	1.91
585	J607	JUNCTION	0.09	1.07	304.07	0	00:46	1.07
586	J608	JUNCTION	0.13	1.53	257.03	0	00:48	1.53
587	J609	JUNCTION	0.13	1.61	212.61	0	00:48	1.61
588	J610	JUNCTION	0.22	1.92	192.42	0	00:49	1.92
589	J611	JUNCTION	0.00	0.00	176.00	0	00:00	0.00
590	J612	JUNCTION	0.07	0.85	154.85	0	00:46	0.85
591	J701	JUNCTION	0.21	1.69	196.19	0	01:31	1.69
592	J702	JUNCTION	0.29	2.41	182.41	0	01:31	2.41
593	J703	JUNCTION	0.52	1.85	177.85	0	01:32	1.85
594	J705	JUNCTION	0.21	1.85	174.85	0	01:16	1.85
595	J706	JUNCTION	0.39	2.89	165.39	0	01:18	2.89
596	J707	JUNCTION	0.13	1.69	161.69	0	00:45	1.69
597	J708	JUNCTION	0.39	2.07	160.07	0	02:31	2.07
598	J709	JUNCTION	0.15	2.10	172.10	0	00:46	2.10
599	J710	JUNCTION	0.07	1.47	166.47	0	00:20	1.46
600	J800	JUNCTION	0.00	0.00	278.00	0	00:00	0.00
601	J801	JUNCTION	0.09	0.39	222.39	0	03:04	0.39
602	J802	JUNCTION	0.21	0.81	217.81	0	03:32	0.81
603	J803	JUNCTION	0.40	1.46	214.46	0	03:36	1.46
604	J803a	JUNCTION	0.38	1.37	209.87	0	03:37	1.37
605	J804	JUNCTION	0.10	0.48	210.48	0	03:01	0.48
606	J805	JUNCTION	0.15	0.70	207.70	0	03:02	0.70
607	J806	JUNCTION	0.12	0.50	201.50	0	03:10	0.50
608	J807	JUNCTION	0.27	1.08	154.08	0	03:18	1.08
609	J808	JUNCTION	0.34	1.14	153.14	0	03:24	1.14
610	J808a	JUNCTION	0.15	1.95	151.45	0	00:46	1.95
611	J810	JUNCTION	0.16	0.57	151.57	0	03:26	0.57
612	J810a	JUNCTION	0.14	1.63	150.13	0	00:47	1.63
613	J811	JUNCTION	0.17	0.60	143.60	0	03:27	0.60
614	J900	JUNCTION	0.00	0.00	356.00	0	00:00	0.00

615	J901	JUNCTION	0.00	0.00	296.00	0	00:00	0.00
616	J902	JUNCTION	0.00	0.00	260.00	0	00:00	0.00
617	J903	JUNCTION	0.02	0.16	244.16	0	00:54	0.16
618	J904	JUNCTION	0.10	0.46	187.46	0	02:47	0.46
619	J-DAB-2	JUNCTION	0.61	2.18	161.48	0	02:18	2.18
620	J-PDM-5	JUNCTION	0.18	1.28	191.98	0	00:51	1.28
621	OF812	OUTFALL	0.16	0.56	140.56	0	03:28	0.56
622	OF-DAB-2	OUTFALL	0.50	1.68	157.18	0	02:18	1.68
623	OF-J-725-2	OUTFALL	0.22	1.71	143.71	0	01:17	1.71
624	OF-J-725B-2	OUTFALL	0.12	0.87	148.52	0	01:35	0.87
625	OF-J-792	OUTFALL	0.10	0.46	140.23	0	02:47	0.46
626	OF-VL	OUTFALL	0.10	0.37	116.15	0	02:28	0.37
627	OF-VL-1	OUTFALL	0.00	0.00	184.75	0	00:00	0.00
628	OF-VL-3	OUTFALL	0.00	0.00	164.25	0	00:00	0.00
629	DAB-1	STORAGE	0.52	2.57	160.07	0	02:34	2.57
630	DAB-2	STORAGE	1.05	4.43	164.43	0	02:17	4.43
631	DAB-3	STORAGE	0.94	3.80	158.80	0	01:44	3.80
632	PDM-1	STORAGE	1.00	3.06	253.06	0	02:35	3.06
633	PDM-2	STORAGE	1.03	3.07	256.07	0	02:38	3.07
634	PDM-3	STORAGE	1.59	3.75	178.75	0	02:51	3.75
635	PDM-4	STORAGE	0.46	4.45	149.45	0	01:17	4.45
636	PDM-5	STORAGE	0.32	2.96	197.96	0	01:25	2.96
637	VL-1	STORAGE	1.41	3.76	182.76	0	02:41	3.76
638	VL-2	STORAGE	0.56	4.64	157.64	0	01:31	4.64
639	VL-3	STORAGE	1.19	3.35	162.35	0	02:40	3.35
640	VL-4	STORAGE	0.76	3.84	148.84	0	02:28	3.84

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643 \*\*\*\*\*  
644 Node Inflow Summary  
645 \*\*\*\*\*  
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			Maximum	Maximum			Lateral	
			Total	Flow			Inflow	
			Lateral	Total	Time of Max			Volume
			Inflow	Balance	Occurrence			
			Volume	Error				
Node	Percent	Type	CFS	CFS	days	hr:min	10 <sup>6</sup> gal	10 <sup>6</sup>
gal								
648								
649								
650								
651								
652								
653	J100	JUNCTION	11.51	11.51	0	00:45	0.255	
	0.255	-0.048						
654	J1000	JUNCTION	0.00	0.00	0	00:00	0	
	0	0.000 gal						
655	J1001	JUNCTION	0.00	0.00	0	00:00	0	
	0	0.000 gal						
656	J1002	JUNCTION	0.00	0.00	0	00:00	0	
	0	0.000 gal						
657	J1003	JUNCTION	8.88	8.88	0	00:45	0.197	
	0.197	-0.322						
658	J1004	JUNCTION	3.58	46.17	0	01:03	0.0793	
	3.44	0.020						
659	J1005	JUNCTION	8.36	49.47	0	02:15	0.555	
	4	-0.067						
660	J1006	JUNCTION	0.00	49.38	0	02:16	0	
	4	2.060						
661	J101	JUNCTION	14.52	25.56	0	00:45	0.322	
	0.577	-0.002						
662	J102	JUNCTION	8.61	8.61	0	00:45	0.191	
	0.191	0.482						



663	J103		JUNCTION	13.23	45.90	0	00:46	0.293
	1.06	-0.003						
664	J104		JUNCTION	11.50	11.50	0	00:45	0.255
	0.255	-1.556						
665	J105		JUNCTION	15.69	70.53	0	00:46	0.348
	1.67	0.124						
666	J106		JUNCTION	13.39	13.39	0	00:45	0.297
	0.297	-0.047						
667	J107		JUNCTION	13.70	26.67	0	00:45	0.303
	0.6	0.041						
668	J108		JUNCTION	16.65	16.65	0	00:45	0.369
	0.369	0.062						
669	J109		JUNCTION	0.00	42.20	0	00:46	0
	0.968	-0.186						
670	J110		JUNCTION	8.88	49.60	0	00:46	0.197
	1.17	0.354						
671	J111		JUNCTION	7.32	55.71	0	00:48	0.162
	1.32	0.025						
672	J200		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
673	J2000		JUNCTION	15.32	15.32	0	00:45	0.339
	0.339	-0.016						
674	J2001		JUNCTION	12.54	27.25	0	00:45	0.278
	0.617	0.012						
675	J2002		JUNCTION	0.00	27.47	0	01:31	0
	1.86	0.051						
676	J2003		JUNCTION	8.42	56.84	0	00:47	0.186
	1.34	-0.005						
677	J2004		JUNCTION	0.00	28.49	0	01:17	0
	1.55	-0.001						
678	J201		JUNCTION	25.76	25.76	0	00:45	0.571
	0.571	0.133						
679	J203		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
680	J204		JUNCTION	10.84	35.96	0	00:45	0.24
	0.81	-0.072						
681	J206		JUNCTION	0.00	34.90	0	00:47	0
	0.811	-0.001						
682	J207		JUNCTION	12.00	46.05	0	00:47	0.266
	1.08	0.062						
683	J208		JUNCTION	0.00	47.21	0	00:47	0
	1.08	-0.096						
684	J210		JUNCTION	9.43	55.25	0	00:47	0.209
	1.29	0.003						
685	J211		JUNCTION	15.42	67.72	0	00:49	0.342
	1.63	-0.005						
686	J212		JUNCTION	11.84	77.15	0	00:50	0.262
	1.89	0.006						
687	J213		JUNCTION	15.97	90.03	0	00:50	0.354
	2.24	-0.001						
688	J214		JUNCTION	14.39	101.84	0	00:49	0.319
	2.56	-0.074						
689	J215		JUNCTION	6.84	6.84	0	00:45	0.151
	0.151	-0.065						
690	J216		JUNCTION	7.39	13.91	0	00:45	0.164
	0.315	0.114						
691	J217		JUNCTION	11.96	24.92	0	00:46	0.265
	0.58	0.784						
692	J218		JUNCTION	13.78	137.88	0	00:49	0.305
	3.44	-0.069						
693	J300		JUNCTION	7.82	7.82	0	00:45	0.173
	0.173	-0.020						
694	J301		JUNCTION	9.75	17.44	0	00:45	0.216
	0.389	0.006						
695	J302		JUNCTION	9.11	25.95	0	00:45	0.202
	0.591	-0.022						

696	J303		JUNCTION	18.85	43.85	0	00:45	0.418
	1.01	0.069						
697	J304		JUNCTION	17.28	59.78	0	00:46	0.383
	1.39	0.032						
698	J305		JUNCTION	20.70	78.61	0	00:46	0.459
	1.85	-0.018						
699	J400		JUNCTION	7.50	7.50	0	00:45	0.166
	0.166	-0.712						
700	J401		JUNCTION	7.51	7.51	0	00:45	0.166
	0.166	-0.832						
701	J402		JUNCTION	13.50	28.03	0	00:45	0.299
	0.634	0.295						
702	J500		JUNCTION	15.02	15.02	0	00:45	0.333
	0.333	-0.004						
703	J501		JUNCTION	11.84	25.94	0	00:45	0.262
	0.595	-0.003						
704	J502		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
705	J503		JUNCTION	18.03	42.40	0	00:46	0.4
	0.994	-0.010						
706	J504		JUNCTION	13.11	54.77	0	00:46	0.29
	1.28	0.026						
707	J505		JUNCTION	11.81	65.40	0	00:47	0.262
	1.55	-0.008						
708	J507		JUNCTION	21.00	21.00	0	00:45	0.465
	0.465	-0.003						
709	J508		JUNCTION	13.48	33.24	0	00:45	0.299
	0.764	-0.007						
710	J509		JUNCTION	8.84	41.84	0	00:45	0.196
	0.96	-0.004						
711	J510		JUNCTION	8.59	49.34	0	00:46	0.19
	1.15	0.007						
712	J600		JUNCTION	16.30	16.30	0	00:45	0.361
	0.361	-0.353						
713	J601		JUNCTION	10.20	10.20	0	00:45	0.226
	0.226	-0.002						
714	J602		JUNCTION	5.66	15.57	0	00:45	0.125
	0.351	-0.072						
715	J603		JUNCTION	9.16	24.14	0	00:46	0.203
	0.554	0.037						
716	J604		JUNCTION	8.84	24.10	0	00:45	0.196
	0.558	0.148						
717	J605		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
718	J606		JUNCTION	12.85	12.85	0	00:45	0.285
	0.285	-0.020						
719	J607		JUNCTION	9.65	22.15	0	00:45	0.214
	0.498	0.271						
720	J608		JUNCTION	20.47	41.07	0	00:45	0.454
	0.951	-0.128						
721	J609		JUNCTION	20.63	58.80	0	00:47	0.457
	1.41	0.385						
722	J610		JUNCTION	40.93	70.61	0	00:48	1.51
	2.92	0.292						
723	J611		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
724	J612		JUNCTION	11.24	11.24	0	00:45	0.249
	0.249	-0.191						
725	J701		JUNCTION	29.29	29.29	0	01:30	1.3
	1.3	-0.512						
726	J702		JUNCTION	24.41	45.93	0	01:30	0.902
	2.21	0.458						
727	J703		JUNCTION	19.58	57.79	0	01:32	0.434
	6.12	-0.076						
728	J705		JUNCTION	35.62	35.62	0	01:15	1.32
	1.32	1.212						

729	J706		JUNCTION	28.00	62.53	0	01:15	1.03
	2.33	-0.162						
730	J707		JUNCTION	18.47	18.47	0	00:45	0.409
	0.409	-0.344						
731	J708		JUNCTION	0.00	18.14	0	00:46	0
	0.411	0.329						
732	J709		JUNCTION	23.33	23.33	0	00:45	0.517
	0.517	-0.038						
733	J710		JUNCTION	28.12	37.50	0	01:15	1.04
	1.56	0.016						
734	J800		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
735	J801		JUNCTION	4.57	4.57	0	03:00	0.405
	0.405	-0.075						
736	J802		JUNCTION	15.00	18.69	0	03:30	1.55
	1.96	0.004						
737	J803		JUNCTION	14.91	33.10	0	03:30	1.54
	3.5	0.017						
738	J803a		JUNCTION	0.00	32.41	0	03:37	0
	3.5	0.048						
739	J804		JUNCTION	7.01	7.01	0	03:00	0.621
	0.621	0.000						
740	J805		JUNCTION	13.05	19.90	0	03:00	1.16
	1.78	-0.005						
741	J806		JUNCTION	1.85	19.76	0	03:02	0.041
	1.82	-0.009						
742	J807		JUNCTION	1.16	25.17	0	03:10	0.0257
	2.8	0.053						
743	J808		JUNCTION	8.81	24.61	0	03:20	0.195
	2.99	-0.006						
744	J808a		JUNCTION	13.60	13.60	0	00:45	0.301
	0.301	-0.080						
745	J810		JUNCTION	2.60	24.51	0	03:24	0.0576
	3.05	0.006						
746	J810a		JUNCTION	6.62	19.33	0	00:46	0.147
	0.448	-0.246						
747	J811		JUNCTION	4.01	28.91	0	03:26	0.0888
	3.85	0.003						
748	J900		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
749	J901		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
750	J902		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
751	J903		JUNCTION	2.93	2.93	0	00:45	0.0649
	0.0649	-0.638						
752	J904		JUNCTION	22.82	23.12	0	02:45	1.85
	1.92	0.024						
753	J-DAB-2		JUNCTION	0.00	48.66	0	02:18	0
	6.87	0.000						
754	J-PDM-5		JUNCTION	0.00	21.31	0	01:25	0
	1.37	-0.067						
755	OF812		OUTFALL	0.00	28.90	0	03:28	0
	3.85	0.000						
756	OF-DAB-2		OUTFALL	0.00	48.66	0	02:18	0
	6.87	0.000						
757	OF-J-725-2		OUTFALL	0.00	28.49	0	01:17	0
	1.55	0.000						
758	OF-J-725B-2		OUTFALL	22.55	48.29	0	02:30	1.66
	3.53	0.000						
759	OF-J-792		OUTFALL	9.09	30.47	0	02:50	0.805
	2.72	0.000						
760	OF-VL		OUTFALL	0.00	47.70	0	02:28	0
	3.92	0.000						
761	OF-VL-1		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						

762	OF-VL-3 0	0.000 gal	OUTFALL	0.00	0.00	0	00:00	0
763	DAB-1 2.09	0.007	STORAGE	5.59	53.61	0	00:46	0.124
764	DAB-2 8.72	-0.127	STORAGE	11.22	119.20	0	01:18	0.249
765	DAB-3 1.08	-0.005	STORAGE	20.77	47.02	0	00:45	0.46
766	PDM-1 0.427	-0.003	STORAGE	19.26	19.26	0	00:45	0.427
767	PDM-2 1.11	0.038	STORAGE	0.00	48.37	0	00:46	0
768	PDM-3 3.18	-0.388	STORAGE	12.56	81.57	0	00:48	0.278
769	PDM-4 1.77	0.011	STORAGE	8.51	74.61	0	00:47	0.188
770	PDM-5 1.76	-0.012	STORAGE	9.76	74.46	0	00:47	0.216
771	VL-1 3.09	-0.086	STORAGE	4.53	132.16	0	00:48	0.1
772	VL-2 3.92	0.011	STORAGE	21.32	154.99	0	00:49	0.472
773	VL-3 1.97	-0.008	STORAGE	5.50	84.16	0	00:47	0.122
774	VL-4 1.29	0.138	STORAGE	9.44	55.36	0	00:47	0.209

775  
776  
777 \*\*\*\*\*  
778 Node Surcharge Summary  
779 \*\*\*\*\*

781 Surcharging occurs when water rises above the top of the highest conduit.

782 -----

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J109	JUNCTION	0.08	1.500	0.000
J208	JUNCTION	0.05	0.603	0.897

791 \*\*\*\*\*  
792 Node Flooding Summary  
793 \*\*\*\*\*

795 Flooding refers to all water that overflows a node, whether it ponds or not.

796 -----

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Poned Depth Feet
J109	0.01	1.90	0 00:46	0.000	0.000

805 \*\*\*\*\*  
806 Storage Volume Summary  
807 \*\*\*\*\*

808  
809 -----

Average Max Volume	Avg Maximum Pcmt	Evap Pcmt	Exfil Pcmt	Maximum Volume	Max Pcmt	Time of
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812	Storage Unit hr:min	CFS	Occurrence		Outflow		1000 ft3	Full	days
			1000 ft3	Full	Loss	Loss			
813									
814	DAB-1 02:34	12.56	28.213	11	0	54	142.765	54	0
815	DAB-2 02:17	57.27	61.541	14	0	21	268.811	59	0
816	DAB-3 01:44	9.35	17.694	13	0	54	76.161	58	0
817	PDM-1 02:35	1.99	12.790	17	0	100	41.331	55	0
818	PDM-2 02:38	5.01	33.846	19	0	100	104.174	58	0
819	PDM-3 02:51	11.10	121.648	25	0	100	294.601	60	0
820	PDM-4 01:17	31.63	7.191	7	0	13	73.629	69	0
821	PDM-5 01:25	25.93	9.463	6	0	22	89.596	55	0
822	VL-1 02:41	13.21	112.426	22	0	100	308.284	60	0
823	VL-2 01:31	48.64	24.959	7	0	19	212.505	62	0
824	VL-3 02:40	8.71	64.981	20	0	100	188.530	58	0
825	VL-4 02:28	8.54	19.124	11	0	45	100.210	59	0

826  
827  
828 \*\*\*\*\*  
829 Outfall Loading Summary  
830 \*\*\*\*\*  
831

832	Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
833	OF812	99.88	6.28	28.90	3.853
834	OF-DAB-2	61.30	17.72	48.66	6.875
835	OF-J-725-2	23.82	12.76	28.49	1.551
836	OF-J-725B-2	53.93	11.14	48.29	3.528
837	OF-J-792	69.61	6.22	30.47	2.723
838	OF-VL	98.13	6.31	47.70	3.921
839	OF-VL-1	0.00	0.00	0.00	0.000
840	OF-VL-3	0.00	0.00	0.00	0.000
841	System	50.83	60.44	206.87	22.451

842  
843  
844 \*\*\*\*\*  
845 Link Flow Summary  
846 \*\*\*\*\*  
847

853	Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
854	C100	CONDUIT	11.23	0 00:45	5.42	0.24	0.44
855	C1000	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
856	C1001	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
857	C1002	CONDUIT	0.00	0 00:00	0.00	0.00	0.03

862	C1003	CONDUIT	6.69	0	00:53	1.39	0.01	0.13
863	C1004	CONDUIT	45.98	0	01:05	5.59	0.05	0.22
864	C1005	CONDUIT	49.38	0	02:16	8.59	0.05	0.20
865	C1007	CHANNEL	47.70	0	02:28	>50.00	0.00	0.03
866	C101	CONDUIT	24.95	0	00:47	8.27	0.56	0.59
867	C102	CONDUIT	8.39	0	00:45	6.56	0.30	0.45
868	C103	CONDUIT	44.94	0	00:47	10.79	0.54	0.64
869	C104	CONDUIT	11.29	0	00:45	7.85	0.41	0.62
870	C105	CONDUIT	72.61	0	00:48	16.77	0.17	0.52
871	C106	CONDUIT	13.13	0	00:45	6.69	0.25	0.42
872	C107	CONDUIT	26.20	0	00:46	7.20	0.51	0.75
873	C108	CONDUIT	16.10	0	00:45	5.67	0.67	0.88
874	C109	CONDUIT	41.18	0	00:46	6.65	1.00	0.83
875	C110	CONDUIT	49.13	0	00:48	9.29	0.67	0.70
876	C111	CONDUIT	55.63	0	00:48	7.92	0.64	0.72
877	C2	CONDUIT	48.66	0	02:18	10.14	0.60	0.64
878	C200	CONDUIT	0.00	0	00:00	0.00	0.00	0.13
879	C2000	CONDUIT	15.01	0	00:46	7.95	0.46	0.41
880	C2001	CONDUIT	26.93	0	00:46	5.51	0.27	0.66
881	C2002	CONDUIT	27.45	0	01:35	4.11	0.27	0.48
882	C2003	CONDUIT	56.43	0	00:48	5.62	0.42	0.76
883	C2004	CONDUIT	28.49	0	01:17	6.87	0.81	0.79
884	C202	CONDUIT	25.39	0	00:45	12.10	0.38	0.44
885	C203	CONDUIT	0.00	0	00:00	0.00	0.00	0.03
886	C205	CONDUIT	34.90	0	00:47	10.92	0.67	0.62
887	C206	CONDUIT	34.88	0	00:47	9.46	0.56	0.72
888	C207	CONDUIT	47.21	0	00:47	8.75	0.63	0.80
889	C209	CONDUIT	46.64	0	00:47	7.40	1.03	0.84
890	C210	CONDUIT	54.28	0	00:49	9.19	0.75	0.78
891	C211	CONDUIT	67.18	0	00:50	8.83	0.76	0.74
892	C212	CONDUIT	76.85	0	00:51	10.10	0.73	0.74
893	C213	CONDUIT	89.91	0	00:51	11.26	0.72	0.77
894	C214	CONDUIT	101.95	0	00:50	10.40	0.56	0.60
895	C215	CONDUIT	6.65	0	00:45	4.40	0.38	0.49
896	C216	CONDUIT	13.60	0	00:47	7.75	0.54	0.55
897	C217	CONDUIT	24.32	0	00:48	9.51	0.87	0.76
898	C218	CONDUIT	136.47	0	00:49	5.92	0.34	0.91
899	C300	CONDUIT	7.74	0	00:45	10.96	0.81	0.84
900	C301	CONDUIT	17.11	0	00:46	9.90	0.53	0.54
901	C302	CONDUIT	25.71	0	00:46	8.40	0.52	0.60
902	C303	CONDUIT	43.50	0	00:47	11.41	0.74	0.73
903	C304	CONDUIT	59.33	0	00:47	13.79	0.72	0.59
904	C305	CONDUIT	79.08	0	00:47	9.34	0.26	0.56
905	C400	CONDUIT	7.36	0	00:45	5.73	0.28	0.46
906	C401	CONDUIT	7.35	0	00:45	5.48	0.31	0.47
907	C402	CONDUIT	27.70	0	00:47	9.45	0.67	0.74
908	C500	CONDUIT	14.47	0	00:46	7.88	0.59	0.57
909	C501	CONDUIT	25.39	0	00:47	12.07	0.39	0.44
910	C502	CONDUIT	0.00	0	00:00	0.00	0.00	0.24
911	C503	CONDUIT	42.39	0	00:47	10.78	0.46	0.54
912	C504	CONDUIT	54.47	0	00:47	13.35	0.58	0.56
913	C505	CONDUIT	65.61	0	00:48	8.38	0.78	0.86
914	C507	CONDUIT	20.20	0	00:46	11.70	0.55	0.54
915	C508	CONDUIT	33.27	0	00:46	11.70	0.82	0.85
916	C509	CONDUIT	41.30	0	00:47	14.52	0.73	0.56
917	C510	CONDUIT	49.09	0	00:47	9.23	0.36	0.53
918	C600	CONDUIT	15.59	0	00:46	10.62	0.44	0.47
919	C601	CONDUIT	10.02	0	00:45	9.22	0.29	0.38
920	C602	CONDUIT	15.34	0	00:46	10.51	0.44	0.47
921	C603	CONDUIT	24.11	0	00:46	8.37	0.23	0.60
922	C604	CONDUIT	24.26	0	00:46	12.29	0.68	0.71
923	C605	CONDUIT	0.00	0	00:00	0.00	0.00	0.40
924	C606	CONDUIT	12.64	0	00:45	5.10	0.93	0.74
925	C607	CONDUIT	21.47	0	00:47	12.87	0.53	0.52
926	C608	CONDUIT	39.85	0	00:48	12.99	0.65	0.60
927	C609	CONDUIT	58.58	0	00:48	16.41	0.45	0.50

928	C610	CONDUIT	70.49	0	00:49	14.01	0.48	0.57
929	C611	CONDUIT	0.00	0	00:00	0.00	0.00	0.21
930	C612	CONDUIT	10.87	0	00:46	8.22	0.38	0.71
931	C701	CONDUIT	28.75	0	01:31	7.66	0.78	0.72
932	C702	CONDUIT	45.61	0	01:32	8.23	0.78	0.73
933	C703	CONDUIT	57.71	0	01:32	13.90	0.70	0.81
934	C705	CONDUIT	34.88	0	01:16	6.70	0.70	0.70
935	C706	CONDUIT	60.40	0	01:18	8.12	0.70	0.81
936	C707	CONDUIT	18.14	0	00:46	5.14	0.50	0.50
937	C708	CONDUIT	17.77	0	00:48	3.75	0.35	0.77
938	C709	CONDUIT	22.66	0	00:46	8.89	0.68	0.52
939	C710	CONDUIT	37.33	0	01:15	9.81	0.11	0.47
940	C800	CONDUIT	0.00	0	00:00	0.00	0.00	0.06
941	C801	CONDUIT	4.42	0	03:04	1.33	0.05	0.29
942	C802	CONDUIT	18.33	0	03:32	2.24	0.18	0.57
943	C803	CONDUIT	32.41	0	03:37	3.62	0.40	0.60
944	C803a	CONDUIT	32.40	0	03:38	11.15	0.58	0.57
945	C804	CONDUIT	6.91	0	03:01	1.91	0.07	0.29
946	C805	CONDUIT	19.76	0	03:02	5.38	0.13	0.30
947	C806	CONDUIT	18.96	0	03:10	3.23	0.02	0.20
948	C807	CONDUIT	24.61	0	03:20	2.70	0.07	0.28
949	C808a	CONDUIT	13.01	0	00:46	3.47	0.96	0.71
950	C809	CONDUIT	24.51	0	03:24	3.72	0.07	0.21
951	C810	CONDUIT	24.50	0	03:26	5.85	0.02	0.15
952	C810a	CONDUIT	18.96	0	00:47	6.52	0.76	0.78
953	C811	CONDUIT	28.90	0	03:28	5.00	0.04	0.12
954	C900	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
955	C901	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
956	C902	CONDUIT	0.00	0	00:00	0.00	0.00	0.03
957	C903	CONDUIT	2.06	0	00:54	2.10	0.00	0.08
958	C904	CONDUIT	22.55	0	02:47	8.32	0.03	0.15
959	C-DAB-1	CONDUIT	6.21	0	03:12	6.48	1.11	0.95
960	C-DAB-2	CONDUIT	48.66	0	02:18	8.67	1.23	0.90
961	C-DAB-3	CONDUIT	6.26	0	01:44	5.28	1.49	0.93
962	C-PDM-4	CONDUIT	25.47	0	01:08	8.11	1.30	1.00
963	C-PDM-5	CONDUIT	21.31	0	01:25	7.83	0.96	0.82
964	C-PDM-5a	CONDUIT	21.32	0	01:26	12.14	0.67	0.58
965	C-VL-2	CONDUIT	40.52	0	01:31	8.53	1.23	0.93
966	C-VL-4	CONDUIT	4.49	0	02:39	7.29	1.26	0.80
967	W1	WEIR	0.00	0	00:00			0.00
968	W2	WEIR	0.00	0	00:00			0.00
969	W3	WEIR	0.00	0	00:00			0.00
970	W4	WEIR	0.00	0	00:00			0.00
971	W5	WEIR	0.00	0	00:00			0.00
972	W-DAB-2	WEIR	0.00	0	00:00			0.00
973	W-PDM-2	WEIR	0.00	0	00:00			0.00
974	W-PDM-3	WEIR	0.00	0	00:00			0.00
975	W-PDM-4	WEIR	3.04	0	01:17			0.23
976	W-VL-3	WEIR	0.00	0	00:00			0.00

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Flow Classification Summary  
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Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----									
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl	
988	C100	1.00	0.79	0.02	0.00	0.05	0.14	0.00	0.00	1.00	0.00
989	C1000	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
990	C1001	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
991	C1002	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
992	C1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
993	C1004	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.85	0.00





1060	C612	1.00	0.76	0.00	0.00	0.22	0.02	0.00	0.00	0.98	0.00
1061	C701	1.00	0.00	0.00	0.00	0.00	0.05	0.00	0.94	0.02	0.00
1062	C702	1.00	0.56	0.05	0.00	0.13	0.09	0.00	0.16	0.78	0.00
1063	C703	1.00	0.00	0.00	0.00	0.24	0.76	0.00	0.00	0.55	0.00
1064	C705	1.00	0.00	0.00	0.00	0.16	0.02	0.00	0.82	0.15	0.00
1065	C706	1.00	0.50	0.11	0.00	0.31	0.00	0.00	0.08	0.77	0.00
1066	C707	1.00	0.00	0.66	0.00	0.33	0.01	0.00	0.00	0.96	0.00
1067	C708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1068	C709	1.00	0.62	0.15	0.00	0.09	0.14	0.00	0.00	0.89	0.00
1069	C710	1.00	0.58	0.04	0.00	0.34	0.04	0.00	0.00	0.97	0.00
1070	C800	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1071	C801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1072	C802	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1073	C803	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1074	C803a	1.00	0.00	0.00	0.00	0.33	0.67	0.00	0.00	0.74	0.00
1075	C804	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1076	C805	1.00	0.00	0.00	0.00	0.55	0.45	0.00	0.00	0.55	0.00
1077	C806	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.97	0.00
1078	C807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91	0.00
1079	C808a	1.00	0.00	0.72	0.00	0.28	0.00	0.00	0.00	0.89	0.00
1080	C809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1081	C810	1.00	0.00	0.00	0.00	0.42	0.58	0.00	0.00	0.40	0.00
1082	C810a	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.97	0.00
1083	C811	1.00	0.00	0.00	0.00	0.56	0.44	0.00	0.00	0.00	0.00
1084	C900	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1085	C901	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1086	C902	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1087	C903	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1088	C904	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.01	0.00
1089	C-DAB-1	1.00	0.00	0.58	0.00	0.20	0.21	0.00	0.00	0.68	0.00
1090	C-DAB-2	1.00	0.00	0.38	0.00	0.25	0.37	0.00	0.00	0.40	0.00
1091	C-DAB-3	1.00	0.01	0.73	0.00	0.16	0.09	0.00	0.00	0.74	0.00
1092	C-PDM-4	1.00	0.00	0.76	0.00	0.15	0.09	0.00	0.00	0.80	0.00
1093	C-PDM-5	1.00	0.66	0.08	0.00	0.04	0.21	0.00	0.00	0.79	0.00
1094	C-PDM-5a	1.00	0.01	0.66	0.00	0.11	0.22	0.00	0.00	0.87	0.00
1095	C-VL-2	1.00	0.70	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00
1096	C-VL-4	1.00	0.00	0.59	0.00	0.04	0.38	0.00	0.00	0.65	0.00

\*\*\*\*\*  
Conduit Surcharge Summary  
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-----						
Conduit	Hours Full			Hours		
	Both Ends	Upstream	Dnstream	Above Full Normal Flow	Capacity Limited	
-----						
C103	0.01	0.01	0.16	0.01	0.01	
C104	0.01	0.01	0.16	0.01	0.01	
C107	0.01	0.01	0.08	0.01	0.01	
C108	0.01	0.01	0.20	0.01	0.01	
C109	0.01	0.08	0.01	0.01	0.01	
C2001	0.01	0.01	3.85	0.01	0.01	
C2003	0.01	0.01	1.42	0.01	0.01	
C207	0.01	0.01	0.05	0.01	0.01	
C209	0.01	0.14	0.01	0.03	0.01	
C218	0.01	0.01	0.50	0.01	0.01	
C300	0.01	0.01	0.16	0.01	0.01	
C305	0.01	0.01	2.18	0.01	0.01	
C402	0.01	0.01	3.37	0.01	0.01	
C505	0.01	0.01	1.56	0.01	0.01	
C508	0.01	0.01	0.03	0.01	0.01	
C603	0.01	0.01	5.53	0.01	0.01	
C604	0.01	0.01	22.95	0.01	0.01	
C612	0.01	0.01	2.02	0.01	0.01	

1126	C703	0.01	0.01	3.78	0.01	0.01
1127	C706	0.01	0.01	2.13	0.01	0.01
1128	C810a	0.01	0.01	3.37	0.01	0.01
1129	C-DAB-1	0.01	4.74	0.01	2.55	0.01
1130	C-DAB-2	0.01	4.07	0.01	3.26	0.01
1131	C-DAB-3	0.01	2.56	0.01	2.42	0.01
1132	C-PDM-4	0.61	2.02	0.61	1.60	0.61
1133	C-PDM-5	0.01	1.56	0.01	0.01	0.01
1134	C-VL-2	0.01	2.24	0.01	2.46	0.01
1135	C-VL-4	0.01	5.87	0.01	4.23	0.01

1136

1137

1138 Analysis begun on: Thu Oct 18 08:34:37 2018

1139 Analysis ended on: Thu Oct 18 08:34:39 2018

1140 Total elapsed time: 00:00:02



## **APPENDIX D – PROPOSED SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. SWMM 10 Year Output Report - No Offsite Flows
4. SWMM 25 Year Output Report - No Offsite Flows
5. **SWMM 25 Year Output Report - With Offsite Flows**
6. SWMM 100 Year Output Report - No Offsite Flows

City of Gonzales Drainage Master Plan

\*\*\*\*\*  
 Element Count  
 \*\*\*\*\*

Number of rain gages ..... 0  
 Number of subcatchments ... 0  
 Number of nodes ..... 122  
 Number of links ..... 119  
 Number of pollutants ..... 0  
 Number of land uses ..... 0

\*\*\*\*\*  
 Node Summary  
 \*\*\*\*\*

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J100	JUNCTION	235.50	4.50	0.0	Yes
J1000	JUNCTION	261.00	4.00	0.0	Yes
J1001	JUNCTION	239.00	4.00	0.0	Yes
J1002	JUNCTION	207.00	4.00	0.0	
J1003	JUNCTION	169.00	4.00	0.0	Yes
J1004	JUNCTION	147.00	4.00	0.0	Yes
J1005	JUNCTION	140.00	4.00	0.0	Yes
J1006	JUNCTION	121.00	16.72	100.0	
J101	JUNCTION	220.50	4.50	0.0	Yes
J102	JUNCTION	228.00	4.00	0.0	Yes
J103	JUNCTION	210.00	5.00	100.0	Yes
J104	JUNCTION	203.00	4.00	100.0	Yes
J105	JUNCTION	184.00	6.00	0.0	Yes
J106	JUNCTION	225.50	4.50	0.0	Yes
J107	JUNCTION	202.50	4.50	100.0	Yes
J108	JUNCTION	196.00	4.00	0.0	Yes
J109	JUNCTION	192.50	4.50	100.0	
J110	JUNCTION	190.00	5.00	0.0	Yes
J111	JUNCTION	181.00	5.00	100.0	Yes
J200	JUNCTION	255.50	4.50	0.0	Yes
J2000	JUNCTION	171.50	4.50	0.0	Yes
J2001	JUNCTION	166.00	4.00	0.0	Yes
J2002	JUNCTION	156.00	4.00	0.0	
J2003	JUNCTION	148.00	5.00	0.0	Yes
J2004	JUNCTION	144.00	6.00	0.0	
J201	JUNCTION	240.50	4.50	100.0	Yes
J203	JUNCTION	235.00	4.00	0.0	
J204	JUNCTION	221.50	5.50	100.0	Yes
J206	JUNCTION	205.50	4.50	100.0	
J207	JUNCTION	202.00	6.00	0.0	Yes
J208	JUNCTION	195.00	5.00	0.0	
J210	JUNCTION	193.00	5.00	100.0	Yes
J211	JUNCTION	182.50	5.50	0.0	Yes
J212	JUNCTION	176.50	5.50	0.0	Yes
J213	JUNCTION	168.50	5.50	0.0	Yes
J214	JUNCTION	160.50	6.50	0.0	Yes
J215	JUNCTION	183.00	4.00	0.0	Yes
J216	JUNCTION	178.00	4.00	100.0	Yes
J217	JUNCTION	168.00	4.00	100.0	Yes
J218	JUNCTION	154.00	9.00	100.0	Yes
J300	JUNCTION	279.00	4.00	0.0	Yes
J301	JUNCTION	223.00	4.00	0.0	Yes
J302	JUNCTION	210.50	4.50	0.0	Yes

67	J303	JUNCTION	191.50	4.50	0.0	Yes
68	J304	JUNCTION	175.00	5.00	100.0	Yes
69	J305	JUNCTION	163.00	4.00	0.0	Yes
70	J400	JUNCTION	163.00	4.00	100.0	Yes
71	J401	JUNCTION	162.00	4.00	0.0	Yes
72	J402	JUNCTION	152.50	4.50	100.0	Yes
73	J500	JUNCTION	281.00	4.00	0.0	Yes
74	J501	JUNCTION	270.50	4.50	0.0	Yes
75	J502	JUNCTION	246.00	4.00	0.0	
76	J503	JUNCTION	235.00	5.00	100.0	Yes
77	J504	JUNCTION	217.00	5.00	100.0	Yes
78	J505	JUNCTION	200.00	5.00	100.0	Yes
79	J507	JUNCTION	251.00	4.00	0.0	Yes
80	J508	JUNCTION	216.00	6.00	0.0	Yes
81	J509	JUNCTION	194.00	6.00	0.0	Yes
82	J510	JUNCTION	172.50	4.50	0.0	Yes
83	J600	JUNCTION	297.00	4.00	100.0	Yes
84	J601	JUNCTION	293.00	4.00	0.0	Yes
85	J602	JUNCTION	280.00	4.00	0.0	Yes
86	J603	JUNCTION	259.50	5.50	0.0	Yes
87	J604	JUNCTION	264.00	4.00	100.0	Yes
88	J605	JUNCTION	258.00	2.00	0.0	
89	J606	JUNCTION	304.00	4.00	0.0	Yes
90	J607	JUNCTION	303.00	7.00	0.0	Yes
91	J608	JUNCTION	255.50	4.50	0.0	Yes
92	J609	JUNCTION	211.00	5.00	100.0	Yes
93	J610	JUNCTION	190.50	5.50	100.0	Yes
94	J611	JUNCTION	176.00	4.00	0.0	
95	J612	JUNCTION	154.00	6.00	100.0	Yes
96	J701	JUNCTION	194.50	4.50	0.0	Yes
97	J702	JUNCTION	180.00	5.00	0.0	Yes
98	J703	JUNCTION	176.00	5.00	0.0	Yes
99	J705	JUNCTION	173.00	5.00	0.0	Yes
100	J706	JUNCTION	162.50	5.50	0.0	Yes
101	J707	JUNCTION	160.00	5.00	0.0	Yes
102	J708	JUNCTION	158.00	6.00	0.0	
103	J709	JUNCTION	170.00	7.00	0.0	Yes
104	J710	JUNCTION	165.00	8.00	0.0	Yes
105	J800	JUNCTION	278.00	4.00	0.0	Yes
106	J801	JUNCTION	222.00	2.00	0.0	Yes
107	J802	JUNCTION	217.00	2.00	0.0	Yes
108	J803	JUNCTION	213.00	2.00	0.0	Yes
109	J803a	JUNCTION	208.50	4.50	0.0	
110	J804	JUNCTION	210.00	2.00	0.0	Yes
111	J805	JUNCTION	207.00	2.00	0.0	Yes
112	J806	JUNCTION	201.00	4.00	0.0	Yes
113	J807	JUNCTION	153.00	4.00	100.0	Yes
114	J808	JUNCTION	152.00	4.00	0.0	Yes
115	J808a	JUNCTION	149.50	4.50	0.0	Yes
116	J810	JUNCTION	151.00	4.00	0.0	Yes
117	J810a	JUNCTION	148.50	4.50	0.0	Yes
118	J811	JUNCTION	143.00	5.00	0.0	Yes
119	J900	JUNCTION	356.00	2.00	0.0	Yes
120	J901	JUNCTION	296.00	2.00	0.0	Yes
121	J902	JUNCTION	260.00	3.00	0.0	Yes
122	J903	JUNCTION	244.00	3.00	0.0	Yes
123	J904	JUNCTION	187.00	3.00	100.0	Yes
124	J-DAB-2	JUNCTION	159.30	5.60	0.0	
125	J-PDM-5	JUNCTION	190.70	5.30	0.0	
126	OF812	OUTFALL	140.00	5.00	0.0	
127	OF-DAB-2	OUTFALL	155.50	3.00	0.0	
128	OF-J-725-2	OUTFALL	142.00	2.50	0.0	
129	OF-J-725B-2	OUTFALL	147.65	2.00	0.0	Yes
130	OF-J-792	OUTFALL	139.77	3.00	0.0	Yes
131	OF-VL	OUTFALL	115.78	16.72	0.0	
132	OF-VL-1	OUTFALL	184.75	0.00	0.0	

133	OF-VL-3	OUTFALL	164.25	0.00	0.0	
134	DAB-1	STORAGE	157.50	4.50	0.0	Yes
135	DAB-2	STORAGE	160.00	7.00	0.0	Yes
136	DAB-3	STORAGE	155.00	6.00	0.0	Yes
137	PDM-1	STORAGE	250.00	5.00	0.0	Yes
138	PDM-2	STORAGE	253.00	5.00	0.0	
139	PDM-3	STORAGE	175.00	6.00	0.0	Yes
140	PDM-4	STORAGE	145.00	6.00	0.0	Yes
141	PDM-5	STORAGE	195.00	5.00	0.0	Yes
142	VL-1	STORAGE	179.00	6.00	0.0	Yes
143	VL-2	STORAGE	153.00	7.00	0.0	Yes
144	VL-3	STORAGE	159.00	5.50	0.0	Yes
145	VL-4	STORAGE	145.00	6.00	0.0	Yes

146  
147

148 \*\*\*\*\*  
149 Link Summary  
150 \*\*\*\*\*

151	Name	From Node	To Node	Type	Length	%Slope
	Roughness					

152

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153	C100	J100	J101	CONDUIT	1109.0	
	1.3527	0.0130				
154	C1000	J1000	J1001	CONDUIT	2024.6	
	1.0867	0.0300				
155	C1001	J1001	J1002	CONDUIT	1819.1	
	1.7594	0.0200				
156	C1002	J1002	J1003	CONDUIT	3155.7	
	1.2043	0.0200				
157	C1003	J1003	J1004	CONDUIT	1822.2	
	1.2074	0.0200				
158	C1004	J1004	J1005	CONDUIT	660.8	
	1.0595	0.0200				
159	C1005	J1005	J1006	CONDUIT	1561.5	
	1.2168	0.0200				
160	C1007	J1006	OF-VL	CONDUIT	1764.0	
	0.2959	0.0500				
161	C101	J101	J103	CONDUIT	879.0	
	1.1946	0.0130				
162	C102	J102	J103	CONDUIT	1127.0	
	1.5530	0.0130				
163	C103	J103	J105	CONDUIT	1690.7	
	1.5380	0.0130				
164	C104	J104	J105	CONDUIT	1230.0	
	1.4636	0.0130				
165	C105	J105	VL-1	CONDUIT	60.0	
	8.3624	0.0130				
166	C106	J106	J107	CONDUIT	1015.2	
	2.2662	0.0150				
167	C107	J107	J109	CONDUIT	613.1	
	1.5498	0.0130				
168	C108	J108	J109	CONDUIT	447.0	
	0.6711	0.0100				
169	C109	J109	J110	CONDUIT	654.7	
	0.3818	0.0130				
170	C110	J110	J111	CONDUIT	703.8	
	1.2078	0.0130				
171	C111	J111	VL-1	CONDUIT	200.0	
	0.7500	0.0130				
172	C2	J-DAB-2	OF-DAB-2	CONDUIT	258.0	
	1.4730	0.0130				
173	C200	J200	J201	CONDUIT	869.0	
	1.6687	0.0130				
174	C2000	J2000	J2001	CONDUIT	851.2	

175	0.6462 C2001	0.0130	J2001	DAB-3	CONDUIT	904.2
176	1.2166 C2002	0.0130	J2002	OF-J-725B-2	CONDUIT	2000.0
177	0.4175 C2003	0.0200	J2003	PDM-4	CONDUIT	448.1
178	0.6695 C2004	0.0130	J2004	OF-J-725-2	CONDUIT	274.2
179	0.7293 C202	0.0130	J201	J204	CONDUIT	683.3
180	2.7086 C203	0.0130	J203	J204	CONDUIT	806.8
181	1.4875 C205	0.0130	J204	J206	CONDUIT	947.2
182	1.6365 C206	0.0130	J206	J207	CONDUIT	153.0
183	2.2876 C207	0.0130	J207	J208	CONDUIT	507.4
184	1.2811 C209	0.0130	J208	J210	CONDUIT	431.1
185	0.4639 C210	0.0130	J210	J211	CONDUIT	883.1
186	1.1891 C211	0.0130	J211	J212	CONDUIT	785.6
187	0.7637 C212	0.0130	J212	J213	CONDUIT	739.1
188	1.0825 C213	0.0130	J213	J214	CONDUIT	517.0
189	1.5477 C214	0.0130	J214	J218	CONDUIT	768.5
190	0.8458 C215	0.0130	J215	J216	CONDUIT	837.1
191	0.5973 C216	0.0130	J216	J217	CONDUIT	775.4
192	1.2252 C217	0.0130	J217	J218	CONDUIT	788.1
193	1.5228 C218	0.0130	J218	VL-2	CONDUIT	300.0
194	0.3333 C300	0.0130	J300	J301	CONDUIT	787.9
195	7.1255 C301	0.0130	J301	J302	CONDUIT	596.4
196	2.0125 C302	0.0130	J302	J303	CONDUIT	1308.9
197	1.4518 C303	0.0130	J303	J304	CONDUIT	788.0
198	2.0310 C304	0.0130	J304	J305	CONDUIT	779.7
199	1.5392 C305	0.0130	J305	VL-3	CONDUIT	500.0
200	0.8000 C400	0.0130	J400	J402	CONDUIT	762.8
201	1.3111 C401	0.0130	J401	J402	CONDUIT	826.8
202	1.0887 C402	0.0130	J402	VL-4	CONDUIT	737.8
203	1.0166 C500	0.0130	J500	J501	CONDUIT	842.7
204	1.1868 C501	0.0130	J501	J503	CONDUIT	1419.1
205	2.4670 C502	0.0130	J502	J503	CONDUIT	697.7
206	1.5051 C503	0.0130	J503	J504	CONDUIT	924.3
207	1.9477 C504	0.0130	J504	J505	CONDUIT	850.1

208	2.0001 C505	0.0130	J505	PDM-5	CONDUIT	584.6
209	0.8553 C507	0.0130	J507	J508	CONDUIT	1308.9
210	2.6367 C508	0.0130	J508	J509	CONDUIT	691.8
211	3.1818 C509	0.0130	J509	J510	CONDUIT	1121.5
212	1.9173 C510	0.0130	J510	J2003	CONDUIT	1111.5
213	2.2048 C600	0.0130	J600	J604	CONDUIT	1355.0
214	2.3992 C601	0.0130	J601	J602	CONDUIT	529.0
215	2.3634 C602	0.0130	J602	J603	CONDUIT	823.1
216	2.4305 C603	0.0130	J603	PDM-2	CONDUIT	495.5
217	1.3119 C604	0.0130	J604	PDM-2	CONDUIT	442.3
218	2.4880 C605	0.0130	J605	J609	CONDUIT	1633.5
219	2.8784 C606	0.0100	J606	J607	CONDUIT	276.4
220	0.3618 C607	0.0130	J607	J608	CONDUIT	1451.3
221	3.2402 C608	0.0130	J608	J609	CONDUIT	1974.4
222	2.2291 C609	0.0130	J609	J610	CONDUIT	534.4
223	3.7454 C610	0.0130	J610	PDM-3	CONDUIT	699.2
224	2.1457 C611	0.0130	J611	J612	CONDUIT	1209.8
225	1.8187 C612	0.0130	J612	PDM-4	CONDUIT	551.1
226	1.6333 C701	0.0130	J701	J702	CONDUIT	1719.8
227	0.8141 C702	0.0130	J702	J703	CONDUIT	451.9
228	0.7745 C703	0.0130	J703	DAB-2	CONDUIT	1043.9
229	1.5330 C705	0.0130	J705	J706	CONDUIT	1799.5
230	0.5557 C706	0.0130	J706	DAB-2	CONDUIT	465.0
231	0.4301 C707	0.0100	J707	J708	CONDUIT	674.4
232	0.2966 C708	0.0130	J708	DAB-1	CONDUIT	508.8
233	0.0983 C709	0.0130	J709	J710	CONDUIT	758.1
234	0.6596 C710	0.0130	J710	DAB-1	CONDUIT	559.0
235	1.3418 C800	0.0130	J800	J806	CONDUIT	3618.0
236	2.1287 C801	0.0200	J801	J802	CONDUIT	1607.5
237	0.3110 C802	0.0200	J802	J803	CONDUIT	981.0
238	0.4078 C803	0.0200	J803	J803a	CONDUIT	959.2
239	0.2606 C803a	0.0200	J803a	J703	CONDUIT	1754.7
240	1.8524 C804	0.0130	J804	J805	CONDUIT	829.0



241	0.3619	0.0200						
	C805		J805	J806	CONDUIT		642.8	
242	0.9334	0.0200						
	C806		J806	J807	CONDUIT		2967.6	
243	1.6177	0.0200						
	C807		J807	J808	CONDUIT		1107.1	
244	0.0903	0.0130						
	C808a		J808a	J810a	CONDUIT		923.6	
245	0.1083	0.0130						
	C809		J808	J810	CONDUIT		927.5	
246	0.1078	0.0130						
	C810		J810	J811	CONDUIT		988.9	
247	0.8090	0.0130						
	C810a		J810a	VL-4	CONDUIT		940.5	
248	0.3721	0.0130						
	C811		J811	OF812	CONDUIT		582.2	
249	0.5153	0.0130						
	C900		J900	J901	CONDUIT		5040.8	
250	1.1904	0.0200						
	C901		J901	J902	CONDUIT		1794.8	
251	2.0062	0.0200						
	C902		J902	J903	CONDUIT		883.3	
252	1.8117	0.0200						
	C903		J903	J904	CONDUIT		3989.6	
253	1.4289	0.0200						
	C904		J904	OF-J-792	CONDUIT		1032.8	
254	4.5779	0.0200						
	C-DAB-1		DAB-1	J807	CONDUIT		500.0	
255	0.9000	0.0130						
	C-DAB-2		DAB-2	J-DAB-2	CONDUIT		125.0	
256	0.5600	0.0130						
	C-DAB-3		DAB-3	J2002	CONDUIT		200.0	
257	0.2500	0.0100						
	C-PDM-4		PDM-4	J2004	CONDUIT		133.0	
258	0.7519	0.0130						
	C-PDM-5		PDM-5	J-PDM-5	CONDUIT		450.0	
259	0.9556	0.0130						
	C-PDM-5a		J-PDM-5	J2002	CONDUIT		1732.0	
260	2.0039	0.0130						
	C-VL-2		VL-2	J1004	CONDUIT		850.0	
261	0.6471	0.0130						
	C-VL-4		VL-4	J811	CONDUIT		200.0	
262	1.0001	0.0130						
	W1		VL-1	OF-VL-1	WEIR			
263			VL-2	J1004	WEIR			
264			PDM-1	J903	WEIR			
265			DAB-3	J2002	WEIR			
266			PDM-5	J-PDM-5	WEIR			
267			DAB-2	J-DAB-2	WEIR			
268			PDM-2	J605	WEIR			
269			PDM-3	J611	WEIR			
270			PDM-4	J2004	WEIR			
271			VL-3	OF-VL-3	WEIR			

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Cross Section Summary  
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277	Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
278								
279								
280	C100	CIRCULAR	2.50	4.91	0.63	2.50	1	47.71
281	C1000	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	110.19
282	C1001	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	1153.17
283	C1002	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	954.06
284	C1003	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	955.32

285	C1004	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	894.87
286	C1005	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	959.03
287	C1007	XS_701	16.72	4292.45	10.30	410.01	1	32860.58
288	C101	CIRCULAR	2.50	4.91	0.63	2.50	1	44.83
289	C102	CIRCULAR	2.00	3.14	0.50	2.00	1	28.19
290	C103	CIRCULAR	3.00	7.07	0.75	3.00	1	82.72
291	C104	CIRCULAR	2.00	3.14	0.50	2.00	1	27.37
292	C105	CIRCULAR	4.00	12.57	1.00	4.00	1	415.39
293	C106	CIRCULAR	2.50	4.91	0.63	2.50	1	53.51
294	C107	CIRCULAR	2.50	4.91	0.63	2.50	1	51.06
295	C108	CIRCULAR	2.00	3.14	0.50	2.00	1	24.09
296	C109	CIRCULAR	3.00	7.07	0.75	3.00	1	41.22
297	C110	CIRCULAR	3.00	7.07	0.75	3.00	1	73.30
298	C111	CIRCULAR	3.50	9.62	0.88	3.50	1	87.13
299	C2	CIRCULAR	3.00	7.07	0.75	3.00	1	80.95
300	C200	CIRCULAR	2.50	4.91	0.63	2.50	1	52.99
301	C2000	CIRCULAR	2.50	4.91	0.63	2.50	1	32.97
302	C2001	RECT_CLOSED	2.00	10.00	0.71	5.00	1	100.75
303	C2002	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	102.45
304	C2003	RECT_CLOSED	3.00	15.00	0.94	5.00	1	134.39
305	C2004	CIRCULAR	2.50	4.91	0.63	2.50	1	35.03
306	C202	CIRCULAR	2.50	4.91	0.63	2.50	1	67.51
307	C203	CIRCULAR	2.00	3.14	0.50	2.00	1	27.59
308	C205	CIRCULAR	2.50	4.91	0.63	2.50	1	52.47
309	C206	CIRCULAR	2.50	4.91	0.63	2.50	1	62.04
310	C207	CIRCULAR	3.00	7.07	0.75	3.00	1	75.49
311	C209	CIRCULAR	3.00	7.07	0.75	3.00	1	45.43
312	C210	CIRCULAR	3.00	7.07	0.75	3.00	1	72.73
313	C211	CIRCULAR	3.50	9.62	0.88	3.50	1	87.92
314	C212	CIRCULAR	3.50	9.62	0.88	3.50	1	104.68
315	C213	CIRCULAR	3.50	9.62	0.88	3.50	1	125.17
316	C214	CIRCULAR	4.50	15.90	1.13	4.50	1	180.85
317	C215	CIRCULAR	2.00	3.14	0.50	2.00	1	17.48
318	C216	CIRCULAR	2.00	3.14	0.50	2.00	1	25.04
319	C217	CIRCULAR	2.00	3.14	0.50	2.00	1	27.92
320	C218	RECT_CLOSED	4.50	45.00	1.55	10.00	1	398.05
321	C300	CIRCULAR	1.00	0.79	0.25	1.00	1	9.51
322	C301	CIRCULAR	2.00	3.14	0.50	2.00	1	32.09
323	C302	CIRCULAR	2.50	4.91	0.63	2.50	1	49.42
324	C303	CIRCULAR	2.50	4.91	0.63	2.50	1	58.45
325	C304	CIRCULAR	3.00	7.07	0.75	3.00	1	82.75
326	C305	RECT_CLOSED	3.00	27.00	1.13	9.00	1	298.60
327	C400	CIRCULAR	2.00	3.14	0.50	2.00	1	25.90
328	C401	CIRCULAR	2.00	3.14	0.50	2.00	1	23.60
329	C402	CIRCULAR	2.50	4.91	0.63	2.50	1	41.36
330	C500	CIRCULAR	2.00	3.14	0.50	2.00	1	24.64
331	C501	CIRCULAR	2.50	4.91	0.63	2.50	1	64.42
332	C502	CIRCULAR	2.00	3.14	0.50	2.00	1	27.75
333	C503	CIRCULAR	3.00	7.07	0.75	3.00	1	93.08
334	C504	CIRCULAR	3.00	7.07	0.75	3.00	1	94.33
335	C505	RECT_CLOSED	2.00	10.00	0.71	5.00	1	84.47
336	C507	CIRCULAR	2.00	3.14	0.50	2.00	1	36.73
337	C508	CIRCULAR	2.00	3.14	0.50	2.00	1	40.35
338	C509	CIRCULAR	2.50	4.91	0.63	2.50	1	56.80
339	C510	RECT_CLOSED	2.00	10.00	0.71	5.00	1	135.62
340	C600	CIRCULAR	2.00	3.14	0.50	2.00	1	35.04
341	C601	CIRCULAR	2.00	3.14	0.50	2.00	1	34.78
342	C602	CIRCULAR	2.00	3.14	0.50	2.00	1	35.27
343	C603	RECT_CLOSED	2.00	10.00	0.71	5.00	1	104.62
344	C604	CIRCULAR	2.00	3.14	0.50	2.00	1	35.68
345	C605	CIRCULAR	2.00	3.14	0.50	2.00	1	49.90
346	C606	CIRCULAR	2.00	3.14	0.50	2.00	1	13.61
347	C607	CIRCULAR	2.00	3.14	0.50	2.00	1	40.72
348	C608	CIRCULAR	2.50	4.91	0.63	2.50	1	61.24
349	C609	CIRCULAR	3.00	7.07	0.75	3.00	1	129.08
350	C610	CIRCULAR	3.50	9.62	0.88	3.50	1	147.38

351	C611	CIRCULAR	2.00	3.14	0.50	2.00	1	30.51
352	C612	CIRCULAR	2.00	3.14	0.50	2.00	1	28.91
353	C701	CIRCULAR	2.50	4.91	0.63	2.50	1	37.01
354	C702	CIRCULAR	3.00	7.07	0.75	3.00	1	58.70
355	C703	CIRCULAR	3.00	7.07	0.75	3.00	1	82.58
356	C705	CIRCULAR	3.00	7.07	0.75	3.00	1	49.72
357	C706	CIRCULAR	3.50	9.62	0.88	3.50	1	85.78
358	C707	CIRCULAR	3.00	7.07	0.75	3.00	1	36.32
359	C708	RECT_CLOSED	3.00	15.00	0.94	5.00	1	51.48
360	C709	CIRCULAR	2.50	4.91	0.63	2.50	1	33.31
361	C710	RECT_CLOSED	3.00	24.00	1.09	8.00	1	336.77
362	C800	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1071.28
363	C801	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	88.43
364	C802	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	101.25
365	C803	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	80.95
366	C803a	CIRCULAR	2.50	4.91	0.63	2.50	1	55.83
367	C804	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	95.38
368	C805	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	153.19
369	C806	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	933.87
370	C807	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	339.50
371	C808a	CIRCULAR	2.50	4.91	0.63	2.50	1	13.50
372	C809	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	370.92
373	C810	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1016.01
374	C810a	CIRCULAR	2.50	4.91	0.63	2.50	1	25.02
375	C811	RECT_OPEN	5.00	50.00	2.50	10.00	1	755.70
376	C900	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	172.99
377	C901	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	224.58
378	C902	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	486.88
379	C903	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	432.38
380	C904	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	773.94
381	C-DAB-1	CIRCULAR	1.25	1.23	0.31	1.25	1	6.13
382	C-DAB-2	CIRCULAR	2.75	5.94	0.69	2.75	1	39.58
383	C-DAB-3	CIRCULAR	1.25	1.23	0.31	1.25	1	4.20
384	C-PDM-4	CIRCULAR	2.00	3.14	0.50	2.00	1	19.62
385	C-PDM-5	CIRCULAR	2.00	3.14	0.50	2.00	1	22.11
386	C-PDM-5a	CIRCULAR	2.00	3.14	0.50	2.00	1	32.02
387	C-VL-2	CIRCULAR	2.50	4.91	0.63	2.50	1	32.99
388	C-VL-4	CIRCULAR	1.00	0.79	0.25	1.00	1	3.56

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393 Transect Summary

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396 Transect XS\_701

397 Area:

398	0.0034	0.0184	0.0345	0.0507	0.0672
399	0.0839	0.1008	0.1180	0.1354	0.1531
400	0.1709	0.1888	0.2069	0.2252	0.2435
401	0.2621	0.2807	0.2995	0.3185	0.3376
402	0.3568	0.3762	0.3958	0.4156	0.4355
403	0.4556	0.4759	0.4963	0.5169	0.5376
404	0.5585	0.5796	0.6008	0.6221	0.6436
405	0.6653	0.6871	0.7091	0.7313	0.7536
406	0.7761	0.7988	0.8216	0.8447	0.8679
407	0.8915	0.9163	0.9425	0.9702	1.0000

408 Hrad:

409	0.0115	0.0375	0.0690	0.1001	0.1308
410	0.1609	0.1905	0.2197	0.2485	0.2778
411	0.3074	0.3369	0.3662	0.3953	0.4241
412	0.4527	0.4811	0.5092	0.5370	0.5645
413	0.5915	0.6181	0.6443	0.6702	0.6960
414	0.7218	0.7478	0.7736	0.7994	0.8250
415	0.8505	0.8759	0.9012	0.9263	0.9511
416	0.9758	1.0003	1.0240	1.0476	1.0709

417		1.0939	1.1170	1.1401	1.1631	1.1833
418		1.1867	1.1447	1.1069	1.0907	1.0000
419	Width:					
420		0.3358	0.4981	0.5052	0.5121	0.5190
421		0.5263	0.5341	0.5419	0.5496	0.5555
422		0.5601	0.5646	0.5689	0.5733	0.5777
423		0.5821	0.5865	0.5909	0.5955	0.6002
424		0.6053	0.6105	0.6160	0.6215	0.6270
425		0.6323	0.6373	0.6422	0.6471	0.6520
426		0.6568	0.6615	0.6663	0.6711	0.6759
427		0.6808	0.6857	0.6911	0.6965	0.7019
428		0.7075	0.7130	0.7184	0.7238	0.7308
429		0.7487	0.7984	0.8499	0.8923	1.0000

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NOTE: The summary statistics displayed in this report are  
based on results found at every computational time step,  
not just on results from each reporting time step.  
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Analysis Options

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Flow Units ..... CFS  
Process Models:  
  Rainfall/Runoff ..... NO  
  RDII ..... NO  
  Snowmelt ..... NO  
  Groundwater ..... NO  
  Flow Routing ..... YES  
  Ponding Allowed ..... NO  
  Water Quality ..... NO  
Flow Routing Method ..... DYNWAVE  
Starting Date ..... 06/13/2009 00:00:00  
Ending Date ..... 06/14/2009 00:00:00  
Antecedent Dry Days ..... 0.0  
Report Time Step ..... 00:01:00  
Routing Time Step ..... 5.00 sec  
Variable Time Step ..... YES  
Maximum Trials ..... 8  
Number of Threads ..... 4  
Head Tolerance ..... 0.005000 ft

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*****		Volume	Volume
Flow Routing Continuity		acre-feet	10 <sup>6</sup> gal
*****		-----	-----
465	Dry Weather Inflow .....	0.000	0.000
466	Wet Weather Inflow .....	0.000	0.000
467	Groundwater Inflow .....	0.000	0.000
468	RDII Inflow .....	0.000	0.000
469	External Inflow .....	199.458	64.997
470	External Outflow .....	151.021	49.212
471	Flooding Loss .....	0.000	0.000
472	Evaporation Loss .....	0.000	0.000
473	Exfiltration Loss .....	47.942	15.623
474	Initial Stored Volume ....	0.001	0.000
475	Final Stored Volume .....	0.082	0.027
476	Continuity Error (%) .....	0.207	

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Time-Step Critical Elements

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Link C105 (6.97%)

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483 Link C-DAB-2 (5.31%)  
484 Link C-PDM-4 (1.50%)

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488 Highest Flow Instability Indexes  
489 \*\*\*\*\*  
490 Link C1007 (15)

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493 \*\*\*\*\*  
494 Routing Time Step Summary  
495 \*\*\*\*\*  
496 Minimum Time Step : 0.50 sec  
497 Average Time Step : 4.83 sec  
498 Maximum Time Step : 5.00 sec  
499 Percent in Steady State : -0.00  
500 Average Iterations per Step : 2.01  
501 Percent Not Converging : 0.11

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505 Node Depth Summary  
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509			Average	Maximum	Maximum	Time of Max	Reported
510			Depth	Depth	HGL	Occurrence	Max Depth
511	Node	Type	Feet	Feet	Feet	days hr:min	Feet
512	-----						
513	J100	JUNCTION	0.07	0.83	236.33	0 00:45	0.83
514	J1000	JUNCTION	0.10	1.68	262.68	0 12:49	1.68
515	J1001	JUNCTION	0.14	3.04	242.04	0 12:51	3.04
516	J1002	JUNCTION	0.16	3.37	210.37	0 12:54	3.37
517	J1003	JUNCTION	0.19	3.34	172.34	0 12:57	3.34
518	J1004	JUNCTION	0.33	3.79	150.79	0 13:00	3.79
519	J1005	JUNCTION	0.34	3.90	143.90	0 12:59	3.90
520	J1006	JUNCTION	0.45	2.25	123.25	0 13:12	2.25
521	J101	JUNCTION	0.11	1.38	221.88	0 00:46	1.38
522	J102	JUNCTION	0.06	0.75	228.75	0 00:45	0.75
523	J103	JUNCTION	0.14	1.58	211.58	0 00:47	1.58
524	J104	JUNCTION	0.08	0.90	203.90	0 00:45	0.90
525	J105	JUNCTION	0.17	3.76	187.76	0 00:27	3.76
526	J106	JUNCTION	0.07	0.84	226.34	0 00:45	0.84
527	J107	JUNCTION	0.11	1.27	203.77	0 00:46	1.27
528	J108	JUNCTION	0.10	1.53	197.53	0 00:47	1.53
529	J109	JUNCTION	0.21	4.50	197.00	0 00:46	3.37
530	J110	JUNCTION	0.16	1.96	191.96	0 00:48	1.96
531	J111	JUNCTION	0.45	2.77	183.77	0 00:48	2.76
532	J200	JUNCTION	0.11	1.75	257.25	0 12:54	1.75
533	J2000	JUNCTION	0.11	1.39	172.89	0 00:45	1.39
534	J2001	JUNCTION	0.05	0.66	166.66	0 00:46	0.66
535	J2002	JUNCTION	0.16	1.06	157.06	0 01:35	1.06
536	J2003	JUNCTION	0.13	1.59	149.59	0 01:14	1.59
537	J2004	JUNCTION	0.26	2.24	146.24	0 01:17	2.24
538	J201	JUNCTION	0.19	1.50	242.00	0 12:54	1.50
539	J203	JUNCTION	0.00	0.00	235.00	0 00:00	0.00
540	J204	JUNCTION	0.24	1.75	223.25	0 12:56	1.75
541	J206	JUNCTION	0.25	2.01	207.51	0 12:56	2.01
542	J207	JUNCTION	0.26	1.85	203.85	0 00:46	1.85
543	J208	JUNCTION	0.39	4.10	199.10	0 00:47	3.73
544	J210	JUNCTION	0.27	2.06	195.06	0 00:49	2.06
545	J211	JUNCTION	0.33	2.63	185.13	0 00:50	2.63
546	J212	JUNCTION	0.32	2.54	179.04	0 00:50	2.54
547	J213	JUNCTION	0.31	2.62	171.12	0 00:50	2.62
548	J214	JUNCTION	0.35	2.80	163.30	0 00:49	2.80

549	J215	JUNCTION	0.07	0.85	183.85	0	00:45	0.85
550	J216	JUNCTION	0.09	1.11	179.11	0	00:46	1.11
551	J217	JUNCTION	0.12	1.59	169.59	0	00:48	1.59
552	J218	JUNCTION	0.48	3.66	157.66	0	01:31	3.66
553	J300	JUNCTION	0.05	0.69	279.69	0	00:45	0.68
554	J301	JUNCTION	0.09	1.12	224.12	0	00:46	1.12
555	J302	JUNCTION	0.11	1.28	211.78	0	00:46	1.28
556	J303	JUNCTION	0.14	1.71	193.21	0	00:46	1.71
557	J304	JUNCTION	0.19	2.42	177.42	0	00:47	2.42
558	J305	JUNCTION	0.09	2.58	165.58	0	00:20	2.58
559	J400	JUNCTION	0.06	0.73	163.73	0	00:45	0.73
560	J401	JUNCTION	0.07	0.77	162.77	0	00:45	0.77
561	J402	JUNCTION	0.13	1.63	154.13	0	00:46	1.63
562	J500	JUNCTION	0.09	1.17	282.17	0	00:46	1.17
563	J501	JUNCTION	0.09	1.13	271.63	0	00:47	1.13
564	J502	JUNCTION	0.00	0.00	246.00	0	00:00	0.00
565	J503	JUNCTION	0.12	1.45	236.45	0	00:46	1.45
566	J504	JUNCTION	0.15	1.82	218.82	0	00:47	1.82
567	J505	JUNCTION	0.11	1.55	201.55	0	00:47	1.55
568	J507	JUNCTION	0.09	1.10	252.10	0	00:46	1.10
569	J508	JUNCTION	0.11	1.41	217.41	0	00:45	1.41
570	J509	JUNCTION	0.15	2.02	196.02	0	00:47	2.02
571	J510	JUNCTION	0.06	0.81	173.31	0	00:47	0.80
572	J600	JUNCTION	0.08	0.96	297.96	0	00:46	0.96
573	J601	JUNCTION	0.06	0.78	293.78	0	00:45	0.77
574	J602	JUNCTION	0.08	0.97	280.97	0	00:46	0.97
575	J603	JUNCTION	0.05	1.16	260.66	0	00:17	1.16
576	J604	JUNCTION	0.11	1.90	265.90	0	00:19	1.90
577	J605	JUNCTION	0.00	0.00	258.00	0	00:00	0.00
578	J606	JUNCTION	0.13	1.92	305.92	0	00:45	1.91
579	J607	JUNCTION	0.09	1.07	304.07	0	00:46	1.07
580	J608	JUNCTION	0.13	1.53	257.03	0	00:48	1.53
581	J609	JUNCTION	0.13	1.61	212.61	0	00:48	1.61
582	J610	JUNCTION	0.22	1.92	192.42	0	00:49	1.92
583	J611	JUNCTION	0.00	0.00	176.00	0	00:00	0.00
584	J612	JUNCTION	0.07	0.85	154.85	0	00:46	0.85
585	J701	JUNCTION	0.21	1.69	196.19	0	01:31	1.69
586	J702	JUNCTION	0.29	2.41	182.41	0	01:31	2.41
587	J703	JUNCTION	0.52	1.85	177.85	0	01:32	1.85
588	J705	JUNCTION	0.21	1.85	174.85	0	01:16	1.85
589	J706	JUNCTION	0.39	2.89	165.39	0	01:18	2.89
590	J707	JUNCTION	0.13	1.69	161.69	0	00:45	1.69
591	J708	JUNCTION	0.37	2.03	160.03	0	02:31	2.03
592	J709	JUNCTION	0.15	2.10	172.10	0	00:46	2.10
593	J710	JUNCTION	0.07	1.47	166.47	0	00:20	1.46
594	J800	JUNCTION	0.12	1.86	279.86	0	13:08	1.86
595	J801	JUNCTION	0.09	0.39	222.39	0	03:04	0.39
596	J802	JUNCTION	0.21	0.81	217.81	0	03:32	0.81
597	J803	JUNCTION	0.40	1.46	214.46	0	03:36	1.46
598	J803a	JUNCTION	0.38	1.37	209.87	0	03:37	1.37
599	J804	JUNCTION	0.10	0.48	210.48	0	03:01	0.48
600	J805	JUNCTION	0.15	0.70	207.70	0	03:02	0.70
601	J806	JUNCTION	0.24	1.96	202.96	0	13:15	1.96
602	J807	JUNCTION	0.52	3.61	156.61	0	13:22	3.61
603	J808	JUNCTION	0.58	3.25	155.25	0	13:24	3.25
604	J808a	JUNCTION	0.15	1.95	151.45	0	00:46	1.95
605	J810	JUNCTION	0.29	1.95	152.95	0	13:25	1.94
606	J810a	JUNCTION	0.14	1.63	150.13	0	00:47	1.63
607	J811	JUNCTION	0.31	2.55	145.55	0	13:27	2.55
608	J900	JUNCTION	0.06	0.94	356.94	0	12:52	0.94
609	J901	JUNCTION	0.09	1.40	297.40	0	12:52	1.40
610	J902	JUNCTION	0.15	2.04	262.04	0	12:55	2.04
611	J903	JUNCTION	0.18	2.23	246.23	0	12:58	2.23
612	J904	JUNCTION	0.21	1.62	188.62	0	13:01	1.62
613	J-DAB-2	JUNCTION	0.61	2.18	161.48	0	02:18	2.18
614	J-PDM-5	JUNCTION	0.18	1.28	191.98	0	00:51	1.28

615	OF812	OUTFALL	0.28	2.01	142.01	0	13:27	2.01
616	OF-DAB-2	OUTFALL	0.50	1.68	157.18	0	02:18	1.68
617	OF-J-725-2	OUTFALL	0.22	1.71	143.71	0	01:17	1.71
618	OF-J-725B-2	OUTFALL	0.12	0.87	148.52	0	01:35	0.87
619	OF-J-792	OUTFALL	0.21	1.55	141.32	0	13:01	1.55
620	OF-VL	OUTFALL	0.18	0.89	116.67	0	13:12	0.89
621	OF-VL-1	OUTFALL	0.00	0.00	184.75	0	00:00	0.00
622	OF-VL-3	OUTFALL	0.00	0.00	164.25	0	00:00	0.00
623	DAB-1	STORAGE	0.49	2.53	160.03	0	02:33	2.53
624	DAB-2	STORAGE	1.05	4.43	164.43	0	02:17	4.43
625	DAB-3	STORAGE	0.94	3.80	158.80	0	01:44	3.80
626	PDM-1	STORAGE	1.00	3.06	253.06	0	02:35	3.06
627	PDM-2	STORAGE	1.03	3.07	256.07	0	02:38	3.07
628	PDM-3	STORAGE	1.59	3.75	178.75	0	02:51	3.75
629	PDM-4	STORAGE	0.46	4.45	149.45	0	01:17	4.45
630	PDM-5	STORAGE	0.32	2.96	197.96	0	01:25	2.96
631	VL-1	STORAGE	1.41	3.76	182.76	0	02:41	3.76
632	VL-2	STORAGE	0.69	4.64	157.64	0	01:31	4.64
633	VL-3	STORAGE	1.19	3.35	162.35	0	02:40	3.35
634	VL-4	STORAGE	0.76	3.83	148.83	0	02:28	3.83

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638 Node Inflow Summary  
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642			Maximum	Maximum			Lateral	
643			Total	Flow			Inflow	
644			Lateral	Total	Time of Max			Volume
645	Node	Type	Inflow	Inflow	Occurrence			10^6 gal
646	gal	Percent	Volume	Error	days hr:min			10^6
			CFS	CFS				
647	J100	JUNCTION	11.51	11.51	0 00:45			0.255
	0.255	-0.048						
648	J1000	JUNCTION	78.16	78.16	0 12:48			2.09
	2.09	-0.372						
649	J1001	JUNCTION	554.10	631.71	0 12:52			10.9
	13	0.011						
650	J1002	JUNCTION	0.00	633.92	0 12:52			0
	13	-0.086						
651	J1003	JUNCTION	8.88	634.25	0 12:55			0.197
	13.2	0.074						
652	J1004	JUNCTION	3.58	637.48	0 12:58			0.0793
	17.3	0.113						
653	J1005	JUNCTION	8.36	634.09	0 13:00			0.555
	17.9	-0.128						
654	J1006	JUNCTION	0.00	645.00	0 13:01			0
	17.9	0.981						
655	J101	JUNCTION	14.52	25.56	0 00:45			0.322
	0.577	-0.002						
656	J102	JUNCTION	8.61	8.61	0 00:45			0.191
	0.191	0.482						
657	J103	JUNCTION	13.23	45.90	0 00:46			0.293
	1.06	-0.003						
658	J104	JUNCTION	11.50	11.50	0 00:45			0.255
	0.255	-1.556						
659	J105	JUNCTION	15.69	70.53	0 00:46			0.348
	1.67	0.124						

660	J106		JUNCTION	13.39	13.39	0	00:45	0.297
	0.297	-0.047						
661	J107		JUNCTION	13.70	26.67	0	00:45	0.303
	0.6	0.041						
662	J108		JUNCTION	16.65	16.65	0	00:45	0.369
	0.369	0.062						
663	J109		JUNCTION	0.00	42.20	0	00:46	0
	0.968	-0.186						
664	J110		JUNCTION	8.88	49.60	0	00:46	0.197
	1.17	0.354						
665	J111		JUNCTION	7.32	55.71	0	00:48	0.162
	1.32	0.025						
666	J200		JUNCTION	39.02	39.02	0	12:53	1.23
	1.23	-0.001						
667	J2000		JUNCTION	15.32	15.32	0	00:45	0.339
	0.339	-0.016						
668	J2001		JUNCTION	12.54	27.25	0	00:45	0.278
	0.617	0.012						
669	J2002		JUNCTION	0.00	27.47	0	01:31	0
	1.86	0.051						
670	J2003		JUNCTION	8.42	56.84	0	00:47	0.186
	1.34	-0.005						
671	J2004		JUNCTION	0.00	28.49	0	01:17	0
	1.55	-0.001						
672	J201		JUNCTION	25.76	39.01	0	12:54	0.571
	1.8	0.042						
673	J203		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
674	J204		JUNCTION	10.84	39.00	0	12:54	0.24
	2.04	-0.029						
675	J206		JUNCTION	0.00	38.98	0	12:56	0
	2.04	-0.002						
676	J207		JUNCTION	12.00	46.05	0	00:47	0.266
	2.3	0.050						
677	J208		JUNCTION	0.00	47.21	0	00:47	0
	2.3	-0.059						
678	J210		JUNCTION	9.43	55.25	0	00:47	0.209
	2.51	-0.006						
679	J211		JUNCTION	15.42	67.72	0	00:49	0.342
	2.85	-0.004						
680	J212		JUNCTION	11.84	77.15	0	00:50	0.262
	3.12	0.008						
681	J213		JUNCTION	15.97	90.03	0	00:50	0.354
	3.47	-0.002						
682	J214		JUNCTION	14.39	101.84	0	00:49	0.319
	3.79	-0.033						
683	J215		JUNCTION	6.84	6.84	0	00:45	0.151
	0.151	-0.065						
684	J216		JUNCTION	7.39	13.91	0	00:45	0.164
	0.315	0.114						
685	J217		JUNCTION	11.96	24.92	0	00:46	0.265
	0.58	0.784						
686	J218		JUNCTION	13.78	137.88	0	00:49	0.305
	4.67	-0.061						
687	J300		JUNCTION	7.82	7.82	0	00:45	0.173
	0.173	-0.020						
688	J301		JUNCTION	9.75	17.44	0	00:45	0.216
	0.389	0.006						
689	J302		JUNCTION	9.11	25.95	0	00:45	0.202
	0.591	-0.022						
690	J303		JUNCTION	18.85	43.85	0	00:45	0.418
	1.01	0.069						
691	J304		JUNCTION	17.28	59.78	0	00:46	0.383
	1.39	0.032						
692	J305		JUNCTION	20.70	78.61	0	00:46	0.459
	1.85	-0.018						



693	J400		JUNCTION	7.50	7.50	0	00:45	0.166
	0.166	-0.712						
694	J401		JUNCTION	7.51	7.51	0	00:45	0.166
	0.166	-0.832						
695	J402		JUNCTION	13.50	28.03	0	00:45	0.299
	0.634	0.295						
696	J500		JUNCTION	15.02	15.02	0	00:45	0.333
	0.333	-0.004						
697	J501		JUNCTION	11.84	25.94	0	00:45	0.262
	0.595	-0.003						
698	J502		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
699	J503		JUNCTION	18.03	42.40	0	00:46	0.4
	0.994	-0.010						
700	J504		JUNCTION	13.11	54.77	0	00:46	0.29
	1.28	0.026						
701	J505		JUNCTION	11.81	65.40	0	00:47	0.262
	1.55	-0.008						
702	J507		JUNCTION	21.00	21.00	0	00:45	0.465
	0.465	-0.003						
703	J508		JUNCTION	13.48	33.24	0	00:45	0.299
	0.764	-0.007						
704	J509		JUNCTION	8.84	41.84	0	00:45	0.196
	0.96	-0.004						
705	J510		JUNCTION	8.59	49.34	0	00:46	0.19
	1.15	0.007						
706	J600		JUNCTION	16.30	16.30	0	00:45	0.361
	0.361	-0.353						
707	J601		JUNCTION	10.20	10.20	0	00:45	0.226
	0.226	-0.002						
708	J602		JUNCTION	5.66	15.57	0	00:45	0.125
	0.351	-0.072						
709	J603		JUNCTION	9.16	24.14	0	00:46	0.203
	0.554	0.037						
710	J604		JUNCTION	8.84	24.10	0	00:45	0.196
	0.558	0.148						
711	J605		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
712	J606		JUNCTION	12.85	12.85	0	00:45	0.285
	0.285	-0.020						
713	J607		JUNCTION	9.65	22.15	0	00:45	0.214
	0.498	0.271						
714	J608		JUNCTION	20.47	41.07	0	00:45	0.454
	0.951	-0.128						
715	J609		JUNCTION	20.63	58.80	0	00:47	0.457
	1.41	0.385						
716	J610		JUNCTION	40.93	70.61	0	00:48	1.51
	2.92	0.292						
717	J611		JUNCTION	0.00	0.00	0	00:00	0
	0	0.000 gal						
718	J612		JUNCTION	11.24	11.24	0	00:45	0.249
	0.249	-0.191						
719	J701		JUNCTION	29.29	29.29	0	01:30	1.3
	1.3	-0.512						
720	J702		JUNCTION	24.41	45.93	0	01:30	0.902
	2.21	0.458						
721	J703		JUNCTION	19.58	57.79	0	01:32	0.434
	6.12	-0.076						
722	J705		JUNCTION	35.62	35.62	0	01:15	1.32
	1.32	1.212						
723	J706		JUNCTION	28.00	62.53	0	01:15	1.03
	2.33	-0.162						
724	J707		JUNCTION	18.47	18.47	0	00:45	0.409
	0.409	-0.342						
725	J708		JUNCTION	0.00	18.14	0	00:46	0
	0.411	0.326						

726	J709		JUNCTION	23.33	23.33	0	00:45	0.517
	0.517	-0.038						
727	J710		JUNCTION	28.12	37.50	0	01:15	1.04
	1.56	0.016						
728	J800		JUNCTION	224.33	224.33	0	13:09	6.29
	6.29	-0.127						
729	J801		JUNCTION	4.57	4.57	0	03:00	0.405
	0.405	-0.075						
730	J802		JUNCTION	15.00	18.69	0	03:30	1.55
	1.96	0.004						
731	J803		JUNCTION	14.91	33.10	0	03:30	1.54
	3.5	0.017						
732	J803a		JUNCTION	0.00	32.41	0	03:37	0
	3.5	0.048						
733	J804		JUNCTION	7.01	7.01	0	03:00	0.621
	0.621	0.000						
734	J805		JUNCTION	13.05	19.90	0	03:00	1.16
	1.78	-0.006						
735	J806		JUNCTION	1.85	225.25	0	13:10	0.041
	8.12	-0.081						
736	J807		JUNCTION	1.16	219.92	0	13:15	0.0257
	9.14	0.122						
737	J808		JUNCTION	8.81	210.89	0	13:22	0.195
	9.32	0.051						
738	J808a		JUNCTION	13.60	13.60	0	00:45	0.301
	0.301	-0.080						
739	J810		JUNCTION	2.60	210.68	0	13:25	0.0576
	9.37	0.003						
740	J810a		JUNCTION	6.62	19.33	0	00:46	0.147
	0.448	-0.246						
741	J811		JUNCTION	4.01	210.82	0	13:26	0.0888
	10.2	0.017						
742	J900		JUNCTION	42.04	42.04	0	12:47	1.17
	1.17	-0.029						
743	J901		JUNCTION	73.91	114.39	0	12:48	2.02
	3.19	-0.037						
744	J902		JUNCTION	97.59	208.26	0	12:55	3.47
	6.66	0.003						
745	J903		JUNCTION	2.93	208.23	0	12:56	0.0649
	6.72	-0.072						
746	J904		JUNCTION	22.82	207.33	0	12:59	1.85
	8.58	0.091						
747	J-DAB-2		JUNCTION	0.00	48.66	0	02:18	0
	6.87	0.000						
748	J-PDM-5		JUNCTION	0.00	21.31	0	01:25	0
	1.37	-0.067						
749	OF812		OUTFALL	0.00	209.75	0	13:27	0
	10.2	0.000						
750	OF-DAB-2		OUTFALL	0.00	48.66	0	02:18	0
	6.87	0.000						
751	OF-J-725-2		OUTFALL	0.00	28.49	0	01:17	0
	1.55	0.000						
752	OF-J-725B-2		OUTFALL	22.55	48.29	0	02:30	1.66
	3.53	0.000						
753	OF-J-792		OUTFALL	9.09	206.62	0	13:01	0.805
	9.38	0.000						
754	OF-VL		OUTFALL	0.00	546.26	0	13:12	0
	17.7	0.000						
755	OF-VL-1		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						
756	OF-VL-3		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						
757	DAB-1		STORAGE	5.59	53.62	0	00:46	0.124
	2.09	0.007						
758	DAB-2		STORAGE	11.22	119.20	0	01:18	0.249
	8.72	-0.127						

759	DAB-3		STORAGE	20.77	47.02	0	00:45	0.46
	1.08	-0.005						
760	PDM-1		STORAGE	19.26	19.26	0	00:45	0.427
	0.427	-0.003						
761	PDM-2		STORAGE	0.00	48.37	0	00:46	0
	1.11	0.038						
762	PDM-3		STORAGE	12.56	81.57	0	00:48	0.278
	3.18	-0.388						
763	PDM-4		STORAGE	8.51	74.61	0	00:47	0.188
	1.77	0.011						
764	PDM-5		STORAGE	9.76	74.46	0	00:47	0.216
	1.76	-0.012						
765	VL-1		STORAGE	4.53	132.16	0	00:48	0.1
	3.09	-0.086						
766	VL-2		STORAGE	21.32	154.99	0	00:49	0.472
	5.15	-0.164						
767	VL-3		STORAGE	5.50	84.16	0	00:47	0.122
	1.97	-0.008						
768	VL-4		STORAGE	9.44	55.36	0	00:47	0.209
	1.3	0.138						

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771 \*\*\*\*\*  
772 Node Surcharge Summary  
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775 Surcharging occurs when water rises above the top of the highest conduit.

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777			Hours	Max. Height	Min. Depth
778			Surcharged	Above Crown	Below Rim
779	Node	Type		Feet	Feet
780	-----				
781	J109	JUNCTION	0.08	1.500	0.000
782	J208	JUNCTION	0.05	0.603	0.897

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785 \*\*\*\*\*  
786 Node Flooding Summary  
787 \*\*\*\*\*

788

789 Flooding refers to all water that overflows a node, whether it ponds or not.

790

791			Maximum	Time of Max	Total	Maximum
792			Rate	Occurrence	Flood	Ponded
793		Hours	CFS	days hr:min	Volume	Depth
794	Node	Flooded			10^6 gal	Feet
795	-----					
796	J109	0.01	1.90	0 00:46	0.000	0.000

797

798

799 \*\*\*\*\*  
800 Storage Volume Summary  
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802

803

804		Average	Avg	Evap	Exfil	Maximum	Max	Time of
805		Max	Maximum	Pcnt	Pcnt	Volume	Pcnt	
806	Storage Unit	Volume	Full	Loss	Loss	1000 ft3	Full	days
807	hr:min	1000 ft3	Full	Loss	Loss	1000 ft3	Full	days

807

808	DAB-1		26.954	10	0	53	140.404	53	0
	02:33	12.98							
809	DAB-2		61.541	14	0	21	268.811	59	0
	02:17	57.27							
810	DAB-3		17.694	13	0	54	76.161	58	0
	01:44	9.35							
811	PDM-1		12.790	17	0	100	41.331	55	0
	02:35	1.99							
812	PDM-2		33.846	19	0	100	104.174	58	0
	02:38	5.01							
813	PDM-3		121.648	25	0	100	294.601	60	0
	02:51	11.10							
814	PDM-4		7.191	7	0	13	73.629	69	0
	01:17	31.63							
815	PDM-5		9.463	6	0	22	89.596	55	0
	01:25	25.93							
816	VL-1		112.426	22	0	100	308.284	60	0
	02:41	13.21							
817	VL-2		30.250	9	0	21	212.505	62	0
	01:31	48.64							
818	VL-3		64.981	20	0	100	188.530	58	0
	02:40	8.71							
819	VL-4		19.099	11	0	45	100.146	59	0
	02:28	8.55							

820  
821

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823 Outfall Loading Summary  
824 \*\*\*\*\*

825  
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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF812	99.88	15.72	209.75	10.165
OF-DAB-2	61.30	17.72	48.66	6.875
OF-J-725-2	23.82	12.76	28.49	1.551
OF-J-725B-2	53.93	11.14	48.29	3.528
OF-J-792	99.99	14.27	206.62	9.376
OF-VL	98.13	27.31	546.26	17.714
OF-VL-1	0.00	0.00	0.00	0.000
OF-VL-3	0.00	0.00	0.00	0.000
System	54.63	98.92	888.66	49.209

841  
842

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844 Link Flow Summary  
845 \*\*\*\*\*

846  
847

Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
C100	CONDUIT	11.23	0 00:45	5.42	0.24	0.44
C1000	CONDUIT	77.90	0 12:49	5.36	0.71	0.92
C1001	CONDUIT	633.92	0 12:52	14.19	0.55	0.80
C1002	CONDUIT	634.25	0 12:55	13.15	0.66	0.84
C1003	CONDUIT	629.12	0 12:58	11.78	0.66	0.89
C1004	CONDUIT	634.09	0 13:00	10.64	0.71	0.96
C1005	CONDUIT	645.00	0 13:01	16.84	0.67	0.73
C1007	CHANNEL	546.26	0 13:12	>50.00	0.02	0.09
C101	CONDUIT	24.95	0 00:47	8.27	0.56	0.59
C102	CONDUIT	8.39	0 00:45	6.56	0.30	0.45

862	C103	CONDUIT	44.94	0	00:47	10.79	0.54	0.64
863	C104	CONDUIT	11.29	0	00:45	7.85	0.41	0.62
864	C105	CONDUIT	72.61	0	00:48	16.77	0.17	0.52
865	C106	CONDUIT	13.13	0	00:45	6.69	0.25	0.42
866	C107	CONDUIT	26.20	0	00:46	7.20	0.51	0.75
867	C108	CONDUIT	16.10	0	00:45	5.67	0.67	0.88
868	C109	CONDUIT	41.18	0	00:46	6.65	1.00	0.83
869	C110	CONDUIT	49.13	0	00:48	9.29	0.67	0.70
870	C111	CONDUIT	55.63	0	00:48	7.92	0.64	0.72
871	C2	CONDUIT	48.66	0	02:18	10.14	0.60	0.64
872	C200	CONDUIT	39.01	0	12:54	11.19	0.74	0.67
873	C2000	CONDUIT	15.01	0	00:46	7.95	0.46	0.41
874	C2001	CONDUIT	26.93	0	00:46	5.51	0.27	0.66
875	C2002	CONDUIT	27.45	0	01:35	4.11	0.27	0.48
876	C2003	CONDUIT	56.43	0	00:48	5.62	0.42	0.76
877	C2004	CONDUIT	28.49	0	01:17	6.87	0.81	0.79
878	C202	CONDUIT	39.00	0	12:54	13.43	0.58	0.57
879	C203	CONDUIT	0.00	0	00:00	0.00	0.00	0.06
880	C205	CONDUIT	38.98	0	12:56	11.14	0.74	0.67
881	C206	CONDUIT	38.98	0	12:56	10.10	0.63	0.73
882	C207	CONDUIT	47.21	0	00:47	8.75	0.63	0.80
883	C209	CONDUIT	46.64	0	00:47	7.40	1.03	0.84
884	C210	CONDUIT	54.28	0	00:49	9.27	0.75	0.78
885	C211	CONDUIT	67.18	0	00:50	8.83	0.76	0.74
886	C212	CONDUIT	76.85	0	00:51	10.10	0.73	0.74
887	C213	CONDUIT	89.91	0	00:51	11.26	0.72	0.77
888	C214	CONDUIT	101.95	0	00:50	10.42	0.56	0.60
889	C215	CONDUIT	6.65	0	00:45	4.40	0.38	0.49
890	C216	CONDUIT	13.60	0	00:47	7.75	0.54	0.55
891	C217	CONDUIT	24.32	0	00:48	9.51	0.87	0.76
892	C218	CONDUIT	136.47	0	00:49	6.76	0.34	0.91
893	C300	CONDUIT	7.74	0	00:45	10.96	0.81	0.84
894	C301	CONDUIT	17.11	0	00:46	9.90	0.53	0.54
895	C302	CONDUIT	25.71	0	00:46	8.40	0.52	0.60
896	C303	CONDUIT	43.50	0	00:47	11.41	0.74	0.73
897	C304	CONDUIT	59.33	0	00:47	13.79	0.72	0.59
898	C305	CONDUIT	79.08	0	00:47	9.34	0.26	0.56
899	C400	CONDUIT	7.36	0	00:45	5.73	0.28	0.46
900	C401	CONDUIT	7.35	0	00:45	5.48	0.31	0.47
901	C402	CONDUIT	27.70	0	00:47	9.45	0.67	0.74
902	C500	CONDUIT	14.47	0	00:46	7.88	0.59	0.57
903	C501	CONDUIT	25.39	0	00:47	12.07	0.39	0.44
904	C502	CONDUIT	0.00	0	00:00	0.00	0.00	0.24
905	C503	CONDUIT	42.39	0	00:47	10.78	0.46	0.54
906	C504	CONDUIT	54.47	0	00:47	13.35	0.58	0.56
907	C505	CONDUIT	65.61	0	00:48	8.38	0.78	0.86
908	C507	CONDUIT	20.20	0	00:46	11.70	0.55	0.54
909	C508	CONDUIT	33.27	0	00:46	11.70	0.82	0.85
910	C509	CONDUIT	41.30	0	00:47	14.52	0.73	0.56
911	C510	CONDUIT	49.09	0	00:47	9.23	0.36	0.53
912	C600	CONDUIT	15.59	0	00:46	10.62	0.44	0.47
913	C601	CONDUIT	10.02	0	00:45	9.22	0.29	0.38
914	C602	CONDUIT	15.34	0	00:46	10.51	0.44	0.47
915	C603	CONDUIT	24.11	0	00:46	8.37	0.23	0.60
916	C604	CONDUIT	24.26	0	00:46	12.29	0.68	0.71
917	C605	CONDUIT	0.00	0	00:00	0.00	0.00	0.40
918	C606	CONDUIT	12.64	0	00:45	5.10	0.93	0.74
919	C607	CONDUIT	21.47	0	00:47	12.87	0.53	0.52
920	C608	CONDUIT	39.85	0	00:48	12.99	0.65	0.60
921	C609	CONDUIT	58.58	0	00:48	16.41	0.45	0.50
922	C610	CONDUIT	70.49	0	00:49	14.01	0.48	0.57
923	C611	CONDUIT	0.00	0	00:00	0.00	0.00	0.21
924	C612	CONDUIT	10.87	0	00:46	8.22	0.38	0.71
925	C701	CONDUIT	28.75	0	01:31	7.66	0.78	0.72
926	C702	CONDUIT	45.61	0	01:32	8.23	0.78	0.73
927	C703	CONDUIT	57.71	0	01:32	13.90	0.70	0.81

928	C705	CONDUIT	34.88	0	01:16	6.70	0.70	0.70		
929	C706	CONDUIT	60.40	0	01:18	8.12	0.70	0.81		
930	C707	CONDUIT	18.14	0	00:46	5.14	0.50	0.50		
931	C708	CONDUIT	17.77	0	00:48	3.75	0.35	0.76		
932	C709	CONDUIT	22.67	0	00:46	8.89	0.68	0.52		
933	C710	CONDUIT	37.33	0	01:15	9.81	0.11	0.46		
934	C800	CONDUIT	225.25	0	13:10	12.41	0.21	0.47		
935	C801	CONDUIT	4.42	0	03:04	1.33	0.05	0.29		
936	C802	CONDUIT	18.33	0	03:32	2.24	0.18	0.57		
937	C803	CONDUIT	32.41	0	03:37	3.62	0.40	0.60		
938	C803a	CONDUIT	32.40	0	03:38	11.15	0.58	0.57		
939	C804	CONDUIT	6.91	0	03:01	1.91	0.07	0.29		
940	C805	CONDUIT	19.76	0	03:02	5.38	0.13	0.49		
941	C806	CONDUIT	219.92	0	13:15	7.60	0.24	0.69		
942	C807	CONDUIT	210.89	0	13:22	4.78	0.62	0.86		
943	C808a	CONDUIT	13.01	0	00:46	3.47	0.96	0.71		
944	C809	CONDUIT	210.68	0	13:25	7.24	0.57	0.65		
945	C810	CONDUIT	210.82	0	13:26	9.06	0.21	0.56		
946	C810a	CONDUIT	18.96	0	00:47	6.52	0.76	0.78		
947	C811	CONDUIT	209.75	0	13:27	9.20	0.28	0.46		
948	C900	CONDUIT	41.24	0	12:52	4.81	0.24	0.58		
949	C901	CONDUIT	112.76	0	12:52	7.89	0.50	0.85		
950	C902	CONDUIT	208.23	0	12:56	10.53	0.43	0.71		
951	C903	CONDUIT	207.33	0	12:59	12.19	0.48	0.64		
952	C904	CONDUIT	206.62	0	13:01	15.98	0.27	0.53		
953	C-DAB-1	CONDUIT	6.68	0	03:13	6.59	1.09	0.94		
954	C-DAB-2	CONDUIT	48.66	0	02:18	8.67	1.23	0.90		
955	C-DAB-3	CONDUIT	6.26	0	01:44	5.28	1.49	0.93		
956	C-PDM-4	CONDUIT	25.47	0	01:08	8.11	1.30	1.00		
957	C-PDM-5	CONDUIT	21.31	0	01:25	7.83	0.96	0.82		
958	C-PDM-5a	CONDUIT	21.32	0	01:26	12.14	0.67	0.58		
959	C-VL-2	CONDUIT	40.52	0	01:31	8.53	1.23	0.93		
960	C-VL-4	CONDUIT	4.50	0	02:39	7.28	1.26	0.80		
961	W1	WEIR	0.00	0	00:00				0.00	
962	W2	WEIR	0.00	0	00:00				0.00	
963	W3	WEIR	0.00	0	00:00				0.00	
964	W4	WEIR	0.00	0	00:00				0.00	
965	W5	WEIR	0.00	0	00:00				0.00	
966	W-DAB-2	WEIR	0.00	0	00:00				0.00	
967	W-PDM-2	WEIR	0.00	0	00:00				0.00	
968	W-PDM-3	WEIR	0.00	0	00:00				0.00	
969	W-PDM-4	WEIR	3.04	0	01:17				0.23	
970	W-VL-3	WEIR	0.00	0	00:00				0.00	

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Flow Classification Summary  
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Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----									
		Up Dry	Down Dry	Sub Dry	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl		
982	C100	1.00	0.79	0.02	0.00	0.05	0.14	0.00	0.00	1.00	0.00
983	C1000	1.00	0.52	0.00	0.00	0.48	0.00	0.00	0.00	0.48	0.00
984	C1001	1.00	0.52	0.00	0.00	0.36	0.12	0.00	0.00	0.45	0.00
985	C1002	1.00	0.00	0.52	0.00	0.37	0.11	0.00	0.00	0.44	0.00
986	C1003	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.94	0.00
987	C1004	1.00	0.00	0.00	0.00	0.69	0.31	0.00	0.00	0.70	0.00
988	C1005	1.00	0.00	0.00	0.00	0.74	0.26	0.00	0.00	0.80	0.00
989	C1007	1.00	0.00	0.00	0.00	0.82	0.17	0.00	0.00	0.01	0.00
990	C101	1.00	0.00	0.79	0.00	0.06	0.14	0.00	0.00	0.97	0.00
991	C102	1.00	0.00	0.00	0.00	0.00	0.06	0.00	0.94	0.03	0.00
992	C103	1.00	0.00	0.00	0.00	0.82	0.18	0.00	0.00	0.03	0.00
993	C104	1.00	0.00	0.00	0.00	0.02	0.02	0.00	0.96	0.02	0.00

994	C105	1.00	0.22	0.56	0.00	0.16	0.06	0.00	0.00	0.95	0.00
995	C106	1.00	0.00	0.82	0.00	0.04	0.14	0.00	0.00	1.00	0.00
996	C107	1.00	0.00	0.00	0.00	0.02	0.06	0.00	0.92	0.03	0.00
997	C108	1.00	0.00	0.00	0.00	0.04	0.05	0.00	0.91	0.01	0.00
998	C109	1.00	0.71	0.08	0.00	0.12	0.09	0.00	0.00	0.88	0.00
999	C110	1.00	0.68	0.02	0.00	0.17	0.07	0.00	0.05	0.93	0.00
1000	C111	1.00	0.32	0.23	0.00	0.38	0.00	0.00	0.06	0.63	0.00
1001	C2	1.00	0.01	0.00	0.00	0.38	0.62	0.00	0.00	0.00	0.00
1002	C200	1.00	0.43	0.08	0.00	0.00	0.00	0.00	0.48	0.00	0.00
1003	C2000	1.00	0.57	0.24	0.00	0.03	0.16	0.00	0.00	0.85	0.00
1004	C2001	1.00	0.39	0.19	0.00	0.41	0.02	0.00	0.00	0.98	0.00
1005	C2002	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00
1006	C2003	1.00	0.00	0.00	0.00	0.90	0.10	0.00	0.00	0.14	0.00
1007	C2004	1.00	0.01	0.00	0.00	0.82	0.17	0.00	0.00	0.00	0.00
1008	C202	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1009	C203	1.00	0.96	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1010	C205	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1011	C206	1.00	0.00	0.58	0.00	0.07	0.35	0.00	0.00	0.74	0.00
1012	C207	1.00	0.00	0.00	0.00	0.01	0.08	0.00	0.90	0.00	0.00
1013	C209	1.00	0.55	0.01	0.00	0.18	0.26	0.00	0.00	0.67	0.00
1014	C210	1.00	0.54	0.01	0.00	0.11	0.33	0.00	0.00	0.87	0.00
1015	C211	1.00	0.53	0.01	0.00	0.12	0.34	0.00	0.00	0.70	0.00
1016	C212	1.00	0.53	0.00	0.00	0.07	0.39	0.00	0.00	0.68	0.00
1017	C213	1.00	0.52	0.01	0.00	0.09	0.38	0.00	0.00	0.82	0.00
1018	C214	1.00	0.11	0.42	0.00	0.17	0.30	0.00	0.00	0.68	0.00
1019	C215	1.00	0.00	0.79	0.00	0.20	0.01	0.00	0.00	0.98	0.00
1020	C216	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1021	C217	1.00	0.00	0.00	0.00	0.05	0.03	0.00	0.92	0.54	0.00
1022	C218	1.00	0.11	0.00	0.00	0.88	0.02	0.00	0.00	0.27	0.00
1023	C300	1.00	0.00	0.82	0.00	0.04	0.15	0.00	0.00	1.00	0.00
1024	C301	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1025	C302	1.00	0.00	0.79	0.00	0.06	0.15	0.00	0.00	0.99	0.00
1026	C303	1.00	0.00	0.00	0.00	0.00	0.04	0.00	0.96	0.00	0.00
1027	C304	1.00	0.62	0.16	0.00	0.02	0.20	0.00	0.00	0.82	0.00
1028	C305	1.00	0.27	0.36	0.00	0.34	0.04	0.00	0.00	0.96	0.00
1029	C400	1.00	0.00	0.00	0.00	0.01	0.05	0.00	0.94	0.03	0.00
1030	C401	1.00	0.00	0.00	0.00	0.01	0.05	0.00	0.94	0.03	0.00
1031	C402	1.00	0.57	0.07	0.00	0.32	0.04	0.00	0.00	0.96	0.00
1032	C500	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1033	C501	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1034	C502	1.00	0.87	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1035	C503	1.00	0.79	0.00	0.00	0.04	0.16	0.00	0.00	0.97	0.00
1036	C504	1.00	0.51	0.28	0.00	0.01	0.20	0.00	0.00	0.83	0.00
1037	C505	1.00	0.51	0.00	0.00	0.45	0.04	0.00	0.00	0.19	0.00
1038	C507	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1039	C508	1.00	0.79	0.01	0.00	0.05	0.15	0.00	0.00	0.99	0.00
1040	C509	1.00	0.57	0.22	0.00	0.01	0.20	0.00	0.00	0.83	0.00
1041	C510	1.00	0.00	0.57	0.00	0.32	0.10	0.00	0.00	1.00	0.00
1042	C600	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.01	0.00
1043	C601	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1044	C602	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1045	C603	1.00	0.31	0.38	0.00	0.27	0.04	0.00	0.00	0.97	0.00
1046	C604	1.00	0.31	0.40	0.00	0.23	0.06	0.00	0.00	0.96	0.00
1047	C605	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1048	C606	1.00	0.00	0.81	0.00	0.10	0.09	0.00	0.00	0.89	0.00
1049	C607	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1050	C608	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1051	C609	1.00	0.00	0.00	0.00	0.00	0.06	0.00	0.94	0.01	0.00
1052	C610	1.00	0.26	0.39	0.00	0.25	0.02	0.00	0.08	0.94	0.00
1053	C611	1.00	0.76	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1054	C612	1.00	0.76	0.00	0.00	0.22	0.02	0.00	0.00	0.98	0.00
1055	C701	1.00	0.00	0.00	0.00	0.00	0.05	0.00	0.94	0.02	0.00
1056	C702	1.00	0.56	0.05	0.00	0.13	0.09	0.00	0.16	0.78	0.00
1057	C703	1.00	0.00	0.00	0.00	0.24	0.76	0.00	0.00	0.55	0.00
1058	C705	1.00	0.00	0.00	0.00	0.16	0.02	0.00	0.82	0.15	0.00
1059	C706	1.00	0.50	0.11	0.00	0.31	0.00	0.00	0.08	0.77	0.00

1060	C707	1.00	0.00	0.67	0.00	0.32	0.01	0.00	0.00	0.96	0.00
1061	C708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1062	C709	1.00	0.62	0.15	0.00	0.09	0.14	0.00	0.00	0.89	0.00
1063	C710	1.00	0.59	0.03	0.00	0.34	0.04	0.00	0.00	0.97	0.00
1064	C800	1.00	0.00	0.52	0.00	0.34	0.15	0.00	0.00	0.45	0.00
1065	C801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1066	C802	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1067	C803	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1068	C803a	1.00	0.00	0.00	0.00	0.33	0.67	0.00	0.00	0.74	0.00
1069	C804	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1070	C805	1.00	0.00	0.00	0.00	0.55	0.45	0.00	0.00	0.55	0.00
1071	C806	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.96	0.00
1072	C807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.80	0.00
1073	C808a	1.00	0.00	0.72	0.00	0.28	0.00	0.00	0.00	0.89	0.00
1074	C809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1075	C810	1.00	0.00	0.00	0.00	0.19	0.81	0.00	0.00	0.15	0.00
1076	C810a	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.97	0.00
1077	C811	1.00	0.00	0.00	0.00	0.41	0.59	0.00	0.00	0.00	0.00
1078	C900	1.00	0.52	0.00	0.00	0.48	0.00	0.00	0.00	0.50	0.00
1079	C901	1.00	0.52	0.00	0.00	0.43	0.05	0.00	0.00	0.50	0.00
1080	C902	1.00	0.00	0.52	0.00	0.33	0.16	0.00	0.00	0.43	0.00
1081	C903	1.00	0.00	0.00	0.00	0.78	0.22	0.00	0.00	0.50	0.00
1082	C904	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
1083	C-DAB-1	1.00	0.00	0.59	0.00	0.19	0.21	0.00	0.00	0.70	0.00
1084	C-DAB-2	1.00	0.00	0.38	0.00	0.25	0.37	0.00	0.00	0.40	0.00
1085	C-DAB-3	1.00	0.01	0.73	0.00	0.16	0.09	0.00	0.00	0.74	0.00
1086	C-PDM-4	1.00	0.00	0.76	0.00	0.15	0.09	0.00	0.00	0.80	0.00
1087	C-PDM-5	1.00	0.66	0.08	0.00	0.04	0.21	0.00	0.00	0.79	0.00
1088	C-PDM-5a	1.00	0.01	0.66	0.00	0.11	0.22	0.00	0.00	0.87	0.00
1089	C-VL-2	1.00	0.50	0.00	0.00	0.04	0.00	0.00	0.45	0.05	0.00
1090	C-VL-4	1.00	0.00	0.56	0.00	0.06	0.38	0.00	0.00	0.20	0.00

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Conduit Surcharge Summary  
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Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
1102	C1000	0.01	0.01	0.65	0.01
1103	C103	0.01	0.01	0.16	0.01
1104	C104	0.01	0.01	0.16	0.01
1105	C107	0.01	0.01	0.08	0.01
1106	C108	0.01	0.01	0.20	0.01
1107	C109	0.01	0.08	0.01	0.01
1108	C2001	0.01	0.01	3.85	0.01
1109	C2003	0.01	0.01	1.42	0.01
1110	C207	0.01	0.01	0.05	0.01
1111	C209	0.01	0.14	0.01	0.03
1112	C218	0.01	0.01	0.50	0.01
1113	C300	0.01	0.01	0.16	0.01
1114	C305	0.01	0.01	2.18	0.01
1115	C402	0.01	0.01	3.36	0.01
1116	C505	0.01	0.01	1.56	0.01
1117	C508	0.01	0.01	0.03	0.01
1118	C603	0.01	0.01	5.53	0.01
1119	C604	0.01	0.01	22.95	0.01
1120	C612	0.01	0.01	2.02	0.01
1121	C703	0.01	0.01	3.78	0.01
1122	C706	0.01	0.01	2.13	0.01
1123	C810a	0.01	0.01	3.36	0.01
1124	C901	0.01	0.01	0.24	0.01
1125	C-DAB-1	0.01	4.44	0.01	2.18



1126	C-DAB-2	0.01	4.07	0.01	3.26	0.01
1127	C-DAB-3	0.01	2.56	0.01	2.42	0.01
1128	C-PDM-4	0.61	2.02	0.61	1.60	0.61
1129	C-PDM-5	0.01	1.56	0.01	0.01	0.01
1130	C-VL-2	0.01	2.24	0.49	2.46	0.01
1131	C-VL-4	0.01	5.86	10.77	4.25	0.01
1132						
1133						
1134	Analysis begun on:	Thu Oct 18 18:02:17 2018				
1135	Analysis ended on:	Thu Oct 18 18:02:19 2018				
1136	Total elapsed time:	00:00:02				



## **APPENDIX D – PROPOSED SWMM MODEL INPUTS**

1. Subbasin Lag Time Calculations
2. Subbasin Parameters Table
3. SWMM 10 Year Output Report - No Offsite Flows
4. SWMM 25 Year Output Report - No Offsite Flows
5. SWMM 25 Year Output Report - With Offsite Flows
6. **SWMM 100 Year Output Report - No Offsite Flows**

City of Gonzales Drainage Master Plan

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Element Count

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Number of rain gages ..... 0  
 Number of subcatchments ... 0  
 Number of nodes ..... 122  
 Number of links ..... 130  
 Number of pollutants ..... 0  
 Number of land uses ..... 0

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Node Summary

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Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J100	JUNCTION	235.50	4.50	0.0	Yes
J1000	JUNCTION	261.00	4.00	0.0	
J1001	JUNCTION	239.00	4.00	0.0	
J1002	JUNCTION	207.00	4.00	0.0	
J1003	JUNCTION	169.00	4.00	0.0	Yes
J1004	JUNCTION	147.00	4.00	0.0	Yes
J1005	JUNCTION	140.00	4.00	0.0	Yes
J1006	JUNCTION	121.00	16.72	100.0	
J101	JUNCTION	220.50	4.50	0.0	Yes
J102	JUNCTION	228.00	4.00	0.0	Yes
J103	JUNCTION	210.00	5.00	100.0	Yes
J104	JUNCTION	203.00	4.00	100.0	Yes
J105	JUNCTION	184.00	6.00	0.0	Yes
J106	JUNCTION	225.50	4.50	0.0	Yes
J107	JUNCTION	202.50	4.50	100.0	Yes
J108	JUNCTION	196.00	4.00	100.0	Yes
J109	JUNCTION	192.50	4.50	100.0	
J110	JUNCTION	190.00	5.00	0.0	Yes
J111	JUNCTION	181.00	5.00	100.0	Yes
J200	JUNCTION	255.50	4.50	0.0	
J2000	JUNCTION	171.50	4.50	0.0	Yes
J2001	JUNCTION	166.00	4.00	0.0	Yes
J2002	JUNCTION	156.00	4.00	0.0	
J2003	JUNCTION	148.00	5.00	0.0	Yes
J2004	JUNCTION	144.00	6.00	0.0	
J201	JUNCTION	240.50	4.50	100.0	Yes
J203	JUNCTION	235.00	4.00	0.0	
J204	JUNCTION	221.50	5.50	100.0	Yes
J206	JUNCTION	205.50	4.50	100.0	
J207	JUNCTION	202.00	6.00	0.0	Yes
J208	JUNCTION	195.00	5.00	0.0	
J210	JUNCTION	193.00	5.00	100.0	Yes
J211	JUNCTION	182.50	5.50	0.0	Yes
J212	JUNCTION	176.50	5.50	0.0	Yes
J213	JUNCTION	168.50	5.50	0.0	Yes
J214	JUNCTION	160.50	6.50	0.0	Yes
J215	JUNCTION	183.00	4.00	0.0	Yes
J216	JUNCTION	178.00	4.00	100.0	Yes
J217	JUNCTION	168.00	4.00	100.0	Yes
J218	JUNCTION	156.50	6.50	100.0	Yes
J300	JUNCTION	279.00	4.00	0.0	Yes
J301	JUNCTION	223.00	4.00	0.0	Yes

67	J302	JUNCTION	210.50	4.50	0.0	Yes
68	J303	JUNCTION	191.50	4.50	0.0	Yes
69	J304	JUNCTION	175.00	5.00	100.0	Yes
70	J305	JUNCTION	163.00	4.00	0.0	Yes
71	J400	JUNCTION	163.00	4.00	100.0	Yes
72	J401	JUNCTION	162.00	4.00	0.0	Yes
73	J402	JUNCTION	152.50	4.50	100.0	Yes
74	J500	JUNCTION	281.00	4.00	0.0	Yes
75	J501	JUNCTION	270.50	4.50	0.0	Yes
76	J502	JUNCTION	246.00	4.00	0.0	
77	J503	JUNCTION	235.00	5.00	100.0	Yes
78	J504	JUNCTION	217.00	5.00	100.0	Yes
79	J505	JUNCTION	200.00	5.00	100.0	Yes
80	J507	JUNCTION	251.00	4.00	0.0	Yes
81	J508	JUNCTION	216.00	6.00	0.0	Yes
82	J509	JUNCTION	194.00	6.00	0.0	Yes
83	J510	JUNCTION	172.50	4.50	0.0	Yes
84	J600	JUNCTION	297.00	4.00	100.0	Yes
85	J601	JUNCTION	293.00	4.00	0.0	Yes
86	J602	JUNCTION	280.00	4.00	0.0	Yes
87	J603	JUNCTION	259.50	5.50	0.0	Yes
88	J604	JUNCTION	264.00	4.00	100.0	Yes
89	J605	JUNCTION	256.00	4.00	0.0	
90	J606	JUNCTION	304.00	4.00	0.0	Yes
91	J607	JUNCTION	303.00	7.00	0.0	Yes
92	J608	JUNCTION	255.50	4.50	0.0	Yes
93	J609	JUNCTION	211.00	5.00	100.0	Yes
94	J610	JUNCTION	190.50	5.50	100.0	Yes
95	J611	JUNCTION	176.00	4.00	0.0	
96	J612	JUNCTION	154.00	6.00	100.0	Yes
97	J701	JUNCTION	194.50	4.50	100.0	Yes
98	J702	JUNCTION	180.00	5.00	0.0	Yes
99	J703	JUNCTION	176.00	5.00	0.0	Yes
100	J705	JUNCTION	173.00	5.00	0.0	Yes
101	J706	JUNCTION	162.50	5.50	0.0	Yes
102	J707	JUNCTION	160.00	5.00	0.0	Yes
103	J708	JUNCTION	158.00	6.00	0.0	
104	J709	JUNCTION	170.00	7.00	0.0	Yes
105	J710	JUNCTION	165.00	8.00	0.0	Yes
106	J800	JUNCTION	278.00	4.00	0.0	
107	J801	JUNCTION	222.00	2.00	0.0	Yes
108	J802	JUNCTION	217.00	2.00	0.0	Yes
109	J803	JUNCTION	213.00	2.00	0.0	Yes
110	J803a	JUNCTION	208.50	4.50	0.0	
111	J804	JUNCTION	210.00	2.00	0.0	Yes
112	J805	JUNCTION	207.00	2.00	0.0	Yes
113	J806	JUNCTION	201.00	4.00	0.0	Yes
114	J807	JUNCTION	153.00	4.00	100.0	Yes
115	J808	JUNCTION	152.00	4.00	0.0	Yes
116	J808a	JUNCTION	149.50	4.50	0.0	Yes
117	J810	JUNCTION	151.00	4.00	0.0	Yes
118	J810a	JUNCTION	148.50	4.50	0.0	Yes
119	J811	JUNCTION	143.00	5.00	0.0	Yes
120	J900	JUNCTION	356.00	2.00	0.0	
121	J901	JUNCTION	296.00	2.00	0.0	
122	J902	JUNCTION	260.00	3.00	0.0	
123	J903	JUNCTION	244.00	3.00	0.0	Yes
124	J904	JUNCTION	187.00	3.00	100.0	Yes
125	J-DAB-2	JUNCTION	159.30	5.60	0.0	
126	J-PDM-5	JUNCTION	190.70	5.30	0.0	
127	OF812	OUTFALL	140.00	5.00	0.0	
128	OF-DAB-2	OUTFALL	155.50	3.00	0.0	
129	OF-J-725-2	OUTFALL	142.00	2.50	0.0	
130	OF-J-725B-2	OUTFALL	147.65	2.00	0.0	Yes
131	OF-J-792	OUTFALL	139.77	3.00	0.0	Yes
132	OF-VL	OUTFALL	115.78	16.72	0.0	

133	OF-VL-1	OUTFALL	184.75	0.00	0.0	
134	OF-VL-3	OUTFALL	164.25	0.00	0.0	
135	DAB-1	STORAGE	157.50	4.50	0.0	Yes
136	DAB-2	STORAGE	160.00	7.00	0.0	Yes
137	DAB-3	STORAGE	155.00	6.00	0.0	Yes
138	PDM-1	STORAGE	250.00	5.00	0.0	Yes
139	PDM-2	STORAGE	253.00	5.00	0.0	
140	PDM-3	STORAGE	175.00	6.00	0.0	Yes
141	PDM-4	STORAGE	145.00	6.00	0.0	Yes
142	PDM-5	STORAGE	195.00	5.00	0.0	Yes
143	VL-1	STORAGE	179.00	6.00	0.0	Yes
144	VL-2	STORAGE	153.00	7.00	0.0	Yes
145	VL-3	STORAGE	159.00	5.50	0.0	Yes
146	VL-4	STORAGE	145.00	6.00	0.0	Yes

147  
148  
149 \*\*\*\*\*  
150 Link Summary  
151 \*\*\*\*\*

152	Name	From Node	To Node	Type	Length	%Slope
153	Roughness					
154	C1	VL-2	J1004	CONDUIT	850.0	
155	0.7059	0.0130				
155	C100	J100	J101	CONDUIT	1109.0	
156	1.3527	0.0130				
156	C1000	J1000	J1001	CONDUIT	2024.6	
157	1.0867	0.0300				
157	C1001	J1001	J1002	CONDUIT	1819.1	
158	1.7594	0.0200				
158	C1002	J1002	J1003	CONDUIT	3155.7	
159	1.2043	0.0200				
159	C1003	J1003	J1004	CONDUIT	1822.2	
160	1.2074	0.0200				
160	C1004	J1004	J1005	CONDUIT	660.8	
161	1.0595	0.0200				
161	C1005	J1005	J1006	CONDUIT	1561.5	
162	1.2168	0.0200				
162	C1007	J1006	OF-VL	CONDUIT	1764.0	
163	0.2959	0.0500				
163	C101	J101	J103	CONDUIT	879.0	
164	1.1946	0.0130				
164	C102	J102	J103	CONDUIT	1127.0	
165	1.5530	0.0130				
165	C103	J103	J105	CONDUIT	1690.7	
166	1.5380	0.0130				
166	C104	J104	J105	CONDUIT	1230.0	
167	1.4636	0.0130				
167	C105	J105	VL-1	CONDUIT	60.0	
168	8.3624	0.0130				
168	C106	J106	J107	CONDUIT	1015.2	
169	2.2662	0.0150				
169	C107	J107	J109	CONDUIT	613.1	
170	1.5498	0.0130				
170	C108	J108	J109	CONDUIT	447.0	
171	0.6711	0.0130				
171	C109	J109	J110	CONDUIT	654.7	
172	0.3818	0.0130				
172	C110	J110	J111	CONDUIT	703.8	
173	1.2078	0.0130				
173	C111	J111	VL-1	CONDUIT	200.0	
174	0.7500	0.0130				
174	C2	J-DAB-2	OF-DAB-2	CONDUIT	258.0	
	1.4730	0.0130				

175	C200		J200	J201	CONDUIT	869.0
	1.6687	0.0130				
176	C2000		J2000	J2001	CONDUIT	851.2
	0.6462	0.0130				
177	C2001		J2001	DAB-3	CONDUIT	904.2
	1.2166	0.0130				
178	C2002		J2002	OF-J-725B-2	CONDUIT	2000.0
	0.4175	0.0200				
179	C2003		J2003	PDM-4	CONDUIT	448.1
	0.6695	0.0130				
180	C2004		J2004	OF-J-725-2	CONDUIT	274.2
	0.7293	0.0130				
181	C202		J201	J204	CONDUIT	683.3
	2.7086	0.0130				
182	C203		J203	J204	CONDUIT	806.8
	1.4875	0.0130				
183	C205		J204	J206	CONDUIT	947.2
	1.6365	0.0130				
184	C206		J206	J207	CONDUIT	153.0
	2.2876	0.0130				
185	C207		J207	J208	CONDUIT	507.4
	1.2811	0.0130				
186	C209		J208	J210	CONDUIT	431.1
	0.4639	0.0130				
187	C210		J210	J211	CONDUIT	883.1
	1.1891	0.0130				
188	C211		J211	J212	CONDUIT	785.6
	0.7637	0.0130				
189	C212		J212	J213	CONDUIT	739.1
	1.0825	0.0130				
190	C213		J213	J214	CONDUIT	517.0
	1.5477	0.0130				
191	C214		J214	J218	CONDUIT	768.5
	0.5205	0.0130				
192	C215		J215	J216	CONDUIT	837.1
	0.5973	0.0130				
193	C216		J216	J217	CONDUIT	775.4
	1.2252	0.0130				
194	C217		J217	J218	CONDUIT	788.1
	1.2055	0.0130				
195	C218		J218	VL-2	CONDUIT	300.0
	1.1667	0.0130				
196	C300		J300	J301	CONDUIT	787.9
	7.1255	0.0130				
197	C301		J301	J302	CONDUIT	596.4
	2.0125	0.0130				
198	C302		J302	J303	CONDUIT	1308.9
	1.4518	0.0130				
199	C303		J303	J304	CONDUIT	788.0
	2.0310	0.0130				
200	C304		J304	J305	CONDUIT	779.7
	1.5392	0.0130				
201	C305		J305	VL-3	CONDUIT	500.0
	0.8000	0.0130				
202	C400		J400	J402	CONDUIT	762.8
	1.3111	0.0130				
203	C401		J401	J402	CONDUIT	826.8
	1.0887	0.0130				
204	C402		J402	VL-4	CONDUIT	737.8
	1.0166	0.0130				
205	C500		J500	J501	CONDUIT	842.7
	1.1868	0.0130				
206	C501		J501	J503	CONDUIT	1419.1
	2.4670	0.0130				
207	C502		J502	J503	CONDUIT	697.7
	1.5051	0.0130				

208	C503 1.9477	0.0130	J503	J504	CONDUIT	924.3
209	C504 2.0001	0.0130	J504	J505	CONDUIT	850.1
210	C505 0.8553	0.0130	J505	PDM-5	CONDUIT	584.6
211	C507 2.6367	0.0130	J507	J508	CONDUIT	1308.9
212	C508 3.1818	0.0130	J508	J509	CONDUIT	691.8
213	C509 1.9173	0.0130	J509	J510	CONDUIT	1121.5
214	C510 2.2048	0.0130	J510	J2003	CONDUIT	1111.5
215	C600 2.3992	0.0130	J600	J604	CONDUIT	1355.0
216	C601 2.3634	0.0130	J601	J602	CONDUIT	529.0
217	C602 2.4305	0.0130	J602	J603	CONDUIT	823.1
218	C603 1.3119	0.0130	J603	PDM-2	CONDUIT	495.5
219	C604 2.4880	0.0130	J604	PDM-2	CONDUIT	442.3
220	C605 2.7559	0.0100	J605	J609	CONDUIT	1633.5
221	C606 0.3618	0.0130	J606	J607	CONDUIT	276.4
222	C607 3.2402	0.0130	J607	J608	CONDUIT	1451.3
223	C608 2.2291	0.0130	J608	J609	CONDUIT	1974.4
224	C609 3.7454	0.0130	J609	J610	CONDUIT	534.4
225	C610 2.1457	0.0130	J610	PDM-3	CONDUIT	699.2
226	C611 1.8187	0.0130	J611	J612	CONDUIT	1209.8
227	C612 1.6333	0.0130	J612	PDM-4	CONDUIT	551.1
228	C701 0.8141	0.0130	J701	J702	CONDUIT	1719.8
229	C702 0.7745	0.0130	J702	J703	CONDUIT	451.9
230	C703 1.5330	0.0130	J703	DAB-2	CONDUIT	1043.9
231	C705 0.5557	0.0130	J705	J706	CONDUIT	1799.5
232	C706 0.6667	0.0130	J706	DAB-2	CONDUIT	300.0
233	C707 0.2966	0.0130	J707	J708	CONDUIT	674.4
234	C708 0.0983	0.0130	J708	DAB-1	CONDUIT	508.8
235	C709 0.6596	0.0130	J709	J710	CONDUIT	758.1
236	C710 1.3418	0.0130	J710	DAB-1	CONDUIT	559.0
237	C800 2.1287	0.0200	J800	J806	CONDUIT	3618.0
238	C801 0.3110	0.0200	J801	J802	CONDUIT	1607.5
239	C802 0.4078	0.0200	J802	J803	CONDUIT	981.0
240	C803 0.2606	0.0200	J803	J803a	CONDUIT	959.2

241	C803a 1.8524	0.0130	J803a	J703	CONDUIT	1754.7
242	C804 0.3619	0.0200	J804	J805	CONDUIT	829.0
243	C805 0.9334	0.0200	J805	J806	CONDUIT	642.8
244	C806 1.6177	0.0200	J806	J807	CONDUIT	2967.6
245	C807 0.0903	0.0130	J807	J808	CONDUIT	1107.1
246	C808a 0.1083	0.0130	J808a	J810a	CONDUIT	923.6
247	C809 0.1078	0.0130	J808	J810	CONDUIT	927.5
248	C810 0.8090	0.0130	J810	J811	CONDUIT	988.9
249	C810a 0.3721	0.0130	J810a	VL-4	CONDUIT	940.5
250	C811 0.5153	0.0130	J811	OF812	CONDUIT	582.2
251	C900 1.1904	0.0200	J900	J901	CONDUIT	5040.8
252	C901 2.0062	0.0200	J901	J902	CONDUIT	1794.8
253	C902 1.8117	0.0200	J902	J903	CONDUIT	883.3
254	C903 1.4289	0.0200	J903	J904	CONDUIT	3989.6
255	C904 4.5779	0.0200	J904	OF-J-792	CONDUIT	1032.8
256	C-DAB-1 0.9000	0.0130	DAB-1	J807	CONDUIT	500.0
257	C-DAB-2 0.5600	0.0130	DAB-2	J-DAB-2	CONDUIT	125.0
258	C-DAB-3 0.2500	0.0130	DAB-3	J2002	CONDUIT	200.0
259	C-PDM-4 0.7519	0.0130	PDM-4	J2004	CONDUIT	133.0
260	C-PDM-5 0.9556	0.0130	PDM-5	J-PDM-5	CONDUIT	450.0
261	C-PDM-5a 2.0039	0.0130	J-PDM-5	J2002	CONDUIT	1732.0
262	C-VL-4 1.0001	0.0130	VL-4	J811	CONDUIT	200.0
263	C-Overflow-710		J710	DAB-1	WEIR	
264	W1		VL-1	OF-VL-1	WEIR	
265	W10		PDM-5	J-PDM-5	WEIR	
266	W11		J509	PDM-4	WEIR	
267	W2		VL-2	J1004	WEIR	
268	W3		J305	VL-3	WEIR	
269	W4		J214	VL-2	WEIR	
270	W5		J208	VL-2	WEIR	
271	W6		J703	DAB-2	WEIR	
272	W7		J702	DAB-2	WEIR	
273	W8		PDM-2	J605	WEIR	
274	W9		J508	PDM-4	WEIR	
275	W-DAB-2		DAB-2	J-DAB-2	WEIR	
276	W-DAB-3		DAB-3	J2002	WEIR	
277	W-J217		J217	VL-2	WEIR	
278	W-J304		J304	VL-3	WEIR	
279	W-PDM-1		PDM-1	J903	WEIR	
280	W-PDM-3		PDM-3	J611	WEIR	
281	W-PDM-4		PDM-4	J2004	WEIR	
282	W-VL-1		J105	VL-1	WEIR	
283	W-VL-3		VL-3	OF-VL-3	WEIR	
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Cross Section Summary

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Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	2.50	4.91	0.63	2.50	1	34.46
C100	CIRCULAR	2.50	4.91	0.63	2.50	1	47.71
C1000	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	110.19
C1001	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	1153.17
C1002	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	954.06
C1003	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	955.32
C1004	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	894.87
C1005	TRAPEZOIDAL	4.00	64.00	2.47	24.00	1	959.03
C1007	XS_701	16.72	4292.45	10.30	410.01	1	32860.58
C101	CIRCULAR	2.50	4.91	0.63	2.50	1	44.83
C102	CIRCULAR	2.00	3.14	0.50	2.00	1	28.19
C103	CIRCULAR	3.00	7.07	0.75	3.00	1	82.72
C104	CIRCULAR	2.00	3.14	0.50	2.00	1	27.37
C105	CIRCULAR	4.00	12.57	1.00	4.00	1	415.39
C106	CIRCULAR	2.50	4.91	0.63	2.50	1	53.51
C107	CIRCULAR	2.50	4.91	0.63	2.50	1	51.06
C108	CIRCULAR	2.00	3.14	0.50	2.00	1	18.53
C109	CIRCULAR	3.00	7.07	0.75	3.00	1	41.22
C110	CIRCULAR	3.00	7.07	0.75	3.00	1	73.30
C111	CIRCULAR	3.50	9.62	0.88	3.50	1	87.13
C2	CIRCULAR	3.00	7.07	0.75	3.00	1	80.95
C200	CIRCULAR	2.50	4.91	0.63	2.50	1	52.99
C2000	CIRCULAR	2.50	4.91	0.63	2.50	1	32.97
C2001	RECT_CLOSED	2.00	10.00	0.71	5.00	1	100.75
C2002	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	102.45
C2003	RECT_CLOSED	3.00	15.00	0.94	5.00	1	134.39
C2004	CIRCULAR	2.50	4.91	0.63	2.50	1	35.03
C202	CIRCULAR	2.50	4.91	0.63	2.50	1	67.51
C203	CIRCULAR	2.00	3.14	0.50	2.00	1	27.59
C205	CIRCULAR	2.50	4.91	0.63	2.50	1	52.47
C206	CIRCULAR	2.50	4.91	0.63	2.50	1	62.04
C207	CIRCULAR	3.00	7.07	0.75	3.00	1	75.49
C209	CIRCULAR	3.00	7.07	0.75	3.00	1	45.43
C210	CIRCULAR	3.00	7.07	0.75	3.00	1	72.73
C211	CIRCULAR	3.50	9.62	0.88	3.50	1	87.92
C212	CIRCULAR	3.50	9.62	0.88	3.50	1	104.68
C213	CIRCULAR	3.50	9.62	0.88	3.50	1	125.17
C214	CIRCULAR	4.50	15.90	1.13	4.50	1	141.87
C215	CIRCULAR	2.00	3.14	0.50	2.00	1	17.48
C216	CIRCULAR	2.00	3.14	0.50	2.00	1	25.04
C217	CIRCULAR	2.00	3.14	0.50	2.00	1	24.84
C218	RECT_CLOSED	4.50	45.00	1.55	10.00	1	744.71
C300	CIRCULAR	1.00	0.79	0.25	1.00	1	9.51
C301	CIRCULAR	2.00	3.14	0.50	2.00	1	32.09
C302	CIRCULAR	2.50	4.91	0.63	2.50	1	49.42
C303	CIRCULAR	2.50	4.91	0.63	2.50	1	58.45
C304	CIRCULAR	3.00	7.07	0.75	3.00	1	82.75
C305	RECT_CLOSED	3.00	27.00	1.13	9.00	1	298.60
C400	CIRCULAR	2.00	3.14	0.50	2.00	1	25.90
C401	CIRCULAR	2.00	3.14	0.50	2.00	1	23.60
C402	CIRCULAR	2.50	4.91	0.63	2.50	1	41.36
C500	CIRCULAR	2.00	3.14	0.50	2.00	1	24.64
C501	CIRCULAR	2.50	4.91	0.63	2.50	1	64.42
C502	CIRCULAR	2.00	3.14	0.50	2.00	1	27.75
C503	CIRCULAR	3.00	7.07	0.75	3.00	1	93.08
C504	CIRCULAR	3.00	7.07	0.75	3.00	1	94.33
C505	RECT_CLOSED	2.00	10.00	0.71	5.00	1	84.47
C507	CIRCULAR	2.00	3.14	0.50	2.00	1	36.73
C508	CIRCULAR	2.00	3.14	0.50	2.00	1	40.35

351	C509	CIRCULAR	2.50	4.91	0.63	2.50	1	56.80
352	C510	RECT_CLOSED	2.00	10.00	0.71	5.00	1	135.62
353	C600	CIRCULAR	2.00	3.14	0.50	2.00	1	35.04
354	C601	CIRCULAR	2.00	3.14	0.50	2.00	1	34.78
355	C602	CIRCULAR	2.00	3.14	0.50	2.00	1	35.27
356	C603	RECT_CLOSED	2.00	10.00	0.71	5.00	1	104.62
357	C604	CIRCULAR	2.00	3.14	0.50	2.00	1	35.68
358	C605	CIRCULAR	2.00	3.14	0.50	2.00	1	48.82
359	C606	CIRCULAR	2.00	3.14	0.50	2.00	1	13.61
360	C607	CIRCULAR	2.00	3.14	0.50	2.00	1	40.72
361	C608	CIRCULAR	2.50	4.91	0.63	2.50	1	61.24
362	C609	CIRCULAR	3.00	7.07	0.75	3.00	1	129.08
363	C610	CIRCULAR	3.50	9.62	0.88	3.50	1	147.38
364	C611	CIRCULAR	2.00	3.14	0.50	2.00	1	30.51
365	C612	CIRCULAR	2.00	3.14	0.50	2.00	1	28.91
366	C701	CIRCULAR	2.50	4.91	0.63	2.50	1	37.01
367	C702	CIRCULAR	3.00	7.07	0.75	3.00	1	58.70
368	C703	CIRCULAR	3.00	7.07	0.75	3.00	1	82.58
369	C705	CIRCULAR	3.00	7.07	0.75	3.00	1	49.72
370	C706	CIRCULAR	3.50	9.62	0.88	3.50	1	82.15
371	C707	CIRCULAR	3.50	9.62	0.88	3.50	1	54.79
372	C708	RECT_CLOSED	3.00	15.00	0.94	5.00	1	51.48
373	C709	CIRCULAR	2.50	4.91	0.63	2.50	1	33.31
374	C710	RECT_CLOSED	3.00	24.00	1.09	8.00	1	336.77
375	C800	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1071.28
376	C801	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	88.43
377	C802	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	101.25
378	C803	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	80.95
379	C803a	CIRCULAR	2.50	4.91	0.63	2.50	1	55.83
380	C804	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	95.38
381	C805	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	153.19
382	C806	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	933.87
383	C807	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	339.50
384	C808a	CIRCULAR	2.50	4.91	0.63	2.50	1	13.50
385	C809	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	370.92
386	C810	TRAPEZOIDAL	4.00	56.00	2.34	22.00	1	1016.01
387	C810a	CIRCULAR	2.50	4.91	0.63	2.50	1	25.02
388	C811	RECT_OPEN	5.00	50.00	2.50	10.00	1	755.70
389	C900	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	172.99
390	C901	TRAPEZOIDAL	2.00	18.00	1.29	13.00	1	224.58
391	C902	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	486.88
392	C903	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	432.38
393	C904	TRAPEZOIDAL	3.00	33.00	1.79	17.00	1	773.94
394	C-DAB-1	CIRCULAR	1.21	1.15	0.30	1.21	1	5.62
395	C-DAB-2	CIRCULAR	2.75	5.94	0.69	2.75	1	39.58
396	C-DAB-3	CIRCULAR	1.25	1.23	0.31	1.25	1	3.23
397	C-PDM-4	CIRCULAR	2.00	3.14	0.50	2.00	1	19.62
398	C-PDM-5	CIRCULAR	2.00	3.14	0.50	2.00	1	22.11
399	C-PDM-5a	CIRCULAR	2.00	3.14	0.50	2.00	1	32.02
400	C-VL-4	CIRCULAR	1.00	0.79	0.25	1.00	1	3.56

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405 Transect Summary  
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407  
408 Transect Street1  
409 Area:

410	0.0004	0.0015	0.0034	0.0060	0.0093
411	0.0134	0.0183	0.0239	0.0302	0.0373
412	0.0452	0.0538	0.0631	0.0732	0.0840
413	0.0956	0.1079	0.1210	0.1348	0.1494
414	0.1647	0.1807	0.1976	0.2151	0.2334
415	0.2524	0.2722	0.2928	0.3141	0.3361
416	0.3589	0.3824	0.4067	0.4319	0.4585

417		0.4866	0.5163	0.5474	0.5800	0.6141
418		0.6493	0.6853	0.7220	0.7595	0.7977
419		0.8367	0.8764	0.9168	0.9580	1.0000
420	Hrad:					
421		0.0210	0.0420	0.0630	0.0840	0.1050
422		0.1259	0.1469	0.1679	0.1889	0.2099
423		0.2309	0.2519	0.2729	0.2939	0.3149
424		0.3359	0.3568	0.3778	0.3988	0.4198
425		0.4408	0.4618	0.4828	0.5038	0.5248
426		0.5458	0.5668	0.5877	0.6087	0.6297
427		0.6507	0.6717	0.6927	0.7008	0.7041
428		0.7093	0.7161	0.7242	0.7335	0.7438
429		0.7702	0.7964	0.8224	0.8483	0.8739
430		0.8994	0.9248	0.9500	0.9751	1.0000
431	Width:					
432		0.0176	0.0353	0.0529	0.0706	0.0882
433		0.1059	0.1235	0.1412	0.1588	0.1765
434		0.1941	0.2118	0.2294	0.2471	0.2647
435		0.2824	0.3000	0.3176	0.3353	0.3529
436		0.3706	0.3882	0.4059	0.4235	0.4412
437		0.4588	0.4765	0.4941	0.5118	0.5294
438		0.5471	0.5647	0.5824	0.6118	0.6471
439		0.6824	0.7176	0.7529	0.7882	0.8235
440		0.8412	0.8588	0.8765	0.8941	0.9118
441		0.9294	0.9471	0.9647	0.9824	1.0000
442						
443	Transect Street2					
444	Area:					
445		0.0005	0.0021	0.0047	0.0084	0.0132
446		0.0189	0.0258	0.0337	0.0426	0.0526
447		0.0637	0.0758	0.0889	0.1032	0.1184
448		0.1342	0.1500	0.1658	0.1816	0.1974
449		0.2132	0.2289	0.2447	0.2605	0.2763
450		0.2926	0.3100	0.3284	0.3479	0.3684
451		0.3900	0.4126	0.4363	0.4611	0.4868
452		0.5137	0.5416	0.5705	0.6005	0.6316
453		0.6637	0.6968	0.7311	0.7663	0.8026
454		0.8400	0.8784	0.9179	0.9584	1.0000
455	Hrad:					
456		0.0175	0.0349	0.0524	0.0699	0.0873
457		0.1048	0.1222	0.1397	0.1572	0.1746
458		0.1921	0.2096	0.2270	0.2445	0.2620
459		0.2965	0.3310	0.3653	0.3996	0.4338
460		0.4679	0.5019	0.5358	0.5696	0.6034
461		0.6362	0.6662	0.6935	0.7184	0.7413
462		0.7624	0.7818	0.7998	0.8166	0.8322
463		0.8469	0.8607	0.8739	0.8864	0.8983
464		0.9098	0.9208	0.9315	0.9419	0.9521
465		0.9620	0.9717	0.9813	0.9907	1.0000
466	Width:					
467		0.0250	0.0500	0.0750	0.1000	0.1250
468		0.1500	0.1750	0.2000	0.2250	0.2500
469		0.2750	0.3000	0.3250	0.3500	0.3750
470		0.3750	0.3750	0.3750	0.3750	0.3750
471		0.3750	0.3750	0.3750	0.3750	0.3750
472		0.4000	0.4250	0.4500	0.4750	0.5000
473		0.5250	0.5500	0.5750	0.6000	0.6250
474		0.6500	0.6750	0.7000	0.7250	0.7500
475		0.7750	0.8000	0.8250	0.8500	0.8750
476		0.9000	0.9250	0.9500	0.9750	1.0000
477						
478	Transect XS_701					
479	Area:					
480		0.0034	0.0184	0.0345	0.0507	0.0672
481		0.0839	0.1008	0.1180	0.1354	0.1531
482		0.1709	0.1888	0.2069	0.2252	0.2435



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549 Groundwater Inflow ..... 0.000 0.000
550 RDII Inflow ..... 0.000 0.000
551 External Inflow ..... 151.450 49.352
552 External Outflow ..... 91.711 29.885
553 Flooding Loss ..... 0.004 0.001
554 Evaporation Loss ..... 0.000 0.000
555 Exfiltration Loss ..... 59.058 19.245
556 Initial Stored Volume .... 0.001 0.000
557 Final Stored Volume ..... 0.558 0.182
558 Continuity Error (%) ..... 0.079

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559
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561 *****

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562 Highest Continuity Errors
563 *****
564 Node J1006 (1.59%)

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565
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567 *****

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568 Time-Step Critical Elements
569 *****
570 Link C-DAB-2 (17.15%)
571 Link C105 (8.75%)

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572
573
574 *****

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575 Highest Flow Instability Indexes
576 *****
577 Link C1007 (15)

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578
579
580 *****

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581 Routing Time Step Summary
582 *****
583 Minimum Time Step      : 0.68 sec
584 Average Time Step      : 4.62 sec
585 Maximum Time Step     : 5.00 sec
586 Percent in Steady State : -0.00
587 Average Iterations per Step : 2.09
588 Percent Not Converging  : 0.51

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591 *****

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592 Node Depth Summary
593 *****

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599 -----

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Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
600	J100	0.09	0.95	236.45	0 00:45	0.95
601	J1000	0.00	0.00	261.00	0 00:00	0.00
602	J1001	0.00	0.00	239.00	0 00:00	0.00
603	J1002	0.00	0.00	207.00	0 00:00	0.00
604	J1003	0.03	0.30	169.30	0 00:52	0.30
605	J1004	0.19	1.00	148.00	0 01:30	1.00
606	J1005	0.21	1.01	141.01	0 01:33	1.01
607	J1006	0.31	0.85	121.85	0 01:57	0.85
608	J101	0.14	1.67	222.17	0 00:46	1.67
609	J102	0.08	0.87	228.87	0 00:45	0.87
610	J103	0.17	1.88	211.88	0 00:48	1.88
611	J104	0.09	1.04	204.04	0 00:45	1.04
612	J105	0.20	4.13	188.13	0 00:25	4.13
613	J106	0.09	0.97	226.47	0 00:45	0.97
614	J107	0.13	1.69	204.19	0 00:47	1.69

615	J108	JUNCTION	0.22	8.65	204.65	0	00:41	7.34
616	J109	JUNCTION	0.30	7.50	200.00	0	00:41	5.56
617	J110	JUNCTION	0.20	2.59	192.59	0	00:47	2.58
618	J111	JUNCTION	1.02	4.52	185.52	0	00:45	3.96
619	J200	JUNCTION	0.00	0.00	255.50	0	00:00	0.00
620	J2000	JUNCTION	0.14	1.64	173.14	0	00:45	1.64
621	J2001	JUNCTION	0.06	0.79	166.79	0	00:46	0.78
622	J2002	JUNCTION	0.23	1.21	157.21	0	01:40	1.21
623	J2003	JUNCTION	0.24	2.76	150.76	0	01:02	2.75
624	J2004	JUNCTION	0.42	4.26	148.26	0	01:15	4.26
625	J201	JUNCTION	0.11	1.30	241.80	0	00:45	1.30
626	J203	JUNCTION	0.00	0.00	235.00	0	00:00	0.00
627	J204	JUNCTION	0.16	2.01	223.51	0	00:47	2.01
628	J206	JUNCTION	0.17	2.72	208.22	0	00:49	2.69
629	J207	JUNCTION	0.19	2.45	204.45	0	00:49	2.44
630	J208	JUNCTION	0.29	4.20	199.20	0	00:48	4.20
631	J210	JUNCTION	0.20	2.51	195.51	0	00:51	2.51
632	J211	JUNCTION	0.28	5.50	188.00	0	00:48	5.50
633	J212	JUNCTION	0.28	5.50	182.00	0	00:47	5.47
634	J213	JUNCTION	0.30	5.50	174.00	0	00:46	5.50
635	J214	JUNCTION	0.36	5.31	165.81	0	00:53	5.30
636	J215	JUNCTION	0.09	1.00	184.00	0	00:45	1.00
637	J216	JUNCTION	0.11	1.25	179.25	0	00:46	1.24
638	J217	JUNCTION	0.20	3.65	171.65	0	00:48	3.65
639	J218	JUNCTION	0.35	2.98	159.48	0	01:29	2.98
640	J300	JUNCTION	0.07	0.93	279.93	0	00:45	0.93
641	J301	JUNCTION	0.11	1.34	224.34	0	00:46	1.34
642	J302	JUNCTION	0.13	1.51	212.01	0	00:46	1.51
643	J303	JUNCTION	0.17	2.37	193.87	0	00:49	2.37
644	J304	JUNCTION	0.27	4.62	179.62	0	00:49	4.61
645	J305	JUNCTION	0.13	2.61	165.61	0	00:18	2.59
646	J400	JUNCTION	0.08	0.84	163.84	0	00:45	0.84
647	J401	JUNCTION	0.08	0.89	162.89	0	00:45	0.89
648	J402	JUNCTION	0.16	1.99	154.49	0	00:46	1.99
649	J500	JUNCTION	0.12	1.41	282.41	0	00:46	1.41
650	J501	JUNCTION	0.12	1.33	271.83	0	00:47	1.33
651	J502	JUNCTION	0.00	0.00	246.00	0	00:00	0.00
652	J503	JUNCTION	0.15	1.71	236.71	0	00:46	1.71
653	J504	JUNCTION	0.19	2.21	219.21	0	00:47	2.21
654	J505	JUNCTION	0.16	2.66	202.66	0	00:54	2.65
655	J507	JUNCTION	0.11	1.31	252.31	0	00:45	1.31
656	J508	JUNCTION	0.16	3.45	219.45	0	00:50	3.45
657	J509	JUNCTION	0.22	3.49	197.49	0	00:54	3.49
658	J510	JUNCTION	0.08	0.88	173.38	0	00:44	0.88
659	J600	JUNCTION	0.10	1.13	298.13	0	00:45	1.12
660	J601	JUNCTION	0.08	0.91	293.91	0	00:45	0.90
661	J602	JUNCTION	0.10	1.14	281.14	0	00:46	1.14
662	J603	JUNCTION	0.06	1.49	260.99	0	00:17	1.48
663	J604	JUNCTION	0.14	2.72	266.72	0	00:19	2.48
664	J605	JUNCTION	0.00	0.00	256.00	0	00:00	0.00
665	J606	JUNCTION	0.17	3.02	307.02	0	00:45	3.01
666	J607	JUNCTION	0.11	1.29	304.29	0	00:45	1.28
667	J608	JUNCTION	0.16	1.86	257.36	0	00:48	1.86
668	J609	JUNCTION	0.16	1.90	212.90	0	00:47	1.90
669	J610	JUNCTION	0.28	2.32	192.82	0	00:48	2.32
670	J611	JUNCTION	0.00	0.00	176.00	0	00:00	0.00
671	J612	JUNCTION	0.09	0.99	154.99	0	00:46	0.99
672	J701	JUNCTION	0.29	6.50	201.00	0	01:33	3.95
673	J702	JUNCTION	0.41	4.17	184.17	0	01:31	4.16
674	J703	JUNCTION	0.65	2.23	178.23	0	01:33	2.23
675	J705	JUNCTION	0.27	2.34	175.34	0	01:17	2.34
676	J706	JUNCTION	0.83	5.50	168.00	0	01:11	5.31
677	J707	JUNCTION	0.23	1.81	161.81	0	00:45	1.81
678	J708	JUNCTION	0.75	3.03	161.03	0	02:37	3.03
679	J709	JUNCTION	0.21	7.00	177.00	0	00:43	5.65
680	J710	JUNCTION	0.09	1.50	166.50	0	00:17	1.50

681	J800	JUNCTION	0.00	0.00	278.00	0	00:00	0.00
682	J801	JUNCTION	0.11	0.45	222.45	0	03:04	0.45
683	J802	JUNCTION	0.26	0.93	217.93	0	03:32	0.93
684	J803	JUNCTION	0.49	1.68	214.68	0	03:36	1.68
685	J803a	JUNCTION	0.46	1.63	210.13	0	03:37	1.63
686	J804	JUNCTION	0.13	0.56	210.56	0	03:01	0.56
687	J805	JUNCTION	0.19	0.81	207.81	0	03:02	0.81
688	J806	JUNCTION	0.15	0.59	201.59	0	03:09	0.59
689	J807	JUNCTION	0.35	1.24	154.24	0	03:17	1.24
690	J808	JUNCTION	0.43	1.28	153.28	0	03:21	1.28
691	J808a	JUNCTION	0.20	2.44	151.94	0	00:46	2.43
692	J810	JUNCTION	0.20	0.65	151.65	0	03:23	0.65
693	J810a	JUNCTION	0.30	1.99	150.49	0	00:48	1.99
694	J811	JUNCTION	0.22	0.69	143.69	0	03:25	0.69
695	J900	JUNCTION	0.00	0.00	356.00	0	00:00	0.00
696	J901	JUNCTION	0.00	0.00	296.00	0	00:00	0.00
697	J902	JUNCTION	0.00	0.00	260.00	0	00:00	0.00
698	J903	JUNCTION	0.02	0.19	244.19	0	00:53	0.19
699	J904	JUNCTION	0.12	0.54	187.54	0	02:47	0.54
700	J-DAB-2	JUNCTION	0.83	2.67	161.97	0	02:23	2.67
701	J-PDM-5	JUNCTION	0.27	2.59	193.29	0	01:28	2.59
702	OF812	OUTFALL	0.21	0.64	140.64	0	03:25	0.64
703	OF-DAB-2	OUTFALL	0.66	1.93	157.43	0	02:23	1.93
704	OF-J-725-2	OUTFALL	0.30	2.11	144.11	0	01:15	2.11
705	OF-J-725B-2	OUTFALL	0.18	1.02	148.67	0	01:40	1.02
706	OF-J-792	OUTFALL	0.12	0.53	140.30	0	02:47	0.53
707	OF-VL	OUTFALL	0.12	0.39	116.17	0	01:57	0.39
708	OF-VL-1	OUTFALL	0.00	0.00	184.75	0	00:00	0.00
709	OF-VL-3	OUTFALL	0.00	0.00	164.25	0	00:00	0.00
710	DAB-1	STORAGE	0.92	3.53	161.03	0	02:37	3.53
711	DAB-2	STORAGE	1.60	5.90	165.90	0	02:23	5.90
712	DAB-3	STORAGE	1.43	4.98	159.98	0	01:56	4.98
713	PDM-1	STORAGE	1.63	3.97	253.97	0	02:36	3.97
714	PDM-2	STORAGE	1.73	4.05	257.05	0	02:39	4.05
715	PDM-3	STORAGE	2.65	4.97	179.97	0	02:56	4.97
716	PDM-4	STORAGE	0.67	5.49	150.49	0	01:15	5.49
717	PDM-5	STORAGE	0.53	3.94	198.94	0	01:21	3.94
718	VL-1	STORAGE	2.37	4.97	183.97	0	02:42	4.97
719	VL-2	STORAGE	1.03	6.44	159.44	0	01:29	6.44
720	VL-3	STORAGE	2.01	4.44	163.44	0	02:40	4.44
721	VL-4	STORAGE	1.28	5.06	150.06	0	02:33	5.06

722  
723  
724 \*\*\*\*\*  
725 Node Inflow Summary  
726 \*\*\*\*\*  
727  
728

			Maximum	Maximum			Lateral
			Total	Flow			Inflow
			Lateral	Total	Time of Max		
			Inflow	Balance	Occurrence		
			Volume	Error			Volume
Node	Percent	Type	CFS	CFS	days hr:min	10^6 gal 10^6	
gal							
729							
730							
731							
732							
733							
734	J100	JUNCTION	15.00	15.00	0 00:45	0.332	
	0.332						
						-0.043	
735	J1000	JUNCTION	0.00	0.00	0 00:00	0	
	0						
						0.000 gal	
736	J1001	JUNCTION	0.00	0.00	0 00:00	0	

737	0 J1002	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
738	0 J1003	0.000 gal	JUNCTION	11.58	11.58	0	00:45	0.256
739	0.256 J1004	-0.318	JUNCTION	4.66	61.92	0	01:28	0.103
740	4.5 J1005	0.020	JUNCTION	10.75	65.26	0	01:33	0.714
741	5.22 J1006	-0.056	JUNCTION	0.00	65.36	0	01:35	0
742	5.22 J101	1.614	JUNCTION	18.93	33.36	0	00:45	0.419
743	0.752 J102	0.001	JUNCTION	11.22	11.22	0	00:45	0.248
744	0.248 J103	0.304	JUNCTION	17.25	59.86	0	00:46	0.382
745	1.38 J104	-0.022	JUNCTION	14.99	14.99	0	00:45	0.332
746	0.332 J105	-1.250	JUNCTION	20.45	91.35	0	00:46	0.453
747	2.17 J106	0.109	JUNCTION	17.45	17.45	0	00:45	0.386
748	0.386 J107	-0.043	JUNCTION	17.85	34.79	0	00:45	0.395
749	0.782 J108	0.036	JUNCTION	21.70	21.70	0	00:45	0.481
750	0.481 J109	0.053	JUNCTION	0.00	53.82	0	00:46	0
751	1.26 J110	-0.142	JUNCTION	11.57	64.93	0	00:46	0.256
752	1.52 J111	0.435	JUNCTION	9.54	72.80	0	00:47	0.211
753	1.72 J200	-0.053	JUNCTION	0.00	0.00	0	00:00	0
754	0 J2000	0.000 gal	JUNCTION	19.97	19.97	0	00:45	0.442
755	0.442 J2001	-0.014	JUNCTION	16.35	35.54	0	00:45	0.362
756	0.804 J2002	0.009	JUNCTION	0.00	37.31	0	01:38	0
757	2.54 J2003	0.041	JUNCTION	10.98	67.38	0	00:44	0.243
758	1.74 J2004	-0.002	JUNCTION	0.00	39.40	0	01:14	0
759	2.06 J201	-0.001	JUNCTION	33.59	33.59	0	00:45	0.744
760	0.744 J203	0.133	JUNCTION	0.00	0.00	0	00:00	0
761	0 J204	0.000 gal	JUNCTION	14.13	47.20	0	00:45	0.313
762	1.06 J206	0.114	JUNCTION	0.00	46.09	0	00:47	0
763	1.05 J207	-0.061	JUNCTION	15.65	58.90	0	00:49	0.347
764	1.4 J208	0.050	JUNCTION	0.00	58.76	0	00:49	0
765	1.4 J210	-0.058	JUNCTION	12.30	61.74	0	00:45	0.272
766	1.64 J211	0.007	JUNCTION	20.10	80.97	0	00:45	0.445
767	2.09 J212	-0.003	JUNCTION	15.43	94.35	0	00:47	0.342
768	2.43 J213	-0.031	JUNCTION	20.81	110.84	0	00:46	0.461
769	2.89 J214	-0.026	JUNCTION	18.76	123.94	0	00:47	0.415



770	3.31 J215 0.197	-0.068 -0.056	JUNCTION	8.91	8.91	0	00:45	0.197
771	J216 0.411	0.169	JUNCTION	9.63	18.15	0	00:45	0.213
772	J217 0.755	0.186	JUNCTION	15.58	32.89	0	00:45	0.345
773	J218 4.45	0.026	JUNCTION	17.96	161.36	0	00:47	0.398
774	J300 0.226	-0.020	JUNCTION	10.19	10.19	0	00:45	0.226
775	J301 0.507	0.002	JUNCTION	12.71	22.55	0	00:45	0.281
776	J302 0.77	-0.012	JUNCTION	11.88	33.72	0	00:45	0.263
777	J303 1.31	0.060	JUNCTION	24.57	57.14	0	00:45	0.544
778	J304 1.81	-0.141	JUNCTION	22.53	75.61	0	00:45	0.499
779	J305 2.41	0.006	JUNCTION	26.99	93.67	0	00:44	0.598
780	J400 0.217	-0.576	JUNCTION	9.78	9.78	0	00:45	0.217
781	J401 0.217	-0.746	JUNCTION	9.79	9.79	0	00:45	0.217
782	J402 0.826	0.282	JUNCTION	17.60	36.59	0	00:45	0.39
783	J500 0.434	-0.003	JUNCTION	19.58	19.58	0	00:45	0.434
784	J501 0.775	-0.003	JUNCTION	15.43	33.79	0	00:45	0.342
785	J502 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
786	J503 1.3	-0.011	JUNCTION	23.52	55.35	0	00:46	0.521
787	J504 1.67	0.037	JUNCTION	17.09	71.54	0	00:46	0.379
788	J505 2.02	-0.021	JUNCTION	15.39	85.36	0	00:47	0.341
789	J507 0.607	0.446	JUNCTION	27.39	27.39	0	00:45	0.607
790	J508 0.993	-0.235	JUNCTION	17.57	45.16	0	00:45	0.389
791	J509 1.25	-0.107	JUNCTION	11.53	50.60	0	00:44	0.255
792	J510 1.5	0.008	JUNCTION	11.20	57.30	0	00:44	0.248
793	J600 0.47	-0.614	JUNCTION	21.24	21.24	0	00:45	0.47
794	J601 0.294	-0.003	JUNCTION	13.29	13.29	0	00:45	0.294
795	J602 0.458	-0.101	JUNCTION	7.38	20.31	0	00:45	0.163
796	J603 0.722	0.058	JUNCTION	11.93	31.49	0	00:46	0.264
797	J604 0.728	0.338	JUNCTION	11.52	32.38	0	00:45	0.255
798	J605 0	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
799	J606 0.371	-0.025	JUNCTION	16.75	16.75	0	00:45	0.371
800	J607 0.65	0.451	JUNCTION	12.58	29.33	0	00:45	0.279
801	J608 1.24	-0.163	JUNCTION	26.69	55.03	0	00:45	0.591
802	J609		JUNCTION	26.89	76.56	0	00:47	0.596

803	1.84 J610	0.292	JUNCTION	53.44	92.30	0	00:47	1.97
804	3.8 J611	0.332	JUNCTION	0.00	0.00	0	00:00	0
805	0 J612	0.000 gal	JUNCTION	14.64	14.64	0	00:45	0.324
806	0.324 J701	-0.161	JUNCTION	38.29	38.29	0	01:30	1.7
807	1.7 J702	-0.397	JUNCTION	31.87	58.90	0	01:29	1.18
808	2.88 J703	0.458	JUNCTION	25.53	74.25	0	01:31	0.565
809	7.99 J705	-0.080	JUNCTION	46.50	46.50	0	01:15	1.72
810	1.72 J706	0.858	JUNCTION	36.57	80.14	0	01:15	1.35
811	3.05 J707	-0.233	JUNCTION	24.08	24.08	0	00:45	0.533
812	0.534 J708	-0.355	JUNCTION	0.00	23.70	0	00:46	0
813	0.536 J709	0.344	JUNCTION	30.42	30.42	0	00:45	0.674
814	0.674 J710	-0.067	JUNCTION	36.77	48.98	0	01:15	1.36
815	2.03 J800	0.014	JUNCTION	0.00	0.00	0	00:00	0
816	0 J801	0.000 gal	JUNCTION	5.97	5.97	0	03:00	0.529
817	0.529 J802	-0.078	JUNCTION	19.55	24.36	0	03:30	2.02
818	2.55 J803	0.005	JUNCTION	19.43	43.18	0	03:30	2.01
819	4.56 J803a	0.015	JUNCTION	0.00	42.35	0	03:36	0
820	4.56 J804	0.038	JUNCTION	9.16	9.16	0	03:00	0.812
821	0.812 J805	0.001	JUNCTION	17.04	26.00	0	03:00	1.51
822	2.32 J806	-0.005	JUNCTION	2.42	25.84	0	03:02	0.0536
823	2.38 J807	-0.016	JUNCTION	1.51	31.33	0	03:09	0.0334
824	3.7 J808	0.052	JUNCTION	11.48	30.66	0	03:18	0.254
825	3.96 J808a	-0.009	JUNCTION	17.73	17.73	0	00:45	0.393
826	0.393 J810	-0.253	JUNCTION	3.39	30.56	0	03:22	0.0751
827	4.03 J810a	0.005	JUNCTION	8.62	25.26	0	00:46	0.191
828	0.585 J811	-0.006	JUNCTION	5.22	35.64	0	03:24	0.116
829	5.11 J900	0.002	JUNCTION	0.00	0.00	0	00:00	0
830	0 J901	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
831	0 J902	0.000 gal	JUNCTION	0.00	0.00	0	00:00	0
832	0 J903	0.000 gal	JUNCTION	3.82	3.82	0	00:45	0.0846
833	0.0846 J904	-0.689	JUNCTION	29.80	30.18	0	02:45	2.42
834	2.51 J-DAB-2	0.026	JUNCTION	0.00	60.14	0	02:23	0
835	9.32 J-PDM-5	-0.000	JUNCTION	0.00	32.15	0	01:19	0

836	1.83	-0.055						
	OF812		OUTFALL	0.00	35.63	0	03:25	0
	5.11	0.000						
837	OF-DAB-2		OUTFALL	0.00	60.14	0	02:23	0
	9.32	0.000						
838	OF-J-725-2		OUTFALL	0.00	39.40	0	01:15	0
	2.06	0.000						
839	OF-J-725B-2		OUTFALL	29.46	57.75	0	02:30	2.18
	4.71	0.000						
840	OF-J-792		OUTFALL	11.86	39.79	0	02:49	1.05
	3.56	0.000						
841	OF-VL		OUTFALL	0.00	56.35	0	01:57	0
	5.14	0.000						
842	OF-VL-1		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						
843	OF-VL-3		OUTFALL	0.00	0.00	0	00:00	0
	0	0.000 gal						
844	DAB-1		STORAGE	7.29	69.82	0	00:45	0.161
	2.73	0.011						
845	DAB-2		STORAGE	14.62	153.78	0	01:16	0.324
	11.4	-0.109						
846	DAB-3		STORAGE	27.09	61.39	0	00:45	0.6
	1.4	-0.009						
847	PDM-1		STORAGE	25.12	25.12	0	00:45	0.556
	0.556	0.001						
848	PDM-2		STORAGE	0.00	63.20	0	00:46	0
	1.45	0.012						
849	PDM-3		STORAGE	16.37	106.56	0	00:48	0.363
	4.15	-0.383						
850	PDM-4		STORAGE	11.10	89.04	0	00:45	0.246
	2.31	0.000						
851	PDM-5		STORAGE	12.72	96.03	0	00:47	0.282
	2.3	-0.004						
852	VL-1		STORAGE	5.90	171.09	0	00:47	0.131
	4.02	-0.096						
853	VL-2		STORAGE	27.79	203.77	0	00:47	0.615
	5.11	0.001						
854	VL-3		STORAGE	7.17	103.02	0	00:49	0.159
	2.57	-0.003						
855	VL-4		STORAGE	12.30	71.43	0	00:47	0.272
	1.68	-0.072						

856  
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858 \*\*\*\*\*  
859 Node Surcharge Summary  
860 \*\*\*\*\*

861  
862 Surcharging occurs when water rises above the top of the highest conduit.  
863 -----

864			Hours	Max. Height	Min. Depth
865			Surcharged	Above Crown	Below Rim
866	Node	Type		Feet	Feet
867	-----				
868	J108	JUNCTION	0.25	6.649	0.000
869	J109	JUNCTION	0.27	4.500	0.000
870	J111	JUNCTION	0.13	1.018	0.482
871	J211	JUNCTION	0.12	2.000	0.000
872	J212	JUNCTION	0.18	2.000	0.000
873	J213	JUNCTION	0.24	2.000	0.000
874	J604	JUNCTION	0.01	0.223	1.277
875	J606	JUNCTION	0.20	1.017	0.983
876	J701	JUNCTION	0.10	4.000	0.000
877	J706	JUNCTION	1.52	2.000	0.000
878	J709	JUNCTION	0.14	4.500	0.000

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881 \*\*\*\*\*  
 882 Node Flooding Summary  
 883 \*\*\*\*\*  
 884

885 Flooding refers to all water that overflows a node, whether it ponds or not.  
 886 -----

887			Maximum	Time of Max	Total	Maximum
888		Hours	Rate	Occurrence	Flood	Ponded
889	Node	Flooded	CFS	days hr:min	Volume	Depth
890					10^6 gal	Feet
891	-----					
892	J109	0.01	5.63	0 00:41	0.000	3.000
893	J211	0.01	4.68	0 00:48	0.000	0.000
894	J212	0.01	7.24	0 00:47	0.000	0.000
895	J213	0.04	9.54	0 00:46	0.000	0.000
896	J701	0.01	1.91	0 01:33	0.000	2.000
897	J706	0.01	5.32	0 01:11	0.000	0.000
898	J709	0.01	3.03	0 00:43	0.000	0.000

900  
 901 \*\*\*\*\*  
 902 Storage Volume Summary  
 903 \*\*\*\*\*  
 904  
 905

906		Average	Avg	Evap	Exfil	Maximum	Max	Time of
907		Max	Maximum	Pcnt	Pcnt	Volume	Pcnt	
908	Storage Unit	Volume	Full	Loss	Loss	1000 ft3	Full	days
909	hr:min	1000 ft3	Full	Loss	Loss			
		CFS						
910	DAB-1	51.414	20	0	52	200.844	76	0
	02:37	13.97						
911	DAB-2	96.552	21	0	18	371.709	82	0
	02:23	70.07						
912	DAB-3	27.957	21	0	50	105.083	80	0
	01:56	10.46						
913	PDM-1	21.759	29	0	100	56.278	75	0
	02:36	2.30						
914	PDM-2	58.356	32	0	100	142.198	79	0
	02:39	5.76						
915	PDM-3	207.526	42	0	97	400.956	81	0
	02:56	12.67						
916	PDM-4	10.792	10	0	11	95.405	89	0
	01:15	43.12						
917	PDM-5	16.028	10	0	20	123.313	76	0
	01:21	37.57						
918	VL-1	192.872	37	0	100	417.772	81	0
	02:42	14.99						
919	VL-2	47.651	14	0	19	310.565	91	0
	01:29	66.34						
920	VL-3	112.088	34	0	100	256.505	79	0
	02:40	9.90						
921	VL-4	33.335	20	0	43	138.358	81	0
	02:33	9.85						

922  
 923  
 924 \*\*\*\*\*  
 925 Outfall Loading Summary  
 926 \*\*\*\*\*  
 927

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF812	99.90	9.02	35.63	5.106
OF-DAB-2	64.66	25.21	60.14	9.315
OF-J-725-2	28.07	16.08	39.40	2.058
OF-J-725B-2	61.93	14.88	57.75	4.711
OF-J-792	71.11	9.03	39.79	3.556
OF-VL	98.37	9.65	56.35	5.137
OF-VL-1	0.00	0.00	0.00	0.000
OF-VL-3	0.00	0.00	0.00	0.000
System	53.00	83.87	249.40	29.883

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link	Type	Maximum  Flow  CFS	Time of Max Occurrence days hr:min	Maximum  Veloc  ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	41.14	0 01:30	11.48	1.19	0.70
C100	CONDUIT	14.66	0 00:45	5.68	0.31	0.52
C1000	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
C1001	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
C1002	CONDUIT	0.00	0 00:00	0.00	0.00	0.04
C1003	CONDUIT	8.98	0 00:52	1.73	0.01	0.15
C1004	CONDUIT	61.68	0 01:31	6.15	0.07	0.25
C1005	CONDUIT	65.36	0 01:35	8.67	0.07	0.23
C1007	CHANNEL	56.35	0 01:57	>50.00	0.00	0.04
C101	CONDUIT	32.56	0 00:47	8.78	0.73	0.71
C102	CONDUIT	10.96	0 00:45	6.64	0.39	0.56
C103	CONDUIT	58.18	0 00:47	11.82	0.70	0.69
C104	CONDUIT	14.62	0 00:45	8.14	0.53	0.63
C105	CONDUIT	92.90	0 00:47	16.79	0.22	0.59
C106	CONDUIT	17.13	0 00:45	6.89	0.32	0.53
C107	CONDUIT	33.48	0 00:47	7.65	0.66	0.84
C108	CONDUIT	21.70	0 00:45	6.91	1.17	1.00
C109	CONDUIT	53.82	0 00:46	7.91	1.31	0.93
C110	CONDUIT	64.04	0 00:47	9.40	0.87	0.93
C111	CONDUIT	72.80	0 00:47	8.36	0.84	0.92
C2	CONDUIT	60.14	0 02:23	10.36	0.74	0.77
C200	CONDUIT	0.00	0 00:00	0.00	0.00	0.16
C2000	CONDUIT	19.57	0 00:46	8.30	0.59	0.48
C2001	CONDUIT	35.16	0 00:46	5.80	0.35	0.70
C2002	CONDUIT	36.23	0 01:40	4.50	0.35	0.56
C2003	CONDUIT	64.16	0 00:44	5.87	0.48	0.96
C2004	CONDUIT	39.40	0 01:15	8.32	1.12	0.92
C202	CONDUIT	33.40	0 00:45	12.25	0.49	0.56
C203	CONDUIT	0.00	0 00:00	0.00	0.00	0.13
C205	CONDUIT	46.09	0 00:47	11.28	0.88	0.82
C206	CONDUIT	45.27	0 00:49	9.41	0.73	0.99
C207	CONDUIT	58.76	0 00:49	8.78	0.78	0.91
C209	CONDUIT	50.28	0 00:50	7.59	1.11	0.92
C210	CONDUIT	61.37	0 00:47	9.32	0.84	0.92
C211	CONDUIT	80.02	0 00:47	8.78	0.91	1.00
C212	CONDUIT	90.74	0 00:46	10.03	0.87	1.00
C213	CONDUIT	106.80	0 00:47	11.10	0.85	1.00
C214	CONDUIT	119.30	0 01:00	10.94	0.84	0.67
C215	CONDUIT	8.67	0 00:45	4.81	0.50	0.56
C216	CONDUIT	17.79	0 00:46	7.43	0.71	0.81

994	C217	CONDUIT	25.67	0	00:48	8.58	1.03	0.94
995	C218	CONDUIT	163.78	0	00:47	7.81	0.22	0.83
996	C300	CONDUIT	9.92	0	00:46	12.84	1.04	0.96
997	C301	CONDUIT	22.20	0	00:46	10.43	0.69	0.64
998	C302	CONDUIT	33.46	0	00:46	8.73	0.68	0.77
999	C303	CONDUIT	54.11	0	00:46	11.40	0.93	0.97
1000	C304	CONDUIT	68.72	0	00:49	14.22	0.83	0.72
1001	C305	CONDUIT	93.56	0	00:44	9.52	0.31	0.63
1002	C400	CONDUIT	9.61	0	00:45	5.72	0.37	0.58
1003	C401	CONDUIT	9.59	0	00:45	5.50	0.41	0.59
1004	C402	CONDUIT	35.77	0	00:47	9.74	0.86	0.87
1005	C500	CONDUIT	18.85	0	00:46	8.29	0.76	0.68
1006	C501	CONDUIT	33.15	0	00:47	12.87	0.51	0.52
1007	C502	CONDUIT	0.00	0	00:00	0.00	0.00	0.30
1008	C503	CONDUIT	55.38	0	00:47	11.45	0.59	0.65
1009	C504	CONDUIT	71.20	0	00:47	13.71	0.75	0.74
1010	C505	CONDUIT	84.33	0	00:48	8.61	1.00	1.00
1011	C507	CONDUIT	27.85	0	00:45	12.09	0.76	0.82
1012	C508	CONDUIT	39.14	0	00:44	12.62	0.97	1.00
1013	C509	CONDUIT	46.42	0	00:44	14.82	0.82	0.68
1014	C510	CONDUIT	56.51	0	00:44	9.50	0.42	0.72
1015	C600	CONDUIT	21.11	0	00:45	10.98	0.60	0.63
1016	C601	CONDUIT	13.06	0	00:45	9.85	0.38	0.44
1017	C602	CONDUIT	20.02	0	00:46	11.17	0.57	0.56
1018	C603	CONDUIT	31.46	0	00:46	9.45	0.30	0.66
1019	C604	CONDUIT	31.90	0	00:47	12.90	0.89	0.84
1020	C605	CONDUIT	0.00	0	00:00	0.00	0.00	0.48
1021	C606	CONDUIT	16.75	0	00:45	6.08	1.23	0.82
1022	C607	CONDUIT	28.92	0	00:46	13.52	0.71	0.65
1023	C608	CONDUIT	51.87	0	00:48	13.61	0.85	0.73
1024	C609	CONDUIT	76.68	0	00:47	16.79	0.59	0.62
1025	C610	CONDUIT	92.04	0	00:49	14.74	0.62	0.69
1026	C611	CONDUIT	0.00	0	00:00	0.00	0.00	0.25
1027	C612	CONDUIT	14.18	0	00:46	8.47	0.49	0.75
1028	C701	CONDUIT	36.48	0	01:40	7.68	0.99	1.00
1029	C702	CONDUIT	58.21	0	01:31	8.65	0.99	0.91
1030	C703	CONDUIT	73.94	0	01:29	14.43	0.90	0.87
1031	C705	CONDUIT	44.67	0	01:17	6.74	0.90	0.89
1032	C706	CONDUIT	80.14	0	01:15	8.79	0.98	1.00
1033	C707	CONDUIT	23.70	0	00:46	5.22	0.43	0.58
1034	C708	CONDUIT	23.14	0	00:48	3.86	0.45	1.00
1035	C709	CONDUIT	30.42	0	00:45	9.52	0.91	0.62
1036	C710	CONDUIT	48.76	0	01:15	9.98	0.14	0.58
1037	C800	CONDUIT	0.00	0	00:00	0.00	0.00	0.07
1038	C801	CONDUIT	5.79	0	03:04	1.46	0.07	0.33
1039	C802	CONDUIT	23.92	0	03:32	2.42	0.24	0.65
1040	C803	CONDUIT	42.35	0	03:36	3.89	0.52	0.70
1041	C803a	CONDUIT	42.33	0	03:37	11.94	0.76	0.68
1042	C804	CONDUIT	9.04	0	03:01	2.08	0.09	0.34
1043	C805	CONDUIT	25.84	0	03:02	5.85	0.17	0.35
1044	C806	CONDUIT	24.88	0	03:09	3.54	0.03	0.23
1045	C807	CONDUIT	30.66	0	03:18	2.87	0.09	0.31
1046	C808a	CONDUIT	16.97	0	00:46	3.71	1.26	0.88
1047	C809	CONDUIT	30.56	0	03:22	4.01	0.08	0.24
1048	C810	CONDUIT	30.55	0	03:24	6.21	0.03	0.17
1049	C810a	CONDUIT	24.37	0	00:48	6.77	0.97	0.89
1050	C811	CONDUIT	35.63	0	03:25	5.37	0.05	0.13
1051	C900	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1052	C901	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
1053	C902	CONDUIT	0.00	0	00:00	0.00	0.00	0.03
1054	C903	CONDUIT	2.79	0	00:53	2.36	0.01	0.10
1055	C904	CONDUIT	29.50	0	02:47	9.08	0.04	0.18
1056	C-DAB-1	CONDUIT	6.77	0	02:58	6.49	1.21	1.00
1057	C-DAB-2	CONDUIT	60.14	0	02:23	10.16	1.52	0.98
1058	C-DAB-3	CONDUIT	6.85	0	01:45	5.72	2.12	0.98
1059	C-PDM-4	CONDUIT	25.61	0	00:53	8.15	1.31	1.00

1060	C-PDM-5	CONDUIT	24.60	0	01:19	8.14	1.11	1.00
1061	C-PDM-5a	CONDUIT	30.51	0	01:38	12.22	0.95	0.80
1062	C-VL-4	CONDUIT	5.14	0	03:09	7.95	1.44	0.85
1063	C-Overflow-710	WEIR	0.00	0	00:00			0.00
1064	W1	WEIR	0.00	0	00:00			0.00
1065	W10	WEIR	7.75	0	01:22			0.18
1066	W11	WEIR	0.00	0	00:00			0.00
1067	W2	WEIR	15.53	0	01:29			0.44
1068	W3	WEIR	0.00	0	00:00			0.00
1069	W4	WEIR	0.00	0	00:00			0.00
1070	W5	WEIR	8.68	0	00:48			0.39
1071	W6	WEIR	0.00	0	00:00			0.00
1072	W7	WEIR	0.00	0	00:00			0.00
1073	W8	WEIR	0.00	0	00:00			0.00
1074	W9	WEIR	0.00	0	00:00			0.00
1075	W-DAB-2	WEIR	0.00	0	00:00			0.00
1076	W-DAB-3	WEIR	0.00	0	00:00			0.00
1077	W-J217	WEIR	5.99	0	00:48			0.31
1078	W-J304	WEIR	3.94	0	00:49			0.23
1079	W-PDM-1	WEIR	0.00	0	00:00			0.00
1080	W-PDM-3	WEIR	0.00	0	00:00			0.00
1081	W-PDM-4	WEIR	18.18	0	01:15			0.75
1082	W-VL-1	WEIR	0.00	0	00:00			0.00
1083	W-VL-3	WEIR	0.00	0	00:00			0.00

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1086 \*\*\*\*\*

1087 Flow Classification Summary

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Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class									
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl	
1095	C1	1.00	0.00	0.63	0.00	0.01	0.35	0.00	0.00	0.70	0.00
1096	C100	1.00	0.76	0.02	0.00	0.08	0.14	0.00	0.00	1.00	0.00
1097	C1000	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1098	C1001	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1099	C1002	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100	C1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1101	C1004	1.00	0.00	0.00	0.00	0.76	0.24	0.00	0.00	0.82	0.00
1102	C1005	1.00	0.00	0.00	0.00	0.76	0.24	0.00	0.00	0.83	0.00
1103	C1007	1.00	0.00	0.00	0.00	0.91	0.09	0.00	0.00	0.01	0.00
1104	C101	1.00	0.00	0.76	0.00	0.08	0.16	0.00	0.00	0.95	0.00
1105	C102	1.00	0.00	0.00	0.00	0.00	0.08	0.00	0.92	0.04	0.00
1106	C103	1.00	0.00	0.00	0.00	0.78	0.22	0.00	0.00	0.03	0.00
1107	C104	1.00	0.00	0.00	0.00	0.01	0.03	0.00	0.95	0.02	0.00
1108	C105	1.00	0.02	0.73	0.00	0.19	0.05	0.00	0.00	0.95	0.00
1109	C106	1.00	0.00	0.79	0.00	0.05	0.16	0.00	0.00	1.00	0.00
1110	C107	1.00	0.00	0.00	0.00	0.03	0.07	0.00	0.90	0.03	0.00
1111	C108	1.00	0.00	0.00	0.00	0.07	0.02	0.00	0.90	0.01	0.00
1112	C109	1.00	0.62	0.13	0.00	0.15	0.10	0.00	0.00	0.88	0.00
1113	C110	1.00	0.48	0.14	0.00	0.30	0.05	0.00	0.03	0.94	0.00
1114	C111	1.00	0.12	0.23	0.00	0.59	0.00	0.00	0.06	0.43	0.00
1115	C2	1.00	0.01	0.00	0.00	0.34	0.65	0.00	0.00	0.00	0.00
1116	C200	1.00	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1117	C2000	1.00	0.55	0.24	0.00	0.03	0.18	0.00	0.00	0.85	0.00
1118	C2001	1.00	0.30	0.25	0.00	0.44	0.02	0.00	0.00	0.99	0.00
1119	C2002	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00
1120	C2003	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	0.13	0.00
1121	C2004	1.00	0.01	0.00	0.00	0.82	0.18	0.00	0.00	0.00	0.00
1122	C202	1.00	0.00	0.00	0.00	0.00	0.03	0.00	0.97	0.00	0.00
1123	C203	1.00	0.97	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1124	C205	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.00	0.00
1125	C206	1.00	0.00	0.78	0.00	0.05	0.17	0.00	0.00	0.89	0.00

1126	C207	1.00	0.00	0.00	0.00	0.03	0.04	0.00	0.93	0.00	0.00
1127	C209	1.00	0.76	0.01	0.00	0.12	0.11	0.00	0.00	0.88	0.00
1128	C210	1.00	0.75	0.01	0.00	0.09	0.15	0.00	0.00	0.94	0.00
1129	C211	1.00	0.75	0.00	0.00	0.09	0.15	0.00	0.00	0.89	0.00
1130	C212	1.00	0.74	0.00	0.00	0.06	0.19	0.00	0.00	0.88	0.00
1131	C213	1.00	0.73	0.01	0.00	0.10	0.16	0.00	0.00	0.90	0.00
1132	C214	1.00	0.66	0.07	0.00	0.15	0.12	0.00	0.00	0.88	0.00
1133	C215	1.00	0.00	0.76	0.00	0.23	0.01	0.00	0.00	0.98	0.00
1134	C216	1.00	0.00	0.00	0.00	0.03	0.01	0.00	0.96	0.02	0.00
1135	C217	1.00	0.00	0.00	0.00	0.00	0.03	0.00	0.97	0.01	0.00
1136	C218	1.00	0.63	0.03	0.00	0.31	0.03	0.00	0.00	0.86	0.00
1137	C300	1.00	0.00	0.79	0.00	0.05	0.16	0.00	0.00	1.00	0.00
1138	C301	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1139	C302	1.00	0.00	0.76	0.00	0.07	0.17	0.00	0.00	0.99	0.00
1140	C303	1.00	0.00	0.00	0.00	0.01	0.05	0.00	0.94	0.00	0.00
1141	C304	1.00	0.59	0.16	0.00	0.09	0.16	0.00	0.00	0.89	0.00
1142	C305	1.00	0.08	0.51	0.00	0.37	0.04	0.00	0.00	0.89	0.00
1143	C400	1.00	0.00	0.00	0.00	0.02	0.06	0.00	0.92	0.04	0.00
1144	C401	1.00	0.00	0.00	0.00	0.02	0.05	0.00	0.93	0.03	0.00
1145	C402	1.00	0.50	0.08	0.00	0.38	0.04	0.00	0.00	0.96	0.00
1146	C500	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1147	C501	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1148	C502	1.00	0.85	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1149	C503	1.00	0.76	0.00	0.00	0.05	0.19	0.00	0.00	0.96	0.00
1150	C504	1.00	0.51	0.25	0.00	0.01	0.23	0.00	0.00	0.83	0.00
1151	C505	1.00	0.51	0.00	0.00	0.44	0.04	0.00	0.00	0.19	0.00
1152	C507	1.00	0.00	0.00	0.00	0.00	0.02	0.00	0.98	0.01	0.00
1153	C508	1.00	0.76	0.01	0.00	0.08	0.15	0.00	0.00	0.98	0.00
1154	C509	1.00	0.55	0.21	0.00	0.01	0.23	0.00	0.00	0.83	0.00
1155	C510	1.00	0.00	0.55	0.00	0.36	0.09	0.00	0.00	1.00	0.00
1156	C600	1.00	0.00	0.00	0.00	0.01	0.02	0.00	0.97	0.01	0.00
1157	C601	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1158	C602	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1159	C603	1.00	0.14	0.52	0.00	0.30	0.04	0.00	0.00	0.97	0.00
1160	C604	1.00	0.14	0.55	0.00	0.25	0.06	0.00	0.00	0.96	0.00
1161	C605	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1162	C606	1.00	0.00	0.79	0.00	0.13	0.09	0.00	0.00	0.89	0.00
1163	C607	1.00	0.00	0.00	0.00	0.00	0.03	0.00	0.97	0.00	0.00
1164	C608	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1165	C609	1.00	0.00	0.00	0.00	0.00	0.14	0.00	0.86	0.05	0.00
1166	C610	1.00	0.05	0.57	0.00	0.29	0.03	0.00	0.07	0.94	0.00
1167	C611	1.00	0.72	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1168	C612	1.00	0.71	0.01	0.00	0.27	0.01	0.00	0.00	0.99	0.00
1169	C701	1.00	0.00	0.00	0.00	0.04	0.04	0.00	0.92	0.03	0.00
1170	C702	1.00	0.47	0.11	0.00	0.17	0.09	0.00	0.17	0.79	0.00
1171	C703	1.00	0.00	0.00	0.00	0.34	0.66	0.00	0.00	0.56	0.00
1172	C705	1.00	0.00	0.00	0.00	0.25	0.01	0.00	0.74	0.20	0.00
1173	C706	1.00	0.44	0.15	0.00	0.33	0.00	0.00	0.08	0.73	0.00
1174	C707	1.00	0.00	0.57	0.00	0.43	0.01	0.00	0.00	0.83	0.00
1175	C708	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
1176	C709	1.00	0.59	0.15	0.00	0.10	0.16	0.00	0.00	0.89	0.00
1177	C710	1.00	0.48	0.11	0.00	0.37	0.04	0.00	0.00	0.97	0.00
1178	C800	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1179	C801	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1180	C802	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99	0.00
1181	C803	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
1182	C803a	1.00	0.00	0.00	0.00	0.33	0.67	0.00	0.00	0.74	0.00
1183	C804	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1184	C805	1.00	0.00	0.00	0.00	0.52	0.48	0.00	0.00	0.55	0.00
1185	C806	1.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.98	0.00
1186	C807	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.87	0.00
1187	C808a	1.00	0.00	0.65	0.00	0.35	0.00	0.00	0.00	0.91	0.00
1188	C809	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1189	C810	1.00	0.00	0.00	0.00	0.39	0.61	0.00	0.00	0.38	0.00
1190	C810a	1.00	0.00	0.00	0.00	0.97	0.03	0.00	0.00	0.83	0.00
1191	C811	1.00	0.00	0.00	0.00	0.51	0.49	0.00	0.00	0.00	0.00



1192	C900	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1193	C901	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1194	C902	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1195	C903	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
1196	C904	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.01	0.00
1197	C-DAB-1	1.00	0.00	0.49	0.00	0.29	0.23	0.00	0.00	0.61	0.00
1198	C-DAB-2	1.00	0.00	0.35	0.00	0.32	0.33	0.00	0.00	0.38	0.00
1199	C-DAB-3	1.00	0.01	0.63	0.00	0.27	0.09	0.00	0.00	0.67	0.00
1200	C-PDM-4	1.00	0.00	0.71	0.00	0.19	0.10	0.00	0.00	0.79	0.00
1201	C-PDM-5	1.00	0.59	0.11	0.00	0.07	0.24	0.00	0.00	0.77	0.00
1202	C-PDM-5a	1.00	0.01	0.59	0.00	0.15	0.25	0.00	0.00	0.85	0.00
1203	C-VL-4	1.00	0.00	0.50	0.00	0.04	0.47	0.00	0.00	0.58	0.00

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Conduit Surcharge Summary  
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Conduit	Hours Full			Hours	Hours	
	Both Ends	Upstream	Dnstream	Above Full Normal Flow	Capacity Limited	
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1215	C1	0.01	3.13	0.01	2.66	0.01
1216	C103	0.01	0.01	0.17	0.01	0.01
1217	C104	0.01	0.01	0.17	0.01	0.01
1218	C105	0.01	0.06	22.60	0.01	0.01
1219	C107	0.01	0.01	0.27	0.01	0.01
1220	C108	0.25	0.25	0.37	0.13	0.19
1221	C109	0.01	0.27	0.01	0.22	0.01
1222	C110	0.01	0.01	0.13	0.01	0.01
1223	C111	0.01	0.13	4.28	0.01	0.01
1224	C2001	0.01	0.01	5.49	0.01	0.01
1225	C2003	0.01	0.01	1.96	0.01	0.01
1226	C2004	0.01	0.94	0.01	0.60	0.01
1227	C206	0.01	0.04	0.01	0.01	0.01
1228	C207	0.01	0.01	0.27	0.01	0.01
1229	C209	0.01	0.32	0.01	0.26	0.01
1230	C210	0.01	0.01	0.21	0.01	0.01
1231	C211	0.12	0.12	0.18	0.01	0.01
1232	C212	0.18	0.18	0.24	0.01	0.01
1233	C213	0.24	0.24	0.35	0.01	0.12
1234	C214	0.01	0.20	0.01	0.01	0.01
1235	C216	0.01	0.01	0.28	0.01	0.01
1236	C217	0.01	0.34	0.01	0.21	0.01
1237	C218	0.01	0.01	2.17	0.01	0.01
1238	C300	0.01	0.01	0.34	0.06	0.01
1239	C303	0.01	0.01	0.25	0.01	0.01
1240	C304	0.01	0.25	0.01	0.01	0.01
1241	C305	0.01	0.01	6.54	0.01	0.01
1242	C402	0.01	0.01	5.05	0.01	0.01
1243	C505	0.16	0.16	2.24	0.01	0.01
1244	C507	0.01	0.01	0.17	0.01	0.01
1245	C508	0.21	0.21	0.34	0.01	0.07
1246	C509	0.01	0.26	0.01	0.01	0.01
1247	C510	0.01	0.01	0.83	0.01	0.01
1248	C600	0.01	0.01	0.01	0.01	0.01
1249	C603	0.01	0.01	23.13	0.01	0.01
1250	C604	0.01	0.09	23.13	0.01	0.01
1251	C606	0.01	0.20	0.01	0.17	0.01
1252	C610	0.01	0.01	5.61	0.01	0.01
1253	C612	0.01	0.01	2.34	0.01	0.01
1254	C701	0.10	0.10	0.48	0.01	0.03
1255	C702	0.01	0.48	0.01	0.01	0.01
1256	C703	0.01	0.01	4.93	0.01	0.01
1257	C705	0.01	0.01	1.52	0.01	0.01

1258	C706	1.33	1.52	4.02	0.01	0.12
1259	C708	0.36	0.36	2.58	0.01	0.01
1260	C709	0.01	0.14	0.01	0.01	0.01
1261	C710	0.01	0.01	2.58	0.01	0.01
1262	C808a	0.01	0.01	0.01	0.22	0.01
1263	C810a	0.01	0.01	5.05	0.01	0.01
1264	C-DAB-1	0.37	6.70	0.37	4.53	0.37
1265	C-DAB-2	0.01	5.18	0.01	4.52	0.01
1266	C-DAB-3	0.01	4.05	0.01	3.95	0.01
1267	C-PDM-4	1.24	2.34	1.24	2.08	1.24
1268	C-PDM-5	0.29	2.24	0.29	1.14	0.29
1269	C-PDM-5a	0.01	0.29	0.01	0.01	0.01
1270	C-VL-4	0.01	7.56	0.01	5.72	0.01

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1272

1273 Analysis begun on: Thu Oct 18 08:34:55 2018

1274 Analysis ended on: Thu Oct 18 08:34:57 2018

1275 Total elapsed time: 00:00:02



## **APPENDIX E – STORAGE BASIN DIMENSIONS**

- 1. Storage Basin Summary**
2. Storage Basin Soil Parameters
3. Web Soils Survey Soils Map



<b>Basin ID VL-1</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	275	275	1.74	0.00
0.5	278	278	1.77	0.88
1	281	281	1.81	1.77
1.5	284	284	1.85	2.69
2	287	287	1.89	3.63
2.5	290	290	1.93	4.58
3	293	293	1.97	5.56
3.5	296	296	2.01	6.55
4	299	299	2.05	7.57
4.5	302	302	2.09	8.60
5	305	305	2.14	9.66
5.5	308	308	2.18	10.74
6	311	311	2.22	11.84
Total Area with Buffer 30-ft		341	341	2.67
Invert Elevation (ft)		179	NAVD88	
Rim Elevation (ft)		185	NAVD88	

<b>Basin ID VL-2</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	200	200	0.92	0.00
0.5	203	203	0.95	0.47
1	206	206	0.97	0.95
1.5	209	209	1.00	1.44
2	212	212	1.03	1.95
2.5	215	215	1.06	2.47
3	218	218	1.09	3.01
3.5	221	221	1.12	3.56
4	224	224	1.15	4.13
4.5	227	227	1.18	4.72
5	230	230	1.21	5.31
5.5	233	233	1.25	5.93
6	236	236	1.28	6.56
6.5	239	239	1.31	7.21
7	242	242	1.34	7.87
Total Area with Buffer		272	272	1.70
Invert Elevation (ft)		153	NAVD88	
Rim Elevation (ft)		160	NAVD88	



<b>Basin ID VL-3</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	227	227	1.18	0.00
0.5	230	230	1.21	0.60
1	233	233	1.25	1.21
1.5	236	236	1.28	1.85
2	239	239	1.31	2.49
2.5	242	242	1.34	3.16
3	245	245	1.38	3.84
3.5	248	248	1.41	4.54
4	251	251	1.45	5.25
4.5	254	254	1.48	5.98
5	257	257	1.52	6.73
5.5	260	260	1.55	7.50
Total Area with Buffer		290	290	1.93
Invert Elevation (ft)		159	NAVD88	
Rim Elevation (ft)		164.5	NAVD88	

<b>Basin ID VL-4</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	150	150	0.52	0.00
0.5	153	153	0.54	0.26
1	156	156	0.56	0.54
1.5	159	159	0.58	0.82
2	162	162	0.60	1.12
2.5	165	165	0.63	1.42
3	168	168	0.65	1.74
3.5	171	171	0.67	2.07
4	174	174	0.70	2.41
4.5	177	177	0.72	2.77
5	180	180	0.74	3.13
5.5	183	183	0.77	3.51
6	186	186	0.79	3.90
Total Area with Buffer 30-ft		216	216	1.07
Invert Elevation (ft)		145	NAVD88	
Rim Elevation (ft)		151	NAVD88	



<b>Basin ID DAB-1</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	228	228	1.19	0.00
0.5	231	231	1.23	0.60
1	234	234	1.26	1.23
1.5	237	237	1.29	1.86
2	240	240	1.32	2.51
2.5	243	243	1.36	3.18
3	246	246	1.39	3.87
3.5	249	249	1.42	4.57
4	252	252	1.46	5.29
4.5	255	255	1.49	6.03
Total Area with Buffer		285	285	1.86
Invert Elevation (ft)		157.5	NAVD88	
Rim Elevation (ft)		162	NAVD88	

<b>Basin ID DAB-2</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	233	233	1.25	0.00
0.5	236	236	1.28	0.63
1	239	239	1.31	1.28
1.5	242	242	1.34	1.94
2	245	245	1.38	2.62
2.5	248	248	1.41	3.32
3	251	251	1.45	4.04
3.5	254	254	1.48	4.77
4	257	257	1.52	5.52
4.5	260	260	1.55	6.28
5	263	263	1.59	7.07
5.5	266	266	1.62	7.87
6	269	269	1.66	8.69
6.5	272	272	1.70	9.53
7	275	275	1.74	10.39
Total Area with Buffer		305	305	2.14
Invert Elevation (ft)		160	NAVD88	
Rim Elevation (ft)		167	NAVD88	



<b>Basin ID DAB-3</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	130	130	0.39	0.00
0.5	133	133	0.41	0.20
1	136	136	0.42	0.41
1.5	139	139	0.44	0.62
2	142	142	0.46	0.85
2.5	145	145	0.48	1.09
3	148	148	0.50	1.33
3.5	151	151	0.52	1.59
4	154	154	0.54	1.86
4.5	157	157	0.57	2.13
5	160	160	0.59	2.42
5.5	163	163	0.61	2.72
6	166	166	0.63	3.03
Total Area with Buffer 30-ft		196	196	0.88
Invert Elevation (ft)		155	NAVD88	
Rim Elevation (ft)		161	NAVD88	

<b>Basin ID PDM-1</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	107	107	0.26	0.00
0.5	110	110	0.28	0.14
1	113	113	0.29	0.28
1.5	116	116	0.31	0.43
2	119	119	0.33	0.59
2.5	122	122	0.34	0.75
3	125	125	0.36	0.93
3.5	128	128	0.38	1.11
4	131	131	0.39	1.30
4.5	134	134	0.41	1.51
5	137	137	0.43	1.72
Total Area with Buffer 30-ft		167	167	0.64
Invert Elevation (ft)		250	NAVD88	
Rim Elevation (ft)		255	NAVD88	



<b>Basin ID PDM-2</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	175	175	0.70	0.00
0.5	178	178	0.73	0.36
1	181	181	0.75	0.73
1.5	184	184	0.78	1.11
2	187	187	0.80	1.50
2.5	190	190	0.83	1.91
3	193	193	0.86	2.33
3.5	196	196	0.88	2.77
4	199	199	0.91	3.22
4.5	202	202	0.94	3.68
5	205	205	0.96	4.15
Total Area with Buffer 30-ft		235	235	1.27
Invert Elevation (ft)		253	NAVD88	
Rim Elevation (ft)		258	NAVD88	

<b>Basin ID PDM-3</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	269	269	1.66	0.00
0.5	272	272	1.70	0.84
1	275	275	1.74	1.70
1.5	278	278	1.77	2.58
2	281	281	1.81	3.47
2.5	284	284	1.85	4.39
3	287	287	1.89	5.32
3.5	290	290	1.93	6.28
4	293	293	1.97	7.26
4.5	296	296	2.01	8.25
5	299	299	2.05	9.27
5.5	302	302	2.09	10.30
6	305	305	2.14	11.36
Total Area with Buffer 30-ft		335	335	2.58
Invert Elevation (ft)		175	NAVD88	
Rim Elevation (ft)		181	NAVD88	





<b>Basin ID PDM-4</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	115	115	0.30	0.00
0.5	118	118	0.32	0.16
1	121	121	0.34	0.32
1.5	124	124	0.35	0.49
2	127	127	0.37	0.67
2.5	130	130	0.39	0.86
3	133	133	0.41	1.06
3.5	136	136	0.42	1.27
4	139	139	0.44	1.49
4.5	142	142	0.46	1.71
5	145	145	0.48	1.95
5.5	148	148	0.50	2.20
6	151	151	0.52	2.45
Total Area with Buffer 30-ft		181	181	0.75
Invert Elevation (ft)		145	NAVD88	
Rim Elevation (ft)		151	NAVD88	

<b>Basin ID PDM-5</b>				
Depth (ft)	Length (ft)	Width (ft)	Area (AC)	Volume (AC-FT)
0	165	165	0.63	0.00
0.5	168	168	0.65	0.32
1	171	171	0.67	0.65
1.5	174	174	0.70	0.99
2	177	177	0.72	1.34
2.5	180	180	0.74	1.71
3	183	183	0.77	2.09
3.5	186	186	0.79	2.48
4	189	189	0.82	2.88
4.5	192	192	0.85	3.30
5	195	195	0.87	3.73
Total Area with Buffer 30-ft		225	225	1.16
Invert Elevation (ft)		195	NAVD88	
Rim Elevation (ft)		200	NAVD88	



## **APPENDIX E – STORAGE BASIN DIMENSIONS**

1. Storage Basin Summary
- 2. Storage Basin Soil Parameters**
3. Web Soils Survey Soils Map



Retention Basin ID	Map Unit Symbol	Depth Start	Depth End	Soil Textture	SucHd	Ksat	SatC	Init C	Moisture Deficit
VL-1	PnA	0	1.1	sandy loam	4.33	0.86	0.412	0.166	0.246
VL-1	PnA	1.1	3	clay	12.45	0.02	0.385	0.306	0.079
VL-1	PnA	3	4.8	sandy clay loam	8.60	0.12	0.330	0.187	0.143
VL-1	PnA	4.8	5.7	gravelly sandy loam	1.95	9.28	0.417	0.091	0.326
VL-2*	DaA	0	1.5	sandy clay loam	8.60	0.12	0.330	0.187	0.143
VL-2*	DaA	1.5	3.2	clay	12.45	0.02	0.385	0.306	0.079
VL-2*	DaA	3.2	5.6	gravelly sandy clay loam	1.95	9.28	0.42	0.09	0.33
VL-3*	DaA	0	1.5	sandy clay loam	8.60	0.12	0.330	0.187	0.143
VL-3*	DaA	1.5	3.2	clay	12.45	0.02	0.385	0.306	0.079
VL-3*	DaA	3.2	5.6	gravelly sandy clay loam	1.95	9.28	0.42	0.09	0.33
VL-4	DaA	0	1.5	sandy clay loam	8.60	0.12	0.330	0.187	0.143
VL-4	DaA	1.5	3.2	clay	12.45	0.02	0.385	0.306	0.079
VL-4	DaA	3.2	5.6	gravelly sandy clay loam	1.95	9.28	0.42	0.09	0.33
DAB-1	DaA	0	1.5	sandy clay loam	8.60	0.12	0.330	0.187	0.143
DAB-1	DaA	1.5	3.2	clay	12.45	0.02	0.385	0.306	0.079
DAB-1	DaA	3.2	5.6	gravelly sandy clay loam	1.95	9.28	0.42	0.09	0.33
DAB-2	PnA	0	1.1	sandy loam	4.33	0.86	0.412	0.166	0.246
DAB-2	PnA	1.1	3	clay	12.45	0.02	0.385	0.306	0.079
DAB-2	PnA	3	4.8	sandy clay loam	8.60	0.12	0.330	0.187	0.143
DAB-2	PnA	4.8	5.7	gravelly sandy loam	1.95	9.28	0.42	0.09	0.33
DAB-3	CbA	0	1.75	sandy loam, sandy clay loam	4.33	0.86	0.412	0.166	0.246



DAB-3	CbA	1.75	3.7	sandy clay loam	8.60	0.12	0.330	0.187	0.143
DAB-3	CbA	3.7	4.9	gravelly sandy loam	1.95	9.28	0.42	0.09	0.33
DAB-3	CbA	4.9	6.7	gravelly coarse sand	1.95	9.28	0.417	0.091	0.326
PDM-1	PnC	0	1.1	sandy loam	4.33	0.86	0.412	0.166	0.246
PDM-1	PnC	1.1	2.4	clay	12.45	0.02	0.385	0.306	0.079
PDM-1	PnC	2.4	3	clay loam	8.22	0.08	0.390	0.244	0.146
PDM-1	PnC	3	4.8	sandy clay loam	8.60	0.12	0.330	0.187	0.143
PDM-1	PnC	4.8	5.7	gravelly sandy loam	1.95	9.28	0.42	0.09	0.33
PDM-2	PnC	0	1.1	sandy loam	4.33	0.86	0.412	0.166	0.246
PDM-2	PnC	1.1	2.4	clay	12.45	0.02	0.385	0.306	0.079
PDM-2	PnC	2.4	3	clay loam	8.22	0.08	0.390	0.244	0.146
PDM-2	PnC	3	4.8	sandy clay loam	8.60	0.12	0.330	0.187	0.143
PDM-2	PnC	4.8	5.7	gravelly sandy loam	1.95	9.28	0.42	0.09	0.33
PDM-3	PnC	0	1.1	sandy loam	4.33	0.86	0.412	0.166	0.246
PDM-3	PnC	1.1	2.4	clay	12.45	0.02	0.385	0.306	0.079
PDM-3	PnC	2.4	3	clay loam	8.22	0.08	0.390	0.244	0.146
PDM-3	PnC	3	4.8	sandy clay loam	8.60	0.12	0.330	0.187	0.143
PDM-3	PnC	4.8	5.7	gravelly sandy loam	1.95	9.28	0.42	0.09	0.33
PDM-4**	DaA	0	1.5	sandy clay loam	8.60	0.12	0.330	0.187	0.143
PDM-4**	DaA	1.5	3.2	clay	12.45	0.02	0.385	0.306	0.079
PDM-4**	DaA	3.2	5.6	gravelly sandy clay loam	1.95	9.28	0.42	0.09	0.33
PDM-5	PnC	0	1.1	sandy loam	4.33	0.86	0.412	0.166	0.246
PDM-5	PnC	1.1	2.4	clay	12.45	0.02	0.385	0.306	0.079
PDM-5	PnC	2.4	3	clay loam	8.22	0.08	0.390	0.244	0.146
PDM-5	PnC	3	4.8	sandy clay loam	8.60	0.12	0.330	0.187	0.143
PDM-5	PnC	4.8	5.7	gravelly sandy loam	1.95	9.28	0.42	0.09	0.33

\*half PnA half DaA

\*\* half CbA half DaA



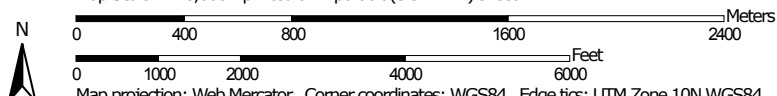
## **APPENDIX E – STORAGE BASIN DIMENSIONS**

1. Storage Basin Summary
2. Storage Basin Soil Parameters
3. **Web Soils Survey Soils Map**

# Custom Soil Resource Report Soil Map



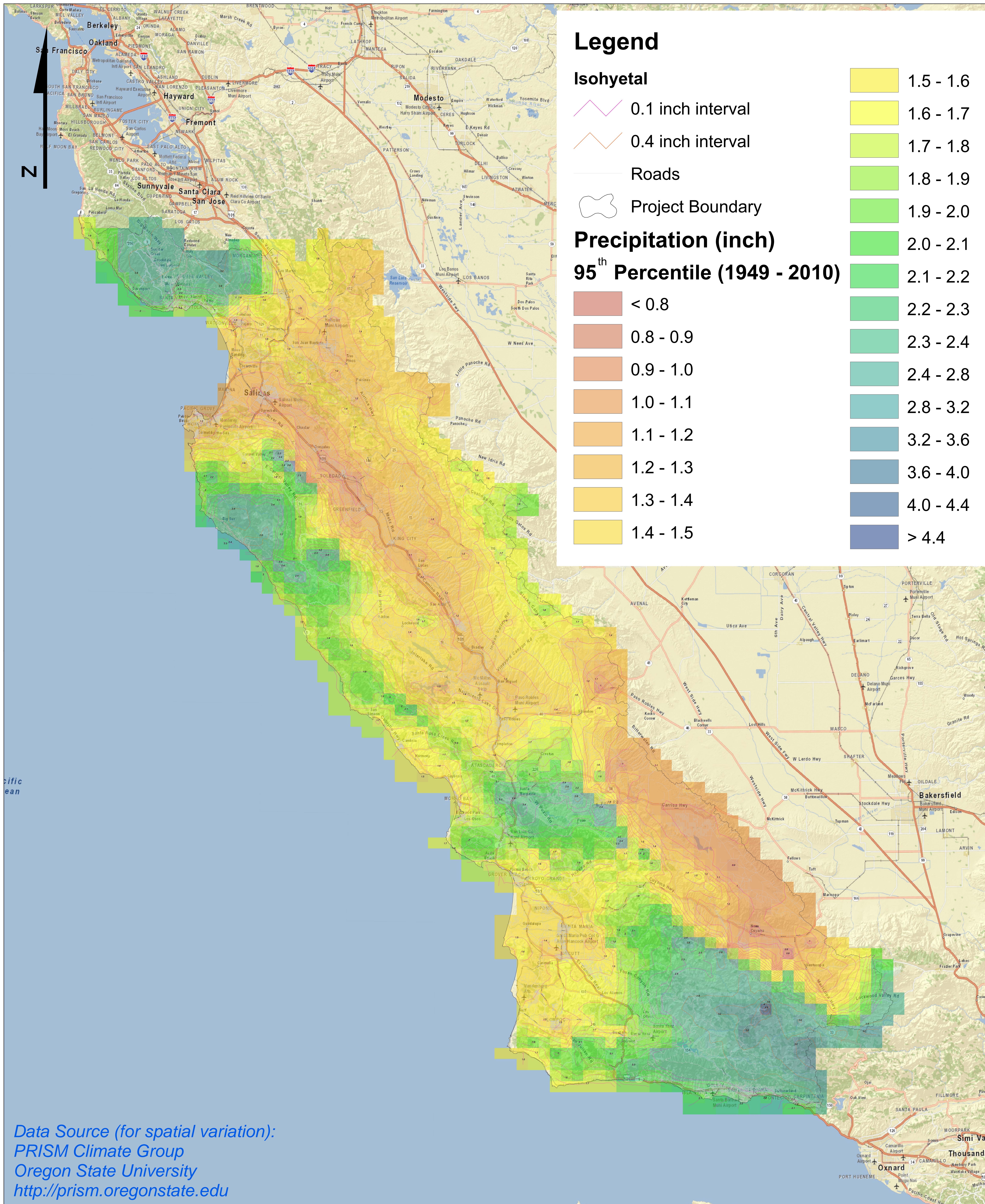
Map Scale: 1:28,000 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84



**APPENDIX F – 95th PERCENTILE RAINFALL DEPTH MAP**



# Legend

## Isohyetal

0.1 inch interval

0.4 inch interval

Roads

Project Boundary

## Precipitation (inch)

### 95<sup>th</sup> Percentile (1949 - 2010)

< 0.8

0.8 - 0.9

0.9 - 1.0

1.0 - 1.1

1.1 - 1.2

1.2 - 1.3

1.3 - 1.4

1.4 - 1.5

1.5 - 1.6

1.6 - 1.7

1.7 - 1.8

1.8 - 1.9

1.9 - 2.0

2.0 - 2.1

2.1 - 2.2

2.2 - 2.3

2.3 - 2.4

2.4 - 2.8

2.8 - 3.2

3.2 - 3.6

3.6 - 4.0

4.0 - 4.4

> 4.4

Data Source (for spatial variation):  
 PRISM Climate Group  
 Oregon State University  
<http://prism.oregonstate.edu>

**Central Coast Region**  
**95<sup>th</sup> Percentile 24-hour Rainfall Depth**  
 NAD 1983 California Teale Albers

0 20 40 80 Kilometers

0 20 40 80 Miles

