May 23, 2007

SYRACUSE CITY, UTAH

STORM WATER IMPACT FEE UPDATE

CAPITAL FACILITY PLAN

May 2007

Prepared By:

Epic Engineering, P.C.
3341 South 4000 West
West Valley City, Utah 84120

SYRACUSE CITY

STORM DRAIN SYSTEM

CAPITAL FACILITY PLAN

PUBLIC REVIEW DRAFT

Stephen D Marks, P.E.
Project Engineer

EPIC ENGINEERING, P.C.
3341 South 4000 West
West Valley City, Utah 84120

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Syracuse City

Mayor
Fred Panucci

City Council
Daniel Hammon
Lurlen Knight
Wallace Peterson
Phillip Orton
Dean Steel

City Staff
Rodger Worthen - City Administrator
Mike Waite - Public Works Director

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SYRACUSE CITY

STORM DRAIN SYSTEM IMPROVEMENTS

EXECUTIVE SUMMARY

The estimated growth within the City in the next twenty four years from 2007 through 2030 will result in the development of approximately 2,161 acres or 1,735 net acres to build out. The cost of the required capital improvement projects identified in the Capital Facility Plan is **$11,163,743.75**

SYRACUSE CITY

STORM DRAIN SYSTEM IMPROVEMENTS
CAPITAL FACILITY PLAN

INTRODUCTION

The purpose of this report is to provide a Capital Facility Plan for the City of Syracuse to update the City's Storm Drain Impact Fees to meet the cost of improvements required due to future growth within the City. This plan consists of the following: first, a projection of growth that will occur during the planning period; second, a storm drain capacity analysis of current and future storm water flows in the system; and third, a determination of the location and required sizing of future piping and detention facilities. The Capital Facility Plan will conclude with a calculation of the costs to construct the proposed improvements. These costs are then used in the subsequent Impact Fee Determination Report to calculate the impact fee required to pay for the cost of said improvements.

The Storm Drain Capital Facility Plan is part of the 2007 Storm Drain Master Plan, which discusses in greater detail planned improvements required to maintain the existing storm drain network at a required Level of Service (LOS). The improvements presented in this report are required to provide the same Level of Service for future development. The Capital Facility Improvements presented in this report are required only for future growth and were added to the storm drain model after all existing LOS issues were resolved.

IMPACT FEE

Syracuse City's Storm Drain impact fees are to be established in a manner consistent with Utah statutory guidelines and are intended to finance the improvements identified in the City's Storm Drain Capital Facility Plan. An impact fee within the State of Utah is defined as:

> "A one-time charge on new development for the purpose of raising revenue for new or expanded public facilities necessitated by that development."

The Utah State Legislature established Senate Bill 4, effective 1 July 1995 concerning the methodology to be used in establishing impact fees. The Bill, embodied in Title 11, Chapter 36 of the Utah Code, solidified local government's authority to impose impact fees in their jurisdictions by regulating those fees within their individual boundaries. However, it also mandates procedural requirements for local governments to follow when establishing and collecting an impact fee.

The purpose of an impact fee is to equitably apportion the cost of constructing capital facilities required by new development, so that existing customers (residences) are not caused to subsidize the construction of the new infrastructure. The methodology is also intended to avoid

overcharging new development, a situation which would result if there was a subsidy from existing customers. The impact fee may consider the cost of existing facilities which provide needed capacity for growth, as well as the cost of new expansion projects to accommodate that growth.

This one-time charge is imposed on new development as a condition of development approval. The fees collected may only be applied within the system for which they are intended (e.g. Storm Drain impact fees cannot fund Culinary Water or Street improvement projects). Not only can the fee fund new improvements to a system, but it can also be charged to recover system improvement costs previously incurred by the City for the benefit of future development for which the City has not previously received compensation. This is consistent with the statute in that new development benefits from already-existing capacity paid for by the City. The impact fee calculation must consider several factors:

1. The expected future demand on the system and the requirements that Syracuse's facilities, existing and planned, must meet;
2. The value of Syracuse's existing facilities from which new development benefits;
3. The cost of improving those facilities to increase capacity for development whose demand will exceed the limits of existing facilities; and
4. Any contributions that existing customers and new development have already paid toward the construction and/or improvement of existing and planned facilities.

This analysis has taken into account the statutory guidelines for developing a funding mechanism that supports Syracuse's growth. The study results in an equitable impact fee on future development to pay for the improvements necessary to handle their increased demand on the existing facilities and the required construction of new facilities which are necessary to serve future growth.

DEMOGRAPHICS

Syracuse City is a community of approximately 24,400 people, based on a study completed for the *Syracuse City Secondary Water Impact Fee Analysis*, completed by Lewis Young and Associates, Inc. The City is located directly on the shore of the Great Salt Lake in Davis County, Utah. Syracuse is bordered on the East by Clearfield City and Layton City, on the south by the Great Salt Lake and on the north by West Point City.

TOPOGRAPHY

As stated above, Syracuse City is located near the eastern shore of the Great Salt Lake. The topography within the City limits of Syracuse City is relatively level and sloping in a

southwesterly direction towards the Great Salt Lake. Ground elevation varies approximately 205 feet from an elevation of 4,415 in the northeast corner of the City to an elevation of 4,210 in the southwest. Much of the elevation change is along a bluff that runs northwesterly through the middle of the City along Bluff Road. Slopes are generally greater to the north and east of the Bluff. Land to the south and west of the Bluff is extremely flat.

HISTORY

Settlement of Syracuse began in the late 1800's after the construction of a beach resort on the Great Salt Lake. Farms were homesteaded and a grid of rural roads was constructed to provide access to the farms. Syracuse remained a rural farming community until the 1980's when rural growth of the neighboring communities of Layton and Clearfield spread westward into the City. In the 1990's growth within the City has accelerated and the limits of the City have expanded to include additional previously unincorporated land. Recent growth within the City has been at over ten percent (10%) annually for several years.

The City first constructed storm drain improvements in the 1950's and 1960's. Up until the 1980's, the City was primarily a rural community and used mainly open ditches along major streets, culverts, overland drainage, and irrigation systems to handle storm water runoff. Because of population growth in the 1980's and 1990's, the City was changing from a rural community to an urban community. The City anticipated the need for a change in storm drainage collection and conveyance methods and completed a Storm Drain Master Plan in 1996. This Master Plan identified several large diameter pipes to be installed in the City's major streets.

Continued rapid growth within the City and increased design storm intensities since the previous Master Plan was written has precipitated the need to perform a more detailed analysis of the City's Storm Drain System to determine the additional improvements required to adequately convey the projected storm flows from the remaining undeveloped portions of the City.

RECENT POPULATION

In recent years the population of Syracuse has grown substantially from 6,296 people in 1996 to 9,387 people in 2000. The 2000 Census, shows that the official population of Syracuse was 9,387 people in 2,490 households in the spring of 2000, for an average population of 3.77 people per household. The Census also showed that there were a total of 2,601 housing units, showing that there was an occupancy rate of 95.73%. After accounting for the occupancy rate, the population per housing unit is 3.61 people per connection.

Table 1 below shows the estimated population and average number of connections for each year from 2001 to 2006. Table 1 also shows the annual population and percent increase for each year, the total population and percent increase, and the average annual population and percent from 2001 to 2006. The population has increased by almost four times in the last ten years.

TABLE 1
Historical Population Growth, 2001 to 2006

Item	2001	2002	2003	2004	2005	2006	Growth	Average
Connections	3,075	3,627	4,204	4,669	5,152	5,819		
Population	12,018	14,675	17,251	19,878	21,934	23,068		
Conn. Increase	474	552	577	465	483	667	3,218	536
Pop. Increase	1,714	1,993	2,083	1,679	1,744	2,408	11,620	1,937
% Increase	18.26%	17.95%	15.91%	11.06%	10.37%	12.95%	123.78%	14.41%

Note: Connections at end of year, from City records. Population estimated.

PLANNING PERIOD

This report uses a planning period from 2007 to 2030. Development is expected to continue in Syracuse as there is available land and as the City annexes smaller pieces of property around the City. It is expected that the City will reach full build-out by the year 2030. By this time all facilities will be in place and there will be negligible new growth.

PLANNING AREA

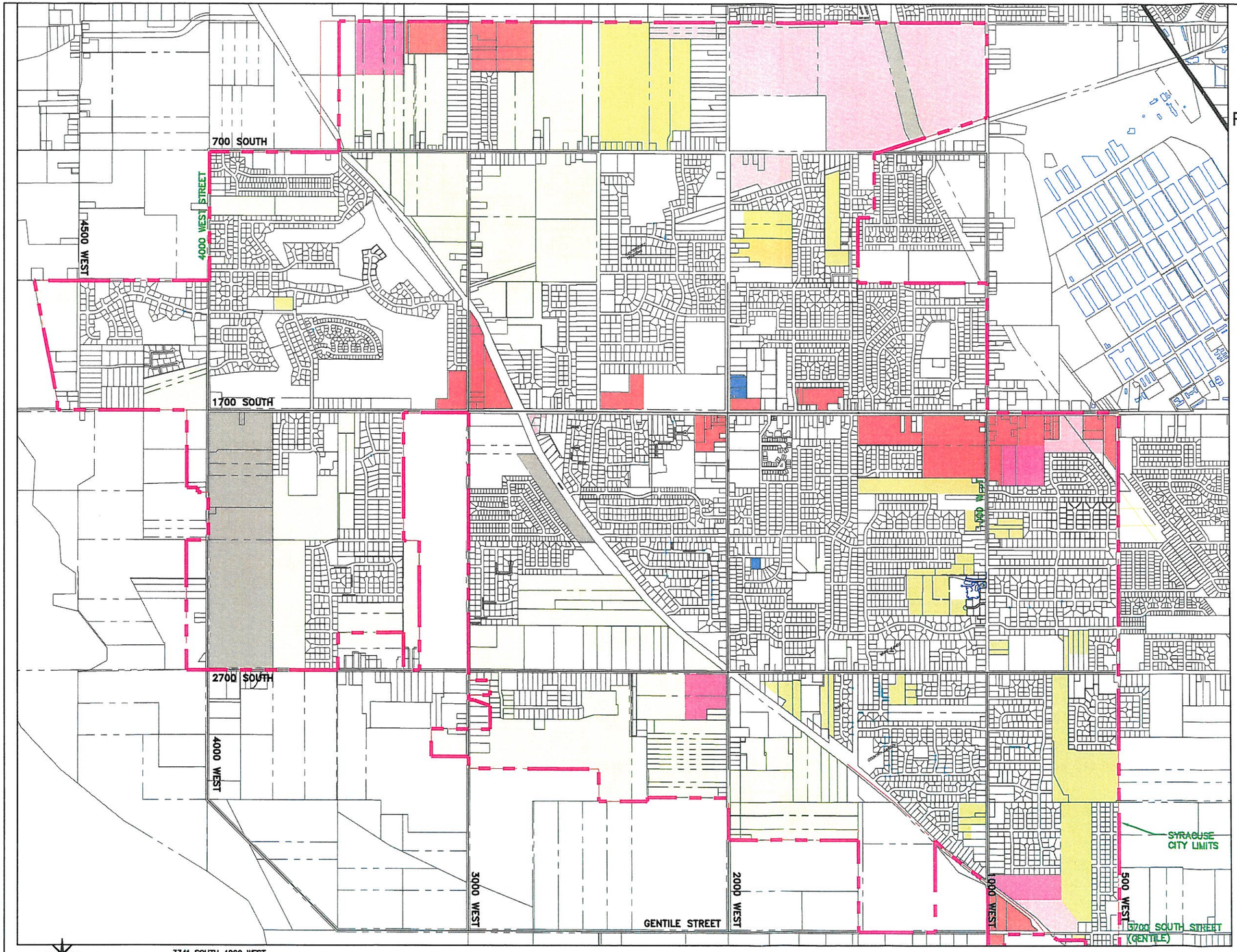
Syracuse has a significant amount of developable land to sustain substantial growth for many years to come. Currently, approximately 2,161 gross acres out of a total of 5,979 total acres within the City limits, or 36%, are still developable. In addition to the undeveloped land within the City, there is approximately 643 acres of undeveloped County land adjacent to the City. If this land is developed, it may be annexed into the City and benefit from City improvements and utilities such as the storm drain system. The impact fees within this report are based solely on development within the City.

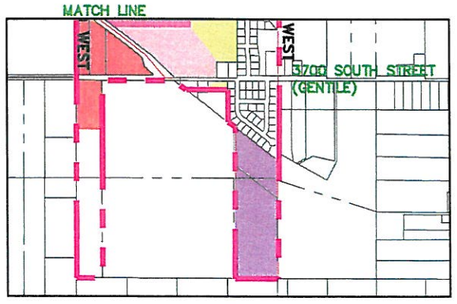
Figure 1 shows the location, quantity and zoning type of the majority of developable land within the City limits. Approximately 25 percent of the developable area will be commercial/industrial, 75 percent will be residential. Using the standard dwelling densities for each zone, the developable residential land will support the construction of 4,359 residences. The 2,161 acre gross developable area is calculated by adding 10% to the area delineated in Figure 1 to account for the numerous small properties that may develop throughout the City. The net developable area is then calculated by deducting 20% from the gross area to subtract roads and public areas. The net developable are is 1,735 acres.

FIGURE 1
STORM DRAIN IMPACT FEE FUTURE DEVELOPMENT AREAS.

SCALE: 1"= 2000'

- CITY BOUNDARY
- UNDEVELOPABLE 17.38 ACRES
- R-1 (2.90 DWELLINGS PER NET ACRE) 1076.31 ACRES
- R-2 (3.79 DWELLINGS PER NET ACRE) 301.37 ACRES
- R-3 (5.44 DWELLINGS PER NET ACRE) 13.58 ACRES
- R-4 (14.52 DWELLINGS PER NET ACRE) 4.82 ACRES
- PRD (8.0 DWELLINGS PER NET ACRE) 74.03 ACRES
- C-1 COMMERCIAL 1 194.01 ACRES
- C-2 COMMERCIAL 2 277.77 ACRES
- I-1 INDUSTRIAL 23.06 ACRES





Epic Engineering
3341 SOUTH 4000 WEST
WEST VALLEY CITY, UT 84120
(801) 955-5605
50 EAST 100 SOUTH
HEBER CITY, UTAH 84032
(435) 654-8600

Syracuse City
1787 SOUTH 2000 WEST
SYRACUSE, UT 84075
(801) 825-1477

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POPULATION GROWTH PROJECTIONS

The Wasatch Front Regional Council (WFRC) projects population growth for municipalities along the Wasatch front, including Syracuse. The WFRC has projected Syracuse City to be one of the fastest growing Cities in Davis County over the next ten to twenty years. A population projection completed for the *Syracuse City Secondary Water Impact Fee Analysis*, Lewis Young and Associates, 2006, shows continued rapid growth for the next three to twelve years, after which the City will grow at a slower rate. For planning purposes this analysis, shown in Table 2, will be used for this study.

TABLE 2
Projected Population, 2010 to 2030

Item	2010	2015	2020	2025	2030
Population	27,341	35,229	40,980	44,088	46,218
Growth Rate	5%	3%	3%	1%	1%

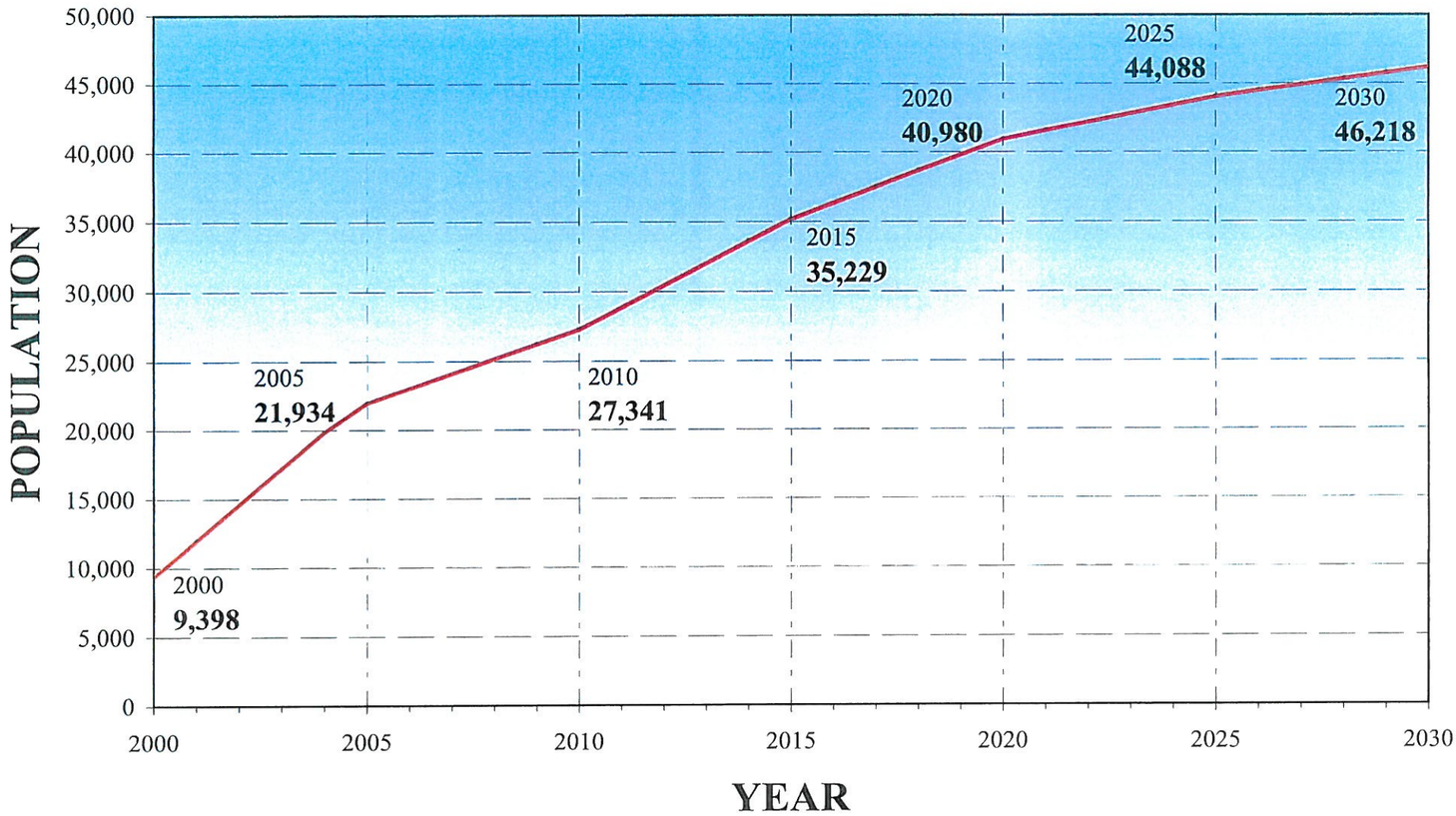
The population is expected to continue to grow at a five percent (5%) growth rate for the next seven years from 2007 to 2014. During 2015 to 2020, the growth is expected to decrease to a rate of three percent (3%). Thereafter, the rate of one percent (1%) is assumed from the year 2021 through 2030.

Table 3 below shows the projected household and population growth used in this plan. The City's population growth from 2000 to present and the projected growth through 2030 is also shown in Figure 2. According to these projections, approximately 5,523 new connections will occur during the planning period.

TABLE 3
Projected Population, 2007 to 2030

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2025	2030
Growth Rate	5%	5%	5%	5%	5%	5%	5%	5%	3%	3%	1%	1%
New Connections	**291**	**306**	**321**	**337**	**354**	**371**	**390**	**409**	**258**	**1,411**	**525**	**550**
Connections	6,110	6,416	6,737	7,074	7,428	7,799	8,189	8,598	8,856	10,267	10,792	11,342
Population	24,168	25,205	26,273	27,341	28,919	30,496	32,074	33,651	35,229	40,980	44,088	46,218

FIGURE 2 - SYRACUSE CITY'S HISTORICAL AND PROJECTED POPULATION



EXISTING STORM DRAIN SYSTEM

The existing Storm Drain system includes approximately 115 miles of 12-inch to 48-inch pipes with inlet boxes to receive storm water that accumulates on the City streets and parking lots. The Storm Drain System also includes several detention basins throughout the City. The components of the existing Storm Drain System are further described as follows.

Conveyance System

The existing storm drain system collects storm water from the developed areas of the City and from two areas of Clearfield City. The collected storm water flows are transported in large diameter piping either southerly or westerly through the City to various surface channels, which convey the water directly to the Great Salt Lake. The existing storm drain system is shown in Figure 3.

The City is divided into several drainage Basins, as shown in Figure 4. In each drainage basin storm water is collected into the storm drain system and flows downhill in the piping until it reaches the surface drainage outfall for that drainage basin. Drainage basins are subsequently divided into sub-basins by the streets and are further subdivided in the Subdivisions. The storm drain piping network starts out with small piping in the Subdivision. As collected flows from several sub-basins converge, the size of the storm drain pipe must be increased to handle the combined flows.

Detention Basins

The storm drain network includes several detention basins. Detention basins are constructed for two reasons. First, detention basins are used to decrease the peak flow transported downstream in the conveyance network. The use of detention basins thus allows the use of smaller piping downstream. This often results in a decrease of the total expense to handle the storm drainage runoff. Second, Davis County requires that all developed land contributing to County outfalls limit their contributing storm water flows to 0.2 cfs per acre developed. Most development must detain runoff to meet this requirement. Most of the City's drainage basins outfall into County maintained channels and must satisfy the 0.2 cfs per acre requirement.

Currently, the City's storm drain system includes 43 detention basins totaling approximately 99 acre feet of detention storage volume. The current detention basins are shown in Figure 3.

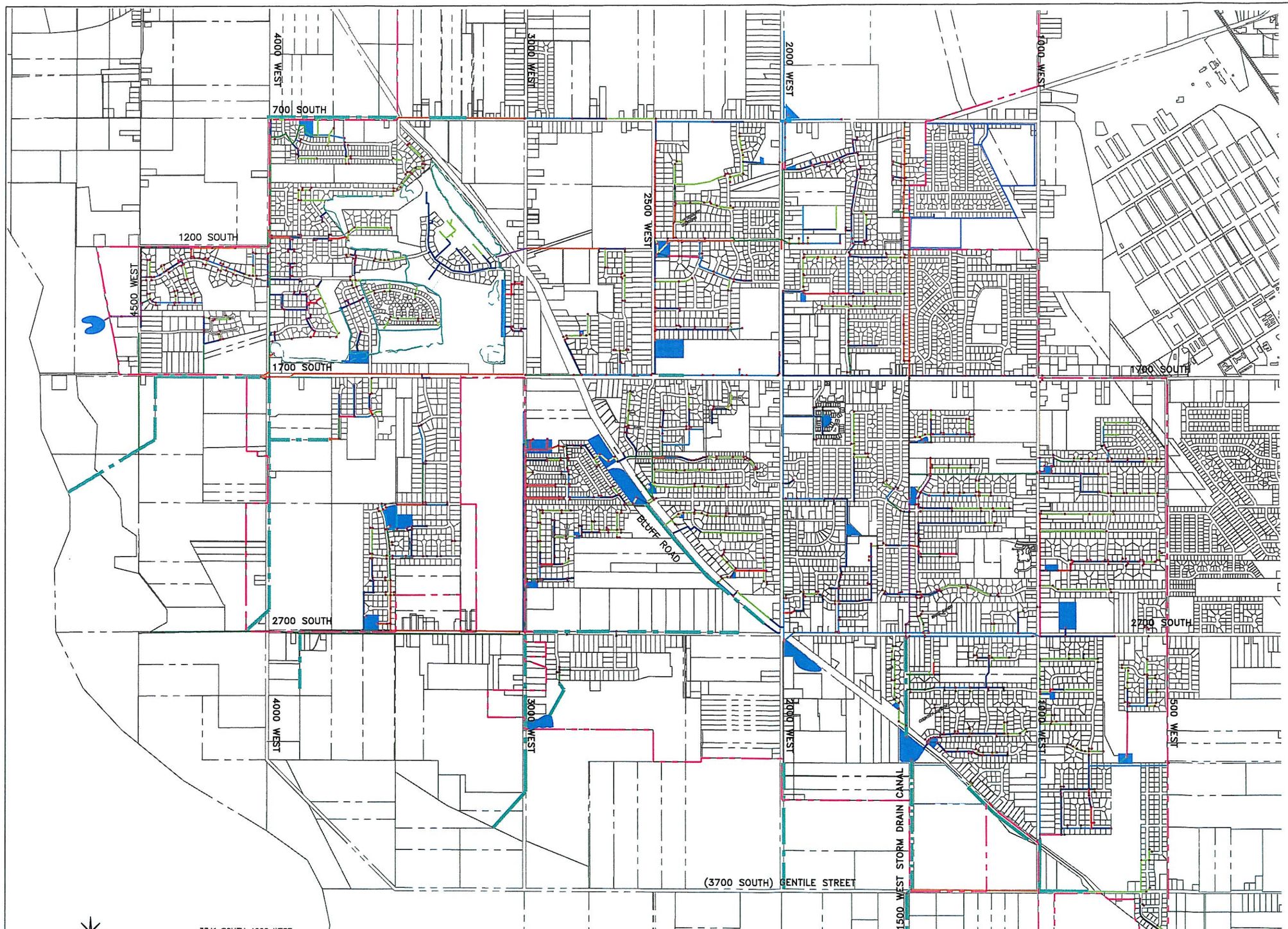


FIGURE 3

STORM DRAIN IMPACT FEE EXISTING PIPING & DETENTION BASINS

COLOR CODING LEGEND

EXISTING PIPES	PIPE SIZE ø in.
	15
	18
	21
	24
	27
	30
	33
	36
	42
	48
	54

DITCH

CITY BOUNDARY

STREET & LOT LINES

DETENTION BASIN (APPROXIMATE SIZE)

NORTH

2000 0 2000

SCALE IN FEET

Epic Engineering

3341 SOUTH 4000 WEST
WEST VALLEY CITY, UT 84120
(801) 955-5605

50 EAST 100 SOUTH
HEBER CITY, UTAH 84032
(435) 654-6600

Syracuse City

1787 SOUTH 2000 WEST
SYRACUSE, UT 84075
(801) 825-1477

STORM DRAIN MODELING

In order to determine what facilities will be needed to store and convey the additional storm water flows that will be generated by the development of the open land, a hydrologic model of the system must be built that will determine the quantity and timing of the additional runoff during the design storm. From these calculations, future pipe sizes and storage facilities can be determined.

Selected Model

The hydrologic and hydraulic modeling of a drainage system of the size and complexity of Syracuse City requires the use of computer modeling software. The storm modeling software StormCad 5.6^{tm} was selected to model the collection and distribution of storm water flows and to determine the size of storm drain pipes required. The model consists of a series of nodes which are connected by pipes. Each node is assigned spacial information, as well as hydrologic parameters. Pipes are then used to route storm water from one node to the next and eventually to an outlet node. The model uses the pipe and node data to route storm water flows through the system and determine the maximum flow for every component.

The program uses established hydrologic methodologies for urban storm flows to model the magnitude, timing and direction of storm water flows. First, each inlet node is assigned a watershed area, time to concentration, and runoff coefficient based on the local topology, and land use. Next, the storm drain model uses the rational equation and time step sequencing of accumulated flows from each inlet node to determine flows in each pipe of the model. The rational equation is as follows:

$$Q = CiA$$

Where "Q" is the flow rate in cubic feet per second, "A" is the contributing area in acres, "i" is the rainfall intensity in inches per hour, and "C" is the Rational Coefficient, which represents the percentage of rainfall that will runoff the area. The Rational Coefficient is expressed as a decimal from 0.1 to 0.9. The larger the value, the more water will runoff of the area.

The model determines the capacity of each pipe in the system using Manning's Equation for a full circular pipe:

$$Q = \frac{1.49}{N} * \pi R^2 \left(\frac{\pi R^2}{2\pi R} \right)^{2/3} * S^{1/2}$$

Where Q is the flow rate in the pipe in cubic feet per second N is a friction factor for the pipe material, R is the cross sectional radius of the pipe in feet and S is the slope of the pipe in feet per foot.

To accurately and efficiently input all the necessary information into the model, an AutoCAD drawing of the 2007 city streets, current and future land use maps, a digital elevation model of the region (based on the Davis County 1982 aerial photographic study), and the local 10 and 50-year Intensity-Duration-Frequency (IDF) curve from the National Oceanic and Atmospheric Administration (NOAA) were utilized. A graphical interface that linked the StormCAD™ software with AutoCAD™ is used to simplify the construction of a spatially accurate, three dimensional (3D) representation of the storm drain network. The pipe sizes of the existing storm drain network is entered manually using various City sources. Watershed areas for each inlet node are determined from the digital elevation model. Runoff coefficients are calculated from the land use map.

Methodology

The Storm Drain Network is modeled and evaluated in three (3) stages. First, the existing pipe network is input, calibrated, and processed to determine the status of each component of the existing system. Any section of pipe that did not have sufficient capacity to pass the 10-year IDF storm event, and any detention basin that did not have sufficient capacity during the 50-year IDF is flagged as under capacity.

Next, the existing model is modified to correct any pipes and detention basins that are flagged as under capacity in the first phase. The modifications are modeled to bring the existing system up to the required level of service in the most cost effective manner possible. The modifications most often include diverting flows to adjacent pipes or to alternate detention facilities, installing additional segments of pipe, and enlarging or installing additional detention facilities. These modifications are discussed in detail in the Storm Drain Master Plan.

Finally, for the purpose of this Capital Facility Plan, the future demands are added to the modified existing system by inserting nodes in areas of future development and installing pipes and detention facilities, as required, to connect the future nodes with the existing system in a logical manner. Locations for regional detention basins are identified and utilized for future flows. Pipes that cannot pass the 10-year IDF storm and detention basins that cannot store the 50-year IDF storm are flagged as insufficient. The insufficient components are then evaluated with alternatives to overcome the deficiencies. Alternatives included, diverting or rerouting flows to areas with additional capacity, creating additional upstream detention to decrease the peak flow, and installing additional segments of pipe to carry the increased flow. Alternatives which bypassed existing local detention basins and routed flows into regional basins while still minimizing the length and size of new pipe are given preference over other alternatives. The selected alternatives are shown in Figure 5.

Modeling Results

The following sections briefly describe the improvements and additions to the existing system that will be necessary to safely convey storm water runoff from the future developed areas to The Great Salt Lake. The sections are organized by drainage basins shown in Figure 4. A detailed list of the resulting Capital Facility Improvements is provided in Tables 4 and 5 and are shown in Figure 5.

Basin 1

Basin 1 is located in the North central portion of the City. Currently the basin is largely undeveloped. The undeveloped areas are currently zoned as R-1 and R-2. It is anticipated that most of the basin will be developed in the future. There are two logical choices to drain storm water from the basin. One choice is to allow the storm water to drain to the South through 2500 West and 3000 West into the central portion of the City. The second option is to route the flow to the west along 700 South. Modeling indicates that if the future storm water runoff from Basin 1 were routed south, the existing system would be overwhelmed and the cost to upgrade the existing system would be very high. Routing the storm water West along 700 South will require fewer feet of pipe, less storage, and not increase the stress on the existing system. **It is recommenced that the storm water from basin 1 be routed to the West along 700 South.**

The major components necessary to effectively drain Basin 1 consist of 27" through 36" pipes located along and to the north of 700 South which will convey water to a 48" pipe. The 48" pipe will flow south from 700 South to a regional detention basin located within the future park at about 2800 West and 1200 South. The area to the south of 700 South and west of the 48" storm drain will drain south and west toward the Bluff where a series of 30" through 42" pipes will convey the water northwest, taking advantage of the change in elevation along the Bluff, to a detention basin in Rock Creek Park. The Rock Creek detention facility will then discharge into the County channel along the north side of 700 South.

Basin 2

Basin 2 is located on the northwest corner of the City. The Basin currently contains numerous R-1 developments. The undeveloped regions of the basin are zoned R-1. Modeling indicates that the addition of future property to this drainage basin by annexing land to the west of 4000 West into the City will stress the existing storm drain in 1200 South and 4500 West. An additional storm drain is proposed to be installed in 4000 West to resolve existing storm drainage problems along 4000 West. The model shows that if this new storm drain pipe is upsized by one pipe size some storm water flows can be routed southward into the new pipe. These flows thus add to the drainage of Basin 3. **It is recommended that a connection be made between the storm drain in 1200 South and the new storm drain in 4000 West discussed under Basin 3.**

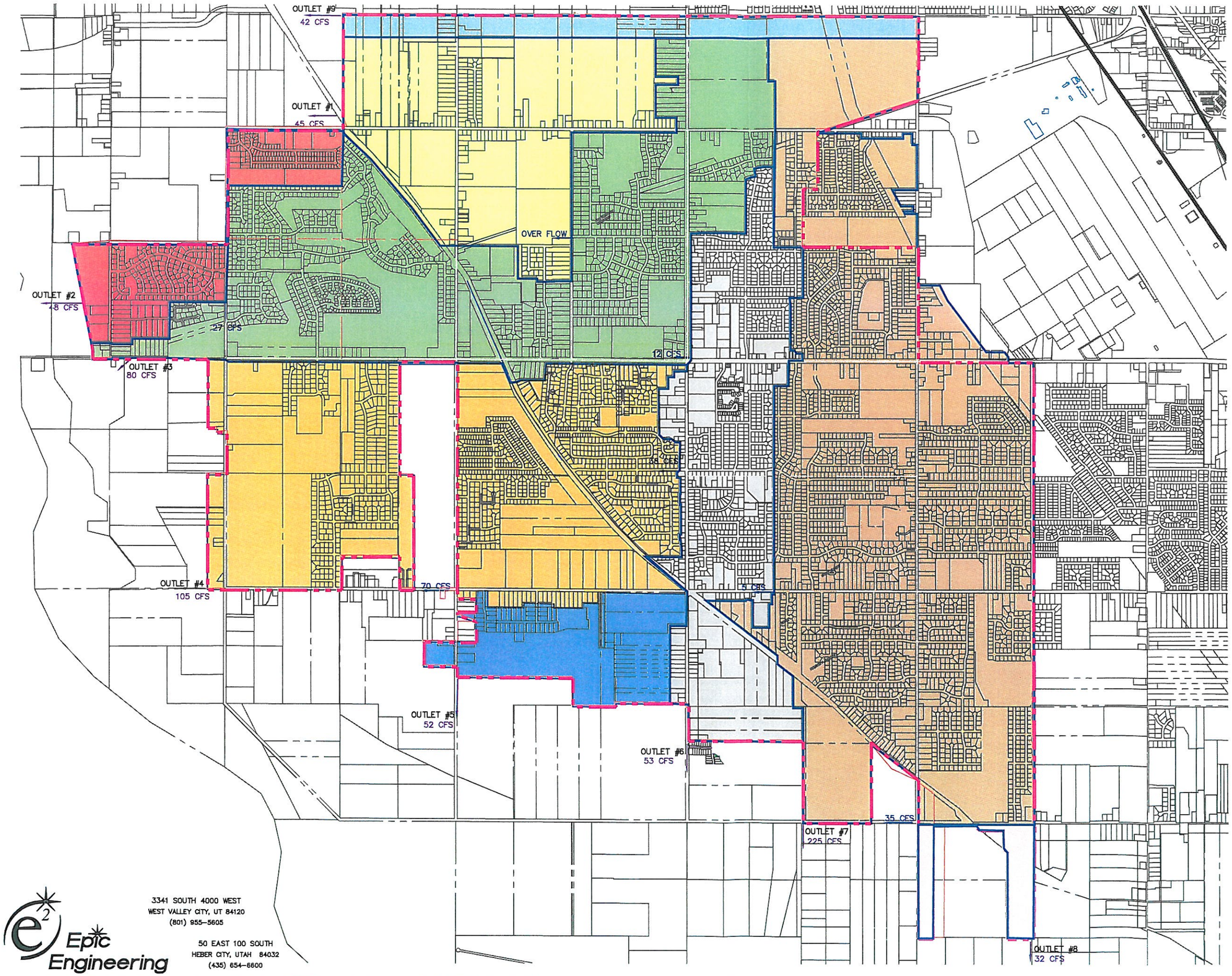


FIGURE 4

STORM DRAIN IMPACT FEE FUTURE DRAINAGE BASIN AREA

CITY BOUNDARY
STREET & LOT LINES

BASIN 1
BASIN 2
BASIN 3
BASIN 4
BASIN 5
BASIN 6
BASIN 7
BASIN 8
BASIN 9

OUTLET #2 48 CFS — BASIN OUTFLOW

48 CFS — INTERBASIN TRANSFER

NORTH

NOT TO SCALE

NOTE:
OUTLET FLOW VALUES ARE APPROXIMATE FOR 10-YEAR DESIGN STORM.

Epic Engineering
3341 SOUTH 4000 WEST
WEST VALLEY CITY, UT 84120
(801) 955-5605

50 EAST 100 SOUTH
HEBER CITY, UTAH 84032
(435) 654-6600

Syracuse City
1787 SOUTH 2000 WEST
SYRACUSE, UT 84075
(801) 825-1477

Basin 3

Basin 3 is located north of 1700 South in the central portion of the City. The basin consists of Residential and commercial developments. A large portion of the basin is currently developed. The undeveloped areas within the basin consist of small to medium size parcels along the Bluff and a few larger parcels located in the Northeast quadrant of the basin. Modeling indicates that if the future areas simply tie into the existing system along 2000 West, 3000 West and 1700 South the existing system will be overwhelmed. After considering a number of alternatives **it is recommended that an overflow be constructed at 1200 South and 2500 West to convey the majority of storm water from the northeastern portion of the drainage basin that lies north of 1200 South into the new regional detention facility in drainage basin 1.**

To adequately control the future flows from the development along the Bluff, a regional detention basin should be constructed on the north side of 1700 South to the west of 3000 West. A series of 18" through 30" storm drain pipes will convey water through the newly developed land to the detention basin. **It is recommended that future storm water flows be routed to a regional detention basin constructed along 1700 South.**

Basin 4

Basin 4 is located between 1700 South and 2700 South on the western quadrant of the City. Portions of the basin east of Bluff Road are generally developed as R-2. West of the Bluff the basin consists of a few R-1 and R-2 developments interspersed with undeveloped land zoned as R-1. A unique feature of the basin includes a number of large wetland areas along the Bluff which currently serve to retain a portion of the storm water upstream from the Bluff. The model indicates that if the future development to the east of 3000 West and west of the Bluff were to drain into the existing system along 2700 South, the system will be overwhelmed, even with an existing large diameter storm drain along 2700 South and a drainage channel south along 3000 West. As an alternative **it is recommended that all of the undeveloped areas to the east of 3000 West and north of 2700 South drain to a regional detention basin near the corner of the intersection of these two streets. Storm drain flows from the existing subdivisions Eagle Estates, Outwest and others to the east of Bluff Road are also routed through this new regional detention basin, thus eliminating several other small detention basins within those Subdivisions. Several storm drain alignments through this area will need to be upsized to 30' through 42" to convey the water to the regional detention basin at the northeast corner of 3000 West and 2700 South.** This pipe network will also provide storm drainage should the wetlands along bluff road become overwhelmed through an expansion of Bluff Road or via the proposed storm water diversion from Basin 6 discussed below.

To the west of 3000 West, options to convey storm water are limited by the unusually flat topography. **It is recommended that 2 regional detention basins be constructed along 2700 South and a network of 36" pipes be constructed to convey the existing and future flows to the basins.** One detention basin will be located at 3800 West for the Syracuse Ranchettes,

Tuscany Meadows, Miller Springs areas. The other detention basin will be located at approximately 3200 West, primarily for the future County land when it annexes into the City.

Conveying storm water South along 3000 West into basin 5 was evaluated. Modeling determined that the existing infrastructure is insufficient and the location of sewer and other utilities would likely inhibit the necessary upgrades. Alternatively, storm water can be conveyed west along 2700 South. The existing storm drain in 2700 South is also insufficient to carry the future flows. Fortunately, the Davis County Service District is constructing a new sanitary sewer along 2700 South. The existing sewer line along 2700 South consists of 36" through 54" pipe and will be abandoned by the Sewer District. **It is recommended that the abandoned sewer be converted into a storm drain pipe and that the outfall from the three proposed regional detention basins be routed into the abandoned sewer line.**

Basin 5

Basin 5 is located on the southern edge of the City between 2000 West and 3000 West. The northwestern edge of the basin is developed as R-1, the remainder of the basin consists of undeveloped land zoned as R-1. The natural drainage is to the southwest such that the development of this area will not affect the majority of the City's storm drain system. **It is recommended that a 42" storm drain pipe be constructed along the southern edge of the developable land to convey storm water to a future detention basin along 3000 West at and the southern city limits, where it will outfall into a channel along 3000 West and travels in a southwesterly direction to the Great Salt Lake.** The detention basin will be required for 2 reasons. First, the channel is a County channel, and storm water discharges will have to be limited according to County policy. Second, it is anticipated that a future large diameter storm drain may conflict with the new sewer line in 3000 West. Using a smaller diameter pipe to discharge from the pond will reduce conflicts with the sewer alignment. **It is also recommended that the drainage channel along the east side of 3000 West be piped and also routed through the proposed detention basin.**

Basin 6

Basin 6 is located in the central portion of the City and consists of residential units and commercial development. Only a few undeveloped areas remain within this basin. With limited potential for growth it is anticipated that additional storm water capacity will not be required with one notable exception. The anticipated expansion 2000 West to the north of 1700 South will increase the flows into basin 6 at 1700 South and 2000 West. Modeling indicates this additional flow will overwhelm the existing system along 2000 West and in 2175 South. To prevent the system from being overwhelmed **it is recommended that the future storm drain diversion pipe along 2175 South be up-sized to a 30" to convey the additional flow.**

Basin 7

TABLE 4
Recommended Storm Drain Piping Improvements

Location	Type	Length	Size (in)	Unit Price* ($/ft)	Construction Cost ($)	Contingency/ Design/C.M. ($)	Total Cost ($)
Drainage Basin 1							
2800 West from 700 S to 1200 S	Up-Size	3,000	48	$ 110.00	$ 330,000.00	$ 82,500.00	$ 412,500.00
1200 South from 2500 W to 2800 W	System	700	48	$ 190.00	$ 99,750.00	$ 24,937.50	$ 124,687.50
Bluff Trail from 1200 S to 700 S	System	4,000	42	$ 150.00	$ 600,000.00	$ 150,000.00	$ 750,000.00
2800 West from 700 S to 600 S	Up-Size	350	36	$ 40.00	$ 14,000.00	$ 3,500.00	$ 17,500.00
1200 South from Bluff Trail to 3000 W	System	300	36	$ 120.00	$ 36,000.00	$ 9,000.00	$ 45,000.00
700 South from 3000 W to Bluff Road	System	2,700	36	$ 120.00	$ 324,000.00	$ 81,000.00	$ 405,000.00
2800 West from 600 S to 300 S	Up-Size	1,000	30	$ 20.00	$ 20,000.00	$ 5,000.00	$ 25,000.00
600 South from 2800 W to 2500 W	Up-Size	600	30	$ 20.00	$ 12,000.00	$ 3,000.00	$ 15,000.00
600 South from 2500 W and 2200 W	Up-Size	1,800	30	$ 20.00	$ 36,000.00	$ 9,000.00	$ 45,000.00
400 South from 2800 W to 2500 W	Up-Size	1,100	27	$ 10.00	$ 11,000.00	$ 2,750.00	$ 13,750.00
900 South from Bluff Trail to 2900 W	Up-Size	2,400	30	$ 20.00	$ 48,000.00	$ 12,000.00	$ 60,000.00
1200 South and 2600 W	System	150	24	$ 80.00	$ 12,000.00	$ 3,000.00	$ 15,000.00
Drainage Basin 2							
1700 South from 4000 W to 4300 W	System	1,200	54	$ 225.00	$ 270,000.00	$ 67,500.00	$ 337,500.00
4000 West from1200 S and 1700 S	System	2,000	36	$ 120.00	$ 240,000.00	$ 60,000.00	$ 300,000.00
4000 West from 1200 S and 1700 S	Up-Size	800	36	$ 20.00	$ 16,000.00	$ 4,000.00	$ 20,000.00
From Bluff Road to 3100 West and 1700 South	Up-Size	2,000	30	$ 20.00	$ 40,000.00	$ 10,000.00	$ 50,000.00
Bluff Road from 1400 S to 1550 S	System	700	24	$ 80.00	$ 56,000.00	$ 14,000.00	$ 70,000.00
Drainage Basin 4							
2700 South from 3000 W to 4500 W	System	Convert Abandoned Sewer			$ 100,000.00	$ 25,000.00	$ 125,000.00
2450 South from 2500 W to Detention Basin	Up-Size	2,550	42	$ 70.00	$ 178,500.00	$ 44,625.00	$ 223,125.00
3695 West from 2000 S to 2700 S	Up-Size	3,800	36	$ 40.00	$ 152,000.00	$ 38,000.00	$ 190,000.00
Doral Drive South of 2100 S	Up-Size	800	36	$ 40.00	$ 32,000.00	$ 8,000.00	$ 40,000.00
2650 South from 3600 W to 3695 W	Up-Size	400	36	$ 40.00	$ 16,000.00	$ 4,000.00	$ 20,000.00
2700 South from 3200 W to 3300 W	System	700	36	$ 120.00	$ 84,000.00	$ 21,000.00	$ 105,000.00
Doral Drive North of 2100 S	Up-Size	550	30	$ 20.00	$ 11,000.00	$ 2,750.00	$ 13,750.00
2830 West from 2330 S to 2450 S	Up-Size	690	30	$ 20.00	$ 13,800.00	$ 3,450.00	$ 17,250.00
2950 West from 2450 S to 2495 S	Up-Size	980	30	$ 20.00	$ 19,600.00	$ 4,900.00	$ 24,500.00
Bluff Road from 2400 S to 2450 S	System	1,400	30	$ 100.00	$ 140,000.00	$ 35,000.00	$ 175,000.00
2450 South from Bluff Road to 2500 W	Up-Size	1,400	30	$ 20.00	$ 28,000.00	$ 7,000.00	$ 35,000.00
3000 West from 2495 S to 2700 S	System	1,200	30	$ 100.00	$ 120,000.00	$ 30,000.00	$ 150,000.00
3200 West and 2600 South	Up-Size	700	30	$ 20.00	$ 14,000.00	$ 3,500.00	$ 17,500.00
2175 South from 2000 W to Bluff Road	Up-Size	3,000	30	$ 20.00	$ 60,000.00	$ 15,000.00	$ 75,000.00
Bluff Road from 2200 S to 2400 S	System	203	21	$ 75.00	$ 15,225.00	$ 3,806.25	$ 19,031.25
Drainage Basin 5							
3300 South from 2500 W to 3000 W	Up-Size	3,000	42	$ 70.00	$ 210,000.00	$ 52,500.00	$ 262,500.00
3000 West from 2900 S to 3100 S	system	700	24	$ 80.00	$ 56,000.00	$ 14,000.00	$ 70,000.00
3000 West from 2700 S to 2900 S	system	1,000	18	$ 70.00	$ 70,000.00	$ 17,500.00	$ 87,500.00
Drainage Basin 6							
2000 West from 3100 S to 3700 S	System	700	48	$ 190.00	$ 133,000.00	$ 33,250.00	$ 166,250.00
Drainage Basin 7							
1475 West from 2050 S to 2100 S	Up-Size	200	36	$ 40.00	$ 8,000.00	$ 2,000.00	$ 10,000.00
3500 South from 1000 W to 1500 W	System	2,500	36	$ 120.00	$ 300,000.00	$ 75,000.00	$ 375,000.00
3700 South from Bluff road to 1100 W	System	1,000	30	$ 100.00	$ 100,000.00	$ 25,000.00	$ 125,000.00
660 West from 2920 S to 3700 S	Up-Size	3,000	30	$ 20.00	$ 60,000.00	$ 15,000.00	$ 75,000.00
2050 South from 1475 W to 1200 W	Up-Size	2,200	30	$ 20.00	$ 44,000.00	$ 11,000.00	$ 55,000.00
Bluff Road from 2800 S to 3000 S	system	1,700	30	$ 100.00	$ 170,000.00	$ 42,500.00	$ 212,500.00
From 2425 S 1300 W to 2700 S 1500 W	System	2,600	24	$ 80.00	$ 208,000.00	$ 52,000.00	$ 260,000.00
950 West from 3450 S to 3700 S	System	1,400	24	$ 80.00	$ 112,000.00	$ 28,000.00	$ 140,000.00
				Total Costs	**$ 4,619,875.00**	**$ 1,154,968.75**	**$ 5,774,843.75**

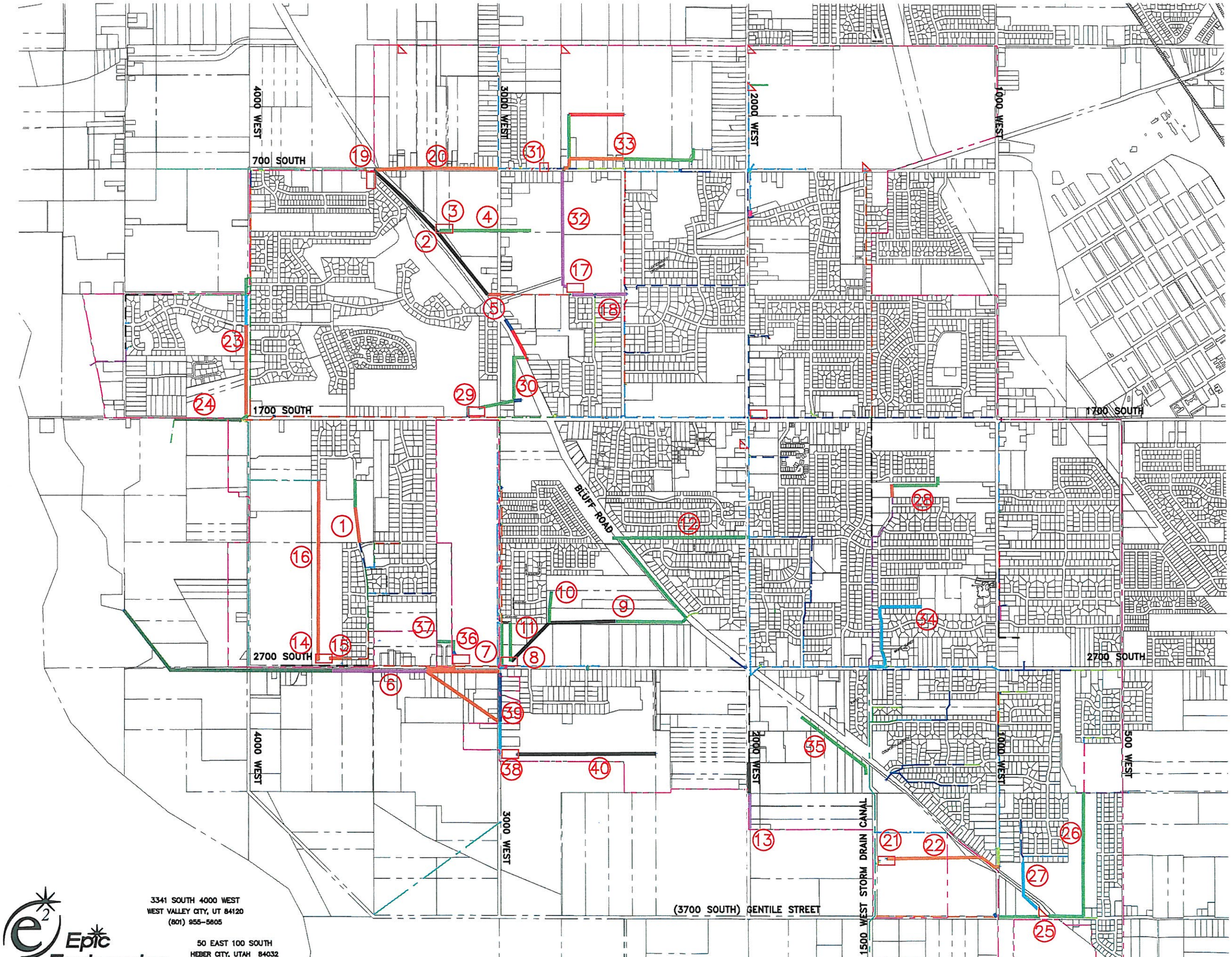
* Note: Unit Price for pipe up-sizing projects is the difference between the installation unit price of that pipe size and the install unit price of a 24" pipe

TABLE 5
Recommended Storm Drain Detention Improvements

Detention Basin Location	Development Type	Located in Public Space	Size (Acre-Feet)	Unit Cost ($/Ac*Ft)	Construction Cost ($)	Contingency/ Design/C.M.	Total Cost ($)
700 S & 2800 W	Residential	Yes	1.43	$76,000.00	$108,680.00	$27,170.00	$135,850.00
2000 W & 500 S	Commercial	No	1.45	$76,000.00	$0.00	$0.00	$0.00
700 S & 1500 W	Commercial	No	3.26	$76,000.00	$0.00	$0.00	$0.00
700 S and bluff road	Residential	Yes	7.3	$76,000.00	$554,800.00	$138,700.00	$693,500.00
Bluff Trail at 900 South	Residential	Yes	2.5	$76,000.00	$190,000.00	$47,500.00	$237,500.00
1200 S and 2500 W	Residential	Yes	16.8	$76,000.00	$1,276,800.00	$319,200.00	$1,596,000.00
1700 S & 3000 W	Both (50/50)	No	4.2	$76,000.00	$159,600.00	$39,900.00	$199,500.00
1700 S & Bluff Road	Commercial	No	0.32	$76,000.00	$0.00	$0.00	$0.00
2700 S & 3800	Residential	Yes	2.91	$76,000.00	$221,160.00	$55,290.00	$276,450.00
West of 2700 S and 3000 West	Residential	Yes	1.02	$76,000.00	$77,520.00	$19,380.00	$96,900.00
2700 S at 3000 West	Residential	Yes	5.03	$76,000.00	$382,280.00	$95,570.00	$477,850.00
3000 W 3300 S	Residential	Yes	6.75	$76,000.00	$513,000.00	$128,250.00	$641,250.00
Bluff Road and 3700 South	Residential	Yes	5.62	$76,000.00	$427,120.00	$106,780.00	$533,900.00
Jensen park	Residential	Yes	3.16	$76,000.00	$240,160.00	$60,040.00	$300,200.00
200 S at 2000 W	Commercial	No	5.4	$76,000.00	$0.00	$0.00	$0.00
200 S at 3000 W	Commercial	No	1.65	$76,000.00	$0.00	$0.00	$0.00
200 S at 3750 W	Commercial	No	0.74	$76,000.00	$0.00	$0.00	$0.00
				Total Cost	**$ 4,151,120.00**	**$ 1,037,780.00**	**$ 5,188,900.00**

FIGURE 5

STORM DRAIN IMPACT FEE REQUIRED CAPITAL FACILITY IMPROVEMENTS



COLOR CODING LEGEND

EXISTING PIPES	PIPE SIZE ø in.	FUTURE PIPES
	15	
	18	
	21	
	24	
	27	
	30	
	33	
	36	
	42	
	48	
	54	

DITCH

CITY BOUNDARY

STREET & LOT LINES

PROPOSED DETENTION BASIN

PROPOSED LOCAL RESIDENTIAL DETENTION BASIN

PROPOSED REGIONAL DETENTION BASIN

1 PRIORITY RANK

NORTH

2000 0 2000

SCALE IN FEET

Epic Engineering

3341 SOUTH 4000 WEST
WEST VALLEY CITY, UT 84120
(801) 955-5605

50 EAST 100 SOUTH
HEBER CITY, UTAH 84032
(435) 654-6600

Syracuse City

1787 SOUTH 2000 WEST
SYRACUSE, UT 84075
(801) 825-1477

N:\PROJ\19806-Syracuse\06-SY-219-IMPACT FEE ASSESMENT SD LE\dwg\Figures\Future pipe size_May.dwg, 5/21/2007 4:47:49 PM, ladd

TABLE 6

PRIORATIZATION OF CAPITAL IMPROVEMENTS

Priority	Location	Upgrade action	Year
1	Doral Drive South of 2100 S	Upsize to 36" through future development	2007
1	Doral Drive North of 2100 S	Upsize to 30" through future development	2007
N/A		Create Storm Drain Master Plan	2007
2	Bluff Trail from 1200 S to 700 S	Install 48" pipe along Bluff Trail	2008
3	Detention Basin along Bluff Trail at 900 South	Construct regional detention basin along bluff at 900 South	2009
4	900 South from Bluff Trail to 2900 W	Upsize to 30" through future development	2009
5	1200 South from Bluff Trail to 3000 W	Extend 36" to new 48" pipe in Bluff Trail	2009
6	2700 South from 3000 W to 4500 W	Convert abandoned sewer line to storm drain	2010
7	3000 West from 2495 S to 2700 S	Extend 36" Pipe along 3000 West	2010
8	Northeast of 3000 West and 2700 South	Install new detention Basin along 2700 S at 3000 West	2011
9	2450 South from 2500 W to Detention Basin	Upsize to 42" through future development	2011
9	Bluff Road from 2400 S to 2450 S	Extend new pipe along south side of bluff road	2011
9	2450 South from Bluff Road to 2500 W	Upsize to 30" through future development	2011
9	Bluff Road from 2200 S to 2400 S	Extend new pipe along south side of bluff road	2011
10	2830 West from 2330 S to 2450 S	Upsize to 30" through future development	2011
11	2950 West from 2450 S to 2495 S	Upsize to 30" through future development	2011
12	2175 South from 2000 W to Bluff Road	Upsize New 24" pipe to 30"	2011
13	2000 West from 3100 S to 3700 S	Extend 48" pipe along 2000 West	2011
N/A		Update & Revise Master Plan and Impact Fee	2012
14	Detention Basin at 3800 West 2700 South	2700 S & 3800	2012
15	2650 South from 3600 W to 3695 W	Upsize to 36" through future development	2013
16	3695 West from 2000 S to 2700 S	Upsize to 36" through future development	2014
17	Detention Basin at 2700 West 1200 south	Construct regional detention basin 1200 S and 2500 W	2014
18	1200 South from 2500 W to 2800 W	48" pipe from Existing detention pond to new detention pond	2014
18	1200 South and 2600 W	Reroute Huckleberry SD to new Detention pond	2014
19	Detention Basin at 3500 West 700 South	700 S and bluff road	2015
20	700 South from 3000 W to Bluff Road	Extend 36" along 700 South	2016
21	Detention Basin in Jensen Park	Construct new detention basin in Jensen park	2016
N/A		Update & Revise Master Plan and Impact Fee	2017
22	3500 South from 1000 W to 1500 W	Extend 36" pipe to County Canal	2017
23	4000 West from1200 S and 1700 S	Upsize New 30" pipe to 36"	2018
23	4000 West from 1200 S and 1700 S	Upsize New 30" pipe to 36"	2018
24	1700 South from 4000 W to 4300 W	Install 54" pipe in the existing ditch	2018
25	Detention Basin at Bluff Road and 3700 South	Construct new detention basin at Bluff road and 3700 South	2019
25	3700 South from Bluff road to 1100 W	Extend 30" pipe to detention basin.	2020
26	660 West from 2920 S to 3700 S	Upsize to 30" through future development	2020
27	950 West from 3450 S to 3700 S	Extend 24" pipe from Silver Lakes	2020
28	1475 West from 2050 S to 2100 S	Upsize to 36" through future development	2020
28	2050 South from 1475 W to 1200 W	Upsize to 30" through future development	2020
29	Detention Basin at 3100 West 1700 South	1700 S & 3000 W	2020
30	From Bluff Road to 3100 West and 1700 South	Upsize to 30" through Commercial property	2021
30	Bluff Road from 1400 S to 1550 S	Install new 24" pipe along Bluff Road	2021
31	Detention Basin at 2800 West 700 South	700 S & 2800 W	2022
32	2800 West from 700 S to 1200 S	Upsize to 48" for future areas north of 700 S	2023
32	2800 West from 700 S to 600 S	Upsize to 36" for future area north of 700 S	2023
32	2800 West from 600 S to 300 S	Upsize to 30" for future area north of 700 S (Runing North)	2023
33	600 South from 2800 W to 2500 W	Upsize to 30" for future area north of 700 S (Runing East)	2023
33	600 South from 2500 W and 2200 W	Upsize to 30" for future area north of 700 S (Runing East)	2023
33	400 South from 2800 W to 2500 W	Upsize to 27" for future area north of 700 S (Runing East)	2024
34	From 2425 S 1300 W to 2700 S 1500 W	Extend 24" pipe to 1500 West Canal	2024
35	Bluff Road from 2800 S to 3000 S	Extend 30" pipe to 1500 West Canal	2025
36	Detention Basin at 3200 West 2700 South	West of 2700 S and 3000 West	2026
37	2700 South from 3200 W to 3300 W	Extend 36" pipe to 48" converted storm drain	2027
37	3200 West and 2600 South	Upsize to 30" through future development	2028
N/A		Update & Revise Master Plan and Impact Fee	2028
38	Detention Basin at 3300 south 3000 West	Enlarge existing pond East of 3000 W 2950 S	2029
39	3000 West from 2900 S to 3100 S	Install 24" pipe in existing ditch	2029
39	3000 West from 2700 S to 2900 S	Install 18" pipe in existing ditch	2029
40	3300 South from 2200 W to 2500 W	Upsize to 42" through future development	2030

IMPROVEMENT COSTS SUMMARY

The cost of improvements to the Syracuse Storm Drain System that will benefit future connections include the construction of forty six (46) storm drain lines and seventeen (17) detention basins. These improvements are grouped into 40 projects as listed in Table 6 and continued updates to the capital facility plan to evaluate current Impact Fee. The cost of these improvements are summarized in Table 7 below.

TABLE 7
Total Improvement Costs

	Cost
Storm Drain Line Construction	$5,774,844
Detention Basin Construction	$5,188,900
Impact Fee Planning	$200,000
Total Improvement Costs	$11,163,744

RESOURCES

1. **Syracuse General Plan**, *Syracuse City General Plan Committee*, 2006.

2. **Syracuse Storm Drain Impact Fee Written Analysis**, *Epic Engineering*, March 2002

3. **Syracuse City Storm Water Management Analysis**, *Horrocks Engineers*, September 1996.

4. **Secondary Water Distribution System, Impact Fee Analysis**, *Lewis, Young, Robertson & Burningham, Inc*, May 2006.

5. **Utah Impact Fees Act, Title 11, Chapter 35, Sections 1-5**, *Utah State Legislature*, July 1995.

6. **StormCAD 5.6**, *Bentley Systems, Inc.*, 2005.

APPENDIX

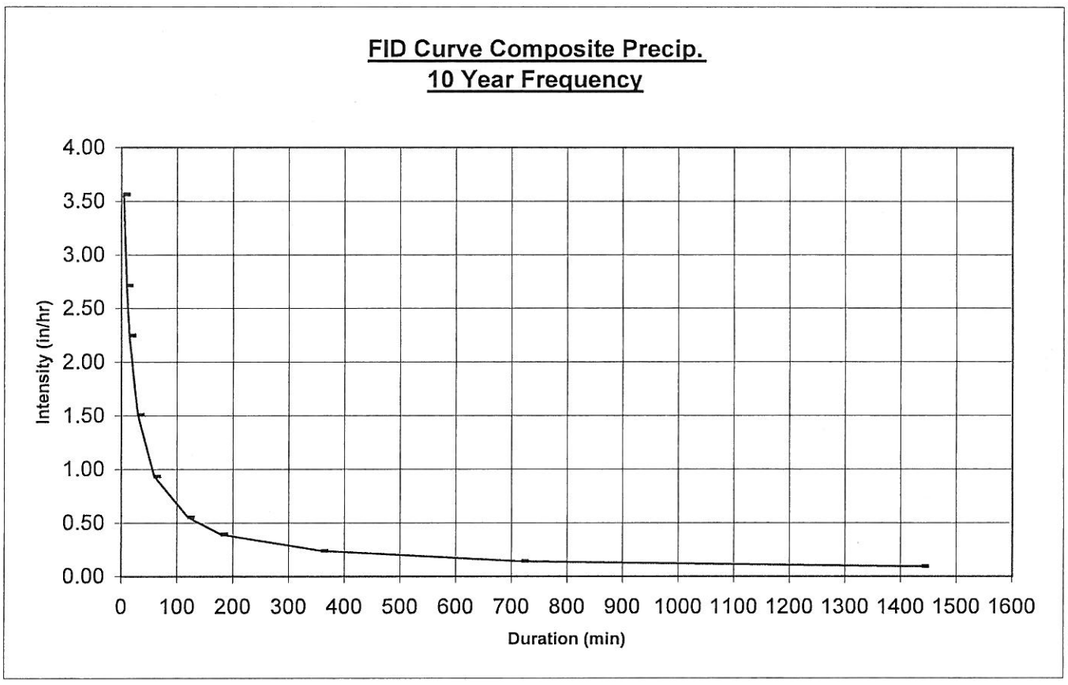
SYRACUSE CITY PRECIPITATION TABLES

10 YEAR FREQUENCY
50 YEAR FREQUENCY
100 YEAR FREQUENCY

Syracuse City Composite Precipitation Table

10 Year frequency Fits 2003 NOAA National Precipitaion Frequency Data

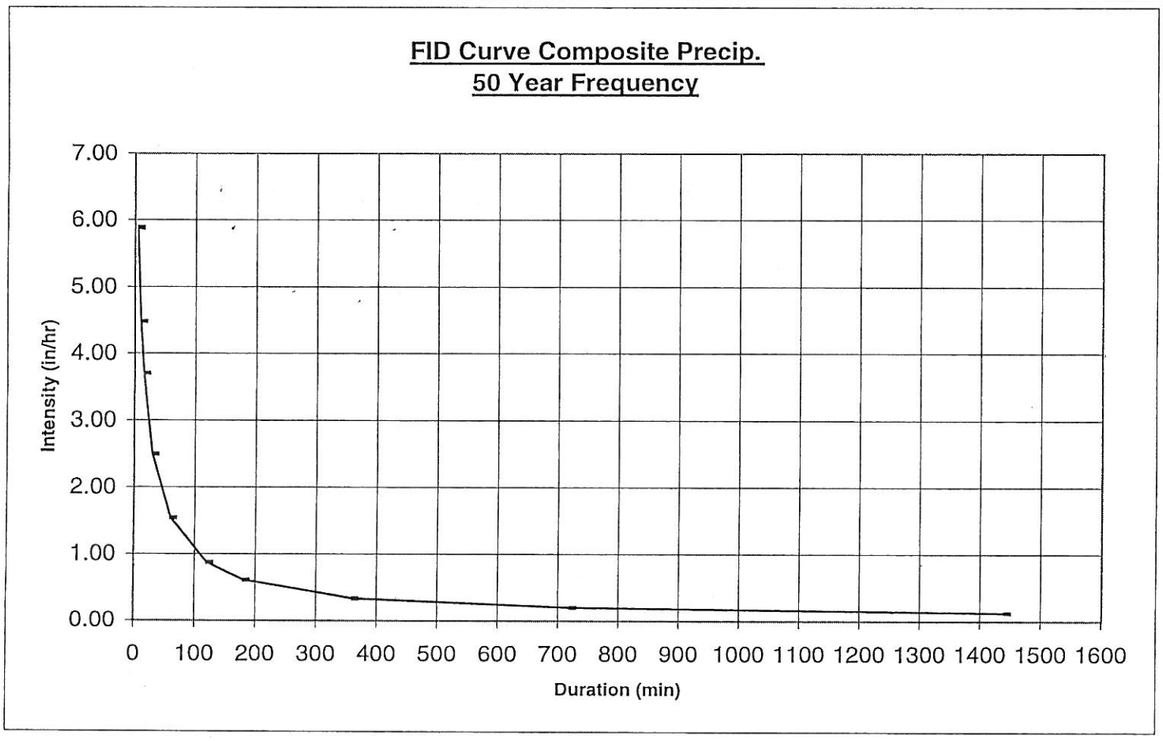
	Farmington		Farmington USU		Antelope Island		Syracuse Composite					
Duration (min)	Manual Curve (in)	Calculated (in/hr)	Manual Curve (in)	Calculated (in/hr)	Manual Curve (in)	Calculated (in/hr)	Farming. 30%	Farm. USU 30%	Ant Island 40%	Composite (in/hr)	Composite (in)	Duration (hrs)
5	0.32	3.79	0.32	3.85	0.27	3.19	1.14	1.16	1.28	3.57	0.30	0.083
10	0.48	2.89	0.49	2.93	0.41	2.43	0.87	0.88	0.97	2.72	0.46	0.167
15	0.60	2.39	0.61	2.43	0.50	2.01	0.72	0.73	0.80	2.25	0.56	0.250
30	0.81	1.61	0.82	1.63	0.68	1.35	0.48	0.49	0.54	1.51	0.76	0.500
60	0.99	0.99	1.01	1.01	0.84	0.84	0.30	0.30	0.34	0.94	0.94	1.000
120	1.20	0.60	1.21	0.60	0.98	0.49	0.18	0.18	0.20	0.56	1.12	2.000
180	1.26	0.42	1.28	0.43	1.07	0.36	0.13	0.13	0.14	0.40	1.19	3.000
360	1.56	0.26	1.55	0.26	1.30	0.22	0.08	0.08	0.09	0.24	1.45	6.000
720	1.92	0.16	1.96	0.16	0.98	0.13	0.05	0.05	0.05	0.15	1.56	12.000
1440	2.40	0.10	2.47	0.10	2.15	0.09	0.03	0.03	0.04	0.10	2.32	24.000



Syracuse City Composite Precipitation Table

50 Year frequency Fits 2003 NOAA National Precipitaion Frequency Data

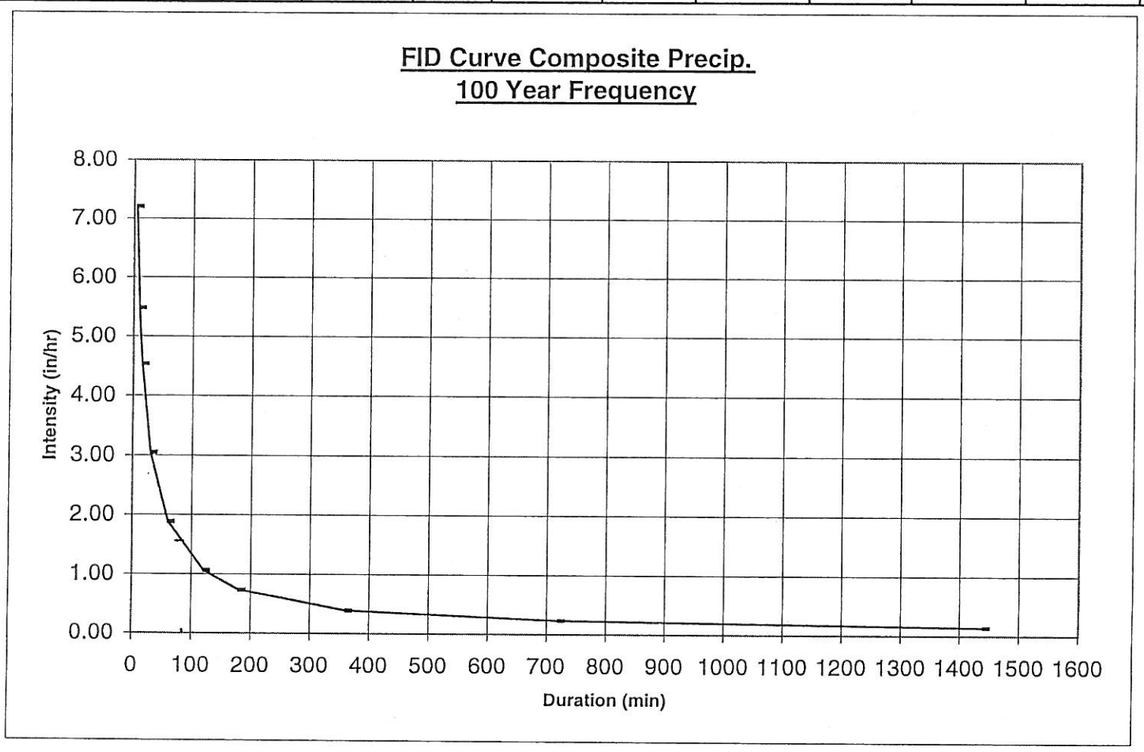
	Farmington		Farmington USU		Antelope Island		Syracuse Composite					
Duration (min)	Manual Curve (in)	Calculated (in/hr)	Manual Curve (in)	Calculated (in/hr)	Manual Curve (in)	Calculated (in/hr)	Farming. 30%	Farm. USU 30%	Ant Island 40%	Composite (in/hr)	Composite (in)	Duration (hrs)
5	0.52	6.25	0.53	6.35	0.44	5.27	1.88	1.91	2.11	5.89	0.49	0.083
10	0.79	4.76	0.81	4.83	0.67	4.01	1.43	1.45	1.60	4.48	0.75	0.167
15	0.98	3.93	1.00	3.99	0.83	3.32	1.18	1.20	1.33	3.70	0.93	0.250
30	1.33	2.65	1.34	2.69	1.12	2.23	0.80	0.81	0.89	2.49	1.25	0.500
60	1.64	1.64	1.66	1.66	1.38	1.38	0.49	0.50	0.55	1.54	1.54	1.000
120	1.88	0.94	1.90	0.95	1.55	0.77	0.28	0.29	0.31	0.88	1.75	2.000
180	1.95	0.65	1.99	0.66	1.62	0.54	0.20	0.20	0.22	0.61	1.83	3.000
360	2.10	0.35	2.15	0.36	1.81	0.30	0.11	0.11	0.12	0.33	2.00	6.000
720	2.64	0.22	2.68	0.22	2.20	0.18	0.07	0.07	0.07	0.20	2.48	12.000
1440	3.12	0.13	3.21	0.13	2.86	0.12	0.04	0.04	0.05	0.13	3.04	24.000



Syracuse City Composite Precipitation Table

100 Year frequency Fits 2003 NOAA National Precipitaion Frequency Data

	Farmington		Farmington USU		Antelope Island		Syracuse Composite					
Duration (min)	Manual Curve (in)	Calculated (in/hr)	Manual Curve (in)	Calculated (in/hr)	Manual Curve (in)	Calculated (in/hr)	Farming. 30%	Farm. USU 30%	Ant Island 40%	Composite (in/hr)	Composite (in)	Duration (hrs)
5	0.64	7.66	0.65	7.78	0.54	6.44	2.30	2.33	2.58	7.21	0.60	0.083
10	0.97	5.83	0.99	5.92	0.82	4.90	1.75	1.78	1.96	5.49	0.92	0.167
15	1.21	4.82	1.22	4.89	1.01	4.05	1.45	1.47	1.62	4.53	1.13	0.250
30	1.62	3.24	1.65	3.29	1.36	2.73	0.97	0.99	1.09	3.05	1.53	0.500
60	2.01	2.01	2.04	2.04	1.69	1.69	0.60	0.61	0.68	1.89	1.89	1.000
120	2.28	1.14	2.30	1.15	1.87	0.94	0.34	0.35	0.38	1.06	2.12	2.000
180	2.37	0.79	2.40	0.80	1.93	0.64	0.24	0.24	0.26	0.73	2.20	3.000
360	2.52	0.42	2.58	0.43	2.09	0.35	0.13	0.13	0.14	0.40	2.37	6.000
720	3.00	0.25	3.02	0.25	1.87	0.21	0.08	0.08	0.08	0.23	2.55	12.000
1440	3.36	0.14	3.54	0.15	3.17	0.13	0.04	0.05	0.05	0.14	3.34	24.000



DETENTION BASIN SIZING CALCULATIONS

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 1b

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 92.13 ACRES
RELEASE RATE = 0.2 cfs/ac * 92.13 Ac = 18.43 cfs

Composite C = 0.35

ORIFICE EQUATION:

Pond Elevation = (3 foot depth)
Grate Elevation =
Orifice Elevation = (at center of pipe)
Head (h) = 5.00 feet

Avg Qout = 18.430 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	92.13	0.35	189.93	56,977.80	5,529.00	51,448.80
15	3.70	92.13	0.35	119.31	107,377.52	16,587.00	90,790.52
30	2.49	92.13	0.35	80.29	144,524.33	33,174.00	111,350.33
45	**1.96**	**92.13**	**0.35**	**63.20**	**170,643.19**	**49,761.00**	**120,882.19**
60	1.54	92.13	0.35	49.66	178,769.05	66,348.00	112,421.05
90	1.20	92.13	0.35	38.69	208,950.84	99,522.00	109,428.84
120	0.88	92.13	0.35	28.38	204,307.49	132,696.00	71,611.49
180	0.61	92.13	0.35	19.67	212,433.35	199,044.00	13,389.35
360	0.39	92.13	0.35	12.58	271,636.09	398,088.00	-126,451.91
720	0.26	92.13	0.35	8.38	362,181.46	796,176.00	-433,994.54
1440	0.16	92.13	0.35	5.16	445,761.79	1,592,352.00	-1,146,590.21

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **120,882.19** Cu. Ft.
2.78 Acre Ft

Reservoir area @ 3 ft depth = 40,294.06 Sq. Ft.

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 2

2800 WEST 700 SOUTH

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 47.4 ACRES

RELEASE RATE = 9.48 CFS @0.2* AC

Composite C = 0.35

Avg Qout = 9.480 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	47.40	0.35	97.72	29,314.53	2,844.00	26,470.53
15	3.70	47.40	0.35	61.38	55,244.70	8,532.00	46,712.70
30	2.49	47.40	0.35	41.31	74,356.38	17,064.00	57,292.38
45	**1.96**	**47.40**	**0.35**	**32.52**	**87,794.28**	**25,596.00**	**62,198.28**
60	1.54	47.40	0.35	25.55	91,974.96	34,128.00	57,846.96
90	1.20	47.40	0.35	19.91	107,503.20	51,192.00	56,311.20
120	0.88	47.40	0.35	14.60	105,114.24	68,256.00	36,858.24
180	0.61	47.40	0.35	10.12	109,294.92	102,384.00	6,910.92
360	0.39	47.40	0.35	6.47	139,754.16	204,768.00	-65,013.84
720	0.26	47.40	0.35	4.31	186,338.88	409,536.00	-223,197.12
1440	0.16	47.40	0.35	2.65	229,340.16	819,072.00	-589,731.84

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **62,198.28** Cu. Ft.

1.43 Acre Ft

Reservoir area @ 3 ft depth = 20,732.76 Sq. Ft.

0.48 acres

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 5a

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 44.15 ACRES
RELEASE RATE = 8.83 CFS @0.2* AC

Composite C = 0.35

Avg Qout = 6.830 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	44.15	0.35	91.02	27,304.57	2,049.00	25,255.57
15	3.70	44.15	0.35	57.17	51,456.83	6,147.00	45,309.83
30	2.49	44.15	0.35	38.48	69,258.11	12,294.00	56,964.11
45	**1.96**	**44.15**	**0.35**	**30.29**	**81,774.63**	**18,441.00**	**63,333.63**
60	1.54	44.15	0.35	23.80	85,668.66	24,588.00	61,080.66
90	1.20	44.15	0.35	18.54	100,132.20	36,882.00	63,250.20
120	0.88	44.15	0.35	13.60	97,907.04	49,176.00	48,731.04
180	0.61	44.15	0.35	9.43	101,801.07	73,764.00	28,037.07
360	0.39	44.15	0.35	6.03	130,171.86	147,528.00	-17,356.14
720	0.26	44.15	0.35	4.02	173,562.48	295,056.00	-121,493.52
1440	0.16	44.15	0.35	2.47	213,615.36	590,112.00	-376,496.64

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **63,333.63** Cu. Ft.
1.45 Acre Ft

Reservoir area @ 3 ft depth = 21,111.21 Sq. Ft.
0.48 acres

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 6a

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 77.18 ACRES
RELEASE RATE = 15.436 CFS @0.2* AC

Composite C = 0.45

Avg Qout = 15.400 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	77.18	0.45	204.57	61,369.68	4,620.00	56,749.68
15	3.70	77.18	0.45	128.50	115,654.23	13,860.00	101,794.23
30	2.49	77.18	0.45	86.48	155,664.34	27,720.00	127,944.34
45	**1.96**	**77.18**	**0.45**	**68.07**	**183,796.45**	**41,580.00**	**142,216.45**
60	1.54	77.18	0.45	53.49	192,548.66	55,440.00	137,108.66
90	1.20	77.18	0.45	41.68	225,056.88	83,160.00	141,896.88
120	0.88	77.18	0.45	30.56	220,055.62	110,880.00	109,175.62
180	0.61	77.18	0.45	21.19	228,807.83	166,320.00	62,487.83
360	0.39	77.18	0.45	13.55	292,573.94	332,640.00	-40,066.06
720	0.26	77.18	0.45	9.03	390,098.59	665,280.00	-275,181.41
1440	0.16	77.18	0.45	5.56	480,121.34	1,330,560.00	-850,438.66

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **142,216.45** Cu. Ft.
3.26 Acre Ft

Reservoir area @ 3 ft depth = 47,405.48 Sq. Ft.
1.09 acres

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 7a

REGIONAL DETENTION BASIN @ ROCK CREEK PARK - 3500 WEST 700 SOUTH

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 237.28 ACRES
RELEASE RATE = 45 CFS <-- Outfall Limit < @ 0.2cfs/acre

Composite C = 0.35

Avg Qout = 45.000 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	237.28	0.35	489.15	146,745.82	13,500.00	133,245.82
15	3.70	237.28	0.35	307.28	276,549.84	40,500.00	236,049.84
30	2.49	237.28	0.35	206.79	372,221.14	81,000.00	291,221.14
45	**1.96**	**237.28**	**0.35**	**162.77**	**439,490.02**	**121,500.00**	**317,990.02**
60	1.54	237.28	0.35	127.89	460,418.11	162,000.00	298,418.11
90	1.20	237.28	0.35	99.66	538,151.04	243,000.00	295,151.04
120	0.88	237.28	0.35	73.08	526,192.13	324,000.00	202,192.13
180	0.61	237.28	0.35	50.66	547,120.22	486,000.00	61,120.22
360	0.39	237.28	0.35	32.39	699,596.35	972,000.00	-272,403.65
720	0.26	237.28	0.35	21.59	932,795.14	1,944,000.00	-1,011,204.86
1440	0.16	237.28	0.35	13.29	1,148,055.55	3,888,000.00	-2,739,944.45

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **317,990.02** Cu. Ft.
7.30 Acre Ft

Reservoir area @ 3 ft depth = 105,996.67 Sq. Ft.
2.43 acres

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 7b

REGIONAL DETENTION BASIN - ALONG BLUFF TRAIL AT 900 SOUTH

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 83.67 ACRES
RELEASE RATE = 16.734 CFS @0.2* AC

Composite C = 0.35

Avg Qout = 16.730 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	83.67	0.35	172.49	51,745.71	5,019.00	46,726.71
15	3.70	83.67	0.35	108.35	97,517.39	15,057.00	82,460.39
30	2.49	83.67	0.35	72.92	131,253.13	30,114.00	101,139.13
45	**1.96**	83.67	0.35	57.40	154,973.57	45,171.00	109,802.57
60	1.54	83.67	0.35	45.10	162,353.27	60,228.00	102,125.27
90	1.20	**83.67**	**0.35**	**35.14**	**189,763.56**	**90,342.00**	**99,421.56**
120	0.88	83.67	0.35	25.77	185,546.59	120,456.00	65,090.59
180	0.61	83.67	0.35	17.86	192,926.29	180,684.00	12,242.29
360	0.39	83.67	0.35	11.42	246,692.63	361,368.00	-114,675.37
720	0.26	83.67	0.35	7.61	328,923.50	722,736.00	-393,812.50
1440	0.16	83.67	0.35	4.69	404,828.93	1,445,472.00	-1,040,643.07

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **109,802.57** Cu. Ft.
2.52 Acre Ft

Reservoir area @ 3 ft depth = 36,600.86 Sq. Ft.
0.84 acres

SYRACUSE CITY
DETENTION BASIN SIZING - AREA 8

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 239.62 ACRES
RELEASE RATE = 0.2 cfs/ac * 196.78 Ac = 39.35 cfs

Composite C = 0.35

Avg Qout = 15.000 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Overflow (cfs)	Total Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	239.62	0.35	493.98	6.67	500.65	150,193.99	4,500.00	145,693.99
15	3.70	239.62	0.35	310.31	16.67	326.98	294,280.11	13,500.00	280,780.11
30	2.49	239.62	0.35	208.83	33.33	242.16	435,885.89	27,000.00	408,885.89
45	**1.96**	239.62	0.35	164.38	50	214.38	578,824.16	40,500.00	538,324.16
60	1.54	239.62	0.35	129.16	66.67	195.83	704,970.65	54,000.00	650,970.65
90	1.20	**239.62**	**0.35**	100.64	50	150.64	**813,458.16**	**81,000.00**	**732,458.16**
120	0.88	239.62	0.35	73.80	33.33	107.13	771,357.31	108,000.00	663,357.31
180	0.61	239.62	0.35	51.16	16.67	67.83	732,551.80	162,000.00	570,551.80
360	0.39	239.62	0.35	32.71	6.67	39.38	850,567.61	324,000.00	526,567.61
720	0.26	239.62	0.35	21.81	3.33	25.14	1,085,850.14	648,000.00	437,850.14
1440	0.16	239.62	0.35	13.42	0	13.42	1,159,377.41	1,296,000.00	-136,622.59

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **732,458.16** Cu. Ft.
16.81 Acre Ft

Reservoir area @ 3 ft depth = 244,152.72 Sq. Ft.
5.60 acres

SYRACUSE CITY
DETENTION BASIN SIZING - AREA 9

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 7.5 ACRES
RELEASE RATE = 1.5 CFS @0.2* AC

Composite C = 0.45

ORIFICE EQUATION:

Pond Elevation = (3 foot depth)
Grate Elevation =
Orifice Elevation = (at center of pipe)
Head (h) = 5.00 feet

Avg Qout : 1.500 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	7.50	0.45	19.88	5,963.63	450.00	5,513.63
15	3.70	7.50	0.45	12.49	11,238.75	1,350.00	9,888.75
30	2.49	7.50	0.45	8.40	15,126.75	2,700.00	12,426.75
45	**1.96**	**7.50**	**0.45**	**6.62**	**17,860.50**	**4,050.00**	**13,810.50**
60	1.54	7.50	0.45	5.20	18,711.00	5,400.00	13,311.00
90	1.20	7.50	0.45	4.05	21,870.00	8,100.00	13,770.00
120	0.88	7.50	0.45	2.97	21,384.00	10,800.00	10,584.00
180	0.61	7.50	0.45	2.06	22,234.50	16,200.00	6,034.50
360	0.39	7.50	0.45	1.32	28,431.00	32,400.00	-3,969.00
720	0.26	7.50	0.45	0.88	37,908.00	64,800.00	-26,892.00
1440	0.16	7.50	0.45	0.54	46,656.00	129,600.00	-82,944.00

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **13,810.50** Cu. Ft.
0.32 Acre Ft

Reservoir area @ 3 ft depth = 4,603.50 Sq. Ft.

SYRACUSE CITY
DETENTION BASIN SIZING - AREA 9

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 81.25 ACRES
RELEASE RATE = 16.25 CFS @0.2* AC

Composite C = 0.45

ORIFICE EQUATION:

Pond Elevation = (3 foot depth)
Grate Elevation =
Orifice Elevation = (at center of pipe)
Head (h) = 5.00 feet

Avg Qout : 10.000 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	81.25	0.45	215.35	64,605.94	3,000.00	61,605.94
15	3.70	81.25	0.45	135.28	121,753.13	9,000.00	112,753.13
30	2.49	81.25	0.45	91.04	163,873.13	18,000.00	145,873.13
45	**1.96**	**81.25**	**0.45**	**71.66**	**193,488.75**	**27,000.00**	**166,488.75**
60	1.54	81.25	0.45	56.31	202,702.50	36,000.00	166,702.50
90	1.20	81.25	0.45	43.88	236,925.00	54,000.00	182,925.00
120	0.88	81.25	0.45	32.18	231,660.00	72,000.00	159,660.00
180	0.61	81.25	0.45	22.30	240,873.75	108,000.00	132,873.75
360	0.39	81.25	0.45	14.26	308,002.50	216,000.00	92,002.50
720	0.26	81.25	0.45	9.51	410,670.00	432,000.00	-21,330.00
1440	0.16	81.25	0.45	5.85	505,440.00	864,000.00	-358,560.00

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = ********** Cu. Ft.
4.20 Acre Ft

Reservoir area @ 3 ft depth = 60,975.00 Sq. Ft.

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 10 SOUTH

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 170.26 ACRES
RELEASE RATE = 34.052 CFS @0.2* AC
PASS THROUGH FLOW = 22.23 cfs

Composite C = 0.35

Avg Qout = 56.282 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	170.26	0.35	350.99	105,297.30	16,884.60	88,412.70
15	3.70	170.26	0.35	242.72	218,445.03	50,653.80	167,791.23
30	2.49	170.26	0.35	170.61	307,100.86	101,307.60	205,793.26
45	**1.96**	**170.26**	**0.35**	**139.03**	**375,376.57**	**151,961.40**	**223,415.17**
60	1.54	170.26	0.35	114.00	410,400.50	202,615.20	207,785.30
90	1.20	170.26	0.35	93.74	506,191.68	303,922.80	202,268.88
120	0.88	170.26	0.35	74.67	537,624.58	405,230.40	132,394.18
180	0.61	170.26	0.35	58.58	632,669.51	607,845.60	24,823.91
360	0.39	170.26	0.35	45.47	982,162.58	1,215,691.20	-233,528.62
720	0.26	170.26	0.35	37.72	1,629,662.11	2,431,382.40	-801,720.29
1440	0.16	170.26	0.35	31.76	2,744,457.98	4,862,764.80	-2,118,306.82

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **223,415.17** Cu. Ft.
5.13 Acre Ft

Reservoir area @ 3 ft depth = 74,471.72 Sq. Ft.
1.71 acres

Of the 170.26 Acres in Area 10, 96.45 acres is future area, therefor this basin is split between future and existing as follows:

	Area (Acres)	Percentage	Volume (Ac. Ft.)
Future	96.45	56.65%	2.91
Existing	73.81	43.35%	2.22

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 11

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 33.71 ACRES
RELEASE RATE = 6.742 CFS @0.2* AC

Composite C = 0.35

ORIFICE EQUATION:

Pond Elevation = (3 foot depth)
Grate Elevation =
Orifice Elevation = (at center of pipe)
Head (h) = 5.00 feet

Avg Qout = 6.720 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	33.71	0.35	69.49	20,847.95	2,016.00	18,831.95
15	3.70	33.71	0.35	43.65	39,289.01	6,048.00	33,241.01
30	2.49	33.71	0.35	29.38	52,880.88	12,096.00	40,784.88
45	**1.96**	**33.71**	**0.35**	**23.13**	**62,437.66**	**18,144.00**	**44,293.66**
60	1.54	33.71	0.35	18.17	65,410.88	24,192.00	41,218.88
90	1.20	33.71	0.35	14.16	76,454.28	36,288.00	40,166.28
120	0.88	33.71	0.35	10.38	74,755.30	48,384.00	26,371.30
180	0.61	33.71	0.35	7.20	77,728.52	72,576.00	5,152.52
360	0.39	33.71	0.35	4.60	99,390.56	145,152.00	-45,761.44
720	0.26	33.71	0.35	3.07	132,520.75	290,304.00	-157,783.25
1440	0.16	33.71	0.35	1.89	163,102.46	580,608.00	-417,505.54

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **44,293.66** Cu. Ft.
1.02 Acre Ft

Reservoir area @ 3 ft depth = 14,764.55 Sq. Ft.
Property Area (Res A *1.2) = **17,717.46** Sq. Ft.
0.41 Acres

Outflow Reduction Detention Summary

Flow	Volume	Area	Cost
31.60	4.76	1.90	$166,600
30.00	4.86	1.94	$170,100
28.00	4.98	1.99	$174,300
26.00	5.11	2.04	$178,850
24.00	5.25	2.10	$183,750
22.00	5.50	2.20	$192,500
20.00	5.75	2.30	$201,250
18.00	6.00	2.40	$210,000
15.80	6.27	2.51	$219,450

SYRACUSE CITY

DETENTION BASIN SIZING - AREA 13a

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 224 ACRES
RELEASE RATE = 44.8 CFS @0.2* AC

Composite C = 0.35

ORIFICE EQUATION:

Pond Elevation = (3 foot depth)
Grate Elevation =
Orifice Elevation = (at center of pipe)
Head (h) = 5.00 feet

Avg Qout = 44.800 cfs

50 Year Storm

Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	224.00	0.35	461.78	138,532.80	13,440.00	125,092.80
15	3.70	224.00	0.35	290.08	261,072.00	40,320.00	220,752.00
30	2.49	224.00	0.35	195.22	351,388.80	80,640.00	270,748.80
45	**1.96**	**224.00**	**0.35**	**153.66**	**414,892.80**	**120,960.00**	**293,932.80**
60	1.54	224.00	0.35	120.74	434,649.60	161,280.00	273,369.60
90	1.20	224.00	0.35	94.08	508,032.00	241,920.00	266,112.00
120	0.88	224.00	0.35	68.99	496,742.40	322,560.00	174,182.40
180	0.61	224.00	0.35	47.82	516,499.20	483,840.00	32,659.20
360	0.39	224.00	0.35	30.58	660,441.60	967,680.00	-307,238.40
720	0.26	224.00	0.35	20.38	880,588.80	1,935,360.00	-1,054,771.20
1440	0.16	224.00	0.35	12.54	1,083,801.60	3,870,720.00	-2,786,918.40

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **293,932.80** Cu. Ft.
6.75 Acre Ft

Reservoir area @ 3 ft depth = 97,977.60 Sq. Ft.

SYRACUSE CITY
DETENTION BASIN SIZING - AREA 15

Theoretical Basin Size Based on Subdivision Parameters

DRAINAGE AREA = 172.73 ACRES
RELEASE RATE = 0.2 cfs/ac * 172.73 Ac = 34.55 cfs

Composite C = 0.35

ORIFICE EQUATION:

Pond Elevation = (3 foot depth)
Grate Elevation =
Orifice Elevation = (at center of pipe)
Head (h) = 5.00 feet

Avg Qout = 33.620 cfs

50 Year Storm

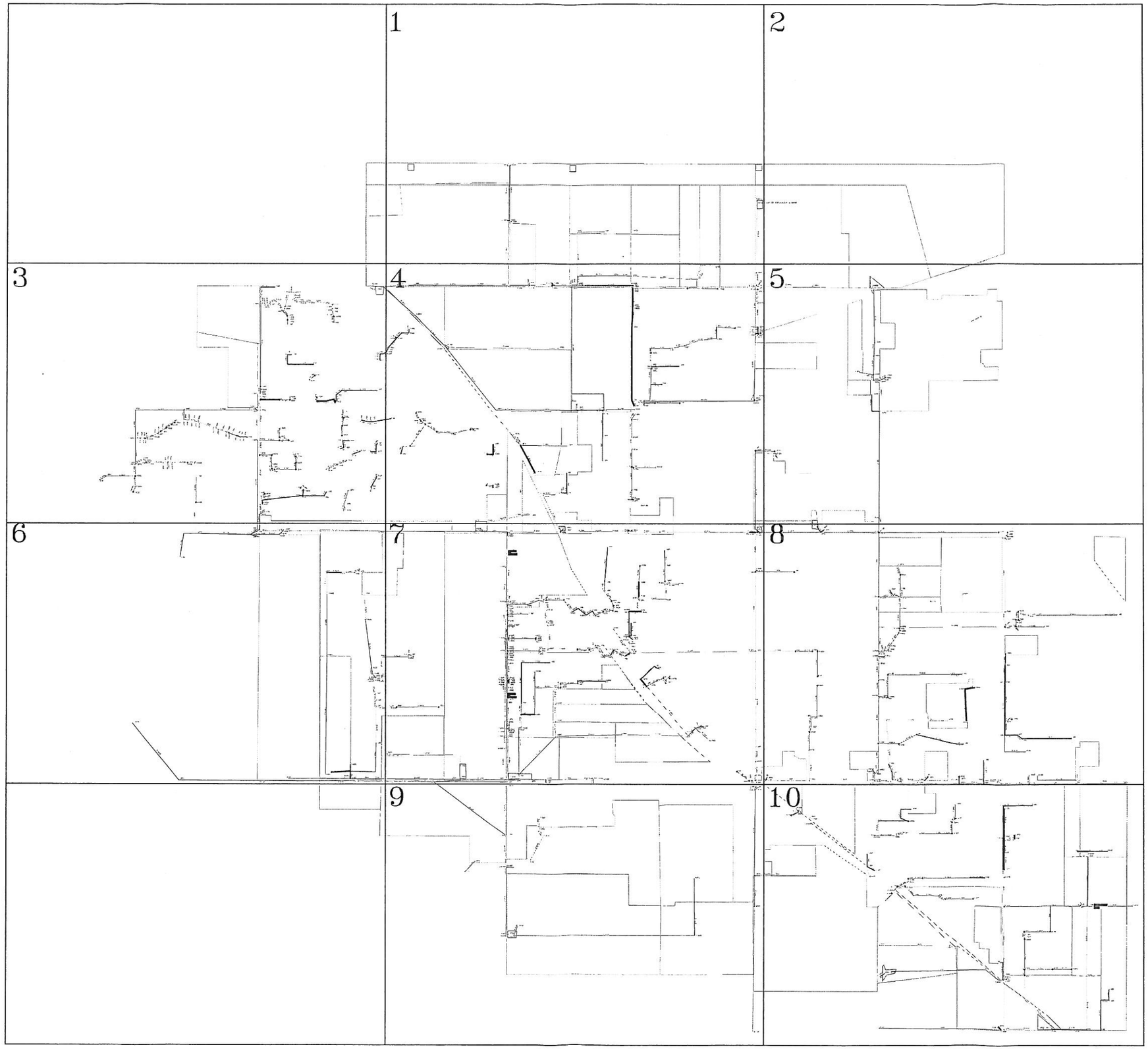
Duration (Min)	Intensity (In. Hr.)	Area (Acres)	C	Flow (cfs)	Volume In (Cu. Ft.)	Volume Out (Cu. Ft.)	Detention (Cu. Ft.)
5	5.89	172.73	0.35	356.08	106,824.87	10,086.00	96,738.87
15	3.70	172.73	0.35	223.69	201,316.82	30,258.00	171,058.82
30	2.49	172.73	0.35	150.53	270,961.55	60,516.00	210,445.55
45	**1.96**	**172.73**	**0.35**	**118.49**	**319,930.51**	**90,774.00**	**229,156.51**
60	1.54	172.73	0.35	93.10	335,165.29	121,032.00	214,133.29
90	1.20	172.73	0.35	72.55	391,751.64	181,548.00	210,203.64
120	0.88	172.73	0.35	53.20	383,046.05	242,064.00	140,982.05
180	0.61	172.73	0.35	36.88	398,280.83	363,096.00	35,184.83
360	0.39	172.73	0.35	23.58	509,277.13	726,192.00	-216,914.87
720	0.26	172.73	0.35	15.72	679,036.18	1,452,384.00	-773,347.82
1440	0.16	172.73	0.35	9.67	835,736.83	2,904,768.00	-2,069,031.17

Note: Intensities are from 50-year storm intensity duration table for Syracuse

Required Detention = **229,156.51** Cu. Ft.
5.26 Acre Ft

Reservoir area @ 3 ft depth = 76,385.50 Sq. Ft.

WATER MODEL PIPE REPORTS
WATER MODEL NODE REPORTS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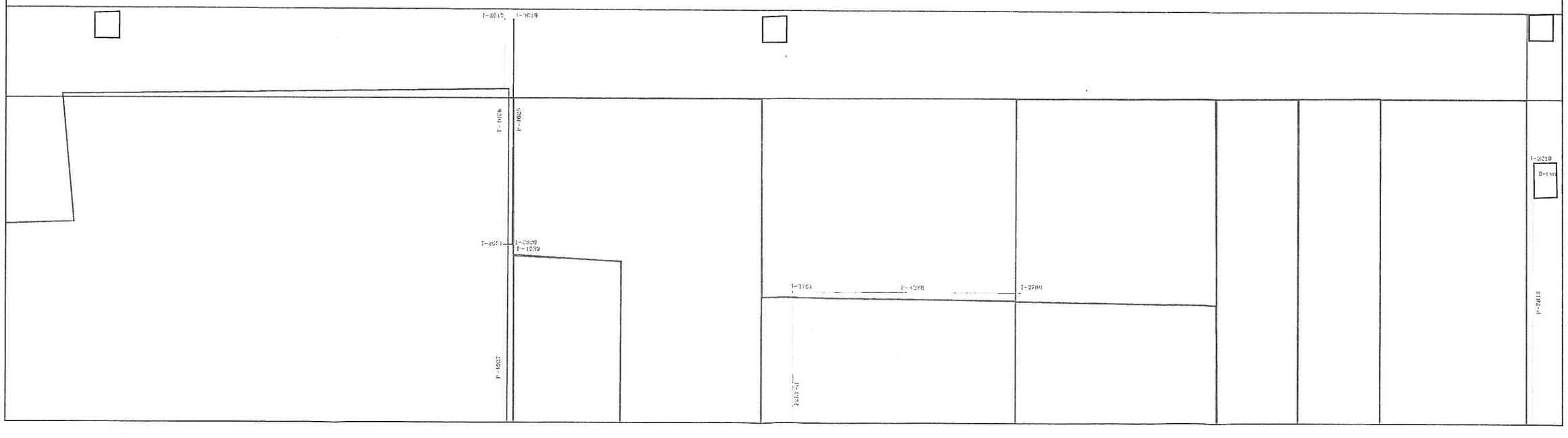
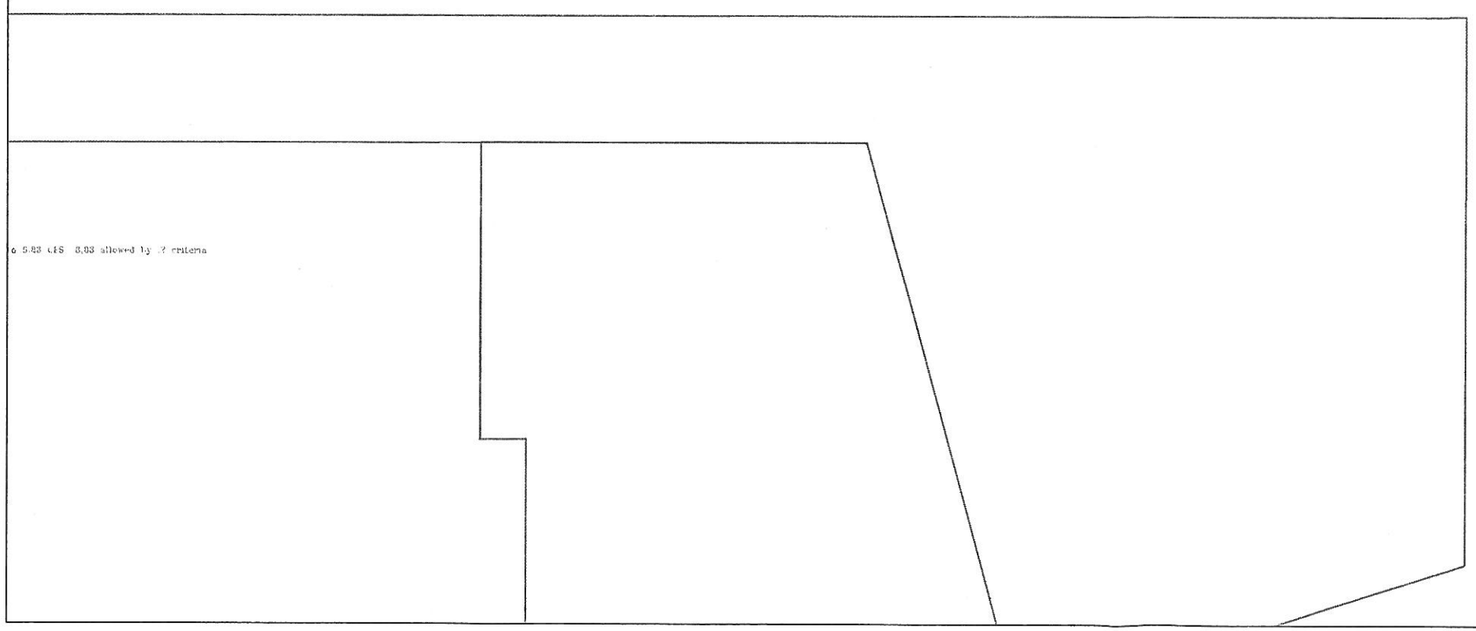
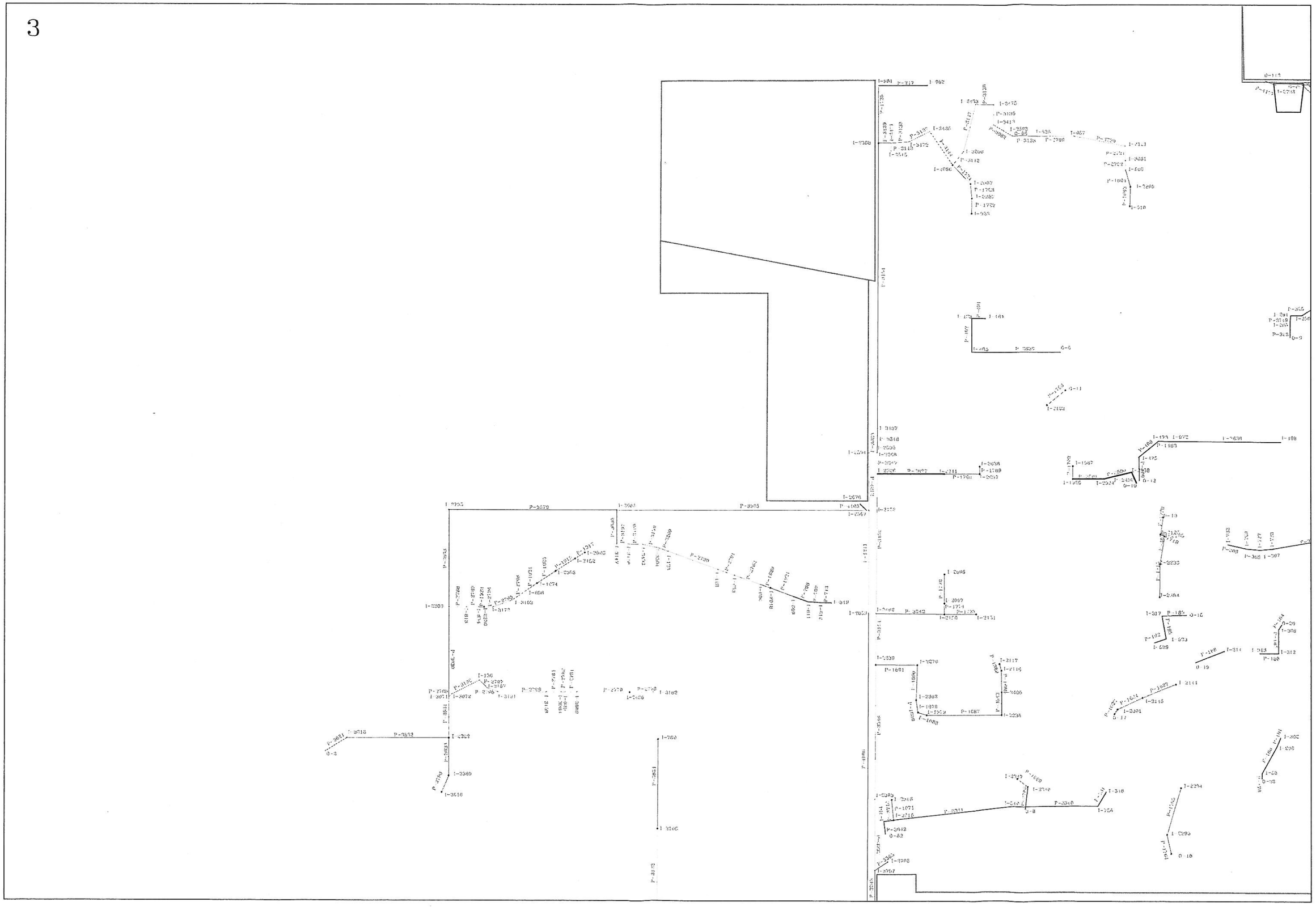
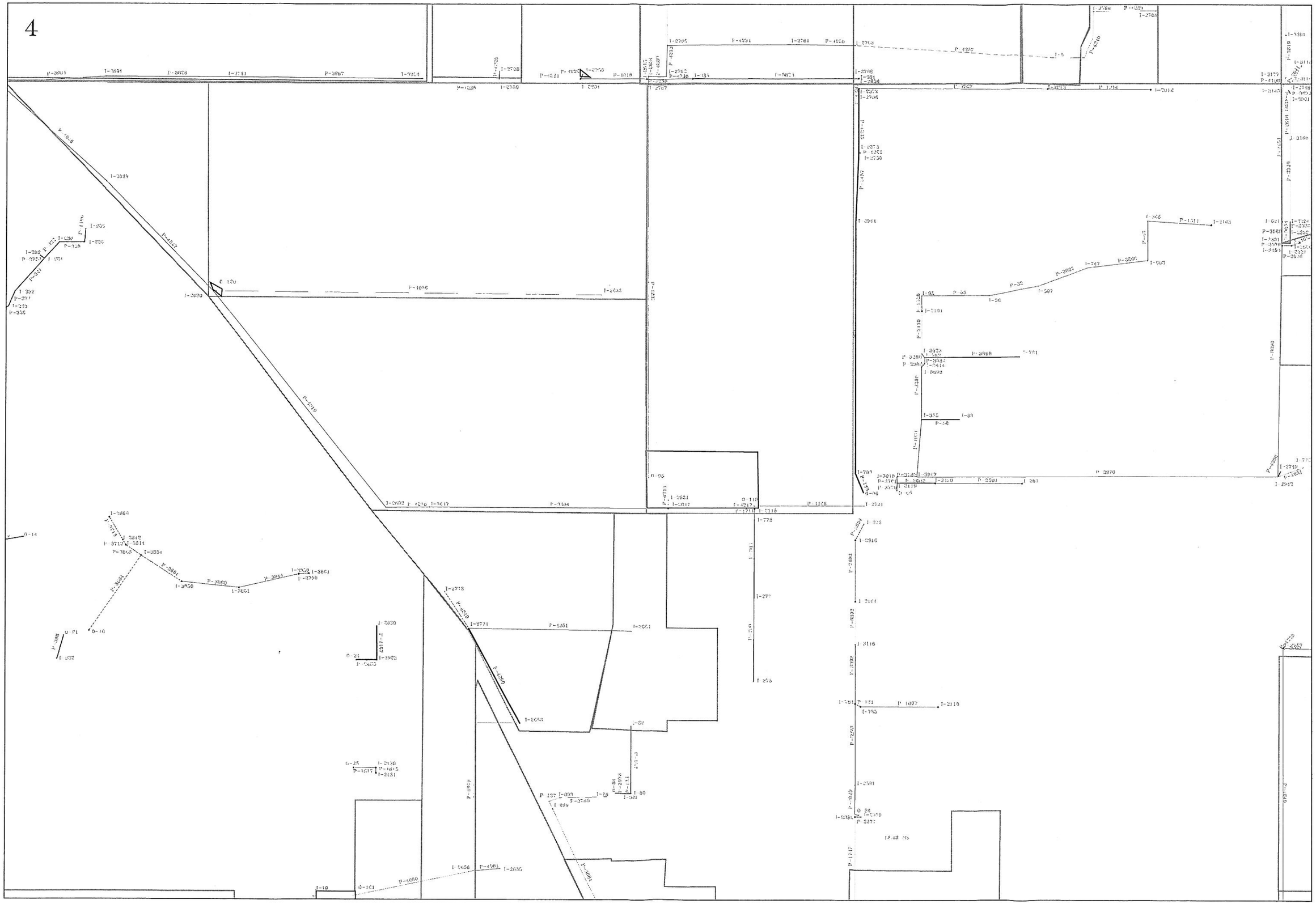



6 5.83 CIS 3.03 allowed by 2 criteria





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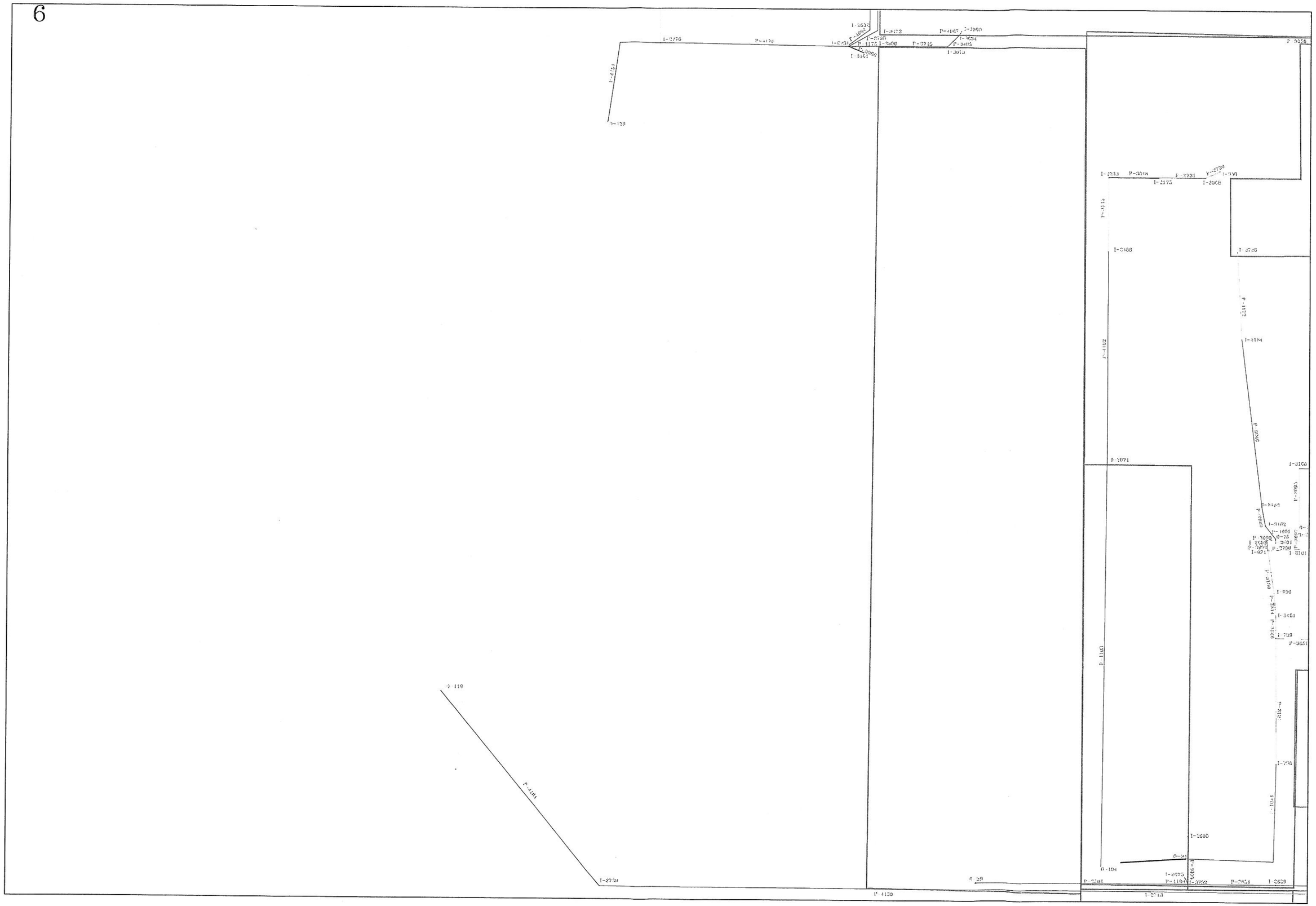

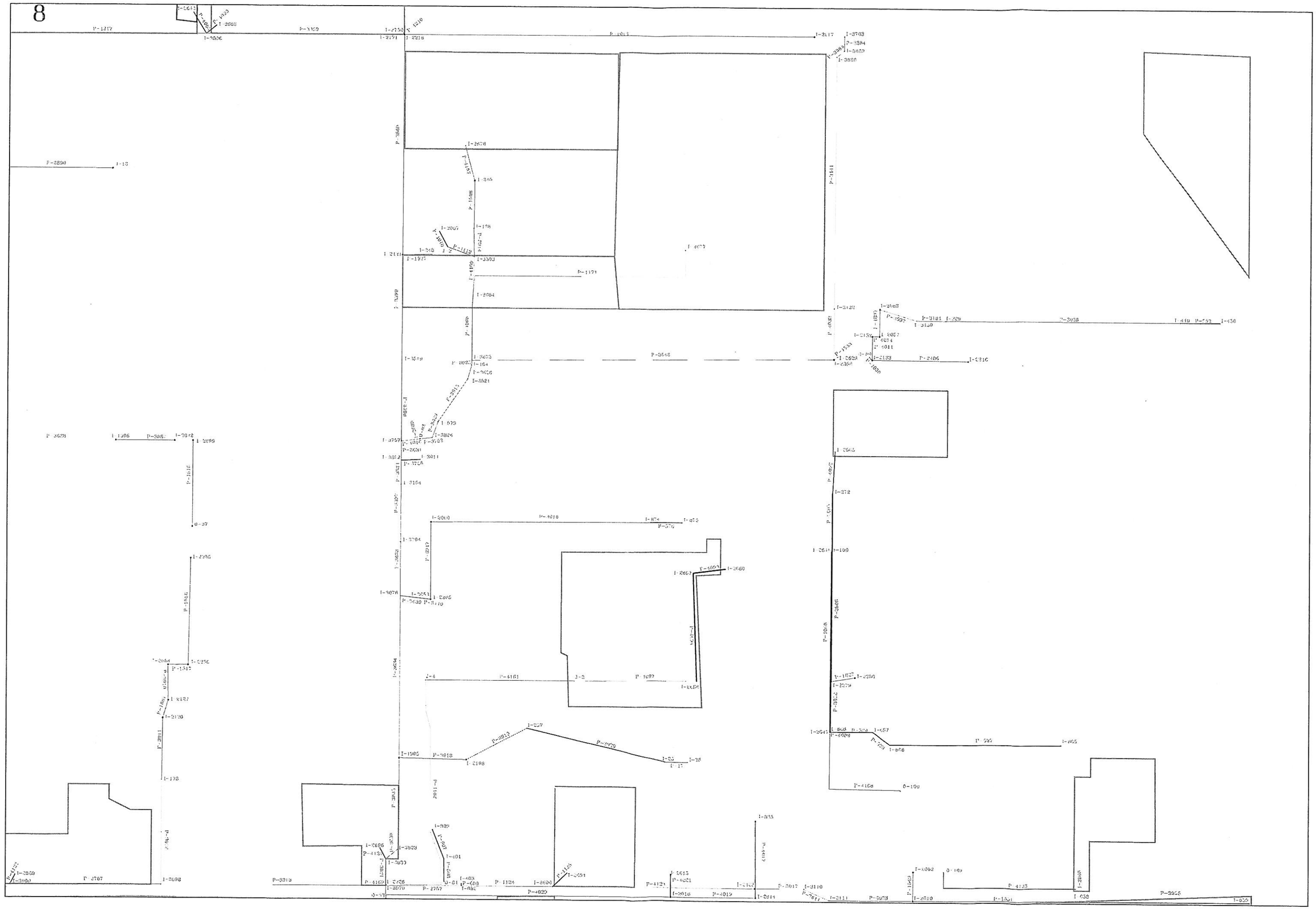

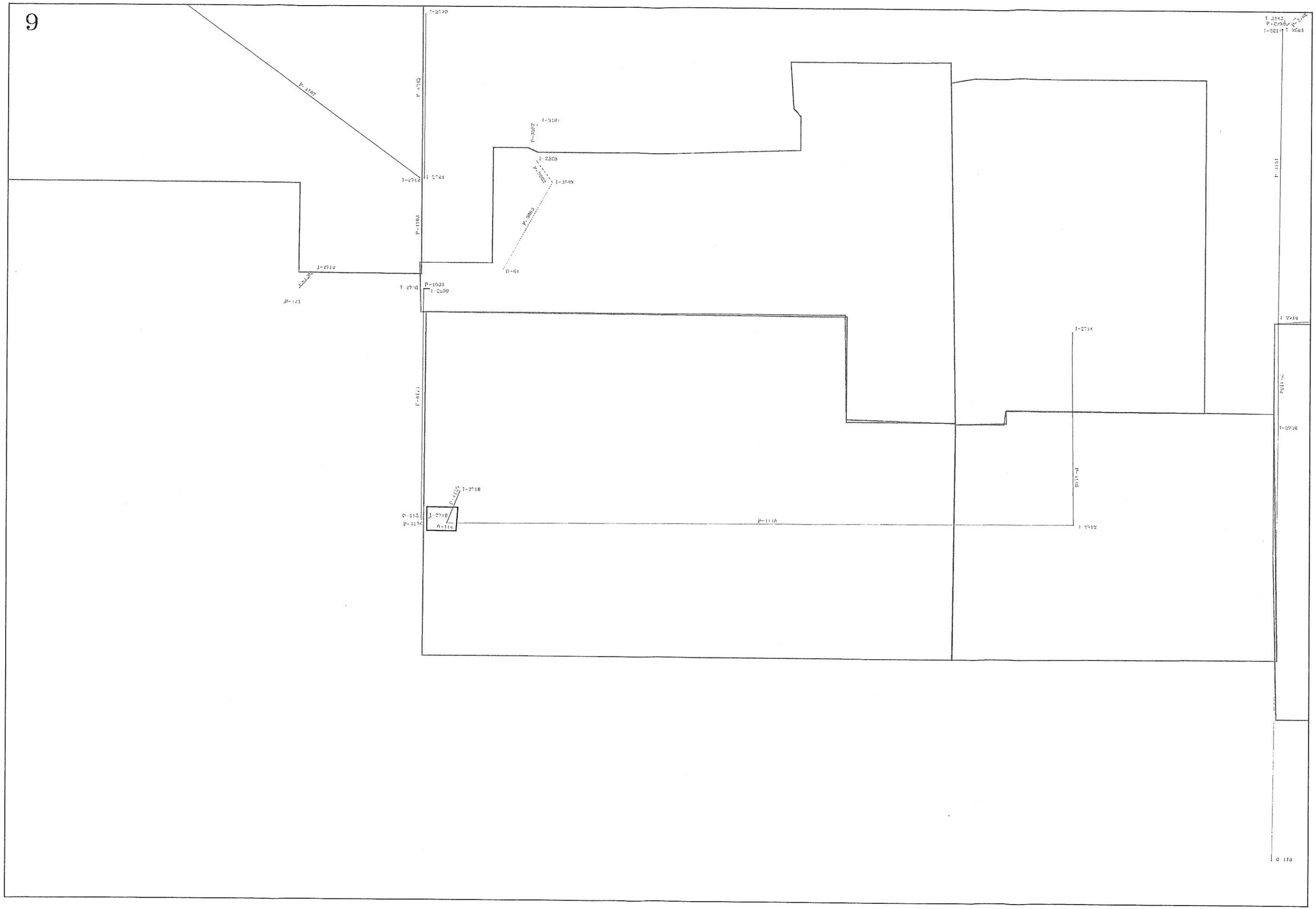
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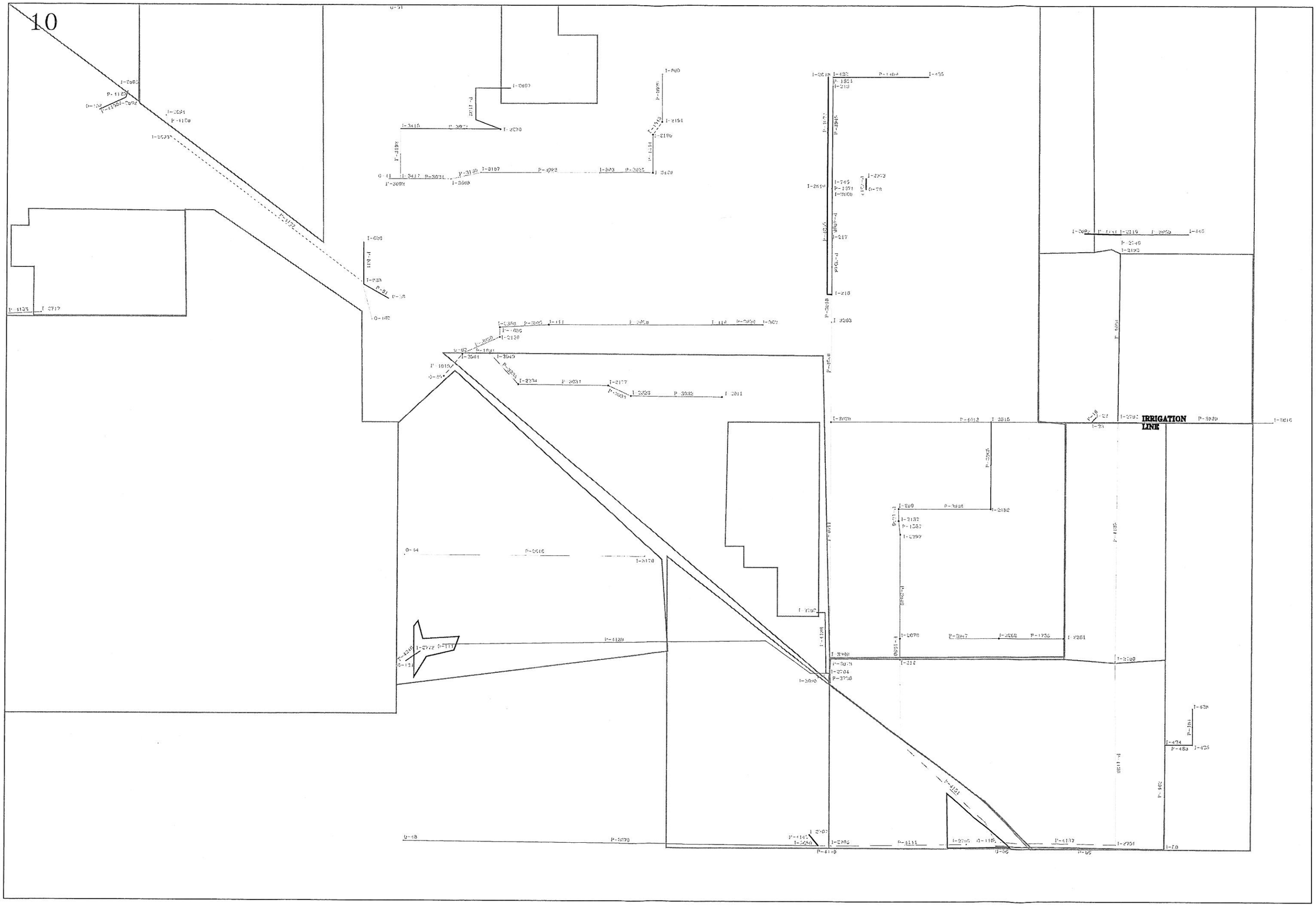
IRRIGATION LINE

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-13	0	0	0	0	0	30	0	0	30	0	0	0	0	4.04	0	4.04	4,280.16	4,280.16	4,275.93	4,275.93	0	0	
I-18	0	0.2	0	0	14.65	0	0	77.45	77.45	0.89	13.15	0	0	0	0	37.33	4,239.98	4,239.98	4,239.91	4,239.87	0	0	
I-19	0	0	0	0	0	75	0	0	75	0	0	0	0	4.4	0	4.4	4,240.53	4,240.53	4,240.53	4,240.53	0	0	
I-20	0	0	0	0	5.37	0	0	65.24	65.24	0.97	5.27	0	0	0	0	5.27	4,234.44	4,234.44	4,230.78	4,230.77	0	0	
I-21	26.84	0.2	5.37	0	5.37	65	0	0	65	0.98	5.28	0	0	0	0	5.28	4,234.16	4,234.16	4,232.91	4,232.91	0.98	5.28	
I-22	0	0	0	0	0	60	0	0	60	0	0	0	0	0	0	0	4,276.39	4,276.39	4,273.39	4,273.39	0	0	
I-23	0	0	0	0	0	48	0	60	60	0	0	0	0	0	0	0	4,271.38	4,271.38	4,267.38	4,267.38	0	0	
I-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,278.56	4,278.56	4,273.56	4,273.56	0	0	
I-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,276.81	4,276.81	4,273.81	4,273.81	0	0	
I-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,234.95	4,234.95	4,230.78	4,230.78	0	0	
I-51	0	0.35	0	0	24.15	39.33	0	41.37	41.37	1.4	33.96	0	0	0	0	33.96	4,232.88	4,232.88	4,233.58	4,232.88	0	0	
I-52	69	0.35	24.15	0	24.15	41.33	0	0	41.33	1.4	33.98	0	0	0	0	33.98	4,233.07	4,233.07	4,233.07	4,233.07	1.4	33.98	
I-53	0	0	0	0	4.43	0	0	26.25	26.25	1.83	8.17	0	0	0	0	8.17	4,235.88	4,235.88	4,232.63	4,232.29	0	0	
I-56	0	0	0	0	11.32	38.62	0	45.88	45.88	1.3	14.86	0	0	0	0	14.86	4,254.00	4,254.00	4,257.53	4,254.00	0	0	
I-78	0	0	0	0	0	0	0	0	0	0	0	0	0	1.63	0	1.63	4,262.56	4,262.56	4,257.98	4,257.98	0	0	
I-80	4	0	0	0	0	27	0	33	33	0	0	0	0	0	0	0	4,263.77	4,263.77	4,258.77	4,258.77	0	0	
I-82	2.17	0	0	0	0	33	0	0	33	0	0	0	0	0	0	0	4,264.65	4,264.65	4,259.65	4,259.65	0	0	
I-83	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4,280.19	4,280.19	4,279.23	4,279.23	0	0	
I-95	33.78	0.3	10.13	0	17.33	51	0	65.44	65.44	0.97	16.99	0	0	0	0	16.99	4,283.46	4,283.46	4,285.63	4,283.46	1.2	12.22	
I-98	0	0	0	0	7.2	0	0	63.72	63.72	0.98	7.14	0	0	0	0	7.14	4,288.16	4,288.16	4,285.47	4,285.39	0	0	
I-109	20.57	0.35	7.2	0	9.18	30	0	32.2	32.2	1.56	14.66	0	0	0	0	14.66	4,299.77	4,299.77	4,296.75	4,296.69	1.63	11.83	
I-114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,254.38	4,254.38	4,249.38	4,249.38	0	0	
I-123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,228.03	4,228.03	4,224.01	4,224.01	0	0	
I-128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.01	4,229.01	4,224.01	4,224.01	0	0	
I-135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.35	4,223.35	4,220.16	4,220.16	0	0	
I-138	11.36	0.3	3.41	0	3.93	35.55	0	31.86	35.55	1.52	6.01	0	0	0	0	9.67	4,293.98	4,293.98	4,291.78	4,291.73	1.52	5.21	
I-178	0	0	0	0	4.95	0	0	38.78	38.78	1.49	7.43	0	0	0	0	13.89	4,259.12	4,259.12	4,258.86	4,258.82	0	0	
I-191	0	0	0	0	0	0	0	0.21	0.21	0	0	0	0	0	0	5.69	4,253.79	4,253.79	4,250.08	4,249.76	0	0	
I-194	0	0	0	0	0.6	0	0	28.74	28.74	1.7	1.03	0	0	0	0	1.03	4,238.00	4,238.00	4,235.14	4,235.12	0	0	
I-195	0	0	0	0	0.6	0	0	29.79	29.79	1.64	1	0	0	0	0	1	4,237.94	4,237.94	4,235.11	4,235.10	0	0	
I-203	0	0	0	0	0.6	0	0	25.83	25.83	1.85	1.12	0	0	0	0	1.12	4,239.33	4,239.33	4,235.27	4,235.27	0	0	
I-209	0	0	0	0	7.65	0	0	68.19	68.19	0.95	7.56	0	0	0	0	7.56	4,260.37	4,260.37	4,256.89	4,256.43	0	0	
I-212	39.06	0.35	13.67	0	25.03	58.19	0	70.75	70.75	0.94	23.63	0	0	0	0	23.63	4,252.03	4,252.03	4,248.93	4,248.82	1.05	14.43	
I-216	25.45	0.35	8.91	0	21.18	65	0	49.29	65	0.98	20.83	0	0	0	0	24.08	4,266.76	4,266.76	4,267.58	4,266.76	0.98	8.76	
I-217	0	0	0	0	1.99	0	0	47.78	47.78	1.26	2.54	0	0	0	0	4.65	4,268.56	4,268.56	4,268.59	4,268.55	0	0	
I-219	0	0	0	0	3.07	0	0	44.64	44.64	1.33	4.1	0	0	0	0	4.1	4,277.66	4,277.66	4,273.51	4,273.48	0	0	
I-229	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,312.74	4,312.74	4,309.35	4,309.35	0	0	
I-232	0	0	0	0	11.21	0	0	22.79	22.79	2.01	22.77	0	0	0	0	22.77	4,238.63	4,238.63	4,242.03	4,238.63	0	0	
I-233	0	0	0	0	11.21	0	0	22.88	22.88	2.01	22.72	0	0	0	0	22.72	4,238.36	4,238.36	4,243.68	4,238.36	0	0	
I-235	0	0	0	0	8.34	0	0	22.2	22.2	2.05	17.21	0	0	0	0	17.21	4,241.47	4,241.47	4,246.18	4,241.47	0	0	
I-236	0	0	0	0	8.34	0	0	22.38	22.38	2.04	17.13	0	0	0	0	17.13	4,240.29	4,240.29	4,243.90	4,240.29	0	0	
I-257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,274.62	4,274.62	4,269.62	4,269.62	0	0	
I-261	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4,280.95	4,280.95	4,276.26	4,276.26	0	0	
I-272	25.25	0.35	8.84	0	11.16	28.98	0	31.41	31.41	1.6	18.01	0	0	0	0	18.01	4,301.97	4,301.97	4,301.52	4,301.35	1.63	14.53	
I-273	165	0	0	0	0	69	0	0	69	0	0	0	0	9	0	9	4,276.00	4,276.00	4,274.29	4,274.29	0	0	
I-275	0	0.3	0	0	0	64.87	0	0	64.87	0	0	0	0	0	0	0	4,272.00	4,272.00	4,270.66	4,270.66	0	0	
I-277	0	0.3	0	0	0	64.91	0	64.87	64.91	0	0	0	0	0	0	0	4,272.92	4,272.92	4,270.66	4,270.66	0	0	
I-282	5.62	0.35	1.97	0	1.97	20	0	0	20	2.16	4.29	0	0	0	0	4.29	4,239.60	4,239.60	4,239.60	4,239.60	2.16	4.29	
I-284	2.58	0.35	0.9	0	11.21	20	0	22.54	22.54	2.03	22.92	0	0	0	0	22.92	4,239.60	4,239.60	4,240.84	4,239.60	2.16	1.97	
I-285	0	0	0	0	11.21	0	0	23.05	23.05	2	22.62	0	0	0	0	22.62	4,237.96	4,237.96	4,239.54	4,237.96	0	0	
I-290	0	0	0	0	11.21	0	0	22.95	22.95	2.01	22.67	0	0	0	0	22.67	4,238.07	4,238.07	4,242.63	4,238.07	0	0	
I-291	0	0	0	0	11.21	0	0	23.01	23.01	2	22.64	0	0	0	0	22.64	4,237.96	4,237.96	4,246.11	4,237.96	0	0	
I-296	4.99	0.35	1.75	0	4.43	20	0	25.78	25.78	1.85	8.28	0	0	0	0	8.28	4,236.08	4,236.08	4,235.97	4,235.74	2.16	3.81	
I-302	7.67	0.35	2.68	0	2.68	25.54	0	0	25.54	1.87	5.05	0	0	0	0	5.05	4,236.10	4,236.10	4,236.10	4,236.10	1.87	5.05	
I-305	0	0	0	0	5.1	0	0	101.51	101.51	0.73	3.73	0	0	0	0	3.73	4,255.26	4,255.26	4,251.25	4,251.25	0	0	
I-306	0	0	0	0	1.68	0	0	25.47	25.47	1.87	3.17	0	0	0	0	3.17	4,235.96	4,235.96	4,231.85	4,231.77	0	0	
I-308	0	0	0	0	3.87	0	0	60.54	60.54	1.01	3.93	0	0	0	0	3.93	4,256.02	4,256.02	4,252.02	4,251.82	0	0	
I-311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,232.82	4,232.82	4,230.24	4,230.24	0	0	
I-312	0	0	0	0	1.68	0	0	24.53	24.53	1.92	3.25	0	0	0	0	3.25	4,235.98	4,235.98	4,232.39	4,232.30	0	0	
I-313	4.6	0.35	1.68	0	1.68	23.81	0	0	23.81	1.96	3.32	0	0	0	0	3.32	4,235.96	4,235.96	4,232.70	4,232.70	1.96	3.32	
I-314	3.85	0.35	1.35	0	1.35	26.92	0	0	26.92	1.79	2.44	0	0	0	0	2.44	4,235.84	4,235.84	4,231.91	4,231.91	1.79	2.44	
I-317	9.34	0.35	3.27	0	4.66	20	0	21.47	21.47	2.08	9.8	0	0	0	0	9.8	4,236.00	4,236.00	4,235.69	4,234.24	2.16	7.13	
I-345	1.73	0.3	0.52	0	0.52	25.2	0	30.72	30.72	1.62	0.84	0	0	0	0	4.5	4,297.42	4,297.42	4,293.30	4,293.23	1.89	0.99	
I-348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,292.01	4,292.01	4,287.65	4,287.65	0	0	
I-355	0	0	0	0	29.15	1	0	68.11	68.11	0.95	28.05	0	0	0	0	28.05	4,279.23	4,279.23	4,279.23	4,279.23	0	0	
I-362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,263.24	4,263.24	4,258.24	4,258.24	0	0	
I-365	0	0	0	0	0	1	0	30	30	0	0	0	0	0	0	0	4,297.38	4,297.38	4,292.38	4,292.38	0	0	
I-378	82	0	0	0	0	60	0	0	60	0	0	0	0	6.5	0	6.5	4,298.70	4,298.70	4,295.38	4,295.38	0	0	
I-384	0.54	0.85	0.46	0	0.46	20	0	0	20	2.16	1	0	0	0	0	1	4,290.55	4,290.55	4,285.89	4,285.89	2.16	1	
I-385	0	0	0	0	1.53	0	0	34.97	34.97	1.53	2.36	0	0	0	0	2.36	4,280.55	4,280.55	4,277.92	4,277.91	0	0	
I-399	10.68	0.25	2.67	0	2.67	40	0	0	40	1.42	3.83	0	0	0	0	3.83	4,266.62	4,266.62	4,263.58	4,263.58	1.42	3.83	
I-401	0	0	0	0	2.67	0	0	40.85	40.85	1.41	3.78	0	0	0	0	3.78	4,265.84	4,265.84	4,262.87	4,262.81	0	0	
I-403	21.23	0	0	0	0	1	0	0	1	0	0	0	0	2.14	0	2.14	4,266.00	4,266.00	4,261.68	4,261.68	0	0	
I-408	0	0	0	0	0	0	0	51.27	51.27	0	0	0	0	0	0	0	4,256.03	4,256.03	4,248.07	4,248.07	0	0	
I-419	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,259.90	4,259.90	4,254.90	4,254.90	0	0	
I-424	32.35	0.35	11.32	0	11.32	45	0	0	45	1.32	15.07	0	0	0	0	15.07	4,259.99	4,259.99	4,263.62	4,259.99	1.32	15.07	
I-425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,262.01	4,262.01	4,259.99	4,259.99	0	0	
I-426	0	0	0	0	0	0	0	0.85	0.85	0	0	0	0	0	0	3.1	4,242.00	4,242.00	4,238.80	4,238.73	0	0	
I-427	0	0	0	0	0	0	0	0	0	0	0	0	0	3.1	0	3.1	4,242.95	4,242.95	4,239.09	4,239.09	0	0	
I-428	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,263.53	4,263.53	4,259.99	4,259.99	0	0	
I-429	61.44	0.35	21.5	0	21.5	34.65	0	102.97	102.97	0.72	15.53	0	0	0	0	22.33	4,249.00	4,249.00	4,248.56	4,246.65	1.53	33.25	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-432	17.41	0.35	6.09	0	3.07	25.58	0	44.43	44.43	1.33	4.12	0	0	0	0	4.12	4,277.94	4,277.94	4,273.89	4,273.73	1.87	11.46	
I-435	17.65	0.35	6.18	0	6.18	43	0	0	43	1.36	8.48	0	0	0	0	8.48	4,284.65	4,284.65	4,284.33	4,284.33	1.36	8.48	
I-440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,328.40	4,328.40	4,323.40	4,323.40	0	0	
I-448	13.16	0.3	3.95	0	3.95	47.21	0	0	47.21	1.27	5.07	0	0	0	0	5.07	4,290.27	4,290.27	4,287.27	4,287.27	1.27	5.07	
I-458	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,331.19	4,331.19	4,326.19	4,326.19	0	0	
I-464	0	0	0	0	28.51	0	0	75.96	75.96	0.9	25.89	0	0	0	0	80.02	4,286.56	4,286.56	4,284.43	4,284.27	0	0	
I-466	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,258.03	4,258.03	4,253.69	4,253.69	0	0	
I-473	7.57	0.35	2.65	0	6.71	31.73	0	29.58	31.73	1.59	10.79	0	0	0	0	10.79	4,236.03	4,236.03	4,237.31	4,236.03	1.59	4.26	
I-475	11.11	0.35	3.89	0	10.6	23.5	0	32.03	32.03	1.59	16.97	0	0	0	0	16.97	4,235.47	4,235.47	4,239.21	4,235.47	1.98	7.75	
I-477	13.83	0.28	3.87	0	3.87	59.29	0	0	59.29	1.02	4	0	0	0	0	4	4,256.00	4,256.00	4,253.04	4,253.04	1.02	4	
I-479	0	0	0	0	0	0	0	1.3	1.3	0	0	0	0	0	0	3.5	4,242.49	4,242.49	4,238.79	4,238.70	0	0	
I-480	0	0	0	0	24.47	0	0	42.64	42.64	1.37	33.76	0	0	0	0	38.76	4,244.15	4,244.15	4,268.15	4,244.15	0	0	
I-482	0	0	0	0	24.47	0	0	42.58	42.58	1.37	33.79	0	0	0	0	38.79	4,243.94	4,243.94	4,257.74	4,243.94	0	0	
I-483	0	0	0	0	6.51	0	0	45.8	45.8	1.3	8.56	0	0	0	0	8.56	4,236.00	4,236.00	4,237.17	4,236.00	0	0	
I-484	18.61	0.35	6.51	0	6.51	45.6	0	0	45.6	1.31	8.59	0	0	0	0	8.59	4,236.00	4,236.00	4,235.00	4,236.00	1.31	8.59	
I-485	5	0.35	1.75	0	8.26	24.2	0	46.3	46.3	1.29	10.77	0	0	0	0	10.77	4,235.26	4,235.26	4,237.11	4,235.26	1.94	3.42	
I-498	6.91	0.35	2.42	0	2.42	28.22	0	0	28.22	1.83	4.47	0	0	0	0	4.47	4,238.00	4,238.00	4,238.00	4,238.00	1.83	4.47	
I-506	8.27	0.35	2.89	0	11.4	27.22	0	47.35	47.35	1.27	14.61	0	0	0	0	14.61	4,237.37	4,237.37	4,237.50	4,237.37	1.78	5.19	
I-510	12.19	0.35	4.27	0	4.27	46.42	0	0	46.42	1.29	5.55	0	0	0	0	5.55	4,237.33	4,237.33	4,237.33	4,237.33	1.29	5.55	
I-525	0	0	0	0	14.8	0	0	49.36	49.36	1.23	18.34	0	0	0	0	18.34	4,237.26	4,237.26	4,234.23	4,234.22	0	0	
I-529	3.98	0.35	1.39	0	1.39	20	0	0	20	2.16	3.04	0	0	0	0	3.04	4,235.79	4,235.79	4,235.79	4,235.79	2.16	3.04	
I-533	0	0	0	0	1.39	0	0	20.5	20.5	2.14	3	0	0	0	0	3	4,235.89	4,235.89	4,236.03	4,235.89	0	0	
I-534	9.48	0.35	3.32	0	3.32	24.94	0	0	24.94	1.9	6.35	0	0	0	0	6.35	4,231.50	4,231.50	4,231.50	4,231.50	1.9	6.35	
I-539	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	4,236.39	4,236.39	4,231.39	4,231.39	0	0	
I-548	5.29	0.3	1.59	0	1.59	28.35	0	0	28.35	1.72	2.75	0	0	0	0	2.75	4,232.16	4,232.16	4,229.24	4,229.24	1.72	2.75	
I-549	0	0	0	0	1.59	0	0	33.13	33.13	1.57	2.5	0	0	0	0	2.5	4,231.44	4,231.44	4,228.06	4,228.04	0	0	
I-566	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,268.15	4,268.15	4,263.15	4,263.15	0	0	
I-567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,269.05	4,269.05	4,264.05	4,264.05	0	0	
I-568	0	0	0	0	0	0	0	31.1	31.1	0	0	0	0	0	0	5	4,266.11	4,266.11	4,261.92	4,261.90	0	0	
I-583	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	3.5	4,241.99	4,241.99	4,238.28	4,238.23	0	0	
I-586	0	0	0	0	12.42	0	0	72	72	0.93	11.52	0	0	0	0	21.73	4,238.00	4,238.00	4,234.52	4,234.51	0	0	
I-587	5.53	0.35	1.94	0	1.94	20	0	0	20	2.16	4.22	0	0	0	0	4.22	4,237.90	4,237.90	4,235.15	4,235.15	2.16	4.22	
I-597	0	0	0	0	7.2	1	0	62.44	62.44	0.99	7.21	0	0	0	0	7.21	4,269.47	4,269.47	4,267.01	4,266.94	0	0	
I-603	23.99	0.3	7.2	0	7.2	60	0	30	60	1.01	7.33	0	0	0	0	7.33	4,294.46	4,294.46	4,290.80	4,290.51	1.01	7.33	
I-605	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.84	4,229.84	4,224.84	4,224.84	0	0	
I-609	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.39	4,230.39	4,225.39	4,225.39	0	0	
I-611	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.60	4,230.60	4,225.60	4,225.60	0	0	
I-612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.69	4,230.69	4,225.69	4,225.69	0	0	
I-620	34	0	0	0	0	1	0	0	1	0	0	0	0	6.6	0	6.6	4,250.60	4,250.60	4,246.65	4,246.65	0	0	
I-621	0	0	0	0	0.43	1	0	53.45	53.45	1.15	0.49	0	0	0	0	7.31	4,306.89	4,306.89	4,304.51	4,304.48	0	0	
I-623	0	0	0	0	0	0	0	1.56	1.56	0	0	0	0	0	0	6.6	4,245.82	4,245.82	4,242.23	4,241.67	0	0	
I-639	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.18	4,225.18	4,220.18	4,220.18	0	0	
I-653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.32	4,229.32	4,224.32	4,224.32	0	0	
I-658	0	0	0	0	2.85	0	0	28.14	28.14	1.73	4.96	0	0	0	0	4.96	4,298.74	4,298.74	4,289.64	4,289.62	0	0	
I-659	9.49	0.3	2.85	0	2.85	25	0	0	25	1.9	5.44	0	0	0	0	5.44	4,303.86	4,303.86	4,299.94	4,299.94	1.9	5.44	ings court inflov
I-665	30.05	0.35	10.52	0	10.52	44.83	0	0	44.83	1.32	14.03	0	0	0	0	14.03	4,301.69	4,301.69	4,301.69	4,301.69	1.32	14.03	
I-666	0	0	0	0	10.52	0	0	46.38	46.38	1.29	13.69	0	0	0	0	13.69	4,293.64	4,293.64	4,295.54	4,293.64	0	0	
I-667	0	0	0	0	10.52	0	0	46.57	46.57	1.29	13.65	0	0	0	0	13.65	4,292.72	4,292.72	4,294.61	4,292.72	0	0	
I-668	0	0	0	0	19.7	0	0	46.57	46.57	1.28	25.4	0	0	0	0	34.44	4,291.16	4,291.16	4,287.74	4,287.64	0	0	
I-686	0	0	0	0	21.5	0	0	103.23	103.23	0.71	15.49	0	0	0	0	22.29	4,242.44	4,242.44	4,248.20	4,242.44	0	0	
I-694	0	0	0	0	0	0	0	1.58	1.58	0	0	0	0	0	0	3.1	4,241.98	4,241.98	4,238.41	4,238.38	0	0	
I-699	0	0	0	0	0	0	0	3.83	3.83	0	0	0	0	0	0	3.1	4,242.03	4,242.03	4,238.15	4,238.10	0	0	
I-702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,237.72	4,237.72	4,232.72	4,232.72	0	0	
I-714	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,236.57	4,236.57	4,231.57	4,231.57	0	0	
I-723	0	0	0	0	1.03	0	0	21.67	21.67	2.07	2.15	0	0	0	0	2.15	4,237.10	4,237.10	4,231.38	4,231.35	0	0	
I-727	0	0	0	0	1.03	0	0	21.02	21.02	2.11	2.19	0	0	0	0	2.19	4,237.05	4,237.05	4,231.48	4,231.47	0	0	
I-729	0	0	0	0	1.03	0	0	20.42	20.42	2.14	2.22	0	0	0	0	2.22	4,236.93	4,236.93	4,231.61	4,231.59	0	0	
I-732	2.94	0.35	1.03	0	1.03	20	0	0	20	2.16	2.24	0	0	0	0	2.24	4,236.79	4,236.79	4,232.20	4,232.20	2.16	2.24	
I-739	5.73	0.35	2.01	0	26.2	20	0	77.15	77.15	0.69	23.58	0	0	0	0	33.6	4,229.07	4,229.07	4,229.17	4,229.07	2.16	4.37	
I-744	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,262.18	4,262.18	4,257.18	4,257.18	0	0	
I-745	0	0	0	0	3.07	0	0	46.38	46.38	1.29	3.99	0	0	0	0	3.99	4,269.99	4,269.99	4,270.02	4,269.99	0	0	
I-747	0	0.35	0	0	7.2	20	0	61.11	61.11	1	7.27	0	0	0	0	7.27	4,291.32	4,291.32	4,288.67	4,288.59	0	0	
I-749	4.84	0.85	4.11	0	4.11	25.65	0	0	25.65	1.86	7.72	0	0	0	0	7.72	4,238.24	4,238.24	4,237.25	4,237.25	1.86	7.72	
I-754	0	0	0	0	3.32	0	0	39.42	39.42	1.44	4.8	0	0	0	0	4.8	4,230.01	4,230.01	4,226.53	4,226.32	0	0	
I-755	0	0	0	0	1.59	0	0	29.09	29.09	1.68	2.68	0	0	0	0	2.68	4,231.97	4,231.97	4,229.06	4,228.98	0	0	
I-769	25.5	0.35	8.93	0	8.93	31.61	0	0	31.61	1.6	14.36	0	0	0	0	14.36	4,227.05	4,227.05	4,227.05	4,227.05	1.6	14.36	
I-775	33.17	0.3	9.95	0	9.95	65	0	64.91	65	0.98	9.79	0	0	0	0	9.79	4,271.92	4,271.92	4,270.66	4,270.61	0.98	9.79	
I-778	27.62	0.35	9.67	0	9.67	30	0	0	30	1.63	15.88	0	0	0	0	15.88	4,299.03	4,299.03	4,296.11	4,296.11	1.63	15.88	
I-781	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,287.23	4,287.23	4,282.23	4,282.23	0	0	
I-782	0	0	0	0	29.15	0	0	66.48	66.48	0.97	28.38	0	0	0	0	28.38	4,280.83	4,280.83	4,280.22	4,280.22	0	0	
I-783	0.5	0.85	0.43	0	2.2	31.2	0	62.55	62.55	0.99	2.2	0	0	0	0	2.96	4,278.01	4,278.01	4,273.68	4,273.64	1.61	0.69	
I-784	0.11	0.85	0.09	0	22.48	20	0	73	73	0.92	20.67	0	0	0	0	28.87	4,271.94	4,271.94	4,269.47	4,269.45	2.16	0.2	
I-785	63.11	0.35	22.09	0	22.09	63	0	25.45	63	0.99	22.03	0	0	0	0	22.03	4,271.89	4,271.89	4,272.91	4,271.29	0.99	22.03	
I-796	12.5	0.3	3.75	0	29.95	45	0	79.04	79.04	0.88	26.56	0	0	0	0	36.58	4,227.91	4,227.91	4,226.46	4,226.44	1.32	4.99	
I-808	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.71	4,224.71	4,220.68	4,220.68	0	0	
I-812	3.76	0.35	1.32	0	1.32	20	0	0	20	2.16	2.87	0	0	0	0	2.87	4,247.89	4,247.89	4,243.90	4,243.90	2.16	2.87	
I-813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.34	4,223.34	4,220.88	4,220.88	0	0	
I-849	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.65	4,230.65	4,225.70	4,225.70	0	0	
I-854	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.60	4,223.60	4,220.88	4,220.88	0	0	
I-874	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,292.92	4,292.92	4,287.92	4,287.92	0	0	
I-875	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,292.86	4,292.86	4,288.10	4,288.10	0	0	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-879	0	0	0	0	28.51	0	0	76.56	76.56	0.9	25.77	0	0	0	0	79.9	4,282.65	4,282.65	4,280.53	4,280.36	0	0	
I-882	0	0	0	0	5.34	0	0	38.76	38.76	1.45	7.8	0	0	0	0	16.88	4,265.99	4,265.99	4,260.59	4,260.55	0	0	
I-885	5.46	0.35	1.91	0	1.91	20	0	0	20	2.16	4.17	0	0	0	0	4.17	4,279.23	4,279.23	4,275.06	4,275.00	2.16	4.17	
I-890	26.94	0.2	5.39	0	5.39	20	0	0	20	2.16	11.75	0	0	0	0	11.75	4,267.54	4,267.54	4,267.54	4,267.54	2.16	11.75	
I-893	0	0	0	0	11.7	0	0	32.49	32.49	1.58	18.62	0	0	0	0	18.62	4,261.36	4,261.36	4,257.97	4,257.93	0	0	
I-898	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	0	4,236.96	4,236.96	4,231.96	4,231.96	0	0	
I-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,250.50	4,250.50	4,245.50	4,245.50	0	0	
I-901	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,249.73	4,249.73	4,244.73	4,244.73	0	0	
I-905	0	0	0	0	0	0	0	0	0	0	0	0	0	5.69	0	5.69	4,254.00	4,254.00	4,250.53	4,250.53	0	0	
I-908	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,235.05	4,235.05	4,230.88	4,230.88	0	0	
I-932	4.54	0.35	1.59	0	1.59	20	0	0	20	2.16	3.47	0	0	0	0	3.47	4,236.83	4,236.83	4,233.66	4,233.66	2.16	3.47	
I-936	23.84	0.35	8.34	0	8.34	22.1	0	0	22.1	2.05	17.25	0	0	0	0	17.25	4,242.06	4,242.06	4,242.06	4,242.06	2.05	17.25	
I-947	0	0	0	0	1.32	0	0	23.14	23.14	2	2.65	0	0	0	0	2.65	4,247.45	4,247.45	4,243.18	4,243.10	0	0	
I-948	45.99	0.35	16.1	0	17.41	45.13	0	23.35	45.13	1.32	23.12	0	0	0	0	23.12	4,241.87	4,241.87	4,240.38	4,240.35	1.32	21.37	
I-950	25.84	0.35	9.04	0	9.04	27.97	0	0	27.97	1.74	15.85	0	0	0	0	15.85	4,233.13	4,233.13	4,230.60	4,230.60	1.74	15.85	
I-953	2	0.85	1.7	0	1.7	30.7	0	0	30.7	1.62	2.77	0	0	0	0	2.77	4,235.92	4,235.92	4,232.98	4,232.98	1.62	2.77	
I-957	0	0	0	0	14.8	0	0	48.71	48.71	1.24	18.54	0	0	0	0	18.54	4,237.31	4,237.31	4,235.94	4,235.79	0	0	
I-961	0.32	0.95	0.3	0	0.94	20	0	21.82	21.82	2.07	1.95	0	0	0	0	1.95	4,235.05	4,235.05	4,230.90	4,230.87	2.16	0.65	
I-962	0.67	0.95	0.64	0	0.64	20	0	0	20	2.16	1.39	0	0	0	0	1.39	4,235.97	4,235.97	4,231.51	4,231.51	2.16	1.39	
I-972	8.23	0.2	1.65	0	4.06	22.48	0	29.41	29.41	1.66	6.81	0	0	0	0	6.81	4,236.07	4,236.07	4,236.18	4,236.07	2.03	3.37	
I-990	0	0	0	0	17.26	0	0	76.25	76.25	0.9	15.64	0	0	0	0	25.66	4,229.65	4,229.65	4,229.71	4,229.65	0	0	
I-991	0	0	0	0	0	20	0	33	33	0	0	0	0	0	0	0	4,263.41	4,263.41	4,259.41	4,259.41	0	0	
I-993	17.68	0.3	5.3	0	5.3	35	0	1.23	35	1.53	8.16	0	0	0	0	9.79	4,260.03	4,260.03	4,256.13	4,256.08	1.53	8.16	
I-994	11.16	0.35	3.91	0	17.26	20	0	75.4	75.4	0.9	15.74	0	0	0	0	25.76	4,229.83	4,229.83	4,229.91	4,229.83	2.16	8.52	
I-999	0	0	0	0	5.3	0	0	35.1	35.1	1.52	8.15	0	0	0	0	9.78	4,255.38	4,255.38	4,253.53	4,253.44	0	0	
I-1004	0	0	0	0	0	0	0	102.36	102.36	0	0	0	0	0	0	6.8	4,249.00	4,249.00	4,248.58	4,248.57	0	0	
I-1966	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	4,233.86	4,233.86	4,230.88	4,230.88	0	0	
I-1968	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,263.07	4,263.07	4,258.07	4,258.07	0	0	
I-1969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,265.51	4,265.51	4,260.51	4,260.51	0	0	
I-1974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.98	4,224.98	4,220.88	4,220.88	0	0	
I-1978	0	0	0	0	5.01	0	0	28.16	28.16	1.73	8.73	0	0	0	0	8.73	4,230.26	4,230.26	4,230.27	4,229.76	0	0	
I-1979	0	0	0	0	5.01	0	0	27.98	27.98	1.74	8.78	0	0	0	0	8.78	4,230.46	4,230.46	4,230.69	4,230.46	0	0	
I-1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,236.96	4,236.96	4,231.96	4,231.96	0	0	
I-1985	5.39	0.35	1.89	0	3.2	20	0	20.82	20.82	2.12	6.83	0	0	0	0	6.83	4,233.98	4,233.98	4,230.68	4,230.58	2.16	4.11	
I-1987	3.75	0.35	1.31	0	1.31	20	0	0	20	2.16	2.86	0	0	0	0	2.86	4,234.02	4,234.02	4,230.74	4,230.74	2.16	2.86	
I-1988	0	0	0	0	10.48	0	0	70.98	70.98	0.93	9.88	0	0	0	0	19.99	4,238.00	4,238.00	4,234.84	4,234.83	0	0	
I-1995	30.28	0.35	10.6	0	44.33	36.5	0	88.75	88.75	0.81	36.35	0	0	0	0	129.08	4,267.83	4,267.83	4,267.83	4,267.83	1.5	15.98	
I-1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,270.32	4,270.32	4,265.32	4,265.32	0	0	
I-2001	0	0	0	0	1.7	0	0	21.7	21.7	2.07	3.55	0	0	0	0	3.55	4,232.82	4,232.82	4,228.62	4,228.54	0	0	
I-2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,279.05	4,279.05	4,274.95	4,274.95	0	0	
I-2010	0	0	0	0	2.85	0	0	31.76	31.76	1.59	4.57	0	0	0	0	11.51	4,288.49	4,288.49	4,284.88	4,284.78	0	0	
I-2011	16.75	0.35	6.56	0	6.56	30	0	0	30	1.63	10.78	0	0	0	0	10.78	4,256.91	4,256.91	4,256.91	4,256.91	1.63	10.78	
I-2012	0.61	0.85	0.52	0	0.52	20	0	0	20	2.16	1.13	0	0	0	0	1.13	4,302.08	4,302.08	4,297.48	4,297.48	2.16	1.13	
I-2013	0.21	0.85	0.18	0	0.7	45	0	23.63	45	1.32	0.93	0	0	0	0	0.93	4,299.14	4,299.14	4,294.47	4,294.47	1.32	0.24	
I-2018	0	0	0	0	0	0	0	6.94	6.94	0	0	0	0	0	0	3.1	4,239.99	4,239.99	4,237.46	4,237.46	0	0	
I-2019	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	3.1	4,241.39	4,241.39	4,237.91	4,237.88	0	0	
I-2037	2.9	0.35	1.01	0	2.7	20	0	22.35	22.35	2.04	5.55	0	0	0	0	5.55	4,232.71	4,232.71	4,228.72	4,228.59	2.16	2.21	
I-2038	4.82	0.35	1.69	0	1.69	21.96	0	0	21.96	2.06	3.5	0	0	0	0	3.5	4,232.77	4,232.77	4,228.77	4,228.77	2.06	3.5	
I-2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,266.40	4,266.40	4,261.92	4,261.92	0	0	
I-2040	0.21	0.85	0.18	0	0.37	43	0	69.31	69.31	0.95	0.35	0	0	0	0	4.35	4,270.00	4,270.00	4,265.72	4,265.69	1.36	0.24	
I-2041	0.21	0.85	0.18	0	0.54	43	0	69.67	69.67	0.94	0.52	0	0	0	0	4.52	4,269.61	4,269.61	4,265.67	4,265.64	1.36	0.24	
I-2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,271.72	4,271.72	4,266.72	4,266.72	0	0	
I-2047	5.6	0.3	1.68	0	1.68	68.7	0	0.07	68.7	0.95	1.61	0	0	0	0	16.61	4,270.10	4,270.10	4,266.61	4,266.40	0.95	1.61	
I-2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.02	4,230.02	4,225.02	4,225.02	0	0	
I-2049	37.4	0.35	13.09	0	19.65	29.64	0	34.29	34.29	1.54	30.53	0	0	0	0	30.53	4,250.05	4,250.05	4,255.44	4,250.05	1.65	21.76	
I-2062	0	0	0	0	0	30	0	0	30	0	0	0	0	6.94	0	6.94	4,289.28	4,289.28	4,285.84	4,285.84	0	0	
I-2066	0.45	0.85	0.38	0	3.33	39.22	0	53.21	53.21	1.15	3.86	0	0	0	0	14	4,235.99	4,235.99	4,232.73	4,232.68	1.44	0.55	
I-2067	0	0	0	0	1.7	0	0	32.21	32.21	1.58	2.71	0	0	0	0	2.71	4,235.99	4,235.99	4,232.86	4,232.84	0	0	
I-2078	0	0	0	0	11.36	0	0	70.39	70.39	0.94	10.75	0	0	0	0	10.75	4,252.98	4,252.98	4,250.34	4,250.25	0	0	
I-2084	0	0	0	0	4.95	0	0	35.28	35.28	1.52	7.59	0	0	0	0	14.05	4,263.91	4,263.91	4,265.39	4,263.91	0	0	
I-2087	39.14	0.35	13.7	0	13.7	30.19	0	0	30.19	1.63	22.45	0	0	0	0	22.45	4,309.47	4,309.47	4,309.35	4,309.03	1.63	22.45	
I-2088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,309.65	4,309.65	4,309.35	4,309.35	0	0	
I-2096	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.98	4,231.98	4,226.98	4,226.98	0	0	
I-2097	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.84	4,231.84	4,226.84	4,226.84	0	0	
I-2098	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,226.20	4,226.20	4,221.20	4,221.20	0	0	
I-2101	33.78	0.35	11.82	0	29.15	43.03	0	65.6	65.6	0.97	28.56	0	0	0	0	28.56	4,281.93	4,281.93	4,281.88	4,281.83	1.36	16.22	
I-2104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,243.78	4,243.78	4,239.86	4,239.86	0	0	
I-2105	15.48	0.3	4.64	0	4.64	32.71	0	0	32.71	1.57	7.37	0	0	0	0	7.37	4,241.98	4,241.98	4,239.86	4,239.68	1.57	7.37	
I-2106	10.86	0.35	3.8	0	12.73	27.02	0	32.74	32.74	1.57	20.18	0	0	0	0	20.18	4,227.25	4,227.25	4,223.36	4,223.34	1.79	6.85	
I-2107	19.64	0	0	0	0.6	25	0	40.52	40.52	1.41	0.86	0	0	0	0	0.86	4,237.28	4,237.28	4,235.07	4,235.07	0	0	
I-2115	9.43	0.3	2.83	0	12.78	61.74	0	65.2	65.2	0.97	12.55	0	0	0	0	12.55	4,273.56	4,273.56	4,270.05	4,269.90	1	2.85	
I-2116	0	0	0	0	2.38	0	0	25.26	25.26	1.88	4.52	0	0	0	0	4.52	4,232.37	4,232.37	4,232.36	4,232.30	0	0	
I-2117	6.81	0.35	2.38	0	2.38	25	0	0	25	1.9	4.56	0	0	0	0	4.56	4,232.43	4,232.43	4,232.43	4,232.43	1.9	4.56	
I-2118	0	0.3	0	0	0	25.45	0	0	25.45	0	0	0	0	0	0	0	4,275.51	4,275.51	4,271.89	4,271.89	0	0	
I-2119	23.69	0.3	7.11	0	15.24	57.52	0	48.88	57.52	1.06	16.3	0	0	0	0	16.3	4,288.17	4,288.17	4,284.71	4,284.63	1.06	7.6	
I-2122	1.43	0.35	0.5	0	0.5	20	0	0	20	2.16	1.09	0	0	0	0	1.09	4,234.20	4,234.20	4,229.52	4,229.52	2.16	1.09	
I-2125	2.26	0.35	0.79	0	2.37	25	0	28.07	28.07	1.73	4.14	0	0	0	0	4.14	4,236.15	4,236.15	4,232.09	4,231.93	1.9	1.51	
I-2126	0	0	0	0	4.95	0	0	35.97	35.97	1.51	7.52	0	0	0	0	13.98	4,261.66	4,261.66	4,262.19	4,261.66	0	0	
I-2127	0	0	0	0	4.95	0	0	35.74	35.74	1.51	7.54	0	0	0	0	14	4,262.46	4,262.46	4,263.02	4,262.46	0	0	
I-2130	2.93	0.35	1.03	0	1.52	34.64	0	20.23	34.64	1.53	2.35	0	0	0	0	2.35	4,240.84	4,240.84	4,236.53	4,236.45	1.53	1.59	
I-2132	0	0	0	0	13.7	0	0	30.35	30.35	1.62	22.41	0	0	0	0	22.41	4,309.18	4,309.18	4,308.89	4,308.74	0	0	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2133	0	0	0	0	25	0	0	42.1	42.1	1.38	34.78	0	0	0	0	34.78	4,308.58	4,308.58	4,309.78	4,306.13	0	0	
I-2137	0	0	0	0	7.86	0	0	68.39	68.39	0.95	7.55	0	0	0	0	7.55	4,259.68	4,259.68	4,255.84	4,255.74	0	0	
I-2144	4.85	0.35	1.7	0	1.7	20	0	0	20	2.16	3.7	0	0	0	0	3.7	4,234.75	4,234.75	4,230.67	4,230.67	2.16	3.7	
I-2145	0	0	0	0	1.7	0	0	21.13	21.13	2.1	3.6	0	0	0	0	3.6	4,234.19	4,234.19	4,229.93	4,229.91	0	0	
I-2149	0	0	0	0	0	0	0	4.65	4.65	0	0	0	0	0	0	3.5	4,241.80	4,241.80	4,237.63	4,237.51	0	0	
I-2150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.98	4,231.98	4,226.80	4,226.80	0	0	
I-2151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,232.04	4,232.04	4,227.04	4,227.04	0	0	
I-2152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.95	4,225.95	4,220.95	4,220.95	0	0	
I-2159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,251.70	4,251.70	4,246.70	4,246.70	0	0	
I-2164	0.13	0.85	0.11	0	0.22	20	0	70.6	70.6	0.94	0.21	0	0	0	0	9.21	4,273.96	4,273.96	4,270.39	4,270.35	2.16	0.24	
I-2171	11.43	0	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,304.54	4,304.54	4,299.54	4,299.54	0	0	
I-2175	0	0.35	0	0	9.04	21.3	0	29.23	29.23	1.67	15.23	0	0	0	0	15.23	4,231.62	4,231.62	4,228.62	4,228.61	0	0	
I-2177	0	0	0	0	6.56	0	0	31.98	31.98	1.59	10.51	0	0	0	0	10.51	4,254.16	4,254.16	4,254.55	4,254.16	0	0	
I-2178	0	0	0	0	6.51	0	0	64.5	64.5	0.98	6.43	0	0	0	0	6.43	4,253.04	4,253.04	4,249.27	4,249.02	0	0	
I-2179	18.6	0.35	6.51	0	6.51	64.18	0	0	64.18	0.98	6.44	0	0	0	0	6.44	4,253.63	4,253.63	4,249.64	4,249.64	0.98	6.44	
I-2182	0	0	0	0	7.86	0	0	66.44	66.44	0.97	7.65	0	0	0	0	7.65	4,263.99	4,263.99	4,260.50	4,260.11	0	0	
I-2185	2.28	0.35	0.79	0	1.58	25	0	27.93	27.93	1.74	2.78	0	0	0	0	2.78	4,236.22	4,236.22	4,232.17	4,232.12	1.9	1.51	
I-2190	21.04	0.3	6.31	0	11.7	31.6	0	21	31.6	1.6	18.83	0	0	0	0	18.83	4,265.24	4,265.24	4,266.94	4,265.24	1.6	10.16	
I-2191	0	0	0	0	5.39	0	0	20.74	20.74	2.12	11.53	0	0	0	0	11.53	4,266.00	4,266.00	4,266.63	4,266.00	0	0	
I-2193	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	0	4,299.04	4,299.04	4,294.04	4,294.04	0	0	
I-2198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,269.40	4,269.40	4,267.83	4,267.83	0	0	
I-2200	0	0.35	0	0	2.83	30.35	0	62.15	62.15	1	2.84	0	0	0	0	9.34	4,293.65	4,293.65	4,293.36	4,293.04	0	0	
I-2204	36.23	0.3	10.87	0	12.4	35	0	60.06	60.06	1.01	12.62	0	0	0	0	22.1	4,278.12	4,278.12	4,278.55	4,278.12	1.53	16.73	
I-2213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,257.33	4,257.33	4,253.41	4,253.41	0	0	
I-2214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,257.87	4,257.87	4,252.87	4,252.87	0	0	
I-2216	0	0	0	0	23.54	0	0	72.1	72.1	0.93	22.01	0	0	0	0	68.23	4,305.17	4,305.17	4,302.81	4,302.76	0	0	
I-2217	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	4,323.20	4,323.20	4,319.22	4,319.22	0	0	
I-2222	12.45	0.3	3.73	0	37.99	32.5	0	64.38	64.38	0.98	37.53	0	0	0	0	48.51	4,222.58	4,222.58	4,219.50	4,219.48	1.58	5.94	
I-2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.71	4,223.71	4,220.88	4,220.88	0	0	
I-2233	0	0	0	0	0.79	0	0	26.63	26.63	1.81	1.44	0	0	0	0	1.44	4,236.05	4,236.05	4,232.25	4,232.25	0	0	
I-2234	0	0	0	0	6.56	0	0	33.54	33.54	1.56	10.3	0	0	0	0	10.3	4,251.18	4,251.18	4,251.78	4,251.16	0	0	
I-2235	2.3	0.35	0.8	0	5.01	20	0	26.51	26.51	1.62	9.18	0	0	0	0	9.18	4,231.93	4,231.93	4,233.02	4,231.93	2.16	1.76	
I-2241	0	0	0	0	2.7	0	0	23.52	23.52	1.98	5.38	0	0	0	0	5.38	4,231.92	4,231.92	4,227.75	4,227.74	0	0	
I-2242	7.99	0.35	2.8	0	17.92	24.43	0	67.25	67.25	0.96	17.35	0	0	0	0	56.57	4,323.92	4,323.92	4,320.50	4,320.48	1.93	5.43	
I-2246	45.2	0.25	11.3	0	11.3	41	0	0	41	1.4	15.98	0	0	0	0	15.98	4,311.94	4,311.94	4,311.94	4,311.94	1.4	15.98	
I-2255	0	0	0	0	0	32	0	0	32	0	0	0	0	6.46	0	6.46	4,268.22	4,268.22	4,266.74	4,266.74	0	0	
I-2256	16.5	0.3	4.95	0	4.95	25.9	0	35.02	35.02	1.53	7.62	0	0	0	0	14.07	4,264.24	4,264.24	4,265.72	4,264.24	1.85	9.22	
I-2261	11.67	0.3	3.5	0	3.5	53.3	0	0	53.3	1.15	4.05	0	0	0	0	4.05	4,260.05	4,260.05	4,255.82	4,255.62	1.15	4.05	
I-2262	0	0	0	0	3.5	44.79	0	54.53	54.53	1.12	3.96	0	0	0	0	3.96	4,256.15	4,256.15	4,251.86	4,251.85	0	0	
I-2265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,277.13	4,277.13	4,274.95	4,274.95	0	0	
I-2267	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4,237.99	4,237.99	4,235.11	4,235.11	0	0	
I-2268	0	0	0	0	0.83	0	0	30.61	30.61	1.62	1.36	0	0	0	0	5.36	4,238.01	4,238.01	4,234.99	4,234.98	0	0	
I-2270	0	0	0	0	2.63	0	0	21.96	21.96	2.08	5.45	0	0	0	0	5.45	4,260.28	4,260.28	4,256.41	4,256.28	0	0	
I-2276	0	0	0	0	5.01	0	0	29.16	29.16	1.67	8.46	0	0	0	0	8.46	4,230.53	4,230.53	4,227.60	4,227.14	0	0	
I-2278	0	0.3	0	0	19.53	0	0	73.07	73.07	0.92	18.12	0	0	0	0	31.05	4,254.60	4,254.60	4,252.62	4,252.57	0	0	
I-2279	0	0	0	0	9.18	0	0	34.41	34.41	1.54	14.24	0	0	0	0	23.28	4,292.42	4,292.42	4,289.77	4,289.72	0	0	
I-2280	45.19	0	0	0	0	30	0	0	30	0	0	0	0	9.04	0	9.04	4,294.09	4,294.09	4,290.95	4,290.95	0	0	
I-2287	0	0	0	0	1.7	0	0	31.23	31.23	1.6	2.75	0	0	0	0	2.75	4,235.94	4,235.94	4,232.93	4,232.92	0	0	
I-2290	12.1	0.35	4.23	0	8.5	39	0	47.06	47.06	1.28	10.95	0	0	0	0	10.95	4,237.37	4,237.37	4,237.72	4,237.37	1.44	6.16	
I-2291	81.56	0.3	24.47	0	24.47	42.3	0	37.73	42.3	1.38	33.93	0	0	0	0	38.93	4,251.03	4,251.03	4,250.70	4,250.33	1.38	33.93	
I-2294	3.21	0.35	1.12	0	1.12	20	0	0	20	2.16	2.45	0	0	0	0	2.45	4,234.10	4,234.10	4,230.28	4,230.28	2.16	2.45	
I-2295	4.72	0.35	1.65	0	2.76	21.56	0	22.08	22.08	2.05	5.74	0	0	0	0	5.74	4,233.65	4,233.65	4,230.14	4,230.07	2.08	3.46	
I-2297	0	0	0	0	7.86	0	0	68.55	68.55	0.95	7.54	0	0	0	0	7.54	4,257.99	4,257.99	4,254.18	4,254.05	0	0	
I-2299	32.34	0.35	11.32	0	11.32	31	0	0	31	1.61	18.36	0	0	0	0	18.36	4,272.14	4,272.14	4,272.14	4,272.14	1.61	18.36	
I-2313	4.37	0.28	1.22	0	1.22	97.07	0	0	97.07	0.76	0.93	0	0	0	0	0.93	4,259.44	4,259.44	4,254.78	4,254.78	0.76	0.93	
I-2315	4.95	0.35	1.73	0	3.32	22.82	0	39.16	39.16	1.44	4.82	0	0	0	0	4.82	4,230.08	4,230.08	4,226.88	4,226.88	2.01	3.52	
I-2316	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.00	4,230.00	4,226.88	4,226.88	0	0	
I-2317	0	0	0	0	0.6	0	0	43.2	43.2	1.36	0.82	0	0	0	0	0.82	4,237.13	4,237.13	4,235.06	4,235.06	0	0	
I-2319	0	0	0	0	0	0	0	60.31	60.31	0	0	0	0	0	0	6.5	4,298.43	4,298.43	4,295.12	4,294.97	0	0	
I-2321	0	0	0	0	0	1	0	30.12	30.12	0	0	0	0	0	0	5.12	4,305.83	4,305.83	4,303.12	4,303.07	0	0	
I-2323	0	0	0	0	6.56	0	0	31.54	31.54	1.6	10.57	0	0	0	0	10.57	4,254.75	4,254.75	4,255.14	4,254.75	0	0	
I-2326	0	0	0	0	6.51	0	0	64.73	64.73	0.98	6.42	0	0	0	0	6.42	4,253.09	4,253.09	4,248.22	4,247.98	0	0	
I-2327	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	4,235.02	4,235.02	4,230.88	4,230.88	0	0	
I-2333	0	0.35	0	0	9.04	21.04	0	30.59	30.59	1.62	14.75	0	0	0	0	14.75	4,230.47	4,230.47	4,227.89	4,227.74	0	0	
I-2339	5.55	0.35	1.94	0	10.75	21.62	0	69.5	69.5	0.95	10.24	0	0	0	0	10.87	4,230.00	4,230.00	4,225.45	4,225.44	2.06	4.07	
I-2346	0	0	0	0	1.89	0	0	25.49	25.49	1.87	3.56	0	0	0	0	3.56	4,231.75	4,231.75	4,228.08	4,227.94	0	0	
I-2347	5.39	0.35	1.89	0	1.89	25	0	0	25	1.9	3.61	0	0	0	0	3.61	4,231.83	4,231.83	4,228.25	4,228.25	1.9	3.61	
I-2349	0	0	0	0	21.84	0	0	51.86	51.86	1.18	25.94	0	0	0	0	25.94	4,292.03	4,292.03	4,244.00	4,243.90	0	0	
I-2353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.50	4,225.50	4,220.88	4,220.88	0	0	
I-2355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,258.02	4,258.02	4,253.64	4,253.64	0	0	
I-2356	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,252.12	4,252.12	4,247.12	4,247.12	0	0	
I-2361	0	0	0	0	3.4	0	0	45.2	45.2	1.32	4.51	0	0	5.8	0	10.31	4,279.99	4,279.99	4,276.22	4,276.20	0	0	
I-2363	0	0	0	0	5.01	0	0	28.43	28.43	1.71	8.66	0	0	0	0	8.66	4,230.25	4,230.25	4,229.22	4,229.07	0	0	
I-2368	0	0	0	0	0	0	0	42.03	42.03	0	0	0	0	0	0	39.04	4,305.71	4,305.71	4,305.57	4,305.31	0	0	
I-2372	0.54	0.85	0.46	0	1.61	21	0	51.07	51.07	1.19	1.94	0	0	0	0	1.94	4,290.05	4,290.05	4,285.67	4,285.65	2.11	0.98	
I-2373	0	0	0	0	1.61	0	0	52.48	52.48	1.17	1.9	0	0	0	0	2.66	4,287.93	4,287.93	4,281.11	4,281.09	0	0	
I-2377	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	4,234.52	4,234.52	4,230.88	4,230.88	0	0	
I-2378	0	0	0	0	0	0	0	37.23	37.23	0	0	0	0	0	0	5	4,257.10	4,257.10	4,252.84	4,252.84	0	0	
I-2380	0	0	0	0	4.19	0	0	45.59	45.59	1.31	5.52	0	0	0	0	5.52	4,222.38	4,222.38	4,220.21	4,220.14	0	0	
I-2382	0.22	0.85	0.19	0	0.19	20	0	65.07	65.07	0.98	0.18	0	0	0	0	4.18	4,270.02	4,270.02	4,266.25	4,266.20	2.16	0.41	
I-2384	2.26	0.35	0.79	0	0.79	25.12	0	0	25.12	1.89	1.51	0	0	0	0	1.51	4,236.09	4,236.09	4,232.50	4,232.50	1.89	1.51	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2385	27.32	0.3	8.2	0	8.2	35	0	19.24	35	1.53	12.61	0	0	0	0	19.21	4,240.03	4,240.03	4,236.41	4,236.36	1.53	12.61	
I-2388	6.42	0.35	2.25	0	6.78	34.26	0	55.3	55.3	1.11	7.57	0	0	0	0	17.71	4,234.04	4,234.04	4,230.75	4,230.73	1.54	3.49	
I-2389	0	0	0	0	3.4	27.02	0	46.98	46.98	1.28	4.38	0	0	0	0	20.68	4,274.32	4,274.32	4,274.42	4,274.31	0	0	
I-2390	0	0	0	0	3.32	0	0	58.48	58.48	1.04	3.49	0	0	0	0	7.49	4,230.01	4,230.01	4,230.02	4,230.01	0	0	
I-2391	1.5	0.85	1.27	0	25.11	25.1	0	84.56	84.56	0.84	21.32	0	0	0	0	35.43	4,229.85	4,229.85	4,229.90	4,229.85	1.69	2.43	
I-2393	7.06	0.35	2.47	0	13.22	28.8	0	73.58	73.58	0.92	12.22	0	0	0	0	12.86	4,230.00	4,230.00	4,224.91	4,224.90	1.69	4.22	
I-2396	10.34	0.35	3.62	0	6.94	20	0	29.05	29.05	1.68	11.75	0	0	0	0	11.75	4,229.10	4,229.10	4,229.12	4,229.10	2.16	7.89	
I-2405	5.21	0.35	1.82	0	4.21	23.82	0	26.14	26.14	1.64	7.79	0	0	0	0	7.79	4,232.06	4,232.06	4,232.14	4,232.06	1.98	3.6	
I-2407	0.98	0.85	0.83	0	0.83	25.09	0	0	25.09	1.89	1.59	0	0	0	0	1.59	4,239.87	4,239.87	4,235.43	4,235.43	1.89	1.59	
I-2420	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	4,278.65	4,278.65	4,276.26	4,276.26	0	0	
I-2421	0	0	0	0	23.54	0	0	74.06	74.06	0.91	21.69	0	0	0	0	67.91	4,290.07	4,290.07	4,287.65	4,287.65	0	0	
I-2423	0	0	0	0	2.85	0	0	34.13	34.13	1.54	4.43	0	0	0	0	11.37	4,275.97	4,275.97	4,274.20	4,274.18	0	0	
I-2429	0	0	0	0	11.7	0	0	31.97	31.97	1.59	18.74	0	0	0	0	18.74	4,263.99	4,263.99	4,266.62	4,263.99	0	0	
I-2431	1.42	0.35	0.5	0	0.5	20	0	0	20	2.16	1.08	0	0	0	0	1.08	4,240.83	4,240.83	4,236.55	4,236.55	2.16	1.08	
I-2436	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,226.58	4,226.58	4,221.58	4,221.58	0	0	
I-2584	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	45	4,242.83	4,242.83	4,240.38	4,240.38	0	0	
I-2585	1.86	0.8	1.49	0	6.37	20	0	65.09	65.09	0.98	6.26	0	0	0	0	9.49	4,242.00	4,242.00	4,240.05	4,240.05	2.16	3.24	
I-2586	0	0	0	0	5.37	0	0	65.94	65.94	0.97	5.25	0	0	0	0	5.25	4,234.15	4,234.15	4,230.69	4,230.69	0	0	
I-2587	0	0	0	0	5.37	0	0	71.49	71.49	0.93	5.04	0	0	0	0	5.04	4,233.11	4,233.11	4,230.24	4,230.24	0	0	
I-2588	9.72	0.25	2.43	0	9.12	42.63	0	68	68	0.96	8.78	0	0	0	0	8.78	4,227.46	4,227.46	4,225.40	4,225.35	1.37	3.35	
I-2589	0	0	0	0	9.12	0	0	68.82	68.82	0.95	8.73	0	0	0	0	8.73	4,227.36	4,227.36	4,225.13	4,225.06	0	0	
I-2590	0	0	0	0	0	65	0	0	65	0	0	0	0	4	0	4	4,270.00	4,270.00	4,267.81	4,267.81	0	0	
I-2591	17.5	0.3	5.25	0	27.73	36.21	0	74.98	74.98	0.91	25.37	0	0	0	0	34.37	4,270.11	4,270.11	4,268.46	4,268.44	1.5	7.95	
I-2592	0	0	0	0	3.4	0	0	51.38	51.38	1.19	4.07	0	0	0	0	9.87	4,271.32	4,271.32	4,267.66	4,267.64	0	0	
I-2593	0	0	0	0	0	50	0	0	50	0	0	0	0	10.14	0	10.14	4,237.05	4,237.05	4,234.31	4,234.31	0	0	
I-2594	0	0	0	0	12.13	0	0	62.84	62.84	0.99	12.11	0	0	0	0	19.71	4,231.92	4,231.92	4,228.97	4,228.74	0	0	
I-2595	0	0	0	0	12.13	0	0	62.7	62.7	0.99	12.12	0	0	0	0	19.73	4,231.92	4,231.92	4,229.04	4,229.04	0	0	
I-2596	0	0	0	0	0	0	0	0	0	0	0	0	0	3.5	0	3.5	4,243.11	4,243.11	4,239.44	4,239.44	0	0	
I-2597	0	0	0	0	9.7	0	0	50	50	1.22	11.9	0	0	0	0	22.88	4,231.90	4,231.90	4,229.07	4,228.88	0	0	
I-2598	0	0	0	0	0	102	0	0	102	0	0	0	0	6.8	0	6.8	4,252.95	4,252.95	4,248.61	4,248.61	0	0	
I-2599	0	0	0	0	0	72	0	0	72	0	0	0	0	7.7	0	7.7	4,224.77	4,224.77	4,224.77	4,224.77	0	0	
I-2600	0	0	0	0	0	45	0	0	45	0	0	0	0	10.02	0	10.02	4,230.00	4,230.00	4,230.00	4,230.00	0	0	
I-2601	0	0	0	13.35	13.35	75	0	0	75	0.91	12.21	0	0	0	0	12.21	4,231.00	4,231.00	4,231.00	4,231.00	0	0	
I-2602	0	0	0	0	13.35	0	0	75.24	75.24	0.91	12.19	0	0	0	0	12.19	4,230.93	4,230.93	4,231.79	4,230.71	0	0	
I-2603	9.31	0.3	2.79	0	2.79	28.02	0	60.17	60.17	1.01	2.84	0	0	0	0	18.24	4,335.96	4,335.96	4,332.41	4,332.34	1.74	4.69	
I-2604	0	0	0	0	0	0	0	0	0	0	0	0	0	10.9	0	10.9	4,247.88	4,247.88	4,244.15	4,244.15	0	0	
I-2605	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0	0.26	4,225.61	4,225.61	4,225.61	4,225.61	0	0	
I-2606	0	0	0	0	1.99	45	0	46.43	46.43	1.29	2.58	0	0	3.25	0	4.71	4,269.99	4,269.99	4,270.03	4,269.99	0	0	
I-2607	3.69	0.3	1.11	0	1.11	26.22	0	0	26.22	1.83	2.04	0	0	0	0	2.04	4,293.34	4,293.34	4,291.01	4,291.01	1.83	2.04	
I-2609	0	0	0	0	0	85	0	0	85	0	0	0	0	43.49	0	43.49	4,281.41	4,281.41	4,281.41	4,281.41	0	0	
I-2610	13.7	0.25	3.42	0	3.42	74.27	0	0	74.27	0.91	3.15	0	0	0	0	3.15	4,255.52	4,255.52	4,251.51	4,251.51	0.91	3.15	
I-2611	0	0	0	0	8.52	0	0	101.52	101.52	0.73	6.24	0	0	0	0	8.24	4,255.26	4,255.26	4,251.25	4,251.24	0	0	
I-2612	0	0	0	0	0	60	0	0	60	0	0	0	0	13.13	0	13.13	4,329.75	4,329.75	4,324.68	4,324.68	0	0	
I-2613	0	0	0	0	1.53	0	0	38.58	38.58	1.45	2.24	0	0	0	0	2.24	4,277.77	4,277.77	4,277.77	4,277.77	0	0	
I-2614	0	0	0	0	1.91	0	0	21.65	21.65	2.08	4	0	0	0	0	4	4,275.97	4,275.97	4,271.89	4,271.74	0	0	
I-2615	10.93	0.35	3.83	0	3.83	40	0	0	40	1.42	5.49	0	0	0	0	5.49	4,277.97	4,277.97	4,270.92	4,270.92	1.42	5.49	
I-2616	0	0	0	0	5.74	0	0	40.34	40.34	1.42	8.19	0	0	0	0	8.19	4,275.97	4,275.97	4,269.23	4,269.17	0	0	
I-2617	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,290.00	4,290.00	4,278.71	4,278.71	0	0	
I-2619	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,290.00	4,290.00	4,287.71	4,287.71	0	0	
I-2620	8.51	0.3	2.55	0	2.55	30	0	0	30	1.63	4.19	0	0	0	0	4.19	4,280.00	4,280.00	4,277.78	4,277.56	1.63	4.19	
I-2621	0	0	0	0	2.55	0	0	30.16	30.16	1.63	4.19	0	0	0	0	4.19	4,280.00	4,280.00	4,277.14	4,277.12	0	0	
I-2623	0	0	0	0	0	42	0	0	42	0	0	0	0	22.27	0	22.27	4,308.58	4,308.58	4,306.11	4,306.11	0	0	
I-2626	0	0	0	0	0	30	0	0	30	0	0	0	0	5.12	0	5.12	4,305.83	4,305.83	4,303.12	4,303.12	0	0	
I-2628	0	0	0	0	21.16	0	0	66.73	66.73	0.96	20.58	0	0	0	0	23.83	4,266.19	4,266.19	4,258.96	4,258.96	0	0	
I-2629	19.29	0.35	6.75	0	31.92	45	0	80.74	80.74	0.97	27.94	0	0	0	0	44.68	4,252.00	4,252.00	4,243.10	4,243.06	1.32	8.98	
I-2630	0	0	0	0	25.17	45	0	77.69	77.69	0.89	22.56	0	0	16.74	0	39.3	4,250.00	4,250.00	4,245.09	4,245.06	0	0	
I-2631	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	15	4,271.00	4,271.00	4,268.31	4,268.31	0	0	
I-2632	67.11	0.35	23.49	0	25.17	50	0	72.82	72.82	0.92	23.4	0	0	0	0	38.4	4,252.00	4,252.00	4,249.47	4,249.25	1.22	28.81	
I-2633	83.36	0.35	29.18	0	29.18	45	0	0	45	1.32	38.82	0	0	0	0	38.82	4,270.00	4,270.00	4,267.10	4,267.10	1.32	38.82	
I-2634	0	0.3	0	0	62.19	42	0	52.4	52.4	1.17	73.16	0	0	0	0	73.16	4,280.00	4,280.00	4,277.45	4,276.67	0	0	
I-2635	0	0	0	0	0	60	0	0	60	0	0	0	0	15.4	0	15.4	4,335.00	4,335.00	4,333.37	4,333.37	0	0	
I-2636	0	0	0	0	0	60	0	0	60	0	0	0	0	10.69	0	10.69	4,329.75	4,329.75	4,325.04	4,325.04	0	0	additional flow ea
I-2637	11.77	0.35	4.12	0	4.12	30	0	0	30	1.63	6.77	0	0	0	0	6.77	4,328.82	4,328.82	4,326.69	4,326.69	1.63	6.77	
I-2638	3.5	0.35	1.22	0	1.22	24.43	0	0	24.43	1.93	2.38	0	0	0	0	2.38	4,323.92	4,323.92	4,322.54	4,322.54	1.93	2.38	
I-2642	0	0.3	0	0	0	27	0	0	27	0	0	0	0	4.76	0	4.76	4,274.32	4,274.32	4,274.32	4,274.32	0	0	
I-2643	0	0	0	0	0	45	0	0	45	0	0	0	0	8.35	0	8.35	4,294.06	4,294.06	4,294.06	4,294.06	0	0	
I-2644	0	0	0	0	3.4	0	0	45	45	1.32	4.52	0	0	0	0	12.02	4,281.96	4,281.96	4,278.25	4,278.25	0	0	
I-2645	0	0	0	0	15.5	0	0	45	45	1.32	20.63	0	0	0	0	36.93	4,266.42	4,266.42	4,260.57	4,260.57	0	0	
I-2646	0	0	0	0	9.18	0	0	32.2	32.2	1.58	14.66	0	0	0	0	14.66	4,296.00	4,296.00	4,296.00	4,296.00	0	0	
I-2647	0	0	0	0	28.88	0	0	46.97	46.97	1.28	37.23	0	0	0	0	46.27	4,289.00	4,289.00	4,287.47	4,287.45	0	0	
I-2648	0	0	0	0	9.2	0	0	44.43	44.43	1.33	12.36	0	0	0	0	12.36	4,276.94	4,276.94	4,274.25	4,274.25	0	0	
I-2649	0	0	0	0	10.28	0	0	46.43	46.43	1.29	13.37	0	0	0	0	14.51	4,267.00	4,267.00	4,267.08	4,267.00	0	0	
I-2652	0	0	0	0	13.61	0	0	79.54	79.54	0.88	12.2	0	0	0	0	15.63	4,223.80	4,223.80	4,223.86	4,223.80	0	0	
I-2653	36.37	0.35	12.73	0	18.15	45	0	41.1	45	1.32	24.15	0	0	0	0	24.15	4,260.00	4,260.00	4,252.07	4,251.67	1.32	16.94	
I-2654	15.48	0.35	5.42	0	5.42	35	0	0	35	1.53	8.34	0	0	0	0	8.34	4,265.65	4,265.65	4,260.77	4,260.77	1.53	8.34	
I-2655	14.23	0.35	4.98	0	4.98	30	0	0	30	1.63	8.18	0	0	0	0	8.18	4,247.50	4,247.50	4,245.61	4,245.61	1.63	8.18	
I-2656	15.17	0.35	5.31	0	28.44	45	0	47.49	47.49	1.27	36.36	0	0	0	0	36.36	4,252.00	4,252.00	4,243.45	4,243.22	1.32	7.06	
I-2659	0	0	0	0	13.81	0	0	69.5	69.5	0.95	13.16	0	0	0	0	16.58	4,227.52	4,227.52	4,225.60	4,225.60	0	0	
I-2660	20.7	0	0	0	0	20	0	0	20	0	0	0	0	4.14	0	4.14	4,225.00	4,225.00	4,225.00	4,225.00	0	0	
I-2661	0	0	0	0	0	20	0	0	20	0	0	0	0	1.5	0	1.5	4,255.60	4,255.60	4,252.86	4,252.86	0	0	
I-2662	0	0	0	0	0	20	0	0	20	0	0	0	0	15	0	15	4,280.96	4,280.96	4,280.59	4,280.59	0	0	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2663	0	0	0	0	0	20	0	0	20	0	0	0	0	2.28	0	2.28	4,299.06	4,299.06	4,293.61	4,293.61	0	0	
I-2664	9.95	0.35	3.48	0	25.9	75	0	48.2	75	0.61	23.69	0	0	15.09	0	38.78	4,285.00	4,285.00	4,285.07	4,285.00	0.91	3.19	
I-2665	6.63	0.35	2.32	0	2.32	30	0	0	30	1.63	3.81	0	0	0	0	3.81	4,299.97	4,299.97	4,299.97	4,299.97	1.63	3.81	
I-2666	4.54	0.35	1.59	0	1.59	25	0	0	25	1.9	3.04	0	0	0	0	3.04	4,295.00	4,295.00	4,288.63	4,288.63	1.9	3.04	
I-2667	0	0	0	0	1.59	0	0	25.84	25.84	1.85	2.97	0	0	0	0	2.97	4,292.00	4,292.00	4,287.72	4,287.62	0	0	
I-2668	19.23	0.35	6.73	0	8.32	30	0	27.92	30	1.63	13.67	0	0	0	0	13.67	4,283.00	4,283.00	4,280.80	4,280.54	1.63	11.06	
I-2674	16.86	0.35	5.9	0	14.95	30	0	40.07	40.07	1.42	21.42	0	0	0	0	21.42	4,226.07	4,226.07	4,225.86	4,225.85	1.63	9.7	
I-2675	0	0	0	0	0	65	0	0	65	0	0	0	0	56.28	0	56.28	4,225.00	4,225.00	4,222.51	4,222.51	0	0	
I-2676	0	0	0	0	0	45	0	0	45	0	0	0	0	4.9	0	4.9	4,227.85	4,227.85	4,227.85	4,227.85	0	0	
I-2677	47.45	0.35	16.61	0	16.61	45	0	0	45	1.32	22.1	0	0	0	0	22.1	4,305.94	4,305.94	4,300.54	4,300.54	1.32	22.1	
I-2678	18.33	0	0	0	0	30	0	0	30	0	0	0	0	3.66	0	3.66	4,299.42	4,299.42	4,295.15	4,295.15	0	0	
I-2682	6.02	0.1	0.6	0	0.6	25	0	0	25	1.9	1.15	0	0	0	0	1.15	4,239.00	4,239.00	4,235.75	4,235.75	1.9	1.15	
I-2683	10.17	0.35	3.56	0	50.6	35	0	85.48	85.48	0.84	47.68	0	0	0	0	53.37	4,238.00	4,238.00	4,232.88	4,232.68	1.53	5.48	
I-2684	29.77	0.35	10.42	0	34.34	35	0	79.19	79.19	0.88	30.42	0	0	0	0	36.11	4,240.00	4,240.00	4,234.76	4,234.74	1.53	16.03	
I-2685	0	0	0	0	15.15	0	0	81.31	81.31	0.86	13.2	0	0	0	0	23.31	4,231.52	4,231.52	4,231.55	4,231.52	0	0	
I-2687	0	0	0	0	0	65	0	0	65	0	0	0	0	35	0	35	4,232.00	4,232.00	4,232.00	4,232.00	0	0	
I-2689	9.58	0.35	3.35	0	3.35	35	0	0	35	1.53	5.15	0	0	0	0	5.15	4,246.05	4,246.05	4,245.71	4,245.71	1.53	5.15	
I-2690	0	0	0	0	5.34	0	0	37.34	37.34	1.48	7.96	0	0	0	0	14.9	4,265.03	4,265.03	4,264.46	4,264.42	0	0	
I-2691	7.13	0.35	2.5	0	2.5	25	0	0	25	1.9	4.77	0	0	0	0	4.77	4,265.03	4,265.03	4,265.03	4,265.03	1.9	4.77	
I-2692	0	0	0	0	2	0	0	25.1	25.1	1.89	3.82	0	0	0	0	3.82	4,241.00	4,241.00	4,237.94	4,237.76	0	0	
I-2693	0	0	0	0	9.62	0	0	35.45	35.45	1.52	14.72	0	0	0	0	14.72	4,242.00	4,242.00	4,239.33	4,239.24	0	0	
I-2694	27.40	0.35	9.62	0	9.62	35	0	0	35	1.53	14.81	0	0	0	0	14.81	4,242.00	4,242.00	4,239.83	4,239.83	1.53	14.81	
I-2695	5.72	0.35	2	0	2	25	0	0	25	1.9	3.83	0	0	0	0	3.83	4,243.00	4,243.00	4,238.79	4,238.79	1.9	3.83	
I-2696	6.15	0.35	2.16	0	2.16	20	0	0	20	2.16	4.7	0	0	0	0	4.7	4,262.57	4,262.57	4,262.57	4,262.57	2.16	4.7	
I-2697	7.5	0.35	2.63	0	2.63	20	0	0	20	2.16	5.72	0	0	0	0	5.72	4,265.28	4,265.28	4,260.40	4,260.40	2.16	5.72	
I-2698	6.3	0.35	2.2	0	2.2	20	0	0	20	2.16	4.81	0	0	0	0	4.81	7,300.00	7,300.00	4,293.17	4,293.17	2.16	4.81	
I-2699	11.95	0.35	4.18	0	4.18	25	0	0	25	1.9	8	0	0	0	0	8	4,287.00	4,287.00	4,285.31	4,285.31	1.9	8	
I-2700	21.27	0.35	7.44	0	33.85	30	0	62.99	62.99	0.99	33.76	0	0	0	0	33.76	4,264.00	4,264.00	4,261.03	4,260.98	1.63	12.23	
I-2701	40.32	0.35	14.11	0	47.96	45	0	65.08	65.08	0.98	47.15	0	0	0	0	47.15	4,252.50	4,252.50	4,251.82	4,250.78	1.32	18.78	
I-2702	31.9	0.35	11.17	0	26.4	37	0	60.07	60.07	1.01	26.87	0	0	0	0	26.87	4,274.00	4,274.00	4,274.00	4,274.00	1.49	16.72	
I-2703	9.1	0.35	3.18	0	3.18	25	0	0	25	1.9	6.09	0	0	0	0	6.09	4,248.00	4,248.00	4,247.09	4,247.09	1.9	6.09	
I-2704	0	0	0	0	32.21	0	0	69.89	69.88	0.94	30.59	0	0	0	0	33.84	4,248.13	4,248.13	4,243.12	4,243.02	0	0	
I-2705	15.34	0.35	5.37	0	5.37	25	0	76.74	76.74	0.9	4.85	0	0	0	0	38.49	4,236.00	4,236.00	4,234.16	4,234.10	1.9	10.26	
I-2706	0	0	0	0	0	75	0	0	75	0	0	0	0	33.64	0	33.64	4,242.00	4,242.00	4,239.98	4,239.98	0	0	
I-2707	35.57	0.35	12.45	0	12.45	45	0	0	45	1.32	16.56	0	0	0	0	16.56	4,235.00	4,235.00	4,233.49	4,233.49	1.32	16.56	
I-2710	0	0	0	0	0	70	0	0	70	0	0	0	0	20.17	0	20.17	4,225.00	4,225.00	4,223.56	4,223.56	0	0	
I-2712	70	0.35	24.5	0	50.64	65	0	68.83	68.83	0.95	48.48	0	0	0	0	48.48	4,228.00	4,228.00	4,227.28	4,227.09	0.98	24.1	
I-2714	74.69	0.35	26.14	0	26.14	65	0	0	65	0.98	25.71	0	0	0	0	25.71	4,231.00	4,231.00	4,229.03	4,229.03	0.98	25.71	
I-2716	0	0	0	0	5.25	0	0	36.52	36.52	1.5	7.91	0	0	0	0	52.91	4,336.00	4,336.00	4,235.34	4,235.31	0	0	
I-2717	15	0.35	5.25	0	5.25	35	0	0	35	1.53	8.08	0	0	0	0	8.08	4,336.00	4,336.00	4,237.83	4,237.83	1.53	8.08	
I-2718	151	0.35	52.85	0	52.85	65	0	0	65	0.98	51.99	0	0	0	0	51.99	4,226.00	4,226.00	4,223.34	4,223.34	0.98	51.99	
I-2719	0	0	0	0	0	85	0	0	85	0	0	0	0	45	0	45	4,221.00	4,221.00	4,221.00	4,221.00	0	0	
I-2720	18.14	0.35	6.35	0	6.95	35	0	46.67	46.67	1.29	9.01	0	0	0	0	9.01	4,237.96	4,237.96	4,235.05	4,234.92	1.53	9.77	
I-2721	0	0	0	0	23.92	0	0	74.97	74.97	0.91	21.89	0	0	0	0	27.58	4,240.00	4,240.00	4,240.33	4,240.00	0	0	
I-2724	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	4,275.00	4,275.00	4,274.54	4,274.54	0	0	
I-2726	0	0	0	0	8.32	0	0	39.61	39.61	1.43	12	0	0	0	0	12	4,262.00	4,262.00	4,262.37	4,261.22	0	0	
I-2727	0	0	0	0	0	65	0	0	65	0	0	0	0	10.08	0	10.08	4,236.00	4,236.00	4,236.00	4,236.00	0	0	
I-2728	16.65	0.35	5.83	0	5.83	20	0	0	20	2.16	12.71	0	0	0	0	12.71	4,230.00	4,230.00	4,229.57	4,229.57	2.16	12.71	
I-2729	0	0	0	0	5.25	0	0	38.52	38.52	1.45	7.69	0	0	0	0	52.69	4,230.72	4,230.72	4,230.74	4,230.72	0	0	
I-2730	0	0	0	0	0	0	0	72.04	72.04	0	0	0	0	0	0	7.7	4,222.79	4,222.79	4,221.77	4,221.76	0	0	
I-2731	0	0	0	0	41.68	0	0	91.97	91.97	0.79	33.26	0	0	0	0	70.33	4,225.37	4,225.37	4,223.95	4,223.92	0	0	
I-2733	0	0	0	0	0	60	0	0	60	0	0	0	0	45	0	45	4,242.00	4,242.00	4,240.19	4,240.19	0	0	
I-2734	76.44	0.35	26.75	0	53.49	45	0	64.98	64.98	0.98	52.63	0	0	0	0	62.11	4,266.02	4,266.02	4,264.61	4,264.61	1.32	35.6	
I-2735	0	0	0	0	0	0	0	0.98	0.98	0	0	0	0	0	0	5.69	4,238.99	4,238.99	4,239.09	4,238.99	0	0	
I-2736	0	0	0	0	6.51	0	0	65.36	65.36	0.97	6.39	0	0	0	0	6.39	4,242.30	4,242.30	4,239.05	4,238.99	0	0	
I-2737	0	0	0	0	6.51	0	0	65.61	65.61	0.97	6.38	0	0	0	0	12.07	4,238.00	4,238.00	4,238.01	4,238.00	0	0	
I-2739	0	0	0	0	0	0	0	88.89	88.89	0	0	0	0	0	0	71.83	4,225.00	4,225.00	4,225.17	4,225.00	0	0	
I-2740	0	0	0	0	0	0	0	70.41	70.41	0	0	0	0	0	0	71.83	4,235.00	4,235.00	4,234.61	4,234.56	0	0	
I-2741	0	0	0	0	0	0	0	65.18	65.18	0	0	0	0	0	0	35	4,235.00	4,235.00	4,236.06	4,235.00	0	0	
I-2742	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,233.00	4,233.00	4,233.00	4,233.00	0	0	
I-2743	0	0	0	0	0	0	0	76.22	76.22	0	0	0	0	0	0	71.83	4,235.00	4,235.00	4,229.57	4,229.55	0	0	
I-2744	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.00	4,225.00	4,223.00	4,223.00	0	0	
I-2745	13.85	0.35	4.85	0	11.8	25	0	48.72	48.72	1.24	14.78	0	0	0	0	14.78	4,235.00	4,235.00	4,234.36	4,234.35	1.9	9.27	
I-2746	19.7	0.35	6.89	0	18.69	25	0	50.77	50.77	1.2	22.63	0	0	0	0	22.63	4,235.00	4,235.00	4,233.87	4,233.85	1.9	13.18	
I-2747	0	0	0	0	4.88	0	0	65	65	0.98	4.8	0	0	0	0	8.03	4,249.88	4,249.88	4,244.62	4,244.62	0	0	
I-2748	3.3	0.85	2.8	0	2.8	20	0	0	20	2.16	6.12	0	0	0	0	6.12	4,310.00	4,310.00	4,306.44	4,306.44	2.16	6.12	
I-2749	3.3	0.85	2.8	0	2.8	25	0	0	25	1.9	5.36	0	0	0	0	5.36	0	0	0	0	1.9	5.36	
I-2750	3.33	0.85	2.83	0	2.83	20	0	0	20	2.16	6.17	0	0	0	0	6.17	0	0	0	0	2.16	6.17	
I-2751	3.33	0.85	2.83	0	2.83	25	0	0	25	1.9	5.41	0	0	0	0	5.41	0	0	0	0	1.9	5.41	
I-2752	0	0	0	0	2.43	0	0	64.08	64.08	0.98	2.4	0	0	0	0	3.92	4,231.90	4,231.90	4,226.64	4,226.63	0	0	
I-2755	0	0	0	0	0	0	0	0	0	0	0	0	0	0.76	0	0.76	0	0	0	0	0	0	
I-2756	0	0	0	0	0	60	0	0	60	0	0	0	0	9.48	0	9.48	0	0	0	0	0	0	
I-2757	3.33	0.85	2.83	0	2.83	20	0	0	20	2.16	6.17	0	0	0	0	6.17	0	0	0	0	2.16	6.17	
I-2758	16.67	0.35	5.83	0	5.83	35	0	0	35	1.53	8.98	0	0	0	0	8.98	0	0	0	0	1.53	8.98	
I-2759	0	0	0	0	18.23	0	0	61.26	61.26	1	18.41	0	0	0	0	27.89	4,275.00	4,275.00	4,275.20	4,275.00	0	0	
I-2760	25.21	0.35	8.82	0	8.82	45	0	0	45	1.32	11.74	0	0	0	0	11.74	4,300.00	4,300.00	4,295.27	4,295.27	1.32	11.74	
I-2761	31.61	0.35	11.06	0	19.89	35	0	48.52	48.52	1.25	25	0	0	0	0	25	4,295.00	4,295.00	4,290.14	4,289.70	1.53	17.03	
I-2762	0	0	0	0	62.19	0	0	52.26	52.26	1.17	73.33	0	0	0	0	73.33	4,284.00	4,284.00	4,280.06	4,278.70	0	0	
I-2763	26.88	0.35	9.41	0	30.15	45	0	49.58	49.58	1.23	37.24	0	0	0	0	37.24	4,296.00	4,296.00	4,289.62	4,289.57	1.32	12.52	
I-2764	34.71	0.35	12.15	0	42.3	35	0	50.66	50.66	1.2	51.29	0	0	0	0	51.29	4,290.00	4,290.00	4,288.42	4,288.33	1.53	18.7	
I-2765	0	0	0	0	62.19	0	0	51.95	51.95	1.18	73.74	0	0	0	0	73.74	7,482.00	7,482.00	4,282.67	4,282.39	0	0	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2768	0	0	0	0	1.61	0	0	51.07	51.07	1.19	1.94	0	0	0	0	1.94	4,290.05	4,290.05	4,285.56	4,285.55	0	0	
I-2767	0	0	0	0	62.19	0	0	52.5	52.5	1.18	73.02	0	0	0	0	73.02	4,280.00	4,280.00	4,276.25	4,276.23	0	0	
I-2768	37.67	0.35	13.18	0	13.18	45	0	0	45	1.32	17.54	0	0	0	0	17.54	4,307.00	4,307.00	4,304.51	4,304.51	1.32	17.54	
I-2769	21.6	0.35	7.56	0	20.74	35	0	45.91	45.91	1.3	27.21	0	0	0	0	27.21	4,305.00	4,305.00	4,302.25	4,301.78	1.53	11.63	
I-2770	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,228.00	4,228.00	4,224.00	4,224.00	0	0	
I-2771	0	0	0	0	0	45	0	0	45	0	0	0	0	36.83	0	36.83	4,228.00	4,228.00	4,228.00	4,228.00	0	0	
I-2772	0	0	0	0	0	45	0	0	45	0	0	0	0	21.23	0	21.23	4,229.00	4,229.00	4,228.25	4,228.25	0	0	
I-2773	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,255.00	4,255.00	4,253.81	4,253.81	0	0	
I-2774	0	0	0	0	5.42	0	0	37.78	37.78	1.47	8.02	0	0	0	0	8.02	4,255.00	4,255.00	4,253.81	4,253.76	0	0	
I-2775	25.79	0.35	9.03	0	9.03	25	0	0	25	1.9	17.26	0	0	0	0	17.26	4,230.00	4,230.00	4,229.68	4,229.68	1.9	17.26	
I-2776	0	0	0	0	54.41	0	0	95.41	95.41	0.77	42.12	0	0	0	0	78.19	4,223.74	4,223.74	4,221.39	4,221.34	0	0	
I-2913	0	0.85	0	0	0	25.16	0	0	25.16	0	0	0	0	0	0	0	4,237.93	4,237.93	4,234.92	4,234.92	0	0	
I-2914	0	0.85	0	0	0	25.16	0	0	25.16	0	0	0	0	0	0	0	4,237.76	4,237.76	4,234.92	4,234.92	0	0	
I-2923	5.08	0.35	1.78	0	3.39	20	0	22.39	22.39	2.04	6.95	0	0	0	0	6.95	4,241.17	4,241.17	4,237.42	4,237.25	2.16	3.68	
I-2924	0	0	0	0	3.2	0	0	21.97	21.97	2.06	6.64	0	0	0	0	6.64	4,234.40	4,234.40	4,230.23	4,230.20	0	0	
I-2926	9.22	0.35	3.23	0	9.97	28.28	0	63.42	63.42	0.99	9.92	0	0	0	0	12.45	4,231.99	4,231.99	4,226.91	4,226.89	1.72	5.6	
I-2927	0	0	0	0	0	0	0	20	20	0	0	0	0	0	0	0	4,234.90	4,234.90	4,232.90	4,232.90	0	0	
I-2928	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,234.91	4,234.91	4,232.90	4,232.90	0	0	
I-2930	4.6	0.35	1.61	0	1.61	20	0	0	20	2.16	3.51	0	0	0	0	3.51	4,241.23	4,241.23	4,237.56	4,237.56	2.16	3.51	
I-2936	5.17	0.35	1.81	0	1.81	20	0	25.16	25.16	1.69	3.44	0	0	0	0	3.44	4,237.84	4,237.84	4,234.92	4,234.92	2.16	3.95	
I-2939	0	0	0	0	0	0	0	0	0	0	0	0	0	6.88	0	6.88	4,238.00	4,238.00	4,235.06	4,235.06	0	0	
I-2940	0	0	0	0	8.2	0	0	36.46	36.46	1.5	12.36	0	0	0	0	18.98	4,238.44	4,238.44	4,235.39	4,235.33	0	0	
I-2941	0	0	0	0	1.22	0	0	98.48	98.48	0.75	0.92	0	0	0	0	0.92	4,257.98	4,257.98	4,253.41	4,253.36	0	0	
I-2942	13.78	0.35	4.82	0	36.25	20	0	57.15	57.15	1.07	39.06	0	0	0	0	52.1	4,298.05	4,298.05	4,295.65	4,295.40	2.16	10.52	
I-2944	0.19	0.85	0.16	0	1.78	20	0	54.03	54.03	1.13	2.03	0	0	0	0	2.79	4,282.12	4,282.12	4,277.84	4,277.83	2.16	0.35	
I-2951	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,234.74	4,234.74	4,232.90	4,232.90	0	0	
I-2956	0	0	0	0	2.49	0	0	47.29	47.29	1.27	3.19	0	0	0	0	3.19	4,237.96	4,237.96	4,234.31	4,234.31	0	0	
I-2957	0.4	0.85	0.34	0	0.34	47	0	0	47	1.28	0.44	0	0	0	0	0.44	4,237.96	4,237.96	4,234.32	4,234.32	1.28	0.44	
I-2958	0	0	0	0	3.2	0	0	23.03	23.03	2	6.45	0	0	0	0	6.45	4,234.96	4,234.96	4,229.86	4,229.74	0	0	
I-2966	0	0	0	0	15.15	0	0	76.6	76.6	0.9	13.69	0	0	0	0	23.8	4,236.08	4,236.08	4,232.90	4,232.90	0	0	
I-2968	26.83	0.35	9.39	0	4.04	38.7	0	62.7	62.7	0.99	4.04	0	0	0	0	6.58	4,231.92	4,231.92	4,226.96	4,226.95	1.45	13.73	
I-2970	0.4	0.85	0.34	0	0.34	20	0	0	20	2.16	0.74	0	0	0	0	0.74	4,237.96	4,237.96	4,234.32	4,234.32	2.16	0.74	
I-2973	16.26	0.35	5.69	0	5.69	37	0	0	37	1.49	8.52	0	0	0	0	8.52	4,275.29	4,275.29	4,271.37	4,271.37	1.49	8.52	
I-2975	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,237.52	4,237.52	4,234.86	4,234.86	0	0	
I-2976	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,237.45	4,237.45	4,234.86	4,234.86	0	0	
I-2977	62.39	0.35	21.84	0	21.84	39.31	0	51.27	51.27	1.19	26.2	0	0	0	0	26.2	4,254.04	4,254.04	4,248.07	4,247.94	1.44	31.64	
I-2982	0	0	0	0	3.32	0	0	48.95	48.95	1.24	4.15	0	0	0	0	8.15	4,237.94	4,237.94	4,233.45	4,233.44	0	0	
I-3065	0	0	0	0	6.94	0	0	29.6	29.6	1.65	11.55	0	0	0	0	11.55	4,228.96	4,228.96	4,228.98	4,228.95	0	0	
I-3068	0	0	0	0	9.04	0	0	28.3	28.3	1.72	15.69	0	0	0	0	15.69	4,232.72	4,232.72	4,230.10	4,229.98	0	0	
I-3070	12.25	0	0	0	3.42	22.46	0	39.94	39.94	1.42	4.9	0	0	0	0	7.17	4,264.02	4,264.02	4,257.45	4,257.44	0	0	
I-3071	14.58	0.35	5.1	0	30.06	28.09	0	63.25	63.25	0.99	29.93	0	0	0	0	40.92	4,222.67	4,222.67	4,220.11	4,220.10	1.73	8.91	
I-3072	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,222.74	4,222.74	4,220.16	4,220.16	0	0	
I-3076	29.1	0.35	10.19	0	33.73	36.72	0	87.01	87.01	0.83	28.06	0	0	0	0	120.79	4,275.16	4,275.16	4,274.95	4,274.94	1.62	16.58	
I-3081	4	0.85	3.4	0	14.8	25	0	47.56	47.56	1.27	18.9	0	0	0	0	18.9	4,237.41	4,237.41	4,237.48	4,237.41	1.9	6.5	
I-3083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.10	4,225.10	4,220.16	4,220.16	0	0	
I-3089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.44	4,225.44	4,220.44	4,220.44	0	0	
I-3091	0	0	0	0	6.37	1	0	42.47	42.47	1.37	8.81	0	0	0	0	9.91	4,309.95	4,309.95	4,306.19	4,306.11	0	0	
I-3096	21.07	0.3	6.32	0	6.32	35	0	0	35	1.53	9.73	0	0	0	0	9.73	4,244.88	4,244.88	4,244.57	4,244.57	1.53	9.73	
I-3098	28.59	0.28	8.29	0	16.65	75	0	44.48	75	0.91	15.23	0	0	0	0	23.96	4,256.97	4,256.97	4,256.08	4,255.88	0.91	7.58	
I-3099	0	0	0	0	20	0	0	77.04	77.04	0.89	18.01	0	0	0	0	26.74	4,250.55	4,250.55	4,245.29	4,244.85	0	0	
I-3101	0	0	0	0	0	0	0	45.51	45.51	0	0	0	0	0	0	10.02	4,229.99	4,229.99	4,230.16	4,229.99	0	0	
I-3102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.36	4,224.36	4,220.88	4,220.88	0	0	
I-3104	0	0	0	0	0	0	0	16.2	16.2	0	0	0	0	0	0	3.1	4,239.86	4,239.86	4,236.46	4,236.45	0	0	
I-3107	0	0	0	0	3.94	0	0	69.9	69.9	0.94	3.75	0	0	0	0	13.55	4,269.14	4,269.14	4,265.51	4,265.47	0	0	
I-3110	0	0	0	0	2.85	0	0	33.27	33.27	1.55	4.48	0	0	0	0	11.42	4,280.13	4,280.13	4,276.09	4,275.96	0	0	
I-3111	0	0	0	0	2.85	0	0	32.83	32.83	1.57	4.51	0	0	0	0	11.45	4,281.00	4,281.00	4,277.34	4,277.21	0	0	
I-3114	0.37	0.85	0.31	0	3.56	21.26	0	42.32	42.32	1.38	4.94	0	0	0	0	6.04	4,311.96	4,311.96	4,307.90	4,307.83	2.1	0.66	
I-3115	0	0	0	0	0	40	0	0	40	0	0	0	0	1.1	0	1.1	4,311.88	4,311.88	4,307.92	4,307.92	0	0	
I-3116	0.09	0.85	0.08	0	0.3	20	0	71.74	71.74	0.93	0.28	0	0	0	0	9.28	4,273.33	4,273.33	4,269.51	4,269.51	2.16	0.17	
I-3119	0	0	0	0	77.77	0	0	69.83	69.83	0.94	73.91	0	0	0	0	86.95	4,277.71	4,277.71	4,276.26	4,276.26	0	0	
I-3121	0	0	0	0	14.8	0	0	47.81	47.81	1.26	18.82	0	0	0	0	18.82	4,237.54	4,237.54	4,238.30	4,237.54	0	0	
I-3122	0	0	0	0	0	0	0	3.8	3.8	0	0	0	0	0	0	16.77	4,307.97	4,307.97	4,307.34	4,307.30	0	0	
I-3131	0	0	0	0	0	0	0	15.56	15.56	0	0	0	0	0	0	3.1	4,239.94	4,239.94	4,236.50	4,236.49	0	0	
I-3134	34.58	0.35	12.1	0	0	30.33	0	51.27	51.27	0	0	0	0	0	0	0	4,266.42	4,266.42	4,258.42	4,258.42	1.82	19.8	
I-3135	34	0.2	6.8	0	3.4	45	0	20.05	45	1.32	4.52	0	0	0	0	12.02	4,281.96	4,281.96	4,278.49	4,278.21	1.32	9.05	
I-3143	0	0	0	0	24.02	0	0	52.34	52.34	1.17	28.29	0	0	0	0	28.29	4,242.77	4,242.77	4,240.11	4,239.61	0	0	
I-3144	10.94	0.2	2.19	0	24.02	21.91	0	52.09	52.09	1.17	28.42	0	0	0	0	28.42	4,245.72	4,245.72	4,242.41	4,242.30	2.06	4.55	
I-3145	0.5	0.85	0.43	0	0.43	23	0	50.19	50.19	1.21	0.52	0	0	0	0	7.34	4,310.26	4,310.26	4,308.61	4,308.48	2	0.86	
I-3147	0	0	0	0	0	0	0	11.63	11.63	0	0	0	0	0	0	3.1	4,237.93	4,237.93	4,236.67	4,236.84	0	0	
I-3153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,261.17	4,261.17	4,256.42	4,256.42	0	0	
I-3154	0	0	0	0	23.54	0	0	85.72	85.72	0.83	19.8	0	0	0	0	112.53	4,279.12	4,279.12	4,279.17	4,279.12	0	0	
I-3158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.78	4,224.78	4,220.16	4,220.16	0	0	
I-3159	0	0	0	0	0	30	0	0	30	0	0	0	0	5	0	5	4,267.50	4,267.50	4,263.29	4,263.29	0	0	
I-3162	0	0	0	0	5.83	0	0	43.66	43.66	1.35	7.92	0	0	0	0	7.92	4,230.07	4,230.07	4,227.04	4,227.00	0	0	
I-3163	0	0	0	0	5.83	0	0	43.13	43.13	1.36	7.98	0	0	0	0	7.98	4,230.38	4,230.38	4,227.39	4,227.38	0	0	
I-3166	0	0	0	0	24.15	0	0	43.36	43.36	1.35	32.96	0	0	0	0	32.96	4,232.00	4,232.00	4,231.73	4,231.15	0	0	
I-3167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.51	4,223.51	4,220.16	4,220.16	0	0	
I-3168	0	0	0	0	6.37	1	0	43.39	43.39	1.35	8.68	0	0	0	0	9.78	4,306.60	4,306.60	4,305.25	4,305.24	0	0	
I-3169	33.16	0.31	10.28	0	14.22	45	0	71.56	71.56	0.93	13.35	0	0	0	0	23.15	4,263.98	4,263.98	4,261.53	4,261.46	1.32	13.68	
I-3170	0	0	0	0	0	0	0	0	0	0	0	0	0	8.5	0	8.5	4,243.53	4,243.53	4,239.66	4,239.66	0	0	
I-3173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.91	4,223.91	4,220.88	4,220.88	0	0	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-3177	0	0	0	0	0	1	0	50.02	50.02	0	0	0	0	0	0	6.82	4,311.80	4,311.80	4,309.67	4,308.64	0	0	
I-3182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.11	4,227.11	4,222.11	4,222.11	0	0	
I-3184	51.19	0	0	0	5.83	35.7	0	22.32	35.7	1.51	8.88	0	0	0	0	8.88	4,233.00	4,233.00	4,228.55	4,228.54	0	0	
I-3187	0	0	0	0	11.7	0	0	34.24	34.24	1.54	18.19	0	0	0	0	18.19	4,255.94	4,255.94	4,252.62	4,252.56	0	0	
I-3191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.74	4,223.74	4,220.16	4,220.16	0	0	
I-3193	0	0	0	0	15.24	0	0	57.71	57.71	1.06	16.24	0	0	0	0	16.24	4,286.00	4,286.00	4,282.43	4,282.41	0	0	
I-3194	0	0	0	0	0	0	0	32.3	32.3	0	0	0	0	0	0	5	4,264.65	4,264.65	4,260.56	4,260.44	0	0	
I-3200	16.24	0.35	6.38	0	24.96	25.98	0	60.8	60.8	1	25.27	0	0	0	0	38.26	4,222.95	4,222.95	4,220.68	4,220.68	1.84	11.67	
I-3201	0	0	0	0	0	1	0	49.19	49.19	0	0	0	0	0	0	6.82	4,313.79	4,313.79	4,309.73	4,309.72	0	0	
I-3203	0	0	0	0	21.18	34.31	0	65.37	65.37	0.97	20.78	0	0	0	0	24.03	4,266.19	4,266.19	4,266.18	4,266.08	0	0	
I-3206	3.57	0.35	1.25	0	1.25	31.23	0	52.82	52.82	1.16	1.46	0	0	0	0	11.6	4,236.31	4,236.31	4,232.92	4,232.87	1.6	2.02	
I-3207	0	0	0	0	0	0	0	34.13	34.13	0	0	0	0	0	0	5	4,260.67	4,260.67	4,256.42	4,256.41	0	0	
I-3211	0	0	0	0	0	0	0	0.08	0.08	0	0	0	0	0	0	45	4,242.26	4,242.26	4,240.34	4,240.10	0	0	
I-3217	3.82	0.85	3.25	0	3.25	39.13	0	0	39.13	1.44	4.72	0	0	0	0	4.72	4,325.88	4,325.88	4,321.64	4,321.64	1.44	4.72	
I-3219	44.16	0	0	0	0	45	0	0	45	0	0	0	0	6.82	0	6.82	4,327.94	4,327.94	4,323.67	4,323.67	0	0	
I-3220	19.84	0.3	5.95	0	26.74	32.56	0	62.15	62.15	1	26.83	0	0	0	0	36.31	4,271.38	4,271.38	4,268.45	4,268.43	1.58	9.46	
I-3224	0	0	0	0	6.37	1	0	45.62	45.62	1.31	8.39	0	0	0	0	9.49	4,307.51	4,307.51	4,304.40	4,304.40	0	0	
I-3390	10.14	0.15	1.52	0	22.7	27.03	0	69.75	69.75	0.94	21.59	0	0	0	0	24.84	4,249.67	4,249.67	4,244.49	4,244.43	1.79	2.74	
I-3391	4	0.8	3.2	0	9.99	24.32	0	53.98	53.98	1.13	11.43	0	0	0	0	19.35	4,306.01	4,306.01	4,303.84	4,303.48	1.93	6.23	
I-3392	0	0	0	0	6.37	1	0	45.94	45.94	1.3	8.35	0	0	0	0	9.45	4,305.95	4,305.95	4,304.30	4,304.22	0	0	
I-3395	25.62	0.35	8.97	0	18.96	25.43	0	54	54	1.13	21.67	0	0	0	0	34.71	4,306.01	4,306.01	4,302.53	4,302.88	1.87	18.94	
I-3413	0	0	0	0	0	0	0	50.67	50.67	0	0	0	0	0	0	10.14	4,237.66	4,237.66	4,234.10	4,234.01	0	0	
I-3416	0	0	0	0	2.63	0	0	23.96	23.96	1.95	5.17	0	0	0	0	5.17	4,255.67	4,255.67	4,251.51	4,251.42	0	0	
I-3417	0	0	0	0	14.33	0	0	35.78	35.78	1.51	21.81	0	0	0	0	21.81	4,254.03	4,254.03	4,251.06	4,251.03	0	0	
I-3419	0	0	0	0	0	0	0	17.8	17.8	0	0	0	0	0	0	3.1	4,239.97	4,239.97	4,236.42	4,236.42	0	0	
I-3428	0	0.35	0	0	24.15	20	0	41.47	41.47	1.39	33.91	0	0	0	0	33.91	4,232.75	4,232.75	4,233.06	4,232.75	0	0	
I-3433	0	0	0	0	0	0	0	51.67	51.67	0	0	0	0	0	0	10.14	4,237.16	4,237.16	4,233.49	4,233.36	0	0	
I-3435	0	0	0	0	3.33	0	0	54.33	54.33	1.13	3.79	0	0	0	0	13.93	4,235.59	4,235.59	4,232.07	4,231.85	0	0	
I-3445	0	0	0	0	0	41	0	0	41	0	0	0	0	0	0	0	4,233.93	4,233.93	4,231.74	4,231.74	0	0	
I-3446	0	0	0	0	0	0	0	41	41	0	0	0	0	0	0	0	4,234.00	4,234.00	4,231.74	4,231.74	0	0	
I-3447	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,226.93	4,226.93	4,224.01	4,224.01	0	0	
I-3448	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.18	4,227.18	4,224.01	4,224.01	0	0	
I-3451	0	0	0	0	17.26	0	0	76.71	76.71	0.9	15.58	0	0	0	0	25.6	4,229.48	4,229.48	4,229.53	4,229.48	0	0	
I-3457	0	0	0	0	6.78	0	0	62.13	62.13	1	6.8	0	0	0	0	16.94	4,231.96	4,231.96	4,227.30	4,227.28	0	0	
I-3459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,311.28	4,311.28	4,309.35	4,309.35	0	0	
I-3461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.96	4,229.96	4,224.96	4,224.96	0	0	
I-3462	14.89	0.35	5.21	0	3.8	38.65	0	67.55	67.55	0.98	3.67	0	0	0	0	4.3	4,230.11	4,230.11	4,225.49	4,225.49	1.45	7.62	
I-3468	0	0	0	0	14.65	0	0	75.64	75.64	0.9	13.33	0	0	0	0	23.03	4,249.88	4,249.88	4,240.72	4,240.71	0	0	
I-3469	0	0	0	0	0	0	0	34.99	34.99	0	0	0	0	0	0	5	4,259.35	4,259.35	4,255.18	4,255.09	0	0	
I-3471	0	0	0	0	3.6	0	0	55.04	55.04	1.11	4.03	0	0	0	0	14.17	4,234.34	4,234.34	4,230.91	4,230.91	0	0	
I-3472	0	0	0	0	3.33	0	0	54.74	54.74	1.12	3.76	0	0	0	0	13.9	4,234.88	4,234.88	4,231.23	4,231.13	0	0	
I-3473	40.87	0.35	14.3	0	14.3	40	0	30	40	1.42	20.52	0	0	0	0	20.52	4,233.80	4,233.80	4,230.88	4,230.71	1.42	20.52	
I-3475	0	0	0	0	0	0	0	51.21	51.21	0	0	0	0	0	0	10.14	4,237.56	4,237.56	4,233.82	4,233.70	0	0	
I-3482	0	0	0	0	2.79	0	0	63.44	63.44	0.99	2.76	0	0	0	0	18.18	4,331.54	4,331.54	4,328.08	4,328.06	0	0	
I-3487	0	0	0	0	0	0	0	37.6	37.6	0	0	0	0	0	0	5	4,255.14	4,255.14	4,250.92	4,250.88	0	0	
I-3488	0	0	0	0	9.04	0	0	32.44	32.44	1.58	14.4	0	0	0	0	14.4	4,229.98	4,229.98	4,227.05	4,227.04	0	0	
I-3491	26.74	0.25	6.68	0	6.68	66.64	0	0	66.64	0.96	6.5	0	0	0	0	6.5	4,228.25	4,228.25	4,225.56	4,225.56	0.96	6.5	
I-3493	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.51	4,227.51	4,224.01	4,224.01	0	0	
I-3495	42.76	0	0	0	6.37	31.09	0	70.17	70.17	0.94	6.04	0	0	0	0	16.15	4,237.99	4,237.99	4,235.02	4,235.01	0	0	
I-3499	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,249.63	4,249.63	4,248.58	4,248.58	0	0	
I-3500	0	0	0	0	10.13	0	0	65.44	65.44	0.97	9.94	0	0	0	0	25.34	4,328.82	4,328.82	4,325.47	4,325.44	0	0	
I-3503	2.74	0.28	0.77	0	5.81	37.46	0	36.08	37.46	1.48	8.64	0	0	0	0	12.3	4,294.01	4,294.01	4,290.15	4,290.12	1.48	1.14	
I-3504	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.80	4,227.80	4,224.01	4,224.01	0	0	
I-3505	0	0.35	0	0	0	0	0	45.38	45.38	0	0	0	0	0	0	10.63	4,294.06	4,294.06	4,293.27	4,293.10	0	0	
I-3508	0	0	0	0	11.7	0	0	34.83	34.83	1.53	18.05	0	0	0	0	18.05	4,255.27	4,255.27	4,251.83	4,251.86	0	0	
I-3510	0	0	0	0	8.2	0	0	35.26	35.26	1.52	12.57	0	0	0	0	19.17	4,240.02	4,240.02	4,236.11	4,236.02	0	0	
I-3515	0.28	0.95	0.26	0	0.26	20	0	0	20	2.16	0.58	0	0	0	0	0.58	4,234.30	4,234.30	4,230.91	4,230.91	2.16	0.58	
I-3518	27.91	0.15	4.19	0	4.19	45	0	0	45	1.32	5.57	0	0	0	0	5.57	4,222.14	4,222.14	4,220.53	4,220.53	1.32	5.57	
I-3519	0	0	0	0	23.54	0	0	75.07	75.07	0.91	21.53	0	0	0	0	67.75	4,282.01	4,282.01	4,282.04	4,282.01	0	0	
I-3523	0	0	0	0	29.15	0	0	66.37	66.37	0.97	28.4	0	0	0	0	28.4	4,280.72	4,280.72	4,280.54	4,280.41	0	0	
I-3638	0	0	0	0	0	0	0	0.32	0.32	0	0	0	0	16.77	0	16.77	4,323.37	4,323.37	4,320.18	4,319.85	0	0	
I-3639	4	0.8	3.2	0	28.31	34	0	93.73	93.73	0.78	22.25	0	0	0	0	36.36	4,226.04	4,226.04	4,222.56	4,222.55	1.55	4.99	
I-3642	7.98	0.35	2.79	0	20.71	24.76	0	71.53	71.53	0.93	19.44	0	0	0	0	58.66	4,305.74	4,305.74	4,305.00	4,304.95	1.91	5.38	
I-3644	0	0	0	0	29.15	1	0	66.64	66.64	0.96	28.35	0	0	0	0	28.35	4,280.75	4,280.75	4,280.16	4,280.01	0	0	
I-3646	0	0	0	0	8.2	0	0	35.62	35.62	1.51	12.51	0	0	0	0	19.11	4,239.99	4,239.99	4,235.83	4,235.74	0	0	
I-3647	0	0	0	0	1.68	0	0	72.43	72.43	0.93	1.57	0	0	0	0	16.57	4,260.86	4,260.86	4,257.17	4,257.16	0	0	
I-3650	0	0	0	0	25.11	0	0	88.2	88.2	0.82	20.69	0	0	0	0	34.8	4,226.97	4,226.97	4,227.00	4,226.97	0	0	
I-3653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,276.35	4,276.35	4,274.95	4,274.95	0	0	
I-3656	0	0	0	0	10.48	0	0	71.06	71.06	0.93	9.87	0	0	0	0	19.99	4,237.99	4,237.99	4,234.81	4,234.80	0	0	
I-3657	0	0	0	0	6.37	0	0	70.67	70.67	0.94	6.02	0	0	0	0	16.13	4,237.99	4,237.99	4,234.91	4,234.90	0	0	
I-3659	0	0	0	0	15.15	0	0	75.15	75.15	0.91	13.84	0	0	0	0	23.95	4,236.02	4,236.02	4,233.41	4,233.40	0	0	
I-3660	0	0	0	0	15.15	0	0	74.6	74.6	0.91	13.9	0	0	0	0	24.01	4,236.06	4,236.06	4,233.62	4,233.61	0	0	
I-3661	0	0	0	0	15.15	0	0	78.42	78.42	0.88	13.5	0	0	0	0	23.61	4,234.00	4,234.00	4,232.35	4,232.35	0	0	
I-3662	0	0	0	0	15.15	0	0	77.36	77.36	0.89	13.61	0	0	0	0	23.72	4,234.95	4,234.95	4,232.67	4,232.66	0	0	
I-3663	25.36	0.35	8.88	0	18.58	29.76	0	55.57	55.57	1.1	20.63	0	0	0	0	31.61	4,227.18	4,227.18	4,224.01	4,224.01	1.64	14.7	
I-3664	5.3	0.3	1.59	0	11.72	22.49	0	65.7	65.7	0.97	11.46	0	0	0	0	26.88	4,328.01	4,328.01	4,325.01	4,324.69	2.03	3.25	
I-3672	0	0	0	0	13.22	0	0	77.61	77.61	0.89	11.86	0	0	0	0	17.19	4,229.93	4,229.93	4,224.26	4,224.21	0	0	
I-3673	0	0	0	0	14.65	0	0	90.7	90.7	0.8	11.81	0	0	0	0	40.13	4,229.98	4,229.98	4,226.70	4,226.34	0	0	
I-3675	7.46	0.35	2.61	0	28.51	20	0	75.92	75.92	0.9	25.9	0	0	0	0	80.03	4,286.94	4,286.94	4,284.90	4,284.65	2.16	5.69	
I-3678	0	0	0	0	15.15	0	0	74.32	74.32	0.91	13.93	0	0	0	0	24.04	4,237.06	4,237.06	4,233.74	4,233.73	0	0	
I-3679	0	0	0	0	15.15	0	0	79.83	79.83	0.87	13.35	0	0	0	0	23.46	4,234.00	4,234.00	4,231.97	4,231.96	0	0	

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-3680	0	0	0	0	17.82	0	0	76.83	76.83	0.89	16.07	0	0	14.5	0	30.57	4,235.23	4,235.23	4,232.40	4,232.39	0	0	
I-3682	0	0	0	0	15.15	0	0	76.75	76.75	0.9	13.67	0	0	0	0	23.79	4,235.87	4,235.87	4,232.96	4,232.85	0	0	
I-3685	10.74	0.3	3.22	0	6.02	24.63	0	64.42	64.42	0.98	5.94	0	0	0	0	21.34	4,330.70	4,330.70	4,327.21	4,327.18	1.92	6.22	
I-3686	7.25	0.3	2.17	0	13.9	26.36	0	65.94	65.94	0.97	13.58	0	0	0	0	52.8	4,329.75	4,329.75	4,324.71	4,324.49	1.86	4.12	
I-3689	0	0	0	0	0	0	0	0.18	0.18	0	0	0	0	15.17	0	15.17	4,323.89	4,323.89	4,320.59	4,320.29	0	0	
I-3691	76.43	0.35	26.75	0	80.24	45	0	66.43	66.43	0.97	78.14	0	0	0	0	87.62	4,259.95	4,259.95	4,257.98	4,257.76	1.32	35.59	
I-3693	0	0	0	0	29.15	1	0	66.76	66.76	0.96	28.32	0	0	0	0	28.32	4,280.54	4,280.54	4,279.96	4,279.82	0	0	
I-3694	0	0	0	0	14.65	0	0	90.47	90.47	0.8	11.84	0	0	0	0	40.15	4,230.35	4,230.35	4,227.17	4,226.98	0	0	
I-3696	0	0	0	0	12.42	0	0	73.86	73.86	0.92	11.46	0	0	0	0	21.57	4,237.96	4,237.96	4,233.91	4,233.90	0	0	
I-3699	0	0	0	0	15.15	0	0	76.42	76.42	0.9	13.71	0	0	0	0	23.62	4,236.00	4,236.00	4,232.98	4,232.97	0	0	
I-3703	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	4,325.35	4,325.35	4,321.57	4,321.57	0	0	
I-3707	0	0	0	0	13.22	0	0	76.37	76.37	0.9	11.97	0	0	0	0	17.3	4,230.00	4,230.00	4,224.47	4,224.46	0	0	
I-3708	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7	0	4.7	4,230.20	4,230.20	4,225.68	4,225.68	0	0	
I-3788	1.8	0.85	1.53	0	1.53	31.44	0	0	31.44	1.6	2.47	0	0	0	0	2.47	4,290.55	4,290.55	4,286.18	4,286.18	1.6	2.47	
I-3792	0	0	0	0	28.31	0	0	95.54	95.54	0.77	21.89	0	0	13	0	34.89	4,223.08	4,223.08	4,221.45	4,221.44	0	0	
I-3794	0	0	0	0	23.54	0	0	86.39	86.39	0.83	19.69	0	0	0	0	112.42	4,277.31	4,277.31	4,277.09	4,277.05	0	0	
I-3795	0	0	0	0	18.58	0	0	58.36	58.36	1.04	19.55	0	0	0	0	30.53	4,223.68	4,223.68	4,221.57	4,221.43	0	0	
I-3797	0	0	0	0	23.54	0	0	85.21	85.21	0.84	19.88	0	0	0	0	109.59	4,280.14	4,280.14	4,280.21	4,280.14	0	0	
I-3815	22.46	0.35	7.86	0	7.86	65	0	0	65	0.98	7.73	0	0	0	0	7.73	4,267.40	4,267.40	4,267.40	4,267.40	0.98	7.73	
I-3816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,283.66	4,283.66	4,278.66	4,278.66	0	0	
I-3818	0	0	0	0	37.99	0	0	66.03	66.03	0.97	37.1	0	0	0	0	48.08	4,220.41	4,220.41	4,217.91	4,217.74	0	0	
I-3821	0	0	0	0	28.51	0	0	76.08	76.08	0.9	25.87	0	0	0	0	80	4,285.50	4,285.50	4,283.43	4,283.21	0	0	
I-3822	0	0	0	0	23.54	0	0	85.44	85.44	0.84	19.84	0	0	0	0	112.57	4,279.97	4,279.97	4,279.99	4,279.97	0	0	
I-3823	0	0	0	0	44.33	0	0	89.67	89.67	0.81	36.07	0	0	0	0	128.8	4,265.16	4,265.16	4,265.60	4,264.70	0	0	
I-3828	0	0	0	0	28.51	0	0	76.74	76.74	0.9	25.74	0	0	0	0	79.87	4,281.96	4,281.96	4,280.23	4,279.67	0	0	
I-3830	0	0	0	0	46.46	0	0	89.83	89.83	0.81	37.77	0	0	0	0	130.5	4,264.57	4,264.57	4,263.62	4,262.99	0	0	
I-3838	0	0	0	0	3.32	0	0	47.92	47.92	1.26	4.22	0	0	0	0	8.22	4,238.00	4,238.00	4,234.22	4,234.20	0	0	
I-3839	0	0	0	0	3.32	0	0	55.59	55.59	1.1	3.69	0	0	0	0	7.69	4,232.02	4,232.02	4,230.51	4,230.50	0	0	
I-3842	11.74	0	0	0	3.96	26.02	0	45.91	45.91	1.3	5.19	0	0	0	0	5.19	4,237.86	4,237.86	4,237.88	4,237.86	0	0	
I-3844	0	0	0	0	3.96	0	0	46.12	46.12	1.3	5.17	0	0	0	0	5.17	4,237.88	4,237.88	4,237.98	4,237.88	0	0	
I-3850	0	0	0	0	2.86	0	0	20.53	20.53	2.14	6.16	0	0	0	0	6.16	4,238.15	4,238.15	4,238.30	4,238.15	0	0	
I-3851	3.76	0.35	1.32	0	2.86	15.99	0	18.9	18.9	2.22	6.41	0	0	0	0	6.41	4,239.16	4,239.16	4,239.28	4,239.16	2.38	3.17	
I-3854	6.93	0.35	2.43	0	9.24	22.46	0	46.78	46.78	1.28	11.96	0	0	0	0	11.96	4,237.94	4,237.94	4,238.20	4,237.94	2.03	4.97	
I-3855	0	0	0	0	1.54	0	0	15.84	15.84	2.39	3.7	0	0	0	0	3.7	4,240.15	4,240.15	4,239.66	4,239.64	0	0	
I-3862	0	0	0	0	5.37	0	0	78.64	78.64	0.88	4.78	0	0	0	0	4.78	4,231.89	4,231.89	4,229.90	4,229.90	0	0	
I-3864	4.4	0.35	1.54	0	1.54	15.35	0	0	15.35	2.41	3.74	0	0	0	0	3.74	4,240.48	4,240.48	4,239.74	4,239.74	2.41	3.74	
I-3866	11.3	0.35	3.96	0	3.96	45	0	0	45	1.32	5.26	0	0	0	0	5.26	4,237.78	4,237.78	4,237.78	4,237.78	1.32	5.26	
I-3908	0	0	0	0	14.65	0	0	91.63	91.63	0.79	11.72	0	0	0	0	40.04	4,230.00	4,230.00	4,224.40	4,224.37	0	0	
I-3911	15.1	0	0	0	0	24.45	0	0	24.45	0	0	0	0	3.02	0	3.02	4,280.68	4,280.68	4,280.23	4,280.23	0	0	
I-3912	63.04	0	0	0	15.15	42.53	0	80.43	80.43	0.87	13.29	0	0	0	0	23.4	4,234.00	4,234.00	4,231.74	4,231.74	0	0	
I-3913	0	0	0	0	3.32	0	0	56.66	56.66	1.08	3.61	0	0	0	0	7.61	4,232.00	4,232.00	4,230.32	4,230.31	0	0	
I-3914	5.34	0.35	1.87	0	1.87	20	0	20	20	2.16	4.06	0	0	0	0	4.06	4,237.49	4,237.49	4,234.86	4,234.86	2.16	4.06	
I-3915	1.01	0.85	0.86	0	15.15	25	0	74.1	74.1	0.91	13.95	0	0	0	0	24.06	4,237.71	4,237.71	4,233.83	4,233.82	1.9	1.64	
I-3916	0.13	0.85	0.11	0	0.11	20	0	69.37	69.37	0.95	0.11	0	0	0	0	3.11	4,276.03	4,276.03	4,273.45	4,273.22	2.16	0.24	
I-3917	41.21	0.3	12.36	0	77.77	47	0	69.61	69.61	0.94	74.03	0	0	0	0	87.07	4,278.84	4,278.84	4,279.08	4,278.84	1.26	15.93	
I-3918	0	0	0	0	77.77	0	0	69.77	69.77	0.94	73.94	0	0	0	0	86.98	4,277.81	4,277.81	4,279.07	4,277.05	0	0	
J-2					1.11				26.82	1.8	2.01					2.01	4,293.18	4,293.18	4,290.53	4,290.53			
J-3					8.32				32.41	1.58	13.25					13.25	4,277.83	4,277.83	4,277.14	4,277.14			
J-4					8.32				34.52	1.54	12.89					12.89	4,272.00	4,272.00	4,268.44	4,268.44			
J-5					20.74				45.79	1.28	26.83					26.83	4,297.00	4,297.00	4,296.77	4,296.77			
O-3					37.99				66.44	0.97	36.99					47.97	4,220.00	4,220.00	4,215.00	4,215.00			
O-5					8.26				47.35	1.27	10.59					10.59	4,235.02	4,235.02	4,230.02	4,230.02			
O-8					1.89				26.05	1.84	3.5					3.5	4,231.44	4,231.44	4,226.44	4,226.44			
O-9					11.21				23.14	2	22.56					22.56	4,237.95	4,237.95	4,232.56	4,232.56			
O-10					3.2				23.46	1.98	6.38					6.38	4,234.66	4,234.66	4,228.40	4,228.40			
O-11					0.5				21.69	2.07	1.05					1.05	4,234.71	4,234.71	4,228.82	4,228.82			
O-12					10.6				32.2	1.58	16.93					16.93	4,234.75	4,234.75	4,229.75	4,229.75			
O-13					2.37				28.46	1.71	4.1					4.1	4,236.21	4,236.21	4,230.50	4,230.50			
O-14					1.03				24.61	1.92	1.99					1.99	4,237.50	4,237.50	4,230.00	4,230.00			
O-15					4.66				21.77	2.07	9.72					9.72	4,235.99	4,235.99	4,229.70	4,229.70			
O-16					9.24				48.18	1.25	11.69					11.69	4,237.18	4,237.18	4,231.00	4,231.00			
O-17					1.7				21.81	2.07	3.54					3.54	4,232.53	4,232.53	4,227.52	4,227.52			
O-18					2.78				22.69	2.02	5.65					5.65	4,233.56	4,233.56	4,228.56	4,228.56			
O-19					1.35				28.53	1.71	2.32					2.32	4,235.75	4,235.75	4,230.75	4,230.75			
O-20					1.58				25.62	1.86	3.16					3.16	4,235.98	4,235.98	4,230.82	4,230.82			
O-21					1.59				20.54	2.13	3.42					3.42	4,236.87	4,236.87	4,231.87	4,231.87			
O-23					4.43				26.33	1.83	8.16					8.16	4,235.85	4,235.85	4,230.60	4,230.60			
O-24					3.39				22.66	2.01	6.87					6.87	4,240.67	4,240.67	4,235.67	4,235.67			
O-25					1.52				35.29	1.52	2.33					2.33	4,240.28	4,240.28	4,235.28	4,235.28			
O-29					28.31				99.86	0.74	21.05					34.05	4,221.96	4,221.96	4,216.56	4,216.56			
O-35					4.64				34.05	1.55	7.24					7.24	4,241.79	4,241.79	4,236.79	4,236.79			
O-37					11.32				31.86	1.59	18.16					18.16	4,268.81	4,268.81	4,263.81	4,263.81			
O-38					0				1.96	0	0					6.8	4,240.12	4,240.12	4,238.12	4,238.12			
O-39					0				0.27	0	0					10.9	4,242.03	4,242.03	4,237.03	4,237.03			
O-41					14.33				36.02	1.51	21.74					21.74	4,253.96	4,253.96	4,248.96	4,248.96			
O-44					0				5.38	0	0					8.5	4,237.97	4,237.97	4,232.97	4,232.97			
O-48					17.82				84.48	0.84	15.14					29.64	4,228.02	4,228.02	4,223.02	4,223.02			
O-52					3.32				39.75	1.43	4.78					4.78	4,230.14	4,230.14	4,224.85	4,224.85			
O-53					56.73				90.12	0.8	45.99					145.53	4,261.55	4,261.55	4,256.55	4,256.55			
O-56					11.32				47.31	1.27	14.52					14.52	4,241.00	4,241.00	4,236.00	4,236.00			
O-61					9.12				71.88	0.93	8.53					8.53	4,222.79	4,222.79	4,222.79	4,222.79			

Future Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
O-63					44.02				77.39	0.89	39.55					48.27	4,237.83	4,237.83	4,237.17	4,237.17			
O-64					0				33	0	0					0	4,257.56	4,257.56	4,257.56	4,257.56			
O-65					77.77				69.89	0.94	73.88					89.92	4,277.55	4,277.55	4,272.55	4,272.55			
O-66					2.2				62.94	0.99	2.2					2.96	4,276.21	4,276.21	4,271.21	4,271.21			
O-68					14.8				50.05	1.22	18.13					18.13	4,235.05	4,235.05	4,232.05	4,232.05			
O-69					112.16				83.13	0.85	96.32					122.54	4,243.00	4,243.00	4,238.00	4,238.00			
O-70					8.2				37.93	1.47	12.11					18.71	4,233.00	4,233.00	4,233.00	4,233.00			
O-71					24.47				42.72	1.37	33.72					38.72	4,238.11	4,238.11	4,237.00	4,237.00			
O-72					8.52				102.14	0.72	6.2					6.2	4,250.00	4,250.00	4,250.00	4,250.00			
O-73					21.5				103.58	0.71	15.44					22.24	4,237.00	4,237.00	4,237.00	4,237.00			
O-74					24.15				44.36	1.33	32.46					32.46	4,226.40	4,226.40	4,226.40	4,226.40			
O-75					5.83				44.06	1.34	7.87					7.87	4,225.73	4,225.73	4,225.73	4,225.73			
O-78					5.69				37.14	1.48	8.5					8.5	4,274.30	4,274.30	4,269.30	4,269.30			
O-82					19.55				34.45	1.54	30.47					30.47	4,247.88	4,247.88	4,242.88	4,242.88			
O-83					28.51				76.88	0.89	25.71					79.84	4,281.41	4,281.41	4,276.41	4,276.41			
O-84					2.67				41.51	1.39	3.75					3.75	4,264.73	4,264.73	4,261.30	4,261.30			
O-88					27.73				75.68	0.9	25.24					34.24	4,270.00	4,270.00	4,265.55	4,265.55			
O-89					25				42.12	1.38	34.76					34.76	4,308.58	4,308.58	4,302.00	4,302.00			
O-91					5.74				45.89	1.3	7.53					7.53	4,261.55	4,261.55	4,256.55	4,256.55			
O-94					29.95				82.77	0.85	25.79					35.81	4,225.00	4,225.00	4,220.61	4,220.61			
O-95					62.19				57.59	1.06	66.43					66.43	4,271.00	4,271.00	4,264.00	4,264.00			
O-99					15.5				50.76	1.2	18.77					35.07	4,237.00	4,237.00	4,237.00	4,237.00			
O-100					28.88				49.58	1.23	35.66					44.7	4,284.28	4,284.28	4,283.00	4,283.00			
O-101					28.44				49.2	1.23	35.35					35.35	4,236.09	4,236.09	4,235.35	4,235.35			
O-104					14.95				48.55	1.25	18.78					18.78	4,224.07	4,224.07	4,218.07	4,218.07			
O-106					70.9				88.92	0.81	58.06					63.75	4,235.00	4,235.00	4,226.75	4,226.75			
O-107					9.62				42.6	1.37	13.28					13.28	4,238.00	4,238.00	4,234.25	4,234.25			
O-108					2				25.5	1.87	3.77					3.77	4,237.00	4,237.00	4,233.00	4,233.00			
O-109					2.2				22.81	2.01	4.47					4.47	4,284.28	4,284.28	4,284.28	4,284.28			
O-110					72.99				73.65	0.92	67.45					67.45	4,235.00	4,235.00	4,234.00	4,234.00			
O-111					32.21				75.28	0.91	29.4					32.65	4,229.00	4,229.00	4,227.00	4,227.00			
O-113					0				60.12	0	0					45	4,238.00	4,238.00	4,237.50	4,237.50			
O-114					103.49				82.79	0.85	89.11					89.11	4,221.00	4,221.00	4,219.00	4,219.00			
O-115					0				85.05	0	0					52.7	4,220.00	4,220.00	4,217.00	4,217.00			
O-116					5.25				45.64	1.31	6.92					51.92	4,228.00	4,228.00	4,224.00	4,224.00			
O-118					12.78				65.23	0.97	12.55					112.55	4,275.00	4,275.00	4,268.00	4,268.00			
O-119					0				94.66	0	0					71.93	4,225.00	4,225.00	4,220.25	4,220.25			
O-120					29.18				49.31	1.23	36.2					36.2	4,250.00	4,250.00	4,242.50	4,242.50			
O-121					0				70.91	0	0					20.17	4,225.00	4,225.00	4,220.79	4,220.79			
O-123					5.66				67.66	0.96	5.46					22.59	4,285.00	4,285.00	4,277.96	4,277.96			
O-124					0				45.01	0	0					21.23	0	0	0	0			
O-125					9.03				30.97	1.61	14.65					14.65	4,228.00	4,228.00	4,223.00	4,223.00			
O-126					54.41				95.53	0.77	42.08					79.15	0	0	0	0			

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-396	I-932	O-21	4.54	0.35	1.59	1.59	2.16	3.47	151	0.006887	15 inch	0.013	5.36	4,232.91	4,231.87	4,236.83	4,236.87	2.67	3.75	4,233.66	4,232.60	
P-307	I-727	I-723	0	0	0	1.03	2.11	2.19	82	0.00122	15 inch	0.013	2.26	4,230.50	4,230.40	4,237.05	4,237.10	5.3	5.45	4,231.47	4,231.36	
P-309	I-732	I-729	2.94	0.35	1.03	1.03	2.16	2.24	114	0.008333	15 inch	0.013	5.9	4,231.60	4,230.65	4,236.79	4,236.93	3.94	5.03	4,232.20	4,231.61	
P-308	I-729	I-727	0	0	0	1.03	2.14	2.22	87	0.001724	15 inch	0.013	2.68	4,230.65	4,230.50	4,236.93	4,237.05	5.03	5.3	4,231.59	4,231.48	
P-306	I-723	O-14	0	0	0	1.03	2.07	2.15	355	0.001127	15 inch	0.013	2.17	4,230.40	4,230.00	4,237.10	4,237.50	5.45	6.25	4,231.35	4,230.59	
P-1496	I-2105	O-35	15.48	0.3	4.64	4.64	1.57	7.37	334	0.000569	18 inch	0.013	2.51	4,236.98	4,236.79	4,241.98	4,241.79	3.5	3.5	4,239.68	4,237.84	
P-1497	I-2104	I-2105	0	0	0	0	0	0	59	0.030508	18 inch	0.013	18.35	4,238.78	4,236.98	4,243.78	4,241.98	3.5	3.5	4,239.86	4,239.66	
P-1764	I-2295	O-18	4.72	0.35	1.65	2.78	2.05	5.74	119	0.000756	18 inch	0.013	2.89	4,228.65	4,228.56	4,233.65	4,233.56	3.5	3.5	4,230.07	4,229.48	
P-1765	I-2294	I-2295	3.21	0.35	1.12	1.12	2.16	2.45	300	0.0015	18 inch	0.013	4.07	4,229.10	4,228.65	4,234.10	4,233.65	3.5	3.5	4,230.28	4,230.14	
P-1617	I-2130	O-25	2.93	0.35	1.03	1.52	1.53	2.35	136	0.004116	18 inch	0.013	6.74	4,235.84	4,235.28	4,240.84	4,240.28	3.5	3.5	4,236.45	4,235.86	
P-1615	I-2431	I-2130	1.42	0.35	0.5	0.5	2.16	1.08	33	0.002727	18 inch	0.013	5.49	4,235.93	4,235.84	4,240.83	4,240.84	3.4	3.5	4,236.55	4,236.53	
P-1753	I-2122	O-11	1.43	0.35	0.5	0.5	2.16	1.09	148	0.000676	18 inch	0.013	2.73	4,228.92	4,228.82	4,234.20	4,234.71	3.78	4.39	4,229.52	4,229.21	
P-2616	I-3170	O-44	0	0	0	0	0	8.5	1,492.00	0.003727	24 inch	0.013	13.81	4,238.53	4,232.97	4,243.53	4,237.97	3	3	4,239.66	4,234.01	
P-2499	I-2959	O-10	0	0	0	3.2	2	6.45	73	0.00137	21 inch	0.013	5.86	4,228.50	4,228.40	4,234.96	4,234.66	4.71	4.51	4,229.74	4,229.34	
P-2500	I-2924	I-2958	0	0	0	3.2	2.06	6.64	176	0.000568	21 inch	0.013	3.78	4,228.60	4,228.50	4,234.40	4,234.96	4.05	4.71	4,230.20	4,229.86	
P-1759	I-1987	I-1986	3.75	0.35	1.31	1.31	2.16	2.86	80	0.0025	18 inch	0.013	5.25	4,228.90	4,228.70	4,234.02	4,233.98	3.62	3.78	4,230.74	4,230.68	
P-2501	I-1986	I-2924	5.39	0.35	1.89	3.2	2.12	6.83	195	0.000513	21 inch	0.013	3.59	4,228.70	4,228.60	4,233.98	4,234.40	3.53	4.05	4,230.58	4,230.23	
P-184	I-306	O-20	0	0	0	1.68	1.87	3.17	34	0.004118	15 inch	0.013	4.14	4,230.96	4,230.82	4,235.96	4,235.98	3.75	3.91	4,231.77	4,231.54	
P-186	I-313	I-312	4.8	0.35	1.68	1.68	1.96	3.32	117	0.002393	15 inch	0.013	3.16	4,231.26	4,230.98	4,235.96	4,235.98	3.45	3.75	4,232.70	4,232.39	
P-185	I-312	I-306	0	0	0	1.68	1.92	3.25	149	0.000134	15 inch	0.013	0.75	4,230.98	4,230.96	4,235.98	4,235.96	3.75	3.75	4,232.30	4,231.85	
P-178	I-53	O-23	0	0	0	4.43	1.83	8.17	31	0.009032	15 inch	0.013	6.14	4,230.88	4,230.60	4,235.88	4,235.85	3.75	4	4,232.29	4,231.72	
P-181	I-302	I-296	7.67	0.35	2.68	2.68	1.67	5.05	60	0.001667	15 inch	0.013	2.64	4,231.10	4,231.00	4,236.10	4,236.09	3.75	3.83	4,236.33	4,235.97	
P-180	I-295	I-53	4.99	0.35	1.75	4.43	1.85	8.28	189	0.000635	15 inch	0.013	1.63	4,231.00	4,230.88	4,235.08	4,235.88	3.83	3.75	4,235.74	4,232.63	
P-402	I-483	I-485	0	0	0	6.51	1.3	8.56	209	0.003062	15 inch	0.013	3.57	4,231.00	4,230.36	4,236.00	4,235.26	3.75	3.65	4,238.93	4,235.26	
P-401	I-484	I-483	18.61	0.35	6.51	6.51	1.31	8.59	83	0.001205	15 inch	0.013	2.24	4,231.10	4,231.00	4,236.00	4,236.00	3.65	3.75	4,237.47	4,236.00	
P-3836	I-485	O-5	5	0.35	1.75	8.26	1.29	10.77	554	0.000614	15 inch	0.013	1.6	4,230.36	4,230.02	4,235.26	4,235.02	3.65	3.75	4,246.66	4,231.22	
P-409	I-475	O-12	11.11	0.35	3.89	10.6	1.59	16.97	146	0.004932	15 inch	0.013	4.54	4,230.47	4,229.75	4,235.47	4,234.75	3.75	3.75	4,241.08	4,230.99	
P-408	I-473	I-475	7.57	0.35	2.65	6.71	1.59	10.79	156	0.003397	15 inch	0.013	3.77	4,231.00	4,230.47	4,236.03	4,235.47	3.78	3.75	4,239.82	4,235.47	
P-1483	I-972	I-473	8.23	0.2	1.65	4.06	1.66	6.81	58	0.001207	15 inch	0.013	2.24	4,231.07	4,231.00	4,236.07	4,236.03	3.75	3.78	4,236.67	4,236.03	
P-3838	I-498	I-972	6.91	0.35	2.42	2.42	1.83	4.47	696	0.002773	15 inch	0.013	3.4	4,233.00	4,231.07	4,238.00	4,236.07	3.75	3.75	4,239.40	4,236.07	
P-1719	I-2185	I-2125	2.26	0.35	0.79	1.58	1.74	2.78	27	0.002593	18 inch	0.013	5.35	4,231.22	4,231.15	4,236.22	4,236.15	3.5	3.5	4,232.12	4,232.09	
P-1720	I-2125	O-13	2.26	0.35	0.79	2.37	1.73	4.14	107	0.006075	18 inch	0.013	8.19	4,231.15	4,230.50	4,236.15	4,236.21	3.5	4.21	4,231.93	4,231.26	
P-1715	I-2384	I-2233	2.26	0.35	0.79	0.79	1.89	1.51	206	0.001796	18 inch	0.013	4.45	4,231.89	4,231.52	4,236.09	4,236.05	2.7	3.03	4,232.50	4,232.25	
P-3839	I-2233	I-2185	0	0	0	0.79	1.81	1.44	173	0.001734	18 inch	0.013	4.37	4,231.52	4,231.22	4,236.05	4,236.22	3.03	3.5	4,232.25	4,232.17	
P-193	I-533	I-317	0	0	0	1.39	2.14	3	143	0.002238	15 inch	0.013	3.06	4,231.12	4,230.80	4,235.89	4,236.00	3.52	3.95	4,236.00	4,235.69	
P-189	I-317	O-15	9.34	0.35	3.27	4.66	2.08	9.8	144	0.007639	15 inch	0.013	5.65	4,230.80	4,229.70	4,236.00	4,235.99	3.95	5.04	4,234.24	4,230.88	
P-192	I-529	I-533	3.98	0.35	1.39	1.39	2.16	3.04	74	0.002432	15 inch	0.013	3.19	4,231.30	4,231.12	4,235.79	4,235.89	3.24	3.52	4,236.05	4,235.89	
P-1622	I-2001	O-17	0	0	0	1.7	2.07	3.55	33	0.009091	18 inch	0.013	10.01	4,227.82	4,227.52	4,232.82	4,232.53	3.5	3.51	4,228.54	4,228.14	
P-1624	I-2145	I-2001	0	0	0	1.7	2.1	3.6	170	0.008059	18 inch	0.013	9.43	4,229.19	4,227.82	4,234.19	4,232.82	3.5	3.5	4,229.91	4,228.62	
P-1627	I-2144	I-2145	4.85	0.35	1.7	1.7	2.16	3.7	220	0.002545	18 inch	0.013	5.3	4,229.75	4,229.19	4,234.75	4,234.19	3.5	3.5	4,230.67	4,229.93	
P-188	I-314	O-19	3.65	0.35	1.35	1.35	1.79	2.44	192	0.000469	15 inch	0.013	1.4	4,230.84	4,230.75	4,235.84	4,235.75	3.75	3.75	4,231.91	4,231.37	
P-1669	I-2347	I-2346	5.39	0.35	1.89	1.89	1.9	3.61	83	0.001807	18 inch	0.013	4.47	4,227.25	4,227.10	4,231.83	4,231.75	3.08	3.15	4,228.25	4,228.08	
P-3786	I-2346	O-8	0	0	0	1.89	1.87	3.56	136	0.004853	15 inch	0.013	4.5	4,227.10	4,226.44	4,231.75	4,231.44	3.4	3.75	4,227.94	4,227.20	
P-1671	I-2316	I-2315	0	0	0	0	0	0	126	0.001587	18 inch	0.013	4.18	4,225.45	4,225.25	4,230.00	4,230.08	3.05	3.33	4,226.88	4,226.88	
P-3742	I-2315	I-754	4.95	0.35	1.73	3.32	1.44	4.82	62	0.003871	15 inch	0.013	4.02	4,225.25	4,225.01	4,230.08	4,230.01	3.58	3.75	4,226.88	4,226.53	
P-231	I-546	I-755	5.29	0.3	1.59	1.59	1.72	2.75	100	0.001	15 inch	0.013	2.04	4,226.81	4,226.71	4,232.16	4,231.97	4.1	4.01	4,229.24	4,229.06	
P-3840	I-755	I-549	0	0	0	1.59	1.68	2.68	530	0.00134	15 inch	0.013	2.36	4,226.71	4,226.00	4,231.97	4,231.44	4.01	4.19	4,228.98	4,228.06	
P-3841	I-549	I-2315	0	0	0	1.59	1.57	2.5	738	0.001016	15 inch	0.013	2.06	4,226.00	4,225.25	4,231.44	4,230.08	4.19	3.58	4,228.04	4,226.93	
P-3842	I-754	O-52	0	0	0	3.32	1.44	4.8	77	0.002078	15 inch	0.013	2.94	4,225.01	4,224.85	4,230.01	4,230.14	3.75	4.04	4,226.32	4,225.74	
P-3681	I-3850	I-3854	0	0	0	2.86	2.14	6.16	297	0.003535	18 inch	0.013	6.25	4,232.95	4,231.90	4,238.15	4,237.94	3.7	4.54	4,238.97	4,237.94	
P-3665	I-3844	I-3854	0	0	0	3.96	1.3	5.17	116	0.002328	18 inch	0.013	5.07	4,232.17	4,231.90	4,237.88	4,237.94	4.21	4.54	4,238.22	4,237.94	
P-3664	I-3854	O-16	6.93	0.35	2.43	9.24	1.28	11.96	566	0.00159	18 inch	0.013	4.19	4,231.90	4,231.00	4,237.94	4,237.18	4.54	4.68	4,239.75	4,232.31	
P-3680	I-3851	I-3850	3.76	0.35	1.32	2.86	2.22	6.41	355	0.004225	18 inch	0.013	5.83	4,234.45	4,232.95	4,239.16	4,238.15	3.21	3.7	4,239.48	4,238.15	
P-3712	I-3842	I-3844	11.74	0	0	3.96	1.3	5.19	37	0.002432	18 inch	0.013	5.16	4,232.28	4,232.17	4,237.86	4,237.88	4.1	4.21	4,237.97	4,237.88	
P-3713	I-3868	I-3842	11.3	0.35	3.96	3.96	1.32	5.28	163	0.001227	18 inch	0.013	3.68	4,232.48	4,232.26	4,237.78	4,237.88	3.82	4.1	4,238.27	4,237.86	
P-3709	I-3856	I-3856	4.4	0.35	1.54	1.54	2.41	3.74	62	0.002581	18 inch	0.013	5.34	4,235.16	4,235.00	4,240.48	4,240.15	3.82	3.65	4,239.74	4,239.66	
P-3844	I-3855	I-3851	0	0	0	1.54	2.39	3.7	385	0.001429	18 inch	0.013	3.97	4,235.00	4,234.45	4,240.15	4,239.16	3.65	3.21	4,239.64	4,239.16	
P-323	I-285	O-9	0	0	0	11.21	2	22.62	100	0.002	15 inch	0.013	2.89	4,232.76	4,232.56	4,237.96	4,237.95	3.95	4.14	4,246.08	4,233.81	
P-325	I-290	I-291	0	0	0	11.21	2.01	22.67	70	0.001571	15 inch	0.013	2.56	4,233.07	4,232.96	4,236.07	4,237.96	3.75	3.75	4,246.59	4,237.96	
P-326	I-233	I-290	0	0	0	11.21	2.01	22.72	81	0.00358	15 inch	0.013	3.87	4,233.36	4,233.07	4,238.36	4,238.07	3.75	3.75	4,248.09	4,238.07	
P-321	I-284	I-232	2.58	0.35	0.9	11.21	2.03	22.92	272	0.003566	15 inch	0.013	3.86	4,234.60	4,233.63	4,239.60	4,238.63	3.75	3.75	4,272.86	4,238.63	
P-328	I-235	I-236	0	0	0	8.34	2.05	17.21	154	0.007662	15 inch	0.013	5.65	4,236.47	4,235.29	4,241.47	4,240.29	3.75	3.75	4,251.22	4,240.29	
P-322	I-236	I-284	0	0	0	8.34	2.04	17.13	137	0.005036	15 inch	0.013	4.58	4,235.29	4,234.60	4,240.29	4,239.60	3.75	3.75	4,249.23	4,239.60	
P-327	I-232	I-233	0	0	0	11.21	2.01	22.77	104	0.002596	15 inch	0.013	3.29	4,233.63	4,233.36	4,238.63	4,238.36	3.75	3.75	4,251.29	4,238.36	
P-1486	I-936	I-235	23.84	0.35	8.34	8.34	2.05	17.25	81	0.011481	15 inch	0.013	6.92	4,237.40	4,236.47	4,242.06	4,241.47	3.41	3.75	4,247.25	4,241.47	
P-3749	I-291	I-285	0	0	0	11.21	2	22.64	35	0.005714	15 inch	0.013	4.88	4,232.96	4,232.76	4,237.96	4,237.96	3.75	3.95	4,242.26	4,237.96	
P-3750	I-282	I-284	5.62	0.35	1.97	1.97	2.16	4.29	30	0.004667	15 inch	0.013	4.41	4,234.74	4,234.60	4,239.60	4,239.60	3.61	3.75	4,239.73	4,239.60	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-2485	I-2923	O-24	5.08	0.35	1.78	3.39	2.04	6.95	127	0.003937	21 inch	0.013	9.94	4,236.17	4,235.67	4,241.17	4,240.67	3.25	3.25	4,237.25	4,236.64	
P-2467	I-2930	I-2923	4.6	0.35	1.61	1.61	2.16	3.51	209	0.000287	21 inch	0.013	2.68	4,236.23	4,236.17	4,241.23	4,241.17	3.25	3.25	4,237.56	4,237.54	
P-1515	I-2299	O-37	32.34	0.35	11.32	11.32	1.61	18.36	534	0.006236	18 inch	0.013	8.29	4,267.14	4,263.81	4,272.14	4,268.81	3.5	3.5	4,281.61	4,285.26	
P-634	I-620	I-623	34	0	0	0	0	6.8	262	0.018244	15 inch	0.013	8.72	4,245.60	4,240.82	4,250.60	4,245.82	3.75	3.75	4,246.65	4,242.23	
P-81	I-623	O-38	0	0	0	0	0	6.8	177	0.015254	15 inch	0.013	7.98	4,240.82	4,238.12	4,245.82	4,240.12	3.75	0.75	4,241.87	4,239.01	
P-4013	I-2604	O-39	0	0	0	0	0	10.9	179	0.032682	18 inch	0.013	18.99	4,242.88	4,237.03	4,247.88	4,242.03	3.5	3.5	4,244.15	4,237.84	
P-484	I-428	I-425	0	0	0	0	0	0	223	0.006816	15 inch	0.013	5.33	4,258.53	4,257.01	4,263.53	4,262.01	3.75	3.75	4,259.99	4,259.99	
P-86	I-56	O-55	0	0	0	11.32	1.3	14.66	1,043.00	0.012464	15 inch	0.013	7.21	4,249.00	4,236.00	4,254.00	4,241.00	3.75	3.75	4,292.43	4,237.24	
P-482	I-424	I-56	32.35	0.35	11.32	11.32	1.32	15.07	647	0.009258	15 inch	0.013	6.22	4,254.99	4,249.00	4,259.99	4,254.00	3.75	3.75	4,288.19	4,254.00	
P-483	I-425	I-424	0	0	0	0	0	0	165	0.012242	15 inch	0.013	7.15	4,257.01	4,254.99	4,262.01	4,259.99	3.75	3.75	4,259.99	4,259.99	
P-3357	I-3491	I-2588	26.74	0.25	6.68	6.68	0.96	6.5	225	0.001111	30 inch	0.013	13.67	4,224.25	4,224.00	4,228.25	4,227.46	1.5	0.96	4,225.56	4,225.40	
P-3962	I-2588	I-2589	9.72	0.25	2.43	9.12	0.96	8.78	163	0.001534	30 inch	0.013	16.06	4,224.00	4,223.75	4,227.46	4,227.36	0.96	1.11	4,225.35	4,225.13	
P-3963	I-2589	O-61	0	0	0	9.12	0.95	8.73	618	0.001553	30 inch	0.013	16.17	4,223.75	4,222.79	4,227.36	4,222.79	1.11	-2.5	4,225.06	4,223.77	
P-132	I-82	I-80	2.17	0	0	0	0	0	416	0.002115	15 inch	0.013	2.97	4,259.65	4,258.77	4,264.65	4,263.77	3.75	3.75	4,259.65	4,258.77	
P-133	I-80	I-991	4	0	0	0	0	0	36	0.01	15 inch	0.013	6.46	4,258.77	4,258.41	4,263.77	4,263.41	3.75	3.75	4,258.77	4,258.41	
P-3973	I-991	O-64	0	0	0	0	0	0	64	0.013281	15 inch	0.013	7.44	4,258.41	4,257.56	4,263.41	4,257.56	3.75	-1.25	4,258.41	4,257.56	
P-2720	I-3121	I-957	0	0	0	14.8	1.26	18.82	323	0.000712	24 inch	0.013	6.04	4,232.54	4,232.31	4,237.54	4,237.31	3	3	4,238.18	4,235.94	
P-2709	I-957	I-525	0	0	0	14.8	1.24	18.54	232	0.00069	24 inch	0.013	5.94	4,232.31	4,232.15	4,237.31	4,237.26	3	3.11	4,235.79	4,234.23	
P-2721	I-3081	I-3121	4	0.85	3.4	14.8	1.27	18.9	90	0.001444	24 inch	0.013	8.6	4,232.67	4,232.54	4,237.41	4,237.54	2.74	3	4,238.17	4,237.54	
P-1693	I-510	I-2290	12.19	0.35	4.27	4.27	1.29	5.55	121	0.004132	18 inch	0.013	6.75	4,233.57	4,233.07	4,237.33	4,237.37	2.26	2.8	4,237.71	4,237.37	
P-1694	I-2290	I-506	12.1	0.35	4.23	8.5	1.28	10.95	107	0.000935	18 inch	0.013	3.21	4,233.07	4,232.97	4,237.37	4,237.37	2.8	2.9	4,238.53	4,237.37	
P-2722	I-506	I-3081	8.27	0.35	2.89	11.4	1.27	14.61	59	0.005085	24 inch	0.013	16.13	4,232.97	4,232.67	4,237.37	4,237.41	2.4	2.74	4,237.56	4,237.41	
P-3133	I-525	O-68	0	0	0	14.8	1.23	18.34	154	0.000649	30 inch	0.013	10.45	4,232.15	4,232.05	4,237.26	4,235.05	2.61	0.5	4,234.22	4,233.50	
P-111	I-567	I-566	0	0	0	0	0	0	319	0.002821	15 inch	0.013	3.43	4,264.05	4,263.15	4,269.05	4,268.15	3.75	3.75	4,264.05	4,263.15	
P-1600	I-566	I-2039	0	0	0	0	0	0	340	0.005147	18 inch	0.013	7.54	4,263.15	4,261.40	4,268.15	4,266.40	3.5	3.5	4,263.15	4,261.92	
P-2664	I-3159	I-568	0	0	0	0	0	5	291	0.004777	24 inch	0.013	15.63	4,262.50	4,261.11	4,267.50	4,266.11	3	3	4,263.29	4,262.02	
P-2681	I-568	I-3194	0	0	0	0	0	5	316	0.00462	24 inch	0.013	15.38	4,261.11	4,259.65	4,266.11	4,264.65	3	3	4,261.90	4,260.66	
P-2665	I-3194	I-3207	0	0	0	0	0	5	560	0.007107	24 inch	0.013	19.07	4,259.65	4,255.67	4,264.65	4,260.67	3	3	4,260.44	4,256.50	
P-2663	I-2039	I-568	0	0	0	0	0	0	62	0.004677	24 inch	0.013	15.47	4,261.40	4,261.11	4,266.40	4,266.11	3	3	4,261.92	4,261.92	
P-3340	I-3153	I-3207	0	0	0	0	0	0	59	0.008475	30 inch	0.013	37.76	4,256.17	4,255.67	4,261.17	4,260.67	2.5	2.5	4,256.42	4,256.42	
P-1603	I-1969	I-1968	0	0	0	0	0	0	349	0.006991	18 inch	0.013	8.78	4,260.51	4,258.07	4,265.51	4,263.07	3.5	3.5	4,260.51	4,258.07	
P-3873	I-1968	I-3153	0	0	0	0	0	0	303	0.006271	21 inch	0.013	12.55	4,258.07	4,256.17	4,263.07	4,261.17	3.25	3.25	4,258.07	4,256.42	
P-3874	I-3207	I-3469	0	0	0	0	0	5	239	0.005523	30 inch	0.013	30.48	4,255.67	4,254.35	4,260.67	4,259.35	2.5	2.5	4,256.41	4,255.18	
P-447	I-482	I-480	0	0	0	24.47	1.37	38.79	114	0.00693	15 inch	0.013	5.38	4,238.94	4,238.15	4,243.94	4,244.15	3.75	4.75	4,285.26	4,244.15	
P-446	I-480	O-71	0	0	0	24.47	1.37	38.76	156	0.007372	15 inch	0.013	5.55	4,238.15	4,237.00	4,244.15	4,238.11	4.75	-0.14	4,294.41	4,238.25	
P-3804	I-2291	I-482	81.56	0.3	24.47	24.47	1.38	38.93	186	0.038118	18 inch	0.013	41.01	4,246.03	4,238.94	4,251.03	4,243.94	3.5	3.5	4,250.33	4,243.94	
P-1738	I-2213	I-2214	0	0	0	0	0	0	111	0.004865	18 inch	0.013	7.33	4,253.41	4,252.87	4,257.33	4,257.87	2.42	3.5	4,253.41	4,252.87	
P-1739	I-2355	I-2213	0	0	0	0	0	0	268	0.000658	18 inch	0.013	3.08	4,253.64	4,253.41	4,258.02	4,257.33	2.88	2.42	4,253.64	4,253.41	
P-1737	I-2214	I-2378	0	0	0	0	0	0	99	0.007778	18 inch	0.013	9.26	4,252.87	4,252.10	4,257.87	4,257.10	3.5	3.5	4,252.87	4,252.84	
P-3117	I-2376	I-3487	0	0	0	0	0	5	140	0.014	30 inch	0.013	48.53	4,252.10	4,250.14	4,257.10	4,255.14	2.5	2.5	4,252.84	4,250.92	
P-3820	I-3487	I-2291	0	0	0	0	0	5	78	0.052692	30 inch	0.013	94.15	4,250.14	4,246.03	4,255.14	4,251.03	2.5	2.5	4,250.88	4,250.70	
P-3871	I-744	I-466	0	0	0	0	0	0	736	0.004742	15 inch	0.013	4.45	4,257.18	4,253.69	4,262.18	4,258.03	3.75	3.09	4,257.18	4,253.69	
P-3872	I-466	I-2355	0	0	0	0	0	0	190	0.000263	18 inch	0.013	1.7	4,253.69	4,253.64	4,258.03	4,258.02	2.84	2.88	4,253.69	4,253.64	
P-3875	I-3469	I-2378	0	0	0	0	0	5	552	0.004076	30 inch	0.013	26.19	4,254.35	4,252.10	4,259.35	4,257.10	2.5	2.5	4,255.09	4,252.85	
P-3210	I-2385	I-3510	27.32	0.3	8.2	8.2	1.53	19.21	74	0.002568	30 inch	0.013	20.78	4,234.54	4,234.35	4,240.03	4,240.02	2.99	3.17	4,236.36	4,236.11	
P-3407	I-3646	I-2940	0	0	0	8.2	1.51	19.11	245	0.002531	36 inch	0.013	33.55	4,234.06	4,233.44	4,239.99	4,238.44	2.93	2	4,235.74	4,235.39	
P-3451	I-3510	I-3646	0	0	0	8.2	1.52	19.17	110	0.002636	36 inch	0.013	34.24	4,234.35	4,234.06	4,240.02	4,239.99	2.67	2.93	4,236.02	4,235.83	
P-1807	I-699	I-2019	0	0	0	0	0	3.1	159	0.001132	18 inch	0.013	3.53	4,237.03	4,236.85	4,242.03	4,241.39	3.5	3.04	4,238.10	4,237.91	
P-1808	I-2019	I-2018	0	0	0	0	0	3.1	263	0.001141	18 inch	0.013	3.55	4,236.85	4,236.55	4,241.39	4,239.99	3.04	1.94	4,237.88	4,237.46	
P-1806	I-694	I-699	0	0	0	0	0	3.1	237	0.000253	18 inch	0.013	1.67	4,237.09	4,237.03	4,241.98	4,242.03	3.39	3.5	4,238.38	4,238.15	
P-448	I-427	I-426	0	0	0	0	0	3.1	149	0.002349	15 inch	0.013	3.13	4,237.95	4,237.60	4,242.95	4,242.00	3.75	3.15	4,239.09	4,238.80	
P-452	I-426	I-694	0	0	0	0	0	3.1	149	0.003423	15 inch	0.013	3.78	4,237.60	4,237.09	4,242.00	4,241.98	3.15	3.64	4,238.73	4,238.41	
P-3865	I-2018	I-3147	0	0	0	0	0	3.1	629	0.001049	24 inch	0.013	7.33	4,236.55	4,235.89	4,239.99	4,237.93	1.44	0.04	4,237.46	4,236.87	
P-3866	I-3147	I-3131	0	0	0	0	0	3.1	526	0.001046	24 inch	0.013	7.31	4,235.89	4,235.34	4,237.93	4,239.94	0.04	2.6	4,236.84	4,236.50	
P-3867	I-3131	I-3104	0	0	0	0	0	3.1	83	0.000964	24 inch	0.013	7.02	4,235.34	4,235.26	4,239.94	4,239.86	2.6	2.6	4,236.49	4,236.46	
P-3868	I-3104	I-3419	0	0	0	0	0	3.1	249	0.001647	30 inch	0.013	16.64	4,235.26	4,234.85	4,239.86	4,239.97	2.1	2.62	4,236.45	4,236.42	
P-3869	I-3419	I-2385	0	0	0	0	0	3.1	214	0.001449	30 inch	0.013	15.61	4,234.85	4,234.54	4,239.97	4,240.03	2.62	2.99	4,236.42	4,236.41	
P-740	I-479	I-583	0	0	0	0	0	3.5	147	0.003401	15 inch	0.013	3.77	4,237.49	4,236.99	4,242.49	4,241.99	3.75	3.75	4,238.70	4,238.28	
P-1946	I-583	I-2149	0	0	0	0	0	3.5	315	0.000603	18 inch	0.013	2.58	4,236.99	4,236.80	4,241.99	4,241.80	3.5	3.6	4,238.23	4,237.63	
P-3870	I-2149	I-2385	0	0	0	0	0	3.5	380	0.005947	18 inch	0.013	8.1	4,236.80	4,234.54	4,241.80	4,240.03	3.5	3.99	4,237.51	4,236.47	
P-3986	I-2940	O-70	0	0	0	8.2	1.5	18.96	334	0.001317	36 inch	0.013	24.21	4,233.44	4,233.00	4,238.44	4,233.00	2	-3	4,235.33	4,234.40	
P-3990	I-2596	I-479	0	0	0	0	0	3.5	222	0.002793	15 inch	0.013	3.41	4,238.11	4,237.49	4,243.11	4,242.49	3.75	3.75	4,239.44	4,238.79	
P-450	I-429	I-686	61.44	0.35	21.5	21.5	0.72	22.33	141	0.039433	15 inch	0.013	25.65	4,243.00	4,237.44	4,249.00	4,242.44	4.75	3.75	4,246.65	4,242.44	
P-3166	I-1004	I-429	0	0	0	0	0	6.8	51	0.019608	30 inch	0.013	67.43	4,244.00	4,243.00	4,249.00	4,249.00	2.5	3.5	4,248.57	4,248.56	
P-3880	I-3499	I-1004	0	0	0	0	0	0	569	0.001107	30 inch	0.013	13.65	4,244.63	4,244.00	4,249.63	4,249.00	2.5	2.5	4,248.58	4,248.58	
P-3991	I-2598	I-1004	0	0	0	0	0	6.8	163	0.018098	30 inch	0.013	55.18	4,246.95	4,244.00	4,252.95	4,249.00	3.5	2.5	4,248.61	4,248.59	
P-3993	I-686	O-73	0	0	0	21.5	0.71	22.29	266	0.001654	18 inch	0.013	4.27	4,237.44	4,237.00	4,242.44	4,237.00	3.5	-1.5	4,250.47	4,238.48	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-177	I-52	I-51	69	0.35	24.15	24.15	1.4	33.98	60	0.003167	15 inch	0.013	3.63	4,229.07	4,228.88	4,233.07	4,232.88	2.75	2.75	4,249.48	4,232.88	
P-3120	I-51	I-3428	0	0.35	0	24.15	1.4	33.96	45	0.002889	30 inch	0.013	22.04	4,228.88	4,228.75	4,232.88	4,232.75	1.5	1.5	4,233.06	4,232.75	
P-3848	I-3428	I-3166	0	0.35	0	24.15	1.39	33.91	544	0.001379	36 inch	0.013	24.76	4,228.75	4,228.00	4,232.75	4,232.00	1	1	4,233.14	4,231.73	
P-3995	I-3166	O-74	0	0	0	24.15	1.35	32.96	399	0.00401	30 inch	0.013	25.97	4,228.00	4,226.40	4,232.00	4,226.40	1.5	-2.5	4,231.15	4,228.35	
P-1891	I-2049	O-82	37.4	0.35	13.09	19.65	1.54	30.53	170	0.012765	18 inch	0.013	11.87	4,245.05	4,242.88	4,250.05	4,247.88	3.5	3.5	4,258.77	4,244.37	
P-1886	I-2356	I-2159	0	0	0	0	0	0	60	0.007	18 inch	0.013	8.79	4,247.12	4,246.70	4,252.12	4,251.70	3.5	3.5	4,247.12	4,246.70	
P-3927	I-114	I-2356	0	0	0	0	0	0	305	0.00741	18 inch	0.013	9.04	4,249.38	4,247.12	4,254.38	4,252.12	3.5	3.5	4,249.38	4,247.12	
P-3928	I-419	I-114	0	0	0	0	0	0	1,010.00	0.005465	18 inch	0.013	7.77	4,254.90	4,249.38	4,259.90	4,254.38	3.5	3.5	4,254.90	4,249.38	
P-3929	I-362	I-419	0	0	0	0	0	0	325	0.010277	15 inch	0.013	6.55	4,258.24	4,254.90	4,263.24	4,259.90	3.75	3.75	4,258.24	4,254.90	
P-3930	I-2159	O-82	0	0	0	0	0	0	253	0.015099	18 inch	0.013	12.91	4,246.70	4,242.88	4,251.70	4,247.88	3.5	3.5	4,246.70	4,242.88	
P-3932	I-2011	I-2323	18.75	0.35	6.56	6.56	1.63	10.78	565	0.003876	18 inch	0.013	6.54	4,251.94	4,249.75	4,256.91	4,254.75	3.47	3.5	4,260.70	4,254.75	
P-3933	I-2323	I-2177	0	0	0	6.56	1.6	10.57	158	0.003734	18 inch	0.013	6.42	4,249.75	4,249.16	4,254.75	4,254.16	3.5	3.5	4,255.76	4,254.16	
P-3934	I-2177	I-2234	0	0	0	6.56	1.59	10.51	557	0.00535	18 inch	0.013	7.68	4,249.16	4,246.18	4,254.16	4,251.18	3.5	3.5	4,256.76	4,251.18	
P-3935	I-2234	I-2049	0	0	0	6.56	1.56	10.3	261	0.00433	18 inch	0.013	6.91	4,246.18	4,245.05	4,251.18	4,250.05	3.5	3.5	4,252.56	4,250.05	
P-597	I-399	I-401	10.68	0.25	2.67	2.67	1.42	3.83	194	0.004021	15 inch	0.013	4.1	4,262.62	4,261.84	4,268.62	4,265.84	2.75	2.75	4,263.58	4,262.87	
P-598	I-401	O-84	0	0	0	2.67	1.41	3.78	144	0.00375	15 inch	0.013	3.96	4,261.84	4,261.30	4,265.84	4,264.73	2.75	2.18	4,262.81	4,262.09	
P-2477	I-2313	I-2941	4.37	0.28	1.22	1.22	0.76	0.93	252	0.005794	21 inch	0.013	12.06	4,254.44	4,252.98	4,259.44	4,257.98	3.25	3.25	4,254.78	4,253.41	
P-3813	I-2941	I-305	0	0	0	1.22	0.75	0.92	533	0.005103	15 inch	0.013	4.61	4,252.98	4,250.26	4,257.98	4,255.26	3.75	3.75	4,253.36	4,251.25	
P-441	I-477	I-308	13.83	0.28	3.87	3.87	1.02	4	268	0.003582	15 inch	0.013	3.87	4,251.98	4,251.02	4,256.90	4,256.02	3.67	3.75	4,253.04	4,252.02	
P-148	I-308	I-305	0	0	0	3.87	1.01	3.93	50	0.0152	15 inch	0.013	7.96	4,251.02	4,250.26	4,256.02	4,255.26	3.75	3.75	4,251.82	4,251.27	
P-3996	I-305	I-2611	0	0	0	5.1	0.73	3.73	2	0.01	30 inch	0.013	41.01	4,250.26	4,250.24	4,255.26	4,255.26	2.5	2.52	4,251.25	4,251.25	
P-4006	I-2611	O-72	0	0	0	8.52	0.73	6.24	125	0.00192	30 inch	0.013	17.97	4,250.24	4,250.00	4,255.26	4,250.00	2.52	-2.5	4,251.24	4,250.83	
P-4009	I-2610	I-2611	13.7	0.25	3.42	3.42	0.91	3.15	101	0.003069	15 inch	0.013	3.58	4,250.55	4,250.24	4,255.52	4,255.26	3.72	3.77	4,251.51	4,251.28	
P-124	I-785	I-784	63.11	0.35	22.09	22.09	0.99	22.03	39	0.026923	18 inch	0.013	17.23	4,267.89	4,266.84	4,271.89	4,271.94	2.5	3.6	4,271.29	4,269.58	
P-1607	I-2118	I-785	0	0.3	0	0	0	0	476	0.005504	18 inch	0.013	7.79	4,270.51	4,267.89	4,275.51	4,271.89	3.5	2.5	4,271.89	4,271.89	
P-3392	I-3116	I-784	0.09	0.85	0.08	0.3	0.93	9.28	364	0.004093	36 inch	0.013	42.57	4,268.33	4,266.84	4,273.33	4,271.94	2	2.1	4,269.51	4,269.47	
P-3892	I-2164	I-3116	0.13	0.85	0.11	0.22	0.94	9.21	267	0.00236	24 inch	0.013	10.99	4,268.96	4,268.33	4,273.96	4,273.33	3	3	4,270.35	4,269.51	
P-3893	I-3916	I-2164	0.13	0.85	0.11	0.11	0.95	9.11	380	0.004132	18 inch	0.013	6.75	4,270.53	4,268.96	4,276.03	4,273.96	4	3.5	4,273.22	4,270.36	
P-3894	I-273	I-3916	165	0	0	0	0	9	114	0.004123	18 inch	0.013	6.74	4,271.00	4,270.53	4,276.00	4,276.03	3.5	4	4,274.29	4,273.45	
P-3978	I-784	I-2591	0.11	0.85	0.09	22.48	0.92	29.87	503	0.00167	36 inch	0.013	27.26	4,266.84	4,266.00	4,271.94	4,270.11	2.1	1.11	4,269.45	4,268.46	
P-4029	I-2591	O-88	17.5	0.3	5.25	27.73	0.91	34.37	205	0.002195	36 inch	0.013	31.25	4,266.00	4,265.55	4,270.11	4,270.00	1.11	1.45	4,268.44	4,267.46	
P-2406	I-2246	I-2133	45.2	0.25	11.3	11.3	1.4	15.98	594	0.006128	18 inch	0.013	8.22	4,306.94	4,303.30	4,311.94	4,308.58	3.5	3.78	4,322.32	4,308.58	
P-4011	I-2132	I-2133	0	0	0	13.7	1.62	22.41	146	0.002397	36 inch	0.013	32.65	4,303.65	4,303.30	4,309.18	4,308.58	2.53	2.28	4,308.74	4,308.58	
P-4014	I-2067	I-2132	39.14	0.35	13.7	13.7	1.63	22.45	45	0.018222	30 inch	0.013	55.37	4,304.47	4,303.65	4,309.47	4,309.18	2.5	3.03	4,309.03	4,308.89	
P-4030	I-2133	O-89	0	0	0	25	1.38	34.78	24	0.054167	18 inch	0.013	24.45	4,303.30	4,302.00	4,308.58	4,308.58	3.78	5.08	4,306.13	4,303.50	
P-1837	I-2088	I-2087	0	0	0	0	0	0	169	0.001065	18 inch	0.013	3.43	4,304.65	4,304.47	4,309.65	4,309.47	3.5	3.5	4,309.35	4,309.35	
P-3937	I-3459	I-2088	0	0	0	0	0	0	237	0.006878	30 inch	0.013	34.01	4,306.28	4,304.65	4,311.28	4,309.65	2.5	2.5	4,309.35	4,309.35	
P-552	I-458	I-440	0	0	0	0	0	0	248	0.01125	15 inch	0.013	6.85	4,326.19	4,323.40	4,331.19	4,328.40	3.75	3.75	4,326.19	4,323.40	
P-3936	I-440	I-229	0	0	0	0	0	0	1,459.00	0.010733	18 inch	0.013	10.88	4,323.40	4,307.74	4,328.40	4,312.74	3.5	3.5	4,323.40	4,309.35	
P-3184	I-229	I-3459	0	0	0	0	0	0	179	0.008156	30 inch	0.013	37.04	4,307.74	4,306.28	4,312.74	4,311.28	2.5	2.5	4,309.35	4,309.35	
P-2517	I-2973	O-78	16.26	0.35	5.69	5.69	1.49	8.52	67	0.014776	21 inch	0.013	19.26	4,270.29	4,269.30	4,275.29	4,274.30	3.25	3.25	4,271.37	4,270.12	
P-4017	I-885	I-2614	5.46	0.35	1.91	1.91	2.16	4.17	477	0.006834	15 inch	0.013	5.34	4,274.23	4,270.97	4,279.23	4,275.97	3.75	3.75	4,275.06	4,271.89	
P-4019	I-2614	I-2616	0	0	0	1.91	2.08	4	531	0.00565	18 inch	0.013	7.9	4,270.97	4,267.97	4,275.97	4,275.97	3.5	6.5	4,271.74	4,269.23	
P-4020	I-2616	O-91	0	0	0	5.74	1.42	8.19	1,798.00	0.006352	18 inch	0.013	8.37	4,267.97	4,256.55	4,275.97	4,261.55	6.5	3.5	4,269.17	4,257.66	
P-4021	I-2615	I-2616	10.93	0.35	3.83	3.83	1.42	5.49	139	0.014388	15 inch	0.013	7.75	4,269.97	4,267.97	4,277.97	4,275.97	6.75	6.75	4,270.92	4,269.34	
P-4067	I-2645	O-99	0	0	0	15.5	1.32	36.93	2,845.00	0.007529	30 inch	0.013	35.59	4,258.42	4,237.00	4,266.42	4,237.00	5.5	-2.5	4,260.57	4,239.06	
P-4079	I-2653	I-2656	36.37	0.35	12.73	18.15	1.32	24.15	1,197.00	0.008962	30 inch	0.013	36.83	4,250.00	4,240.35	4,260.00	4,252.00	7.5	9.15	4,251.67	4,243.63	
P-4080	I-2656	O-101	15.17	0.35	5.31	28.44	1.27	36.36	760	0.006579	30 inch	0.013	33.27	4,240.35	4,235.35	4,252.00	4,236.09	9.15	-1.76	4,243.22	4,237.39	
P-4081	I-2655	I-2656	14.23	0.35	4.98	4.98	1.63	8.18	168	0.024702	18 inch	0.013	16.51	4,244.50	4,240.35	4,247.50	4,252.00	1.5	10.15	4,245.61	4,243.45	
P-4249	I-2773	I-2774	0	0	0	0	0	0	272	0.001838	18 inch	0.013	4.5	4,252.00	4,251.50	4,255.00	4,255.00	1.5	2	4,253.81	4,253.81	
P-4250	I-2774	I-2653	0	0	0	5.42	1.47	8.02	665	0.002256	21 inch	0.013	7.52	4,251.50	4,250.00	4,255.00	4,260.00	1.75	8.25	4,253.78	4,252.07	
P-4251	I-2654	I-2774	15.48	0.35	5.42	5.42	1.53	8.34	1,006.00	0.008101	18 inch	0.013	9.45	4,259.65	4,251.50	4,265.65	4,255.00	4.5	2	4,260.77	4,253.92	
P-3145	I-2333	I-3488	0	0.35	0	9.04	1.62	14.75	460	0.002	30 inch	0.013	18.34	4,225.99	4,225.07	4,230.47	4,229.98	1.98	2.41	4,227.74	4,227.05	
P-3048	I-2175	I-2333	0	0.35	0	9.04	1.67	15.23	314	0.002006	27 inch	0.013	13.87	4,226.62	4,225.99	4,231.62	4,230.47	2.75	2.23	4,228.61	4,227.89	
P-2730	I-950	I-3088	25.84	0.35	9.04	9.04	1.74	15.65	100	0.0041	24 inch	0.013	14.48	4,228.13	4,227.72	4,233.13	4,232.72	3	3	4,230.60	4,230.10	
P-2731	I-3088	I-2175	0	0	0	9.04	1.72	15.69	278	0.003957	24 inch	0.013	14.23	4,227.72	4,226.62	4,232.72	4,231.62	3	3	4,229.96	4,228.62	
P-4102	I-3488	I-2674	0	0	0	9.04	1.58	14.4	1,317.00	0.000759	36 inch	0.013	18.38	4,225.07	4,224.07	4,229.98	4,226.07	1.91	-1	4,227.04	4,225.86	
P-4103	I-2674	O-104	16.86	0.35	5.9	14.95	1.42	21.42	2,508.00	0.002392	36 inch	0.013	32.62	4,224.07	4,218.07	4,226.07	4,224.07	-1	3	4,225.85	4,219.56	
P-4127	I-2693	O-107	0	0	0	9.62	1.52	14.72	1,733.00	0.001875	30 inch	0.013	17.76	4,237.50	4,234.25	4,242.00	4,238.00	2	1.25	4,239.24	4,235.54	
P-4128	I-2694	I-2693	27.49	0.35	9.62	9.62	1.53	14.81	134	0.003731	24 inch	0.013	13.82	4,238.00	4,237.50	4,242.00	4,242.00	2	2.5	4,239.83	4,239.33	
P-4129	I-2695	I-2692	5.72	0.35	2	2	1.9	3.83	44	0.022727	15 inch	0.013	9.74	4,238.00	4,237.00	4,243.00	4,241.00	3.75	2.75	4,238.79	4,237.94	
P-4130	I-2692	O-108	0	0	0	2	1.89	3.82	176	0.022472	15 inch	0.013	9.68	4,237.00	4,233.00	4,241.00	4,237.00	2.75	2.75	4,237.79	4,233.55	
P-1544	I-2190	I-2429	21.04	0.3	6.31	11.7	1.6	18.83	237	0.005274	18 inch	0.013	7.63	4,260.24	4,259.99	4,265.24	4,263.99	3.5	3.5	4,271.61	4,263.99	
P-1543	I-2191	I-2190	0	0	0	5.39	2.12	11.53	99	0.007677	18 inch	0.013	9.2	4,261.00	4,260.24	4,266.00	4,265.24	3.5	3.5	4,266.43	4,265.24	
P-3092	I-3417	O-41	0	0	0	14.33	1.51	21.81	71	0.002676	30 inch	0.013	21.22	4,249.15	4,248.96	4,254.03	4,253.96	2.38	2.5	4,251.03	4,250.55	
P-3192	I-3416	I-3417	0	0	0	2.63	1.95	5.17	311	0.004887	30 inch	0.013	28.67	4,250.67	4,249.15	4,255.67	4,254.03	2.5	2.38	4,251.42	4,251.07	
P-3922	I-2270	I-3416	0	0	0	2.63	2.06	5.45	621	0.007424	15 inch	0.013	5.57	4,255.28	4,250.67	4,260.28	4,255.67	3.75	3.75	4,256.28	4,251.62	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3195	I-3187	I-3508	0	0	0	11.7	1.54	18.19	192	0.00349	30 inch	0.013	24.23	4,250.94	4,250.27	4,255.94	4,255.27	2.5	2.5	4,252.56	4,251.93	
P-3923	I-893	I-3187	0	0	0	11.7	1.58	18.62	737	0.007354	24 inch	0.013	19.4	4,256.36	4,250.94	4,261.36	4,255.94	3	3	4,257.93	4,252.62	
P-3924	I-3508	I-3417	0	0	0	11.7	1.53	18.05	313	0.003578	30 inch	0.013	24.53	4,250.27	4,249.15	4,255.27	4,254.03	2.5	2.38	4,251.86	4,251.06	
P-3925	I-2429	I-893	0	0	0	11.7	1.59	18.74	331	0.007946	18 inch	0.013	9.36	4,258.99	4,256.36	4,263.99	4,261.36	3.5	3.5	4,268.51	4,257.97	
P-3926	I-890	I-2191	26.94	0.2	5.39	5.39	2.16	11.75	297	0.005185	18 inch	0.013	7.56	4,262.54	4,261.00	4,267.54	4,266.00	3.5	3.5	4,269.72	4,266.00	
P-4132	I-2697	I-2270	7.5	0.35	2.63	2.63	2.16	5.72	578	0.00692	15 inch	0.013	5.37	4,259.28	4,255.28	4,265.28	4,260.28	4.75	3.75	4,260.40	4,256.41	
P-4133	I-2698	O-109	6.3	0.35	2.2	2.2	2.16	4.81	920	0.006896	15 inch	0.013	6.02	4,292.28	4,284.28	7,300.00	4,284.28	3,006.47	-1.28	4,293.17	4,285.12	
P-2740	I-2119	I-3193	23.69	0.3	7.11	15.24	1.06	16.3	116	0.018707	24 inch	0.013	30.94	4,283.17	4,281.00	4,288.17	4,286.00	3	3	4,284.63	4,282.04	
P-3953	I-448	I-2119	13.16	0.3	3.95	3.95	1.27	5.07	415	0.006217	15 inch	0.013	5.09	4,285.75	4,283.17	4,290.27	4,288.17	3.27	3.75	4,287.27	4,284.71	
P-4004	I-3193	I-2702	0	0	0	15.24	1.06	16.24	1,039.00	0.008287	27 inch	0.013	28.19	4,281.00	4,272.39	4,286.00	4,274.00	2.75	-0.64	4,282.41	4,274.00	
P-4134	I-2699	I-2119	11.95	0.35	4.18	4.18	1.9	8	225	0.004444	21 inch	0.013	10.56	4,284.17	4,283.17	4,287.00	4,288.17	1.08	3.25	4,285.31	4,284.71	
P-4135	I-2702	I-2700	31.9	0.35	11.17	26.4	1.01	26.87	1,493.00	0.008969	30 inch	0.013	38.84	4,272.39	4,259.00	4,274.00	4,264.00	-0.89	2.5	4,274.16	4,261.03	
P-4136	I-2700	I-2701	21.27	0.35	7.44	33.85	0.99	33.76	1,133.00	0.009267	30 inch	0.013	39.48	4,259.00	4,248.50	4,264.00	4,252.50	2.5	1.5	4,260.98	4,251.82	
P-4137	I-2701	O-110	40.32	0.35	14.11	47.96	0.98	47.15	745	0.019463	30 inch	0.013	57.22	4,248.50	4,234.00	4,252.50	4,235.00	1.5	-1.5	4,250.76	4,235.73	
P-1795	I-2261	I-2262	11.67	0.3	3.5	3.5	1.15	4.05	404	0.009653	18 inch	0.013	10.32	4,255.05	4,251.15	4,260.05	4,256.15	3.5	3.5	4,255.82	4,251.80	
P-1560	I-2078	I-212	0	0	0	11.36	0.94	10.75	129	0.007364	18 inch	0.013	9.01	4,247.98	4,247.03	4,252.98	4,252.03	3.5	3.5	4,250.25	4,248.93	
P-3947	I-2262	I-2078	0	0	0	3.5	1.12	3.96	609	0.005205	24 inch	0.013	16.32	4,251.15	4,247.98	4,256.15	4,252.98	3	3	4,251.85	4,250.34	
P-1556	I-209	I-2137	0	0	0	7.86	0.95	7.56	74	0.009324	18 inch	0.013	10.14	4,255.37	4,254.68	4,260.37	4,259.68	3.5	3.5	4,256.43	4,255.84	
P-1557	I-2137	I-2297	0	0	0	7.86	0.95	7.55	65	0.019882	18 inch	0.013	14.81	4,254.68	4,252.99	4,259.68	4,257.99	3.5	3.5	4,255.74	4,254.18	
P-3948	I-2182	I-209	0	0	0	7.86	0.97	7.65	566	0.006396	18 inch	0.013	8.4	4,258.69	4,255.37	4,263.99	4,260.37	3.5	3.5	4,260.11	4,256.89	
P-3949	I-2297	I-2078	0	0	0	7.86	0.95	7.54	644	0.00778	18 inch	0.013	9.26	4,252.99	4,247.98	4,257.99	4,252.98	3.5	3.5	4,254.05	4,250.39	
P-3965	I-3815	I-2182	22.46	0.35	7.86	7.86	0.98	7.73	544	0.005268	15 inch	0.013	5.11	4,262.40	4,258.99	4,267.40	4,263.99	3.75	3.75	4,268.29	4,260.50	
P-4154	I-212	O-110	39.06	0.35	13.67	25.03	0.94	23.63	1,373.00	0.00949	24 inch	0.013	22.04	4,247.03	4,234.00	4,252.03	4,235.00	3	-1	4,248.82	4,235.72	
P-2738	I-3096	I-2704	21.07	0.3	6.32	6.32	1.53	9.73	74	0.031351	24 inch	0.013	40.05	4,243.45	4,241.13	4,244.88	4,246.13	-0.57	5	4,244.57	4,243.23	
P-3073	I-3390	I-2704	10.14	0.15	1.52	22.7	0.94	24.84	90	0.017111	24 inch	0.013	29.59	4,242.67	4,241.13	4,249.67	4,246.13	5	5	4,244.43	4,243.28	
P-3016	I-216	I-3203	25.45	0.35	8.91	21.18	0.98	24.08	171	0.004971	24 inch	0.013	15.95	4,261.70	4,260.85	4,266.76	4,266.19	3.06	3.34	4,268.12	4,266.18	
P-3946	I-217	I-216	0	0	0	1.99	1.26	4.65	345	0.005391	15 inch	0.013	4.74	4,263.56	4,261.70	4,268.56	4,266.76	3.75	3.81	4,268.55	4,266.76	
P-4006	I-2606	I-217	0	0	0	1.99	1.29	4.71	310	0.004581	15 inch	0.013	4.37	4,264.98	4,263.56	4,269.99	4,268.56	3.76	3.75	4,270.21	4,268.56	
P-4040	I-3203	I-2628	0	0	0	21.18	0.97	24.03	621	0.005894	24 inch	0.013	17.37	4,260.85	4,257.19	4,266.19	4,266.19	3.34	7	4,266.08	4,259.02	
P-4041	I-2628	I-3390	0	0	0	21.18	0.98	23.83	1,467.00	0.009898	24 inch	0.013	22.51	4,257.19	4,242.67	4,266.19	4,249.67	7	5	4,258.96	4,244.49	
P-3620	I-3816	I-23	0	0	0	0	0	0	1,119.00	0.01008	18 inch	0.013	10.55	4,278.66	4,267.38	4,283.66	4,271.38	3.5	2.5	4,278.66	4,267.38	
P-16	I-22	I-23	0	0	0	0	0	0	40	0.15025	15 inch	0.013	25.04	4,273.39	4,267.38	4,276.39	4,271.38	1.75	2.75	4,273.39	4,267.38	
P-4042	I-23	I-2628	0	0	0	0	0	0	1,616.00	0.006306	18 inch	0.013	8.34	4,267.38	4,257.19	4,271.38	4,266.19	2.5	7.5	4,267.38	4,258.96	
P-1824	I-432	I-219	17.41	0.35	6.09	3.07	1.33	4.12	55	0.005091	18 inch	0.013	7.49	4,272.94	4,272.66	4,277.94	4,277.66	3.5	3.5	4,273.73	4,273.51	
P-3945	I-219	I-745	0	0	0	3.07	1.33	4.1	629	0.012178	15 inch	0.013	7.13	4,272.66	4,265.00	4,277.66	4,269.99	3.75	3.74	4,273.48	4,269.99	
P-1469	I-435	I-432	17.65	0.35	6.18	6.18	1.36	8.48	592	0.011334	15 inch	0.013	6.88	4,279.65	4,272.94	4,284.65	4,277.94	3.75	3.75	4,284.33	4,274.08	
P-4071	I-745	I-2606	0	0	0	3.07	1.29	3.99	9	0.002222	15 inch	0.013	3.05	4,265.00	4,264.98	4,269.99	4,269.99	3.74	3.76	4,270.02	4,269.99	
P-4138	I-2703	I-2704	9.1	0.35	3.18	3.18	1.9	6.09	446	0.007556	15 inch	0.013	5.61	4,244.50	4,241.13	4,248.00	4,246.13	2.25	5.75	4,247.09	4,243.12	
P-4139	I-2704	O-111	0	0	0	32.21	0.94	33.84	2,467.00	0.005728	36 inch	0.013	50.48	4,241.13	4,227.00	4,248.13	4,229.00	4	-1	4,243.02	4,228.80	
P-4072	I-2648	I-2649	0	0	0	9.2	1.33	12.36	684	0.009415	21 inch	0.013	15.37	4,272.94	4,266.50	4,276.94	4,267.00	2.25	-1.25	4,274.25	4,267.69	
P-4255	I-2649	I-216	0	0	0	10.28	1.29	14.51	692	0.006936	21 inch	0.013	13.2	4,266.50	4,261.70	4,267.00	4,266.76	-1.25	3.31	4,272.56	4,266.76	
P-3370	I-3680	O-48	0	0	0	17.82	0.89	30.57	2,577.00	0.002798	36 inch	0.013	35.28	4,230.23	4,223.02	4,235.23	4,228.02	2	2	4,232.39	4,224.81	
P-4140	I-2705	I-3680	15.34	0.35	5.37	5.37	0.9	38.49	77	0.022987	30 inch	0.013	62.18	4,232.00	4,230.23	4,236.00	4,235.23	1.5	2.5	4,234.10	4,232.40	
P-4141	I-2706	I-2705	0	0	0	0	0	33.64	839	0.007151	30 inch	0.013	34.68	4,238.00	4,232.00	4,242.00	4,236.00	1.5	1.5	4,239.98	4,234.16	
P-4142	I-2707	I-3680	35.57	0.35	12.45	12.45	1.32	16.56	89	0.011236	21 inch	0.013	16.79	4,231.23	4,230.23	4,235.00	4,235.23	2.02	3.25	4,233.49	4,232.52	
P-4148	I-2712	O-114	70	0.35	24.5	50.64	0.95	48.48	3,900.00	0.001282	48 inch	0.013	51.43	4,224.00	4,219.00	4,228.00	4,221.00	0	-2	4,227.09	4,221.09	
P-4149	I-2714	I-2712	74.69	0.35	26.14	26.14	0.98	25.71	1,197.00	0.002506	36 inch	0.013	33.39	4,227.00	4,224.00	4,231.00	4,228.00	1	1	4,229.03	4,227.28	
P-4155	I-2718	O-114	151	0.35	52.85	52.85	0.98	51.99	214	0.009346	36 inch	0.013	64.48	4,221.00	4,219.00	4,226.00	4,221.00	2	-1	4,223.34	4,221.04	
P-3565	I-3792	O-29	0	0	0	28.31	0.77	34.89	1,317.00	0.001913	42 inch	0.013	44.01	4,219.08	4,216.58	4,223.08	4,221.96	0.5	1.9	4,221.44	4,218.40	
P-3558	I-3650	I-3639	0	0	0	25.11	0.82	34.8	1,640.00	0.00161	36 inch	0.013	26.76	4,222.74	4,220.10	4,226.97	4,226.04	1.23	2.94	4,227.04	4,222.56	
P-3854	I-3639	I-3792	4	0.8	3.2	28.31	0.78	36.36	548	0.001861	42 inch	0.013	43.4	4,220.10	4,219.08	4,226.04	4,223.08	2.44	0.5	4,222.55	4,221.46	
P-4005	I-2605	I-3792	0	0	0	0	0	0.26	297	0.01862	4 inch	0.013	0.26	4,224.61	4,219.08	4,225.61	4,223.08	0.67	3.67	4,226.99	4,221.45	
P-4104	I-2675	I-3792	0	0	0	0	0	56.28	47	0.021277	36 inch	0.013	97.28	4,220.08	4,219.08	4,225.00	4,223.08	1.92	1	4,222.51	4,221.67	
P-3767	I-3862	I-2391	0	0	0	5.37	0.88	4.78	206	0.004854	27 inch	0.013	21.58	4,225.50	4,224.50	4,231.89	4,229.85	4.14	3.1	4,229.90	4,229.85	
P-15	I-21	I-20	26.84	0.2	5.37	5.37	0.98	5.28	95	0.002947	12 inch	0.013	1.93	4,229.72	4,229.44	4,234.16	4,234.44	3.44	4	4,232.91	4,230.82	
P-32	I-29	I-20	0	0	0	0	0	0	236	0.002161	12 inch	0.013	1.66	4,229.95	4,229.44	4,234.95	4,234.44	4	4	4,230.78	4,230.78	
P-33	I-20	I-2586	0	0	0	5.37	0.97	5.27	140	0.002071	24 inch	0.013	10.3	4,229.44	4,229.15	4,234.44	4,234.15	3	3	4,230.77	4,230.69	
P-3959	I-2586	I-2587	0	0	0	5.37	0.97	5.25	883	0.001178	24 inch	0.013	7.76	4,229.15	4,228.11	4,234.15	4,233.11	3	3	4,230.69	4,230.25	
P-3960	I-2587	I-3862	0	0	0	5.37	0.93	5.04	688	0.003794	24 inch	0.013	13.93	4,228.11	4,225.50	4,233.11	4,231.89	3	4.39	4,230.24	4,229.90	
P-3961	I-311	I-2587	0	0	0	0	0	0	60	0.014833	15 inch	0.013	7.87	4,229.00	4,228.11	4,232.82	4,233.11	2.57	3.75	4,230.24	4,230.24	
P-1459	I-2267	I-2268	0	0	0	0	0	4	93	0.004194	18 inch	0.013	6.8	4,233.99	4,233.60	4,237.99	4,238.01	2.5	2.91	4,235.11	4,235.01	
P-3649	I-2268	I-3838	0	0	0	0.83	1.62	5.36	783	0.000766	24 inch	0.013	6.26	4,233.60	4,233.00	4,238.01	4,238.00	2.41	3	4,234.98	4,234.22	
P-3654	I-3838	I-2862	0	0	0	3.32	1.26	8.22	258	0.002907	24 inch	0.013	12.2	4,233.00	4,232.25	4,238.00	4,237.94	3	3.69	4,234.20	4,233.45	
P-3655	I-2862	I-3839	0	0	0	3.32	1.24	8.15	1,668.00	0.002962	24 inch	0.013	12.31	4,232.25	4,227.31	4,237.94	4,232.02	3.69	2.71	4,233.44	4,230.51	
P-3759	I-3839	I-3913	0	0	0	3.32	1.1	7.69	157	0.003248	24 inch	0.013	12.89	4,227.31	4,226.80	4,232.02	4,232.00	2.71	3.2	4,230.50	4,230.32	
P-3760	I-3913	I-2390	0	0	0	3.32	1.08	7.61	265	0.002981	24 inch	0.013	12.35	4,226.80	4,226.01	4,232.00	4,230.01	3.2	2	4,230.31	4,230.01	
P-2607	I-2913	I-2936	0	0.85	0	0	0	0	29	0.001724	15 inch	0.013	2.68	4,233.25	4,233.20	4,237.93	4,237.84	3.43	3.39	4,234.92	4,234.82	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-2608	I-2914	I-2936	0	0.85	0	0	0	0	30	0.001667	15 inch	0.013	2.64	4,233.25	4,233.20	4,237.76	4,237.84	3.26	3.39	4,234.92	4,234.92	
P-2511	I-2957	I-2956	0.4	0.85	0.34	0.34	1.28	0.44	28	0.001786	15 inch	0.013	2.73	4,233.08	4,233.03	4,237.96	4,237.96	3.63	3.68	4,234.32	4,234.31	
P-2510	I-2970	I-2956	0.4	0.85	0.34	0.34	2.16	0.74	31	0.001613	15 inch	0.013	2.59	4,233.08	4,233.03	4,237.96	4,237.96	3.63	3.68	4,234.32	4,234.31	
P-2612	I-2936	I-2956	5.17	0.35	1.81	1.81	1.89	3.44	584	0.000291	18 inch	0.013	1.79	4,233.20	4,233.03	4,237.84	4,237.96	3.14	3.43	4,234.92	4,234.32	
P-3768	I-2956	I-3838	0	0	0	2.49	1.27	3.19	69	0.000435	18 inch	0.013	2.19	4,233.03	4,233.00	4,237.96	4,238.00	3.43	3.5	4,234.31	4,234.25	
P-3861	I-2407	I-2268	0.98	0.85	0.83	0.83	1.89	1.59	737	0.001723	24 inch	0.013	9.39	4,234.87	4,233.60	4,239.87	4,238.01	3	2.41	4,235.43	4,234.99	
P-1653	I-2390	I-2391	0	0	0	3.32	1.04	7.49	662	0.002281	24 inch	0.01	14.04	4,226.01	4,224.50	4,230.01	4,229.85	2	3.35	4,230.28	4,229.85	
P-4199	I-2391	I-3650	1.5	0.85	1.27	25.11	0.84	35.43	1,096.00	0.001606	36 inch	0.013	26.73	4,224.50	4,222.74	4,229.85	4,226.97	2.35	1.23	4,230.07	4,226.97	
P-3418	I-3662	I-3661	0	0	0	15.15	0.89	23.72	273	0.001612	36 inch	0.013	26.78	4,230.13	4,229.69	4,234.95	4,234.00	1.82	1.31	4,232.66	4,232.35	
P-3419	I-3661	I-3679	0	0	0	15.15	0.88	23.61	362	0.001602	36 inch	0.013	26.7	4,229.69	4,229.11	4,234.00	4,234.00	1.31	1.89	4,232.35	4,231.97	
P-3417	I-3682	I-3662	0	0	0	15.15	0.9	23.79	156	0.001603	36 inch	0.013	26.7	4,230.38	4,230.13	4,235.87	4,234.95	2.49	1.82	4,232.85	4,232.67	
P-3756	I-3679	I-3912	0	0	0	15.15	0.87	23.46	187	0.002574	36 inch	0.013	34.49	4,229.11	4,228.61	4,234.00	4,234.00	1.89	2.39	4,231.86	4,231.74	
P-3758	I-3446	I-3912	0	0	0	0	0	0	38	0.001316	15 inch	0.013	2.34	4,228.66	4,228.61	4,234.00	4,234.00	4.09	4.14	4,231.74	4,231.74	
P-3757	I-3912	I-2685	63.04	0	0	15.15	0.67	23.4	176	0.002727	36 inch	0.013	34.83	4,228.61	4,228.13	4,234.00	4,231.52	2.39	0.39	4,231.74	4,231.52	
P-2507	I-2927	I-2966	0	0	0	0	0	0	31	0.014516	21 inch	0.013	19.09	4,230.90	4,230.45	4,234.90	4,236.08	2.25	3.88	4,232.90	4,232.90	
P-2508	I-2951	I-2927	0	0.85	0	0	0	0	31	0.003226	21 inch	0.013	9	4,231.00	4,230.90	4,234.74	4,234.90	1.99	2.25	4,232.90	4,232.90	
P-2509	I-2928	I-2927	0	0.85	0	0	0	0	28	0.003571	21 inch	0.013	9.47	4,231.00	4,230.90	4,234.91	4,234.90	2.16	2.25	4,232.90	4,232.90	
P-3413	I-3678	I-3660	0	0	0	15.15	0.91	24.04	73	0.001644	36 inch	0.013	27.04	4,231.42	4,231.30	4,237.06	4,236.06	2.64	1.76	4,233.73	4,233.62	
P-3415	I-3659	I-3699	0	0	0	15.15	0.91	23.95	326	0.001626	36 inch	0.013	26.89	4,231.06	4,230.53	4,236.02	4,236.00	1.96	2.47	4,233.40	4,232.98	
P-3414	I-3660	I-3659	0	0	0	15.15	0.91	24.01	144	0.001667	36 inch	0.013	27.23	4,231.30	4,231.06	4,236.06	4,236.02	1.76	1.96	4,233.61	4,233.41	
P-3762	I-3699	I-2966	0	0	0	15.15	0.9	23.82	47	0.001702	36 inch	0.013	27.52	4,230.53	4,230.45	4,236.00	4,236.08	2.47	2.63	4,232.97	4,232.91	
P-3763	I-2966	I-3682	0	0	0	15.15	0.9	23.8	40	0.00175	36 inch	0.013	27.9	4,230.45	4,230.38	4,236.08	4,235.87	2.63	2.49	4,232.90	4,232.88	
P-155	I-587	I-586	5.53	0.35	1.94	1.94	2.16	4.22	148	0.003534	15 inch	0.013	3.84	4,232.90	4,232.38	4,237.90	4,238.00	3.75	4.37	4,235.15	4,234.52	
P-3563	I-3656	I-586	0	0	0	10.48	0.93	19.99	233	0.001592	36 inch	0.013	26.61	4,232.75	4,232.38	4,237.99	4,238.00	2.24	2.62	4,234.80	4,234.52	
P-3564	I-586	I-3698	0	0	0	12.42	0.93	21.73	468	0.001596	36 inch	0.013	26.65	4,232.38	4,231.63	4,238.00	4,237.96	2.62	3.33	4,234.51	4,233.91	
P-1791	I-749	I-1988	4.84	0.85	4.11	4.11	1.66	7.72	443	0.001036	18 inch	0.013	3.38	4,233.24	4,232.78	4,238.24	4,238.00	3.5	3.72	4,237.25	4,234.85	
P-3409	I-3495	I-3657	42.76	0	0	6.37	0.94	16.15	120	0.001667	36 inch	0.013	27.23	4,233.10	4,232.90	4,237.99	4,237.99	1.89	2.09	4,235.01	4,234.91	
P-3765	I-2939	I-3495	0	0	0	0	0	6.88	102	0.001471	36 inch	0.013	25.58	4,233.25	4,233.10	4,238.00	4,237.99	1.75	1.89	4,235.06	4,235.04	
P-3766	I-3657	I-1988	0	0	0	6.37	0.94	16.13	75	0.0016	36 inch	0.013	26.68	4,232.90	4,232.78	4,237.99	4,238.00	2.09	2.22	4,234.90	4,234.84	
P-3767	I-1988	I-3656	0	0	0	10.48	0.93	19.59	20	0.0016	36 inch	0.013	26.68	4,232.78	4,232.75	4,238.00	4,237.99	2.22	2.24	4,234.83	4,234.81	
P-3772	I-3698	I-3915	0	0	0	12.42	0.92	21.57	63	0.001746	36 inch	0.013	27.87	4,231.63	4,231.52	4,237.96	4,237.71	3.33	3.19	4,233.90	4,233.83	
P-3773	I-3915	I-3678	1.01	0.85	0.86	15.15	0.91	24.06	58	0.001724	36 inch	0.013	27.69	4,231.52	4,231.42	4,237.71	4,237.06	3.19	2.64	4,233.82	4,233.74	
P-3769	I-2975	I-3914	0	0.85	0	0	0	0	30	0.001	15 inch	0.013	2.04	4,232.52	4,232.49	4,237.52	4,237.49	3.75	3.75	4,234.86	4,234.86	
P-3770	I-2976	I-3914	0	0.85	0	0	0	0	30	0.003333	15 inch	0.013	3.73	4,232.59	4,232.49	4,237.45	4,237.49	3.61	3.75	4,234.86	4,234.86	
P-3774	I-3914	I-3915	5.34	0.35	1.87	1.87	2.16	4.08	685	0.001416	18 inch	0.013	3.95	4,232.49	4,231.52	4,237.49	4,237.71	3.5	4.69	4,234.86	4,233.83	
P-3170	I-3445	I-3446	0	0	0	0	0	0	58	0.004655	30 inch	0.013	27.98	4,228.93	4,228.66	4,233.93	4,234.00	2.5	2.84	4,231.74	4,231.74	
P-3958	I-2585	I-3495	1.86	0.8	1.49	6.37	0.98	9.49	1,482.00	0.003981	30 inch	0.013	25.88	4,239.00	4,233.10	4,242.00	4,237.99	0.5	2.39	4,240.05	4,235.02	
P-4204	I-2747	I-2585	0	0	0	4.86	0.98	8.03	73	0.001644	15 inch	0.013	16.04	4,243.50	4,239.00	4,249.88	4,242.00	5.13	1.75	4,244.62	4,239.63	
P-4241	I-2685	I-2391	0	0	0	15.15	0.86	23.31	926	0.00392	30 inch	0.013	25.68	4,228.13	4,224.50	4,231.52	4,229.85	0.89	2.85	4,232.84	4,229.85	
P-4166	I-2724	O-118	0	0	0	0	0	100	682	0.004707	48 inch	0.013	98.54	4,271.21	4,268.00	4,275.00	4,275.00	-0.21	3	4,274.54	4,271.03	
P-303	I-277	I-775	0	0.3	0	0	0	0	486	0.001173	15 inch	0.013	2.21	4,269.25	4,268.68	4,272.92	4,271.92	2.42	1.99	4,270.66	4,270.66	
P-298	I-275	I-277	0	0.3	0	0	0	0	515	0.001068	15 inch	0.013	2.11	4,269.80	4,269.25	4,272.00	4,272.92	0.95	2.42	4,270.66	4,270.66	
P-1711	I-775	I-2115	33.17	0.3	9.95	9.95	0.98	9.79	65	0.001846	18 inch	0.013	4.51	4,268.68	4,268.56	4,271.92	4,273.56	1.74	3.5	4,270.61	4,270.05	
P-4217	I-2115	O-118	9.43	0.3	2.83	12.78	0.97	12.55	21	0.026667	18 inch	0.013	17.15	4,268.56	4,268.00	4,273.56	4,275.00	3.5	5.5	4,269.90	4,269.06	
P-4068	I-2646	I-2647	0	0	0	9.18	1.58	14.65	1,121.00	0.00917	21 inch	0.013	15.17	4,294.77	4,284.49	4,296.00	4,289.00	-0.52	2.76	4,297.07	4,287.47	
P-1827	I-2280	I-2279	45.19	0	0	0	0	9.04	148	0.011284	18 inch	0.013	11.16	4,289.09	4,287.42	4,294.09	4,292.42	3.5	3.5	4,290.95	4,289.85	
P-2605	I-272	I-109	25.25	0.35	8.84	11.16	1.6	18.01	356	0.009129	21 inch	0.013	15.14	4,297.25	4,294.00	4,301.97	4,299.77	2.97	4.02	4,301.35	4,296.75	
P-2606	I-109	I-2279	20.67	0.35	7.2	9.18	1.58	14.66	808	0.008144	21 inch	0.013	14.3	4,294.00	4,287.42	4,299.77	4,292.42	4.02	3.25	4,296.69	4,289.77	
P-527	I-665	I-666	30.05	0.35	10.52	10.52	1.32	14.03	1,060.00	0.007594	15 inch	0.013	5.63	4,296.69	4,288.64	4,301.69	4,293.64	3.75	3.75	4,343.66	4,293.64	
P-528	I-666	I-667	0	0	0	10.52	1.29	13.69	132	0.00697	15 inch	0.013	5.39	4,288.64	4,287.72	4,293.64	4,292.72	3.75	3.75	4,298.65	4,292.72	
P-529	I-667	I-668	0	0	0	10.52	1.29	13.65	264	0.012159	15 inch	0.013	7.12	4,287.72	4,284.51	4,292.72	4,291.16	3.75	5.4	4,299.53	4,287.74	
P-3052	I-2279	I-668	0	0	0	9.18	1.54	23.28	313	0.009297	27 inch	0.013	29.86	4,287.42	4,284.51	4,292.42	4,291.16	2.75	4.4	4,289.72	4,287.95	
P-4069	I-668	I-2647	0	0	0	19.7	1.28	34.44	3	0.006667	30 inch	0.013	33.49	4,284.51	4,284.49	4,291.16	4,289.00	4.15	2.01	4,287.64	4,287.62	
P-4092	I-2665	I-272	6.63	0.35	2.32	2.32	1.63	3.81	263	0.00654	15 inch	0.013	5.22	4,298.97	4,297.25	4,299.97	4,301.97	-0.25	3.47	4,302.43	4,301.52	
P-4198	I-2647	O-100	0	0	0	28.86	1.28	46.27	797	0.00187	42 inch	0.013	43.5	4,284.49	4,283.00	4,289.00	4,284.28	1.01	-2.22	4,287.45	4,285.12	
P-3626	I-464	I-3621	0	0	0	28.51	0.9	80.02	89	0.01191	48 inch	0.013	156.75	4,281.56	4,280.50	4,286.56	4,285.50	1	1	4,284.27	4,283.43	
P-3548	I-2368	I-3675	0	0	0	0	0	39.04	2,253.00	0.009099	30 inch	0.013	39.12	4,302.44	4,281.94	4,305.71	4,286.94	0.77	2.5	4,305.31	4,284.90	
P-3625	I-3675	I-464	7.46	0.35	2.61	28.51	0.9	80.03	31	0.012258	48 inch	0.013	159.03	4,281.94	4,281.56	4,286.94	4,286.56	1	1	4,284.65	4,284.43	
P-3629	I-879	I-3826	0	0	0	28.51	0.9	79.9	106	0.006509	48 inch	0.013	115.89	4,277.65	4,276.96	4,282.65	4,281.96	1	1	4,280.36	4,280.23	
P-3752	I-3826	O-83	0	0	0	28.51	0.9	79.87	74	0.007432	48 inch	0.013	123.83	4,276.96	4,276.41	4,281.96	4,281.41	1	1	4,279.67	4,278.81	
P-3915	I-3821	I-879	0	0	0	28.51	0.9	80	325	0.008769	48 inch	0.013	134.51	4,280.50	4,277.65	4,285.50	4,282.65	1	1	4,283.21	4,280.53	
P-3384	I-3703	I-3689	0	0	0	0	0	10	88	0.016591	18 inch	0.013	13.53	4,320.35	4,318.89	4,325.35	4,323.89	3.5	3.5	4,321.57	4,320.59	
P-3385	I-3689	I-3636	0	0	0	0	0	15.17	62	0.008387	24 inch	0.013	20.72	4,318.89	4,318.37	4,323.89	4,323.37	3	3	4,320.29	4,320.18	
P-3441	I-3636	I-3122	0	0	0	0	0	16.77	1,566.00	0.008825	24 inch	0.013	21.25	4,318.37	4,304.55	4,323.37	4,307.97	3	1.42	4,319.85	4,307.34	
P-4032	I-3122	I-2368	0	0	0	0	0	16.77	316	0.006677	24 inch	0.013	18.48	4,304.55	4,302.44	4,307.97	4,305.71	1.42	1.27	4,307.30	4,305.57	
P-4033	I-2623	I-2368	0	0	0	0	0	22.27	28	0.073571	30 inch	0.013	111.25	4,304.50	4,302.44	4,308.58	4,305.71	1.58	0.77	4,306.11	4,305.71	
P-4098	I-2664	I-3675	9.95	0.35	3.48	25.9	0.91	38.78	412	0.005024	36 inch	0.013	47.27	4,284.01	4,281.94	4,285.00	4,286.94	-2.01	2	4,286.08	4,284.92	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-1598	I-345	I-138	1.73	0.3	0.52	0.52	1.62	4.5	298	0.008188	18 inch	0.013	9.5	4,292.42	4,289.98	4,297.42	4,293.98	3.5	2.5	4,293.23	4,291.78	
P-3914	I-138	I-3503	11.38	0.3	3.41	3.93	1.52	9.67	175	0.005943	18 inch	0.013	8.1	4,289.98	4,288.94	4,293.98	4,294.01	2.5	3.57	4,291.73	4,290.15	
P-4109	I-3503	I-2664	2.74	0.28	0.77	5.81	1.48	12.3	234	0.021068	30 inch	0.013	59.53	4,288.94	4,284.01	4,294.01	4,285.00	2.57	-1.51	4,290.12	4,284.78	
P-4010	I-2607	J-2	3.69	0.3	1.11	1.11	1.83	2.04	109	0.003119	15 inch	0.013	3.61	4,290.34	4,290.00	4,293.34	4,293.18	1.75	1.93	4,291.01	4,290.57	
P-4112	J-2	I-3503	N/A	N/A	N/A	1.11	1.8	2.01	176	0.006023	18 inch	0.013	8.15	4,290.00	4,288.94	4,293.18	4,294.01	1.68	3.57	4,290.53	4,290.15	
P-4157	I-2678	I-345	18.33	0	0	0	0	3.66	225	0.008889	18 inch	0.013	9.9	4,294.42	4,292.42	4,299.42	4,297.42	3.5	3.5	4,295.15	4,293.30	
P-4171	I-2677	I-2664	47.45	0.35	16.61	16.61	1.32	22.1	1,595.00	0.009391	30 inch	0.013	39.68	4,288.94	4,284.01	4,305.94	4,285.00	4.5	-1.51	4,300.54	4,285.34	
P-2689	I-3163	I-3162	0	0	0	5.83	1.36	7.98	123	0.00252	36 inch	0.013	33.48	4,226.38	4,226.07	4,230.38	4,230.07	1	1	4,227.38	4,227.04	
P-3846	I-3184	I-3163	51.19	0	0	5.83	1.51	8.88	1,047.00	0.000592	36 inch	0.013	16.23	4,227.00	4,226.38	4,233.00	4,230.38	3	1	4,228.54	4,227.39	
P-4001	I-3162	O-75	0	0	0	5.83	1.35	7.92	103	0.003301	36 inch	0.013	38.32	4,226.07	4,225.73	4,230.07	4,225.73	1	-3	4,227.00	4,226.62	
P-4172	I-2728	I-3184	18.65	0.35	5.83	5.83	2.16	12.71	543	0.001842	30 inch	0.013	17.6	4,228.00	4,227.00	4,230.00	4,233.00	-0.5	3.5	4,229.57	4,228.55	
P-3972	I-2584	I-3211	0	0	0	0	0	45	35	0.004	42 inch	0.013	63.63	4,237.83	4,237.69	4,242.83	4,242.26	1.5	1.07	4,240.38	4,240.34	
P-4151	I-3211	I-2716	0	0	0	0	0	45	1,828.00	0.002976	42 inch	0.013	54.88	4,237.69	4,232.25	4,242.26	4,336.00	1.07	100.25	4,240.10	4,235.34	
P-4152	I-2716	I-2729	0	0	0	5.25	1.5	52.91	658	0.002325	42 inch	0.013	48.51	4,232.25	4,230.72	4,336.00	4,230.72	100.25	-3.5	4,235.31	4,233.00	
P-4153	I-2717	I-2718	15	0.35	5.25	5.25	1.53	8.08	418	0.004187	18 inch	0.013	6.6	4,234.00	4,232.25	4,336.00	4,336.00	100.5	102.25	4,237.83	4,235.35	
P-4173	I-2729	O-116	0	0	0	5.25	1.45	52.69	2,675.00	0.002512	48 inch	0.013	71.99	4,230.72	4,224.00	4,230.72	4,228.00	-4	0	4,233.26	4,226.18	
P-4177	I-2733	O-113	0	0	0	0	0	45	66	0.007576	36 inch	0.013	58.05	4,238.00	4,237.50	4,242.00	4,238.00	1	-2.5	4,240.19	4,239.50	
P-4115	I-2683	O-106	10.17	0.35	3.56	56.6	0.84	53.37	1,144.00	0.001967	42 inch	0.013	44.62	4,229.00	4,226.75	4,238.00	4,235.00	5.5	4.75	4,232.68	4,229.04	
P-4116	I-2684	I-2683	29.77	0.35	10.42	34.34	0.88	36.11	1,418.00	0.00141	42 inch	0.013	37.78	4,231.00	4,229.00	4,240.00	4,238.00	5.5	5.5	4,234.74	4,232.91	
P-4160	I-2721	I-2684	0	0	0	23.92	0.91	27.58	1,420.00	0.003951	30 inch	0.013	25.78	4,236.61	4,231.00	4,240.00	4,240.00	0.89	6.5	4,241.18	4,234.76	
P-422	I-947	I-948	0	0	0	1.32	2	2.65	115	0.048522	15 inch	0.013	14.23	4,242.45	4,236.67	4,247.45	4,241.87	3.75	3.75	4,243.10	4,240.38	
P-424	I-901	I-947	0	0	0	0	0	0	107	0.021308	15 inch	0.013	9.43	4,244.73	4,242.45	4,249.73	4,247.45	3.75	3.75	4,244.73	4,243.18	
P-425	I-900	I-901	0	0	0	0	0	0	72	0.010694	15 inch	0.013	6.68	4,245.50	4,244.73	4,250.50	4,249.73	3.75	3.75	4,245.50	4,244.73	
P-4002	I-812	I-947	3.76	0.35	1.32	1.32	2.16	2.87	410	0.001073	18 inch	0.013	3.44	4,242.89	4,242.45	4,247.89	4,247.45	3.5	3.5	4,243.80	4,243.24	
P-4180	I-948	I-2721	45.99	0.35	16.1	17.41	1.32	23.12	111	0.002342	30 inch	0.013	19.85	4,236.87	4,236.61	4,241.87	4,240.00	2.5	0.89	4,240.35	4,240.00	
P-427	I-905	I-191	0	0	0	0	0	5.69	59	0.003559	15 inch	0.013	3.85	4,249.00	4,248.79	4,254.00	4,253.79	3.75	3.75	4,250.53	4,250.08	
P-4179	I-191	I-2735	0	0	0	0	0	5.69	403	0.026799	15 inch	0.013	10.57	4,248.79	4,237.99	4,253.79	4,238.99	3.75	-0.25	4,249.76	4,238.99	
P-4181	I-2735	I-2737	0	0	0	0	0	5.69	203	0.001921	21 inch	0.013	6.94	4,237.99	4,237.60	4,238.99	4,238.00	-0.75	-1.35	4,239.16	4,238.48	
P-4182	I-2737	I-2721	0	0	0	6.51	0.97	12.07	1,381.00	0.000717	30 inch	0.013	10.98	4,237.60	4,236.61	4,238.00	4,240.00	-2.1	0.89	4,241.20	4,240.00	
P-1502	I-2178	I-2326	0	0	0	6.51	0.98	6.43	90	0.011556	18 inch	0.013	11.29	4,248.04	4,247.00	4,253.04	4,253.09	3.5	4.59	4,249.02	4,248.22	
P-1503	I-2326	I-2736	0	0	0	6.51	0.98	6.42	343	0.026822	18 inch	0.013	17.2	4,247.00	4,237.80	4,253.09	4,242.30	4.59	3	4,247.98	4,239.05	
P-1501	I-2179	I-2178	18.6	0.35	6.51	6.51	0.98	6.44	98	0.00602	18 inch	0.013	8.15	4,248.63	4,248.04	4,253.63	4,253.04	3.5	3.5	4,249.64	4,249.27	
P-4183	I-2736	I-2737	0	0	0	6.51	0.97	6.39	59	0.00339	18 inch	0.013	6.12	4,237.80	4,237.60	4,242.30	4,238.00	3	-1.1	4,238.99	4,238.58	
P-1809	I-908	I-2377	0	0	0	0	0	0	237	0.002236	18 inch	0.013	4.97	4,230.05	4,229.52	4,235.05	4,234.52	3.5	3.5	4,230.88	4,230.88	
P-2736	I-2377	I-1966	0	0	0	0	0	0	306	0.001536	24 inch	0.013	8.87	4,229.52	4,229.05	4,234.52	4,233.86	3	2.81	4,230.88	4,230.88	
P-3167	I-1966	I-3473	0	0	0	0	0	0	57	0.001754	30 inch	0.013	17.18	4,229.05	4,228.95	4,233.86	4,233.80	2.31	2.35	4,230.88	4,230.88	
P-3857	I-2327	I-2377	0	0	0	0	0	0	287	0.001742	21 inch	0.013	6.61	4,230.02	4,229.52	4,235.02	4,234.52	3.25	3.25	4,230.88	4,230.88	
P-3860	I-702	I-714	0	0	0	0	0	0	627	0.001834	15 inch	0.013	2.77	4,232.72	4,231.57	4,237.72	4,236.57	3.75	3.75	4,232.72	4,231.57	
P-3861	I-714	I-908	0	0	0	0	0	0	871	0.001745	15 inch	0.013	2.7	4,231.57	4,230.05	4,236.57	4,235.05	3.75	3.75	4,231.57	4,230.88	
P-3862	I-1981	I-539	0	0	0	0	0	0	343	0.001662	18 inch	0.013	4.28	4,231.96	4,231.39	4,236.96	4,236.39	3.5	3.5	4,231.96	4,231.39	
P-3863	I-898	I-539	0	0	0	0	0	0	458	0.001245	18 inch	0.013	3.71	4,231.96	4,231.39	4,236.96	4,236.39	3.5	3.5	4,231.96	4,231.39	
P-3864	I-539	I-2327	0	0	0	0	0	0	567	0.002416	18 inch	0.013	5.16	4,231.39	4,230.02	4,236.39	4,235.02	3.5	3.5	4,231.39	4,230.88	
P-4194	I-3473	O-106	40.87	0.35	14.3	14.3	1.42	20.52	971	0.002266	36 inch	0.013	31.75	4,226.95	4,226.75	4,233.80	4,235.00	1.85	5.25	4,230.71	4,228.20	
P-1814	I-2107	I-2317	19.64	0	0	0.6	1.41	0.86	78	0.001923	18 inch	0.013	4.61	4,232.28	4,232.13	4,237.28	4,237.13	3.5	3.5	4,235.07	4,235.06	
P-473	I-194	I-195	0	0	0	0.6	1.7	1.03	53	0.001132	15 inch	0.013	2.17	4,233.00	4,232.94	4,238.00	4,237.94	3.75	3.75	4,235.12	4,235.11	
P-3858	I-195	I-2107	0	0	0	0.6	1.64	1	363	0.001818	18 inch	0.013	4.48	4,232.94	4,232.28	4,237.94	4,237.28	3.5	3.5	4,235.10	4,235.07	
P-3859	I-203	I-194	0	0	0	0.6	1.85	1.12	445	0.002889	15 inch	0.013	3.53	4,234.33	4,233.00	4,239.33	4,238.00	3.75	3.75	4,236.27	4,235.14	
P-4117	I-2682	I-203	6.02	0.1	0.6	0.6	1.9	1.15	166	0.006024	15 inch	0.013	5.01	4,235.33	4,234.33	4,239.00	4,239.33	2.42	3.75	4,235.75	4,235.27	
P-4159	I-2317	I-2720	0	0	0	0.6	1.36	0.82	97	0.001753	18 inch	0.013	4.4	4,232.13	4,231.96	4,237.13	4,237.96	3.5	4.6	4,235.06	4,235.05	
P-4195	I-2720	I-2745	18.14	0.35	6.35	6.95	1.29	9.01	352	0.002727	24 inch	0.013	11.81	4,231.96	4,231.00	4,237.96	4,235.00	4	2	4,234.92	4,234.36	
P-4196	I-2745	I-2746	13.85	0.35	4.85	11.8	1.24	14.78	370	0.002703	30 inch	0.013	21.32	4,231.00	4,230.00	4,235.00	4,235.00	1.5	2.5	4,234.35	4,233.87	
P-4197	I-2746	I-2683	19.7	0.35	6.89	18.69	1.2	22.63	320	0.003125	30 inch	0.013	22.93	4,230.00	4,229.00	4,235.00	4,238.00	2.5	6.5	4,233.85	4,232.88	
P-2799	I-3158	I-3191	0	0	0	0	0	0	297	0.003502	24 inch	0.013	13.39	4,219.78	4,218.74	4,224.78	4,223.74	3	3	4,220.16	4,220.16	
P-2798	I-3191	I-3167	0	0	0	0	0	0	70	0.003286	24 inch	0.013	12.97	4,218.74	4,218.51	4,223.74	4,223.51	3	3	4,220.16	4,220.16	
P-2797	I-3167	I-136	0	0	0	0	0	0	67	0.002388	24 inch	0.013	11.05	4,218.51	4,218.35	4,223.51	4,223.35	3	3	4,220.16	4,220.16	
P-2784	I-3083	I-3158	0	0	0	0	0	0	93	0.003441	24 inch	0.013	13.27	4,220.10	4,219.78	4,225.10	4,224.78	3	3	4,220.16	4,220.16	
P-2778	I-3162	I-2436	0	0	0	0	0	0	152	0.003487	24 inch	0.013	13.36	4,222.11	4,221.58	4,227.11	4,226.58	3	3	4,222.11	4,221.58	
P-2779	I-2436	I-3089	0	0	0	0	0	0	326	0.003497	24 inch	0.013	13.38	4,221.58	4,220.44	4,226.58	4,225.44	3	3	4,221.58	4,220.44	
P-2781	I-3089	I-639	0	0	0	0	0	0	75	0.003467	24 inch	0.013	13.32	4,220.44	4,220.18	4,225.44	4,225.18	3	3	4,220.44	4,220.18	
P-2782	I-639	I-3083	0	0	0	0	0	0	24	0.003333	24 inch	0.013	13.06	4,220.18	4,220.10	4,225.18	4,225.10	3	3	4,220.18	4,220.16	
P-2786	I-3072	I-3071	0	0	0	0	0	0	24	0.01625	24 inch	0.013	28.84	4,217.74	4,217.35	4,222.74	4,222.67	3	3.32	4,220.16	4,220.16	
P-3196	I-136	I-3072	0	0	0	0	0	0	192	0.003177	30 inch	0.013	23.12	4,218.35	4,217.74	4,223.35	4,222.74	2.5	2.5	4,220.16	4,220.16	
P-1915	I-2152	I-2353	0	0	0	0	0	0	145	0.003103	18 inch	0.013	5.85	4,220.95	4,220.50	4,225.95	4,225.50	3.5	3.5	4,220.95	4,220.88	
P-1924	I-1974	I-808	0	0	0	0	0	0	82	0.003293	18 inch	0.013	6.03	4,219.98	4,219.71	4,224.98	4,224.71	3.5	3.5	4,220.88	4,220.88	
P-1925	I-2353	I-1974	0	0	0	0	0	0	137	0.003796	18 inch	0.013	6.47	4,220.50	4,219.98	4,225.50	4,224.98	3.5	3.5	4,220.88	4,220.88	
P-1917	I-2098	I-2152	0	0	0	0	0	0	71	0.003521	18 inch	0.013	6.23	4,221.20	4,220.95	4,226.20	4,225.95	3.5	3.5	4,221.20	4,220.95	
P-1923	I-2230	I-854	0	0	0	0	0	0	34	0.003235	18 inch	0.013	5.97	4,218.71	4,218.60	4,223.71	4,223.60	3.5	3.5	4,220.88	4,220.85	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-2789	I-654	I-813	0	0	0	0	0	0	74	0.003514	24 inch	0.013	13.41	4,218.60	4,218.34	4,223.60	4,223.34	3	3	4,220.88	4,220.88	
P-2794	I-3173	I-2230	0	0	0	0	0	0	56	0.003571	24 inch	0.013	13.52	4,218.91	4,218.71	4,223.91	4,223.71	3	3	4,220.88	4,220.88	
P-2795	I-3102	I-3173	0	0	0	0	0	0	124	0.003629	24 inch	0.013	13.63	4,219.36	4,218.91	4,224.36	4,223.91	3	3	4,220.88	4,220.88	
P-2796	I-808	I-3102	0	0	0	0	0	0	104	0.003365	24 inch	0.013	13.12	4,219.71	4,219.36	4,224.71	4,224.36	3	3	4,220.88	4,220.88	
P-2788	I-813	I-3200	0	0	0	0	0	0	110	0.003545	24 inch	0.013	13.47	4,218.34	4,217.95	4,223.34	4,222.95	3	3	4,220.88	4,220.88	
P-3579	I-3653	I-3795	25.36	0.35	8.88	18.58	1.1	31.61	1,037.00	0.003375	42 inch	0.013	58.45	4,222.18	4,218.68	4,227.18	4,223.68	1.5	1.5	4,224.01	4,221.57	
P-3803	I-3795	I-3200	0	0	0	18.58	1.04	30.53	602	0.001213	42 inch	0.013	35.03	4,218.68	4,217.95	4,223.68	4,222.95	1.5	1.5	4,221.43	4,220.89	
P-3830	I-3200	I-3071	18.24	0.35	6.38	24.96	1	36.26	554	0.001083	42 inch	0.013	33.11	4,217.95	4,217.35	4,222.95	4,222.67	1.5	1.82	4,220.88	4,220.11	
P-3831	I-3071	I-2222	14.58	0.35	5.1	30.06	0.99	40.92	254	0.000827	48 inch	0.013	41.3	4,217.35	4,217.14	4,222.67	4,222.58	1.32	1.44	4,220.10	4,219.72	
P-3621	I-3818	O-3	0	0	0	37.99	0.97	48.08	154	0.002662	48 inch	0.013	74.11	4,215.41	4,215.00	4,220.41	4,220.00	1	1	4,217.74	4,217.08	
P-3832	I-2222	I-3818	12.45	0.3	3.73	37.99	0.98	48.51	629	0.00275	48 inch	0.013	75.33	4,217.14	4,215.41	4,222.58	4,220.41	1.44	1	4,219.48	4,217.91	
P-3790	I-3518	I-2380	27.91	0.15	4.19	4.19	1.32	5.57	111	0.003243	18 inch	0.013	5.98	4,218.24	4,217.88	4,222.14	4,222.38	2.4	3	4,220.53	4,220.21	
P-3833	I-2380	I-2222	0	0	0	4.19	1.31	5.52	233	0.003176	18 inch	0.013	5.92	4,217.88	4,217.14	4,222.38	4,222.58	3	3.94	4,220.14	4,219.50	
P-708	I-611	I-609	0	0	0	0	0	0	100	0.0021	15 inch	0.013	2.96	4,225.60	4,225.39	4,230.60	4,230.39	3.75	3.75	4,225.60	4,225.39	
P-709	I-612	I-611	0	0	0	0	0	0	72	0.00125	15 inch	0.013	2.28	4,225.69	4,225.60	4,230.69	4,230.60	3.75	3.75	4,225.69	4,225.60	
P-713	I-849	I-612	0	0	0	0	0	0	71	0.000141	15 inch	0.013	0.77	4,225.70	4,225.69	4,230.65	4,230.69	3.7	3.75	4,225.70	4,225.69	
P-1921	I-609	I-2048	0	0	0	0	0	0	153	0.002418	18 inch	0.013	5.17	4,225.39	4,225.02	4,230.39	4,230.02	3.5	3.5	4,225.39	4,225.02	
P-1920	I-2048	I-606	0	0	0	0	0	0	62	0.002903	18 inch	0.013	5.66	4,225.02	4,224.84	4,230.02	4,229.84	3.5	3.5	4,225.02	4,224.84	
P-2792	I-606	I-653	0	0	0	0	0	0	176	0.002955	24 inch	0.013	12.3	4,224.84	4,224.32	4,229.84	4,229.32	3	3	4,224.84	4,224.32	
P-2791	I-653	I-128	0	0	0	0	0	0	106	0.002825	24 inch	0.013	12.23	4,224.32	4,224.01	4,229.32	4,229.01	3	3	4,224.32	4,224.01	
P-2790	I-128	I-123	0	0	0	0	0	0	327	0.002897	24 inch	0.013	12.38	4,224.01	4,223.03	4,229.01	4,228.03	3	3	4,224.01	4,224.01	
P-3200	I-123	I-3504	0	0	0	0	0	0	74	0.003108	30 inch	0.013	22.87	4,223.03	4,222.80	4,228.03	4,227.80	2.5	2.5	4,224.01	4,224.01	
P-3198	I-3493	I-3448	0	0	0	0	0	0	96	0.001667	30 inch	0.013	16.74	4,222.64	4,222.48	4,227.51	4,227.18	2.37	2.2	4,224.01	4,224.01	
P-3197	I-3448	I-3447	0	0	0	0	0	0	71	0.001127	30 inch	0.013	13.77	4,222.48	4,222.40	4,227.18	4,226.93	2.2	2.03	4,224.01	4,224.01	
P-3199	I-3504	I-3493	0	0	0	0	0	0	90	0.001778	30 inch	0.013	17.29	4,222.80	4,222.64	4,227.80	4,227.51	2.5	2.37	4,224.01	4,224.01	
P-3835	I-3447	I-3663	0	0	0	0	0	0	210	0.001048	36 inch	0.013	21.59	4,222.40	4,222.18	4,226.93	4,227.18	1.53	2	4,224.01	4,224.01	
P-3985	I-2597	I-3663	0	0	0	9.7	1.22	22.88	1,557.00	0.002389	30 inch	0.013	20.05	4,225.90	4,222.18	4,231.90	4,227.18	3.5	2.5	4,228.88	4,224.03	
P-4198	I-2676	I-2597	0	0	0	0	0	4.9	58	0.016379	15 inch	0.013	8.27	4,226.85	4,225.90	4,227.85	4,231.90	-0.25	4.75	4,229.41	4,229.07	
P-17	I-26	I-25	0	0	0	0	0	0	140	0.001786	12 inch	0.013	1.51	4,273.81	4,273.56	4,278.81	4,278.56	4	4	4,273.81	4,273.56	
P-3835	I-1995	I-3823	30.28	0.35	10.6	44.33	0.81	129.08	564	0.006507	48 inch	0.013	115.87	4,263.83	4,260.16	4,267.83	4,265.16	0	1	4,269.72	4,265.16	
P-3636	I-3823	I-3830	0	0	0	44.33	0.81	128.8	99	0.00596	48 inch	0.013	110.88	4,260.16	4,259.57	4,265.16	4,264.57	1	1	4,264.70	4,263.90	
P-3439	I-3653	I-3078	0	0	0	0	0	0	125	0.00952	36 inch	0.013	65.97	4,271.35	4,270.16	4,276.35	4,275.16	2	2	4,274.95	4,274.95	
P-3440	I-2265	I-3653	0	0	0	0	0	0	66	0.011818	36 inch	0.013	72.5	4,272.13	4,271.35	4,277.13	4,276.35	2	2	4,274.95	4,274.95	
P-3634	I-3078	I-1995	29.1	0.35	10.19	33.73	0.83	120.79	1,005.00	0.006299	48 inch	0.013	113.99	4,270.16	4,263.83	4,275.16	4,267.83	1	0	4,274.94	4,267.83	
P-3633	I-3794	I-3078	0	0	0	23.54	0.83	112.42	335	0.006418	48 inch	0.013	115.07	4,272.31	4,270.16	4,277.31	4,275.16	1	1	4,277.05	4,274.99	
P-3597	I-3154	I-3794	0	0	0	23.54	0.83	112.53	357	0.00507	48 inch	0.013	102.27	4,274.12	4,272.31	4,279.12	4,277.31	1	1	4,279.28	4,277.09	
P-3821	I-3830	O-53	0	0	0	46.48	0.81	130.5	247	0.012227	48 inch	0.013	158.82	4,259.57	4,256.55	4,264.57	4,261.55	1	1	4,262.99	4,259.34	
P-3550	I-3664	I-3686	5.3	0.3	1.59	11.72	0.97	26.88	120	0.008417	36 inch	0.013	61.19	4,323.01	4,322.00	4,328.01	4,329.75	2	4.75	4,324.69	4,324.77	
P-3551	I-3500	I-3664	0	0	0	10.13	0.97	25.34	118	0.006864	36 inch	0.013	55.26	4,323.82	4,323.01	4,328.82	4,328.01	2	2	4,325.44	4,325.01	
P-1913	I-2217	I-2216	0	0	0	0	0	7	2,551.00	0.007068	18 inch	0.013	8.83	4,318.20	4,300.17	4,323.20	4,305.17	3.5	3.5	4,319.22	4,302.81	
P-3371	I-3642	I-2216	7.98	0.35	2.79	20.71	0.93	58.66	308	0.007078	36 inch	0.013	56.11	4,302.35	4,300.17	4,305.74	4,305.17	0.39	2	4,304.95	4,302.81	
P-3561	I-2242	I-3642	7.99	0.35	2.8	17.92	0.96	56.57	2,281.00	0.006839	36 inch	0.013	55.16	4,317.95	4,302.35	4,323.92	4,305.74	2.97	0.39	4,320.48	4,305.00	
P-3562	I-3686	I-2242	7.25	0.3	2.17	13.9	0.97	52.8	650	0.006136	36 inch	0.013	52.25	4,322.00	4,317.95	4,329.75	4,323.92	4.75	2.97	4,324.49	4,320.54	
P-1927	I-348	I-2421	0	0	0	0	0	0	181	0.010718	18 inch	0.013	10.87	4,287.01	4,285.07	4,292.01	4,290.07	3.5	3.5	4,287.65	4,287.65	
P-3580	I-2216	I-2421	0	0	0	23.54	0.93	68.23	1,372.00	0.011006	42 inch	0.013	105.54	4,300.17	4,285.07	4,305.17	4,290.07	1.5	1.5	4,302.76	4,287.69	
P-3598	I-3519	I-3797	0	0	0	23.54	0.91	67.75	502	0.007689	42 inch	0.013	88.22	4,279.00	4,275.14	4,282.01	4,280.14	-0.49	1.5	4,282.39	4,280.14	
P-3599	I-2421	I-3519	0	0	0	23.54	0.91	67.91	658	0.009225	42 inch	0.013	96.63	4,285.07	4,279.00	4,290.07	4,282.01	1.5	-0.49	4,287.65	4,282.01	
P-3631	I-3797	I-3822	0	0	0	23.54	0.84	109.59	120	0.00325	48 inch	0.013	81.88	4,275.14	4,274.75	4,280.14	4,279.97	1	1.22	4,280.67	4,279.97	
P-3765	I-3911	I-3822	15.1	0	0	0	0	3.02	118	0.007881	15 inch	0.013	5.73	4,275.68	4,274.75	4,280.68	4,279.97	3.75	3.97	4,280.23	4,279.97	
P-3824	I-3822	I-3154	0	0	0	23.54	0.84	112.57	150	0.0042	48 inch	0.013	93.09	4,274.75	4,274.12	4,279.97	4,279.12	1.22	1	4,280.04	4,279.12	
P-3906	I-3685	I-3500	10.74	0.3	3.22	6.02	0.98	21.34	394	0.004772	36 inch	0.013	46.07	4,325.70	4,323.82	4,330.70	4,328.82	2	2	4,327.18	4,325.47	
P-3907	I-3482	I-3685	0	0	0	2.79	0.99	18.18	296	0.002838	36 inch	0.013	35.53	4,326.54	4,325.70	4,331.54	4,330.70	2	2	4,328.06	4,327.21	
P-576	I-875	I-874	0	0	0	0	0	0	199	0.000905	15 inch	0.013	1.94	4,288.10	4,287.92	4,292.86	4,292.92	3.51	3.75	4,288.10	4,287.92	
P-3916	I-874	I-2009	0	0	0	0	0	0	1,366.00	0.010154	18 inch	0.013	10.58	4,287.92	4,274.05	4,292.92	4,279.05	3.5	3.5	4,287.92	4,274.95	
P-3917	I-2009	I-2265	0	0	0	0	0	0	481	0.003992	18 inch	0.013	6.64	4,274.05	4,272.13	4,279.05	4,277.13	3.5	3.5	4,274.95	4,274.95	
P-3918	I-2196	I-1995	0	0	0	0	0	0	419	0.00136	18 inch	0.013	3.87	4,264.40	4,263.83	4,269.40	4,267.83	3.5	2.5	4,267.83	4,267.83	
P-3919	I-257	I-2196	0	0	0	0	0	0	425	0.012262	18 inch	0.013	11.64	4,269.62	4,264.40	4,274.62	4,269.40	3.5	3.5	4,269.62	4,267.83	
P-3920	I-25	I-257	0	0	0	0	0	0	892	0.004417	15 inch	0.013	4.29	4,273.56	4,269.62	4,278.56	4,274.62	3.75	3.75	4,273.56	4,269.62	
P-4000	I-2603	I-3462	9.31	0.3	2.79	2.79	1.01	18.24	1,121.00	0.003943	36 inch	0.013	41.88	4,330.96	4,326.54	4,335.96	4,331.54	2	2	4,332.34	4,328.08	
P-4016	I-2609	I-3797	0	0	0	0	0	43.49	114	0.01114	30 inch	0.013	43.29	4,276.41	4,275.14	4,281.41	4,280.14	2.5	2.5	4,281.42	4,280.14	
P-4028	I-2612	I-3686	0	0	0	0	0	13.13	137	0.007299	36 inch	0.013	56.98	4,323.00	4,322.00	4,329.75	4,329.75	3.75	4.75	4,324.68	4,324.71	
P-4057	I-2635	I-2603	0	0	0	0	0	15.4	86	0.011628	24 inch	0.013	24.39	4,331.96	4,330.96	4,335.00	4,335.96	1.04	3	4,333.37	4,332.41	
P-4058	I-2636	I-3685	0	0	0	0	0	10.69	134	0.007463	24 inch	0.013	19.54	4,323.00	4,322.00	4,328.75	4,329.75	4.75	5.75	4,325.04	4,324.74	
P-4059	I-2637	I-3500	11.77	0.35	4.12	4.12	1.63	6.77	288	0.003472	18 inch	0.013	6.19	4,324.82	4,323.82	4,328.82	4,328.82	2.5	3.5	4,326.69	4,325.49	
P-4060	I-2638	I-2242	3.5	0.35	1.22	1.22	1.93	2.38	499	0.007956	15 inch	0.013	5.76	4,321.92	4,317.95	4,323.92	4,323.92	0.75	4.72	4,322.54	4,320.50	
P-4131	I-2696	I-3830	6.16	0.35	2.16	2.16	2.16	4.7	77	0.005584	15 inch	0.013	4.83	4,260.00	4,259.57	4,262.57	4,264.57	1.32	3.75	4,264.02	4,263.62	
P-4210	I-2750	I-2216	3.33	0.85	2.83	2.83	2.16	6.17	12	-358.3475	15 inch	0.013	-1,222.78	0	4,300.17	0	4,305.17	-1.25	3.75	4,303.23	4,303.12	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-4205	I-2710	O-121	0	0	0	0	0	20.17	297	0.003367	30 inch	0.013	23.8	4,221.79	4,220.79	4,225.00	4,225.00	0.71	1.71	4,223.56	4,222.32	
P-3778	I-3119	O-65	0	0	0	77.77	0.94	86.95	46	0.003478	36 inch	0.013	39.33	4,272.71	4,272.55	4,277.71	4,277.55	2	2	4,276.26	4,275.38	
P-3781	I-3918	I-3119	0	0	0	77.77	0.94	86.98	38	0.002632	36 inch	0.013	34.21	4,272.81	4,272.71	4,277.81	4,277.71	2	2	4,277.05	4,276.40	
P-3782	I-3917	I-3918	41.21	0.3	12.36	77.77	0.94	87.07	120	0.008583	36 inch	0.013	61.79	4,273.84	4,272.81	4,278.84	4,277.81	2	2	4,279.86	4,277.81	
P-3901	I-261	I-2420	0	0	0	0	0	0	539	0.003006	18 inch	0.013	5.76	4,275.95	4,274.33	4,280.95	4,278.65	3.5	2.82	4,276.26	4,276.26	
P-3902	I-2420	I-3119	0	0	0	0	0	0	231	0.007013	15 inch	0.013	5.41	4,274.33	4,272.71	4,278.65	4,277.71	3.07	3.75	4,276.26	4,276.26	
P-2651	I-3145	I-621	0.5	0.85	0.43	0.43	1.21	7.34	813	0.004145	18 inch	0.013	6.76	4,305.26	4,301.89	4,310.26	4,306.89	3.5	3.5	4,306.48	4,304.51	
P-3038	I-3224	I-3392	0	0	0	6.37	1.31	9.49	132	0.010833	27 inch	0.013	32.23	4,302.51	4,301.08	4,307.51	4,305.95	2.75	2.62	4,304.40	4,304.30	
P-3054	I-3392	I-3391	0	0	0	6.37	1.3	9.45	52	0.001346	27 inch	0.013	11.36	4,301.08	4,301.01	4,305.95	4,306.01	2.62	2.75	4,304.22	4,304.17	
P-3076	I-2321	I-3395	0	0	0	0	0	5.12	59	0.004746	18 inch	0.013	7.24	4,301.25	4,300.97	4,305.83	4,306.01	3.08	3.54	4,303.07	4,302.93	
P-3079	I-3391	I-3395	4	0.8	3.2	9.99	1.13	19.35	16	0.0025	18 inch	0.013	5.25	4,301.01	4,300.97	4,306.01	4,306.01	3.5	3.54	4,303.48	4,302.94	
P-3090	I-621	I-3391	0	0	0	0.43	1.15	7.31	131	0.006718	18 inch	0.013	8.61	4,301.89	4,301.01	4,306.89	4,306.01	3.5	3.5	4,304.48	4,303.84	
P-3093	I-3395	I-2942	25.62	0.35	8.97	18.96	1.13	34.71	1,434.00	0.005523	36 inch	0.013	49.57	4,300.97	4,293.05	4,306.01	4,298.05	2.04	2	4,302.88	4,295.97	
P-2646	I-3091	I-3168	0	0	0	6.37	1.37	9.91	288	0.004687	24 inch	0.013	15.49	4,304.95	4,303.60	4,309.95	4,309.60	3	3	4,309.11	4,305.25	
P-2641	I-3115	I-3114	0	0	0	0	0	1.1	109	0.001101	24 inch	0.013	7.51	4,307.08	4,306.96	4,311.88	4,311.96	2.8	3	4,307.92	4,307.90	
P-2643	I-3217	I-3114	3.82	0.85	3.25	3.25	1.44	4.72	1,162.00	0.011979	24 inch	0.013	24.76	4,320.88	4,306.96	4,325.88	4,311.96	3	3	4,321.64	4,307.92	
P-3899	I-3114	I-3091	0.37	0.85	0.31	3.56	1.38	6.04	78	0.025769	24 inch	0.013	36.31	4,306.96	4,304.95	4,311.96	4,309.95	3	3	4,307.83	4,306.19	
P-3900	I-3168	I-3224	0	0	0	6.37	1.35	9.78	508	0.002146	24 inch	0.013	10.48	4,303.60	4,302.51	4,308.60	4,307.51	3	3	4,305.24	4,304.40	
P-3970	I-2942	I-3917	13.78	0.35	4.82	36.25	1.07	52.1	2,234.00	0.008599	36 inch	0.013	61.85	4,293.05	4,273.84	4,298.05	4,278.84	2	2	4,295.40	4,278.84	
P-4038	I-2626	I-2321	0	0	0	0	0	5.12	55	0.018182	18 inch	0.013	14.16	4,302.25	4,301.25	4,305.83	4,305.83	2.08	3.08	4,303.12	4,303.12	
P-53	I-96	I-95	0	0	0	7.2	0.98	7.14	418	0.008852	18 inch	0.013	9.88	4,282.16	4,278.46	4,286.16	4,283.46	4.5	3.5	4,285.39	4,283.46	
P-52	I-597	I-96	0	0	0	7.2	0.99	7.21	311	0.007042	18 inch	0.013	8.81	4,284.35	4,282.16	4,289.47	4,286.16	3.62	4.5	4,286.94	4,285.47	
P-1526	I-95	I-2101	33.78	0.3	10.13	17.33	0.97	16.99	95	0.016105	18 inch	0.013	13.33	4,278.46	4,276.93	4,283.46	4,281.93	3.5	3.5	4,284.36	4,281.88	
P-3110	I-2101	I-3523	33.78	0.35	11.82	29.15	0.97	28.56	266	0.003496	30 inch	0.013	24.25	4,276.93	4,276.00	4,281.93	4,280.72	2.5	2.22	4,281.83	4,280.54	
P-3387	I-782	I-3644	0	0	0	29.15	0.97	28.38	37	0.004054	36 inch	0.013	42.47	4,275.90	4,275.75	4,280.83	4,280.75	1.93	2	4,280.22	4,280.16	
P-58	I-83	I-355	0	0	0	0	0	0	234	0.002094	15 inch	0.013	2.96	4,275.19	4,274.70	4,280.19	4,279.23	3.75	3.28	4,279.23	4,279.23	
P-3389	I-3693	I-355	0	0	0	29.15	0.96	28.32	326	0.002577	36 inch	0.013	33.85	4,275.54	4,274.70	4,280.54	4,279.23	2	1.53	4,279.82	4,279.23	
P-3388	I-3644	I-3693	0	0	0	29.15	0.96	28.35	29	0.007241	36 inch	0.013	56.75	4,275.75	4,275.54	4,280.75	4,280.54	2	2	4,280.01	4,279.96	
P-3386	I-3523	I-782	0	0	0	29.15	0.97	28.4	28	0.003571	36 inch	0.013	39.86	4,276.00	4,275.90	4,280.72	4,280.83	1.72	1.93	4,280.41	4,280.36	
P-48	I-365	I-603	0	0	0	0	0	0	245	0.011918	15 inch	0.013	7.05	4,292.38	4,289.46	4,297.38	4,294.46	3.75	3.75	4,292.38	4,290.80	
P-1511	I-2193	I-365	0	0	0	0	0	0	388	0.004278	18 inch	0.013	6.97	4,294.04	4,292.38	4,299.04	4,297.38	3.5	3.5	4,294.04	4,292.38	
P-3896	I-603	I-747	23.99	0.3	7.2	7.2	1.01	7.33	375	0.007227	18 inch	0.013	8.93	4,289.46	4,286.75	4,294.46	4,291.32	3.5	3.07	4,290.51	4,288.67	
P-3897	I-747	I-597	0	0.35	0	7.2	1	7.27	330	0.007273	18 inch	0.013	8.96	4,286.75	4,284.35	4,291.32	4,289.47	3.07	3.62	4,288.59	4,287.01	
P-3898	I-781	I-782	0	0	0	0	0	0	589	0.010747	15 inch	0.013	6.7	4,282.23	4,275.90	4,287.23	4,280.83	3.75	3.68	4,282.23	4,280.22	
P-4031	I-355	I-3917	0	0	0	29.15	0.95	28.05	357	0.002409	36 inch	0.013	32.73	4,274.70	4,273.84	4,279.23	4,278.84	1.53	2	4,279.47	4,278.84	
P-4051	I-778	I-2942	27.62	0.35	9.67	9.67	1.63	15.88	169	0.005799	30 inch	0.013	31.23	4,294.03	4,293.05	4,299.03	4,298.05	2.5	2.5	4,296.11	4,295.90	
P-3818	I-3219	I-3201	44.16	0	0	0	0	6.82	1,538.00	0.0092	24 inch	0.013	21.7	4,322.94	4,308.79	4,327.94	4,313.79	3	3	4,323.87	4,309.73	
P-3819	I-3201	I-3177	0	0	0	0	0	6.82	264	0.006212	24 inch	0.013	17.83	4,308.79	4,307.15	4,313.79	4,311.80	3	2.65	4,309.72	4,308.67	
P-4106	I-3177	I-3145	0	0	0	0	0	6.82	84	0.0225	24 inch	0.013	33.93	4,307.15	4,305.26	4,311.80	4,310.26	2.65	3	4,308.64	4,306.61	
P-4206	I-2749	I-2942	3.3	0.85	2.8	2.8	1.9	5.36	37	-116.028378	15 inch	0.013	-695.79	0	4,293.05	0	4,298.05	-1.25	3.75	4,295.90	4,295.65	
P-4209	I-2748	I-3091	3.3	0.85	2.8	2.8	2.16	6.12	21	-204.997619	15 inch	0.013	-924.85	0	4,304.95	4,310.00	4,309.95	4,308.75	3.75	4,306.44	4,306.25	
P-4056	I-2633	O-120	83.36	0.35	29.18	29.18	1.32	38.82	2,388.00	0.009422	30 inch	0.013	39.81	4,265.00	4,242.50	4,270.00	4,250.00	2.5	5	4,267.10	4,244.50	
P-2457	I-2373	I-2944	0	0	0	1.61	1.17	2.66	421	0.008029	21 inch	0.013	14.2	4,280.50	4,277.12	4,287.93	4,282.12	5.68	3.25	4,281.09	4,277.84	
P-123	I-763	O-66	0.5	0.85	0.43	2.2	0.99	2.96	131	0.01374	21 inch	0.013	18.57	4,273.01	4,271.21	4,278.01	4,276.21	3.25	3.25	4,273.64	4,271.68	
P-3895	I-2944	I-783	0.19	0.85	0.16	1.78	1.13	2.79	1,565.00	0.002626	21 inch	0.013	8.12	4,277.12	4,273.01	4,282.12	4,278.01	3.25	3.25	4,277.83	4,273.68	
P-4221	I-2755	I-2373	0	0	0	0	0	0.76	11	-389.136364	15 inch	0.013	-1,274.22	0	4,280.50	0	4,287.93	-1.25	6.16	4,281.13	4,281.11	
P-4235	I-2766	I-2373	0	0	0	1.61	1.19	1.94	397	0.011461	21 inch	0.013	16.96	4,285.05	4,280.50	4,290.05	4,287.93	3.25	5.68	4,285.55	4,281.11	
P-2808	I-364	I-2372	0.54	0.85	0.46	0.46	2.16	1	60	0.006667	24 inch	0.013	18.47	4,285.55	4,285.15	4,290.55	4,290.05	3	2.9	4,285.89	4,285.67	
P-1944	I-2012	I-2013	0.61	0.85	0.52	0.52	2.16	1.13	641	0.004587	18 inch	0.013	7.11	4,297.08	4,294.14	4,302.08	4,299.14	3.5	3.5	4,297.48	4,294.54	
P-2607	I-2013	I-2372	0.21	0.85	0.18	0.7	1.32	0.93	1,173.00	0.007664	24 inch	0.013	19.8	4,294.14	4,285.15	4,299.14	4,290.05	3	2.9	4,294.47	4,285.67	
P-4258	I-2372	I-2766	0.54	0.85	0.46	1.61	1.19	1.94	2	0.05	21 inch	0.013	35.43	4,285.15	4,285.05	4,290.05	4,290.05	3.15	3.25	4,285.65	4,285.56	
P-3828	I-2734	I-3691	76.44	0.35	26.75	53.49	0.98	62.11	765	0.007843	36 inch	0.013	59.07	4,260.95	4,254.95	4,266.02	4,259.95	2.07	2	4,264.61	4,257.98	
P-3984	I-3691	O-69	76.43	0.35	26.75	80.24	0.97	87.62	669	0.025336	36 inch	0.013	106.16	4,254.95	4,238.00	4,259.95	4,243.00	2	2	4,257.78	4,240.08	
P-3987	I-3220	I-2734	19.84	0.3	5.95	26.74	1	36.31	1,200.00	0.004525	36 inch	0.013	44.86	4,266.38	4,260.95	4,271.38	4,266.02	2	2.07	4,268.43	4,264.61	
P-4026	I-2617	I-2621	0	0	0	0	0	0	1,170.00	0.001974	24 inch	0.013	10.05	4,278.71	4,276.40	4,290.00	4,280.00	9.29	1.6	4,278.71	4,277.14	
P-4027	I-2621	I-3220	0	0	0	2.55	1.63	4.19	1,391.00	0.007203	24 inch	0.013	19.2	4,276.40	4,266.38	4,280.00	4,271.38	1.6	3	4,277.12	4,268.45	
P-4025	I-2619	I-2620	0	0	0	0	0	0	1,170.00	0.009365	15 inch	0.013	6.26	4,287.71	4,276.73	4,290.00	4,280.00	1.04	2.02	4,287.71	4,277.78	
P-4039	I-2620	I-2621	8.51	0.3	2.55	2.55	1.63	4.19	46	0.007174	15 inch	0.013	5.47	4,276.73	4,276.40	4,280.00	4,280.00	2.02	2.35	4,277.56	4,277.22	
P-4046	I-2629	O-69	19.29	0.35	6.75	31.92	0.87	44.68	906	0.002925	42 inch	0.013	54.41	4,240.65	4,238.00	4,252.00	4,243.00	7.85	1.5	4,243.06	4,240.08	
P-4047	I-2630	I-2629	0	0	0	25.17	0.89	39.3	952	0.001943	42 inch	0.013	44.35	4,242.50	4,240.65	4,250.00	4,252.00	4	7.85	4,245.06	4,243.10	
P-3364	I-2047	I-3647	5.6	0.3	1.68	1.68	0.95	16.61	1,480.00	0.006243	36 inch	0.013	52.7	4,265.10	4,255.86	4,270.10	4,260.86	2	2	4,266.40	4,257.17	
P-4215	I-2631	I-2047	0	0	0	0	0	15	50	0.038	30 inch	0.013	78.95	4,267.00	4,265.10	4,271.00	4,270.10	1.5	2.5	4,268.31	4,268.61	
P-4216	I-3647	I-2632	0	0	0	1.68	0.93	16.57	274	0.032336	36 inch	0.013	119.93	4,255.86	4,247.00	4,260.86	4,252.00	2	2	4,257.16	4,249.47	
P-4219	I-2632	I-2630	67.11	0.35	23.49	25.17	0.92	38.4	1,716.00	0.002622	42 inch	0.013	51.52	4,247.00	4,242.50	4,252.00	4,250.00	1.5	4	4,249.25	4,245.09	
P-4018	I-2613	I-2204	0	0	0	1.53	1.45	2.24	413	0.001574	18 inch	0.013	4.17	4,272.77	4,272.12	4,277.77	4,278.12	3.5	4.5	4,278.31	4,278.12	
P-3825	I-3788	I-385	1.8	0.85	1.53	1.53	1.6	2.47	1,030.00	0.009709	15 inch	0.013	6.36	4,285.55	4,275.55	4,290.55	4,280.55	3.75	3.75	4,286.18	4,277.92	
P-4036	I-385	I-2613	0	0	0	1.53	1.53	2.36	288	0.009653	18 inch	0.013	10.32	4,275.55	4,272.77	4,280.55	4,277.77	3.5	3.5	4,277.91	4,277.77	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-4222	I-2756	I-2204	0	0	0	0	0	9.48	30	-142.404	15 inch	0.013	-770.83	0	4,272.12	0	4,278.12	-1.25	4.75	4,278.77	4,278.12	
P-4224	I-2204	I-2759	36.23	0.3	10.87	12.4	1.01	22.1	504	0.005694	24 inch	0.013	17.07	4,272.12	4,269.25	4,278.12	4,275.00	4	3.75	4,279.81	4,275.00	
P-4225	I-2759	I-3220	0	0	0	18.23	1	27.89	473	0.006068	24 inch	0.013	17.62	4,269.25	4,266.38	4,275.00	4,271.38	3.75	3	4,275.65	4,268.46	
P-4226	I-2758	I-2759	16.67	0.35	5.83	5.83	1.53	8.98	47	-90.835106	15 inch	0.013	-615.63	0	4,269.25	0	4,275.00	-1.25	4.5	4,275.91	4,275.00	
P-4187	I-2742	I-2740	0	0	0	0	0	0	1,697.00	0.000554	36 inch	0.013	15.69	4,224.00	4,222.95	4,233.00	4,235.00	6	9.05	4,234.87	4,234.87	
P-4184	I-2739	O-115	0	0	0	0	0	71.83	1,563.00	0.00032	54 inch	0.013	35.17	4,220.75	4,220.25	4,225.00	4,225.00	-0.25	0.25	4,225.63	4,222.72	
P-4188	I-2743	I-2739	0	0	0	0	0	71.83	3,432.00	0.000379	54 inch	0.013	38.27	4,222.05	4,220.75	4,235.00	4,225.00	8.45	-0.25	4,229.55	4,225.00	
P-4189	I-2740	I-2743	0	0	0	0	0	71.83	1,996.00	0.000451	48 inch	0.013	30.5	4,222.95	4,222.05	4,235.00	4,235.00	8.05	8.95	4,234.56	4,229.57	
P-4190	I-2741	I-2740	0	0	0	0	0	35	1,552.00	0.000677	36 inch	0.013	17.35	4,224.00	4,222.95	4,235.00	4,235.00	8	9.05	4,238.88	4,234.61	
P-4242	I-2657	I-2741	0	0	0	0	0	35	121	0.041322	24 inch	0.013	45.98	4,229.00	4,224.00	4,232.00	4,235.00	1	9	4,237.90	4,235.00	
P-4244	I-2771	I-2740	0	0	0	0	0	36.83	640	0.003203	36 inch	0.013	37.75	4,225.00	4,222.95	4,228.00	4,235.00	0	9.05	4,236.85	4,234.90	
P-4156	I-2719	O-115	0	0	0	0	0	45	53	0.037736	30 inch	0.013	79.67	4,219.00	4,217.00	4,221.00	4,220.00	-0.5	0.5	4,221.23	4,218.53	
P-4003	I-2599	I-2730	0	0	0	0	0	7.7	37	0.107568	15 inch	0.013	21.19	4,224.77	4,220.79	4,224.77	4,222.79	-1.25	0.75	4,225.87	4,221.35	
P-4174	I-2730	O-115	0	0	0	0	0	7.7	1,436.00	0.002639	36 inch	0.013	34.26	4,220.79	4,217.00	4,222.79	4,220.00	-1	0	4,221.76	4,217.87	
P-4193	I-2744	I-2730	0	0	0	0	0	0	690	0.003203	24 inch	0.013	12.8	4,223.00	4,220.79	4,225.00	4,222.79	0	0	4,223.00	4,221.77	
P-4243	I-2770	I-2744	0	0	0	0	0	0	1,023.00	0.000978	18 inch	0.013	3.28	4,224.00	4,223.00	4,228.00	4,225.00	2.5	0.5	4,224.00	4,223.00	
P-3127	I-739	I-796	5.73	0.35	2.01	26.2	0.89	33.6	779	0.002015	30 inch	0.013	18.41	4,224.54	4,222.97	4,229.07	4,227.91	2.03	2.44	4,231.69	4,226.46	
P-3128	I-3451	I-739	0	0	0	17.26	0.9	25.6	138	0.003162	30 inch	0.013	23.06	4,224.97	4,224.54	4,229.48	4,229.07	2.01	2.03	4,229.60	4,229.07	
P-2706	I-3101	I-994	0	0	0	0	0	10.02	196	0.001888	24 inch	0.013	9.83	4,226.20	4,225.83	4,229.99	4,229.83	1.79	2	4,230.21	4,229.83	
P-3130	I-994	I-990	11.16	0.35	3.91	17.26	0.9	25.76	268	0.00153	30 inch	0.013	16.04	4,225.83	4,225.42	4,229.83	4,229.65	1.5	1.73	4,230.71	4,229.65	
P-3344	I-990	I-3451	0	0	0	17.26	0.9	25.66	145	0.003103	30 inch	0.013	22.85	4,225.42	4,224.97	4,229.65	4,229.48	1.73	2.01	4,230.05	4,229.48	
P-2704	I-2396	I-3065	10.34	0.35	3.62	6.94	1.68	11.75	124	0.001129	24 inch	0.013	7.6	4,225.10	4,224.96	4,229.10	4,228.96	2	2	4,229.29	4,228.96	
P-3851	I-3065	I-739	0	0	0	6.94	1.65	11.55	328	0.00128	24 inch	0.013	8.09	4,224.96	4,224.54	4,228.96	4,229.07	2	2.53	4,229.93	4,229.07	
P-3852	I-534	I-2396	9.48	0.35	3.32	3.32	1.9	6.35	896	0.002709	18 inch	0.013	5.47	4,227.50	4,225.10	4,231.50	4,229.10	2.5	2.5	4,232.34	4,229.10	
P-3997	I-2600	I-3101	0	0	0	0	0	10.02	98	0.002041	24 inch	0.013	10.22	4,226.40	4,226.20	4,230.00	4,229.99	1.6	1.79	4,230.18	4,229.99	
P-3998	I-2602	I-994	0	0	0	13.35	0.91	12.19	65	0.004615	18 inch	0.013	7.14	4,226.13	4,225.83	4,230.93	4,229.83	3.3	2.5	4,230.71	4,229.83	
P-3999	I-2601	I-2602	0	0	0	13.35	0.91	12.21	56	0.004821	24 inch	0.013	15.71	4,226.40	4,226.13	4,231.00	4,230.93	2.6	2.8	4,231.09	4,230.93	
P-4044	I-796	O-94	12.5	0.3	3.75	29.95	0.88	36.58	1,158.00	0.002038	36 inch	0.013	30.11	4,222.97	4,220.61	4,227.91	4,225.00	1.94	1.39	4,226.44	4,222.58	
P-1928	I-379	I-2319	82	0	0	0	0	6.5	68	0.003971	18 inch	0.013	6.62	4,293.70	4,293.43	4,298.70	4,298.43	3.5	3.5	4,295.38	4,295.12	
P-1596	I-2319	I-2200	0	0	0	0	0	6.5	406	0.011773	18 inch	0.013	11.4	4,293.43	4,288.65	4,298.43	4,293.65	3.5	3.5	4,294.97	4,293.41	
P-4223	I-2757	I-2200	3.33	0.85	2.83	2.83	2.16	6.17	11	-389.877273	15 inch	0.013	-1,276.44	0	4,288.65	0	4,293.65	-1.25	3.75	4,293.46	4,293.36	
P-4245	I-2200	O-123	0	0.35	0	2.83	1	9.34	1,749.00	0.006112	18 inch	0.013	8.21	4,288.65	4,277.96	4,293.65	4,285.00	3.5	5.54	4,293.04	4,279.14	
P-4246	I-2751	O-123	3.33	0.85	2.83	2.83	1.9	5.41	25	-171.1184	15 inch	0.013	-844.97	0	4,277.96	0	4,285.00	-1.25	5.79	4,279.24	4,278.90	
P-3359	I-2171	I-3506	11.43	0	0	0	0	0	1,172.00	0.008942	18 inch	0.013	9.93	4,299.54	4,289.06	4,304.54	4,294.06	3.5	3.5	4,299.54	4,293.27	
P-4065	I-2643	I-3506	0	0	0	0	0	8.35	155	0.012903	15 inch	0.013	7.34	4,291.06	4,289.06	4,294.06	4,294.06	1.75	3.75	4,296.21	4,293.62	
P-4090	I-2663	I-3506	0	0	0	0	0	2.28	83	0.012048	15 inch	0.013	7.09	4,290.06	4,289.06	4,299.06	4,294.06	7.75	3.75	4,293.61	4,293.50	
P-4247	I-3506	O-123	0	0.35	0	0	0	10.63	1,354.00	0.008198	18 inch	0.013	9.51	4,289.06	4,277.96	4,294.06	4,285.00	3.5	5.54	4,293.10	4,279.21	
P-600	I-403	I-882	21.23	0	0	0	0	2.14	14	0.147857	15 inch	0.013	24.84	4,261.10	4,259.03	4,266.00	4,265.99	3.65	5.71	4,261.68	4,260.59	
P-2757	I-882	I-3070	0	0	0	5.34	1.45	16.88	467	0.00651	24 inch	0.013	18.25	4,259.03	4,255.99	4,265.99	4,264.02	4.98	6.03	4,260.55	4,257.47	
P-1867	I-2127	I-2126	0	0	0	4.95	1.51	14	113	0.00708	18 inch	0.013	8.84	4,257.46	4,256.66	4,262.46	4,261.66	3.5	3.5	4,263.67	4,261.66	
P-1518	I-2255	I-2256	0	0	0	0	0	6.46	662	0.006012	18 inch	0.013	8.14	4,263.22	4,259.24	4,268.22	4,264.24	3.5	3.5	4,266.74	4,264.24	
P-1517	I-2256	I-2084	16.5	0.3	4.95	4.95	1.53	14.07	123	0.002683	18 inch	0.013	5.44	4,259.24	4,258.91	4,264.24	4,263.91	3.5	3.5	4,266.12	4,263.91	
P-3910	I-2084	I-2127	0	0	0	4.95	1.52	14.05	219	0.006621	18 inch	0.013	8.55	4,258.91	4,257.46	4,263.91	4,262.46	3.5	3.5	4,266.38	4,262.46	
P-3911	I-2126	I-178	0	0	0	4.95	1.51	13.98	383	0.006532	18 inch	0.013	8.55	4,256.66	4,254.12	4,261.66	4,259.12	3.5	3.5	4,265.64	4,258.86	
P-3026	I-3135	I-2389	34	0.2	6.8	3.4	1.32	12.02	839	0.009106	24 inch	0.013	21.59	4,276.96	4,269.32	4,281.96	4,274.32	3	3	4,278.21	4,274.32	
P-3887	I-2042	I-1996	0	0	0	0	0	0.	363	0.003857	18 inch	0.013	6.52	4,266.72	4,265.32	4,271.72	4,270.32	3.5	3.5	4,266.72	4,265.32	
P-2768	I-3099	O-63	0	0	0	20	0.89	26.74	251	0.023426	24 inch	0.013	34.62	4,243.05	4,237.17	4,250.55	4,237.83	5.5	-1.34	4,244.85	4,238.49	
P-2770	I-3143	O-63	0	0	0	24.02	1.17	28.29	29	0.02069	24 inch	0.013	32.54	4,237.77	4,237.17	4,242.77	4,237.83	3	-1.34	4,239.61	4,238.74	
P-2771	I-3144	I-3143	10.94	0.2	2.19	24.02	1.17	28.42	138	0.012536	24 inch	0.013	25.33	4,239.50	4,237.77	4,245.72	4,242.77	4.22	3	4,242.30	4,240.11	
P-2767	I-3098	I-3099	29.59	0.28	8.29	16.65	0.91	23.96	934	0.00561	24 inch	0.013	16.94	4,248.29	4,243.05	4,256.97	4,250.55	6.68	5.5	4,255.88	4,245.40	
P-2773	I-408	I-2977	0	0	0	0	0	0	304	0.006842	24 inch	0.013	18.71	4,246.03	4,243.95	4,256.03	4,254.04	8	8.09	4,248.07	4,248.07	
P-3001	I-2977	I-2349	62.39	0.35	21.84	21.84	1.19	26.2	293	0.010751	24 inch	0.013	23.46	4,243.95	4,240.80	4,254.04	4,252.03	8.09	9.23	4,247.94	4,244.00	
P-3002	I-2349	I-3144	0	0	0	21.84	1.18	25.94	113	0.011504	24 inch	0.013	24.26	4,240.80	4,239.50	4,252.03	4,245.72	9.23	4.22	4,243.90	4,242.41	
P-3188	I-3134	I-408	34.58	0.35	12.1	0	0	0	2,049.00	0.006047	24 inch	0.013	17.59	4,258.42	4,246.03	4,266.42	4,256.03	6	8	4,258.42	4,248.07	
P-3888	I-1996	I-3134	0	0	0	0	0	0	850	0.008118	24 inch	0.013	20.38	4,265.32	4,258.42	4,270.32	4,266.42	3	6	4,265.32	4,258.42	
P-3889	I-2389	I-3134	0	0	0	3.4	1.28	20.68	1,665.00	0.006431	24 inch	0.013	18.14	4,269.32	4,258.42	4,274.32	4,266.42	3	6	4,274.31	4,260.05	
P-3890	I-13	I-2389	0	0	0	0	0	4.04	818	0.007139	18 inch	0.013	8.88	4,275.16	4,269.32	4,280.16	4,274.32	3.5	3.5	4,275.93	4,274.32	
P-3912	I-178	I-3098	0	0	0	4.95	1.49	13.89	652	0.008942	24 inch	0.013	21.39	4,254.12	4,248.29	4,259.12	4,256.97	3	6.68	4,258.82	4,256.36	
P-3913	I-3070	I-3098	12.25	0	0	3.42	1.42	7.17	1,400.00	0.0055	24 inch	0.013	16.78	4,255.99	4,248.29	4,264.02	4,256.97	6.03	6.68	4,257.44	4,256.08	
P-4064	I-2642	I-2389	0	0.3	0	0	0	4.76	34	0.058824	15 inch	0.013	15.67	4,271.32	4,269.32	4,274.32	4,274.32	1.75	3.75	4,274.50	4,274.32	
P-4089	I-2662	I-3135	0	0	0	0	0	15	39	0.025641	15 inch	0.013	10.34	4,277.96	4,276.96	4,280.96	4,281.96	1.75	3.75	4,280.59	4,278.49	
P-4122	I-2689	I-3099	9.56	0.35	3.35	3.35	1.53	5.15	66	0.014394	15 inch	0.013	7.75	4,244.00	4,243.05	4,246.05	4,250.55	0.8	6.25	4,245.71	4,245.29	
P-1549	I-2062	I-2010	0	0	0	0	0	6.94	181	0.004365	18 inch	0.013	6.94	4,284.28	4,283.49	4,289.28	4,288.49	3.5	3.5	4,285.84	4,285.05	
P-1551	I-658	I-2010	0	0	0	2.85	1.73	4.96	998	0.005261	18 inch	0.013	7.62	4,288.74	4,283.49	4,298.74	4,288.49	8.5	3.5	4,289.62	4,284.88	
P-2644	I-3111	I-3110	0	0	0	2.85	1.57	11.45	170	0.007353	24 inch	0.013	19.4	4,276.00	4,274.75	4,281.00	4,280.13	3	3.38	4,277.21	4,276.09	
P-3017	I-3110	I-2423	0	0	0	2.85	1.56	11.42	304	0.005855	24 inch	0.013	17.31	4,274.75	4,272.97	4,280.13	4,275.97	3.38	1	4,275.96	4,274.20	
P-3033	I-2010	I-3111	0	0	0	2.85	1.59	11.51	520	0.014404	18 inch	0.013	12.61	4,283.49	4,276.00	4,288.49	4,281.00	3.5	3.5	4,284.78	4,277.34	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3955	I-659	I-658	9.49	0.3	2.85	2.85	1.9	5.44	1,084.00	0.009456	15 inch	0.013	6.28	4,298.99	4,288.74	4,303.86	4,298.74	3.62	8.75	4,299.94	4,289.64	
P-4123	I-2423	I-2690	0	0	0	2.85	1.54	11.37	1,267.00	0.007845	24 inch	0.013	20.04	4,272.97	4,263.03	4,275.97	4,265.03	1	0	4,274.18	4,264.46	
P-4124	I-2690	I-882	0	0	0	5.34	1.46	14.9	569	0.00703	24 inch	0.013	18.97	4,263.03	4,259.03	4,265.03	4,265.99	0	4.96	4,264.42	4,260.60	
P-4125	I-2691	I-2690	7.13	0.35	2.5	2.5	1.9	4.77	123	0.00813	15 inch	0.013	5.82	4,264.03	4,263.03	4,265.03	4,265.03	-0.25	0.75	4,265.28	4,264.61	
P-4093	I-2666	I-2667	4.54	0.35	1.59	1.59	1.9	3.04	200	0.005	21 inch	0.013	11.2	4,288.00	4,287.00	4,295.00	4,292.00	5.25	3.25	4,288.63	4,287.72	
P-4094	I-2667	I-2668	0	0	0	1.59	1.85	2.97	671	0.011923	21 inch	0.013	17.3	4,287.00	4,279.00	4,292.00	4,283.00	3.25	2.25	4,287.62	4,280.80	
P-4097	I-2668	J-3	19.23	0.35	6.73	8.32	1.63	13.67	764	0.004149	24 inch	0.013	14.57	4,279.00	4,275.83	4,283.00	4,277.83	2	0	4,280.54	4,277.16	
P-4161	J-3	J-4	N/A	N/A	N/A	8.32	1.58	13.25	927	0.009525	24 inch	0.013	22.08	4,275.83	4,267.00	4,277.83	4,272.00	0	3	4,277.14	4,268.44	
P-4162	J-4	I-2726	N/A	N/A	N/A	8.32	1.54	12.89	1,626.00	0.004305	24 inch	0.013	14.84	4,267.00	4,260.00	4,272.00	4,262.00	3	0	4,268.44	4,262.00	
P-4169	I-2726	I-3070	0	0	0	8.32	1.43	12	4	1.0025	15 inch	0.013	64.68	4,260.00	4,255.99	4,262.00	4,264.02	0.75	6.78	4,261.22	4,257.53	
P-4248	I-2772	O-124	0	0	0	0	0	21.23	109	38.779817	15 inch	0.013	402.25	4,227.00	0	4,229.00	0	0.75	-1.25	4,228.25	0.2	
P-4230	I-2762	I-2634	0	0	0	62.19	1.17	73.33	113	0.017699	36 inch	0.013	88.73	4,276.00	4,274.00	4,284.00	4,280.00	5	3	4,278.70	4,277.45	
P-4228	I-2760	I-2761	25.21	0.35	8.82	8.82	1.32	11.74	1,183.00	0.005072	24 inch	0.013	16.11	4,284.00	4,288.00	4,300.00	4,295.00	4	5	4,295.27	4,290.14	
P-4232	I-2761	I-2765	31.61	0.35	11.06	19.89	1.25	25	938	0.010661	30 inch	0.013	42.35	4,288.00	4,278.00	4,295.00	7,482.00	4.5	3,201.50	4,289.70	4,282.67	
P-4233	I-2765	I-2762	0	0	0	62.19	1.18	73.74	193	0.010363	36 inch	0.013	67.89	4,276.00	4,276.00	7,482.00	4,284.00	3,201.00	5	4,282.39	4,280.05	
P-4234	I-2764	I-2765	34.71	0.35	12.15	42.3	1.2	51.29	804	0.00995	36 inch	0.013	66.53	4,286.00	4,278.00	4,290.00	7,482.00	1	3,201.00	4,288.33	4,283.38	
P-4236	I-2634	I-2767	0	0.3	0	62.19	1.17	73.16	65	0.007692	42 inch	0.013	88.24	4,274.00	4,273.50	4,280.00	4,280.00	2.5	3	4,276.67	4,276.25	
P-4237	I-2767	O-95	0	0	0	62.19	1.16	73.02	2,429.00	0.003911	48 inch	0.013	89.83	4,273.50	4,264.00	4,280.00	4,271.00	2.5	3	4,276.23	4,266.58	
P-4256	I-2763	I-2764	26.88	0.35	9.41	30.15	1.23	37.24	363	0.002755	36 inch	0.013	35.01	4,287.00	4,286.00	4,296.00	4,290.00	6	1	4,289.57	4,288.42	
P-4239	I-2768	I-2769	37.67	0.35	13.18	13.18	1.32	17.54	390	0.007692	24 inch	0.013	19.84	4,303.00	4,300.00	4,307.00	4,305.00	2	3	4,304.51	4,302.25	
P-4240	I-2769	J-5	21.6	0.35	7.56	20.74	1.3	27.21	480	0.010417	30 inch	0.013	41.86	4,300.00	4,295.00	4,305.00	4,297.00	2.5	-0.5	4,301.78	4,296.47	
P-4257	J-5	I-2763	N/A	N/A	N/A	20.74	1.28	26.83	1,247.00	0.006415	30 inch	0.013	32.85	4,295.00	4,287.00	4,297.00	4,296.00	-0.5	6.5	4,296.77	4,289.62	
P-4253	I-2775	O-125	25.79	0.35	9.03	9.03	1.9	17.26	1,765.00	0.002833	30 inch	0.013	21.83	4,228.00	4,223.00	4,230.00	4,228.00	-0.5	2.5	4,229.68	4,224.41	
P-3983	I-2595	I-2594	0	0	0	12.13	0.99	19.73	50	0.0046	30 inch	0.013	27.82	4,227.05	4,226.82	4,231.92	4,231.92	2.37	2.6	4,229.04	4,228.97	
P-3132	I-2106	I-2776	10.86	0.35	3.8	12.73	1.57	20.18	663	0.00454	30 inch	0.013	27.64	4,221.75	4,218.74	4,227.25	4,223.74	3	2.5	4,223.34	4,221.39	
P-3634	I-769	I-2106	25.5	0.35	8.93	8.93	1.6	14.36	552	0.000543	18 inch	0.013	2.45	4,222.05	4,221.75	4,227.05	4,227.25	3.5	4	4,233.68	4,223.36	
P-3365	I-3708	I-3707	0	0	0	0	0	4.7	99	0.03303	36 inch	0.013	121.21	4,225.00	4,221.73	4,230.20	4,230.00	2.2	5.27	4,225.68	4,224.49	
P-3147	I-3433	I-3206	0	0	0	0	0	10.14	302	0.002815	30 inch	0.013	21.76	4,232.16	4,231.31	4,237.16	4,236.31	2.5	2.5	4,233.36	4,232.92	
P-3135	I-3413	I-3475	0	0	0	0	0	10.14	125	0.00208	30 inch	0.013	18.71	4,232.66	4,232.40	4,237.66	4,237.56	2.5	2.66	4,234.01	4,233.82	
P-3136	I-3475	I-3433	0	0	0	0	0	10.14	109	0.002202	30 inch	0.013	19.25	4,232.40	4,232.16	4,237.56	4,237.16	2.66	2.5	4,233.70	4,233.49	
P-1723	I-2287	I-2067	0	0	0	1.7	1.6	2.75	91	0.003297	18 inch	0.013	6.03	4,231.42	4,231.12	4,235.94	4,235.99	3.02	3.37	4,232.92	4,232.86	
P-1722	I-953	I-2287	2	0.85	1.7	1.7	1.62	2.77	94	0.00234	18 inch	0.013	5.08	4,231.64	4,231.42	4,235.92	4,235.94	2.78	3.02	4,232.98	4,232.93	
P-1724	I-2067	I-2066	0	0	0	1.7	1.58	2.71	162	0.000802	18 inch	0.013	2.98	4,231.12	4,230.99	4,235.99	4,235.99	3.37	3.5	4,232.84	4,232.73	
P-3142	I-3206	I-2066	3.57	0.35	1.25	1.25	1.16	11.6	108	0.002963	30 inch	0.013	22.33	4,231.31	4,230.99	4,236.31	4,235.99	2.5	2.5	4,232.87	4,232.78	
P-3137	I-3435	I-3472	0	0	0	3.33	1.13	13.93	143	0.004965	30 inch	0.013	28.9	4,230.59	4,229.88	4,235.59	4,234.88	2.5	2.5	4,231.85	4,231.23	
P-3143	I-3515	I-3471	0.28	0.95	0.26	0.26	2.16	0.58	47	0.001277	30 inch	0.013	14.65	4,229.40	4,229.34	4,234.30	4,234.34	2.4	2.5	4,230.91	4,230.91	
P-3138	I-3472	I-3471	0	0	0	3.33	1.12	13.9	106	0.005094	30 inch	0.013	29.27	4,229.88	4,229.34	4,234.88	4,234.34	2.5	2.5	4,231.13	4,230.94	
P-247	I-962	I-961	0.67	0.95	0.64	0.64	2.16	1.39	299	0.003077	15 inch	0.013	3.58	4,230.97	4,230.05	4,235.97	4,235.05	3.75	3.75	4,231.51	4,230.90	
P-1725	I-961	I-2388	0.32	0.95	0.3	0.94	2.07	1.95	356	0.002837	18 inch	0.013	5.59	4,230.05	4,229.04	4,235.05	4,234.04	3.5	3.5	4,230.87	4,230.75	
P-3154	I-2388	I-3457	6.42	0.35	2.25	6.78	1.11	17.71	1,770.00	0.001904	36 inch	0.013	29.1	4,229.04	4,225.67	4,234.04	4,231.96	2	3.29	4,230.73	4,227.30	
P-3139	I-3471	I-2388	0	0	0	3.6	1.11	14.17	91	0.003704	30 inch	0.013	24.96	4,229.34	4,229.04	4,234.34	4,234.04	2.5	2.5	4,230.91	4,230.83	
P-3144	I-2066	I-3435	0.45	0.85	0.38	3.33	1.15	14	251	0.001594	30 inch	0.013	16.37	4,230.99	4,230.59	4,235.99	4,235.59	2.5	2.5	4,232.68	4,232.07	
P-1776	I-2096	I-2097	0	0	0	0	0	0	179	0.000782	18 inch	0.013	2.94	4,226.98	4,226.84	4,231.98	4,231.84	3.5	3.5	4,226.98	4,226.84	
P-1774	I-2097	I-2150	0	0	0	0	0	0	68	0.000588	18 inch	0.013	2.55	4,226.84	4,226.80	4,231.84	4,231.98	3.5	3.68	4,226.84	4,226.80	
P-1773	I-2151	I-2150	0	0	0	0	0	0	200	0.0012	18 inch	0.013	3.64	4,227.04	4,226.80	4,232.04	4,231.98	3.5	3.68	4,227.04	4,226.80	
P-1687	I-2235	I-1979	2.3	0.35	0.8	5.01	1.82	9.18	460	0.00313	18 inch	0.013	5.88	4,226.90	4,225.46	4,231.93	4,230.46	3.53	3.5	4,233.97	4,230.46	
P-1689	I-1978	I-2363	0	0	0	5.01	1.73	8.73	78	0.00141	18 inch	0.013	3.94	4,225.36	4,225.25	4,230.26	4,230.25	3.4	3.5	4,229.76	4,229.22	
P-1688	I-1979	I-1978	0	0	0	5.01	1.74	8.78	53	0.001887	18 inch	0.013	4.56	4,225.46	4,225.36	4,230.46	4,230.26	3.5	3.4	4,230.63	4,230.26	
P-1691	I-2276	I-2339	0	0	0	5.01	1.67	8.46	258	0.006318	18 inch	0.013	8.35	4,225.15	4,223.52	4,230.53	4,230.00	3.88	4.98	4,227.14	4,225.47	
P-1690	I-2363	I-2276	0	0	0	5.01	1.71	8.66	216	0.000463	18 inch	0.013	2.26	4,225.25	4,225.15	4,230.25	4,230.53	3.5	3.88	4,229.07	4,227.60	
P-3152	I-2926	I-3462	9.22	0.35	3.23	9.97	0.99	12.45	865	0.00141	30 inch	0.013	15.4	4,225.19	4,223.97	4,231.99	4,230.11	4.3	3.64	4,226.89	4,225.49	
P-3151	I-3462	I-2339	14.89	0.35	5.21	3.8	0.96	4.3	316	0.001424	30 inch	0.013	15.48	4,223.97	4,223.52	4,230.11	4,230.00	3.64	3.98	4,225.49	4,225.45	
P-3342	I-2150	I-3462	0	0	0	0	0	0	417	0.006787	18 inch	0.013	8.65	4,226.80	4,223.97	4,231.98	4,230.11	3.68	4.64	4,226.80	4,225.49	
P-3346	I-2339	I-2393	5.55	0.35	1.94	10.75	0.95	10.87	831	0.001408	30 inch	0.013	15.39	4,223.52	4,222.35	4,230.00	4,230.00	3.98	5.15	4,225.44	4,224.91	
P-3347	I-2968	I-2926	26.83	0.35	9.39	4.04	0.99	6.58	131	0.00145	30 inch	0.013	15.62	4,225.38	4,225.19	4,231.92	4,231.99	4.04	4.3	4,226.95	4,226.91	
P-3348	I-3457	I-2968	0	0	0	6.78	1	16.94	149	0.001946	36 inch	0.013	28.42	4,225.67	4,225.38	4,231.96	4,231.92	3.29	3.54	4,227.28	4,226.96	
P-3737	I-2393	I-3707	7.06	0.35	2.47	13.22	0.92	12.86	439	0.001412	30 inch	0.013	15.41	4,222.35	4,221.73	4,230.00	4,230.00	5.15	5.77	4,224.90	4,224.47	
P-3743	I-3707	I-3672	0	0	0	13.22	0.9	17.3	325	0.002	36 inch	0.013	29.83	4,221.73	4,221.08	4,230.00	4,229.93	5.27	5.85	4,224.46	4,224.26	
P-3793	I-3672	I-2731	0	0	0	13.22	0.89	17.19	205	0.002	36 inch	0.013	29.83	4,221.08	4,220.67	4,229.93	4,225.37	5.85	1.7	4,224.21	4,224.07	
P-1789	I-2038	I-2037	4.82	0.35	1.69	1.69	2.06	3.5	46	0.002174	18 inch	0.013	4.9	4,227.27	4,227.17	4,232.77	4,232.71	4	4.04	4,228.77	4,228.72	
P-1790	I-2037	I-2241	2.9	0.35	1.01	2.7	2.04	5.55	222	0.001577	18 inch	0.013	4.17	4,227.17	4,226.82	4,232.71	4,231.92	4.04	3.6	4,228.59	4,227.75	
P-3837	I-2241	I-2926	0	0	0	2.7	1.98	5.38	409	0.003985	21 inch	0.013	10	4,226.82	4,225.19	4,231.92	4,231.99	3.35	5.05	4,227.74	4,226.91	
P-1683	I-2116	I-2405	0	0	0	2.38	1.88	4.52	132	0.000152	18 inch	0.013	1.29	4,227.37	4,227.35	4,232.37	4,232.06	3.5	3.21	4,232.30	4,232.06	
P-1682	I-2117	I-2116	6.81	0.35	2.38	2.38	1.9	4.56	43	0.001395	18 inch	0.013	3.92	4,227.43	4,227.37	4,232.43	4,232.37	3.5	3.5	4,232.44	4,232.36	
P-3843	I-2405	I-2235	5.21	0.35	1.82	4.21	1.84	7.79	141	0.003191	15 inch	0.013	3.65	4,227.35	4,226.90	4,232.06	4,231.93	3.46	3.78	4,233.98	4,231.93	
P-3966	I-3461	I-2731	0	0	0	0	0	0	103	0.04165	15 inch	0.013	13.18	4,224.96	4,220.67	4,229.96	4,225.37	3.75	3.45	4,224.96	4,224.06	
P-3982	I-2593	I-3413	0	0	0	0	0	10.14	135	0.001407	30 inch	0.013	15.39	4,232.85	4,232.66	4,237.05	4,237.66	1.7	2.5	4,234.31	4,234.10	

Future Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-4084	I-2652	I-2731	0	0	0	13.81	0.88	15.63	172	0.00657	36 inch	0.013	54.06	4,221.80	4,220.67	4,223.80	4,225.37	-1	1.7	4,224.12	4,224.06	
P-4086	I-2659	I-2652	0	0	0	13.81	0.95	16.58	1,908.00	0.000901	36 inch	0.013	20.02	4,223.52	4,221.80	4,227.52	4,223.80	1	-1	4,225.60	4,223.80	
P-4176	I-2731	I-2776	0	0	0	41.68	0.79	70.33	1,170.00	0.00165	54 inch	0.013	79.86	4,220.67	4,218.74	4,225.37	4,223.74	0.2	0.5	4,223.92	4,221.41	
P-3405	I-3694	I-3673	0	0	0	14.65	0.8	40.15	103	0.004854	36 inch	0.013	46.47	4,224.75	4,224.25	4,230.35	4,229.98	2.6	2.73	4,226.98	4,226.70	
P-14	I-19	I-18	0	0	0	0	0	4.4	224	0.001161	12 inch	0.013	1.21	4,235.35	4,235.09	4,240.53	4,239.98	4.18	3.89	4,243.33	4,239.91	
P-3556	I-18	I-3694	0	0.2	0	14.65	0.89	37.33	4,124.00	0.002507	36 inch	0.013	33.4	4,235.09	4,224.75	4,239.98	4,230.35	1.89	2.6	4,239.87	4,227.29	
P-3745	I-3673	I-3908	0	0	0	14.65	0.8	40.13	429	0.005245	36 inch	0.013	48.3	4,224.25	4,222.00	4,229.98	4,230.00	2.73	5	4,226.34	4,224.40	
P-1746	I-2040	I-2041	0.21	0.85	0.18	0.37	0.95	4.35	62	0.001613	24 inch	0.013	9.08	4,264.28	4,264.18	4,270.00	4,269.61	3.72	3.43	4,265.69	4,265.67	
P-1747	I-2382	I-2040	0.22	0.85	0.19	0.19	0.98	4.18	666	0.001306	24 inch	0.013	8.18	4,265.15	4,264.28	4,270.02	4,270.00	2.87	3.72	4,266.20	4,265.72	
P-2575	I-2041	I-3107	0.21	0.85	0.18	0.54	0.94	4.52	35	0.001143	24 inch	0.013	7.65	4,264.18	4,264.14	4,269.61	4,269.14	3.43	3	4,265.64	4,265.63	
P-3882	I-2278	I-3468	0	0.3	0	19.53	0.92	31.05	1,151.00	0.006169	30 inch	0.013	32.21	4,250.60	4,243.50	4,254.60	4,249.88	1.5	3.88	4,252.57	4,245.40	
P-3883	I-3169	I-2278	33.16	0.31	10.28	14.22	0.93	23.15	797	0.011481	24 inch	0.013	24.24	4,259.75	4,250.60	4,263.98	4,254.60	2.23	2	4,261.46	4,252.62	
P-137	I-993	I-999	17.68	0.3	5.3	5.3	1.53	8.79	68	0.044559	30 inch	0.013	86.58	4,255.03	4,252.00	4,260.03	4,255.38	2.5	0.88	4,256.08	4,253.53	
P-3789	I-78	I-993	0	0	0	0	0	1.63	287	0.008815	30 inch	0.013	38.51	4,257.56	4,255.03	4,262.56	4,260.03	2.5	2.5	4,257.98	4,256.13	
P-3884	I-999	I-2278	0	0	0	5.3	1.52	8.78	868	0.001613	30 inch	0.013	16.47	4,252.00	4,250.60	4,255.38	4,254.60	0.88	1.5	4,253.44	4,252.73	
P-3885	I-3107	I-3169	0	0	0	3.94	0.94	13.55	646	0.006796	24 inch	0.013	18.65	4,264.14	4,259.75	4,269.14	4,263.98	3	2.23	4,265.47	4,261.53	
P-3971	I-3468	I-18	0	0	0	14.65	0.9	23.03	664	0.004021	36 inch	0.013	42.29	4,237.76	4,235.09	4,249.88	4,239.98	9.12	1.89	4,240.71	4,239.92	
P-3977	I-2590	I-2382	0	0	0	0	0	4	39	0.047436	15 inch	0.013	14.07	4,267.00	4,265.15	4,270.00	4,270.02	1.75	3.62	4,267.81	4,266.25	
P-3909	I-2361	I-2592	0	0	0	3.4	1.32	10.31	1,926.00	0.004502	24 inch	0.013	15.18	4,274.99	4,266.32	4,279.99	4,271.32	3	3	4,276.20	4,267.66	
P-3980	I-2592	I-3107	0	0	0	3.4	1.19	9.87	687	0.003173	24 inch	0.013	12.74	4,266.32	4,264.14	4,271.32	4,269.14	3	3	4,267.64	4,265.51	
P-4066	I-2644	I-2361	0	0	0	3.4	1.32	12.02	110	0.017909	21 inch	0.013	21.2	4,276.96	4,274.99	4,281.96	4,279.99	3.25	3.25	4,278.25	4,275.93	
P-4087	I-2660	I-3694	20.7	0	0	0	0	4.14	30	0.006333	18 inch	0.013	8.59	4,225.00	4,224.75	4,225.00	4,230.35	-1.5	4.1	4,227.22	4,227.17	
P-4088	I-2661	I-2278	0	0	0	0	0	1.5	91	0.010989	15 inch	0.013	6.77	4,251.60	4,250.60	4,255.60	4,254.60	2.75	2.75	4,252.88	4,252.81	
P-4170	I-2727	I-18	0	0	0	0	0	10.08	34	0.007647	18 inch	0.013	9.19	4,235.35	4,235.09	4,236.00	4,239.98	-0.65	3.39	4,240.29	4,239.98	
P-4175	I-3908	I-2731	0	0	0	14.65	0.79	40.04	177	0.007514	36 inch	0.013	57.81	4,222.00	4,220.67	4,230.00	4,225.37	5	1.7	4,224.37	4,223.95	
P-4211	I-2752	I-2659	0	0	0	2.43	0.98	3.92	637	0.003736	24 inch	0.013	13.83	4,225.90	4,223.52	4,231.90	4,227.52	4	2	4,226.63	4,225.60	
P-4212	I-2594	I-2752	0	0	0	12.13	0.99	19.71	358	0.00257	30 inch	0.013	20.79	4,226.82	4,225.90	4,231.92	4,231.90	2.6	3.5	4,228.74	4,227.41	
P-4254	I-2776	O-126	0	0	0	54.41	0.77	79.19	762	5.536404	54 inch	0.013	4,626.82	4,216.74	0	4,223.74	0	0.5	-4.5	4,221.34	0.41	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-13	0	0	0	0	0	30	0	0	30	0	0	0	0	4.04	0	4.04	4,280.16	4,280.16	4,275.93	4,275.93	0	0	
I-18	0	0.2	0	0	23.06	0	0	87.94	87.94	0.82	19.04	0	0	0	0	34.67	4,239.98	4,239.98	4,237.18	4,237.14	0	0	
I-19	0	0	0	0	0	0	0	0	0	0	0	0	0	4.4	0	4.4	4,240.53	4,240.53	4,240.46	4,240.46	0	0	
I-20	0	0	0	0	5.37	0	0	65.24	65.24	0.97	5.27	0	0	0	0	5.27	4,234.44	4,234.44	4,230.54	4,230.53	0	0	
I-21	26.84	0.2	5.37	0	5.37	65	0	0	65	0.98	5.28	0	0	0	0	5.28	4,234.16	4,234.16	4,232.68	4,232.68	0.98	5.28	
I-22	0	0	0	0	0	60	0	0	60	0	0	0	0	7.93	0	7.93	4,276.39	4,276.39	4,274.50	4,274.50	0	0	
I-23	0	0	0	0	0	48	0	60.37	60.37	0	0	0	0	0	0	7.93	4,271.38	4,271.38	4,268.61	4,268.55	0	0	
I-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,278.56	4,278.56	4,273.56	4,273.56	0	0	
I-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,278.81	4,278.81	4,273.81	4,273.81	0	0	
I-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,234.95	4,234.95	4,230.54	4,230.54	0	0	
I-51	0	0.35	0	0	24.15	39.33	0	41.37	41.37	1.4	33.96	0	0	0	0	33.96	4,232.88	4,232.88	4,233.56	4,232.88	0	0	
I-52	69	0.35	24.15	0	24.15	41.33	0	0	41.33	1.4	33.98	0	0	0	0	33.98	4,233.07	4,233.07	4,233.07	4,233.07	1.4	33.98	
I-53	0	0	0	0	4.43	0	0	26.25	26.25	1.83	8.17	0	0	0	0	8.17	4,235.88	4,235.88	4,232.63	4,232.29	0	0	
I-56	0	0	0	0	11.32	38.82	0	45.88	45.88	1.3	14.88	0	0	0	0	14.88	4,254.00	4,254.00	4,257.53	4,254.00	0	0	
I-78	0	0	0	0	0	0	0	0	0	0	0	0	0	1.63	0	1.63	4,262.56	4,262.56	4,257.98	4,257.98	0	0	
I-80	4	0	0	0	0	27	0	33	33	0	0	0	0	0	0	0	4,263.77	4,263.77	4,258.77	4,258.77	0	0	
I-82	2.17	0	0	0	0	33	0	0	33	0	0	0	0	0	0	0	4,264.65	4,264.65	4,259.65	4,259.65	0	0	
I-83	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4,280.19	4,280.19	4,279.23	4,279.23	0	0	
I-95	33.78	0.3	10.13	0	17.33	51	0	65.44	65.44	0.97	17	0	0	0	0	17	4,283.46	4,283.46	4,265.63	4,263.46	1.2	12.22	
I-96	0	0	0	0	7.2	0	0	63.72	63.72	0.98	7.14	0	0	0	0	7.14	4,288.16	4,288.16	4,285.48	4,285.39	0	0	
I-109	20.57	0.35	7.2	0	8.02	30	0	30.85	30.85	1.61	13.03	0	0	0	0	13.03	4,299.77	4,299.77	4,295.38	4,295.34	1.63	11.83	
I-114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,254.38	4,254.38	4,249.38	4,249.38	0	0	
I-123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,228.03	4,228.03	4,223.96	4,223.96	0	0	
I-128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.01	4,229.01	4,224.01	4,224.01	0	0	
I-136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.35	4,223.35	4,220.11	4,220.11	0	0	
I-138	11.38	0.3	3.41	0	3.93	35.55	0	26.63	35.55	1.52	6.01	0	0	0	0	6.01	4,293.98	4,293.98	4,290.96	4,290.93	1.52	5.21	
I-178	0	0	0	0	4.95	0	0	38.78	38.78	1.49	7.43	0	0	0	0	13.89	4,259.12	4,259.12	4,256.80	4,256.77	0	0	
I-191	0	0	0	0	0	0	0	0.21	0.21	0	0	0	0	0	0	5.69	4,253.79	4,253.79	4,250.07	4,249.76	0	0	
I-194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,238.00	4,238.00	4,233.00	4,233.00	0	0	
I-195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,237.94	4,237.94	4,232.94	4,232.94	0	0	
I-203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,239.33	4,239.33	4,234.33	4,234.33	0	0	
I-209	0	0	0	0	7.86	0	0	68.19	68.19	0.95	7.56	0	0	0	0	7.56	4,260.37	4,260.37	4,256.74	4,256.44	0	0	
I-212	39.06	0.35	13.67	0	25.03	58.19	0	70.75	70.75	0.94	23.63	0	0	0	0	23.63	4,252.03	4,252.03	4,249.34	4,248.73	1.05	14.43	
I-216	25.45	0.35	8.91	0	11.99	65	0	48.46	65	0.98	11.8	0	0	0	0	19	4,266.76	4,266.76	4,263.27	4,263.24	0.98	8.76	
I-217	0	0	0	0	3.09	0	0	47.3	47.3	1.27	3.96	0	0	0	0	7.16	4,268.56	4,268.56	4,264.74	4,264.71	0	0	
I-219	0	0	0	0	6.17	0	0	44.62	44.62	1.33	8.26	0	0	0	0	8.26	4,277.66	4,277.66	4,273.81	4,273.77	0	0	
I-229	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,312.74	4,312.74	4,309.35	4,309.35	0	0	
I-232	0	0	0	0	11.21	0	0	22.79	22.79	2.01	22.77	0	0	0	0	22.77	4,238.63	4,238.63	4,242.03	4,238.63	0	0	
I-233	0	0	0	0	11.21	0	0	22.88	22.88	2.01	22.72	0	0	0	0	22.72	4,238.36	4,238.36	4,243.68	4,238.35	0	0	
I-235	0	0	0	0	8.34	0	0	22.2	22.2	2.05	17.21	0	0	0	0	17.21	4,241.47	4,241.47	4,246.18	4,241.47	0	0	
I-236	0	0	0	0	8.34	0	0	22.38	22.38	2.04	17.13	0	0	0	0	17.13	4,240.29	4,240.29	4,243.90	4,240.29	0	0	
I-257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,274.62	4,274.62	4,269.62	4,269.62	0	0	
I-261	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4,280.95	4,280.95	4,276.01	4,276.01	0	0	
I-272	25.25	0.35	8.84	0	8.84	29.98	0	0	29.98	1.63	14.53	0	0	0	0	14.53	4,301.97	4,301.97	4,298.41	4,298.41	1.63	14.53	
I-273	165	0	0	0	0	69	0	0	69	0	0	0	0	9	0	9	4,276.00	4,276.00	4,272.31	4,272.31	0	0	
I-275	0	0.3	0	0	0	64.87	0	0	64.87	0	0	0	0	0	0	0	4,272.00	4,272.00	4,271.92	4,271.92	0	0	
I-277	0	0.3	0	0	0	64.91	0	64.87	64.91	0	0	0	0	0	0	0	4,272.92	4,272.92	4,271.92	4,271.92	0	0	
I-282	5.62	0.35	1.97	0	1.97	20	0	0	20	2.16	4.29	0	0	0	0	4.29	4,239.60	4,239.60	4,239.60	4,239.60	2.16	4.29	
I-284	2.58	0.35	0.9	0	11.21	20	0	22.54	22.54	2.03	22.92	0	0	0	0	22.92	4,239.60	4,239.60	4,240.84	4,239.60	2.16	1.97	
I-285	0	0	0	0	11.21	0	0	23.05	23.05	2	22.62	0	0	0	0	22.62	4,237.96	4,237.96	4,239.54	4,237.96	0	0	
I-290	0	0	0	0	11.21	0	0	22.95	22.95	2.01	22.67	0	0	0	0	22.67	4,238.07	4,238.07	4,242.63	4,238.07	0	0	
I-291	0	0	0	0	11.21	0	0	23.01	23.01	2	22.64	0	0	0	0	22.64	4,237.96	4,237.96	4,246.11	4,237.96	0	0	
I-295	4.99	0.35	1.75	0	4.43	20	0	25.78	25.78	1.65	8.28	0	0	0	0	8.28	4,236.08	4,236.08	4,235.97	4,235.74	2.16	3.81	
I-302	7.67	0.35	2.68	0	2.68	25.54	0	0	25.54	1.87	5.05	0	0	0	0	5.05	4,236.10	4,236.10	4,236.10	4,236.10	1.87	5.05	
I-305	0	0	0	0	5.1	0	0	101.51	101.51	0.73	3.73	0	0	0	0	3.73	4,255.26	4,255.26	4,251.25	4,251.25	0	0	
I-306	0	0	0	0	1.68	0	0	25.47	25.47	1.87	3.17	0	0	0	0	3.17	4,235.96	4,235.96	4,231.85	4,231.77	0	0	
I-308	0	0	0	0	3.87	0	0	60.54	60.54	1.01	3.93	0	0	0	0	3.93	4,256.02	4,256.02	4,252.02	4,251.82	0	0	
I-311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,232.82	4,232.82	4,229.00	4,229.00	0	0	
I-312	0	0	0	0	1.68	0	0	24.53	24.53	1.92	3.25	0	0	0	0	3.25	4,235.98	4,235.98	4,232.39	4,232.30	0	0	
I-313	4.6	0.35	1.68	0	1.68	23.81	0	0	23.81	1.96	3.32	0	0	0	0	3.32	4,235.96	4,235.96	4,232.70	4,232.70	1.96	3.32	
I-314	3.85	0.35	1.35	0	1.35	26.92	0	0	26.92	1.79	2.44	0	0	0	0	2.44	4,235.84	4,235.84	4,231.91	4,231.91	1.79	2.44	
I-317	9.34	0.35	3.27	0	4.66	20	0	21.47	21.47	2.08	9.8	0	0	0	0	9.8	4,236.00	4,236.00	4,235.69	4,234.24	2.16	7.13	
I-345	1.73	0.3	0.52	0	0.52	25.2	0	0	25.2	1.89	0.99	0	0	0	0	0.99	4,297.42	4,297.42	4,292.79	4,292.79	1.89	0.99	
I-348	0	0	0	0	0	0	0	0.36	0.36	0	0	0	0	0	0	6.2	4,292.01	4,292.01	4,288.00	4,287.97	0	0	
I-355	0	0	0	0	29.15	1	0	68.11	68.11	0.95	28.05	0	0	0	0	28.05	4,279.23	4,279.23	4,279.23	4,279.23	0	0	
I-362	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,263.24	4,263.24	4,258.24	4,258.24	0	0	
I-365	0	0	0	0	0	1	0	30	30	0	0	0	0	0	0	0	4,297.38	4,297.38	4,292.38	4,292.38	0	0	
I-379	82	0	0	0	0	60	0	0	60	0	0	0	0	6.5	0	6.5	4,288.70	4,288.70	4,284.91	4,284.91	0	0	
I-384	0.54	0.85	0.46	0	0.46	20	0	0	20	2.16	1	0	0	0	0	1	4,290.55	4,290.55	4,285.69	4,285.69	2.16	1	
I-385	0	0	0	0	1.53	0	0	34.97	34.97	1.53	2.36	0	0	0	0	2.36	4,280.55	4,280.55	4,276.14	4,276.13	0	0	
I-399	10.88	0.25	2.67	0	2.67	40	0	0	40	1.42	3.83	0	0	0	0	3.83	4,266.62	4,266.62	4,263.58	4,263.58	1.42	3.83	
I-401	0	0	0	0	2.67	0	0	40.85	40.85	1.41	3.78	0	0	0	0	3.78	4,265.84	4,265.84	4,262.87	4,262.81	0	0	
I-403	21.23	0	0	0	0	30	0	0	30	0	0	0	0	2.14	0	2.14	4,266.00	4,266.00	4,261.68	4,261.68	0	0	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-408	0	0	0	0	3.92	0	0	79.91	79.91	0.87	3.45	0	0	0	0	6.86	4,256.03	4,256.03	4,247.97	4,247.96	0	0	
I-419	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,259.90	4,259.90	4,254.90	4,254.90	0	0	
I-424	32.35	0.35	11.32	0	11.32	45	0	0	45	1.32	15.07	0	0	0	0	15.07	4,259.99	4,259.99	4,263.62	4,259.99	1.32	15.07	
I-425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,262.01	4,262.01	4,259.99	4,259.99	0	0	
I-426	0	0	0	0	0	0	0	104.85	104.85	0	0	0	0	0	0	3.1	4,242.00	4,242.00	4,239.80	4,238.73	0	0	
I-427	0	0	0	0	0	104	0	0	104	0	0	0	0	3.1	0	3.1	4,242.95	4,242.95	4,239.09	4,239.09	0	0	
I-428	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,263.53	4,263.53	4,259.99	4,259.99	0	0	
I-429	61.44	0.35	21.5	0	21.5	34.65	0	102.97	102.97	0.72	15.53	0	0	0	0	22.33	4,249.00	4,249.00	4,248.58	4,246.65	1.53	33.25	
I-432	17.62	0.35	6.17	0	6.17	25.58	0	44.43	44.43	1.33	8.29	0	0	0	0	8.29	4,277.94	4,277.94	4,274.53	4,274.25	1.67	11.5	
I-435	17.65	0.35	6.18	0	6.18	43	0	0	43	1.36	8.48	0	0	0	0	8.48	4,284.65	4,284.65	4,284.65	4,284.65	1.36	8.48	
I-440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,328.40	4,328.40	4,323.40	4,323.40	0	0	
I-448	13.16	0.3	3.95	0	3.95	47.21	0	0	47.21	1.27	5.07	0	0	0	0	5.07	4,290.27	4,290.27	4,287.25	4,287.25	1.27	5.07	
I-458	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,331.19	4,331.19	4,326.19	4,326.19	0	0	
I-464	0	0	0	0	0	0	0	46.21	46.21	0	0	0	0	0	0	39.04	4,266.56	4,266.56	4,263.50	4,263.42	0	0	
I-466	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,258.03	4,258.03	4,253.69	4,253.69	0	0	
I-473	7.57	0.35	2.65	0	6.71	31.73	0	29.58	31.73	1.59	10.79	0	0	0	0	10.79	4,236.03	4,236.03	4,237.31	4,236.03	1.59	4.26	
I-475	11.11	0.35	3.89	0	10.6	23.5	0	32.03	32.03	1.59	16.97	0	0	0	0	16.97	4,235.47	4,235.47	4,239.21	4,235.47	1.98	7.75	
I-477	13.83	0.28	3.87	0	3.87	59.29	0	0	59.29	1.02	4	0	0	0	0	4	4,256.90	4,256.90	4,253.04	4,253.04	1.02	4	
I-479	0	0	0	0	0	0	0	1.3	1.3	0	0	0	0	0	0	3.5	4,242.49	4,242.49	4,238.79	4,238.70	0	0	
I-480	0	0	0	0	24.47	0	0	42.64	42.64	1.37	33.78	0	0	0	0	38.78	4,244.15	4,244.15	4,268.15	4,244.15	0	0	
I-482	0	0	0	0	24.47	0	0	42.58	42.58	1.37	33.79	0	0	0	0	38.79	4,243.94	4,243.94	4,257.74	4,243.94	0	0	
I-483	0	0	0	0	6.51	0	0	45.8	45.8	1.3	8.56	0	0	0	0	8.56	4,236.00	4,236.00	4,237.17	4,236.00	0	0	
I-484	18.61	0.35	6.51	0	6.51	45.6	0	0	45.6	1.31	8.59	0	0	0	0	8.59	4,236.00	4,236.00	4,236.00	4,236.00	1.31	8.59	
I-485	5	0.35	1.75	0	8.26	24.2	0	46.3	46.3	1.29	10.77	0	0	0	0	10.77	4,235.26	4,235.26	4,237.11	4,235.26	1.94	3.42	
I-488	6.91	0.35	2.42	0	2.42	26.22	0	0	26.22	1.83	4.47	0	0	0	0	4.47	4,238.00	4,238.00	4,238.00	4,238.00	1.83	4.47	
I-506	8.27	0.35	2.89	0	11.4	27.22	0	47.35	47.35	1.27	14.61	0	0	0	0	14.61	4,237.37	4,237.37	4,237.50	4,237.37	1.78	5.19	
I-510	12.19	0.35	4.27	0	4.27	46.42	0	0	46.42	1.29	5.55	0	0	0	0	5.55	4,237.33	4,237.33	4,237.33	4,237.33	1.29	5.55	
I-525	0	0	0	0	14.8	0	0	49.36	49.36	1.23	18.34	0	0	0	0	18.34	4,237.26	4,237.26	4,234.23	4,234.22	0	0	
I-529	3.98	0.35	1.39	0	1.39	20	0	0	20	2.16	3.04	0	0	0	0	3.04	4,235.79	4,235.79	4,235.79	4,235.79	2.16	3.04	
I-533	0	0	0	0	1.39	0	0	20.5	20.5	2.14	3	0	0	0	0	3	4,235.89	4,235.89	4,236.03	4,235.89	0	0	
I-534	9.48	0.35	3.32	0	3.32	24.94	0	0	24.94	1.9	6.35	0	0	0	0	6.35	4,231.50	4,231.50	4,231.50	4,231.50	1.9	6.35	
I-539	0	0	0	0	0	0	0	33.25	33.25	0	0	0	0	0	0	3.92	4,236.39	4,236.39	4,232.57	4,232.55	0	0	
I-548	5.29	0.3	1.59	0	1.59	28.35	0	0	28.35	1.72	2.75	0	0	0	0	2.75	4,232.16	4,232.16	4,229.24	4,229.24	1.72	2.75	
I-549	0	0	0	0	1.59	0	0	33.13	33.13	1.57	2.5	0	0	0	0	2.5	4,231.44	4,231.44	4,228.06	4,228.04	0	0	
I-566	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,268.15	4,268.15	4,263.15	4,263.15	0	0	
I-567	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,269.05	4,269.05	4,264.05	4,264.05	0	0	
I-568	0	0	0	0	0	0	0	31.1	31.1	0	0	0	0	0	0	5	4,266.11	4,266.11	4,261.92	4,261.90	0	0	
I-583	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	3.5	4,241.99	4,241.99	4,238.28	4,238.23	0	0	
I-586	0	0	0	0	7.54	0	0	33.1	33.1	1.57	11.9	0	0	0	0	16.76	4,238.00	4,238.00	4,234.30	4,234.29	0	0	
I-587	5.53	0.35	1.94	0	1.94	20	0	0	20	2.16	4.22	0	0	0	0	4.22	4,237.90	4,237.90	4,234.94	4,234.94	2.16	4.22	
I-597	0	0	0	0	7.2	1	0	62.44	62.44	0.99	7.21	0	0	0	0	7.21	4,289.47	4,289.47	4,287.01	4,286.94	0	0	
I-603	23.99	0.3	7.2	0	7.2	60	0	30	60	1.01	7.33	0	0	0	0	7.33	4,294.46	4,294.46	4,290.80	4,290.51	1.01	7.33	
I-606	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.84	4,229.84	4,224.84	4,224.84	0	0	
I-609	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.39	4,230.39	4,225.39	4,225.39	0	0	
I-611	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.60	4,230.60	4,225.60	4,225.60	0	0	
I-612	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.69	4,230.69	4,225.69	4,225.69	0	0	
I-620	34	0	0	0	0	1	0	0	1	0	0	0	0	6.8	0	6.8	4,250.60	4,250.60	4,246.65	4,246.65	0	0	
I-621	0	0	0	0	0.43	1	0	28.17	28.17	1.73	0.74	0	0	0	0	0.74	4,306.89	4,306.89	4,302.96	4,302.96	0	0	
I-623	0	0	0	0	0	0	0	1.56	1.56	0	0	0	0	0	0	6.8	4,245.82	4,245.82	4,242.23	4,241.67	0	0	
I-639	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.18	4,225.18	4,220.18	4,220.18	0	0	
I-653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.32	4,229.32	4,224.32	4,224.32	0	0	
I-658	0	0	0	0	2.65	0	0	28.14	28.14	1.73	4.96	0	0	0	0	4.96	4,298.74	4,298.74	4,289.64	4,289.62	0	0	
I-659	8.49	0.3	2.85	0	2.65	25	0	0	25	1.9	5.44	0	0	0	0	5.44	4,303.86	4,303.86	4,299.94	4,299.94	1.9	5.44	Kings court inflow
I-665	30.05	0.35	10.52	0	10.52	44.83	0	0	44.83	1.32	14.03	0	0	0	0	14.03	4,301.69	4,301.69	4,301.69	4,301.69	1.32	14.03	
I-666	0	0	0	0	10.52	0	0	46.38	46.38	1.29	13.69	0	0	0	0	13.69	4,293.64	4,293.64	4,295.54	4,293.64	0	0	
I-667	0	0	0	0	10.52	0	0	46.57	46.57	1.29	13.65	0	0	0	0	13.65	4,292.72	4,292.72	4,294.61	4,292.72	0	0	
I-668	0	0	0	0	16.54	0	0	46.97	46.97	1.28	23.9	0	0	0	0	32.94	4,291.16	4,291.16	4,287.55	4,287.46	0	0	
I-686	0	0	0	0	21.5	0	0	103.23	103.23	0.71	15.49	0	0	0	0	22.29	4,242.44	4,242.44	4,248.20	4,242.44	0	0	
I-694	0	0	0	0	0	0	0	105.58	105.58	0	0	0	0	0	0	3.1	4,241.98	4,241.98	4,238.41	4,238.38	0	0	
I-699	0	0	0	0	0	0	0	107.83	107.83	0	0	0	0	0	0	3.1	4,242.03	4,242.03	4,238.15	4,238.10	0	0	
I-702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,237.72	4,237.72	4,232.72	4,232.72	0	0	
I-714	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,236.57	4,236.57	4,231.59	4,231.59	0	0	
I-723	0	0	0	0	1.03	0	0	21.67	21.67	2.07	2.15	0	0	0	0	2.15	4,237.10	4,237.10	4,231.36	4,231.35	0	0	
I-727	0	0	0	0	1.03	0	0	21.02	21.02	2.11	2.19	0	0	0	0	2.19	4,237.05	4,237.05	4,231.48	4,231.47	0	0	
I-729	0	0	0	0	1.03	0	0	20.42	20.42	2.14	2.22	0	0	0	0	2.22	4,236.93	4,236.93	4,231.61	4,231.59	0	0	
I-732	2.94	0.35	1.03	0	1.03	20	0	0	20	2.16	2.24	0	0	0	0	2.24	4,236.79	4,236.79	4,232.20	4,232.20	2.16	2.24	
I-739	5.73	0.35	2.01	0	12.85	20	0	49.53	49.53	1.23	15.88	0	0	0	0	25.9	4,229.07	4,229.07	4,227.81	4,227.77	2.16	4.37	
I-744	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,262.18	4,262.18	4,257.18	4,257.18	0	0	
I-745	0	0	0	0	3.09	0	0	46.09	46.09	1.3	4.04	0	0	0	0	4.04	4,269.99	4,269.99	4,266.24	4,266.23	0	0	
I-747	0	0.35	0	0	7.2	20	0	61.11	61.11	1	7.27	0	0	0	0	7.27	4,291.32	4,291.32	4,288.67	4,288.59	0	0	
I-749	4.84	0.85	4.11	0	4.11	25.65	0	0	25.65	1.86	7.72	0	0	0	0	7.72	4,238.24	4,238.24	4,236.99	4,236.99	1.86	7.72	
I-754	0	0	0	0	3.32	0	0	39.42	39.42	1.44	4.8	0	0	0	0	4.8	4,230.01	4,230.01	4,226.53	4,226.32	0	0	
I-755	0	0	0	0	1.59	0	0	29.09	29.09	1.68	2.68	0	0	0	0	2.68	4,231.97	4,231.97	4,229.06	4,228.98	0	0	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-769	25.5	0.35	8.93	0	8.93	31.61	0	0	31.61	1.6	14.36	0	0	0	0	14.36	4,227.05	4,227.05	4,227.05	4,227.05	1.6	14.36	
I-775	33.17	0.3	9.95	0	9.95	65	0	64.91	65	0.98	9.79	0	0	0	0	9.79	4,271.92	4,271.92	4,272.07	4,271.92	0.98	9.79	
I-778	27.62	0.35	9.67	0	9.67	30	0	0	30	1.63	15.88	0	0	0	0	15.88	4,299.03	4,299.03	4,295.55	4,295.55	1.63	15.88	
I-781	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,287.23	4,287.23	4,282.23	4,282.23	0	0	
I-782	0	0	0	0	29.15	0	0	66.48	66.48	0.97	28.38	0	0	0	0	28.38	4,280.83	4,280.83	4,280.22	4,280.22	0	0	
I-783	0.5	0.85	0.43	0	2.19	31.2	0	39.85	39.85	1.43	3.15	0	0	0	0	3.91	4,278.01	4,278.01	4,273.79	4,273.74	1.61	0.69	
I-784	0.11	0.85	0.09	0	22.48	20	0	73.11	73.11	0.92	20.66	0	0	0	0	29.86	4,271.94	4,271.94	4,269.47	4,269.45	2.16	0.2	
I-785	63.11	0.35	22.09	0	22.09	63	0	25.45	63	0.99	22.03	0	0	0	0	22.03	4,271.89	4,271.89	4,272.90	4,271.29	0.99	22.03	
I-796	12.5	0.3	3.75	0	16.6	45	0	51.11	51.11	1.19	19.97	0	0	0	0	29.99	4,227.91	4,227.91	4,225.77	4,225.75	1.32	4.99	
I-808	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.71	4,224.71	4,220.80	4,220.80	0	0	
I-811	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,249.14	4,249.14	4,244.14	4,244.14	0	0	
I-812	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,247.89	4,247.89	4,242.89	4,242.89	0	0	
I-813	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.34	4,223.34	4,220.80	4,220.80	0	0	
I-849	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.65	4,230.65	4,225.70	4,225.70	0	0	
I-854	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.60	4,223.60	4,220.80	4,220.80	0	0	
I-874	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,292.92	4,292.92	4,287.92	4,287.92	0	0	
I-875	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,292.86	4,292.86	4,288.10	4,288.10	0	0	
I-879	0	0	0	0	0	0	0	46.94	46.94	0	0	0	0	0	0	39.04	4,282.65	4,282.65	4,279.60	4,279.51	0	0	
I-882	0	0	0	0	2.85	0	0	68.01	68.01	0.96	2.74	0	0	0	0	11.82	4,265.99	4,265.99	4,260.30	4,260.27	0	0	
I-885	5.46	0.35	1.91	0	1.91	20	0	0	20	2.16	4.17	0	0	0	0	4.17	4,279.23	4,279.23	4,275.06	4,275.06	2.16	4.17	
I-890	26.94	0.2	5.39	0	5.39	20	0	0	20	2.16	11.75	0	0	0	0	11.75	4,267.54	4,267.54	4,267.54	4,267.54	2.16	11.75	
I-893	0	0	0	0	11.7	0	0	32.49	32.49	1.58	18.62	0	0	0	0	18.62	4,261.36	4,261.36	4,257.97	4,257.93	0	0	
I-898	0	0	0	0	0	30	0	0	30	0	0	0	0	3.92	0	3.92	4,236.96	4,236.96	4,233.24	4,233.24	0	0	
I-900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,250.50	4,250.50	4,245.50	4,245.50	0	0	
I-901	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,248.73	4,248.73	4,244.73	4,244.73	0	0	
I-905	0	0	0	0	0	0	0	0	0	0	0	0	0	5.69	0	5.69	4,254.00	4,254.00	4,250.53	4,250.53	0	0	
I-908	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,235.05	4,235.05	4,231.59	4,231.59	0	0	
I-932	4.54	0.35	1.59	0	1.59	20	0	0	20	2.16	3.47	0	0	0	0	3.47	4,236.83	4,236.83	4,233.66	4,233.66	2.16	3.47	
I-936	23.64	0.35	8.34	0	8.34	22.1	0	0	22.1	2.05	17.25	0	0	0	0	17.25	4,242.06	4,242.06	4,242.06	4,242.06	2.05	17.25	
I-947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,247.45	4,247.45	4,242.45	4,242.45	0	0	
I-948	45.89	0.35	16.1	0	16.1	45.13	0	0	45.13	1.32	21.37	0	0	0	0	21.37	4,241.87	4,241.87	4,240.52	4,240.05	1.32	21.37	
I-950	25.84	0.35	9.04	0	9.04	27.97	0	0	27.97	1.74	15.85	0	0	0	0	15.85	4,233.13	4,233.13	4,230.56	4,230.56	1.74	15.85	
I-953	2	0.85	1.7	0	1.7	30.7	0	0	30.7	1.62	2.77	0	0	0	0	2.77	4,235.92	4,235.92	4,233.00	4,233.00	1.62	2.77	
I-957	0	0	0	0	14.8	0	0	48.71	48.71	1.24	18.54	0	0	0	0	18.54	4,237.31	4,237.31	4,235.94	4,235.79	0	0	
I-961	0.32	0.85	0.3	0	0.64	20	0	21.82	21.82	2.07	1.95	0	0	0	0	1.95	4,235.05	4,235.05	4,230.93	4,230.87	2.16	0.65	
I-962	0.67	0.95	0.64	0	0.64	20	0	0	20	2.16	1.39	0	0	0	0	1.39	4,235.97	4,235.97	4,231.51	4,231.51	2.16	1.39	
I-972	8.23	0.2	1.65	0	4.06	22.48	0	29.41	29.41	1.66	6.81	0	0	0	0	6.81	4,236.07	4,236.07	4,236.18	4,236.07	2.03	3.37	
I-990	0	0	0	0	3.91	0	0	47.99	47.99	1.26	4.95	0	0	0	0	14.97	4,229.65	4,229.65	4,228.22	4,228.20	0	0	
I-991	0	0	0	0	0	20	0	33	33	0	0	0	0	0	0	0	4,263.41	4,263.41	4,258.41	4,258.41	0	0	
I-993	17.68	0.3	5.3	0	5.3	35	0	1.23	35	1.53	8.16	0	0	0	0	9.79	4,260.03	4,260.03	4,256.13	4,256.08	1.53	8.16	
I-994	11.16	0.35	3.91	0	3.91	20	0	46.54	46.54	1.29	5.07	0	0	0	0	15.09	4,229.83	4,229.83	4,228.61	4,228.58	2.16	8.52	
I-999	0	0	0	0	5.3	0	0	35.1	35.1	1.52	8.15	0	0	0	0	9.78	4,255.38	4,255.38	4,253.53	4,253.44	0	0	
I-1004	0	0	0	0	0	0	0	102.36	102.36	0	0	0	0	0	0	6.8	4,249.00	4,249.00	4,248.58	4,248.57	0	0	
I-1966	0	0	0	0	0	0	0	43.21	43.21	0	0	0	0	0	0	3.92	4,233.86	4,233.86	4,231.49	4,231.49	0	0	
I-1968	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,263.07	4,263.07	4,258.07	4,258.07	0	0	
I-1969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,265.51	4,265.51	4,260.51	4,260.51	0	0	
I-1974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.98	4,224.98	4,220.80	4,220.80	0	0	
I-1978	0	0	0	0	5.01	0	0	28.16	28.16	1.73	8.73	0	0	0	0	8.73	4,230.26	4,230.26	4,230.77	4,230.26	0	0	
I-1979	0	0	0	0	5.01	0	0	27.98	27.98	1.74	8.78	0	0	0	0	8.78	4,230.46	4,230.46	4,230.69	4,230.46	0	0	
I-1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,236.96	4,236.96	4,232.57	4,232.57	0	0	
I-1986	5.39	0.35	1.89	0	3.2	20	0	20.82	20.82	2.12	6.83	0	0	0	0	6.83	4,233.98	4,233.98	4,230.68	4,230.58	2.16	4.11	
I-1987	3.75	0.35	1.31	0	1.31	20	0	0	20	2.16	2.86	0	0	0	0	2.86	4,234.02	4,234.02	4,230.74	4,230.74	2.16	2.86	
I-1988	0	0	0	0	5.6	0	0	32.03	32.03	1.59	8.97	0	0	0	0	15.85	4,238.00	4,238.00	4,234.57	4,234.56	0	0	
I-1995	30.28	0.35	10.6	0	36.15	36.5	0	50.83	50.83	1.2	43.71	0	0	0	0	101.46	4,267.83	4,267.83	4,266.89	4,266.89	1.5	15.98	
I-1996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,270.32	4,270.32	4,265.32	4,265.32	0	0	
I-2001	0	0	0	0	1.7	0	0	21.7	21.7	2.07	3.55	0	0	0	0	3.55	4,232.82	4,232.82	4,228.62	4,228.54	0	0	
I-2009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,278.05	4,278.05	4,274.05	4,274.05	0	0	
I-2010	0	0	0	0	2.85	0	0	60.67	60.67	1.01	2.89	0	0	0	0	9.83	4,288.49	4,288.49	4,284.76	4,284.70	0	0	
I-2011	18.75	0.35	6.56	0	6.56	30	0	0	30	1.63	10.78	0	0	0	0	10.78	4,256.91	4,256.91	4,256.91	4,256.91	1.63	10.78	
I-2012	0.61	0.85	0.52	0	0.52	20	0	0	20	2.16	1.13	0	0	0	0	1.13	4,302.08	4,302.08	4,297.48	4,297.48	2.16	1.13	
I-2013	0.2	0.85	0.17	0	0.69	20	0	23.63	23.63	1.97	1.37	0	0	0	0	1.37	4,299.14	4,299.14	4,294.55	4,294.54	2.16	0.37	
I-2018	0	0	0	0	0	0	0	110.94	110.94	0	0	0	0	0	0	3.1	4,239.99	4,239.99	4,237.47	4,237.46	0	0	
I-2019	0	0	0	0	0	0	0	109	109	0	0	0	0	0	0	3.1	4,241.39	4,241.39	4,237.91	4,237.88	0	0	
I-2037	2.9	0.35	1.01	0	2.7	20	0	22.35	22.35	2.04	5.55	0	0	0	0	5.55	4,232.71	4,232.71	4,228.69	4,228.67	2.16	2.21	
I-2038	4.82	0.35	1.69	0	1.69	21.96	0	0	21.96	2.06	3.5	0	0	0	0	3.5	4,232.77	4,232.77	4,228.94	4,228.94	2.06	3.5	
I-2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,266.40	4,266.40	4,261.92	4,261.92	0	0	
I-2040	0.21	0.85	0.18	0	0.37	43	0	79.77	79.77	0.87	0.32	0	0	0	0	4.32	4,270.00	4,270.00	4,266.14	4,266.04	1.36	0.24	
I-2041	0.21	0.85	0.18	0	0.54	43	0	80.19	80.19	0.87	0.48	0	0	0	0	4.48	4,269.61	4,269.61	4,265.93	4,265.91	1.36	0.24	
I-2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,271.72	4,271.72	4,266.72	4,266.72	0	0	
I-2047	5.6	0.3	1.68	0	14.46	68.7	0	66.46	68.7	0.95	13.85	0	0	0	0	13.85	4,270.10	4,270.10	4,266.30	4,266.28	0.95	1.61	
I-2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.02	4,230.02	4,225.02	4,225.02	0	0	
I-2049	37.4	0.35	13.09	0	19.65	29.64	0	34.29	34.29	1.54	30.53	0	0	0	0	30.53	4,250.05	4,250.05	4,255.44	4,250.05	1.65	21.78	
I-2062	0	0	0	0	0	60	0	0	60	0	0	0	0	6.94	0	6.94	4,289.28	4,289.28	4,285.62	4,285.62	0	0	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2066	0.45	0.85	0.38	0	3.33	39.22	0	53.21	53.21	1.15	3.86	0	0	0	0	14	4,235.99	4,235.99	4,232.74	4,232.69	1.44	0.55	
I-2067	0	0	0	0	1.7	0	0	32.21	32.21	1.58	2.71	0	0	0	0	2.71	4,235.99	4,235.99	4,232.87	4,232.85	0	0	
I-2078	0	0	0	0	11.36	0	0	70.39	70.39	0.94	10.75	0	0	0	0	10.75	4,252.98	4,252.98	4,250.79	4,250.68	0	0	
I-2084	0	0	0	0	4.95	0	0	35.28	35.28	1.52	7.59	0	0	0	0	14.05	4,263.91	4,263.91	4,265.39	4,263.91	0	0	
I-2087	39.14	0.35	13.7	0	13.7	30.19	0	0	30.19	1.63	22.45	0	0	0	0	22.45	4,309.47	4,309.47	4,309.35	4,309.03	1.63	22.45	
I-2088	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,309.65	4,309.65	4,309.35	4,309.35	0	0	
I-2096	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.98	4,231.98	4,226.98	4,226.98	0	0	
I-2097	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.84	4,231.84	4,226.84	4,226.84	0	0	
I-2098	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,226.20	4,226.20	4,221.20	4,221.20	0	0	
I-2101	33.78	0.35	11.82	0	28.15	43.03	0	65.6	65.6	0.97	28.56	0	0	0	0	28.56	4,281.93	4,281.93	4,281.88	4,281.84	1.36	16.22	
I-2104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,243.78	4,243.78	4,239.86	4,239.85	0	0	
I-2105	15.48	0.3	4.64	0	4.64	32.71	0	0	32.71	1.57	7.37	0	0	0	0	7.37	4,241.98	4,241.98	4,238.86	4,239.68	1.57	7.37	
I-2106	10.86	0.35	3.8	0	12.73	27.02	0	32.74	32.74	1.57	20.18	0	0	0	0	20.18	4,227.25	4,227.25	4,223.37	4,223.35	1.79	6.85	
I-2107	19.64	0	0	0	0	25	0	0	25	0	0	0	0	0	0	0	4,237.28	4,237.28	4,232.28	4,232.28	0	0	
I-2115	9.43	0.3	2.83	0	12.78	61.74	0	65.2	65.2	0.97	12.55	0	0	0	0	12.55	4,273.56	4,273.56	4,274.74	4,273.56	1	2.85	
I-2116	0	0	0	0	2.38	0	0	25.28	25.28	1.88	4.52	0	0	0	0	4.52	4,232.37	4,232.37	4,232.36	4,232.30	0	0	
I-2117	6.81	0.35	2.38	0	2.38	25	0	0	25	1.9	4.56	0	0	0	0	4.56	4,232.43	4,232.43	4,232.43	4,232.43	1.9	4.56	
I-2118	0	0.3	0	0	0	25.45	0	0	25.45	0	0	0	0	0	0	0	4,275.51	4,275.51	4,271.69	4,271.69	0	0	
I-2119	23.69	0.3	7.11	0	11.06	57.52	0	48.88	57.52	1.06	11.83	0	0	0	0	11.83	4,288.17	4,288.17	4,284.69	4,284.41	1.06	7.6	
I-2122	1.43	0.35	0.5	0	0.5	20	0	0	20	2.16	1.09	0	0	0	0	1.09	4,234.20	4,234.20	4,229.52	4,229.52	2.16	1.09	
I-2125	2.26	0.35	0.79	0	2.37	25	0	28.07	28.07	1.73	4.14	0	0	0	0	4.14	4,236.15	4,236.15	4,232.09	4,231.93	1.9	1.51	
I-2126	0	0	0	0	4.95	0	0	35.97	35.97	1.51	7.52	0	0	0	0	13.98	4,261.66	4,261.66	4,262.19	4,261.66	0	0	
I-2127	0	0	0	0	4.95	0	0	35.74	35.74	1.51	7.54	0	0	0	0	14	4,262.46	4,262.46	4,263.02	4,262.46	0	0	
I-2130	2.93	0.35	1.03	0	1.52	34.64	0	20.23	34.64	1.53	2.35	0	0	0	0	2.35	4,240.84	4,240.84	4,236.53	4,236.45	1.53	1.59	
I-2132	0	0	0	0	13.7	0	0	30.35	30.35	1.62	22.41	0	0	0	0	22.41	4,309.18	4,309.18	4,308.89	4,308.74	0	0	
I-2133	0	0	0	0	25	0	0	42.1	42.1	1.38	34.78	0	0	0	0	34.78	4,308.58	4,308.58	4,309.78	4,306.13	0	0	
I-2137	0	0	0	0	7.86	0	0	68.39	68.39	0.95	7.55	0	0	0	0	7.55	4,259.68	4,259.68	4,255.81	4,255.74	0	0	
I-2144	4.85	0.35	1.7	0	1.7	20	0	0	20	2.16	3.7	0	0	0	0	3.7	4,234.75	4,234.75	4,230.67	4,230.67	2.16	3.7	
I-2145	0	0	0	0	1.7	0	0	21.13	21.13	2.1	3.6	0	0	0	0	3.6	4,234.19	4,234.19	4,229.93	4,229.91	0	0	
I-2146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,246.88	4,246.88	4,244.50	4,244.50	0	0	
I-2149	0	0	0	0	0	0	0	4.65	4.65	0	0	0	0	0	0	3.5	4,241.80	4,241.80	4,237.63	4,237.51	0	0	
I-2150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.98	4,231.98	4,226.81	4,226.81	0	0	
I-2151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,232.04	4,232.04	4,227.04	4,227.04	0	0	
I-2152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.95	4,225.95	4,220.95	4,220.95	0	0	
I-2159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,251.70	4,251.70	4,246.70	4,246.70	0	0	
I-2164	0.13	0.85	0.11	0	0.22	20	0	70.72	70.72	0.94	0.21	0	0	0	0	9.21	4,273.96	4,273.96	4,270.36	4,270.35	2.16	0.24	
I-2171	11.43	0	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,304.54	4,304.54	4,299.54	4,299.54	0	0	
I-2175	0	0.35	0	0	9.04	21.3	0	29.23	29.23	1.67	15.23	0	0	0	0	15.23	4,231.62	4,231.62	4,228.60	4,228.59	0	0	
I-2177	0	0	0	0	6.56	0	0	31.98	31.98	1.59	10.51	0	0	0	0	10.51	4,254.16	4,254.16	4,254.55	4,254.16	0	0	
I-2178	0	0	0	0	6.51	0	0	64.5	64.5	0.98	6.43	0	0	0	0	6.43	4,253.04	4,253.04	4,249.27	4,249.02	0	0	
I-2179	18.6	0.35	6.51	0	6.51	64.18	0	0	64.18	0.98	6.44	0	0	0	0	6.44	4,253.63	4,253.63	4,249.64	4,249.64	0.98	6.44	
I-2182	0	0	0	0	7.86	0	0	66.44	66.44	0.97	7.65	0	0	0	0	7.65	4,263.99	4,263.99	4,260.40	4,260.11	0	0	
I-2185	2.26	0.35	0.79	0	1.58	25	0	27.93	27.93	1.74	2.78	0	0	0	0	2.78	4,236.22	4,236.22	4,232.17	4,232.12	1.9	1.51	
I-2190	21.04	0.3	6.31	0	11.7	31.6	0	21	31.6	1.6	18.83	0	0	0	0	18.83	4,265.24	4,265.24	4,266.94	4,265.24	1.6	10.16	
I-2191	0	0	0	0	5.39	0	0	20.74	20.74	2.12	11.53	0	0	0	0	11.53	4,266.00	4,266.00	4,266.63	4,266.00	0	0	
I-2193	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	0	4,299.04	4,299.04	4,294.04	4,294.04	0	0	
I-2198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,269.40	4,269.40	4,266.89	4,266.89	0	0	
I-2200	0	0.35	0	0	0	30.35	0	61.28	61.28	0	0	0	0	0	0	6.5	4,293.65	4,293.65	4,289.89	4,289.64	0	0	
I-2204	36.23	0.3	10.87	0	12.4	77	0	38.83	77	0.89	11.17	0	0	0	0	11.17	4,278.12	4,278.12	4,273.34	4,273.32	0.89	9.79	
I-2213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,257.33	4,257.33	4,253.41	4,253.41	0	0	
I-2214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,257.87	4,257.87	4,252.87	4,252.87	0	0	
I-2216	0	0	0	0	15.37	0	0	42.96	42.96	1.36	21.1	0	0	0	0	41.23	4,305.17	4,305.17	4,302.20	4,302.17	0	0	
I-2217	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	4,323.20	4,323.20	4,319.22	4,319.22	0	0	
I-2222	12.45	0.3	3.73	0	40.41	32.5	0	66.1	66.1	0.97	39.45	0	0	0	0	47.05	4,222.58	4,222.58	4,219.45	4,219.43	1.58	5.94	
I-2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.71	4,223.71	4,220.80	4,220.80	0	0	
I-2233	0	0	0	0	0.79	0	0	26.63	26.63	1.81	1.44	0	0	0	0	1.44	4,236.05	4,236.05	4,232.25	4,232.25	0	0	
I-2234	0	0	0	0	6.56	0	0	33.54	33.54	1.56	10.3	0	0	0	0	10.3	4,251.18	4,251.18	4,251.78	4,251.18	0	0	
I-2235	2.3	0.35	0.8	0	5.01	20	0	26.51	26.51	1.82	9.18	0	0	0	0	9.18	4,231.93	4,231.93	4,233.02	4,231.93	2.16	1.76	
I-2241	0	0	0	0	2.7	0	0	23.52	23.52	1.98	5.38	0	0	0	0	5.38	4,231.92	4,231.92	4,228.07	4,228.06	0	0	
I-2242	7.99	0.35	2.8	0	12.58	24.43	0	37.72	37.72	1.47	18.64	0	0	0	0	31.77	4,323.92	4,323.92	4,320.77	4,320.75	1.93	5.43	
I-2246	45.2	0.25	11.3	0	11.3	41	0	0	41	1.4	15.98	0	0	0	0	15.98	4,311.94	4,311.94	4,311.94	4,311.94	1.4	15.98	
I-2255	0	0	0	0	0	32	0	0	32	0	0	0	0	6.46	0	6.46	4,268.22	4,268.22	4,266.74	4,266.74	0	0	
I-2256	16.5	0.3	4.95	0	4.95	25.9	0	35.02	35.02	1.53	7.62	0	0	0	0	14.07	4,264.24	4,264.24	4,265.72	4,264.24	1.85	9.22	
I-2261	11.67	0.3	3.5	0	3.5	53.3	0	0	53.3	1.15	4.05	0	0	0	0	4.05	4,260.05	4,260.05	4,255.82	4,255.82	1.15	4.05	
I-2262	0	0	0	0	3.5	44.79	0	54.53	54.53	1.12	3.96	0	0	0	0	3.96	4,256.15	4,256.15	4,251.86	4,251.85	0	0	
I-2265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,277.13	4,277.13	4,273.04	4,273.04	0	0	
I-2267	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4,237.99	4,237.99	4,235.11	4,235.11	0	0	
I-2268	0	0	0	0	0.83	0	0	30.61	30.61	1.62	1.36	0	0	0	0	5.36	4,238.01	4,238.01	4,234.99	4,234.98	0	0	
I-2270	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,260.28	4,260.28	4,255.28	4,255.28	0	0	
I-2276	0	0	0	0	5.01	0	0	29.16	29.16	1.67	8.46	0	0	0	0	8.46	4,230.53	4,230.53	4,228.49	4,227.96	0	0	
I-2278	0	0.3	0	0	23.06	0	0	83.69	83.69	0.85	19.71	0	0	0	0	31.14	4,254.60	4,254.60	4,252.62	4,252.57	0	0	
I-2279	0	0	0	0	8.02	0	0	32.84	32.84	1.57	12.7	0	0	0	0	21.74	4,292.42	4,292.42	4,289.11	4,289.05	0	0	
I-2280	45.19	0	0	0	0	30	0	0	30	0	0	0	0	9.04	0	9.04	4,294.09	4,294.09	4,290.25	4,290.25	0	0	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2287	0	0	0	0	1.7	0	0	31.23	31.23	1.8	2.75	0	0	0	0	2.75	4,235.94	4,235.94	4,232.94	4,232.93	0	0	
I-2290	12.1	0.35	4.23	0	8.5	39	0	47.06	47.06	1.28	10.95	0	0	0	0	10.95	4,237.37	4,237.37	4,237.72	4,237.37	1.44	6.16	
I-2291	81.56	0.3	24.47	0	24.47	42.3	0	37.73	42.3	1.38	33.93	0	0	0	0	38.93	4,251.03	4,251.03	4,250.70	4,250.33	1.38	33.93	
I-2294	3.21	0.35	1.12	0	1.12	20	0	0	20	2.16	2.45	0	0	0	0	2.45	4,234.10	4,234.10	4,230.28	4,230.28	2.16	2.45	
I-2295	4.72	0.35	1.65	0	2.78	21.56	0	22.08	22.08	2.05	5.74	0	0	0	0	5.74	4,233.65	4,233.65	4,230.14	4,230.07	2.08	3.46	
I-2297	0	0	0	0	7.86	0	0	68.55	68.55	0.95	7.54	0	0	0	0	7.54	4,257.99	4,257.99	4,254.15	4,254.05	0	0	
I-2299	32.34	0.35	11.32	0	11.32	31	0	0	31	1.61	18.36	0	0	0	0	18.36	4,272.14	4,272.14	4,272.14	4,272.14	1.61	18.36	
I-2313	4.37	0.28	1.22	0	1.22	97.07	0	0	97.07	0.76	0.93	0	0	0	0	0.93	4,259.44	4,259.44	4,254.78	4,254.76	0.76	0.93	
I-2315	4.95	0.35	1.73	0	3.32	22.82	0	39.16	39.16	1.44	4.82	0	0	0	0	4.82	4,230.08	4,230.08	4,228.88	4,228.68	2.01	3.52	
I-2316	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.00	4,230.00	4,230.00	4,226.88	0	0	
I-2317	0	0	0	0	0	0	0	25	25	0	0	0	0	0	0	0	4,237.13	4,237.13	4,232.13	4,232.13	0	0	
I-2319	0	0	0	0	0	0	0	60.27	60.27	0	0	0	0	0	0	8.5	4,298.43	4,298.43	4,294.64	4,294.42	0	0	
I-2321	0	0	0	0	0	1	0	30.12	30.12	0	0	0	0	0	0	5.12	4,305.83	4,305.83	4,302.89	4,302.64	0	0	
I-2323	0	0	0	0	6.56	0	0	31.54	31.54	1.6	10.57	0	0	0	0	10.57	4,254.75	4,254.75	4,255.14	4,254.75	0	0	
I-2326	0	0	0	0	6.51	0	0	64.73	64.73	0.98	6.42	0	0	0	0	6.42	4,253.09	4,253.09	4,248.22	4,247.88	0	0	
I-2327	0	0	0	0	0	0	0	36.19	36.19	0	0	0	0	0	0	3.92	4,235.02	4,235.02	4,231.81	4,231.78	0	0	
I-2333	0	0.35	0	0	9.04	21.04	0	30.59	30.59	1.62	14.75	0	0	0	0	14.75	4,230.47	4,230.47	4,227.84	4,227.68	0	0	
I-2339	5.55	0.35	1.94	0	14.83	21.62	0	69.05	69.05	0.95	14.18	0	0	0	0	15.87	4,230.00	4,230.00	4,226.25	4,226.24	2.08	4.07	
I-2346	0	0	0	0	1.89	0	0	25.49	25.49	1.87	3.56	0	0	0	0	3.56	4,231.75	4,231.75	4,228.08	4,227.94	0	0	
I-2347	5.39	0.35	1.89	0	1.89	25	0	0	25	1.9	3.61	0	0	0	0	3.61	4,231.83	4,231.83	4,228.25	4,228.25	1.9	3.61	
I-2349	0	0	0	0	25.76	0	0	81.43	81.43	0.86	22.42	0	0	0	0	25.83	4,252.03	4,252.03	4,243.76	4,243.65	0	0	
I-2353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.50	4,225.50	4,220.80	4,220.80	0	0	
I-2355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,258.02	4,258.02	4,253.64	4,253.64	0	0	
I-2356	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,252.12	4,252.12	4,247.12	4,247.12	0	0	
I-2361	0	0	0	0	6.93	0	0	60.21	60.21	1.01	7.05	0	0	5.8	0	12.65	4,279.99	4,279.99	4,276.43	4,276.40	0	0	
I-2363	0	0	0	0	5.01	0	0	28.43	28.43	1.71	8.66	0	0	0	0	8.66	4,230.25	4,230.25	4,230.12	4,229.96	0	0	
I-2366	0	0	0	0	0	0	0	42.03	42.03	0	0	0	0	0	0	39.04	4,305.71	4,305.71	4,304.81	4,304.55	0	0	
I-2372	0.54	0.85	0.46	0	1.61	21	0	29.02	29.02	1.68	2.72	0	0	0	0	2.72	4,290.05	4,290.05	4,285.70	4,285.68	2.11	0.98	
I-2373	0	0	0	0	1.61	0	0	30.7	30.7	1.62	2.62	0	0	0.76	0	3.38	4,287.93	4,287.93	4,283.61	4,283.60	0	0	
I-2377	0	0	0	0	0	0	0	39.12	39.12	0	0	0	0	0	0	3.92	4,234.52	4,234.52	4,231.59	4,231.59	0	0	
I-2378	0	0	0	0	0	0	0	37.23	37.23	0	0	0	0	0	0	5	4,257.10	4,257.10	4,252.84	4,252.84	0	0	
I-2380	0	0	0	0	4.19	0	0	45.59	45.59	1.31	5.52	0	0	0	0	5.52	4,222.38	4,222.38	4,220.17	4,220.10	0	0	
I-2382	0.22	0.85	0.19	0	0.19	20	0	75.07	75.07	0.91	0.17	0	0	0	0	4.17	4,270.02	4,270.02	4,267.30	4,267.19	2.16	0.41	
I-2384	2.26	0.35	0.79	0	0.79	25.12	0	0	25.12	1.89	1.51	0	0	0	0	1.51	4,236.09	4,236.09	4,232.50	4,232.50	1.89	1.51	
I-2385	27.32	0.3	8.2	0	8.2	35	0	123.24	123.24	0.59	4.88	0	0	0	0	11.48	4,240.03	4,240.03	4,236.56	4,236.54	1.53	12.61	
I-2388	6.42	0.35	2.25	0	6.76	34.26	0	55.3	55.3	1.11	7.57	0	0	0	0	17.71	4,234.04	4,234.04	4,230.75	4,230.73	1.54	3.49	
I-2389	0	0	0	0	2.41	0	0	69.07	69.07	0.95	2.3	0	0	0	0	14.94	4,274.32	4,274.32	4,270.77	4,270.71	0	0	
I-2390	0	0	0	0	3.32	0	0	57.27	57.27	1.07	3.57	0	0	0	0	7.57	4,230.01	4,230.01	4,227.26	4,227.24	0	0	
I-2391	1.5	0.85	1.27	0	9.97	25.1	0	75.08	75.08	0.91	9.11	0	0	0	0	13.11	4,229.85	4,229.85	4,225.99	4,225.98	1.89	2.43	
I-2393	7.06	0.35	2.47	0	17.3	28.8	0	73.34	73.34	0.92	16.03	0	0	0	0	17.72	4,230.00	4,230.00	4,225.00	4,224.98	1.69	4.22	
I-2396	10.34	0.35	3.62	0	6.94	20	0	29.05	29.05	1.68	11.75	0	0	0	0	11.75	4,229.10	4,229.10	4,229.11	4,229.08	2.16	7.89	
I-2405	5.21	0.35	1.82	0	4.21	23.82	0	26.14	26.14	1.84	7.79	0	0	0	0	7.79	4,232.06	4,232.06	4,232.14	4,232.06	1.96	3.6	
I-2407	0.98	0.85	0.83	0	0.83	25.09	0	0	25.09	1.89	1.59	0	0	0	0	1.59	4,239.87	4,239.87	4,235.43	4,235.43	1.89	1.59	
I-2420	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	4,278.85	4,278.85	4,276.01	4,276.01	0	0	
I-2421	0	0	0	0	15.37	0	0	45.18	45.18	1.32	20.39	0	0	0	0	46.72	4,290.07	4,290.07	4,287.24	4,287.21	0	0	
I-2423	0	0	0	0	2.85	0	0	63.12	63.12	0.99	2.84	0	0	0	0	9.78	4,275.97	4,275.97	4,274.11	4,274.09	0	0	
I-2429	0	0	0	0	11.7	0	0	31.97	31.97	1.59	18.74	0	0	0	0	18.74	4,263.99	4,263.99	4,266.62	4,263.99	0	0	
I-2431	1.42	0.35	0.5	0	0.5	20	0	0	20	2.16	1.08	0	0	0	0	1.08	4,240.83	4,240.83	4,236.55	4,236.55	2.16	1.08	
I-2436	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,226.58	4,226.58	4,221.58	4,221.58	0	0	
I-2584	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	45	4,242.83	4,242.83	4,240.43	4,240.43	0	0	
I-2585	1.88	0.8	1.49	0	1.49	20	0	0	20	2.16	3.24	0	0	0	0	3.24	4,242.00	4,242.00	4,239.60	4,239.60	2.16	3.24	
I-2586	0	0	0	0	5.37	0	0	65.94	65.94	0.97	5.25	0	0	0	0	5.25	4,234.15	4,234.15	4,230.36	4,230.35	0	0	
I-2587	0	0	0	0	5.37	0	0	71.49	71.49	0.93	5.04	0	0	0	0	5.04	4,233.11	4,233.11	4,228.94	4,228.94	0	0	
I-2588	9.72	0.25	2.43	0	9.12	42.63	0	68	68	0.96	8.76	0	0	0	0	8.76	4,227.46	4,227.46	4,225.40	4,225.35	1.37	3.35	
I-2589	0	0	0	0	9.12	0	0	68.82	68.82	0.95	8.73	0	0	0	0	8.73	4,227.36	4,227.36	4,225.13	4,225.06	0	0	
I-2590	0	0	0	0	0	75	0	0	75	0	0	0	0	4	0	4	4,270.00	4,270.00	4,267.81	4,267.81	0	0	
I-2591	17.5	0.3	5.25	0	27.73	36.21	0	75.1	75.1	0.91	25.35	0	0	0	0	34.35	4,270.11	4,270.11	4,268.46	4,268.44	1.5	7.95	
I-2592	0	0	0	0	6.93	0	0	66.13	66.13	0.97	6.76	0	0	0	0	12.56	4,271.32	4,271.32	4,267.96	4,267.93	0	0	
I-2593	0	0	0	0	0	50	0	0	50	0	0	0	0	10.14	0	10.14	4,237.05	4,237.05	4,234.31	4,234.31	0	0	
I-2594	0	0	0	0	12.13	0	0	50.18	50.18	1.21	14.83	0	0	0	0	22.43	4,231.92	4,231.92	4,230.03	4,229.77	0	0	
I-2595	0	0	0	0	12.13	0	0	50	50	1.22	14.67	0	0	0	0	22.48	4,231.92	4,231.92	4,230.18	4,230.18	0	0	
I-2596	0	0	0	0	0	0	0	0	0	0	0	0	0	3.5	0	3.5	4,243.11	4,243.11	4,239.44	4,239.44	0	0	
I-2597	0	0	0	0	12.13	0	0	51.49	51.49	1.19	14.5	0	0	0	0	22.1	4,231.90	4,231.90	4,228.69	4,228.46	0	0	
I-2598	0	0	0	0	0	102	0	0	102	0	0	0	0	6.8	0	6.8	4,252.95	4,252.95	4,248.61	4,248.61	0	0	
I-2599	0	0	0	0	0	72	0	0	72	0	0	0	0	7.7	0	7.7	4,224.77	4,224.77	4,224.77	4,224.77	0	0	
I-2600	0	0	0	0	0	45	0	0	45	0	0	0	0	10.02	0	10.02	4,230.00	4,230.00	4,229.39	4,229.39	0	0	
I-2601	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,231.00	4,231.00	4,228.61	4,228.61	0	0	
I-2602	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.93	4,230.93	4,228.61	4,228.61	0	0	
I-2603	9.31	0.3	2.79	0	2.79	28.02	0	0	28.02	1.74	4.89	0	0	0	0	4.89	4,335.96	4,335.96	4,331.65	4,331.65	1.74	4.89	
I-2604	0	0	0	0	0	0	0	0	0	0	0	0	0	10.9	0	10.9	4,247.88	4,247.88	4,244.15	4,244.15	0	0	
I-2605	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0	0.26	4,225.61	4,225.61	4,225.61	4,225.61	0	0	
I-2606	0	0	0	0	3.09	45	0	46.1	46.1	1.3	4.04	0	0	3.2	0	7.24	4,269.99	4,269.99	4,266.23	4,266.21	0	0	
I-2607	3.69	0.3	1.11	0	1.11	26.22	0	0	26.22	1.83	2.04	0	0	0	0	2.04	4,293.34	4,293.34	4,291.01	4,291.01	1.83	2.04	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-2608	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2	0	6.2	4,293.93	4,293.93	4,289.94	4,289.94	0	0	
I-2609	0	0	0	0	0	0	0	0	0	0	0	0	0	28.4	0	28.4	4,281.41	4,281.41	4,278.73	4,278.73	0	0	
I-2610	13.7	0.25	3.42	0	3.42	74.27	0	0	74.27	0.91	3.15	0	0	0	0	3.15	4,255.52	4,255.52	4,251.51	4,251.51	0.91	3.15	
I-2611	0	0	0	0	6.52	0	0	101.52	101.52	0.73	6.24	0	0	0	0	6.24	4,255.28	4,255.28	4,251.25	4,251.24	0	0	
I-2612	0	0	0	0	0	20	0	0	20	0	0	0	0	13.13	0	13.13	4,329.75	4,329.75	4,324.15	4,324.15	0	0	
I-2613	0	0	0	0	1.53	0	0	35.99	35.99	1.51	2.32	0	0	0	0	2.32	4,277.77	4,277.77	4,273.64	4,273.64	0	0	
I-2614	0	0	0	0	1.91	0	0	21.65	21.65	2.08	4	0	0	0	0	4	4,275.97	4,275.97	4,271.89	4,271.74	0	0	
I-2615	10.93	0.35	3.83	0	3.83	40	0	0	40	1.42	5.49	0	0	0	0	5.49	4,277.97	4,277.97	4,270.92	4,270.92	1.42	5.49	
I-2616	0	0	0	0	5.74	0	0	40.34	40.34	1.42	8.19	0	0	0	0	8.19	4,275.97	4,275.97	4,269.23	4,269.17	0	0	
I-2617	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,290.00	4,290.00	4,278.71	4,278.71	0	0	
I-2619	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,290.00	4,290.00	4,287.71	4,287.71	0	0	
I-2620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,280.00	4,280.00	4,276.73	4,276.73	0	0	
I-2621	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,280.00	4,280.00	4,276.40	4,276.40	0	0	
I-2622	0	0	0	0	0	55	0	0	55	0	0	0	0	22.61	0	22.61	4,226.00	4,226.00	4,228.00	4,226.00	0	0	
I-2623	0	0	0	0	0	42	0	0	42	0	0	0	0	22.27	0	22.27	4,308.58	4,308.58	4,306.11	4,306.11	0	0	
I-2624	0	0	0	0	0	45	0	0	45	0	0	0	0	8.35	0	8.35	4,299.06	4,299.06	4,293.19	4,293.19	0	0	
I-2625	0	0	0	0	6.93	0	0	60	60	1.01	7.06	0	0	0	0	18.08	4,281.96	4,281.96	4,278.51	4,278.51	0	0	
I-2626	0	0	0	0	0	30	0	0	30	0	0	0	0	5.12	0	5.12	4,305.83	4,305.83	4,303.12	4,303.12	0	0	
I-2627	23.82	0	0	0	0	27	0	0	27	0	0	0	0	4.76	0	4.76	4,274.32	4,274.32	4,271.20	4,271.20	0	0	
I-2628	0	0	0	0	6	0	0	67.16	67.16	0.96	5.81	0	0	0	0	11.37	4,266.19	4,266.19	4,258.42	4,258.40	0	0	
I-2629	0	0	0	0	10.59	0	0	60	60	1.01	10.79	0	0	0	0	20.01	4,266.42	4,266.42	4,260.11	4,260.11	0	0	
I-2630	0	0	0	0	8.02	0	0	30.85	30.85	1.61	13.03	0	0	0	0	13.03	4,299.77	4,299.77	4,295.34	4,295.34	0	0	
I-2631	0	0	0	0	8.02	0	0	32.84	32.84	1.57	12.7	0	0	0	0	12.7	4,292.42	4,292.42	4,289.35	4,289.32	0	0	
I-2632	0	0	0	0	26.55	0	0	46.98	46.98	1.28	34.24	0	0	0	0	43.28	4,291.16	4,291.16	4,287.31	4,287.28	0	0	
I-2633	0	0	0	0	6.17	0	0	44.43	44.43	1.33	8.29	0	0	0	0	8.29	4,277.94	4,277.94	4,277.83	4,277.83	0	0	
I-2634	0	0	0	0	9.28	0	0	46.12	46.12	1.3	12.1	0	0	0	0	12.1	4,269.99	4,269.99	4,266.55	4,266.51	0	0	
I-2635	0	0	0	0	15.26	0	0	67.16	67.16	0.96	14.76	0	0	0	0	20.34	4,266.19	4,266.19	4,258.86	4,258.81	0	0	
I-2636	0	0	0	0	7.31	0	0	69.05	69.05	0.95	6.98	0	0	0	0	7.82	4,230.00	4,230.00	4,225.77	4,225.77	0	0	
I-2913	0	0.85	0	0	0	25.16	0	0	25.16	0	0	0	0	0	0	0	4,237.93	4,237.93	4,234.92	4,234.92	0	0	
I-2914	0	0.85	0	0	0	25.16	0	0	25.16	0	0	0	0	0	0	0	4,237.76	4,237.76	4,234.92	4,234.92	0	0	
I-2923	5.08	0.35	1.78	0	3.39	20	0	22.39	22.39	2.04	6.95	0	0	0	0	6.95	4,241.17	4,241.17	4,237.42	4,237.25	2.16	3.88	
I-2924	0	0	0	0	3.2	0	0	21.97	21.97	2.06	6.64	0	0	0	0	6.64	4,234.40	4,234.40	4,230.23	4,230.20	0	0	
I-2926	9.22	0.35	3.23	0	9.97	28.28	0	63.42	63.42	0.99	9.92	0	0	0	0	12.45	4,231.99	4,231.99	4,227.63	4,227.62	1.72	5.6	
I-2927	0	0	0	0	0	0	0	20	20	0	0	0	0	0	0	0	4,234.90	4,234.90	4,232.52	4,232.52	0	0	
I-2928	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,234.91	4,234.91	4,232.52	4,232.52	0	0	
I-2930	4.6	0.35	1.61	0	1.61	20	0	0	20	2.16	3.51	0	0	0	0	3.51	4,241.23	4,241.23	4,237.56	4,237.56	2.16	3.51	
I-2936	5.17	0.35	1.81	0	1.81	20	0	25.16	25.16	1.89	3.44	0	0	0	0	3.44	4,237.84	4,237.84	4,234.92	4,234.92	2.16	3.95	
I-2939	0	0	0	0	0	0	0	0	0	0	0	0	0	6.88	0	6.88	4,238.00	4,238.00	4,234.71	4,234.71	0	0	
I-2940	0	0	0	0	8.2	0	0	124.89	124.89	0.59	4.84	0	0	0	0	11.44	4,238.44	4,238.44	4,236.38	4,236.22	0	0	
I-2941	0	0	0	0	1.22	0	0	98.48	98.48	0.75	0.92	0	0	0	0	0.92	4,257.98	4,257.98	4,253.41	4,253.36	0	0	
I-2942	13.78	0.35	4.82	0	30.64	20	0	50.01	50.01	1.22	37.58	0	0	0	0	43.8	4,298.05	4,298.05	4,295.48	4,295.21	2.16	10.52	
I-2944	0.19	0.85	0.16	0	1.77	20	0	31.89	31.89	1.59	2.84	0	0	0	0	3.6	4,282.12	4,282.12	4,277.95	4,277.94	2.16	0.35	
I-2951	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,234.74	4,234.74	4,232.52	4,232.52	0	0	
I-2956	0	0	0	0	2.49	0	0	47.29	47.29	1.27	3.19	0	0	0	0	3.19	4,237.96	4,237.96	4,234.31	4,234.31	0	0	
I-2957	0.4	0.85	0.34	0	0.34	47	0	0	47	1.28	0.44	0	0	0	0	0.44	4,237.96	4,237.96	4,234.32	4,234.32	1.28	0.44	
I-2958	0	0	0	0	3.2	0	0	23.03	23.03	2	6.45	0	0	0	0	6.45	4,234.96	4,234.96	4,229.86	4,229.74	0	0	
I-2966	0	0	0	0	10.27	0	0	37.78	37.78	1.47	15.2	0	0	0	0	22.08	4,236.08	4,236.08	4,232.52	4,232.52	0	0	
I-2968	26.83	0.35	9.39	0	4.04	38.7	0	62.7	62.7	0.99	4.04	0	0	0	0	6.58	4,231.92	4,231.92	4,227.66	4,227.66	1.45	13.73	
I-2970	0.4	0.85	0.34	0	0.34	20	0	0	20	2.16	0.74	0	0	0	0	0.74	4,237.96	4,237.96	4,234.32	4,234.32	2.16	0.74	
I-2973	16.26	0.35	5.69	0	5.69	37	0	0	37	1.49	8.52	0	0	0	0	8.52	4,275.29	4,275.29	4,271.37	4,271.37	1.49	8.52	
I-2975	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,237.52	4,237.52	4,234.67	4,234.67	0	0	
I-2976	0	0.85	0	0	0	20	0	0	20	0	0	0	0	0	0	0	4,237.45	4,237.45	4,234.67	4,234.67	0	0	
I-2977	62.39	0.35	21.84	0	25.76	39.31	0	80.83	80.83	0.87	22.53	0	0	0	0	25.94	4,254.04	4,254.04	4,247.68	4,247.56	1.44	31.64	
I-2982	0	0	0	0	3.32	0	0	48.95	48.95	1.24	4.15	0	0	0	0	8.15	4,237.94	4,237.94	4,233.45	4,233.44	0	0	
I-2987	0	0	0	0	0	41	0	0	41	0	0	0	0	0	0	0	4,232.18	4,232.18	4,227.94	4,227.94	0	0	
I-3065	0	0	0	0	6.94	0	0	29.6	29.6	1.65	11.55	0	0	0	0	11.55	4,228.96	4,228.96	4,228.75	4,228.73	0	0	
I-3068	0	0	0	0	9.04	0	0	28.3	28.3	1.72	15.69	0	0	0	0	15.69	4,232.72	4,232.72	4,230.07	4,229.93	0	0	
I-3070	12.25	0	0	0	1.14	22.46	0	69.27	69.27	0.95	1.09	0	0	0	0	4.72	4,264.02	4,264.02	4,256.76	4,256.75	0	0	
I-3071	14.58	0.35	5.1	0	32.49	28.09	0	64.97	64.97	0.98	31.97	0	0	0	0	39.57	4,222.67	4,222.67	4,220.06	4,220.05	1.73	8.91	
I-3072	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,222.74	4,222.74	4,220.11	4,220.11	0	0	
I-3078	29.1	0.35	10.19	0	25.55	30.72	0	49.17	49.17	1.23	31.78	0	0	0	0	69.53	4,275.16	4,275.16	4,273.04	4,273.03	1.62	16.58	
I-3081	4	0.85	3.4	0	14.8	25	0	47.56	47.56	1.27	18.9	0	0	0	0	18.9	4,237.41	4,237.41	4,237.48	4,237.41	1.9	6.5	
I-3083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.10	4,225.10	4,220.11	4,220.11	0	0	
I-3089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,225.44	4,225.44	4,220.44	4,220.44	0	0	
I-3091	0	0	0	0	3.56	1	0	42.47	42.47	1.37	4.93	0	0	0	0	6.03	4,309.85	4,309.85	4,305.85	4,305.82	0	0	
I-3096	21.07	0.3	6.32	0	6.32	35	0	0	35	1.53	9.73	0	0	0	0	9.73	4,244.88	4,244.88	4,244.57	4,244.57	1.53	9.73	
I-3098	29.59	0.28	8.29	0	14.37	35.62	0	74.36	74.36	0.91	13.21	0	0	0	0	23.3	4,256.97	4,256.97	4,254.03	4,253.84	1.51	12.64	
I-3099	0	0	0	0	14.37	0	0	76.45	76.45	0.9	13	0	0	0	0	23.09	4,250.55	4,250.55	4,243.92	4,243.48	0	0	
I-3101	0	0	0	0	0	0	0	45.51	45.51	0	0	0	0	0	0	10.02	4,229.99	4,229.99	4,229.20	4,229.04	0	0	
I-3102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.36	4,224.36	4,220.60	4,220.60	0	0	
I-3104	0	0	0	0	0	0	0	120.2	120.2	0	0	0	0	0	0	3.1	4,239.86	4,239.86	4,236.60	4,236.60	0	0	
I-3107	0	0	0	0	7.48	0	0	80.42	80.42	0.87	6.56	0	0	0	0	16.36	4,269.14	4,269.14	4,265.69	4,265.62	0	0	
I-3110	0	0	0	0	2.85	0	0	62.23	62.23	0.99	2.85	0	0	0	0	9.79	4,280.13	4,280.13	4,275.98	4,275.87	0	0	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-3111	0	0	0	0	2.85	0	0	61.77	61.77	1	2.86	0	0	0	0	9.8	4,281.00	4,281.00	4,277.23	4,277.12	0	0	
I-3114	0.37	0.85	0.31	0	3.56	21.26	0	42.32	42.32	1.38	4.94	0	0	0	0	6.04	4,311.96	4,311.96	4,307.98	4,307.95	2.1	0.66	
I-3115	0	0	0	0	0	40	0	0	40	0	0	0	0	1.1	0	1.1	4,311.88	4,311.88	4,308.15	4,308.15	0	0	
I-3116	0.09	0.85	0.08	0	0.3	20	0	71.86	71.86	0.93	0.28	0	0	0	0	9.28	4,273.33	4,273.33	4,269.51	4,269.50	2.16	0.17	
I-3119	0	0	0	0	72.16	0	0	69.86	69.86	0.94	68.57	0	0	0	0	74.79	4,277.71	4,277.71	4,276.01	4,276.01	0	0	
I-3121	0	0	0	0	14.8	0	0	47.81	47.81	1.26	18.82	0	0	0	0	18.82	4,237.54	4,237.54	4,238.30	4,237.54	0	0	
I-3122	0	0	0	0	0	0	0	3.8	3.8	0	0	0	0	0	0	16.77	4,307.97	4,307.97	4,306.57	4,306.55	0	0	
I-3131	0	0	0	0	0	0	0	119.56	119.56	0	0	0	0	0	0	3.1	4,239.94	4,239.94	4,236.63	4,236.63	0	0	
I-3134	34.58	0.35	12.1	0	3.92	30.33	0	73.46	73.46	0.92	3.63	0	0	0	0	7.04	4,266.42	4,266.42	4,259.36	4,259.36	1.62	19.8	
I-3135	46.71	0.2	9.34	0	2.41	45	0	68.72	68.72	0.96	2.34	0	0	0	0	6.18	4,281.96	4,281.96	4,277.85	4,277.84	1.32	12.43	
I-3143	0	0	0	0	27.94	0	0	81.92	81.92	0.86	24.23	0	0	0	0	27.64	4,242.77	4,242.77	4,240.07	4,239.59	0	0	
I-3144	10.94	0.2	2.19	0	27.94	21.91	0	81.66	81.66	0.86	24.26	0	0	0	0	27.69	4,245.72	4,245.72	4,242.21	4,242.11	2.06	4.55	
I-3145	0.5	0.85	0.43	0	0.43	23	0	0	23	2	0.86	0	0	0	0	0.86	4,310.28	4,310.28	4,305.62	4,305.62	2	0.86	
I-3147	0	0	0	0	0	0	0	115.63	115.63	0	0	0	0	0	0	3.1	4,237.93	4,237.93	4,236.92	4,236.89	0	0	
I-3153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,261.17	4,261.17	4,256.42	4,256.42	0	0	
I-3154	0	0	0	0	15.37	0	0	47.93	47.93	1.26	19.51	0	0	0	0	77.26	4,279.12	4,279.12	4,276.81	4,276.78	0	0	
I-3158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,224.78	4,224.78	4,220.11	4,220.11	0	0	
I-3159	0	0	0	0	0	30	0	0	30	0	0	0	0	5	0	5	4,267.50	4,267.50	4,263.29	4,263.29	0	0	
I-3162	0	0	0	0	0	0	0	35.7	35.7	0	0	0	0	0	0	0	4,230.07	4,230.07	4,226.07	4,226.07	0	0	
I-3163	0	0	0	0	0	0	0	35.7	35.7	0	0	0	0	0	0	0	4,230.38	4,230.38	4,226.38	4,226.38	0	0	
I-3166	0	0	0	0	24.15	0	0	43.38	43.38	1.35	32.96	0	0	0	0	32.96	4,232.00	4,232.00	4,231.73	4,231.15	0	0	
I-3167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.51	4,223.51	4,220.11	4,220.11	0	0	
I-3168	0	0	0	0	3.58	1	0	43.51	43.51	1.35	4.85	0	0	0	0	5.95	4,308.60	4,308.60	4,304.69	4,304.68	0	0	
I-3169	33.16	0.31	10.28	0	17.78	45	0	82.03	82.03	0.66	15.38	0	0	0	0	25.18	4,263.98	4,263.98	4,262.52	4,262.43	1.32	13.68	
I-3170	0	0	0	0	0	0	0	0	0	0	0	0	0	8.5	0	8.5	4,243.53	4,243.53	4,239.66	4,239.66	0	0	
I-3173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.91	4,223.91	4,220.80	4,220.80	0	0	
I-3177	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	4,311.80	4,311.80	4,307.98	4,307.98	0	0	
I-3182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.11	4,227.11	4,222.11	4,222.11	0	0	
I-3184	51.19	0	0	0	0	35.7	0	0	35.7	0	0	0	0	0	0	0	4,230.70	4,230.70	4,226.70	4,226.70	0	0	
I-3187	0	0	0	0	11.7	0	0	34.24	34.24	1.54	18.19	0	0	0	0	18.19	4,255.94	4,255.94	4,252.62	4,252.56	0	0	
I-3191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,223.74	4,223.74	4,220.11	4,220.11	0	0	
I-3193	0	0	0	0	11.06	0	0	57.73	57.73	1.06	11.78	0	0	0	0	11.78	4,286.00	4,286.00	4,282.21	4,282.19	0	0	
I-3194	0	0	0	0	0	0	0	32.3	32.3	0	0	0	0	0	0	5	4,264.65	4,264.65	4,260.56	4,260.44	0	0	
I-3200	18.24	0.35	6.38	0	27.39	25.98	0	62.59	62.59	0.99	27.39	0	0	0	0	35	4,222.95	4,222.95	4,220.80	4,220.60	1.64	11.67	
I-3201	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	4,313.79	4,313.79	4,308.79	4,308.79	0	0	
I-3203	0	0	0	0	11.99	34.31	0	65.49	65.49	0.97	11.76	0	0	0	0	14.96	4,266.19	4,266.19	4,262.31	4,262.28	0	0	
I-3206	3.57	0.35	1.25	0	1.25	31.23	0	52.82	52.82	1.16	1.46	0	0	0	0	11.6	4,236.31	4,236.31	4,232.93	4,232.88	1.6	2.02	
I-3207	0	0	0	0	0	0	0	34.13	34.13	0	0	0	0	0	0	5	4,260.67	4,260.67	4,256.42	4,256.41	0	0	
I-3211	0	0	0	0	0	0	0	0.08	0.08	0	0	0	0	0	0	45	4,242.26	4,242.26	4,240.39	4,240.16	0	0	
I-3217	3.82	0.85	3.25	0	3.25	39.13	0	0	39.13	1.44	4.72	0	0	0	0	4.72	4,325.88	4,325.88	4,321.64	4,321.64	1.44	4.72	
I-3219	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4,327.94	4,327.94	4,322.94	4,322.94	0	0	
I-3220	19.84	0.3	5.95	0	18.35	32.56	0	79.76	79.78	0.87	16.16	0	0	0	0	18.18	4,271.38	4,271.38	4,267.66	4,267.66	1.58	9.46	
I-3224	0	0	0	0	3.56	1	0	45.97	45.97	1.3	4.67	0	0	0	0	5.77	4,307.51	4,307.51	4,303.34	4,303.33	0	0	
I-3390	10.14	0.15	1.52	0	32.55	27.03	0	71.6	71.6	0.93	30.54	0	0	0	0	36.1	4,249.67	4,249.67	4,245.64	4,245.38	1.79	2.74	
I-3391	4	0.8	3.2	0	7.19	24.32	0	46.63	46.63	1.29	9.32	0	0	0	0	10.42	4,306.01	4,306.01	4,302.96	4,302.86	1.93	6.23	
I-3392	0	0	0	0	3.56	1	0	46.33	46.33	1.29	4.64	0	0	0	0	5.74	4,305.95	4,305.95	4,303.11	4,303.08	0	0	
I-3395	25.62	0.35	8.97	0	16.15	25.43	0	46.67	46.67	1.29	20.93	0	0	0	0	27.15	4,306.01	4,306.01	4,302.70	4,302.65	1.87	16.94	
I-3413	0	0	0	0	0	0	0	50.67	50.67	0	0	0	0	0	0	10.14	4,237.66	4,237.66	4,234.10	4,234.01	0	0	
I-3416	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,255.67	4,255.67	4,250.81	4,250.81	0	0	
I-3417	0	0	0	0	11.7	0	0	35.78	35.78	1.51	17.81	0	0	0	0	17.81	4,254.03	4,254.03	4,250.81	4,250.81	0	0	
I-3419	0	0	0	0	0	0	0	121.8	121.8	0	0	0	0	0	0	3.1	4,239.97	4,239.97	4,236.58	4,236.58	0	0	
I-3428	0	0.35	0	0	24.15	20	0	41.47	41.47	1.39	33.91	0	0	0	0	33.91	4,232.75	4,232.75	4,233.06	4,232.75	0	0	
I-3433	0	0	0	0	0	0	0	51.67	51.67	0	0	0	0	0	0	10.14	4,237.16	4,237.16	4,233.49	4,233.37	0	0	
I-3435	0	0	0	0	3.33	0	0	54.33	54.33	1.13	3.79	0	0	0	0	13.93	4,235.59	4,235.59	4,232.12	4,231.85	0	0	
I-3445	0	0	0	0	0	41	0	0	41	0	0	0	0	12.09	0	12.09	4,233.93	4,233.93	4,233.93	4,233.93	0	0	
I-3446	0	0	0	0	0	0	0	41.39	41.39	0	0	0	0	0	0	12.09	4,234.00	4,234.00	4,234.46	4,232.28	0	0	
I-3447	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,226.93	4,226.93	4,223.96	4,223.96	0	0	
I-3448	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.16	4,227.16	4,223.96	4,223.96	0	0	
I-3451	0	0	0	0	3.91	0	0	48.78	48.78	1.24	4.89	0	0	0	0	14.91	4,229.48	4,229.48	4,228.01	4,227.99	0	0	
I-3457	0	0	0	0	6.78	0	0	62.13	62.13	1	6.8	0	0	0	0	16.94	4,231.96	4,231.96	4,227.77	4,227.76	0	0	
I-3459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,311.28	4,311.28	4,309.35	4,309.35	0	0	
I-3461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,229.96	4,229.96	4,224.96	4,224.96	0	0	
I-3462	14.89	0.35	5.21	0	15.18	38.65	0	67.55	67.55	0.96	14.67	0	0	0	0	17.2	4,230.11	4,230.11	4,226.81	4,226.81	1.45	7.62	
I-3468	0	0	0	0	23.06	0	0	86.26	86.26	0.83	19.31	0	0	0	0	30.74	4,249.88	4,249.88	4,239.68	4,239.65	0	0	
I-3469	0	0	0	0	0	0	0	34.99	34.99	0	0	0	0	0	0	5	4,259.35	4,259.35	4,255.18	4,255.09	0	0	
I-3471	0	0	0	0	3.6	0	0	55.04	55.04	1.11	4.03	0	0	0	0	14.17	4,234.34	4,234.34	4,230.94	4,230.94	0	0	
I-3472	0	0	0	0	3.33	0	0	54.74	54.74	1.12	3.76	0	0	0	0	13.9	4,234.88	4,234.88	4,231.27	4,231.13	0	0	
I-3473	40.87	0.35	14.3	0	14.3	40	0	43.55	43.55	1.35	19.47	0	0	0	0	23.39	4,233.80	4,233.80	4,231.48	4,231.46	1.42	20.52	
I-3475	0	0	0	0	0	0	0	51.21	51.21	0	0	0	0	0	0	10.14	4,237.56	4,237.56	4,233.82	4,233.70	0	0	
I-3482	0	0	0	0	2.79	0	0	32.73	32.73	1.57	4.43	0	0	0	0	4.43	4,331.54	4,331.54	4,327.26	4,327.26	0	0	
I-3487	0	0	0	0	0	0	0	37.6	37.6	0	0	0	0	0	0	5	4,255.14	4,255.14	4,250.92	4,250.88	0	0	
I-3488	0	0	0	0	9.04	0	0	32.44	32.44	1.58	14.4	0	0	0	0	14.4	4,229.98	4,229.98	4,226.72	4,226.60	0	0	
I-3491	26.74	0.25	6.68	0	6.68	66.64	0	0	66.64	0.96	6.5	0	0	0	0	6.5	4,228.25	4,228.25	4,225.56	4,225.56	0.96	6.5	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-3493	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.51	4,227.51	4,223.96	4,223.98	0	0	
I-3495	42.76	0	0	0	1.49	31.09	0	26.86	31.09	1.61	2.41	0	0	0	0	9.29	4,237.99	4,237.99	4,234.66	4,234.65	0	0	
I-3499	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,249.63	4,249.63	4,248.58	4,248.58	0	0	
I-3500	0	0	0	0	6.02	0	0	35.46	35.46	1.52	9.2	0	0	0	0	9.2	4,328.82	4,328.82	4,324.79	4,324.78	0	0	
I-3503	2.74	0.28	0.77	0	4.7	37.46	0	36.09	37.46	1.48	6.99	0	0	0	0	6.99	4,294.01	4,294.01	4,289.95	4,289.83	1.48	1.14	
I-3504	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,227.80	4,227.80	4,223.96	4,223.96	0	0	
I-3506	41.73	0	0	0	0	0	0	45.23	45.23	0	0	0	0	0	0	8.35	4,294.06	4,294.06	4,290.25	4,290.18	0	0	
I-3508	0	0	0	0	11.7	0	0	34.83	34.83	1.53	18.05	0	0	0	0	18.05	4,255.27	4,255.27	4,251.93	4,251.86	0	0	
I-3510	0	0	0	0	8.2	0	0	123.52	123.52	0.59	4.87	0	0	0	0	11.47	4,240.02	4,240.02	4,236.50	4,236.47	0	0	
I-3515	0.28	0.95	0.26	0	0.26	20	0	0	20	2.16	0.58	0	0	0	0	0.58	4,234.30	4,234.30	4,230.94	4,230.94	2.16	0.58	
I-3518	27.91	0.15	4.19	0	4.19	45	0	0	45	1.32	5.57	0	0	0	0	5.57	4,222.14	4,222.14	4,220.48	4,220.48	1.32	5.57	
I-3519	0	0	0	0	15.37	0	0	46.17	46.17	1.3	20.08	0	0	0	0	46.41	4,282.01	4,282.01	4,279.31	4,279.29	0	0	
I-3523	0	0	0	0	29.15	0	0	66.37	66.37	0.97	28.4	0	0	0	0	28.4	4,280.72	4,280.72	4,280.54	4,280.41	0	0	
I-3636	0	0	0	0	0	0	0	0.32	0.32	0	0	0	0	16.77	0	16.77	4,323.37	4,323.37	4,320.18	4,319.85	0	0	
I-3639	4	0.8	3.2	0	13.17	34	0	87.24	87.24	0.62	10.93	0	0	0	0	37.54	4,226.04	4,226.04	4,222.59	4,222.57	1.55	4.99	
I-3640	0	0.35	0	0	9.04	27.23	0	33.23	33.23	1.56	14.25	0	0	0	0	14.25	4,230.00	4,230.00	4,226.11	4,226.04	0	0	
I-3642	7.98	0.35	2.79	0	15.37	24.76	0	42.26	42.26	1.38	21.33	0	0	0	0	34.46	4,305.74	4,305.74	4,303.68	4,303.65	1.91	5.38	
I-3644	0	0	0	0	29.15	1	0	66.63	66.63	0.96	28.35	0	0	0	0	28.35	4,280.75	4,280.75	4,280.16	4,280.01	0	0	
I-3646	0	0	0	0	8.2	0	0	123.94	123.94	0.59	4.86	0	0	0	0	11.46	4,239.99	4,239.99	4,236.45	4,236.43	0	0	
I-3647	0	0	0	0	14.46	0	0	72.63	72.63	0.92	13.46	0	0	0	0	13.46	4,260.86	4,260.86	4,256.97	4,256.93	0	0	
I-3650	0	0	0	0	9.97	0	0	79.94	79.94	0.87	8.78	0	0	0	0	12.78	4,226.97	4,226.97	4,224.21	4,224.20	0	0	
I-3653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,276.35	4,276.35	4,273.04	4,273.04	0	0	
I-3656	0	0	0	0	5.6	0	0	32.11	32.11	1.59	8.96	0	0	0	0	15.84	4,237.99	4,237.99	4,234.54	4,234.54	0	0	
I-3657	0	0	0	0	1.49	0	0	31.66	31.66	1.6	2.39	0	0	0	0	9.27	4,237.99	4,237.99	4,234.60	4,234.60	0	0	
I-3659	0	0	0	0	10.27	0	0	36.32	36.32	1.5	15.51	0	0	0	0	22.39	4,236.02	4,236.02	4,233.16	4,233.15	0	0	
I-3660	0	0	0	0	10.27	0	0	35.77	35.77	1.51	15.63	0	0	0	0	22.51	4,236.06	4,236.06	4,233.41	4,233.39	0	0	
I-3661	0	0	0	0	10.27	0	0	39.63	39.63	1.43	14.61	0	0	0	0	21.69	4,234.00	4,234.00	4,231.73	4,231.72	0	0	
I-3662	0	0	0	0	10.27	0	0	38.55	38.55	1.45	15.04	0	0	0	0	21.92	4,234.95	4,234.95	4,232.20	4,232.19	0	0	
I-3663	25.36	0.35	8.88	0	21	29.76	0	57.3	57.3	1.07	22.58	0	0	0	0	30.17	4,227.18	4,227.18	4,223.96	4,223.96	1.64	14.7	
I-3664	5.3	0.3	1.59	0	7.61	22.49	0	35.8	35.8	1.51	11.58	0	0	0	0	11.58	4,328.01	4,328.01	4,324.24	4,324.09	2.03	3.25	
I-3672	0	0	0	0	24.61	0	0	78.7	78.7	0.88	21.88	0	0	0	0	29.12	4,229.93	4,229.93	4,223.53	4,223.29	0	0	
I-3673	0	0	0	0	23.06	0	0	98.38	98.38	0.75	17.38	0	0	0	0	33.21	4,229.98	4,229.98	4,219.85	4,219.58	0	0	
I-3675	0	0	0	0	0	0	0	46.16	46.16	0	0	0	0	0	0	39.04	4,286.94	4,286.94	4,284.10	4,283.80	0	0	
I-3678	0	0	0	0	10.27	0	0	35.48	35.48	1.52	15.69	0	0	0	0	22.57	4,237.06	4,237.06	4,233.53	4,233.53	0	0	
I-3679	0	0	0	0	10.27	0	0	41.06	41.06	1.4	14.5	0	0	0	0	21.38	4,234.00	4,234.00	4,231.09	4,231.08	0	0	
I-3680	0	0	0	0	0	0	0	0	0	0	0	0	0	14.5	0	14.5	4,235.23	4,235.23	4,231.57	4,231.57	0	0	
I-3682	0	0	0	0	10.27	0	0	37.93	37.93	1.47	15.17	0	0	0	0	22.05	4,235.87	4,235.87	4,232.46	4,232.45	0	0	
I-3685	10.74	0.3	3.22	0	6.02	24.63	0	34.17	34.17	1.54	9.36	0	0	0	0	9.36	4,330.70	4,330.70	4,326.68	4,326.67	1.92	6.22	
I-3686	7.25	0.3	2.17	0	9.78	25.36	0	36.1	36.1	1.5	14.83	0	0	0	0	27.98	4,329.75	4,329.75	4,323.83	4,323.71	1.88	4.12	
I-3689	0	0	0	0	0	0	0	0.18	0.18	0	0	0	0	15.17	0	15.17	4,323.89	4,323.89	4,320.59	4,320.29	0	0	
I-3691	1.62	0.85	1.38	0	19.73	30.85	0	85.01	85.01	0.84	16.69	0	0	0	0	16.69	4,259.95	4,259.95	4,256.27	4,256.26	1.61	2.24	
I-3693	0	0	0	0	29.15	1	0	66.76	66.76	0.96	28.32	0	0	0	0	28.32	4,280.54	4,280.54	4,279.86	4,279.82	0	0	
I-3694	0	0	0	0	23.06	0	0	98.12	98.12	0.75	17.42	0	0	0	0	33.25	4,230.35	4,230.35	4,220.34	4,220.08	0	0	
I-3698	0	0	0	0	7.54	0	0	35.01	35.01	1.53	11.6	0	0	0	0	18.48	4,237.96	4,237.96	4,233.70	4,233.70	0	0	
I-3699	0	0	0	0	10.27	0	0	37.6	37.6	1.47	15.24	0	0	0	0	22.12	4,236.00	4,236.00	4,232.62	4,232.61	0	0	
I-3703	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	4,325.35	4,325.35	4,321.57	4,321.57	0	0	
I-3707	0	0	0	0	24.61	0	0	77.57	77.57	0.89	22.07	0	0	0	0	29.31	4,230.00	4,230.00	4,224.18	4,224.16	0	0	
I-3708	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7	0	4.7	4,230.20	4,230.20	4,225.68	4,225.68	0	0	
I-3788	1.6	0.85	1.53	0	1.53	31.44	0	0	31.44	1.6	2.47	0	0	0	0	2.47	4,290.55	4,290.55	4,286.18	4,286.18	1.6	2.47	
I-3790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,230.00	4,230.00	4,225.00	4,225.00	0	0	
I-3792	0	0	0	0	13.17	0	0	69.04	69.04	0.81	10.77	0	0	13	0	23.77	4,223.08	4,223.08	4,220.91	4,220.91	0	0	
I-3794	0	0	0	0	15.37	0	0	48.6	48.6	1.25	19.3	0	0	0	0	77.05	4,277.31	4,277.31	4,275.00	4,274.97	0	0	
I-3795	0	0	0	0	21	0	0	60.12	60.12	1.01	21.36	0	0	0	0	28.97	4,223.68	4,223.68	4,221.46	4,221.33	0	0	
I-3797	0	0	0	0	15.37	0	0	47.36	47.36	1.27	19.69	0	0	0	0	74.42	4,280.14	4,280.14	4,278.11	4,278.07	0	0	
I-3815	22.46	0.35	7.86	0	7.86	65	0	0	65	0.98	7.73	0	0	0	0	7.73	4,267.40	4,267.40	4,267.40	4,267.40	0.98	7.73	
I-3816	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,283.66	4,283.66	4,278.66	4,278.66	0	0	
I-3818	0	0	0	0	40.41	0	0	67.75	67.75	0.96	38.98	0	0	0	0	46.59	4,220.41	4,220.41	4,217.86	4,217.69	0	0	
I-3821	0	0	0	0	0	0	0	46.35	46.35	0	0	0	0	0	0	39.04	4,285.50	4,285.50	4,282.47	4,282.36	0	0	
I-3822	0	0	0	0	15.37	0	0	47.63	47.63	1.27	19.61	0	0	0	0	77.36	4,279.97	4,279.97	4,277.56	4,277.54	0	0	
I-3823	0	0	0	0	38.15	0	0	51.74	51.74	1.18	43.03	0	0	0	0	100.78	4,265.16	4,265.16	4,264.16	4,263.58	0	0	
I-3826	0	0	0	0	0	0	0	47.15	47.15	0	0	0	0	0	0	39.04	4,281.96	4,281.96	4,279.09	4,278.82	0	0	
I-3830	0	0	0	0	38.15	0	0	51.9	51.9	1.18	42.9	0	0	0	0	100.65	4,264.57	4,264.57	4,263.28	4,262.61	0	0	
I-3838	0	0	0	0	3.32	0	0	47.92	47.92	1.26	4.22	0	0	0	0	8.22	4,238.00	4,238.00	4,234.22	4,234.20	0	0	
I-3839	0	0	0	0	3.32	0	0	55.59	55.59	1.1	3.69	0	0	0	0	7.69	4,232.02	4,232.02	4,228.44	4,228.42	0	0	
I-3842	11.74	0	0	0	3.96	26.02	0	45.91	45.91	1.3	5.19	0	0	0	0	5.19	4,237.86	4,237.86	4,237.86	4,237.86	0	0	
I-3844	0	0	0	0	3.96	0	0	46.12	46.12	1.3	5.17	0	0	0	0	5.17	4,237.88	4,237.88	4,237.98	4,237.88	0	0	
I-3850	0	0	0	0	2.86	0	0	20.53	20.53	2.14	6.16	0	0	0	0	6.16	4,238.15	4,238.15	4,238.30	4,238.15	0	0	
I-3851	3.78	0.35	1.32	0	2.86	15.99	0	18.9	18.9	2.22	6.41	0	0	0	0	6.41	4,239.16	4,239.16	4,239.26	4,239.16	2.38	3.17	
I-3854	6.93	0.35	2.43	0	9.24	22.46	0	46.78	46.78	1.28	11.96	0	0	0	0	11.96	4,237.94	4,237.94	4,238.20	4,237.94	2.03	4.97	
I-3856	0	0	0	0	1.54	0	0	15.84	15.84	2.39	3.7	0	0	0	0	3.7	4,240.15	4,240.15	4,239.66	4,239.64	0	0	
I-3862	0	0	0	0	5.37	0	0	74.3	74.3	0.91	4.94	0	0	0	0	4.94	4,231.89	4,231.89	4,226.27	4,226.26	0	0	
I-3864	4.4	0.35	1.54	0	1.54	15.35	0	0	15.35	2.41	3.74	0	0	0	0	3.74	4,240.48	4,240.48	4,239.74	4,239.74	2.41	3.74	
I-3866	11.3	0.35	3.96	0	3.96	45	0	0	45	1.32	5.26	0	0	0	0	5.26	4,237.78	4,237.78	4,237.78	4,237.78	1.32	5.26	

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
I-3908	0	0	0	0	23.06	0	0	99.46	99.46	0.74	17.21	0	0	0	0	33.04	4,230.00	4,230.00	4,217.86	4,217.83	0	0	
I-3911	15.1	0	0	0	0	24.45	0	0	24.45	0	0	0	0	3.02	0	3.02	4,280.68	4,280.68	4,277.81	4,277.81	0	0	
I-3912	63.04	0	0	0	10.27	42.53	0	41.67	42.53	1.37	14.19	0	0	0	0	33.16	4,234.00	4,234.00	4,230.69	4,230.68	0	0	
I-3913	0	0	0	0	3.32	0	0	56.2	56.2	1.09	3.65	0	0	0	0	7.65	4,232.00	4,232.00	4,227.94	4,227.94	0	0	
I-3914	5.34	0.35	1.87	0	1.87	20	0	20	20	2.16	4.08	0	0	0	0	4.08	4,237.49	4,237.49	4,234.67	4,234.67	2.16	4.08	
I-3915	1.01	0.85	0.86	0	10.27	25	0	35.26	35.26	1.52	15.74	0	0	0	0	22.62	4,237.71	4,237.71	4,233.64	4,233.63	1.9	1.64	
I-3916	0.13	0.85	0.11	0	0.11	12.9	0	69.4	69.4	0.95	0.11	0	0	0	0	9.11	4,276.03	4,276.03	4,271.93	4,271.82	2.64	0.29	
I-3917	41.21	0.3	12.36	0	72.16	47	0	69.61	69.61	0.94	68.59	0	0	0	0	74.91	4,278.84	4,278.84	4,279.01	4,278.84	1.28	15.93	
I-3918	0	0	0	0	72.16	0	0	69.8	69.8	0.94	68.6	0	0	0	0	74.82	4,277.81	4,277.81	4,277.99	4,276.59	0	0	
J-1					18.35				83.21	0.65	15.75					15.75	4,266.02	4,266.02	4,262.22	4,262.22			
O-2					14.46				73.69	0.92	13.36					13.36	4,242.19	4,242.19	4,237.19	4,237.19			
O-3					40.41				68.17	0.95	38.87					46.47	4,220.00	4,220.00	4,215.00	4,215.00			
O-5					8.28				47.35	1.27	10.59					10.59	4,235.02	4,235.02	4,230.02	4,230.02			
O-7					10.27				43.05	1.36	14.07					33.04	4,231.52	4,231.52	4,228.13	4,228.13			
O-8					1.69				26.05	1.84	3.5					3.5	4,231.44	4,231.44	4,228.44	4,228.44			
O-9					11.21				23.14	2	22.56					22.56	4,237.95	4,237.95	4,232.58	4,232.58			
O-10					3.2				23.48	1.98	6.38					6.38	4,234.66	4,234.66	4,228.40	4,228.40			
O-11					0.5				21.69	2.07	1.05					1.05	4,234.71	4,234.71	4,228.82	4,228.82			
O-12					10.6				32.2	1.58	16.93					16.93	4,234.75	4,234.75	4,229.75	4,229.75			
O-13					2.37				28.46	1.71	4.1					4.1	4,236.21	4,236.21	4,230.50	4,230.50			
O-14					1.03				24.61	1.92	1.99					1.99	4,237.50	4,237.50	4,230.00	4,230.00			
O-15					4.66				21.77	2.07	9.72					9.72	4,235.99	4,235.99	4,229.70	4,229.70			
O-16					9.24				48.18	1.25	11.69					11.69	4,237.18	4,237.18	4,231.00	4,231.00			
O-17					1.7				21.81	2.07	3.54					3.54	4,232.53	4,232.53	4,227.52	4,227.52			
O-18					2.78				22.69	2.02	5.65					5.65	4,233.56	4,233.56	4,228.56	4,228.56			
O-19					1.35				28.53	1.71	2.32					2.32	4,235.75	4,235.75	4,230.75	4,230.75			
O-20					1.68				25.62	1.86	3.16					3.16	4,235.98	4,235.98	4,230.82	4,230.82			
O-21					1.59				20.54	2.13	3.42					3.42	4,236.87	4,236.87	4,231.87	4,231.87			
O-23					4.43				26.33	1.83	8.16					8.16	4,235.85	4,235.85	4,230.60	4,230.60			
O-24					3.39				22.86	2.01	6.87					6.87	4,240.67	4,240.67	4,235.67	4,235.67			
O-25					1.52				35.29	1.52	2.33					2.33	4,240.28	4,240.28	4,235.28	4,235.28			
O-26					9.04				33.38	1.56	14.22					14.22	4,229.94	4,229.94	4,224.64	4,224.64			
O-27					24.61				79.41	0.88	21.76					29	4,225.37	4,225.37	4,220.67	4,220.67			
O-29					13.17				93.74	0.78	10.34					23.34	4,221.96	4,221.96	4,216.56	4,216.56			
O-33					0				0.92	0	0					5.69	4,241.99	4,241.99	4,236.99	4,236.99			
O-34					6.51				65.35	0.97	6.39					6.39	4,242.30	4,242.30	4,237.30	4,237.30			
O-35					4.64				34.05	1.55	7.24					7.24	4,241.79	4,241.79	4,236.79	4,236.79			
O-36					0				8.76	0	0					45	4,230.72	4,230.72	4,230.72	4,230.72			
O-37					11.32				31.86	1.59	18.16					18.16	4,268.81	4,268.81	4,263.81	4,263.81			
O-38					0				1.96	0	0					6.8	4,240.12	4,240.12	4,238.12	4,238.12			
O-39					0				0.27	0	0					10.9	4,242.03	4,242.03	4,237.03	4,237.03			
O-41					11.7				36.03	1.51	17.75					17.75	4,253.96	4,253.96	4,248.96	4,248.96			
O-44					0				5.38	0	0					8.5	4,237.97	4,237.97	4,232.97	4,232.97			
O-47					12.73				34.6	1.53	19.69					19.69	4,223.74	4,223.74	4,218.74	4,218.74			
O-48					0				9.05	0	0					14.5	4,228.02	4,228.02	4,223.02	4,223.02			
O-52					3.32				39.75	1.43	4.78					4.78	4,230.14	4,230.14	4,224.85	4,224.85			
O-53					37.86				60	1.01	38.55					101.74	4,261.55	4,261.55	4,256.55	4,256.55			
O-55					54.13				71.73	0.93	50.73					61.86	4,248.13	4,248.13	4,241.13	4,241.13			
O-56					11.32				47.38	1.27	14.5					14.5	4,241.00	4,241.00	4,236.00	4,236.00			
O-58					16.1				45.19	1.32	21.35					21.35	4,241.61	4,241.61	4,236.61	4,236.61			
O-59					0				0	0	0					0	4,227.00	4,227.00	4,223.00	4,223.00			
O-61					9.12				71.88	0.93	8.53					8.53	4,222.79	4,222.79	4,222.79	4,222.79			
O-62					23.06				99.9	0.74	17.14					32.97	4,224.82	4,224.82	4,215.13	4,215.13			
O-63					42.32				81.97	0.86	36.68					50.18	4,237.83	4,237.83	4,237.17	4,237.17			
O-64					0				33	0	0					0	4,257.56	4,257.56	4,257.56	4,257.56			
O-65					72.16				69.93	0.94	68.53					74.75	4,277.55	4,277.55	4,272.55	4,272.55			
O-66					2.19				40.21	1.42	3.14					3.9	4,276.21	4,276.21	4,271.21	4,271.21			
O-68					14.8				50.05	1.22	18.13					18.13	4,235.05	4,235.05	4,232.05	4,232.05			
O-69					19.73				86.47	0.83	16.49					16.49	4,251.85	4,251.85	4,248.85	4,248.85			
O-70					8.2				126.06	0.58	4.82					11.42	4,233.00	4,233.00	4,233.00	4,233.00			
O-71					24.47				42.72	1.37	33.72					38.72	4,238.11	4,238.11	4,237.00	4,237.00			
O-72					8.52				102.14	0.72	6.2					6.2	4,250.00	4,250.00	4,250.00	4,250.00			
O-73					21.5				103.58	0.71	15.44					22.24	4,237.00	4,237.00	4,237.00	4,237.00			
O-74					24.15				44.36	1.33	32.46					32.46	4,226.40	4,226.40	4,226.40	4,226.40			
O-75					0				35.7	0	0					0	4,225.73	4,225.73	4,225.73	4,225.73			
O-77					11.06				59.65	1.01	11.29					11.29	4,274.00	4,274.00	4,272.39	4,272.39			
O-78					5.69				37.14	1.48	8.5					8.5	4,274.30	4,274.30	4,269.30	4,269.30			
O-80					1.11				28.62	1.8	2.01					2.01	4,293.18	4,293.18	4,290.00	4,290.00			
O-81					4.7				37.88	1.47	6.95					6.95	4,293.93	4,293.93	4,288.50	4,288.50			
O-82					19.65				34.45	1.54	30.47					30.47	4,247.88	4,247.88	4,242.88	4,242.88			
O-83					0				47.29	0	0					39.04	4,281.41	4,281.41	4,276.41	4,276.41			
O-84					2.67				41.51	1.39	3.75					3.75	4,264.73	4,264.73	4,261.30	4,261.30			
O-85					0				72.04	0	0					7.7	4,222.79	4,222.79	4,220.79	4,220.79			

Existing Node Report

Label	Area (acres)	Inlet C	Inlet CA (acres)	External CA (acres)	System CA (acres)	Time of Concentration (min)	External Time of Concentration (min)	Upstream Time Of Concentration (min)	System Flow Time (min)	System Intensity (in/hr)	System Rational Flow (cfs)	Additional Flow (cfs)	Additional Carryover (cfs)	Known Flow (cfs)	Upstream Additional Flow (cfs)	Total System Flow (cfs)	Ground Elevation (ft)	Rim Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Local Intensity (in/hr)	Local Rational Flow (cfs)	Description
O-88					27.73				75.8	0.9	25.21					34.21	4,270.00	4,270.00	4,265.55	4,265.55			
O-89					25				42.12	1.38	34.76					34.76	4,308.58	4,308.58	4,302.00	4,302.00			
O-91					5.74				45.89	1.3	7.53					7.53	4,261.55	4,261.55	4,258.65	4,258.55			
O-92					0				25	0	0					0	4,236.96	4,236.96	4,231.96	4,231.96			
O-93					14.3				44.51	1.33	19.18					23.1	4,229.35	4,229.35	4,228.57	4,228.57			
O-94					16.6				56.75	1.08	18.02					28.04	4,225.00	4,225.00	4,220.61	4,220.61			
O-95					10.59				66.79	0.96	10.29					19.51	4,237.00	4,237.00	4,237.00	4,237.00			
O-96					28.55				49.55	1.23	32.81					41.85	4,269.28	4,269.28	4,263.00	4,263.00			

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-396	I-932	O-21	4.54	0.35	1.59	1.59	2.16	3.47	151	0.006887	15 inch	0.013	5.36	4,232.91	4,231.87	4,236.83	4,236.87	2.67	3.75	4,233.66	4,232.60	
P-307	I-727	I-723	0	0	0	1.03	2.11	2.19	82	0.00122	15 inch	0.013	2.26	4,230.50	4,230.40	4,237.05	4,237.10	5.3	5.45	4,231.47	4,231.36	
P-309	I-732	I-729	2.94	0.35	1.03	1.03	2.16	2.24	114	0.008333	15 inch	0.013	5.9	4,231.60	4,230.65	4,236.79	4,236.93	3.94	5.03	4,232.20	4,231.61	
P-308	I-729	I-727	0	0	0	1.03	2.14	2.22	87	0.001724	15 inch	0.013	2.68	4,230.65	4,230.50	4,236.93	4,237.05	5.03	5.3	4,231.59	4,231.48	
P-306	I-723	O-14	0	0	0	1.03	2.07	2.15	355	0.001127	15 inch	0.013	2.17	4,230.40	4,230.00	4,237.10	4,237.50	5.45	6.25	4,231.35	4,230.59	
P-1496	I-2105	O-35	15.46	0.3	4.64	4.64	1.57	7.37	334	0.000569	18 inch	0.013	2.51	4,236.98	4,236.79	4,241.98	4,241.79	3.5	3.5	4,238.68	4,237.84	
P-1497	I-2104	I-2105	0	0	0	0	0	0	59	0.030508	18 inch	0.013	18.35	4,238.78	4,236.98	4,243.78	4,241.98	3.5	3.5	4,239.86	4,239.86	
P-1764	I-2295	O-18	4.72	0.35	1.65	2.78	2.05	5.74	119	0.000756	18 inch	0.013	2.89	4,228.65	4,228.56	4,233.65	4,233.56	3.5	3.5	4,230.07	4,229.48	
P-1765	I-2294	I-2295	3.21	0.35	1.12	1.12	2.16	2.45	300	0.0015	18 inch	0.013	4.07	4,229.10	4,228.65	4,234.10	4,233.65	3.5	3.5	4,230.28	4,230.14	
P-1617	I-2130	O-26	2.93	0.35	1.03	1.52	1.53	2.35	136	0.004118	18 inch	0.013	6.74	4,235.84	4,235.28	4,240.84	4,240.28	3.5	3.5	4,236.45	4,235.86	
P-1615	I-2431	I-2130	1.42	0.35	0.5	0.5	2.16	1.08	33	0.002727	18 inch	0.013	5.49	4,235.93	4,235.84	4,240.83	4,240.84	3.4	3.5	4,236.55	4,236.53	
P-1753	I-2122	O-11	1.43	0.35	0.5	0.5	2.16	1.09	148	0.000676	18 inch	0.013	2.73	4,228.92	4,228.82	4,234.20	4,234.71	3.78	4.39	4,229.52	4,229.21	
P-2616	I-3170	O-44	0	0	0	0	0	8.5	1,492.00	0.003727	24 inch	0.013	13.81	4,239.53	4,232.97	4,243.53	4,237.97	3	3	4,239.66	4,234.01	
P-3370	I-3680	O-48	0	0	0	0	0	14.5	2,577.00	0.002798	36 inch	0.013	35.28	4,230.23	4,223.02	4,235.23	4,228.02	2	2	4,231.57	4,224.23	
P-3364	I-2047	I-3647	5.6	0.3	1.68	14.46	0.95	13.85	1,480.00	0.006243	36 inch	0.013	52.7	4,265.10	4,255.86	4,270.10	4,260.86	2	2	4,266.28	4,256.91	
P-3661	I-3647	O-2	0	0	0	14.46	0.92	13.46	663	0.02816	48 inch	0.013	241.03	4,255.86	4,237.19	4,260.86	4,242.19	1	1	4,256.93	4,237.83	
P-303	I-277	I-775	0	0.3	0	0	0	0	486	0.001173	15 inch	0.013	2.21	4,269.25	4,268.68	4,272.92	4,271.92	2.42	1.99	4,271.92	4,271.92	
P-298	I-275	I-277	0	0.3	0	0	0	0	515	0.001068	15 inch	0.013	2.11	4,269.80	4,269.25	4,272.00	4,272.92	0.95	2.42	4,271.92	4,271.92	
P-1711	I-775	I-2115	33.17	0.3	9.95	9.95	0.98	9.79	65	0.001846	18 inch	0.013	4.51	4,268.68	4,268.56	4,271.92	4,273.56	1.74	3.5	4,274.12	4,273.56	
P-3845	I-2115	I-2047	9.43	0.3	2.83	12.78	0.97	12.55	537	0.006443	18 inch	0.013	8.43	4,268.56	4,265.10	4,273.56	4,270.10	3.5	3.5	4,274.19	4,266.44	
P-2489	I-2958	O-10	0	0	0	3.2	2	6.45	73	0.00137	21 inch	0.013	5.86	4,228.50	4,228.40	4,234.96	4,234.66	4.71	4.51	4,229.74	4,229.34	
P-2500	I-2924	I-2958	0	0	0	3.2	2.06	6.64	176	0.000568	21 inch	0.013	3.78	4,228.60	4,228.50	4,234.40	4,234.96	4.05	4.71	4,230.20	4,229.86	
P-1759	I-1987	I-1986	3.75	0.35	1.31	1.31	2.16	2.86	80	0.0025	18 inch	0.013	5.25	4,228.90	4,228.70	4,234.02	4,233.98	3.62	3.78	4,230.74	4,230.68	
P-2501	I-1986	I-2924	5.39	0.35	1.89	3.2	2.12	6.83	195	0.000513	21 inch	0.013	3.59	4,228.70	4,228.60	4,233.98	4,234.40	3.53	4.05	4,230.58	4,230.23	
P-184	I-306	O-20	0	0	0	1.68	1.87	3.17	34	0.004118	15 inch	0.013	4.14	4,230.96	4,230.82	4,235.96	4,235.98	3.75	3.91	4,231.77	4,231.54	
P-186	I-313	I-312	4.8	0.35	1.68	1.68	1.96	3.32	117	0.002393	15 inch	0.013	3.16	4,231.26	4,230.98	4,235.96	4,235.98	3.45	3.75	4,232.70	4,232.39	
P-185	I-312	I-306	0	0	0	1.68	1.92	3.25	149	0.000134	15 inch	0.013	0.75	4,230.98	4,230.96	4,235.98	4,235.96	3.75	3.75	4,232.30	4,231.85	
P-178	I-53	O-23	0	0	0	4.43	1.83	8.17	31	0.009032	15 inch	0.013	6.14	4,230.88	4,230.60	4,235.88	4,235.85	3.75	4	4,232.29	4,231.72	
P-181	I-302	I-296	7.67	0.35	2.68	2.68	1.87	5.05	60	0.001667	15 inch	0.013	2.64	4,231.10	4,231.00	4,236.10	4,236.08	3.75	3.83	4,236.33	4,235.97	
P-180	I-296	I-53	4.99	0.35	1.75	4.43	1.85	8.28	189	0.000635	15 inch	0.013	1.63	4,231.00	4,230.88	4,236.08	4,235.88	3.83	3.75	4,235.74	4,232.63	
P-3827	I-3790	O-59	0	0	0	0	0	0	32	0.0625	18 inch	0.013	26.26	4,225.00	4,223.00	4,230.00	4,227.00	3.5	2.5	4,225.00	4,223.00	
P-3132	I-2106	O-47	10.86	0.35	3.8	12.73	1.57	20.18	678	0.00444	30 inch	0.013	27.33	4,221.75	4,218.74	4,227.25	4,223.74	3	2.5	4,223.35	4,220.27	
P-3834	I-769	I-2106	25.5	0.35	8.93	8.93	1.6	14.36	552	0.000543	18 inch	0.013	2.45	4,222.05	4,221.75	4,227.05	4,227.25	3.5	4	4,233.69	4,223.37	
P-402	I-483	I-465	0	0	0	6.51	1.3	8.56	209	0.003062	15 inch	0.013	3.57	4,231.00	4,230.36	4,236.00	4,235.26	3.75	3.65	4,238.93	4,235.26	
P-401	I-484	I-483	18.61	0.35	6.51	6.51	1.31	8.59	83	0.001205	15 inch	0.013	2.24	4,231.10	4,231.00	4,236.00	4,236.00	3.65	3.75	4,237.47	4,236.00	
P-3836	I-485	O-5	5	0.35	1.75	8.26	1.29	10.77	554	0.000614	15 inch	0.013	1.6	4,230.36	4,230.02	4,235.26	4,235.02	3.65	3.75	4,246.66	4,231.22	
P-409	I-475	O-12	11.11	0.35	3.89	10.6	1.59	16.87	146	0.004932	15 inch	0.013	4.54	4,230.47	4,229.75	4,235.47	4,234.75	3.75	3.75	4,241.08	4,230.99	
P-408	I-473	I-475	7.57	0.35	2.65	6.71	1.59	10.79	156	0.003397	15 inch	0.013	3.77	4,231.00	4,230.47	4,236.03	4,235.47	3.78	3.75	4,239.82	4,235.47	
P-1483	I-972	I-473	8.23	0.2	1.65	4.06	1.66	6.81	58	0.001207	15 inch	0.013	2.24	4,231.07	4,231.00	4,236.07	4,236.03	3.75	3.78	4,236.67	4,236.03	
P-3838	I-498	I-972	6.91	0.35	2.42	2.42	1.83	4.47	696	0.002773	15 inch	0.013	3.4	4,233.00	4,231.07	4,238.00	4,236.07	3.75	3.75	4,239.40	4,236.07	
P-1719	I-2185	I-2125	2.26	0.35	0.79	1.58	1.74	2.78	27	0.002593	18 inch	0.013	5.35	4,231.22	4,231.15	4,236.22	4,236.15	3.5	3.5	4,232.12	4,232.09	
P-1720	I-2125	O-13	2.26	0.35	0.79	2.37	1.73	4.14	107	0.006075	18 inch	0.013	8.19	4,231.15	4,230.50	4,236.15	4,236.21	3.5	4.21	4,231.93	4,231.25	
P-1715	I-2384	I-2233	2.26	0.35	0.79	0.79	1.89	1.51	206	0.001796	18 inch	0.013	4.45	4,231.89	4,231.52	4,236.09	4,236.05	2.7	3.03	4,232.50	4,232.25	
P-3839	I-2233	I-2185	0	0	0	0.79	1.81	1.44	173	0.001734	18 inch	0.013	4.37	4,231.52	4,231.22	4,236.05	4,236.22	3.03	3.5	4,232.25	4,232.17	
P-193	I-533	I-317	0	0	0	1.39	2.14	3	143	0.002238	15 inch	0.013	3.06	4,231.12	4,230.80	4,235.89	4,236.00	3.52	3.95	4,236.00	4,235.69	
P-189	I-317	O-15	9.34	0.35	3.27	4.66	2.08	9.8	144	0.007639	15 inch	0.013	5.65	4,230.80	4,229.70	4,236.00	4,235.99	3.95	5.04	4,234.24	4,230.88	
P-192	I-529	I-533	3.98	0.35	1.39	1.39	2.16	3.04	74	0.002432	15 inch	0.013	3.19	4,231.30	4,231.12	4,235.79	4,235.89	3.24	3.52	4,236.05	4,235.89	
P-1622	I-2001	O-17	0	0	0	1.7	2.07	3.55	33	0.009091	18 inch	0.013	10.01	4,227.82	4,227.52	4,232.82	4,232.53	3.5	3.51	4,228.54	4,228.14	
P-1624	I-2145	I-2001	0	0	0	1.7	2.1	3.6	170	0.008059	18 inch	0.013	9.43	4,229.19	4,227.82	4,234.19	4,232.82	3.5	3.5	4,229.91	4,228.62	
P-1627	I-2144	I-2145	4.85	0.35	1.7	1.7	2.16	3.7	220	0.002545	18 inch	0.013	5.3	4,229.75	4,229.19	4,234.75	4,234.19	3.5	3.5	4,230.67	4,229.93	
P-188	I-314	O-19	3.85	0.35	1.35	1.35	1.79	2.44	192	0.000469	15 inch	0.013	1.4	4,230.84	4,230.75	4,235.84	4,235.75	3.75	3.75	4,231.91	4,231.37	
P-1669	I-2347	I-2346	5.39	0.35	1.89	1.89	1.9	3.61	83	0.001807	18 inch	0.013	4.47	4,227.25	4,227.10	4,231.83	4,231.75	3.08	3.15	4,228.25	4,228.08	
P-3786	I-2346	O-8	0	0	0	1.89	1.87	3.56	136	0.004853	15 inch	0.013	4.5	4,227.10	4,226.44	4,231.75	4,231.44	3.4	3.75	4,227.94	4,227.20	
P-1671	I-2316	I-2315	0	0	0	0	0	0	126	0.001587	18 inch	0.013	4.18	4,225.45	4,225.25	4,230.00	4,230.08	3.05	3.33	4,226.88	4,226.88	
P-3742	I-2315	I-754	4.95	0.35	1.73	3.32	1.44	4.82	62	0.003871	15 inch	0.013	4.02	4,225.25	4,225.01	4,230.08	4,230.01	3.58	3.75	4,226.88	4,226.53	
P-231	I-548	I-755	5.29	0.3	1.59	1.59	1.72	2.75	100	0.001	15 inch	0.013	2.04	4,226.81	4,226.71	4,232.16	4,231.97	4.1	4.01	4,229.24	4,229.06	
P-3840	I-755	I-549	0	0	0	1.59	1.68	2.68	530	0.00134	15 inch	0.013	2.36	4,226.71	4,226.00	4,231.97	4,231.44	4.01	4.19	4,228.98	4,228.06	
P-3841	I-549	I-2315	0	0	0	1.59	1.57	2.5	738	0.001016	15 inch	0.013	2.06	4,226.00	4,225.25	4,231.44	4,230.08	4.19	3.58	4,228.04	4,226.93	
P-3842	I-754	O-52	0	0	0	3.32	1.44	4.8	77	0.002078	15 inch	0.013	2.94	4,225.01	4,224.85	4,230.01	4,230.14	3.75	4.04	4,226.32	4,225.74	
P-3681	I-3850	I-3854	0	0	0	2.86	2.14	6.16	297	0.003535	18 inch	0.013	6.25	4,232.95	4,231.90	4,238.15	4,237.94	3.7	4.54	4,238.97	4,237.94	
P-3665	I-3844	I-3854	0	0	0	3.96	1.3	5.17	116	0.002328	18 inch	0.013	5.07	4,232.17	4,231.90	4,237.88	4,237.94	4.21	4.54	4,238.22	4,237.94	
P-3664	I-3854	O-16	6.93	0.35	2.43	9.24	1.28	11.96	566	0.00159	18 inch	0.013	4.19	4,231.90	4,231.00	4,237.94	4,237.18	4.54	4.68	4,239.75	4,232.31	
P-3680	I-3851	I-3850	3.78	0.35	1.32	2.86	2.22	6.41	355	0.004225	18 inch	0.013	6.83	4,234.45	4,232.95	4,239.16	4,238.15	3.21	3.7	4,239.48	4,238.15	
P-3712	I-3842	I-3844	11.74	0	0	3.96	1.3	5.19	37	0.002432	18 inch	0.013	5.18	4,232.26	4,232.17	4,237.86	4,237.88	4.1	4.21	4,237.97	4,237.88	
P-3713	I-3866	I-3842	11.3	0.35	3.96	3.96	1.32	5.26	163	0.001227	18 inch	0.013	3.68	4,232.46	4,232.26	4,237.78	4,237.86	3.82	4.1	4,238.27	4,237.86	
P-3709	I-3864	I-3856	4.4	0.35	1.54	1.54	2.41	3.74	62	0.002581	18 inch	0.013	5.34	4,235.16	4,235.00	4,240.48	4,240.15	3.82	3.65	4,239.74	4,239.66	
P-3844	I-3856	I-3851	0	0	0	1.54	2.39	3.7	385	0.001429	18 inch	0.013	3.97	4,235.00	4,234.45	4,240.15	4,239.16	3.65	3.21	4,239.64	4,239.16	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-323	I-285	O-9	0	0	0	11.21	2	22.62	100	0.002	15 inch	0.013	2.89	4,232.76	4,232.56	4,237.96	4,237.95	3.95	4.14	4,246.08	4,233.81	
P-325	I-290	I-291	0	0	0	11.21	2.01	22.67	70	0.001571	15 inch	0.013	2.56	4,233.07	4,232.96	4,238.07	4,237.96	3.75	3.75	4,246.59	4,237.96	
P-326	I-233	I-290	0	0	0	11.21	2.01	22.72	81	0.00358	15 inch	0.013	3.87	4,233.36	4,233.07	4,238.36	4,238.07	3.75	3.75	4,248.09	4,238.07	
P-321	I-284	I-232	2.58	0.35	0.9	11.21	2.03	22.92	272	0.003566	15 inch	0.013	3.86	4,234.60	4,233.63	4,239.60	4,238.63	3.75	3.75	4,272.88	4,238.63	
P-328	I-235	I-236	0	0	0	8.34	2.05	17.21	154	0.007662	15 inch	0.013	5.65	4,236.47	4,235.29	4,241.47	4,240.29	3.75	3.75	4,251.22	4,240.29	
P-322	I-236	I-284	0	0	0	8.34	2.04	17.13	137	0.005036	15 inch	0.013	4.58	4,235.29	4,234.60	4,240.29	4,239.60	3.75	3.75	4,249.23	4,239.60	
P-327	I-232	I-233	0	0	0	11.21	2.01	22.77	104	0.002596	15 inch	0.013	3.29	4,233.63	4,233.36	4,238.63	4,238.36	3.75	3.75	4,251.29	4,238.36	
P-1486	I-936	I-235	23.84	0.35	8.34	8.34	2.05	17.25	81	0.011481	15 inch	0.013	6.92	4,237.40	4,236.47	4,242.06	4,241.47	3.41	3.75	4,247.25	4,241.47	
P-3749	I-291	I-285	0	0	0	11.21	2	22.64	35	0.005714	15 inch	0.013	4.88	4,232.96	4,232.76	4,237.96	4,237.96	3.75	3.95	4,242.26	4,237.96	
P-3750	I-282	I-284	5.62	0.35	1.97	1.97	2.16	4.29	30	0.004667	15 inch	0.013	4.41	4,234.74	4,234.60	4,239.60	4,239.60	3.61	3.75	4,239.73	4,239.60	
P-2485	I-2923	O-24	5.08	0.35	1.78	3.39	2.04	6.95	127	0.003937	21 inch	0.013	9.94	4,236.17	4,235.67	4,241.17	4,240.67	3.25	3.25	4,237.25	4,236.64	
P-2467	I-2930	I-2923	4.6	0.35	1.61	1.61	2.16	3.51	209	0.000287	21 inch	0.013	2.68	4,236.23	4,236.17	4,241.23	4,241.17	3.25	3.25	4,237.56	4,237.42	
P-3145	I-2333	I-3488	0	0.35	0	9.04	1.62	14.75	460	0.002	30 inch	0.013	18.34	4,225.99	4,225.07	4,230.47	4,229.98	1.98	2.41	4,227.68	4,226.72	
P-3048	I-2175	I-2333	0	0.35	0	9.04	1.67	15.23	314	0.002006	27 inch	0.013	13.87	4,226.62	4,225.99	4,231.62	4,230.47	2.75	2.23	4,228.59	4,227.84	
P-2730	I-950	I-3068	25.84	0.35	9.04	9.04	1.74	15.85	100	0.0041	24 inch	0.013	14.48	4,228.13	4,227.72	4,233.13	4,232.72	3	3	4,230.56	4,230.07	
P-2731	I-3068	I-2175	0	0	0	9.04	1.72	15.69	278	0.003957	24 inch	0.013	14.23	4,227.72	4,226.62	4,232.72	4,231.62	3	3	4,229.93	4,228.60	
P-3431	I-3488	I-3640	0	0	0	9.04	1.58	14.4	179	0.001508	36 inch	0.013	25.9	4,225.07	4,224.80	4,229.98	4,230.00	1.91	2.2	4,226.60	4,226.11	
P-3428	I-3640	O-26	0	0.35	0	9.04	1.56	14.25	45	0.003556	36 inch	0.013	39.77	4,224.80	4,224.64	4,230.00	4,229.94	2.2	2.3	4,226.04	4,225.84	
P-1653	I-2390	I-2391	0	0	0	3.32	1.07	7.57	662	0.002281	24 inch	0.013	10.8	4,226.01	4,224.50	4,230.01	4,229.85	2	3.35	4,227.24	4,226.03	
P-1499	I-2267	I-2268	0	0	0	0	0	4	93	0.004194	18 inch	0.013	6.8	4,233.99	4,233.60	4,237.99	4,238.01	2.5	2.91	4,235.11	4,235.01	
P-3649	I-2268	I-3938	0	0	0	0.83	1.62	5.36	783	0.000766	24 inch	0.013	6.28	4,233.60	4,233.00	4,238.01	4,238.00	2.41	3	4,234.98	4,234.22	
P-3654	I-3838	I-2962	0	0	0	3.32	1.26	8.22	258	0.002907	24 inch	0.013	12.2	4,233.00	4,232.25	4,238.00	4,237.94	3	3.69	4,234.20	4,233.45	
P-3655	I-2962	I-3839	0	0	0	3.32	1.24	8.15	1,668.00	0.002962	24 inch	0.013	12.31	4,232.25	4,227.31	4,237.94	4,232.02	3.69	2.71	4,233.44	4,228.44	
P-3759	I-3839	I-3913	0	0	0	3.32	1.1	7.69	157	0.003248	24 inch	0.013	12.89	4,227.31	4,226.80	4,232.02	4,232.00	2.71	3.2	4,228.42	4,227.95	
P-3760	I-3913	I-2390	0	0	0	3.32	1.09	7.65	265	0.002961	24 inch	0.013	12.35	4,226.80	4,226.01	4,232.00	4,230.01	3.2	2	4,227.94	4,227.26	
P-3761	I-2987	I-3913	0	0	0	0	0	0	91	0.004176	21 inch	0.013	10.24	4,227.18	4,226.80	4,232.18	4,232.00	3.25	3.45	4,227.94	4,227.94	
P-2607	I-2913	I-2936	0	0.85	0	0	0	0	29	0.001724	15 inch	0.013	2.68	4,233.25	4,233.20	4,237.93	4,237.84	3.43	3.39	4,234.92	4,234.92	
P-2608	I-2914	I-2936	0	0.85	0	0	0	0	30	0.001667	15 inch	0.013	2.64	4,233.25	4,233.20	4,237.76	4,237.84	3.26	3.39	4,234.92	4,234.92	
P-2511	I-2957	I-2956	0.4	0.85	0.34	0.34	1.28	0.44	28	0.001786	15 inch	0.013	2.73	4,233.08	4,233.03	4,237.96	4,237.96	3.63	3.68	4,234.32	4,234.31	
P-2510	I-2970	I-2956	0.4	0.85	0.34	0.34	2.16	0.74	31	0.001613	15 inch	0.013	2.59	4,233.08	4,233.03	4,237.96	4,237.96	3.63	3.68	4,234.32	4,234.31	
P-2612	I-2936	I-2956	5.17	0.35	1.81	1.81	1.89	3.44	584	0.000291	18 inch	0.013	1.79	4,233.20	4,233.03	4,237.84	4,237.96	3.14	3.43	4,234.92	4,234.32	
P-3768	I-2956	I-3838	0	0	0	2.49	1.27	3.19	89	0.000435	18 inch	0.013	2.19	4,233.03	4,233.00	4,237.96	4,238.00	3.43	3.5	4,234.31	4,234.25	
P-3787	I-3862	I-2391	0	0	0	5.37	0.91	4.94	206	0.004854	27 inch	0.013	21.58	4,225.50	4,224.50	4,231.89	4,229.85	4.14	3.1	4,226.26	4,225.99	
P-3565	I-3792	O-29	0	0	0	13.17	0.81	23.77	1,317.00	0.001913	42 inch	0.013	44.01	4,219.08	4,216.56	4,223.08	4,221.96	0.5	1.9	4,220.91	4,218.06	
P-3558	I-3650	I-3639	0	0	0	9.97	0.87	12.78	1,640.00	0.00161	36 inch	0.013	26.76	4,222.74	4,220.10	4,226.97	4,226.04	1.23	2.94	4,224.20	4,222.59	
P-3854	I-3639	I-3792	4	0.8	3.2	13.17	0.82	37.54	548	0.001861	42 inch	0.013	43.4	4,220.10	4,219.08	4,226.04	4,223.08	2.44	0.5	4,222.57	4,220.98	
P-3855	I-2391	I-3650	1.5	0.85	1.27	9.97	0.91	13.11	1,096.00	0.001606	36 inch	0.013	26.73	4,224.50	4,222.74	4,229.85	4,226.97	2.35	1.23	4,225.98	4,224.21	
P-3881	I-2407	I-2268	0.98	0.85	0.83	0.83	1.89	1.59	737	0.001723	24 inch	0.013	9.39	4,234.87	4,233.60	4,239.87	4,238.01	3	2.41	4,235.43	4,234.99	
P-15	I-21	I-20	26.84	0.2	5.37	5.37	0.98	5.28	95	0.002947	12 inch	0.013	1.93	4,229.72	4,229.44	4,234.16	4,234.44	3.44	4	4,232.68	4,230.60	
P-32	I-29	I-20	0	0	0	0	0	0	236	0.002161	12 inch	0.013	1.66	4,229.95	4,229.44	4,234.95	4,234.44	4	4	4,230.54	4,230.54	
P-33	I-20	I-2586	0	0	0	5.37	0.97	5.27	140	0.002071	24 inch	0.013	10.3	4,229.44	4,229.15	4,234.44	4,234.15	3	3	4,230.53	4,230.36	
P-3959	I-2586	I-2587	0	0	0	5.37	0.97	5.25	883	0.001178	24 inch	0.013	7.76	4,229.15	4,228.11	4,234.15	4,233.11	3	3	4,230.35	4,228.95	
P-3960	I-2587	I-3862	0	0	0	5.37	0.93	5.04	688	0.003794	24 inch	0.013	13.93	4,228.11	4,225.50	4,233.11	4,231.89	3	4.39	4,228.94	4,226.29	
P-3961	I-311	I-2587	0	0	0	0	0	0	60	0.014833	15 inch	0.013	7.87	4,229.00	4,228.11	4,232.82	4,233.11	2.57	3.75	4,229.00	4,228.94	
P-4005	I-2605	I-3792	0	0	0	0	0	0.26	297	0.01862	4 inch	0.013	0.26	4,224.61	4,219.08	4,225.61	4,223.08	0.67	3.67	4,226.46	4,220.91	
P-4045	I-2622	I-3639	0	0	0	0	0	22.61	674	0.004169	24 inch	0.013	14.61	4,222.91	4,220.10	4,226.00	4,226.04	1.09	3.94	4,229.43	4,222.70	
P-1502	I-2178	I-2326	0	0	0	6.51	0.98	6.43	50	0.011556	18 inch	0.013	11.29	4,248.04	4,247.00	4,253.04	4,253.09	3.5	4.59	4,249.02	4,248.22	
P-1503	I-2326	O-34	0	0	0	6.51	0.98	6.42	343	0.02828	18 inch	0.013	17.66	4,247.00	4,237.30	4,253.09	4,242.30	4.59	3.5	4,247.98	4,237.93	
P-1501	I-2179	I-2178	18.6	0.35	6.51	6.51	0.98	6.44	98	0.00602	18 inch	0.013	8.15	4,248.63	4,248.04	4,253.63	4,253.04	3.5	3.5	4,249.64	4,249.27	
P-427	I-905	I-191	0	0	0	0	0	5.69	59	0.003559	15 inch	0.013	3.85	4,249.00	4,248.79	4,254.00	4,253.79	3.75	3.75	4,250.53	4,250.07	
P-3886	I-191	O-33	0	0	0	0	0	5.69	389	0.030334	15 inch	0.013	11.25	4,248.79	4,236.99	4,253.79	4,241.99	3.75	3.75	4,249.76	4,237.62	
P-422	I-947	I-948	0	0	0	0	0	0	115	0.048522	15 inch	0.013	14.23	4,242.45	4,236.87	4,247.45	4,241.87	3.75	3.75	4,242.45	4,240.52	
P-424	I-901	I-947	0	0	0	0	0	0	107	0.021308	15 inch	0.013	9.43	4,244.73	4,242.45	4,249.73	4,247.45	3.75	3.75	4,244.73	4,242.45	
P-1498	I-948	O-58	45.99	0.35	16.1	16.1	1.32	21.37	47	0.005532	18 inch	0.013	7.81	4,236.87	4,236.61	4,241.87	4,241.61	3.5	3.5	4,240.05	4,238.09	
P-425	I-900	I-901	0	0	0	0	0	0	72	0.010694	15 inch	0.013	6.68	4,245.50	4,244.73	4,250.50	4,249.73	3.75	3.75	4,245.50	4,244.73	
P-1495	I-2146	I-811	0	0	0	0	0	0	275	0.001309	18 inch	0.013	3.8	4,244.50	4,244.14	4,246.88	4,249.14	0.88	3.5	4,244.50	4,244.14	
P-34	I-811	I-812	0	0	0	0	0	0	882	0.001417	15 inch	0.013	2.43	4,244.14	4,242.89	4,249.14	4,247.89	3.75	3.75	4,244.14	4,242.89	
P-4002	I-812	I-947	0	0	0	0	0	0	410	0.001073	15 inch	0.013	2.12	4,242.89	4,242.45	4,247.89	4,247.45	3.75	3.75	4,242.89	4,242.45	
P-1515	I-2299	O-37	32.34	0.35	11.32	11.32	1.61	18.36	534	0.006236	18 inch	0.013	8.29	4,267.14	4,263.81	4,272.14	4,268.81	3.5	3.5	4,261.61	4,265.26	
P-634	I-620	I-623	34	0	0	0	0	6.8	262	0.018244	15 inch	0.013	8.72	4,245.60	4,240.82	4,250.60	4,245.82	3.75	3.75	4,246.65	4,242.23	
P-81	I-623	O-38	0	0	0	0	0	6.8	177	0.015254	15 inch	0.013	7.98	4,240.82	4,238.12	4,245.82	4,240.12	3.75	0.75	4,241.87	4,239.01	
P-1544	I-2190	I-2429	21.04	0.3	6.31	11.7	1.6	18.83	237	0.005274	18 inch	0.013	7.63	4,260.24	4,258.99	4,265.24	4,263.99	3.5	3.5	4,271.61	4,263.99	
P-1543	I-2191	I-2190	0	0	0	5.39	2.12	11.53	99	0.007677	18 inch	0.013	9.2	4,261.00	4,260.24	4,266.00	4,265.24	3.5	3.5	4,266.43	4,265.24	
P-3092	I-3417	O-41	0	0	0	11.7	1.51	17.81	71	0.002676	30 inch	0.013	21.22	4,249.15	4,248.96	4,254.03	4,253.96	2.38	2.5	4,250.81	4,250.39	
P-3192	I-3416	I-3417	0	0	0	0	0	0	311	0.004887	30 inch	0.013	28.67	4,250.67	4,249.15	4,255.67	4,254.03	2.5	2.38	4,250.81	4,250.81	
P-3622	I-2270	I-3416	0	0	0	0	0	0	621	0.007424	15 inch	0.013	5.57	4,255.28	4,250.67	4,260.28	4,255.67	3.75	3.75	4,255.28	4,250.81	
P-3195	I-3187	I-3508	0	0	0	11.7	1.54	18.19	192	0.00349	30 inch	0.013	24.23	4,250.94	4,250.27	4,255.94	4,255.27	2.5	2.5	4,252.56	4,251.93	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3923	I-893	I-3187	0	0	0	11.7	1.58	18.62	737	0.007354	24 inch	0.013	19.4	4,256.36	4,250.94	4,261.36	4,255.94	3	3	4,257.93	4,252.62	
P-3924	I-3508	I-3417	0	0	0	11.7	1.53	18.05	313	0.003578	30 inch	0.013	24.53	4,250.27	4,249.15	4,255.27	4,254.03	2.5	2.38	4,251.86	4,250.83	
P-3925	I-2429	I-893	0	0	0	11.7	1.59	18.74	331	0.007946	18 inch	0.013	9.36	4,258.99	4,256.36	4,263.99	4,261.36	3.5	3.5	4,268.51	4,257.97	
P-3926	I-890	I-2191	26.94	0.2	5.39	5.39	2.16	11.75	297	0.005185	18 inch	0.013	7.56	4,262.54	4,261.00	4,267.54	4,266.00	3.5	3.5	4,269.72	4,266.00	
P-4013	I-2604	O-39	0	0	0	0	0	10.9	179	0.032682	18 inch	0.013	18.99	4,242.88	4,237.03	4,247.88	4,242.03	3.5	3.5	4,244.15	4,237.84	
P-484	I-428	I-425	0	0	0	0	0	0	223	0.006816	15 inch	0.013	5.33	4,258.53	4,257.01	4,263.53	4,262.01	3.75	3.75	4,259.99	4,259.99	
P-86	I-56	O-56	0	0	0	11.32	1.3	14.86	1,091.00	0.011916	15 inch	0.013	7.05	4,249.00	4,236.00	4,254.00	4,241.00	3.75	3.75	4,294.97	4,237.24	
P-482	I-424	I-56	32.35	0.35	11.32	11.32	1.32	15.07	647	0.009258	15 inch	0.013	6.22	4,254.99	4,249.00	4,259.99	4,254.00	3.75	3.75	4,289.19	4,254.00	
P-483	I-425	I-424	0	0	0	0	0	0	165	0.012242	15 inch	0.013	7.15	4,257.01	4,254.98	4,262.01	4,259.99	3.75	3.75	4,259.99	4,259.99	
P-3357	I-3491	I-2588	26.74	0.25	6.68	6.68	0.96	6.5	225	0.001111	30 inch	0.013	13.67	4,224.25	4,224.00	4,228.25	4,227.46	1.5	0.96	4,225.56	4,225.40	
P-3962	I-2568	I-2589	9.72	0.25	2.43	9.12	0.96	8.78	163	0.001534	30 inch	0.013	16.06	4,224.00	4,223.75	4,227.46	4,227.36	0.96	1.11	4,225.35	4,225.13	
P-3963	I-2589	O-61	0	0	0	9.12	0.95	8.73	618	0.001553	30 inch	0.013	16.17	4,223.75	4,222.79	4,227.36	4,222.79	1.11	-2.5	4,225.06	4,223.77	
P-3571	I-3211	O-36	0	0	0	0	0	45	2,487.00	0.002803	42 inch	0.013	53.26	4,237.69	4,230.72	4,242.26	4,230.72	1.07	-3.5	4,240.16	4,232.81	
P-3972	I-2584	I-3211	0	0	0	0	0	45	35	0.004	42 inch	0.013	63.63	4,237.83	4,237.69	4,242.83	4,242.26	1.5	1.07	4,240.43	4,240.39	
P-132	I-82	I-80	2.17	0	0	0	0	0	416	0.002115	15 inch	0.013	2.97	4,259.65	4,258.77	4,264.65	4,263.77	3.75	3.75	4,259.65	4,258.77	
P-133	I-80	I-991	4	0	0	0	0	0	40	0.009	15 inch	0.013	6.13	4,258.77	4,258.41	4,263.77	4,263.41	3.75	3.75	4,258.77	4,258.41	
P-3973	I-991	O-64	0	0	0	0	0	0	70	0.012143	15 inch	0.013	7.12	4,258.41	4,257.56	4,263.41	4,257.56	3.75	-1.25	4,258.41	4,257.55	
P-1945	I-2372	I-2373	0.54	0.85	0.46	1.61	1.68	2.72	400	0.0053	18 inch	0.013	7.65	4,285.05	4,282.93	4,290.05	4,287.93	3.5	3.5	4,285.68	4,283.61	
P-2457	I-2373	I-2944	0	0	0	1.61	1.62	3.38	421	0.0138	21 inch	0.013	18.61	4,282.93	4,277.12	4,287.93	4,282.12	3.25	3.25	4,283.60	4,277.95	
P-2808	I-384	I-2372	0.54	0.85	0.46	0.46	2.16	1	60	0.008333	24 inch	0.013	20.65	4,285.55	4,285.05	4,290.55	4,290.05	3	3	4,285.89	4,285.70	
P-1944	I-2012	I-2013	0.61	0.85	0.52	0.52	2.16	1.13	641	0.004587	18 inch	0.013	7.11	4,297.08	4,294.14	4,302.08	4,299.14	3.5	3.5	4,297.48	4,294.55	
P-2807	I-2013	I-2372	0.2	0.85	0.17	0.69	1.97	1.37	1,173.00	0.007749	24 inch	0.013	19.91	4,294.14	4,285.05	4,299.14	4,290.05	3	3	4,294.54	4,285.72	
P-123	I-783	O-66	0.5	0.85	0.43	2.19	1.43	3.91	131	0.01374	21 inch	0.013	18.57	4,273.01	4,271.21	4,278.01	4,276.21	3.25	3.25	4,273.74	4,271.76	
P-3895	I-2844	I-783	0.19	0.85	0.16	1.77	1.59	3.6	1,565.00	0.002626	21 inch	0.013	8.12	4,277.12	4,273.01	4,282.12	4,278.01	3.25	3.25	4,277.94	4,273.79	
P-2720	I-3121	I-957	0	0	0	14.8	1.26	18.82	323	0.000712	24 inch	0.013	6.04	4,232.54	4,232.31	4,237.54	4,237.31	3	3	4,238.18	4,235.94	
P-2709	I-957	I-525	0	0	0	14.8	1.24	18.54	232	0.00069	24 inch	0.013	5.94	4,232.31	4,232.15	4,237.31	4,237.26	3	3.11	4,235.79	4,234.23	
P-2721	I-3081	I-3121	4	0.85	3.4	14.8	1.27	18.9	90	0.001444	24 inch	0.013	8.6	4,232.67	4,232.54	4,237.41	4,237.54	2.74	3	4,238.17	4,237.54	
P-1693	I-510	I-2290	12.19	0.35	4.27	4.27	1.29	5.55	121	0.004132	18 inch	0.013	6.75	4,233.57	4,233.07	4,237.33	4,237.37	2.26	2.8	4,237.71	4,237.37	
P-1694	I-2290	I-506	12.1	0.35	4.23	8.5	1.28	10.95	107	0.000935	18 inch	0.013	3.21	4,233.07	4,232.97	4,237.37	4,237.37	2.8	2.9	4,238.53	4,237.37	
P-2722	I-506	I-3081	8.27	0.35	2.89	11.4	1.27	14.61	59	0.005085	24 inch	0.013	16.13	4,232.97	4,232.67	4,237.37	4,237.41	2.4	2.74	4,237.66	4,237.41	
P-3133	I-525	O-68	0	0	0	14.8	1.23	18.34	154	0.000649	30 inch	0.013	10.45	4,232.15	4,232.05	4,237.26	4,235.05	2.61	0.5	4,234.22	4,233.50	
P-3365	I-3708	I-3707	0	0	0	0	0	4.7	99	0.03303	36 inch	0.013	121.21	4,225.00	4,221.73	4,230.20	4,230.00	2.2	5.27	4,225.68	4,224.24	
P-3147	I-3433	I-3206	0	0	0	0	0	10.14	302	0.002815	30 inch	0.013	21.76	4,232.16	4,231.31	4,237.16	4,236.31	2.5	2.5	4,233.37	4,232.93	
P-3135	I-3413	I-3475	0	0	0	0	0	10.14	125	0.00208	30 inch	0.013	18.71	4,232.66	4,232.40	4,237.66	4,237.56	2.5	2.66	4,234.01	4,233.82	
P-3136	I-3475	I-3433	0	0	0	0	0	10.14	109	0.002202	30 inch	0.013	19.25	4,232.40	4,232.16	4,237.56	4,237.16	2.66	2.5	4,233.70	4,233.49	
P-1723	I-2287	I-2067	0	0	0	1.7	1.6	2.75	91	0.003297	18 inch	0.013	6.03	4,231.42	4,231.12	4,235.94	4,235.99	3.02	3.37	4,232.93	4,232.87	
P-1722	I-953	I-2287	2	0.85	1.7	1.7	1.62	2.77	94	0.00234	18 inch	0.013	5.08	4,231.64	4,231.42	4,235.92	4,235.94	2.78	3.02	4,233.00	4,232.94	
P-1724	I-2067	I-2066	0	0	0	1.7	1.58	2.71	162	0.000802	18 inch	0.013	2.98	4,231.12	4,230.99	4,235.99	4,235.99	3.37	3.5	4,232.85	4,232.74	
P-3142	I-3206	I-2066	3.57	0.35	1.25	1.25	1.16	11.6	108	0.002963	30 inch	0.013	22.33	4,231.31	4,230.99	4,236.31	4,235.99	2.5	2.5	4,232.88	4,232.79	
P-3137	I-3435	I-3472	0	0	0	3.33	1.13	13.93	143	0.004965	30 inch	0.013	28.9	4,230.59	4,229.88	4,235.59	4,234.88	2.5	2.5	4,231.85	4,231.27	
P-3143	I-3515	I-3471	0.28	0.95	0.26	0.26	2.16	0.58	47	0.001277	30 inch	0.013	14.65	4,229.40	4,229.34	4,234.30	4,234.34	2.4	2.5	4,230.94	4,230.94	
P-3138	I-3472	I-3471	0	0	0	3.33	1.12	13.9	106	0.005094	30 inch	0.013	29.27	4,229.88	4,229.34	4,234.88	4,234.34	2.5	2.5	4,231.13	4,230.97	
P-247	I-962	I-961	0.67	0.95	0.64	0.64	2.16	1.39	299	0.003077	15 inch	0.013	3.58	4,230.97	4,230.05	4,235.97	4,235.05	3.75	3.75	4,231.51	4,230.93	
P-1725	I-961	I-2388	0.32	0.95	0.3	0.94	2.07	1.95	356	0.002837	18 inch	0.013	5.59	4,230.05	4,229.04	4,235.05	4,234.04	3.5	3.5	4,230.87	4,230.75	
P-3154	I-2368	I-3457	6.42	0.35	2.25	6.78	1.11	17.71	1,770.00	0.001904	36 inch	0.013	29.1	4,229.04	4,225.67	4,234.04	4,231.96	2	3.29	4,230.73	4,227.77	
P-3139	I-3471	I-2388	0	0	0	3.6	1.11	14.17	81	0.003704	30 inch	0.013	24.96	4,229.34	4,229.04	4,234.34	4,234.04	2.5	2.5	4,230.94	4,230.86	
P-3144	I-2066	I-3435	0.45	0.85	0.38	3.33	1.15	14	251	0.001594	30 inch	0.013	16.37	4,230.99	4,230.59	4,235.99	4,235.59	2.5	2.5	4,232.69	4,232.12	
P-1776	I-2096	I-2097	0	0	0	0	0	0	179	0.000782	18 inch	0.013	2.94	4,226.98	4,226.84	4,231.98	4,231.84	3.5	3.5	4,226.98	4,226.84	
P-1774	I-2097	I-2150	0	0	0	0	0	0	68	0.000588	18 inch	0.013	2.55	4,226.84	4,226.80	4,231.84	4,231.98	3.5	3.68	4,226.84	4,226.81	
P-1773	I-2151	I-2150	0	0	0	0	0	0	200	0.0012	18 inch	0.013	3.64	4,227.04	4,226.80	4,232.04	4,231.98	3.5	3.68	4,227.04	4,226.81	
P-1687	I-2235	I-1979	2.3	0.35	0.8	5.01	1.82	9.18	460	0.00313	18 inch	0.013	5.88	4,226.90	4,225.46	4,231.93	4,230.46	3.53	3.5	4,233.97	4,230.46	
P-1689	I-1978	I-2363	0	0	0	5.01	1.73	8.73	78	0.00141	18 inch	0.013	3.94	4,225.36	4,225.25	4,230.26	4,230.25	3.4	3.5	4,230.66	4,230.12	
P-1688	I-1979	I-1978	0	0	0	5.01	1.74	8.78	53	0.001687	18 inch	0.013	4.56	4,225.46	4,225.36	4,230.46	4,230.26	3.5	3.4	4,230.63	4,230.26	
P-1691	I-2276	I-2339	0	0	0	5.01	1.67	8.46	258	0.006318	18 inch	0.013	8.35	4,225.15	4,223.52	4,230.53	4,230.00	3.88	4.98	4,227.96	4,226.28	
P-1690	I-2363	I-2276	0	0	0	5.01	1.71	8.66	216	0.000463	18 inch	0.013	2.26	4,225.25	4,225.15	4,230.25	4,230.53	3.5	3.88	4,229.96	4,228.49	
P-3152	I-2926	I-3462	9.22	0.35	3.23	9.97	0.99	12.45	865	0.00141	30 inch	0.013	15.4	4,225.19	4,223.97	4,231.99	4,230.11	4.3	3.64	4,227.62	4,226.83	
P-3151	I-3462	I-2339	14.89	0.35	5.21	15.18	0.96	17.2	316	0.001424	30 inch	0.013	15.48	4,223.97	4,223.52	4,230.11	4,230.00	3.64	3.98	4,226.81	4,226.25	
P-3342	I-2150	I-3462	0	0	0	0	0	0	417	0.006787	18 inch	0.013	8.65	4,226.80	4,223.97	4,231.98	4,230.11	3.68	4.64	4,226.81	4,226.81	
P-3346	I-2339	I-2393	5.55	0.35	1.94	14.83	0.95	15.67	831	0.001408	30 inch	0.013	15.39	4,223.52	4,222.35	4,230.00	4,230.00	3.98	5.15	4,226.24	4,225.00	
P-3347	I-2968	I-2926	26.63	0.35	9.39	4.04	0.99	6.58	131	0.00145	30 inch	0.013	15.62	4,225.38	4,225.19	4,231.92	4,231.99	4.04	4.3	4,227.66	4,227.63	
P-3348	I-3457	I-2968	0	0	0	6.78	1	16.94	149	0.001946	36 inch	0.013	29.42	4,225.67	4,225.38	4,231.96	4,231.92	3.29	3.54	4,227.78	4,227.66	
P-3737	I-2393	I-3707	7.06	0.35	2.47	17.3	0.92	17.72	439	0.001412	30 inch	0.013	15.41	4,222.35	4,221.73	4,230.00	4,230.00	5.15	5.77	4,224.98	4,224.18	
P-3743	I-3707	I-3672	0	0	0	24.61	0.89	29.31	325	0.002	36 inch	0.013	29.83	4,221.73	4,221.08	4,230.00	4,229.93	5.27	5.85	4,224.16	4,223.53	
P-3793	I-3672	O-27	0	0	0	24.61	0.88	29.12	205	0.002	36 inch	0.013	29.83	4,221.08	4,220.67	4,229.93	4,225.37	5.85	1.7	4,223.29	4,222.42	
P-1769	I-2039	I-2037	4.82	0.35	1.69	1.69	2.06	3.5	46	0.002174	18 inch	0.013	4.9	4,227.27	4,227.17	4,232.77	4,232.71	4	4.04	4,228.94	4,228.89	
P-1790	I-2037	I-2241	2.9	0.35	1.01	2.7	2.04	5.55	222	0.001577	18 inch	0.013	4.17	4,227.17	4,226.82	4,232.71	4,231.92	4.04	3.6	4,228.67	4,228.07	
P-3837	I-2241	I-2926	0	0	0	2.7	1.98	5.38	409	0.003985	21 inch	0.013	10	4,226.82	4,225.19	4,231.92	4,231.99	3.35	5.05	4,228.06	4,227.64	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-1583	I-2116	I-2405	0	0	0	2.38	1.88	4.52	132	0.000152	18 inch	0.013	1.29	4,227.37	4,227.35	4,232.37	4,232.06	3.5	3.21	4,232.30	4,232.06	
P-1582	I-2117	I-2116	6.81	0.35	2.38	2.38	1.9	4.56	43	0.001395	18 inch	0.013	3.92	4,227.43	4,227.37	4,232.43	4,232.37	3.5	3.5	4,232.44	4,232.36	
P-3843	I-2405	I-2235	5.21	0.35	1.82	4.21	1.84	7.79	141	0.003191	15 inch	0.013	3.65	4,227.35	4,226.90	4,232.06	4,231.93	3.46	3.78	4,233.98	4,231.93	
P-3966	I-3461	O-27	0	0	0	0	0	0	103	0.04165	15 inch	0.013	13.18	4,224.96	4,220.67	4,229.96	4,225.37	3.75	3.45	4,224.96	4,220.67	
P-3982	I-2593	I-3413	0	0	0	0	0	10.14	135	0.001407	30 inch	0.013	15.39	4,232.85	4,232.66	4,237.05	4,237.66	1.7	2.5	4,234.31	4,234.10	
P-4059	I-2636	I-3707	0	0	0	7.31	0.95	7.82	1,272.00	0.001407	24 inch	0.013	8.49	4,223.52	4,221.73	4,230.00	4,230.00	4.48	6.27	4,225.77	4,224.26	
P-2799	I-3158	I-3191	0	0	0	0	0	0	297	0.003502	24 inch	0.013	13.39	4,219.78	4,218.74	4,224.78	4,223.74	3	3	4,220.11	4,220.11	
P-2798	I-3191	I-3167	0	0	0	0	0	0	70	0.003286	24 inch	0.013	12.97	4,218.74	4,218.51	4,223.74	4,223.51	3	3	4,220.11	4,220.11	
P-2797	I-3167	I-136	0	0	0	0	0	0	67	0.002388	24 inch	0.013	11.05	4,218.51	4,218.35	4,223.51	4,223.35	3	3	4,220.11	4,220.11	
P-2784	I-3083	I-3158	0	0	0	0	0	0	93	0.003441	24 inch	0.013	13.27	4,220.10	4,219.78	4,225.10	4,224.78	3	3	4,220.11	4,220.11	
P-2778	I-3182	I-2436	0	0	0	0	0	0	152	0.003487	24 inch	0.013	13.36	4,222.11	4,221.58	4,227.11	4,226.58	3	3	4,222.11	4,221.58	
P-2779	I-2436	I-3089	0	0	0	0	0	0	326	0.003497	24 inch	0.013	13.38	4,221.58	4,220.44	4,226.58	4,225.44	3	3	4,221.58	4,220.44	
P-2781	I-3089	I-639	0	0	0	0	0	0	75	0.003467	24 inch	0.013	13.32	4,220.44	4,220.18	4,225.44	4,225.18	3	3	4,220.44	4,220.18	
P-2782	I-639	I-3083	0	0	0	0	0	0	24	0.003333	24 inch	0.013	13.06	4,220.18	4,220.10	4,225.18	4,225.10	3	3	4,220.18	4,220.11	
P-2766	I-3072	I-3071	0	0	0	0	0	0	24	0.01625	24 inch	0.013	28.84	4,217.74	4,217.35	4,222.74	4,222.67	3	3.32	4,220.11	4,220.11	
P-3196	I-136	I-3072	0	0	0	0	0	0	192	0.003177	30 inch	0.013	23.12	4,218.35	4,217.74	4,223.35	4,222.74	2.5	2.5	4,220.11	4,220.11	
P-1915	I-2152	I-2353	0	0	0	0	0	0	145	0.003103	18 inch	0.013	5.85	4,220.95	4,220.50	4,225.95	4,225.50	3.5	3.5	4,220.95	4,220.80	
P-1924	I-1974	I-808	0	0	0	0	0	0	82	0.003293	18 inch	0.013	6.03	4,219.98	4,219.71	4,224.98	4,224.71	3.5	3.5	4,220.80	4,220.80	
P-1925	I-2353	I-1974	0	0	0	0	0	0	137	0.003796	18 inch	0.013	6.47	4,220.50	4,219.98	4,225.50	4,224.98	3.5	3.5	4,220.80	4,220.80	
P-1917	I-2098	I-2152	0	0	0	0	0	0	71	0.003521	18 inch	0.013	6.23	4,221.20	4,220.95	4,226.20	4,225.95	3.5	3.5	4,221.20	4,220.95	
P-1923	I-2230	I-854	0	0	0	0	0	0	34	0.003235	18 inch	0.013	5.97	4,218.71	4,218.60	4,223.71	4,223.60	3.5	3.5	4,220.80	4,220.80	
P-2789	I-854	I-813	0	0	0	0	0	0	74	0.003514	24 inch	0.013	13.41	4,218.60	4,218.34	4,223.60	4,223.34	3	3	4,220.80	4,220.80	
P-2794	I-3173	I-2230	0	0	0	0	0	0	56	0.003571	24 inch	0.013	13.52	4,218.91	4,218.71	4,223.91	4,223.71	3	3	4,220.80	4,220.80	
P-2795	I-3102	I-3173	0	0	0	0	0	0	124	0.003629	24 inch	0.013	13.63	4,219.36	4,218.91	4,224.36	4,223.91	3	3	4,220.80	4,220.80	
P-2796	I-808	I-3102	0	0	0	0	0	0	104	0.003365	24 inch	0.013	13.12	4,219.71	4,219.36	4,224.71	4,224.36	3	3	4,220.80	4,220.80	
P-2788	I-813	I-3200	0	0	0	0	0	0	110	0.003545	24 inch	0.013	13.47	4,218.34	4,217.95	4,223.34	4,222.95	3	3	4,220.80	4,220.80	
P-3579	I-3663	I-3795	25.36	0.35	8.88	21	1.07	30.17	1,037.00	0.003375	42 inch	0.013	58.45	4,222.18	4,218.68	4,227.18	4,223.68	1.5	1.5	4,223.96	4,221.46	
P-3803	I-3795	I-3200	0	0	0	21	1.01	28.97	602	0.001213	42 inch	0.013	35.03	4,218.68	4,217.95	4,223.68	4,222.95	1.5	1.5	4,221.33	4,220.81	
P-3830	I-3200	I-3071	18.24	0.35	6.38	27.39	0.99	35	554	0.001083	42 inch	0.013	33.11	4,217.95	4,217.35	4,222.95	4,222.67	1.5	1.82	4,220.80	4,220.06	
P-3831	I-3071	I-2222	14.58	0.35	5.1	32.49	0.98	39.57	254	0.000827	48 inch	0.013	41.3	4,217.35	4,217.14	4,222.67	4,222.58	1.32	1.44	4,220.05	4,219.67	
P-3621	I-3818	O-3	0	0	0	40.41	0.96	46.59	154	0.002992	48 inch	0.013	74.11	4,215.41	4,215.00	4,220.41	4,220.00	1	1	4,217.69	4,217.05	
P-3832	I-2222	I-3818	12.45	0.3	3.73	40.41	0.97	47.05	629	0.00275	48 inch	0.013	75.33	4,217.14	4,215.41	4,222.58	4,220.41	1.44	1	4,219.43	4,217.86	
P-3790	I-3518	I-2380	27.91	0.15	4.19	4.19	1.32	5.57	111	0.003243	18 inch	0.013	5.98	4,218.24	4,217.88	4,222.14	4,222.38	2.4	3	4,220.48	4,220.17	
P-3833	I-2380	I-2222	0	0	0	4.19	1.31	5.52	233	0.003176	18 inch	0.013	5.92	4,217.88	4,217.14	4,222.38	4,222.58	3	3.94	4,220.10	4,219.45	
P-708	I-611	I-609	0	0	0	0	0	0	100	0.0021	15 inch	0.013	2.96	4,225.60	4,225.39	4,230.60	4,230.39	3.75	3.75	4,225.60	4,225.39	
P-709	I-612	I-611	0	0	0	0	0	0	72	0.00125	15 inch	0.013	2.28	4,225.69	4,225.60	4,230.69	4,230.60	3.75	3.75	4,225.69	4,225.60	
P-713	I-849	I-612	0	0	0	0	0	0	71	0.000141	15 inch	0.013	0.77	4,225.70	4,225.69	4,230.65	4,230.69	3.7	3.75	4,225.70	4,225.69	
P-1921	I-609	I-2048	0	0	0	0	0	0	153	0.002418	18 inch	0.013	5.17	4,225.39	4,225.02	4,230.39	4,230.02	3.5	3.5	4,225.39	4,225.02	
P-1920	I-2048	I-606	0	0	0	0	0	0	62	0.002903	18 inch	0.013	5.66	4,225.02	4,224.84	4,230.02	4,229.84	3.5	3.5	4,225.02	4,224.84	
P-2792	I-606	I-653	0	0	0	0	0	0	176	0.002855	24 inch	0.013	12.3	4,224.84	4,224.32	4,229.84	4,229.32	3	3	4,224.84	4,224.32	
P-2791	I-653	I-128	0	0	0	0	0	0	106	0.002925	24 inch	0.013	12.23	4,224.32	4,224.01	4,229.32	4,229.01	3	3	4,224.32	4,224.01	
P-2790	I-128	I-123	0	0	0	0	0	0	327	0.002997	24 inch	0.013	12.38	4,224.01	4,223.03	4,229.01	4,228.03	3	3	4,224.01	4,223.96	
P-3200	I-123	I-3504	0	0	0	0	0	0	74	0.003108	30 inch	0.013	22.87	4,223.03	4,222.80	4,228.03	4,227.80	2.5	2.5	4,223.96	4,223.96	
P-3198	I-3493	I-3448	0	0	0	0	0	0	96	0.001667	30 inch	0.013	16.74	4,222.64	4,222.48	4,227.51	4,227.18	2.37	2.2	4,223.96	4,223.96	
P-3197	I-3448	I-3447	0	0	0	0	0	0	71	0.001127	30 inch	0.013	13.77	4,222.48	4,222.40	4,227.18	4,226.93	2.2	2.03	4,223.96	4,223.96	
P-3199	I-3504	I-3493	0	0	0	0	0	0	90	0.001778	30 inch	0.013	17.29	4,222.80	4,222.64	4,227.80	4,227.51	2.5	2.37	4,223.96	4,223.96	
P-3835	I-3447	I-3663	0	0	0	0	0	0	210	0.001048	36 inch	0.013	21.59	4,222.40	4,222.18	4,226.93	4,227.18	1.53	2	4,223.96	4,223.96	
P-3985	I-2597	I-3663	0	0	0	12.13	1.19	22.1	1,571.00	0.002368	30 inch	0.013	19.96	4,225.90	4,222.18	4,231.90	4,227.18	3.5	2.5	4,228.46	4,223.96	
P-3983	I-2595	I-2594	0	0	0	12.13	1.22	22.48	50	0.0046	30 inch	0.013	27.82	4,227.05	4,226.82	4,231.92	4,231.92	2.37	2.6	4,230.18	4,230.03	
P-3986	I-2594	I-2597	0	0	0	12.13	1.21	22.43	358	0.00257	30 inch	0.013	20.79	4,226.82	4,225.90	4,231.92	4,231.90	2.6	3.5	4,229.77	4,228.69	
P-111	I-567	I-566	0	0	0	0	0	0	319	0.002821	15 inch	0.013	3.43	4,264.05	4,263.15	4,269.05	4,268.15	3.75	3.75	4,264.05	4,263.15	
P-1600	I-566	I-2039	0	0	0	0	0	0	340	0.005147	18 inch	0.013	7.54	4,263.15	4,261.40	4,268.15	4,266.40	3.5	3.5	4,263.15	4,261.92	
P-2664	I-3159	I-568	0	0	0	0	0	5	291	0.004777	24 inch	0.013	15.63	4,262.50	4,261.11	4,267.50	4,266.11	3	3	4,263.29	4,262.02	
P-2651	I-568	I-3194	0	0	0	0	0	5	316	0.00462	24 inch	0.013	15.38	4,261.11	4,259.65	4,266.11	4,264.65	3	3	4,261.90	4,260.56	
P-2665	I-3194	I-3207	0	0	0	0	0	5	560	0.007107	24 inch	0.013	19.07	4,259.65	4,255.67	4,264.65	4,260.67	3	3	4,260.44	4,256.50	
P-2663	I-2039	I-568	0	0	0	0	0	0	62	0.004677	24 inch	0.013	15.47	4,261.40	4,261.11	4,266.40	4,266.11	3	3	4,261.92	4,261.92	
P-3340	I-3153	I-3207	0	0	0	0	0	0	59	0.008475	30 inch	0.013	37.76	4,256.17	4,255.67	4,261.17	4,260.67	2.5	2.5	4,256.42	4,256.42	
P-1603	I-1969	I-1968	0	0	0	0	0	0	349	0.006991	18 inch	0.013	8.78	4,260.51	4,258.07	4,265.51	4,263.07	3.5	3.5	4,260.51	4,258.07	
P-3873	I-1968	I-3153	0	0	0	0	0	0	303	0.006271	21 inch	0.013	12.55	4,258.07	4,256.17	4,263.07	4,261.17	3.25	3.25	4,258.07	4,256.42	
P-3874	I-3207	I-3469	0	0	0	0	0	5	239	0.005523	30 inch	0.013	30.48	4,255.67	4,254.35	4,260.67	4,259.35	2.5	2.5	4,256.41	4,255.18	
P-447	I-482	I-480	0	0	0	24.47	1.37	38.79	114	0.00693	15 inch	0.013	5.38	4,238.94	4,238.15	4,243.94	4,244.15	3.75	4.75	4,285.26	4,244.15	
P-446	I-480	O-71	0	0	0	24.47	1.37	38.76	156	0.007372	15 inch	0.013	5.55	4,238.15	4,237.00	4,244.15	4,238.11	4.75	-0.14	4,294.41	4,238.25	
P-3804	I-2291	I-482	61.56	0.3	24.47	24.47	1.38	38.93	186	0.038118	18 inch	0.013	41.01	4,246.03	4,238.94	4,251.03	4,243.94	3.5	3.5	4,250.33	4,243.94	
P-1738	I-2213	I-2214	0	0	0	0	0	0	111	0.004865	18 inch	0.013	7.33	4,253.41	4,252.87	4,257.33	4,257.87	2.42	3.5	4,253.41	4,252.87	
P-1739	I-2355	I-2213	0	0	0	0	0	0	268	0.000658	18 inch	0.013	3.08	4,253.64	4,253.41	4,258.02	4,257.33	2.68	2.42	4,253.64	4,253.41	
P-1737	I-2214	I-2378	0	0	0	0	0	0	99	0.007778	18 inch	0.013	9.26	4,252.87	4,252.10	4,257.87	4,257.10	3.5	3.5	4,252.87	4,252.84	
P-3117	I-2378	I-3487	0	0	0	0	0	5	140	0.014	30 inch	0.013	48.53	4,252.10	4,250.14	4,257.10	4,255.14	2.5	2.5	4,252.84	4,250.92	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3820	I-3487	I-2291	0	0	0	0	0	5	78	0.052692	30 inch	0.013	94.15	4,250.14	4,246.03	4,255.14	4,251.03	2.5	2.5	4,250.88	4,250.70	
P-3871	I-744	I-466	0	0	0	0	0	0	736	0.004742	15 inch	0.013	4.45	4,257.18	4,253.69	4,262.18	4,258.03	3.75	3.09	4,257.18	4,253.69	
P-3872	I-466	I-2355	0	0	0	0	0	0	190	0.000263	18 inch	0.013	1.7	4,253.69	4,253.64	4,258.03	4,258.02	2.84	2.88	4,253.69	4,253.64	
P-3675	I-3469	I-2378	0	0	0	0	0	5	552	0.004076	30 inch	0.013	26.19	4,254.35	4,252.10	4,259.35	4,257.10	2.5	2.5	4,255.09	4,252.85	
P-3210	I-2385	I-3510	27.32	0.3	8.2	8.2	0.59	11.48	74	0.002568	30 inch	0.013	20.78	4,234.54	4,234.35	4,240.03	4,240.02	2.99	3.17	4,236.54	4,236.50	
P-3407	I-3646	I-2940	0	0	0	8.2	0.59	11.46	245	0.002531	36 inch	0.013	33.55	4,234.06	4,233.44	4,239.99	4,235.44	2.93	2	4,236.43	4,236.38	
P-3451	I-3510	I-3646	0	0	0	8.2	0.59	11.47	110	0.002636	36 inch	0.013	34.24	4,234.35	4,234.06	4,240.02	4,239.99	2.67	2.93	4,236.47	4,236.45	
P-1807	I-699	I-2019	0	0	0	0	0	3.1	159	0.001132	18 inch	0.013	3.53	4,237.03	4,236.85	4,242.03	4,241.39	3.5	3.04	4,238.10	4,237.91	
P-1808	I-2019	I-2018	0	0	0	0	0	3.1	263	0.001141	18 inch	0.013	3.55	4,236.85	4,236.55	4,241.39	4,239.99	3.04	1.94	4,237.88	4,237.47	
P-1806	I-694	I-699	0	0	0	0	0	3.1	237	0.000253	18 inch	0.013	1.67	4,237.09	4,237.03	4,241.98	4,242.03	3.39	3.5	4,238.38	4,238.15	
P-448	I-427	I-426	0	0	0	0	0	3.1	149	0.002349	15 inch	0.013	3.13	4,237.95	4,237.60	4,242.95	4,242.00	3.75	3.15	4,239.09	4,238.80	
P-452	I-426	I-694	0	0	0	0	0	3.1	149	0.003423	15 inch	0.013	3.78	4,237.60	4,237.09	4,242.00	4,241.98	3.15	3.64	4,238.73	4,238.41	
P-3865	I-2018	I-3147	0	0	0	0	0	3.1	629	0.001049	24 inch	0.013	7.33	4,236.55	4,235.89	4,239.99	4,237.93	1.44	0.04	4,237.46	4,236.92	
P-3866	I-3147	I-3131	0	0	0	0	0	3.1	526	0.001046	24 inch	0.013	7.31	4,235.89	4,235.34	4,237.93	4,239.94	0.04	2.6	4,236.89	4,236.63	
P-3867	I-3131	I-3104	0	0	0	0	0	3.1	83	0.000964	24 inch	0.013	7.02	4,235.34	4,235.26	4,239.94	4,239.86	2.6	2.6	4,236.63	4,236.60	
P-3868	I-3104	I-3419	0	0	0	0	0	3.1	249	0.001647	30 inch	0.013	16.64	4,235.26	4,234.85	4,239.86	4,239.97	2.1	2.62	4,236.60	4,236.58	
P-3869	I-3419	I-2385	0	0	0	0	0	3.1	214	0.001449	30 inch	0.013	15.61	4,234.85	4,234.54	4,239.97	4,240.03	2.62	2.99	4,236.58	4,236.56	
P-740	I-479	I-583	0	0	0	0	0	3.5	147	0.003401	15 inch	0.013	3.77	4,237.49	4,236.99	4,242.49	4,241.99	3.75	3.75	4,238.70	4,238.28	
P-1948	I-583	I-2149	0	0	0	0	0	3.5	315	0.000603	18 inch	0.013	2.58	4,236.99	4,236.80	4,241.99	4,241.80	3.5	3.5	4,238.23	4,237.63	
P-3870	I-2149	I-2385	0	0	0	0	0	3.5	380	0.005947	18 inch	0.013	8.1	4,236.80	4,234.54	4,241.80	4,240.03	3.5	3.99	4,237.51	4,236.58	
P-3988	I-2940	O-70	0	0	0	8.2	0.59	11.44	334	0.001317	21 inch	0.013	5.75	4,233.44	4,233.00	4,238.44	4,233.00	3.25	-1.75	4,236.22	4,234.26	
P-3990	I-2596	I-479	0	0	0	0	0	3.5	222	0.002793	15 inch	0.013	3.41	4,238.11	4,237.49	4,243.11	4,242.49	3.75	3.75	4,239.44	4,238.79	
P-450	I-429	I-686	61.44	0.35	21.5	21.5	0.72	22.33	141	0.039433	15 inch	0.013	25.65	4,243.00	4,237.44	4,249.00	4,242.44	4.75	3.75	4,248.65	4,242.44	
P-3166	I-1004	I-429	0	0	0	0	0	6.8	51	0.019608	30 inch	0.013	57.43	4,244.00	4,243.00	4,249.00	4,249.00	2.5	3.5	4,248.57	4,248.56	
P-3850	I-3459	I-1004	0	0	0	0	0	0	569	0.001107	30 inch	0.013	13.65	4,244.63	4,244.00	4,249.63	4,249.00	2.5	2.5	4,248.58	4,248.58	
P-3991	I-2598	I-1004	0	0	0	0	0	6.8	163	0.018098	30 inch	0.013	55.18	4,246.95	4,244.00	4,252.95	4,249.00	3.5	2.5	4,248.61	4,248.59	
P-3993	I-686	O-73	0	0	0	21.5	0.71	22.29	266	0.001654	18 inch	0.013	4.27	4,237.44	4,237.00	4,242.44	4,237.00	3.5	-1.5	4,250.47	4,238.48	
P-177	I-52	I-51	69	0.35	24.15	24.15	1.4	33.98	60	0.003167	15 inch	0.013	3.63	4,229.07	4,228.88	4,233.07	4,232.88	2.75	2.75	4,249.48	4,232.88	
P-3120	I-51	I-3428	0	0.35	0	24.15	1.4	33.96	45	0.002889	30 inch	0.013	22.04	4,228.88	4,228.75	4,232.88	4,232.75	1.5	1.5	4,233.06	4,232.75	
P-3848	I-3428	I-3166	0	0.35	0	24.15	1.39	33.91	544	0.001379	36 inch	0.013	24.76	4,228.75	4,228.00	4,232.75	4,232.00	1	1	4,233.14	4,231.73	
P-3995	I-3166	O-74	0	0	0	24.15	1.35	32.96	359	0.00401	30 inch	0.013	25.97	4,228.00	4,226.40	4,232.00	4,226.40	1.5	-2.5	4,231.15	4,226.35	
P-2889	I-3163	I-3162	0	0	0	0	0	0	123	0.00252	24 inch	0.013	11.36	4,226.38	4,226.07	4,230.38	4,230.07	2	2	4,226.38	4,226.07	
P-3846	I-3184	I-3163	51.19	0	0	0	0	0	263	0.001217	24 inch	0.013	7.89	4,226.70	4,226.38	4,230.70	4,230.38	2	2	4,226.70	4,226.38	
P-4001	I-3162	O-75	0	0	0	0	0	0	103	0.003301	24 inch	0.013	13	4,226.07	4,225.73	4,230.07	4,225.73	2	-2	4,226.07	4,225.73	
P-2740	I-2119	I-3193	23.69	0.3	7.11	11.06	1.06	11.83	116	0.018707	24 inch	0.013	30.94	4,283.17	4,281.00	4,288.17	4,286.00	3	3	4,284.41	4,281.86	
P-3953	I-448	I-2119	13.16	0.3	3.95	3.95	1.27	5.07	415	0.006217	15 inch	0.013	5.09	4,285.75	4,283.17	4,290.27	4,288.17	3.27	3.75	4,287.25	4,284.69	
P-4004	I-3193	O-77	0	0	0	11.06	1.06	11.78	906	0.009503	27 inch	0.013	30.19	4,281.00	4,272.39	4,286.00	4,274.00	2.75	-0.64	4,282.19	4,273.37	
P-4010	I-2607	O-80	3.69	0.3	1.11	1.11	1.83	2.04	109	0.003119	15 inch	0.013	3.61	4,290.34	4,290.00	4,293.34	4,293.18	1.75	1.93	4,291.01	4,290.57	
P-3203	I-3503	O-81	2.74	0.28	0.77	4.7	1.48	6.99	113	0.003894	30 inch	0.013	25.59	4,288.94	4,288.50	4,294.01	4,293.93	2.57	2.93	4,289.83	4,289.38	
P-1598	I-345	I-138	1.73	0.3	0.52	0.52	1.89	0.99	298	0.008186	18 inch	0.013	9.5	4,292.42	4,289.98	4,297.42	4,293.98	3.5	2.5	4,292.79	4,290.96	
P-3914	I-138	I-3503	11.38	0.3	3.41	3.93	1.52	6.01	166	0.006265	18 inch	0.013	8.31	4,289.98	4,288.94	4,293.98	4,294.01	2.5	3.57	4,290.93	4,289.95	
P-1891	I-2049	O-82	37.4	0.35	13.09	19.65	1.54	30.53	170	0.012765	18 inch	0.013	11.87	4,245.05	4,242.88	4,250.05	4,247.88	3.5	3.5	4,258.77	4,244.37	
P-1886	I-2356	I-2159	0	0	0	0	0	0	60	0.007	18 inch	0.013	8.79	4,247.12	4,246.70	4,252.12	4,251.70	3.5	3.5	4,247.12	4,246.70	
P-3927	I-114	I-2356	0	0	0	0	0	0	305	0.00741	18 inch	0.013	9.04	4,249.38	4,247.12	4,254.38	4,252.12	3.5	3.5	4,249.38	4,247.12	
P-3928	I-419	I-114	0	0	0	0	0	0	1,010.00	0.005465	18 inch	0.013	7.77	4,254.90	4,249.38	4,259.90	4,254.38	3.5	3.5	4,254.90	4,249.38	
P-3929	I-362	I-419	0	0	0	0	0	0	325	0.010277	15 inch	0.013	6.55	4,258.24	4,254.90	4,263.24	4,259.90	3.75	3.75	4,258.24	4,254.90	
P-3930	I-2159	O-82	0	0	0	0	0	0	253	0.015099	18 inch	0.013	12.91	4,246.70	4,242.88	4,251.70	4,247.88	3.5	3.5	4,246.70	4,242.88	
P-3932	I-2011	I-2323	18.75	0.35	6.56	6.56	1.63	10.78	565	0.003876	18 inch	0.013	6.54	4,251.94	4,249.75	4,256.91	4,254.75	3.47	3.5	4,260.70	4,254.75	
P-3933	I-2323	I-2177	0	0	0	6.56	1.6	10.57	158	0.003734	18 inch	0.013	6.42	4,249.75	4,249.16	4,254.75	4,254.16	3.5	3.5	4,255.76	4,254.16	
P-3934	I-2177	I-2234	0	0	0	6.56	1.59	10.51	557	0.00535	18 inch	0.013	7.68	4,249.16	4,246.18	4,254.16	4,251.18	3.5	3.5	4,258.76	4,251.18	
P-3935	I-2234	I-2049	0	0	0	6.56	1.56	10.3	261	0.00433	18 inch	0.013	6.91	4,246.18	4,245.05	4,251.18	4,250.05	3.5	3.5	4,252.56	4,250.05	
P-597	I-399	I-401	10.68	0.25	2.67	2.67	1.42	3.83	194	0.004021	15 inch	0.013	4.1	4,262.62	4,261.84	4,265.62	4,265.84	2.75	2.75	4,263.58	4,262.87	
P-598	I-401	O-84	0	0	0	2.67	1.41	3.78	144	0.00375	15 inch	0.013	3.96	4,261.84	4,261.30	4,265.84	4,264.73	2.75	2.18	4,262.81	4,262.09	
P-4003	I-2599	O-85	0	0	0	0	0	7.7	37	0.107568	15 inch	0.013	21.19	4,224.77	4,220.79	4,224.77	4,222.79	-1.25	0.75	4,225.87	4,221.35	
P-2477	I-2313	I-2941	4.37	0.28	1.22	1.22	0.76	0.93	252	0.005794	21 inch	0.013	12.06	4,254.44	4,252.98	4,259.44	4,257.98	3.25	3.25	4,254.78	4,253.41	
P-3813	I-2941	I-305	0	0	0	1.22	0.75	0.92	533	0.005103	15 inch	0.013	4.61	4,252.98	4,250.26	4,257.98	4,255.26	3.75	3.75	4,253.36	4,251.25	
P-441	I-477	I-308	13.83	0.28	3.87	3.87	1.02	4	268	0.003582	15 inch	0.013	3.87	4,251.98	4,251.02	4,256.90	4,256.02	3.67	3.75	4,253.04	4,252.02	
P-148	I-308	I-305	0	0	0	3.87	1.01	3.93	50	0.0152	15 inch	0.013	7.96	4,251.02	4,250.26	4,256.02	4,255.26	3.75	3.75	4,251.82	4,251.27	
P-3996	I-305	I-2611	0	0	0	5.1	0.73	3.73	2	0.01	30 inch	0.013	41.01	4,250.26	4,250.24	4,255.26	4,255.26	2.5	2.52	4,251.25	4,251.25	
P-4006	I-2611	O-72	0	0	0	8.52	0.73	6.24	125	0.00192	30 inch	0.013	17.97	4,250.24	4,250.00	4,255.26	4,250.00	2.52	-2.5	4,251.24	4,250.83	
P-4009	I-2610	I-2611	13.7	0.25	3.42	3.42	0.91	3.15	101	0.003069	15 inch	0.013	3.58	4,250.55	4,250.24	4,255.52	4,255.26	3.72	3.77	4,251.51	4,251.28	
P-2809	I-2204	I-3220	36.23	0.3	10.87	12.4	0.89	11.17	977	0.005875	24 inch	0.013	17.34	4,272.12	4,266.38	4,278.12	4,271.38	4	3	4,273.32	4,267.68	
P-3828	J-1	I-3691	N/A	N/A	N/A	18.35	0.85	15.75	765	0.007843	36 inch	0.013	59.07	4,260.95	4,254.95	4,265.02	4,259.95	2.07	2	4,262.22	4,256.27	
P-3984	I-3691	O-69	1.62	0.85	1.38	19.73	0.84	16.69	667	0.009145	36 inch	0.013	63.78	4,254.95	4,248.85	4,259.95	4,251.85	2	0	4,256.26	4,249.90	
P-3987	I-3220	J-1	19.84	0.3	5.95	18.35	0.87	16.18	1,200.00	0.004525	36 inch	0.013	44.86	4,266.38	4,260.95	4,271.38	4,266.02	2	2.07	4,267.66	4,262.20	
P-4018	I-2613	I-2204	0	0	0	1.53	1.51	2.32	413	0.001574	18 inch	0.013	4.17	4,272.77	4,272.12	4,277.77	4,278.12	3.5	4.5	4,273.64	4,273.34	
P-3825	I-3788	I-385	1.8	0.85	1.53	1.53	1.6	2.47	1,030.00	0.009709	15 inch	0.013	6.36	4,285.55	4,275.55	4,290.55	4,280.55	3.75	3.75	4,285.18	4,276.09	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-4036	I-385	I-2613	0	0	0	1.53	1.53	2.36	288	0.009653	18 inch	0.013	10.32	4,275.55	4,272.77	4,280.55	4,277.77	3.5	3.5	4,276.13	4,273.64	
P-4026	I-2617	I-2621	0	0	0	0	0	0	1,170.00	0.001974	24 inch	0.013	10.05	4,278.71	4,276.40	4,290.00	4,280.00	9.29	1.6	4,278.71	4,276.40	
P-4027	I-2621	I-3220	0	0	0	0	0	0	1,391.00	0.007203	24 inch	0.013	19.2	4,276.40	4,266.38	4,280.00	4,271.38	1.6	3	4,276.40	4,267.66	
P-4025	I-2619	I-2620	0	0	0	0	0	0	1,170.00	0.009385	15 inch	0.013	6.26	4,287.71	4,276.73	4,290.00	4,280.00	1.04	2.02	4,287.71	4,276.73	
P-4039	I-2620	I-2621	0	0	0	0	0	0	46	0.007174	15 inch	0.013	5.47	4,276.73	4,276.40	4,280.00	4,280.00	2.02	2.35	4,276.73	4,276.40	
P-124	I-785	I-784	63.11	0.35	22.09	22.09	0.99	22.03	39	0.026923	18 inch	0.013	17.23	4,267.89	4,266.84	4,271.89	4,271.94	2.5	3.6	4,271.29	4,269.58	
P-1607	I-2118	I-785	0	0.3	0	0	0	0	476	0.005504	18 inch	0.013	7.79	4,270.51	4,267.89	4,275.51	4,271.89	3.5	2.5	4,271.89	4,271.89	
P-3392	I-3116	I-784	0.09	0.85	0.08	0.3	0.93	9.28	364	0.004093	36 inch	0.013	42.67	4,268.33	4,266.84	4,273.33	4,271.94	2	2.1	4,269.50	4,269.47	
P-3892	I-2164	I-3116	0.13	0.85	0.11	0.22	0.94	9.21	267	0.00236	24 inch	0.013	10.99	4,268.96	4,268.33	4,273.96	4,273.33	3	3	4,270.35	4,269.51	
P-3893	I-3916	I-2164	0.13	0.85	0.11	0.11	0.95	9.11	380	0.004132	21 inch	0.013	10.18	4,270.53	4,268.96	4,276.03	4,273.96	3.75	3.25	4,271.82	4,270.36	
P-3894	I-273	I-3916	165	0	0	0	0	9	114	0.004123	21 inch	0.013	10.17	4,271.00	4,270.53	4,276.00	4,276.03	3.25	3.75	4,272.31	4,271.93	
P-3978	I-784	I-2591	0.11	0.85	0.09	22.48	0.92	29.86	503	0.00167	36 inch	0.013	27.26	4,266.84	4,266.00	4,271.94	4,270.11	2.1	1.11	4,269.45	4,268.46	
P-4029	I-2591	O-88	17.5	0.3	5.25	27.73	0.91	34.35	205	0.002195	36 inch	0.013	31.25	4,266.00	4,265.55	4,270.11	4,270.00	1.11	1.45	4,268.44	4,267.45	
P-2406	I-2246	I-2133	45.2	0.25	11.3	11.3	1.4	15.98	594	0.006128	18 inch	0.013	8.22	4,306.94	4,303.30	4,311.94	4,308.58	3.5	3.78	4,322.32	4,308.58	
P-4011	I-2132	I-2133	0	0	0	13.7	1.62	22.41	146	0.002397	36 inch	0.013	32.65	4,303.65	4,303.30	4,309.18	4,308.58	2.53	2.28	4,308.74	4,308.58	
P-4014	I-2087	I-2132	39.14	0.35	13.7	13.7	1.63	22.45	45	0.016222	30 inch	0.013	55.37	4,304.47	4,303.65	4,309.47	4,309.18	2.5	3.03	4,309.03	4,308.89	
P-4030	I-2133	O-89	0	0	0	25	1.38	34.78	24	0.054167	18 inch	0.013	24.45	4,303.30	4,302.00	4,308.58	4,308.58	3.78	5.08	4,306.13	4,303.50	
P-1837	I-2088	I-2087	0	0	0	0	0	0	169	0.001065	18 inch	0.013	3.43	4,304.65	4,304.47	4,309.65	4,309.47	3.5	3.5	4,309.35	4,309.35	
P-3937	I-3459	I-2088	0	0	0	0	0	0	237	0.006878	30 inch	0.013	34.01	4,306.28	4,304.65	4,311.28	4,309.65	2.5	2.5	4,309.35	4,309.35	
P-552	I-458	I-440	0	0	0	0	0	0	248	0.01125	15 inch	0.013	6.85	4,326.19	4,323.40	4,331.19	4,328.40	3.75	3.75	4,326.19	4,323.40	
P-3936	I-440	I-229	0	0	0	0	0	0	1,459.00	0.010733	18 inch	0.013	10.88	4,323.40	4,307.74	4,328.40	4,312.74	3.5	3.5	4,323.40	4,309.35	
P-3184	I-229	I-3459	0	0	0	0	0	0	179	0.008156	30 inch	0.013	37.04	4,307.74	4,306.28	4,312.74	4,311.28	2.5	2.5	4,309.35	4,309.35	
P-3626	I-464	I-3821	0	0	0	0	0	39.04	89	0.01191	48 inch	0.013	156.75	4,281.56	4,280.50	4,286.56	4,285.50	1	1	4,283.42	4,282.47	
P-3548	I-2368	I-3675	0	0	0	0	0	39.04	2,253.00	0.005099	30 inch	0.013	39.12	4,302.44	4,281.94	4,305.71	4,286.94	0.77	2.5	4,304.55	4,284.10	
P-3625	I-3675	I-464	0	0	0	0	0	39.04	31	0.012258	48 inch	0.013	159.03	4,281.94	4,281.56	4,286.94	4,286.56	1	1	4,283.80	4,283.50	
P-3629	I-879	I-3826	0	0	0	0	0	39.04	106	0.006509	48 inch	0.013	115.89	4,277.65	4,276.96	4,282.65	4,281.96	1	1	4,279.51	4,279.09	
P-3752	I-3826	O-83	0	0	0	0	0	39.04	74	0.007432	48 inch	0.013	123.83	4,276.96	4,276.41	4,281.96	4,281.41	1	1	4,278.82	4,277.99	
P-3915	I-3821	I-879	0	0	0	0	0	39.04	325	0.008769	48 inch	0.013	134.51	4,280.50	4,277.65	4,285.50	4,282.65	1	1	4,282.36	4,279.60	
P-3384	I-3703	I-3689	0	0	0	0	0	10	88	0.016591	18 inch	0.013	13.53	4,320.35	4,316.89	4,325.35	4,323.89	3.5	3.5	4,321.57	4,320.59	
P-3385	I-3689	I-3636	0	0	0	0	0	15.17	62	0.008387	24 inch	0.013	20.72	4,316.89	4,316.37	4,323.89	4,323.37	3	3	4,320.29	4,320.18	
P-3441	I-3636	I-3122	0	0	0	0	0	16.77	1,566.00	0.008825	24 inch	0.013	21.25	4,318.37	4,304.55	4,323.37	4,307.97	3	1.42	4,319.85	4,306.57	
P-4032	I-3122	I-2368	0	0	0	0	0	16.77	316	0.006677	24 inch	0.013	18.48	4,304.55	4,302.44	4,307.97	4,305.71	1.42	1.27	4,306.55	4,304.81	
P-4033	I-2623	I-2368	0	0	0	0	0	22.27	28	0.073571	30 inch	0.013	111.25	4,304.50	4,302.44	4,308.58	4,305.71	1.58	0.77	4,306.11	4,304.97	
P-2517	I-2973	O-78	16.26	0.35	5.69	5.69	1.49	8.52	67	0.014776	21 inch	0.013	19.26	4,270.29	4,269.30	4,275.29	4,274.30	3.25	3.25	4,271.37	4,270.12	
P-1735	I-2261	I-2252	11.67	0.3	3.5	3.5	1.15	4.05	404	0.009653	18 inch	0.013	10.32	4,255.05	4,251.15	4,260.05	4,256.15	3.5	3.5	4,255.82	4,251.80	
P-1560	I-2078	I-212	0	0	0	11.36	0.94	10.75	129	0.007364	18 inch	0.013	9.01	4,247.98	4,247.03	4,252.98	4,252.03	3.5	3.5	4,250.68	4,249.34	
P-3049	I-212	I-3390	39.06	0.35	13.67	25.03	0.94	23.63	437	0.009977	27 inch	0.013	30.93	4,247.03	4,242.67	4,252.03	4,249.67	2.75	4.75	4,248.73	4,246.36	
P-2738	I-3096	O-55	21.07	0.3	6.32	6.32	1.53	9.73	74	0.031351	24 inch	0.013	40.05	4,243.45	4,241.13	4,244.88	4,248.13	-0.57	5	4,244.57	4,241.81	
P-3073	I-3390	O-55	10.14	0.15	1.52	32.55	0.93	36.1	90	0.017111	24 inch	0.013	29.59	4,242.67	4,241.13	4,249.67	4,248.13	5	5	4,245.36	4,243.06	
P-3947	I-2262	I-2078	0	0	0	3.5	1.12	3.96	609	0.005205	24 inch	0.013	16.32	4,251.16	4,247.98	4,256.15	4,252.98	3	3	4,251.85	4,250.85	
P-1556	I-209	I-2137	0	0	0	7.86	0.95	7.56	74	0.009324	18 inch	0.013	10.14	4,255.37	4,254.68	4,260.37	4,259.68	3.5	3.5	4,256.44	4,255.81	
P-1557	I-2137	I-2297	0	0	0	7.86	0.95	7.55	85	0.019882	18 inch	0.013	14.81	4,254.68	4,252.99	4,259.68	4,257.99	3.5	3.5	4,255.74	4,254.15	
P-3948	I-2182	I-209	0	0	0	7.86	0.97	7.65	566	0.006396	18 inch	0.013	8.4	4,258.99	4,255.37	4,263.99	4,260.37	3.5	3.5	4,260.11	4,256.74	
P-3949	I-2297	I-2078	0	0	0	7.86	0.95	7.54	644	0.00778	18 inch	0.013	9.26	4,252.99	4,247.98	4,257.99	4,252.98	3.5	3.5	4,254.05	4,250.79	
P-3965	I-3815	I-2182	22.46	0.35	7.86	7.86	0.98	7.73	544	0.006268	15 inch	0.013	5.11	4,262.40	4,258.99	4,267.40	4,263.99	3.75	3.75	4,268.20	4,260.40	
P-3016	I-216	I-3203	25.45	0.35	8.91	11.99	0.98	15	171	0.004971	24 inch	0.013	15.95	4,261.70	4,260.85	4,266.76	4,266.19	3.06	3.34	4,263.24	4,262.31	
P-3946	I-217	I-216	0	0	0	3.09	1.27	7.16	345	0.005391	18 inch	0.013	7.71	4,263.56	4,261.70	4,269.56	4,266.76	3.5	3.56	4,264.71	4,263.27	
P-4008	I-2606	I-217	0	0	0	3.09	1.3	7.24	314	0.004268	18 inch	0.013	6.86	4,264.90	4,263.56	4,269.99	4,268.56	3.59	3.5	4,266.21	4,264.74	
P-4040	I-3203	I-2628	0	0	0	11.99	0.97	14.96	621	0.005894	24 inch	0.013	17.37	4,260.85	4,257.19	4,266.19	4,266.19	3.34	7	4,262.28	4,258.58	
P-4041	I-2628	I-3390	0	0	0	6	0.96	11.37	1,467.00	0.009898	24 inch	0.013	22.51	4,257.19	4,242.67	4,266.19	4,249.67	7	5	4,258.40	4,245.64	
P-3620	I-3616	I-23	0	0	0	0	0	0	1,119.00	0.01008	60 inch	0.013	261.47	4,278.66	4,267.38	4,283.66	4,271.38	0	-1	4,278.66	4,268.61	
P-16	I-22	I-23	0	0	0	0	0	7.93	213	0.028216	15 inch	0.013	10.85	4,273.39	4,267.38	4,276.39	4,271.38	1.75	2.75	4,274.50	4,268.74	
P-4042	I-23	I-2628	0	0	0	0	0	7.93	1,616.00	0.006306	18 inch	0.013	8.34	4,267.38	4,257.19	4,271.38	4,266.19	2.5	7.5	4,268.55	4,258.56	
P-1824	I-432	I-219	17.62	0.35	6.17	6.17	1.33	8.29	55	0.005091	18 inch	0.013	7.49	4,272.94	4,272.66	4,277.94	4,277.66	3.5	3.5	4,274.25	4,273.81	
P-3945	I-219	I-745	0	0	0	6.17	1.33	8.26	629	0.012194	18 inch	0.013	11.6	4,272.66	4,264.99	4,277.66	4,269.99	3.5	3.5	4,273.77	4,266.24	
P-1469	I-435	I-432	17.65	0.35	6.18	6.18	1.36	8.48	592	0.011334	15 inch	0.013	6.88	4,279.65	4,272.94	4,284.65	4,277.94	3.75	3.75	4,284.72	4,274.53	
P-4055	I-745	I-2606	0	0	0	3.09	1.3	4.04	4	0.0225	18 inch	0.013	15.76	4,264.99	4,264.90	4,269.99	4,269.99	3.5	3.59	4,266.23	4,266.23	
P-4056	I-2633	I-2634	0	0	0	6.17	1.33	8.29	685	0.011606	15 inch	0.013	6.96	4,272.94	4,264.99	4,277.94	4,269.99	3.75	3.75	4,277.83	4,266.55	
P-4057	I-2634	I-2635	0	0	0	9.26	1.3	12.1	1,456.00	0.005357	21 inch	0.013	11.6	4,264.99	4,257.19	4,269.99	4,266.19	3.25	7.25	4,266.51	4,258.86	
P-4058	I-2635	O-55	0	0	0	15.26	0.96	20.34	1,559.00	0.010301	24 inch	0.013	22.96	4,257.19	4,241.13	4,266.19	4,248.13	7	5	4,258.81	4,242.59	
P-17	I-26	I-25	0	0	0	0	0	0	140	0.001786	12 inch	0.013	1.51	4,273.81	4,273.56	4,278.81	4,278.56	4	4	4,273.81	4,273.56	
P-3635	I-1995	I-3823	30.28	0.35	10.6	36.15	1.2	101.46	564	0.006507	48 inch	0.013	115.87	4,263.83	4,260.16	4,267.83	4,265.16	0	1	4,266.89	4,264.18	
P-3636	I-3823	I-3830	0	0	0	36.15	1.18	100.78	59	0.00596	48 inch	0.013	110.88	4,260.16	4,259.57	4,265.16	4,264.57	1	1	4,263.58	4,263.28	
P-3439	I-3653	I-3078	0	0	0	0	0	0	125	0.00952	36 inch	0.013	65.07	4,271.35	4,270.16	4,276.35	4,275.16	2	2	4,273.04	4,273.04	
P-3440	I-2265	I-3653	0	0	0	0	0	0	66	0.011818	36 inch	0.013	72.5	4,272.13	4,271.35	4,277.13	4,276.35	2	2	4,273.04	4,273.04	
P-3634	I-3078	I-1995	29.1	0.35	10.19	25.55	1.23	89.53	1,005.00	0.006299	48 inch	0.013	113.99	4,270.16	4,263.83	4,275.16	4,267.83	1	0	4,273.03	4,266.95	
P-3633	I-3794	I-3078	0	0	0	15.37	1.25	77.05	335	0.006418	48 inch	0.013	115.07	4,272.31	4,270.16	4,277.31	4,275.16	1	1	4,274.97	4,273.08	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3597	I-3154	I-3794	0	0	0	15.37	1.26	77.26	357	0.00507	48 inch	0.013	102.27	4,274.12	4,272.31	4,279.12	4,277.31	1	1	4,276.78	4,275.00	
P-3821	I-3830	O-53	0	0	0	36.15	1.18	100.65	247	0.012227	48 inch	0.013	158.82	4,259.57	4,256.55	4,264.57	4,261.55	1	1	4,262.61	4,258.89	
P-3550	I-3664	I-3686	5.3	0.3	1.59	7.61	1.51	11.58	120	0.008417	36 inch	0.013	61.19	4,323.01	4,322.00	4,328.01	4,329.75	2	4.75	4,324.09	4,323.83	
P-3551	I-3500	I-3664	0	0	0	6.02	1.52	9.2	118	0.006864	36 inch	0.013	55.26	4,323.82	4,323.01	4,328.82	4,328.01	2	2	4,324.78	4,324.24	
P-1913	I-2217	I-2216	0	0	0	0	0	7	2,549.00	0.007073	18 inch	0.013	8.83	4,318.20	4,300.17	4,323.20	4,305.17	3.5	3.5	4,319.22	4,302.22	
P-3371	I-3642	I-2216	7.98	0.35	2.79	15.37	1.38	34.46	308	0.005097	36 inch	0.013	47.62	4,301.74	4,300.17	4,305.74	4,305.17	1	2	4,303.65	4,302.20	
P-3561	I-2242	I-3642	7.99	0.35	2.8	12.58	1.47	31.77	2,281.00	0.007532	36 inch	0.013	57.88	4,318.92	4,301.74	4,323.92	4,305.74	2	1	4,320.75	4,303.68	
P-3562	I-3686	I-2242	7.25	0.3	2.17	9.76	1.5	27.96	660	0.004667	36 inch	0.013	45.56	4,322.00	4,318.92	4,329.75	4,323.92	4.75	2	4,323.71	4,320.77	
P-1927	I-348	I-2421	0	0	0	0	0	6.2	181	0.010718	18 inch	0.013	10.87	4,287.01	4,285.07	4,292.01	4,290.07	3.5	3.5	4,287.97	4,287.25	
P-3560	I-2216	I-2421	0	0	0	15.37	1.36	41.23	1,372.00	0.011006	42 inch	0.013	105.54	4,300.17	4,285.07	4,305.17	4,290.07	1.5	1.5	4,302.17	4,287.24	
P-3598	I-3519	I-3797	0	0	0	15.37	1.3	46.41	502	0.003725	42 inch	0.013	61.4	4,277.01	4,275.14	4,282.01	4,280.14	1.5	1.5	4,279.29	4,278.11	
P-3599	I-2421	I-3519	0	0	0	15.37	1.32	46.72	658	0.012249	42 inch	0.013	111.35	4,285.07	4,277.01	4,290.07	4,282.01	1.5	1.5	4,287.21	4,279.31	
P-3631	I-3797	I-3822	0	0	0	15.37	1.27	74.42	120	0.00325	48 inch	0.013	81.88	4,275.14	4,274.75	4,280.14	4,279.97	1	1.22	4,278.07	4,277.57	
P-3755	I-3911	I-3822	15.1	0	0	0	0	3.02	118	0.007881	15 inch	0.013	5.73	4,275.68	4,274.75	4,280.68	4,279.97	3.75	3.97	4,277.81	4,277.56	
P-3824	I-3822	I-3154	0	0	0	15.37	1.27	77.36	150	0.0042	48 inch	0.013	93.09	4,274.75	4,274.12	4,279.97	4,279.12	1.22	1	4,277.54	4,276.81	
P-3906	I-3685	I-3500	10.74	0.3	3.22	6.02	1.54	9.36	394	0.004772	36 inch	0.013	46.07	4,325.70	4,323.82	4,330.70	4,328.82	2	2	4,326.67	4,324.74	
P-3907	I-3482	I-3685	0	0	0	2.79	1.57	4.43	296	0.002838	36 inch	0.013	35.53	4,326.54	4,325.70	4,331.54	4,330.70	2	2	4,327.26	4,326.68	
P-576	I-875	I-874	0	0	0	0	0	0	199	0.000905	15 inch	0.013	1.94	4,288.10	4,287.92	4,292.86	4,292.92	3.51	3.75	4,288.10	4,287.92	
P-3916	I-874	I-2009	0	0	0	0	0	0	1,366.00	0.010154	18 inch	0.013	10.58	4,287.92	4,274.05	4,292.92	4,279.05	3.5	3.5	4,287.92	4,274.05	
P-3917	I-2009	I-2265	0	0	0	0	0	0	481	0.003992	18 inch	0.013	6.64	4,274.05	4,272.13	4,279.05	4,277.13	3.5	3.5	4,274.05	4,273.04	
P-3918	I-2198	I-1995	0	0	0	0	0	0	419	0.00136	18 inch	0.013	3.87	4,264.40	4,263.83	4,269.40	4,267.83	3.5	2.5	4,266.89	4,266.69	
P-3919	I-257	I-2198	0	0	0	0	0	0	425	0.012282	18 inch	0.013	11.64	4,269.62	4,264.40	4,274.62	4,269.40	3.5	3.5	4,269.62	4,266.89	
P-3920	I-25	I-257	0	0	0	0	0	0	892	0.004417	15 inch	0.013	4.29	4,273.56	4,269.62	4,278.56	4,274.62	3.75	3.75	4,273.56	4,269.62	
P-4000	I-2603	I-3482	9.31	0.3	2.79	2.79	1.74	4.89	1,121.00	0.003943	36 inch	0.013	41.88	4,330.96	4,326.54	4,335.96	4,331.54	2	2	4,331.65	4,327.26	
P-4012	I-2608	I-348	0	0	0	0	0	6.2	146	0.013151	15 inch	0.013	7.41	4,288.93	4,287.01	4,293.93	4,292.01	3.75	3.75	4,289.94	4,287.88	
P-4016	I-2609	I-3797	0	0	0	0	0	28.4	114	0.01114	30 inch	0.013	43.29	4,276.41	4,275.14	4,281.41	4,280.14	2.5	2.5	4,278.73	4,278.23	
P-4028	I-2612	I-3686	0	0	0	0	0	13.13	137	0.007299	36 inch	0.013	56.98	4,323.00	4,322.00	4,329.75	4,329.75	3.75	4.75	4,324.15	4,323.87	
P-4017	I-885	I-2614	5.46	0.35	1.91	1.91	2.16	4.17	477	0.006834	15 inch	0.013	5.34	4,274.23	4,270.97	4,279.23	4,275.97	3.75	3.75	4,275.06	4,271.89	
P-4019	I-2614	I-2616	0	0	0	1.91	2.08	4	531	0.00565	18 inch	0.013	7.9	4,270.97	4,267.97	4,275.97	4,275.97	3.5	6.5	4,271.74	4,269.23	
P-4020	I-2616	O-91	0	0	0	5.74	1.42	8.19	1,798.00	0.006352	18 inch	0.013	8.37	4,267.97	4,256.55	4,275.97	4,261.55	6.5	3.5	4,269.17	4,257.66	
P-4021	I-2615	I-2616	10.93	0.35	3.83	3.83	1.42	5.49	139	0.014388	15 inch	0.013	7.75	4,269.97	4,267.97	4,277.97	4,275.97	6.75	6.75	4,270.92	4,269.34	
P-1814	I-2107	I-2317	19.64	0	0	0	0	0	78	0.001923	18 inch	0.013	4.61	4,232.28	4,232.13	4,237.28	4,237.13	3.5	3.5	4,232.28	4,232.13	
P-473	I-194	I-195	0	0	0	0	0	0	53	0.001132	15 inch	0.013	2.17	4,233.00	4,232.94	4,238.00	4,237.94	3.75	3.75	4,233.00	4,232.94	
P-3858	I-195	I-2107	0	0	0	0	0	0	363	0.001818	18 inch	0.013	4.48	4,232.94	4,232.28	4,237.94	4,237.28	3.5	3.5	4,232.94	4,232.28	
P-3859	I-203	I-194	0	0	0	0	0	0	445	0.002989	15 inch	0.013	3.53	4,234.33	4,233.00	4,239.33	4,238.00	3.75	3.75	4,234.33	4,233.00	
P-4022	I-2317	O-92	0	0	0	0	0	0	94	0.001809	18 inch	0.013	4.47	4,232.13	4,231.96	4,237.13	4,236.96	3.5	3.5	4,232.13	4,231.96	
P-1809	I-908	I-2377	0	0	0	0	0	0	237	0.002236	18 inch	0.013	4.97	4,230.05	4,229.52	4,235.05	4,234.52	3.5	3.5	4,231.59	4,231.59	
P-2736	I-2377	I-1966	0	0	0	0	0	3.92	306	0.001536	24 inch	0.013	8.87	4,229.52	4,229.05	4,234.52	4,233.86	3	2.81	4,231.59	4,231.49	
P-3167	I-1966	I-3473	0	0	0	0	0	3.92	57	0.001754	30 inch	0.013	17.18	4,229.05	4,228.95	4,233.86	4,233.80	2.31	2.35	4,231.49	4,231.48	
P-3857	I-2327	I-2377	0	0	0	0	0	3.92	287	0.001742	21 inch	0.013	6.61	4,230.02	4,229.52	4,235.02	4,234.52	3.25	3.25	4,231.78	4,231.60	
P-3860	I-702	I-714	0	0	0	0	0	0	627	0.001834	15 inch	0.013	2.77	4,232.72	4,231.57	4,237.72	4,236.57	3.75	3.75	4,232.72	4,231.59	
P-3861	I-714	I-908	0	0	0	0	0	0	871	0.001745	15 inch	0.013	2.7	4,231.57	4,230.05	4,236.57	4,235.05	3.75	3.75	4,231.59	4,231.59	
P-3862	I-1981	I-539	0	0	0	0	0	0	343	0.001662	18 inch	0.013	4.28	4,231.96	4,231.39	4,236.96	4,236.39	3.5	3.5	4,232.57	4,232.57	
P-3863	I-898	I-539	0	0	0	0	0	3.92	450	0.001239	18 inch	0.013	3.7	4,231.96	4,231.39	4,236.96	4,236.39	3.5	3.5	4,233.24	4,232.63	
P-3864	I-539	I-2327	0	0	0	0	0	3.92	567	0.002416	18 inch	0.013	5.16	4,231.39	4,230.02	4,236.39	4,235.02	3.5	3.5	4,232.55	4,231.81	
P-4043	I-3473	O-93	40.87	0.35	14.3	14.3	1.35	23.39	276	0.001377	30 inch	0.013	15.22	4,228.95	4,228.57	4,233.80	4,229.35	2.35	-1.72	4,231.46	4,230.22	
P-3127	I-739	I-796	5.73	0.35	2.01	12.85	1.23	25.9	500	0.0031	30 inch	0.013	22.84	4,224.54	4,222.99	4,229.07	4,227.91	2.03	2.42	4,227.77	4,225.77	
P-3128	I-3451	I-739	0	0	0	3.91	1.24	14.91	136	0.003162	30 inch	0.013	23.06	4,224.97	4,224.54	4,229.48	4,229.07	2.01	2.03	4,227.99	4,227.81	
P-2706	I-3101	I-994	0	0	0	0	0	10.02	196	0.001888	24 inch	0.013	9.83	4,226.20	4,225.83	4,229.99	4,229.83	1.79	2	4,228.04	4,228.65	
P-3130	I-994	I-990	11.16	0.35	3.91	3.91	1.29	15.09	268	0.00153	30 inch	0.013	16.04	4,225.83	4,225.42	4,229.83	4,229.65	1.5	1.73	4,228.58	4,228.22	
P-3344	I-990	I-3451	0	0	0	3.91	1.26	14.97	145	0.003103	30 inch	0.013	22.85	4,225.42	4,224.97	4,229.65	4,229.48	1.73	2.01	4,228.20	4,228.01	
P-2704	I-2396	I-3065	10.34	0.35	3.62	6.94	1.68	11.75	124	0.001129	24 inch	0.013	7.6	4,225.10	4,224.96	4,229.10	4,228.96	2	2	4,229.08	4,228.75	
P-3851	I-3065	I-739	0	0	0	6.94	1.65	11.55	328	0.00128	24 inch	0.013	8.09	4,224.96	4,224.54	4,228.96	4,229.07	2	2.53	4,228.73	4,227.87	
P-3852	I-534	I-2396	9.48	0.35	3.32	3.32	1.9	6.35	886	0.002709	18 inch	0.013	5.47	4,227.50	4,225.10	4,231.50	4,229.10	2.5	2.5	4,232.34	4,229.10	
P-3997	I-2600	I-3101	0	0	0	0	0	10.02	98	0.002041	24 inch	0.013	10.22	4,226.40	4,226.20	4,230.00	4,229.99	1.6	1.79	4,229.39	4,229.20	
P-3998	I-2602	I-994	0	0	0	0	0	0	65	0.004615	18 inch	0.013	7.14	4,226.13	4,225.83	4,230.93	4,229.83	3.3	2.5	4,228.61	4,228.61	
P-3999	I-2601	I-2602	0	0	0	0	0	0	56	0.004821	24 inch	0.013	15.71	4,226.40	4,226.13	4,231.00	4,230.93	2.6	2.8	4,228.61	4,228.61	
P-4044	I-796	O-94	12.5	0.3	3.75	16.6	1.19	29.89	1,438.00	0.001655	36 inch	0.013	27.13	4,222.99	4,220.61	4,227.91	4,225.00	1.92	1.39	4,225.75	4,222.39	
P-3418	I-3662	I-3661	0	0	0	10.27	1.45	21.92	273	0.001612	36 inch	0.013	26.78	4,230.13	4,229.69	4,234.95	4,234.00	1.82	1.31	4,232.19	4,231.73	
P-3419	I-3661	I-3679	0	0	0	10.27	1.43	21.69	362	0.001602	36 inch	0.013	26.7	4,229.69	4,229.11	4,234.00	4,234.00	1.31	1.89	4,231.72	4,231.09	
P-3417	I-3662	I-3662	0	0	0	10.27	1.47	22.05	156	0.001603	36 inch	0.013	26.7	4,230.38	4,230.13	4,235.87	4,234.95	2.49	1.82	4,232.45	4,232.20	
P-3756	I-3679	I-3912	0	0	0	10.27	1.4	21.38	187	0.002674	36 inch	0.013	34.49	4,229.11	4,228.61	4,234.00	4,234.00	1.89	2.39	4,231.08	4,230.89	
P-3758	I-3446	I-3912	0	0	0	0	0	12.09	38	0.001316	15 inch	0.013	2.34	4,228.66	4,228.61	4,234.00	4,234.00	4.09	4.14	4,232.28	4,230.94	
P-3757	I-3912	O-7	63.04	0	0	10.27	1.37	33.16	176	0.002727	36 inch	0.013	34.83	4,228.61	4,228.13	4,234.00	4,231.52	2.39	0.39	4,230.86	4,230.00	
P-2507	I-2927	I-2966	0	0	0	0	0	0	31	0.014516	21 inch	0.013	19.09	4,230.90	4,230.45	4,234.90	4,236.08	2.25	3.88	4,232.52	4,232.52	
P-2508	I-2951	I-2927	0	0.85	0	0	0	0	31	0.003226	21 inch	0.013	9	4,231.00	4,230.90	4,234.74	4,234.90	1.99	2.25	4,232.52	4,232.52	
P-2509	I-2928	I-2927	0	0.85	0	0	0	0	28	0.003571	21 inch	0.013	9.47	4,231.00	4,230.90	4,234.91	4,234.90	2.16	2.25	4,232.52	4,232.52	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3413	I-3678	I-3660	0	0	0	10.27	1.52	22.57	73	0.001644	36 inch	0.013	27.04	4,231.42	4,231.30	4,237.06	4,236.06	2.64	1.76	4,233.53	4,233.41	
P-3415	I-3659	I-3699	0	0	0	10.27	1.5	22.39	326	0.001626	36 inch	0.013	26.89	4,231.06	4,230.53	4,236.02	4,236.00	1.96	2.47	4,233.15	4,232.62	
P-3414	I-3660	I-3659	0	0	0	10.27	1.51	22.51	144	0.001667	36 inch	0.013	27.23	4,231.30	4,231.06	4,236.06	4,236.02	1.76	1.96	4,233.39	4,233.16	
P-3762	I-3699	I-2966	0	0	0	10.27	1.47	22.12	47	0.001702	36 inch	0.013	27.52	4,230.53	4,230.45	4,236.00	4,236.08	2.47	2.63	4,232.61	4,232.53	
P-3763	I-2966	I-3682	0	0	0	10.27	1.47	22.08	40	0.00175	36 inch	0.013	27.9	4,230.45	4,230.38	4,236.08	4,235.87	2.63	2.49	4,232.52	4,232.46	
P-155	I-587	I-586	5.53	0.35	1.94	1.94	2.16	4.22	148	0.003534	15 inch	0.013	3.84	4,232.90	4,232.38	4,237.90	4,238.00	3.75	4.37	4,234.94	4,234.30	
P-3563	I-3656	I-586	0	0	0	5.6	1.59	15.84	233	0.001592	36 inch	0.013	26.61	4,232.75	4,232.38	4,237.99	4,238.00	2.24	2.62	4,234.54	4,234.30	
P-3564	I-586	I-3698	0	0	0	7.54	1.57	18.78	468	0.001596	36 inch	0.013	26.65	4,232.38	4,231.63	4,238.00	4,237.96	2.62	3.33	4,234.29	4,233.70	
P-1791	I-749	I-1988	4.84	0.85	4.11	4.11	1.88	7.72	443	0.001038	18 inch	0.013	3.38	4,233.24	4,232.78	4,238.24	4,238.00	3.5	3.72	4,236.99	4,234.60	
P-3409	I-3495	I-3657	42.76	0	0	1.49	1.61	9.29	120	0.001667	36 inch	0.013	27.23	4,233.10	4,232.90	4,237.99	4,237.99	1.89	2.09	4,234.65	4,234.60	
P-3765	I-2939	I-3495	0	0	0	0	0	6.88	102	0.001471	36 inch	0.013	25.58	4,233.25	4,233.10	4,238.00	4,237.99	1.75	1.89	4,234.71	4,234.68	
P-3766	I-3657	I-1988	0	0	0	1.49	1.6	9.27	75	0.0016	36 inch	0.013	26.68	4,232.90	4,232.78	4,237.99	4,238.00	2.09	2.22	4,234.60	4,234.57	
P-3767	I-1988	I-3656	0	0	0	5.6	1.59	15.85	20	0.0016	36 inch	0.013	26.68	4,232.78	4,232.75	4,238.00	4,237.99	2.22	2.24	4,234.56	4,234.54	
P-3772	I-3698	I-3915	0	0	0	7.54	1.53	18.48	63	0.001746	36 inch	0.013	27.87	4,231.63	4,231.52	4,237.96	4,237.71	3.33	3.19	4,233.70	4,233.64	
P-3773	I-3915	I-3678	1.01	0.85	0.86	10.27	1.52	22.62	58	0.001724	36 inch	0.013	27.69	4,231.52	4,231.42	4,237.71	4,237.06	3.19	2.64	4,233.63	4,233.53	
P-3769	I-2975	I-3914	0	0.85	0	0	0	0	30	0.001	15 inch	0.013	2.04	4,232.52	4,232.49	4,237.52	4,237.49	3.75	3.75	4,234.67	4,234.67	
P-3770	I-2976	I-3914	0	0.85	0	0	0	0	30	0.003333	15 inch	0.013	3.73	4,232.59	4,232.49	4,237.45	4,237.49	3.61	3.75	4,234.67	4,234.67	
P-3774	I-3914	I-3915	5.34	0.35	1.87	1.87	2.16	4.08	685	0.001416	18 inch	0.013	3.95	4,232.49	4,231.52	4,237.49	4,237.71	3.5	4.69	4,234.67	4,233.64	
P-3170	I-3445	I-3446	0	0	0	0	0	12.09	58	0.004655	30 inch	0.013	27.98	4,228.93	4,228.66	4,233.93	4,234.00	2.5	2.84	4,234.05	4,234.00	
P-3958	I-2585	I-3495	1.86	0.8	1.49	1.49	2.16	3.24	1,482.00	0.003981	30 inch	0.013	25.88	4,239.00	4,233.10	4,242.00	4,237.99	0.5	2.39	4,239.60	4,234.66	
P-3778	I-3119	O-65	0	0	0	72.16	0.94	74.79	46	0.003478	36 inch	0.013	39.33	4,272.71	4,272.55	4,277.71	4,277.55	2	2	4,276.01	4,275.27	
P-3781	I-3918	I-3119	0	0	0	72.16	0.94	74.82	38	0.002632	36 inch	0.013	34.21	4,272.81	4,272.71	4,277.81	4,277.71	2	2	4,276.59	4,276.11	
P-3782	I-3917	I-3918	41.21	0.3	12.36	72.16	0.94	74.91	120	0.008583	36 inch	0.013	61.79	4,273.84	4,272.81	4,278.84	4,277.81	2	2	4,279.33	4,277.81	
P-3901	I-261	I-2420	0	0	0	0	0	0	539	0.003006	18 inch	0.013	5.76	4,275.95	4,274.33	4,280.95	4,278.65	3.5	2.82	4,276.01	4,276.01	
P-3902	I-2420	I-3119	0	0	0	0	0	0	231	0.007013	15 inch	0.013	5.41	4,274.33	4,272.71	4,278.65	4,277.71	3.07	3.75	4,276.01	4,276.01	
P-2651	I-3145	I-621	0.5	0.85	0.43	0.43	2	0.86	813	0.004145	18 inch	0.013	6.76	4,305.26	4,301.89	4,310.26	4,306.89	3.5	3.5	4,305.62	4,302.96	
P-3038	I-3224	I-3392	0	0	0	3.56	1.3	5.77	132	0.010833	27 inch	0.013	32.23	4,302.51	4,301.08	4,307.51	4,305.95	2.75	2.62	4,303.33	4,303.11	
P-3054	I-3392	I-3391	0	0	0	3.56	1.29	5.74	52	0.001346	27 inch	0.013	11.36	4,301.08	4,301.01	4,305.95	4,306.01	2.62	2.75	4,303.08	4,303.07	
P-3076	I-2321	I-3395	0	0	0	0	0	5.12	59	0.004746	18 inch	0.013	7.24	4,301.25	4,300.97	4,305.83	4,306.01	3.08	3.54	4,302.84	4,302.70	
P-3079	I-3391	I-3395	4	0.8	3.2	7.19	1.29	10.42	16	0.0025	18 inch	0.013	5.25	4,301.01	4,300.97	4,306.01	4,306.01	3.5	3.54	4,302.88	4,302.70	
P-3080	I-621	I-3391	0	0	0	0.43	1.73	0.74	131	0.006718	18 inch	0.013	8.61	4,301.89	4,301.01	4,306.89	4,306.01	3.5	3.5	4,302.96	4,302.96	
P-3090	I-3395	I-2942	25.62	0.35	8.97	16.15	1.29	27.15	1,434.00	0.005523	36 inch	0.013	49.57	4,300.97	4,293.05	4,306.01	4,298.05	2.04	2	4,302.65	4,295.50	
P-2648	I-3091	I-3168	0	0	0	3.56	1.37	6.03	288	0.004687	24 inch	0.013	15.49	4,304.95	4,303.60	4,309.95	4,308.60	3	3	4,305.82	4,304.69	
P-2641	I-3115	I-3114	0	0	0	0	0	1.1	109	0.001101	24 inch	0.013	7.51	4,307.08	4,306.96	4,311.88	4,311.96	2.8	3	4,308.15	4,308.15	
P-2643	I-3217	I-3114	3.82	0.65	3.25	3.25	1.44	4.72	1,162.00	0.011979	24 inch	0.013	24.76	4,320.88	4,306.96	4,325.88	4,311.96	3	3	4,321.64	4,308.18	
P-2642	I-3177	I-3114	0	0	0	0	0	0	46	0.00413	24 inch	0.013	14.54	4,307.15	4,306.96	4,311.80	4,311.96	2.65	3	4,307.98	4,307.98	
P-3818	I-3219	I-3201	0	0	0	0	0	0	1,538.00	0.0092	24 inch	0.013	21.7	4,322.94	4,308.79	4,327.94	4,313.79	3	3	4,322.94	4,308.79	
P-3819	I-3201	I-3177	0	0	0	0	0	0	264	0.006212	24 inch	0.013	17.83	4,308.79	4,307.15	4,313.79	4,311.80	3	2.65	4,308.79	4,307.98	
P-3899	I-3114	I-3091	0.37	0.85	0.31	3.56	1.38	6.04	78	0.025769	15 inch	0.013	10.37	4,306.96	4,304.95	4,311.96	4,309.95	3.75	3.75	4,307.95	4,305.63	
P-3500	I-3168	I-3224	0	0	0	3.56	1.35	5.95	508	0.002146	24 inch	0.013	10.48	4,303.60	4,302.51	4,308.60	4,307.51	3	3	4,304.68	4,303.37	
P-3970	I-2942	I-3917	13.78	0.35	4.82	30.64	1.22	43.8	2,234.00	0.008599	36 inch	0.013	61.85	4,293.05	4,273.84	4,298.05	4,278.84	2	2	4,295.21	4,278.84	
P-4038	I-2626	I-2321	0	0	0	0	0	5.12	55	0.018182	18 inch	0.013	14.16	4,302.25	4,301.25	4,305.83	4,305.83	2.08	3.08	4,303.12	4,302.89	
P-53	I-96	I-95	0	0	0	7.2	0.98	7.14	418	0.008852	18 inch	0.013	9.88	4,282.16	4,278.46	4,288.16	4,283.46	4.5	3.5	4,285.39	4,283.46	
P-52	I-597	I-96	0	0	0	7.2	0.99	7.21	311	0.007042	18 inch	0.013	8.81	4,284.35	4,282.16	4,289.47	4,288.16	3.62	4.5	4,286.94	4,285.48	
P-1526	I-95	I-2101	33.78	0.3	10.13	17.33	0.97	17	95	0.016105	18 inch	0.013	13.33	4,278.46	4,276.93	4,283.46	4,281.93	3.5	3.5	4,284.37	4,281.88	
P-3110	I-2101	I-3523	33.78	0.35	11.82	29.15	0.97	28.56	266	0.003496	30 inch	0.013	24.25	4,276.93	4,276.00	4,281.93	4,280.72	2.5	2.22	4,281.84	4,280.54	
P-3387	I-762	I-3644	0	0	0	29.15	0.97	28.38	37	0.004054	36 inch	0.013	42.47	4,275.90	4,275.75	4,280.83	4,280.75	1.93	2	4,280.22	4,280.16	
P-58	I-63	I-355	0	0	0	0	0	0	234	0.002094	15 inch	0.013	2.96	4,275.19	4,274.70	4,280.19	4,279.23	3.75	3.28	4,279.23	4,279.23	
P-3389	I-3693	I-355	0	0	0	29.15	0.96	28.32	326	0.002577	36 inch	0.013	33.85	4,275.54	4,274.70	4,280.54	4,279.23	2	1.53	4,279.82	4,279.23	
P-3388	I-3644	I-3693	0	0	0	29.15	0.96	28.35	29	0.007241	36 inch	0.013	56.75	4,275.75	4,275.54	4,280.75	4,280.54	2	2	4,280.01	4,279.96	
P-3386	I-3523	I-782	0	0	0	29.15	0.97	28.4	28	0.003571	36 inch	0.013	39.86	4,276.00	4,275.90	4,280.72	4,280.83	1.72	1.93	4,280.41	4,280.36	
P-48	I-365	I-603	0	0	0	0	0	0	245	0.011918	15 inch	0.013	7.05	4,292.38	4,289.46	4,297.38	4,294.46	3.75	3.75	4,292.38	4,290.80	
P-1511	I-2193	I-365	0	0	0	0	0	0	388	0.004278	18 inch	0.013	6.87	4,294.04	4,292.38	4,299.04	4,297.38	3.5	3.5	4,294.04	4,292.38	
P-3896	I-603	I-747	23.99	0.3	7.2	7.2	1.01	7.33	375	0.007227	18 inch	0.013	8.93	4,289.46	4,286.75	4,294.46	4,291.32	3.5	3.07	4,290.51	4,288.67	
P-3897	I-747	I-597	0	0.35	0	7.2	1	7.27	330	0.007273	18 inch	0.013	8.96	4,286.75	4,284.35	4,291.32	4,289.47	3.07	3.62	4,288.59	4,287.01	
P-3898	I-761	I-782	0	0	0	0	0	0	589	0.010747	15 inch	0.013	6.7	4,282.23	4,275.90	4,287.23	4,280.83	3.75	3.68	4,282.23	4,280.22	
P-4031	I-355	I-3917	0	0	0	29.15	0.95	28.05	357	0.002409	36 inch	0.013	32.73	4,274.70	4,273.84	4,279.23	4,278.84	1.53	2	4,279.47	4,278.84	
P-4046	I-778	I-2942	27.62	0.35	9.67	9.67	1.63	15.88	169	0.005799	30 inch	0.013	31.23	4,294.03	4,293.05	4,299.03	4,298.05	2.5	2.5	4,295.55	4,295.48	
P-3405	I-3694	I-3673	0	0	0	23.06	0.75	33.25	103	0.004078	36 inch	0.013	42.59	4,218.00	4,217.58	4,230.35	4,229.98	9.35	9.4	4,220.08	4,219.65	
P-14	I-19	I-18	0	0	0	0	0	4.4	215	0.001209	12 inch	0.013	1.24	4,235.35	4,235.09	4,240.53	4,239.98	4.18	3.89	4,240.46	4,237.18	
P-3556	I-18	I-3694	0	0.2	0	23.06	0.82	34.87	4,129.00	0.004139	36 inch	0.013	42.91	4,235.09	4,218.00	4,239.98	4,230.35	1.89	9.35	4,237.14	4,220.34	
P-3745	I-3673	I-3908	0	0	0	23.06	0.75	33.21	429	0.004033	36 inch	0.013	42.35	4,217.58	4,215.85	4,229.98	4,230.00	9.4	11.15	4,219.58	4,217.86	
P-3967	I-3908	O-62	0	0	0	23.06	0.74	33.04	176	0.004091	36 inch	0.013	42.66	4,215.85	4,215.13	4,230.00	4,224.82	11.15	6.69	4,217.83	4,216.99	
P-1746	I-2040	I-2041	0.21	0.85	0.18	0.37	0.67	4.32	62	0.001613	18 inch	0.013	4.22	4,264.28	4,264.18	4,270.00	4,269.61	4.22	3.93	4,266.04	4,265.93	
P-1747	I-2382	I-2040	0.22	0.85	0.19	0.19	0.91	4.17	666	0.001306	18 inch	0.013	3.8	4,265.15	4,264.28	4,270.02	4,270.00	3.37	4.22	4,267.19	4,266.14	
P-2675	I-2041	I-3107	0.21	0.85	0.18	0.54	0.87	4.48	35	0.001143	24 inch	0.013	7.65	4,264.18	4,264.14	4,269.61	4,269.14	3.43	3	4,265.91	4,265.90	
P-3862	I-2278	I-3468	0	0.3	0	23.06	0.85	31.14	1,151.00	0.006169	30 inch	0.013	32.21	4,250.60	4,243.50	4,254.60	4,249.88	1.5	3.88	4,252.57	4,245.40	

Existing Pipe Report

Label	Upstream Node	Downstream Node	Upstream Inlet Area (acres)	Upstream Inlet Rational Coefficient	Upstream Inlet CA (acres)	Upstream Calculated System CA (acres)	System Intensity (in/hr)	Total System Flow (cfs)	Length (ft)	Constructed Slope (ft/ft)	Section Size	Mannings n	Full Capacity (cfs)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Upstream Ground Elevation (ft)	Downstream Ground Elevation (ft)	Upstream Cover (ft)	Downstream Cover (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)	Description
P-3883	I-3169	I-2278	33.16	0.31	10.28	17.76	0.86	25.18	797	0.011481	24 inch	0.013	24.24	4,259.75	4,250.60	4,263.98	4,254.60	2.23	2	4,262.43	4,252.62	
P-137	I-993	I-999	17.68	0.3	5.3	5.3	1.53	9.79	68	0.044559	30 inch	0.013	86.58	4,255.03	4,252.00	4,260.03	4,255.38	2.5	0.88	4,256.08	4,253.53	
P-3789	I-78	I-993	0	0	0	0	0	1.63	287	0.008815	30 inch	0.013	38.51	4,257.56	4,255.03	4,262.56	4,260.03	2.5	2.5	4,257.98	4,256.13	
P-3884	I-999	I-2278	0	0	0	5.3	1.52	9.78	868	0.001613	30 inch	0.013	16.47	4,252.00	4,250.60	4,255.38	4,254.60	0.88	1.5	4,253.44	4,252.73	
P-3885	I-3107	I-3169	0	0	0	7.48	0.87	16.36	646	0.006796	24 inch	0.013	18.65	4,264.14	4,259.75	4,269.14	4,263.98	3	2.23	4,265.62	4,262.52	
P-3971	I-3468	I-18	0	0	0	23.06	0.83	30.74	660	0.004045	36 inch	0.013	42.42	4,237.76	4,235.09	4,249.88	4,239.98	9.12	1.89	4,239.65	4,237.18	
P-3977	I-2590	I-2382	0	0	0	0	0	4	39	0.047436	15 inch	0.013	14.07	4,267.00	4,265.15	4,270.00	4,270.02	1.75	3.62	4,267.61	4,267.30	
P-3909	I-2361	I-2592	0	0	0	6.93	1.01	12.85	1,926.00	0.004502	24 inch	0.013	15.18	4,274.99	4,266.32	4,279.99	4,271.32	3	3	4,276.40	4,267.96	
P-3980	I-2592	I-3107	0	0	0	6.93	0.97	12.56	687	0.003173	24 inch	0.013	12.74	4,266.32	4,264.14	4,271.32	4,269.14	3	3	4,267.93	4,265.69	
P-4048	I-2625	I-2361	0	0	0	6.93	1.01	18.08	119	0.016555	21 inch	0.013	20.39	4,276.96	4,274.99	4,281.96	4,279.99	3.25	3.25	4,278.51	4,276.27	
P-1549	I-2062	I-2010	0	0	0	0	0	6.94	181	0.004365	18 inch	0.013	6.94	4,284.28	4,283.49	4,289.28	4,288.49	3.5	3.5	4,285.62	4,284.96	
P-1551	I-658	I-2010	0	0	0	2.85	1.73	4.96	998	0.005261	18 inch	0.013	7.62	4,288.74	4,283.49	4,298.74	4,288.49	8.5	3.5	4,289.62	4,284.78	
P-2644	I-3111	I-3110	0	0	0	2.85	1	9.8	170	0.007353	24 inch	0.013	19.4	4,276.00	4,274.75	4,281.00	4,280.13	3	3.38	4,277.12	4,275.98	
P-3017	I-3110	I-2423	0	0	0	2.85	0.99	9.79	304	0.005855	24 inch	0.013	17.31	4,274.75	4,272.97	4,280.13	4,275.97	3.38	1	4,275.87	4,274.11	
P-3033	I-2010	I-3111	0	0	0	2.85	1.01	9.83	520	0.014404	18 inch	0.013	12.61	4,283.49	4,276.00	4,288.49	4,281.00	3.5	3.5	4,284.70	4,277.23	
P-600	I-403	I-882	21.23	0	0	0	0	2.14	14	0.147857	15 inch	0.013	24.84	4,261.10	4,259.03	4,266.00	4,265.99	3.65	5.71	4,261.68	4,260.30	
P-2757	I-882	I-3070	0	0	0	2.85	0.96	11.82	467	0.00651	24 inch	0.013	16.25	4,259.03	4,255.99	4,265.99	4,264.02	4.96	6.03	4,260.27	4,257.16	
P-1867	I-2127	I-2126	0	0	0	4.95	1.51	14	113	0.00708	18 inch	0.013	8.84	4,257.46	4,256.66	4,262.46	4,261.66	3.5	3.5	4,263.67	4,261.66	
P-1518	I-2255	I-2256	0	0	0	0	0	6.46	662	0.006012	18 inch	0.013	8.14	4,263.22	4,259.24	4,268.22	4,264.24	3.5	3.5	4,266.74	4,264.24	
P-1517	I-2256	I-2084	16.5	0.3	4.95	4.95	1.53	14.07	123	0.002683	18 inch	0.013	5.44	4,259.24	4,258.91	4,264.24	4,263.91	3.5	3.5	4,266.12	4,263.91	
P-3910	I-2084	I-2127	0	0	0	4.95	1.52	14.05	219	0.006621	18 inch	0.013	8.55	4,258.91	4,257.46	4,263.91	4,262.46	3.5	3.5	4,266.38	4,262.46	
P-3911	I-2126	I-178	0	0	0	4.95	1.51	13.98	383	0.006632	18 inch	0.013	8.55	4,256.66	4,254.12	4,261.66	4,259.12	3.5	3.5	4,263.59	4,256.80	
P-3026	I-3135	I-2389	46.71	0.2	9.34	2.41	0.96	6.18	839	0.009106	24 inch	0.013	21.59	4,276.96	4,269.32	4,281.96	4,274.32	3	3	4,277.84	4,270.77	
P-3359	I-2171	I-3506	11.43	0	0	0	0	0	1,172.00	0.008942	18 inch	0.013	9.93	4,299.54	4,289.06	4,304.54	4,294.06	3.5	3.5	4,299.54	4,290.25	
P-3360	I-3506	I-3135	41.73	0	0	0	0	8.35	1,391.00	0.008599	18 inch	0.013	9.8	4,289.06	4,276.96	4,294.06	4,281.96	3.5	3.5	4,290.18	4,278.02	
P-3867	I-2042	I-1996	0	0	0	0	0	0	363	0.003857	18 inch	0.013	6.52	4,266.72	4,265.32	4,271.72	4,270.32	3.5	3.5	4,266.72	4,265.32	
P-2768	I-3099	O-63	0	0	0	14.37	0.9	23.09	251	0.018247	24 inch	0.013	30.56	4,241.75	4,237.17	4,250.55	4,237.83	6.8	-1.34	4,243.46	4,238.47	
P-2770	I-3143	O-63	0	0	0	27.94	0.86	27.64	29	0.02069	24 inch	0.013	32.54	4,237.77	4,237.17	4,242.77	4,237.83	3	-1.34	4,239.59	4,238.71	
P-2771	I-3144	I-3143	10.94	0.2	2.19	27.94	0.86	27.69	138	0.012536	24 inch	0.013	25.33	4,239.50	4,237.77	4,245.72	4,242.77	4.22	3	4,242.11	4,240.07	
P-2767	I-3098	I-3099	29.59	0.28	8.29	14.37	0.91	23.3	934	0.007002	24 inch	0.013	18.93	4,248.29	4,241.75	4,256.97	4,250.55	6.68	6.8	4,253.84	4,243.92	
P-2773	I-408	I-2977	0	0	0	3.92	0.87	6.86	304	0.006842	24 inch	0.013	18.71	4,246.03	4,243.95	4,256.03	4,254.04	8	8.09	4,247.96	4,247.68	
P-3001	I-2977	I-2349	62.39	0.35	21.84	25.76	0.87	25.94	293	0.010751	24 inch	0.013	23.46	4,243.95	4,240.80	4,254.04	4,252.03	8.09	9.23	4,247.56	4,243.76	
P-3002	I-2349	I-3144	0	0	0	25.76	0.86	25.83	113	0.011504	24 inch	0.013	24.26	4,240.80	4,239.50	4,252.03	4,245.72	9.23	4.22	4,243.66	4,242.21	
P-3188	I-3134	I-408	34.58	0.35	12.1	3.92	0.92	7.04	2,049.00	0.006047	24 inch	0.013	17.59	4,258.42	4,246.03	4,266.42	4,256.03	6	8	4,259.36	4,247.97	
P-3888	I-1996	I-3134	0	0	0	0	0	0	850	0.008118	24 inch	0.013	20.38	4,265.32	4,258.42	4,270.32	4,266.42	3	6	4,265.32	4,259.36	
P-3889	I-2389	I-3134	0	0	0	2.41	0.95	14.94	1,695.00	0.006431	24 inch	0.013	18.14	4,269.32	4,258.42	4,274.32	4,266.42	3	6	4,270.71	4,259.80	
P-3890	I-13	I-2389	0	0	0	0	0	4.04	818	0.007139	18 inch	0.013	8.88	4,275.16	4,269.32	4,280.16	4,274.32	3.5	3.5	4,275.93	4,270.79	
P-1928	I-379	I-2319	82	0	0	0	0	6.5	68	0.003971	18 inch	0.013	6.62	4,293.70	4,293.43	4,298.70	4,298.43	3.5	3.5	4,294.91	4,294.64	
P-1595	I-2319	I-2200	0	0	0	0	0	6.5	406	0.011773	18 inch	0.013	11.4	4,293.43	4,288.65	4,298.43	4,293.65	3.5	3.5	4,294.42	4,289.89	
P-3908	I-2200	I-3135	0	0.35	0	0	0	6.5	1,744.00	0.006703	18 inch	0.013	8.6	4,288.65	4,276.96	4,293.65	4,281.96	3.5	3.5	4,289.64	4,277.93	
P-3912	I-178	I-3098	0	0	0	4.95	1.49	13.89	652	0.008942	24 inch	0.013	21.39	4,254.12	4,248.29	4,259.12	4,256.97	3	6.68	4,256.77	4,254.31	
P-3913	I-3070	I-3098	12.25	0	0	1.14	0.95	4.72	1,400.00	0.0055	24 inch	0.013	16.78	4,255.99	4,248.29	4,264.02	4,256.97	6.03	6.68	4,256.75	4,254.03	
P-3921	I-2423	I-882	0	0	0	2.85	0.99	9.78	1,836.00	0.007593	24 inch	0.013	19.71	4,272.97	4,259.03	4,275.97	4,265.99	1	4.96	4,274.09	4,260.30	
P-3955	I-659	I-658	9.49	0.3	2.85	2.85	1.9	5.44	1,084.00	0.009456	15 inch	0.013	6.28	4,298.99	4,288.74	4,303.86	4,298.74	3.62	8.75	4,299.94	4,289.64	
P-4047	I-2624	I-3506	0	0	0	0	0	8.35	124	0.024194	15 inch	0.013	10.05	4,292.06	4,289.06	4,299.06	4,294.06	5.75	3.75	4,293.19	4,290.46	
P-4049	I-2627	I-2389	23.82	0	0	0	0	4.76	13	0.076923	15 inch	0.013	17.92	4,270.32	4,269.32	4,274.32	4,274.32	2.75	3.75	4,271.20	4,270.90	
P-4050	I-2629	O-95	0	0	0	10.59	1.01	20.01	2,880.00	0.007438	24 inch	0.013	19.51	4,258.42	4,237.00	4,266.42	4,237.00	6	-2	4,260.11	4,238.61	
P-4051	I-2630	I-2631	0	0	0	8.02	1.61	13.03	808	0.008144	21 inch	0.013	14.3	4,294.00	4,287.42	4,299.77	4,292.42	4.02	3.25	4,295.34	4,289.35	
P-4052	I-2631	I-2632	0	0	0	8.02	1.57	12.7	313	0.009361	21 inch	0.013	15.33	4,287.42	4,284.49	4,292.42	4,291.16	3.25	4.92	4,289.32	4,287.31	
P-1827	I-2260	I-2279	45.19	0	0	0	0	9.04	148	0.011284	18 inch	0.013	11.16	4,289.09	4,287.42	4,294.09	4,292.42	3.5	3.5	4,290.25	4,289.22	
P-2605	I-272	I-109	25.25	0.35	8.84	8.84	1.63	14.53	356	0.008343	21 inch	0.013	14.47	4,296.97	4,294.00	4,301.97	4,299.77	3.25	4.02	4,298.41	4,295.41	
P-2606	I-109	I-2279	20.57	0.35	7.2	8.02	1.61	13.03	808	0.008144	21 inch	0.013	14.3	4,294.00	4,287.42	4,299.77	4,292.42	4.02	3.25	4,295.34	4,289.11	
P-527	I-665	I-666	30.05	0.35	10.52	10.52	1.32	14.03	1,060.00	0.007594	15 inch	0.013	5.63	4,296.69	4,288.64	4,301.69	4,293.64	3.75	3.75	4,343.66	4,293.64	
P-528	I-666	I-667	0	0	0	10.52	1.29	13.69	132	0.00697	15 inch	0.013	5.39	4,288.64	4,287.72	4,293.64	4,292.72	3.75	3.75	4,298.65	4,292.72	
P-529	I-667	I-668	0	0	0	10.52	1.29	13.65	264	0.012159	15 inch	0.013	7.12	4,287.72	4,284.51	4,292.72	4,291.16	3.75	5.4	4,299.34	4,287.55	
P-3052	I-2279	I-668	0	0	0	8.02	1.57	21.74	313	0.009297	27 inch	0.013	29.86	4,287.42	4,284.51	4,292.42	4,291.16	2.75	4.4	4,289.05	4,287.73	
P-4054	I-668	I-2632	0	0	0	18.54	1.28	32.94	3	0.006667	30 inch	0.013	33.49	4,284.51	4,284.49	4,291.16	4,291.16	4.15	4.17	4,287.46	4,287.44	
P-4060	I-2632	O-96	0	0	0	26.55	1.28	43.28	797	0.00187	42 inch	0.013	43.5	4,284.49	4,283.00	4,291.16	4,289.28	3.17	2.78	4,287.28	4,285.05	