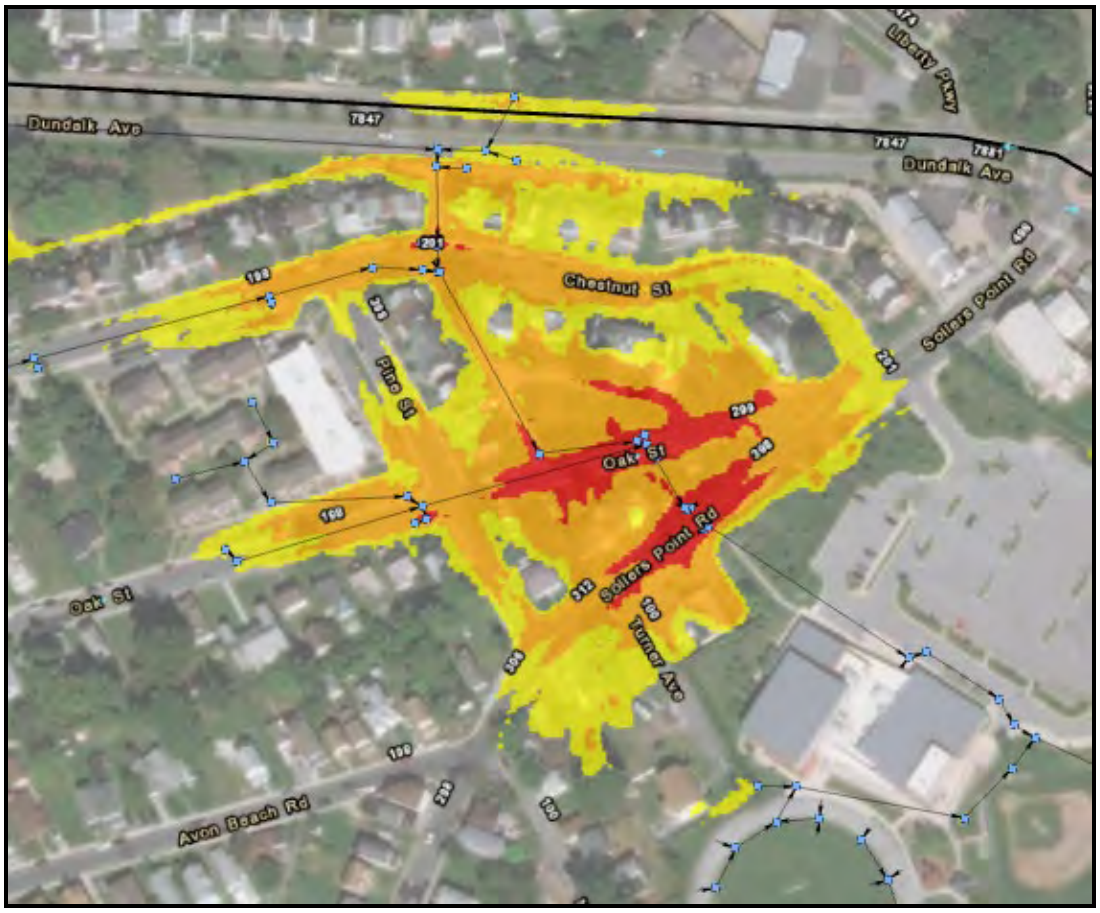
FLOOD RESILIENCE STUDY, TURNER STATION, BALTIMORE COUNTY, MARYLAND



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1 INTRODUCTION

1.1 STUDY PURPOSE AND OBJECTIVES

Turner Station Conservation Teams, Inc., and Baltimore County requested assistance from the U.S. Army Corps of Engineers (USACE), Baltimore District, to complete a flood resiliency study for areas prone to stormwater and tidal flooding. Turner Station Conservation Teams, Inc., is a community organization dedicated to the revitalization of Turner Station. The purpose of this study was to provide the community and county with initial concepts to determine their effectiveness in reducing the risk of flooding to property owners and roadways. For this study, the objectives included:

1. Mapping and assessing existing stormwater infrastructure.

2. Completing stormwater modeling and mapping as it pertains to water quantity (flooding) for existing-conditions 50% annual chance (2-year), 10% annual chance (10-year), and 1% annual chance (100-year) rainfall events.

3. Completing future conditions stormwater modeling and mapping for sea level rise and potential future rainfall scenarios.

4. Evaluating measures for reducing the flood risk to buildings, bridges, and roadways within the study area.

Regular flooding due to heavy rain events and high tides occurs within the Turner Station community, which is south of Dundalk, in Baltimore County, Maryland. Homes within the community have experienced repeated flood damage, including the total loss of cars and property. Based upon the effective Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) for Baltimore County, Maryland, dated May 4, 2014, the community is subject to coastal flooding from the Chesapeake Bay (Bear Creek) (FEMA, 2014).

1.2 STUDY AUTHORITY

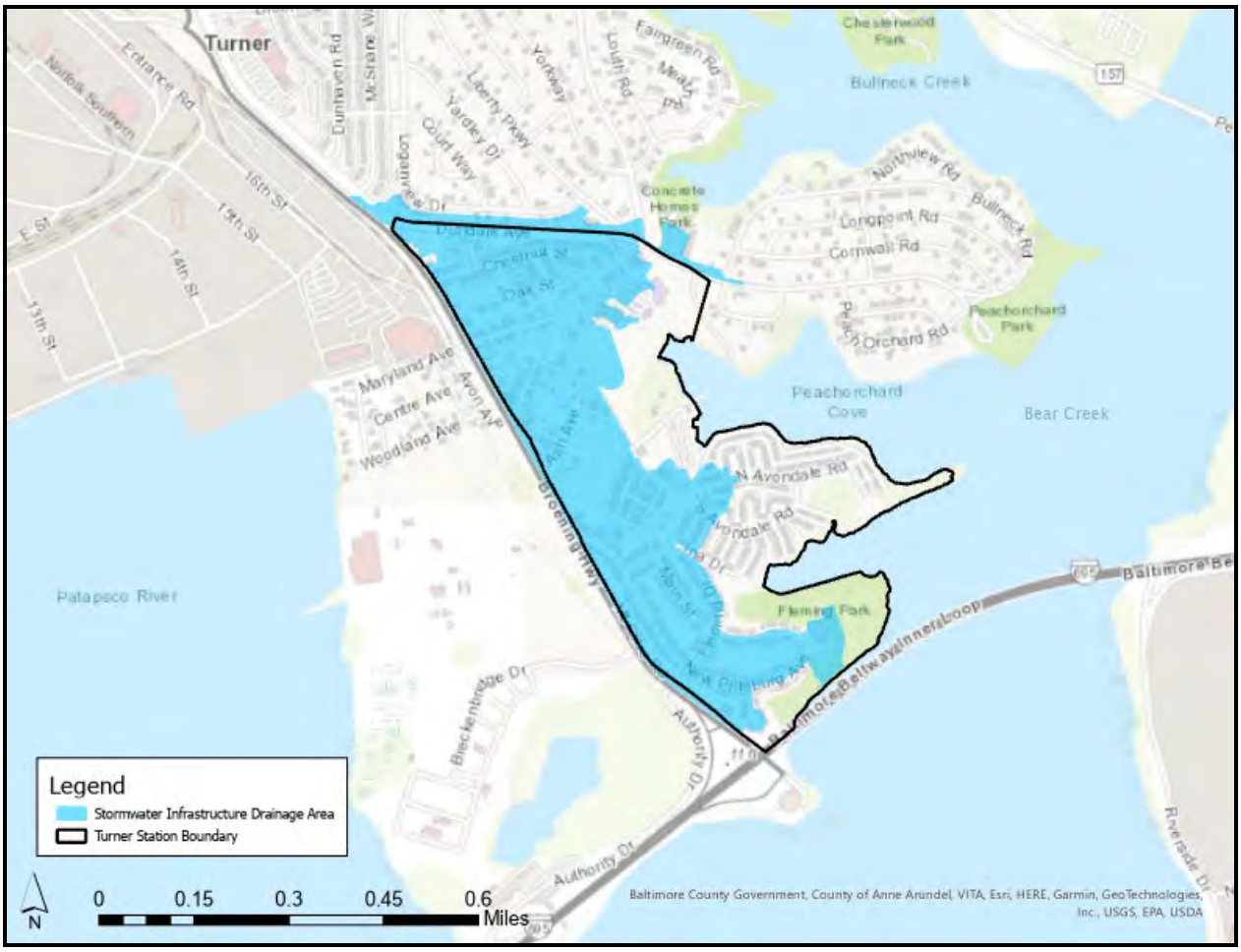
This study was conducted by the Planning Division of the USACE, Baltimore District, under the Floodplain Management Services Program (FPMS). The FPMS program is designed to provide planning-level assistance to communities and USACE partners for floodplain related issues.

1.3 STUDY AREA

Turner Station is a small, historic, residential community located in Baltimore County, Maryland. The study limit is the Turner Station community boundary and any stormwater system

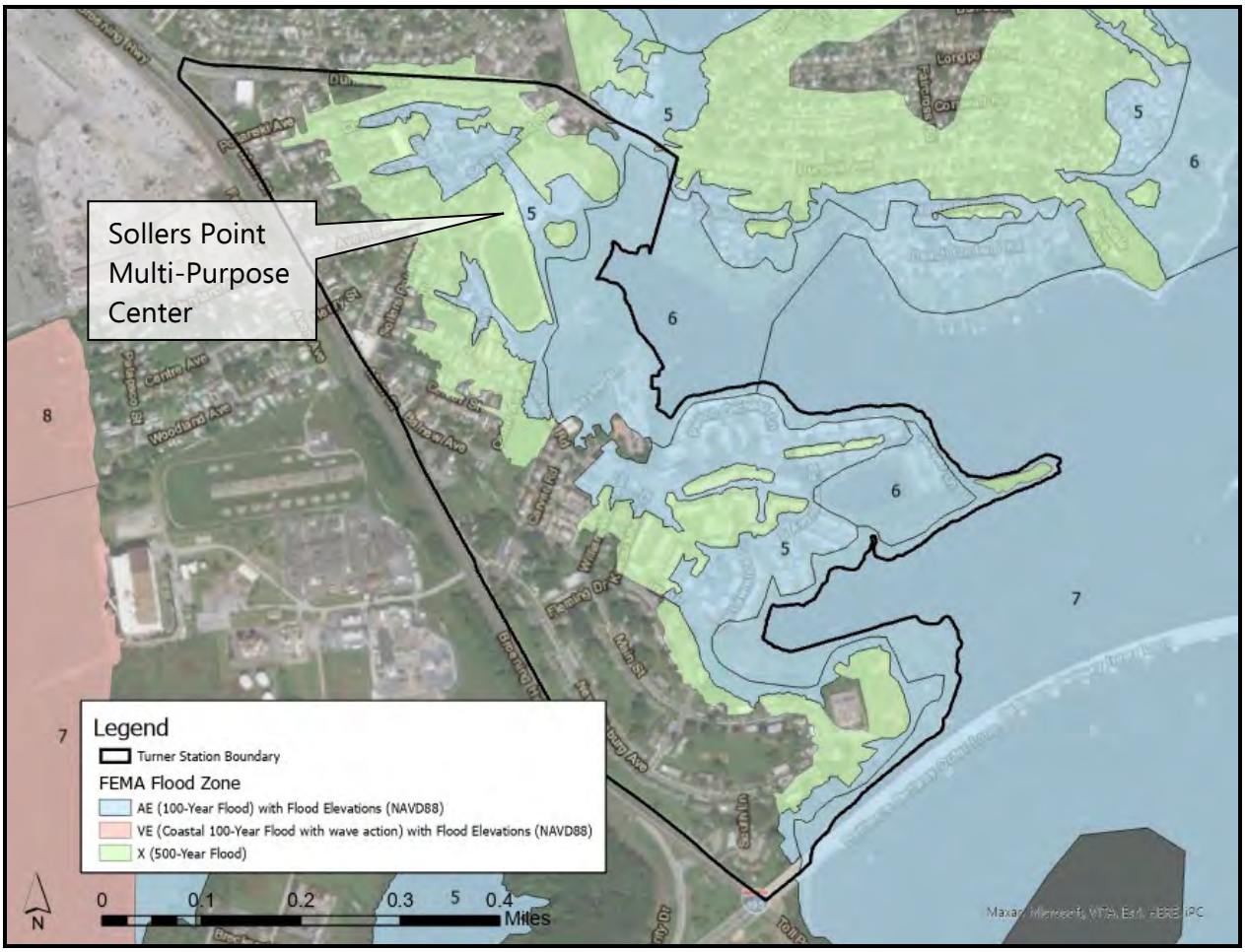
infrastructure that drains to the stormwater outfalls within the community limits. A map of the study area is shown in Figure 1.1.

FIGURE 1.1: STUDY AREA



Turner Station is located along tidal Bear Creek, which confluences with the Patapsco River. The FIRM for Baltimore County, Maryland, dated May 4, 2014, is shown in Figure 1.2. The 1% annual chance Base Flood Elevations (BFEs) are shown. The 1% annual chance flood is a flood with a 1% chance of occurring in each year. Much of Turner Station is at risk of flooding from the 1% and 0.2% annual chance riverine flood events, without consideration of stormwater flooding based on the FIRM. It is important to note that FEMA's study used topography dated 2005 and does not consider the construction of the Sollers Point Multi-Purpose Center, which was built on higher ground, and will change the floodplain in that area of Turner Station.

FIGURE 1.2: FLOOD INSURANCE RATE MAP



1.4 DATA SOURCES

Data was collected from various federal, state, and local entities to support the analyses in this investigation. The following entities contributed data to this investigation: Baltimore County, Maryland iMAP, Natural Resource Conservation Service (NRCS), the National Weather Service (NWS), and Boos Development Group, Inc. A list of essential data collected for this investigation is shown in Table 1.1.

TABLE 1.1: DATA COLLECTED

Data	*Date*	*Source*
Digital Elevation Model (DEM), 1.0-meter resolution	2015	Baltimore County
Aerial Imagery	2017	Maryland iMAP
Baltimore County Soils Data	2003	NRCS
Land Use – Impervious Surface	2020	Baltimore County
Land Use – Building Footprints	2018	Baltimore County
Precipitation Data (Frequency estimates)	2006	NWS
As-Built Plans – Family Dollar	2018	Boos Development Group, Inc.

The project digital terrain model (DEM) was generated from USGS Light Detection and Ranging (LiDAR) data flown in 2014 by Dewberry (Baltimore County, 2015). The LiDAR was downloaded from the Maryland iMAP website (https://imap.maryland.gov/). A 1-meter project Digital Elevation Model (DEM) was created for this investigation using the LiDAR data. This dataset was the most recent, highest-resolution digital elevation data available at the onset of this investigation and is in the North American Datum of 1983 (NAD83) State Plane Maryland horizontal datum and the North American Vertical Datum of 1988 (NAVD88) vertical datum.

2 STORMWATER SYSTEM SURVEY AND ASSESSMENT

A stormwater system survey and assessment were completed in January and February 2021 for Turner Station. The objective was to complete comprehensive mapping of the stormwater conveyance system to (1) determine the location of existing stormwater infrastructure; (2) assess the overall condition of the existing stormwater infrastructure (excluding underground pipes and junctions); and (3) collect data to support hydrologic and hydraulic modeling. The resultant mapping layers include such stormwater features as inlets, manholes, pipe inlets and pipe outlets, stormwater pipes, and open drainage channels.

2.1 METHODOLOGY

Global Positioning System (GPS) techniques for capturing the location and elevations of stormwater system features were used as the survey method. The use of GPS allows for the collection of a large amount of data in a short time frame to a high degree of accuracy. The survey utilized relative positioning techniques yielding precision on the order of < 2 centimeters horizontally and vertically. More specifically, Real-Time Kinematic (RTK) GPS techniques were used. The Trimble R8 GNSS (Global Navigation Satellite System) unit was utilized to perform the field survey. The collected survey points are in NAD83 State Plane Maryland horizontal datum and NAVD88 vertical datum (feet).

Stormwater structures surveyed in Turner Station include combination inlets, curb inlets, drop curb inlets, grate inlets, manholes, pipe inlets, pipe outlets, pond structures, and slotted inlets (Figure 2.1). Underground junctions were assumed in areas where it was apparent that two or more pipes meet underground without a surface manhole for access. For stormwater structures, the geographic location and invert elevations were determined by taking a survey point at the top of the structure or invert of pipe inlet and outlets. Distance measurements were made from the surface to any inside piping of the combination or grate inlets using a tape measure and the inverts of the internal pipes were determined by subtraction. For structures that had a sump lower than entering/exiting pipes, the sump elevation was also determined using this methodology.

The location and information on the stormwater pipes, such as shape, material, size, elevations, and slope, were derived from data compiled for the stormwater structures. In areas where there were questions about pipe connectivity in the field, as-built plans were consulted in an attempt to clarify connectivity concerns. At underground junctions where information for the pipes could not be obtained, the location was assumed, the top elevation was taken from the project DEM, and the invert elevations were interpolated from the upstream and downstream structures.

For the stormwater system assessment, stormwater inlets were assessed for both physical condition and conveyance condition. The stormwater inlets were categorized as being in Good, Fair, Poor, or Unknown condition. Table 2.1 defines the condition categories for each stormwater system component.

FIGURE 2.1: TYPES OF STORMWATER STRUCTURES IN TURNER STATION

Combination Inlet

Curb Inlet

Drop Curb Inlet

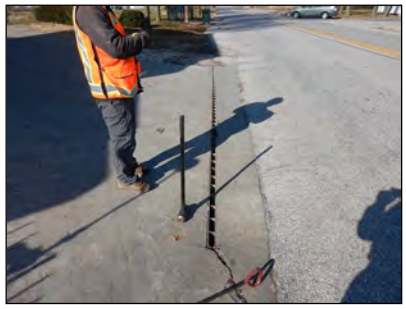
Grate Inlet

Manhole

Pipe Inlet

Pipe Outlet

Pond Structure



Slotted Inlet

TABLE 2.1: DEFINITION OF CONDITION CATEGORIES FOR ASSESSMENT OF STORMWATER STRUCTURES

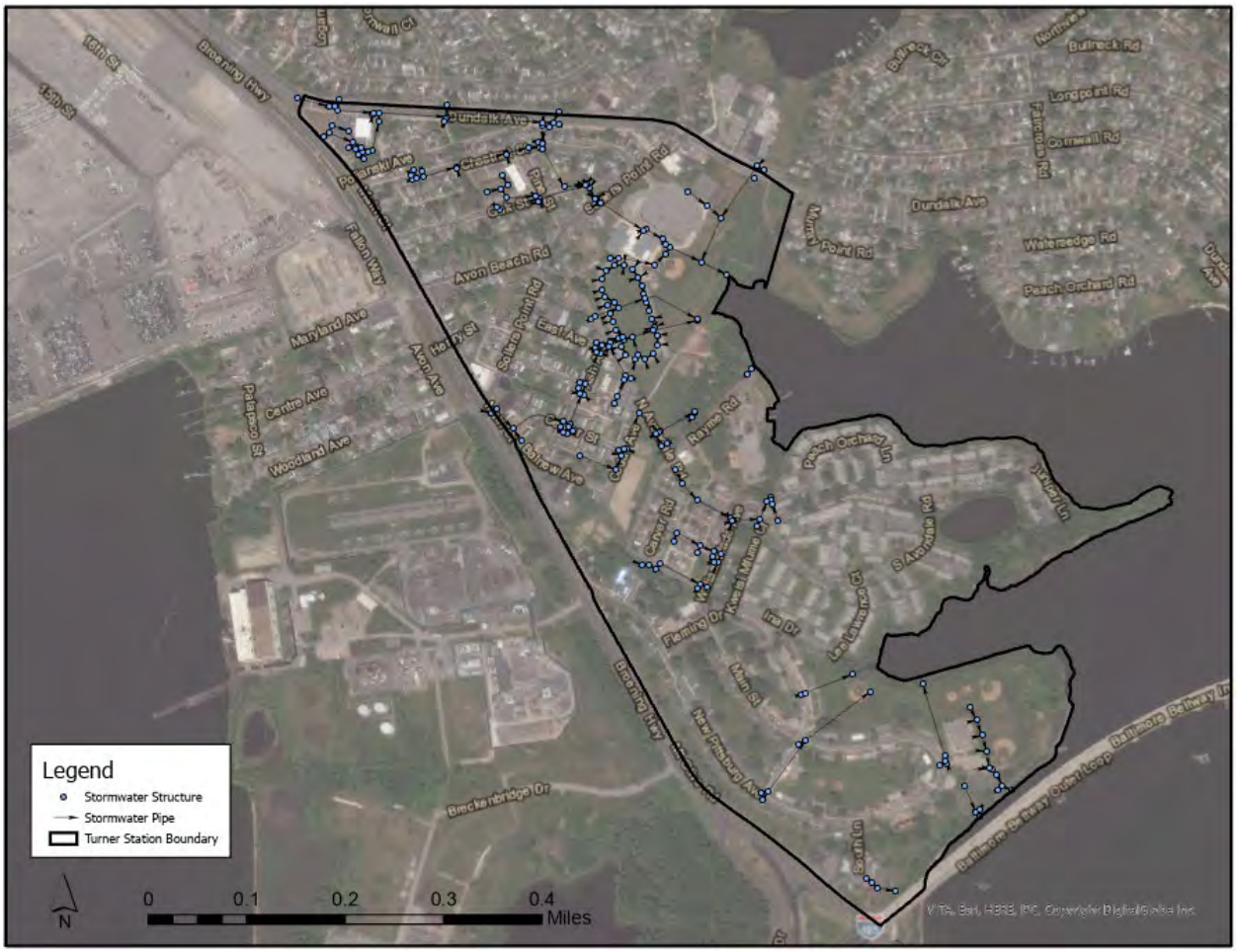
Assessment	Condition			
	Good	***Fair***	***Poor***	***Unknown***
Physical	*No deterioration of precast or cast-in place material.*	*Minor deterioration of precast or cast-in place material (i.e., cracks, slumping, rusting)*	*Major deterioration of precast or cast-in place material (i.e., cracks, slumping, rusting)*	*Structure could not be accessed due to physical condition such as paved or rusted-in manholes or heavy vegetation.*
Conveyance	*Minimal or no debris, vegetation, and/or silt reducing conveyance of stormwater flow.*	*Structure contains debris, vegetation, or silt causing a 10%-50% blockage that hinders stormwater flow.*	*Structure contains debris, vegetation, or silt causing a greater than 50% blockage that hinders stormwater flow.*	*Structure could not be accessed due to physical condition such as paved or rusted-in manholes or heavy vegetation.*

2.2 CONNECTIVITY LAYER

Data collected from the stormwater system survey were used to develop comprehensive mapping of the connectivity of the stormwater system within the study area. The mapping was completed in a Geographic Information System (GIS) platform as separate shapefiles for stormwater structures (points), stormwater pipes (lines), and stormwater management ponds (polygons). Each data point, line, or polygon is complete with *attribution*. Attribution is the data collected during the stormwater system survey and assessment for each individual stormwater structure and stormwater pipe. There are several *fields* within the attribution table for each feature. A field is a specific piece of data for each individual feature. The fields were developed to correspond to the specific information collected during the survey and assessment.

All stormwater system mapping is referenced to NAD83 State Plane Maryland horizontal datum. Vertical elevations referenced in this study are in NAVD88. A GIS data layer, or shapefile, was created separately for stormwater structures, stormwater pipes and open drainage channels, and stormwater best management practices (BMPs), such as stormwater detention ponds and underground vaults that detain stormwater. These shapefiles are provided in electronic format on the Project Disc, as well as photographs of each stormwater structure. A map of the stormwater connectivity layers is shown in Figure 2.2.

FIGURE 2.2: STORMWATER CONNECTIVITY



For this study, all stormwater structures were assigned a Permanent ID in addition to its Field ID. Stormwater pipes and open drainage channels were named based upon the stormwater structures in which they are flowing to and from. For example, a stormwater pipe between Structure T6 and Structure T5 has the Permanent ID of T6-T5. For stormwater pipes that connect to the system directly from a building, the Field ID begins with the abbreviation BLDG. For example, Pipe BLDG-A9 is a stormwater pipe coming directly from a building into A9.

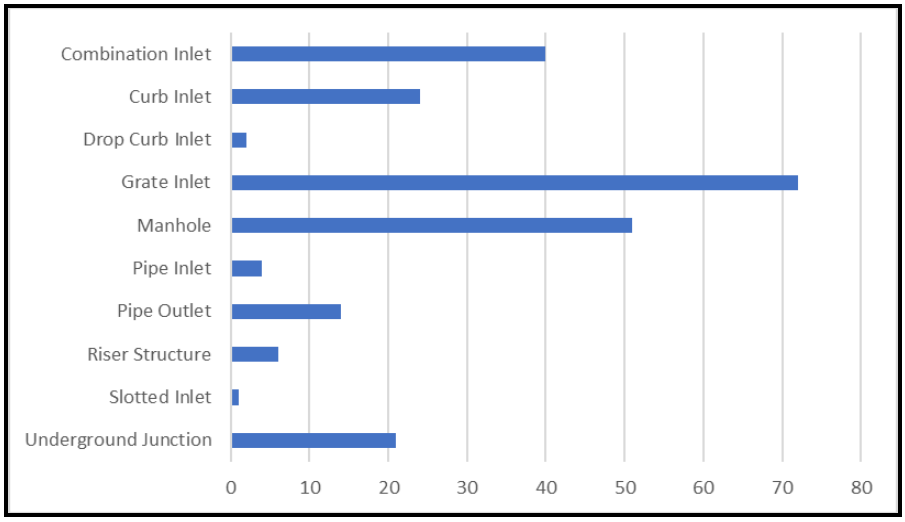
2.3 SUMMARY OF EXISTING-CONDITIONS MAPPING AND ASSESSMENT RESULTS

The purpose of this section is to provide data on the existing stormwater system in the community of Turner Station.

Stormwater Structures

There is a total of 235 stormwater structures located in Turner Station (Figure 2.3). Most of these structures are grate inlets.

FIGURE 2.3: EXISTING STORMWATER STRUCTURES - TYPE



The existing stormwater system in Turner Station is in moderate to good condition overall. Of the 235 stormwater structures within the study area, only 26, or 11%, were noted as being in poor conveyance condition (Figure 2.4) at the time of the survey. The structures that were noted to have poor conveyance were all submerged. Only one was noted as being in poor physical condition at the time of the survey (Figure 2.5). The structure conveyance and physical conditions for underground junctions and outfall locations that were unable to be located in the field are unknown due to lack of accessibility. The results of the stormwater survey can be used by Turner Station and Baltimore County to identify those stormwater structures that require maintenance.

FIGURE 2.4: EXISTING STORMWATER STRUCTURES – CONVEYANCE CONDITION

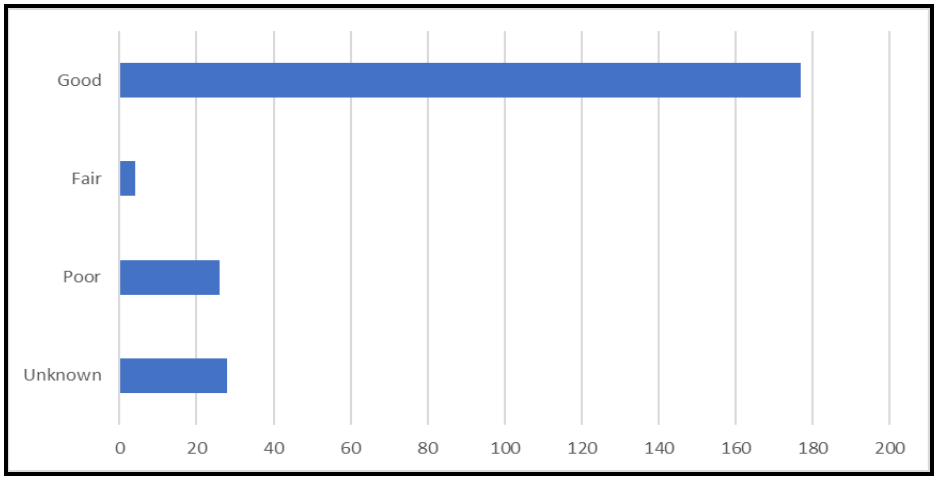
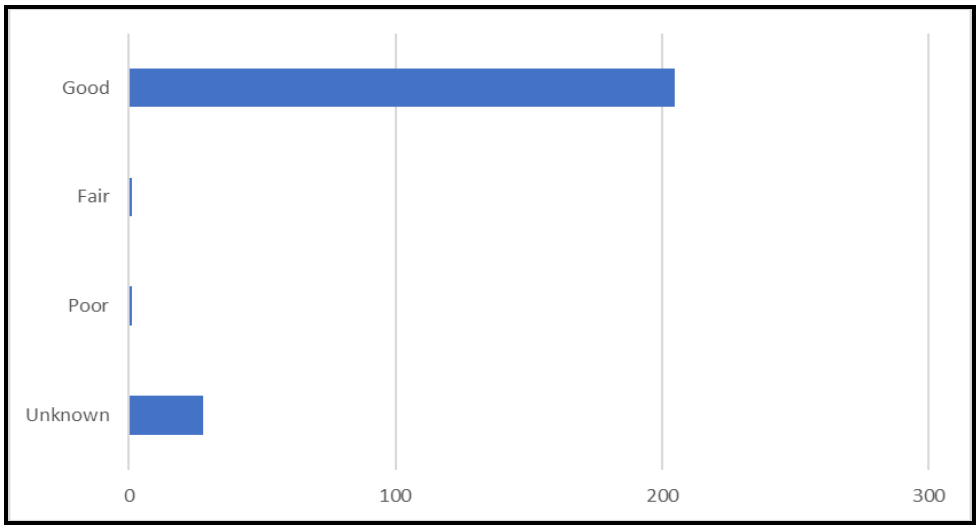


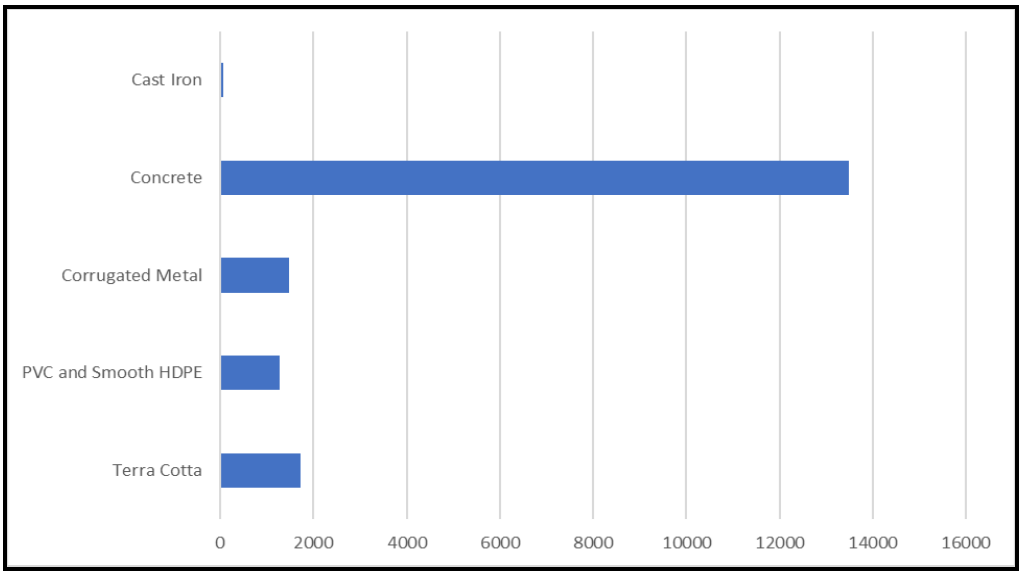
FIGURE 2.5: EXISTING STORMWATER STRUCTURES – PHYSICAL CONDITION



Stormwater Pipes

There are approximately 17,968 linear feet (3.4 miles) of existing stormwater piping in Turner Station. Approximately 13,478 linear feet are reinforced concrete pipe, which accounts for the overall majority of stormwater pipe. The next most prevalent stormwater pipe type is terra cotta, comprising approximately 1,713 linear feet. Other existing pipe materials include PVC and smooth HDPE, cast iron, and corrugated metal, as shown in Figure 2.6. Open channels that are tied into the stormwater system are also included in pipe data, but there are no open channels tied into the stormwater system in Turner Station.

FIGURE 2.6: EXISTING STORMWATER PIPES



Assessing the internal condition of the stormwater piping was not within the scope of this stormwater system survey. Only the portions of the pipes visible at the stormwater structures were assessed. In order to obtain data on the internal condition of the stormwater pipes, Closed Circuit Television (CCTV) is required. CCTV is the insertion of a video camera into the stormwater pipe for the purpose of inspecting for any collapses or blockages. CCTV inspection was outside the scope of this investigation.

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3 STORMWATER MODELING

Stormwater quantity modeling was performed in an event-based environment using XPSWMM version 2019.1.2 to identify areas in Turner Station that are susceptible to stormwater flooding. XPSWMM is a link-node model that performs hydrologic, hydraulic, and quality analysis of stormwater drainage systems. It utilizes sophisticated graphical tools along with associated GIS data and can be used to model the full hydrologic cycle from stormwater flow to simulation of the hydraulics in any combined system of open and/or closed conduits with any boundary condition. The two-dimensional hydrodynamic engine XP2D was used to enable a complete model of one-dimensional pipe flow and two-dimensional overland flow once the pipe network has reached capacity. This two-dimensional modeling provides more accurate results that are more readily accepted and understood (Innovyze, 2019).

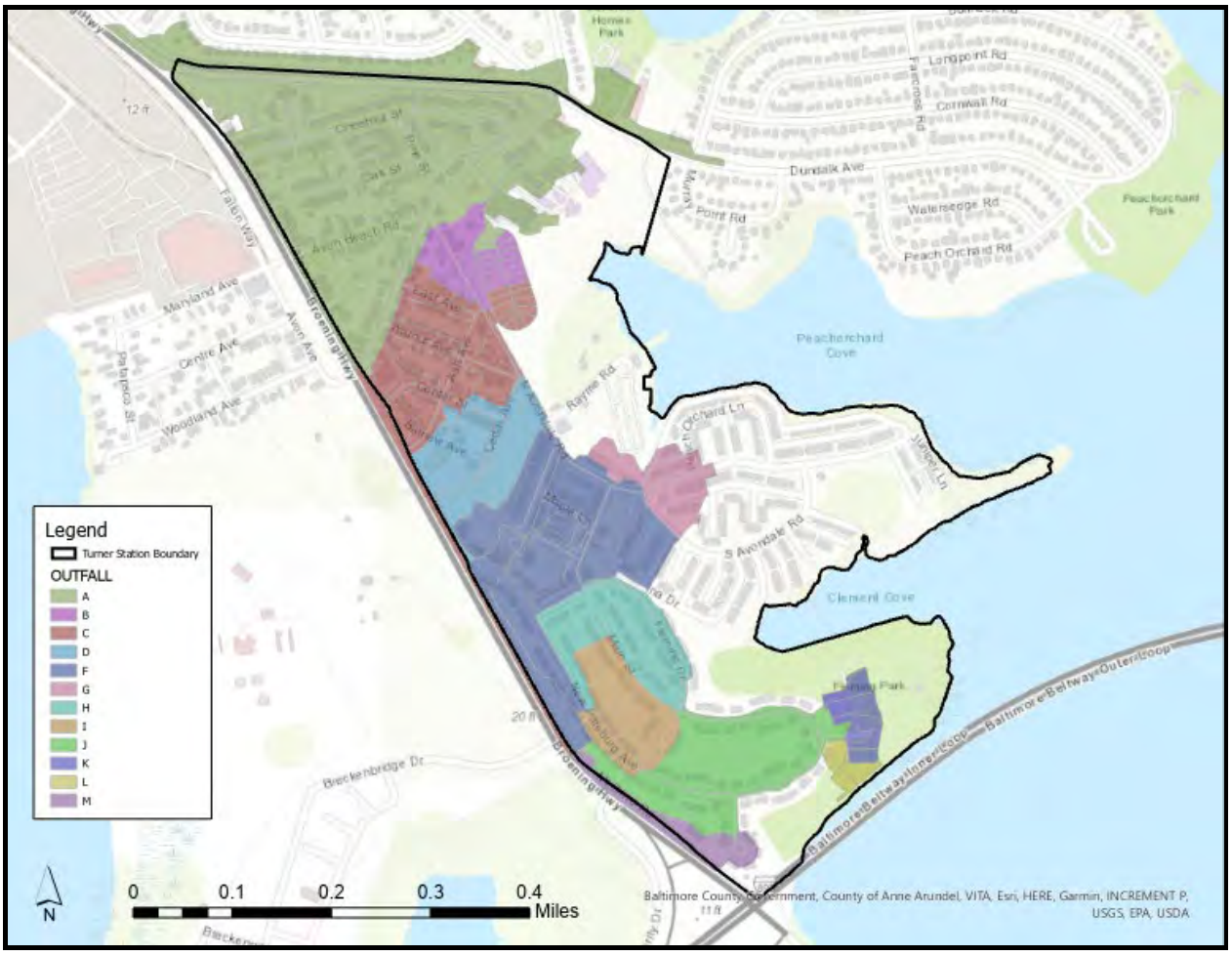
3.1 HYDROLOGIC INPUT

The SWMM Runoff Non-linear Reservoir Method was utilized for the hydrologic computations in the Turner Station model. For this method, the development of hydrologic data is required. This data includes drainage area to each inlet, drainage area width and slope, percent impervious area, and infiltration data. 24-hour precipitation data and control specifications are also required for a successful simulation.

Drainage Basins

The project DEM as well as field observations were used to delineate the drainage basins to each stormwater inlet to determine watershed extents to each stormwater outfall in Turner Station and inflow points to the community from neighboring localities. Width and slope for each drainage area were calculated. More information on outlets, outfalls, and drainage basins can be found in Section 2.2, and a map showing the existing-conditions outfall watersheds (12 total) and the individual drainage basins for each stormwater inlet for the Turner Station study area is shown in Figure 3.1; each color represents an outfall watershed.

FIGURE 3.1: OUTFALL DRAINAGE BASINS



Land Use

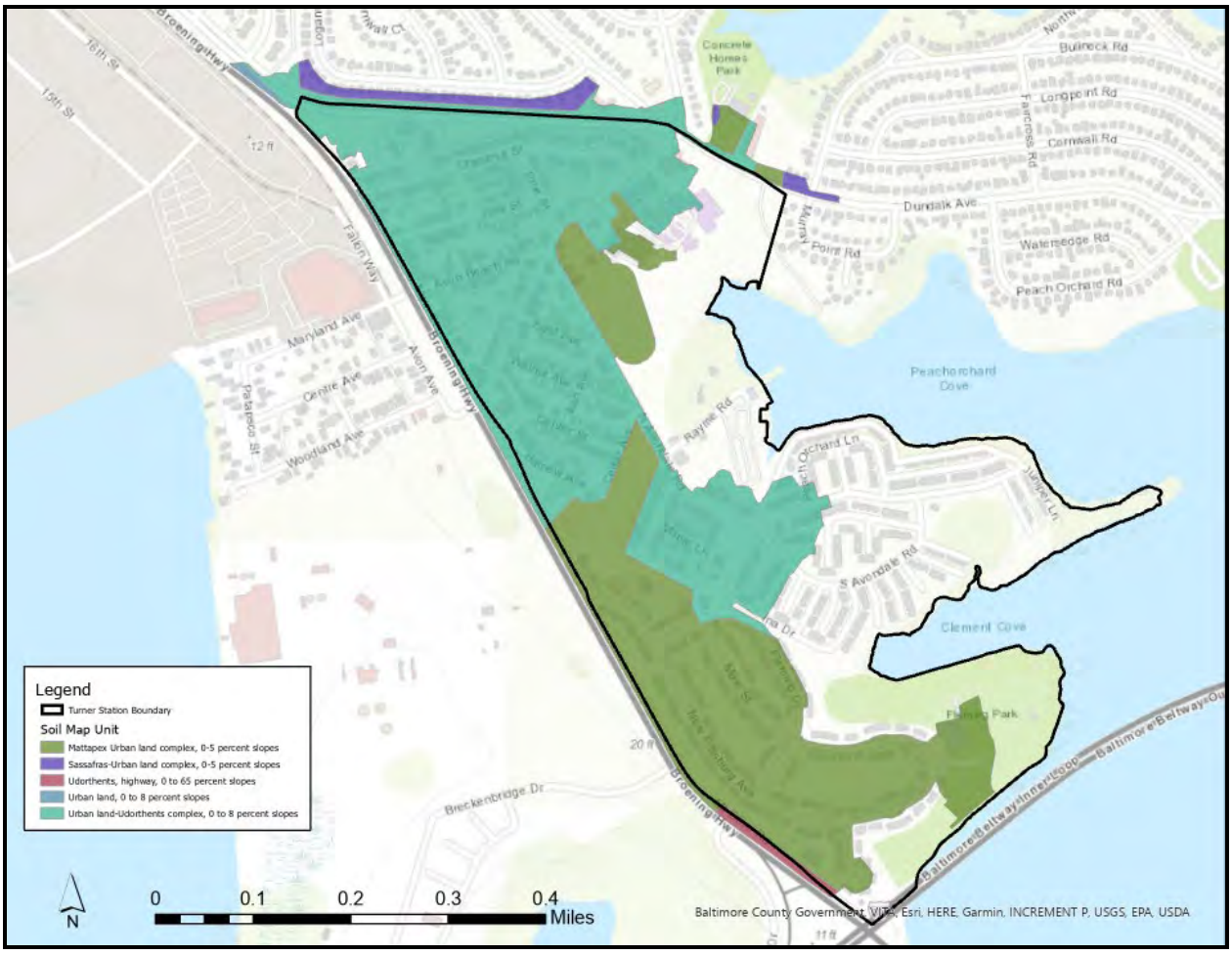
Land use data for this investigation was based on 2020 and 2018 land use data provided by Baltimore County. Percent impervious area for each drainage basin was calculated using this land use data. A map showing the existing-conditions land use is shown in Figure 3.2.

FIGURE 3.2: LAND USE

Soils and Infiltration

Spatial soil data for Baltimore County was obtained directly from the NRCS Web Soil Survey (USDA, 2003). The Horton Infiltration Method was used within XPSWMM to model infiltration within the study area, using the current NRCS soils data as a basis for the setting of initial infiltration parameters. The Horton Infiltration Method requires the input of numerous infiltration parameters including depression storage, Manning's n, zero detention percentage, maximum infiltration rate, minimum (asymptotic) infiltration, decay rate of infiltration, and minimum infiltration volume. The majority of soils within the study area are fine loams and silts (Figure 3.3), and therefore initial values for the Horton Infiltration parameters were set within the range for general loam to silty soils.

FIGURE 3.3: SOILS



3.2 HYDRAULIC INPUT

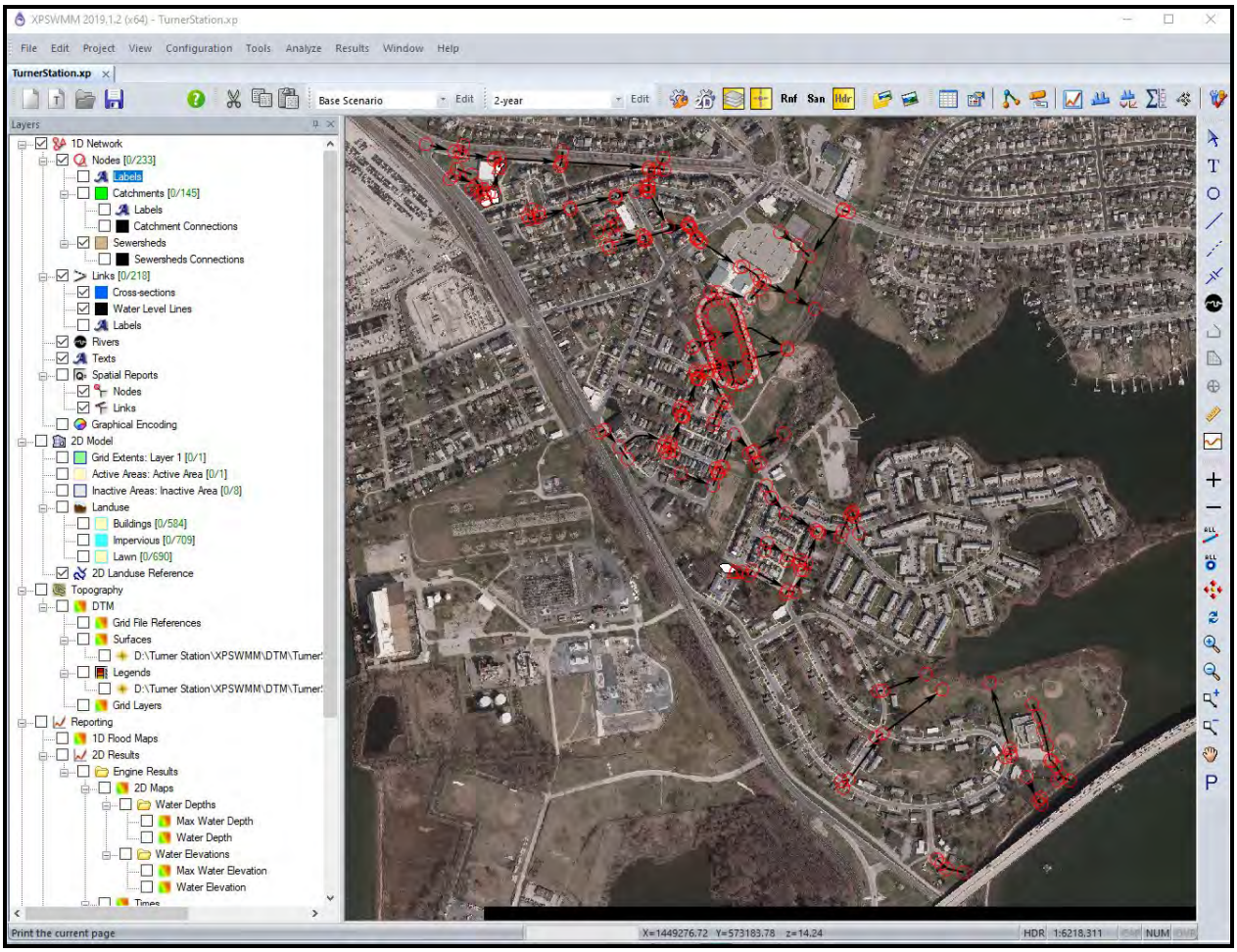
XPSWMM models both hydrology and hydraulics simultaneously. The hydraulic input required for the model is the stormwater infrastructure data discussed in Section 2.

Stormwater Structures, Pipes, and Open Drainage Channels

Stormwater structures, pipes, and open drainage channel GIS data were uploaded into the XPSWMM hydraulic model (Figure 3.4). The model was first run in a one-dimensional environment to assure the model was running correctly and to identify any warnings or errors in the model. In order to complete the two-dimensional portion of the model, the DEM is uploaded into the model and linked to the one-dimensional model.

Pipe and open channel Manning's roughness (n) values were assigned based upon engineering judgment.

FIGURE 3.4: XPSWMM HYDRAULIC MODEL



Stormwater Best Management Practices

XPSWMM has the ability to model the depth to volume characteristics of any natural or man-made storage facility and a combination of weirs, orifices, or other devices used to control the discharge. This is accomplished by converting a regular node in the hydraulics mode to a storage node. The information required in the storage node is a stepwise linear depth vs. area curve. For this investigation, a depth vs. area curve was generated for one of the bioretention ponds at the Family Dollar (Boos Development Group, Inc., 2018). The other bioretention ponds at the Family Dollar are infiltration ponds with no outflow connection to the stormwater system, and therefore were not modeled as storage nodes. A depth vs. area curve was also generated for the stormwater pond in the vicinity of Lyon Homes Apartments. The outflow controls were modeled as a multi-link pipe in the hydraulic model. This allows for the input of low flow orifices and grate tops of riser structures as well as weirs where applicable to represent emergency spillways.

The depth vs. area curves and outflow control data used for the bioretention and stormwater ponds are located in Appendix A.

Two-Dimensional Grid

In order to complete the two-dimensional portion of the model, the DEM is uploaded into the model and linked to the one-dimensional model. Through an iterative process, the grid size of 8 feet was set to allow the maximum amount of accuracy for the minimal computation time. An overland n value must be assigned to the corresponding land use to determine resistance to overland flow. Overland n values were obtained from the XPSWMM user's manual (Innovyze, 2019), which was derived from the USACE Flood Runoff Analysis Engineering Design Manual, EM 1110-2-1417 (USACE, 1994). An n value of 0.014 was used for impervious areas and an n value of 0.020 was used for pervious surfaces. Buildings were set at an n value of 3.0 in order to simulate the fact that water does enter the buildings, but flow inside a building is slowed substantially.

Inactive Areas

Inactive areas are modeled to purposefully exclude areas from 2D flooding. Areas commonly set as inactive areas are large buildings that are protected from flooding (usually flood proofed) and stormwater ponds that are modeled using a storage node. The bioretention pond at the Family Dollar and the stormwater ponds in the Vicinity of Lyon Homes Apartments were set as inactive areas as well as the Family Dollar building.

3.3 PRECIPITATION DATA

For this investigation, precipitation data was taken from NOAA Atlas 14, Volume 2, Version 3, for the location of Turner Station (NOAA, 2006). The project team agreed to use the future precipitation and sea level rise estimates from the *Baltimore County Climate Action Plan* (Hazen and Sawyer, 2021). Future conditions precipitation data was calculated at a 15% increase for 2050 and a 30% increase for 2080. The precipitation data used is shown in Table 3.1.

TABLE 3.1: PRECIPITATION DATA

Rainfall Event	*Existing Conditions Rainfall (inches)*	*2050 Rainfall (inches)*	*2080 Rainfall (inches)*
50% annual chance, 24-hour	3.23	3.71	4.20
10% annual chance, 24-hour	4.98	5.73	6.47
1% annual chance, 24-hour	8.60	9.89	11.18

Stormwater systems are typically designed to convey runoff generated from a 10% annual chance (10-year) rainfall event; therefore, the 10% annual chance and future conditions 2080 10% annual chance rainfall events are the focus for this investigation.

3.4 OUTFALL CONDITIONS

Tidal elevations are shown in Table 3.2. The XPSWMM model for Turner Station was run with the outfall water surface elevations set at the occasional nuisance tide elevation ("king tide") (Hazen and Sawyer, 2021). Occasional nuisance tides occur once or twice a year when the orbits and alignment of the earth, moon, and sun combine to produce the greatest tidal effects of the year (EPA, 2014).

TABLE 3.2: TIDAL FLOODING ELEVATIONS

Decade	*Average High Tide Elevation (NAVD88)*	*Occasional Nuisance Tidal Elevation (NAVD88)*
2020	1.3 feet	3.1 feet
2050	2.4 feet	4.2 feet
2080	3.4 feet	5.2 feet

3.5 CONTROL SPECIFICATIONS

For the XPSWMM model, a 1-second time step was used for the simulation. The start date and end date of the simulation was randomly set at 1 July 2021 and 2 July 2021, respectively.

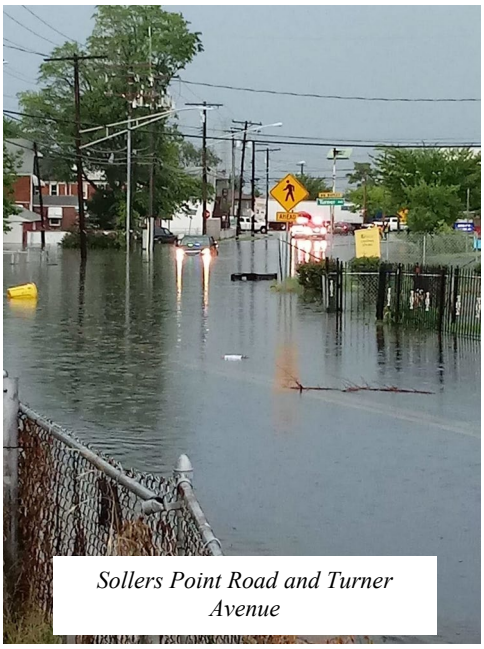
3.6 MODEL VERIFICATION

Calibration is the adjustment of a model to replicate conditions during storm events with known historical data. In order to perform calibration of the XPWMM model, precipitation data as well as flow data from the respective outfalls is required. The combination of this data for a particular historical storm was not available; however, precipitation data (Table 3.3) (Weather Underground, 2021) as well as photographs of flooded areas taken by citizens of Turner Station (Figure 3.5) were available for a storm event that occurred on July 17, 2021. A complete set of the flood mapping for the July 17, 2021, simulation is shown in Appendix E.

TABLE 3.3: RAINFALL DATA FOR JULY 17, 2021 (HISTORIC DUNDALK KMDDUNDA15)

Time on July 17, 2021	Total Rainfall Accumulation
3:14 PM	0.00 in
3:19 PM	0.01 in
3:24 PM	0.03 in
3:29 PM	0.18 in
3:34 PM	0.37 in
3:39 PM	0.50 in
3:44 PM	0.58 in
3:45 PM	0.59 in
4:04 PM	1.60 in
4:09 PM	1.86 in
4:14 PM	2.29 in
4:19 PM	2.90 in
4:24 PM	3.06 in
4:29 PM	3.10 in
4:34 PM	3.13 in
4:39 PM	3.14 in
4:44 PM	3.15 in
4:49 PM	3.16 in
4:54 PM	3.16 in
4:59 PM	3.24 in
5:04 PM	3.44 in
5:09 PM	3.62 in
5:14 PM	3.73 in
5:19 PM	3.93 in
5:24 PM	3.97 in
5:29 PM	3.97 in
5:34 PM	4.07 in
5:39 PM	4.20 in
5:44 PM	4.21 in
5:49 PM	4.22 in
5:54 PM	4.22 in
5:59 PM	4.22 in
6:04 PM	4.22 in
6:09 PM	4.23 in
6:14 PM	4.23 in
6:19 PM	4.23 in

FIGURE 3.5: JULY 17, 2021, STORM EVENT PHOTOGRAPHS



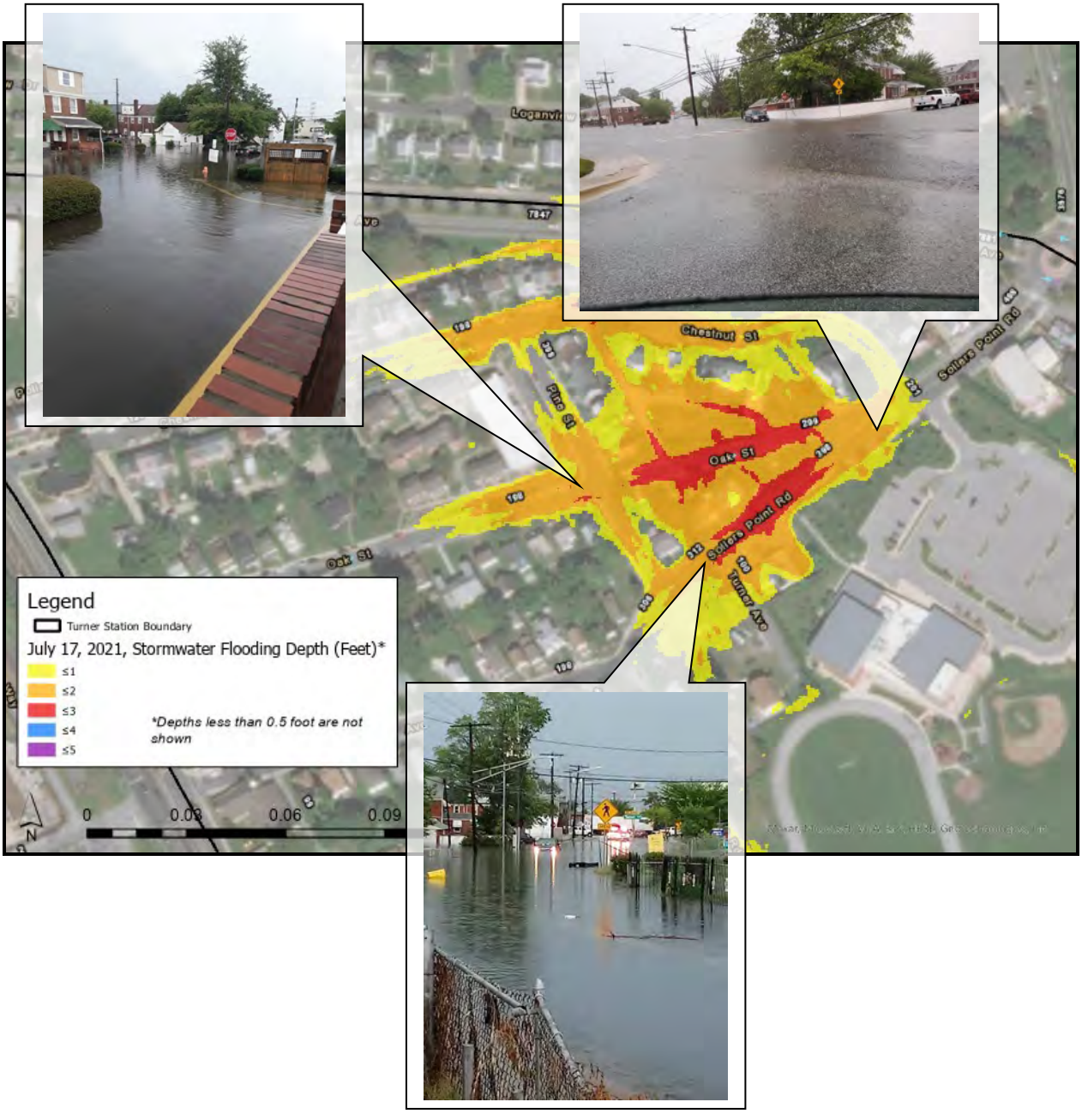
Sollers Point Road and Turner Avenue

Oak Street and Pine Street

Sollers Point Road and Oak Street

Based on observed conditions by the field team and citizens of Turner Station and by comparing the output stormwater flooding mapping to photos from the July 17, 2021, storm, it is assumed that this XPSWMM model is accurate to a reasonable tolerance (Figure 3.6).

FIGURE 3.6: JULY 17, 2021, STORM EVENT MODEL COMPARISON



4 FLOOD ASSESSMENT

The results of the XPSWMM modeling were used to complete a flood assessment of the Turner Station study area to determine or confirm areas where stormwater flooding would occur and to determine potential causes of flooding. All models are provided on the attached Project Disc, and future users of the model can choose a different output format based upon the specific need of the user. The results of the 50%, 10%, and 1% annual chance flooding events on the stormwater system are shown in Appendix B, C, and D, respectively, as well as future conditions run results. The results for the July 17, 2021, flooding event on the stormwater system are shown in Appendix E. Detailed XPSWMM results for these storm events are located in Appendix F. Stormwater systems are typically designed to convey runoff generated from a 10% annual chance (10-year), 24-hour storm event; therefore, the 10% annual chance, 24-hour, storm event and the future conditions 2080 10% annual chance, 24-hour, storm event were the focus for this assessment.

Because the primary purpose of this investigation was to identify areas within Turner Station that are at risk of stormwater flooding, the model was run with a "fixed outfall" condition. This was to assure that any flooding identified from the modeling also includes the effects of tidal elevations, and in this case, the highest potential tidal elevation scenario, the occasional nuisance tide ("king tide"), was modeled. Stormwater flooding could be more significant should it occur during times where the rivers are at levels that are significantly higher than the elevation of the stormwater outfalls.

Based on observations by the citizens of Turner Station and confirmed by the XPSWMM modeling, the primary area that is at risk of flooding is the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area. Flood depths for the 10% annual chance, 24-hour, rainfall event could reach up to 2.6 feet (Figure 4.1); flood depths for the 2080 10% annual chance, 24-hour, rainfall event could reach up to 3.0 feet (Figure 4.2).

Secondary areas of flood risk include the North Avondale Road/East Avenue area as well as a small portion of Walnut Avenue, the South Avondale Road/Kweisi Mfume Court intersection, Lee Lawrence Court, Anjou Rouse Court, Peach Orchard Lane, Fleming Drive, and the area of Main Street in front of the Fleming Senior Center (Figure 4.5). These secondary areas are at risk of "nuisance flooding", with flooding mostly restricted to roadways and with flood depths of generally less than one foot for the both the 10% annual chance, 24-hour, storm event (Figure 4.4) and the 2080 10% annual chance, 24-hour, storm event (Figure 4.3).

FIGURE 4.1: TURNER STATION PRIMARY AREAS AT RISK OF FLOODING – 10% ANNUAL CHANCE RAINFALL EVENT

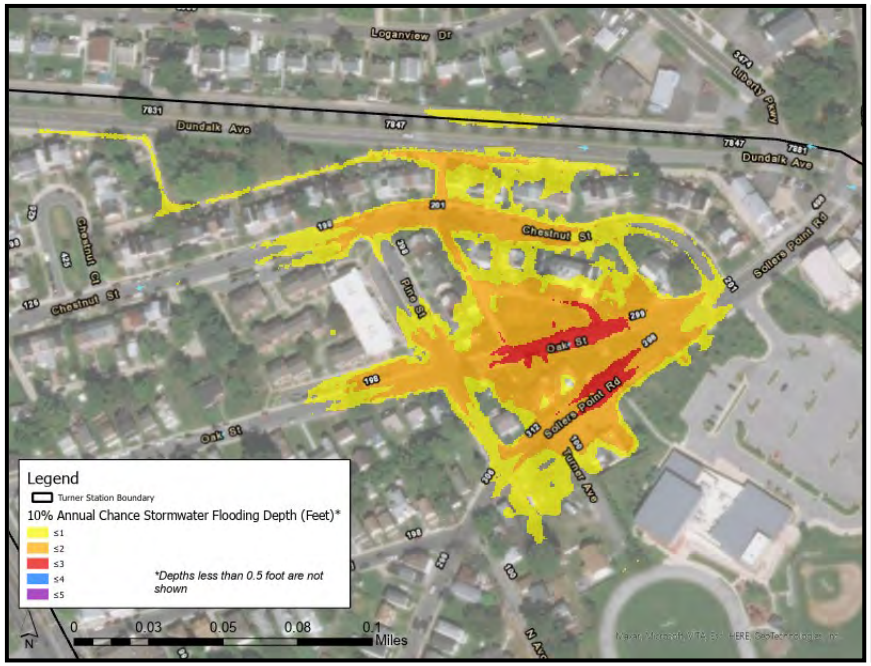


FIGURE 4.2: TURNER STATION PRIMARY AREAS AT RISK OF FLOODING – 10% ANNUAL CHANCE 2080 RAINFALL EVENT

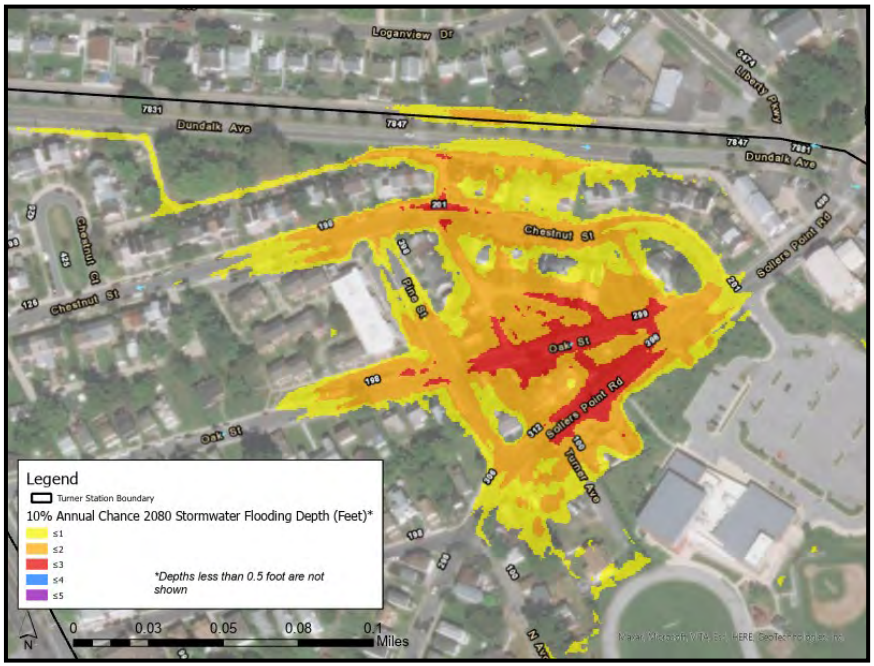
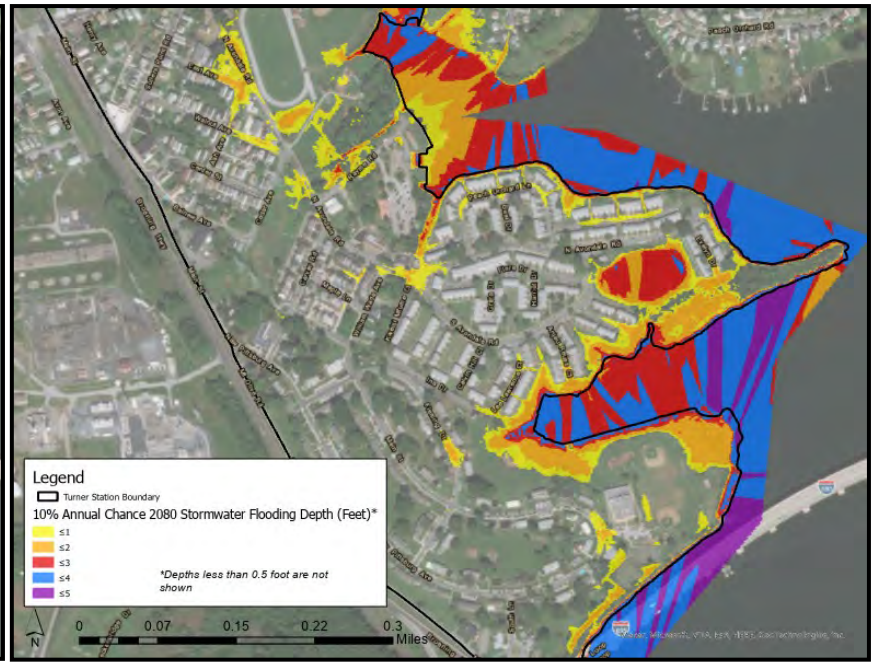


FIGURE 4.3: TURNER STATION SECONDARY AREAS AT RISK OF FLOODING – 10% ANNUAL CHANCE RAINFALL EVENT

FIGURE 4.4: TURNER STATION SECONDARY AREAS AT RISK OF FLOODING – 10% ANNUAL CHANCE 2080 RAINFALL EVENT



Based upon modeling results, the contributing factors resulting in the flooding within the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area include:

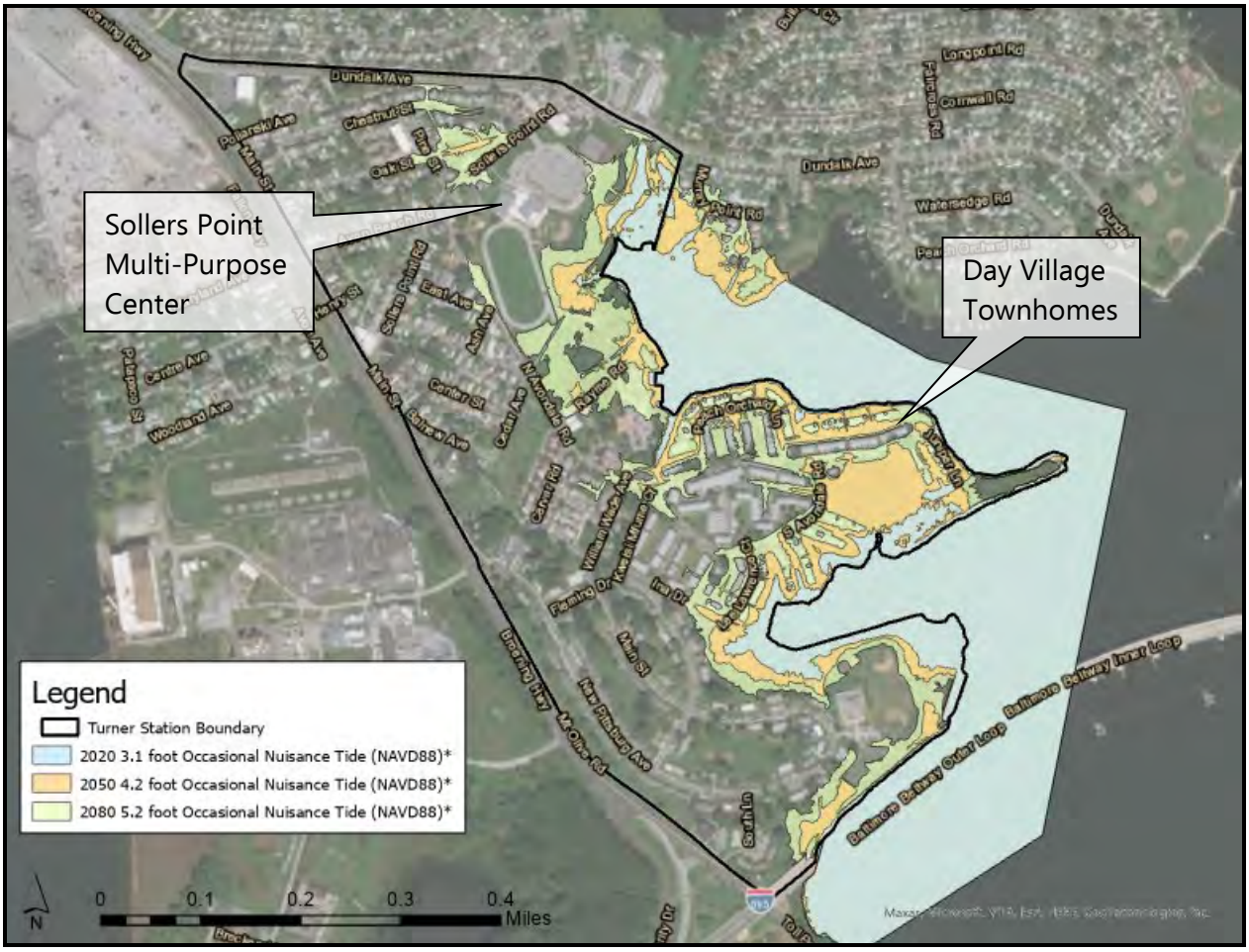
1. The main drainage trunk lines are undersized and cannot convey the 10% annual chance design storm, causing stormwater within the pipes to back up out of the pipe network. The surface runoff cannot drain into the system when it reaches an inlet because of backwater from the pipes. Thus, the runoff continues downhill and ponds at the natural low areas along Sollers Point Road, Oak Street, Chestnut Street, and Pine Street.

2. The stormwater infrastructure is low-lying, with little positive slope. Current tidal levels on Bear Creek flood the stormwater system on a sunny day, which limits pipe capacity during storm events. Stormwater cannot enter the already-full pipes, and ponds at the natural low areas along Sollers Point Road, Oak Street, Chestnut Street, and Pine Street.

3. There is a lack of stormwater quantity management for impervious areas in the watershed that were constructed prior to stormwater management regulations.

While this study focused on using XPSWMM to model and assess stormwater flooding in the study area, it is also important to point out that Turner Station is at risk of future tidal and coastal flooding. The current and future occasional nuisance tide levels at Turner Station are shown in Figure 4.5, and are based on the 2015 Baltimore County topography (Baltimore County, 2015). The 2080 Occasional Nuisance Tide Level is predicted to be 5.2 feet NAVD88 (Hazen and Sawyer, 2021). In comparison, the current average high tide is 1.3 feet NAVD88. Ground elevations around the shoreline in Turner Station range from around 3.5 feet NAVD88 at the Day Village Townhome community to around 7.0 feet NAVD88 at the Sollers Point Multi-Purpose Center.

FIGURE 4.5: CURRENT AND FUTURE OCCASIONAL NUISANCE TIDE LEVELS AT TURNER STATION



**Tidal delineations are based on 2015 Baltimore County topography and future tide projections from Hazen and Sawyer (2021)*

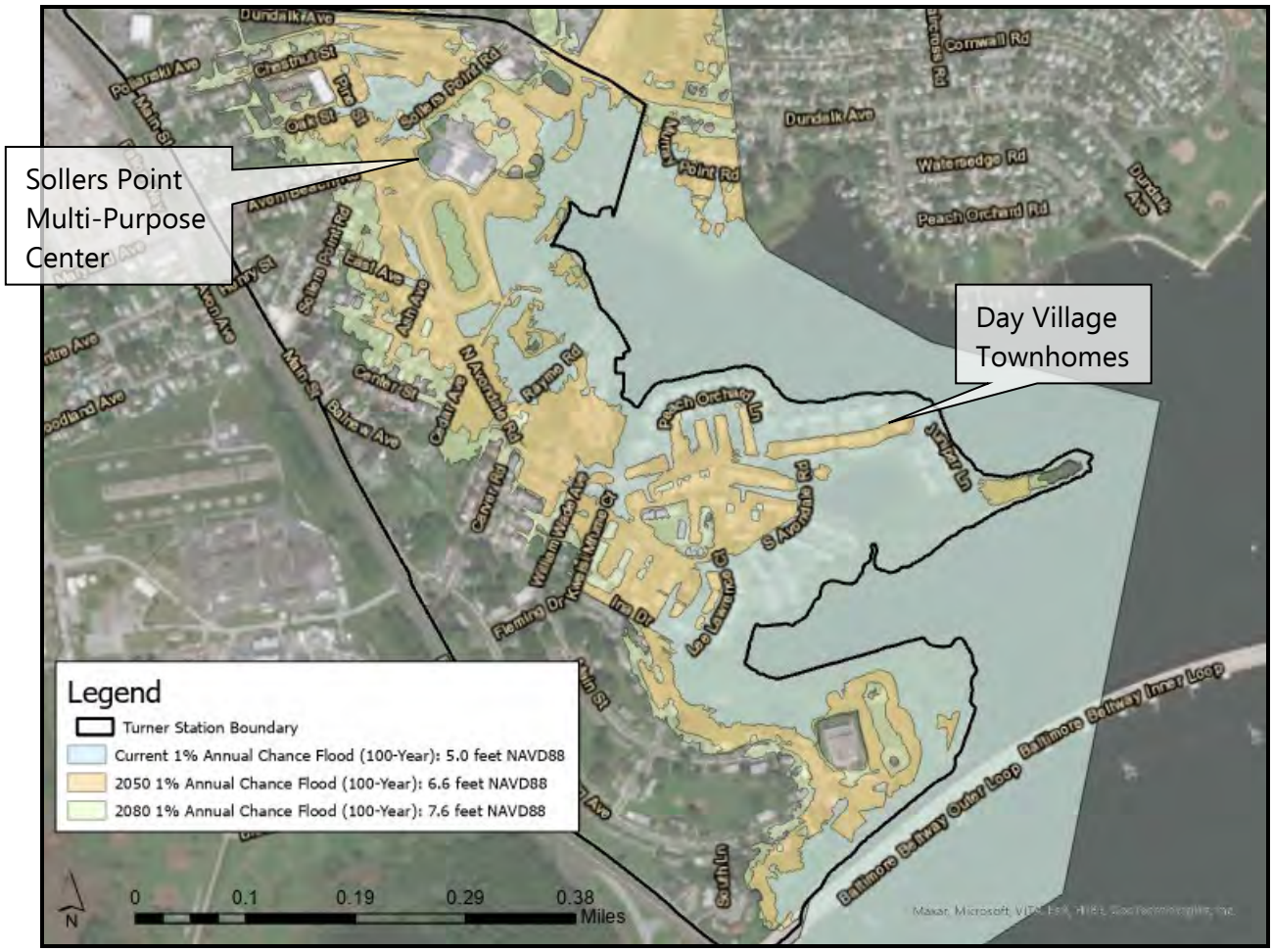
A summary of the current (FEMA, 2014) and future (Hazen and Sawyer, 2021) 1% and 0.2% annual chance flood elevations on Bear Creek are shown below in Table 4.1. These projections are based on likely 67% probability upper range estimates (Hazen and Sawyer, 2021).

TABLE 4.1: CURRENT AND FUTURE COASTAL FLOOD ELEVATIONS

Decade	*1% Annual Chance Flood Elevation (NAVD88)*	*0.2% Annual Chance Flood Elevation (NAVD88)*
Current	5.0 feet	7.0 feet
2050	6.6 feet	8.6 feet
2080	7.6 feet	9.6 feet

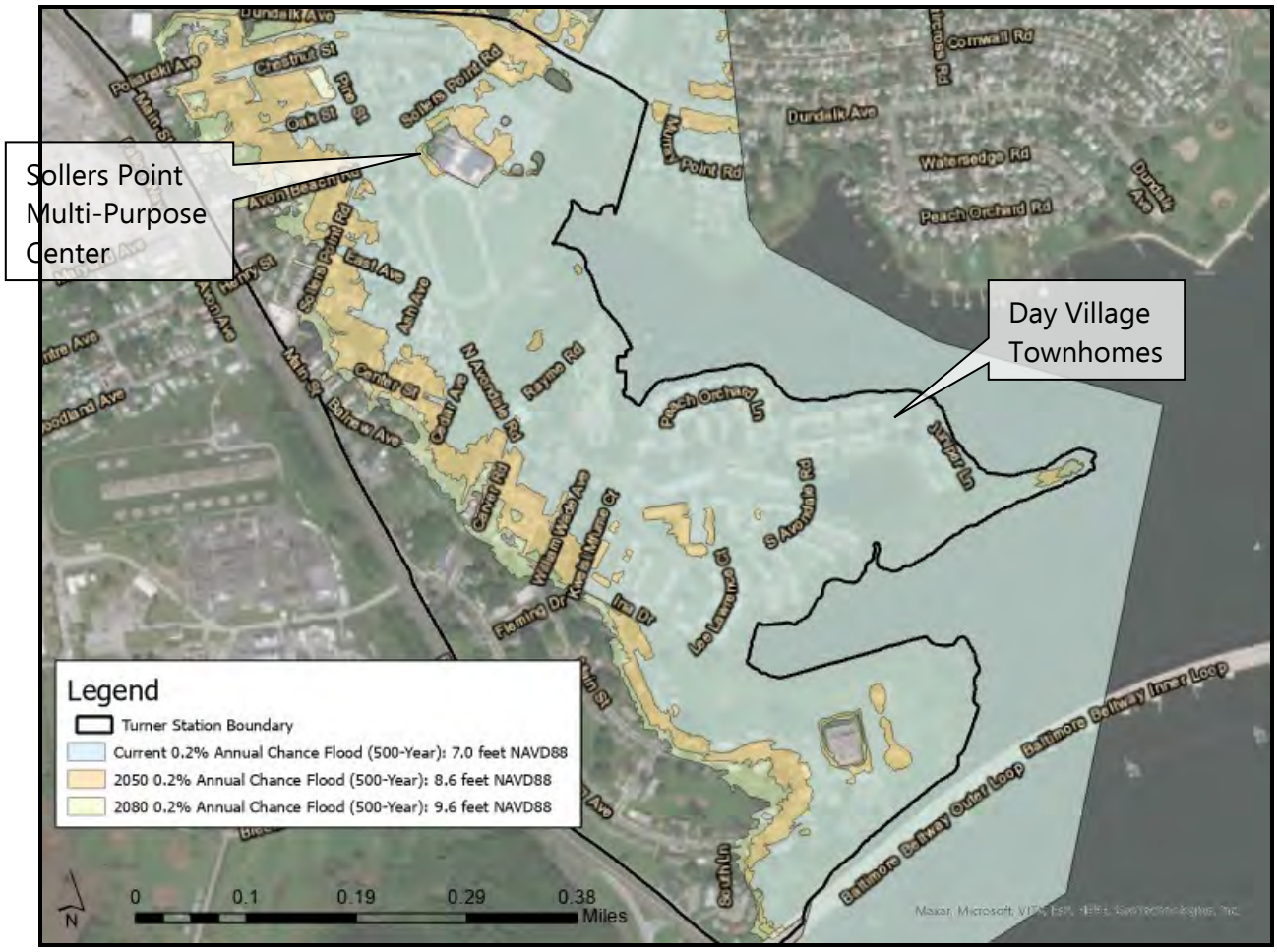
The current and future coastal flood inundation areas for the 1% and 0.2% annual chance flood are shown in Figure 4.6 and Figure 4.7, respectively. Since the delineations in Figure 4.6 and Figure 4.7 are based on newer topography after construction of the Sollers Point Multi-Purpose Center, this is a more accurate depiction of the coastal flood hazard than the current FEMA FIRM, which was based on topography dated 2005.

FIGURE 4.6: 1% ANNUAL CHANCE CURRENT AND FUTURE FLOOD INUNDATION AREAS



**Delineations are based on 2015 Baltimore County topography and future 1% annual chance flood projections from Hazen and Sawyer (2021)*

FIGURE 4.7: 0.2% ANNUAL CHANCE CURRENT AND FUTURE FLOOD INUNDATION AREAS



**Delineations are based on 2015 Baltimore County topography and future 0.2% annual chance flood projections from Hazen and Sawyer (2021)*

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5 DEVELOPMENT OF FLOOD RISK MANAGEMENT MEASURES

Using the results of the existing- and future-conditions XPSWMM modeling and flooding assessment, flood risk management measures were developed to attempt to safely convey the 10% annual chance, 24-hour, and 10% annual chance 2080, 24-hour, design storms in pipe in accordance with Maryland State Highway Administration (SHA) Highway Drainage Manual design guidelines (or similar), eliminating or significantly reducing surface flooding.

Potential types of projects considered included:

- Stormwater management in the upland watersheds to provide quantity (flood) control and to integrate, whenever possible, quality control to meet National Pollutant Discharge Elimination System (NPDES) permit requirements.
- Upsize and/or parallel existing infrastructure (pipes, inlets, culverts) to add capacity.
- Overland safe conveyance of larger storms using swales/channels and possibly berms.
- Reduction of head losses at structures through elimination of poor geometry (elimination of connections at angles greater than 90 degrees).
- Relief storm drain set at a higher elevation in storm drain system to outfall above water surface elevations at stream channel to reduce tail-water effect.
- Underground storage/pump stations.
- Curb and gutter improvements to provide sufficient curb reveal to safely convey flows in street.
- Private property opportunities to reduce runoff, improve infiltration and/or temporarily store and release runoff.

To alleviate the flooding in the Turner Station study area, the developed flood risk management measures sought to 1) raise the relief storm drain to outfall above river tidal water surface elevations, 2) increase subsurface stormwater system capacity, and 3) decrease the amount of surface runoff reaching the major flooding area. Based on these three principles, three main flood risk management measures were evaluated by modifying the existing-conditions XPSWMM model (discussed in Section 3). After investigating each measure separately, it was found that there is minimal reduction in stormwater flooding if an individual measure is applied to the model. However, when measures are combined, the stormwater flooding is lessened to the point that flooding is limited to alleyways and minor road flooding for both the 10% annual chance, 24-hour, and 10% annual chance 2080, 24-hour, storms.

5.1 MEASURE #1: INCREASE TRUNK LINE SIZE AND INSTALL PUMP STATION

Modeling results show insufficient pipe capacity for the 10% annual chance, 24-hour, and the 10% annual chance 2080, 24-hour, storms in the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area. These pipes are also flooded at normal tide levels. There is very little slope to the stormwater infrastructure in Turner Station, and therefore there isn’t enough head pressure to push stormwater through the existing system and outfall. Therefore, increasing the capacity of the trunk line pipes through this area was evaluated along with raising the outfall pipe and incorporating a pump station to push water out of the system during and after rainfall events.

The results of this measure are shown in Figure 5.1 and include:

1) Increasing sizes of the pipes along the main trunk line and along Oak Street to a 6'x3' conduit.

2) Rerouting the outfall to higher ground, above the 2080 5.2 feet NAVD88 occasional nuisance tide level (and therefore the 5.0 feet NAVD88 FEMA FIRM 1% annual chance flood elevation on Bear Creek). The existing outfall invert elevation for this area is at -1.3 feet NAVD88.

3) Installing a pump station to evacuate stormwater from the system. A flap gate is recommended for the outfall pipe to prevent floodwaters less frequent than the 1% annual chance flood from entering the system. Due to the pump water pressure, if the outfall is submerged, stormwater will still be able to be pumped out. Any storage needed for the pump could be addressed by adding an underground vault under the Sollers Point Multipurpose Center parking lot. An oversized pump was modeled; the size of the pump could be decreased with further refinement of the design.

By increasing the pipe capacities, the trunk line can convey more stormwater from upstream drainage areas to the system outfall. By rerouting the outfall to high ground and installing a pump station, stormwater can exit the system without being impeded by normal tide levels. If this measure were implemented, the resultant maximum flood depth within the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area during a 10% annual chance, 24-hour, storm would be 1.6 feet, compared to the existing 2.6 feet (Figure 5.2). If Measure #1 was implemented, the resultant maximum flood depth in this area for the 10% annual chance, 2080, 24-hour, storm would be 2.8 feet, compared to the future conditions depth of 3.0 feet without implementation (Figure 5.3).

FIGURE 5.1: MEASURE #1

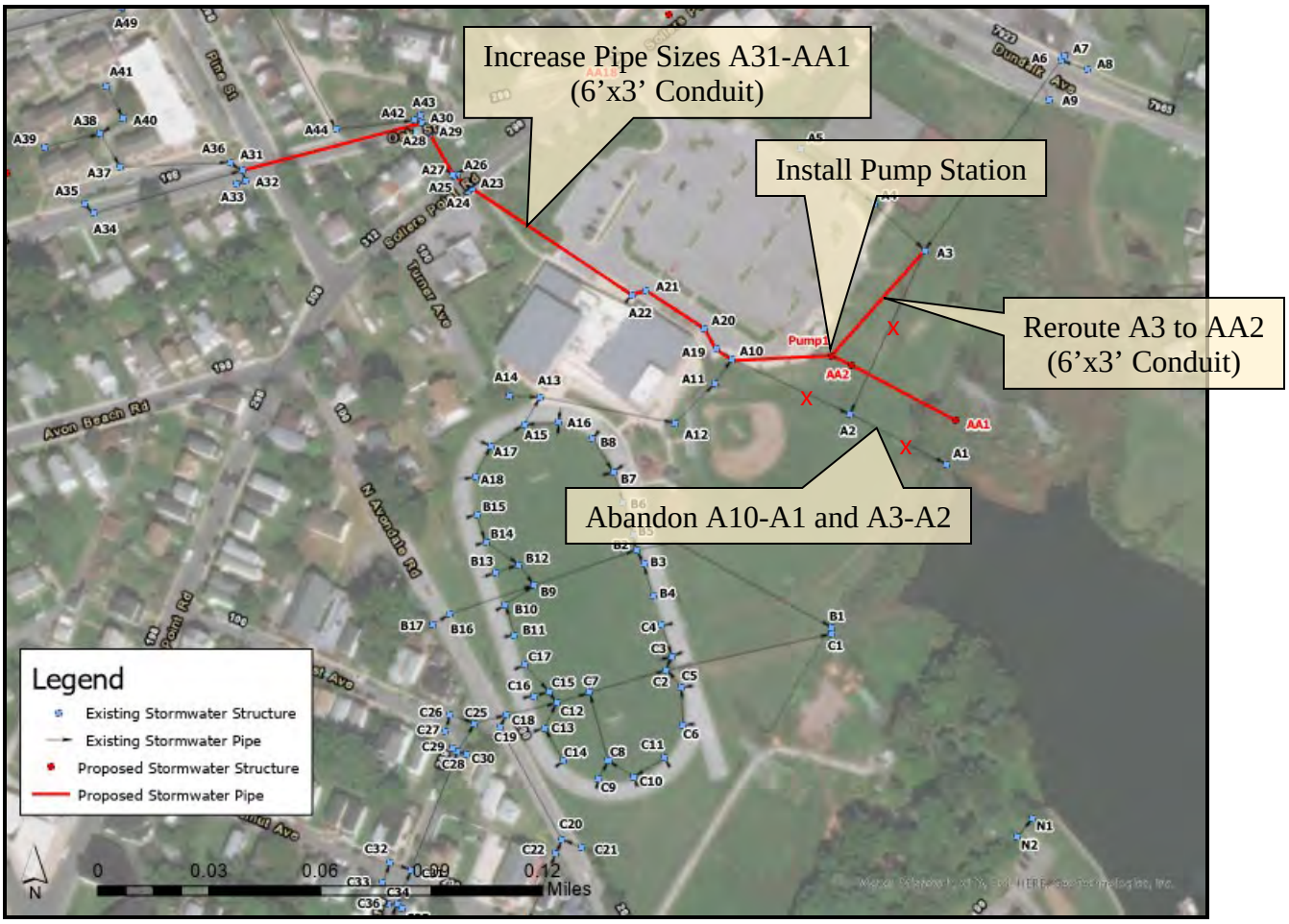


FIGURE 5.2: MEASURE #1 RESULTS – 10% ANNUAL CHANCE RAINFALL EVENT

With No Alternatives Implemented **With Measure #1 Implemented**

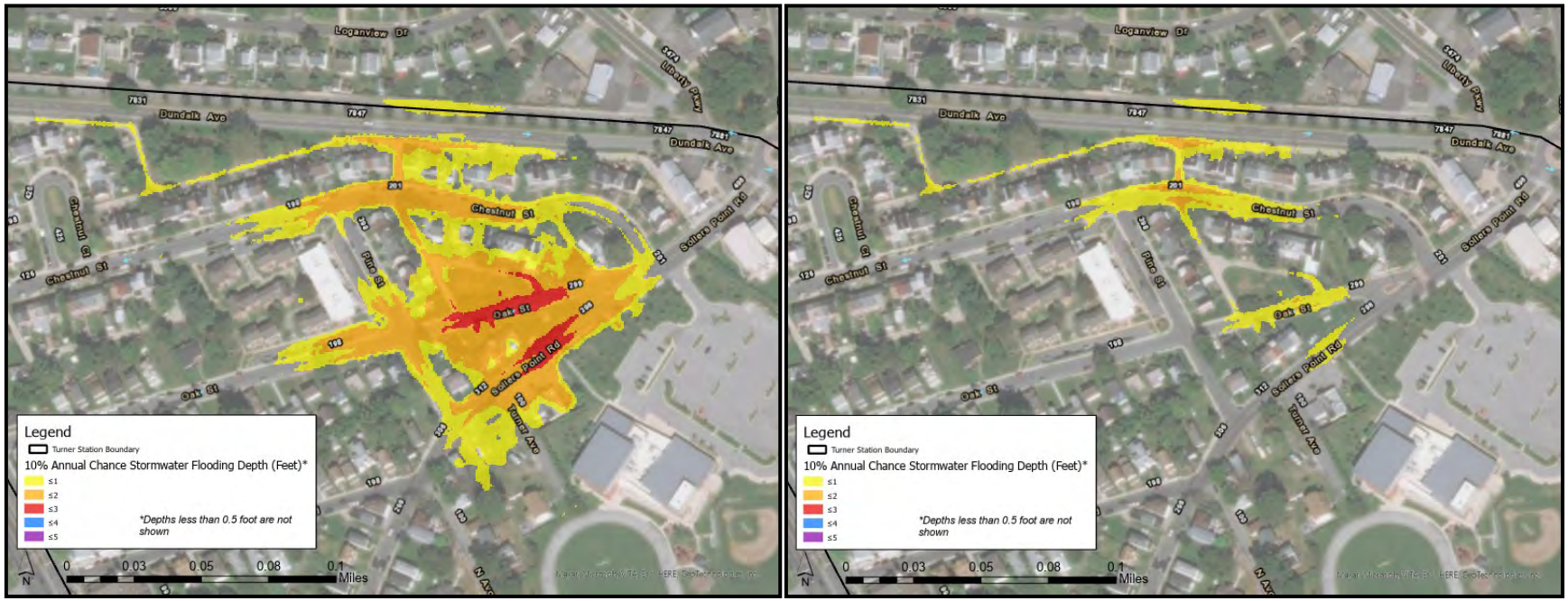
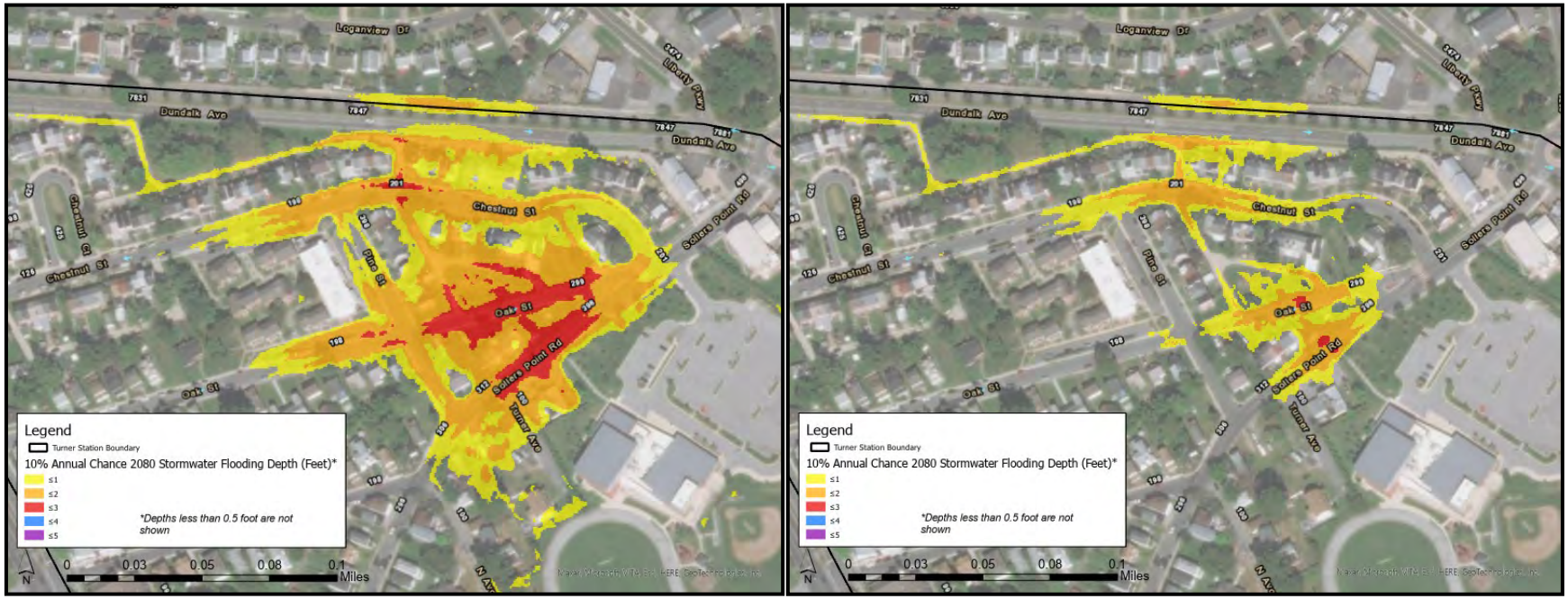


FIGURE 5.3: MEASURE #1 RESULTS – 10% ANNUAL CHANCE 2080 RAINFALL EVENT

With No Alternatives Implemented **With Measure #1 Implemented**



5.2 MEASURE #2: DIVERT EXISTING STORMWATER SYSTEM AWAY FROM MAIN TRUNK LINE

Results from modeling the implementation of Measure #1 indicate that stormwater flooding is not completely resolved in the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area. Modeling results show insufficient pipe capacity for the stormwater infrastructure in this area and an inability for the main trunk line to handle the 10% annual chance, 24-hour, storm event despite upsizing the main trunk line for Measure #1. Therefore, diverting the existing stormwater infrastructure away from the main trunk line was evaluated.

This measure includes (Figure 5.4):

1) Diverting the line exiting A62 away from the main trunk line with twin 36” pipes.

2) Diverting the line exiting A45 away from the main trunk line with a 6’x3’ conduit.

By diverting the existing stormwater infrastructure away from the main trunk line, the burden on the trunk line is relieved. This measure is not feasible without implementing Measure #1 first, so that water can exit the system without being impeded by normal tide levels. If Measures #1 and #2 were implemented, the resultant maximum flood depth within the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area during a 10% annual chance, 24-hour, storm would be 1.0 foot, compared to the existing 2.6 feet (Figure 5.5). If Measure #1 and Measure #2 were both implemented, the resultant maximum flood depth in this area for the 10% annual chance, 2080, 24-hour, storm would be 1.2 feet, compared to the future conditions depth of 3.0 feet without implementation (Figure 5.6). Flooding is almost eliminated in the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area.

FIGURE 5.4: MEASURE #2

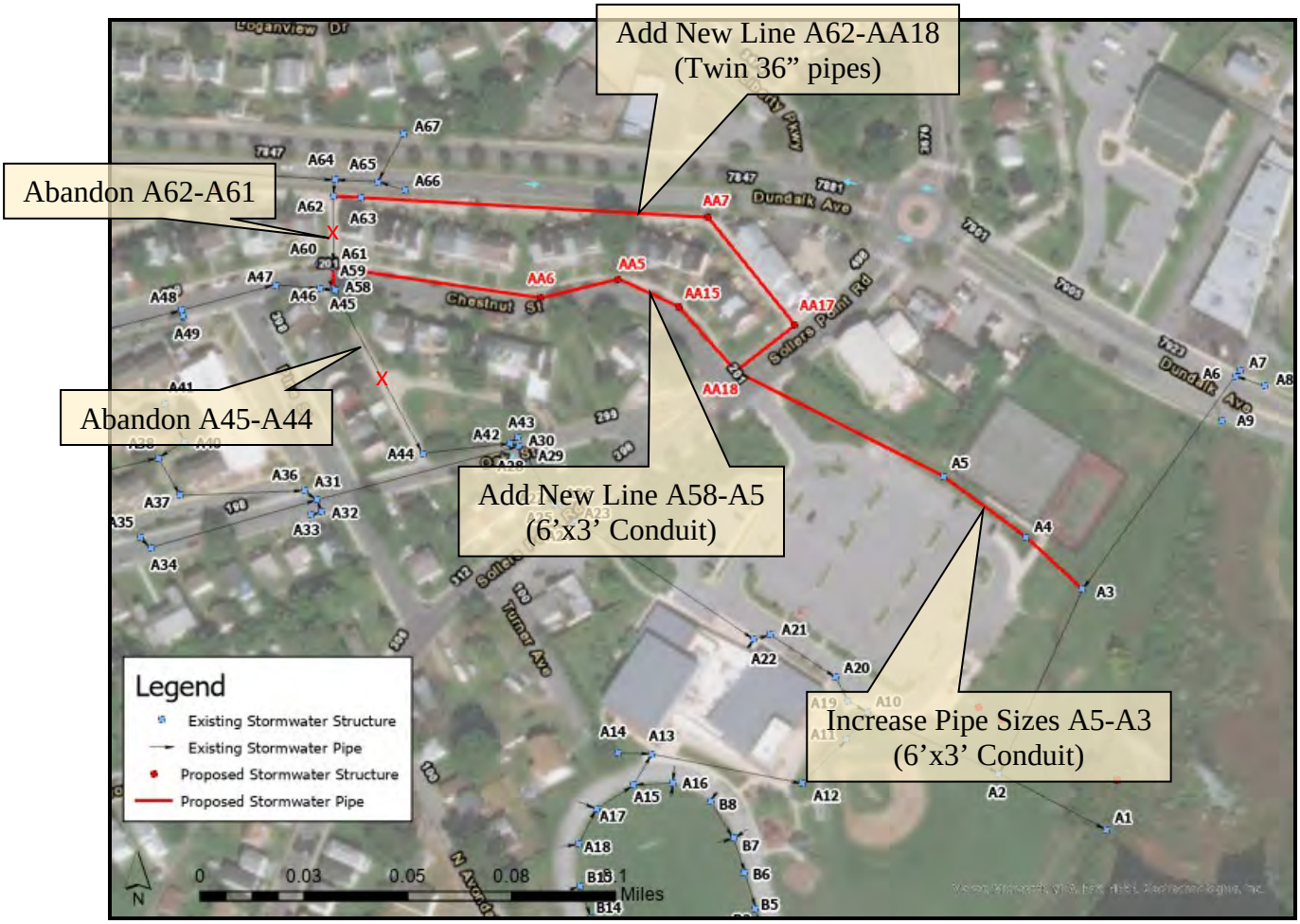
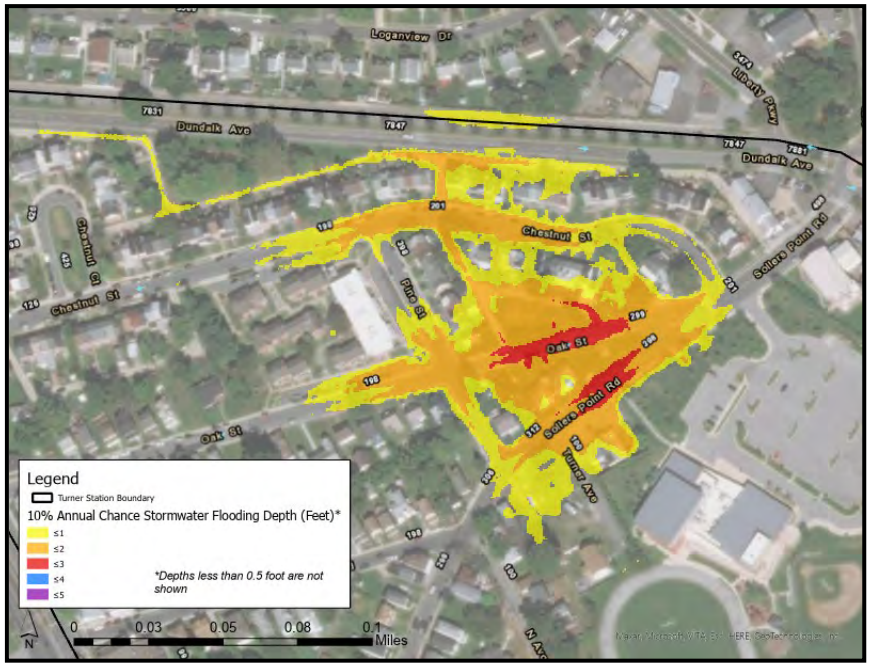


FIGURE 5.5: MEASURE #1 AND #2 RESULTS – 10% ANNUAL CHANCE RAINFALL EVENT

With No Alternatives Implemented



With Measure #1 and #2 Implemented

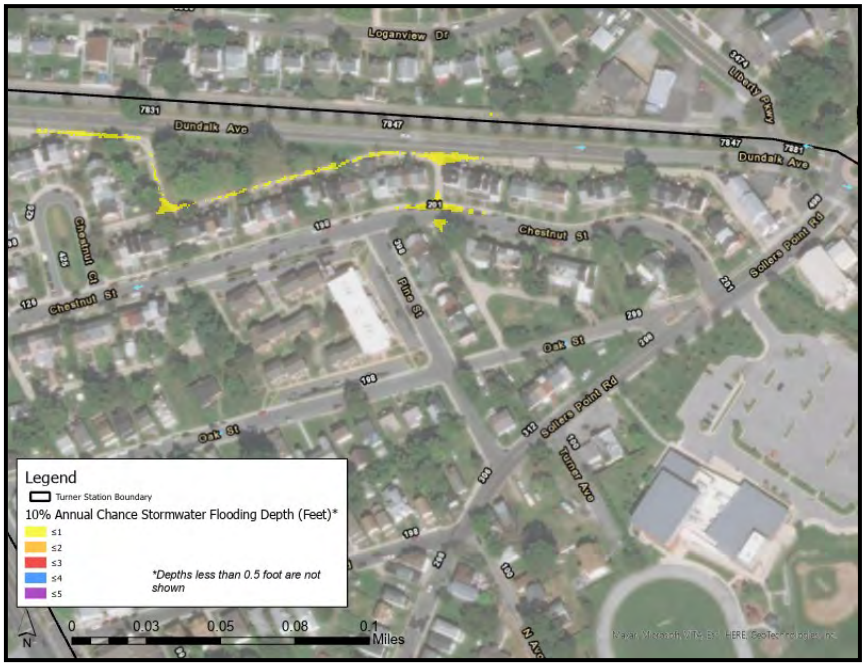
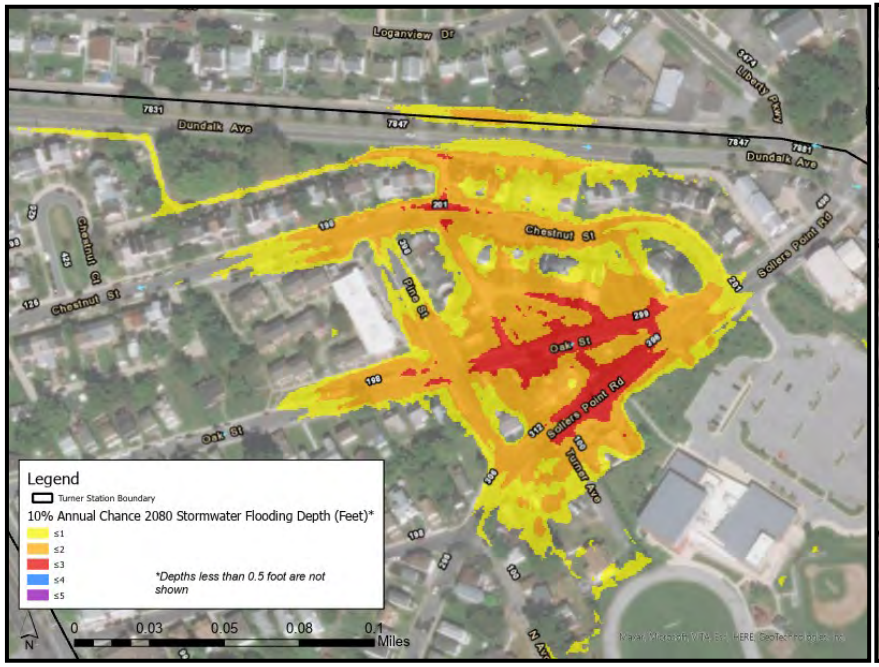
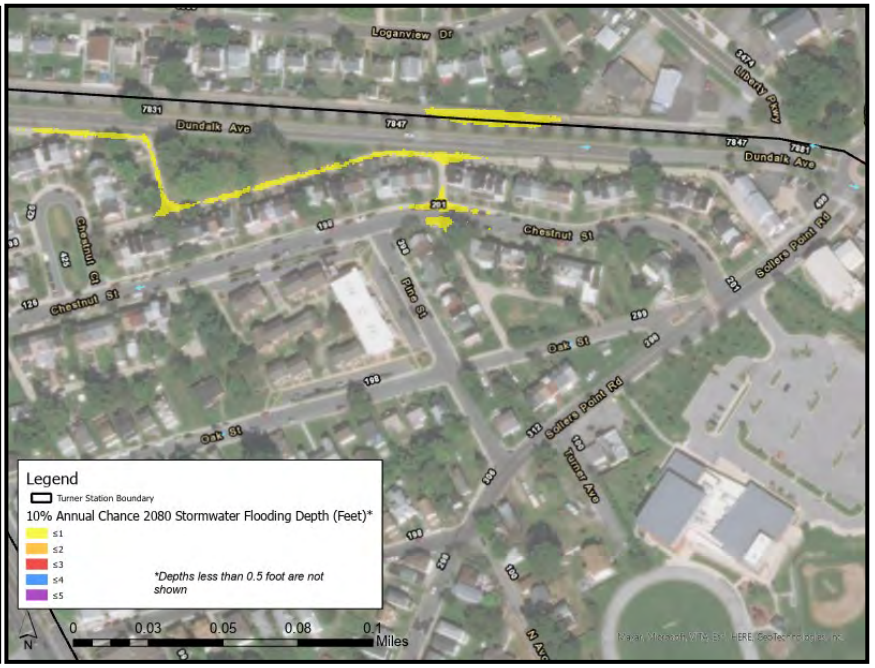


FIGURE 5.6: MEASURE #1 AND #2 RESULTS – 10% ANNUAL CHANCE 2080 RAINFALL EVENT

With No Alternatives Implemented



With Measure #1 and #2 Implemented



5.3 MEASURE #3: STORMWATER DETENTION

Stormwater detention ponds are a common way for individual sites to reduce surface runoff in urban areas. The main benefit of detention ponds (and also subsurface vaults or piped detention) is attenuation of flows, with a secondary benefit of reducing runoff by infiltrating a portion of the runoff. The amount of attenuation is a function of the amount of storage provided and the outlet structure configuration, with more storage and smaller outlet openings resulting in more attenuation. Infiltration is a function of the permeability of the underlying soils and can be quite variable, even in close geographic proximity from site to site. Basin modeling can become complex and become sensitive to these variables. For this analysis, hypothetical storage curves were created for two potential stormwater detention ponds (Figure 5.7). These are shown in Appendix A. It should be noted that these properties are not owned by Baltimore County and there have been no discussions concerning property acquisition for stormwater detention.

By building stormwater detention ponds, the attenuation of flow would relieve the burden on the main trunk line. This measure is not feasible without implementing Measure #1 first, so that water can exit the system without being impeded by normal tide levels. If Measures #1 and #3 were implemented, the resultant maximum flood depth within the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area during a 10% annual chance, 24-hour, storm would be 1.2 feet, compared to the existing 2.6 feet (Figure 5.8), and flooding is almost eliminated. If Measure #1 and Measure #3 were both implemented, the resultant maximum flood depth in this area for the 10% annual chance, 2080, 24-hour, storm would be 2.5 feet, compared to the future conditions depth of 3.0 feet without implementation (Figure 5.9).

FIGURE 5.7: MEASURE #3

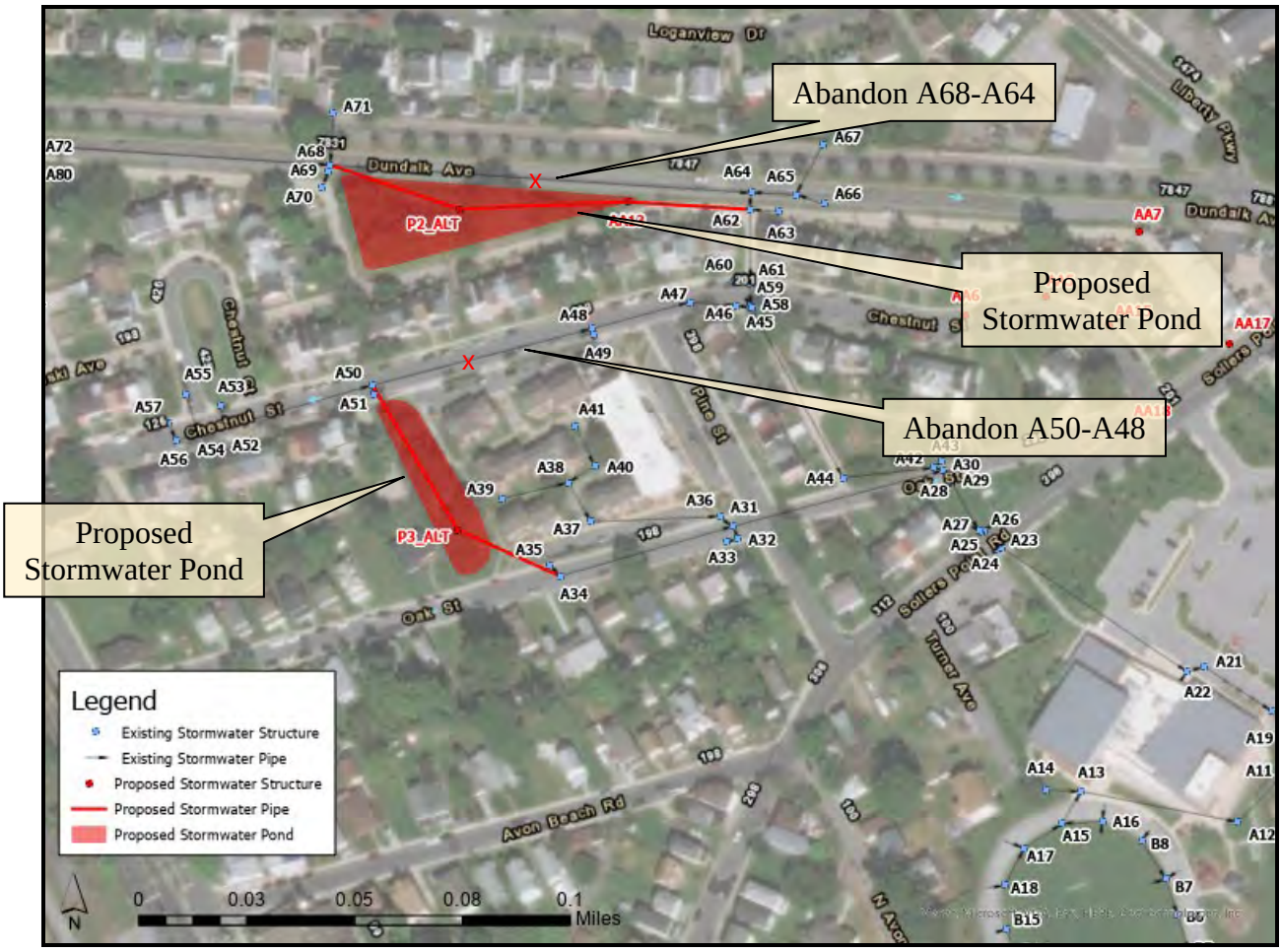
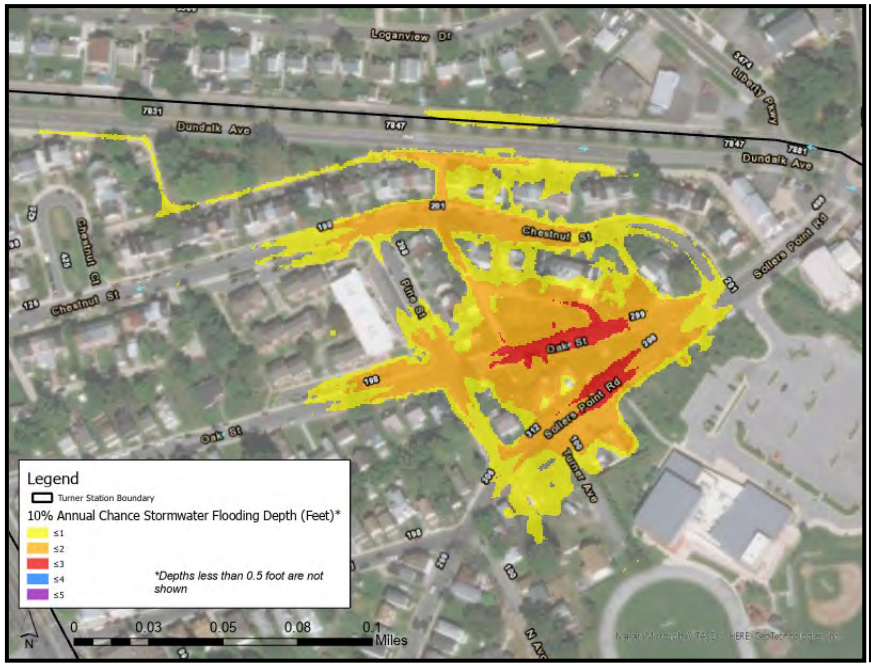


FIGURE 5.8: MEASURE #1 AND #3 RESULTS – 10% ANNUAL CHANCE RAINFALL EVENT

With No Alternatives Implemented



With Measure #1 and #3 Implemented

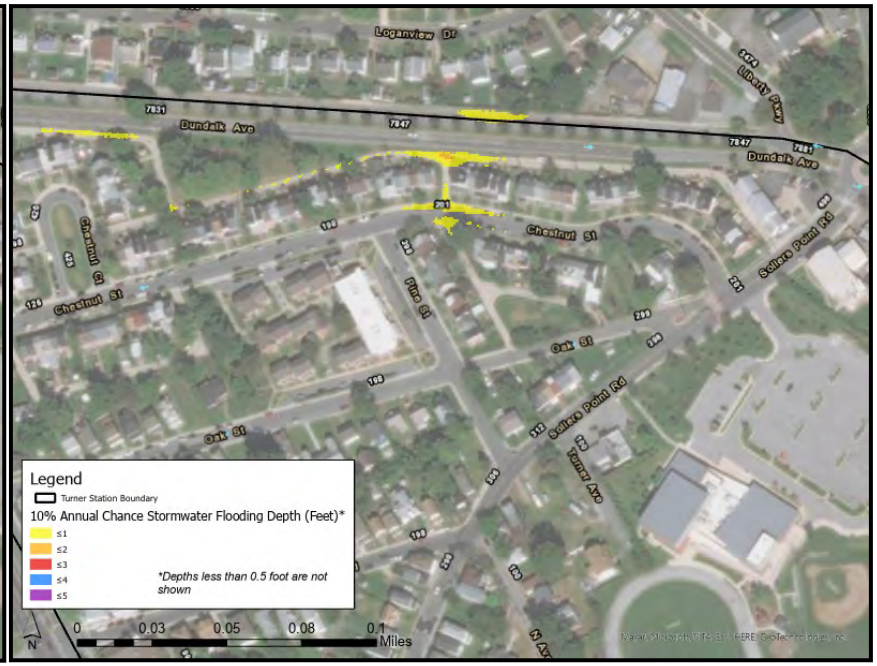
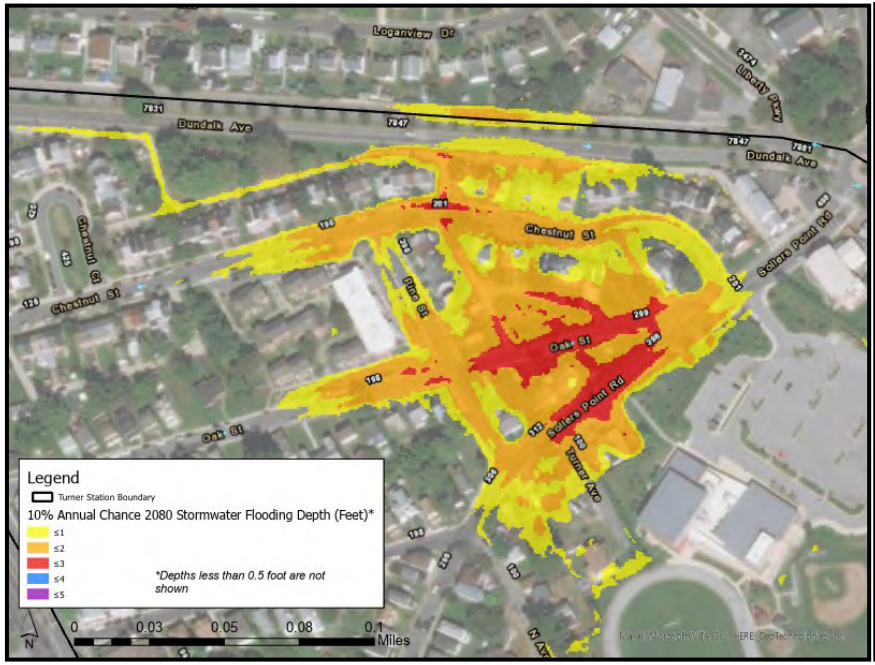
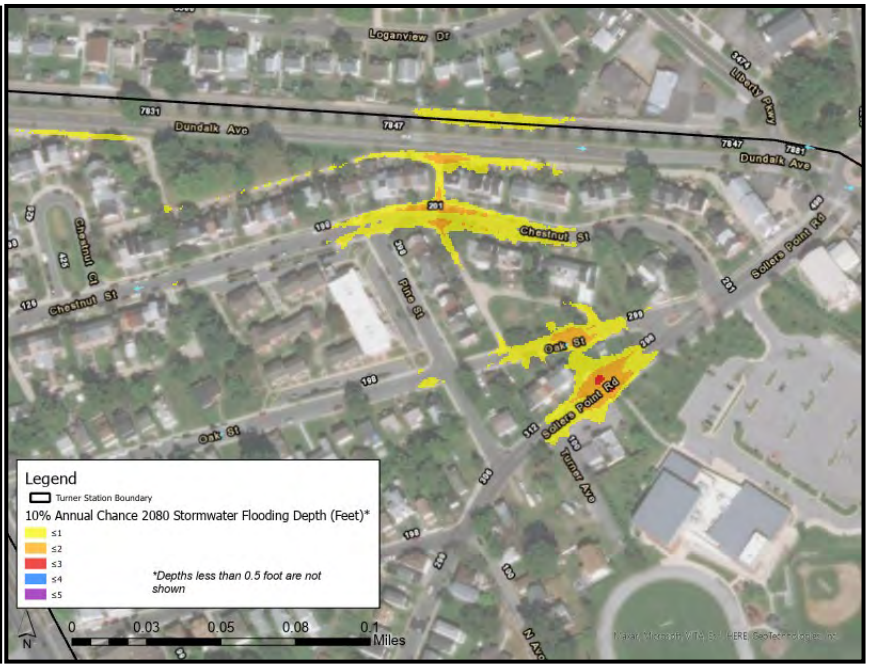


FIGURE 5.9: MEASURE #1 AND #3 RESULTS – 10% ANNUAL CHANCE 2080 RAINFALL EVENT

With No Alternatives Implemented



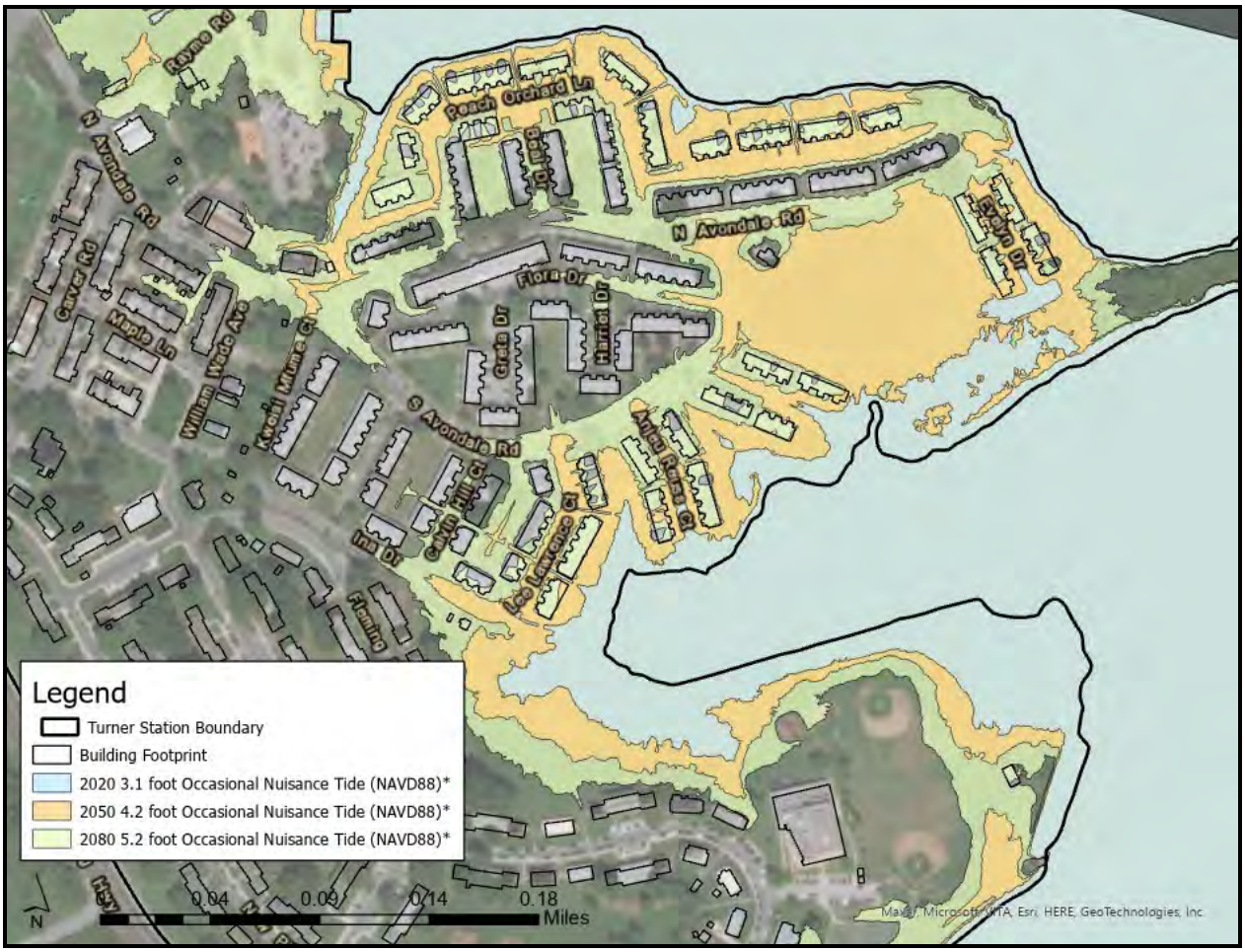
With Measure #1 and #3 Implemented



5.4 COASTAL FLOOD RISK MANAGEMENT MEASURES

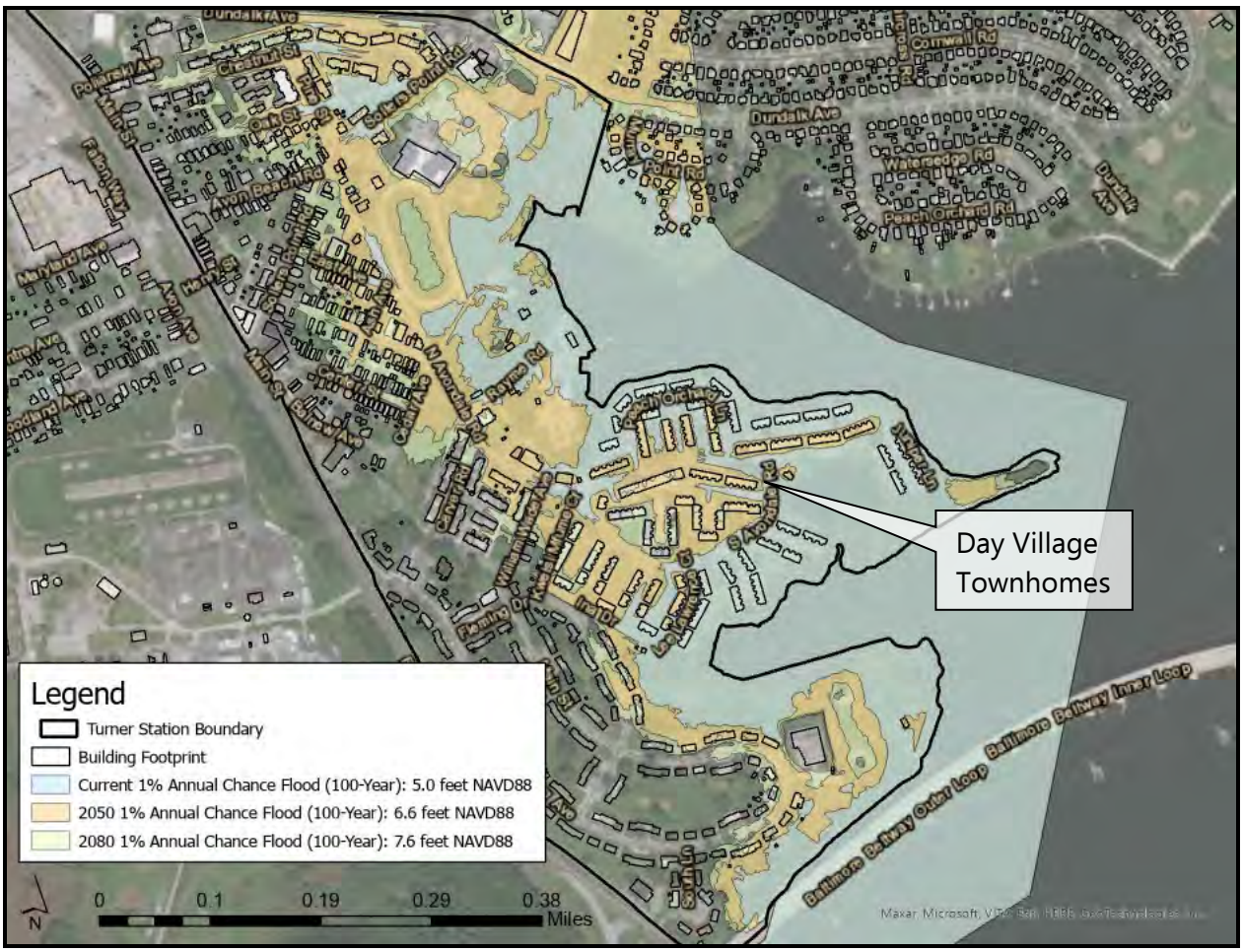
As noted in Section 4, portions of Turner Station are at risk of future tidal and coastal flooding. As shown in Figure 5.10, the Day Village Townhome community along Avondale Road and Peach Orchard Lane is the most at risk for projected future tidal and coastal flooding. The 2050 (4.2 feet NAVD) and 2080 (5.2 feet NAVD88) Occasional Nuisance Tides are projected to inundate this area.

FIGURE 5.10: AREAS AT RISK OF FUTURE TIDAL FLOODING



As shown in Figure 5.11, portions of the Day Village Townhomes community are currently within the 1% annual chance flood hazard area. Using the 2050 and 2080 projections, many more structures within Turner Station will be subjected to future coastal flooding.

FIGURE 5.11: AREAS AT RISK OF FUTURE 1% ANNUAL CHANCE COASTAL FLOODING



Due to the way this community sits on the shoreline, the only options to reduce flood damages in the areas affected by future occasional nuisance tides and coastal flooding are a floodwall or acquisitions. Elevating buildings is often a consideration to reduce flood risk but is not feasible in the Turner Station study area since the buildings at risk of flooding are multi-unit townhomes. The cost of elevating these buildings would be extremely high and the flooding would still surround the buildings, limiting access.

5.4.1 Floodwall

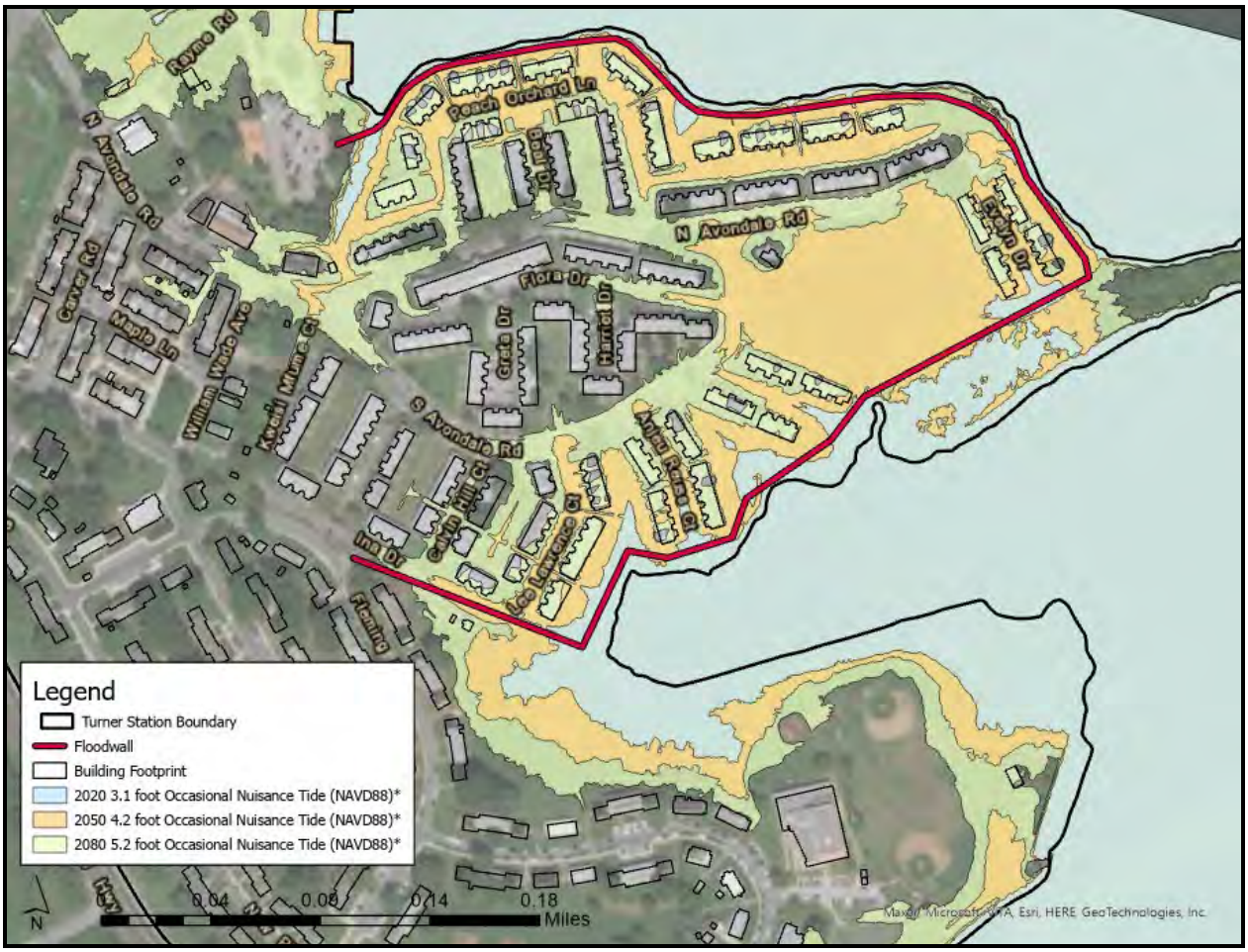
Due to the limited amount of space available for a flood risk management structure, a floodwall, rather than an earthen levee, would be needed to reduce the risk of the flood waters reaching the buildings. While less expensive, a levee requires much more space than a floodwall due to its width. Levees have gentle embankment slopes, usually a ratio of 1 vertical to two or three horizontal, which is not feasible in the Day Village Townhome area. Floodwalls are constructed of stronger materials, are thinner, take up less space, and generally require less maintenance than

levees. A floodwall could be constructed using a variety of designs and materials, such as sheet piles, concrete and masonry (Figure 5.12). Pump stations would likely be required for interior drainage, as rain that falls on the landward side of the floodwall would have to be pumped to the river side of the floodwall.

FIGURE 5.12: FLOODWALL

A depiction of the location of the potential floodwall is shown in Figure 5.13. Approximately 3,950 feet of floodwall would be required. The top elevation of the floodwall would need to be over 5.2 feet NAVD88 to reduce the risk of flooding from the 2080 projected tide levels, which would also protect against current 1% annual chance coastal flooding (5.0 feet NAVD88). However, based on the future conditions coastal flooding shown in Figure 5.11, this floodwall will not protect all the areas in Turner Station against future 1% annual chance coastal flooding. The floodwall could be higher and extend further along the shoreline based on discussions with stakeholders on whether projected future conditions coastal flooding should be considered and will have to tie-in to high ground. The downside to a potential floodwall is that there would be a visual impact to water views depending on the determined floodwall height. The current land elevation along the coast in this area is approximately 3.5 feet NAVD88 for reference, so the minimum height of the floodwall would be approximately 2 feet high. However, it is standard for floodwalls to be built higher than the targeted elevation for protection. In order for a floodwall to be accredited for certification under FEMA's National Flood Insurance Program, a 3-foot freeboard is required. Under the USACE's standards for risk and uncertainty, a 2 to 4-foot freeboard is most often implemented. Based on these requirements, the floodwall is likely to be around 5 feet high.

FIGURE 5.13: POTENTIAL FLOODWALL LOCATION



5.4.2 Acquisitions

An acquisition, or buy-out, is when the government purchases the floodprone buildings and the homeowners relocate to a new house outside the floodplain. Although this typically is not preferred by property owners, it does eliminate the risk of flood damages to structures and the risk to human life and safety. The floodplain is restored to a natural floodplain after the buyout and demolition of the existing buildings. When structures are at risk of flooding from higher frequency storms, with smaller depths and velocities, repetitive damages can become financially burdensome on property and business owners. There are various federal grant programs that can assist with acquisitions. Each building with repetitive flood damages should be assessed as a candidate for acquisition if other flood risk management measures are not implemented.

The advantages of acquisitions are the elimination of the risk of flood damages to buildings and the risk to human life and safety for those buildings that are acquired and the relatively lower cost. The disadvantage is that the relocation/buyout process can be lengthy and disruptive to property owners, many of which may not be amenable to moving.

5.5 FLOODPROOFING

Nonstructural floodproofing may be considered for buildings that frequently flood in the Turner Station study area. Nonstructural floodproofing does not change the course of the water; it changes the consequences of flooding as the buildings are modified to reduce flood damages. Nonstructural floodproofing measures can be either "passive" or "active". A "passive" measure is one that requires minimal pre-flood actions and includes flood doors and windows (dry floodproofing) and wet floodproofing. An "active" measure requires property and/or business owners to perform pre-flood actions in order to deploy the measure, i.e., dry floodproofing using temporary flood barriers (removable panels at doors and windows). The number of pre-flood actions required may impact the feasibility of implementing active measures for some buildings in the Turner Station study area.

Floodproofing would need to be accomplished on a building-by-building basis, as each building has unique variables such as building type, building material, flood depth, and flood velocity, which will ultimately dictate the potential cost of such a measure for each building. It is recommended that a detailed nonstructural assessment and building elevation survey be conducted in the Turner Station study area to determine the unique needs for each building that is affected by flooding.

General Nonstructural Recommendations

While there are various nonstructural measures identified in detail below that provide different approaches to reducing flood damages to structures within the study area, there are common best practices that should be considered by stakeholders in the Turner Station study area. These include elevation of utilities inside and outside of structures (see example in Figure 5.14); moving valuable contents to higher elevations (i.e., upper levels of the structures); establishing flood action plans to help facilitate and organize property owner actions in case of a flood event; signing up to wireless alert services; and purchasing flood insurance. These practices may provide low-cost alternatives to individual property owners and can improve overall flood resiliency.

FIGURE 5.14: EXAMPLE OF ELEVATION OF UTILITIES

5.5.1 Dry Floodproofing

Dry floodproofing consists of waterproofing the exterior of a structure up to a determined height to reduce the probability of flooding to the building interior. Dry floodproofing townhomes is more complex than single family homes as each owner in the building would need to agree to floodproof their unit.

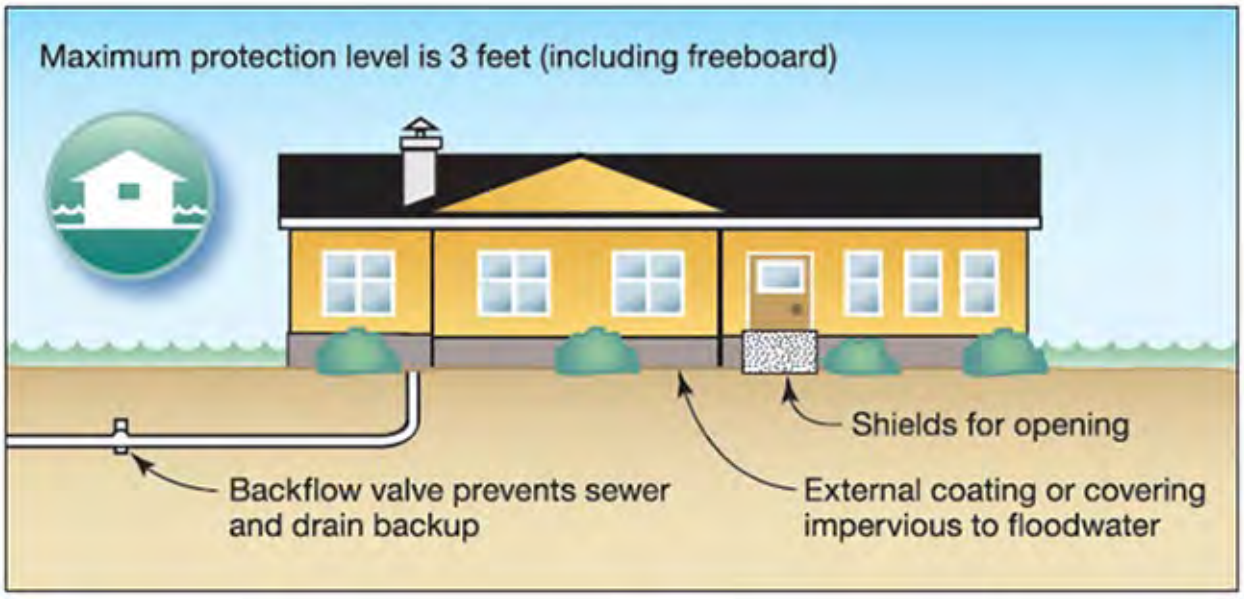
Dry floodproofing of a structure can generally provide effective flood risk management up to a height of 3 to 4 feet on the exterior walls, after which point the hydrostatic load on the walls may be high enough to significantly increase the risk of structural damage. Buildings may be dry flood proofed above this 3 to 4-foot height if a full structural analysis is performed and the walls are found to have sufficient flexural capacity. Full structural analysis should also be performed if erosive flood velocities are greater than 3 ft./sec. due to lateral/shear forces.

In some cases, where necessary, sealant may be applied to exterior walls to make them sufficiently impermeable to resist water penetration up to the design flood elevation (DFE)[1]. Otherwise, provisions can be made for the installation of a temporary impermeable membrane around the building exterior just before a flood event begins if there is adequate warning time. If a structure contains a basement area, it typically must be removed by filling prior to implementation of dry floodproofing measures to the first floor and above. Provisions must also be made for the closure of building openings, specifically doors and windows with a sill below the DFE. Such openings may have permanent framing installed which allows for the placement of a temporary flood shield to seal the opening in the case of a flood event (active), or otherwise existing doors, windows and frames may be completely replaced with structural flood proof products (passive). Interior drainage collection systems and pumps are required to control the interior water level and collect seepage. Figure 5.15 shows a diagram of a typical dry flood

[1] Design flood elevation (DFE) refers to the target level of flood risk management that is assumed to be both technically sound and economically feasible to implement.

proofed structure. Residential property owners who dry flood proof are not eligible for flood insurance premium rate reductions.

FIGURE 5.15: DRY FLOODPROOFING



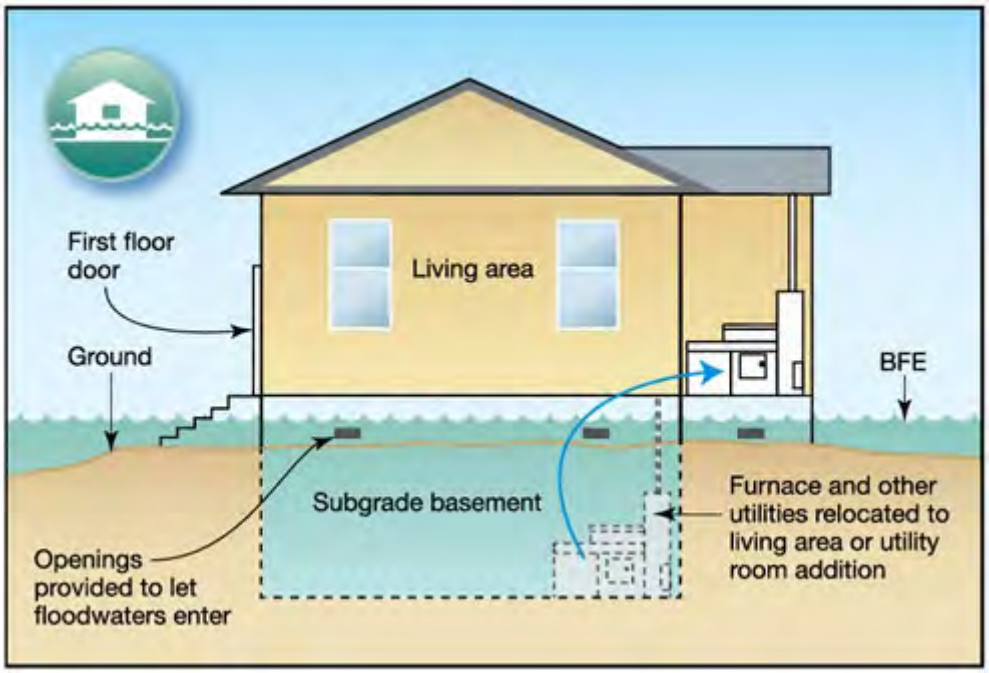
(Source: FEMA)

By choosing to implement passive dry floodproofing, i.e., through purchase of flood proof doors (including garage doors) that are watertight and able to resist hydrostatic force during a flood event, certain structures (especially commercial and public) may potentially be dry flood proofed with little to no pre-flood actions. However, flood doors and similar closures are relatively expensive and, in some cases, building modifications may be necessary to ensure that they have the ability to resist structural loads associated with flood waters.

5.5.2 Wet Floodproofing

Wet floodproofing is the process of modifying a building to allow flood waters to enter and inundate a portion of the building to minimize the risk of structural damage. The designed inundation area may be the sub-grade basement or crawlspace of a building, but not the living space. Raising utilities and important building contents and equipment to higher floors above the DFE, using flood-damage-resistant materials in the building interior, and installing flood louvers or flood openings in exterior walls to equalize the hydrostatic pressure, are examples of some of the most common wet floodproofing measures. Additional provisions may be required to ensure minimal damage to the building mechanical and electrical systems in the event of a flood. Figure 5.16 shows a diagram of a typical wet floodproofed structure. In some instances, implementation may require significant changes to interior building layout and functionality, which may not be desirable. Allowing flood waters into a structure would require all valuables and utilities to be elevated, which may be costly depending on the original building layout. Pumping and clean-up after a flood event will be required.

FIGURE 5.16: WET FLOODPROOFING



(Source: FEMA)

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6 CONCLUSIONS

Property owners within Turner Station have experienced substantial flooding during heavy rainfall, like the event that occurred on July 17, 2021. As a result, Turner Station Conservation Teams, Inc., and Baltimore County requested the assistance of the USACE, Baltimore District, under the FPMS program, to complete a flood resiliency study for areas prone to stormwater and tidal flooding. This study provides the community and county with various alternative solutions to consider pursuing to reduce the risk of flooding to property owners and roadways.

A stormwater system survey and assessment were completed by USACE, Baltimore District, to determine the location of existing stormwater infrastructure, assess the overall condition of the existing stormwater infrastructure, and collect data to support hydrologic and hydraulic modeling. Data from the stormwater system survey was input into XPSWMM (Version 2019.1.2) to complete stormwater quantity modeling in an event-based environment. This model was used to identify and confirm the potential causes of stormwater flooding in the Turner Station study area. The process for the development of the XPSWMM model for the Turner Station study area involved modeling the July 17, 2021, storm first and calibrating the model to observations during that storm. Once a verified XPSWMM model was developed that accurately depicted flooding conditions in the study area, the model was run for several frequency storms for present day rainfall, future conditions 2050 rainfall, and future conditions 2080 rainfall, including: the 50% annual chance, 24-hour storm; the 10% annual chance, 24-hour storm; and the 1% annual chance, 24-hour storm.

The results of the XPSWMM modeling were used to complete a flood assessment of the Turner Station study area to determine or confirm areas where stormwater flooding would occur and to determine potential causes of the flooding. The primary area that is at risk of stormwater flooding is the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area. Flood depths for the current 10% annual chance, 24-hour, rainfall event could reach up to 2.6 feet; flood depths for the 2080 10% annual chance, 24-hour, rainfall event could reach up to 3.0 feet.

Based upon modeling results, the contributing factors resulting in the flooding within the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area include: the main drainage trunk lines are undersized and cannot convey the 10% annual chance design storm, causing stormwater within the pipes to back up out of the pipe network; the stormwater infrastructure is low-lying, with little positive slope, and subject to tidal flooding; and the lack of stormwater quantity management for impervious areas in the watershed that were constructed prior to stormwater management regulations.

Several flood risk management measures for stormwater flooding were evaluated using XPSWMM. It was determined that Measure #1, increasing the main trunk line size and installing a pump station to pump water out of the low-lying stormwater system, would decrease flooding in the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area. Flood depths for the 10% annual chance, 24-hour, rainfall event would decrease by 1.0 foot, and the flooding footprint would substantially decrease. Flood depths for the 2080 10% annual chance, 24-hour, rainfall event would decrease by 0.2 foot.

By combining Measure #1 with Measure #2, the addition of stormwater lines to divert the existing stormwater infrastructure away from the main trunk line, there is even more of a decrease in stormwater flooding in the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area. Flood depths for the 10% annual chance, 24-hour, rainfall event would decrease by 1.6 feet. Flood depths for the 2080 10% annual chance, 24-hour, rainfall event would decrease by 1.8 feet. When combining Measure #1 with Measure #2, flooding is almost eliminated in the primary flooding area in Turner Station during those rainfall events.

By combining Measure #1 with Measure #3, the addition of stormwater detention, there is a decrease in stormwater flooding in the Sollers Point Road/Oak Street/Chestnut Street/Pine Street area, but there is not as much of a flood reduction impact as combining Measure #1 with Measure #2. Flood depths for the 10% annual chance, 24-hour, rainfall event would decrease by 1.4 feet and flooding is almost eliminated. Flood depths for the 2080 10% annual chance, 24-hour, rainfall event would decrease by 0.5 foot.

When observing projected future tidal and coastal flooding in the area, the Day Village Townhome community along Avondale Road and Peach Orchard Lane is the most at risk. Portions of this community lie within the current 1% annual chance floodplain and the 1% annual chance floods and the 2050 and 2080 Occasional Nuisance Tides are projected to inundate this area. Due to the way this community sits on the shoreline, the only options to reduce flood damages in this area are a floodwall or acquisitions.

If these measures aren't implemented, or take several years to be implemented, nonstructural floodproofing may be considered for buildings that frequently flood in the Turner Station study area. Floodproofing would need to be accomplished on a building-by-building basis, as each building has unique variables such as building type, building material, flood depth, and flood velocity, which will ultimately dictate the potential cost of such a measure for each building. It is recommended that a detailed nonstructural assessment and building elevation survey be conducted in the Turner Station study area to determine the unique needs for each building that is affected by flooding.

This study included the modeling and analysis of initial concepts to determine their effectiveness in reducing stormwater and tidal flooding. Due to the low-lying stormwater infrastructure and residential structures, the options will be costly. It is recommended that Turner Station Conservation Teams, Inc., and Baltimore County further assess the costs, impacts and advantages/disadvantages of each of the concepts and consider future conditions.

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APPENDIX A

Depth-Area Curves for Stormwater BMPs

BMP_ID	DESCRIPTION	TYPE	OWNER	MODEL
BIO1	Family Dollar	Quality - Bioretention	Private	No
BIO2	Family Dollar	Quality - Bioretention	Private	No
BIO3	Family Dollar	Quality - Bioretention	Private	Yes
POND1	Lyon Homes Apartments	Quantity - Pond	Private	Yes
POND2_ALT	Neighborspace of Baltimore County Property	Quantity - Pond	Private	Yes - Alternatives
POND3_ALT	Turner Station Apartments Property	Quantity - Pond	Private	Yes - Alternatives

XPSWMM STORAGE NODE DATA

General Information	
Model Area:	Turner Station
BMP_ID	BIO3
Description:	Family Dollar
Type:	Quality - Bioretention
Owner	Private

Outflow Control Data		
Outflow	Type	Description
1	Pipe	4" (0.34 sq.ft.) PVC pipe at 6.70'
2	Pipe	4" (0.34 sq.ft.) PVC pipe at 6.70'

Storage Curve

Data Source:	As-Built Plan - Nov 2014		
Initial Elevation:	6.70		
Depth	Elevation	Area (Acres)	Cumulative Area (Acres)
0	6.70	0.00001	0.00001
3.3	10.00	0.02775	0.02776
4.3	11.00	0.02487	0.05263
4.8	11.50	0.01295	0.06558

Location Map

XPSWMM STORAGE NODE DATA

General Information

Model Area:	Turner Station
BMP_ID	POND1
Description:	Lyon Homes Apartments
Type:	Quantity - Pond
Owner	Private

Outflow Control Data

Outflow	Type	Description
1	Pipe	4" (0.34 sq.ft.) PVC pipe at 7.22'

Storage Curve

Data Source:	DEM - 2015		
Initial Elevation:	7.22		
Depth	Elevation	Area (Acres)	Cumulative Area (Acres)
0	7.22	0.00001	0.00001
3.28	10.50	0.00124	0.00125
3.53	10.75	0.00764	0.00888

Location Map

XPSWMM STORAGE NODE DATA

General Information	
Model Area:	Turner Station
BMP_ID	POND2_ALT
Description:	Neighborspace of Baltimore County Property
Type:	Quantity - Pond
Owner	Private

Outflow Control Data		
Outflow	Type	Description
1	Orifice	4 30"x6" (5.0 sq.ft.) inlets at 7.0'

Storage Curve			
Data Source:	Hypothetical BMP		
Initial Elevation:	2.90		
Depth	Elevation	Area (Acres)	Cumulative Area (Acres)
0	2.90	0.00001	0.00001
0.1	3.00	0.27686	0.27687
1.1	4.00	0.03686	0.31373
2.1	5.00	0.03722	0.35096
3.1	6.00	0.04923	0.40019
4.1	7.00	0.04842	0.44861
5.1	8.00	0.05165	0.50026

Location Map

XPSWMM STORAGE NODE DATA

General Information

Model Area:	Turner Station
BMP_ID	P3_ALT
Description:	Turner Station Apartments
Type:	Quantity - Pond
Owner	Private

Outflow Control Data

Outflow	Type	Description
1	Orifice	4 30"x6" (5.0 sq.ft.) inlets at 5.5'

Storage Curve

Data Source:	Hypothetical BMP
Initial Elevation:	2.28

Depth	Elevation	Area (Acres)	Cumulative Area (Acres)
0	2.28	0.00001	0.00001
0.72	3.00	0.14533	0.14534
1.72	4.00	0.02290	0.16825
2.72	5.00	0.02542	0.19367
3.72	6.00	0.02741	0.22108
4.72	7.00	0.04668	0.26776

Location Map

APPENDIX B

Turner Station Stormwater Mapping
50% Annual Chance (2-Year)
Existing Conditions and Future Rainfall Events

Turner Station Stormwater Mapping

50% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

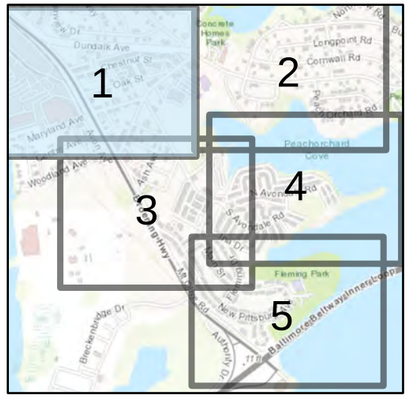
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

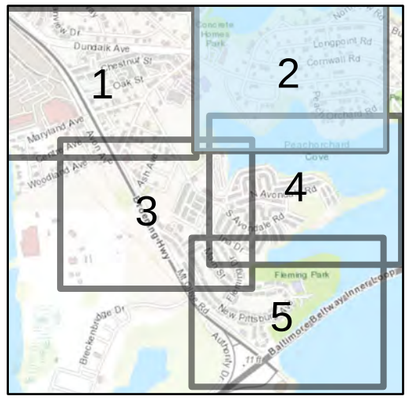
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

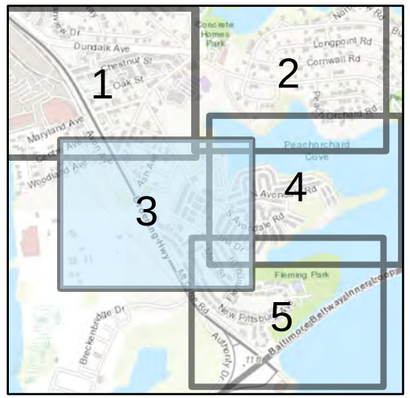
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

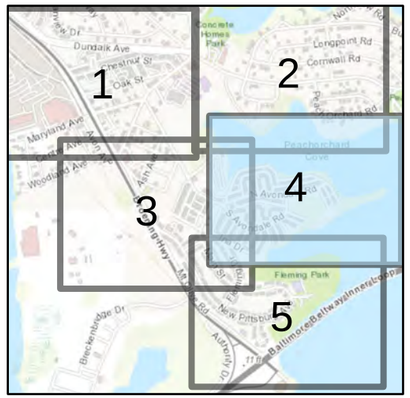
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

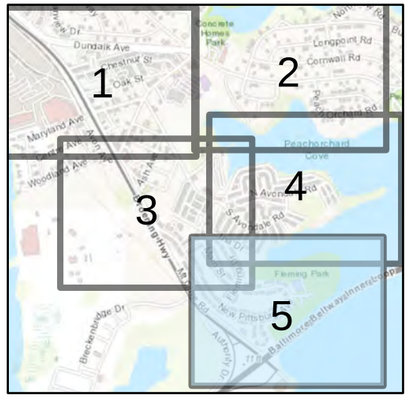
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

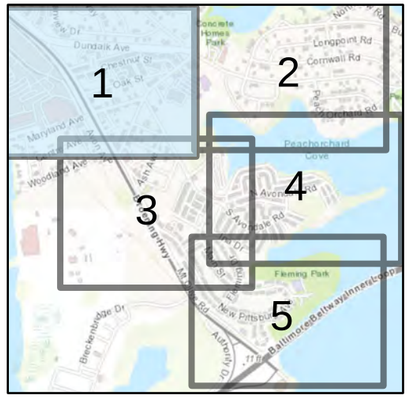
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

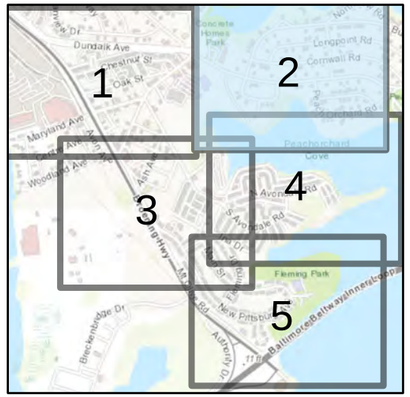
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

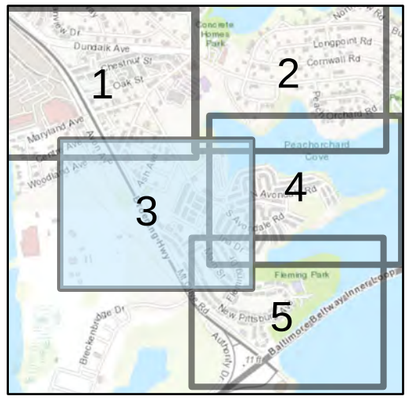
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

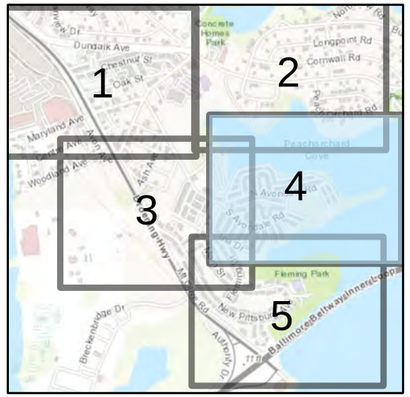
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

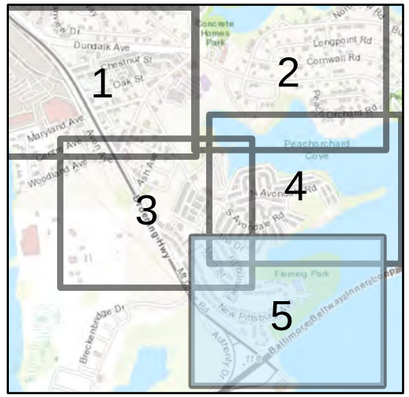
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

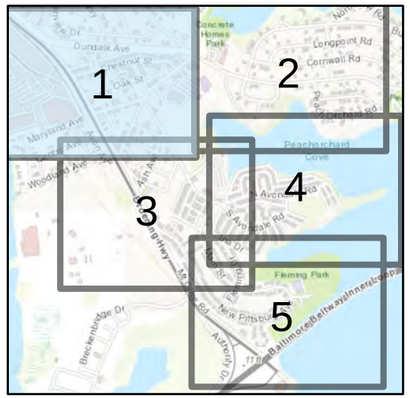
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

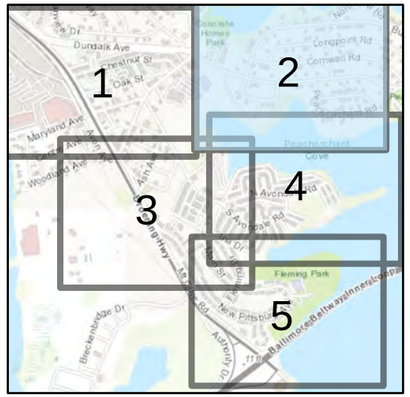
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

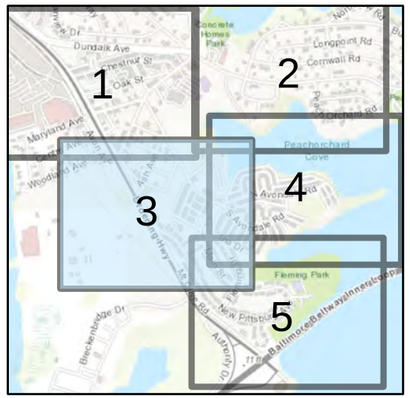
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

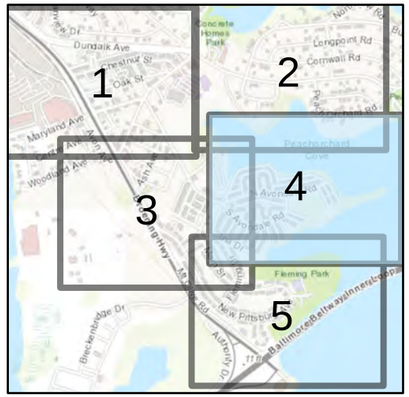
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

50% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

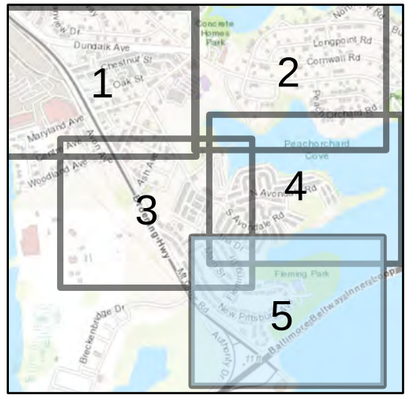
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

APPENDIX C

Turner Station Stormwater Mapping
10% Annual Chance (10-Year)
Existing Conditions and Future Rainfall Events

Turner Station Stormwater Mapping

10% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

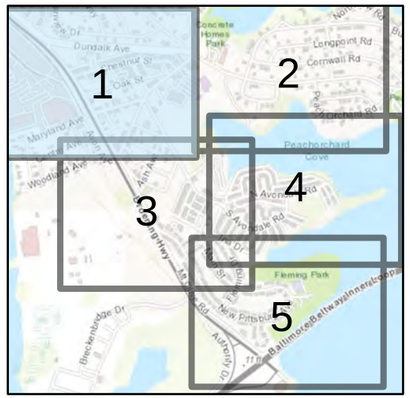
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

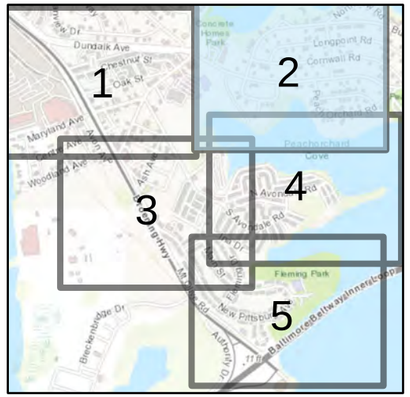
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

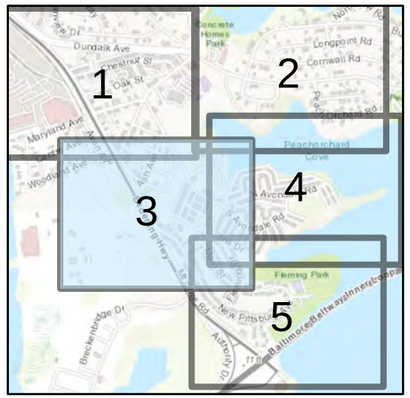
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

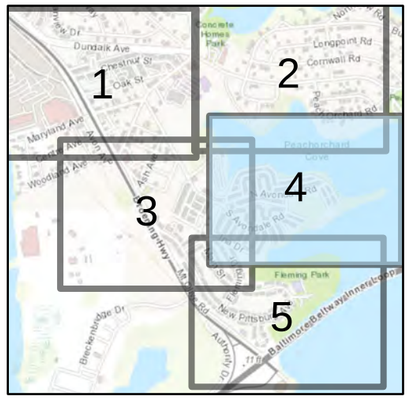
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

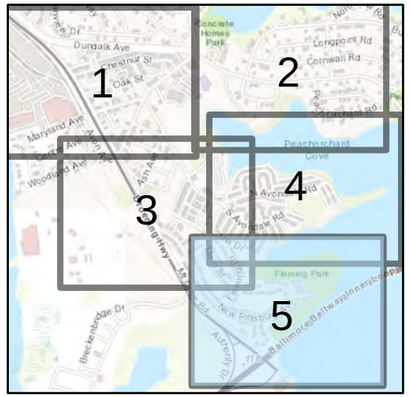
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤ 1
- ≤2
- ≤3

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

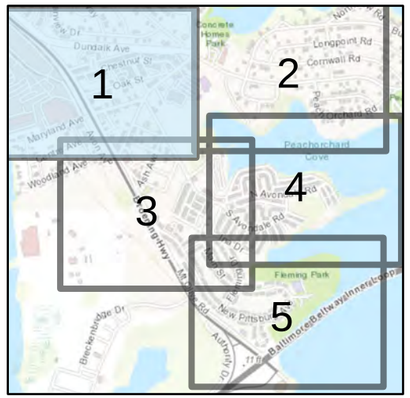
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

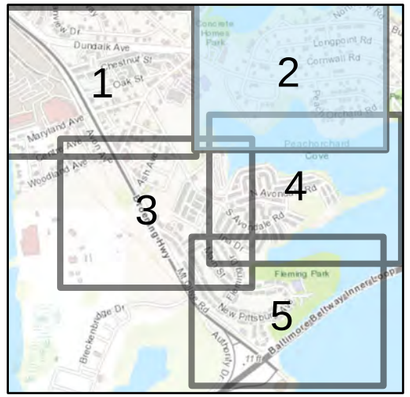
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

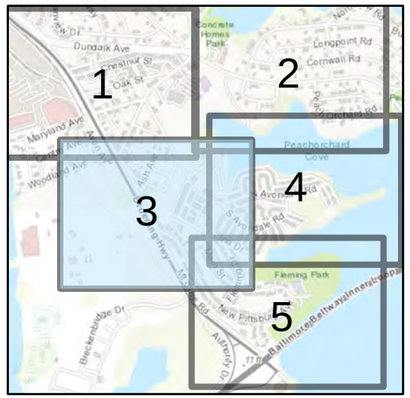
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

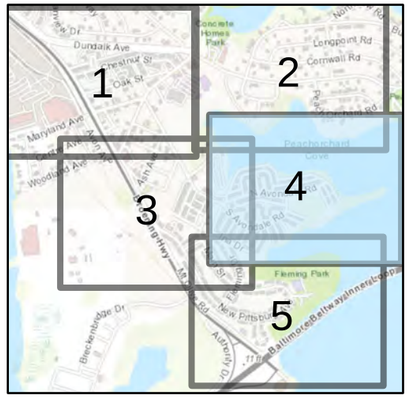
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

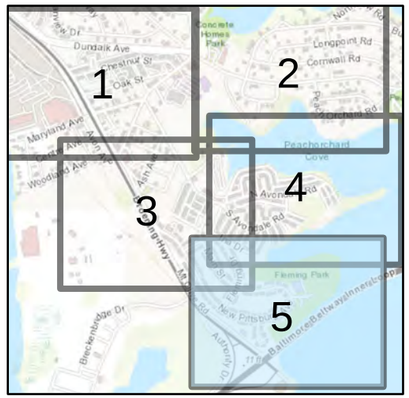
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

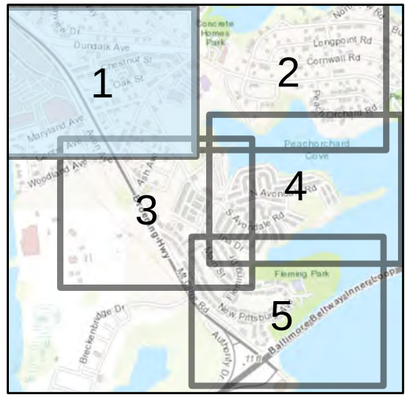
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

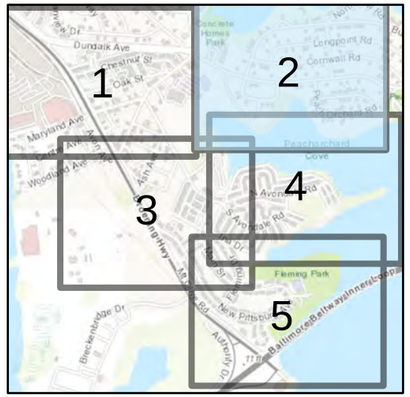
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

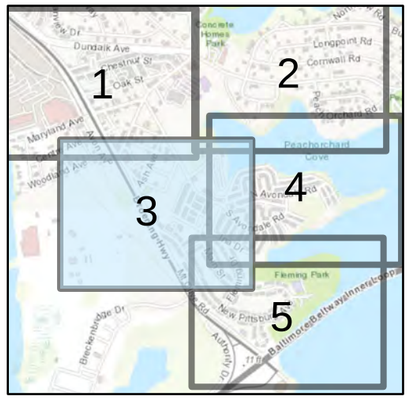
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

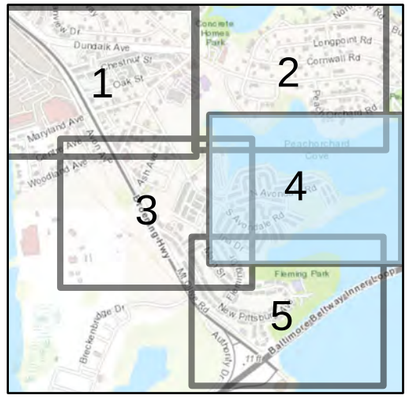
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

10% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

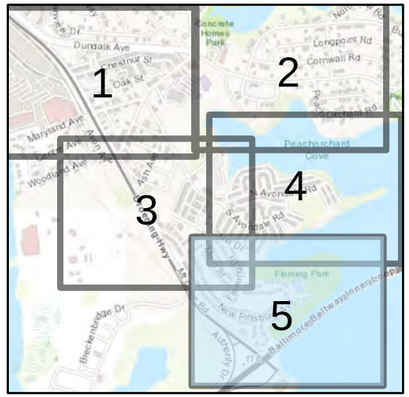
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

APPENDIX D

Turner Station Stormwater Mapping
1% Annual Chance (100-Year)
Existing Conditions and Future Rainfall Events

Turner Station Stormwater Mapping

1% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

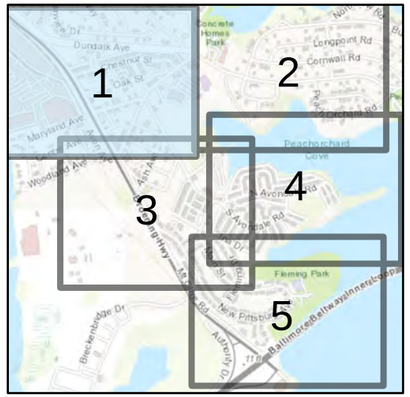
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

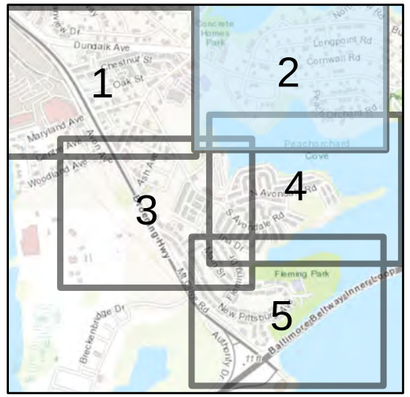
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

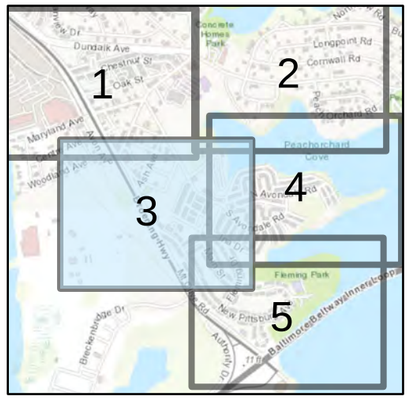
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

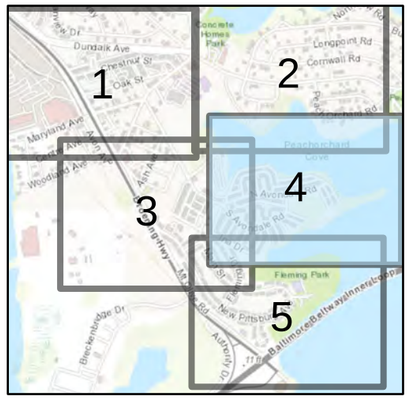
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance Rainfall Event

Occasional Nuisance Tide Outfall Condition of 3.1 Feet NAVD88

Legend

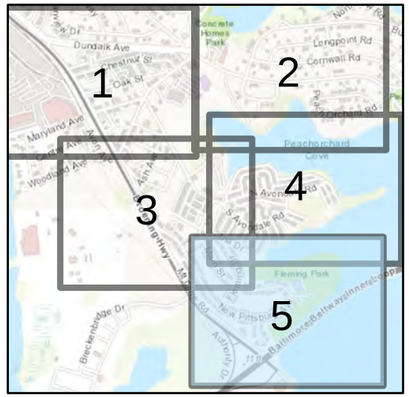
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

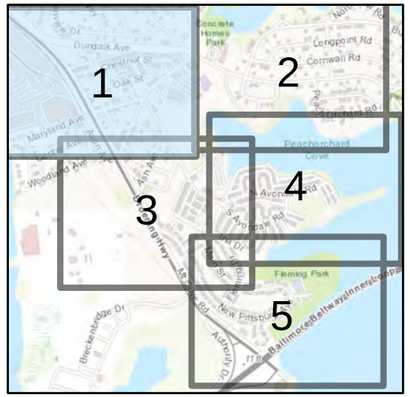
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

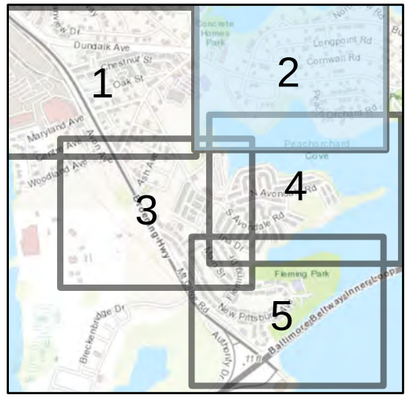
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

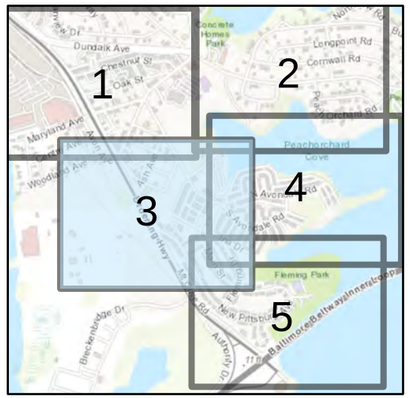
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

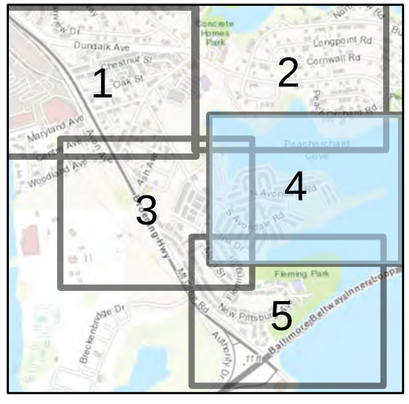
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2050 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 4.2 Feet NAVD88

Legend

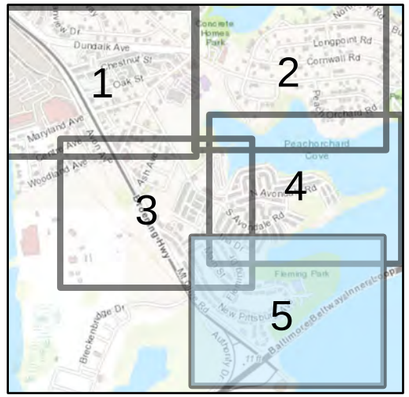
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

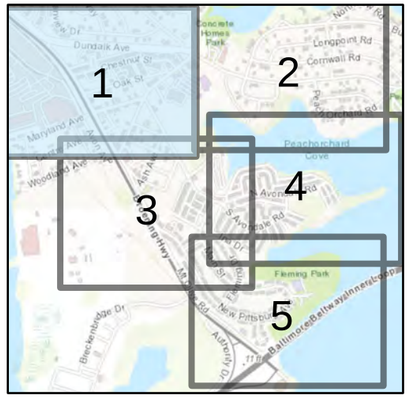
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

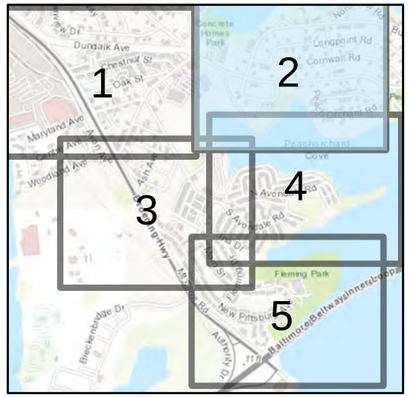
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

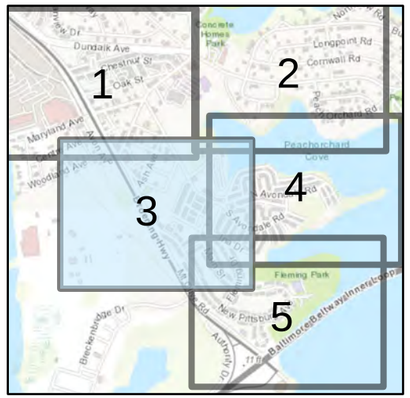
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

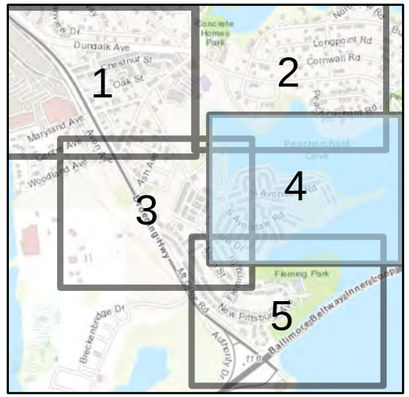
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

1% Annual Chance 2080 Rainfall Event

Occasional Nuisance Tide Outfall Condition of 5.2 Feet NAVD88

Legend

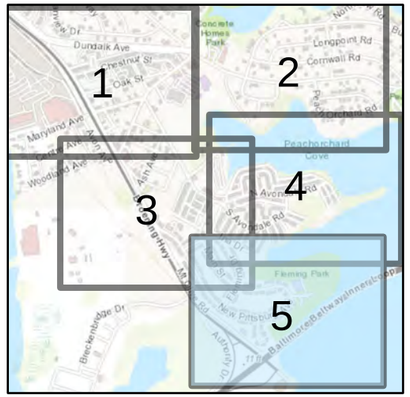
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4
- ≤5

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

APPENDIX E

Turner Station Stormwater Mapping
July 17, 2021, Flood Event

Turner Station Stormwater Mapping

July 17, 2021 Rainfall Event

Tide Outfall Condition of 0.51 Feet NAVD88

Legend

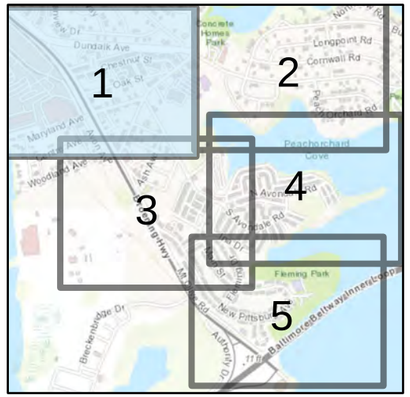
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 1 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

July 17, 2021 Rainfall Event

Tide Outfall Condition of 0.51 Feet NAVD88

Legend

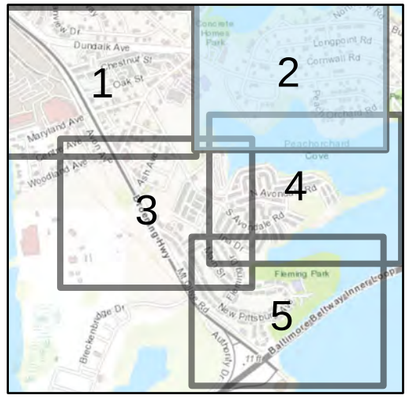
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 2 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

July 17, 2021 Rainfall Event

Tide Outfall Condition of 0.51 Feet NAVD88

Legend

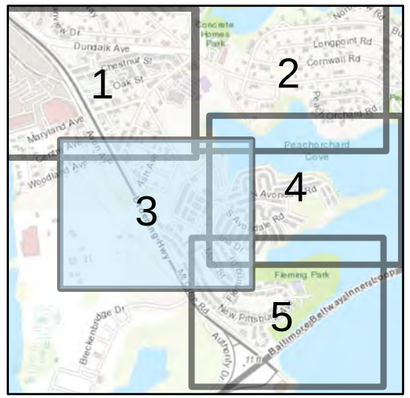
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 3 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

July 17, 2021 Rainfall Event

Tide Outfall Condition of 0.51 Feet NAVD88

Legend

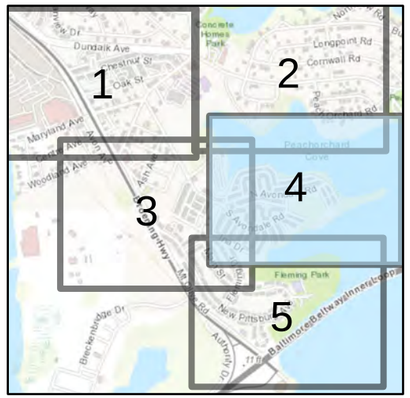
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 4 of 5



0 100 200 400 Feet

Turner Station Stormwater Mapping

July 17, 2021 Rainfall Event

Tide Outfall Condition of 0.51 Feet NAVD88

Legend

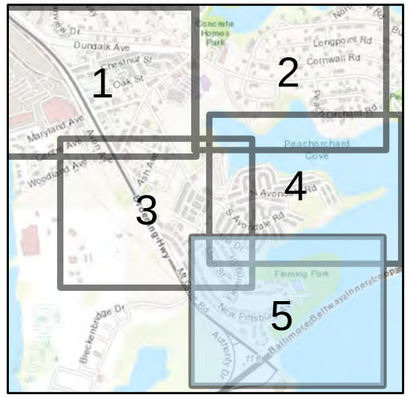
- Stormwater Structure
- Stormwater Pipe
- Stormwater BMP

Stormwater Flooding Depth (Feet)*

- ≤1
- ≤2
- ≤3
- ≤4

*Depths less than 0.5 foot are not shown

Panel 5 of 5



0 100 200 400 Feet

APPENDIX F

Existing Conditions XPSWMM Results

XPSWMM Node Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	2-year	Outfall	1380	0	0	54.747	0
A10	2-year	Manhole	1377.917	0	0	87.709	0
A11	2-year	Grate Inlet	1378.7	691.6	0	81.079	11776.06
A12	2-year	Grate Inlet	1377.667	668.5	0	68.945	8368.72
A13	2-year	Manhole	1376.267	0.5	0	67.402	15.86
A14	2-year	Grate Inlet	697.983	581.3	0	33.149	9011.82
A15	2-year	Grate Inlet	713.5	256.3	0	55.452	7767.98
A16	2-year	Grate Inlet	1328.433	141.3	0	48.654	2231.78
A17	2-year	Grate Inlet	1334.583	183	0	50.724	4017.88
A18	2-year	Grate Inlet	1257.883	228.4	0	46.579	2736.3
A19	2-year	Manhole	1378.133	0	0	91.153	0
A2	2-year	Manhole	1379.28	672.9	0	85.5	152736.88
A20	2-year	Manhole	1378.033	0	0	91.354	0
A21	2-year	Manhole	1377.75	0	0	90.052	0
A22	2-year	Manhole	1377.417	0	0	86.729	0
A23	2-year	Combination Inlet	1374.633	1286.6	0	82.038	668863.6
A24	2-year	Combination Inlet	1215.95	1131.3	0	67.571	243029.01
A25	2-year	Combination Inlet	1374.367	1306.1	0	81.373	326686.6
A26	2-year	Combination Inlet	1376.4	1237.3	0	70.887	353545.42
A27	2-year	Manhole	1286.317	1160.8	0	74.428	1555539.67
A28	2-year	Manhole	1371.167	975.6	0	75.861	93797.33
A29	2-year	Curb Inlet	1375.85	1065.8	0	69.92	64053.8
A3	2-year	Manhole	1376.983	674.8	0	69.338	65125.19
A30	2-year	Manhole	1365.117	1011.3	0	72.227	143783.69
A31	2-year	Manhole	1370.5	689.8	0	66.726	14446.8
A32	2-year	Combination Inlet	1369.4	1143.4	0	57.06	68805.7
A33	2-year	Combination Inlet	1334.583	830.8	0	52.521	39802.36
A34	2-year	Manhole	1206.617	120.3	0	56.206	8086.14
A35	2-year	Combination Inlet	928.283	548.8	0	48.018	15519.98
A36	2-year	Curb Inlet	819.417	683.6	0	56.018	8728.75
A37	2-year	Manhole	679.667	0	0	43.792	0
A38	2-year	Grate Inlet	679.45	0	0	41.549	0
A39	2-year	Grate Inlet	678.2	0	0	32.224	0
A4	2-year	Grate Inlet	1377.2	1354.5	0	61.597	42252.5
A40	2-year	Grate Inlet	678.9	0	0	34.104	0
A41	2-year	Grate Inlet	676.383	0	0	29.988	0
A42	2-year	Underground Junction	1362.783	779	0	70.514	13322.37
A43	2-year	Curb Inlet	1375.5	1152.2	0	69.941	49720.94
A44	2-year	Grate Inlet	1298.533	817.3	0	66.22	73629.02
A45	2-year	Underground Junction	1333.883	689.1	0	86.148	7745.44
A46	2-year	Combination Inlet	1367.417	707.4	0	62.162	32008.18

XPSWMM Node Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A47	2-year	Manhole	1364.667	674.8	0	60.139	28788.44
A48	2-year	Manhole	1287.633	619.3	0	57.036	103223.14
A49	2-year	Combination Inlet	1369.567	657.1	0	57.965	57187.92
A5	2-year	Grate Inlet	1376.433	676.2	0	54.202	552.96
A50	2-year	Manhole	682	80.8	0	57.4	20329.97
A51	2-year	Combination Inlet	685.8	173.7	0	58.218	22000.17
A52	2-year	Manhole	442.833	1.1	0	51.128	102.07
A53	2-year	Combination Inlet	270.65	12.7	0	42.771	518.61
A54	2-year	Underground Junction	381.233	0	0	45.69	0
A55	2-year	Combination Inlet	74.417	0.8	0	38.837	48.29
A56	2-year	Manhole	276.967	0.4	0	47.657	39.79
A57	2-year	Grate Inlet	87.283	2.3	0	39.063	149.14
A58	2-year	Grate Inlet	1245.95	737.4	0	76.047	41087.71
A59	2-year	Underground Junction	1356.933	688.6	0	65.097	3549.83
A6	2-year	Manhole	1374.8	683.6	0	52.827	31648.41
A60	2-year	Combination Inlet	1356.95	955.5	0	61.603	43944.91
A61	2-year	Grate Inlet	1354.4	908.3	0	64.915	78799.1
A62	2-year	Grate Inlet	1361.883	729	0	64.787	46773.54
A63	2-year	Grate Inlet	1363.333	694.8	0	53.106	3334.52
A64	2-year	Manhole	1366.35	198.2	0	72.009	47933.16
A65	2-year	Manhole	1359.5	247.4	0	67.036	34648.1
A66	2-year	Curb Inlet	910.267	260.7	0	51.445	17528.95
A67	2-year	Curb Inlet	762.15	237.2	0	54.208	8955.41
A68	2-year	Manhole	341.333	0.2	0	74.03	83.66
A69	2-year	Combination Inlet	287.45	1.3	0	63.157	128.1
A7	2-year	Grate Inlet	1376.183	719.5	0	50.177	22040.32
A70	2-year	Grate Inlet	222.317	16.7	0	47.149	862.15
A71	2-year	Curb Inlet	177.883	7.3	0	49.697	46.07
A72	2-year	Manhole	19.967	0	0	52.418	0
A73	2-year	Underground Junction	15.833	0	0	41.569	0
A74	2-year	Curb Inlet	12.4	0	0	34.353	0
A75	2-year	Manhole	10.1	0	0	33.932	0
A76	2-year	Curb Inlet	10.733	0	0	30.56	0
A77	2-year	Curb Inlet	10.317	0	0	34.398	0
A78	2-year	Curb Inlet	9.75	0	0	30.631	0
A79	2-year	Combination Inlet	1.85	0	0	18.04	0
A8	2-year	Curb Inlet	1374.267	650.2	0	50.909	13729.02
A80	2-year	Pond Structure	11.417	0	0	54.3	0
A81	2-year	Pond Structure	21.333	21.3	0	53.18	340.14
A82	2-year	Grate Inlet	26.633	1.1	0	37.108	82.7
A83	2-year	Grate Inlet	39.1	5.4	0	41.002	200.27

XPSWMM Node Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A84	2-year	Pond Structure	35.667	35.7	0	78.813	0.17
A85	2-year	Manhole	686.167	11.8	0	83.773	465.97
A86	2-year	Manhole	742.767	11.1	0	105.6	553.51
A87	2-year	Curb Inlet	826.733	35.9	0	101.642	1285.06
A88	2-year	Pond Structure	359.717	359.7	0	66.049	9876.07
A89	2-year	Manhole	693.65	6	0	55.29	386.55
A90	2-year	Grate Inlet	688.567	18.5	0	63.352	539.94
A91	2-year	Pond Structure	382.967	383	0	64.059	6819.28
A92	2-year	Grate Inlet	677.633	187.4	0	58.525	13284.61
A93	2-year	Grate Inlet	677.933	77.6	0	51.377	1394.18
B1	2-year	Outfall	1380	0	0	58.948	0
B10	2-year	Grate Inlet	1378.167	0	0	26.986	0
B11	2-year	Grate Inlet	1376.667	0	0	22.098	0
B12	2-year	Underground Junction	1377.9	0	0	29.087	0
B13	2-year	Grate Inlet	1377.85	0	0	28.891	0
B14	2-year	Grate Inlet	1377.333	0	0	30.57	0
B15	2-year	Grate Inlet	1377.017	0	0	27.844	0
B16	2-year	Curb Inlet	1377.5	70.4	0	46.791	2538.34
B17	2-year	Grate Inlet	227.8	71.4	0	40.65	4265.39
B2	2-year	Underground Junction	902.45	0	0	30.881	0
B3	2-year	Grate Inlet	1366.3	0	0	20.357	0
B4	2-year	Grate Inlet	1377.55	0	0	18.135	0
B5	2-year	Grate Inlet	1378.5	0	0	28.212	0
B6	2-year	Grate Inlet	1378.317	0	0	38.148	0
B7	2-year	Grate Inlet	1377.55	0	0	37.751	0
B8	2-year	Grate Inlet	1377.217	0	0	36.035	0
B9	2-year	Underground Junction	1.967	0	0	25.431	0
BIO3	2-year	Family Dollar	66.083	0	0	2567.018	0
C1	2-year	Outfall	1380	0	0	58.413	0
C10	2-year	Grate Inlet	1377.583	0	0	44.901	0
C11	2-year	Grate Inlet	1376.517	0	0	37.22	0
C12	2-year	Underground Junction	1377.6	0	0	81.787	0
C13	2-year	Grate Inlet	1377.533	0	0	36.694	0
C14	2-year	Grate Inlet	1368.95	0	0	29.252	0
C15	2-year	Underground Junction	1378.033	0	0	42.861	0
C16	2-year	Grate Inlet	1377.45	0	0	36.15	0
C17	2-year	Grate Inlet	1377.233	0	0	32.954	0
C18	2-year	Curb Inlet	1377.417	19.3	0	75.481	8279.92
C19	2-year	Manhole	1377.633	11.7	0	59.556	2377.09
C2	2-year	Underground Junction	1379.16	0	0	72.353	0
C20	2-year	Manhole	1376.167	15.9	0	55.239	2474.18

XPSWMM Node Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C21	2-year	Curb Inlet	48.283	16.2	0	43.634	1015.46
C22	2-year	Grate Inlet	1376.05	27.1	0	51.897	2669.43
C23	2-year	Curb Inlet	47.967	20.9	0	45.888	625.14
C24	2-year	Curb Inlet	39.683	17.3	0	43.323	563.7
C25	2-year	Manhole	1376.8	27.8	0	68.953	11931.64
C26	2-year	Combination Inlet	1377.633	31.9	0	55.247	1738.23
C27	2-year	Curb Inlet	1377.5	31.4	0	50.691	631.75
C28	2-year	Manhole	36.333	26.2	0	60.862	4373.09
C29	2-year	Combination Inlet	1377.1	31.1	0	47.784	2580.86
C3	2-year	Grate Inlet	1378.667	0	0	35.274	0
C30	2-year	Combination Inlet	1377.8	30.7	0	52.999	1984.14
C31	2-year	Manhole	29.383	11	0	53.799	1871.6
C32	2-year	Combination Inlet	30.767	18.2	0	45.402	2469.43
C33	2-year	Curb Inlet	29.433	7.6	0	46	654.25
C34	2-year	Manhole	28.133	12.9	0	54.039	4365.82
C35	2-year	Combination Inlet	31.917	23.7	0	48.514	4808.83
C36	2-year	Combination Inlet	34.117	24.8	0	50.511	4338.62
C37	2-year	Manhole	19.6	0	0	42.279	0
C38	2-year	Underground Junction	26.283	0	0	34.224	0
C39	2-year	Curb Inlet	8.533	0	0	16.743	0
C4	2-year	Grate Inlet	1378.15	0	0	28.259	0
C40	2-year	Combination Inlet	18.983	0	0	29.228	0
C41	2-year	Combination Inlet	8.15	0	0	23.102	0
C42	2-year	Curb Inlet	17.717	0	0	35.262	0
C43	2-year	Curb Inlet	21.8	0	0	31.401	0
C44	2-year	Underground Junction	0	0	0	11.98	0
C45	2-year	Combination Inlet	0	0	0	4.569	0
C46	2-year	Grate Inlet	0	0	0	3.499	0
C47	2-year	Combination Inlet	0	0	0	4.954	0
C5	2-year	Grate Inlet	1377.767	0	0	30.189	0
C6	2-year	Grate Inlet	1375.733	0	0	22.144	0
C7	2-year	Underground Junction	1378.917	0	0	79.671	0
C8	2-year	Underground Junction	1378.133	0	0	51.987	0
C9	2-year	Grate Inlet	1376.217	0	0	33.685	0
D1	2-year	Outfall	1380	0	0	42.1	0
D10	2-year	Curb Inlet	20.9	0.5	0	27.577	7.78
D11	2-year	Manhole	26.4	17.8	0	42.494	381.31
D12	2-year	Combination Inlet	27.683	19.6	0	40.897	6846.27
D13	2-year	Manhole	25.283	0.3	0	53.329	10.02
D14	2-year	Grate Inlet	0	0	0	8.809	0
D2	2-year	Combination Inlet	0.467	0	0	42.582	0

XPSWMM Node Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
D3	2-year	Manhole	1.557	0	0	43.169	0
D4	2-year	Drop Curb Inlet	0.467	0	0	40.143	0
D5	2-year	Combination Inlet	17.173	0.4	0	43.937	23.64
D6	2-year	Combination Inlet	1.35	0.3	0	42.826	10.66
D7	2-year	Manhole	23.567	0	0	25.498	0
D8	2-year	Underground Junction	31.4	17.8	0	42.64	75.68
D9	2-year	Grate Inlet	29.133	23.1	0	36.916	3046.63
F1	2-year	Outfall	1380	0	0	47.915	0
F10	2-year	Manhole	40.617	14.6	0	58.156	721.93
F11	2-year	Manhole	37.817	13.9	0	47.178	1380.31
F12	2-year	Combination Inlet	32.55	10.4	0	39.329	535.97
F13	2-year	Manhole	31.933	4.1	0	44.576	167.26
F14	2-year	Grate Inlet	26.1	12.4	0	33.787	240.43
F15	2-year	Manhole	20.35	0	0	32.556	0
F16	2-year	Grate Inlet	14.75	0	0	22.171	0
F17	2-year	Manhole	36.25	12.4	0	60.633	1302.14
F18	2-year	Combination Inlet	38.25	11	0	53.789	878.42
F19	2-year	Manhole	33.283	8.9	0	57.459	554.53
F2	2-year	Grate Inlet	1379.68	56.8	0	66.467	12294.86
F20	2-year	Manhole	29.317	13	0	53.345	1174.51
F21	2-year	Combination Inlet	28.55	13.6	0	45.737	686.51
F22	2-year	Manhole	30.65	19.6	0	51.12	1695.56
F23	2-year	Grate Inlet	27.367	20.1	0	51.206	2273.55
F24	2-year	Drop Curb Inlet	28.7	20.1	0	50.49	2044.08
F25	2-year	Pond Structure	46.333	0	0	44.062	0
F3	2-year	Grate Inlet	1371.793	50.1	0	55.149	8649.91
F4	2-year	Manhole	1379.08	38	0	60.336	2168.39
F5	2-year	Underground Junction	1378.833	34.2	0	58.325	306.95
F6	2-year	Grate Inlet	1378.65	42.8	0	55.766	12147.59
F7	2-year	Manhole	1377.983	23.9	0	69.518	1260.7
F8	2-year	Grate Inlet	40.967	24.2	0	56.061	1562.32
F9	2-year	Slotted Inlet	37.5	34.6	0	37.826	3932.35
G1	2-year	Outfall	1380	0	0	55.51	0
G2	2-year	Grate Inlet	1379.96	1375.8	0	54.306	72134.64
G3	2-year	Grate Inlet	1379.84	1315.2	0	45.771	130352.66
G4	2-year	Grate Inlet	1379.597	89.5	0	56.616	3013.65
H1	2-year	Outfall	1380	0	0	61.863	0
H2	2-year	Combination Inlet	1377.483	60.3	0	61.232	405.36
H3	2-year	Combination Inlet	1378.3	61.8	0	62.529	19465.8
I1	2-year	Outfall	0	0	0	18.513	0
I2	2-year	Underground Junction	0	0	0	24.037	0

XPSWMM Node Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
I3	2-year	Grate Inlet	19.667	0	0	47.401	0
I4	2-year	Manhole	0	0	0	6.308	0
I5	2-year	Combination Inlet	0	0	0	5.699	0
I6	2-year	Combination Inlet	0	0	0	6.658	0
J1	2-year	Outfall	1380	0	0	53.098	0
J2	2-year	Curb Inlet	1378.367	97.8	0	66.47	256.4
J3	2-year	Underground Junction	1378.333	74.3	0	64.753	8.34
J4	2-year	Grate Inlet	1378.183	101.8	0	57.981	13580.15
J5	2-year	Combination Inlet	1378.567	102.9	0	64.429	28816.97
K1	2-year	Outfall	1380	0	0	45.57	0
K10	2-year	Grate Inlet	611.4	31.8	0	42.465	706.24
K2	2-year	Underground Junction	0	0	0	58.651	0
K3	2-year	Grate Inlet	999.417	595.7	0	51.246	19762.55
K4	2-year	Combination Inlet	981.583	687.8	0	59.424	26577.99
K5	2-year	Manhole	941	15.2	0	58.496	779.98
K6	2-year	Grate Inlet	903.717	45.1	0	57.133	1610.37
K7	2-year	Grate Inlet	883.333	157.8	0	57.833	3997.53
K8	2-year	Grate Inlet	850.2	113.6	0	52.189	5115.87
K9	2-year	Grate Inlet	820.1	62.7	0	46.203	2006.42
L1	2-year	Outfall	1380	0	0	33.857	0
L2	2-year	Grate Inlet	1379.64	110.3	0	43.912	1824.58
L3	2-year	Pipe Inlet	222.073	222.1	0	36.975	848.13
L4	2-year	Pipe Inlet	64.167	64.2	0	28.738	48.19
M1	2-year	Outfall	0	0	0	12.566	0
M2	2-year	Underground Junction	14.433	0	0	51.711	0
M3	2-year	Combination Inlet	12.483	5.7	0	55.307	64.57
M4	2-year	Combination Inlet	8.7	0	0	25.943	0
POND1	2-year	Lyon Homes Apartments	340.567	0	0	108.286	0

XPSWMM Link Output Data
2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	2-year	Circular	Concrete	4.53	-25.40	6.29
A11-A10	2-year	Circular	Concrete	6.73	4.16	0.73
A12-A11	2-year	Circular	Concrete	6.67	3.81	0.63
A13-A12	2-year	Circular	PVC	1.61	1.33	0.97
A14-A13	2-year	Circular	PVC	3.06	-1.58	0.60
A15-A13	2-year	Circular	PVC	2.16	1.26	0.72
A16-A15	2-year	Circular	Terra Cotta	1.13	-1.31	1.33
A17-A15	2-year	Circular	Terra Cotta	0.83	1.18	1.68
A18-A17	2-year	Circular	Terra Cotta	0.90	-1.31	1.59
A19-A10	2-year	Circular	Concrete	35.99	-22.46	0.64
A2-A1	2-year	Circular	Concrete	22.06	-43.93	2.29
A20-A19	2-year	Circular	Concrete	8.08	-21.70	2.79
A21-A20	2-year	Circular	Concrete	16.90	-19.71	1.26
A22-A21	2-year	Circular	Concrete	43.52	-18.30	0.45
A23-A22	2-year	Circular	Concrete	18.14	-16.92	0.93
A24-A23	2-year	Circular	Concrete	25.18	-31.93	1.35
A25-A23	2-year	Circular	Concrete	16.21	46.69	3.40
A26-A25	2-year	Circular	Concrete	18.91	-38.10	2.11
A27-A25	2-year	Circular	Concrete	149.50	-139.32	1.20
A28-A27	2-year	Circular	Concrete	15.72	18.33	1.81
A29-A28	2-year	Circular	Concrete	17.68	-22.62	1.39
A3-A2	2-year	Special	Concrete	27.26	-14.19	0.58
A30-A28	2-year	Circular	Concrete	47.75	-32.25	0.82
A31-A30	2-year	Circular	Concrete	6.73	5.41	0.81
A32-A31	2-year	Circular	Concrete	9.76	-12.90	1.50
A33-A32	2-year	Circular	Concrete	9.44	11.02	1.69
A34-A31	2-year	Circular	Concrete	4.38	3.41	0.82
A35-A34	2-year	Circular	Concrete	6.96	-7.56	1.17
A36-A31	2-year	Circular	Concrete	17.99	-12.36	0.77
A37-A36	2-year	Circular	Corrugated Metal	4.36	-3.84	1.09
A38-A37	2-year	Circular	Corrugated Metal	1.18	3.39	2.87
A39-A38	2-year	Special	Corrugated Metal	5.44	1.31	0.24
A4-A3	2-year	Special	Concrete	14.68	-6.10	0.42
A40-A38	2-year	Special	Corrugated Metal	7.00	1.72	0.30
A41-A40	2-year	Special	Corrugated Metal	3.89	1.14	0.37
A42-A30	2-year	Circular	Concrete	25.67	-17.30	0.90
A43-A42	2-year	Circular	Concrete	3.75	-11.48	4.01
A44-A42	2-year	Circular	Concrete	20.97	-10.91	0.74
A45-A44	2-year	Circular	Concrete	6.48	14.84	2.29
A46-A45	2-year	Special	Concrete	25.77	-20.55	1.39
A47-A46	2-year	Special	Concrete	11.85	10.93	1.28
A48-A47	2-year	Special	Concrete	13.92	8.91	0.88

XPSWMM Link Output Data
2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	2-year	Circular	Concrete	6.53	18.42	3.25
A5-A4	2-year	Special	Concrete	13.58	8.65	0.64
A50-A48	2-year	Special	Concrete	13.94	9.02	0.68
A51-A50	2-year	Circular	Concrete	5.98	-17.63	3.80
A52-A50	2-year	Circular	Concrete	7.32	5.35	0.91
A53-A52	2-year	Circular	Concrete	8.59	5.75	0.74
A54-A52	2-year	Circular	Concrete	4.91	6.23	1.92
A55-A54	2-year	Circular	Concrete	8.36	5.04	0.73
A56-A54	2-year	Circular	Concrete	8.47	3.08	1.08
A57-A56	2-year	Circular	Concrete	10.11	4.08	0.78
A58-A45	2-year	Circular	Concrete	104.63	-47.43	2.14
A59-A58	2-year	Circular	Concrete	26.14	-22.96	1.29
A6-A3	2-year	Special	Concrete	8.57	6.97	0.96
A60-A59	2-year	Circular	Concrete	11.37	15.37	1.53
A61-A59	2-year	Circular	Concrete	11.80	38.54	3.60
A62-A61	2-year	Circular	Concrete	10.18	13.41	1.38
A63-A62	2-year	Circular	Concrete	6.42	3.89	1.15
A64-A62	2-year	Circular	Concrete	13.43	21.92	2.31
A65-A64	2-year	Circular	Concrete	11.08	-10.25	1.06
A66-A65	2-year	Circular	Concrete	15.64	5.54	0.45
A67-A65	2-year	Circular	Concrete	17.18	8.03	0.55
A68-A64	2-year	Circular	Concrete	14.28	12.43	0.96
A69-A68	2-year	Circular	Concrete	26.67	5.20	0.84
A7-A6	2-year	Circular	Concrete	8.30	10.38	1.65
A70-A69	2-year	Circular	Concrete	7.77	6.60	1.17
A71-A68	2-year	Circular	Concrete	8.02	5.30	0.79
A72-A68	2-year	Circular	Concrete	10.03	7.09	0.72
A73-A72	2-year	Circular	Concrete	20.79	6.60	0.40
A74-A73	2-year	Circular	Concrete	14.94	-1.86	0.18
A75-A73	2-year	Circular	Concrete	8.80	6.09	0.75
A76-A75	2-year	Circular	Concrete	4.50	3.83	0.92
A77-A75	2-year	Circular	Concrete	8.04	2.39	0.34
A78-A77	2-year	Circular	Concrete	4.78	2.26	0.54
A79-A78	2-year	Circular	Concrete	4.41	1.66	0.42
A8-A6	2-year	Special	Concrete	2.31	7.69	5.69
A80-A72	2-year	Circular	Concrete	2.10	6.21	3.57
A81-BIO3	2-year	Circular	Concrete	2.97	3.41	1.23
A82-A81	2-year	Circular	Smooth HDPE	2.56	2.83	1.30
A83-A82	2-year	Circular	Smooth HDPE	3.60	-2.31	1.08
A85-A84	2-year	Circular	Concrete	3.68	-3.64	1.38
A86-A85	2-year	Circular	Concrete	2.30	-1.44	0.74
A87-A86	2-year	Circular	Concrete	3.13	2.81	1.36

XPSWMM Link Output Data
2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	2-year	Circular	Smooth HDPE	2.87	2.67	1.04
A90-A89	2-year	Circular	Smooth HDPE	1.85	2.23	2.00
A92-A91	2-year	Circular	Smooth HDPE	1.64	-7.26	4.95
A93-A92	2-year	Circular	Smooth HDPE	1.00	-2.49	3.43
B10-B9	2-year	Circular	Terra Cotta	0.82	1.01	1.23
B11-B10	2-year	Circular	Terra Cotta	1.15	0.50	0.44
B12-B9	2-year	Circular	Terra Cotta	0.83	1.32	1.59
B13-B12	2-year	Circular	Terra Cotta	0.51	0.47	0.90
B14-B12	2-year	Circular	Terra Cotta	0.67	0.85	1.28
B15-B14	2-year	Circular	Terra Cotta	0.89	-0.44	0.52
B16-B9	2-year	Circular	Corrugated Metal	0.60	2.50	4.14
B17-B16	2-year	Circular	Corrugated Metal	2.58	2.74	1.19
B2-B1	2-year	Circular	Concrete	19.17	-9.31	0.49
B3-B2	2-year	Circular	Terra Cotta	2.09	0.93	0.45
B4-B3	2-year	Circular	Terra Cotta	0.64	0.49	0.76
B5-B2	2-year	Circular	Terra Cotta	1.76	1.75	1.00
B6-B5	2-year	Circular	Terra Cotta	0.73	1.29	1.77
B7-B6	2-year	Circular	Terra Cotta	0.72	0.82	1.15
B8-B7	2-year	Circular	Terra Cotta	0.70	0.42	0.61
B9-B2	2-year	Circular	Concrete	10.73	-4.88	0.56
C10-C8	2-year	Circular	Terra Cotta	1.16	0.64	0.58
C11-C10	2-year	Circular	Terra Cotta	1.27	0.38	0.30
C12-C7	2-year	Special	Corrugated Metal	21.52	25.75	1.52
C13-C12	2-year	Circular	Terra Cotta	1.63	1.08	0.79
C14-C13	2-year	Circular	Terra Cotta	1.14	0.52	0.68
C15-C12	2-year	Circular	Terra Cotta	1.79	1.31	1.07
C16-C15	2-year	Circular	Terra Cotta	1.50	1.05	0.90
C17-C15	2-year	Circular	Terra Cotta	1.20	0.66	0.58
C18-C12	2-year	Special	Corrugated Metal	1.50	27.55	22.56
C19-C18	2-year	Circular	Concrete	17.90	6.46	0.80
C2-C1	2-year	Special	Corrugated Metal	18.05	-38.56	2.42
C20-C19	2-year	Circular	Concrete	4.61	4.64	1.23
C21-C20	2-year	Circular	Concrete	8.77	-4.24	0.75
C22-C20	2-year	Circular	Concrete	6.35	9.91	1.83
C23-C22	2-year	Circular	Concrete	5.35	4.54	1.16
C24-C23	2-year	Circular	Corrugated Metal	3.59	2.69	1.32
C25-C18	2-year	Circular	Concrete	13.58	29.94	2.46
C26-C25	2-year	Circular	Concrete	11.86	10.61	0.93
C27-C26	2-year	Circular	Concrete	6.67	9.17	1.66
C28-C25	2-year	Circular	Concrete	31.65	25.37	0.91
C29-C28	2-year	Circular	Concrete	12.33	-11.08	1.24
C3-C2	2-year	Circular	Terra Cotta	3.80	1.34	0.44

XPSWMM Link Output Data
2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	2-year	Circular	Concrete	1.74	-12.94	9.38
C31-C28	2-year	Circular	Concrete	24.95	18.32	0.83
C32-C31	2-year	Circular	Concrete	14.63	8.55	0.73
C33-C32	2-year	Circular	Concrete	6.49	3.67	1.16
C34-C31	2-year	Circular	Concrete	18.17	20.17	1.37
C35-C34	2-year	Circular	Concrete	15.06	-15.31	1.59
C36-C34	2-year	Circular	Concrete	10.38	12.57	2.08
C37-C34	2-year	Circular	Concrete	22.46	12.56	0.66
C38-C37	2-year	Circular	Concrete	10.64	4.26	0.44
C39-C38	2-year	Circular	Corrugated Metal	3.86	0.64	0.22
C4-C3	2-year	Circular	Terra Cotta	0.93	0.57	0.88
C40-C38	2-year	Circular	Concrete	10.16	3.51	0.38
C41-C40	2-year	Circular	Concrete	15.19	2.50	0.18
C42-C37	2-year	Circular	Concrete	13.67	8.30	0.74
C43-C42	2-year	Circular	Concrete	4.89	0.86	0.23
C44-C42	2-year	Circular	Concrete	15.91	2.90	0.20
C45-C44	2-year	Circular	Concrete	9.24	1.70	0.18
C46-C44	2-year	Circular	Concrete	20.35	1.11	0.06
C47-C46	2-year	Circular	Concrete	3.21	1.05	0.33
C5-C2	2-year	Circular	Terra Cotta	3.32	1.09	0.40
C6-C5	2-year	Circular	Terra Cotta	0.96	0.46	0.72
C7-C2	2-year	Special	Corrugated Metal	14.03	-36.54	2.61
C8-C7	2-year	Circular	Terra Cotta	1.46	1.01	0.76
C9-C8	2-year	Circular	Terra Cotta	2.15	0.34	0.22
D10-D8	2-year	Circular	Concrete	12.95	1.12	0.20
D11-D8	2-year	Circular	Concrete	6.61	6.77	1.10
D12-D11	2-year	Circular	PVC	3.11	10.20	3.57
D13-D11	2-year	Circular	Concrete	2.49	-1.47	1.10
D14-D13	2-year	Circular	PVC	6.77	0.89	0.14
D2-D1	2-year	Special	Concrete	50.58	-20.82	0.53
D3-D2	2-year	Special	Corrugated Metal	15.34	-16.33	1.21
D4-D3	2-year	Special	Corrugated Metal	30.20	-9.27	0.36
D5-D4	2-year	Circular	Concrete	7.46	7.29	0.98
D6-D5	2-year	Circular	Corrugated Metal	4.09	-2.71	1.49
D7-D3	2-year	Circular	Concrete	3.73	5.77	1.55
D8-D7	2-year	Circular	Concrete	2.43	5.77	2.38
D9-D8	2-year	Circular	Concrete	6.26	1.80	0.54
F10-F5	2-year	Circular	Concrete	13.10	12.89	0.99
F11-F10	2-year	Circular	Concrete	4.50	4.50	1.30
F12-F11	2-year	Circular	Concrete	8.64	3.03	0.75
F13-F11	2-year	Circular	Concrete	4.32	4.21	1.03
F14-F13	2-year	Circular	PVC	4.40	3.20	0.87

XPSWMM Link Output Data
2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	2-year	Circular	Concrete	3.73	1.52	0.51
F16-F15	2-year	Circular	PVC	4.02	1.42	0.40
F17-F10	2-year	Circular	Concrete	10.42	13.36	1.36
F18-F17	2-year	Circular	Concrete	5.91	7.79	1.65
F19-F17	2-year	Circular	Concrete	8.27	8.78	1.12
F2-F1	2-year	Circular	Concrete	16.41	38.48	2.57
F20-F19	2-year	Circular	Concrete	8.18	10.11	1.28
F21-F20	2-year	Circular	Concrete	5.26	7.19	1.58
F22-F20	2-year	Circular	Concrete	3.69	5.68	1.57
F23-F22	2-year	Circular	Concrete	7.79	7.80	1.28
F24-F23	2-year	Circular	Concrete	1.33	8.49	6.81
F25-F24	2-year	Circular	Smooth HDPE	5.04	7.50	1.66
F3-F2	2-year	Circular	Concrete	54.63	24.28	0.57
F4-F2	2-year	Circular	Concrete	10.63	13.73	1.63
F5-F4	2-year	Circular	Concrete	29.27	13.50	0.59
F6-F5	2-year	Circular	Concrete	7.92	-7.76	1.34
F7-F6	2-year	Circular	Concrete	2.04	-5.14	2.95
F8-F7	2-year	Circular	Concrete	10.49	6.60	0.68
F9-F8	2-year	Circular	Corrugated Metal	2.96	4.33	1.53
G2-G1	2-year	Circular	Concrete	19.84	11.77	1.26
G3-G2	2-year	Circular	Concrete	17.04	-9.64	1.24
G4-G3	2-year	Circular	Concrete	5.96	7.28	1.36
H2-H1	2-year	Circular	Concrete	6.82	6.89	1.01
H3-H2	2-year	Circular	Concrete	3.63	8.07	2.64
I2-I1	2-year	Circular	Concrete	15.16	16.72	1.10
I3-I2	2-year	Circular	Concrete	3.84	13.20	3.45
I4-I2	2-year	Circular	Concrete	28.62	3.92	0.14
I5-I4	2-year	Circular	Concrete	6.93	1.90	0.27
I6-I4	2-year	Circular	Concrete	5.66	2.09	0.37
J2-J1	2-year	Circular	Concrete	4.21	5.32	1.26
J3-J2	2-year	Circular	Concrete	2.79	4.89	1.88
J4-J3	2-year	Circular	Concrete	5.09	2.64	0.57
J5-J3	2-year	Circular	Concrete	1.19	3.73	3.23
K10-K9	2-year	Circular	Concrete	4.15	2.55	0.82
K2-K1	2-year	Circular	Corrugated Metal	5.93	0.70	0.12
K3-K2	2-year	Circular	Concrete	3.11	-3.18	1.02
K4-K2	2-year	Circular	Concrete	3.28	3.84	1.17
K5-K4	2-year	Circular	Concrete	5.26	4.37	1.07
K6-K5	2-year	Circular	Concrete	8.63	5.71	0.83
K7-K6	2-year	Circular	Concrete	2.03	3.97	2.18
K8-K7	2-year	Circular	Concrete	3.86	2.82	0.84
K9-K8	2-year	Circular	Concrete	4.72	-2.29	0.73

XPSWMM Link Output Data

2-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	2-year	Circular	Cast Iron	2.27	3.38	1.49
L3-L2	2-year	Circular	Corrugated Metal	5.35	4.29	0.93
L4-L2	2-year	Circular	Corrugated Metal	3.17	2.09	0.66
Orifice1.1	2-year			2.21	0.82	0.46
Orifice2.1	2-year			2.21	0.82	0.46
Orifice3.1	2-year			2.21	2.77	1.29
M2-M1	2-year	Circular	Concrete	4.38	6.92	1.60
M3-M2	2-year	Circular	Concrete	6.04	7.32	1.23
M4-M2	2-year	Circular	Concrete	4.75	0.56	0.12

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	2-year 2050	Outfall	1380	0	0	68.57	0
A10	2-year 2050	Manhole	1378.55	0	0	88.748	0
A11	2-year 2050	Grate Inlet	1378.867	1201.8	0	82.041	47127.18
A12	2-year 2050	Grate Inlet	1378.083	1088.4	0	69.834	24726.35
A13	2-year 2050	Manhole	1377	3	0	67.363	54.42
A14	2-year 2050	Grate Inlet	1368.867	909.9	0	34.743	12950.04
A15	2-year 2050	Grate Inlet	1367.65	311.9	0	55.408	9689.94
A16	2-year 2050	Grate Inlet	1368.667	191.2	0	48.836	2892.41
A17	2-year 2050	Grate Inlet	1369.5	240.9	0	51.329	5414.42
A18	2-year 2050	Grate Inlet	1368.417	274.3	0	47.107	3633.41
A19	2-year 2050	Manhole	1378.583	0	0	92.311	0
A2	2-year 2050	Manhole	1379.4	948.7	0	86.333	218064.21
A20	2-year 2050	Manhole	1378.4	0	0	92.655	0
A21	2-year 2050	Manhole	1378.033	0	0	91.774	0
A22	2-year 2050	Manhole	1377.833	0	0	88.546	0
A23	2-year 2050	Combination Inlet	1376.75	1373.5	0	84.977	222790.63
A24	2-year 2050	Combination Inlet	1375.367	1354.7	0	70.514	71103.7
A25	2-year 2050	Combination Inlet	1376.217	1373.1	0	84.314	121733.82
A26	2-year 2050	Combination Inlet	1376.883	1371	0	73.828	29699.7
A27	2-year 2050	Manhole	1372.867	1369.7	0	77.369	177967.01
A28	2-year 2050	Manhole	1374.367	1357.8	0	78.805	59153.42
A29	2-year 2050	Curb Inlet	1376.467	1358.8	0	72.863	37492.84
A3	2-year 2050	Manhole	1377.717	1152.7	0	70.496	94551.97
A30	2-year 2050	Manhole	1371.8	1359.3	0	75.17	74115.46
A31	2-year 2050	Manhole	1374.2	1188.7	0	69.703	115739.17
A32	2-year 2050	Combination Inlet	1374.083	1352.8	0	60.045	102978.03
A33	2-year 2050	Combination Inlet	1369.417	1239.2	0	55.52	97098.05
A34	2-year 2050	Manhole	1367.967	227	0	56.504	17568.83
A35	2-year 2050	Combination Inlet	1363.733	624.9	0	49.349	18872.56
A36	2-year 2050	Curb Inlet	1356.633	1076.8	0	58.995	59082.78
A37	2-year 2050	Manhole	1244.517	33.1	0	55.856	2579.02
A38	2-year 2050	Grate Inlet	1260.833	61	0	62.331	7568.73
A39	2-year 2050	Grate Inlet	990.75	57.6	0	48.788	2338.74
A4	2-year 2050	Grate Inlet	1377.733	1377.5	0	62.786	55801.07
A40	2-year 2050	Grate Inlet	1087.233	53.6	0	58.073	5656.16
A41	2-year 2050	Grate Inlet	843.983	20.3	0	50.595	2181.59
A42	2-year 2050	Underground Junction	1371.433	1343.3	0	73.456	11058.87
A43	2-year 2050	Curb Inlet	1376.233	1368.7	0	72.885	20558.53
A44	2-year 2050	Grate Inlet	1368.8	1336.8	0	69.169	107382.57

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A45	2-year 2050	Underground Junction	1352.2	1034.5	0	85.351	82886.21
A46	2-year 2050	Combination Inlet	1359.45	1220	0	65.084	235721.56
A47	2-year 2050	Manhole	1362.25	1061.5	0	62.923	84920.19
A48	2-year 2050	Manhole	1366.017	822.4	0	59.724	136258.42
A49	2-year 2050	Combination Inlet	1370.983	1017.1	0	60.8	90245.2
A5	2-year 2050	Grate Inlet	1377.583	1194.5	0	58.46	8059.35
A50	2-year 2050	Manhole	1234.75	142.2	0	57.726	37180.83
A51	2-year 2050	Combination Inlet	1317.483	258.1	0	58.542	33942.94
A52	2-year 2050	Manhole	527.983	8.2	0	51.563	878.27
A53	2-year 2050	Combination Inlet	360.6	59	0	44.346	2621.3
A54	2-year 2050	Underground Junction	473.083	0.1	0	50.659	3.14
A55	2-year 2050	Combination Inlet	162.3	5.4	0	38.651	231.63
A56	2-year 2050	Manhole	368.967	2.8	0	47.67	260.82
A57	2-year 2050	Grate Inlet	182.267	12.7	0	39.946	827.24
A58	2-year 2050	Grate Inlet	1357.067	1282.8	0	74.932	452643.57
A59	2-year 2050	Underground Junction	1366.917	1078.8	0	72.524	27061.5
A6	2-year 2050	Manhole	1376.867	1181.2	0	53.967	140597.52
A60	2-year 2050	Combination Inlet	1366.067	1307.7	0	64.57	77913.87
A61	2-year 2050	Grate Inlet	1368.3	1321	0	67.692	160783
A62	2-year 2050	Grate Inlet	1366.533	1295.9	0	66.644	163200.15
A63	2-year 2050	Grate Inlet	1367.917	1163.1	0	55.148	26923.14
A64	2-year 2050	Manhole	1369.883	292.1	0	72.771	62587.53
A65	2-year 2050	Manhole	1369.3	348.2	0	66.83	38568.95
A66	2-year 2050	Curb Inlet	1357.533	359.7	0	52.086	21159.51
A67	2-year 2050	Curb Inlet	1303.317	334.4	0	55.691	9358.48
A68	2-year 2050	Manhole	425.233	2.3	0	74.417	978.75
A69	2-year 2050	Combination Inlet	379.683	7.7	0	65.845	1693.68
A7	2-year 2050	Grate Inlet	1376.917	1296.7	0	51.923	85812.96
A70	2-year 2050	Grate Inlet	320.05	21.1	0	47.94	1996.99
A71	2-year 2050	Curb Inlet	279.7	10.8	0	50.944	358.4
A72	2-year 2050	Manhole	24.267	0	0	60.534	0
A73	2-year 2050	Underground Junction	19.6	0	0	49.699	0
A74	2-year 2050	Curb Inlet	16.6	0	0	42.021	0
A75	2-year 2050	Manhole	13.7	0	0	45.646	0
A76	2-year 2050	Curb Inlet	14.383	0	0	44.175	0
A77	2-year 2050	Curb Inlet	14	0	0	46.344	0
A78	2-year 2050	Curb Inlet	13.3	0	0	42.674	0

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A79	2-year 2050	Combination Inlet	8.767	0	0	30.539	0
A8	2-year 2050	Curb Inlet	1376.85	991.3	0	51.321	42135.8
A80	2-year 2050	Pond Structure	14.5	0	0	54.356	0
A81	2-year 2050	Pond Structure	23.333	23.3	0	53.258	370.87
A82	2-year 2050	Grate Inlet	23.617	1.5	0	37.187	114.14
A83	2-year 2050	Grate Inlet	36.483	6.2	0	41.289	262.82
A84	2-year 2050	Pond Structure	39.333	39.3	0	78.812	0.19
A85	2-year 2050	Manhole	706.867	14.9	0	83.773	710.81
A86	2-year 2050	Manhole	779.3	13.5	0	105.621	640.13
A87	2-year 2050	Curb Inlet	868.433	44.9	0	101.848	1517.5
A88	2-year 2050	Pond Structure	365.833	365.8	0	66.03	9877.84
A89	2-year 2050	Manhole	683.833	7	0	55.29	450.09
A90	2-year 2050	Grate Inlet	682.567	20.3	0	63.347	574.38
A91	2-year 2050	Pond Structure	395.15	395.1	0	63.992	7047.4
A92	2-year 2050	Grate Inlet	678.583	227.1	0	58.594	15981.34
A93	2-year 2050	Grate Inlet	681	97	0	51.312	1700.29
B1	2-year 2050	Outfall	1380	0	0	72.771	0
B10	2-year 2050	Grate Inlet	1378.517	1.5	0	56.08	24.88
B11	2-year 2050	Grate Inlet	1378.133	2.5	0	45.573	24.3
B12	2-year 2050	Underground Junction	1378.4	0	0	48.437	0
B13	2-year 2050	Grate Inlet	1378.283	8.2	0	55.146	82.27
B14	2-year 2050	Grate Inlet	1377.95	7	0	54.918	142.56
B15	2-year 2050	Grate Inlet	1377.667	10.9	0	48.865	144.1
B16	2-year 2050	Curb Inlet	1378.117	974.6	0	50.152	42209.94
B17	2-year 2050	Grate Inlet	1377.917	1061.2	0	44.027	40092.6
B2	2-year 2050	Underground Junction	1378.733	0	0	45.679	0
B3	2-year 2050	Grate Inlet	1378.517	0	0	35.265	0
B4	2-year 2050	Grate Inlet	1378.533	0	0	33.314	0
B5	2-year 2050	Grate Inlet	1379.04	0.1	0	42.934	1.47
B6	2-year 2050	Grate Inlet	1378.733	9.1	0	57.854	150.82
B7	2-year 2050	Grate Inlet	1378.167	11.8	0	53.018	182.13
B8	2-year 2050	Grate Inlet	1377.833	11.6	0	51.716	138.95
B9	2-year 2050	Underground Junction	1378.367	0	0	40.959	0
BIO3	2-year 2050	Family Dollar Bioretention	73.5	0	0	2589.898	0
C1	2-year 2050	Outfall	1380	0	0	72.236	0
C10	2-year 2050	Grate Inlet	1377.983	7.4	0	58.211	161.91
C11	2-year 2050	Grate Inlet	1377.217	9.3	0	50.816	123.47

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C12	2-year 2050	Underground Junction	1378.35	0	0	85.708	0
C13	2-year 2050	Grate Inlet	1378.2	1.4	0	56.185	34.56
C14	2-year 2050	Grate Inlet	1377.617	0.2	0	46.69	3.63
C15	2-year 2050	Underground Junction	1378.583	0	0	45.966	0
C16	2-year 2050	Grate Inlet	1378.167	0	0	40.733	0
C17	2-year 2050	Grate Inlet	1377.9	0.9	0	50.435	2.93
C18	2-year 2050	Curb Inlet	1378.05	126.4	0	77.503	51248.3
C19	2-year 2050	Manhole	1378.233	69.7	0	60.893	9032.98
C2	2-year 2050	Underground Junction	1379.4	0	0	82.447	0
C20	2-year 2050	Manhole	1377.067	86.9	0	55.481	11735.15
C21	2-year 2050	Curb Inlet	1376.75	133.7	0	43.916	9360.19
C22	2-year 2050	Grate Inlet	1376.95	577	0	51.876	32095.09
C23	2-year 2050	Curb Inlet	1376.717	88	0	49.296	2469.81
C24	2-year 2050	Curb Inlet	1375.2	56.9	0	43.432	2160.57
C25	2-year 2050	Manhole	1377.867	386.1	0	69.261	73699.6
C26	2-year 2050	Combination Inlet	1378.25	1042	0	58.388	163066.07
C27	2-year 2050	Curb Inlet	1378.283	753.6	0	53.815	49833.2
C28	2-year 2050	Manhole	1376.65	199.7	0	61.801	39941.54
C29	2-year 2050	Combination Inlet	1378	1023.2	0	8412.122	152640.6
C3	2-year 2050	Grate Inlet	1379.04	0	0	43.33	0
C30	2-year 2050	Combination Inlet	1378.15	992.1	0	55.616	123124.63
C31	2-year 2050	Manhole	167.9	33.2	0	54.846	6339.36
C32	2-year 2050	Combination Inlet	757.833	46.8	0	46.159	5821.91
C33	2-year 2050	Curb Inlet	358.833	21.8	0	46.014	1701.77
C34	2-year 2050	Manhole	68.1	33.9	0	56.044	10120.35
C35	2-year 2050	Combination Inlet	1369.417	54	0	49.168	11039.36
C36	2-year 2050	Combination Inlet	1375.733	59.4	0	50.634	9624.75
C37	2-year 2050	Manhole	48.817	0	0	46.026	0
C38	2-year 2050	Underground Junction	59.017	0	0	38.25	0
C39	2-year 2050	Curb Inlet	20.267	0	0	21.46	0
C4	2-year 2050	Grate Inlet	1378.717	0	0	36.876	0
C40	2-year 2050	Combination Inlet	46.467	0	0	33.859	0
C41	2-year 2050	Combination Inlet	18.533	0	0	27.759	0
C42	2-year 2050	Curb Inlet	43.683	0	0	39.716	0
C43	2-year 2050	Curb Inlet	51.933	0	0	35.739	0
C44	2-year 2050	Underground Junction	0	0	0	17.895	0

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C45	2-year 2050	Combination Inlet	0	0	0	5.229	0
C46	2-year 2050	Grate Inlet	0	0	0	4.108	0
C47	2-year 2050	Combination Inlet	0	0	0	5.992	0
C5	2-year 2050	Grate Inlet	1378.833	0	0	38.888	0
C6	2-year 2050	Grate Inlet	1378.283	0	0	31.222	0
C7	2-year 2050	Underground Junction	1379.12	0	0	85.195	0
C8	2-year 2050	Underground Junction	1378.467	0	0	63.319	0
C9	2-year 2050	Grate Inlet	1377.25	6.1	0	48.597	99.36
D1	2-year 2050	Outfall	1380	0	0	55.922	0
D10	2-year 2050	Curb Inlet	33.8	1.1	0	27.715	24.77
D11	2-year 2050	Manhole	47.433	26.4	0	43.296	780.79
D12	2-year 2050	Combination Inlet	51.283	30.1	0	41.699	10140.3
D13	2-year 2050	Manhole	44.417	0.3	0	53.344	10.54
D14	2-year 2050	Grate Inlet	0	0	0	9.68	0
D2	2-year 2050	Combination Inlet	1379.323	1.2	0	71.735	906.36
D3	2-year 2050	Manhole	1379.4	0.8	0	70.544	1084.85
D4	2-year 2050	Drop Curb Inlet	1379.31	1.5	0	61.255	486.58
D5	2-year 2050	Combination Inlet	1379.32	931.2	0	52.48	58194.83
D6	2-year 2050	Combination Inlet	1379.073	153.3	0	44.778	6280.84
D7	2-year 2050	Manhole	1377.167	1.6	0	44.601	27.62
D8	2-year 2050	Underground Junction	275.717	28.1	0	43.928	177.19
D9	2-year 2050	Grate Inlet	64.983	38	0	37.743	5525.41
F1	2-year 2050	Outfall	1380	0	0	61.737	0
F10	2-year 2050	Manhole	448.15	18.6	0	58.365	1244.07
F11	2-year 2050	Manhole	73.883	17.9	0	46.941	1596.6
F12	2-year 2050	Combination Inlet	47.65	14.7	0	39.255	548.4
F13	2-year 2050	Manhole	45.6	10.5	0	45.171	396.1
F14	2-year 2050	Grate Inlet	37.4	16.2	0	34.481	315.46
F15	2-year 2050	Manhole	30.517	3.7	0	44.005	87.74
F16	2-year 2050	Grate Inlet	16.583	6.6	0	33.903	7.13
F17	2-year 2050	Manhole	57.817	15.1	0	61.668	1840.12
F18	2-year 2050	Combination Inlet	69.45	13.9	0	54.189	1347.22
F19	2-year 2050	Manhole	46.767	10.9	0	57.709	753.54
F2	2-year 2050	Grate Inlet	1379.76	1379.7	0	65.067	27210.28
F20	2-year 2050	Manhole	41.917	15.7	0	53.584	1633.94
F21	2-year 2050	Combination Inlet	39	16.5	0	46.039	1126.06
F22	2-year 2050	Manhole	42.383	27.8	0	51.187	2566.57
F23	2-year 2050	Grate Inlet	39.283	29.1	0	51.606	3187.48

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
F24	2-year 2050	Drop Curb Inlet	40.617	29	0	50.942	4375.97
F25	2-year 2050	Pond Structure	58.917	4.8	0	45.947	0
F3	2-year 2050	Grate Inlet	1379.68	1379.7	0	55.679	14646.31
F4	2-year 2050	Manhole	1379.28	817.3	0	61.49	69574.65
F5	2-year 2050	Underground Junction	1379.04	219.4	0	59.219	8395.97
F6	2-year 2050	Grate Inlet	1378.933	1232.2	0	56.783	113534.23
F7	2-year 2050	Manhole	1378.3	35.2	0	69.543	2066.89
F8	2-year 2050	Grate Inlet	1046.967	33.9	0	56.468	2098.98
F9	2-year 2050	Slotted Inlet	62.317	46.7	0	38.307	6140.38
G1	2-year 2050	Outfall	1380	0	0	69.333	0
G2	2-year 2050	Grate Inlet	1380	1380	0	59.23	1249371.3
G3	2-year 2050	Grate Inlet	1379.84	1379.8	0	50.392	365361.17
G4	2-year 2050	Grate Inlet	1379.68	811.1	0	57.098	55317.96
H1	2-year 2050	Outfall	1380	0	0	75.686	0
H2	2-year 2050	Combination Inlet	1379.24	91.3	0	62.326	1240.49
H3	2-year 2050	Combination Inlet	1379.28	101.8	0	63.71	29151.87
I1	2-year 2050	Outfall	0	0	0	19.437	0
I2	2-year 2050	Underground Junction	9.717	0	0	33.25	0
I3	2-year 2050	Grate Inlet	24.9	9.8	0	59.336	646.77
I4	2-year 2050	Manhole	0	0	0	6.883	0
I5	2-year 2050	Combination Inlet	0	0	0	6.23	0
I6	2-year 2050	Combination Inlet	0	0	0	7.343	0
J1	2-year 2050	Outfall	1380	0	0	66.921	0
J2	2-year 2050	Curb Inlet	1378.733	140.4	0	67.255	374.53
J3	2-year 2050	Underground Junction	1378.733	104.8	0	65.549	9.22
J4	2-year 2050	Grate Inlet	1378.617	397.3	0	58.774	25075.73
J5	2-year 2050	Combination Inlet	1378.85	637.5	0	65.332	48987.64
K1	2-year 2050	Outfall	1380	0	0	59.393	0
K10	2-year 2050	Grate Inlet	563.983	37.1	0	42.408	863.87
K2	2-year 2050	Underground Junction	0	0	0	58.987	0
K3	2-year 2050	Grate Inlet	1039.283	574	0	51.57	21151.73
K4	2-year 2050	Combination Inlet	1022.483	697.7	0	59.699	26247.47
K5	2-year 2050	Manhole	984.767	22.1	0	58.499	1238.35
K6	2-year 2050	Grate Inlet	949.967	56.7	0	57.16	1978.66
K7	2-year 2050	Grate Inlet	930.75	178.3	0	58.865	4679.52
K8	2-year 2050	Grate Inlet	894.583	132.1	0	53.168	6405.23
K9	2-year 2050	Grate Inlet	860.65	74.3	0	47.003	2261.58

XPSWMM Node Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
L1	2-year 2050	Outfall	1380	0	0	47.68	0
L2	2-year 2050	Grate Inlet	1379.68	1379.6	0	44.528	2681.91
L3	2-year 2050	Pipe Inlet	1378.393	1378.4	0	37.575	4183.99
L4	2-year 2050	Pipe Inlet	123.417	122.8	0	29.633	183.61
M1	2-year 2050	Outfall	0	0	0	12.566	0
M2	2-year 2050	Underground Junction	18.267	0	0	58.203	0
M3	2-year 2050	Combination Inlet	16.367	11.6	0	60.386	485.52
M4	2-year 2050	Combination Inlet	13.283	0	0	34.321	0
POND1	2-year 2050	Lyon Homes Apartments	381.917	0	0	108.286	0

XPSWMM Link Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	2-year 2050	Circular	Concrete	4.53	-33.285	7.355
A11-A10	2-year 2050	Circular	Concrete	6.73	-3.777	0.691
A12-A11	2-year 2050	Circular	Concrete	6.67	4.456	0.712
A13-A12	2-year 2050	Circular	PVC	1.61	-1.243	0.803
A14-A13	2-year 2050	Circular	PVC	3.06	1.469	0.618
A15-A13	2-year 2050	Circular	PVC	2.16	1.408	0.688
A16-A15	2-year 2050	Circular	Terra Cotta	1.13	1.276	1.267
A17-A15	2-year 2050	Circular	Terra Cotta	0.83	1.212	1.607
A18-A17	2-year 2050	Circular	Terra Cotta	0.9	1.197	1.58
A19-A10	2-year 2050	Circular	Concrete	35.99	-23.913	0.74
A2-A1	2-year 2050	Circular	Concrete	22.06	-46.464	2.65
A20-A19	2-year 2050	Circular	Concrete	8.08	-22.986	3.281
A21-A20	2-year 2050	Circular	Concrete	16.9	-21.225	1.447
A22-A21	2-year 2050	Circular	Concrete	43.52	-20.802	0.517
A23-A22	2-year 2050	Circular	Concrete	18.14	-20.243	1.13
A24-A23	2-year 2050	Circular	Concrete	25.18	21.143	1.309
A25-A23	2-year 2050	Circular	Concrete	16.21	-56.831	3.963
A26-A25	2-year 2050	Circular	Concrete	18.91	-33.704	1.923
A27-A25	2-year 2050	Circular	Concrete	149.5	-96.235	0.974
A28-A27	2-year 2050	Circular	Concrete	15.72	-19.209	2.117
A29-A28	2-year 2050	Circular	Concrete	17.68	-9.547	1.542
A3-A2	2-year 2050	Special	Concrete	27.26	-19.886	0.732
A30-A28	2-year 2050	Circular	Concrete	47.75	-28.303	0.851
A31-A30	2-year 2050	Circular	Concrete	6.73	-6.291	0.96
A32-A31	2-year 2050	Circular	Concrete	9.76	-12.789	1.624
A33-A32	2-year 2050	Circular	Concrete	9.44	-12.846	1.706
A34-A31	2-year 2050	Circular	Concrete	4.38	3.164	0.776
A35-A34	2-year 2050	Circular	Concrete	6.96	5.599	1.662
A36-A31	2-year 2050	Circular	Concrete	17.99	10.06	0.701
A37-A36	2-year 2050	Circular	Corrugated Metal	4.36	-4.493	1.135
A38-A37	2-year 2050	Circular	Corrugated Metal	1.18	-4.294	6.649
A39-A38	2-year 2050	Special	Corrugated Metal	5.44	4.391	0.968
A4-A3	2-year 2050	Special	Concrete	14.68	-8.012	0.567
A40-A38	2-year 2050	Special	Corrugated Metal	7	6.927	1.226
A41-A40	2-year 2050	Special	Corrugated Metal	3.89	7.067	1.988
A42-A30	2-year 2050	Circular	Concrete	25.67	-12.694	0.93
A43-A42	2-year 2050	Circular	Concrete	3.75	12.907	3.702
A44-A42	2-year 2050	Circular	Concrete	20.97	-15.855	0.877
A45-A44	2-year 2050	Circular	Concrete	6.48	-12.685	2.232
A46-A45	2-year 2050	Special	Concrete	25.77	32.057	1.713
A47-A46	2-year 2050	Special	Concrete	11.85	13.625	1.372
A48-A47	2-year 2050	Special	Concrete	13.92	7.84	0.718

XPSWMM Link Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	2-year 2050	Circular	Concrete	6.53	-15.404	3.095
A5-A4	2-year 2050	Special	Concrete	13.58	9.881	0.73
A50-A48	2-year 2050	Special	Concrete	13.94	10.469	0.793
A51-A50	2-year 2050	Circular	Concrete	5.98	-22.088	3.808
A52-A50	2-year 2050	Circular	Concrete	7.32	5.933	0.894
A53-A52	2-year 2050	Circular	Concrete	8.59	4.145	0.956
A54-A52	2-year 2050	Circular	Concrete	4.91	7.673	1.953
A55-A54	2-year 2050	Circular	Concrete	8.36	3.766	0.802
A56-A54	2-year 2050	Circular	Concrete	8.47	5.758	0.971
A57-A56	2-year 2050	Circular	Concrete	10.11	5.936	0.676
A58-A45	2-year 2050	Circular	Concrete	104.63	-208.707	2.067
A59-A58	2-year 2050	Circular	Concrete	26.14	-37.385	1.768
A6-A3	2-year 2050	Special	Concrete	8.57	-10.952	1.355
A60-A59	2-year 2050	Circular	Concrete	11.37	15.969	1.715
A61-A59	2-year 2050	Circular	Concrete	11.8	-38.806	4.288
A62-A61	2-year 2050	Circular	Concrete	10.18	-13.013	1.761
A63-A62	2-year 2050	Circular	Concrete	6.42	6.297	1.144
A64-A62	2-year 2050	Circular	Concrete	13.43	18.072	3.145
A65-A64	2-year 2050	Circular	Concrete	11.08	-10.512	1.077
A66-A65	2-year 2050	Circular	Concrete	15.64	-5.944	0.448
A67-A65	2-year 2050	Circular	Concrete	17.18	9.064	0.547
A68-A64	2-year 2050	Circular	Concrete	14.28	13.886	0.994
A69-A68	2-year 2050	Circular	Concrete	26.67	-16.168	0.882
A7-A6	2-year 2050	Circular	Concrete	8.3	-15.166	2.201
A70-A69	2-year 2050	Circular	Concrete	7.77	-8.485	1.297
A71-A68	2-year 2050	Circular	Concrete	8.02	5.341	0.784
A72-A68	2-year 2050	Circular	Concrete	10.03	9.052	0.933
A73-A72	2-year 2050	Circular	Concrete	20.79	8.994	0.477
A74-A73	2-year 2050	Circular	Concrete	14.94	-2.084	0.173
A75-A73	2-year 2050	Circular	Concrete	8.8	8.068	0.969
A76-A75	2-year 2050	Circular	Concrete	4.5	4.79	1.113
A77-A75	2-year 2050	Circular	Concrete	8.04	3.268	0.435
A78-A77	2-year 2050	Circular	Concrete	4.78	3.026	0.671
A79-A78	2-year 2050	Circular	Concrete	4.41	2.088	0.514
A8-A6	2-year 2050	Special	Concrete	2.31	10.703	5.77
A80-A72	2-year 2050	Circular	Concrete	2.1	6.191	3.577
A81-BIO3	2-year 2050	Circular	Concrete	2.97	3.539	1.224
A82-A81	2-year 2050	Circular	Smooth HDPE	2.56	-3.318	1.348
A83-A82	2-year 2050	Circular	Smooth HDPE	3.6	1.985	1.205
A85-A84	2-year 2050	Circular	Concrete	3.68	-3.789	1.368
A86-A85	2-year 2050	Circular	Concrete	2.3	1.23	0.86
A87-A86	2-year 2050	Circular	Concrete	3.13	2.812	1.582

XPSWMM Link Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	2-year 2050	Circular	Smooth HDPE	2.87	2.575	1.041
A90-A89	2-year 2050	Circular	Smooth HDPE	1.85	2.748	1.901
A92-A91	2-year 2050	Circular	Smooth HDPE	1.64	6.313	4.43
A93-A92	2-year 2050	Circular	Smooth HDPE	1	-2.516	3.467
B10-B9	2-year 2050	Circular	Terra Cotta	0.82	1.742	2.216
B11-B10	2-year 2050	Circular	Terra Cotta	1.15	-0.938	1.138
B12-B9	2-year 2050	Circular	Terra Cotta	0.83	-2.027	2.648
B13-B12	2-year 2050	Circular	Terra Cotta	0.51	-0.58	3.089
B14-B12	2-year 2050	Circular	Terra Cotta	0.67	1.292	2.281
B15-B14	2-year 2050	Circular	Terra Cotta	0.89	1.185	1.606
B16-B9	2-year 2050	Circular	Corrugated Metal	0.6	-2.138	3.699
B17-B16	2-year 2050	Circular	Corrugated Metal	2.58	-2.787	1.184
B2-B1	2-year 2050	Circular	Concrete	19.17	-14.289	0.747
B3-B2	2-year 2050	Circular	Terra Cotta	2.09	1.084	0.611
B4-B3	2-year 2050	Circular	Terra Cotta	0.64	0.621	1.191
B5-B2	2-year 2050	Circular	Terra Cotta	1.76	1.808	1.073
B6-B5	2-year 2050	Circular	Terra Cotta	0.73	1.473	2.3
B7-B6	2-year 2050	Circular	Terra Cotta	0.72	1.228	2.067
B8-B7	2-year 2050	Circular	Terra Cotta	0.7	0.785	1.47
B9-B2	2-year 2050	Circular	Concrete	10.73	-7.744	0.868
C10-C8	2-year 2050	Circular	Terra Cotta	1.16	1.343	1.166
C11-C10	2-year 2050	Circular	Terra Cotta	1.27	0.964	0.978
C12-C7	2-year 2050	Special	Corrugated Metal	21.52	-36.733	1.707
C13-C12	2-year 2050	Circular	Terra Cotta	1.63	-1.181	1.315
C14-C13	2-year 2050	Circular	Terra Cotta	1.14	0.722	1.047
C15-C12	2-year 2050	Circular	Terra Cotta	1.79	-1.757	1.169
C16-C15	2-year 2050	Circular	Terra Cotta	1.5	1.06	0.815
C17-C15	2-year 2050	Circular	Terra Cotta	1.2	0.657	1.058
C18-C12	2-year 2050	Special	Corrugated Metal	1.5	-24.879	21.478
C19-C18	2-year 2050	Circular	Concrete	17.9	12.631	0.858
C2-C1	2-year 2050	Special	Corrugated Metal	18.05	-42.056	2.928
C20-C19	2-year 2050	Circular	Concrete	4.61	-5.894	1.302
C21-C20	2-year 2050	Circular	Concrete	8.77	-6.338	0.832
C22-C20	2-year 2050	Circular	Concrete	6.35	-10.469	1.98
C23-C22	2-year 2050	Circular	Concrete	5.35	4.528	1.034
C24-C23	2-year 2050	Circular	Corrugated Metal	3.59	3.079	1.244
C25-C18	2-year 2050	Circular	Concrete	13.58	21.787	2.202
C26-C25	2-year 2050	Circular	Concrete	11.86	8.945	0.973
C27-C26	2-year 2050	Circular	Concrete	6.67	8.717	1.521
C28-C25	2-year 2050	Circular	Concrete	31.65	22.557	0.848
C29-C28	2-year 2050	Circular	Concrete	12.33	-16.171	1.692
C3-C2	2-year 2050	Circular	Terra Cotta	3.8	-1.473	0.518

XPSWMM Link Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	2-year 2050	Circular	Concrete	1.74	-12.445	9.013
C31-C28	2-year 2050	Circular	Concrete	24.95	18.574	0.795
C32-C31	2-year 2050	Circular	Concrete	14.63	6.111	0.661
C33-C32	2-year 2050	Circular	Concrete	6.49	4.227	1.419
C34-C31	2-year 2050	Circular	Concrete	18.17	20.418	1.292
C35-C34	2-year 2050	Circular	Concrete	15.06	-21.64	1.893
C36-C34	2-year 2050	Circular	Concrete	10.38	-18.602	2.399
C37-C34	2-year 2050	Circular	Concrete	22.46	13.557	0.652
C38-C37	2-year 2050	Circular	Concrete	10.64	4.436	0.493
C39-C38	2-year 2050	Circular	Corrugated Metal	3.86	0.753	0.205
C4-C3	2-year 2050	Circular	Terra Cotta	0.93	0.705	1.001
C40-C38	2-year 2050	Circular	Concrete	10.16	3.993	0.407
C41-C40	2-year 2050	Circular	Concrete	15.19	2.907	0.198
C42-C37	2-year 2050	Circular	Concrete	13.67	9.109	0.687
C43-C42	2-year 2050	Circular	Concrete	4.89	1.05	0.222
C44-C42	2-year 2050	Circular	Concrete	15.91	3.582	0.226
C45-C44	2-year 2050	Circular	Concrete	9.24	2.035	0.221
C46-C44	2-year 2050	Circular	Concrete	20.35	1.542	0.076
C47-C46	2-year 2050	Circular	Concrete	3.21	1.472	0.46
C5-C2	2-year 2050	Circular	Terra Cotta	3.32	1.257	0.5
C6-C5	2-year 2050	Circular	Terra Cotta	0.96	0.685	0.833
C7-C2	2-year 2050	Special	Corrugated Metal	14.03	-38.934	3.217
C8-C7	2-year 2050	Circular	Terra Cotta	1.46	1.039	0.863
C9-C8	2-year 2050	Circular	Terra Cotta	2.15	1.33	0.7
D10-D8	2-year 2050	Circular	Concrete	12.95	3.011	0.269
D11-D8	2-year 2050	Circular	Concrete	6.61	6.485	0.983
D12-D11	2-year 2050	Circular	PVC	3.11	9.802	3.549
D13-D11	2-year 2050	Circular	Concrete	2.49	1.655	1.594
D14-D13	2-year 2050	Circular	PVC	6.77	0.977	0.145
D2-D1	2-year 2050	Special	Concrete	50.58	31.713	0.824
D3-D2	2-year 2050	Special	Corrugated Metal	15.34	-57.606	6.372
D4-D3	2-year 2050	Special	Corrugated Metal	30.2	18.042	1.314
D5-D4	2-year 2050	Circular	Concrete	7.46	17.687	2.54
D6-D5	2-year 2050	Circular	Corrugated Metal	4.09	3.536	1.494
D7-D3	2-year 2050	Circular	Concrete	3.73	4.717	1.707
D8-D7	2-year 2050	Circular	Concrete	2.43	4.866	2.008
D9-D8	2-year 2050	Circular	Concrete	6.26	-2.714	0.565
F10-F5	2-year 2050	Circular	Concrete	13.1	12.938	0.993
F11-F10	2-year 2050	Circular	Concrete	4.5	4.415	1.303
F12-F11	2-year 2050	Circular	Concrete	8.64	3.968	0.746
F13-F11	2-year 2050	Circular	Concrete	4.32	4.832	1.293
F14-F13	2-year 2050	Circular	PVC	4.4	3.196	0.847

XPSWMM Link Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	2-year 2050	Circular	Concrete	3.73	3.375	0.998
F16-F15	2-year 2050	Circular	PVC	4.02	3.267	0.877
F17-F10	2-year 2050	Circular	Concrete	10.42	11.705	1.285
F18-F17	2-year 2050	Circular	Concrete	5.91	6.824	1.669
F19-F17	2-year 2050	Circular	Concrete	8.27	8.316	1.163
F2-F1	2-year 2050	Circular	Concrete	16.41	25.599	3.065
F20-F19	2-year 2050	Circular	Concrete	8.18	10.254	1.291
F21-F20	2-year 2050	Circular	Concrete	5.26	7.348	1.584
F22-F20	2-year 2050	Circular	Concrete	3.69	5.558	1.571
F23-F22	2-year 2050	Circular	Concrete	7.79	9.04	1.264
F24-F23	2-year 2050	Circular	Concrete	1.33	8.624	7.031
F25-F24	2-year 2050	Circular	Smooth HDPE	5.04	7.955	1.662
F3-F2	2-year 2050	Circular	Concrete	54.63	12.021	0.513
F4-F2	2-year 2050	Circular	Concrete	10.63	-17.539	1.766
F5-F4	2-year 2050	Circular	Concrete	29.27	-16.709	0.591
F6-F5	2-year 2050	Circular	Concrete	7.92	-8.841	1.244
F7-F6	2-year 2050	Circular	Concrete	2.04	4.999	3.578
F8-F7	2-year 2050	Circular	Concrete	10.49	7.166	0.755
F9-F8	2-year 2050	Circular	Corrugated Metal	2.96	4.286	1.608
G2-G1	2-year 2050	Circular	Concrete	19.84	-21.047	1.781
G3-G2	2-year 2050	Circular	Concrete	17.04	-5.393	1.294
G4-G3	2-year 2050	Circular	Concrete	5.96	8.179	1.392
H2-H1	2-year 2050	Circular	Concrete	6.82	5.807	0.852
H3-H2	2-year 2050	Circular	Concrete	3.63	-6.726	2.519
I2-I1	2-year 2050	Circular	Concrete	15.16	18.459	1.219
I3-I2	2-year 2050	Circular	Concrete	3.84	14.465	3.818
I4-I2	2-year 2050	Circular	Concrete	28.62	4.661	0.164
I5-I4	2-year 2050	Circular	Concrete	6.93	2.229	0.322
I6-I4	2-year 2050	Circular	Concrete	5.66	2.501	0.443
J2-J1	2-year 2050	Circular	Concrete	4.21	-4.494	1.076
J3-J2	2-year 2050	Circular	Concrete	2.79	3.796	1.426
J4-J3	2-year 2050	Circular	Concrete	5.09	2.392	0.603
J5-J3	2-year 2050	Circular	Concrete	1.19	3.51	3.075
K10-K9	2-year 2050	Circular	Concrete	4.15	-2.89	0.84
K2-K1	2-year 2050	Circular	Corrugated Metal	5.93	0.637	0.107
K3-K2	2-year 2050	Circular	Concrete	3.11	-3.174	1.022
K4-K2	2-year 2050	Circular	Concrete	3.28	3.78	1.153
K5-K4	2-year 2050	Circular	Concrete	5.26	4.383	1.077
K6-K5	2-year 2050	Circular	Concrete	8.63	5.637	0.821
K7-K6	2-year 2050	Circular	Concrete	2.03	4.165	2.259
K8-K7	2-year 2050	Circular	Concrete	3.86	2.877	0.852
K9-K8	2-year 2050	Circular	Concrete	4.72	2.886	0.702

XPSWMM Link Output Data

2-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	2-year 2050	Circular	Cast Iron	2.27	-2.054	1.835
L3-L2	2-year 2050	Circular	Corrugated Metal	5.35	-2.845	0.712
L4-L2	2-year 2050	Circular	Corrugated Metal	3.17	2.075	0.654
Orifice1.1	2-year 2050			2.21	0.748	0.384
Orifice2.1	2-year 2050			2.21	0.748	0.384
Orifice3.1	2-year 2050			2.21	3.097	1.407
M2-M1	2-year 2050	Circular	Concrete	4.38	7.512	1.714
M3-M2	2-year 2050	Circular	Concrete	6.04	7.244	1.235
M4-M2	2-year 2050	Circular	Concrete	4.75	0.504	0.177

XPSWMM Node Output Data
2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	2-year 2080	Outfall	1380	0	0	81.136	0
A10	2-year 2080	Manhole	1378.733	0	0	90.333	0
A11	2-year 2080	Grate Inlet	1378.967	1369.5	0	83.495	10766.96
A12	2-year 2080	Grate Inlet	1378.333	1364.5	0	71.472	8961.93
A13	2-year 2080	Manhole	1377.367	14	0	67.794	303.21
A14	2-year 2080	Grate Inlet	1374.533	1234.2	0	35.543	15487.19
A15	2-year 2080	Grate Inlet	1372.583	734.6	0	55.776	23872.41
A16	2-year 2080	Grate Inlet	1373.433	457.5	0	48.925	7163.88
A17	2-year 2080	Grate Inlet	1373.833	564.2	0	51.448	13011.26
A18	2-year 2080	Grate Inlet	1373.1	630.1	0	47.278	8500.24
A19	2-year 2080	Manhole	1378.783	0	0	93.956	0
A2	2-year 2080	Manhole	1379.48	1374.5	0	87.27	780123.76
A20	2-year 2080	Manhole	1378.65	0	0	94.376	0
A21	2-year 2080	Manhole	1378.25	0	0	93.724	0
A22	2-year 2080	Manhole	1378.083	0	0	90.548	0
A23	2-year 2080	Combination Inlet	1377.15	1374.8	0	87.632	32340.42
A24	2-year 2080	Combination Inlet	1375.817	1372.8	0	73.167	19605.59
A25	2-year 2080	Combination Inlet	1376.983	1374.7	0	86.968	47980.33
A26	2-year 2080	Combination Inlet	1377.267	1372.8	0	76.482	14400.4
A27	2-year 2080	Manhole	1374.267	1371.7	0	80.023	40980.12
A28	2-year 2080	Manhole	1375.2	1368.8	0	81.458	16571.45
A29	2-year 2080	Curb Inlet	1376.783	1369.3	0	75.516	7144.71
A3	2-year 2080	Manhole	1378.133	1377	0	71.364	300936.05
A30	2-year 2080	Manhole	1373.05	1368.8	0	77.825	20633.31
A31	2-year 2080	Manhole	1374.667	1355.3	0	72.39	29608.7
A32	2-year 2080	Combination Inlet	1374.617	1368.8	0	62.7	30305.35
A33	2-year 2080	Combination Inlet	1371.767	1359.5	0	58.158	23121.9
A34	2-year 2080	Manhole	1369.8	374.7	0	56.495	23318.59
A35	2-year 2080	Combination Inlet	1368.267	1156.2	0	51.425	33878.19
A36	2-year 2080	Curb Inlet	1366.95	1346.9	0	61.653	16422.44
A37	2-year 2080	Manhole	1357.55	139.9	0	56.495	12755.97
A38	2-year 2080	Grate Inlet	1357.217	179.2	0	63.675	29826.85
A39	2-year 2080	Grate Inlet	1344.45	154.6	0	48.714	7610.74
A4	2-year 2080	Grate Inlet	1378.067	1377.8	0	63.668	105170.08
A40	2-year 2080	Grate Inlet	1348.033	157.7	0	59.541	22002.08
A41	2-year 2080	Grate Inlet	1336.483	85.5	0	51.217	8359.32
A42	2-year 2080	Underground Junction	1372.733	1366.4	0	76.11	1030.31
A43	2-year 2080	Curb Inlet	1376.65	1370.4	0	75.54	15462.98
A44	2-year 2080	Grate Inlet	1370.25	1365.8	0	71.822	60838.02

XPSWMM Node Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A45	2-year 2080	Underground Junction	1368.517	1344.4	0	84.623	11837.98
A46	2-year 2080	Combination Inlet	1371.367	1357.3	0	67.594	30879.56
A47	2-year 2080	Manhole	1370.933	1342.8	0	65.501	32782.03
A48	2-year 2080	Manhole	1369.033	1270	0	62.39	182121.7
A49	2-year 2080	Combination Inlet	1371.733	1324.7	0	63.424	85662.62
A5	2-year 2080	Grate Inlet	1377.85	1376.6	0	60.18	1257.35
A50	2-year 2080	Manhole	1354.033	226.3	0	58.706	57996.64
A51	2-year 2080	Combination Inlet	1361.567	360	0	58.821	45362.04
A52	2-year 2080	Manhole	1260.267	30.9	0	52.562	3619.55
A53	2-year 2080	Combination Inlet	488.517	137.8	0	44.255	7658.95
A54	2-year 2080	Underground Junction	1094.117	0.4	0	51.979	16.85
A55	2-year 2080	Combination Inlet	255.717	16.3	0	39.441	723.17
A56	2-year 2080	Manhole	498.083	10.9	0	48.61	1098.95
A57	2-year 2080	Grate Inlet	278.033	41.5	0	40.034	2560.94
A58	2-year 2080	Grate Inlet	1368.783	1361	0	70.884	38272.66
A59	2-year 2080	Underground Junction	1370.267	1346.1	0	70.387	4450.93
A6	2-year 2080	Manhole	1377.2	1373.2	0	54.481	84435.53
A60	2-year 2080	Combination Inlet	1371.35	1363.9	0	67.081	22337.82
A61	2-year 2080	Grate Inlet	1370.367	1364.4	0	70.243	47186.55
A62	2-year 2080	Grate Inlet	1370.217	1361.3	0	68.914	64495.92
A63	2-year 2080	Grate Inlet	1370.417	1352	0	57.541	8189.71
A64	2-year 2080	Manhole	1370.933	410.2	0	72.98	75003.7
A65	2-year 2080	Manhole	1370.617	472.4	0	66.772	51131.22
A66	2-year 2080	Curb Inlet	1367.1	479.8	0	54.24	27702.46
A67	2-year 2080	Curb Inlet	1361.65	451.4	0	57.232	11146.07
A68	2-year 2080	Manhole	600.1	4.2	0	75.414	1788.11
A69	2-year 2080	Combination Inlet	504.817	10.7	0	67.8	2939.54
A7	2-year 2080	Grate Inlet	1377.25	1375.6	0	52.444	72510.14
A70	2-year 2080	Grate Inlet	424.317	26.5	0	48.728	3285.5
A71	2-year 2080	Curb Inlet	382.567	13.7	0	51.82	949.55
A72	2-year 2080	Manhole	31.1	0.2	0	71.631	4.18
A73	2-year 2080	Underground Junction	23.117	0	0	60.705	0
A74	2-year 2080	Curb Inlet	19.983	0.1	0	56.412	6.53
A75	2-year 2080	Manhole	16.383	0	0	53.418	0
A76	2-year 2080	Curb Inlet	17.133	5.4	0	51.235	64.57
A77	2-year 2080	Curb Inlet	16.7	0	0	54.488	0
A78	2-year 2080	Curb Inlet	15.683	0	0	52.077	0

XPSWMM Node Output Data
2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A79	2-year 2080	Combination Inlet	11.117	1	0	49.202	4.84
A8	2-year 2080	Curb Inlet	1377.2	1363.6	0	51.304	11330.51
A80	2-year 2080	Pond Structure	20.083	0	0	54.453	0
A81	2-year 2080	Pond Structure	28.667	28.7	0	53.298	449.69
A82	2-year 2080	Grate Inlet	30.867	2	0	37.824	149.98
A83	2-year 2080	Grate Inlet	46.317	7.7	0	41.634	310.26
A84	2-year 2080	Pond Structure	42.5	42.5	0	78.812	0.21
A85	2-year 2080	Manhole	730.75	19.5	0	83.773	950.53
A86	2-year 2080	Manhole	815.8	16.6	0	105.545	798.21
A87	2-year 2080	Curb Inlet	908.767	49.7	0	101.782	1800.85
A88	2-year 2080	Pond Structure	369.417	369.4	0	66.019	10474.3
A89	2-year 2080	Manhole	700.517	7.4	0	55.29	506.19
A90	2-year 2080	Grate Inlet	697.267	22	0	63.142	589.79
A91	2-year 2080	Pond Structure	379.583	379.6	0	63.969	6553.66
A92	2-year 2080	Grate Inlet	671.617	158.3	0	58.733	11823.77
A93	2-year 2080	Grate Inlet	696.45	69.9	0	51.316	1309.45
B1	2-year 2080	Outfall	1380	0	0	85.337	0
B10	2-year 2080	Grate Inlet	1378.7	752.6	0	56.594	16287.92
B11	2-year 2080	Grate Inlet	1378.417	657.6	0	49.034	9253.11
B12	2-year 2080	Underground Junction	1378.65	0	0	55.45	0
B13	2-year 2080	Grate Inlet	1378.5	817.4	0	55.57	10581.94
B14	2-year 2080	Grate Inlet	1378.25	420.3	0	55.258	8268.64
B15	2-year 2080	Grate Inlet	1377.967	796.5	0	50.629	9419.13
B16	2-year 2080	Curb Inlet	1378.433	1378.1	0	52.877	8312.59
B17	2-year 2080	Grate Inlet	1378.25	1378.1	0	46.739	11843.6
B2	2-year 2080	Underground Junction	1379.16	0	0	61.908	0
B3	2-year 2080	Grate Inlet	1378.967	841.9	0	50.806	21771.17
B4	2-year 2080	Grate Inlet	1378.817	578.9	0	49.256	7958.46
B5	2-year 2080	Grate Inlet	1379.2	664	0	56.483	15227.97
B6	2-year 2080	Grate Inlet	1378.917	664.5	0	58.215	12121.23
B7	2-year 2080	Grate Inlet	1378.45	476	0	53.83	8445.26
B8	2-year 2080	Grate Inlet	1378.1	554	0	51.847	6770.48
B9	2-year 2080	Underground Junction	1378.717	0	0	54.85	0
BIO3	2-year 2080	Family Dollar Bioretention	93.25	0	0	2665.325	0
C1	2-year 2080	Outfall	1380	0	0	84.802	0
C10	2-year 2080	Grate Inlet	1378.217	620.1	0	58.982	10381.35
C11	2-year 2080	Grate Inlet	1377.567	573.1	0	50.928	5990.91

XPSWMM Node Output Data
2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C12	2-year 2080	Underground Junction	1378.667	0	0	88.419	0
C13	2-year 2080	Grate Inlet	1378.517	736.4	0	56.868	18182.21
C14	2-year 2080	Grate Inlet	1378.017	345.1	0	47.265	5203.4
C15	2-year 2080	Underground Junction	1378.8	0	0	59.037	0
C16	2-year 2080	Grate Inlet	1378.483	414	0	54.297	5290.78
C17	2-year 2080	Grate Inlet	1378.233	608.1	0	51.051	6130.28
C18	2-year 2080	Curb Inlet	1378.4	1322.8	0	78.984	692351.46
C19	2-year 2080	Manhole	1378.65	1210.9	0	62.012	153822.02
C2	2-year 2080	Underground Junction	1379.52	0	0	91.47	0
C20	2-year 2080	Manhole	1377.5	1120.3	0	56.015	193201.62
C21	2-year 2080	Curb Inlet	1377.25	1149.1	0	45.319	62878.06
C22	2-year 2080	Grate Inlet	1377.383	1322.9	0	52.656	136805.51
C23	2-year 2080	Curb Inlet	1377.133	1240.1	0	52.473	37540.95
C24	2-year 2080	Curb Inlet	1377.05	798.5	0	45.978	31274.26
C25	2-year 2080	Manhole	1378.3	1375.3	0	69.596	375375.18
C26	2-year 2080	Combination Inlet	1378.45	1377.1	0	60.477	2686.41
C27	2-year 2080	Curb Inlet	1378.483	1376.8	0	56.556	3214.29
C28	2-year 2080	Manhole	1377.833	1368.9	0	64.488	95262.41
C29	2-year 2080	Combination Inlet	1378.25	1376.1	0	53.714	9990.85
C3	2-year 2080	Grate Inlet	1379.28	717.2	0	59.498	18564.48
C30	2-year 2080	Combination Inlet	1378.367	1375.4	0	58.314	5418.68
C31	2-year 2080	Manhole	1374.733	404.4	0	55.656	72292.19
C32	2-year 2080	Combination Inlet	1371.983	961.6	0	46.689	117768.85
C33	2-year 2080	Curb Inlet	1338.05	330	0	46.202	26137.58
C34	2-year 2080	Manhole	1373.167	415.4	0	56.846	137917.37
C35	2-year 2080	Combination Inlet	1371.567	1090.1	0	49.071	245821.53
C36	2-year 2080	Combination Inlet	1376.333	1113.4	0	51.251	232085.48
C37	2-year 2080	Manhole	1037.317	0	0	48.301	0
C38	2-year 2080	Underground Junction	1374.183	0	0	40.614	0
C39	2-year 2080	Curb Inlet	45.167	0	0	23.851	0
C4	2-year 2080	Grate Inlet	1378.967	586.3	0	53.417	7700.25
C40	2-year 2080	Combination Inlet	699.7	0	0	36.425	0
C41	2-year 2080	Combination Inlet	38.4	0	0	30.361	0
C42	2-year 2080	Curb Inlet	411.433	0	0	42.369	0
C43	2-year 2080	Curb Inlet	1312.117	0	0	38.38	0
C44	2-year 2080	Underground Junction	0	0	0	21.217	0

XPSWMM Node Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C45	2-year 2080	Combination Inlet	0	0	0	6.346	0
C46	2-year 2080	Grate Inlet	0	0	0	4.682	0
C47	2-year 2080	Combination Inlet	0	0	0	7.041	0
C5	2-year 2080	Grate Inlet	1379.08	712.7	0	55.334	15106.57
C6	2-year 2080	Grate Inlet	1378.683	445.8	0	47.405	5474.05
C7	2-year 2080	Underground Junction	1379.24	0	0	90.252	0
C8	2-year 2080	Underground Junction	1378.667	0	0	68.342	0
C9	2-year 2080	Grate Inlet	1377.683	520.8	0	48.74	5727.52
D1	2-year 2080	Outfall	1380	0	0	68.488	0
D10	2-year 2080	Curb Inlet	59.833	12	0	28.08	144.27
D11	2-year 2080	Manhole	1376.283	38.4	0	44.077	1259.07
D12	2-year 2080	Combination Inlet	1376.85	44.1	0	42.481	13618.42
D13	2-year 2080	Manhole	1364.867	0.3	0	53.218	12.74
D14	2-year 2080	Grate Inlet	0	0	0	10.723	0
D2	2-year 2080	Combination Inlet	1379.227	1136.7	0	75.371	1301034.39
D3	2-year 2080	Manhole	1379.443	880.6	0	76.182	1227910.81
D4	2-year 2080	Drop Curb Inlet	1369.843	1159.9	0	64.231	519622.98
D5	2-year 2080	Combination Inlet	1379.44	1375.1	0	56.06	71580.99
D6	2-year 2080	Combination Inlet	1379.36	1245.7	0	48.199	13305.35
D7	2-year 2080	Manhole	1378.867	494.5	0	45.612	20140.19
D8	2-year 2080	Underground Junction	1377.833	45.3	0	46.114	454.85
D9	2-year 2080	Grate Inlet	1377.383	740.8	0	38.451	29091.96
F1	2-year 2080	Outfall	1380	0	0	74.303	0
F10	2-year 2080	Manhole	1377.067	22.4	0	58.374	2007.57
F11	2-year 2080	Manhole	1376.117	21.5	0	47.011	2127.37
F12	2-year 2080	Combination Inlet	67.233	18.1	0	39.529	442.73
F13	2-year 2080	Manhole	59.383	14.6	0	45.319	308.36
F14	2-year 2080	Grate Inlet	47.25	19.9	0	36.116	406.84
F15	2-year 2080	Manhole	39.367	7.6	0	43.938	161.96
F16	2-year 2080	Grate Inlet	20.45	11.6	0	33.843	2.82
F17	2-year 2080	Manhole	120.833	18.7	0	61.239	1800.62
F18	2-year 2080	Combination Inlet	1375.75	16.8	0	53.976	1572.94
F19	2-year 2080	Manhole	60.15	14.2	0	57.849	722.47
F2	2-year 2080	Grate Inlet	1379.8	1379.8	0	69.838	1360506.8
F20	2-year 2080	Manhole	50.433	19	0	53.754	1746.26
F21	2-year 2080	Combination Inlet	48.183	19.7	0	46.471	1779.28
F22	2-year 2080	Manhole	52.85	35.9	0	51.219	3927.57
F23	2-year 2080	Grate Inlet	47.033	36.9	0	51.655	3362.18

XPSWMM Node Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
F24	2-year 2080	Drop Curb Inlet	48.7	37.5	0	51.272	7172.77
F25	2-year 2080	Pond Structure	69.833	17.3	0	48.133	0
F3	2-year 2080	Grate Inlet	1379.72	1379.7	0	59.976	762394.55
F4	2-year 2080	Manhole	1379.32	1377.6	0	62.559	59022.42
F5	2-year 2080	Underground Junction	1379.12	1376.6	0	59.554	140.41
F6	2-year 2080	Grate Inlet	1379	1378	0	57.778	56407.48
F7	2-year 2080	Manhole	1378.383	48.5	0	69.74	3083.15
F8	2-year 2080	Grate Inlet	1377.2	41.5	0	56.554	3023.9
F9	2-year 2080	Slotted Inlet	1372.35	58.1	0	38.949	8436.83
G1	2-year 2080	Outfall	1380	0	0	81.899	0
G2	2-year 2080	Grate Inlet	1380	1380	0	63.221	2024769.21
G3	2-year 2080	Grate Inlet	1379.84	1379.8	0	53.77	488382.32
G4	2-year 2080	Grate Inlet	1379.68	964	0	57.907	41000.72
H1	2-year 2080	Outfall	1380	0	0	88.252	0
H2	2-year 2080	Combination Inlet	1379.4	1151.3	0	63.188	99334.13
H3	2-year 2080	Combination Inlet	1379.44	1207.3	0	64.623	121999.69
I1	2-year 2080	Outfall	1380	0	0	28.525	0
I2	2-year 2080	Underground Junction	13.7	0	0	39.781	0
I3	2-year 2080	Grate Inlet	29.767	12.9	0	61.229	2967.1
I4	2-year 2080	Manhole	0	0	0	7.392	0
I5	2-year 2080	Combination Inlet	0	0	0	6.713	0
I6	2-year 2080	Combination Inlet	0	0	0	7.948	0
J1	2-year 2080	Outfall	1380	0	0	79.487	0
J2	2-year 2080	Curb Inlet	1378.967	1378.3	0	67.844	5374.21
J3	2-year 2080	Underground Junction	1378.917	184	0	66.159	9.46
J4	2-year 2080	Grate Inlet	1378.817	1378.5	0	59.384	29472.93
J5	2-year 2080	Combination Inlet	1378.983	1374.2	0	66.049	58528.21
K1	2-year 2080	Outfall	1380	0	0	71.959	0
K10	2-year 2080	Grate Inlet	1277.167	80.7	0	42.746	2630.91
K2	2-year 2080	Underground Junction	0	0	0	60.614	0
K3	2-year 2080	Grate Inlet	1350.367	1277.3	0	52.069	40123.19
K4	2-year 2080	Combination Inlet	1344.65	1277.3	0	60.18	31638.89
K5	2-year 2080	Manhole	1332.017	36.3	0	58.45	2433.84
K6	2-year 2080	Grate Inlet	1319.2	193.4	0	57.239	6812.29
K7	2-year 2080	Grate Inlet	1311.667	683.8	0	59.722	21191.47
K8	2-year 2080	Grate Inlet	1297.033	545.2	0	53.981	20178.04
K9	2-year 2080	Grate Inlet	1281.633	291.9	0	47.634	11075.54

XPSWMM Node Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
L1	2-year 2080	Outfall	1380	0	0	60.246	0
L2	2-year 2080	Grate Inlet	1379.72	1379.7	0	45.096	161693.91
L3	2-year 2080	Pipe Inlet	1379.143	1379.1	0	38.076	37643.58
L4	2-year 2080	Pipe Inlet	1366.483	1366.5	0	30.404	1122.75
M1	2-year 2080	Outfall	1380	0	0	22.619	0
M2	2-year 2080	Underground Junction	30.283	0	0	62.053	0
M3	2-year 2080	Combination Inlet	23.65	15.8	0	61.234	1660.15
M4	2-year 2080	Combination Inlet	18.167	0	0	38.315	0
POND1	2-year 2080	Lyon Homes Apartments	421.417	0	0	108.286	0

XPSWMM Link Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	2-year 2080	Circular	Concrete	4.53	-35.524	8.29
A11-A10	2-year 2080	Circular	Concrete	6.73	-4.818	0.721
A12-A11	2-year 2080	Circular	Concrete	6.67	-2.595	0.646
A13-A12	2-year 2080	Circular	PVC	1.61	-0.969	0.909
A14-A13	2-year 2080	Circular	PVC	3.06	-1.734	0.635
A15-A13	2-year 2080	Circular	PVC	2.16	1.098	0.668
A16-A15	2-year 2080	Circular	Terra Cotta	1.13	-1.372	1.272
A17-A15	2-year 2080	Circular	Terra Cotta	0.83	1.194	1.702
A18-A17	2-year 2080	Circular	Terra Cotta	0.9	1.341	1.576
A19-A10	2-year 2080	Circular	Concrete	35.99	-29.241	0.813
A2-A1	2-year 2080	Circular	Concrete	22.06	-54.933	2.951
A20-A19	2-year 2080	Circular	Concrete	8.08	-25.239	3.593
A21-A20	2-year 2080	Circular	Concrete	16.9	-24.481	1.644
A22-A21	2-year 2080	Circular	Concrete	43.52	-24.838	0.576
A23-A22	2-year 2080	Circular	Concrete	18.14	-22.122	1.27
A24-A23	2-year 2080	Circular	Concrete	25.18	-29.235	1.314
A25-A23	2-year 2080	Circular	Concrete	16.21	36.972	3.651
A26-A25	2-year 2080	Circular	Concrete	18.91	-14.482	1.855
A27-A25	2-year 2080	Circular	Concrete	149.5	-89.365	1.048
A28-A27	2-year 2080	Circular	Concrete	15.72	-21.81	2.258
A29-A28	2-year 2080	Circular	Concrete	17.68	-5.26	1.449
A3-A2	2-year 2080	Special	Concrete	27.26	-21.747	0.826
A30-A28	2-year 2080	Circular	Concrete	47.75	-22.229	0.751
A31-A30	2-year 2080	Circular	Concrete	6.73	-6.605	1.176
A32-A31	2-year 2080	Circular	Concrete	9.76	-10.88	1.449
A33-A32	2-year 2080	Circular	Concrete	9.44	-10.817	1.681
A34-A31	2-year 2080	Circular	Concrete	4.38	2.729	0.678
A35-A34	2-year 2080	Circular	Concrete	6.96	-6.685	1.487
A36-A31	2-year 2080	Circular	Concrete	17.99	-8.745	0.748
A37-A36	2-year 2080	Circular	Corrugated Metal	4.36	4.307	1.24
A38-A37	2-year 2080	Circular	Corrugated Metal	1.18	9.763	8.88
A39-A38	2-year 2080	Special	Corrugated Metal	5.44	4.63	1.011
A4-A3	2-year 2080	Special	Concrete	14.68	-10.149	0.699
A40-A38	2-year 2080	Special	Corrugated Metal	7	7.458	1.415
A41-A40	2-year 2080	Special	Corrugated Metal	3.89	6.927	1.998
A42-A30	2-year 2080	Circular	Concrete	25.67	-20.811	0.871
A43-A42	2-year 2080	Circular	Concrete	3.75	8.929	3.145
A44-A42	2-year 2080	Circular	Concrete	20.97	-13.761	0.866
A45-A44	2-year 2080	Circular	Concrete	6.48	-13.569	2.12
A46-A45	2-year 2080	Special	Concrete	25.77	-24.995	1.436
A47-A46	2-year 2080	Special	Concrete	11.85	-8.021	1.348
A48-A47	2-year 2080	Special	Concrete	13.92	-5.322	0.786

XPSWMM Link Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	2-year 2080	Circular	Concrete	6.53	-15.412	3.029
A5-A4	2-year 2080	Special	Concrete	13.58	10.77	0.799
A50-A48	2-year 2080	Special	Concrete	13.94	11.068	0.811
A51-A50	2-year 2080	Circular	Concrete	5.98	-22.48	4.001
A52-A50	2-year 2080	Circular	Concrete	7.32	5.519	0.907
A53-A52	2-year 2080	Circular	Concrete	8.59	5.688	0.957
A54-A52	2-year 2080	Circular	Concrete	4.91	8.697	2.026
A55-A54	2-year 2080	Circular	Concrete	8.36	5.156	0.809
A56-A54	2-year 2080	Circular	Concrete	8.47	8.023	1.113
A57-A56	2-year 2080	Circular	Concrete	10.11	6.133	0.777
A58-A45	2-year 2080	Circular	Concrete	104.63	103.62	1.836
A59-A58	2-year 2080	Circular	Concrete	26.14	-24.921	1.24
A6-A3	2-year 2080	Special	Concrete	8.57	-10.218	1.586
A60-A59	2-year 2080	Circular	Concrete	11.37	17.203	1.752
A61-A59	2-year 2080	Circular	Concrete	11.8	-36.994	3.539
A62-A61	2-year 2080	Circular	Concrete	10.18	-12.283	1.336
A63-A62	2-year 2080	Circular	Concrete	6.42	5.752	1.129
A64-A62	2-year 2080	Circular	Concrete	13.43	19.573	1.883
A65-A64	2-year 2080	Circular	Concrete	11.08	9.071	1.052
A66-A65	2-year 2080	Circular	Concrete	15.64	-5.82	0.428
A67-A65	2-year 2080	Circular	Concrete	17.18	10.265	0.604
A68-A64	2-year 2080	Circular	Concrete	14.28	13.311	0.995
A69-A68	2-year 2080	Circular	Concrete	26.67	15.979	0.985
A7-A6	2-year 2080	Circular	Concrete	8.3	8.583	1.884
A70-A69	2-year 2080	Circular	Concrete	7.77	-8.739	1.33
A71-A68	2-year 2080	Circular	Concrete	8.02	5.626	0.76
A72-A68	2-year 2080	Circular	Concrete	10.03	10.257	1.108
A73-A72	2-year 2080	Circular	Concrete	20.79	9.794	0.536
A74-A73	2-year 2080	Circular	Concrete	14.94	-1.503	0.224
A75-A73	2-year 2080	Circular	Concrete	8.8	8.861	1.047
A76-A75	2-year 2080	Circular	Concrete	4.5	5.483	1.287
A77-A75	2-year 2080	Circular	Concrete	8.04	3.529	0.51
A78-A77	2-year 2080	Circular	Concrete	4.78	3.228	0.861
A79-A78	2-year 2080	Circular	Concrete	4.41	2.138	0.693
A8-A6	2-year 2080	Special	Concrete	2.31	-5.362	4.764
A80-A72	2-year 2080	Circular	Concrete	2.1	4.366	3.582
A81-BIO3	2-year 2080	Circular	Concrete	2.97	3.419	1.224
A82-A81	2-year 2080	Circular	Smooth HDPE	2.56	-2.884	1.322
A83-A82	2-year 2080	Circular	Smooth HDPE	3.6	2.769	1.354
A85-A84	2-year 2080	Circular	Concrete	3.68	-3.442	1.407
A86-A85	2-year 2080	Circular	Concrete	2.3	-1.375	0.843
A87-A86	2-year 2080	Circular	Concrete	3.13	-4.086	1.586

XPSWMM Link Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	2-year 2080	Circular	Smooth HDPE	2.87	2.839	1.057
A90-A89	2-year 2080	Circular	Smooth HDPE	1.85	2.844	2.015
A92-A91	2-year 2080	Circular	Smooth HDPE	1.64	-7.44	4.967
A93-A92	2-year 2080	Circular	Smooth HDPE	1	-3.012	3.045
B10-B9	2-year 2080	Circular	Terra Cotta	0.82	1.445	2.769
B11-B10	2-year 2080	Circular	Terra Cotta	1.15	-1.283	1.268
B12-B9	2-year 2080	Circular	Terra Cotta	0.83	-2.229	3.58
B13-B12	2-year 2080	Circular	Terra Cotta	0.51	1.198	2.942
B14-B12	2-year 2080	Circular	Terra Cotta	0.67	-1.417	2.121
B15-B14	2-year 2080	Circular	Terra Cotta	0.89	-1.47	1.667
B16-B9	2-year 2080	Circular	Corrugated Metal	0.6	-1.744	4.496
B17-B16	2-year 2080	Circular	Corrugated Metal	2.58	-0.555	0.646
B2-B1	2-year 2080	Circular	Concrete	19.17	-17.606	0.946
B3-B2	2-year 2080	Circular	Terra Cotta	2.09	1.71	0.969
B4-B3	2-year 2080	Circular	Terra Cotta	0.64	1.332	2.232
B5-B2	2-year 2080	Circular	Terra Cotta	1.76	1.914	1.436
B6-B5	2-year 2080	Circular	Terra Cotta	0.73	-1.578	2.43
B7-B6	2-year 2080	Circular	Terra Cotta	0.72	1.319	1.986
B8-B7	2-year 2080	Circular	Terra Cotta	0.7	1.086	1.822
B9-B2	2-year 2080	Circular	Concrete	10.73	-10.613	1.127
C10-C8	2-year 2080	Circular	Terra Cotta	1.16	1.077	1.105
C11-C10	2-year 2080	Circular	Terra Cotta	1.27	-1.14	0.998
C12-C7	2-year 2080	Special	Corrugated Metal	21.52	-40.32	1.996
C13-C12	2-year 2080	Circular	Terra Cotta	1.63	1.572	1.134
C14-C13	2-year 2080	Circular	Terra Cotta	1.14	-1.239	1.159
C15-C12	2-year 2080	Circular	Terra Cotta	1.79	1.39	1.11
C16-C15	2-year 2080	Circular	Terra Cotta	1.5	1.628	1.168
C17-C15	2-year 2080	Circular	Terra Cotta	1.2	1.095	1.045
C18-C12	2-year 2080	Special	Corrugated Metal	1.5	-34.709	24.281
C19-C18	2-year 2080	Circular	Concrete	17.9	-12.869	0.938
C2-C1	2-year 2080	Special	Corrugated Metal	18.05	-45.487	3.332
C20-C19	2-year 2080	Circular	Concrete	4.61	-5.809	1.576
C21-C20	2-year 2080	Circular	Concrete	8.77	-6.051	0.778
C22-C20	2-year 2080	Circular	Concrete	6.35	-12.536	2.391
C23-C22	2-year 2080	Circular	Concrete	5.35	5.313	0.996
C24-C23	2-year 2080	Circular	Corrugated Metal	3.59	3.739	1.095
C25-C18	2-year 2080	Circular	Concrete	13.58	-19.746	2.291
C26-C25	2-year 2080	Circular	Concrete	11.86	8.803	0.817
C27-C26	2-year 2080	Circular	Concrete	6.67	3.75	1.324
C28-C25	2-year 2080	Circular	Concrete	31.65	17.702	0.841
C29-C28	2-year 2080	Circular	Concrete	12.33	-12.151	1.371
C3-C2	2-year 2080	Circular	Terra Cotta	3.8	1.977	0.627

XPSWMM Link Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	2-year 2080	Circular	Concrete	1.74	-15.069	9.791
C31-C28	2-year 2080	Circular	Concrete	24.95	-17.447	0.713
C32-C31	2-year 2080	Circular	Concrete	14.63	-9.473	0.863
C33-C32	2-year 2080	Circular	Concrete	6.49	7.5	1.423
C34-C31	2-year 2080	Circular	Concrete	18.17	17.977	1.354
C35-C34	2-year 2080	Circular	Concrete	15.06	-23.004	1.843
C36-C34	2-year 2080	Circular	Concrete	10.38	-21.828	2.503
C37-C34	2-year 2080	Circular	Concrete	22.46	16.058	0.728
C38-C37	2-year 2080	Circular	Concrete	10.64	5.213	0.506
C39-C38	2-year 2080	Circular	Corrugated Metal	3.86	-0.662	0.186
C4-C3	2-year 2080	Circular	Terra Cotta	0.93	1.419	1.618
C40-C38	2-year 2080	Circular	Concrete	10.16	4.554	0.458
C41-C40	2-year 2080	Circular	Concrete	15.19	3.294	0.221
C42-C37	2-year 2080	Circular	Concrete	13.67	10.871	0.804
C43-C42	2-year 2080	Circular	Concrete	4.89	1.173	0.253
C44-C42	2-year 2080	Circular	Concrete	15.91	4.404	0.278
C45-C44	2-year 2080	Circular	Concrete	9.24	2.342	0.254
C46-C44	2-year 2080	Circular	Concrete	20.35	2.01	0.099
C47-C46	2-year 2080	Circular	Concrete	3.21	1.924	0.603
C5-C2	2-year 2080	Circular	Terra Cotta	3.32	1.464	0.607
C6-C5	2-year 2080	Circular	Terra Cotta	0.96	1.325	1.428
C7-C2	2-year 2080	Special	Corrugated Metal	14.03	-41.99	3.628
C8-C7	2-year 2080	Circular	Terra Cotta	1.46	-1.277	0.89
C9-C8	2-year 2080	Circular	Terra Cotta	2.15	1.362	0.756
D10-D8	2-year 2080	Circular	Concrete	12.95	-2.503	0.252
D11-D8	2-year 2080	Circular	Concrete	6.61	6.286	0.959
D12-D11	2-year 2080	Circular	PVC	3.11	9.471	3.515
D13-D11	2-year 2080	Circular	Concrete	2.49	1.995	1.646
D14-D13	2-year 2080	Circular	PVC	6.77	1.127	0.168
D2-D1	2-year 2080	Special	Concrete	50.58	25.369	1.063
D3-D2	2-year 2080	Special	Corrugated Metal	15.34	98.659	7.575
D4-D3	2-year 2080	Special	Corrugated Metal	30.2	-48.648	1.979
D5-D4	2-year 2080	Circular	Concrete	7.46	13.954	1.918
D6-D5	2-year 2080	Circular	Corrugated Metal	4.09	4.231	1.612
D7-D3	2-year 2080	Circular	Concrete	3.73	-6.67	1.873
D8-D7	2-year 2080	Circular	Concrete	2.43	3.909	1.727
D9-D8	2-year 2080	Circular	Concrete	6.26	-3.928	0.78
F10-F5	2-year 2080	Circular	Concrete	13.1	12.774	0.985
F11-F10	2-year 2080	Circular	Concrete	4.5	4.536	1.245
F12-F11	2-year 2080	Circular	Concrete	8.64	-2.994	0.788
F13-F11	2-year 2080	Circular	Concrete	4.32	4.746	1.355
F14-F13	2-year 2080	Circular	PVC	4.4	3.487	0.892

XPSWMM Link Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	2-year 2080	Circular	Concrete	3.73	3.1	0.964
F16-F15	2-year 2080	Circular	PVC	4.02	3.15	0.828
F17-F10	2-year 2080	Circular	Concrete	10.42	12.07	1.345
F18-F17	2-year 2080	Circular	Concrete	5.91	6.568	1.651
F19-F17	2-year 2080	Circular	Concrete	8.27	7.958	1.113
F2-F1	2-year 2080	Circular	Concrete	16.41	-35.248	3.512
F20-F19	2-year 2080	Circular	Concrete	8.18	10.064	1.337
F21-F20	2-year 2080	Circular	Concrete	5.26	5.42	1.608
F22-F20	2-year 2080	Circular	Concrete	3.69	5.615	1.591
F23-F22	2-year 2080	Circular	Concrete	7.79	8.806	1.242
F24-F23	2-year 2080	Circular	Concrete	1.33	8.528	7.027
F25-F24	2-year 2080	Circular	Smooth HDPE	5.04	7.964	1.719
F3-F2	2-year 2080	Circular	Concrete	54.63	-9.462	0.793
F4-F2	2-year 2080	Circular	Concrete	10.63	-17.944	1.822
F5-F4	2-year 2080	Circular	Concrete	29.27	-17.281	0.613
F6-F5	2-year 2080	Circular	Concrete	7.92	-8.987	1.277
F7-F6	2-year 2080	Circular	Concrete	2.04	5.153	3.732
F8-F7	2-year 2080	Circular	Concrete	10.49	7.035	0.764
F9-F8	2-year 2080	Circular	Corrugated Metal	2.96	4.371	1.562
G2-G1	2-year 2080	Circular	Concrete	19.84	-32.982	2.185
G3-G2	2-year 2080	Circular	Concrete	17.04	-7.149	1.321
G4-G3	2-year 2080	Circular	Concrete	5.96	8.302	1.395
H2-H1	2-year 2080	Circular	Concrete	6.82	4.578	0.809
H3-H2	2-year 2080	Circular	Concrete	3.63	-8.274	2.61
I2-I1	2-year 2080	Circular	Concrete	15.16	17.998	1.189
I3-I2	2-year 2080	Circular	Concrete	3.84	13.896	3.692
I4-I2	2-year 2080	Circular	Concrete	28.62	5.365	0.188
I5-I4	2-year 2080	Circular	Concrete	6.93	2.544	0.367
I6-I4	2-year 2080	Circular	Concrete	5.66	2.878	0.51
J2-J1	2-year 2080	Circular	Concrete	4.21	-5.415	1.289
J3-J2	2-year 2080	Circular	Concrete	2.79	-3.873	1.424
J4-J3	2-year 2080	Circular	Concrete	5.09	-2.111	0.457
J5-J3	2-year 2080	Circular	Concrete	1.19	-1.863	1.933
K10-K9	2-year 2080	Circular	Concrete	4.15	-2.794	0.939
K2-K1	2-year 2080	Circular	Corrugated Metal	5.93	-0.659	0.111
K3-K2	2-year 2080	Circular	Concrete	3.11	-3.592	1.156
K4-K2	2-year 2080	Circular	Concrete	3.28	3.054	0.932
K5-K4	2-year 2080	Circular	Concrete	5.26	4.167	1.079
K6-K5	2-year 2080	Circular	Concrete	8.63	6.18	0.844
K7-K6	2-year 2080	Circular	Concrete	2.03	4.351	2.183
K8-K7	2-year 2080	Circular	Concrete	3.86	2.316	0.764
K9-K8	2-year 2080	Circular	Concrete	4.72	3.121	0.741

XPSWMM Link Output Data

2-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	2-year 2080	Circular	Cast Iron	2.27	-2.966	2.197
L3-L2	2-year 2080	Circular	Corrugated Metal	5.35	-3.546	0.848
L4-L2	2-year 2080	Circular	Corrugated Metal	3.17	2.098	0.661
Orifice1.1	2-year 2080			2.21	0.719	0.387
Orifice2.1	2-year 2080			2.21	0.719	0.387
Orifice3.1	2-year 2080			2.21	3.163	1.453
M2-M1	2-year 2080	Circular	Concrete	4.38	7.236	1.651
M3-M2	2-year 2080	Circular	Concrete	6.04	6.921	1.172
M4-M2	2-year 2080	Circular	Concrete	4.75	0.574	0.171

XPSWMM Node Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	10-year	Outfall	1380	0	0	54.747	0
A10	10-year	Manhole	1377.917	0	0	90.058	0
A11	10-year	Grate Inlet	1378.717	709.6	0	83.286	5387.58
A12	10-year	Grate Inlet	1377.683	697.7	0	71.244	4301.9
A13	10-year	Manhole	1376.267	34	0	67.701	701.96
A14	10-year	Grate Inlet	724.667	640.9	0	37.363	6548.66
A15	10-year	Grate Inlet	754.933	402.7	0	56.004	13303.7
A16	10-year	Grate Inlet	1332.967	290.9	0	48.945	4277.72
A17	10-year	Grate Inlet	1338.317	346.5	0	51.517	7875.93
A18	10-year	Grate Inlet	1285.267	364.3	0	47.369	5123.95
A19	10-year	Manhole	1378.15	0	0	93.746	0
A2	10-year	Manhole	1379.28	690.6	0	86.778	278628.2
A20	10-year	Manhole	1378.033	0	0	94.244	0
A21	10-year	Manhole	1377.75	0	0	93.824	0
A22	10-year	Manhole	1377.433	0	0	90.698	0
A23	10-year	Combination Inlet	1374.783	1295.2	0	88.395	652755.54
A24	10-year	Combination Inlet	1240.1	1151.2	0	73.934	242008.23
A25	10-year	Combination Inlet	1374.883	1314.2	0	87.737	342694.63
A26	10-year	Combination Inlet	1376.45	1249.7	0	77.251	347521.01
A27	10-year	Manhole	1295.567	1185.8	0	80.792	1493131.17
A28	10-year	Manhole	1371	1026.3	0	82.226	103601.54
A29	10-year	Curb Inlet	1375.867	1106.5	0	76.284	75061.07
A3	10-year	Manhole	1376.983	696.4	0	70.963	114000.65
A30	10-year	Manhole	1365.85	1062	0	78.593	155192.47
A31	10-year	Manhole	1370.517	724	0	73.123	15997.23
A32	10-year	Combination Inlet	1369.417	1173	0	63.466	85228.88
A33	10-year	Combination Inlet	1341.633	878.1	0	58.94	49959.87
A34	10-year	Manhole	1245.75	364.6	0	56.636	22057.39
A35	10-year	Combination Inlet	988.367	642.4	0	52.073	21760.56
A36	10-year	Curb Inlet	879.05	713.8	0	62.408	13419.93
A37	10-year	Manhole	712.483	167.8	0	56.432	15189.91
A38	10-year	Grate Inlet	712.517	204.8	0	63.917	35606.01
A39	10-year	Grate Inlet	703.383	175.3	0	48.962	8876.68
A4	10-year	Grate Inlet	1377.2	1358.7	0	63.284	64975.66
A40	10-year	Grate Inlet	706.05	182.2	0	59.456	27013.15
A41	10-year	Grate Inlet	698.883	103.5	0	51.339	10276.3
A42	10-year	Underground Junction	1363.933	829.8	0	76.881	15215.85
A43	10-year	Curb Inlet	1375.517	1186.6	0	76.306	54676.44
A44	10-year	Grate Inlet	1317.25	865.8	0	72.591	74788.36
A45	10-year	Underground Junction	1344.533	720.2	0	75.55	9929.41
A46	10-year	Combination Inlet	1366.283	752.3	0	68.357	34583.09

XPSWMM Node Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A47	10-year	Manhole	1362.967	720	0	66.283	17754.91
A48	10-year	Manhole	1311.233	681.5	0	63.114	70952.47
A49	10-year	Combination Inlet	1369.567	709.9	0	64.129	33069.23
A5	10-year	Grate Inlet	1376.2	696.3	0	60.402	780.9
A50	10-year	Manhole	714.233	253.6	0	58.962	63115.96
A51	10-year	Combination Inlet	727.05	379.4	0	58.884	47932.99
A52	10-year	Manhole	645.167	43	0	52.793	4618.63
A53	10-year	Combination Inlet	491.783	157.4	0	44.497	8945.56
A54	10-year	Underground Junction	598.083	3.7	0	54.894	206.41
A55	10-year	Combination Inlet	286.717	26.2	0	39.471	1031.5
A56	10-year	Manhole	497.55	17.9	0	48.799	1445.87
A57	10-year	Grate Inlet	304.117	55.1	0	40.646	3235.21
A58	10-year	Grate Inlet	1273.667	792.6	0	70.331	64461.5
A59	10-year	Underground Junction	1354.183	721.6	0	71.127	5153.03
A6	10-year	Manhole	1372.833	705.4	0	54.472	34501.76
A60	10-year	Combination Inlet	1355.617	1010.2	0	67.84	58274.81
A61	10-year	Grate Inlet	1351.117	978	0	71.001	107952.44
A62	10-year	Grate Inlet	1361.25	784.5	0	69.656	76407.54
A63	10-year	Grate Inlet	1362.817	733.8	0	58.311	10117.58
A64	10-year	Manhole	1366.833	425.3	0	72.9	62465.61
A65	10-year	Manhole	1362.683	473.9	0	66.728	51174.03
A66	10-year	Curb Inlet	982.067	483.2	0	55.009	30377.44
A67	10-year	Curb Inlet	822.1	462.3	0	59.423	11334.6
A68	10-year	Manhole	548.55	6.8	0	74.899	2382.71
A69	10-year	Combination Inlet	503.433	14	0	68.389	3811.02
A7	10-year	Grate Inlet	1376.183	754.3	0	52.474	41345.53
A70	10-year	Grate Inlet	445.15	31	0	49.67	5411.39
A71	10-year	Curb Inlet	404.283	18.6	0	52.665	2097.12
A72	10-year	Manhole	37.167	2.6	0	72.683	165.95
A73	10-year	Underground Junction	28.133	0	0	63.104	0
A74	10-year	Curb Inlet	24	0.9	0	56.611	63.09
A75	10-year	Manhole	20	2.4	0	61.866	99.63
A76	10-year	Curb Inlet	20.65	11.1	0	53.517	706.5
A77	10-year	Curb Inlet	20.433	0.3	0	67.466	26.73
A78	10-year	Curb Inlet	19.633	0.7	0	60.935	45.62
A79	10-year	Combination Inlet	13.617	6	0	49.489	66.39
A8	10-year	Curb Inlet	1372	691.6	0	51.311	7473.86
A80	10-year	Pond Structure	25.583	0	0	54.725	0
A81	10-year	Pond Structure	35.5	35.5	0	53.341	546.71
A82	10-year	Grate Inlet	35.4	3.2	0	37.502	240.41
A83	10-year	Grate Inlet	55.45	9.4	0	41.56	391.92

XPSWMM Node Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A84	10-year	Pond Structure	50.417	50.4	0	78.814	0.25
A85	10-year	Manhole	771.967	22.9	0	83.773	1143.84
A86	10-year	Manhole	865.7	22	0	105.514	1086.9
A87	10-year	Curb Inlet	962.933	64.7	0	101.752	2441.93
A88	10-year	Pond Structure	377	377	0	66.039	10736.94
A89	10-year	Manhole	686.083	9.8	0	55.29	783.69
A90	10-year	Grate Inlet	685.1	24.5	0	63.432	753.62
A91	10-year	Pond Structure	431.217	431.2	0	63.978	7757.17
A92	10-year	Grate Inlet	723.333	287.6	0	58.929	20646.99
A93	10-year	Grate Inlet	723.45	116.7	0	51.332	2067.69
B1	10-year	Outfall	1380	0	0	58.948	0
B10	10-year	Grate Inlet	1378.167	0	0	41.658	0
B11	10-year	Grate Inlet	1376.7	0.8	0	45.314	3.18
B12	10-year	Underground Junction	1377.9	0	0	44.887	0
B13	10-year	Grate Inlet	1377.85	3.8	0	55.009	42.74
B14	10-year	Grate Inlet	1377.35	5.6	0	54.967	97.5
B15	10-year	Grate Inlet	1377.017	8.8	0	49.024	101.32
B16	10-year	Curb Inlet	1377.5	112.9	0	50.855	6551.67
B17	10-year	Grate Inlet	385.65	114.7	0	44.766	8699.17
B2	10-year	Underground Junction	1048.367	0	0	34.897	0
B3	10-year	Grate Inlet	1365.817	0	0	27.31	0
B4	10-year	Grate Inlet	1377.55	0	0	26.759	0
B5	10-year	Grate Inlet	1378.5	0	0	38.265	0
B6	10-year	Grate Inlet	1378.317	8.6	0	57.829	131.36
B7	10-year	Grate Inlet	1377.55	11.1	0	53.356	152.25
B8	10-year	Grate Inlet	1377.217	11.5	0	51.711	110.91
B9	10-year	Underground Junction	13.1	0	0	30.178	0
BIO3	10-year	Family Dollar Bioretention	117.667	0	0	2685.313	0
C1	10-year	Outfall	1380	0	0	58.413	0
C10	10-year	Grate Inlet	1377.667	10.4	0	58.753	166.02
C11	10-year	Grate Inlet	1376.567	11.4	0	50.86	146.84
C12	10-year	Underground Junction	1377.6	0	0	85.127	0
C13	10-year	Grate Inlet	1377.517	2.9	0	56.258	64.3
C14	10-year	Grate Inlet	1369.3	2.3	0	46.822	33.11
C15	10-year	Underground Junction	1378.05	0	0	46.391	0
C16	10-year	Grate Inlet	1377.45	0	0	41.117	0
C17	10-year	Grate Inlet	1377.233	2.4	0	50.463	11.76
C18	10-year	Curb Inlet	1377.417	47.9	0	78.259	27420.2
C19	10-year	Manhole	1377.633	40.1	0	60.626	2918.47
C2	10-year	Underground Junction	1379.16	0	0	74.752	0
C20	10-year	Manhole	1376.183	45.1	0	55.938	6491.8

XPSWMM Node Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C21	10-year	Curb Inlet	76.967	46.6	0	44.354	2861.52
C22	10-year	Grate Inlet	1376.05	53.7	0	52.394	6061.67
C23	10-year	Curb Inlet	76.05	49.8	0	51.994	806.33
C24	10-year	Curb Inlet	66.967	47	0	45.515	3526.78
C25	10-year	Manhole	1376.817	54.8	0	69.458	16765.58
C26	10-year	Combination Inlet	1377.633	59.4	0	59.269	2377.61
C27	10-year	Curb Inlet	1377.567	58.8	0	54.575	3082.95
C28	10-year	Manhole	63.417	53.5	0	62.492	7636.38
C29	10-year	Combination Inlet	1377.1	58.3	0	51.855	6551.62
C3	10-year	Grate Inlet	1378.667	0	0	38.007	0
C30	10-year	Combination Inlet	1377.8	57.5	0	56.426	4038.34
C31	10-year	Manhole	56.633	35.1	0	54.816	7463.23
C32	10-year	Combination Inlet	58.3	43.7	0	46.564	5850.47
C33	10-year	Curb Inlet	56.617	25.1	0	46.02	2171.4
C34	10-year	Manhole	54.883	37	0	55.574	10819.24
C35	10-year	Combination Inlet	59.75	48.6	0	49.134	8689.54
C36	10-year	Combination Inlet	61.8	50.6	0	50.427	7619.01
C37	10-year	Manhole	46.833	0.6	0	60.505	86.66
C38	10-year	Underground Junction	52.8	0	0	50.884	0
C39	10-year	Curb Inlet	26.133	0.9	0	33.257	35.25
C4	10-year	Grate Inlet	1378.15	0	0	33.152	0
C40	10-year	Combination Inlet	45.717	2.7	0	59.838	338.71
C41	10-year	Combination Inlet	24.433	6.1	0	44.392	316
C42	10-year	Curb Inlet	44.667	1.1	0	55.868	142.07
C43	10-year	Curb Inlet	48.633	2.1	0	47.291	123.4
C44	10-year	Underground Junction	0.483	0	0	25.566	0
C45	10-year	Combination Inlet	0	0	0	7.567	0
C46	10-year	Grate Inlet	0	0	0	5.547	0
C47	10-year	Combination Inlet	0	0	0	8.917	0
C5	10-year	Grate Inlet	1377.767	0	0	34.959	0
C6	10-year	Grate Inlet	1375.733	0	0	29.124	0
C7	10-year	Underground Junction	1378.917	0	0	82.493	0
C8	10-year	Underground Junction	1378.15	0	0	65.8	0
C9	10-year	Grate Inlet	1376.267	9.6	0	48.659	142.36
D1	10-year	Outfall	1380	0	0	42.1	0
D10	10-year	Curb Inlet	32.45	3.9	0	27.603	35.99
D11	10-year	Manhole	39.45	28.9	0	44.688	513.15
D12	10-year	Combination Inlet	41.167	31.4	0	43.092	15476.97
D13	10-year	Manhole	37.933	0.3	0	53.334	12.91
D14	10-year	Grate Inlet	0	0	0	11.806	0
D2	10-year	Combination Inlet	0.467	0	0	42.582	0

XPSWMM Node Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
D3	10-year	Manhole	13.023	0	0	43.169	0
D4	10-year	Drop Curb Inlet	0.467	0	0	40.143	0
D5	10-year	Combination Inlet	35.457	0.4	0	43.937	23.64
D6	10-year	Combination Inlet	22.133	0.3	0	42.826	10.66
D7	10-year	Manhole	35.867	0	0	27.425	0
D8	10-year	Underground Junction	45.783	28.5	0	45.12	115.94
D9	10-year	Grate Inlet	43	35.3	0	38.484	6253.8
F1	10-year	Outfall	1380	0	0	47.915	0
F10	10-year	Manhole	63.517	25.8	0	58.683	2956.03
F11	10-year	Manhole	60.467	25.2	0	46.975	2589.75
F12	10-year	Combination Inlet	54.5	22.6	0	39.396	340.16
F13	10-year	Manhole	53.567	18.9	0	45.88	199.36
F14	10-year	Grate Inlet	48.283	24.3	0	37.186	786.88
F15	10-year	Manhole	41.833	13.1	0	43.937	234.43
F16	10-year	Grate Inlet	24.567	17.3	0	34.71	2.51
F17	10-year	Manhole	59.033	22.9	0	61.042	1824.3
F18	10-year	Combination Inlet	61.2	21.5	0	53.98	1571.65
F19	10-year	Manhole	56.633	19.1	0	57.838	804.34
F2	10-year	Grate Inlet	1379.68	84.1	0	66.755	16375.37
F20	10-year	Manhole	53.7	23.6	0	53.997	2321.98
F21	10-year	Combination Inlet	51.433	24.3	0	47.154	2848.16
F22	10-year	Manhole	57.45	43.9	0	51.307	5452.66
F23	10-year	Grate Inlet	53.05	45.4	0	51.664	3366.4
F24	10-year	Drop Curb Inlet	55.45	46.4	0	52.091	11397.99
F25	10-year	Pond Structure	83.75	29.2	0	50.658	0
F3	10-year	Grate Inlet	1370.343	72.8	0	55.614	11844.28
F4	10-year	Manhole	1379.08	60.1	0	62.663	4980.88
F5	10-year	Underground Junction	1378.833	54.8	0	59.72	398.27
F6	10-year	Grate Inlet	1378.65	66.4	0	58.02	22973.8
F7	10-year	Manhole	1378.05	41.6	0	69.716	2427.23
F8	10-year	Grate Inlet	63.483	41.9	0	56.547	2782.24
F9	10-year	Slotted Inlet	58.583	54	0	39.305	11005.21
G1	10-year	Outfall	1380	0	0	55.51	0
G2	10-year	Grate Inlet	1379.96	1376.7	0	54.492	72141.91
G3	10-year	Grate Inlet	1379.84	1318.4	0	47.223	135062.32
G4	10-year	Grate Inlet	1379.68	103.1	0	56.689	3982.48
H1	10-year	Outfall	1380	0	0	61.863	0
H2	10-year	Combination Inlet	1377.483	82	0	63.667	370.3
H3	10-year	Combination Inlet	1378.3	83.5	0	65.248	41147.93
I1	10-year	Outfall	0	0	0	20.025	0
I2	10-year	Underground Junction	14.483	0	0	38.884	0

XPSWMM Node Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
I3	10-year	Grate Inlet	33.633	14.7	0	62.463	5253.34
I4	10-year	Manhole	0	0	0	8.143	0
I5	10-year	Combination Inlet	0	0	0	7.454	0
I6	10-year	Combination Inlet	0	0	0	8.868	0
J1	10-year	Outfall	1380	0	0	53.098	0
J2	10-year	Curb Inlet	1378.367	132.4	0	68.329	285.96
J3	10-year	Underground Junction	1378.333	103.5	0	66.687	10.77
J4	10-year	Grate Inlet	1378.183	142.5	0	59.912	28016.61
J5	10-year	Combination Inlet	1378.567	148.3	0	66.779	56672.71
K1	10-year	Outfall	1380	0	0	45.57	0
K10	10-year	Grate Inlet	837.317	51.1	0	43.276	1835.98
K2	10-year	Underground Junction	0	0	0	59.043	0
K3	10-year	Grate Inlet	1112.817	818.5	0	51.551	29664.61
K4	10-year	Combination Inlet	1098.517	884.6	0	60.07	33322.21
K5	10-year	Manhole	1066.25	30.6	0	58.481	2090.11
K6	10-year	Grate Inlet	1036.1	77.4	0	56.868	2380.95
K7	10-year	Grate Inlet	1019.533	268.4	0	60.767	6879.52
K8	10-year	Grate Inlet	988.7	197.9	0	55.001	9363.56
K9	10-year	Grate Inlet	957.3	102.6	0	48.38	3330.12
L1	10-year	Outfall	1380	0	0	33.857	0
L2	10-year	Grate Inlet	1379.64	141.7	0	44.524	2397.62
L3	10-year	Pipe Inlet	273.157	273.2	0	37.595	2075.25
L4	10-year	Pipe Inlet	86.333	86.3	0	31.032	100.95
M1	10-year	Outfall	0	0	0	12.566	0
M2	10-year	Underground Junction	27.6	0	0	60.777	0
M3	10-year	Combination Inlet	24.917	18.3	0	61.872	3126.61
M4	10-year	Combination Inlet	20.117	0	0	37.174	0
POND1	10-year	Lyon Homes Apartments	484.55	0	0	108.286	0

XPSWMM Link Output Data
10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	10-year	Circular	Concrete	4.53	-25.399	6.294
A11-A10	10-year	Circular	Concrete	6.73	3.765	0.721
A12-A11	10-year	Circular	Concrete	6.67	3.047	0.656
A13-A12	10-year	Circular	PVC	1.61	1.073	0.772
A14-A13	10-year	Circular	PVC	3.06	-1.317	0.579
A15-A13	10-year	Circular	PVC	2.16	1.222	0.678
A16-A15	10-year	Circular	Terra Cotta	1.13	-1.279	1.319
A17-A15	10-year	Circular	Terra Cotta	0.83	1.327	1.64
A18-A17	10-year	Circular	Terra Cotta	0.9	-1.306	1.574
A19-A10	10-year	Circular	Concrete	35.99	-22.394	0.637
A2-A1	10-year	Circular	Concrete	22.06	-43.927	2.288
A20-A19	10-year	Circular	Concrete	8.08	-21.629	2.777
A21-A20	10-year	Circular	Concrete	16.9	-19.644	1.251
A22-A21	10-year	Circular	Concrete	43.52	-18.215	0.448
A23-A22	10-year	Circular	Concrete	18.14	-17.094	0.943
A24-A23	10-year	Circular	Concrete	25.18	-32.24	1.349
A25-A23	10-year	Circular	Concrete	16.21	47.65	3.422
A26-A25	10-year	Circular	Concrete	18.91	-37.871	2.164
A27-A25	10-year	Circular	Concrete	149.5	-153.558	1.226
A28-A27	10-year	Circular	Concrete	15.72	-16.524	1.808
A29-A28	10-year	Circular	Concrete	17.68	-18.656	1.335
A3-A2	10-year	Special	Concrete	27.26	-14.174	0.582
A30-A28	10-year	Circular	Concrete	47.75	30.073	0.809
A31-A30	10-year	Circular	Concrete	6.73	5.556	0.865
A32-A31	10-year	Circular	Concrete	9.76	-10.429	1.482
A33-A32	10-year	Circular	Concrete	9.44	11.629	1.731
A34-A31	10-year	Circular	Concrete	4.38	3.468	0.807
A35-A34	10-year	Circular	Concrete	6.96	6.226	1.05
A36-A31	10-year	Circular	Concrete	17.99	-11.397	0.779
A37-A36	10-year	Circular	Corrugated Metal	4.36	5.975	1.417
A38-A37	10-year	Circular	Corrugated Metal	1.18	8.95	8.853
A39-A38	10-year	Special	Corrugated Metal	5.44	4.729	1.013
A4-A3	10-year	Special	Concrete	14.68	-6.111	0.437
A40-A38	10-year	Special	Corrugated Metal	7	9.127	1.418
A41-A40	10-year	Special	Corrugated Metal	3.89	7.242	2.09
A42-A30	10-year	Circular	Concrete	25.67	-16.098	0.878
A43-A42	10-year	Circular	Concrete	3.75	11.987	3.912
A44-A42	10-year	Circular	Concrete	20.97	-10.767	0.783
A45-A44	10-year	Circular	Concrete	6.48	14.068	2.173
A46-A45	10-year	Special	Concrete	25.77	34.016	1.6
A47-A46	10-year	Special	Concrete	11.85	11.076	1.284
A48-A47	10-year	Special	Concrete	13.92	-8.364	0.975

XPSWMM Link Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	10-year	Circular	Concrete	6.53	-13.134	3.259
A5-A4	10-year	Special	Concrete	13.58	12.251	0.904
A50-A48	10-year	Special	Concrete	13.94	12.429	0.893
A51-A50	10-year	Circular	Concrete	5.98	-22.397	4.161
A52-A50	10-year	Circular	Concrete	7.32	6.394	1.01
A53-A52	10-year	Circular	Concrete	8.59	5.424	0.995
A54-A52	10-year	Circular	Concrete	4.91	7.918	1.911
A55-A54	10-year	Circular	Concrete	8.36	4.169	0.838
A56-A54	10-year	Circular	Concrete	8.47	4.695	1.078
A57-A56	10-year	Circular	Concrete	10.11	5.627	0.752
A58-A45	10-year	Circular	Concrete	104.63	-94.813	1.842
A59-A58	10-year	Circular	Concrete	26.14	23.167	1.356
A6-A3	10-year	Special	Concrete	8.57	-6.278	0.97
A60-A59	10-year	Circular	Concrete	11.37	14.862	1.565
A61-A59	10-year	Circular	Concrete	11.8	35.076	3.986
A62-A61	10-year	Circular	Concrete	10.18	12.097	1.76
A63-A62	10-year	Circular	Concrete	6.42	6.056	1.164
A64-A62	10-year	Circular	Concrete	13.43	28.559	2.538
A65-A64	10-year	Circular	Concrete	11.08	9.522	1.047
A66-A65	10-year	Circular	Concrete	15.64	-5.105	0.459
A67-A65	10-year	Circular	Concrete	17.18	11.869	0.705
A68-A64	10-year	Circular	Concrete	14.28	13.724	1.007
A69-A68	10-year	Circular	Concrete	26.67	17.685	0.899
A7-A6	10-year	Circular	Concrete	8.3	-11.37	1.853
A70-A69	10-year	Circular	Concrete	7.77	-9.271	1.361
A71-A68	10-year	Circular	Concrete	8.02	5.553	0.835
A72-A68	10-year	Circular	Concrete	10.03	11.138	1.133
A73-A72	10-year	Circular	Concrete	20.79	9.796	0.723
A74-A73	10-year	Circular	Concrete	14.94	-3.056	0.427
A75-A73	10-year	Circular	Concrete	8.8	9.283	1.097
A76-A75	10-year	Circular	Concrete	4.5	5.535	1.267
A77-A75	10-year	Circular	Concrete	8.04	4.283	1.176
A78-A77	10-year	Circular	Concrete	4.78	4.059	1.473
A79-A78	10-year	Circular	Concrete	4.41	2.989	0.772
A8-A6	10-year	Special	Concrete	2.31	10.297	5.693
A80-A72	10-year	Circular	Concrete	2.1	7.502	3.566
A81-BIO3	10-year	Circular	Concrete	2.97	3.422	1.224
A82-A81	10-year	Circular	Smooth HDPE	2.56	-3.231	1.323
A83-A82	10-year	Circular	Smooth HDPE	3.6	-2.478	1.132
A85-A84	10-year	Circular	Concrete	3.68	-3.345	1.363
A86-A85	10-year	Circular	Concrete	2.3	1.666	0.846
A87-A86	10-year	Circular	Concrete	3.13	3.163	1.584

XPSWMM Link Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	10-year	Circular	Smooth HDPE	2.87	2.723	1.041
A90-A89	10-year	Circular	Smooth HDPE	1.85	3.102	1.908
A92-A91	10-year	Circular	Smooth HDPE	1.64	6.296	4.941
A93-A92	10-year	Circular	Smooth HDPE	1	2.862	3.439
B10-B9	10-year	Circular	Terra Cotta	0.82	1.742	2.126
B11-B10	10-year	Circular	Terra Cotta	1.15	0.787	1.187
B12-B9	10-year	Circular	Terra Cotta	0.83	2.028	2.646
B13-B12	10-year	Circular	Terra Cotta	0.51	0.818	3.309
B14-B12	10-year	Circular	Terra Cotta	0.67	1.616	2.55
B15-B14	10-year	Circular	Terra Cotta	0.89	1.345	1.638
B16-B9	10-year	Circular	Corrugated Metal	0.6	2.662	4.417
B17-B16	10-year	Circular	Corrugated Metal	2.58	3.176	1.243
B2-B1	10-year	Circular	Concrete	19.17	9.691	0.506
B3-B2	10-year	Circular	Terra Cotta	2.09	1.488	0.729
B4-B3	10-year	Circular	Terra Cotta	0.64	0.777	1.233
B5-B2	10-year	Circular	Terra Cotta	1.76	2.387	1.377
B6-B5	10-year	Circular	Terra Cotta	0.73	2.012	2.822
B7-B6	10-year	Circular	Terra Cotta	0.72	1.54	2.166
B8-B7	10-year	Circular	Terra Cotta	0.7	1.08	1.675
B9-B2	10-year	Circular	Concrete	10.73	5.77	0.555
C10-C8	10-year	Circular	Terra Cotta	1.16	1.132	1.242
C11-C10	10-year	Circular	Terra Cotta	1.27	1.094	0.946
C12-C7	10-year	Special	Corrugated Metal	21.52	26.977	1.523
C13-C12	10-year	Circular	Terra Cotta	1.63	2.265	1.49
C14-C13	10-year	Circular	Terra Cotta	1.14	0.684	1.186
C15-C12	10-year	Circular	Terra Cotta	1.79	2.098	1.283
C16-C15	10-year	Circular	Terra Cotta	1.5	0.93	0.834
C17-C15	10-year	Circular	Terra Cotta	1.2	1.236	1.218
C18-C12	10-year	Special	Corrugated Metal	1.5	31.027	22.829
C19-C18	10-year	Circular	Concrete	17.9	15.497	0.946
C2-C1	10-year	Special	Corrugated Metal	18.05	-38.562	2.42
C20-C19	10-year	Circular	Concrete	4.61	4.464	1.12
C21-C20	10-year	Circular	Concrete	8.77	-4.862	0.714
C22-C20	10-year	Circular	Concrete	6.35	9.9	1.66
C23-C22	10-year	Circular	Concrete	5.35	6.005	1.196
C24-C23	10-year	Circular	Corrugated Metal	3.59	3.777	1.298
C25-C18	10-year	Circular	Concrete	13.58	30.728	2.487
C26-C25	10-year	Circular	Concrete	11.86	9.491	0.955
C27-C26	10-year	Circular	Concrete	6.67	8.768	1.647
C28-C25	10-year	Circular	Concrete	31.65	25.54	0.911
C29-C28	10-year	Circular	Concrete	12.33	10.384	1.528
C3-C2	10-year	Circular	Terra Cotta	3.8	1.859	0.503

XPSWMM Link Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	10-year	Circular	Concrete	1.74	7.362	9.157
C31-C28	10-year	Circular	Concrete	24.95	20.483	0.863
C32-C31	10-year	Circular	Concrete	14.63	-7.057	0.639
C33-C32	10-year	Circular	Concrete	6.49	7.959	1.416
C34-C31	10-year	Circular	Concrete	18.17	26.708	1.572
C35-C34	10-year	Circular	Concrete	15.06	-16.494	1.697
C36-C34	10-year	Circular	Concrete	10.38	15.118	2.191
C37-C34	10-year	Circular	Concrete	22.46	19.653	1.001
C38-C37	10-year	Circular	Concrete	10.64	8.696	1.104
C39-C38	10-year	Circular	Corrugated Metal	3.86	0.781	0.578
C4-C3	10-year	Circular	Terra Cotta	0.93	0.698	0.825
C40-C38	10-year	Circular	Concrete	10.16	5.759	1.225
C41-C40	10-year	Circular	Concrete	15.19	10.476	0.801
C42-C37	10-year	Circular	Concrete	13.67	13.346	1.445
C43-C42	10-year	Circular	Concrete	4.89	1.525	1.444
C44-C42	10-year	Circular	Concrete	15.91	5.733	0.371
C45-C44	10-year	Circular	Concrete	9.24	2.855	0.309
C46-C44	10-year	Circular	Concrete	20.35	2.822	0.139
C47-C46	10-year	Circular	Concrete	3.21	2.717	0.851
C5-C2	10-year	Circular	Terra Cotta	3.32	1.672	0.531
C6-C5	10-year	Circular	Terra Cotta	0.96	0.667	0.747
C7-C2	10-year	Special	Corrugated Metal	14.03	-36.543	2.614
C8-C7	10-year	Circular	Terra Cotta	1.46	1.432	1.005
C9-C8	10-year	Circular	Terra Cotta	2.15	0.891	0.641
D10-D8	10-year	Circular	Concrete	12.95	1.566	0.155
D11-D8	10-year	Circular	Concrete	6.61	6.926	1.057
D12-D11	10-year	Circular	PVC	3.11	10.616	3.591
D13-D11	10-year	Circular	Concrete	2.49	2.512	1.442
D14-D13	10-year	Circular	PVC	6.77	1.355	0.202
D2-D1	10-year	Special	Concrete	50.58	21.687	0.527
D3-D2	10-year	Special	Corrugated Metal	15.34	21.055	1.373
D4-D3	10-year	Special	Corrugated Metal	30.2	14.708	0.487
D5-D4	10-year	Circular	Concrete	7.46	14.089	1.889
D6-D5	10-year	Circular	Corrugated Metal	4.09	-2.712	1.486
D7-D3	10-year	Circular	Concrete	3.73	5.783	1.549
D8-D7	10-year	Circular	Concrete	2.43	5.794	2.404
D9-D8	10-year	Circular	Concrete	6.26	2.707	0.464
F10-F5	10-year	Circular	Concrete	13.1	13.109	1.003
F11-F10	10-year	Circular	Concrete	4.5	4.905	1.183
F12-F11	10-year	Circular	Concrete	8.64	-2.342	0.772
F13-F11	10-year	Circular	Concrete	4.32	4.943	1.255
F14-F13	10-year	Circular	PVC	4.4	3.72	0.953

XPSWMM Link Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	10-year	Circular	Concrete	3.73	3.364	0.977
F16-F15	10-year	Circular	PVC	4.02	3.398	0.879
F17-F10	10-year	Circular	Concrete	10.42	12.775	1.374
F18-F17	10-year	Circular	Concrete	5.91	7.319	1.587
F19-F17	10-year	Circular	Concrete	8.27	8.298	1.105
F2-F1	10-year	Circular	Concrete	16.41	45.717	2.786
F20-F19	10-year	Circular	Concrete	8.18	10.846	1.359
F21-F20	10-year	Circular	Concrete	5.26	6.807	1.695
F22-F20	10-year	Circular	Concrete	3.69	5.728	1.637
F23-F22	10-year	Circular	Concrete	7.79	8.741	1.324
F24-F23	10-year	Circular	Concrete	1.33	8.616	7.295
F25-F24	10-year	Circular	Smooth HDPE	5.04	8.17	1.665
F3-F2	10-year	Circular	Concrete	54.63	27.051	0.569
F4-F2	10-year	Circular	Concrete	10.63	14.699	1.627
F5-F4	10-year	Circular	Concrete	29.27	14.426	0.59
F6-F5	10-year	Circular	Concrete	7.92	7.93	1.424
F7-F6	10-year	Circular	Concrete	2.04	5.076	2.939
F8-F7	10-year	Circular	Concrete	10.49	6.407	0.761
F9-F8	10-year	Circular	Corrugated Metal	2.96	4.352	1.502
G2-G1	10-year	Circular	Concrete	19.84	18.315	1.256
G3-G2	10-year	Circular	Concrete	17.04	-8.284	1.241
G4-G3	10-year	Circular	Concrete	5.96	10.431	1.768
H2-H1	10-year	Circular	Concrete	6.82	7.085	1.04
H3-H2	10-year	Circular	Concrete	3.63	9.03	2.612
I2-I1	10-year	Circular	Concrete	15.16	19.634	1.298
I3-I2	10-year	Circular	Concrete	3.84	14.904	3.888
I4-I2	10-year	Circular	Concrete	28.62	6.47	0.227
I5-I4	10-year	Circular	Concrete	6.93	3.052	0.441
I6-I4	10-year	Circular	Concrete	5.66	3.477	0.615
J2-J1	10-year	Circular	Concrete	4.21	5.445	1.293
J3-J2	10-year	Circular	Concrete	2.79	5.25	1.916
J4-J3	10-year	Circular	Concrete	5.09	2.496	0.597
J5-J3	10-year	Circular	Concrete	1.19	3.43	3.318
K10-K9	10-year	Circular	Concrete	4.15	2.544	0.943
K2-K1	10-year	Circular	Corrugated Metal	5.93	0.836	0.141
K3-K2	10-year	Circular	Concrete	3.11	-3.177	1.022
K4-K2	10-year	Circular	Concrete	3.28	3.957	1.206
K5-K4	10-year	Circular	Concrete	5.26	4.282	1.085
K6-K5	10-year	Circular	Concrete	8.63	7.145	0.847
K7-K6	10-year	Circular	Concrete	2.03	4.652	2.288
K8-K7	10-year	Circular	Concrete	3.86	2.319	0.79
K9-K8	10-year	Circular	Concrete	4.72	3.089	0.745

XPSWMM Link Output Data

10-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	10-year	Circular	Cast Iron	2.27	3.435	1.516
L3-L2	10-year	Circular	Corrugated Metal	5.35	4.206	0.93
L4-L2	10-year	Circular	Corrugated Metal	3.17	2.206	0.695
Orifice1.1	10-year			2.21	0.704	0.38
Orifice2.1	10-year			2.21	0.704	0.38
Orifice3.1	10-year			2.21	3.179	1.485
M2-M1	10-year	Circular	Concrete	4.38	7.667	1.749
M3-M2	10-year	Circular	Concrete	6.04	7.299	1.244
M4-M2	10-year	Circular	Concrete	4.75	0.685	0.171

XPSWMM Node Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	10-year 2050	Outfall	1380	0	0	68.57	0
A10	10-year 2050	Manhole	1378.55	0	0	91.177	0
A11	10-year 2050	Grate Inlet	1378.867	1220.9	0	84.726	41447.13
A12	10-year 2050	Grate Inlet	1378.083	1130.3	0	72.981	21982.84
A13	10-year 2050	Manhole	1377	125.7	0	67.854	2723.97
A14	10-year 2050	Grate Inlet	1369.217	989	0	40.473	10451.26
A15	10-year 2050	Grate Inlet	1367.767	492.7	0	56.023	13598.28
A16	10-year 2050	Grate Inlet	1368.867	380	0	48.904	4539.92
A17	10-year 2050	Grate Inlet	1369.8	440.5	0	51.595	7878.05
A18	10-year 2050	Grate Inlet	1368.567	459.1	0	47.468	5308.83
A19	10-year 2050	Manhole	1378.583	0	0	94.962	0
A2	10-year 2050	Manhole	1379.4	1020.1	0	87.359	349805.33
A20	10-year 2050	Manhole	1378.4	0	0	95.577	0
A21	10-year 2050	Manhole	1378.033	0	0	95.503	0
A22	10-year 2050	Manhole	1377.85	0	0	92.452	0
A23	10-year 2050	Combination Inlet	1376.75	1373.7	0	91.031	145120.98
A24	10-year 2050	Combination Inlet	1374.983	1357	0	76.572	53039.89
A25	10-year 2050	Combination Inlet	1376.35	1373.3	0	90.371	144024.82
A26	10-year 2050	Combination Inlet	1376.983	1371.5	0	79.885	35092.36
A27	10-year 2050	Manhole	1373.167	1370.4	0	83.426	100120.78
A28	10-year 2050	Manhole	1374.633	1364	0	84.86	39762.11
A29	10-year 2050	Curb Inlet	1376.467	1365.5	0	78.919	27048.1
A3	10-year 2050	Manhole	1377.717	1224	0	71.535	145252.44
A30	10-year 2050	Manhole	1371.917	1364.5	0	81.224	61342.42
A31	10-year 2050	Manhole	1374.217	1218.5	0	75.73	109757.19
A32	10-year 2050	Combination Inlet	1373.783	1357.7	0	66.081	110086.49
A33	10-year 2050	Combination Inlet	1369.467	1257.9	0	61.534	100074.58
A34	10-year 2050	Manhole	1369.017	438.8	0	57.974	16673.13
A35	10-year 2050	Combination Inlet	1365.633	741.2	0	54.728	24668.84
A36	10-year 2050	Curb Inlet	1359.267	1114	0	65.04	61258.63
A37	10-year 2050	Manhole	1286.683	248.3	0	56.631	24028.29
A38	10-year 2050	Grate Inlet	1301.067	266	0	64.84	50773.29
A39	10-year 2050	Grate Inlet	1050.017	238	0	49.208	12477.82
A4	10-year 2050	Grate Inlet	1377.733	1377.5	0	63.915	80299.75
A40	10-year 2050	Grate Inlet	1160.467	247.3	0	59.296	36569.61
A41	10-year 2050	Grate Inlet	901.167	154	0	52.871	13353.94
A42	10-year 2050	Underground Junction	1371.45	1356.1	0	79.513	6400.71
A43	10-year 2050	Curb Inlet	1376.233	1369	0	78.938	28465.36
A44	10-year 2050	Grate Inlet	1368.9	1348.3	0	75.215	105632.06
A45	10-year 2050	Underground Junction	1354.567	1080.9	0	89.311	75206.24
A46	10-year 2050	Combination Inlet	1361.933	1241.9	0	71.005	212787.13

XPSWMM Node Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A47	10-year 2050	Manhole	1364.533	1107.9	0	68.913	72701.88
A48	10-year 2050	Manhole	1366.783	905.2	0	65.746	109609.2
A49	10-year 2050	Combination Inlet	1371.083	1083.6	0	66.753	71904.28
A5	10-year 2050	Grate Inlet	1377.583	1229.9	0	62.492	9134.53
A50	10-year 2050	Manhole	1277.833	330.7	0	59.449	81479.16
A51	10-year 2050	Combination Inlet	1337.75	455.2	0	59.31	55902.49
A52	10-year 2050	Manhole	716.933	80.5	0	52.66	8995.39
A53	10-year 2050	Combination Inlet	569.75	217.3	0	44.712	13229.35
A54	10-year 2050	Underground Junction	689.417	10	0	54.818	77.06
A55	10-year 2050	Combination Inlet	364.167	41.7	0	40.018	1692.05
A56	10-year 2050	Manhole	573.217	28.4	0	48.122	2300.56
A57	10-year 2050	Grate Inlet	384.95	92.1	0	40.406	5301.67
A58	10-year 2050	Grate Inlet	1358.4	1297.5	0	76.143	417322.87
A59	10-year 2050	Underground Junction	1367.467	1123.2	0	75.136	24778.08
A6	10-year 2050	Manhole	1376.867	1205.3	0	54.939	139224.27
A60	10-year 2050	Combination Inlet	1367.717	1319.7	0	70.49	77920.93
A61	10-year 2050	Grate Inlet	1368.217	1331.7	0	73.655	163112.51
A62	10-year 2050	Grate Inlet	1367.9	1309.9	0	72.314	160504.57
A63	10-year 2050	Grate Inlet	1367.767	1194.1	0	60.96	29743.28
A64	10-year 2050	Manhole	1370.067	501.3	0	72.532	67551.99
A65	10-year 2050	Manhole	1369.267	551.5	0	69.347	59303.25
A66	10-year 2050	Curb Inlet	1358.367	561.9	0	57.654	34875.36
A67	10-year 2050	Curb Inlet	1315.283	540.2	0	61.473	13132.43
A68	10-year 2050	Manhole	639.8	8.8	0	75.772	3280.25
A69	10-year 2050	Combination Inlet	584.333	17.4	0	68.567	4862.74
A7	10-year 2050	Grate Inlet	1376.917	1308.2	0	53.027	100561.68
A70	10-year 2050	Grate Inlet	520.067	49.7	0	49.903	7467.16
A71	10-year 2050	Curb Inlet	478.15	23.1	0	53.432	3130.61
A72	10-year 2050	Manhole	53.467	5.5	0	72.4	385
A73	10-year 2050	Underground Junction	34.85	0	0	63.302	0
A74	10-year 2050	Curb Inlet	29.65	2.5	0	56.586	199.17
A75	10-year 2050	Manhole	24.417	7.1	0	64.261	384.89
A76	10-year 2050	Curb Inlet	25.1	12.8	0	54.452	1645.55
A77	10-year 2050	Curb Inlet	24.683	1.6	0	67.683	105.9
A78	10-year 2050	Curb Inlet	23.567	4	0	61.197	228.61
A79	10-year 2050	Combination Inlet	16.467	8.4	0	49.493	89.98
A8	10-year 2050	Curb Inlet	1376.85	1045.8	0	51.782	36733.93
A80	10-year 2050	Pond Structure	31.583	0	0	54.834	0
A81	10-year 2050	Pond Structure	40.75	40.8	0	53.206	657.69
A82	10-year 2050	Grate Inlet	36.267	4.7	0	37.552	301.83
A83	10-year 2050	Grate Inlet	54.767	14.1	0	41.624	569.8

XPSWMM Node Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A84	10-year 2050	Pond Structure	57.817	57.8	0	78.815	0.28
A85	10-year 2050	Manhole	813.067	28.5	0	83.773	1459.62
A86	10-year 2050	Manhole	911.167	25.5	0	105.519	1288.03
A87	10-year 2050	Curb Inlet	1004.2	84.1	0	101.825	2966.75
A88	10-year 2050	Pond Structure	397.9	397.9	0	66.042	11567.32
A89	10-year 2050	Manhole	747.217	10.2	0	55.29	860.27
A90	10-year 2050	Grate Inlet	744.617	30.8	0	63.497	875.35
A91	10-year 2050	Pond Structure	436.133	436.1	0	63.952	7707.7
A92	10-year 2050	Grate Inlet	735.033	272.5	0	59.032	20286.85
A93	10-year 2050	Grate Inlet	756.083	110.6	0	51.341	2041.67
B1	10-year 2050	Outfall	1380	0	0	72.771	0
B10	10-year 2050	Grate Inlet	1378.517	12.7	0	56.41	251.87
B11	10-year 2050	Grate Inlet	1378.133	13.4	0	48.87	108.16
B12	10-year 2050	Underground Junction	1378.4	0	0	53.944	0
B13	10-year 2050	Grate Inlet	1378.283	16.7	0	55.482	221.87
B14	10-year 2050	Grate Inlet	1377.967	16.9	0	55.294	282.72
B15	10-year 2050	Grate Inlet	1377.667	19	0	50.702	345.13
B16	10-year 2050	Curb Inlet	1378.117	1036.6	0	53.296	42560.83
B17	10-year 2050	Grate Inlet	1377.917	1107.2	0	47.177	41806.05
B2	10-year 2050	Underground Junction	1378.733	0	0	50.39	0
B3	10-year 2050	Grate Inlet	1378.517	3.4	0	50.218	59.29
B4	10-year 2050	Grate Inlet	1378.533	7.5	0	49.016	70.59
B5	10-year 2050	Grate Inlet	1379.04	8.9	0	56.131	158.19
B6	10-year 2050	Grate Inlet	1378.733	17.4	0	58.172	325.13
B7	10-year 2050	Grate Inlet	1378.183	19.5	0	53.885	409.68
B8	10-year 2050	Grate Inlet	1377.833	19.8	0	51.704	313.95
B9	10-year 2050	Underground Junction	1378.367	0	0	45.758	0
BIO3	10-year 2050	mily Dollar Bioretenti	136	0	0	2735.493	0
C1	10-year 2050	Outfall	1380	0	0	72.236	0
C10	10-year 2050	Grate Inlet	1378.033	15.9	0	59.083	131.75
C11	10-year 2050	Grate Inlet	1377.25	17.1	0	50.911	243.38
C12	10-year 2050	Underground Junction	1378.35	0	0	86.938	0
C13	10-year 2050	Grate Inlet	1378.2	10.8	0	56.626	252.7
C14	10-year 2050	Grate Inlet	1377.617	10.8	0	46.921	112.32
C15	10-year 2050	Underground Junction	1378.583	0	0	53.476	0
C16	10-year 2050	Grate Inlet	1378.167	7.9	0	54.087	119.52
C17	10-year 2050	Grate Inlet	1377.9	10.3	0	50.757	90.31
C18	10-year 2050	Curb Inlet	1378.05	191.3	0	80.427	97447.14
C19	10-year 2050	Manhole	1378.233	121.6	0	62.709	12433.46
C2	10-year 2050	Underground Junction	1379.4	0	0	83.014	0
C20	10-year 2050	Manhole	1377.067	137.6	0	55.975	16642.79

XPSWMM Node Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C21	10-year 2050	Curb Inlet	1376.65	186.7	0	45.215	13854.54
C22	10-year 2050	Grate Inlet	1376.95	637.5	0	52.416	46069.66
C23	10-year 2050	Curb Inlet	1376.717	145.6	0	53.521	3622.11
C24	10-year 2050	Curb Inlet	1375.683	101.6	0	47.03	6375.27
C25	10-year 2050	Manhole	1377.917	461.4	0	70.119	94985.89
C26	10-year 2050	Combination Inlet	1378.25	1070.1	0	60.864	159263
C27	10-year 2050	Curb Inlet	1378.283	805.4	0	57.215	48037.27
C28	10-year 2050	Manhole	1376.617	266.8	0	64.902	48526.3
C29	10-year 2050	Combination Inlet	1378	1048.5	0	8466.636	150167.07
C3	10-year 2050	Grate Inlet	1379.04	0	0	46.075	0.56
C30	10-year 2050	Combination Inlet	1378.15	1002.6	0	58.661	119104.78
C31	10-year 2050	Manhole	262.233	71	0	55.126	18332.03
C32	10-year 2050	Combination Inlet	831.283	94.5	0	46.437	11700.83
C33	10-year 2050	Curb Inlet	445.433	48.5	0	46.08	3522.94
C34	10-year 2050	Manhole	127.9	73.6	0	55.194	20811.62
C35	10-year 2050	Combination Inlet	1371.95	103.2	0	48.797	18797.03
C36	10-year 2050	Combination Inlet	1375.667	111.7	0	50.749	18178.72
C37	10-year 2050	Manhole	98.717	2.9	0	62.409	562.72
C38	10-year 2050	Underground Junction	114.4	0.1	0	57.981	6.39
C39	10-year 2050	Curb Inlet	45.1	4.4	0	33.571	156.97
C4	10-year 2050	Grate Inlet	1378.717	1.2	0	52.814	3.01
C40	10-year 2050	Combination Inlet	94.817	7.4	0	60.017	1250.74
C41	10-year 2050	Combination Inlet	42.167	8.8	0	45.691	955.73
C42	10-year 2050	Curb Inlet	90.467	6.8	0	57.366	1017.33
C43	10-year 2050	Curb Inlet	103.183	9.1	0	47.607	518.31
C44	10-year 2050	Underground Junction	9.85	0	0	33.137	0
C45	10-year 2050	Combination Inlet	0	0	0	9.933	0
C46	10-year 2050	Grate Inlet	0	0	0	6.99	0
C47	10-year 2050	Combination Inlet	0	0	0	10.853	0
C5	10-year 2050	Grate Inlet	1378.833	1.2	0	54.854	15.94
C6	10-year 2050	Grate Inlet	1378.283	2.9	0	47.016	20.23
C7	10-year 2050	Underground Junction	1379.12	0	0	85.726	0
C8	10-year 2050	Underground Junction	1378.467	0	0	67.205	0
C9	10-year 2050	Grate Inlet	1377.283	15.5	0	48.858	187.53
D1	10-year 2050	Outfall	1380	0	0	55.922	0
D10	10-year 2050	Curb Inlet	46.9	13.5	0	28.206	133.81
D11	10-year 2050	Manhole	65.133	38.2	0	45.545	895.81
D12	10-year 2050	Combination Inlet	73.717	42.5	0	43.949	20104.09
D13	10-year 2050	Manhole	61.083	4.3	0	53.501	89.85
D14	10-year 2050	Grate Inlet	0	0	0	13.713	0
D2	10-year 2050	Combination Inlet	1377.64	8.9	0	71.735	7815.84

XPSWMM Node Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
D3	10-year 2050	Manhole	1379.217	7	0	75.055	9997.48
D4	10-year 2050	Drop Curb Inlet	1378.727	11.6	0	63.197	1861.88
D5	10-year 2050	Combination Inlet	1379.32	938.7	0	56.68	61158.4
D6	10-year 2050	Combination Inlet	1379.073	169.2	0	48.643	6809.97
D7	10-year 2050	Manhole	1377.8	16.6	0	45.355	435.06
D8	10-year 2050	Underground Junction	389.317	40.7	0	46.543	317.37
D9	10-year 2050	Grate Inlet	113.05	52.3	0	39.126	10045.76
F1	10-year 2050	Outfall	1380	0	0	61.737	0
F10	10-year 2050	Manhole	567.283	30.3	0	59	3826.98
F11	10-year 2050	Manhole	116.317	30.2	0	46.422	3376.53
F12	10-year 2050	Combination Inlet	72.867	26.9	0	39.329	456.35
F13	10-year 2050	Manhole	69.167	23.1	0	46.306	228.95
F14	10-year 2050	Grate Inlet	59.283	28.8	0	37.941	1007.64
F15	10-year 2050	Manhole	52.667	16.2	0	44.318	329.75
F16	10-year 2050	Grate Inlet	29.067	19.9	0	35.168	3.8
F17	10-year 2050	Manhole	84.417	26.3	0	60.842	2183.48
F18	10-year 2050	Combination Inlet	107.4	24.3	0	53.938	1716.37
F19	10-year 2050	Manhole	72.2	21.4	0	57.807	902.16
F2	10-year 2050	Grate Inlet	1379.76	1379.7	0	67.152	26452.63
F20	10-year 2050	Manhole	64.083	26	0	53.859	2902.45
F21	10-year 2050	Combination Inlet	61.717	26.9	0	47.529	3934.15
F22	10-year 2050	Manhole	70.2	52.2	0	51.561	6657.67
F23	10-year 2050	Grate Inlet	62.017	53.7	0	51.696	3837.4
F24	10-year 2050	Drop Curb Inlet	65.45	54.6	0	52.773	15053.36
F25	10-year 2050	Pond Structure	96.917	36.3	0	52.288	0
F3	10-year 2050	Grate Inlet	1379.68	1379.7	0	58.004	19900.48
F4	10-year 2050	Manhole	1379.28	849.1	0	63.469	73209.43
F5	10-year 2050	Underground Junction	1379.04	260.1	0	60.574	9642.66
F6	10-year 2050	Grate Inlet	1378.933	1249.2	0	58.845	125669.16
F7	10-year 2050	Manhole	1378.317	51.8	0	69.734	3188.79
F8	10-year 2050	Grate Inlet	1111.85	49.6	0	56.864	3393.69
F9	10-year 2050	Slotted Inlet	98.5	66.3	0	39.825	14513.21
G1	10-year 2050	Outfall	1380	0	0	69.333	0
G2	10-year 2050	Grate Inlet	1380	1380	0	61.03	1253289.91
G3	10-year 2050	Grate Inlet	1379.84	1379.8	0	52.131	377681.3
G4	10-year 2050	Grate Inlet	1379.68	815	0	57.098	54653.66
H1	10-year 2050	Outfall	1380	0	0	75.686	0
H2	10-year 2050	Combination Inlet	1379.24	135.7	0	64.661	4144.49
H3	10-year 2050	Combination Inlet	1379.28	160.2	0	66.332	56865.26
I1	10-year 2050	Outfall	0	0	0	20.272	0
I2	10-year 2050	Underground Junction	17.217	0	0	42.028	0

XPSWMM Node Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
I3	10-year 2050	Grate Inlet	37.65	17.5	0	63.655	8499.24
I4	10-year 2050	Manhole	0	0	0	9.126	0
I5	10-year 2050	Combination Inlet	0	0	0	8.207	0
I6	10-year 2050	Combination Inlet	0	0	0	9.759	0
J1	10-year 2050	Outfall	1380	0	0	66.921	0
J2	10-year 2050	Curb Inlet	1378.733	223	0	68.932	912.83
J3	10-year 2050	Underground Junctior	1378.733	149.5	0	67.321	10.85
J4	10-year 2050	Grate Inlet	1378.617	496.8	0	60.549	42723.5
J5	10-year 2050	Combination Inlet	1378.85	677	0	67.624	82709.81
K1	10-year 2050	Outfall	1380	0	0	59.393	0
K10	10-year 2050	Grate Inlet	852.367	56.5	0	43.728	2541.17
K2	10-year 2050	Underground Junctior	0	0	0	59.448	0
K3	10-year 2050	Grate Inlet	1143.083	843.3	0	51.978	32288.58
K4	10-year 2050	Combination Inlet	1130.167	918.6	0	60.353	34169.85
K5	10-year 2050	Manhole	1100.667	35.2	0	58.401	2648.5
K6	10-year 2050	Grate Inlet	1072.117	85	0	57.219	2561.28
K7	10-year 2050	Grate Inlet	1057.017	292.4	0	61.694	7587.57
K8	10-year 2050	Grate Inlet	1028.3	223.8	0	55.918	10783.39
K9	10-year 2050	Grate Inlet	999.1	115.3	0	49.172	4080.13
L1	10-year 2050	Outfall	1380	0	0	47.68	0
L2	10-year 2050	Grate Inlet	1379.68	1379.6	0	44.882	4352.58
L3	10-year 2050	Pipe Inlet	1378.31	1378.3	0	37.931	5582.93
L4	10-year 2050	Pipe Inlet	191.417	191.2	0	31.828	321.64
M1	10-year 2050	Outfall	0	0	0	12.566	0
M2	10-year 2050	Underground Junctior	31.433	0	0	61.712	0
M3	10-year 2050	Combination Inlet	28.817	22.1	0	62.492	5005.41
M4	10-year 2050	Combination Inlet	24.3	0	0	38.234	0
POND1	10-year 2050	yon Homes Apartmen	540.167	0	0	108.286	0

XPSWMM Link Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	10-year 2050	Circular	Concrete	4.53	-33.285	7.355
A11-A10	10-year 2050	Circular	Concrete	6.73	-3.988	0.675
A12-A11	10-year 2050	Circular	Concrete	6.67	4	0.703
A13-A12	10-year 2050	Circular	PVC	1.61	-1.242	0.803
A14-A13	10-year 2050	Circular	PVC	3.06	-1.483	0.59
A15-A13	10-year 2050	Circular	PVC	2.16	-1.277	0.698
A16-A15	10-year 2050	Circular	Terra Cotta	1.13	1.271	1.248
A17-A15	10-year 2050	Circular	Terra Cotta	0.83	1.192	1.681
A18-A17	10-year 2050	Circular	Terra Cotta	0.9	-1.33	1.565
A19-A10	10-year 2050	Circular	Concrete	35.99	-23.905	0.74
A2-A1	10-year 2050	Circular	Concrete	22.06	-46.464	2.65
A20-A19	10-year 2050	Circular	Concrete	8.08	-22.985	3.281
A21-A20	10-year 2050	Circular	Concrete	16.9	-21.212	1.447
A22-A21	10-year 2050	Circular	Concrete	43.52	-20.804	0.517
A23-A22	10-year 2050	Circular	Concrete	18.14	-20.19	1.133
A24-A23	10-year 2050	Circular	Concrete	25.18	-28.649	1.297
A25-A23	10-year 2050	Circular	Concrete	16.21	33.747	3.75
A26-A25	10-year 2050	Circular	Concrete	18.91	-27.25	1.945
A27-A25	10-year 2050	Circular	Concrete	149.5	-97.807	1.103
A28-A27	10-year 2050	Circular	Concrete	15.72	-19.342	2.163
A29-A28	10-year 2050	Circular	Concrete	17.68	-9.891	1.509
A3-A2	10-year 2050	Special	Concrete	27.26	-19.886	0.732
A30-A28	10-year 2050	Circular	Concrete	47.75	-31.321	0.794
A31-A30	10-year 2050	Circular	Concrete	6.73	-6.302	1.012
A32-A31	10-year 2050	Circular	Concrete	9.76	-12.473	1.528
A33-A32	10-year 2050	Circular	Concrete	9.44	-12.57	1.72
A34-A31	10-year 2050	Circular	Concrete	4.38	2.873	0.678
A35-A34	10-year 2050	Circular	Concrete	6.96	-6.018	1.169
A36-A31	10-year 2050	Circular	Concrete	17.99	-10.383	0.726
A37-A36	10-year 2050	Circular	Corrugated Metal	4.36	3.897	1.304
A38-A37	10-year 2050	Circular	Corrugated Metal	1.18	9.463	8.838
A39-A38	10-year 2050	Special	Corrugated Metal	5.44	4.799	1.034
A4-A3	10-year 2050	Special	Concrete	14.68	-8.01	0.568
A40-A38	10-year 2050	Special	Corrugated Metal	7	9.116	1.371
A41-A40	10-year 2050	Special	Corrugated Metal	3.89	7.981	2.104
A42-A30	10-year 2050	Circular	Concrete	25.67	-18.206	0.883
A43-A42	10-year 2050	Circular	Concrete	3.75	8.281	3.099
A44-A42	10-year 2050	Circular	Concrete	20.97	-13.641	0.821
A45-A44	10-year 2050	Circular	Concrete	6.48	-13.639	2.357
A46-A45	10-year 2050	Special	Concrete	25.77	-30.496	1.619
A47-A46	10-year 2050	Special	Concrete	11.85	15.704	1.525
A48-A47	10-year 2050	Special	Concrete	13.92	10.108	0.772

XPSWMM Link Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	10-year 2050	Circular	Concrete	6.53	-17.178	3.088
A5-A4	10-year 2050	Special	Concrete	13.58	13.487	0.994
A50-A48	10-year 2050	Special	Concrete	13.94	12.329	0.887
A51-A50	10-year 2050	Circular	Concrete	5.98	-19.423	3.8
A52-A50	10-year 2050	Circular	Concrete	7.32	5.977	0.921
A53-A52	10-year 2050	Circular	Concrete	8.59	-7.74	1.15
A54-A52	10-year 2050	Circular	Concrete	4.91	8.649	1.93
A55-A54	10-year 2050	Circular	Concrete	8.36	4.285	0.79
A56-A54	10-year 2050	Circular	Concrete	8.47	5.635	1.016
A57-A56	10-year 2050	Circular	Concrete	10.11	-5.805	0.789
A58-A45	10-year 2050	Circular	Concrete	104.63	-211.33	2.039
A59-A58	10-year 2050	Circular	Concrete	26.14	32.882	1.757
A6-A3	10-year 2050	Special	Concrete	8.57	-10.951	1.355
A60-A59	10-year 2050	Circular	Concrete	11.37	-17.117	1.712
A61-A59	10-year 2050	Circular	Concrete	11.8	-36.977	4.612
A62-A61	10-year 2050	Circular	Concrete	10.18	12.422	1.96
A63-A62	10-year 2050	Circular	Concrete	6.42	6.257	1.156
A64-A62	10-year 2050	Circular	Concrete	13.43	20.856	3.178
A65-A64	10-year 2050	Circular	Concrete	11.08	-9.378	1.076
A66-A65	10-year 2050	Circular	Concrete	15.64	-4.586	0.426
A67-A65	10-year 2050	Circular	Concrete	17.18	12.863	0.75
A68-A64	10-year 2050	Circular	Concrete	14.28	13.684	1.017
A69-A68	10-year 2050	Circular	Concrete	26.67	18.557	0.983
A7-A6	10-year 2050	Circular	Concrete	8.3	-15.01	2.18
A70-A69	10-year 2050	Circular	Concrete	7.77	-8.632	1.353
A71-A68	10-year 2050	Circular	Concrete	8.02	5.805	0.829
A72-A68	10-year 2050	Circular	Concrete	10.03	11.063	1.121
A73-A72	10-year 2050	Circular	Concrete	20.79	10.199	0.637
A74-A73	10-year 2050	Circular	Concrete	14.94	-2.684	0.451
A75-A73	10-year 2050	Circular	Concrete	8.8	9.44	1.148
A76-A75	10-year 2050	Circular	Concrete	4.5	5.272	1.297
A77-A75	10-year 2050	Circular	Concrete	8.04	7.924	1.574
A78-A77	10-year 2050	Circular	Concrete	4.78	6.69	1.562
A79-A78	10-year 2050	Circular	Concrete	4.41	3.169	0.826
A8-A6	10-year 2050	Special	Concrete	2.31	10.74	5.539
A80-A72	10-year 2050	Circular	Concrete	2.1	7.512	3.585
A81-BIO3	10-year 2050	Circular	Concrete	2.97	3.426	1.228
A82-A81	10-year 2050	Circular	Smooth HDPE	2.56	-3.267	1.321
A83-A82	10-year 2050	Circular	Smooth HDPE	3.6	3.951	1.307
A85-A84	10-year 2050	Circular	Concrete	3.68	-4.284	1.356
A86-A85	10-year 2050	Circular	Concrete	2.3	1.671	0.847
A87-A86	10-year 2050	Circular	Concrete	3.13	-4.218	1.578

XPSWMM Link Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	10-year 2050	Circular	Smooth HDPE	2.87	2.687	1.041
A90-A89	10-year 2050	Circular	Smooth HDPE	1.85	2.882	1.973
A92-A91	10-year 2050	Circular	Smooth HDPE	1.64	6.765	4.958
A93-A92	10-year 2050	Circular	Smooth HDPE	1	-2.747	3.434
B10-B9	10-year 2050	Circular	Terra Cotta	0.82	1.915	2.369
B11-B10	10-year 2050	Circular	Terra Cotta	1.15	1.221	1.357
B12-B9	10-year 2050	Circular	Terra Cotta	0.83	-2.028	2.648
B13-B12	10-year 2050	Circular	Terra Cotta	0.51	1.444	3.074
B14-B12	10-year 2050	Circular	Terra Cotta	0.67	1.339	2.305
B15-B14	10-year 2050	Circular	Terra Cotta	0.89	1.178	1.423
B16-B9	10-year 2050	Circular	Corrugated Metal	0.6	-2.125	3.689
B17-B16	10-year 2050	Circular	Corrugated Metal	2.58	-2.778	1.204
B2-B1	10-year 2050	Circular	Concrete	19.17	-14.289	0.747
B3-B2	10-year 2050	Circular	Terra Cotta	2.09	2.346	1.217
B4-B3	10-year 2050	Circular	Terra Cotta	0.64	1.244	2.444
B5-B2	10-year 2050	Circular	Terra Cotta	1.76	2.712	1.621
B6-B5	10-year 2050	Circular	Terra Cotta	0.73	1.58	2.318
B7-B6	10-year 2050	Circular	Terra Cotta	0.72	1.234	2.063
B8-B7	10-year 2050	Circular	Terra Cotta	0.7	0.882	1.476
B9-B2	10-year 2050	Circular	Concrete	10.73	-7.744	0.868
C10-C8	10-year 2050	Circular	Terra Cotta	1.16	1.214	1.164
C11-C10	10-year 2050	Circular	Terra Cotta	1.27	0.715	0.963
C12-C7	10-year 2050	Special	Corrugated Metal	21.52	-36.733	1.707
C13-C12	10-year 2050	Circular	Terra Cotta	1.63	1.845	1.439
C14-C13	10-year 2050	Circular	Terra Cotta	1.14	1.406	1.268
C15-C12	10-year 2050	Circular	Terra Cotta	1.79	-1.794	1.471
C16-C15	10-year 2050	Circular	Terra Cotta	1.5	1.737	1.341
C17-C15	10-year 2050	Circular	Terra Cotta	1.2	1.249	1.173
C18-C12	10-year 2050	Special	Corrugated Metal	1.5	24.936	21.478
C19-C18	10-year 2050	Circular	Concrete	17.9	-13.873	1.034
C2-C1	10-year 2050	Special	Corrugated Metal	18.05	-42.056	2.928
C20-C19	10-year 2050	Circular	Concrete	4.61	-5.898	1.303
C21-C20	10-year 2050	Circular	Concrete	8.77	-5.817	0.83
C22-C20	10-year 2050	Circular	Concrete	6.35	-8.864	1.976
C23-C22	10-year 2050	Circular	Concrete	5.35	6.157	1.152
C24-C23	10-year 2050	Circular	Corrugated Metal	3.59	3.592	1.291
C25-C18	10-year 2050	Circular	Concrete	13.58	28.291	2.264
C26-C25	10-year 2050	Circular	Concrete	11.86	9.594	0.966
C27-C26	10-year 2050	Circular	Concrete	6.67	8.937	1.538
C28-C25	10-year 2050	Circular	Concrete	31.65	23.656	0.828
C29-C28	10-year 2050	Circular	Concrete	12.33	-16.435	1.667
C3-C2	10-year 2050	Circular	Terra Cotta	3.8	2.068	0.564

XPSWMM Link Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	10-year 2050	Circular	Concrete	1.74	-13.714	9.043
C31-C28	10-year 2050	Circular	Concrete	24.95	19.706	0.79
C32-C31	10-year 2050	Circular	Concrete	14.63	5.793	0.688
C33-C32	10-year 2050	Circular	Concrete	6.49	7.462	1.369
C34-C31	10-year 2050	Circular	Concrete	18.17	22.178	1.355
C35-C34	10-year 2050	Circular	Concrete	15.06	-24.092	1.746
C36-C34	10-year 2050	Circular	Concrete	10.38	-16.73	2.296
C37-C34	10-year 2050	Circular	Concrete	22.46	21.188	1.067
C38-C37	10-year 2050	Circular	Concrete	10.64	9.277	1.182
C39-C38	10-year 2050	Circular	Corrugated Metal	3.86	2.225	0.676
C4-C3	10-year 2050	Circular	Terra Cotta	0.93	0.816	1.483
C40-C38	10-year 2050	Circular	Concrete	10.16	10.433	1.224
C41-C40	10-year 2050	Circular	Concrete	15.19	14.439	1.011
C42-C37	10-year 2050	Circular	Concrete	13.67	17.541	1.639
C43-C42	10-year 2050	Circular	Concrete	4.89	6.183	1.605
C44-C42	10-year 2050	Circular	Concrete	15.91	6.89	0.444
C45-C44	10-year 2050	Circular	Concrete	9.24	3.262	0.375
C46-C44	10-year 2050	Circular	Concrete	20.35	3.745	0.184
C47-C46	10-year 2050	Circular	Concrete	3.21	3.52	1.101
C5-C2	10-year 2050	Circular	Terra Cotta	3.32	1.789	0.778
C6-C5	10-year 2050	Circular	Terra Cotta	0.96	1.278	1.385
C7-C2	10-year 2050	Special	Corrugated Metal	14.03	-38.934	3.217
C8-C7	10-year 2050	Circular	Terra Cotta	1.46	1.378	0.975
C9-C8	10-year 2050	Circular	Terra Cotta	2.15	0.896	0.725
D10-D8	10-year 2050	Circular	Concrete	12.95	-1.805	0.259
D11-D8	10-year 2050	Circular	Concrete	6.61	6.621	1.029
D12-D11	10-year 2050	Circular	PVC	3.11	9.743	3.58
D13-D11	10-year 2050	Circular	Concrete	2.49	2.397	1.17
D14-D13	10-year 2050	Circular	PVC	6.77	1.791	0.266
D2-D1	10-year 2050	Special	Concrete	50.58	41.196	0.976
D3-D2	10-year 2050	Special	Corrugated Metal	15.34	87.331	7.895
D4-D3	10-year 2050	Special	Corrugated Metal	30.2	51.424	1.889
D5-D4	10-year 2050	Circular	Concrete	7.46	20.849	3.189
D6-D5	10-year 2050	Circular	Corrugated Metal	4.09	3.652	1.503
D7-D3	10-year 2050	Circular	Concrete	3.73	4.976	1.707
D8-D7	10-year 2050	Circular	Concrete	2.43	4.857	2.184
D9-D8	10-year 2050	Circular	Concrete	6.26	-4.001	0.642
F10-F5	10-year 2050	Circular	Concrete	13.1	12.996	0.995
F11-F10	10-year 2050	Circular	Concrete	4.5	5.071	1.441
F12-F11	10-year 2050	Circular	Concrete	8.64	3.01	0.761
F13-F11	10-year 2050	Circular	Concrete	4.32	5.332	1.302
F14-F13	10-year 2050	Circular	PVC	4.4	3.829	0.946

XPSWMM Link Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	10-year 2050	Circular	Concrete	3.73	3.351	1.015
F16-F15	10-year 2050	Circular	PVC	4.02	3.641	0.916
F17-F10	10-year 2050	Circular	Concrete	10.42	12.455	1.298
F18-F17	10-year 2050	Circular	Concrete	5.91	7.39	1.573
F19-F17	10-year 2050	Circular	Concrete	8.27	8.278	1.144
F2-F1	10-year 2050	Circular	Concrete	16.41	29.922	3.065
F20-F19	10-year 2050	Circular	Concrete	8.18	10.202	1.291
F21-F20	10-year 2050	Circular	Concrete	5.26	5.796	1.661
F22-F20	10-year 2050	Circular	Concrete	3.69	5.739	1.603
F23-F22	10-year 2050	Circular	Concrete	7.79	7.477	1.282
F24-F23	10-year 2050	Circular	Concrete	1.33	8.776	6.932
F25-F24	10-year 2050	Circular	Smooth HDPE	5.04	8.187	1.666
F3-F2	10-year 2050	Circular	Concrete	54.63	15.125	0.513
F4-F2	10-year 2050	Circular	Concrete	10.63	-17.539	1.766
F5-F4	10-year 2050	Circular	Concrete	29.27	-16.709	0.591
F6-F5	10-year 2050	Circular	Concrete	7.92	-8.841	1.238
F7-F6	10-year 2050	Circular	Concrete	2.04	5.177	3.572
F8-F7	10-year 2050	Circular	Concrete	10.49	7.116	0.825
F9-F8	10-year 2050	Circular	Corrugated Metal	2.96	4.34	1.618
G2-G1	10-year 2050	Circular	Concrete	19.84	-21.047	1.781
G3-G2	10-year 2050	Circular	Concrete	17.04	-5.393	1.294
G4-G3	10-year 2050	Circular	Concrete	5.96	8.844	1.486
H2-H1	10-year 2050	Circular	Concrete	6.82	6.027	0.884
H3-H2	10-year 2050	Circular	Concrete	3.63	8.387	2.743
I2-I1	10-year 2050	Circular	Concrete	15.16	20.191	1.334
I3-I2	10-year 2050	Circular	Concrete	3.84	14.433	3.791
I4-I2	10-year 2050	Circular	Concrete	28.62	7.505	0.264
I5-I4	10-year 2050	Circular	Concrete	6.93	3.54	0.511
I6-I4	10-year 2050	Circular	Concrete	5.66	4.052	0.717
J2-J1	10-year 2050	Circular	Concrete	4.21	-4.494	1.076
J3-J2	10-year 2050	Circular	Concrete	2.79	3.236	1.463
J4-J3	10-year 2050	Circular	Concrete	5.09	2.265	0.585
J5-J3	10-year 2050	Circular	Concrete	1.19	3.047	3.019
K10-K9	10-year 2050	Circular	Concrete	4.15	2.866	0.931
K2-K1	10-year 2050	Circular	Corrugated Metal	5.93	0.767	0.129
K3-K2	10-year 2050	Circular	Concrete	3.11	-3.217	1.035
K4-K2	10-year 2050	Circular	Concrete	3.28	3.909	1.192
K5-K4	10-year 2050	Circular	Concrete	5.26	4.433	1.116
K6-K5	10-year 2050	Circular	Concrete	8.63	5.778	0.884
K7-K6	10-year 2050	Circular	Concrete	2.03	4.882	2.401
K8-K7	10-year 2050	Circular	Concrete	3.86	2.876	0.834
K9-K8	10-year 2050	Circular	Concrete	4.72	-3.035	0.772

XPSWMM Link Output Data

10-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	10-year 2050	Circular	Cast Iron	2.27	-2.056	1.835
L3-L2	10-year 2050	Circular	Corrugated Metal	5.35	-2.944	0.712
L4-L2	10-year 2050	Circular	Corrugated Metal	3.17	2.252	0.71
Orifice1.1	10-year 2050			2.21	0.803	0.386
Orifice2.1	10-year 2050			2.21	0.803	0.386
Orifice3.1	10-year 2050			2.21	3.324	1.509
M2-M1	10-year 2050	Circular	Concrete	4.38	7.722	1.762
M3-M2	10-year 2050	Circular	Concrete	6.04	7.311	1.237
M4-M2	10-year 2050	Circular	Concrete	4.75	0.787	0.168

XPSWMM Node Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	10-year 2080	Outfall	1380	0	0	81.136	0
A10	10-year 2080	Manhole	1378.733	0	0	92.262	0
A11	10-year 2080	Grate Inlet	1378.967	1369.6	0	85.742	10043.65
A12	10-year 2080	Grate Inlet	1378.333	1365	0	73.689	9853.6
A13	10-year 2080	Manhole	1377.367	182.9	0	67.956	3929.55
A14	10-year 2080	Grate Inlet	1374.7	1258.7	0	42.129	13141.71
A15	10-year 2080	Grate Inlet	1372.533	839.8	0	56.942	22041.25
A16	10-year 2080	Grate Inlet	1373.433	612.2	0	50.261	7765.9
A17	10-year 2080	Grate Inlet	1373.833	706.1	0	53.158	12567.73
A18	10-year 2080	Grate Inlet	1373.1	747.3	0	48.808	9416.47
A19	10-year 2080	Manhole	1378.783	0	0	96.092	0
A2	10-year 2080	Manhole	1379.48	1374.7	0	87.705	864675.01
A20	10-year 2080	Manhole	1378.65	0	0	96.761	0
A21	10-year 2080	Manhole	1378.25	0	0	96.851	0
A22	10-year 2080	Manhole	1378.083	0	0	93.836	0
A23	10-year 2080	Combination Inlet	1377.15	1374.8	0	92.775	32847.27
A24	10-year 2080	Combination Inlet	1375.7	1372.7	0	78.316	29243.2
A25	10-year 2080	Combination Inlet	1377	1374.7	0	92.12	77358.98
A26	10-year 2080	Combination Inlet	1377.267	1373	0	81.634	21320.54
A27	10-year 2080	Manhole	1374.283	1371.9	0	85.175	42703.15
A28	10-year 2080	Manhole	1375.2	1368.7	0	86.61	16901.71
A29	10-year 2080	Curb Inlet	1376.783	1368.9	0	80.669	12367.93
A3	10-year 2080	Manhole	1378.133	1377	0	72.081	322893.43
A30	10-year 2080	Manhole	1373.15	1368.5	0	82.977	26529.37
A31	10-year 2080	Manhole	1374.667	1357.5	0	77.492	28836
A32	10-year 2080	Combination Inlet	1374.583	1368.7	0	67.83	49810.29
A33	10-year 2080	Combination Inlet	1371.9	1361.6	0	63.271	32451.89
A34	10-year 2080	Manhole	1369.85	522.7	0	59.746	20793.65
A35	10-year 2080	Combination Inlet	1368.267	1203.2	0	56.432	36102.04
A36	10-year 2080	Curb Inlet	1367.533	1350.8	0	66.779	21065.21
A37	10-year 2080	Manhole	1359.333	299.1	0	57.099	28493.01
A38	10-year 2080	Grate Inlet	1359.433	309.8	0	65.233	58935.31
A39	10-year 2080	Grate Inlet	1350.433	282.1	0	50.511	14384.89
A4	10-year 2080	Grate Inlet	1378.067	1377.8	0	64.463	126616.41
A40	10-year 2080	Grate Inlet	1354.1	285.3	0	59.974	43003.79
A41	10-year 2080	Grate Inlet	1343.717	193.7	0	53.804	16156.36
A42	10-year 2080	Underground Junction	1372.8	1365.8	0	81.258	1001.46
A43	10-year 2080	Curb Inlet	1376.65	1370.6	0	80.691	25960.21
A44	10-year 2080	Grate Inlet	1370.517	1366	0	76.967	69225.35
A45	10-year 2080	Underground Junction	1369.367	1349.4	0	82.951	10358.78
A46	10-year 2080	Combination Inlet	1371.1	1359.3	0	72.743	28781.5

XPSWMM Node Output Data
10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A47	10-year 2080	Manhole	1370.817	1347	0	70.647	30738.71
A48	10-year 2080	Manhole	1368.967	1289.9	0	67.466	152884.87
A49	10-year 2080	Combination Inlet	1371.733	1333.8	0	68.483	73182.13
A5	10-year 2080	Grate Inlet	1377.85	1376.6	0	63.553	2527.2
A50	10-year 2080	Manhole	1357.433	385.6	0	59.318	87166.1
A51	10-year 2080	Combination Inlet	1362.3	529.9	0	59.251	64337.7
A52	10-year 2080	Manhole	1270.433	106.5	0	52.718	12988.92
A53	10-year 2080	Combination Inlet	699.7	256.4	0	45.212	16382.22
A54	10-year 2080	Underground Junction	1144.35	12.9	0	53.929	119.31
A55	10-year 2080	Combination Inlet	419.883	60.4	0	40.402	2700.47
A56	10-year 2080	Manhole	710.217	45.8	0	47.942	4251.51
A57	10-year 2080	Grate Inlet	444.867	121.2	0	39.979	7403.64
A58	10-year 2080	Grate Inlet	1369.417	1362.7	0	74.704	43054.18
A59	10-year 2080	Underground Junction	1370.417	1352.5	0	75.517	3725.86
A6	10-year 2080	Manhole	1377.2	1373	0	55.319	91235.12
A60	10-year 2080	Combination Inlet	1371.65	1365.7	0	72.225	29612.22
A61	10-year 2080	Grate Inlet	1370.45	1365.7	0	75.39	57101.65
A62	10-year 2080	Grate Inlet	1370.4	1364	0	74.043	81720.95
A63	10-year 2080	Grate Inlet	1370.683	1356.3	0	62.694	13590.19
A64	10-year 2080	Manhole	1371	589.2	0	73.046	83164.71
A65	10-year 2080	Manhole	1370.767	676.9	0	71.087	79493.45
A66	10-year 2080	Curb Inlet	1367.6	684.3	0	59.39	43005.6
A67	10-year 2080	Curb Inlet	1362.983	643.3	0	63.612	17744.05
A68	10-year 2080	Manhole	795.267	11.3	0	75.697	4117.39
A69	10-year 2080	Combination Inlet	722.6	20.5	0	68.941	5871.62
A7	10-year 2080	Grate Inlet	1377.25	1375.6	0	53.456	89527.83
A70	10-year 2080	Grate Inlet	605.367	68.8	0	50.737	9855.6
A71	10-year 2080	Curb Inlet	547.167	26.2	0	54.231	4274.16
A72	10-year 2080	Manhole	77.817	8.1	0	72.953	646.68
A73	10-year 2080	Underground Junction	40.467	0	0	63.531	2.43
A74	10-year 2080	Curb Inlet	34.25	4.3	0	56.349	331.52
A75	10-year 2080	Manhole	27.35	9.2	0	63.515	635.97
A76	10-year 2080	Curb Inlet	28.4	14.1	0	55.247	2621.06
A77	10-year 2080	Curb Inlet	27.883	3.8	0	68.156	298.11
A78	10-year 2080	Curb Inlet	26.583	7.2	0	61.952	431.97
A79	10-year 2080	Combination Inlet	18.9	10.4	0	49.79	125.05
A8	10-year 2080	Curb Inlet	1377.2	1364.1	0	52.169	14871.36
A80	10-year 2080	Pond Structure	37.25	0	0	55.009	0
A81	10-year 2080	Pond Structure	46.333	46.3	0	53.608	705.27
A82	10-year 2080	Grate Inlet	41.2	6.3	0	37.512	408.27
A83	10-year 2080	Grate Inlet	61.1	14.2	0	41.611	561.71

XPSWMM Node Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A84	10-year 2080	Pond Structure	68.167	68.2	0	78.813	0.33
A85	10-year 2080	Manhole	848.233	28.9	0	83.773	1630.9
A86	10-year 2080	Manhole	949.817	29	0	105.588	1458.42
A87	10-year 2080	Curb Inlet	1037.467	102	0	101.925	3539.89
A88	10-year 2080	Pond Structure	399.15	399.1	0	66.105	11220.79
A89	10-year 2080	Manhole	695.817	13.3	0	55.29	1142.92
A90	10-year 2080	Grate Inlet	694.317	31.6	0	63.523	909.35
A91	10-year 2080	Pond Structure	459.567	459.6	0	63.975	7873.24
A92	10-year 2080	Grate Inlet	751.567	305.7	0	59.236	23191.58
A93	10-year 2080	Grate Inlet	790.883	116.8	0	51.418	2118.11
B1	10-year 2080	Outfall	1380	0	0	85.337	0
B10	10-year 2080	Grate Inlet	1378.7	758.4	0	56.663	16500.38
B11	10-year 2080	Grate Inlet	1378.417	668.3	0	50.065	9859.59
B12	10-year 2080	Underground Junction	1378.65	0	0	56.056	0
B13	10-year 2080	Grate Inlet	1378.5	835.4	0	56.331	10760.71
B14	10-year 2080	Grate Inlet	1378.25	442.2	0	55.397	8805.14
B15	10-year 2080	Grate Inlet	1377.967	817.3	0	50.922	10117.74
B16	10-year 2080	Curb Inlet	1378.433	1378.1	0	55.416	14082.25
B17	10-year 2080	Grate Inlet	1378.25	1378.1	0	49.271	20125.95
B2	10-year 2080	Underground Junction	1379.16	0	0	61.601	0
B3	10-year 2080	Grate Inlet	1378.967	843.3	0	50.87	21817.07
B4	10-year 2080	Grate Inlet	1378.817	592.6	0	49.481	8069.58
B5	10-year 2080	Grate Inlet	1379.2	687.3	0	56.558	16087.7
B6	10-year 2080	Grate Inlet	1378.917	690	0	58.308	13099.71
B7	10-year 2080	Grate Inlet	1378.45	516	0	54.222	9305.72
B8	10-year 2080	Grate Inlet	1378.1	572.6	0	52.025	7087.32
B9	10-year 2080	Underground Junction	1378.717	0	0	55.553	0
BIO3	10-year 2080	mily Dollar Bioretentio	156.5	0	0	2732.1	0
C1	10-year 2080	Outfall	1380	0	0	84.802	0
C10	10-year 2080	Grate Inlet	1378.217	651.5	0	59.363	11224.37
C11	10-year 2080	Grate Inlet	1377.567	597.3	0	51.05	6784.11
C12	10-year 2080	Underground Junction	1378.667	0	0	89.375	0
C13	10-year 2080	Grate Inlet	1378.517	753.1	0	56.907	19340.67
C14	10-year 2080	Grate Inlet	1378	367	0	47.984	5521.65
C15	10-year 2080	Underground Junction	1378.8	0	0	60.729	0
C16	10-year 2080	Grate Inlet	1378.483	461.3	0	54.301	6138.12
C17	10-year 2080	Grate Inlet	1378.233	638.4	0	52.062	6551.86
C18	10-year 2080	Curb Inlet	1378.4	1334.9	0	79.216	713110.21
C19	10-year 2080	Manhole	1378.65	1230.4	0	64.281	131738.42
C2	10-year 2080	Underground Junction	1379.52	0	0	92.339	0
C20	10-year 2080	Manhole	1377.5	1159.3	0	56.044	183790.83

XPSWMM Node Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C21	10-year 2080	Curb Inlet	1377.25	1190.7	0	46.388	69257.38
C22	10-year 2080	Grate Inlet	1377.383	1334.9	0	53.891	142898.61
C23	10-year 2080	Curb Inlet	1377.133	1270.3	0	54.899	31772.27
C24	10-year 2080	Curb Inlet	1377.05	890.4	0	48.402	35615.63
C25	10-year 2080	Manhole	1378.3	1375.4	0	71.934	340105.92
C26	10-year 2080	Combination Inlet	1378.45	1377.1	0	62.929	4497.91
C27	10-year 2080	Curb Inlet	1378.483	1376.8	0	59.008	6402.56
C28	10-year 2080	Manhole	1377.833	1370	0	66.893	83872.76
C29	10-year 2080	Combination Inlet	1378.25	1376.1	0	56.135	13899.24
C3	10-year 2080	Grate Inlet	1379.28	735.6	0	59.427	19441.34
C30	10-year 2080	Combination Inlet	1378.367	1375.6	0	60.708	7580.74
C31	10-year 2080	Manhole	1374.967	506.7	0	55.758	100782.43
C32	10-year 2080	Combination Inlet	1373.617	998.7	0	46.569	125255.11
C33	10-year 2080	Curb Inlet	1344.65	382.5	0	46.122	30288.24
C34	10-year 2080	Manhole	1373.083	513.9	0	56.235	174134.63
C35	10-year 2080	Combination Inlet	1372.933	1112.7	0	49.477	250635.48
C36	10-year 2080	Combination Inlet	1376.483	1131.7	0	50.726	225694.17
C37	10-year 2080	Manhole	1103.417	7.3	0	62.113	1465.76
C38	10-year 2080	Underground Junction	1374.45	0.6	0	60.855	59.24
C39	10-year 2080	Curb Inlet	122.033	7.8	0	33.517	202.61
C4	10-year 2080	Grate Inlet	1378.967	607.3	0	53.615	8052.42
C40	10-year 2080	Combination Inlet	816.017	9.5	0	60.843	2300.59
C41	10-year 2080	Combination Inlet	99.1	10.7	0	46.592	1664.86
C42	10-year 2080	Curb Inlet	567.517	11.3	0	58.727	2614.52
C43	10-year 2080	Curb Inlet	1326.217	12.3	0	50.495	447.66
C44	10-year 2080	Underground Junction	12.483	0	0	35.497	0
C45	10-year 2080	Combination Inlet	0	0	0	14.22	0
C46	10-year 2080	Grate Inlet	0	0	0	8.315	0
C47	10-year 2080	Combination Inlet	9.033	0	0	13.825	0
C5	10-year 2080	Grate Inlet	1379.08	723.9	0	55.477	15691.37
C6	10-year 2080	Grate Inlet	1378.683	463.4	0	47.634	5787.07
C7	10-year 2080	Underground Junction	1379.24	0	0	89.99	0
C8	10-year 2080	Underground Junction	1378.667	0	0	68.041	0
C9	10-year 2080	Grate Inlet	1377.7	557.9	0	49.216	6415.38
D1	10-year 2080	Outfall	1380	0	0	68.488	0
D10	10-year 2080	Curb Inlet	89.767	22.2	0	28.003	261.99
D11	10-year 2080	Manhole	1376.55	52.4	0	46.142	1708.94
D12	10-year 2080	Combination Inlet	1376.867	59.5	0	44.546	25046.89
D13	10-year 2080	Manhole	1368.233	6.5	0	53.43	161.15
D14	10-year 2080	Grate Inlet	0	0	0	14.845	0
D2	10-year 2080	Combination Inlet	1379.16	1138.4	0	75.374	1326570.18

XPSWMM Node Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
D3	10-year 2080	Manhole	1379.16	890.5	0	77.129	1261305.54
D4	10-year 2080	Drop Curb Inlet	1370.31	1167.1	0	64.282	522883.81
D5	10-year 2080	Combination Inlet	1379.44	1376.1	0	57.283	76783.92
D6	10-year 2080	Combination Inlet	1379.36	1258.5	0	49.184	13539.86
D7	10-year 2080	Manhole	1378.867	510.5	0	45.562	20262.95
D8	10-year 2080	Underground Junction	1377.85	60.9	0	46.883	548.32
D9	10-year 2080	Grate Inlet	1377.517	812.3	0	39.63	35942.82
F1	10-year 2080	Outfall	1380	0	0	74.303	0
F10	10-year 2080	Manhole	1376.933	37.9	0	59.362	4568.85
F11	10-year 2080	Manhole	1376.133	37.2	0	46.534	4141.15
F12	10-year 2080	Combination Inlet	101.017	32.7	0	40.115	570.32
F13	10-year 2080	Manhole	85.133	28.5	0	46.679	327.27
F14	10-year 2080	Grate Inlet	69.05	35.5	0	38.42	1239.68
F15	10-year 2080	Manhole	57.233	19.9	0	44.585	311.38
F16	10-year 2080	Grate Inlet	35.45	24.1	0	35.638	11.28
F17	10-year 2080	Manhole	209.8	31.1	0	61.245	2595.12
F18	10-year 2080	Combination Inlet	1375.833	28	0	53.817	2381.95
F19	10-year 2080	Manhole	87.733	23.8	0	57.686	990.5
F2	10-year 2080	Grate Inlet	1379.8	1379.8	0	71.511	1370606.72
F20	10-year 2080	Manhole	76.067	30	0	53.864	3634.41
F21	10-year 2080	Combination Inlet	70.317	31.1	0	47.828	4942.56
F22	10-year 2080	Manhole	77.633	59	0	51.798	7572.23
F23	10-year 2080	Grate Inlet	70.583	60.3	0	51.667	4057.31
F24	10-year 2080	Drop Curb Inlet	73.617	61.2	0	53.383	18758.17
F25	10-year 2080	Pond Structure	108.333	42.1	0	53.472	0
F3	10-year 2080	Grate Inlet	1379.72	1379.7	0	61.79	794175.25
F4	10-year 2080	Manhole	1379.32	1377.6	0	64.396	71284.3
F5	10-year 2080	Underground Junction	1379.12	1376.6	0	61.45	173.35
F6	10-year 2080	Grate Inlet	1379	1378	0	59.707	80496.13
F7	10-year 2080	Manhole	1378.383	74.8	0	69.734	4360.46
F8	10-year 2080	Grate Inlet	1376.967	61.7	0	56.757	4391.92
F9	10-year 2080	Slotted Inlet	1371.617	86.5	0	40.331	18295.68
G1	10-year 2080	Outfall	1380	0	0	81.899	0
G2	10-year 2080	Grate Inlet	1380	1380	0	64.61	2021581.57
G3	10-year 2080	Grate Inlet	1379.84	1379.8	0	55.147	499538.66
G4	10-year 2080	Grate Inlet	1379.68	988.8	0	60.333	42417.44
H1	10-year 2080	Outfall	1380	0	0	88.252	0
H2	10-year 2080	Combination Inlet	1379.4	1174.1	0	65.645	92019.56
H3	10-year 2080	Combination Inlet	1379.44	1241	0	67.399	146973.57
I1	10-year 2080	Outfall	1380	0	0	28.525	0
I2	10-year 2080	Underground Junction	22.633	0	0	48.195	0

XPSWMM Node Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
I3	10-year 2080	Grate Inlet	42.667	21.7	0	64.851	13230.7
I4	10-year 2080	Manhole	0	0	0	10.373	0
I5	10-year 2080	Combination Inlet	0	0	0	9.047	0
I6	10-year 2080	Combination Inlet	0	0	0	10.715	0
J1	10-year 2080	Outfall	1380	0	0	79.487	0
J2	10-year 2080	Curb Inlet	1378.967	1378.3	0	69.461	4563.58
J3	10-year 2080	Underground Junction	1378.917	319.1	0	67.886	11.64
J4	10-year 2080	Grate Inlet	1378.817	1378.5	0	61.116	50951.35
J5	10-year 2080	Combination Inlet	1378.983	1376	0	68.437	101087.49
K1	10-year 2080	Outfall	1380	0	0	71.959	0
K10	10-year 2080	Grate Inlet	1280.483	96.1	0	44.078	4359.85
K2	10-year 2080	Underground Junction	0	0	0	61.249	0
K3	10-year 2080	Grate Inlet	1350.95	1280.6	0	52.477	48151.26
K4	10-year 2080	Combination Inlet	1345.517	1280.7	0	60.786	32542.75
K5	10-year 2080	Manhole	1333.45	50.2	0	58.535	4086.05
K6	10-year 2080	Grate Inlet	1321.1	216.2	0	57.019	7446.97
K7	10-year 2080	Grate Inlet	1313.933	706.2	0	62.577	22066.76
K8	10-year 2080	Grate Inlet	1299.783	581	0	56.794	23573.22
K9	10-year 2080	Grate Inlet	1284.95	320	0	50.023	12517.96
L1	10-year 2080	Outfall	1380	0	0	60.246	0
L2	10-year 2080	Grate Inlet	1379.72	1379.7	0	45.402	170148.77
L3	10-year 2080	Pipe Inlet	1379.143	1379.1	0	38.374	41108.69
L4	10-year 2080	Pipe Inlet	1366.483	1366.5	0	32.569	1418.08
M1	10-year 2080	Outfall	1380	0	0	22.619	0
M2	10-year 2080	Underground Junction	45.467	0	0	64.944	0
M3	10-year 2080	Combination Inlet	37.067	27	0	63.148	7546.79
M4	10-year 2080	Combination Inlet	30.333	0	0	41.619	0
POND1	10-year 2080	yon Homes Apartment	586.467	0	0	108.286	0

XPSWMM Link Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	10-year 2080	Circular	Concrete	4.53	-35.524	8.29
A11-A10	10-year 2080	Circular	Concrete	6.73	-4.818	0.721
A12-A11	10-year 2080	Circular	Concrete	6.67	-3.434	0.552
A13-A12	10-year 2080	Circular	PVC	1.61	1.216	0.909
A14-A13	10-year 2080	Circular	PVC	3.06	-1.541	0.62
A15-A13	10-year 2080	Circular	PVC	2.16	1.276	0.694
A16-A15	10-year 2080	Circular	Terra Cotta	1.13	-1.245	1.291
A17-A15	10-year 2080	Circular	Terra Cotta	0.83	1.191	1.652
A18-A17	10-year 2080	Circular	Terra Cotta	0.9	1.282	1.573
A19-A10	10-year 2080	Circular	Concrete	35.99	-29.241	0.813
A2-A1	10-year 2080	Circular	Concrete	22.06	-54.933	2.951
A20-A19	10-year 2080	Circular	Concrete	8.08	-25.239	3.593
A21-A20	10-year 2080	Circular	Concrete	16.9	-24.495	1.644
A22-A21	10-year 2080	Circular	Concrete	43.52	-24.85	0.576
A23-A22	10-year 2080	Circular	Concrete	18.14	-22.125	1.27
A24-A23	10-year 2080	Circular	Concrete	25.18	-29.233	1.304
A25-A23	10-year 2080	Circular	Concrete	16.21	-37.324	3.353
A26-A25	10-year 2080	Circular	Concrete	18.91	-30.115	1.745
A27-A25	10-year 2080	Circular	Concrete	149.5	-90.235	1.03
A28-A27	10-year 2080	Circular	Concrete	15.72	-21.813	2.258
A29-A28	10-year 2080	Circular	Concrete	17.68	-4.793	1.414
A3-A2	10-year 2080	Special	Concrete	27.26	-21.747	0.825
A30-A28	10-year 2080	Circular	Concrete	47.75	-28.381	0.806
A31-A30	10-year 2080	Circular	Concrete	6.73	-6.605	1.177
A32-A31	10-year 2080	Circular	Concrete	9.76	6.97	1.446
A33-A32	10-year 2080	Circular	Concrete	9.44	-10.982	1.703
A34-A31	10-year 2080	Circular	Concrete	4.38	2.293	0.568
A35-A34	10-year 2080	Circular	Concrete	6.96	-5.843	1.667
A36-A31	10-year 2080	Circular	Concrete	17.99	8.708	0.682
A37-A36	10-year 2080	Circular	Corrugated Metal	4.36	5.009	1.179
A38-A37	10-year 2080	Circular	Corrugated Metal	1.18	8.854	8.748
A39-A38	10-year 2080	Special	Corrugated Metal	5.44	-4.728	0.998
A4-A3	10-year 2080	Special	Concrete	14.68	-10.166	0.7
A40-A38	10-year 2080	Special	Corrugated Metal	7	8.502	1.401
A41-A40	10-year 2080	Special	Corrugated Metal	3.89	7.288	2.105
A42-A30	10-year 2080	Circular	Concrete	25.67	-20.739	0.864
A43-A42	10-year 2080	Circular	Concrete	3.75	5.81	3.046
A44-A42	10-year 2080	Circular	Concrete	20.97	-13.765	0.864
A45-A44	10-year 2080	Circular	Concrete	6.48	-13.543	2.117
A46-A45	10-year 2080	Special	Concrete	25.77	-31.638	1.564
A47-A46	10-year 2080	Special	Concrete	11.85	-11.908	1.152
A48-A47	10-year 2080	Special	Concrete	13.92	7.802	0.707

XPSWMM Link Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	10-year 2080	Circular	Concrete	6.53	-15.655	3.096
A5-A4	10-year 2080	Special	Concrete	13.58	13.987	1.03
A50-A48	10-year 2080	Special	Concrete	13.94	11.937	0.857
A51-A50	10-year 2080	Circular	Concrete	5.98	-18.071	4.043
A52-A50	10-year 2080	Circular	Concrete	7.32	6.048	0.858
A53-A52	10-year 2080	Circular	Concrete	8.59	-7.407	1.061
A54-A52	10-year 2080	Circular	Concrete	4.91	8.495	1.842
A55-A54	10-year 2080	Circular	Concrete	8.36	5.551	0.813
A56-A54	10-year 2080	Circular	Concrete	8.47	7.53	1.18
A57-A56	10-year 2080	Circular	Concrete	10.11	6.226	0.782
A58-A45	10-year 2080	Circular	Concrete	104.63	-203.525	1.945
A59-A58	10-year 2080	Circular	Concrete	26.14	32.956	1.432
A6-A3	10-year 2080	Special	Concrete	8.57	-10.209	1.585
A60-A59	10-year 2080	Circular	Concrete	11.37	-16.114	1.655
A61-A59	10-year 2080	Circular	Concrete	11.8	-29.067	3.55
A62-A61	10-year 2080	Circular	Concrete	10.18	13.328	1.491
A63-A62	10-year 2080	Circular	Concrete	6.42	-4.971	1.128
A64-A62	10-year 2080	Circular	Concrete	13.43	33.71	3.147
A65-A64	10-year 2080	Circular	Concrete	11.08	-9.319	1.058
A66-A65	10-year 2080	Circular	Concrete	15.64	-5.331	0.523
A67-A65	10-year 2080	Circular	Concrete	17.18	13.089	0.762
A68-A64	10-year 2080	Circular	Concrete	14.28	13.902	1.007
A69-A68	10-year 2080	Circular	Concrete	26.67	-17.209	0.897
A7-A6	10-year 2080	Circular	Concrete	8.3	9.177	2.1
A70-A69	10-year 2080	Circular	Concrete	7.77	-8.437	1.351
A71-A68	10-year 2080	Circular	Concrete	8.02	5.707	0.817
A72-A68	10-year 2080	Circular	Concrete	10.03	10.817	1.129
A73-A72	10-year 2080	Circular	Concrete	20.79	10.862	0.688
A74-A73	10-year 2080	Circular	Concrete	14.94	3.197	0.445
A75-A73	10-year 2080	Circular	Concrete	8.8	9.795	1.15
A76-A75	10-year 2080	Circular	Concrete	4.5	5.63	1.293
A77-A75	10-year 2080	Circular	Concrete	8.04	8.26	1.344
A78-A77	10-year 2080	Circular	Concrete	4.78	5.28	1.575
A79-A78	10-year 2080	Circular	Concrete	4.41	3.418	0.907
A8-A6	10-year 2080	Special	Concrete	2.31	5.188	5.427
A80-A72	10-year 2080	Circular	Concrete	2.1	6.577	3.576
A81-BIO3	10-year 2080	Circular	Concrete	2.97	3.449	1.229
A82-A81	10-year 2080	Circular	Smooth HDPE	2.56	-2.874	1.583
A83-A82	10-year 2080	Circular	Smooth HDPE	3.6	3.752	1.113
A85-A84	10-year 2080	Circular	Concrete	3.68	-2.778	1.347
A86-A85	10-year 2080	Circular	Concrete	2.3	1.814	0.857
A87-A86	10-year 2080	Circular	Concrete	3.13	3.27	1.581

XPSWMM Link Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	10-year 2080	Circular	Smooth HDPE	2.87	2.559	1.078
A90-A89	10-year 2080	Circular	Smooth HDPE	1.85	3.37	1.893
A92-A91	10-year 2080	Circular	Smooth HDPE	1.64	-7.196	4.931
A93-A92	10-year 2080	Circular	Smooth HDPE	1	-3.095	3.429
B10-B9	10-year 2080	Circular	Terra Cotta	0.82	1.357	2.767
B11-B10	10-year 2080	Circular	Terra Cotta	1.15	1.271	1.267
B12-B9	10-year 2080	Circular	Terra Cotta	0.83	-2.23	3.578
B13-B12	10-year 2080	Circular	Terra Cotta	0.51	1.323	3.026
B14-B12	10-year 2080	Circular	Terra Cotta	0.67	-1.417	2.122
B15-B14	10-year 2080	Circular	Terra Cotta	0.89	1.369	1.72
B16-B9	10-year 2080	Circular	Corrugated Metal	0.6	-1.742	4.496
B17-B16	10-year 2080	Circular	Corrugated Metal	2.58	-0.555	0.644
B2-B1	10-year 2080	Circular	Concrete	19.17	-17.606	0.946
B3-B2	10-year 2080	Circular	Terra Cotta	2.09	1.921	0.968
B4-B3	10-year 2080	Circular	Terra Cotta	0.64	1.323	2.254
B5-B2	10-year 2080	Circular	Terra Cotta	1.76	1.856	1.436
B6-B5	10-year 2080	Circular	Terra Cotta	0.73	-1.579	2.429
B7-B6	10-year 2080	Circular	Terra Cotta	0.72	1.434	2.144
B8-B7	10-year 2080	Circular	Terra Cotta	0.7	1.21	1.837
B9-B2	10-year 2080	Circular	Concrete	10.73	-10.613	1.127
C10-C8	10-year 2080	Circular	Terra Cotta	1.16	1.292	1.151
C11-C10	10-year 2080	Circular	Terra Cotta	1.27	-1.131	1.044
C12-C7	10-year 2080	Special	Corrugated Metal	21.52	-40.32	1.996
C13-C12	10-year 2080	Circular	Terra Cotta	1.63	1.588	1.09
C14-C13	10-year 2080	Circular	Terra Cotta	1.14	-1.195	1.16
C15-C12	10-year 2080	Circular	Terra Cotta	1.79	1.658	1.142
C16-C15	10-year 2080	Circular	Terra Cotta	1.5	1.367	1.167
C17-C15	10-year 2080	Circular	Terra Cotta	1.2	1.024	0.976
C18-C12	10-year 2080	Special	Corrugated Metal	1.5	-34.709	24.281
C19-C18	10-year 2080	Circular	Concrete	17.9	-12.826	0.925
C2-C1	10-year 2080	Special	Corrugated Metal	18.05	-45.487	3.332
C20-C19	10-year 2080	Circular	Concrete	4.61	-5.805	1.576
C21-C20	10-year 2080	Circular	Concrete	8.77	-5.65	0.75
C22-C20	10-year 2080	Circular	Concrete	6.35	-12.536	2.395
C23-C22	10-year 2080	Circular	Concrete	5.35	6.181	1.157
C24-C23	10-year 2080	Circular	Corrugated Metal	3.59	3.124	1.1
C25-C18	10-year 2080	Circular	Concrete	13.58	19.856	2.291
C26-C25	10-year 2080	Circular	Concrete	11.86	8.696	0.814
C27-C26	10-year 2080	Circular	Concrete	6.67	3.75	1.345
C28-C25	10-year 2080	Circular	Concrete	31.65	-17.368	0.841
C29-C28	10-year 2080	Circular	Concrete	12.33	-13.959	1.438
C3-C2	10-year 2080	Circular	Terra Cotta	3.8	2.094	0.6

XPSWMM Link Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	10-year 2080	Circular	Concrete	1.74	-10.801	9.052
C31-C28	10-year 2080	Circular	Concrete	24.95	-17.447	0.713
C32-C31	10-year 2080	Circular	Concrete	14.63	-9.764	0.827
C33-C32	10-year 2080	Circular	Concrete	6.49	7.674	1.433
C34-C31	10-year 2080	Circular	Concrete	18.17	21.31	1.292
C35-C34	10-year 2080	Circular	Concrete	15.06	-23.307	1.893
C36-C34	10-year 2080	Circular	Concrete	10.38	-21.855	2.35
C37-C34	10-year 2080	Circular	Concrete	22.46	22.703	1.103
C38-C37	10-year 2080	Circular	Concrete	10.64	9.854	1.297
C39-C38	10-year 2080	Circular	Corrugated Metal	3.86	1.936	0.622
C4-C3	10-year 2080	Circular	Terra Cotta	0.93	1.419	1.618
C40-C38	10-year 2080	Circular	Concrete	10.16	10.745	1.211
C41-C40	10-year 2080	Circular	Concrete	15.19	15.043	1.054
C42-C37	10-year 2080	Circular	Concrete	13.67	23.339	1.777
C43-C42	10-year 2080	Circular	Concrete	4.89	5.793	1.664
C44-C42	10-year 2080	Circular	Concrete	15.91	7.983	0.525
C45-C44	10-year 2080	Circular	Concrete	9.24	3.694	0.418
C46-C44	10-year 2080	Circular	Concrete	20.35	4.479	0.223
C47-C46	10-year 2080	Circular	Concrete	3.21	4.329	1.352
C5-C2	10-year 2080	Circular	Terra Cotta	3.32	1.806	0.565
C6-C5	10-year 2080	Circular	Terra Cotta	0.96	1.108	1.326
C7-C2	10-year 2080	Special	Corrugated Metal	14.03	-41.99	3.628
C8-C7	10-year 2080	Circular	Terra Cotta	1.46	-1.272	0.885
C9-C8	10-year 2080	Circular	Terra Cotta	2.15	1.354	0.805
D10-D8	10-year 2080	Circular	Concrete	12.95	2.973	0.266
D11-D8	10-year 2080	Circular	Concrete	6.61	6.324	0.973
D12-D11	10-year 2080	Circular	PVC	3.11	9.7	3.524
D13-D11	10-year 2080	Circular	Concrete	2.49	2.371	1.16
D14-D13	10-year 2080	Circular	PVC	6.77	1.995	0.303
D2-D1	10-year 2080	Special	Concrete	50.58	32.595	1.063
D3-D2	10-year 2080	Special	Corrugated Metal	15.34	-99.895	7.786
D4-D3	10-year 2080	Special	Corrugated Metal	30.2	-46.448	2.048
D5-D4	10-year 2080	Circular	Concrete	7.46	13.999	1.96
D6-D5	10-year 2080	Circular	Corrugated Metal	4.09	5.905	1.553
D7-D3	10-year 2080	Circular	Concrete	3.73	-6.67	1.873
D8-D7	10-year 2080	Circular	Concrete	2.43	4.08	1.789
D9-D8	10-year 2080	Circular	Concrete	6.26	-4.038	0.677
F10-F5	10-year 2080	Circular	Concrete	13.1	12.84	0.983
F11-F10	10-year 2080	Circular	Concrete	4.5	5.044	1.517
F12-F11	10-year 2080	Circular	Concrete	8.64	4.359	0.771
F13-F11	10-year 2080	Circular	Concrete	4.32	5.682	1.401
F14-F13	10-year 2080	Circular	PVC	4.4	3.825	1.05

XPSWMM Link Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	10-year 2080	Circular	Concrete	3.73	3.547	1.098
F16-F15	10-year 2080	Circular	PVC	4.02	3.692	0.936
F17-F10	10-year 2080	Circular	Concrete	10.42	12.407	1.248
F18-F17	10-year 2080	Circular	Concrete	5.91	8.55	1.614
F19-F17	10-year 2080	Circular	Concrete	8.27	8.825	1.137
F2-F1	10-year 2080	Circular	Concrete	16.41	-35.248	3.512
F20-F19	10-year 2080	Circular	Concrete	8.18	10.405	1.319
F21-F20	10-year 2080	Circular	Concrete	5.26	8.14	1.651
F22-F20	10-year 2080	Circular	Concrete	3.69	5.753	1.614
F23-F22	10-year 2080	Circular	Concrete	7.79	9.396	1.255
F24-F23	10-year 2080	Circular	Concrete	1.33	8.799	7.101
F25-F24	10-year 2080	Circular	Smooth HDPE	5.04	8.182	1.665
F3-F2	10-year 2080	Circular	Concrete	54.63	-9.455	0.793
F4-F2	10-year 2080	Circular	Concrete	10.63	-17.944	1.822
F5-F4	10-year 2080	Circular	Concrete	29.27	-17.281	0.613
F6-F5	10-year 2080	Circular	Concrete	7.92	-8.987	1.277
F7-F6	10-year 2080	Circular	Concrete	2.04	5.764	3.732
F8-F7	10-year 2080	Circular	Concrete	10.49	7.694	0.834
F9-F8	10-year 2080	Circular	Corrugated Metal	2.96	4.392	1.524
G2-G1	10-year 2080	Circular	Concrete	19.84	-32.982	2.185
G3-G2	10-year 2080	Circular	Concrete	17.04	-7.149	1.321
G4-G3	10-year 2080	Circular	Concrete	5.96	8.811	1.479
H2-H1	10-year 2080	Circular	Concrete	6.82	4.868	0.809
H3-H2	10-year 2080	Circular	Concrete	3.63	-8.562	2.624
I2-I1	10-year 2080	Circular	Concrete	15.16	19.85	1.312
I3-I2	10-year 2080	Circular	Concrete	3.84	13.634	3.642
I4-I2	10-year 2080	Circular	Concrete	28.62	8.56	0.301
I5-I4	10-year 2080	Circular	Concrete	6.93	4.023	0.581
I6-I4	10-year 2080	Circular	Concrete	5.66	4.621	0.817
J2-J1	10-year 2080	Circular	Concrete	4.21	-5.415	1.289
J3-J2	10-year 2080	Circular	Concrete	2.79	-3.873	1.424
J4-J3	10-year 2080	Circular	Concrete	5.09	-2.111	0.457
J5-J3	10-year 2080	Circular	Concrete	1.19	1.693	1.825
K10-K9	10-year 2080	Circular	Concrete	4.15	-2.558	0.935
K2-K1	10-year 2080	Circular	Corrugated Metal	5.93	-0.659	0.111
K3-K2	10-year 2080	Circular	Concrete	3.11	-3.633	1.169
K4-K2	10-year 2080	Circular	Concrete	3.28	3.167	0.966
K5-K4	10-year 2080	Circular	Concrete	5.26	4.87	1.073
K6-K5	10-year 2080	Circular	Concrete	8.63	5.843	0.833
K7-K6	10-year 2080	Circular	Concrete	2.03	5.08	2.499
K8-K7	10-year 2080	Circular	Concrete	3.86	2.451	0.944
K9-K8	10-year 2080	Circular	Concrete	4.72	3.073	0.768

XPSWMM Link Output Data

10-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	10-year 2080	Circular	Cast Iron	2.27	-2.966	2.197
L3-L2	10-year 2080	Circular	Corrugated Metal	5.35	-3.546	0.848
L4-L2	10-year 2080	Circular	Corrugated Metal	3.17	2.274	0.717
Orifice1.1	10-year 2080			2.21	0.749	0.379
Orifice2.1	10-year 2080			2.21	0.749	0.379
Orifice3.1	10-year 2080			2.21	3.209	1.499
M2-M1	10-year 2080	Circular	Concrete	4.38	7.418	1.692
M3-M2	10-year 2080	Circular	Concrete	6.04	6.958	1.169
M4-M2	10-year 2080	Circular	Concrete	4.75	0.891	0.188

XPSWMM Node Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	100-year	Outfall	1380.00	0.00	0.00	54.75	0.00
A10	100-year	Manhole	1377.95	0.00	0.00	93.39	0.00
A11	100-year	Grate Inlet	1378.70	860.00	0.00	86.64	9397.63
A12	100-year	Grate Inlet	1377.70	833.00	0.00	74.32	10034.12
A13	100-year	Manhole	1376.28	217.50	0.00	68.18	4005.18
A14	100-year	Grate Inlet	887.10	781.40	0.00	44.35	6278.06
A15	100-year	Grate Inlet	927.32	568.10	0.00	59.16	12796.19
A16	100-year	Grate Inlet	1332.05	475.90	0.00	52.12	6635.65
A17	100-year	Grate Inlet	1337.75	528.90	0.00	55.28	8279.34
A18	100-year	Grate Inlet	1312.18	536.00	0.00	50.67	7876.36
A19	100-year	Manhole	1378.17	0.00	0.00	97.25	0.00
A2	100-year	Manhole	1379.28	819.50	0.00	88.10	413748.37
A20	100-year	Manhole	1378.05	0.00	0.00	97.97	0.00
A21	100-year	Manhole	1377.78	0.00	0.00	98.18	0.00
A22	100-year	Manhole	1377.45	0.00	0.00	95.19	0.00
A23	100-year	Combination Inlet	1375.28	1320.10	0.00	94.84	518130.58
A24	100-year	Combination Inlet	1291.30	1215.00	0.00	80.38	207823.65
A25	100-year	Combination Inlet	1375.00	1332.50	0.00	94.21	312823.96
A26	100-year	Combination Inlet	1376.45	1289.20	0.00	83.72	280620.84
A27	100-year	Manhole	1320.70	1245.70	0.00	87.26	1259325.45
A28	100-year	Manhole	1371.80	1153.00	0.00	88.67	117619.02
A29	100-year	Curb Inlet	1375.87	1196.70	0.00	82.73	83251.62
A3	100-year	Manhole	1377.00	842.10	0.00	72.39	159651.07
A30	100-year	Manhole	1367.05	1175.70	0.00	85.03	167806.59
A31	100-year	Manhole	1370.37	865.00	0.00	79.56	28141.93
A32	100-year	Combination Inlet	1368.83	1244.30	0.00	69.93	120144.45
A33	100-year	Combination Inlet	1350.62	1023.50	0.00	65.36	74669.87
A34	100-year	Manhole	1303.18	533.90	0.00	61.79	20195.12
A35	100-year	Combination Inlet	1126.23	771.10	0.00	58.59	30814.69
A36	100-year	Curb Inlet	1047.28	844.60	0.00	68.87	26325.21
A37	100-year	Manhole	847.02	344.10	0.00	58.52	33931.67
A38	100-year	Grate Inlet	846.17	348.90	0.00	65.24	64335.67
A39	100-year	Grate Inlet	834.22	323.40	0.00	52.83	15492.37
A4	100-year	Grate Inlet	1377.20	1366.00	0.00	64.84	107524.26
A40	100-year	Grate Inlet	840.17	327.70	0.00	60.30	46713.67
A41	100-year	Grate Inlet	822.47	227.40	0.00	54.23	18150.55
A42	100-year	Underground Junction	1365.53	979.20	0.00	83.32	17796.88
A43	100-year	Curb Inlet	1375.52	1255.90	0.00	82.75	63034.90
A44	100-year	Grate Inlet	1340.03	1015.90	0.00	79.04	92513.59
A45	100-year	Underground Junction	1347.53	855.20	0.00	83.39	15194.02
A46	100-year	Combination Inlet	1364.43	904.70	0.00	74.80	52069.75

XPSWMM Node Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A47	100-year	Manhole	1361.68	855.90	0.00	72.70	23861.13
A48	100-year	Manhole	1328.73	810.30	0.00	69.49	59403.54
A49	100-year	Combination Inlet	1369.57	845.60	0.00	70.50	31926.25
A5	100-year	Grate Inlet	1376.45	839.60	0.00	65.22	5403.76
A50	100-year	Manhole	853.50	426.30	0.00	59.18	88042.15
A51	100-year	Combination Inlet	871.00	570.00	0.00	59.14	73710.24
A52	100-year	Manhole	763.55	137.20	0.00	52.60	17273.26
A53	100-year	Combination Inlet	704.00	294.40	0.00	45.11	19247.66
A54	100-year	Underground Junction	753.70	17.90	0.00	53.82	145.34
A55	100-year	Combination Inlet	460.60	80.10	0.00	41.25	4377.01
A56	100-year	Manhole	712.55	62.60	0.00	48.42	6234.40
A57	100-year	Grate Inlet	482.23	153.60	0.00	40.30	9917.49
A58	100-year	Grate Inlet	1310.23	964.10	0.00	76.77	115547.61
A59	100-year	Underground Junction	1355.93	860.80	0.00	77.57	7513.45
A6	100-year	Manhole	1373.78	848.90	0.00	55.89	59325.07
A60	100-year	Combination Inlet	1355.85	1149.30	0.00	74.29	84321.86
A61	100-year	Grate Inlet	1353.15	1125.40	0.00	77.45	146224.72
A62	100-year	Grate Inlet	1361.38	958.50	0.00	76.16	113596.01
A63	100-year	Grate Inlet	1363.25	880.70	0.00	64.81	20233.76
A64	100-year	Manhole	1367.17	622.80	0.00	75.19	92641.32
A65	100-year	Manhole	1364.92	680.00	0.00	73.28	87537.72
A66	100-year	Curb Inlet	1149.02	689.20	0.00	61.53	49211.83
A67	100-year	Curb Inlet	990.68	665.00	0.00	67.02	22706.73
A68	100-year	Manhole	745.68	16.80	0.00	76.22	5653.24
A69	100-year	Combination Inlet	730.90	27.30	0.00	69.52	8564.37
A7	100-year	Grate Inlet	1376.20	934.60	0.00	54.30	77379.49
A70	100-year	Grate Inlet	651.12	97.00	0.00	51.84	16503.00
A71	100-year	Curb Inlet	602.82	32.90	0.00	55.83	7997.35
A72	100-year	Manhole	110.05	12.80	0.00	73.83	1009.84
A73	100-year	Underground Junction	54.25	0.60	0.00	68.83	44.73
A74	100-year	Curb Inlet	46.00	9.70	0.00	56.76	735.83
A75	100-year	Manhole	35.80	13.70	0.00	64.54	1041.03
A76	100-year	Curb Inlet	37.25	20.30	0.00	56.32	5671.32
A77	100-year	Curb Inlet	36.28	8.80	0.00	68.31	1076.30
A78	100-year	Curb Inlet	34.88	13.70	0.00	61.97	1113.11
A79	100-year	Combination Inlet	24.87	16.30	0.00	51.03	476.20
A8	100-year	Curb Inlet	1372.75	823.00	0.00	52.77	15024.94
A80	100-year	Pond Structure	50.58	0.00	0.00	59.04	0.00
A81	100-year	Pond Structure	64.08	64.10	0.00	53.57	1027.93
A82	100-year	Grate Inlet	57.12	10.40	0.00	37.49	757.29
A83	100-year	Grate Inlet	89.05	19.30	0.00	41.76	818.78

XPSWMM Node Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A84	100-year	Pond Structure	90.48	90.50	0.00	78.82	0.45
A85	100-year	Manhole	937.40	37.50	0.00	83.77	2176.74
A86	100-year	Manhole	1030.73	41.30	0.00	105.69	2092.29
A87	100-year	Curb Inlet	1106.53	152.00	0.00	101.79	5351.75
A88	100-year	Pond Structure	436.50	436.50	0.00	66.02	12551.28
A89	100-year	Manhole	712.07	18.60	0.00	55.29	1885.09
A90	100-year	Grate Inlet	711.05	41.70	0.00	63.62	1152.60
A91	100-year	Pond Structure	544.33	544.30	0.00	64.12	9798.42
A92	100-year	Grate Inlet	874.32	446.80	0.00	59.62	33668.00
A93	100-year	Grate Inlet	887.93	172.00	0.00	51.55	3078.91
B1	100-year	Outfall	1380.00	0.00	0.00	58.95	0.00
B10	100-year	Grate Inlet	1378.20	14.40	0.00	56.29	188.29
B11	100-year	Grate Inlet	1376.70	15.70	0.00	49.94	268.00
B12	100-year	Underground Junction	1377.92	0.00	0.00	51.77	0.00
B13	100-year	Grate Inlet	1377.85	15.80	0.00	55.87	147.72
B14	100-year	Grate Inlet	1377.35	17.60	0.00	55.29	210.49
B15	100-year	Grate Inlet	1377.03	19.00	0.00	51.01	786.41
B16	100-year	Curb Inlet	1377.50	342.30	0.00	55.35	15402.50
B17	100-year	Grate Inlet	770.03	350.30	0.00	49.21	18850.10
B2	100-year	Underground Junction	1176.22	0.00	0.00	40.87	0.00
B3	100-year	Grate Inlet	1364.77	2.70	0.00	50.02	44.52
B4	100-year	Grate Inlet	1377.55	7.10	0.00	49.22	62.54
B5	100-year	Grate Inlet	1378.50	4.20	0.00	56.05	67.01
B6	100-year	Grate Inlet	1378.32	17.70	0.00	58.36	341.42
B7	100-year	Grate Inlet	1377.55	19.90	0.00	54.25	659.44
B8	100-year	Grate Inlet	1377.23	20.20	0.00	52.01	605.56
B9	100-year	Underground Junction	22.33	0.00	0.00	36.41	0.00
BIO3	100-year	Family Dollar Bioretention	217.33	0.00	0.00	3482.32	0.00
C1	100-year	Outfall	1380.00	0.00	0.00	58.41	0.00
C10	100-year	Grate Inlet	1377.68	40.10	0.00	59.39	566.50
C11	100-year	Grate Inlet	1376.58	38.70	0.00	51.16	859.71
C12	100-year	Underground Junction	1377.60	0.00	0.00	85.61	0.00
C13	100-year	Grate Inlet	1377.55	56.50	0.00	56.94	1559.03
C14	100-year	Grate Inlet	1367.92	45.70	0.00	47.94	797.59
C15	100-year	Underground Junction	1378.05	0.00	0.00	57.97	0.00
C16	100-year	Grate Inlet	1377.45	53.00	0.00	54.27	805.75
C17	100-year	Grate Inlet	1377.23	55.20	0.00	51.92	637.29
C18	100-year	Curb Inlet	1377.42	148.30	0.00	80.84	45923.17
C19	100-year	Manhole	1377.65	137.40	0.00	63.97	3621.77
C2	100-year	Underground Junction	1379.16	0.00	0.00	79.78	0.00
C20	100-year	Manhole	1376.18	139.70	0.00	55.81	14805.84

XPSWMM Node Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C21	100-year	Curb Inlet	215.65	141.60	0.00	46.44	13870.58
C22	100-year	Grate Inlet	1376.07	153.30	0.00	53.98	32313.01
C23	100-year	Curb Inlet	210.62	145.80	0.00	55.73	1182.77
C24	100-year	Curb Inlet	173.25	137.80	0.00	49.28	10285.38
C25	100-year	Manhole	1376.82	156.40	0.00	71.72	23210.42
C26	100-year	Combination Inlet	1377.63	164.00	0.00	62.82	5059.46
C27	100-year	Curb Inlet	1377.40	165.00	0.00	58.90	7089.78
C28	100-year	Manhole	169.92	154.50	0.00	66.78	12716.45
C29	100-year	Combination Inlet	1377.10	160.00	0.00	56.03	13358.70
C3	100-year	Grate Inlet	1378.67	3.20	0.00	58.89	61.02
C30	100-year	Combination Inlet	1377.80	160.30	0.00	60.59	7587.81
C31	100-year	Manhole	157.68	120.80	0.00	55.74	37183.55
C32	100-year	Combination Inlet	158.37	137.40	0.00	46.79	17717.58
C33	100-year	Curb Inlet	156.70	85.60	0.00	46.00	6242.35
C34	100-year	Manhole	155.38	122.30	0.00	56.39	33989.91
C35	100-year	Combination Inlet	161.23	142.00	0.00	49.48	21015.11
C36	100-year	Combination Inlet	164.47	145.00	0.00	51.43	21749.09
C37	100-year	Manhole	146.80	13.40	0.00	63.58	2783.72
C38	100-year	Underground Junction	154.30	0.70	0.00	62.94	77.49
C39	100-year	Curb Inlet	97.37	14.20	0.00	34.02	476.28
C4	100-year	Grate Inlet	1378.15	9.40	0.00	53.31	94.60
C40	100-year	Combination Inlet	146.07	15.00	0.00	60.66	3089.73
C41	100-year	Combination Inlet	86.02	17.20	0.00	46.73	2108.80
C42	100-year	Curb Inlet	143.15	15.50	0.00	60.20	4895.05
C43	100-year	Curb Inlet	149.78	17.30	0.00	52.19	2161.42
C44	100-year	Underground Junction	17.75	0.00	0.00	48.19	0.00
C45	100-year	Combination Inlet	11.08	5.90	0.00	38.14	61.51
C46	100-year	Grate Inlet	0.00	0.00	0.00	14.05	0.00
C47	100-year	Combination Inlet	36.83	0.60	0.00	33.95	1.32
C5	100-year	Grate Inlet	1377.77	8.40	0.00	54.97	138.88
C6	100-year	Grate Inlet	1375.48	11.00	0.00	47.33	94.45
C7	100-year	Underground Junction	1378.92	0.00	0.00	82.88	0.00
C8	100-year	Underground Junction	1378.17	0.00	0.00	67.07	0.00
C9	100-year	Grate Inlet	1376.30	34.70	0.00	49.14	386.16
D1	100-year	Outfall	1380.00	0.00	0.00	42.10	0.00
D10	100-year	Curb Inlet	47.90	16.60	0.00	28.08	203.73
D11	100-year	Manhole	57.65	43.70	0.00	47.66	648.06
D12	100-year	Combination Inlet	59.92	46.80	0.00	46.06	33223.71
D13	100-year	Manhole	55.97	9.40	0.00	53.73	262.80
D14	100-year	Grate Inlet	6.98	0.00	0.00	20.42	0.00
D2	100-year	Combination Inlet	30.57	0.00	0.00	42.58	0.00

XPSWMM Node Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
D3	100-year	Manhole	36.84	0.00	0.00	43.17	0.00
D4	100-year	Drop Curb Inlet	31.15	0.00	0.00	40.14	0.00
D5	100-year	Combination Inlet	54.62	31.10	0.00	57.53	751.23
D6	100-year	Combination Inlet	39.37	30.70	0.00	49.68	283.67
D7	100-year	Manhole	52.57	0.00	0.00	34.35	0.00
D8	100-year	Underground Junction	66.22	43.70	0.00	46.87	172.32
D9	100-year	Grate Inlet	62.27	51.90	0.00	40.29	12653.57
F1	100-year	Outfall	1380.00	0.00	0.00	47.92	0.00
F10	100-year	Manhole	98.40	44.40	0.00	60.10	6184.75
F11	100-year	Manhole	90.38	43.80	0.00	47.43	5156.77
F12	100-year	Combination Inlet	83.18	40.30	0.00	40.55	539.30
F13	100-year	Manhole	81.82	37.40	0.00	47.43	479.86
F14	100-year	Grate Inlet	74.90	43.20	0.00	39.43	2097.51
F15	100-year	Manhole	60.20	30.10	0.00	44.60	280.28
F16	100-year	Grate Inlet	43.07	34.80	0.00	36.51	182.40
F17	100-year	Manhole	88.03	38.00	0.00	60.90	3128.91
F18	100-year	Combination Inlet	91.32	35.60	0.00	54.40	4258.40
F19	100-year	Manhole	85.48	31.30	0.00	58.06	980.00
F2	100-year	Grate Inlet	1379.68	156.20	0.00	68.55	29810.14
F20	100-year	Manhole	82.18	37.40	0.00	53.97	5283.63
F21	100-year	Combination Inlet	80.22	37.70	0.00	49.11	8831.81
F22	100-year	Manhole	84.52	71.00	0.00	52.42	9746.85
F23	100-year	Grate Inlet	82.17	72.90	0.00	51.64	4462.96
F24	100-year	Drop Curb Inlet	83.87	74.00	0.00	55.08	28547.31
F25	100-year	Pond Structure	138.65	55.90	0.00	55.63	0.00
F3	100-year	Grate Inlet	1359.21	131.00	0.00	59.68	30325.16
F4	100-year	Manhole	1379.08	91.40	0.00	65.13	9406.72
F5	100-year	Underground Junction	1378.83	83.30	0.00	62.39	577.32
F6	100-year	Grate Inlet	1378.65	107.00	0.00	60.84	41687.29
F7	100-year	Manhole	1378.05	62.80	0.00	69.74	3873.42
F8	100-year	Grate Inlet	100.45	62.10	0.00	56.84	3918.53
F9	100-year	Slotted Inlet	88.92	80.30	0.00	41.64	27346.65
G1	100-year	Outfall	1380.00	0.00	0.00	55.51	0.00
G2	100-year	Grate Inlet	1379.96	1375.90	0.00	58.92	77650.81
G3	100-year	Grate Inlet	1379.84	1320.40	0.00	50.24	150632.16
G4	100-year	Grate Inlet	1379.68	153.40	0.00	58.46	9216.60
H1	100-year	Outfall	1380.00	0.00	0.00	61.86	0.00
H2	100-year	Combination Inlet	1377.50	118.80	0.00	67.34	3572.67
H3	100-year	Combination Inlet	1378.30	126.80	0.00	69.48	85033.31
I1	100-year	Outfall	0.00	0.00	0.00	21.14	0.00
I2	100-year	Underground Junction	25.20	0.00	0.00	52.77	0.00

XPSWMM Node Output Data

100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
I3	100-year	Grate Inlet	50.05	25.70	0.00	67.13	23855.56
I4	100-year	Manhole	0.00	0.00	0.00	13.01	0.00
I5	100-year	Combination Inlet	0.00	0.00	0.00	11.40	0.00
I6	100-year	Combination Inlet	0.00	0.00	0.00	13.93	0.00
J1	100-year	Outfall	1380.00	0.00	0.00	53.10	0.00
J2	100-year	Curb Inlet	1378.37	236.30	0.00	70.53	1594.98
J3	100-year	Underground Junction	1378.33	174.10	0.00	69.10	12.96
J4	100-year	Grate Inlet	1378.18	257.90	0.00	62.34	58524.13
J5	100-year	Combination Inlet	1378.57	281.90	0.00	70.44	117529.25
K1	100-year	Outfall	1380.00	0.00	0.00	45.57	0.00
K10	100-year	Grate Inlet	973.35	76.70	0.00	44.65	5160.77
K2	100-year	Underground Junction	0.00	0.00	0.00	59.70	0.00
K3	100-year	Grate Inlet	1215.25	974.70	0.00	52.43	43536.67
K4	100-year	Combination Inlet	1205.72	1035.20	0.00	60.99	35607.75
K5	100-year	Manhole	1184.53	49.30	0.00	58.74	4533.55
K6	100-year	Grate Inlet	1162.68	123.20	0.00	57.11	3996.50
K7	100-year	Grate Inlet	1150.45	402.00	0.00	64.39	10911.97
K8	100-year	Grate Inlet	1127.13	322.60	0.00	58.59	16337.40
K9	100-year	Grate Inlet	1104.17	174.30	0.00	51.81	6772.26
L1	100-year	Outfall	1380.00	0.00	0.00	33.86	0.00
L2	100-year	Grate Inlet	1379.64	219.70	0.00	45.13	5324.61
L3	100-year	Pipe Inlet	373.99	374.00	0.00	38.23	5156.17
L4	100-year	Pipe Inlet	132.83	132.80	0.00	33.97	1141.39
M1	100-year	Outfall	0.00	0.00	0.00	12.57	0.00
M2	100-year	Underground Junction	44.30	0.00	0.00	64.96	0.00
M3	100-year	Combination Inlet	40.93	32.50	0.00	64.36	13721.74
M4	100-year	Combination Inlet	35.12	0.00	0.00	42.17	0.00
POND1	100-year	Lyon Homes Apartments	714.25	0.00	0.00	108.29	0.00

XPSWMM Link Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	100-year	Circular	Concrete	4.53	-25.40	6.29
A11-A10	100-year	Circular	Concrete	6.73	3.27	0.84
A12-A11	100-year	Circular	Concrete	6.67	-3.59	0.60
A13-A12	100-year	Circular	PVC	1.61	1.28	0.83
A14-A13	100-year	Circular	PVC	3.06	-1.39	0.77
A15-A13	100-year	Circular	PVC	2.16	1.28	0.71
A16-A15	100-year	Circular	Terra Cotta	1.13	-1.21	1.25
A17-A15	100-year	Circular	Terra Cotta	0.83	-1.27	1.69
A18-A17	100-year	Circular	Terra Cotta	0.90	-1.38	1.58
A19-A10	100-year	Circular	Concrete	35.99	-22.05	0.63
A2-A1	100-year	Circular	Concrete	22.06	-43.93	2.29
A20-A19	100-year	Circular	Concrete	8.08	-21.26	2.74
A21-A20	100-year	Circular	Concrete	16.90	-19.35	1.23
A22-A21	100-year	Circular	Concrete	43.52	18.82	0.45
A23-A22	100-year	Circular	Concrete	18.14	18.10	1.00
A24-A23	100-year	Circular	Concrete	25.18	-32.34	1.41
A25-A23	100-year	Circular	Concrete	16.21	46.57	3.51
A26-A25	100-year	Circular	Concrete	18.91	-37.88	2.14
A27-A25	100-year	Circular	Concrete	149.50	-156.28	1.17
A28-A27	100-year	Circular	Concrete	15.72	-18.50	1.81
A29-A28	100-year	Circular	Concrete	17.68	-20.83	1.41
A3-A2	100-year	Special	Concrete	27.26	-14.20	0.58
A30-A28	100-year	Circular	Concrete	47.75	-29.13	0.81
A31-A30	100-year	Circular	Concrete	6.73	-4.67	0.74
A32-A31	100-year	Circular	Concrete	9.76	-10.45	1.37
A33-A32	100-year	Circular	Concrete	9.44	11.94	1.70
A34-A31	100-year	Circular	Concrete	4.38	2.76	0.65
A35-A34	100-year	Circular	Concrete	6.96	5.16	1.16
A36-A31	100-year	Circular	Concrete	17.99	-9.91	0.73
A37-A36	100-year	Circular	Corrugated Metal	4.36	4.89	1.19
A38-A37	100-year	Circular	Corrugated Metal	1.18	9.30	8.75
A39-A38	100-year	Special	Corrugated Metal	5.44	5.58	1.13
A4-A3	100-year	Special	Concrete	14.68	-6.12	0.42
A40-A38	100-year	Special	Corrugated Metal	7.00	9.55	1.36
A41-A40	100-year	Special	Corrugated Metal	3.89	7.18	2.11
A42-A30	100-year	Circular	Concrete	25.67	-16.26	0.87
A43-A42	100-year	Circular	Concrete	3.75	-12.07	3.90
A44-A42	100-year	Circular	Concrete	20.97	-10.78	0.78
A45-A44	100-year	Circular	Concrete	6.48	11.31	1.76
A46-A45	100-year	Special	Concrete	25.77	-27.03	1.59
A47-A46	100-year	Special	Concrete	11.85	9.63	1.39
A48-A47	100-year	Special	Concrete	13.92	7.90	0.83

XPSWMM Link Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	100-year	Circular	Concrete	6.53	-15.42	3.13
A5-A4	100-year	Special	Concrete	13.58	15.29	1.13
A50-A48	100-year	Special	Concrete	13.94	11.95	0.86
A51-A50	100-year	Circular	Concrete	5.98	-19.79	3.77
A52-A50	100-year	Circular	Concrete	7.32	5.92	0.89
A53-A52	100-year	Circular	Concrete	8.59	-7.44	1.09
A54-A52	100-year	Circular	Concrete	4.91	6.95	1.90
A55-A54	100-year	Circular	Concrete	8.36	4.63	0.80
A56-A54	100-year	Circular	Concrete	8.47	6.74	1.14
A57-A56	100-year	Circular	Concrete	10.11	6.28	0.81
A58-A45	100-year	Circular	Concrete	104.63	-106.61	1.92
A59-A58	100-year	Circular	Concrete	26.14	25.86	1.81
A6-A3	100-year	Special	Concrete	8.57	-6.30	0.97
A60-A59	100-year	Circular	Concrete	11.37	16.65	1.78
A61-A59	100-year	Circular	Concrete	11.80	-26.56	4.59
A62-A61	100-year	Circular	Concrete	10.18	13.05	1.73
A63-A62	100-year	Circular	Concrete	6.42	5.70	1.18
A64-A62	100-year	Circular	Concrete	13.43	18.95	1.80
A65-A64	100-year	Circular	Concrete	11.08	-8.70	1.03
A66-A65	100-year	Circular	Concrete	15.64	-4.94	0.49
A67-A65	100-year	Circular	Concrete	17.18	14.30	0.83
A68-A64	100-year	Circular	Concrete	14.28	13.76	1.01
A69-A68	100-year	Circular	Concrete	26.67	-17.19	0.92
A7-A6	100-year	Circular	Concrete	8.30	-11.19	1.95
A70-A69	100-year	Circular	Concrete	7.77	-9.14	1.37
A71-A68	100-year	Circular	Concrete	8.02	5.82	0.81
A72-A68	100-year	Circular	Concrete	10.03	11.00	1.18
A73-A72	100-year	Circular	Concrete	20.79	12.77	0.68
A74-A73	100-year	Circular	Concrete	14.94	5.30	0.52
A75-A73	100-year	Circular	Concrete	8.80	9.88	1.15
A76-A75	100-year	Circular	Concrete	4.50	5.87	1.30
A77-A75	100-year	Circular	Concrete	8.04	8.68	1.43
A78-A77	100-year	Circular	Concrete	4.78	6.90	1.72
A79-A78	100-year	Circular	Concrete	4.41	4.02	0.92
A8-A6	100-year	Special	Concrete	2.31	7.95	5.93
A80-A72	100-year	Circular	Concrete	2.10	6.58	3.57
A81-BIO3	100-year	Circular	Concrete	2.97	3.43	1.23
A82-A81	100-year	Circular	Smooth HDPE	2.56	-3.29	1.31
A83-A82	100-year	Circular	Smooth HDPE	3.60	-2.52	1.42
A85-A84	100-year	Circular	Concrete	3.68	-1.89	1.31
A86-A85	100-year	Circular	Concrete	2.30	2.13	1.03
A87-A86	100-year	Circular	Concrete	3.13	4.30	1.59

XPSWMM Link Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	100-year	Circular	Smooth HDPE	2.87	2.59	1.04
A90-A89	100-year	Circular	Smooth HDPE	1.85	3.49	1.99
A92-A91	100-year	Circular	Smooth HDPE	1.64	-6.49	4.98
A93-A92	100-year	Circular	Smooth HDPE	1.00	-2.62	3.43
B10-B9	100-year	Circular	Terra Cotta	0.82	2.31	2.92
B11-B10	100-year	Circular	Terra Cotta	1.15	1.73	1.51
B12-B9	100-year	Circular	Terra Cotta	0.83	2.40	2.97
B13-B12	100-year	Circular	Terra Cotta	0.51	1.38	3.43
B14-B12	100-year	Circular	Terra Cotta	0.67	1.53	2.53
B15-B14	100-year	Circular	Terra Cotta	0.89	1.22	1.67
B16-B9	100-year	Circular	Corrugated Metal	0.60	2.84	4.71
B17-B16	100-year	Circular	Corrugated Metal	2.58	2.84	1.24
B2-B1	100-year	Circular	Concrete	19.17	12.06	0.63
B3-B2	100-year	Circular	Terra Cotta	2.09	3.17	1.54
B4-B3	100-year	Circular	Terra Cotta	0.64	1.68	2.67
B5-B2	100-year	Circular	Terra Cotta	1.76	3.38	1.94
B6-B5	100-year	Circular	Terra Cotta	0.73	1.97	2.81
B7-B6	100-year	Circular	Terra Cotta	0.72	1.46	2.21
B8-B7	100-year	Circular	Terra Cotta	0.70	0.86	1.60
B9-B2	100-year	Circular	Concrete	10.73	6.87	0.66
C10-C8	100-year	Circular	Terra Cotta	1.16	1.16	1.24
C11-C10	100-year	Circular	Terra Cotta	1.27	1.05	0.95
C12-C7	100-year	Special	Corrugated Metal	21.52	36.20	1.70
C13-C12	100-year	Circular	Terra Cotta	1.63	2.11	1.57
C14-C13	100-year	Circular	Terra Cotta	1.14	1.41	1.27
C15-C12	100-year	Circular	Terra Cotta	1.79	2.02	1.85
C16-C15	100-year	Circular	Terra Cotta	1.50	1.55	1.26
C17-C15	100-year	Circular	Terra Cotta	1.20	1.33	1.19
C18-C12	100-year	Special	Corrugated Metal	1.50	36.44	24.43
C19-C18	100-year	Circular	Concrete	17.90	15.67	1.05
C2-C1	100-year	Special	Corrugated Metal	18.05	39.41	2.42
C20-C19	100-year	Circular	Concrete	4.61	4.75	1.27
C21-C20	100-year	Circular	Concrete	8.77	-3.67	0.79
C22-C20	100-year	Circular	Concrete	6.35	8.55	1.81
C23-C22	100-year	Circular	Concrete	5.35	6.88	1.29
C24-C23	100-year	Circular	Corrugated Metal	3.59	3.62	1.32
C25-C18	100-year	Circular	Concrete	13.58	32.04	2.63
C26-C25	100-year	Circular	Concrete	11.86	12.23	1.09
C27-C26	100-year	Circular	Concrete	6.67	10.54	1.75
C28-C25	100-year	Circular	Concrete	31.65	25.31	0.89
C29-C28	100-year	Circular	Concrete	12.33	10.72	1.44
C3-C2	100-year	Circular	Terra Cotta	3.80	2.73	1.00

XPSWMM Link Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	100-year	Circular	Concrete	1.74	8.67	8.67
C31-C28	100-year	Circular	Concrete	24.95	20.94	0.87
C32-C31	100-year	Circular	Concrete	14.63	-7.73	0.71
C33-C32	100-year	Circular	Concrete	6.49	6.02	1.43
C34-C31	100-year	Circular	Concrete	18.17	24.85	1.52
C35-C34	100-year	Circular	Concrete	15.06	-25.01	1.85
C36-C34	100-year	Circular	Concrete	10.38	-13.10	2.31
C37-C34	100-year	Circular	Concrete	22.46	24.14	1.13
C38-C37	100-year	Circular	Concrete	10.64	9.29	1.33
C39-C38	100-year	Circular	Corrugated Metal	3.86	2.04	0.59
C4-C3	100-year	Circular	Terra Cotta	0.93	1.46	1.85
C40-C38	100-year	Circular	Concrete	10.16	9.49	1.22
C41-C40	100-year	Circular	Concrete	15.19	11.25	1.08
C42-C37	100-year	Circular	Concrete	13.67	23.88	1.83
C43-C42	100-year	Circular	Concrete	4.89	5.90	1.75
C44-C42	100-year	Circular	Concrete	15.91	11.01	0.73
C45-C44	100-year	Circular	Concrete	9.24	4.85	0.72
C46-C44	100-year	Circular	Concrete	20.35	7.44	0.37
C47-C46	100-year	Circular	Concrete	3.21	6.94	2.40
C5-C2	100-year	Circular	Terra Cotta	3.32	2.95	0.94
C6-C5	100-year	Circular	Terra Cotta	0.96	1.42	1.58
C7-C2	100-year	Special	Corrugated Metal	14.03	36.57	2.62
C8-C7	100-year	Circular	Terra Cotta	1.46	1.47	1.05
C9-C8	100-year	Circular	Terra Cotta	2.15	1.16	0.67
D10-D8	100-year	Circular	Concrete	12.95	1.95	0.24
D11-D8	100-year	Circular	Concrete	6.61	7.12	1.10
D12-D11	100-year	Circular	PVC	3.11	4.58	3.59
D13-D11	100-year	Circular	Concrete	2.49	2.48	1.46
D14-D13	100-year	Circular	PVC	6.77	2.51	0.43
D2-D1	100-year	Special	Concrete	50.58	33.78	0.67
D3-D2	100-year	Special	Corrugated Metal	15.34	32.50	2.12
D4-D3	100-year	Special	Corrugated Metal	30.20	25.97	0.86
D5-D4	100-year	Circular	Concrete	7.46	24.99	3.35
D6-D5	100-year	Circular	Corrugated Metal	4.09	3.88	1.59
D7-D3	100-year	Circular	Concrete	3.73	5.86	1.58
D8-D7	100-year	Circular	Concrete	2.43	5.79	2.41
D9-D8	100-year	Circular	Concrete	6.26	-3.31	0.54
F10-F5	100-year	Circular	Concrete	13.10	13.07	1.00
F11-F10	100-year	Circular	Concrete	4.50	5.20	1.41
F12-F11	100-year	Circular	Concrete	8.64	-3.09	0.72
F13-F11	100-year	Circular	Concrete	4.32	5.60	1.41
F14-F13	100-year	Circular	PVC	4.40	3.76	1.01

XPSWMM Link Output Data
100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	100-year	Circular	Concrete	3.73	3.79	1.06
F16-F15	100-year	Circular	PVC	4.02	3.46	0.92
F17-F10	100-year	Circular	Concrete	10.42	12.63	1.31
F18-F17	100-year	Circular	Concrete	5.91	6.82	1.64
F19-F17	100-year	Circular	Concrete	8.27	9.01	1.11
F2-F1	100-year	Circular	Concrete	16.41	50.50	3.08
F20-F19	100-year	Circular	Concrete	8.18	10.23	1.29
F21-F20	100-year	Circular	Concrete	5.26	8.34	1.68
F22-F20	100-year	Circular	Concrete	3.69	5.87	1.64
F23-F22	100-year	Circular	Concrete	7.79	9.44	1.26
F24-F23	100-year	Circular	Concrete	1.33	9.31	7.11
F25-F24	100-year	Circular	Smooth HDPE	5.04	7.98	1.70
F3-F2	100-year	Circular	Concrete	54.63	24.19	0.57
F4-F2	100-year	Circular	Concrete	10.63	13.98	1.63
F5-F4	100-year	Circular	Concrete	29.27	15.52	0.61
F6-F5	100-year	Circular	Concrete	7.92	-7.76	1.25
F7-F6	100-year	Circular	Concrete	2.04	6.16	3.04
F8-F7	100-year	Circular	Concrete	10.49	8.14	0.84
F9-F8	100-year	Circular	Corrugated Metal	2.96	4.34	1.61
G2-G1	100-year	Circular	Concrete	19.84	24.70	1.26
G3-G2	100-year	Circular	Concrete	17.04	-7.72	1.24
G4-G3	100-year	Circular	Concrete	5.96	10.41	1.75
H2-H1	100-year	Circular	Concrete	6.82	7.37	1.08
H3-H2	100-year	Circular	Concrete	3.63	6.89	2.66
I2-I1	100-year	Circular	Concrete	15.16	22.20	1.47
I3-I2	100-year	Circular	Concrete	3.84	14.72	3.87
I4-I2	100-year	Circular	Concrete	28.62	11.61	0.41
I5-I4	100-year	Circular	Concrete	6.93	5.42	0.78
I6-I4	100-year	Circular	Concrete	5.66	6.27	1.11
J2-J1	100-year	Circular	Concrete	4.21	5.60	1.33
J3-J2	100-year	Circular	Concrete	2.79	5.25	1.92
J4-J3	100-year	Circular	Concrete	5.09	2.51	0.63
J5-J3	100-year	Circular	Concrete	1.19	3.48	3.34
K10-K9	100-year	Circular	Concrete	4.15	3.49	0.90
K2-K1	100-year	Circular	Corrugated Metal	5.93	1.08	0.18
K3-K2	100-year	Circular	Concrete	3.11	-3.20	1.03
K4-K2	100-year	Circular	Concrete	3.28	4.10	1.25
K5-K4	100-year	Circular	Concrete	5.26	4.40	1.08
K6-K5	100-year	Circular	Concrete	8.63	6.32	0.73
K7-K6	100-year	Circular	Concrete	2.03	5.51	2.71
K8-K7	100-year	Circular	Concrete	3.86	2.62	0.96
K9-K8	100-year	Circular	Concrete	4.72	3.12	0.75

XPSWMM Link Output Data

100-Year Rainfall Event, Tide Level 3.1 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	100-year	Circular	Cast Iron	2.27	3.49	1.54
L3-L2	100-year	Circular	Corrugated Metal	5.35	4.26	0.91
L4-L2	100-year	Circular	Corrugated Metal	3.17	2.41	0.76
Orifice1.1	100-year			2.21	0.85	0.40
Orifice2.1	100-year			2.21	0.85	0.40
Orifice3.1	100-year			2.21	3.31	1.53
M2-M1	100-year	Circular	Concrete	4.38	7.91	1.81
M3-M2	100-year	Circular	Concrete	6.04	7.33	1.24
M4-M2	100-year	Circular	Concrete	4.75	1.19	0.25

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	100-year 2050	Outfall	1380	0	0	68.57	0
A10	100-year 2050	Manhole	1378.55	0	0	94.178	0
A11	100-year 2050	Grate Inlet	1378.867	1266.1	0	87.247	32183.31
A12	100-year 2050	Grate Inlet	1378.083	1201.8	0	74.817	23845.92
A13	100-year 2050	Manhole	1377	241.6	0	68.738	3842.54
A14	100-year 2050	Grate Inlet	1369.383	1089.4	0	45.599	10211.21
A15	100-year 2050	Grate Inlet	1367.833	649.6	0	60.355	14880.08
A16	100-year 2050	Grate Inlet	1369.167	529.8	0	53.251	7883.45
A17	100-year 2050	Grate Inlet	1369.75	599.1	0	56.431	9606.73
A18	100-year 2050	Grate Inlet	1368.817	612.5	0	51.71	9304.28
A19	100-year 2050	Manhole	1378.583	0	0	98.212	0
A2	100-year 2050	Manhole	1379.4	1115.4	0	88.347	480310.22
A20	100-year 2050	Manhole	1378.417	0	0	99.128	0
A21	100-year 2050	Manhole	1378.05	0	0	99.947	0
A22	100-year 2050	Manhole	1377.85	0	0	97.088	0
A23	100-year 2050	Combination Inlet	1376.767	1373.7	0	96.252	61884.93
A24	100-year 2050	Combination Inlet	1375.083	1366.8	0	81.794	49015.53
A25	100-year 2050	Combination Inlet	1376.317	1373.3	0	95.652	174962.49
A26	100-year 2050	Combination Inlet	1376.983	1371.3	0	85.165	40955.18
A27	100-year 2050	Manhole	1373.3	1370.2	0	88.707	66802.08
A28	100-year 2050	Manhole	1374.583	1365.6	0	90.075	27251.24
A29	100-year 2050	Curb Inlet	1376.483	1366.5	0	84.134	29636.32
A3	100-year 2050	Manhole	1377.733	1249	0	72.671	177692.95
A30	100-year 2050	Manhole	1371.9	1366	0	86.438	55680.5
A31	100-year 2050	Manhole	1374.2	1268.2	0	80.975	90027.59
A32	100-year 2050	Combination Inlet	1374.117	1360.5	0	71.328	127634.12
A33	100-year 2050	Combination Inlet	1369.583	1292	0	66.767	98034.28
A34	100-year 2050	Manhole	1367.9	591	0	63.214	21081.6
A35	100-year 2050	Combination Inlet	1366.833	909.9	0	59.905	37760.61
A36	100-year 2050	Curb Inlet	1361.567	1193.4	0	70.275	57590.8
A37	100-year 2050	Manhole	1310.817	371.8	0	59.158	37617.82
A38	100-year 2050	Grate Inlet	1324.267	382.5	0	65.504	71083.07
A39	100-year 2050	Grate Inlet	1140	350.7	0	54.024	17009.27
A4	100-year 2050	Grate Inlet	1377.75	1377.5	0	65.135	131557.75

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A40	100-year 2050	Grate Inlet	1205.15	350.9	0	60.222	51467.68
A41	100-year 2050	Grate Inlet	1050.233	254.3	0	54.692	19879.59
A42	100-year 2050	Underground Junction	1371.567	1361.2	0	84.727	4069.58
A43	100-year 2050	Curb Inlet	1376.25	1369.2	0	84.151	46178.3
A44	100-year 2050	Grate Inlet	1369.2	1353.9	0	80.435	111717.46
A45	100-year 2050	Underground Junction	1358.733	1165.2	0	89.204	54743.44
A46	100-year 2050	Combination Inlet	1364.233	1280.2	0	76.228	155594.71
A47	100-year 2050	Manhole	1366.233	1183.8	0	74.126	60214.96
A48	100-year 2050	Manhole	1367.15	1039.5	0	70.92	99316.33
A49	100-year 2050	Combination Inlet	1371.15	1165	0	71.936	64978.24
A5	100-year 2050	Grate Inlet	1377.583	1269.8	0	65.815	11802.11
A50	100-year 2050	Manhole	1307.983	468.9	0	59.321	100504.4
A51	100-year 2050	Combination Inlet	1346.35	631.5	0	59.426	88346.03
A52	100-year 2050	Manhole	880.7	150.2	0	53.114	19392.13
A53	100-year 2050	Combination Inlet	773.583	322.4	0	45.222	20618.08
A54	100-year 2050	Underground Junction	861	22.4	0	55.527	256.85
A55	100-year 2050	Combination Inlet	508.717	90.8	0	41.337	5633.88
A56	100-year 2050	Manhole	778.95	72.5	0	48.206	7339.78
A57	100-year 2050	Grate Inlet	530.483	167.3	0	40.159	11041.93
A58	100-year 2050	Grate Inlet	1362.25	1317.3	0	78.192	303521.96
A59	100-year 2050	Underground Junction	1368.117	1197.2	0	79.023	17556.79
A6	100-year 2050	Manhole	1376.867	1257.2	0	56.266	126223.37
A60	100-year 2050	Combination Inlet	1368.383	1334.4	0	75.71	76027.37
A61	100-year 2050	Grate Inlet	1368.9	1343.5	0	78.886	157294.41
A62	100-year 2050	Grate Inlet	1368.417	1326	0	77.671	160145.53
A63	100-year 2050	Grate Inlet	1368.933	1248.3	0	66.31	31724.38
A64	100-year 2050	Manhole	1370.267	689.1	0	76.732	105583.04
A65	100-year 2050	Manhole	1369.167	746	0	74.786	99736.23
A66	100-year 2050	Curb Inlet	1361.483	766	0	63.089	56381.23
A67	100-year 2050	Curb Inlet	1333.817	735.5	0	67.948	29446.79
A68	100-year 2050	Manhole	836.5	20.7	0	76.164	6486.37

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A69	100-year 2050	Combination Inlet	798.967	32	0	68.951	10538.64
A7	100-year 2050	Grate Inlet	1376.917	1331.2	0	54.822	116776.36
A70	100-year 2050	Grate Inlet	729.283	100	0	52.397	20721.57
A71	100-year 2050	Curb Inlet	668.067	37.3	0	56.81	10607.5
A72	100-year 2050	Manhole	122.033	15.3	0	74.258	1157.44
A73	100-year 2050	Underground Junction	61.833	1.3	0	68.486	87.75
A74	100-year 2050	Curb Inlet	52.5	11.7	0	56.866	953.06
A75	100-year 2050	Manhole	41.217	15.7	0	65.624	1125.95
A76	100-year 2050	Curb Inlet	42.117	22.4	0	57.137	7607.52
A77	100-year 2050	Curb Inlet	41.867	10.8	0	68.797	1522.26
A78	100-year 2050	Curb Inlet	40.283	15.8	0	62.429	1595.75
A79	100-year 2050	Combination Inlet	28.183	18.1	0	51.606	967.36
A8	100-year 2050	Curb Inlet	1376.85	1140.3	0	53.175	36040.01
A80	100-year 2050	Pond Structure	56.833	1.8	0	60.355	0
A81	100-year 2050	Pond Structure	71.083	71.1	0	53.397	1213.03
A82	100-year 2050	Grate Inlet	69.3	12.5	0	37.779	1011.82
A83	100-year 2050	Grate Inlet	97.883	22.8	0	41.816	905.44
A84	100-year 2050	Pond Structure	105.25	105.3	0	78.815	0.53
A85	100-year 2050	Manhole	979.6	43.4	0	83.773	2624.45
A86	100-year 2050	Manhole	1066.4	48.4	0	105.651	2397.02
A87	100-year 2050	Curb Inlet	1136.733	187.2	0	101.971	6457.04
A88	100-year 2050	Pond Structure	488.667	488.7	0	66.156	14646.74
A89	100-year 2050	Manhole	885.2	19.8	0	55.29	2162.83
A90	100-year 2050	Grate Inlet	883.65	46.4	0	63.65	1473.47
A91	100-year 2050	Pond Structure	563.55	563.5	0	64.129	10255.23
A92	100-year 2050	Grate Inlet	922.067	453.6	0	59.845	34868.24
A93	100-year 2050	Grate Inlet	937.083	180.7	0	51.565	3193.26
B1	100-year 2050	Outfall	1380	0	0	72.771	0
B10	100-year 2050	Grate Inlet	1378.517	25	0	56.722	284.32
B11	100-year 2050	Grate Inlet	1378.133	26.5	0	50.352	937.41
B12	100-year 2050	Underground Junction	1378.4	0	0	54.355	0
B13	100-year 2050	Grate Inlet	1378.283	51.2	0	56.712	530.64
B14	100-year 2050	Grate Inlet	1377.967	93.9	0	55.326	1017.87
B15	100-year 2050	Grate Inlet	1377.667	103	0	52.419	1357.62
B16	100-year 2050	Curb Inlet	1378.117	1114	0	57.812	47858.76
B17	100-year 2050	Grate Inlet	1377.917	1182.6	0	51.729	49338.41

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
B2	100-year 2050	Underground Junction	1378.733	0	0	51.878	0
B3	100-year 2050	Grate Inlet	1378.517	14.9	0	50.535	172.09
B4	100-year 2050	Grate Inlet	1378.533	17	0	49.821	304.53
B5	100-year 2050	Grate Inlet	1379.04	23.3	0	56.327	428.99
B6	100-year 2050	Grate Inlet	1378.733	94.5	0	58.907	930.78
B7	100-year 2050	Grate Inlet	1378.183	111.9	0	55.714	2246.06
B8	100-year 2050	Grate Inlet	1377.85	111.9	0	54.479	889.64
B9	100-year 2050	Underground Junction	1378.367	0	0	46.014	0
BIO3	100-year 2050	Family Dollar Bioretention	237.5	0	0	3697.926	0
C1	100-year 2050	Outfall	1380	0	0	72.236	0
C10	100-year 2050	Grate Inlet	1378.05	91.6	0	59.642	1921.91
C11	100-year 2050	Grate Inlet	1377.267	86.5	0	51.33	1923.32
C12	100-year 2050	Underground Junction	1378.35	0	0	88.305	0
C13	100-year 2050	Grate Inlet	1378.217	92.7	0	57.092	2538.92
C14	100-year 2050	Grate Inlet	1377.617	86.5	0	48.459	1698.12
C15	100-year 2050	Underground Junction	1378.583	0	0	60.878	0
C16	100-year 2050	Grate Inlet	1378.167	95.4	0	54.558	1512.88
C17	100-year 2050	Grate Inlet	1377.917	94.9	0	52.379	1195.45
C18	100-year 2050	Curb Inlet	1378.05	300.7	0	80.428	88019.23
C19	100-year 2050	Manhole	1378.233	223.8	0	66.423	12677
C2	100-year 2050	Underground Junction	1379.4	0	0	84.546	0
C20	100-year 2050	Manhole	1377.067	241.9	0	56.01	30348.54
C21	100-year 2050	Curb Inlet	1376.617	291.5	0	47.218	27710.66
C22	100-year 2050	Grate Inlet	1376.95	725.9	0	54.885	77542.21
C23	100-year 2050	Curb Inlet	1376.733	250.3	0	56.502	3976.68
C24	100-year 2050	Curb Inlet	1375.95	202.1	0	50.072	14099.27
C25	100-year 2050	Manhole	1377.833	567.2	0	74.125	98040.26
C26	100-year 2050	Combination Inlet	1378.25	1107.2	0	65.142	156121.2
C27	100-year 2050	Curb Inlet	1378.283	878.7	0	61.248	47306.91
C28	100-year 2050	Manhole	1376.717	377.9	0	69.105	56668.53
C29	100-year 2050	Combination Inlet	1378	1083	0	8675.929	150039.33
C3	100-year 2050	Grate Inlet	1379.04	38.3	0	59.062	878.43

XPSWMM Node Output Data
100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C30	100-year 2050	Combination Inlet	1378.15	1049	0	62.958	113887.46
C31	100-year 2050	Manhole	406.117	160.9	0	56.501	48588.35
C32	100-year 2050	Combination Inlet	934.567	186.8	0	46.882	21911.01
C33	100-year 2050	Curb Inlet	571.017	121.3	0	46.054	8606.99
C34	100-year 2050	Manhole	241.633	161.9	0	57.275	47625.84
C35	100-year 2050	Combination Inlet	1373.167	199.7	0	50.52	31032.51
C36	100-year 2050	Combination Inlet	1375.6	215.1	0	52.394	33562.29
C37	100-year 2050	Manhole	195.583	16.3	0	63.691	3671.23
C38	100-year 2050	Underground Junction	212.983	2.3	0	63.142	96.69
C39	100-year 2050	Curb Inlet	122.25	16.6	0	35.063	553.16
C4	100-year 2050	Grate Inlet	1378.717	37.3	0	54.047	521.66
C40	100-year 2050	Combination Inlet	192.767	18.9	0	60.811	4366.11
C41	100-year 2050	Combination Inlet	112.65	20.7	0	46.289	2681.57
C42	100-year 2050	Curb Inlet	188.567	19.9	0	59.825	7157.04
C43	100-year 2050	Curb Inlet	202.583	21.1	0	52.909	3559.14
C44	100-year 2050	Underground Junction	25.267	0	0	51.015	0
C45	100-year 2050	Combination Inlet	13.533	9.2	0	38.407	173.49
C46	100-year 2050	Grate Inlet	0	0	0	19.214	0
C47	100-year 2050	Combination Inlet	46.217	13.5	0	35.117	101.14
C5	100-year 2050	Grate Inlet	1378.833	39	0	55.181	755.95
C6	100-year 2050	Grate Inlet	1378.283	31.9	0	48.006	522.35
C7	100-year 2050	Underground Junction	1379.12	0	0	87.86	0
C8	100-year 2050	Underground Junction	1378.483	0	0	69.256	0
C9	100-year 2050	Grate Inlet	1377.283	86.7	0	49.67	1296.16
D1	100-year 2050	Outfall	1380	0	0	55.922	0
D10	100-year 2050	Curb Inlet	69.383	28	0	28.989	1215.85
D11	100-year 2050	Manhole	127.967	58.4	0	48.596	1143.03
D12	100-year 2050	Combination Inlet	152.733	63.6	0	47	41374.51

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
D13	100-year 2050	Manhole	114.333	13.2	0	53.775	310.13
D14	100-year 2050	Grate Inlet	11.3	0	0	23.594	0
D2	100-year 2050	Combination Inlet	1377.757	21.5	0	72.339	19624
D3	100-year 2050	Manhole	1379.3	18.7	0	78.383	26756.34
D4	100-year 2050	Drop Curb Inlet	1378.993	27.2	0	64.862	3797.64
D5	100-year 2050	Combination Inlet	1379.32	954.1	0	58.882	78743.49
D6	100-year 2050	Combination Inlet	1379.073	186.8	0	50.326	8426
D7	100-year 2050	Manhole	1378.067	36.1	0	46.676	393.22
D8	100-year 2050	Underground Junction	659.733	61.9	0	48.02	439.03
D9	100-year 2050	Grate Inlet	222.867	89	0	40.993	19398.09
F1	100-year 2050	Outfall	1380	0	0	61.737	0
F10	100-year 2050	Manhole	777.667	51.8	0	60.536	7395.86
F11	100-year 2050	Manhole	217.967	51.6	0	47.703	5953.75
F12	100-year 2050	Combination Inlet	122.417	45.4	0	40.916	700.63
F13	100-year 2050	Manhole	114.9	39.2	0	47.676	558.5
F14	100-year 2050	Grate Inlet	89.95	49.5	0	39.978	2617.84
F15	100-year 2050	Manhole	80.45	31.6	0	44.583	259.11
F16	100-year 2050	Grate Inlet	48.533	35	0	36.924	426.39
F17	100-year 2050	Manhole	161.933	41.6	0	61.325	3536.94
F18	100-year 2050	Combination Inlet	200.133	38.7	0	55.204	5488.25
F19	100-year 2050	Manhole	121.817	34.7	0	58.247	1051.77
F2	100-year 2050	Grate Inlet	1379.76	1379.7	0	70.775	24482.21
F20	100-year 2050	Manhole	105.25	40.9	0	53.928	6166.59
F21	100-year 2050	Combination Inlet	97.017	41.6	0	49.373	11642.05
F22	100-year 2050	Manhole	110.667	80.8	0	52.65	11087.65
F23	100-year 2050	Grate Inlet	96.267	82.8	0	51.608	5025.76
F24	100-year 2050	Drop Curb Inlet	100.767	84.2	0	55.937	34827.82
F25	100-year 2050	Pond Structure	157.067	62.9	0	56.311	0
F3	100-year 2050	Grate Inlet	1379.68	1379.7	0	62.262	32318.73
F4	100-year 2050	Manhole	1379.28	916.9	0	66.031	79359.21
F5	100-year 2050	Underground Junction	1379.04	355.8	0	63.223	11317.79
F6	100-year 2050	Grate Inlet	1378.933	1279.5	0	61.613	149202.67
F7	100-year 2050	Manhole	1378.3	87	0	69.855	4700.31

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
F8	100-year 2050	Grate Inlet	1215.817	78	0	57	5433.31
F9	100-year 2050	Slotted Inlet	192.567	111.6	0	42.414	34078.87
G1	100-year 2050	Outfall	1380	0	0	69.333	0
G2	100-year 2050	Grate Inlet	1380	1380	0	62.947	1254727.33
G3	100-year 2050	Grate Inlet	1379.84	1379.8	0	54.012	404192.16
G4	100-year 2050	Grate Inlet	1379.68	819.3	0	61.106	57475.26
H1	100-year 2050	Outfall	1380	0	0	75.686	0
H2	100-year 2050	Combination Inlet	1379.24	258.8	0	68.544	14718.73
H3	100-year 2050	Combination Inlet	1379.28	324.9	0	70.88	119543.3
I1	100-year 2050	Outfall	0	0	0	21.426	0
I2	100-year 2050	Underground Junction	28.667	0	0	57.241	0
I3	100-year 2050	Grate Inlet	55	29.3	0	68.441	31649.25
I4	100-year 2050	Manhole	0	0	0	14.848	0
I5	100-year 2050	Combination Inlet	0	0	0	13.101	0
I6	100-year 2050	Combination Inlet	3.383	0	0	18.02	0
J1	100-year 2050	Outfall	1380	0	0	66.921	0
J2	100-year 2050	Curb Inlet	1378.733	454.3	0	71.221	4463.16
J3	100-year 2050	Underground Junction	1378.733	286.6	0	69.902	13.79
J4	100-year 2050	Grate Inlet	1378.617	833	0	63.136	85145.72
J5	100-year 2050	Combination Inlet	1378.85	987.8	0	71.67	164450.98
K1	100-year 2050	Outfall	1380	0	0	59.393	0
K10	100-year 2050	Grate Inlet	1020.517	87.8	0	44.873	6222.03
K2	100-year 2050	Underground Junction	0	0	0	60.122	0
K3	100-year 2050	Grate Inlet	1234.4	1025.3	0	52.775	48381.39
K4	100-year 2050	Combination Inlet	1225.867	1075.3	0	61.262	35671.86
K5	100-year 2050	Manhole	1206.783	55	0	58.857	5386.11
K6	100-year 2050	Grate Inlet	1187.767	141.5	0	57.312	4843.13
K7	100-year 2050	Grate Inlet	1177.067	454.4	0	65.168	12538.34
K8	100-year 2050	Grate Inlet	1156.75	371.3	0	59.366	18949.66
K9	100-year 2050	Grate Inlet	1135.4	206.2	0	52.585	8464.81
L1	100-year 2050	Outfall	1380	0	0	47.68	0
L2	100-year 2050	Grate Inlet	1379.68	1379.6	0	45.565	7404.5

XPSWMM Node Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
L3	100-year 2050	Pipe Inlet	1378.393	1378.4	0	38.636	9078.31
L4	100-year 2050	Pipe Inlet	337.833	336.3	0	34.727	1725.82
M1	100-year 2050	Outfall	0	0	0	12.566	0
M2	100-year 2050	Underground Junction	48.5	0	0	66.283	0
M3	100-year 2050	Combination Inlet	45.083	36.9	0	65.044	18139.19
M4	100-year 2050	Combination Inlet	39.433	0	0	43.884	0
POND1	100-year 2050	Lyon Homes Apartments	772.067	0	0	108.286	0

XPSWMM Link Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	100-year 2050	Circular	Concrete	4.53	-33.285	7.355
A11-A10	100-year 2050	Circular	Concrete	6.73	4.055	0.708
A12-A11	100-year 2050	Circular	Concrete	6.67	-3.82	0.709
A13-A12	100-year 2050	Circular	PVC	1.61	1.327	0.824
A14-A13	100-year 2050	Circular	PVC	3.06	-1.676	0.633
A15-A13	100-year 2050	Circular	PVC	2.16	-1.154	0.673
A16-A15	100-year 2050	Circular	Terra Cotta	1.13	1.289	1.276
A17-A15	100-year 2050	Circular	Terra Cotta	0.83	1.315	1.672
A18-A17	100-year 2050	Circular	Terra Cotta	0.9	-1.325	1.576
A19-A10	100-year 2050	Circular	Concrete	35.99	-23.716	0.738
A2-A1	100-year 2050	Circular	Concrete	22.06	-46.464	2.65
A20-A19	100-year 2050	Circular	Concrete	8.08	-22.962	3.265
A21-A20	100-year 2050	Circular	Concrete	16.9	-20.983	1.43
A22-A21	100-year 2050	Circular	Concrete	43.52	-20.718	0.514
A23-A22	100-year 2050	Circular	Concrete	18.14	-20.124	1.12
A24-A23	100-year 2050	Circular	Concrete	25.18	-23.139	1.35
A25-A23	100-year 2050	Circular	Concrete	16.21	-51.598	3.711
A26-A25	100-year 2050	Circular	Concrete	18.91	-25.584	1.785
A27-A25	100-year 2050	Circular	Concrete	149.5	-74.064	1.051
A28-A27	100-year 2050	Circular	Concrete	15.72	-19.121	2.114
A29-A28	100-year 2050	Circular	Concrete	17.68	-14.328	1.451
A3-A2	100-year 2050	Special	Concrete	27.26	-19.886	0.732
A30-A28	100-year 2050	Circular	Concrete	47.75	-30.864	0.829
A31-A30	100-year 2050	Circular	Concrete	6.73	-6.233	0.947
A32-A31	100-year 2050	Circular	Concrete	9.76	-11.122	1.517
A33-A32	100-year 2050	Circular	Concrete	9.44	-12.111	1.715
A34-A31	100-year 2050	Circular	Concrete	4.38	1.811	0.598
A35-A34	100-year 2050	Circular	Concrete	6.96	5.121	1.469
A36-A31	100-year 2050	Circular	Concrete	17.99	9.511	0.727
A37-A36	100-year 2050	Circular	Corrugated Metal	4.36	4.513	1.239
A38-A37	100-year 2050	Circular	Corrugated Metal	1.18	8.455	8.668
A39-A38	100-year 2050	Special	Corrugated Metal	5.44	5.862	1.153
A4-A3	100-year 2050	Special	Concrete	14.68	-8.033	0.571
A40-A38	100-year 2050	Special	Corrugated Metal	7	9.509	1.372
A41-A40	100-year 2050	Special	Corrugated Metal	3.89	7.114	2.068
A42-A30	100-year 2050	Circular	Concrete	25.67	14.306	0.887
A43-A42	100-year 2050	Circular	Concrete	3.75	10.687	3.697
A44-A42	100-year 2050	Circular	Concrete	20.97	-15.399	0.779
A45-A44	100-year 2050	Circular	Concrete	6.48	-12.102	2.038
A46-A45	100-year 2050	Special	Concrete	25.77	-31.213	1.561
A47-A46	100-year 2050	Special	Concrete	11.85	12.436	1.347
A48-A47	100-year 2050	Special	Concrete	13.92	7.844	0.749

XPSWMM Link Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	100-year 2050	Circular	Concrete	6.53	-15.193	3.226
A5-A4	100-year 2050	Special	Concrete	13.58	15.586	1.15
A50-A48	100-year 2050	Special	Concrete	13.94	11.409	0.82
A51-A50	100-year 2050	Circular	Concrete	5.98	-18.713	4.137
A52-A50	100-year 2050	Circular	Concrete	7.32	5.903	0.865
A53-A52	100-year 2050	Circular	Concrete	8.59	-7.364	1.12
A54-A52	100-year 2050	Circular	Concrete	4.91	7.726	1.782
A55-A54	100-year 2050	Circular	Concrete	8.36	5.038	0.785
A56-A54	100-year 2050	Circular	Concrete	8.47	7.114	1.039
A57-A56	100-year 2050	Circular	Concrete	10.11	6.735	0.799
A58-A45	100-year 2050	Circular	Concrete	104.63	-204.754	2.056
A59-A58	100-year 2050	Circular	Concrete	26.14	-31.414	1.613
A6-A3	100-year 2050	Special	Concrete	8.57	-11.078	1.363
A60-A59	100-year 2050	Circular	Concrete	11.37	16.038	1.628
A61-A59	100-year 2050	Circular	Concrete	11.8	-39.163	4.188
A62-A61	100-year 2050	Circular	Concrete	10.18	15.057	1.852
A63-A62	100-year 2050	Circular	Concrete	6.42	6.673	1.175
A64-A62	100-year 2050	Circular	Concrete	13.43	16.854	2.486
A65-A64	100-year 2050	Circular	Concrete	11.08	-8.437	1.06
A66-A65	100-year 2050	Circular	Concrete	15.64	-5.529	0.43
A67-A65	100-year 2050	Circular	Concrete	17.18	13.915	0.81
A68-A64	100-year 2050	Circular	Concrete	14.28	13.652	0.991
A69-A68	100-year 2050	Circular	Concrete	26.67	16.98	0.908
A7-A6	100-year 2050	Circular	Concrete	8.3	-12.848	2.14
A70-A69	100-year 2050	Circular	Concrete	7.77	-9.543	1.381
A71-A68	100-year 2050	Circular	Concrete	8.02	5.619	0.796
A72-A68	100-year 2050	Circular	Concrete	10.03	10.898	1.123
A73-A72	100-year 2050	Circular	Concrete	20.79	11.123	0.685
A74-A73	100-year 2050	Circular	Concrete	14.94	-4.313	0.426
A75-A73	100-year 2050	Circular	Concrete	8.8	9.761	1.16
A76-A75	100-year 2050	Circular	Concrete	4.5	5.306	1.298
A77-A75	100-year 2050	Circular	Concrete	8.04	9.176	1.573
A78-A77	100-year 2050	Circular	Concrete	4.78	7.997	1.829
A79-A78	100-year 2050	Circular	Concrete	4.41	3.904	0.906
A8-A6	100-year 2050	Special	Concrete	2.31	10.836	5.624
A80-A72	100-year 2050	Circular	Concrete	2.1	6.687	3.579
A81-BIO3	100-year 2050	Circular	Concrete	2.97	3.434	1.231
A82-A81	100-year 2050	Circular	Smooth HDPE	2.56	3.063	1.368
A83-A82	100-year 2050	Circular	Smooth HDPE	3.6	-2.475	1.258
A85-A84	100-year 2050	Circular	Concrete	3.68	-1.42	1.244
A86-A85	100-year 2050	Circular	Concrete	2.3	2.174	1.067
A87-A86	100-year 2050	Circular	Concrete	3.13	-4.194	1.586

XPSWMM Link Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	100-year 2050	Circular	Smooth HDPE	2.87	2.735	1.168
A90-A89	100-year 2050	Circular	Smooth HDPE	1.85	3.541	1.916
A92-A91	100-year 2050	Circular	Smooth HDPE	1.64	6.796	4.953
A93-A92	100-year 2050	Circular	Smooth HDPE	1	-2.64	3.433
B10-B9	100-year 2050	Circular	Terra Cotta	0.82	1.922	2.363
B11-B10	100-year 2050	Circular	Terra Cotta	1.15	1.618	1.447
B12-B9	100-year 2050	Circular	Terra Cotta	0.83	2.043	2.645
B13-B12	100-year 2050	Circular	Terra Cotta	0.51	1.417	3.204
B14-B12	100-year 2050	Circular	Terra Cotta	0.67	1.643	2.488
B15-B14	100-year 2050	Circular	Terra Cotta	0.89	1.652	1.908
B16-B9	100-year 2050	Circular	Corrugated Metal	0.6	2.259	3.758
B17-B16	100-year 2050	Circular	Corrugated Metal	2.58	2.778	1.204
B2-B1	100-year 2050	Circular	Concrete	19.17	-14.289	0.747
B3-B2	100-year 2050	Circular	Terra Cotta	2.09	2.589	1.304
B4-B3	100-year 2050	Circular	Terra Cotta	0.64	1.43	2.443
B5-B2	100-year 2050	Circular	Terra Cotta	1.76	2.757	1.641
B6-B5	100-year 2050	Circular	Terra Cotta	0.73	1.889	2.596
B7-B6	100-year 2050	Circular	Terra Cotta	0.72	1.622	2.293
B8-B7	100-year 2050	Circular	Terra Cotta	0.7	1.127	1.775
B9-B2	100-year 2050	Circular	Concrete	10.73	-7.744	0.868
C10-C8	100-year 2050	Circular	Terra Cotta	1.16	1.002	1.268
C11-C10	100-year 2050	Circular	Terra Cotta	1.27	-1.14	0.993
C12-C7	100-year 2050	Special	Corrugated Metal	21.52	-36.733	1.707
C13-C12	100-year 2050	Circular	Terra Cotta	1.63	1.87	1.444
C14-C13	100-year 2050	Circular	Terra Cotta	1.14	1.316	1.212
C15-C12	100-year 2050	Circular	Terra Cotta	1.79	1.847	1.611
C16-C15	100-year 2050	Circular	Terra Cotta	1.5	1.735	1.322
C17-C15	100-year 2050	Circular	Terra Cotta	1.2	1.074	1.084
C18-C12	100-year 2050	Special	Corrugated Metal	1.5	30.629	21.478
C19-C18	100-year 2050	Circular	Concrete	17.9	-13.446	0.988
C2-C1	100-year 2050	Special	Corrugated Metal	18.05	-42.056	2.928
C20-C19	100-year 2050	Circular	Concrete	4.61	-5.899	1.305
C21-C20	100-year 2050	Circular	Concrete	8.77	-5.2	0.851
C22-C20	100-year 2050	Circular	Concrete	6.35	-8.559	1.956
C23-C22	100-year 2050	Circular	Concrete	5.35	6.965	1.303
C24-C23	100-year 2050	Circular	Corrugated Metal	3.59	4.094	1.224
C25-C18	100-year 2050	Circular	Concrete	13.58	30.796	2.411
C26-C25	100-year 2050	Circular	Concrete	11.86	-9.943	0.986
C27-C26	100-year 2050	Circular	Concrete	6.67	9.563	1.555
C28-C25	100-year 2050	Circular	Concrete	31.65	22.271	0.831
C29-C28	100-year 2050	Circular	Concrete	12.33	-18.228	1.652
C3-C2	100-year 2050	Circular	Terra Cotta	3.8	2.991	0.825

XPSWMM Link Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	100-year 2050	Circular	Concrete	1.74	-12.549	9.069
C31-C28	100-year 2050	Circular	Concrete	24.95	19.556	0.793
C32-C31	100-year 2050	Circular	Concrete	14.63	-7.92	0.748
C33-C32	100-year 2050	Circular	Concrete	6.49	7.451	1.368
C34-C31	100-year 2050	Circular	Concrete	18.17	24.569	1.392
C35-C34	100-year 2050	Circular	Concrete	15.06	-20.298	1.952
C36-C34	100-year 2050	Circular	Concrete	10.38	-14.84	2.333
C37-C34	100-year 2050	Circular	Concrete	22.46	25.223	1.131
C38-C37	100-year 2050	Circular	Concrete	10.64	10.003	1.372
C39-C38	100-year 2050	Circular	Corrugated Metal	3.86	1.637	0.61
C4-C3	100-year 2050	Circular	Terra Cotta	0.93	1.415	1.704
C40-C38	100-year 2050	Circular	Concrete	10.16	9.507	1.19
C41-C40	100-year 2050	Circular	Concrete	15.19	14.828	1.04
C42-C37	100-year 2050	Circular	Concrete	13.67	23.914	1.817
C43-C42	100-year 2050	Circular	Concrete	4.89	6.711	1.608
C44-C42	100-year 2050	Circular	Concrete	15.91	13.087	0.823
C45-C44	100-year 2050	Circular	Concrete	9.24	6.575	0.731
C46-C44	100-year 2050	Circular	Concrete	20.35	8.699	0.445
C47-C46	100-year 2050	Circular	Concrete	3.21	8.144	2.546
C5-C2	100-year 2050	Circular	Terra Cotta	3.32	2.414	0.799
C6-C5	100-year 2050	Circular	Terra Cotta	0.96	1.283	1.478
C7-C2	100-year 2050	Special	Corrugated Metal	14.03	-38.934	3.217
C8-C7	100-year 2050	Circular	Terra Cotta	1.46	1.364	0.974
C9-C8	100-year 2050	Circular	Terra Cotta	2.15	1.176	0.648
D10-D8	100-year 2050	Circular	Concrete	12.95	1.837	0.274
D11-D8	100-year 2050	Circular	Concrete	6.61	6.977	1.071
D12-D11	100-year 2050	Circular	PVC	3.11	4.101	3.539
D13-D11	100-year 2050	Circular	Concrete	2.49	3.51	1.466
D14-D13	100-year 2050	Circular	PVC	6.77	3.013	0.477
D2-D1	100-year 2050	Special	Concrete	50.58	51.536	1.056
D3-D2	100-year 2050	Special	Corrugated Metal	15.34	110.262	8.114
D4-D3	100-year 2050	Special	Corrugated Metal	30.2	49.521	1.889
D5-D4	100-year 2050	Circular	Concrete	7.46	18.338	3.153
D6-D5	100-year 2050	Circular	Corrugated Metal	4.09	5.414	1.473
D7-D3	100-year 2050	Circular	Concrete	3.73	5.754	1.874
D8-D7	100-year 2050	Circular	Concrete	2.43	4.828	2.247
D9-D8	100-year 2050	Circular	Concrete	6.26	-4.004	0.69
F10-F5	100-year 2050	Circular	Concrete	13.1	12.986	0.994
F11-F10	100-year 2050	Circular	Concrete	4.5	5.086	1.397
F12-F11	100-year 2050	Circular	Concrete	8.64	2.935	0.752
F13-F11	100-year 2050	Circular	Concrete	4.32	5.171	1.207
F14-F13	100-year 2050	Circular	PVC	4.4	3.549	0.991

XPSWMM Link Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	100-year 2050	Circular	Concrete	3.73	3.531	1.101
F16-F15	100-year 2050	Circular	PVC	4.02	3.037	0.924
F17-F10	100-year 2050	Circular	Concrete	10.42	12.689	1.354
F18-F17	100-year 2050	Circular	Concrete	5.91	6.491	1.505
F19-F17	100-year 2050	Circular	Concrete	8.27	8.654	1.122
F2-F1	100-year 2050	Circular	Concrete	16.41	36.209	3.065
F20-F19	100-year 2050	Circular	Concrete	8.18	9.657	1.294
F21-F20	100-year 2050	Circular	Concrete	5.26	6.789	1.604
F22-F20	100-year 2050	Circular	Concrete	3.69	5.739	1.607
F23-F22	100-year 2050	Circular	Concrete	7.79	9.198	1.285
F24-F23	100-year 2050	Circular	Concrete	1.33	8.645	7.243
F25-F24	100-year 2050	Circular	Smooth HDPE	5.04	8.17	1.714
F3-F2	100-year 2050	Circular	Concrete	54.63	22.273	0.513
F4-F2	100-year 2050	Circular	Concrete	10.63	-17.539	1.766
F5-F4	100-year 2050	Circular	Concrete	29.27	-16.709	0.591
F6-F5	100-year 2050	Circular	Concrete	7.92	-8.841	1.238
F7-F6	100-year 2050	Circular	Concrete	2.04	6.2	3.578
F8-F7	100-year 2050	Circular	Concrete	10.49	8.083	0.834
F9-F8	100-year 2050	Circular	Corrugated Metal	2.96	4.363	1.539
G2-G1	100-year 2050	Circular	Concrete	19.84	-21.047	1.781
G3-G2	100-year 2050	Circular	Concrete	17.04	-5.393	1.294
G4-G3	100-year 2050	Circular	Concrete	5.96	9.598	1.611
H2-H1	100-year 2050	Circular	Concrete	6.82	6.377	0.936
H3-H2	100-year 2050	Circular	Concrete	3.63	8.508	2.726
I2-I1	100-year 2050	Circular	Concrete	15.16	23.002	1.519
I3-I2	100-year 2050	Circular	Concrete	3.84	14.73	3.843
I4-I2	100-year 2050	Circular	Concrete	28.62	13.449	0.471
I5-I4	100-year 2050	Circular	Concrete	6.93	6.261	0.903
I6-I4	100-year 2050	Circular	Concrete	5.66	7.271	1.285
J2-J1	100-year 2050	Circular	Concrete	4.21	4.658	1.106
J3-J2	100-year 2050	Circular	Concrete	2.79	3.7	1.426
J4-J3	100-year 2050	Circular	Concrete	5.09	2.45	0.593
J5-J3	100-year 2050	Circular	Concrete	1.19	2.969	2.877
K10-K9	100-year 2050	Circular	Concrete	4.15	-3.296	1.007
K2-K1	100-year 2050	Circular	Corrugated Metal	5.93	0.975	0.165
K3-K2	100-year 2050	Circular	Concrete	3.11	-3.228	1.039
K4-K2	100-year 2050	Circular	Concrete	3.28	4.015	1.224
K5-K4	100-year 2050	Circular	Concrete	5.26	4.365	1.085
K6-K5	100-year 2050	Circular	Concrete	8.63	6.487	0.812
K7-K6	100-year 2050	Circular	Concrete	2.03	5.681	2.796
K8-K7	100-year 2050	Circular	Concrete	3.86	2.428	0.891
K9-K8	100-year 2050	Circular	Concrete	4.72	3.119	0.847

XPSWMM Link Output Data

100-Year 2050 Rainfall Event, Tide Level 4.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	100-year 2050	Circular	Cast Iron	2.27	-2.071	1.835
L3-L2	100-year 2050	Circular	Corrugated Metal	5.35	-2.874	0.712
L4-L2	100-year 2050	Circular	Corrugated Metal	3.17	2.436	0.768
Orifice1.1	100-year 2050			2.21	0.708	0.397
Orifice2.1	100-year 2050			2.21	0.708	0.397
Orifice3.1	100-year 2050			2.21	3.181	1.493
M2-M1	100-year 2050	Circular	Concrete	4.38	7.991	1.823
M3-M2	100-year 2050	Circular	Concrete	6.04	7.328	1.238
M4-M2	100-year 2050	Circular	Concrete	4.75	1.367	0.288

XPSWMM Node Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	100-year 2080	Outfall	1380	0	0	81.136	0
A10	100-year 2080	Manhole	1378.733	0	0	94.866	0
A11	100-year 2080	Grate Inlet	1378.967	1369.7	0	87.848	10525.25
A12	100-year 2080	Grate Inlet	1378.333	1364.5	0	75.254	17642.61
A13	100-year 2080	Manhole	1377.367	275.9	0	69.945	4292.06
A14	100-year 2080	Grate Inlet	1374.7	1281.3	0	46.815	11464.06
A15	100-year 2080	Grate Inlet	1372.533	901.8	0	61.61	22303.12
A16	100-year 2080	Grate Inlet	1373.45	707.7	0	54.463	10699.31
A17	100-year 2080	Grate Inlet	1373.85	810	0	57.692	14047.19
A18	100-year 2080	Grate Inlet	1373.117	842.6	0	52.963	12578.28
A19	100-year 2080	Manhole	1378.783	0	0	99.057	0
A2	100-year 2080	Manhole	1379.48	1374.7	0	88.579	950967.91
A20	100-year 2080	Manhole	1378.65	0	0	100.162	0
A21	100-year 2080	Manhole	1378.267	0	0	101.545	0
A22	100-year 2080	Manhole	1378.083	0	0	98.809	0
A23	100-year 2080	Combination Inlet	1377.15	1374.8	0	97.667	37840.68
A24	100-year 2080	Combination Inlet	1375.65	1373	0	83.212	51686.24
A25	100-year 2080	Combination Inlet	1377	1374.8	0	97.115	152450.4
A26	100-year 2080	Combination Inlet	1377.267	1373.1	0	86.629	34795.22
A27	100-year 2080	Manhole	1374.383	1372	0	90.17	36361.56
A28	100-year 2080	Manhole	1375.217	1369.3	0	91.485	23662.68
A29	100-year 2080	Curb Inlet	1376.783	1369.6	0	85.543	19438.19
A3	100-year 2080	Manhole	1378.133	1377	0	72.976	329386.53
A30	100-year 2080	Manhole	1373.233	1369.3	0	87.848	35709.09
A31	100-year 2080	Manhole	1374.667	1357	0	82.347	32853.42
A32	100-year 2080	Combination Inlet	1374.617	1368.5	0	72.736	94000.87
A33	100-year 2080	Combination Inlet	1372.017	1360.7	0	68.159	56647.95
A34	100-year 2080	Manhole	1369.85	687.1	0	64.503	25170.59
A35	100-year 2080	Combination Inlet	1368.767	1230.1	0	61.27	49585.27
A36	100-year 2080	Curb Inlet	1368.117	1347.3	0	71.655	33314.21
A37	100-year 2080	Manhole	1359.85	413.3	0	59.97	43328.22
A38	100-year 2080	Grate Inlet	1359.967	424.9	0	65.24	77176.51
A39	100-year 2080	Grate Inlet	1345.667	391.9	0	54.857	19424.01
A4	100-year 2080	Grate Inlet	1378.067	1377.8	0	65.469	184138.17
A40	100-year 2080	Grate Inlet	1349.95	396.1	0	60.074	55191.6
A41	100-year 2080	Grate Inlet	1335.167	279.7	0	55.712	21670.61
A42	100-year 2080	Underground Junction	1372.8	1368.6	0	86.133	628.48
A43	100-year 2080	Curb Inlet	1376.65	1370.6	0	85.563	47439.78
A44	100-year 2080	Grate Inlet	1370.4	1367.3	0	81.844	89632.45

XPSWMM Node Output Data
100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A45	100-year 2080	Underground Junction	1368.7	1344.3	0	87.021	10946.65
A46	100-year 2080	Combination Inlet	1371.2	1357.5	0	77.65	32859.04
A47	100-year 2080	Manhole	1370.733	1342.5	0	75.529	32167.26
A48	100-year 2080	Manhole	1369.467	1296.7	0	72.314	124862.7
A49	100-year 2080	Combination Inlet	1371.733	1332.6	0	73.326	63616.72
A5	100-year 2080	Grate Inlet	1377.85	1376.6	0	66.37	9891.96
A50	100-year 2080	Manhole	1361.2	526	0	59.367	116281.38
A51	100-year 2080	Combination Inlet	1365.017	703.4	0	60.148	102603.15
A52	100-year 2080	Manhole	1260.667	167.4	0	53.165	21335.9
A53	100-year 2080	Combination Inlet	884.95	354.7	0	45.268	22385.55
A54	100-year 2080	Underground Junction	1209.333	25.3	0	55.726	282.67
A55	100-year 2080	Combination Inlet	570.417	101	0	41.973	6861.04
A56	100-year 2080	Manhole	891.867	82	0	48.997	8513.02
A57	100-year 2080	Grate Inlet	598.383	185.9	0	40.354	12818.04
A58	100-year 2080	Grate Inlet	1368.633	1361.5	0	79.622	58881.94
A59	100-year 2080	Underground Junction	1370.417	1345.5	0	80.433	4202.36
A6	100-year 2080	Manhole	1377.2	1373	0	56.59	102774.46
A60	100-year 2080	Combination Inlet	1371.7	1364	0	77.132	57053.94
A61	100-year 2080	Grate Inlet	1370.733	1365.1	0	80.311	94638.25
A62	100-year 2080	Grate Inlet	1370.533	1361.9	0	79.241	118039.56
A63	100-year 2080	Grate Inlet	1370.733	1352.2	0	67.862	22454.81
A64	100-year 2080	Manhole	1371	769.6	0	78.265	120649.67
A65	100-year 2080	Manhole	1370.767	847.2	0	76.341	112495.99
A66	100-year 2080	Curb Inlet	1367.517	866.6	0	64.675	64221.81
A67	100-year 2080	Curb Inlet	1363.2	835.1	0	68.805	38296.97
A68	100-year 2080	Manhole	984.133	23.3	0	76.095	8032.36
A69	100-year 2080	Combination Inlet	905.6	36	0	69.313	13306.75
A7	100-year 2080	Grate Inlet	1377.25	1375.6	0	55.31	124078.08
A70	100-year 2080	Grate Inlet	815.117	110.2	0	52.702	23796.31
A71	100-year 2080	Curb Inlet	773.15	41.6	0	57.642	13380.72
A72	100-year 2080	Manhole	135.567	18.3	0	74.228	1318.23
A73	100-year 2080	Underground Junction	68.7	4.2	0	69.163	176.02
A74	100-year 2080	Curb Inlet	57.517	14.8	0	56.774	918.71
A75	100-year 2080	Manhole	45.733	19.3	0	64.516	870.37
A76	100-year 2080	Curb Inlet	47.383	24.7	0	57.717	10245.7
A77	100-year 2080	Curb Inlet	46.483	13.9	0	68.642	1358.23
A78	100-year 2080	Curb Inlet	43.983	18.5	0	62.207	1512.47

XPSWMM Node Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A79	100-year 2080	Combination Inlet	31.817	20.8	0	51.96	1605.04
A8	100-year 2080	Curb Inlet	1377.2	1363.9	0	53.521	22522.28
A80	100-year 2080	Pond Structure	64	9.7	0	62.054	0
A81	100-year 2080	Pond Structure	78.5	78.5	0	53.43	1397.7
A82	100-year 2080	Grate Inlet	70.867	14.3	0	37.849	1182.48
A83	100-year 2080	Grate Inlet	103.817	25.6	0	41.857	941.11
A84	100-year 2080	Pond Structure	120.35	120.3	0	78.816	0.6
A85	100-year 2080	Manhole	1014.117	52.6	0	83.846	3261.19
A86	100-year 2080	Manhole	1095.9	58.5	0	105.527	2748.49
A87	100-year 2080	Curb Inlet	1161.283	224.5	0	101.754	7711.47
A88	100-year 2080	Pond Structure	478.833	478.8	0	66.064	13509.3
A89	100-year 2080	Manhole	734.167	22.6	0	55.29	2554.92
A90	100-year 2080	Grate Inlet	732.917	57.6	0	63.791	1850.94
A91	100-year 2080	Pond Structure	615.9	615.9	0	64.107	11250.24
A92	100-year 2080	Grate Inlet	976.033	540.2	0	59.997	42382.59
A93	100-year 2080	Grate Inlet	977.717	208.7	0	51.622	3912.18
B1	100-year 2080	Outfall	1380	0	0	85.337	0
B10	100-year 2080	Grate Inlet	1378.7	786.8	0	58.422	16665.57
B11	100-year 2080	Grate Inlet	1378.417	705.2	0	52.384	11010.78
B12	100-year 2080	Underground Junction	1378.65	0	0	57.631	0
B13	100-year 2080	Grate Inlet	1378.5	870	0	58.389	11263.2
B14	100-year 2080	Grate Inlet	1378.267	520.3	0	56.905	9650.32
B15	100-year 2080	Grate Inlet	1377.967	868.8	0	53.889	10848.98
B16	100-year 2080	Curb Inlet	1378.433	1378.1	0	60.365	27803.11
B17	100-year 2080	Grate Inlet	1378.25	1378.1	0	54.26	38843.09
B2	100-year 2080	Underground Junction	1379.16	0	0	61.616	0
B3	100-year 2080	Grate Inlet	1378.967	863.9	0	52.838	21196.98
B4	100-year 2080	Grate Inlet	1378.817	633.2	0	50.262	9030.42
B5	100-year 2080	Grate Inlet	1379.2	730.2	0	56.653	17150.42
B6	100-year 2080	Grate Inlet	1378.917	739.8	0	59.671	13574.19
B7	100-year 2080	Grate Inlet	1378.45	589	0	56.655	11346.11
B8	100-year 2080	Grate Inlet	1378.1	653.1	0	55.527	7393.22
B9	100-year 2080	Underground Junction	1378.717	0	0	54.752	0
BIO3	100-year 2080	Family Dollar Bioretention	267.583	0	0	4066.129	0
C1	100-year 2080	Outfall	1380	0	0	84.802	0
C10	100-year 2080	Grate Inlet	1378.25	704.5	0	59.793	12428.3
C11	100-year 2080	Grate Inlet	1377.583	652.9	0	51.446	8555.78

XPSWMM Node Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C12	100-year 2080	Underground Junction	1378.667	0	0	92.611	0
C13	100-year 2080	Grate Inlet	1378.533	782.8	0	57.236	20035.47
C14	100-year 2080	Grate Inlet	1378.017	412.3	0	49.183	6890.42
C15	100-year 2080	Underground Junction	1378.817	5.1	0	61.727	15.76
C16	100-year 2080	Grate Inlet	1378.483	538.7	0	56.48	7299.39
C17	100-year 2080	Grate Inlet	1378.233	688.7	0	54.325	7525.79
C18	100-year 2080	Curb Inlet	1378.4	1346.3	0	81.333	719748.69
C19	100-year 2080	Manhole	1378.65	1251.4	0	68.943	122968.24
C2	100-year 2080	Underground Junction	1379.52	0	0	91.296	0
C20	100-year 2080	Manhole	1377.5	1195.5	0	57.15	179930.36
C21	100-year 2080	Curb Inlet	1377.25	1231.2	0	48.176	79352.44
C22	100-year 2080	Grate Inlet	1377.383	1346.5	0	56.049	155688.91
C23	100-year 2080	Curb Inlet	1377.133	1301.9	0	57.537	24027.62
C24	100-year 2080	Curb Inlet	1377.05	994	0	51.112	42489.27
C25	100-year 2080	Manhole	1378.3	1375.7	0	76.642	299446.35
C26	100-year 2080	Combination Inlet	1378.45	1377.2	0	67.622	10245.91
C27	100-year 2080	Curb Inlet	1378.483	1376.8	0	63.714	12339.8
C28	100-year 2080	Manhole	1377.833	1371.8	0	71.576	63736.79
C29	100-year 2080	Combination Inlet	1378.25	1376.2	0	60.818	22137.43
C3	100-year 2080	Grate Inlet	1379.28	778	0	59.611	21028.1
C30	100-year 2080	Combination Inlet	1378.367	1375.7	0	65.443	9836.22
C31	100-year 2080	Manhole	1375.267	615.5	0	57.903	136877.11
C32	100-year 2080	Combination Inlet	1373.5	1043.5	0	47.612	130236.91
C33	100-year 2080	Curb Inlet	1349.717	462.7	0	46.158	33265.86
C34	100-year 2080	Manhole	1373.75	626.5	0	58.445	210302.98
C35	100-year 2080	Combination Inlet	1373.867	1139.2	0	51.666	246956.51
C36	100-year 2080	Combination Inlet	1376.35	1158.8	0	53.771	229333.97
C37	100-year 2080	Manhole	1185.117	21.1	0	63.901	3183.01
C38	100-year 2080	Underground Junction	1374.5	4.1	0	62.522	307.21
C39	100-year 2080	Curb Inlet	203.267	21.6	0	35.365	1252.01
C4	100-year 2080	Grate Inlet	1378.967	637.3	0	54.317	9188.5
C40	100-year 2080	Combination Inlet	964.533	24.5	0	60.953	6488.74
C41	100-year 2080	Combination Inlet	175.333	26	0	47.662	3699.4
C42	100-year 2080	Curb Inlet	741.967	25.9	0	59.932	8207.81
C43	100-year 2080	Curb Inlet	1340.9	28.2	0	53.39	4459.8
C44	100-year 2080	Underground Junction	34.383	0	0	53.738	0

XPSWMM Node Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C45	100-year 2080	Combination Inlet	15.867	12.2	0	38.675	193.18
C46	100-year 2080	Grate Inlet	4.3	0	0	23.009	0
C47	100-year 2080	Combination Inlet	53.733	23	0	38.286	593.39
C5	100-year 2080	Grate Inlet	1379.08	765.9	0	55.501	17218.04
C6	100-year 2080	Grate Inlet	1378.683	481.9	0	48.22	6730.47
C7	100-year 2080	Underground Junction	1379.24	0	0	92.336	0
C8	100-year 2080	Underground Junction	1378.667	0	0	69.982	0
C9	100-year 2080	Grate Inlet	1377.717	620.8	0	49.885	7366.34
D1	100-year 2080	Outfall	1380	0	0	68.488	0
D10	100-year 2080	Curb Inlet	179.717	38.3	0	29.322	1964.14
D11	100-year 2080	Manhole	1376.533	95.2	0	49.388	3687.8
D12	100-year 2080	Combination Inlet	1376.85	111	0	47.792	51605.67
D13	100-year 2080	Manhole	1374.367	16.5	0	53.774	413.8
D14	100-year 2080	Grate Inlet	12.133	0	0	26.152	0
D2	100-year 2080	Combination Inlet	1378.977	1134.1	0	75.086	1340547.59
D3	100-year 2080	Manhole	1379.21	902.7	0	76.838	1286564.59
D4	100-year 2080	Drop Curb Inlet	1372.36	1174.4	0	63.824	520732.72
D5	100-year 2080	Combination Inlet	1379.44	1376	0	59.732	94669.28
D6	100-year 2080	Combination Inlet	1379.36	1278.3	0	51.054	13476.01
D7	100-year 2080	Manhole	1378.867	553.3	0	47.378	19760.87
D8	100-year 2080	Underground Junction	1377.833	117.4	0	48.351	1116.62
D9	100-year 2080	Grate Inlet	1377.383	941.5	0	41.376	50844.44
F1	100-year 2080	Outfall	1380	0	0	74.303	0
F10	100-year 2080	Manhole	1376.933	58.9	0	60.974	8412.61
F11	100-year 2080	Manhole	1376.167	58.6	0	48.109	6674.82
F12	100-year 2080	Combination Inlet	196.95	51.1	0	41.122	1181.84
F13	100-year 2080	Manhole	163.95	44.4	0	48.065	594.07
F14	100-year 2080	Grate Inlet	110.417	56.2	0	40.354	3226.13
F15	100-year 2080	Manhole	90.567	36.6	0	44.769	290.18
F16	100-year 2080	Grate Inlet	55.25	40.3	0	37.297	707.05
F17	100-year 2080	Manhole	428.817	46.4	0	61.335	4345.49
F18	100-year 2080	Combination Inlet	1375.833	43.1	0	55.72	6849.89
F19	100-year 2080	Manhole	163.433	37.9	0	58.697	1159.31
F2	100-year 2080	Grate Inlet	1379.8	1379.8	0	73.882	1383383.19
F20	100-year 2080	Manhole	123.917	45	0	54.435	7156.45
F21	100-year 2080	Combination Inlet	117.583	45.9	0	50.131	14280.83
F22	100-year 2080	Manhole	130.133	87.4	0	52.855	12147.9
F23	100-year 2080	Grate Inlet	109.617	90.8	0	52.04	5745.59

XPSWMM Node Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
F24	100-year 2080	Drop Curb Inlet	115	92.2	0	56.644	41103.5
F25	100-year 2080	Pond Structure	175.75	69.8	0	56.746	0
F3	100-year 2080	Grate Inlet	1379.72	1379.7	0	65.026	853187.24
F4	100-year 2080	Manhole	1379.32	1377.6	0	67.064	95724.25
F5	100-year 2080	Underground Junction	1379.12	1376.6	0	64.248	209
F6	100-year 2080	Grate Inlet	1379	1378	0	62.641	133099.24
F7	100-year 2080	Manhole	1378.383	135.8	0	69.904	7089.47
F8	100-year 2080	Grate Inlet	1377.067	107.2	0	57.013	8116.95
F9	100-year 2080	Slotted Inlet	1371.767	153.6	0	43.146	41316.82
G1	100-year 2080	Outfall	1380	0	0	81.899	0
G2	100-year 2080	Grate Inlet	1380	1380	0	66.972	1983488.09
G3	100-year 2080	Grate Inlet	1379.84	1379.8	0	57.508	499884.2
G4	100-year 2080	Grate Inlet	1379.68	1081.9	0	63.864	53639.11
H1	100-year 2080	Outfall	1380	0	0	88.252	0
H2	100-year 2080	Combination Inlet	1379.4	1222.4	0	69.538	76495.06
H3	100-year 2080	Combination Inlet	1379.44	1297.4	0	72.121	204329.47
I1	100-year 2080	Outfall	1380	0	0	28.525	0
I2	100-year 2080	Underground Junction	34.783	6.8	0	63.668	8.36
I3	100-year 2080	Grate Inlet	61.65	33.8	0	69.85	41653.73
I4	100-year 2080	Manhole	0	0	0	16.98	0
I5	100-year 2080	Combination Inlet	2.55	0	0	16.851	0
I6	100-year 2080	Combination Inlet	7.583	0	0	23.74	0
J1	100-year 2080	Outfall	1380	0	0	79.487	0
J2	100-year 2080	Curb Inlet	1378.967	1378.3	0	71.891	6921.32
J3	100-year 2080	Underground Junction	1378.917	650	0	70.66	14.92
J4	100-year 2080	Grate Inlet	1378.817	1378.5	0	63.895	103316.59
J5	100-year 2080	Combination Inlet	1378.983	1377.5	0	72.861	205838.88
K1	100-year 2080	Outfall	1380	0	0	71.959	0
K10	100-year 2080	Grate Inlet	1286.667	127.4	0	44.997	8276.95
K2	100-year 2080	Underground Junction	0	0	0	61.579	0
K3	100-year 2080	Grate Inlet	1352.35	1286.9	0	53.27	67458.96
K4	100-year 2080	Combination Inlet	1347.367	1287.3	0	61.612	34350.64
K5	100-year 2080	Manhole	1336.1	75.5	0	58.976	7847.99
K6	100-year 2080	Grate Inlet	1324.583	286.7	0	57.244	11237.87
K7	100-year 2080	Grate Inlet	1317.933	741.5	0	65.763	23596.51
K8	100-year 2080	Grate Inlet	1304.8	652.8	0	59.962	30604.67
K9	100-year 2080	Grate Inlet	1290.967	397.5	0	53.175	17415.03

XPSWMM Node Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
L1	100-year 2080	Outfall	1380	0	0	60.246	0
L2	100-year 2080	Grate Inlet	1379.72	1379.7	0	46.156	191850.42
L3	100-year 2080	Pipe Inlet	1379.143	1379.1	0	39.156	48915.4
L4	100-year 2080	Pipe Inlet	1366.4	1366.4	0	35.408	2907.36
M1	100-year 2080	Outfall	1380	0	0	22.619	0
M2	100-year 2080	Underground Junction	65.483	11.8	0	69.75	3.83
M3	100-year 2080	Combination Inlet	54.483	42.5	0	65.778	23589.2
M4	100-year 2080	Combination Inlet	46.783	0	0	47.791	0
POND1	100-year 2080	Lyon Homes Apartments	827.483	0	0	108.286	0

XPSWMM Link Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	100-year 2080	Circular	Concrete	4.53	-35.524	8.29
A11-A10	100-year 2080	Circular	Concrete	6.73	-4.818	0.721
A12-A11	100-year 2080	Circular	Concrete	6.67	-3.203	0.579
A13-A12	100-year 2080	Circular	PVC	1.61	1.368	0.906
A14-A13	100-year 2080	Circular	PVC	3.06	-1.516	0.599
A15-A13	100-year 2080	Circular	PVC	2.16	-1.184	0.671
A16-A15	100-year 2080	Circular	Terra Cotta	1.13	1.285	1.255
A17-A15	100-year 2080	Circular	Terra Cotta	0.83	1.19	1.68
A18-A17	100-year 2080	Circular	Terra Cotta	0.9	-1.301	1.567
A19-A10	100-year 2080	Circular	Concrete	35.99	-29.241	0.813
A2-A1	100-year 2080	Circular	Concrete	22.06	-54.933	2.951
A20-A19	100-year 2080	Circular	Concrete	8.08	-25.239	3.591
A21-A20	100-year 2080	Circular	Concrete	16.9	-24.512	1.638
A22-A21	100-year 2080	Circular	Concrete	43.52	-24.817	0.573
A23-A22	100-year 2080	Circular	Concrete	18.14	-22.121	1.27
A24-A23	100-year 2080	Circular	Concrete	25.18	-29.23	1.314
A25-A23	100-year 2080	Circular	Concrete	16.21	-25.474	3.353
A26-A25	100-year 2080	Circular	Concrete	18.91	-27.893	1.771
A27-A25	100-year 2080	Circular	Concrete	149.5	-75.153	0.998
A28-A27	100-year 2080	Circular	Concrete	15.72	-21.816	2.26
A29-A28	100-year 2080	Circular	Concrete	17.68	-5.184	0.788
A3-A2	100-year 2080	Special	Concrete	27.26	-21.747	0.825
A30-A28	100-year 2080	Circular	Concrete	47.75	-22.036	0.743
A31-A30	100-year 2080	Circular	Concrete	6.73	-6.613	1.175
A32-A31	100-year 2080	Circular	Concrete	9.76	-7.993	1.589
A33-A32	100-year 2080	Circular	Concrete	9.44	-10.596	1.443
A34-A31	100-year 2080	Circular	Concrete	4.38	1.692	0.449
A35-A34	100-year 2080	Circular	Concrete	6.96	-6.256	1.176
A36-A31	100-year 2080	Circular	Concrete	17.99	-9.127	0.708
A37-A36	100-year 2080	Circular	Corrugated Metal	4.36	4.291	1.25
A38-A37	100-year 2080	Circular	Corrugated Metal	1.18	8.459	8.438
A39-A38	100-year 2080	Special	Corrugated Metal	5.44	-5.609	1.165
A4-A3	100-year 2080	Special	Concrete	14.68	-10.175	0.701
A40-A38	100-year 2080	Special	Corrugated Metal	7	8.975	1.388
A41-A40	100-year 2080	Special	Corrugated Metal	3.89	7.256	2.167
A42-A30	100-year 2080	Circular	Concrete	25.67	-20.742	0.863
A43-A42	100-year 2080	Circular	Concrete	3.75	-3.75	2.67
A44-A42	100-year 2080	Circular	Concrete	20.97	-13.751	0.865
A45-A44	100-year 2080	Circular	Concrete	6.48	-13.557	2.16
A46-A45	100-year 2080	Special	Concrete	25.77	-21.648	1.513
A47-A46	100-year 2080	Special	Concrete	11.85	-13.128	1.4
A48-A47	100-year 2080	Special	Concrete	13.92	-10.01	0.744

XPSWMM Link Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	100-year 2080	Circular	Concrete	6.53	-13.553	3.293
A5-A4	100-year 2080	Special	Concrete	13.58	15.794	1.163
A50-A48	100-year 2080	Special	Concrete	13.94	10.692	0.769
A51-A50	100-year 2080	Circular	Concrete	5.98	-19.815	3.989
A52-A50	100-year 2080	Circular	Concrete	7.32	5.861	0.801
A53-A52	100-year 2080	Circular	Concrete	8.59	7.591	1.121
A54-A52	100-year 2080	Circular	Concrete	4.91	8.045	1.941
A55-A54	100-year 2080	Circular	Concrete	8.36	4.957	0.799
A56-A54	100-year 2080	Circular	Concrete	8.47	8.418	1.084
A57-A56	100-year 2080	Circular	Concrete	10.11	-6.093	0.792
A58-A45	100-year 2080	Circular	Concrete	104.63	-85.809	1.814
A59-A58	100-year 2080	Circular	Concrete	26.14	24.522	1.486
A6-A3	100-year 2080	Special	Concrete	8.57	-10.206	1.585
A60-A59	100-year 2080	Circular	Concrete	11.37	-16.556	1.719
A61-A59	100-year 2080	Circular	Concrete	11.8	-28.661	3.645
A62-A61	100-year 2080	Circular	Concrete	10.18	12.076	1.532
A63-A62	100-year 2080	Circular	Concrete	6.42	-6.08	1.086
A64-A62	100-year 2080	Circular	Concrete	13.43	16.811	1.674
A65-A64	100-year 2080	Circular	Concrete	11.08	-8.76	1.175
A66-A65	100-year 2080	Circular	Concrete	15.64	-5.35	0.416
A67-A65	100-year 2080	Circular	Concrete	17.18	13.45	0.784
A68-A64	100-year 2080	Circular	Concrete	14.28	13.439	0.967
A69-A68	100-year 2080	Circular	Concrete	26.67	-17.37	0.928
A7-A6	100-year 2080	Circular	Concrete	8.3	9.313	1.987
A70-A69	100-year 2080	Circular	Concrete	7.77	-9.5	1.394
A71-A68	100-year 2080	Circular	Concrete	8.02	5.72	0.802
A72-A68	100-year 2080	Circular	Concrete	10.03	11.127	1.131
A73-A72	100-year 2080	Circular	Concrete	20.79	12.986	0.694
A74-A73	100-year 2080	Circular	Concrete	14.94	-4.828	0.469
A75-A73	100-year 2080	Circular	Concrete	8.8	9.425	1.14
A76-A75	100-year 2080	Circular	Concrete	4.5	5.604	1.277
A77-A75	100-year 2080	Circular	Concrete	8.04	9.49	1.365
A78-A77	100-year 2080	Circular	Concrete	4.78	7.792	1.713
A79-A78	100-year 2080	Circular	Concrete	4.41	3.811	0.899
A8-A6	100-year 2080	Special	Concrete	2.31	10.168	5.425
A80-A72	100-year 2080	Circular	Concrete	2.1	6.438	3.584
A81-BIO3	100-year 2080	Circular	Concrete	2.97	3.432	1.224
A82-A81	100-year 2080	Circular	Smooth HDPE	2.56	-2.983	1.329
A83-A82	100-year 2080	Circular	Smooth HDPE	3.6	2.657	1.311
A85-A84	100-year 2080	Circular	Concrete	3.68	-1.641	1.39
A86-A85	100-year 2080	Circular	Concrete	2.3	2.182	1.068
A87-A86	100-year 2080	Circular	Concrete	3.13	-4.264	1.592

XPSWMM Link Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	100-year 2080	Circular	Smooth HDPE	2.87	2.685	1.041
A90-A89	100-year 2080	Circular	Smooth HDPE	1.85	3.583	1.994
A92-A91	100-year 2080	Circular	Smooth HDPE	1.64	6.813	4.96
A93-A92	100-year 2080	Circular	Smooth HDPE	1	-2.661	3.428
B10-B9	100-year 2080	Circular	Terra Cotta	0.82	1.482	2.768
B11-B10	100-year 2080	Circular	Terra Cotta	1.15	1.276	1.268
B12-B9	100-year 2080	Circular	Terra Cotta	0.83	-2.227	3.579
B13-B12	100-year 2080	Circular	Terra Cotta	0.51	1.29	2.98
B14-B12	100-year 2080	Circular	Terra Cotta	0.67	-1.413	2.118
B15-B14	100-year 2080	Circular	Terra Cotta	0.89	1.417	1.734
B16-B9	100-year 2080	Circular	Corrugated Metal	0.6	-1.744	4.497
B17-B16	100-year 2080	Circular	Corrugated Metal	2.58	-0.555	0.645
B2-B1	100-year 2080	Circular	Concrete	19.17	-17.606	0.946
B3-B2	100-year 2080	Circular	Terra Cotta	2.09	1.995	1.002
B4-B3	100-year 2080	Circular	Terra Cotta	0.64	1.346	2.263
B5-B2	100-year 2080	Circular	Terra Cotta	1.76	2.044	1.436
B6-B5	100-year 2080	Circular	Terra Cotta	0.73	1.63	2.429
B7-B6	100-year 2080	Circular	Terra Cotta	0.72	1.5	2.174
B8-B7	100-year 2080	Circular	Terra Cotta	0.7	1.178	1.81
B9-B2	100-year 2080	Circular	Concrete	10.73	-10.613	1.127
C10-C8	100-year 2080	Circular	Terra Cotta	1.16	1.117	1.097
C11-C10	100-year 2080	Circular	Terra Cotta	1.27	-1.1	1.044
C12-C7	100-year 2080	Special	Corrugated Metal	21.52	-40.32	1.996
C13-C12	100-year 2080	Circular	Terra Cotta	1.63	1.44	1.156
C14-C13	100-year 2080	Circular	Terra Cotta	1.14	-1.18	1.18
C15-C12	100-year 2080	Circular	Terra Cotta	1.79	1.469	1.098
C16-C15	100-year 2080	Circular	Terra Cotta	1.5	1.536	1.181
C17-C15	100-year 2080	Circular	Terra Cotta	1.2	0.953	1.007
C18-C12	100-year 2080	Special	Corrugated Metal	1.5	-34.709	24.281
C19-C18	100-year 2080	Circular	Concrete	17.9	-13.849	0.962
C2-C1	100-year 2080	Special	Corrugated Metal	18.05	-45.487	3.332
C20-C19	100-year 2080	Circular	Concrete	4.61	-5.813	1.577
C21-C20	100-year 2080	Circular	Concrete	8.77	-5.779	0.741
C22-C20	100-year 2080	Circular	Concrete	6.35	-10.837	2.064
C23-C22	100-year 2080	Circular	Concrete	5.35	6.703	1.255
C24-C23	100-year 2080	Circular	Corrugated Metal	3.59	4.167	1.24
C25-C18	100-year 2080	Circular	Concrete	13.58	21.907	2.288
C26-C25	100-year 2080	Circular	Concrete	11.86	7.597	0.795
C27-C26	100-year 2080	Circular	Concrete	6.67	4.395	1.302
C28-C25	100-year 2080	Circular	Concrete	31.65	-17.359	0.839
C29-C28	100-year 2080	Circular	Concrete	12.33	11.627	1.426
C3-C2	100-year 2080	Circular	Terra Cotta	3.8	1.756	0.574

XPSWMM Link Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	100-year 2080	Circular	Concrete	1.74	-10.277	7.663
C31-C28	100-year 2080	Circular	Concrete	24.95	-17.288	0.706
C32-C31	100-year 2080	Circular	Concrete	14.63	-9.073	0.803
C33-C32	100-year 2080	Circular	Concrete	6.49	7.523	1.404
C34-C31	100-year 2080	Circular	Concrete	18.17	23.902	1.328
C35-C34	100-year 2080	Circular	Concrete	15.06	-25.414	2.009
C36-C34	100-year 2080	Circular	Concrete	10.38	-24.394	2.453
C37-C34	100-year 2080	Circular	Concrete	22.46	26.917	1.201
C38-C37	100-year 2080	Circular	Concrete	10.64	9.572	1.328
C39-C38	100-year 2080	Circular	Corrugated Metal	3.86	2.116	0.668
C4-C3	100-year 2080	Circular	Terra Cotta	0.93	1.418	1.617
C40-C38	100-year 2080	Circular	Concrete	10.16	9.512	1.196
C41-C40	100-year 2080	Circular	Concrete	15.19	14.776	1.165
C42-C37	100-year 2080	Circular	Concrete	13.67	20.993	1.894
C43-C42	100-year 2080	Circular	Concrete	4.89	5.348	1.786
C44-C42	100-year 2080	Circular	Concrete	15.91	14.234	0.895
C45-C44	100-year 2080	Circular	Concrete	9.24	6.487	0.737
C46-C44	100-year 2080	Circular	Concrete	20.35	8.902	0.459
C47-C46	100-year 2080	Circular	Concrete	3.21	8.644	2.69
C5-C2	100-year 2080	Circular	Terra Cotta	3.32	1.703	0.581
C6-C5	100-year 2080	Circular	Terra Cotta	0.96	1.229	1.312
C7-C2	100-year 2080	Special	Corrugated Metal	14.03	-41.99	3.628
C8-C7	100-year 2080	Circular	Terra Cotta	1.46	-1.261	0.881
C9-C8	100-year 2080	Circular	Terra Cotta	2.15	-1.307	0.757
D10-D8	100-year 2080	Circular	Concrete	12.95	-2.906	0.271
D11-D8	100-year 2080	Circular	Concrete	6.61	7.183	1.092
D12-D11	100-year 2080	Circular	PVC	3.11	10.232	3.501
D13-D11	100-year 2080	Circular	Concrete	2.49	3.258	1.547
D14-D13	100-year 2080	Circular	PVC	6.77	3.258	0.516
D2-D1	100-year 2080	Special	Concrete	50.58	36.539	1.063
D3-D2	100-year 2080	Special	Corrugated Metal	15.34	109.942	7.887
D4-D3	100-year 2080	Special	Corrugated Metal	30.2	-52.82	2.073
D5-D4	100-year 2080	Circular	Concrete	7.46	12.925	1.917
D6-D5	100-year 2080	Circular	Corrugated Metal	4.09	5.142	1.584
D7-D3	100-year 2080	Circular	Concrete	3.73	-6.67	1.873
D8-D7	100-year 2080	Circular	Concrete	2.43	3.953	1.779
D9-D8	100-year 2080	Circular	Concrete	6.26	-4.255	0.694
F10-F5	100-year 2080	Circular	Concrete	13.1	12.833	0.983
F11-F10	100-year 2080	Circular	Concrete	4.5	5.044	1.341
F12-F11	100-year 2080	Circular	Concrete	8.64	2.603	0.796
F13-F11	100-year 2080	Circular	Concrete	4.32	5.202	1.255
F14-F13	100-year 2080	Circular	PVC	4.4	3.836	1.027

XPSWMM Link Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	100-year 2080	Circular	Concrete	3.73	3.533	1.094
F16-F15	100-year 2080	Circular	PVC	4.02	3.636	0.914
F17-F10	100-year 2080	Circular	Concrete	10.42	12.592	1.238
F18-F17	100-year 2080	Circular	Concrete	5.91	7.238	1.617
F19-F17	100-year 2080	Circular	Concrete	8.27	8.564	1.144
F2-F1	100-year 2080	Circular	Concrete	16.41	-35.248	3.512
F20-F19	100-year 2080	Circular	Concrete	8.18	10.287	1.294
F21-F20	100-year 2080	Circular	Concrete	5.26	7.628	1.644
F22-F20	100-year 2080	Circular	Concrete	3.69	5.689	1.613
F23-F22	100-year 2080	Circular	Concrete	7.79	7.684	1.288
F24-F23	100-year 2080	Circular	Concrete	1.33	8.762	7.068
F25-F24	100-year 2080	Circular	Smooth HDPE	5.04	8.203	1.689
F3-F2	100-year 2080	Circular	Concrete	54.63	19.03	0.793
F4-F2	100-year 2080	Circular	Concrete	10.63	-17.944	1.822
F5-F4	100-year 2080	Circular	Concrete	29.27	-17.281	0.613
F6-F5	100-year 2080	Circular	Concrete	7.92	-8.987	1.277
F7-F6	100-year 2080	Circular	Concrete	2.04	6.056	3.732
F8-F7	100-year 2080	Circular	Concrete	10.49	8.052	0.834
F9-F8	100-year 2080	Circular	Corrugated Metal	2.96	4.387	1.548
G2-G1	100-year 2080	Circular	Concrete	19.84	-32.982	2.185
G3-G2	100-year 2080	Circular	Concrete	17.04	-7.149	1.321
G4-G3	100-year 2080	Circular	Concrete	5.96	9.39	1.577
H2-H1	100-year 2080	Circular	Concrete	6.82	5.295	0.809
H3-H2	100-year 2080	Circular	Concrete	3.63	-8.087	2.608
I2-I1	100-year 2080	Circular	Concrete	15.16	22.908	1.513
I3-I2	100-year 2080	Circular	Concrete	3.84	13.72	3.675
I4-I2	100-year 2080	Circular	Concrete	28.62	15.317	0.536
I5-I4	100-year 2080	Circular	Concrete	6.93	7.106	1.025
I6-I4	100-year 2080	Circular	Concrete	5.66	8.284	1.464
J2-J1	100-year 2080	Circular	Concrete	4.21	-5.415	1.289
J3-J2	100-year 2080	Circular	Concrete	2.79	-3.873	1.424
J4-J3	100-year 2080	Circular	Concrete	5.09	-2.111	0.457
J5-J3	100-year 2080	Circular	Concrete	1.19	2.484	2.098
K10-K9	100-year 2080	Circular	Concrete	4.15	-3.552	0.985
K2-K1	100-year 2080	Circular	Corrugated Metal	5.93	-0.659	0.111
K3-K2	100-year 2080	Circular	Concrete	3.11	-3.64	1.172
K4-K2	100-year 2080	Circular	Concrete	3.28	3.367	1.028
K5-K4	100-year 2080	Circular	Concrete	5.26	4.137	1.071
K6-K5	100-year 2080	Circular	Concrete	8.63	6.939	0.811
K7-K6	100-year 2080	Circular	Concrete	2.03	5.816	2.868
K8-K7	100-year 2080	Circular	Concrete	3.86	2.943	0.843
K9-K8	100-year 2080	Circular	Concrete	4.72	2.883	0.799

XPSWMM Link Output Data

100-Year 2080 Rainfall Event, Tide Level 5.2 Feet NAVD88

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	100-year 2080	Circular	Cast Iron	2.27	-2.967	2.197
L3-L2	100-year 2080	Circular	Corrugated Metal	5.35	-3.546	0.848
L4-L2	100-year 2080	Circular	Corrugated Metal	3.17	2.447	0.771
Orifice1.1	100-year 2080			2.21	0.749	0.391
Orifice2.1	100-year 2080			2.21	0.749	0.391
Orifice3.1	100-year 2080			2.21	3.248	1.487
M2-M1	100-year 2080	Circular	Concrete	4.38	7.711	1.759
M3-M2	100-year 2080	Circular	Concrete	6.04	6.968	1.177
M4-M2	100-year 2080	Circular	Concrete	4.75	1.546	0.325

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A1	July 17, 2021	Outfall	0.00	0.00	0.00	0.00	0.00
A10	July 17, 2021	Manhole	154.30	0.00	0.00	91.45	0.00
A11	July 17, 2021	Grate Inlet	155.70	142.90	0.00	84.81	612.46
A12	July 17, 2021	Grate Inlet	153.55	142.90	0.00	72.94	784.87
A13	July 17, 2021	Manhole	150.83	59.70	0.00	67.89	1245.25
A14	July 17, 2021	Grate Inlet	143.00	142.70	0.00	40.54	500.40
A15	July 17, 2021	Grate Inlet	143.37	134.10	0.00	55.96	2508.16
A16	July 17, 2021	Grate Inlet	148.77	126.60	0.00	49.09	1003.36
A17	July 17, 2021	Grate Inlet	152.85	134.00	0.00	51.68	1302.79
A18	July 17, 2021	Grate Inlet	145.42	132.90	0.00	47.53	1194.07
A19	July 17, 2021	Manhole	154.82	0.00	0.00	95.24	0.00
A2	July 17, 2021	Manhole	154.23	142.10	0.00	86.83	88911.33
A20	July 17, 2021	Manhole	154.78	0.00	0.00	95.87	0.00
A21	July 17, 2021	Manhole	154.42	0.00	0.00	95.82	0.00
A22	July 17, 2021	Manhole	154.00	0.00	0.00	92.78	0.00
A23	July 17, 2021	Combination Inlet	151.65	148.30	0.00	91.11	14812.44
A24	July 17, 2021	Combination Inlet	150.62	146.30	0.00	76.65	21216.98
A25	July 17, 2021	Combination Inlet	151.28	147.90	0.00	90.45	49696.36
A26	July 17, 2021	Combination Inlet	152.65	146.90	0.00	79.97	13773.49
A27	July 17, 2021	Manhole	147.92	145.80	0.00	83.51	13587.22
A28	July 17, 2021	Manhole	149.82	143.80	0.00	84.94	10500.67
A29	July 17, 2021	Curb Inlet	152.60	144.50	0.00	79.00	7795.91
A3	July 17, 2021	Manhole	151.33	143.00	0.00	71.14	44395.79
A30	July 17, 2021	Manhole	147.88	144.20	0.00	81.31	16905.90
A31	July 17, 2021	Manhole	149.58	142.60	0.00	75.82	5226.25
A32	July 17, 2021	Combination Inlet	149.60	143.80	0.00	66.18	30141.88
A33	July 17, 2021	Combination Inlet	146.30	143.20	0.00	61.63	16449.10
A34	July 17, 2021	Manhole	144.77	139.10	0.00	58.05	3837.95
A35	July 17, 2021	Combination Inlet	143.67	142.50	0.00	54.72	9379.32
A36	July 17, 2021	Curb Inlet	143.28	142.50	0.00	65.11	10454.42
A37	July 17, 2021	Manhole	142.48	104.20	0.00	56.66	10537.25
A38	July 17, 2021	Grate Inlet	142.48	109.80	0.00	64.86	21956.11
A39	July 17, 2021	Grate Inlet	142.38	103.30	0.00	49.93	5236.84
A4	July 17, 2021	Grate Inlet	151.72	147.00	0.00	63.49	33564.72
A40	July 17, 2021	Grate Inlet	142.40	102.50	0.00	59.02	15515.66
A41	July 17, 2021	Grate Inlet	142.22	76.30	0.00	53.00	6177.83
A42	July 17, 2021	Underground Junction	147.52	142.80	0.00	79.59	206.07
A43	July 17, 2021	Curb Inlet	152.63	145.40	0.00	79.02	18772.06
A44	July 17, 2021	Grate Inlet	145.43	143.30	0.00	75.30	21039.23

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A45	July 17, 2021	Underground Junction	145.43	141.80	0.00	74.46	594.53
A46	July 17, 2021	Combination Inlet	148.60	142.70	0.00	71.06	3931.14
A47	July 17, 2021	Manhole	147.92	142.30	0.00	68.97	5502.93
A48	July 17, 2021	Manhole	144.57	141.70	0.00	65.79	20186.15
A49	July 17, 2021	Combination Inlet	148.33	142.40	0.00	66.83	10273.96
A5	July 17, 2021	Grate Inlet	148.82	143.30	0.00	62.17	1849.81
A50	July 17, 2021	Manhole	142.28	122.30	0.00	59.31	24931.10
A51	July 17, 2021	Combination Inlet	142.50	140.10	0.00	59.12	15433.88
A52	July 17, 2021	Manhole	141.92	54.50	0.00	52.76	6424.27
A53	July 17, 2021	Combination Inlet	141.77	105.00	0.00	45.51	7409.24
A54	July 17, 2021	Underground Junction	141.80	7.80	0.00	56.00	152.02
A55	July 17, 2021	Combination Inlet	138.07	34.10	0.00	40.65	1325.67
A56	July 17, 2021	Manhole	141.73	27.10	0.00	49.16	2344.96
A57	July 17, 2021	Grate Inlet	140.65	63.20	0.00	40.16	3610.04
A58	July 17, 2021	Grate Inlet	144.87	142.90	0.00	73.03	6215.38
A59	July 17, 2021	Underground Junction	147.15	142.10	0.00	73.84	197.17
A6	July 17, 2021	Manhole	147.78	143.30	0.00	54.66	9238.14
A60	July 17, 2021	Combination Inlet	148.67	143.40	0.00	70.55	17710.77
A61	July 17, 2021	Grate Inlet	147.12	143.40	0.00	73.71	23089.67
A62	July 17, 2021	Grate Inlet	146.90	143.20	0.00	72.36	35854.29
A63	July 17, 2021	Grate Inlet	147.02	142.90	0.00	61.01	8903.45
A64	July 17, 2021	Manhole	147.08	140.70	0.00	72.50	12823.28
A65	July 17, 2021	Manhole	146.50	141.60	0.00	69.40	26548.29
A66	July 17, 2021	Curb Inlet	143.58	141.50	0.00	57.71	26677.33
A67	July 17, 2021	Curb Inlet	143.32	141.80	0.00	61.42	8507.32
A68	July 17, 2021	Manhole	141.45	10.10	0.00	75.57	3884.73
A69	July 17, 2021	Combination Inlet	141.40	20.80	0.00	68.50	5890.04
A7	July 17, 2021	Grate Inlet	150.20	143.50	0.00	52.79	25696.08
A70	July 17, 2021	Grate Inlet	141.32	60.50	0.00	49.60	8654.93
A71	July 17, 2021	Curb Inlet	141.40	26.90	0.00	53.41	3383.17
A72	July 17, 2021	Manhole	75.68	5.20	0.00	72.59	348.52
A73	July 17, 2021	Underground Junction	45.28	0.00	0.00	63.70	1.31
A74	July 17, 2021	Curb Inlet	33.57	2.20	0.00	56.85	140.35
A75	July 17, 2021	Manhole	26.18	6.20	0.00	63.33	356.01
A76	July 17, 2021	Curb Inlet	27.63	15.90	0.00	54.68	1538.80
A77	July 17, 2021	Curb Inlet	26.45	1.90	0.00	67.56	159.14
A78	July 17, 2021	Curb Inlet	25.47	3.60	0.00	62.03	249.72

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
A79	July 17, 2021	Combination Inlet	21.25	7.70	0.00	51.36	163.24
A8	July 17, 2021	Curb Inlet	147.78	143.00	0.00	51.52	2950.72
A80	July 17, 2021	Pond Structure	28.23	0.00	0.00	55.35	0.00
A81	July 17, 2021	Pond Structure	31.97	32.00	0.00	53.22	809.00
A82	July 17, 2021	Grate Inlet	49.22	5.50	0.00	37.73	416.23
A83	July 17, 2021	Grate Inlet	64.45	14.90	0.00	41.53	586.84
A84	July 17, 2021	Pond Structure	23.00	23.00	0.00	78.81	0.11
A85	July 17, 2021	Manhole	142.10	29.40	0.00	83.77	1546.92
A86	July 17, 2021	Manhole	143.73	27.30	0.00	105.63	1370.69
A87	July 17, 2021	Curb Inlet	154.42	68.40	0.00	101.91	2992.38
A88	July 17, 2021	Pond Structure	101.98	102.00	0.00	66.12	3538.58
A89	July 17, 2021	Manhole	159.08	13.40	0.00	55.29	1266.81
A90	July 17, 2021	Grate Inlet	158.47	41.40	0.00	63.73	1257.58
A91	July 17, 2021	Pond Structure	95.40	95.40	0.00	64.06	1729.77
A92	July 17, 2021	Grate Inlet	142.27	98.30	0.00	59.49	9154.94
A93	July 17, 2021	Grate Inlet	142.22	55.30	0.00	51.48	980.97
B1	July 17, 2021	Outfall	185.00	0.00	0.00	26.40	0.00
B10	July 17, 2021	Grate Inlet	28.40	0.00	0.00	35.04	0.00
B11	July 17, 2021	Grate Inlet	20.58	0.00	0.00	34.39	0.00
B12	July 17, 2021	Underground Junction	47.68	0.00	0.00	37.57	0.00
B13	July 17, 2021	Grate Inlet	35.98	0.00	0.00	38.96	0.00
B14	July 17, 2021	Grate Inlet	26.72	1.80	0.00	54.76	18.93
B15	July 17, 2021	Grate Inlet	23.45	4.10	0.00	49.29	36.19
B16	July 17, 2021	Curb Inlet	143.03	142.60	0.00	49.68	7202.65
B17	July 17, 2021	Grate Inlet	142.90	142.70	0.00	43.58	12577.79
B2	July 17, 2021	Underground Junction	0.00	0.00	0.00	15.73	0.00
B3	July 17, 2021	Grate Inlet	0.00	0.00	0.00	13.06	0.00
B4	July 17, 2021	Grate Inlet	22.43	0.00	0.00	15.30	0.00
B5	July 17, 2021	Grate Inlet	21.33	0.00	0.00	29.47	0.00
B6	July 17, 2021	Grate Inlet	27.73	3.00	0.00	57.78	46.59
B7	July 17, 2021	Grate Inlet	24.70	7.00	0.00	53.44	113.46
B8	July 17, 2021	Grate Inlet	23.50	7.80	0.00	51.85	124.16
B9	July 17, 2021	Underground Junction	0.00	0.00	0.00	15.22	0.00
BIO3	July 17, 2021	Family Dollar Bioretention	78.30	0.00	0.00	2774.68	0.00
C1	July 17, 2021	Outfall	0.00	0.00	0.00	25.87	0.00
C10	July 17, 2021	Grate Inlet	39.23	6.30	0.00	58.31	99.57
C11	July 17, 2021	Grate Inlet	35.52	7.30	0.00	50.90	106.01

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C12	July 17, 2021	Underground Junction	37.33	0.00	0.00	77.08	0.00
C13	July 17, 2021	Grate Inlet	37.97	0.30	0.00	56.24	5.71
C14	July 17, 2021	Grate Inlet	34.85	0.80	0.00	46.83	7.69
C15	July 17, 2021	Underground Junction	38.48	0.00	0.00	40.70	0.00
C16	July 17, 2021	Grate Inlet	37.60	0.00	0.00	36.11	0.00
C17	July 17, 2021	Grate Inlet	36.68	0.00	0.00	36.46	0.00
C18	July 17, 2021	Curb Inlet	37.82	23.30	0.00	76.66	10076.33
C19	July 17, 2021	Manhole	38.37	14.70	0.00	61.42	1727.19
C2	July 17, 2021	Underground Junction	38.37	0.00	0.00	59.35	0.00
C20	July 17, 2021	Manhole	38.57	32.70	0.00	55.47	4086.14
C21	July 17, 2021	Curb Inlet	38.03	33.80	0.00	43.74	834.63
C22	July 17, 2021	Grate Inlet	38.53	37.50	0.00	52.13	3869.48
C23	July 17, 2021	Curb Inlet	38.57	37.60	0.00	52.68	507.11
C24	July 17, 2021	Curb Inlet	38.80	37.50	0.00	46.23	4823.02
C25	July 17, 2021	Manhole	37.78	33.50	0.00	69.08	10749.33
C26	July 17, 2021	Combination Inlet	38.35	36.10	0.00	58.03	531.15
C27	July 17, 2021	Curb Inlet	38.32	37.30	0.00	53.43	2854.25
C28	July 17, 2021	Manhole	36.40	33.60	0.00	61.62	4571.27
C29	July 17, 2021	Combination Inlet	38.13	34.70	0.00	50.58	5040.61
C3	July 17, 2021	Grate Inlet	29.23	0.00	0.00	23.54	0.00
C30	July 17, 2021	Combination Inlet	38.78	34.30	0.00	55.29	2171.98
C31	July 17, 2021	Manhole	34.73	28.00	0.00	54.70	5415.98
C32	July 17, 2021	Combination Inlet	35.02	31.00	0.00	46.45	3848.96
C33	July 17, 2021	Curb Inlet	34.45	20.10	0.00	45.98	1633.65
C34	July 17, 2021	Manhole	34.32	29.10	0.00	55.43	7761.33
C35	July 17, 2021	Combination Inlet	35.72	32.30	0.00	48.88	3878.10
C36	July 17, 2021	Combination Inlet	36.25	33.20	0.00	51.08	4214.06
C37	July 17, 2021	Manhole	32.23	2.00	0.00	63.08	352.53
C38	July 17, 2021	Underground Junction	33.93	0.00	0.00	53.13	0.00
C39	July 17, 2021	Curb Inlet	26.00	2.40	0.00	33.47	76.93
C4	July 17, 2021	Grate Inlet	21.10	0.00	0.00	19.61	0.00
C40	July 17, 2021	Combination Inlet	31.58	4.70	0.00	60.01	909.30
C41	July 17, 2021	Combination Inlet	25.58	6.20	0.00	47.03	724.56
C42	July 17, 2021	Curb Inlet	31.07	3.80	0.00	55.40	496.21
C43	July 17, 2021	Curb Inlet	33.00	5.40	0.00	48.15	357.40
C44	July 17, 2021	Underground Junction	4.17	0.00	0.00	43.53	0.00

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
C45	July 17, 2021	Combination Inlet	0.25	0.10	0.00	23.04	2.50
C46	July 17, 2021	Grate Inlet	0.00	0.00	0.00	6.41	0.00
C47	July 17, 2021	Combination Inlet	0.00	0.00	0.00	9.37	0.00
C5	July 17, 2021	Grate Inlet	17.23	0.00	0.00	21.65	0.00
C6	July 17, 2021	Grate Inlet	8.90	0.00	0.00	17.73	0.00
C7	July 17, 2021	Underground Junction	39.32	0.00	0.00	73.40	0.00
C8	July 17, 2021	Underground Junction	39.80	0.00	0.00	64.38	0.00
C9	July 17, 2021	Grate Inlet	34.37	3.80	0.00	48.67	53.75
D1	July 17, 2021	Outfall	0.00	0.00	0.00	15.28	0.00
D10	July 17, 2021	Curb Inlet	46.37	6.30	0.00	27.81	63.97
D11	July 17, 2021	Manhole	56.30	39.40	0.00	45.81	1039.93
D12	July 17, 2021	Combination Inlet	60.20	44.90	0.00	44.22	22293.54
D13	July 17, 2021	Manhole	55.07	2.00	0.00	53.22	41.35
D14	July 17, 2021	Grate Inlet	0.00	0.00	0.00	15.63	0.00
D2	July 17, 2021	Combination Inlet	0.00	0.00	0.00	15.35	0.00
D3	July 17, 2021	Manhole	0.00	0.00	0.00	17.43	0.00
D4	July 17, 2021	Drop Curb Inlet	0.00	0.00	0.00	16.44	0.00
D5	July 17, 2021	Combination Inlet	8.83	0.00	0.00	29.34	0.00
D6	July 17, 2021	Combination Inlet	6.00	0.00	0.00	21.53	0.00
D7	July 17, 2021	Manhole	50.35	0.00	0.00	24.70	0.00
D8	July 17, 2021	Underground Junction	68.78	37.50	0.00	45.66	207.81
D9	July 17, 2021	Grate Inlet	63.33	52.00	0.00	39.18	8143.36
F1	July 17, 2021	Outfall	0.00	0.00	0.00	31.14	0.00
F10	July 17, 2021	Manhole	59.13	28.00	0.00	58.95	3972.89
F11	July 17, 2021	Manhole	55.83	28.10	0.00	45.99	3252.25
F12	July 17, 2021	Combination Inlet	49.23	27.30	0.00	39.23	126.41
F13	July 17, 2021	Manhole	48.13	27.20	0.00	46.16	129.58
F14	July 17, 2021	Grate Inlet	36.72	28.00	0.00	37.64	1227.16
F15	July 17, 2021	Manhole	32.15	20.50	0.00	44.20	354.66
F16	July 17, 2021	Grate Inlet	27.57	26.30	0.00	35.13	67.65
F17	July 17, 2021	Manhole	55.92	26.60	0.00	61.66	2017.53
F18	July 17, 2021	Combination Inlet	58.48	25.10	0.00	53.93	2048.42
F19	July 17, 2021	Manhole	58.63	23.40	0.00	57.93	895.75
F2	July 17, 2021	Grate Inlet	25.05	11.00	0.00	67.79	966.64
F20	July 17, 2021	Manhole	55.93	26.20	0.00	53.89	2689.33
F21	July 17, 2021	Combination Inlet	54.57	26.40	0.00	47.66	4309.01
F22	July 17, 2021	Manhole	85.20	54.90	0.00	51.53	6822.40
F23	July 17, 2021	Grate Inlet	69.92	58.60	0.00	51.67	4151.17

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
F24	July 17, 2021	Drop Curb Inlet	78.05	60.60	0.00	52.88	15517.06
F25	July 17, 2021	Pond Structure	87.23	27.80	0.00	51.42	0.00
F3	July 17, 2021	Grate Inlet	15.35	11.70	0.00	56.09	495.90
F4	July 17, 2021	Manhole	86.48	36.70	0.00	63.13	1603.85
F5	July 17, 2021	Underground Junction	76.18	32.00	0.00	60.33	193.49
F6	July 17, 2021	Grate Inlet	74.70	52.70	0.00	58.64	19213.55
F7	July 17, 2021	Manhole	78.12	30.50	0.00	69.67	1808.96
F8	July 17, 2021	Grate Inlet	60.30	41.00	0.00	56.86	2373.67
F9	July 17, 2021	Slotted Inlet	61.70	60.60	0.00	39.91	15310.30
G1	July 17, 2021	Outfall	185.00	0.00	0.00	22.96	0.00
G2	July 17, 2021	Grate Inlet	21.98	0.00	0.00	36.22	0.00
G3	July 17, 2021	Grate Inlet	10.30	2.10	0.00	42.20	177.17
G4	July 17, 2021	Grate Inlet	16.00	4.30	0.00	57.40	303.08
H1	July 17, 2021	Outfall	185.00	0.00	0.00	29.32	0.00
H2	July 17, 2021	Combination Inlet	100.65	97.50	0.00	64.01	359.38
H3	July 17, 2021	Combination Inlet	102.53	98.30	0.00	65.70	53691.71
I1	July 17, 2021	Outfall	0.00	0.00	0.00	20.57	0.00
I2	July 17, 2021	Underground Junction	23.47	0.00	0.00	45.90	0.00
I3	July 17, 2021	Grate Inlet	50.02	23.60	0.00	63.82	9378.65
I4	July 17, 2021	Manhole	0.00	0.00	0.00	10.74	0.00
I5	July 17, 2021	Combination Inlet	0.00	0.00	0.00	9.79	0.00
I6	July 17, 2021	Combination Inlet	0.00	0.00	0.00	11.10	0.00
J1	July 17, 2021	Outfall	185.00	0.00	0.00	20.55	0.00
J2	July 17, 2021	Curb Inlet	139.15	126.70	0.00	68.76	134.20
J3	July 17, 2021	Underground Junction	139.82	119.30	0.00	67.16	16.08
J4	July 17, 2021	Grate Inlet	136.48	129.90	0.00	60.39	38178.94
J5	July 17, 2021	Combination Inlet	145.03	130.20	0.00	67.63	76603.23
K1	July 17, 2021	Outfall	185.00	0.00	0.00	13.03	0.00
K10	July 17, 2021	Grate Inlet	153.05	59.10	0.00	43.84	2824.36
K2	July 17, 2021	Underground Junction	0.00	0.00	0.00	59.09	0.00
K3	July 17, 2021	Grate Inlet	160.18	150.80	0.00	51.69	19272.77
K4	July 17, 2021	Combination Inlet	159.72	151.80	0.00	60.39	5702.68
K5	July 17, 2021	Manhole	158.83	44.90	0.00	58.48	3543.52
K6	July 17, 2021	Grate Inlet	157.95	81.70	0.00	57.06	3101.48
K7	July 17, 2021	Grate Inlet	157.20	101.30	0.00	61.96	2191.43
K8	July 17, 2021	Grate Inlet	155.67	97.80	0.00	56.18	7586.91
K9	July 17, 2021	Grate Inlet	153.87	86.40	0.00	49.44	2818.63

XPSWMM Node Output Data
July 17, 2021, Rainfall Event

Name	Storm	Node Description	Duration of Surcharge min	Duration of Flooding min	Flood Loss ft^3	Max Volume ft^3	Volume of Ponded Flow Stored ft^3
L1	July 17, 2021	Outfall	0.00	0.00	0.00	9.43	0.00
L2	July 17, 2021	Grate Inlet	119.30	117.80	0.00	44.49	312.79
L3	July 17, 2021	Pipe Inlet	119.22	119.20	0.00	37.60	1941.59
L4	July 17, 2021	Pipe Inlet	118.22	118.20	0.00	31.50	387.16
M1	July 17, 2021	Outfall	0.00	0.00	0.00	12.57	0.00
M2	July 17, 2021	Underground Junction	31.20	0.00	0.00	63.30	0.00
M3	July 17, 2021	Combination Inlet	29.77	26.50	0.00	62.54	5468.28
M4	July 17, 2021	Combination Inlet	27.53	0.00	0.00	40.49	0.00
POND1	July 17, 2021	Lyon Homes Apartments	139.97	0.00	0.00	108.29	0.00

XPSWMM Node Output Data

July 17, 2021, Rainfall Event

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A10-A2	July 17, 2021	Circular	Concrete	4.53	18.21	4.02
A11-A10	July 17, 2021	Circular	Concrete	6.73	5.22	0.95
A12-A11	July 17, 2021	Circular	Concrete	6.67	3.18	0.81
A13-A12	July 17, 2021	Circular	PVC	1.61	1.29	1.05
A14-A13	July 17, 2021	Circular	PVC	3.06	1.30	0.46
A15-A13	July 17, 2021	Circular	PVC	2.16	1.27	0.63
A16-A15	July 17, 2021	Circular	Terra Cotta	1.13	-1.23	1.22
A17-A15	July 17, 2021	Circular	Terra Cotta	0.83	1.18	1.65
A18-A17	July 17, 2021	Circular	Terra Cotta	0.90	1.07	1.55
A19-A10	July 17, 2021	Circular	Concrete	35.99	16.94	0.47
A2-A1	July 17, 2021	Circular	Concrete	22.06	0.00	0.00
A20-A19	July 17, 2021	Circular	Concrete	8.08	16.94	2.10
A21-A20	July 17, 2021	Circular	Concrete	16.90	16.94	1.00
A22-A21	July 17, 2021	Circular	Concrete	43.52	16.95	0.39
A23-A22	July 17, 2021	Circular	Concrete	18.14	16.78	0.93
A24-A23	July 17, 2021	Circular	Concrete	25.18	-27.58	1.35
A25-A23	July 17, 2021	Circular	Concrete	16.21	29.40	3.08
A26-A25	July 17, 2021	Circular	Concrete	18.91	-25.52	1.85
A27-A25	July 17, 2021	Circular	Concrete	149.50	-53.36	0.93
A28-A27	July 17, 2021	Circular	Concrete	15.72	-10.65	1.09
A29-A28	July 17, 2021	Circular	Concrete	17.68	-3.76	1.11
A3-A2	July 17, 2021	Special	Concrete	27.26	-8.51	0.32
A30-A28	July 17, 2021	Circular	Concrete	47.75	-13.07	0.65
A31-A30	July 17, 2021	Circular	Concrete	6.73	8.98	1.35
A32-A31	July 17, 2021	Circular	Concrete	9.76	1.08	1.05
A33-A32	July 17, 2021	Circular	Concrete	9.44	-8.10	1.34
A34-A31	July 17, 2021	Circular	Concrete	4.38	3.79	0.92
A35-A34	July 17, 2021	Circular	Concrete	6.96	7.15	1.04
A36-A31	July 17, 2021	Circular	Concrete	17.99	6.48	0.80
A37-A36	July 17, 2021	Circular	Corrugated Metal	4.36	7.29	1.70
A38-A37	July 17, 2021	Circular	Corrugated Metal	1.18	9.63	9.08
A39-A38	July 17, 2021	Special	Corrugated Metal	5.44	4.60	0.96
A4-A3	July 17, 2021	Special	Concrete	14.68	8.90	0.61
A40-A38	July 17, 2021	Special	Corrugated Metal	7.00	7.73	1.38
A41-A40	July 17, 2021	Special	Corrugated Metal	3.89	7.55	2.06
A42-A30	July 17, 2021	Circular	Concrete	25.67	-11.90	0.69
A43-A42	July 17, 2021	Circular	Concrete	3.75	-4.99	3.89
A44-A42	July 17, 2021	Circular	Concrete	20.97	7.69	0.61
A45-A44	July 17, 2021	Circular	Concrete	6.48	16.96	2.63
A46-A45	July 17, 2021	Special	Concrete	25.77	6.16	1.06
A47-A46	July 17, 2021	Special	Concrete	11.85	6.88	1.32
A48-A47	July 17, 2021	Special	Concrete	13.92	9.14	0.69

XPSWMM Node Output Data

July 17, 2021, Rainfall Event

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A49-A48	July 17, 2021	Circular	Concrete	6.53	8.29	2.97
A5-A4	July 17, 2021	Special	Concrete	13.58	18.22	1.35
A50-A48	July 17, 2021	Special	Concrete	13.94	12.52	0.91
A51-A50	July 17, 2021	Circular	Concrete	5.98	17.75	3.59
A52-A50	July 17, 2021	Circular	Concrete	7.32	7.58	1.14
A53-A52	July 17, 2021	Circular	Concrete	8.59	-8.61	1.16
A54-A52	July 17, 2021	Circular	Concrete	4.91	8.76	2.24
A55-A54	July 17, 2021	Circular	Concrete	8.36	6.50	0.84
A56-A54	July 17, 2021	Circular	Concrete	8.47	8.84	1.04
A57-A56	July 17, 2021	Circular	Concrete	10.11	6.91	0.80
A58-A45	July 17, 2021	Circular	Concrete	104.63	12.75	1.09
A59-A58	July 17, 2021	Circular	Concrete	26.14	14.33	1.14
A6-A3	July 17, 2021	Special	Concrete	8.57	8.39	0.98
A60-A59	July 17, 2021	Circular	Concrete	11.37	4.15	1.38
A61-A59	July 17, 2021	Circular	Concrete	11.80	7.99	2.33
A62-A61	July 17, 2021	Circular	Concrete	10.18	14.03	1.74
A63-A62	July 17, 2021	Circular	Concrete	6.42	1.68	1.00
A64-A62	July 17, 2021	Circular	Concrete	13.43	31.12	2.63
A65-A64	July 17, 2021	Circular	Concrete	11.08	14.03	1.51
A66-A65	July 17, 2021	Circular	Concrete	15.64	-3.25	0.23
A67-A65	July 17, 2021	Circular	Concrete	17.18	13.33	0.78
A68-A64	July 17, 2021	Circular	Concrete	14.28	13.89	1.01
A69-A68	July 17, 2021	Circular	Concrete	26.67	-21.29	0.91
A7-A6	July 17, 2021	Circular	Concrete	8.30	10.27	1.32
A70-A69	July 17, 2021	Circular	Concrete	7.77	-10.26	1.36
A71-A68	July 17, 2021	Circular	Concrete	8.02	5.93	0.98
A72-A68	July 17, 2021	Circular	Concrete	10.03	11.24	1.15
A73-A72	July 17, 2021	Circular	Concrete	20.79	10.57	0.67
A74-A73	July 17, 2021	Circular	Concrete	14.94	-2.88	0.46
A75-A73	July 17, 2021	Circular	Concrete	8.80	9.77	1.14
A76-A75	July 17, 2021	Circular	Concrete	4.50	5.92	1.52
A77-A75	July 17, 2021	Circular	Concrete	8.04	6.17	1.30
A78-A77	July 17, 2021	Circular	Concrete	4.78	5.06	1.68
A79-A78	July 17, 2021	Circular	Concrete	4.41	3.76	0.89
A8-A6	July 17, 2021	Special	Concrete	2.31	3.93	4.58
A80-A72	July 17, 2021	Circular	Concrete	2.10	5.50	3.37
A81-BIO3	July 17, 2021	Circular	Concrete	2.97	3.64	1.22
A82-A81	July 17, 2021	Circular	Smooth HDPE	2.56	2.97	1.33
A83-A82	July 17, 2021	Circular	Smooth HDPE	3.60	3.99	1.37
A85-A84	July 17, 2021	Circular	Concrete	3.68	-1.25	1.17
A86-A85	July 17, 2021	Circular	Concrete	2.30	1.93	0.89
A87-A86	July 17, 2021	Circular	Concrete	3.13	3.62	1.59

XPSWMM Node Output Data

July 17, 2021, Rainfall Event

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
A89-A88	July 17, 2021	Circular	Smooth HDPE	2.87	2.78	1.13
A90-A89	July 17, 2021	Circular	Smooth HDPE	1.85	3.50	2.00
A92-A91	July 17, 2021	Circular	Smooth HDPE	1.64	6.80	4.44
A93-A92	July 17, 2021	Circular	Smooth HDPE	1.00	-2.37	3.41
B10-B9	July 17, 2021	Circular	Terra Cotta	0.82	2.14	2.67
B11-B10	July 17, 2021	Circular	Terra Cotta	1.15	1.06	0.96
B12-B9	July 17, 2021	Circular	Terra Cotta	0.83	2.58	3.19
B13-B12	July 17, 2021	Circular	Terra Cotta	0.51	0.92	1.90
B14-B12	July 17, 2021	Circular	Terra Cotta	0.67	1.48	3.04
B15-B14	July 17, 2021	Circular	Terra Cotta	0.89	1.30	1.56
B16-B9	July 17, 2021	Circular	Corrugated Metal	0.60	3.09	5.14
B17-B16	July 17, 2021	Circular	Corrugated Metal	2.58	2.05	1.20
B2-B1	July 17, 2021	Circular	Concrete	19.17	12.43	0.65
B3-B2	July 17, 2021	Circular	Terra Cotta	2.09	2.10	1.02
B4-B3	July 17, 2021	Circular	Terra Cotta	0.64	1.10	1.72
B5-B2	July 17, 2021	Circular	Terra Cotta	1.76	3.23	1.85
B6-B5	July 17, 2021	Circular	Terra Cotta	0.73	2.47	3.50
B7-B6	July 17, 2021	Circular	Terra Cotta	0.72	1.64	2.49
B8-B7	July 17, 2021	Circular	Terra Cotta	0.70	1.21	1.74
B9-B2	July 17, 2021	Circular	Concrete	10.73	7.41	0.69
C10-C8	July 17, 2021	Circular	Terra Cotta	1.16	1.37	1.47
C11-C10	July 17, 2021	Circular	Terra Cotta	1.27	0.74	1.10
C12-C7	July 17, 2021	Special	Corrugated Metal	21.52	50.02	2.34
C13-C12	July 17, 2021	Circular	Terra Cotta	1.63	2.23	1.82
C14-C13	July 17, 2021	Circular	Terra Cotta	1.14	1.36	1.34
C15-C12	July 17, 2021	Circular	Terra Cotta	1.79	2.38	1.46
C16-C15	July 17, 2021	Circular	Terra Cotta	1.50	1.25	0.94
C17-C15	July 17, 2021	Circular	Terra Cotta	1.20	1.16	0.99
C18-C12	July 17, 2021	Special	Corrugated Metal	1.50	54.46	36.31
C19-C18	July 17, 2021	Circular	Concrete	17.90	17.94	1.06
C2-C1	July 17, 2021	Special	Corrugated Metal	18.05	45.59	2.61
C20-C19	July 17, 2021	Circular	Concrete	4.61	8.00	1.83
C21-C20	July 17, 2021	Circular	Concrete	8.77	2.82	0.71
C22-C20	July 17, 2021	Circular	Concrete	6.35	10.82	1.92
C23-C22	July 17, 2021	Circular	Concrete	5.35	7.61	1.76
C24-C23	July 17, 2021	Circular	Corrugated Metal	3.59	4.35	1.48
C25-C18	July 17, 2021	Circular	Concrete	13.58	42.74	3.35
C26-C25	July 17, 2021	Circular	Concrete	11.86	14.17	1.27
C27-C26	July 17, 2021	Circular	Concrete	6.67	12.08	1.86
C28-C25	July 17, 2021	Circular	Concrete	31.65	24.81	1.09
C29-C28	July 17, 2021	Circular	Concrete	12.33	13.00	1.66
C3-C2	July 17, 2021	Circular	Terra Cotta	3.80	2.30	0.67

XPSWMM Node Output Data

July 17, 2021, Rainfall Event

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
C30-C28	July 17, 2021	Circular	Concrete	1.74	9.45	7.03
C31-C28	July 17, 2021	Circular	Concrete	24.95	24.94	1.03
C32-C31	July 17, 2021	Circular	Concrete	14.63	5.90	0.73
C33-C32	July 17, 2021	Circular	Concrete	6.49	7.70	1.53
C34-C31	July 17, 2021	Circular	Concrete	18.17	28.70	1.58
C35-C34	July 17, 2021	Circular	Concrete	15.06	-24.60	1.63
C36-C34	July 17, 2021	Circular	Concrete	10.38	-24.71	2.38
C37-C34	July 17, 2021	Circular	Concrete	22.46	20.98	1.03
C38-C37	July 17, 2021	Circular	Concrete	10.64	6.79	1.16
C39-C38	July 17, 2021	Circular	Corrugated Metal	3.86	1.93	0.70
C4-C3	July 17, 2021	Circular	Terra Cotta	0.93	1.06	1.33
C40-C38	July 17, 2021	Circular	Concrete	10.16	5.15	1.21
C41-C40	July 17, 2021	Circular	Concrete	15.19	15.60	1.05
C42-C37	July 17, 2021	Circular	Concrete	13.67	21.26	1.68
C43-C42	July 17, 2021	Circular	Concrete	4.89	1.55	1.60
C44-C42	July 17, 2021	Circular	Concrete	15.91	6.72	0.49
C45-C44	July 17, 2021	Circular	Concrete	9.24	3.34	0.59
C46-C44	July 17, 2021	Circular	Concrete	20.35	3.11	0.16
C47-C46	July 17, 2021	Circular	Concrete	3.21	2.93	0.91
C5-C2	July 17, 2021	Circular	Terra Cotta	3.32	2.08	0.70
C6-C5	July 17, 2021	Circular	Terra Cotta	0.96	0.94	1.10
C7-C2	July 17, 2021	Special	Corrugated Metal	14.03	46.50	3.49
C8-C7	July 17, 2021	Circular	Terra Cotta	1.46	1.84	1.33
C9-C8	July 17, 2021	Circular	Terra Cotta	2.15	1.13	0.76
D10-D8	July 17, 2021	Circular	Concrete	12.95	2.14	0.27
D11-D8	July 17, 2021	Circular	Concrete	6.61	7.44	1.25
D12-D11	July 17, 2021	Circular	PVC	3.11	10.87	3.82
D13-D11	July 17, 2021	Circular	Concrete	2.49	3.12	1.43
D14-D13	July 17, 2021	Circular	PVC	6.77	2.20	0.33
D2-D1	July 17, 2021	Special	Concrete	50.58	25.33	0.51
D3-D2	July 17, 2021	Special	Corrugated Metal	15.34	24.62	1.61
D4-D3	July 17, 2021	Special	Corrugated Metal	30.20	17.87	0.59
D5-D4	July 17, 2021	Circular	Concrete	7.46	17.02	2.29
D6-D5	July 17, 2021	Circular	Corrugated Metal	4.09	0.63	0.17
D7-D3	July 17, 2021	Circular	Concrete	3.73	6.18	1.66
D8-D7	July 17, 2021	Circular	Concrete	2.43	6.18	2.73
D9-D8	July 17, 2021	Circular	Concrete	6.26	3.33	0.66
F10-F5	July 17, 2021	Circular	Concrete	13.10	13.38	1.02
F11-F10	July 17, 2021	Circular	Concrete	4.50	4.92	1.34
F12-F11	July 17, 2021	Circular	Concrete	8.64	-3.53	0.57
F13-F11	July 17, 2021	Circular	Concrete	4.32	4.97	1.33
F14-F13	July 17, 2021	Circular	PVC	4.40	3.93	0.95

XPSWMM Node Output Data

July 17, 2021, Rainfall Event

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
F15-F13	July 17, 2021	Circular	Concrete	3.73	3.26	0.98
F16-F15	July 17, 2021	Circular	PVC	4.02	3.48	0.89
F17-F10	July 17, 2021	Circular	Concrete	10.42	13.86	1.37
F18-F17	July 17, 2021	Circular	Concrete	5.91	6.57	1.76
F19-F17	July 17, 2021	Circular	Concrete	8.27	8.72	1.10
F2-F1	July 17, 2021	Circular	Concrete	16.41	61.99	3.78
F20-F19	July 17, 2021	Circular	Concrete	8.18	9.24	1.28
F21-F20	July 17, 2021	Circular	Concrete	5.26	7.22	1.65
F22-F20	July 17, 2021	Circular	Concrete	3.69	6.99	1.94
F23-F22	July 17, 2021	Circular	Concrete	7.79	9.37	1.38
F24-F23	July 17, 2021	Circular	Concrete	1.33	9.47	7.35
F25-F24	July 17, 2021	Circular	Smooth HDPE	5.04	8.27	1.73
F3-F2	July 17, 2021	Circular	Concrete	54.63	47.35	0.90
F4-F2	July 17, 2021	Circular	Concrete	10.63	22.17	2.11
F5-F4	July 17, 2021	Circular	Concrete	29.27	21.38	0.79
F6-F5	July 17, 2021	Circular	Concrete	7.92	12.66	1.75
F7-F6	July 17, 2021	Circular	Concrete	2.04	5.74	3.32
F8-F7	July 17, 2021	Circular	Concrete	10.49	7.41	0.86
F9-F8	July 17, 2021	Circular	Corrugated Metal	2.96	5.54	1.90
G2-G1	July 17, 2021	Circular	Concrete	19.84	31.61	1.66
G3-G2	July 17, 2021	Circular	Concrete	17.04	21.85	1.32
G4-G3	July 17, 2021	Circular	Concrete	5.96	14.59	2.46
H2-H1	July 17, 2021	Circular	Concrete	6.82	9.24	1.36
H3-H2	July 17, 2021	Circular	Concrete	3.63	10.41	2.92
I2-I1	July 17, 2021	Circular	Concrete	15.16	20.74	1.38
I3-I2	July 17, 2021	Circular	Concrete	3.84	15.14	4.04
I4-I2	July 17, 2021	Circular	Concrete	28.62	8.98	0.32
I5-I4	July 17, 2021	Circular	Concrete	6.93	4.63	0.67
I6-I4	July 17, 2021	Circular	Concrete	5.66	4.80	0.85
J2-J1	July 17, 2021	Circular	Concrete	4.21	7.32	1.74
J3-J2	July 17, 2021	Circular	Concrete	2.79	6.90	2.56
J4-J3	July 17, 2021	Circular	Concrete	5.09	4.16	1.00
J5-J3	July 17, 2021	Circular	Concrete	1.19	6.42	5.42
K10-K9	July 17, 2021	Circular	Concrete	4.15	2.03	0.83
K2-K1	July 17, 2021	Circular	Corrugated Metal	5.93	1.02	0.17
K3-K2	July 17, 2021	Circular	Concrete	3.11	-3.21	1.03
K4-K2	July 17, 2021	Circular	Concrete	3.28	4.09	1.25
K5-K4	July 17, 2021	Circular	Concrete	5.26	4.99	1.03
K6-K5	July 17, 2021	Circular	Concrete	8.63	5.87	0.80
K7-K6	July 17, 2021	Circular	Concrete	2.03	4.94	2.44
K8-K7	July 17, 2021	Circular	Concrete	3.86	3.24	0.84
K9-K8	July 17, 2021	Circular	Concrete	4.72	2.87	0.81

XPSWMM Node Output Data

July 17, 2021, Rainfall Event

Name	Frequency	Shape	Link Description	Design Full Flow cfs	Max Flow cfs	Max Flow/Design Flow (fraction) %
L2-L1	July 17, 2021	Circular	Cast Iron	2.27	5.14	2.27
L3-L2	July 17, 2021	Circular	Corrugated Metal	5.35	4.15	1.57
L4-L2	July 17, 2021	Circular	Corrugated Metal	3.17	2.57	0.89
Orifice1.1	July 17, 2021			2.21	0.75	0.45
Orifice2.1	July 17, 2021			2.21	0.75	0.45
Orifice3.1	July 17, 2021			2.21	3.40	1.56
M2-M1	July 17, 2021	Circular	Concrete	4.38	7.81	1.78
M3-M2	July 17, 2021	Circular	Concrete	6.04	7.39	1.30
M4-M2	July 17, 2021	Circular	Concrete	4.75	1.18	0.25