

**Fifth and Dinwiddie Development
Sewage Facilities Planning Module Application
West Site**

**City of Pittsburgh
Allegheny County, Pennsylvania**

Prepared for:

Fifth and Dinwiddie Development, LLC on behalf of URA

by:



100 Airside Drive
Moon Township, PA 15108
(412) 269-6300

July 2021

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Fifth and Dinwiddie Development, LLC
Fifth and Dinwiddie – West Site
Pittsburgh, Pennsylvania

Sanitary Sewer Planning Module

1.0 PROJECT NARRATIVE (SECTION F)

1.1 Nature of Development Project

The proposed project is a mixed use development that is being coordinated on the behalf of the Urban Redevelopment Authority (URA). Development will include, but is not limited to: demolition of existing infrastructure (i.e. building pads, abandoned utilities, paved areas, etc.), earthwork and site grading, construction of proposed housing units as well as commercial office and retail space, and installation of associated site features such as community areas, parking garages, concrete curbs and sidewalks, site utilities, stormwater management and conveyance facilities, landscaping, etc. The existing land use for the past five (5) years and 50 years is an urban area used for a parking lot and residential housing, with surrounding developed urban lots. The project site is located in the area of Fifth Avenue, Dinwiddie Street, Our Way, and Colwell Street.

1.2 Number of Lots or EDUs in the Development Project

The site was originally 32 lots; however, a lot consolidation plan is being approved to consolidate these down to 2 lots (a north bar and south bar). The projected site flows are as follows:

Type of Sanitary Flow	Definition	Flow, gpd	EDUs*
Project Flow	Peak daily flow associated with the Project	35,380	89
Existing Flow	Peak daily flow within the past five years	800	2
Net Flow	= Project Flow – Existing Flow	34,580	87

*Note: EDUs is based on DEPs definition of 1 EDU = 400 gpd.

1.3 Proposed Sewer Disposal Method

There will be two sanitary taps into an existing system: one for the north bar building and one for the south bar building. The proposed method of sewer disposal is to connect into the existing combined sewer system provided under Our Way.

1.4 Projected Population and Sewage Flows

The project sewage flows were completed in compliance with PWSA's Table 1: Water Use and Sanitary Flow Estimates found in the PWSA Developer's Manual. The calculations can be found in Attachment E of this submission.

1.5 Location of Discharge

The proposed discharge location is proposed to replace the existing connection point from the of the renovated building. The discharge point coordinates have been approximated to be:

North Bar Building:

Latitude: N40.43875833
Longitude: W79.98180278

South Bar Building:

Latitude: N40.43875000
Longitude: W79.98163611

1.6 Total Acreage of the Proposed Land Development Project

The total acreage of the proposed land development is:

North Bar: 0.72 acres
South Bar: 0.51 acres
Disturbed Area: 2.65 acres

1.7 Use of any Acreage or Parcels Under the Same Ownership and Adjacent to the Property

The Applicant is currently working on a project development adjacent to this site; Fifth and Dinwiddie – East Site. This project is on the northeast corner of the intersection of Fifth Avenue and Dinwiddie Street. While the two projects are planned to have overlapping construction schedules, they are being permitted separately through the City and a separate sanitary sewer planning process will be undertaken for the East Site project.

1.8 Previous Act 537 Planning

There are no known previously completed Act 537 planning applications for the subject site.

2.0 ALTERNATIVES ANALYSIS (SECTION H)

The site is located within the City limits adjacent to existing sewer collection infrastructure that is planned to accept sanitary flow from the subject site. The property in question is also proposed to be completely developed (in compliance with the zoning code) which prevents the use of onsite treatment facilities. As such it is our opinion that no alternative exists for the site other than to connect into the existing combined sewer system adjacent to the site.



Pittsburgh
Water & Sewer
Authority

August 30th, 2021

Brandon Fombelle
Michael Baker International
100 Airside Drive, Airside Business Park
Moon Township, PA 15108

Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: 20014.30 Fifth and Dinwiddie – West Site (Project)
PWSA Project No.: 20014.30

Dear Brandon:

Pursuant to your request, we have reviewed the SFPM and determined that the Project will not create a dry-weather hydraulic overload within the next five (5) years for any collection facility owned by the Pittsburgh Water and Sewer Authority (PWSA). We have enclosed for your use the electronically signed "Section J – Chapter 94 Consistency Determination". Please be advised that this approval is limited to the collection system portion of the SFPM.

Our review was based on information provided by others under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at x5543 or BGRUNAUER@pgh2o.com.

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

Enclosures

cc: Barry King, P.E. – PWSA (via email)
Kate Mechler, P.E. – PWSA (via email)
Robert Herring, P.E. – PWSA (via email)
Thomas Flanagan – DEP (via email)
eBuilder – Filing System (via email)



Pittsburgh
Water & Sewer
Authority

MEMO

To: Barry King, PE, PMP - Director of Engineering and Construction

From: Benjamin Grunauer, E.I.T.

Cc: Robert Herring, PE, PMP; e-Builder

Date: August 30, 2021

Subject: Department of Environmental Protection (DEP) - Sewage Facilities Planning Module (SFPM)

Chapter 94 Consistency Determination

Project Name: 20014.30 Fifth and Dinwiddie – West Site (Project)

Project Address: 121 Dinwiddie Street, Pittsburgh, PA 15219

PWSA Project Number: 20014.30

The Pittsburgh Water and Sewer Authority (PWSA) received a SFPM application for the aforementioned Project. In accordance with Title 25 of the Pennsylvania Code, the PWSA is required to prepare an annual Wasteload Management Report on the collection and conveyance of wastewater relative to available capacity. Our review of the SFPM was conducted to understand how the Project will impact available dry-weather capacity and whether the proposed flows will contribute to a dry-weather hydraulic overload within the next five (5) years. Please note that a dry-weather hydraulic overload shall require both the denial of the SFPM and the submission of a Corrective Action Plan to the DEP.

We have determined that the Project will not contribute to a dry-weather hydraulic overload within the next five years. Please refer to the enclosed hydraulic calculations for additional information. Upon your approval, please sign and return the enclosed “Section J - Chapter 94 Consistency Determination” page from the SFPM.

Our review was based on information provided by others under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly.

Enclosures

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows 35380 gpd
 2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
 - b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
 - c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	677889	2372613	24000	75000	33114	115899
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

- b. Collection System PWSA
Name of Agency, Authority, Municipality _____
Name of Responsible Agent Barry King, PE, PMP
Agent Signature 

Sewage Facilities Planning Module
Chapter 94 Consistency Determination
Hydraulic Calculations Spreadsheet for Flow Monitoring Measurements

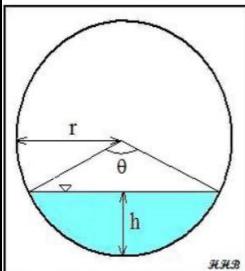
PROJECT NAME:	20014.30 Fifth and Dinwiddie West Site
PWSA PROJECT NUMBER:	20014.3
PWSA REVIEWER:	Benjamin Grunauer, E.I.T.
DATE:	August 30, 2021

LEGEND:

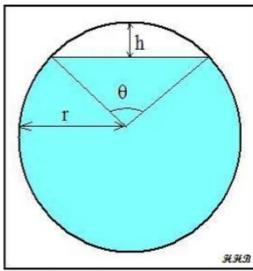
Input Data

Output Data

Section A: Manning Equation for Partially Filled Pipes



Partially Full Pipe Flow Parameters
(Less Than Half Full)



Partially Full Pipe Flow Parameters
(More Than Half Full)

Variable	Units	Description
Q	ft ³	Volumetric flowrate
n	Unitless	Manning Roughness Coeff.
A	ft ²	Cross-Sectional Area of Flow
R	ft	Hydraulic Radius
S	ft/ft	Slope of Hydraulic Grade Line
P	ft	Wetted Perimeter of "A"
r	ft	Radius
h	ft	Depth of Flow or Headspace
θ	radians	Central Angle

$$Q = \left(\frac{1.49}{n}\right) \times A \times R^{2/3} \times S^{1/2}$$

$$R = \frac{A}{P}$$

$$\theta = 2 \times \cos^{-1} \left(\frac{r - h}{r} \right)$$

$$A_{<50\% Full} = \frac{r^2(\theta - \sin \theta)}{2}$$

OR

$$A_{>50\% Full} = \pi \times r^2 \times \frac{r^2(\theta - \sin \theta)}{2}$$

$$P_{<50\% Full} = r \times \theta$$

$$P_{>50\% Full} = (2 \times \pi \times r) - (r \times \theta)$$

Section B: Data for Calculations

Peaking Factor, P.F.	
Sanitary Sewers	3
Combined Sewers	3.5

Proposed Project Flows		
Variable	Value	Units
Q _p	35,380	gpd

Variable	Value	Units
Material	VCP	
n	0.015	unitless
S	0.004	ft/ft
h	0.500	ft
D	1.25	ft
P.F.	3.5	unitless

Section C: Calculations for Design and/or Permitted Capacities

Variable	Description	Definition
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Q_d, avg	Design Capacity, Average	= full pipe flow conditions / peaking factor
Q_d, peak	Design Capacity, Peak	full pipe flow conditions

Design Capacity, Average		
Variable	Value	Unit
Q_d, avg	655,610	gpd

Design Capacity, Peak		
Variable	Value	Unit
D	1.250	ft
r	0.625	ft
A	1.227	ft ²
P	3.927	ft
R	0.313	ft
Q_d, peak	4	cfs
Q_d, peak	2,294,636	gpd

Section D: Calculations for Present Flows

Variable	Description	Definition
$Q_{ex, \text{avg}}$	Present Flows, Average	determined via flow monitoring data
$Q_{ex, \text{peak}}$	Present Flows, Peak	determined via flow monitoring data

Present Flows, Average		
Variable	Value	Unit
$Q_{ex, \text{avg}}$	24,000	gpd

Present Flows, Peak		
Variable	Value	Unit
$Q_{ex, \text{peak}}$	75,000	gpd

Section E: Calculations for Projected Flows in Five (5) Years

Variable	Description	Definition
$Q_{proj, \text{avg}}$	Projected Flows in Five (5) Years, Average	= $Q_{proj, \text{peak}} \div \text{P.F.}$
$Q_{proj, \text{peak}}$	Projected Flows in Five (5) Years, Peak	= $(Q_{ex, \text{peak}} + Q_p) \times 1.05$

Projected Flow Calculations		
Variable	Value	Unit
$Q_{proj, \text{avg}}$	33,114	gpd
$Q_{proj, \text{peak}}$	115,899	gpd

Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
Q_d, avg	655,610	677,889	-22,279	-3%
Q_d, peak	2,294,636	2,372,613	-77,977	-3%
$Q_{ex, \text{avg}}$	24,000	24,000	0	0%
$Q_{ex, \text{peak}}$	75,000	75,000	0	0%
$Q_{proj, \text{avg}}$	33,114	33,114	0	0%
$Q_{proj, \text{peak}}$	115,899	115,889	10	0%



October 7, 2021

Members of the Board

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Chair Person

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John Weinstein

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Joseph Vallarian
*Director
Communications*

Julie Motley-Williams
*Director
Administration*

Mr. Brian R. Fombelle
Michael Baker International
100 Airside Driver
Moon Township, PA 15108

Re: Fifth and Dinwiddie – West Site

**112 Dinwiddie Street, City of Pittsburgh – 3rd Ward, Allegheny County
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure M-05-00**

Dear Mr. Fombelle:

We have reviewed the Component 3 Planning Module for the referenced project to be located in the City of Pittsburgh, 3rd Ward. The project will generate a peak flow of 35,380 gpd in the ALCOSAN Monongahela River Interceptor and Woods Run Treatment Plant.

The capacity of the ALCOSAN M-05-00 Regulator Structure is approximately 20.6 MGD. The monitored peak dry weather flow is approximately 3.26 MGD. Dry weather capacity exists for this connection. However, the ALCOSAN Monongahela River Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated by tributary communities during wet weather periods. This limitation will be addressed as ALCOSAN implements its Clean Water Plan.

ALCOSAN requests that this letter be made part of the planning module submission. The signed Component 3 Planning Module is attached. The sewers in this project are to be designed as separated sanitary and storm sewers. If you have any questions regarding this matter, please contact me at 412-732-8053.

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Shawn P. McWilliams, EIT
Civil Engineer

Attachment

cc: Christina Dean (w/o attachment)
Dan Thornton (w/o attachment)
Michael Lichte (w/o attachment)

Barry King/ PWSA (w/o attachment)
Thomas Flanagan/ PADEP (w/o attachment)
Fred Fields/ ACHD (w/o attachment)



INSTRUCTIONS FOR COMPLETING COMPONENT 4A MUNICIPAL PLANNING AGENCY REVIEW

Remove and recycle these instructions prior to mailing component to the approving agency.

Background

This component, Component 4, is used to obtain the comments of planning agencies and/or health departments having jurisdiction over the project area. It is used in conjunction with other planning module components appropriate to the characteristics of the project proposed.

Who Should Complete the Component?

The component should be completed by any existing municipal planning agency, county planning agency, planning agency with areawide jurisdiction, and/or health department having jurisdiction over the project site. It is divided into sections to allow for convenient use by the appropriate agencies.

The project sponsor must forward copies of this component, along with supporting components and data, to the appropriate planning agency(ies) and health department(s) (if any) having jurisdiction over the development site. These agencies are responsible for responding to the questions in their respective sections of Component 4, as well as providing whatever additional comments they may wish to provide on the project plan. After the agencies have completed their review, the component will be returned to the applicant. The agencies have 60 days in which to provide comments to the applicant. If the agencies fail to comment within this 60 day period, the applicant may proceed to the next stage of the review without the comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the module package to the agencies will document a date of receipt.

After receipt of the completed Component 4 from the planning agencies, or following expiration of the 60 day period without comments, the applicant must submit the entire component package to the municipality having jurisdiction over the project area for review and action. If approved by the municipality, the proposed plan, along with the municipal action, will be forwarded to the approving agency (Department of Environmental Protection or delegated local agency). The approving agency, in turn, will either approve the proposed plan, return it as incomplete, or disapprove the plan, based upon the information provided.

Instructions for Completing Planning Agency and/or Health Department Review Component

Section A. Project Name

Enter the project name as it appears on the accompanying sewage facilities planning module component (Component 2, 2m, 3, 3s or 3m).

Section B. Review Schedule

Enter the date the package was received by the reviewing agency, and the date that the review was completed.

Section C. Agency Review

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.
2. Complete the name, title, and signature block.

Section D. Additional Comments

The Agency may provide whatever additional comment(s) it deems necessary, as described in the form. Attach additional sheets, if necessary.

**SEWAGE FACILITIES PLANNING MODULE
 COMPONENT 4A - MUNICIPAL PLANNING AGENCY REVIEW**

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning module package and one copy of this *Planning Agency Review Component* should be sent to the local municipal planning agency for their comments.

SECTION A. PROJECT NAME (See Section A of instructions)

Project Name

Fifth and Dinwiddie -- West Site

SECTION B. REVIEW SCHEDULE (See Section B of instructions)

1. Date plan received by municipal planning agency September 20, 2021

2. Date review completed by agency October 8, 2021

SECTION C. AGENCY REVIEW (See Section C of instructions)

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Is there a municipal comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101, et seq.)?
<input type="checkbox"/>	<input type="checkbox"/>	2. Is this proposal consistent with the comprehensive plan for land use? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Is this proposal consistent with the use, development, and protection of water resources? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land Preservation?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Does this project propose encroachments, obstructions, or dams that will affect wetlands? If yes, describe impacts _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Will any known historical or archaeological resources be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Will any known endangered or threatened species of plant or animal be impacted by this project? If yes, describe impacts _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Is there a municipal zoning ordinance?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Does the proposal require a change or variance to an existing comprehensive plan or zoning ordinance?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is there a municipal subdivision and land development ordinance?

SECTION C. AGENCY REVIEW (continued)	
Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/> 13. Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/> 14. Is this plan consistent with the municipal Official Sewage Facilities Plan? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input checked="" type="checkbox"/> 15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
<input type="checkbox"/>	<input checked="" type="checkbox"/> 16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision? If yes, is the proposed waiver consistent with applicable ordinances? If no, describe the inconsistencies _____
<hr/> <p>17. Name, title and signature of planning agency staff member completing this section: Name: <u>Martina Wolf Battistone</u> Title: <u>Principal Environmental Planner</u> Signature: <u>Martina Wolf Battistone</u> Date: <u>October 8, 2021</u> Name of Municipal Planning Agency: <u>City of Pittsburgh Department of City Planning</u> Address <u>200 Ross Street 4th Floor Pittsburgh, PA 15219</u> Telephone Number: <u>(412) 255-2516</u></p>	
SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)	
This component does not limit municipal planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.	
The planning agency must complete this component within 60 days.	
This component and any additional comments are to be returned to the applicant.	

APPLICATION



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

Code No.

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

DEP USE ONLY

DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH ID #

This planning module component is used to fulfill the planning requirements of Act 537 for the following types of projects: (1) a subdivision to be served by sewage collection, conveyance or treatment facilities, (2) a tap-in to an existing collection system with flows on a lot of 2 EDU's or more, or (3) the construction of, or modification to, wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. Planning for any project that will require DEP to issue or modify a permit cannot be processed by a delegated agency. Delegated agencies must send their projects to DEP for final planning approval.

This component, along with any other documents specified in the cover letter, must be completed and submitted to the municipality with jurisdiction over the project site for review and approval. All required documentation must be attached for the Sewage Facilities Planning Module to be complete. Refer to the instructions for help in completing this component.

REVIEW FEES: Amendments to the Sewage Facilities Act established fees to be paid by the developer for review of planning modules for land development. These fees may vary depending on the approving agency for the project (DEP or delegated local agency). Please see section R and the instructions for more information on these fees.

NOTE: All projects must complete Sections A through I, and Sections O through R. Complete Sections J, K, L, M and/or N if applicable or marked .

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name Fifth and Dinwiddie - West Site
2. Brief Project Description Construction of a new Multi-Use development

B. CLIENT (MUNICIPALITY) INFORMATION (See Section B of instructions)

Municipality Name City of Pittsburgh	County Allegheny	City <input checked="" type="checkbox"/>	Boro <input type="checkbox"/>	Twp <input type="checkbox"/>
Municipality Contact Individual - Last Name Battistone	First Name Martina	MI	Suffix CFM	Title Senior Environmental Planner
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1 City of Pittsburgh, Department of City Planning	Mailing Address Line 2 200 Ross Street, 4 th Floor			
Address Last Line -- City Pittsburgh	State PA		ZIP+4 15219	
Area Code + Phone + Ext. 412-255-2516	FAX (optional)		Email (optional) martina.battistone@pittsburghpa.gov	

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Fifth and Dinwiddie - West Site

Site Location Line 1 121 Dinwiddie Street	Site Location Line 2			
Site Location Last Line -- City Pittsburgh	State PA	ZIP+4 15219	Latitude 40.43880000	Longitude 79.98145278

Detailed Written Directions to Site Drive south on State Route 28. Take the ramp on the right to merge onto I-579 (Veterans Bridge). After crossing Veterans Bridge take the 6th/7th Ave Exit toward downtown but keep left toward PPG Areana. Take a slight left onto Bigelow Blvd. Then continue straight onto Chatham Street. Turn left onto Centre Ave. Then turn right onto Dinwiddie Street

Description of Site Existing site consists of an existing parking lot, existing buildings and is divided by the existing ROW of Our Way. The site is bound on the north by Colwell Street, the east by Dinwiddie Street, and the south by Fifth Avenue.

Site Contact (Developer/Owner)

Last Name Tillman	First Name Derrick	MI	Suffix	Phone (412) 583-1447	Ext.
Site Contact Title	Site Contact Firm (if none, leave blank) Fifth and Dinwiddie Development, LLC				
FAX	Email dtillman@btgdevelopment.net				
Mailing Address Line 1 Energy Innovation Center	Mailing Address Line 2 1435 Bedford Ave				
Mailing Address Last Line -- City Pittsburgh	State PA	ZIP+4 15219			

D. PROJECT CONSULTANT INFORMATION (See Section D of instructions)

Last Name Fombelle	First Name Brandon	MI	Suffix R
Title	Consulting Firm Name		
Project Manager	Michael Baker International		
Mailing Address Line 1 100 Airside Drive	Mailing Address Line 2		
Address Last Line – City Moon Township	State PA	ZIP+4 15108	Country United States
Email brandon.fombelle@mbakerintl.com	Area Code + Phone 412-375-3081	Ext.	Area Code + FAX

E. AVAILABILITY OF DRINKING WATER SUPPLY

The project will be provided with drinking water from the following source: (Check appropriate box)

- Individual wells or cisterns.
- A proposed public water supply.
- An existing public water supply. (existing connections to be updated)

If existing public water supply is to be used, provide the name of the water company and attach documentation from the water company stating that it will serve the project.

Name of water company: Pittsburgh Water and Sewer Authority (PWSA)

F. PROJECT NARRATIVE (See Section F of instructions)

- A narrative has been prepared as described in Section F of the instructions and is attached.

The applicant may choose to include additional information beyond that required by Section F of the instructions.

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (See Section G of instructions)

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter 93 (relating to wastewater treatment requirements).

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

- New collection system Pump Station Force Main
 Grinder pump(s) Extension to existing collection system Expansion of existing facility

Clean Streams Law Permit Number _____

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 89 _____

Connections 1 _____

Name of:

existing collection or conveyance system 15" Combined Concrete Sewer - Dinwiddie Street

owner Pittsburgh Water and Sewer Authority (PWSA)

existing interceptor Monongahela River Interceptor

owner Allegheny County Sanitary Authority (ALCOSAN)

2. WASTEWATER TREATMENT FACILITY

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter(s) 91 (relating to general provisions), 92 (relating to national Pollution Discharge Elimination System permitting, monitoring and compliance) and 93 (relating to water quality standards).

a. Check appropriate box and provide requested information concerning the treatment facility

- New facility Existing facility Upgrade of existing facility Expansion of existing facility

Name of existing facility ALCOSAN Woods Run WWTP

NPDES Permit Number for existing facility PA0025984

Clean Streams Law Permit Number _____

Location of discharge point for a new facility. Latitude 40°28'34" N Longitude 80°02'44" W

b. The following certification statement must be completed and signed by the wastewater treatment facility permittee or their representative.

As an authorized representative of the permittee, I confirm that the ALCOSAN Woods Run (Name from above) sewage treatment facilities can accept sewage flows from this project without adversely affecting the facility's ability to achieve all applicable technology and water quality based effluent limits (see Section I) and conditions contained in the NPDES permit identified above.

Name of Permittee Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature Shawn P. McWilliams Date 10/7/2021

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

The following information is to be submitted on a plot plan of the proposed subdivision.

- a. Existing and proposed buildings.
- b. Lot lines and lot sizes.
- c. Adjacent lots.
- d. Remainder of tract.
- e. Existing and proposed sewerage facilities. Plot location of discharge point, land application field, spray field, COLDS, or LVCOLDS if a new facility is proposed.
- f. Show tap-in or extension to the point of connection to existing collection system (if applicable).
- g. Existing and proposed water supplies and surface water (wells, springs, ponds, streams, etc.)
- h. Existing and proposed rights-of-way.
- i. Existing and proposed buildings, streets, roadways, access roads, etc.
- j. Any designated recreational or open space area.
- k. Wetlands - from National Wetland Inventory Mapping and USGS Hydric Soils Mapping.
- l. Flood plains or Flood prone areas, floodways, (Federal Flood Insurance Mapping)
- m. Prime Agricultural Land.
- n. Any other facilities (pipelines, power lines, etc.)
- o. Orientation to north.
- p. Locations of all site testing activities (soil profile test pits, slope measurements, permeability test sites, background sampling, etc. (if applicable).
- q. Soils types and boundaries when a land based system is proposed.
- r. Topographic lines with elevations when a land based system is proposed

4. WETLAND PROTECTION

YES NO

- a. Are there wetlands in the project area? If yes, ensure these areas appear on the plot plan as shown in the mapping or through on-site delineation.
- b. Are there any construction activities (encroachments, or obstructions) proposed in, along, or through the wetlands? If yes, Identify any proposed encroachments on wetlands and identify whether a General Permit or a full encroachment permit will be required. If a full permit is required, address time and cost impacts on the project. Note that wetland encroachments should be avoided where feasible. Also note that a feasible alternative **MUST BE SELECTED** to an identified encroachment on an exceptional value wetland as defined in Chapter 105. Identify any project impacts on streams classified as HQ or EV and address impacts of the permitting requirements of said encroachments on the project.

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

- Will the project involve the disturbance of prime agricultural lands?
If yes, coordinate with local officials to resolve any conflicts with the local prime agricultural land protection program. The project must be consistent with such municipal programs before the sewage facilities planning module package may be submitted to DEP.
If no, prime agricultural land protection is not a factor to this project.
- Have prime agricultural land protection issues been settled?

6. HISTORIC PRESERVATION ACT

YES NO

- Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code* (available online at the DEP website at www.dep.state.pa.us, select "subject" then select "technical guidance"). As a minimum this includes copies of the completed Cultural Resources Notice

(CRN), a return receipt for its submission to the PHMC and the PHMC review letter.

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

- The "Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from my search of the PNDI database and all supporting documentation from jurisdictional agencies (when necessary) is/are attached.
- A completed "Pennsylvania Natural Diversity Inventory (PNDI) Project Planning & Environmental Review Form," (PNDI Form) available at www.naturalheritage.state.pa.us, and all required supporting documentation is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning module will be considered incomplete upon submission to the Department and that the DEP review will not begin, and that processing of my planning module will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials BRF.

H. ALTERNATIVE SEWAGE FACILITIES ANALYSIS (See Section H of instructions)

- An alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions and is attached to this component.

The applicant may choose to include additional information beyond that required by Section H of the attached instructions.

I. COMPLIANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS (See Section I of instructions) (Check and complete all that apply.)

1. Waters designated for Special Protection

- The proposed project will result in a new or increased discharge into special protection waters as identified in Title 25, Pennsylvania Code, Chapter 93. The Social or Economic Justification (SEJ) required by Section 93.4c. is attached.

2. Pennsylvania Waters Designated As Impaired

- The proposed project will result in a new or increased discharge of a pollutant into waters that DEP has identified as being impaired by that pollutant. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss water quality based discharge limitations.

3. Interstate and International Waters

- The proposed project will result in a new or increased discharge into interstate or international waters. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss effluent limitations necessary to meet the requirements of the interstate or international compact.

4. Tributaries To The Chesapeake Bay

- The proposed project result in a new or increased discharge of sewage into a tributary to the Chesapeake Bay. This proposal for a new sewage treatment facility or new flows to an existing facility includes total nitrogen and total phosphorus in the following amounts: _____ pounds of TN per year, and _____ pounds of TP per year. Based on the process design and effluent limits, the total nitrogen treatment capacity of the wastewater treatment facility is _____ pounds per year and the total phosphorus capacity is _____ pounds per year as determined by the wastewater treatment facility permittee. The permittee has determined that the additional TN and TP to be contributed by this project (as modified by credits and/or offsets to be provided) will not cause the discharge to exceed the annual total mass limits for these parameters. Documentation of compliance with nutrient allocations is attached.

Name of Permittee Agency, Authority, Municipality _____

Initials of Responsible Agent (See Section G 2.b) _____

See *Special Instructions* (Form 3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay watershed requirements.

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows 35380 gpd
 2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
 - b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
 - c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	677889	2372613	24000	75000	33114	115899
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

- b. Collection System PWSA
Name of Agency, Authority, Municipality _____
Name of Responsible Agent Barry King, PE, PMP
Agent Signature 

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows 35380 gpd

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When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance	---	20,600,000	3,000,000	3,260,000	3,101,500	3,364,100
Treatment	209,300,000	250,000,000	190,200,000	250,000,000	219,021,000	295,000,000

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature SP Mcwilliams

Date 10/7/2021

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO ***ALCOSAN IS UNDER A CONSENT DECREE TO ADDRESS WET WEATHER OVERFLOWS.**

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature SP Mcwilliams

Date 10/7/2021

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may NOT receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

- 1. Spray irrigation (other than individual residential spray systems (IRISIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
- 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
- 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
- 4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

N. DETAILED HYDROGEOLOGIC STUDY (See Section N of instructions)

The detailed hydrogeologic information required in Section N. of the instructions is attached.

O. SEWAGE MANAGEMENT (See Section O of instructions)

(1-3 for completion by the developer(project sponsor), 4-5 for completion by the non-municipal facility agent and 6 for completion by the municipality)

Yes No

1. Is connection to, or construction of, a DEP permitted, non-municipal sewage facility or a local agency permitted, community onlot sewage facility proposed.

If Yes, respond to the following questions, attach the supporting analysis, and an evaluation of the options available to assure long-term proper operation and maintenance of the proposed non-municipal facilities. If No, skip the remainder of Section O.

2. Project Flows _____ gpd

Yes No

3. Is the use of nutrient credits or offsets a part of this project?

If yes, attach a letter of intent to purchase the necessary credits and describe the assurance that these credits and offsets will be available for the remaining design life of the non-municipal sewage facility;

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

The questions below are to be answered by the organization/individual responsible for the non-municipal collection and conveyance facilities. The individual(s) signing below must be legally authorized to make representation for the organization.

Yes No

- a. If this project proposes sewer extensions or tap-ins, will these actions create a hydraulic overload on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, a representative of the organization responsible for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with Chapter 71 §71.53(d)(3) and that this proposal will not affect that status.

- b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

- c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

The questions below are to be answered by a representative of the facility permittee. The individual signing below must be legally authorized to make representation for the organization.

Yes No

- a. If this project proposes the use of an existing non-municipal wastewater treatment plant for the disposal of sewage, will this action create a hydraulic or organic overload at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with §71.53(d)(3) and that this proposal will not impact that status.

- b. Name of Facility _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

(For completion by the municipality)

6. The **SELECTED OPTION** necessary to assure long-term proper operation and maintenance of the proposed non-municipal facilities is clearly identified with documentation attached in the planning module package.

P. PUBLIC NOTIFICATION REQUIREMENT (See Section P of instructions)

This section must be completed to determine if the applicant will be required to publish facts about the project in a newspaper of general circulation to provide a chance for the general public to comment on proposed new land development projects. This notice may be provided by the applicant or the applicant's agent, the municipality or the local agency by publication in a newspaper of general circulation within the municipality affected. Where an applicant or an applicant's agent provides the required notice for publication, the applicant or applicant's agent shall notify the municipality or local agency and the municipality and local agency will be relieved of the obligation to publish. The required content of the publication notice is found in Section P of the instructions.

To complete this section, each of the following questions must be answered with a "yes" or "no". Newspaper publication is required if any of the following are answered "yes".

Yes No

1. Does the project propose the construction of a sewage treatment facility ?
2. Will the project change the flow at an existing sewage treatment facility by more than 50,000 gallons per day?
3. Will the project result in a public expenditure for the sewage facilities portion of the project in excess of \$100,000?
4. Will the project lead to a major modification of the existing municipal administrative organizations within the municipal government?
5. Will the project require the establishment of *new* municipal administrative organizations within the municipal government?
6. Will the project result in a subdivision of 50 lots or more? (onlot sewage disposal only)
7. Does the project involve a major change in established growth projections?
8. Does the project involve a different land use pattern than that established in the municipality's Official Sewage Plan?

P. PUBLIC NOTIFICATION REQUIREMENT cont'd. (See Section P of instructions)

9. Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)?
10. Does the project require resolution of a conflict between the proposed alternative and consistency requirements contained in §71.21(a)(5)(i), (ii), (iii)?
11. Will sewage facilities discharge into high quality or exceptional value waters?
- Attached is a copy of:
 the public notice,
 all comments received as a result of the notice,
 the municipal response to these comments.
- No comments were received. A copy of the public notice is attached.

Q. FALSE SWEARING STATEMENT (See Section Q of instructions)

I verify that the statements made in this component are true and correct to the best of my knowledge, information and belief. I understand that false statements in this component are made subject to the penalties of 18 PA C.S.A. §4904 relating to unsworn falsification to authorities.

Brandon Fombelle

Name (Print)



Signature

Project Manager

Title

08/30/2021

Date

100 Airside Drive, Moon Township, PA 15108

Address

412-375-3081

Telephone Number

R. REVIEW FEE (See Section R of instructions)

The Sewage Facilities Act establishes a fee for the DEP planning module review. DEP will calculate the review fee for the project and invoice the project sponsor **OR** the project sponsor may attach a self-calculated fee payment to the planning module prior to submission of the planning package to DEP. (Since the fee and fee collection procedures may vary if a "delegated local agency" is conducting the review, the project sponsor should contact the "delegated local agency" to determine these details.) Check the appropriate box.

- I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.
- I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of \$4450 payable to "Commonwealth of PA, DEP". Include DEP code number on check. I understand DEP will not begin review of my project unless it receives the fee and determines the fee is correct. If the fee is incorrect, DEP will return my check or money order, send me an invoice for the correct amount. I understand DEP review will NOT begin until I have submitted the correct fee.
- I request to be exempt from the DEP planning module review fee because this planning module creates **only** one new lot and is the **only** lot subdivided from a parcel of land as that land existed on December 14, 1995. I realize that subdivision of a second lot from this parcel of land shall disqualify me from this review fee exemption. I am furnishing the following deed reference information in support of my fee exemption.

County Recorder of Deeds for _____ County, Pennsylvania

Deed Volume _____ Book Number _____

Page Number _____ Date Recorded _____

R. REVIEW FEE (continued)

Formula:

1. For a new collection system (with or without a Clean Streams Law Permit), a collection system extension, or individual tap-ins to an existing collection system use this formula.

$$\#89 \quad \text{Lots (or EDUs)} \times \$50.00 = \$4450$$

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewer system projects, one EDU is equal to a sewage flow of 400 gallons per day.

2. For a surface or subsurface discharge system, use the appropriate one of these formulae.

- A. A new surface discharge greater than 2000 gpd will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

- B. An increase in an existing surface discharge will use:

$$\# \quad \text{Lots (or EDUs)} \times \$35.00 = \$$$

to a maximum of \$ 1,500 per submittal (non-municipal) or \$ 500 per submittal (municipal)

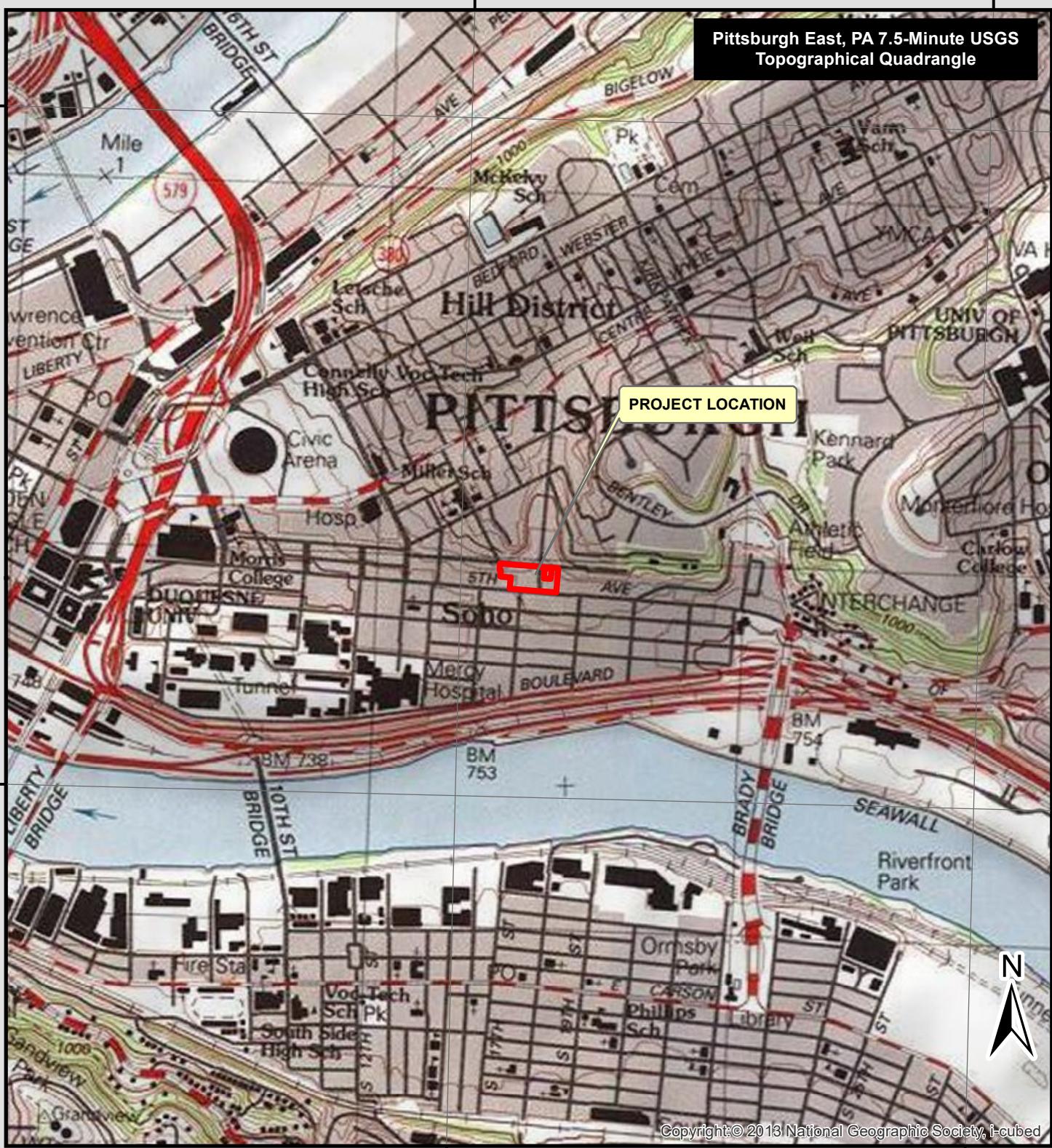
The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewage system projects one EDU is equal to a sewage flow of 400 gallons per day.
- For non-single family residential projects, EDUs are calculated using projected population figures

- C. A sub-surface discharge system that requires a permit under The Clean Streams Law will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

SITE LOCATION MAP



PROJECT LOCATION MAP

Legend

LOD

0 500 1,000 2,000 Feet

Fifth and Dinwiddie Development

prepared by

Michael Baker
INTERNATIONAL

Pittsburgh
Allegheny County, PA
Latitude: 40.438775
Longitude: -79.981117

PNDI

1. PROJECT INFORMATION

Project Name: **Fifth and Dinwiddie**

Date of Review: **3/11/2020 12:06:42 PM**

Project Category: **Development, Other**

Project Area: **2.32 acres**

County(s): **Allegheny**

Township/Municipality(s): **PITTSBURGH**

ZIP Code: **15219**

Quadrangle Name(s): **PITTSBURGH EAST**

Watersheds HUC 8: **Lower Monongahela**

Watersheds HUC 12: **Streets Run-Monongahela River**

Decimal Degrees: **40.438739, -79.981074**

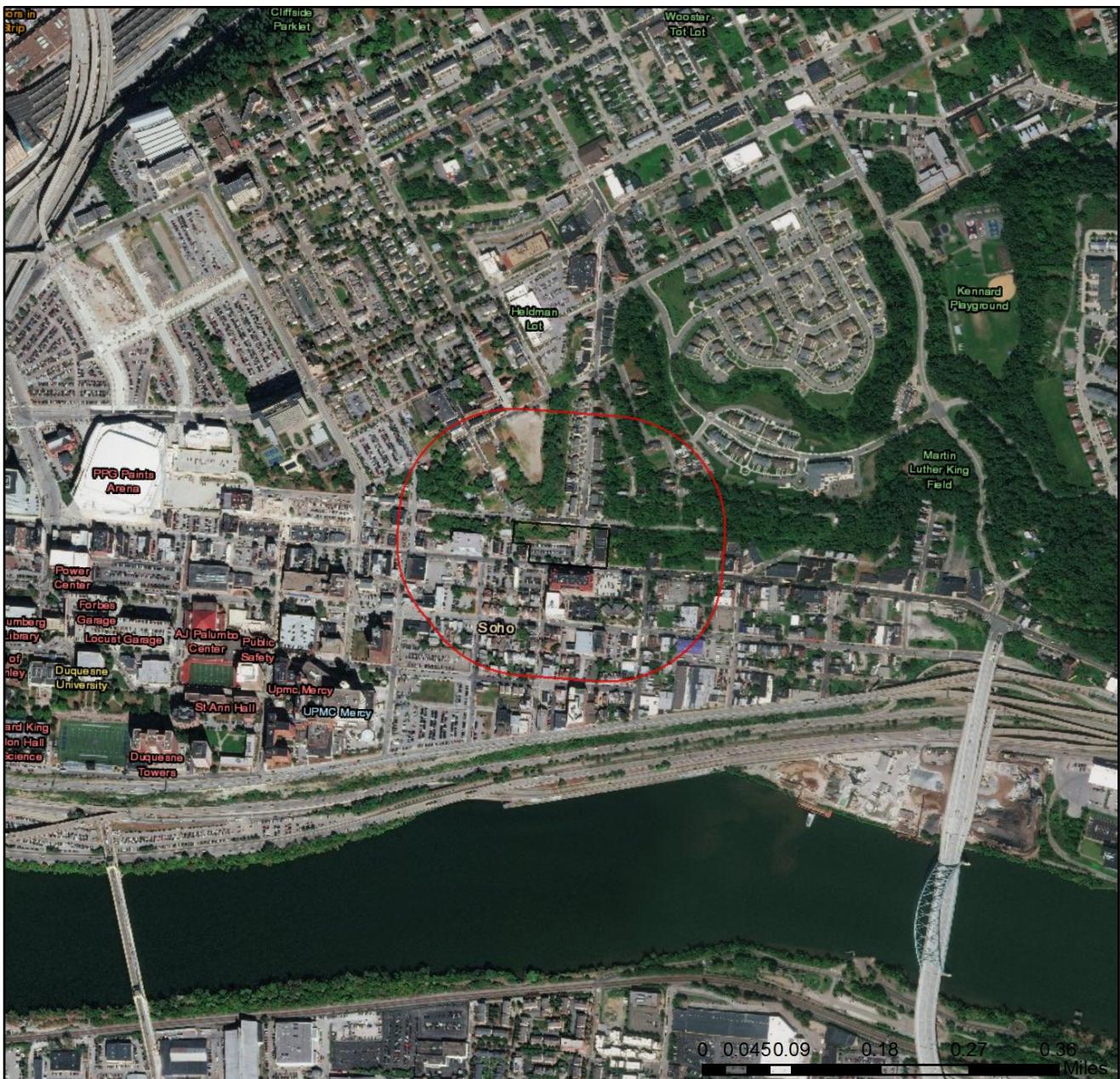
Degrees Minutes Seconds: **40° 26' 19.4607" N, 79° 58' 51.8674" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Fifth and Dinwiddie

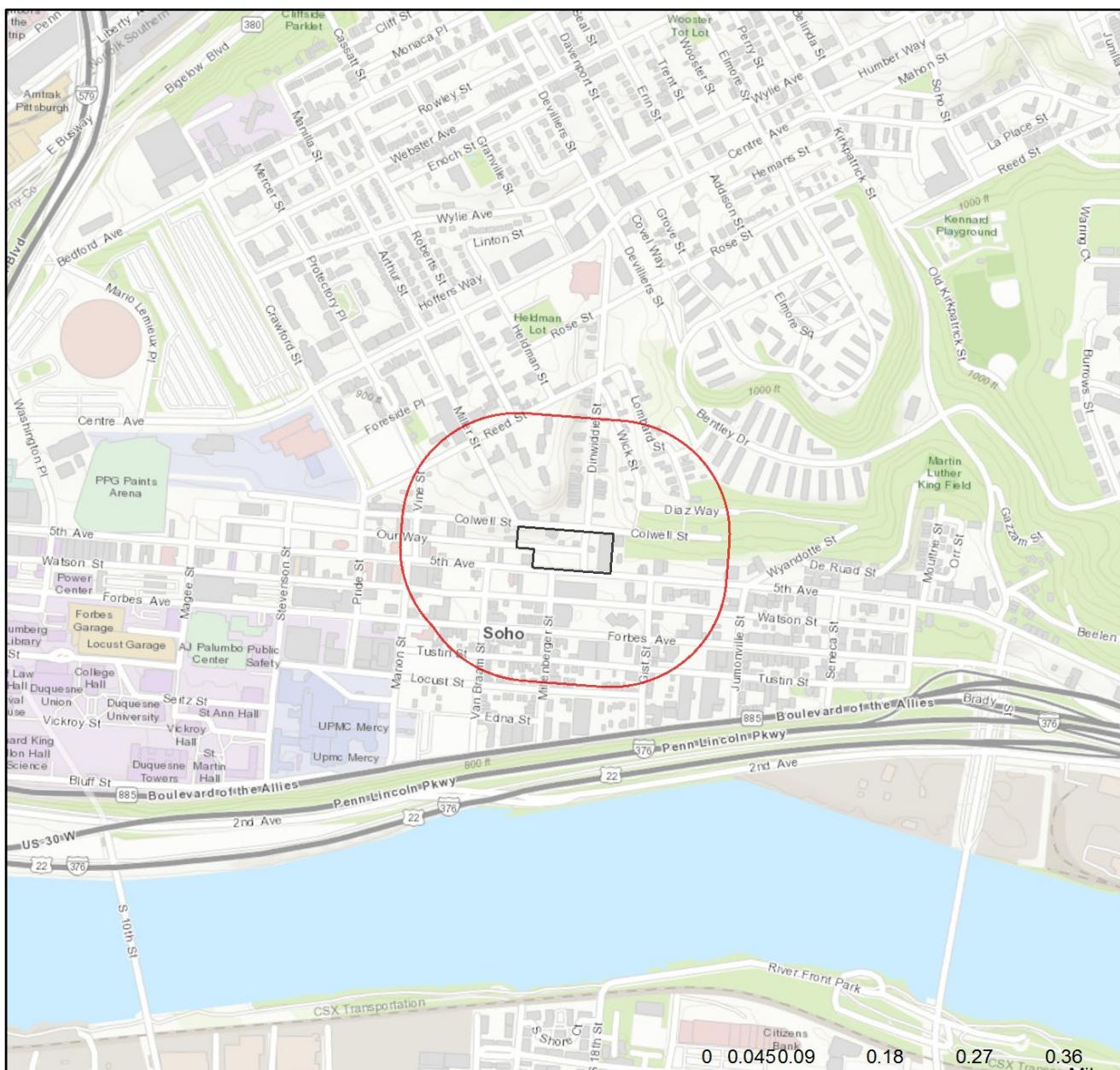


- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

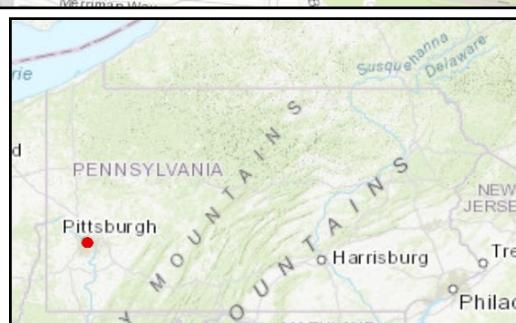


Fifth and Dinwiddie



Project Boundary

Buffered Project Boundary



Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,

RESPONSE TO QUESTION(S) ASKED

Q1: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: No forests, woodlots or trees will be affected by the project.

Q2: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Faxes Please

PA Game Commission

Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Catalina Escobar

Company/Business Name: Michael Baker International

Address: 100 Airside Drive

City, State, Zip: Moon Township, PA, 15108

Phone: (412) 269 6300 Fax: ()

Email: catalina.escobar@mbakerintl.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.



applicant/project proponent signature

11 March 2020

date

TABLE OF PARCELS & LOTS

S.O. No.: 176433
Project: 5th Avenue & Dinwiddie Development

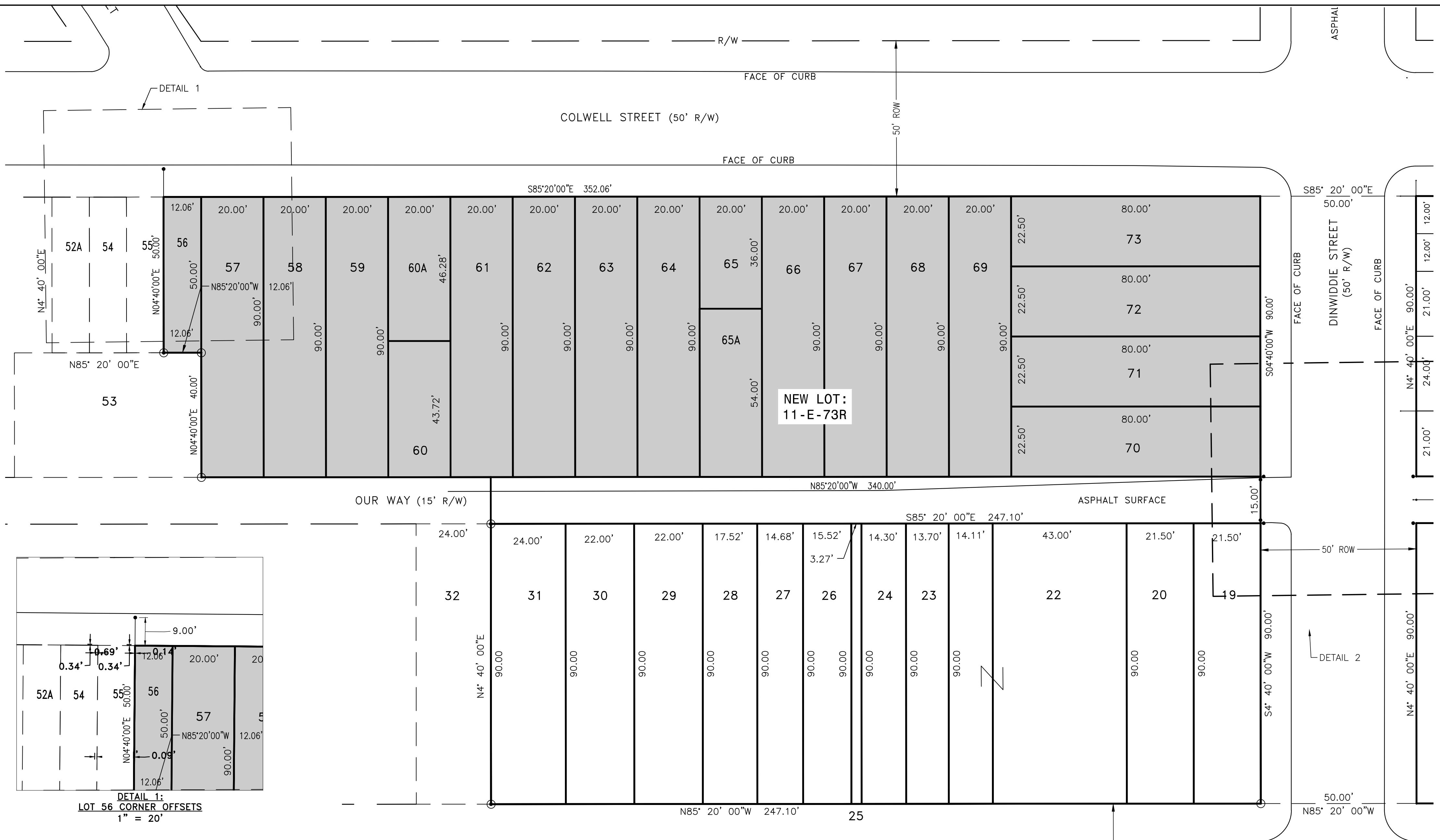
Michael Baker

I N T E R N A T I O N A L

Subject: Table of Parcels and Lots

Date: 3/19/2020 Sheet No.: 1 of 1

FIFTH AND DINWIDDIE PARCELS AND LOTS				
LOT No.	OWNER	PARCEL No.	DEED BOOK	DEED PAGE
19		11-E-19		
20		11-E-20		
22		11-E-22		
23		11-E-23		
24		11-E-24		
25		11-E-25		
26		11-E-26		
27		11-E-27		
28		11-E-28		
29		11-E-29		
30		11-E-30		
31		11-E-31		
56		11-E-56		
57		11-E-57		
58		11-E-58		
59		11-E-59		
60	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	11-E-60	15465	552
60A		11-E-60A	14533	313
61		11-E-61	15465	552
62		11-E-62		
63		11-E-63	14533	313
64		11-E-64		
65		11-E-65		
65A		11-E-65A	14533	295
66		11-E-66		
67		11-E-67	14449	280
68		11-E-68		
69		11-E-69	14533	286
70		11-E-70		
71		11-E-71	13936	206
72		11-E-72	14533	286
73		11-E-73		
81		11-E-81	8400	439
82	CITY OF PITTSBURGH	11-E-82	N/A	N/A
85		11-E-85	N/A	N/A



PARCEL OWNERS				
LOT No.	OWNER	PARCEL No.	DEED BOOK	DEED PAGE
53	CRAIG THOMPSON	11-E-53	14794	579
55	BEDCLIFF ASSOCIATES	11-E-55	8674	232
56	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	11-E-56	15047	63
57		11-E-57		
58		11-E-58		
59		11-E-59		
60		11-E-60	15465	552
60A		11-E-60A	14533	313
61		11-E-61	15465	552
62		11-E-62	14533	313
63		11-E-63		
64		11-E-64		
65	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	11-E-65	14533	295
65A		11-E-65A		
66		11-E-66		
67		11-E-67	14449	280
68		11-E-68	14533	286
69		11-E-69		
70		11-E-70		
71	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	11-E-71	13936	206
72		11-E-72	14533	286
73		11-E-73		

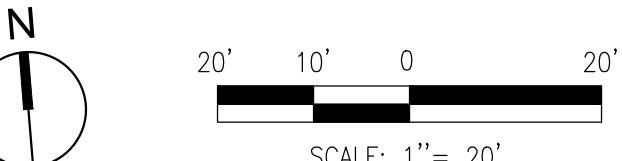
EXISTING PARCELS TO BE CONSOLIDATED		
LOT No.	AREA (SF)	AREA (AC)
56	603.00	0.013843
57	1800.00	0.041322
58	1800.00	0.041322
59	1800.00	0.041322
60	874.40	0.020073
60A	925.60	0.021249
61	1800.00	0.041322
62	1800.00	0.041322
63	1800.00	0.041322
64	1800.00	0.041322
65	720.06	0.016530
65A	1079.94	0.024792
66	1800.00	0.041322
67	1800.00	0.041322
68	1800.00	0.041322
69	1800.00	0.041322
70	1800.00	0.041322
71	1800.00	0.041322
72	1800.00	0.041322
73	1800.00	0.041322
TOTAL	31203.00	0.716317

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LOTS TO BE
CONSOLIDATED

REVISIONS

PREPARED BY:
MICHAEL BAKER INTERNATIONAL



CITY OF PITTSBURGH
DEPARTMENT OF CITY PLANNING

CITY PLANNING COMMISSION

CHAIRMAN

ATTEST: _____
SECRETARY

KNOW ALL MEN BY THESE PRESENTS: THAT FIFTH AND DINWIDDIE DEVELOPMENT, LLC FORMED IN THE STATE OF PENNSYLVANIA, DOES HEREBY ADOPT THIS PLAN AS ITS PLAN OF LOTS OF ITS PROPERTY, SITUATED IN THE 3RD WARD, CITY OF PITTSBURGH, ALLEGHENY COUNTY, PENNSYLVANIA.

N WITNESS WHERE OF THE SAID LIMITED LIABILITY COMPANY HAS CAUSED ITS SEAL TO BE AFFIXED BY OUR HAND, THIS
_____ DAY OF _____ 20____.

ATTEST:

NOTARY PUBLIC

FETH AND DINWIDDIE DEVELOPMENT, LLC : SIGNATURE AUTHORITY

I, RALPH WILLIAM GROMLEY, A PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS AND HIGHWAYS AS SURVEYED ON FEBRUARY AND SEPTEMBER OF 2020 AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

SIGNATURE
REG. NO. SU 075308

DATE

RECORDED IN THE OFFICE OF THE DEPARTMENT OF REAL ESTATE OF THE COUNTY OF ALLEGHENY, COMMONWEALTH OF
PENNSYLVANIA, IN PLAN BOOK VOLUME PAGE(S)

GIVEN UNDER MY HAND AND SEAL THIS DAY OF 20

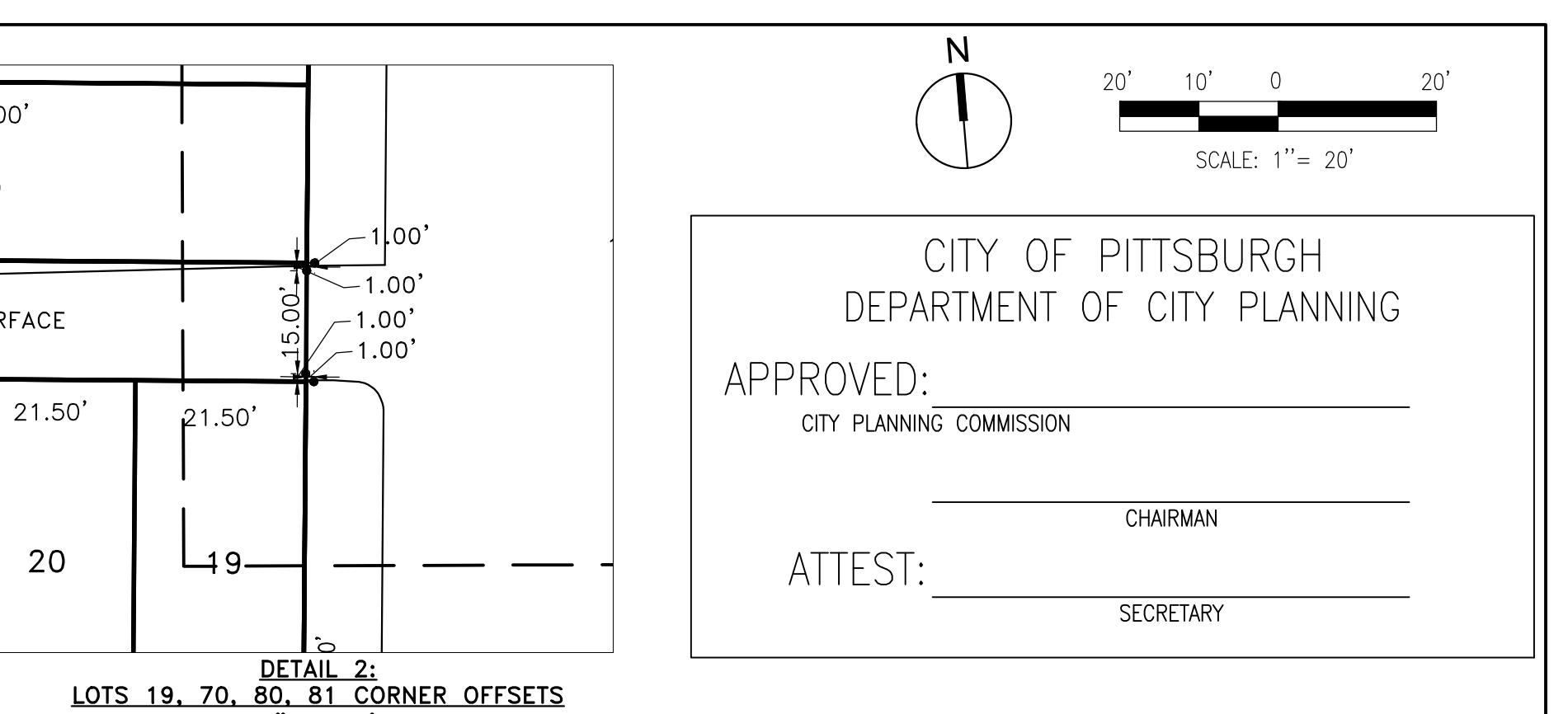
FIFTH AND DINWIDDIE DEVELOPMENT, LLC

CITY OF PITTSBURGH DEPARTMENT OF MOBILITY AND INFRASTRUCTURE

LOT CONSOLIDATION EXHIBIT

NEW LOT 11-E-73R

DATE: 06/25/2021 SHEET NO. 1 OF 1 ACCESSION NO.
BY: CASE NO.



**CITY OF PITTSBURGH
DEPARTMENT OF CITY PLANNING**

APPROVED: _____
CITY PLANNING COMMISSION

ATTEST: _____
CHAIRMAN
SECRETARY

KNOW ALL MEN BY THESE PRESENTS: THAT FIFTH AND DINWIDDIE DEVELOPMENT, LLC FORMED IN THE STATE OF PENNSYLVANIA, DOES HEREBY ADOPT THIS PLAN AS ITS PLAN OF LOTS OF ITS PROPERTY, SITUATED IN THE 3RD WARD, CITY OF PITTSBURGH, ALLEGHENY COUNTY, PENNSYLVANIA.

IN WITNESS WHEREOF THE SAID LIMITED LIABILITY COMPANY HAS CAUSED ITS SEAL TO BE AFFIXED BY OUR HAND, THIS DAY OF 20.

ATTEST:

NOTARY PUBLIC

FIFTH AND DINWIDDIE DEVELOPMENT, LLC : SIGNATURE AUTHORITY

I, RALPH WILLIAM GROMLEY, A PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS AND HIGHWAYS AS SURVEYED IN FEBRUARY AND SEPTEMBER OF 2020 AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

SIGNATURE
REG. NO. SU 075308

DATE

RECORDED IN THE OFFICE OF THE DEPARTMENT OF REAL ESTATE OF THE COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA, IN PLAN BOOK VOLUME ___, PAGE(S) _____.
GIVEN UNDER MY HAND AND SEAL THIS ____ DAY OF ____ 20____.

FIFTH AND DINWIDDIE DEVELOPMENT, LLC

FIFTH AND DINWIDDIE DEVELOPMENT

CITY OF PITTSBURGH DEPARTMENT OF MOBILITY AND INFRASTRUCTURE

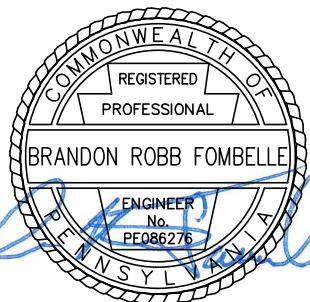
**LOT CONSOLIDATION EXHIBIT
NEW LOT 11-E-19R**

PREPARED BY:
MICHAEL BAKER INTERNATIONAL
Consulting Engineers
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108
(412) 269-6300
(412) 375-3977 (FAX)

Michael Baker
INTERNATIONAL

DATE: 06/25/2021 SHEET NO. _____
REV: _____ 1 OF 1 ACCESSION NO. _____
CASE NO. _____

WATER & SANITARY CALCULATIONS



S.O. No.: 176433
Project: 5th Avenue & Dinwiddie Development
Subject: Water Consumption and Sanitary Flow Calculations
Existing Site Water Consumption North Bar
Date: 7/21/2021



NORTH BAR: FIFTH AND DINWIDDIE PARCELS, LOTS, & EDU			
LOT No.	OWNER	PARCEL No.	EDUS
56	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	11-E-56	0
57		11-E-57	0
58		11-E-58	0
59		11-E-59	0
60		11-E-60	0
60A		11-E-60A	0
61		11-E-61	0
62		11-E-62	0
63		11-E-63	0
64		11-E-64	0
65		11-E-65	0
65A		11-E-65A	0
66		11-E-66	0
67		11-E-67	0
68		11-E-68	0
69		11-E-69	0
70		11-E-70	1
71		11-E-71	1
72		11-E-72	0
73		11-E-73	0
Existing EDU =			2

S.O. No.: 176433
Project: 5th Avenue & Dinwiddie Development
Subject: Water Consumption and Sanitary Flow Calculations
Existing Site Water Consumption South Bar
Date: 7/21/2021



SOUTH BAR: FIFTH AND DINWIDDIE PARCELS, LOTS, & EDU			
LOT No.	OWNER	PARCEL No.	EDUs
19	URBAN REDEVELOPMENT AUTHORITY OF PITTSBURGH	11-E-19	0
20		11-E-20	0
22		11-E-22	0
23		11-E-23	0
24		11-E-24	0
25		11-E-25	0
26		11-E-26	0
27		11-E-27	0
28		11-E-28	0
29		11-E-29	0
30		11-E-30	0
31		11-E-31	0
Existing EDU =			0

S.O. No.: 176433
Project: 5th Avenue & Dinwiddie Development
Subject: Water Consumption and Sanitary Flow Calculations
North Bar and South Bar Sanitary Flow
Date: 7/21/2021



Sheet No.: 1 of 2

II. SANITARY / CONDENSER FLOW

A. NORTH BAR AND SOUTH BAR

1. SANITARY FLOW

a. ONE BEDROOM UNIT SANITARY FLOW (1S1B):

$$1S1B = 1W1B = 22,800 \text{ gal/day}$$

$$\text{Therefore, Total 1S1B from } 152 \text{ units} = 22,800 \text{ gal/day}$$

b. TWO BEDROOM UNIT SANITARY FLOW (1S2B):

$$1S2B = 1W2B = 5,700 \text{ gal/day}$$

$$\text{Therefore, Total 1S2B from } 19 \text{ units} = 5,700 \text{ gal/day}$$

d. RETAIL UNIT SANITARY FLOW (1SCOM):

$$1SCOM = 1WCOM = 6,000 \text{ gal/day}$$

$$\text{Therefore, Total 1SCOM} = 6,000 \text{ gal/day}$$

f. TOTAL ESTIMATED NORTH BAR AND SOUTH BAR SANITARY FLOW (TE1S):

$$\begin{aligned} TE1S &= 1S1B + 1S2B + 1S3B + 1SOBC+1SCOM \\ TE1S &= (22800 \text{ gal/day}) + (5700 \text{ gal/day}) + (6000 \text{ gal/day}) \end{aligned}$$

$$TE1S = \boxed{34,500 \text{ gal/day}}$$

2. CONDENSER FLOW

a. ONE BEDROOM UNIT CONDENSER FLOW (1C1B):

$$29 = \text{Number of Studio Units}$$

$$123 = \text{Number of One Bedroom Units}$$

$$5 \text{ gal/unit/day} = \text{Estimated Unit Condenser Flow}$$

$$1C1B = (\text{Number of Units}) \times (\text{Estimated Condenser Flow})$$

$$1C1B = (152 \text{ units}) \times (5 \text{ gal/unit/day})$$

$$\text{Therefore, Total 1C1B from } 152 \text{ units} = 760 \text{ gal/day}$$

b. TWO BEDROOM UNIT CONDENSER FLOW (1C2B):

$19 = \text{Number of Two Bedroom Units}$
 $5 \text{ gal/unit/day} = \text{Estimated Unit Condenser Flow}$

$$\begin{aligned} 1C2B &= (\text{Number of Units}) \times (\text{Estimated Condenser Flow}) \\ 1C2B &= (19 \text{ units}) \times (5 \text{ gal/unit/day}) \end{aligned}$$

Therefore, Total 1C2B from 19 units = 95 gal/day

c. THREE BEDROOM UNIT CONDENSER FLOW (1C3B):

$0 = \text{Number of Three Bedroom Units}$
 $5 \text{ gal/unit/day} = \text{Estimated Unit Condenser Flow}$

$$\begin{aligned} 1C3B &= (\text{Number of Units}) \times (\text{Estimated Condenser Flow}) \\ 1C3B &= (0 \text{ units}) \times (5 \text{ gal/unit/day}) \end{aligned}$$

Therefore, Total 1C3B from 0 units = - gal/day

d. COMMERCIAL UNIT CONDENSER FLOW (1CCOM):

$5 = \text{Number of Commercial Units}$
 $5 \text{ gal/unit/day} = \text{Estimated Unit Condenser Flow}$

$$\begin{aligned} 1CCOM &= (\text{Number of Units}) \times (\text{Estimated Condenser Flow}) \\ 1CCOM &= (5 \text{ units}) \times (5 \text{ gal/unit/day}) \end{aligned}$$

Therefore, Total 1CCOM from 5 units = 25 gal/day

e. TOTAL ESTIMATED NORTH BAR AND SOUTH BAR CONDENSER FLOW (TE1C):

$$\begin{aligned} TE1C &= 1C1B + 1C2B + 1C3B + 1CCOM \\ TE1C &= (760 \text{ gal/day}) + (95 \text{ gal/day}) + (0 \text{ gal/day}) + (25 \text{ gal/day}) \end{aligned}$$

$$TE1C = 880 \text{ gal/day}$$

3. TOTAL COMBINED NORTH BAR AND SOUTH BAR SANITARY FLOW

$$\begin{aligned} TC1S &= TE1S + TE1C \\ TC1S &= (34500 \text{ gal/day}) + (880 \text{ gal/day}) = 35,380 \text{ gal/day} \end{aligned}$$

4. SUMMARY

$Q_{d,\text{avg}} =$	677,889 gal/day	(Capacity Per FlowMaster Model / 3.5 peaking factor)
$Q_{d,\text{peak}} =$	2,372,613 gal/day	(Capacity Per FlowMaster Model)
$Q_{ex,\text{avg}} =$	24,000 gal/day	(Average flow from metering)
$Q_{ex,\text{peak}} =$	75,000 gal/day	(Peak flow from metering)
$Q_{proj,\text{avg}} =$	33,114 gal/day	(Proposed Peak / 3.5 peaking factor)
$Q_{proj,\text{peak}} =$	115,899 gal/day	(Existing Peak + Proposed Flow) x 1.05

Design Capacity, Average

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth
Input Data	
Roughness Coefficient	0.015
Channel Slope	0.004 ft/ft
Diameter	15.0 in
Discharge	677,889.00 gal/day
Results	
Normal Depth	0.5 ft
Flow Area	0.4 ft ²
Wetted Perimeter	1.6 ft
Hydraulic Radius	0.3 ft
Top Width	1.21 ft
Critical Depth	0.4 ft
Percent Full	37.3 %
Critical Slope	0.007 ft/ft
Velocity	2.51 ft/s
Velocity Head	0.10 ft
Specific Energy	0.56 ft
Froude Number	0.755
Maximum Discharge	2,461,592.49 gal/day
Discharge Full	2,288,350.90 gal/day
Slope Full	0.000 ft/ft
Flow Type	Subcritical
GVF Input Data	
Downstream Depth	0.0 ft
Length	0.0 ft
Number Of Steps	0
GVF Output Data	
Upstream Depth	0.0 ft
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	35.3 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.5 ft
Critical Depth	0.4 ft
Channel Slope	0.004 ft/ft
Critical Slope	0.007 ft/ft

Design Capacity, Peak

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Capacity

Input Data

Roughness Coefficient	0.015
Channel Slope	0.004 ft/ft
Normal Depth	1.3 ft
Diameter	15.0 in
Discharge	2,372,612.71 gal/day

Results

Discharge	2,372,612.71 gal/day
Normal Depth	1.3 ft
Flow Area	1.2 ft ²
Wetted Perimeter	3.9 ft
Hydraulic Radius	0.3 ft
Top Width	0.00 ft
Critical Depth	0.8 ft
Percent Full	100.0 %
Critical Slope	0.009 ft/ft
Velocity	2.99 ft/s
Velocity Head	0.14 ft
Specific Energy	1.39 ft
Froude Number	(N/A)
Maximum Discharge	2,552,233.42 gal/day
Discharge Full	2,372,612.71 gal/day
Slope Full	0.004 ft/ft
Flow Type	Supercritical

GVF Input Data

Downstream Depth	0.0 ft
Length	0.0 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.0 ft
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	100.0 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	1.3 ft
Critical Depth	0.8 ft
Channel Slope	0.004 ft/ft
Critical Slope	0.009 ft/ft

Existing Flows, Average

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015
Channel Slope	0.004 ft/ft
Diameter	15.0 in
Discharge	24,000.00 gal/day

Results

Normal Depth	0.1 ft
Flow Area	0.0 ft ²
Wetted Perimeter	0.7 ft
Hydraulic Radius	0.1 ft
Top Width	0.65 ft
Critical Depth	0.1 ft
Percent Full	7.2 %
Critical Slope	0.010 ft/ft
Velocity	0.94 ft/s
Velocity Head	0.01 ft
Specific Energy	0.10 ft
Froude Number	0.672
Maximum Discharge	2,461,592.49 gal/day
Discharge Full	2,288,350.90 gal/day
Slope Full	0.000 ft/ft
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.0 ft
Length	0.0 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.0 ft
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	3.4 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.1 ft
Critical Depth	0.1 ft
Channel Slope	0.004 ft/ft
Critical Slope	0.010 ft/ft

Existing Flows, Peak

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015
Channel Slope	0.004 ft/ft
Diameter	15.0 in
Discharge	75,000.00 gal/day

Results

Normal Depth	0.2 ft
Flow Area	0.1 ft ²
Wetted Perimeter	0.9 ft
Hydraulic Radius	0.1 ft
Top Width	0.82 ft
Critical Depth	0.1 ft
Percent Full	12.4 %
Critical Slope	0.008 ft/ft
Velocity	1.33 ft/s
Velocity Head	0.03 ft
Specific Energy	0.18 ft
Froude Number	0.719
Maximum Discharge	2,461,592.49 gal/day
Discharge Full	2,288,350.90 gal/day
Slope Full	0.000 ft/ft
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.0 ft
Length	0.0 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.0 ft
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	9.1 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.2 ft
Critical Depth	0.1 ft
Channel Slope	0.004 ft/ft
Critical Slope	0.008 ft/ft

Projected Flows in 5 Years, Average

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015
Channel Slope	0.004 ft/ft
Diameter	15.0 in
Discharge	115,899.00 gal/day

Results

Normal Depth	0.2 ft
Flow Area	0.1 ft ²
Wetted Perimeter	1.0 ft
Hydraulic Radius	0.1 ft
Top Width	0.90 ft
Critical Depth	0.2 ft
Percent Full	15.3 %
Critical Slope	0.008 ft/ft
Velocity	1.51 ft/s
Velocity Head	0.04 ft
Specific Energy	0.23 ft
Froude Number	0.732
Maximum Discharge	2,461,592.49 gal/day
Discharge Full	2,288,350.90 gal/day
Slope Full	0.000 ft/ft
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.0 ft
Length	0.0 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.0 ft
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	5.2 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.2 ft
Critical Depth	0.2 ft
Channel Slope	0.004 ft/ft
Critical Slope	0.008 ft/ft

Projected Flows in 5 Years, Peak

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth
Input Data	
Roughness Coefficient	0.015
Channel Slope	0.004 ft/ft
Diameter	15.0 in
Discharge	33,114.00 gal/day
Results	
Normal Depth	0.1 ft
Flow Area	0.0 ft ²
Wetted Perimeter	0.7 ft
Hydraulic Radius	0.1 ft
Top Width	0.69 ft
Critical Depth	0.1 ft
Percent Full	8.4 %
Critical Slope	0.009 ft/ft
Velocity	1.04 ft/s
Velocity Head	0.02 ft
Specific Energy	0.12 ft
Froude Number	0.687
Maximum Discharge	2,461,592.49 gal/day
Discharge Full	2,288,350.90 gal/day
Slope Full	0.000 ft/ft
Flow Type	Subcritical
GVF Input Data	
Downstream Depth	0.0 ft
Length	0.0 ft
Number Of Steps	0
GVF Output Data	
Upstream Depth	0.0 ft
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	9.4 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.1 ft
Critical Depth	0.1 ft
Channel Slope	0.004 ft/ft
Critical Slope	0.009 ft/ft

SEWER FLOW METERING DATA

MH 002H083

April 17, 2021 through May 16, 2021

Line Size:		15 "		Manhole Depth:		0 "	
Date	Average Daily Flow (MGD)	Minimum Hourly Flow (Time)	Minimum Hourly Flow (MGD)	Maximum Hourly Flow (Time)	Maximum Hourly Flow (MGD)	Total 24 hr. Precip. (inches)	
04/17/2021	0.021	1:00 AM	0.017	6:00 AM	0.025	0.00	
04/18/2021	0.024	12:00 AM	0.017	9:00 AM	0.031	0.01	
04/19/2021	0.018	7:00 AM	0.016	11:00 PM	0.024	0.05	
04/20/2021	0.019	1:00 AM	0.015	9:00 PM	0.023	0.00	
04/21/2021	0.021	8:00 PM	0.018	10:00 AM	0.029	0.09	
04/22/2021	0.022	5:00 AM	0.015	11:00 PM	0.035	0.00	
04/23/2021	0.029	12:00 PM	0.025	4:00 AM	0.037	0.00	
04/24/2021	0.024	6:00 AM	0.020	6:00 PM	0.034	0.19	
04/25/2021	0.022	5:00 PM	0.018	8:00 AM	0.027	0.12	
04/26/2021	0.022	6:00 PM	0.019	1:00 PM	0.029	0.00	
04/27/2021	0.027	6:00 AM	0.017	1:00 PM	0.036	0.00	
04/28/2021	0.021	3:00 AM	0.015	10:00 AM	0.027	0.00	
04/29/2021	0.032	7:00 AM	0.019	6:00 PM	0.075	0.77	
04/30/2021	0.027	9:00 AM	0.024	3:00 PM	0.040	0.13	
05/01/2021	0.027	1:00 AM	0.021	12:00 PM	0.039	0.00	
05/02/2021	0.029	4:00 AM	0.024	5:00 PM	0.033	0.00	
05/03/2021	0.028	3:00 PM	0.020	10:00 AM	0.052	0.69	
05/04/2021	0.019	6:00 AM	0.015	1:00 PM	0.036	0.17	
05/05/2021	0.022	12:00 PM	0.015	6:00 AM	0.041	0.39	
05/06/2021	0.020	11:00 AM	0.016	7:00 AM	0.023	0.00	
05/07/2021	0.020	2:00 AM	0.018	12:00 PM	0.024	0.11	
05/08/2021	0.020	5:00 AM	0.017	7:00 PM	0.023	0.01	
05/09/2021	0.036	2:00 AM	0.019	7:00 PM	0.065	1.09	
05/10/2021	0.035	11:00 PM	0.026	1:00 PM	0.044	0.01	
05/11/2021	0.023	12:00 PM	0.021	8:00 AM	0.027	0.00	
05/12/2021	0.022	10:00 PM	0.020	7:00 AM	0.025	0.00	
05/13/2021	0.022	12:00 PM	0.019	2:00 PM	0.026	0.00	
05/14/2021	0.020	2:00 AM	0.018	10:00 PM	0.024	0.00	
05/15/2021	0.021	10:00 PM	0.019	4:00 AM	0.022	0.00	
05/16/2021	0.019	5:00 AM	0.017	12:00 PM	0.021	0.00	

Average	0.024	0.019	0.033
Minimum	0.018	0.015	0.021
Maximum	0.036	0.026	0.075

3.83 Total

Total Flow 0.711 MG

MH 002H083

April 17, 2021 through May 16, 2021

Time	Head inches	Velocity fps	Flow MGD	Precip. inches																		
04/17/2021	12:00 AM	2.20	0.24	0.017																		
	1:00 AM	2.19	0.23	0.017																		
	2:00 AM	2.21	0.28	0.020																		
	3:00 AM	2.27	0.25	0.019																		
	4:00 AM	2.26	0.24	0.018																		
	5:00 AM	2.30	0.26	0.020																		
	6:00 AM	2.35	0.32	0.025																		
	7:00 AM	2.30	0.31	0.024																		
	8:00 AM	2.31	0.31	0.024																		
	9:00 AM	2.24	0.24	0.018																		
	10:00 AM	2.28	0.24	0.018																		
	11:00 AM	2.31	0.27	0.021																		
	12:00 PM	2.36	0.26	0.021																		
	1:00 PM	2.34	0.31	0.025																		
	2:00 PM	2.35	0.27	0.021																		
	3:00 PM	2.30	0.29	0.023																		
	4:00 PM	2.31	0.29	0.023																		
	5:00 PM	2.27	0.31	0.024																		
	6:00 PM	2.21	0.31	0.023																		
	7:00 PM	2.26	0.32	0.024																		
	8:00 PM	2.24	0.32	0.023																		
	9:00 PM	2.32	0.33	0.025																		
	10:00 PM	2.33	0.24	0.018																		
	11:00 PM	2.28	0.25	0.019																		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>MIN</td><td>2.19</td><td>0.23</td><td>0.017</td><td>MIN</td><td>0.00</td></tr> <tr> <td>MAX</td><td>2.36</td><td>0.33</td><td>0.025</td><td>MAX</td><td>0.00</td></tr> <tr> <td>AVE</td><td>2.28</td><td>0.28</td><td>0.021</td><td>TOTAL</td><td>0.00</td></tr> </table>					MIN	2.19	0.23	0.017	MIN	0.00	MAX	2.36	0.33	0.025	MAX	0.00	AVE	2.28	0.28	0.021	TOTAL	0.00
MIN	2.19	0.23	0.017	MIN	0.00																	
MAX	2.36	0.33	0.025	MAX	0.00																	
AVE	2.28	0.28	0.021	TOTAL	0.00																	
04/18/2021	12:00 AM	2.20	0.23	0.017																		
	1:00 AM	2.19	0.28	0.020																		
	2:00 AM	2.17	0.29	0.021																		
	3:00 AM	2.15	0.26	0.018																		
	4:00 AM	2.15	0.31	0.021																		
	5:00 AM	2.18	0.32	0.023																		
	6:00 AM	2.20	0.29	0.021																		
	7:00 AM	2.32	0.28	0.022																		
	8:00 AM	2.31	0.37	0.029																		
	9:00 AM	2.44	0.37	0.031																		
	10:00 AM	2.33	0.35	0.028																		
	11:00 AM	2.29	0.32	0.024																		
	12:00 PM	2.28	0.35	0.026																		
	1:00 PM	2.23	0.36	0.026																		
	2:00 PM	2.25	0.34	0.025																		
	3:00 PM	2.24	0.36	0.027																		
	4:00 PM	2.19	0.37	0.027																		
	5:00 PM	2.23	0.36	0.026																		
	6:00 PM	2.28	0.33	0.025																		
	7:00 PM	2.31	0.33	0.026																		
	8:00 PM	2.31	0.35	0.027																		
	9:00 PM	2.14	0.28	0.020																		
	10:00 PM	2.19	0.27	0.019																		
	11:00 PM	2.14	0.30	0.021																		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>MIN</td><td>2.14</td><td>0.23</td><td>0.017</td><td>MIN</td><td>0.00</td></tr> <tr> <td>MAX</td><td>2.44</td><td>0.37</td><td>0.031</td><td>MAX</td><td>0.01</td></tr> <tr> <td>AVE</td><td>2.24</td><td>0.32</td><td>0.024</td><td>TOTAL</td><td>0.01</td></tr> </table>					MIN	2.14	0.23	0.017	MIN	0.00	MAX	2.44	0.37	0.031	MAX	0.01	AVE	2.24	0.32	0.024	TOTAL	0.01
MIN	2.14	0.23	0.017	MIN	0.00																	
MAX	2.44	0.37	0.031	MAX	0.01																	
AVE	2.24	0.32	0.024	TOTAL	0.01																	

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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04/19/2021	12:00 AM	2.21	0.26	0.019	0.04
	1:00 AM	2.14	0.23	0.016	0.01
	2:00 AM	2.16	0.27	0.019	0.00
	3:00 AM	2.15	0.24	0.017	0.00
	4:00 AM	2.16	0.24	0.017	0.00
	5:00 AM	2.14	0.23	0.016	0.00
	6:00 AM	2.16	0.27	0.019	0.00
	7:00 AM	2.14	0.23	0.016	0.00
	8:00 AM	2.16	0.24	0.017	0.00
	9:00 AM	2.23	0.25	0.018	0.00
	10:00 AM	2.18	0.23	0.016	0.00
	11:00 AM	2.17	0.25	0.018	0.00
	12:00 PM	2.18	0.30	0.021	0.00
	1:00 PM	2.18	0.26	0.019	0.00
	2:00 PM	2.17	0.23	0.016	0.00
	3:00 PM	2.21	0.25	0.018	0.00
	4:00 PM	2.16	0.23	0.016	0.00
	5:00 PM	2.19	0.26	0.018	0.00
	6:00 PM	2.15	0.26	0.018	0.00
	7:00 PM	2.17	0.23	0.016	0.00
	8:00 PM	2.14	0.24	0.016	0.00
	9:00 PM	2.17	0.28	0.020	0.00
	10:00 PM	2.18	0.23	0.016	0.00
	11:00 PM	2.32	0.31	0.024	0.00

MIN	2.14	0.23	0.016	MIN	0.00
MAX	2.32	0.31	0.024	MAX	0.04
AVE	2.18	0.25	0.018	TOTAL	0.05

04/20/2021	12:00 AM	2.31	0.28	0.022	0.00
	1:00 AM	2.15	0.21	0.015	0.00
	2:00 AM	2.16	0.22	0.016	0.00
	3:00 AM	2.16	0.25	0.017	0.00
	4:00 AM	2.16	0.23	0.016	0.00
	5:00 AM	2.16	0.25	0.017	0.00
	6:00 AM	2.26	0.26	0.020	0.00
	7:00 AM	2.16	0.27	0.019	0.00
	8:00 AM	2.15	0.26	0.018	0.00
	9:00 AM	2.18	0.26	0.019	0.00
	10:00 AM	2.17	0.27	0.019	0.00
	11:00 AM	2.18	0.26	0.018	0.00
	12:00 PM	2.17	0.29	0.021	0.00
	1:00 PM	2.15	0.29	0.020	0.00
	2:00 PM	2.16	0.28	0.019	0.00
	3:00 PM	2.16	0.27	0.019	0.00
	4:00 PM	2.16	0.27	0.019	0.00
	5:00 PM	2.15	0.28	0.020	0.00
	6:00 PM	2.16	0.29	0.020	0.00
	7:00 PM	2.19	0.29	0.021	0.00
	8:00 PM	2.20	0.30	0.022	0.00
	9:00 PM	2.23	0.32	0.023	0.00
	10:00 PM	2.20	0.29	0.021	0.00
	11:00 PM	2.17	0.26	0.018	0.00

MIN	2.15	0.21	0.015	MIN	0.00
MAX	2.31	0.32	0.023	MAX	0.00
AVE	2.18	0.27	0.019	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
04/21/2021	12:00 AM	2.19	0.26	0.019	0.00
	1:00 AM	2.19	0.28	0.020	0.00
	2:00 AM	2.19	0.27	0.020	0.00
	3:00 AM	2.19	0.27	0.019	0.00
	4:00 AM	2.19	0.26	0.019	0.00
	5:00 AM	2.26	0.29	0.022	0.00
	6:00 AM	2.21	0.27	0.020	0.00
	7:00 AM	2.26	0.31	0.023	0.05
	8:00 AM	2.20	0.31	0.022	0.04
	9:00 AM	2.28	0.34	0.026	0.00
	10:00 AM	2.31	0.38	0.029	0.00
	11:00 AM	2.27	0.33	0.025	0.00
	12:00 PM	2.25	0.29	0.022	0.00
	1:00 PM	2.25	0.27	0.020	0.00
	2:00 PM	2.25	0.25	0.019	0.00
	3:00 PM	2.29	0.25	0.019	0.00
	4:00 PM	2.27	0.25	0.019	0.00
	5:00 PM	2.23	0.26	0.019	0.00
	6:00 PM	2.25	0.28	0.021	0.00
	7:00 PM	2.09	0.29	0.019	0.00
	8:00 PM	1.93	0.30	0.018	0.00
	9:00 PM	2.12	0.32	0.022	0.00
	10:00 PM	2.04	0.29	0.019	0.00
	11:00 PM	2.06	0.29	0.019	0.00

MIN	1.93	0.25	0.018	MIN	0.00
MAX	2.31	0.38	0.029	MAX	0.05
AVE	2.20	0.29	0.021	TOTAL	0.09

04/22/2021	12:00 AM	2.03	0.27	0.018	0.00
	1:00 AM	1.99	0.25	0.016	0.00
	2:00 AM	2.06	0.28	0.018	0.00
	3:00 AM	2.10	0.27	0.018	0.00
	4:00 AM	2.00	0.25	0.015	0.00
	5:00 AM	2.00	0.24	0.015	0.00
	6:00 AM	2.02	0.25	0.016	0.00
	7:00 AM	2.02	0.26	0.017	0.00
	8:00 AM	2.05	0.26	0.017	0.00
	9:00 AM	2.06	0.26	0.017	0.00
	10:00 AM	2.09	0.25	0.017	0.00
	11:00 AM	2.03	0.24	0.015	0.00
	12:00 PM	2.05	0.27	0.018	0.00
	1:00 PM	2.08	0.26	0.018	0.00
	2:00 PM	2.15	0.39	0.027	0.00
	3:00 PM	2.06	0.37	0.024	0.00
	4:00 PM	2.08	0.42	0.028	0.00
	5:00 PM	2.06	0.38	0.025	0.00
	6:00 PM	2.04	0.40	0.026	0.00
	7:00 PM	2.07	0.45	0.029	0.00
	8:00 PM	2.10	0.46	0.031	0.00
	9:00 PM	2.12	0.49	0.034	0.00
	10:00 PM	2.10	0.46	0.031	0.00
	11:00 PM	2.26	0.47	0.035	0.00

MIN	1.99	0.24	0.015	MIN	0.00
MAX	2.26	0.49	0.035	MAX	0.00
AVE	2.07	0.33	0.022	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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04/23/2021	12:00 AM	2.27	0.37	0.028	0.00
	1:00 AM	2.31	0.36	0.028	0.00
	2:00 AM	2.32	0.36	0.028	0.00
	3:00 AM	2.25	0.35	0.027	0.00
	4:00 AM	2.25	0.49	0.037	0.00
	5:00 AM	2.26	0.47	0.035	0.00
	6:00 AM	2.24	0.44	0.033	0.00
	7:00 AM	2.20	0.43	0.031	0.00
	8:00 AM	2.15	0.39	0.027	0.00
	9:00 AM	2.15	0.39	0.027	0.00
	10:00 AM	2.17	0.38	0.027	0.00
	11:00 AM	2.19	0.41	0.029	0.00
	12:00 PM	2.12	0.37	0.025	0.00
	1:00 PM	2.09	0.44	0.030	0.00
	2:00 PM	2.03	0.41	0.027	0.00
	3:00 PM	2.04	0.45	0.029	0.00
	4:00 PM	2.01	0.41	0.026	0.00
	5:00 PM	2.05	0.46	0.030	0.00
	6:00 PM	2.07	0.43	0.029	0.00
	7:00 PM	2.01	0.44	0.028	0.00
	8:00 PM	2.06	0.44	0.029	0.00
	9:00 PM	2.01	0.44	0.028	0.00
	10:00 PM	2.03	0.43	0.028	0.00
	11:00 PM	2.02	0.44	0.028	0.00

MIN	2.01	0.35	0.025	MIN	0.00
MAX	2.32	0.49	0.037	MAX	0.00
AVE	2.14	0.42	0.029	TOTAL	0.00

04/24/2021	12:00 AM	2.04	0.41	0.027	0.00
	1:00 AM	2.07	0.42	0.028	0.00
	2:00 AM	2.08	0.38	0.025	0.00
	3:00 AM	1.99	0.33	0.021	0.00
	4:00 AM	2.04	0.33	0.021	0.00
	5:00 AM	2.00	0.32	0.020	0.00
	6:00 AM	1.98	0.32	0.020	0.00
	7:00 AM	2.00	0.33	0.021	0.00
	8:00 AM	2.03	0.32	0.020	0.00
	9:00 AM	2.05	0.33	0.021	0.00
	10:00 AM	2.02	0.32	0.020	0.00
	11:00 AM	2.06	0.32	0.021	0.00
	12:00 PM	2.11	0.30	0.021	0.00
	1:00 PM	2.08	0.30	0.020	0.00
	2:00 PM	2.03	0.40	0.026	0.00
	3:00 PM	2.02	0.42	0.027	0.00
	4:00 PM	1.99	0.47	0.029	0.00
	5:00 PM	2.03	0.49	0.031	0.00
	6:00 PM	2.02	0.52	0.034	0.02
	7:00 PM	2.10	0.46	0.031	0.01
	8:00 PM	2.02	0.36	0.023	0.02
	9:00 PM	2.05	0.37	0.024	0.05
	10:00 PM	2.04	0.37	0.024	0.04
	11:00 PM	2.13	0.34	0.023	0.05

MIN	1.98	0.30	0.020	MIN	0.00
MAX	2.13	0.52	0.034	MAX	0.05
AVE	2.04	0.37	0.024	TOTAL	0.19

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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04/25/2021	12:00 AM	2.13	0.35	0.024	0.04
	1:00 AM	2.13	0.33	0.023	0.03
	2:00 AM	2.17	0.35	0.025	0.03
	3:00 AM	2.10	0.35	0.024	0.01
	4:00 AM	2.11	0.35	0.024	0.01
	5:00 AM	2.05	0.36	0.024	0.00
	6:00 AM	2.08	0.37	0.025	0.00
	7:00 AM	2.06	0.40	0.026	0.00
	8:00 AM	2.06	0.41	0.027	0.00
	9:00 AM	2.11	0.32	0.022	0.00
	10:00 AM	2.08	0.30	0.020	0.00
	11:00 AM	2.07	0.31	0.020	0.00
	12:00 PM	2.06	0.30	0.020	0.00
	1:00 PM	2.06	0.30	0.020	0.00
	2:00 PM	2.09	0.32	0.021	0.00
	3:00 PM	2.09	0.31	0.021	0.00
	4:00 PM	2.06	0.33	0.021	0.00
	5:00 PM	2.04	0.28	0.018	0.00
	6:00 PM	2.06	0.29	0.019	0.00
	7:00 PM	2.03	0.30	0.019	0.00
	8:00 PM	2.00	0.30	0.019	0.00
	9:00 PM	2.04	0.29	0.018	0.00
	10:00 PM	2.10	0.32	0.022	0.00
	11:00 PM	2.08	0.30	0.020	0.00

MIN	2.00	0.28	0.018	MIN	0.00
MAX	2.17	0.41	0.027	MAX	0.04
AVE	2.08	0.33	0.022	TOTAL	0.12

04/26/2021	12:00 AM	2.08	0.32	0.022	0.00
	1:00 AM	2.08	0.33	0.022	0.00
	2:00 AM	2.07	0.30	0.020	0.00
	3:00 AM	2.08	0.33	0.022	0.00
	4:00 AM	2.07	0.32	0.021	0.00
	5:00 AM	2.07	0.31	0.021	0.00
	6:00 AM	2.06	0.31	0.021	0.00
	7:00 AM	2.11	0.33	0.022	0.00
	8:00 AM	2.10	0.34	0.023	0.00
	9:00 AM	2.13	0.34	0.024	0.00
	10:00 AM	2.08	0.34	0.023	0.00
	11:00 AM	2.07	0.33	0.022	0.00
	12:00 PM	2.06	0.36	0.024	0.00
	1:00 PM	2.10	0.42	0.029	0.00
	2:00 PM	2.11	0.36	0.024	0.00
	3:00 PM	2.11	0.31	0.021	0.00
	4:00 PM	2.11	0.30	0.021	0.00
	5:00 PM	2.11	0.29	0.020	0.00
	6:00 PM	2.07	0.29	0.019	0.00
	7:00 PM	2.08	0.30	0.020	0.00
	8:00 PM	2.09	0.30	0.020	0.00
	9:00 PM	2.16	0.31	0.022	0.00
	10:00 PM	2.11	0.34	0.023	0.00
	11:00 PM	2.09	0.32	0.021	0.00

MIN	2.06	0.29	0.019	MIN	0.00
MAX	2.16	0.42	0.029	MAX	0.00
AVE	2.09	0.33	0.022	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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04/27/2021	12:00 AM	2.07	0.31	0.021	0.00
	1:00 AM	2.07	0.31	0.020	0.00
	2:00 AM	2.10	0.31	0.021	0.00
	3:00 AM	2.07	0.30	0.020	0.00
	4:00 AM	2.08	0.29	0.019	0.00
	5:00 AM	2.06	0.28	0.018	0.00
	6:00 AM	2.11	0.26	0.017	0.00
	7:00 AM	2.09	0.27	0.018	0.00
	8:00 AM	2.13	0.26	0.018	0.00
	9:00 AM	2.14	0.26	0.018	0.00
	10:00 AM	2.13	0.40	0.028	0.00
	11:00 AM	2.08	0.48	0.032	0.00
	12:00 PM	2.09	0.49	0.033	0.00
	1:00 PM	2.13	0.52	0.036	0.00
	2:00 PM	2.09	0.44	0.030	0.00
	3:00 PM	2.13	0.48	0.033	0.00
	4:00 PM	2.11	0.47	0.032	0.00
	5:00 PM	2.09	0.45	0.030	0.00
	6:00 PM	2.06	0.46	0.030	0.00
	7:00 PM	2.09	0.47	0.032	0.00
	8:00 PM	2.08	0.51	0.034	0.00
	9:00 PM	2.08	0.51	0.034	0.00
	10:00 PM	2.08	0.54	0.036	0.00
	11:00 PM	2.20	0.42	0.030	0.00

MIN	2.06	0.26	0.017	MIN	0.00
MAX	2.20	0.54	0.036	MAX	0.00
AVE	2.10	0.40	0.027	TOTAL	0.00

04/28/2021	12:00 AM	2.14	0.25	0.017	0.00
	1:00 AM	2.11	0.23	0.016	0.00
	2:00 AM	2.10	0.23	0.015	0.00
	3:00 AM	2.09	0.22	0.015	0.00
	4:00 AM	2.11	0.23	0.016	0.00
	5:00 AM	2.10	0.23	0.015	0.00
	6:00 AM	2.11	0.22	0.015	0.00
	7:00 AM	2.16	0.24	0.017	0.00
	8:00 AM	2.16	0.22	0.016	0.00
	9:00 AM	2.19	0.29	0.021	0.00
	10:00 AM	2.18	0.37	0.027	0.00
	11:00 AM	2.19	0.36	0.026	0.00
	12:00 PM	2.19	0.35	0.025	0.00
	1:00 PM	2.17	0.34	0.024	0.00
	2:00 PM	2.18	0.34	0.024	0.00
	3:00 PM	2.17	0.35	0.025	0.00
	4:00 PM	2.19	0.35	0.025	0.00
	5:00 PM	2.19	0.34	0.024	0.00
	6:00 PM	2.17	0.34	0.024	0.00
	7:00 PM	2.15	0.34	0.024	0.00
	8:00 PM	2.15	0.34	0.024	0.00
	9:00 PM	2.14	0.34	0.024	0.00
	10:00 PM	2.16	0.33	0.023	0.00
	11:00 PM	2.19	0.34	0.024	0.00

MIN	2.09	0.22	0.015	MIN	0.00
MAX	2.19	0.37	0.027	MAX	0.00
AVE	2.15	0.30	0.021	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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04/29/2021	12:00 AM	2.06	0.33	0.022	0.00
	1:00 AM	2.09	0.35	0.024	0.00
	2:00 AM	2.07	0.35	0.023	0.00
	3:00 AM	2.08	0.36	0.024	0.00
	4:00 AM	2.10	0.37	0.025	0.00
	5:00 AM	2.10	0.37	0.025	0.00
	6:00 AM	2.18	0.32	0.023	0.00
	7:00 AM	2.23	0.25	0.019	0.01
	8:00 AM	2.31	0.25	0.020	0.02
	9:00 AM	2.32	0.29	0.023	0.06
	10:00 AM	2.41	0.31	0.026	0.12
	11:00 AM	2.46	0.37	0.032	0.05
	12:00 PM	2.40	0.37	0.031	0.05
	1:00 PM	2.34	0.38	0.030	0.00
	2:00 PM	2.33	0.37	0.029	0.00
	3:00 PM	2.36	0.37	0.029	0.00
	4:00 PM	2.35	0.38	0.030	0.00
	5:00 PM	2.76	0.49	0.053	0.11
	6:00 PM	2.79	0.73	0.075	0.26
	7:00 PM	2.91	0.65	0.071	0.09
	8:00 PM	2.58	0.44	0.041	0.00
	9:00 PM	2.25	0.43	0.032	0.00
	10:00 PM	2.35	0.40	0.032	0.00
	11:00 PM	2.38	0.43	0.035	0.00

MIN	2.06	0.25	0.019	MIN	0.00
MAX	2.91	0.73	0.075	MAX	0.26
AVE	2.34	0.39	0.032	TOTAL	0.77

04/30/2021	12:00 AM	2.32	0.39	0.031	0.00
	1:00 AM	2.16	0.39	0.028	0.00
	2:00 AM	2.18	0.38	0.027	0.00
	3:00 AM	2.09	0.41	0.027	0.00
	4:00 AM	2.05	0.39	0.026	0.00
	5:00 AM	2.12	0.37	0.026	0.00
	6:00 AM	2.08	0.38	0.025	0.00
	7:00 AM	2.03	0.39	0.025	0.00
	8:00 AM	2.10	0.39	0.027	0.00
	9:00 AM	2.03	0.37	0.024	0.00
	10:00 AM	2.00	0.38	0.024	0.00
	11:00 AM	1.95	0.43	0.026	0.00
	12:00 PM	2.00	0.42	0.027	0.00
	1:00 PM	1.98	0.41	0.026	0.00
	2:00 PM	2.02	0.42	0.027	0.05
	3:00 PM	2.08	0.60	0.040	0.08
	4:00 PM	1.93	0.51	0.031	0.00
	5:00 PM	1.89	0.47	0.027	0.00
	6:00 PM	1.88	0.46	0.027	0.00
	7:00 PM	1.88	0.48	0.028	0.00
	8:00 PM	1.88	0.45	0.026	0.00
	9:00 PM	1.90	0.43	0.025	0.00
	10:00 PM	1.95	0.40	0.025	0.00
	11:00 PM	1.93	0.41	0.024	0.00

MIN	1.88	0.37	0.024	MIN	0.00
MAX	2.32	0.60	0.040	MAX	0.08
AVE	2.02	0.42	0.027	TOTAL	0.13

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/01/2021	12:00 AM	1.89	0.37	0.022	0.00
	1:00 AM	1.88	0.37	0.021	0.00
	2:00 AM	1.90	0.37	0.022	0.00
	3:00 AM	1.90	0.37	0.021	0.00
	4:00 AM	1.92	0.38	0.023	0.00
	5:00 AM	1.92	0.36	0.022	0.00
	6:00 AM	2.01	0.42	0.026	0.00
	7:00 AM	1.89	0.43	0.025	0.00
	8:00 AM	1.95	0.47	0.028	0.00
	9:00 AM	1.95	0.43	0.026	0.00
	10:00 AM	1.98	0.51	0.031	0.00
	11:00 AM	1.99	0.56	0.035	0.00
	12:00 PM	2.05	0.60	0.039	0.00
	1:00 PM	2.05	0.46	0.030	0.00
	2:00 PM	2.10	0.41	0.028	0.00
	3:00 PM	2.08	0.40	0.026	0.00
	4:00 PM	2.09	0.42	0.028	0.00
	5:00 PM	2.08	0.41	0.028	0.00
	6:00 PM	2.10	0.41	0.028	0.00
	7:00 PM	2.10	0.42	0.028	0.00
	8:00 PM	2.11	0.41	0.028	0.00
	9:00 PM	2.16	0.44	0.031	0.00
	10:00 PM	2.09	0.41	0.027	0.00
	11:00 PM	2.15	0.45	0.031	0.00

MIN	1.88	0.36	0.021	MIN	0.00
MAX	2.16	0.60	0.039	MAX	0.00
AVE	2.01	0.43	0.027	TOTAL	0.00

05/02/2021	12:00 AM	2.14	0.40	0.028	0.00
	1:00 AM	2.11	0.39	0.026	0.00
	2:00 AM	2.11	0.37	0.025	0.00
	3:00 AM	2.14	0.36	0.025	0.00
	4:00 AM	2.10	0.36	0.024	0.00
	5:00 AM	2.10	0.36	0.025	0.00
	6:00 AM	2.14	0.38	0.026	0.00
	7:00 AM	2.14	0.40	0.027	0.00
	8:00 AM	2.17	0.41	0.029	0.00
	9:00 AM	2.19	0.41	0.030	0.00
	10:00 AM	2.19	0.43	0.031	0.00
	11:00 AM	2.14	0.39	0.027	0.00
	12:00 PM	2.09	0.47	0.031	0.00
	1:00 PM	1.97	0.49	0.030	0.00
	2:00 PM	1.96	0.47	0.029	0.00
	3:00 PM	1.97	0.50	0.031	0.00
	4:00 PM	2.02	0.52	0.033	0.00
	5:00 PM	2.04	0.51	0.033	0.00
	6:00 PM	2.02	0.50	0.032	0.00
	7:00 PM	2.06	0.50	0.033	0.00
	8:00 PM	2.07	0.48	0.032	0.00
	9:00 PM	2.08	0.49	0.033	0.00
	10:00 PM	2.05	0.44	0.029	0.00
	11:00 PM	2.05	0.48	0.031	0.00

MIN	1.96	0.36	0.024	MIN	0.00
MAX	2.19	0.52	0.033	MAX	0.00
AVE	2.09	0.44	0.029	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/03/2021	12:00 AM	2.03	0.38	0.025	0.00
	1:00 AM	2.03	0.44	0.028	0.00
	2:00 AM	2.05	0.45	0.030	0.00
	3:00 AM	2.01	0.41	0.026	0.00
	4:00 AM	2.01	0.41	0.026	0.02
	5:00 AM	2.04	0.45	0.029	0.02
	6:00 AM	2.13	0.47	0.033	0.02
	7:00 AM	1.96	0.54	0.033	0.02
	8:00 AM	1.99	0.54	0.033	0.02
	9:00 AM	2.00	0.58	0.036	0.07
	10:00 AM	2.17	0.74	0.052	0.10
	11:00 AM	2.36	0.38	0.030	0.03
	12:00 PM	2.31	0.35	0.027	0.02
	1:00 PM	2.22	0.32	0.023	0.00
	2:00 PM	2.18	0.30	0.022	0.00
	3:00 PM	2.14	0.28	0.020	0.04
	4:00 PM	2.35	0.34	0.027	0.02
	5:00 PM	2.20	0.34	0.024	0.00
	6:00 PM	2.17	0.32	0.023	0.00
	7:00 PM	2.20	0.33	0.024	0.02
	8:00 PM	2.34	0.47	0.038	0.04
	9:00 PM	2.20	0.36	0.026	0.24
	10:00 PM	2.22	0.30	0.022	0.01
	11:00 PM	2.22	0.28	0.021	0.00

MIN	1.96	0.28	0.020	MIN	0.00
MAX	2.36	0.74	0.052	MAX	0.24
AVE	2.15	0.41	0.028	TOTAL	0.69

05/04/2021	12:00 AM	2.16	0.27	0.019	0.00
	1:00 AM	2.16	0.28	0.020	0.00
	2:00 AM	2.23	0.25	0.019	0.00
	3:00 AM	2.14	0.25	0.017	0.00
	4:00 AM	2.05	0.26	0.017	0.00
	5:00 AM	2.03	0.25	0.016	0.00
	6:00 AM	2.01	0.23	0.015	0.00
	7:00 AM	2.03	0.27	0.017	0.00
	8:00 AM	1.96	0.26	0.016	0.00
	9:00 AM	1.97	0.29	0.018	0.00
	10:00 AM	1.96	0.28	0.017	0.00
	11:00 AM	1.97	0.30	0.019	0.00
	12:00 PM	1.94	0.30	0.018	0.00
	1:00 PM	2.23	0.48	0.036	0.01
	2:00 PM	1.93	0.38	0.023	0.04
	3:00 PM	1.91	0.34	0.020	0.00
	4:00 PM	1.92	0.34	0.020	0.00
	5:00 PM	1.88	0.32	0.018	0.07
	6:00 PM	1.89	0.32	0.018	0.00
	7:00 PM	1.92	0.33	0.019	0.02
	8:00 PM	1.94	0.41	0.025	0.01
	9:00 PM	1.90	0.34	0.020	0.00
	10:00 PM	1.90	0.31	0.018	0.02
	11:00 PM	1.90	0.30	0.018	0.00

MIN	1.88	0.23	0.015	MIN	0.00
MAX	2.23	0.48	0.036	MAX	0.07
AVE	2.00	0.31	0.019	TOTAL	0.17

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/05/2021	12:00 AM	1.90	0.29	0.017	0.00
	1:00 AM	1.90	0.29	0.017	0.00
	2:00 AM	1.90	0.30	0.018	0.01
	3:00 AM	1.91	0.30	0.017	0.00
	4:00 AM	1.94	0.30	0.018	0.02
	5:00 AM	1.98	0.34	0.021	0.13
	6:00 AM	2.34	0.52	0.041	0.11
	7:00 AM	2.23	0.45	0.034	0.04
	8:00 AM	2.41	0.43	0.036	0.04
	9:00 AM	2.13	0.47	0.032	0.03
	10:00 AM	1.95	0.41	0.025	0.01
	11:00 AM	1.94	0.31	0.018	0.00
	12:00 PM	1.95	0.24	0.015	0.00
	1:00 PM	1.97	0.26	0.016	0.00
	2:00 PM	1.96	0.32	0.020	0.00
	3:00 PM	2.02	0.36	0.023	0.00
	4:00 PM	2.02	0.34	0.022	0.00
	5:00 PM	2.04	0.35	0.023	0.00
	6:00 PM	2.03	0.36	0.023	0.00
	7:00 PM	1.94	0.35	0.021	0.00
	8:00 PM	1.89	0.34	0.020	0.00
	9:00 PM	1.88	0.34	0.019	0.00
	10:00 PM	1.88	0.34	0.019	0.00
	11:00 PM	1.90	0.34	0.020	0.00

MIN	1.88	0.24	0.015	MIN	0.00
MAX	2.41	0.52	0.041	MAX	0.13
AVE	2.00	0.35	0.022	TOTAL	0.39

05/06/2021	12:00 AM	1.90	0.34	0.020	0.00
	1:00 AM	1.91	0.34	0.020	0.00
	2:00 AM	1.89	0.33	0.019	0.00
	3:00 AM	1.88	0.34	0.019	0.00
	4:00 AM	1.88	0.34	0.020	0.00
	5:00 AM	1.88	0.34	0.020	0.00
	6:00 AM	1.88	0.34	0.019	0.00
	7:00 AM	1.95	0.38	0.023	0.00
	8:00 AM	1.92	0.36	0.021	0.00
	9:00 AM	1.93	0.33	0.020	0.00
	10:00 AM	1.95	0.34	0.021	0.00
	11:00 AM	1.94	0.26	0.016	0.00
	12:00 PM	1.94	0.36	0.022	0.00
	1:00 PM	1.94	0.35	0.021	0.00
	2:00 PM	1.95	0.36	0.022	0.00
	3:00 PM	1.90	0.34	0.020	0.00
	4:00 PM	1.88	0.31	0.018	0.00
	5:00 PM	1.89	0.33	0.019	0.00
	6:00 PM	1.89	0.33	0.019	0.00
	7:00 PM	1.89	0.32	0.018	0.00
	8:00 PM	1.92	0.34	0.020	0.00
	9:00 PM	1.90	0.33	0.019	0.00
	10:00 PM	1.88	0.31	0.018	0.00
	11:00 PM	1.88	0.31	0.018	0.00

MIN	1.88	0.26	0.016	MIN	0.00
MAX	1.95	0.38	0.023	MAX	0.00
AVE	1.91	0.33	0.020	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/07/2021	12:00 AM	1.90	0.32	0.019	0.00
	1:00 AM	1.90	0.31	0.018	0.00
	2:00 AM	1.89	0.30	0.018	0.00
	3:00 AM	1.89	0.31	0.018	0.00
	4:00 AM	1.91	0.31	0.018	0.00
	5:00 AM	1.91	0.31	0.018	0.00
	6:00 AM	1.92	0.32	0.019	0.00
	7:00 AM	1.92	0.33	0.020	0.00
	8:00 AM	1.92	0.34	0.020	0.00
	9:00 AM	1.95	0.36	0.022	0.03
	10:00 AM	1.95	0.35	0.021	0.04
	11:00 AM	1.94	0.39	0.024	0.04
	12:00 PM	1.94	0.41	0.024	0.00
	1:00 PM	1.92	0.38	0.022	0.00
	2:00 PM	1.89	0.35	0.020	0.00
	3:00 PM	1.89	0.34	0.020	0.00
	4:00 PM	1.87	0.34	0.020	0.00
	5:00 PM	1.86	0.32	0.018	0.00
	6:00 PM	1.89	0.36	0.021	0.00
	7:00 PM	1.87	0.35	0.020	0.00
	8:00 PM	1.88	0.33	0.019	0.00
	9:00 PM	1.86	0.33	0.019	0.00
	10:00 PM	1.85	0.32	0.018	0.00
	11:00 PM	1.86	0.32	0.018	0.00

MIN	1.85	0.30	0.018	MIN	0.00
MAX	1.95	0.41	0.024	MAX	0.04
AVE	1.90	0.34	0.020	TOTAL	0.11

05/08/2021	12:00 AM	1.88	0.34	0.020	0.00
	1:00 AM	1.86	0.33	0.019	0.00
	2:00 AM	1.85	0.32	0.018	0.00
	3:00 AM	1.85	0.33	0.018	0.00
	4:00 AM	1.88	0.32	0.018	0.00
	5:00 AM	1.85	0.31	0.017	0.00
	6:00 AM	1.89	0.34	0.020	0.00
	7:00 AM	1.86	0.32	0.018	0.00
	8:00 AM	1.88	0.34	0.019	0.00
	9:00 AM	1.90	0.34	0.020	0.00
	10:00 AM	1.86	0.32	0.018	0.00
	11:00 AM	1.89	0.34	0.020	0.01
	12:00 PM	1.86	0.33	0.019	0.00
	1:00 PM	1.92	0.37	0.022	0.00
	2:00 PM	1.91	0.39	0.023	0.00
	3:00 PM	1.85	0.31	0.018	0.00
	4:00 PM	1.88	0.34	0.020	0.00
	5:00 PM	1.89	0.35	0.020	0.00
	6:00 PM	1.88	0.37	0.021	0.00
	7:00 PM	1.91	0.39	0.023	0.00
	8:00 PM	1.87	0.35	0.020	0.00
	9:00 PM	1.86	0.34	0.019	0.00
	10:00 PM	1.88	0.38	0.022	0.00
	11:00 PM	1.87	0.38	0.021	0.00

MIN	1.85	0.31	0.017	MIN	0.00
MAX	1.92	0.39	0.023	MAX	0.01
AVE	1.88	0.34	0.020	TOTAL	0.01

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/09/2021	12:00 AM	1.85	0.35	0.020	0.00
	1:00 AM	1.86	0.37	0.021	0.00
	2:00 AM	1.86	0.34	0.019	0.00
	3:00 AM	1.85	0.35	0.020	0.00
	4:00 AM	1.87	0.37	0.021	0.00
	5:00 AM	1.86	0.36	0.020	0.00
	6:00 AM	1.86	0.36	0.020	0.00
	7:00 AM	1.87	0.36	0.021	0.00
	8:00 AM	1.88	0.38	0.022	0.07
	9:00 AM	2.06	0.49	0.033	0.15
	10:00 AM	2.32	0.54	0.042	0.09
	11:00 AM	2.06	0.45	0.030	0.03
	12:00 PM	2.72	0.55	0.055	0.12
	1:00 PM	2.24	0.51	0.038	0.04
	2:00 PM	2.39	0.54	0.044	0.12
	3:00 PM	2.35	0.58	0.046	0.07
	4:00 PM	2.20	0.57	0.041	0.05
	5:00 PM	2.13	0.54	0.037	0.05
	6:00 PM	2.38	0.55	0.045	0.07
	7:00 PM	2.83	0.63	0.065	0.12
	8:00 PM	2.52	0.61	0.054	0.08
	9:00 PM	2.63	0.58	0.054	0.03
	10:00 PM	2.28	0.59	0.045	0.00
	11:00 PM	2.20	0.56	0.041	0.00

MIN	1.85	0.34	0.019	MIN	0.00
MAX	2.83	0.63	0.065	MAX	0.15
AVE	2.17	0.48	0.036	TOTAL	1.09

05/10/2021	12:00 AM	2.11	0.55	0.037	0.00
	1:00 AM	2.19	0.57	0.041	0.00
	2:00 AM	2.17	0.54	0.038	0.00
	3:00 AM	2.15	0.52	0.036	0.00
	4:00 AM	2.12	0.47	0.032	0.00
	5:00 AM	2.11	0.48	0.033	0.00
	6:00 AM	2.15	0.52	0.036	0.00
	7:00 AM	2.12	0.50	0.034	0.00
	8:00 AM	2.12	0.50	0.034	0.00
	9:00 AM	2.09	0.49	0.032	0.01
	10:00 AM	2.09	0.48	0.033	0.00
	11:00 AM	2.07	0.46	0.030	0.00
	12:00 PM	2.35	0.46	0.037	0.00
	1:00 PM	2.67	0.46	0.044	0.00
	2:00 PM	2.59	0.46	0.042	0.00
	3:00 PM	2.53	0.43	0.038	0.00
	4:00 PM	2.42	0.40	0.033	0.00
	5:00 PM	2.39	0.40	0.032	0.00
	6:00 PM	2.43	0.39	0.032	0.00
	7:00 PM	2.54	0.39	0.035	0.00
	8:00 PM	2.47	0.39	0.033	0.00
	9:00 PM	2.36	0.39	0.031	0.00
	10:00 PM	2.28	0.39	0.030	0.00
	11:00 PM	2.15	0.37	0.026	0.00

MIN	2.07	0.37	0.026	MIN	0.00
MAX	2.67	0.57	0.044	MAX	0.01
AVE	2.28	0.46	0.035	TOTAL	0.01

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/11/2021	12:00 AM	2.13	0.38	0.026	0.00
	1:00 AM	2.06	0.38	0.025	0.00
	2:00 AM	2.01	0.36	0.023	0.00
	3:00 AM	2.00	0.36	0.023	0.00
	4:00 AM	1.99	0.38	0.024	0.00
	5:00 AM	1.96	0.37	0.023	0.00
	6:00 AM	1.94	0.36	0.021	0.00
	7:00 AM	2.05	0.38	0.025	0.00
	8:00 AM	2.15	0.39	0.027	0.00
	9:00 AM	2.15	0.39	0.027	0.00
	10:00 AM	2.02	0.39	0.025	0.00
	11:00 AM	1.92	0.36	0.021	0.00
	12:00 PM	1.85	0.37	0.021	0.00
	1:00 PM	1.91	0.37	0.022	0.00
	2:00 PM	1.98	0.36	0.022	0.00
	3:00 PM	1.97	0.35	0.021	0.00
	4:00 PM	1.97	0.37	0.023	0.00
	5:00 PM	1.97	0.37	0.023	0.00
	6:00 PM	1.96	0.37	0.023	0.00
	7:00 PM	1.95	0.35	0.021	0.00
	8:00 PM	1.97	0.39	0.024	0.00
	9:00 PM	1.95	0.36	0.022	0.00
	10:00 PM	2.00	0.36	0.023	0.00
	11:00 PM	1.95	0.34	0.021	0.00

MIN	1.85	0.34	0.021	MIN	0.00
MAX	2.15	0.39	0.027	MAX	0.00
AVE	1.99	0.37	0.023	TOTAL	0.00

05/12/2021	12:00 AM	1.96	0.35	0.021	0.00
	1:00 AM	2.01	0.38	0.024	0.00
	2:00 AM	1.97	0.37	0.023	0.00
	3:00 AM	1.95	0.37	0.022	0.00
	4:00 AM	1.95	0.36	0.022	0.00
	5:00 AM	1.96	0.38	0.024	0.00
	6:00 AM	1.97	0.37	0.023	0.00
	7:00 AM	2.01	0.40	0.025	0.00
	8:00 AM	1.97	0.39	0.024	0.00
	9:00 AM	1.96	0.37	0.023	0.00
	10:00 AM	1.99	0.34	0.021	0.00
	11:00 AM	2.01	0.38	0.024	0.00
	12:00 PM	1.98	0.35	0.022	0.00
	1:00 PM	1.98	0.33	0.021	0.00
	2:00 PM	1.99	0.34	0.022	0.00
	3:00 PM	1.95	0.36	0.022	0.00
	4:00 PM	1.97	0.38	0.024	0.00
	5:00 PM	1.95	0.38	0.023	0.00
	6:00 PM	1.95	0.37	0.022	0.00
	7:00 PM	1.98	0.39	0.024	0.00
	8:00 PM	1.94	0.37	0.022	0.00
	9:00 PM	1.93	0.35	0.021	0.00
	10:00 PM	1.91	0.34	0.020	0.00
	11:00 PM	1.92	0.36	0.021	0.00

MIN	1.91	0.33	0.020	MIN	0.00
MAX	2.01	0.40	0.025	MAX	0.00
AVE	1.96	0.37	0.022	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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05/13/2021	12:00 AM	1.90	0.35	0.020	0.00
	1:00 AM	1.91	0.35	0.021	0.00
	2:00 AM	1.90	0.37	0.022	0.00
	3:00 AM	1.92	0.36	0.021	0.00
	4:00 AM	1.92	0.36	0.021	0.00
	5:00 AM	1.93	0.37	0.022	0.00
	6:00 AM	1.91	0.37	0.022	0.00
	7:00 AM	1.93	0.38	0.023	0.00
	8:00 AM	1.95	0.42	0.025	0.00
	9:00 AM	1.95	0.38	0.023	0.00
	10:00 AM	1.92	0.35	0.021	0.00
	11:00 AM	1.94	0.34	0.021	0.00
	12:00 PM	1.92	0.32	0.019	0.00
	1:00 PM	1.92	0.33	0.020	0.00
	2:00 PM	1.91	0.44	0.026	0.00
	3:00 PM	1.92	0.44	0.026	0.00
	4:00 PM	1.90	0.36	0.021	0.00
	5:00 PM	1.93	0.38	0.022	0.00
	6:00 PM	1.91	0.36	0.021	0.00
	7:00 PM	1.91	0.38	0.022	0.00
	8:00 PM	1.91	0.36	0.021	0.00
	9:00 PM	1.89	0.37	0.022	0.00
	10:00 PM	1.87	0.34	0.019	0.00
	11:00 PM	1.90	0.35	0.021	0.00

MIN	1.87	0.32	0.019	MIN	0.00
MAX	1.95	0.44	0.026	MAX	0.00
AVE	1.92	0.37	0.022	TOTAL	0.00

05/14/2021	12:00 AM	1.87	0.32	0.018	0.00
	1:00 AM	1.88	0.32	0.018	0.00
	2:00 AM	1.86	0.31	0.018	0.00
	3:00 AM	1.86	0.33	0.019	0.00
	4:00 AM	1.87	0.36	0.020	0.00
	5:00 AM	1.85	0.35	0.019	0.00
	6:00 AM	1.91	0.36	0.021	0.00
	7:00 AM	1.89	0.36	0.021	0.00
	8:00 AM	1.90	0.38	0.022	0.00
	9:00 AM	1.88	0.37	0.021	0.00
	10:00 AM	1.85	0.34	0.019	0.00
	11:00 AM	1.88	0.35	0.020	0.00
	12:00 PM	1.90	0.35	0.021	0.00
	1:00 PM	1.91	0.34	0.020	0.00
	2:00 PM	1.88	0.33	0.019	0.00
	3:00 PM	1.87	0.32	0.018	0.00
	4:00 PM	1.88	0.34	0.019	0.00
	5:00 PM	1.87	0.33	0.019	0.00
	6:00 PM	1.89	0.33	0.019	0.00
	7:00 PM	1.88	0.35	0.020	0.00
	8:00 PM	1.93	0.37	0.022	0.00
	9:00 PM	1.90	0.37	0.022	0.00
	10:00 PM	1.94	0.40	0.024	0.00
	11:00 PM	1.94	0.34	0.020	0.00

MIN	1.85	0.31	0.018	MIN	0.00
MAX	1.94	0.40	0.024	MAX	0.00
AVE	1.89	0.35	0.020	TOTAL	0.00

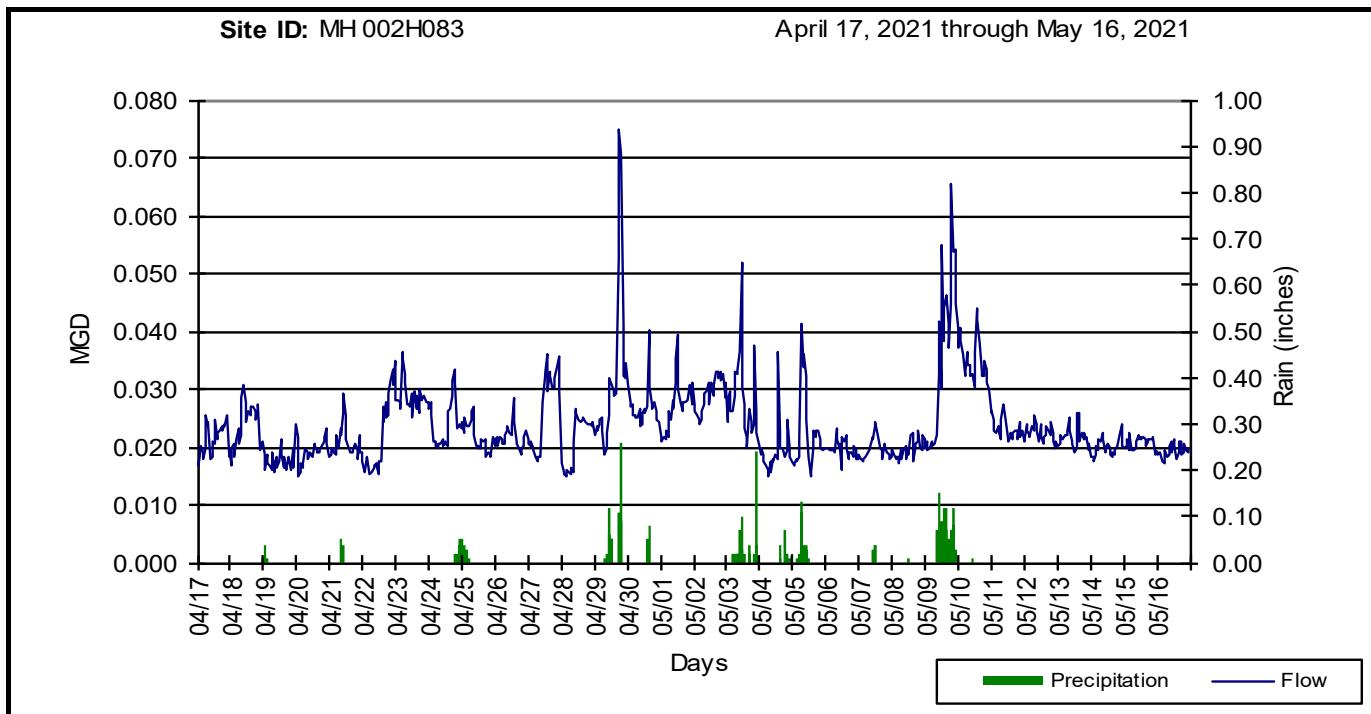
Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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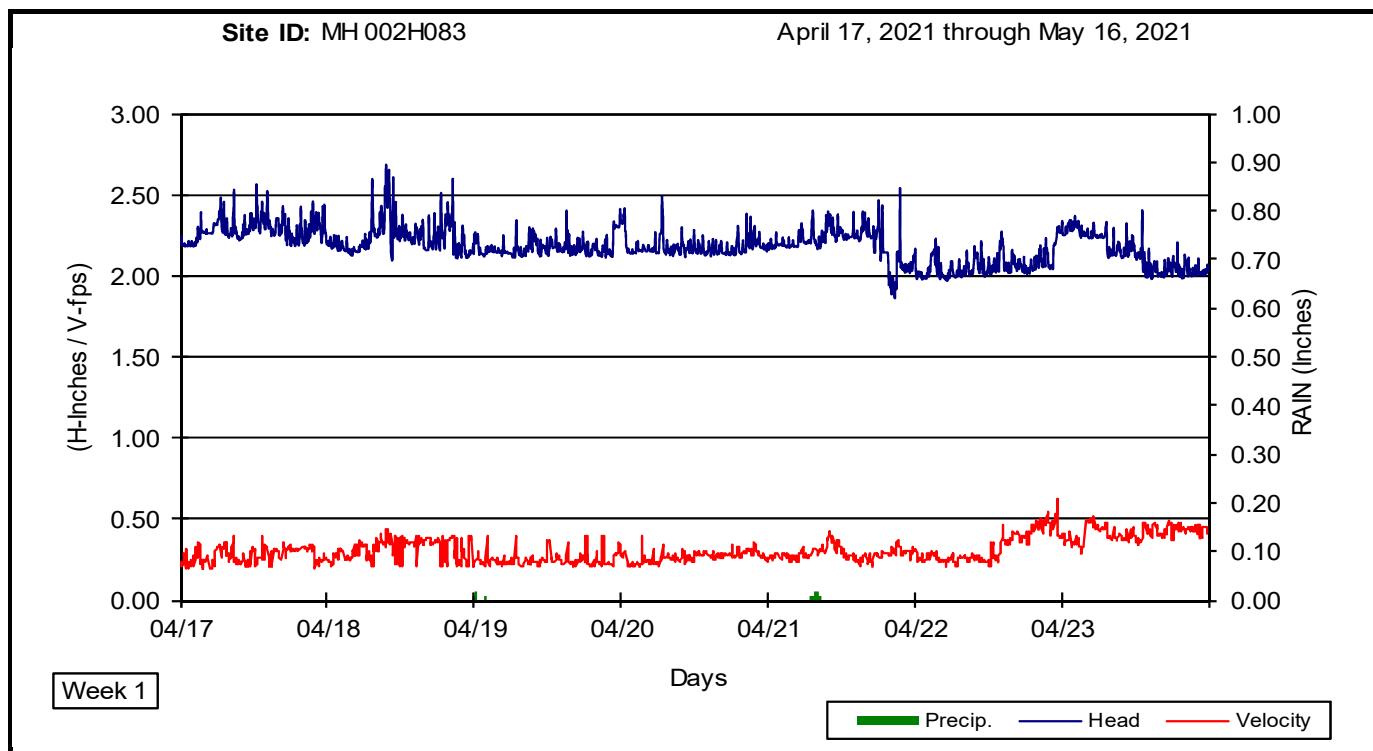
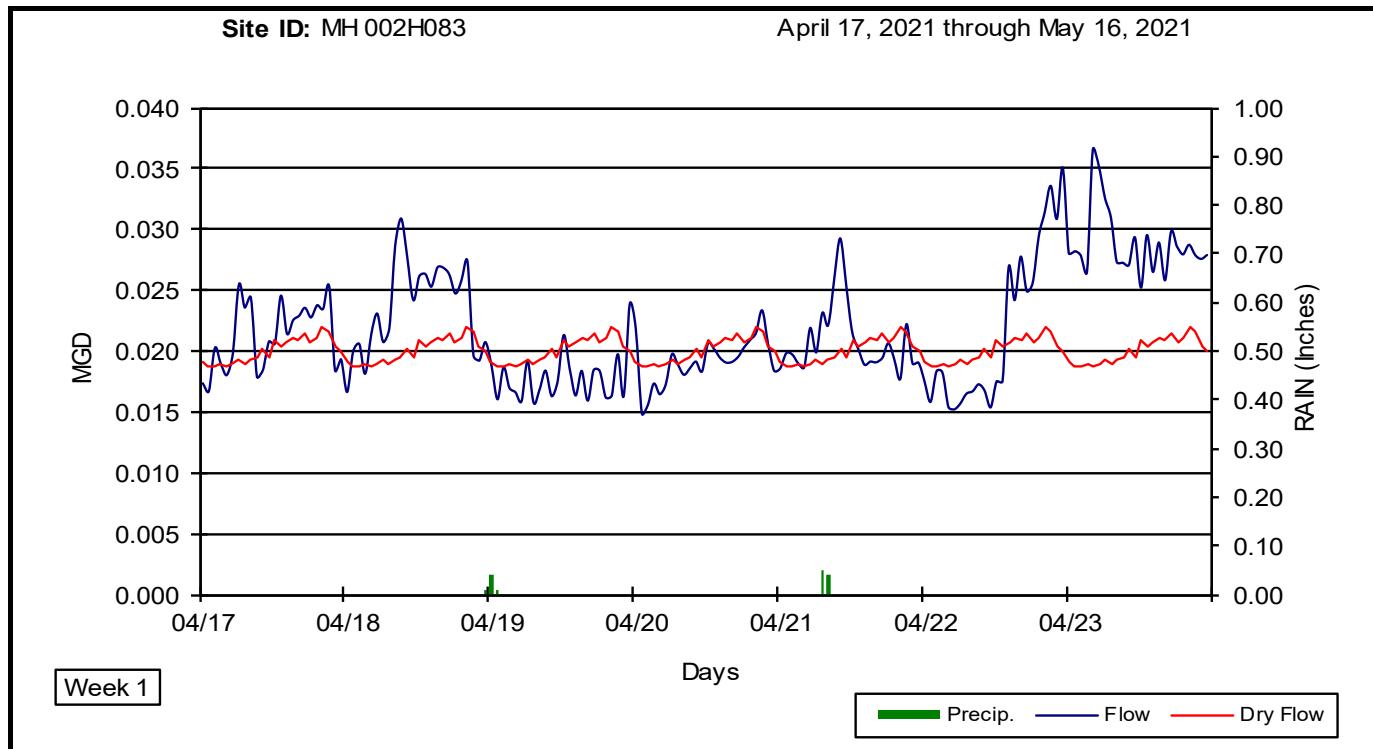
05/15/2021	12:00 AM	1.94	0.33	0.020	0.00
	1:00 AM	1.94	0.34	0.020	0.00
	2:00 AM	1.95	0.35	0.021	0.00
	3:00 AM	1.95	0.32	0.019	0.00
	4:00 AM	2.00	0.35	0.022	0.00
	5:00 AM	1.94	0.33	0.020	0.00
	6:00 AM	1.93	0.32	0.019	0.00
	7:00 AM	1.93	0.33	0.019	0.00
	8:00 AM	1.93	0.33	0.020	0.00
	9:00 AM	1.99	0.34	0.021	0.00
	10:00 AM	2.04	0.34	0.022	0.00
	11:00 AM	1.97	0.35	0.021	0.00
	12:00 PM	1.93	0.36	0.022	0.00
	1:00 PM	1.89	0.37	0.021	0.00
	2:00 PM	1.92	0.37	0.022	0.00
	3:00 PM	1.89	0.36	0.021	0.00
	4:00 PM	1.89	0.35	0.020	0.00
	5:00 PM	1.88	0.37	0.021	0.00
	6:00 PM	1.89	0.37	0.021	0.00
	7:00 PM	1.89	0.37	0.021	0.00
	8:00 PM	1.90	0.37	0.021	0.00
	9:00 PM	1.89	0.38	0.022	0.00
	10:00 PM	1.87	0.33	0.019	0.00
	11:00 PM	1.84	0.35	0.019	0.00

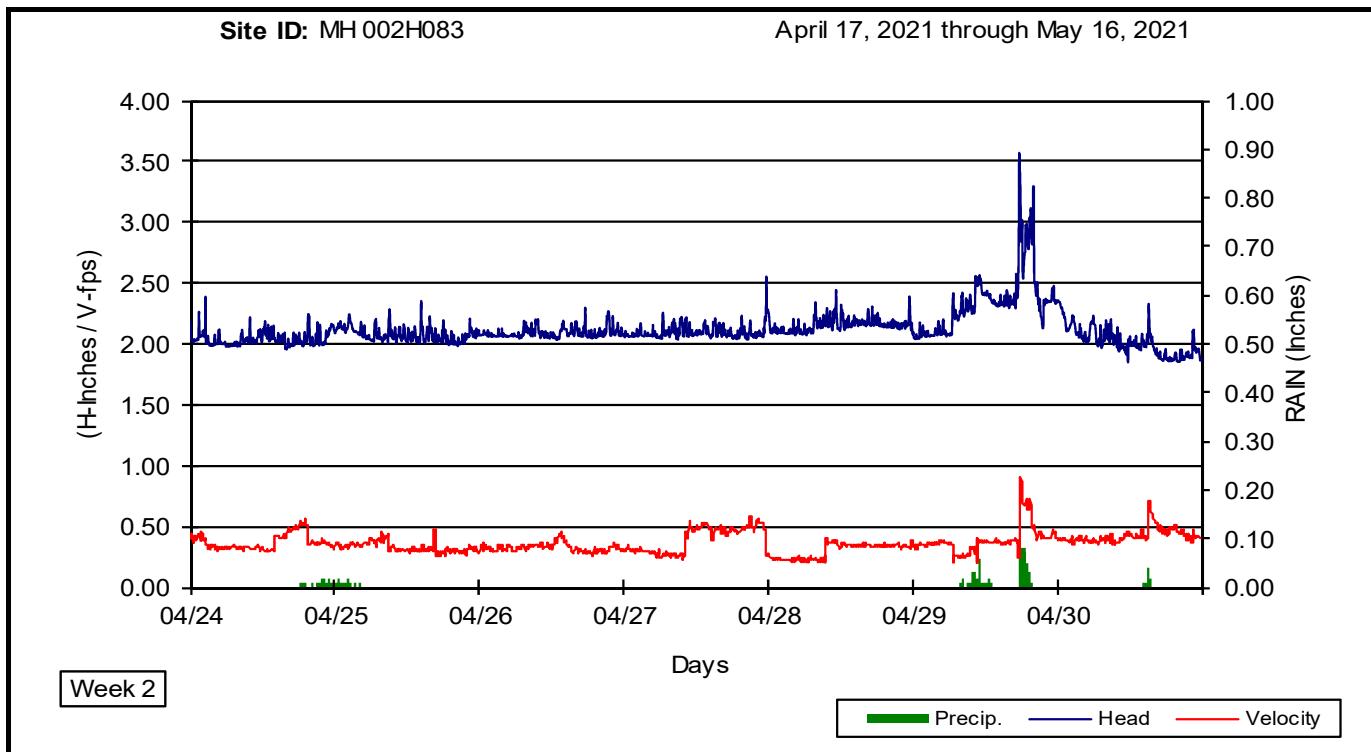
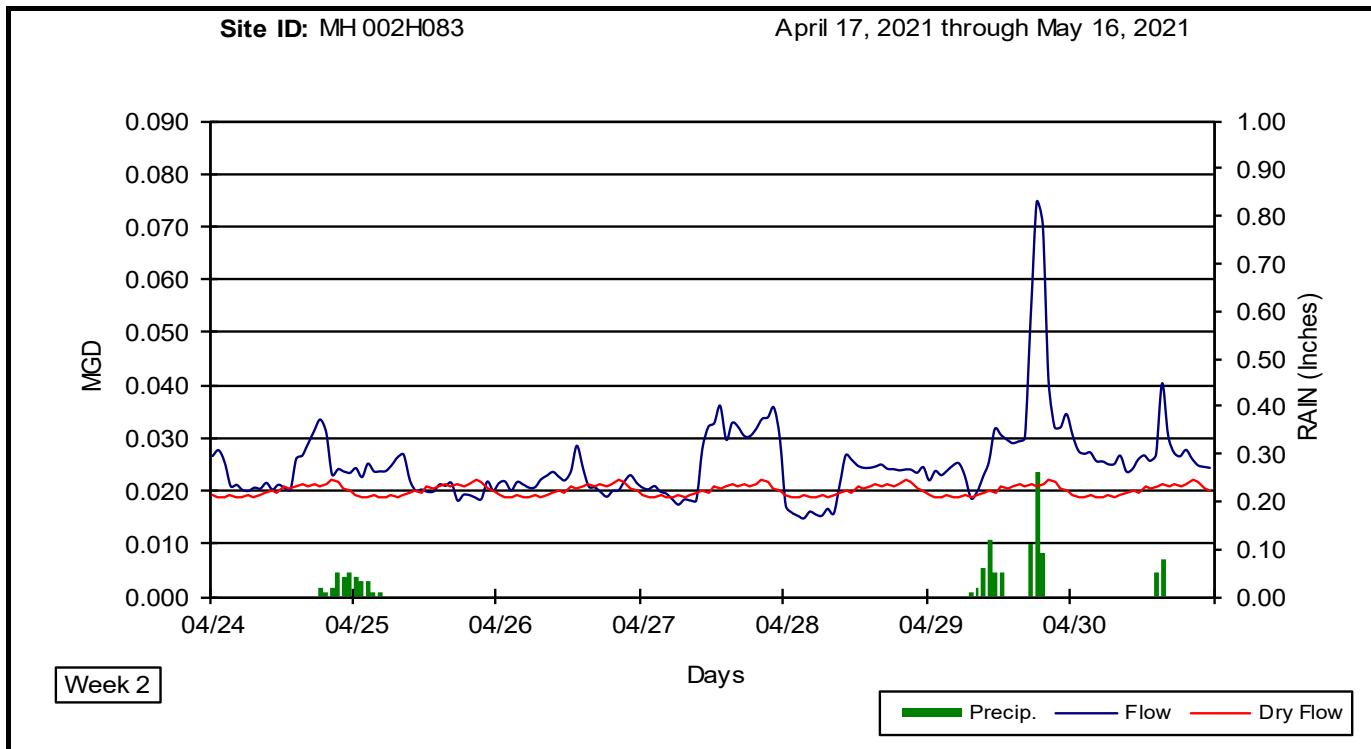
MIN	1.84	0.32	0.019	MIN	0.00
MAX	2.04	0.38	0.022	MAX	0.00
AVE	1.92	0.35	0.021	TOTAL	0.00

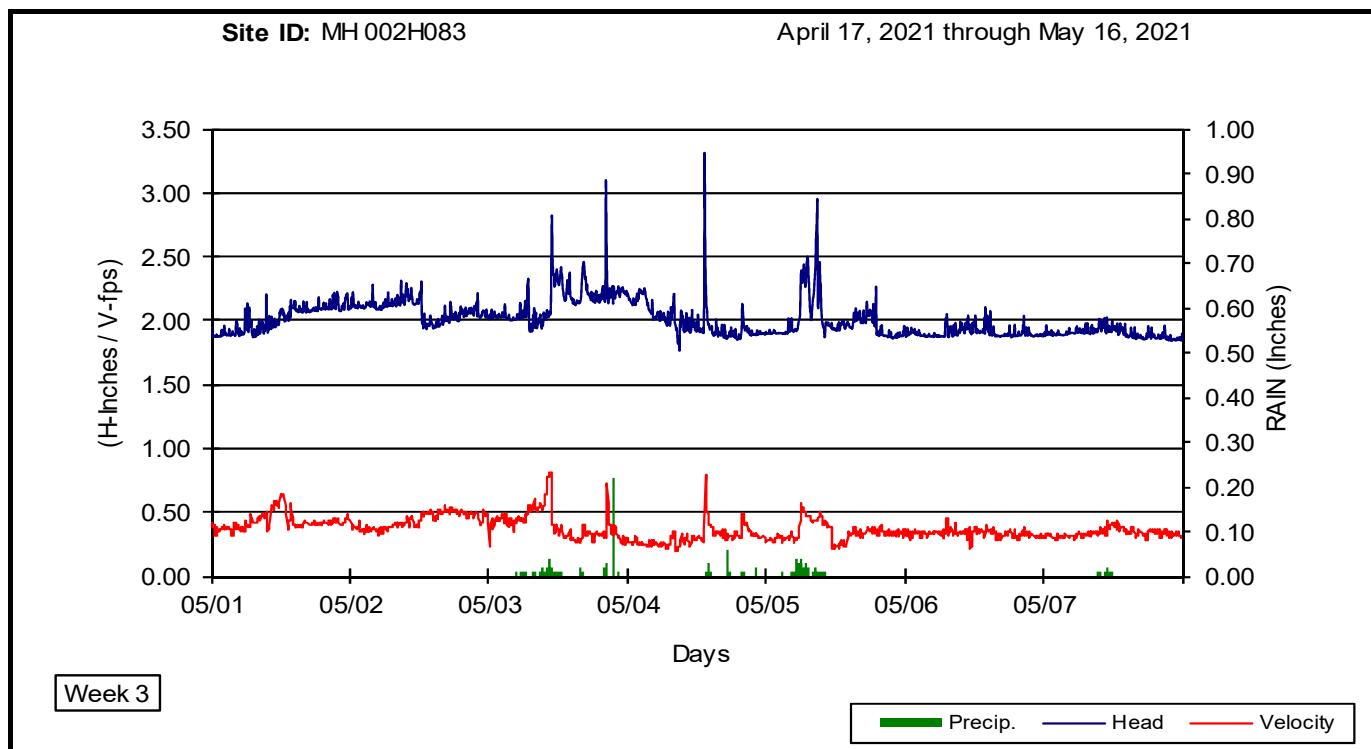
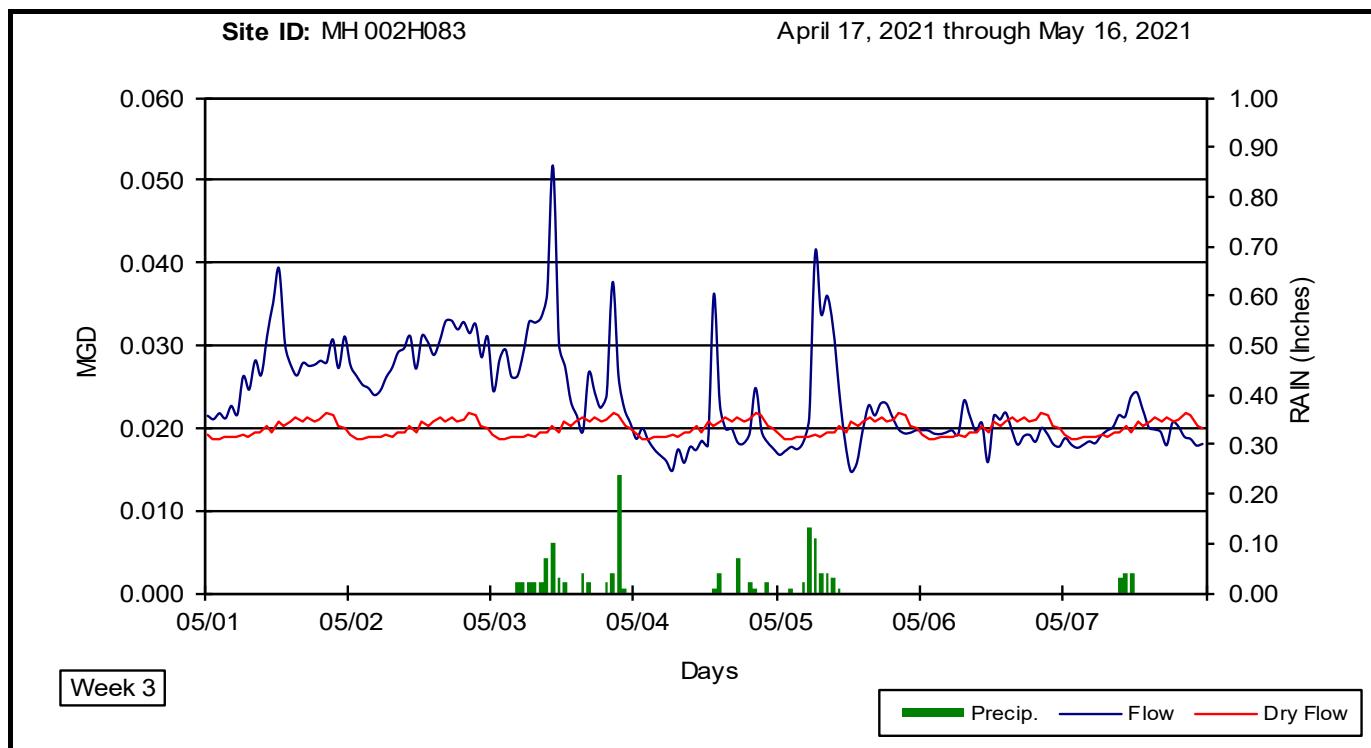
05/16/2021	12:00 AM	1.82	0.34	0.019	0.00
	1:00 AM	1.81	0.34	0.019	0.00
	2:00 AM	1.83	0.34	0.019	0.00
	3:00 AM	1.82	0.32	0.018	0.00
	4:00 AM	1.81	0.33	0.018	0.00
	5:00 AM	1.82	0.32	0.017	0.00
	6:00 AM	1.88	0.34	0.020	0.00
	7:00 AM	1.83	0.33	0.018	0.00
	8:00 AM	1.86	0.33	0.019	0.00
	9:00 AM	1.87	0.35	0.020	0.00
	10:00 AM	1.86	0.37	0.021	0.00
	11:00 AM	1.84	0.34	0.019	0.00
	12:00 PM	1.89	0.37	0.021	0.00
	1:00 PM	1.86	0.36	0.020	0.00
	2:00 PM	1.81	0.33	0.018	0.00
	3:00 PM	1.82	0.35	0.019	0.00
	4:00 PM	1.86	0.37	0.021	0.00
	5:00 PM	1.85	0.37	0.021	0.00
	6:00 PM	1.82	0.34	0.019	0.00
	7:00 PM	1.84	0.34	0.019	0.00
	8:00 PM	1.86	0.36	0.021	0.00
	9:00 PM	1.82	0.35	0.019	0.00
	10:00 PM	1.82	0.35	0.019	0.00
	11:00 PM	1.82	0.37	0.020	0.00

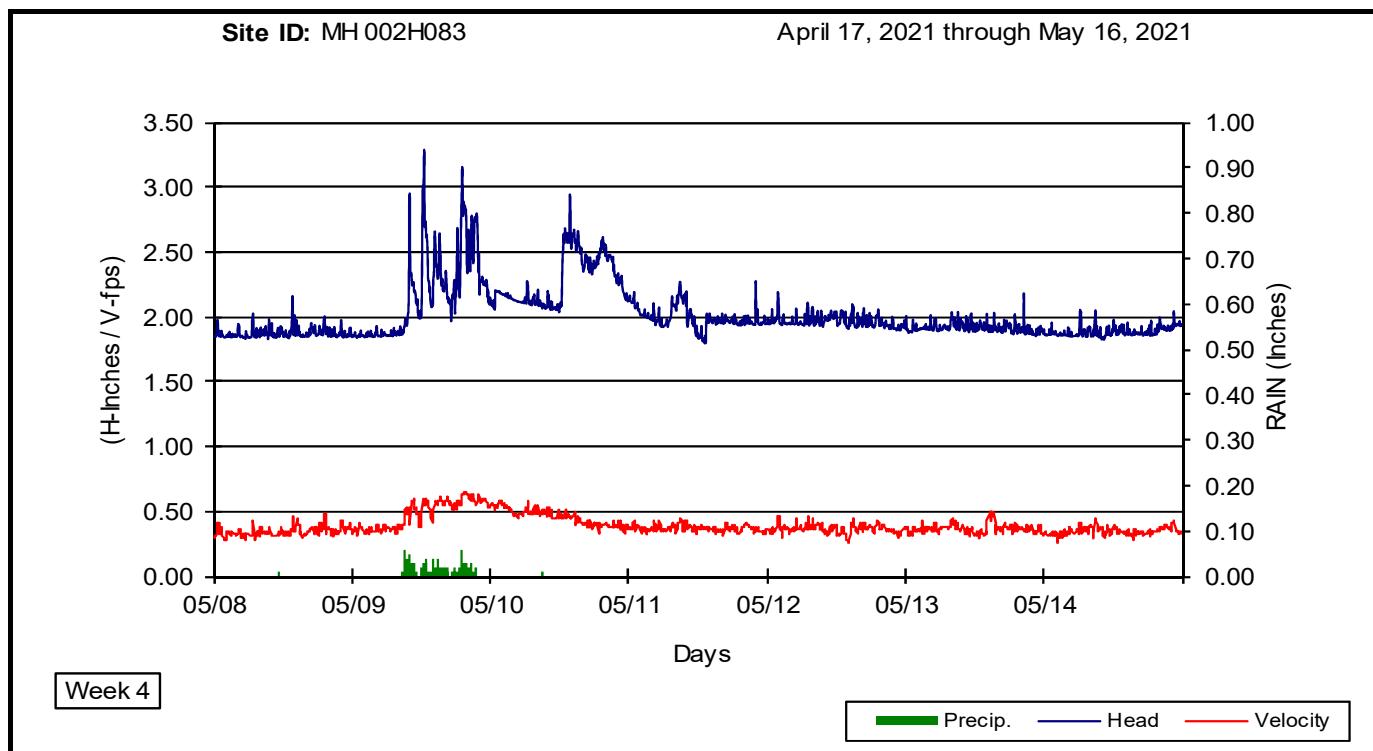
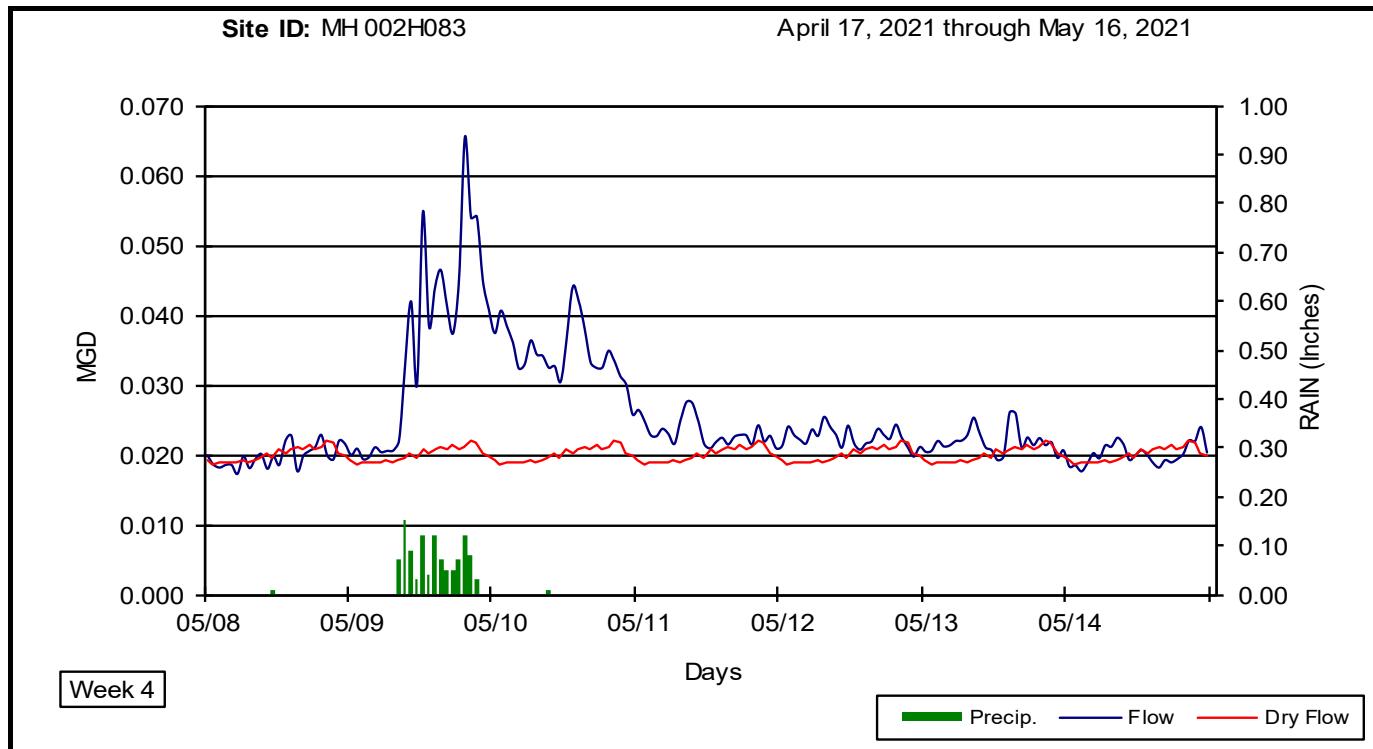
MIN	1.81	0.32	0.017	MIN	0.00
MAX	1.89	0.37	0.021	MAX	0.00
AVE	1.84	0.35	0.019	TOTAL	0.00

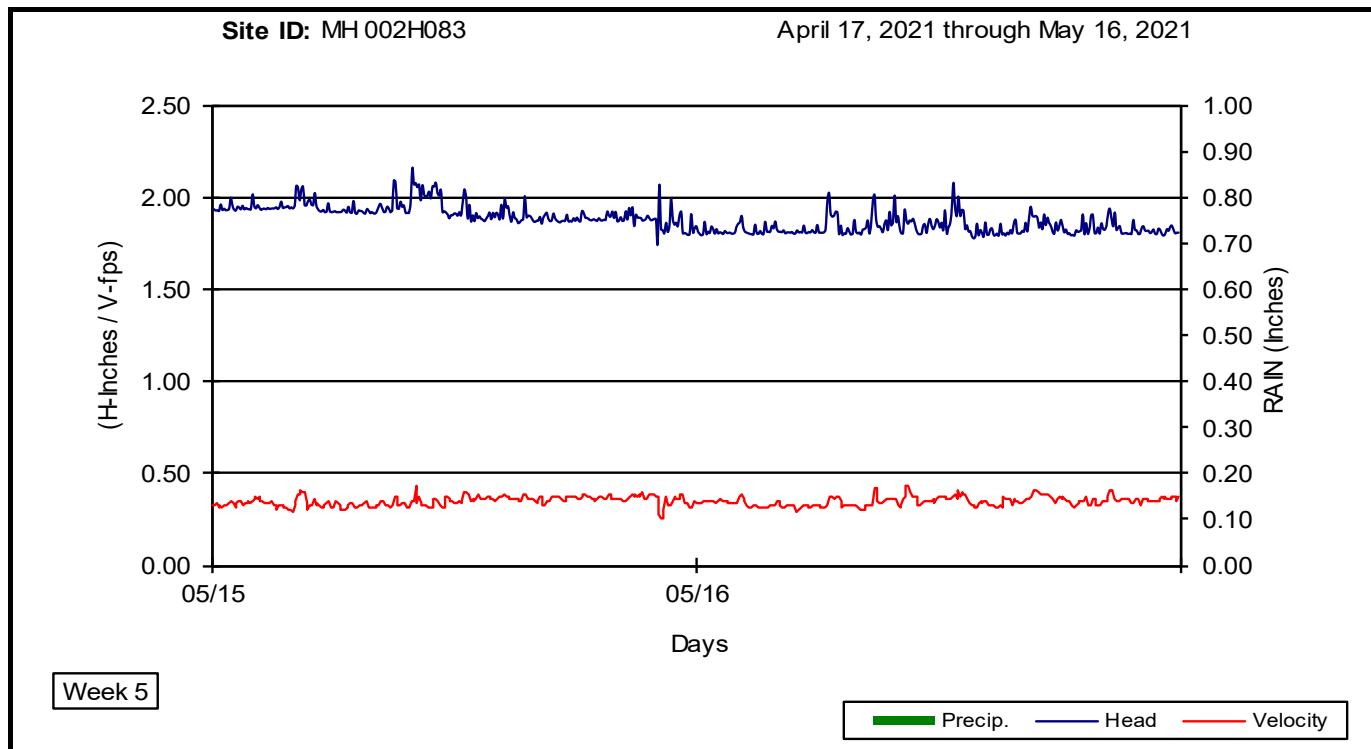
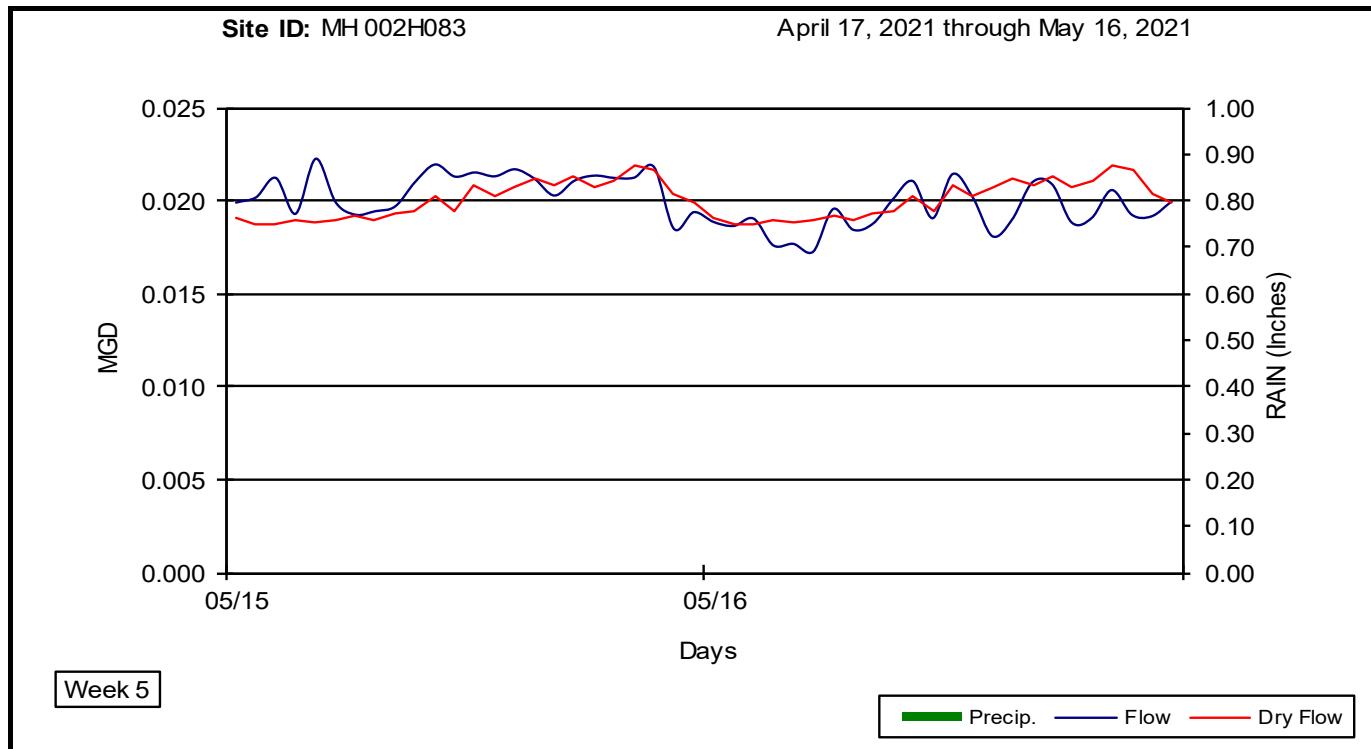












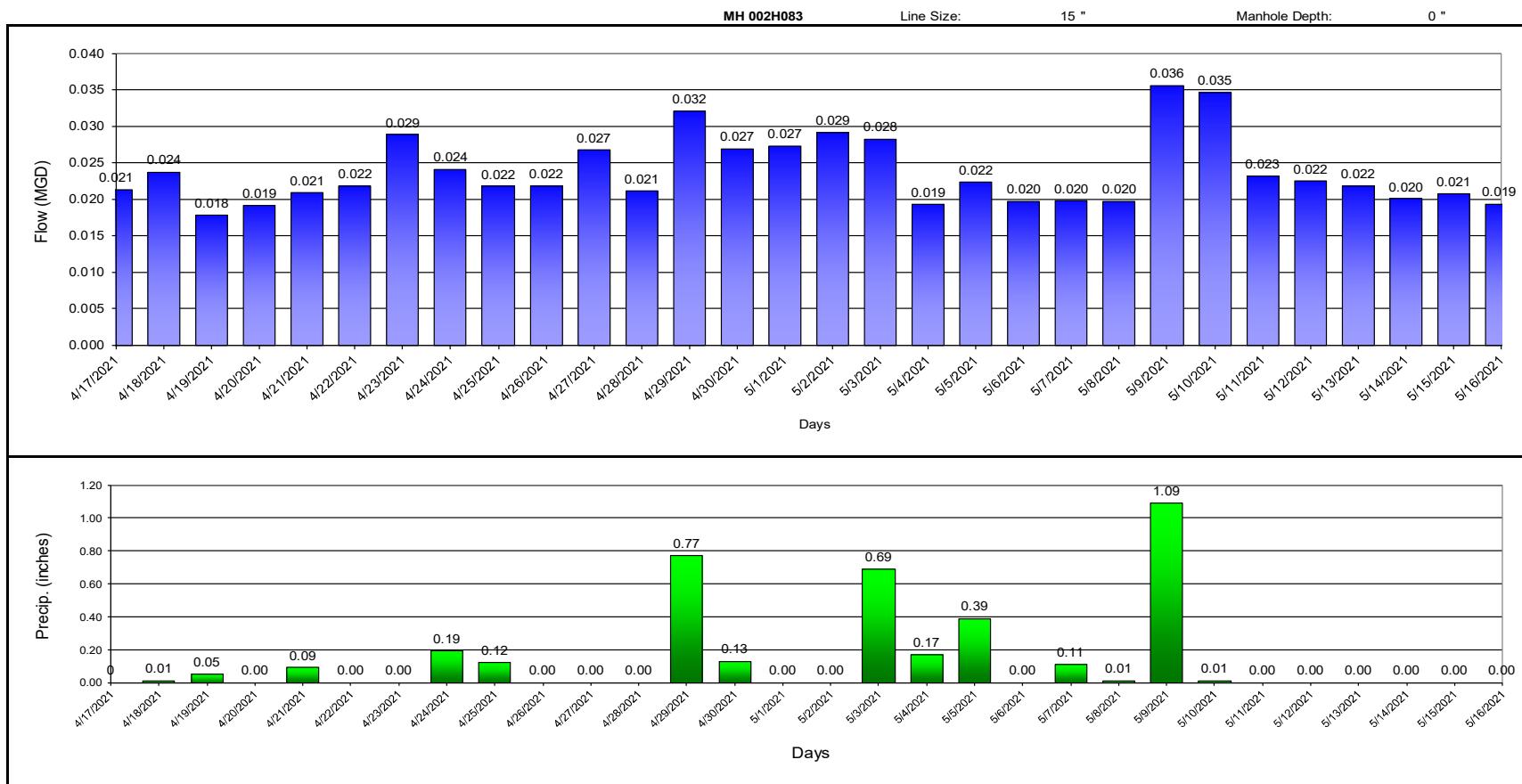
DRNACH ENVIRONMENTAL, INC.

MH 002H083

April 17, 2021 through May 16, 2021

Date:	04/17/2021	04/18/2021	04/19/2021	04/20/2021	04/21/2021	04/22/2021	04/23/2021	04/24/2021	04/25/2021	04/26/2021	04/27/2021	04/28/2021	04/29/2021	04/30/2021	05/01/2021	05/02/2021
Flow:	0.021	0.024	0.018	0.019	0.021	0.022	0.029	0.024	0.022	0.022	0.027	0.021	0.032	0.027	0.027	0.029
Precip.:	0.00	0.01	0.05	0.00	0.09	0.00	0.00	0.19	0.12	0.00	0.00	0.00	0.77	0.13	0.00	0.00

Date:	05/03/2021	05/04/2021	05/05/2021	05/06/2021	05/07/2021	05/08/2021	05/09/2021	05/10/2021	05/11/2021	05/12/2021	05/13/2021	05/14/2021	05/15/2021	05/16/2021	Line Size:	Manhole Depth:
Flow:	0.028	0.019	0.022	0.020	0.020	0.020	0.036	0.035	0.023	0.022	0.022	0.020	0.021	0.019		
Precip.:	0.69	0.17	0.39	0.00	0.11	0.01	1.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00		



Line Size:

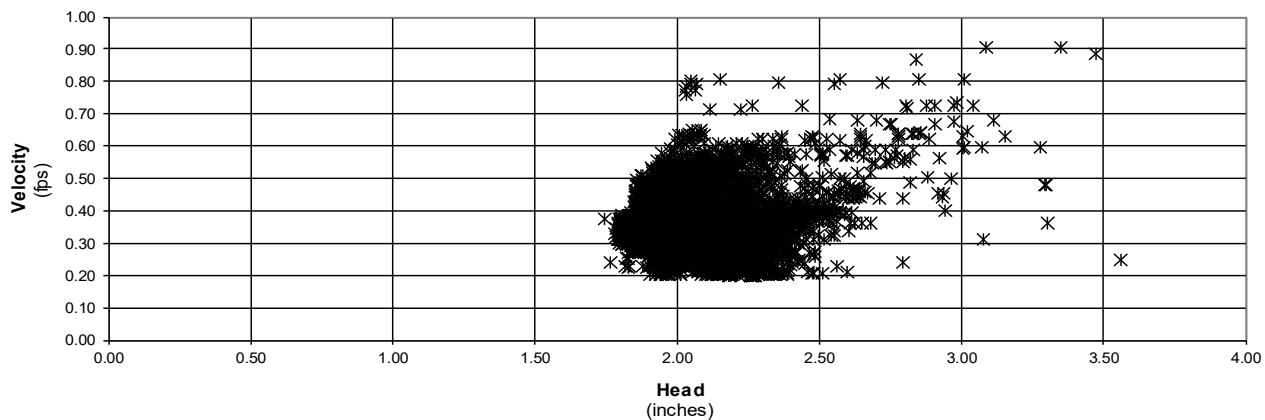
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Manhole Depth:

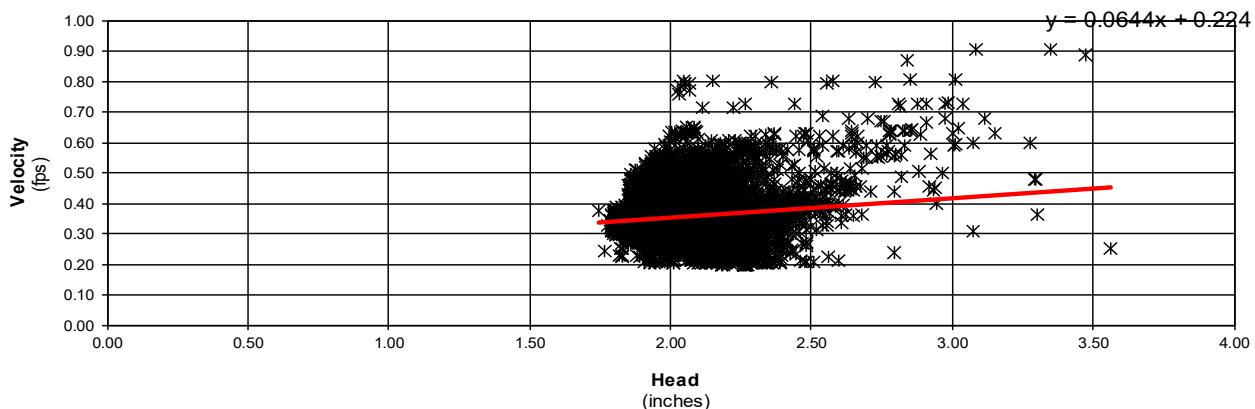
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MH 002H083

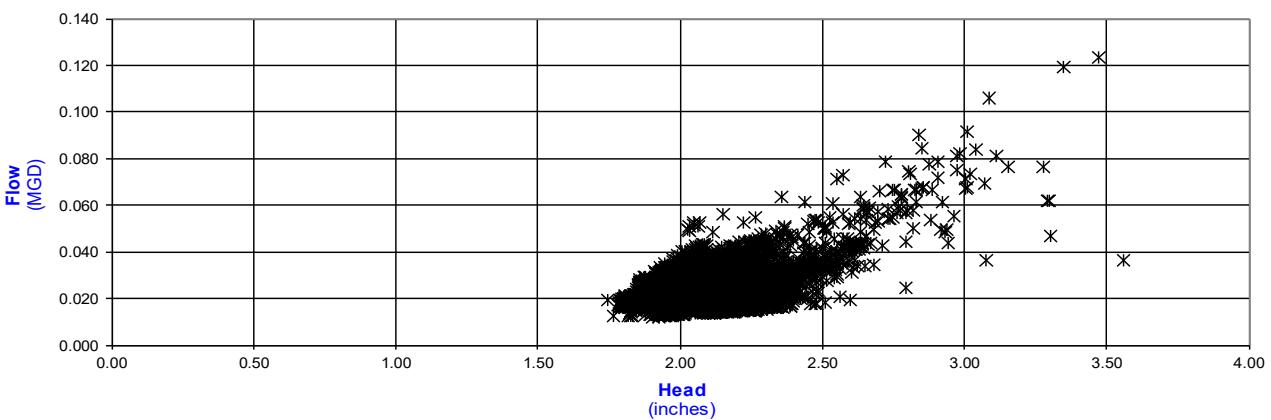
April 17, 2021 through May 16, 2021

Scatter Plot (Head Vs Velocity)**MH 002H083**

April 17, 2021 through May 16, 2021

Scatter Plot (Free Flow)**MH 002H083**

April 17, 2021 through May 16, 2021

Scatter Plot (Head Vs Flow)

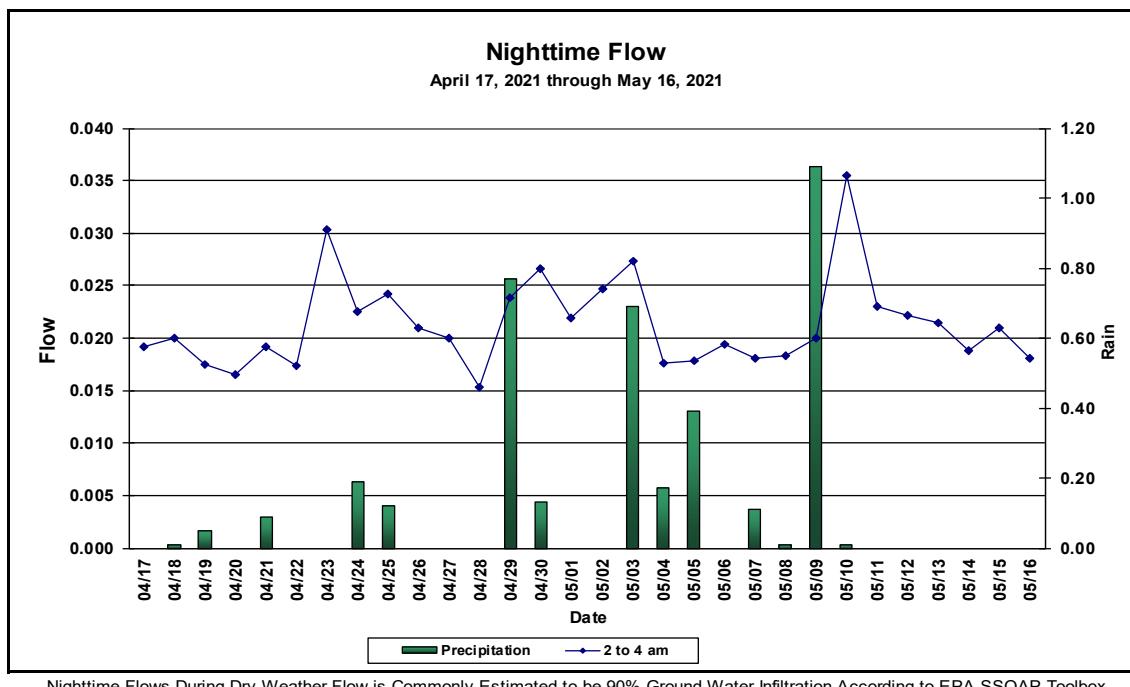
MH 002H083

Nighttime Flow

Date	Total 24 hr Precipitation	Ave flow 2 to 4 am
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04/17	0.00	0.019
04/18	0.01	0.020
04/19	0.05	0.017
04/20	0.00	0.016
04/21	0.09	0.019
04/22	0.00	0.017
04/23	0.00	0.030
04/24	0.19	0.022
04/25	0.12	0.024
04/26	0.00	0.021
04/27	0.00	0.020
04/28	0.00	0.015
04/29	0.77	0.024
04/30	0.13	0.027
05/01	0.00	0.022
05/02	0.00	0.025
05/03	0.69	0.027
05/04	0.17	0.018
05/05	0.39	0.018
05/06	0.00	0.019
05/07	0.11	0.018
05/08	0.01	0.018
05/09	1.09	0.020
05/10	0.01	0.036
05/11	0.00	0.023
05/12	0.00	0.022
05/13	0.00	0.021
05/14	0.00	0.019
05/15	0.00	0.021
05/16	0.00	0.018

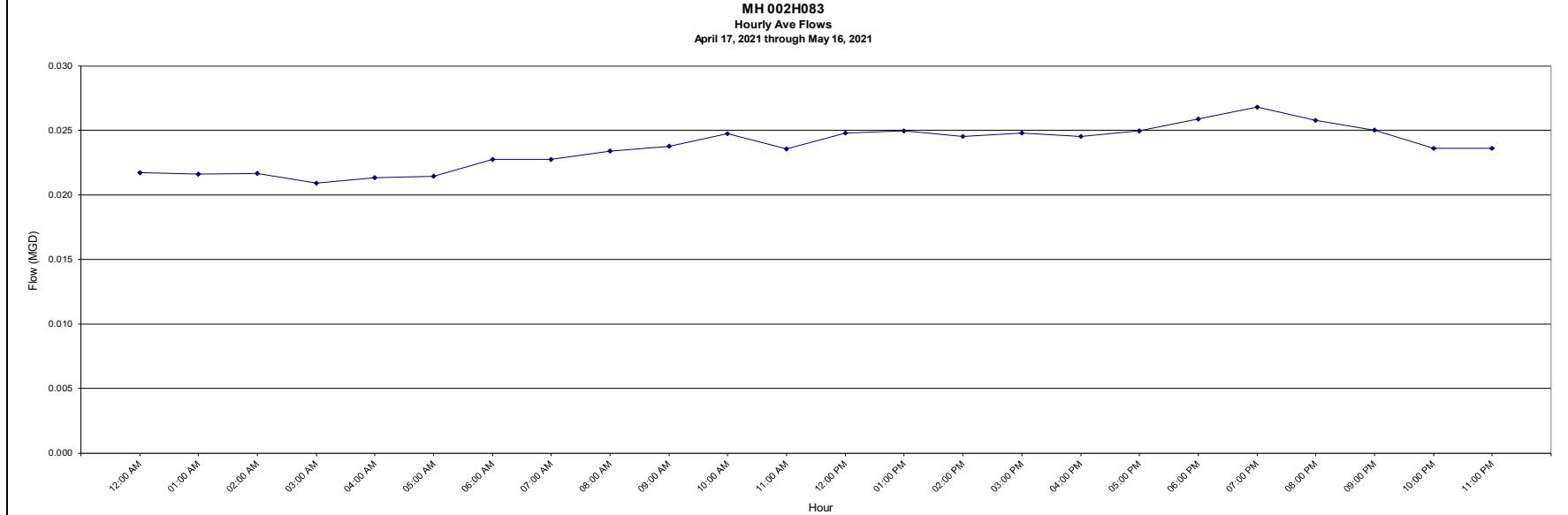
AVG	0.13	0.021
MIN	0.00	0.015
MAX	1.09	0.036



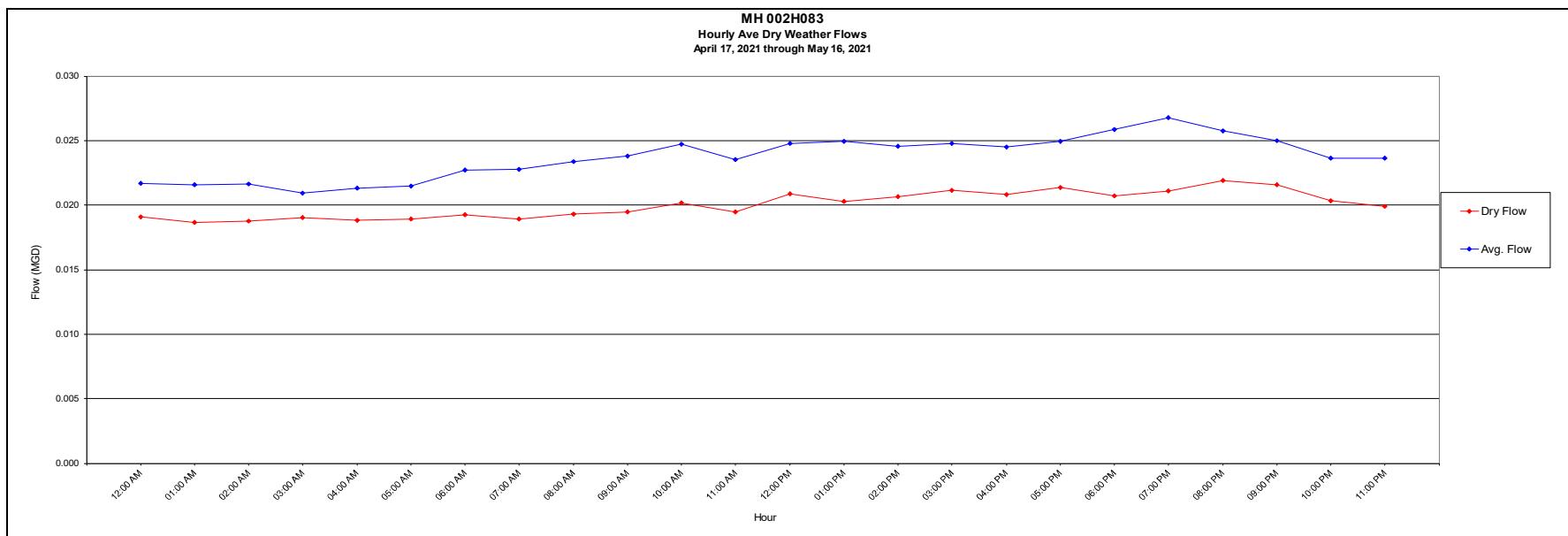
Average Hourly Flow

April 17, 2021 through May 16, 2021

2021	04/17	04/18	04/19	04/20	04/21	04/22	04/23	04/24	04/25	04/26	04/27	04/28	04/29	04/30	05/01	05/02	05/03	05/04	05/05	05/06	05/07	05/08	05/09	05/10	05/11	05/12	05/13	05/14	05/15	05/16	Average
12:00 AM	0.017	0.017	0.019	0.022	0.019	0.018	0.028	0.027	0.024	0.022	0.021	0.017	0.022	0.031	0.022	0.028	0.025	0.019	0.017	0.020	0.019	0.020	0.020	0.021	0.020	0.018	0.020	0.019	0.022		
01:00 AM	0.017	0.020	0.016	0.015	0.020	0.016	0.028	0.028	0.023	0.022	0.020	0.016	0.024	0.028	0.021	0.026	0.028	0.020	0.017	0.020	0.018	0.019	0.021	0.018	0.020	0.019	0.020	0.019	0.022		
02:00 AM	0.020	0.021	0.019	0.016	0.020	0.018	0.028	0.025	0.020	0.021	0.015	0.023	0.027	0.022	0.025	0.030	0.019	0.018	0.019	0.018	0.019	0.019	0.023	0.022	0.018	0.021	0.019	0.022			
03:00 AM	0.019	0.018	0.017	0.017	0.019	0.018	0.027	0.021	0.024	0.022	0.020	0.015	0.024	0.027	0.021	0.025	0.026	0.017	0.017	0.019	0.018	0.020	0.036	0.023	0.022	0.021	0.019	0.018	0.021		
04:00 AM	0.018	0.021	0.017	0.016	0.019	0.015	0.037	0.021	0.024	0.021	0.019	0.016	0.025	0.026	0.023	0.024	0.026	0.017	0.018	0.020	0.018	0.019	0.021	0.032	0.024	0.022	0.021	0.020	0.018	0.021	
05:00 AM	0.020	0.023	0.016	0.017	0.022	0.015	0.035	0.020	0.024	0.021	0.018	0.015	0.025	0.026	0.022	0.025	0.029	0.016	0.021	0.020	0.018	0.020	0.033	0.023	0.024	0.022	0.019	0.020	0.017	0.021	
06:00 AM	0.025	0.021	0.019	0.020	0.020	0.016	0.033	0.020	0.025	0.021	0.017	0.015	0.023	0.025	0.026	0.026	0.033	0.015	0.041	0.019	0.019	0.020	0.020	0.036	0.021	0.023	0.022	0.021	0.019	0.020	0.023
07:00 AM	0.024	0.022	0.016	0.019	0.023	0.017	0.031	0.021	0.026	0.022	0.018	0.017	0.019	0.025	0.025	0.027	0.033	0.017	0.034	0.023	0.020	0.018	0.021	0.034	0.025	0.025	0.023	0.021	0.019	0.018	0.023
08:00 AM	0.024	0.029	0.017	0.018	0.022	0.017	0.027	0.020	0.027	0.023	0.018	0.016	0.020	0.027	0.028	0.029	0.033	0.016	0.036	0.021	0.020	0.019	0.022	0.034	0.027	0.024	0.025	0.022	0.019	0.023	
09:00 AM	0.018	0.031	0.018	0.019	0.026	0.017	0.027	0.021	0.022	0.024	0.018	0.021	0.023	0.024	0.026	0.030	0.036	0.018	0.032	0.020	0.022	0.020	0.033	0.032	0.027	0.023	0.021	0.020	0.024		
10:00 AM	0.018	0.028	0.016	0.019	0.029	0.017	0.027	0.020	0.020	0.023	0.028	0.027	0.026	0.024	0.031	0.031	0.052	0.017	0.025	0.021	0.021	0.018	0.042	0.033	0.025	0.021	0.019	0.022	0.021	0.025	
11:00 AM	0.021	0.024	0.018	0.025	0.015	0.029	0.021	0.020	0.022	0.032	0.026	0.032	0.026	0.035	0.027	0.030	0.019	0.018	0.016	0.024	0.020	0.030	0.030	0.021	0.024	0.021	0.020	0.019	0.024		
12:00 PM	0.021	0.026	0.021	0.022	0.018	0.025	0.021	0.020	0.024	0.033	0.025	0.031	0.027	0.031	0.031	0.027	0.018	0.015	0.022	0.024	0.019	0.055	0.037	0.021	0.022	0.021	0.022	0.021	0.025		
01:00 PM	0.025	0.026	0.019	0.020	0.020	0.018	0.030	0.020	0.020	0.029	0.036	0.024	0.030	0.030	0.023	0.036	0.036	0.016	0.021	0.022	0.022	0.038	0.044	0.022	0.021	0.020	0.021	0.020	0.025		
02:00 PM	0.021	0.025	0.016	0.019	0.019	0.027	0.027	0.026	0.021	0.024	0.030	0.024	0.029	0.027	0.028	0.029	0.022	0.023	0.020	0.022	0.020	0.044	0.042	0.022	0.022	0.026	0.019	0.022	0.018	0.025	
03:00 PM	0.023	0.027	0.018	0.019	0.019	0.024	0.029	0.027	0.021	0.021	0.033	0.025	0.029	0.040	0.026	0.031	0.023	0.020	0.020	0.018	0.046	0.038	0.021	0.022	0.026	0.018	0.021	0.019	0.025		
04:00 PM	0.023	0.027	0.016	0.019	0.019	0.028	0.026	0.029	0.021	0.021	0.032	0.025	0.030	0.031	0.028	0.033	0.027	0.020	0.022	0.018	0.026	0.020	0.041	0.033	0.023	0.024	0.021	0.019	0.020	0.021	
05:00 PM	0.024	0.026	0.018	0.020	0.019	0.025	0.030	0.031	0.018	0.020	0.030	0.024	0.053	0.027	0.028	0.033	0.024	0.018	0.023	0.019	0.018	0.020	0.037	0.032	0.023	0.022	0.019	0.021	0.025		
06:00 PM	0.023	0.025	0.018	0.020	0.021	0.026	0.029	0.034	0.019	0.019	0.030	0.024	0.075	0.027	0.028	0.032	0.023	0.018	0.023	0.019	0.021	0.045	0.032	0.023	0.022	0.019	0.021	0.019	0.026		
07:00 PM	0.024	0.026	0.016	0.021	0.019	0.029	0.028	0.031	0.019	0.020	0.032	0.024	0.071	0.028	0.033	0.024	0.019	0.021	0.018	0.020	0.023	0.065	0.035	0.021	0.024	0.022	0.021	0.021	0.019	0.027	
08:00 PM	0.023	0.027	0.016	0.022	0.018	0.031	0.029	0.023	0.019	0.020	0.034	0.024	0.041	0.026	0.028	0.032	0.038	0.025	0.020	0.019	0.020	0.054	0.033	0.024	0.022	0.021	0.021	0.021	0.021	0.026	
09:00 PM	0.025	0.020	0.020	0.023	0.022	0.034	0.028	0.024	0.018	0.022	0.034	0.024	0.042	0.031	0.033	0.026	0.020	0.019	0.019	0.019	0.054	0.031	0.022	0.021	0.022	0.022	0.022	0.022	0.019	0.025	
10:00 PM	0.018	0.019	0.016	0.021	0.019	0.031	0.028	0.024	0.022	0.023	0.036	0.023	0.042	0.025	0.027	0.029	0.022	0.018	0.019	0.018	0.022	0.045	0.030	0.023	0.020	0.019	0.024	0.019	0.019	0.024	
11:00 PM	0.019	0.021	0.024	0.018	0.019	0.035	0.028	0.023	0.020	0.021	0.030	0.024	0.035	0.024	0.031	0.021	0.018	0.020	0.018	0.018	0.021	0.041	0.026	0.021	0.021	0.020	0.019	0.020	0.019	0.024	
AVG.	0.021	0.024	0.018	0.019	0.021	0.022	0.029	0.024	0.022	0.021	0.017	0.027	0.027	0.027	0.027	0.028	0.019	0.022	0.020	0.020	0.036	0.035	0.023	0.022	0.022	0.020	0.021	0.019	0.024		
Precip.:	0.00	0.01	0.05	0.00	0.09	0.00	0.00	0.12	0.00	0.00	0.77	0.13	0.00	0.00	0.69	0.17	0.39	0.00	0.11	0.01	1.09	0.01	0.00								



Average Hourly Dry Flow		April 17, 2021 through May 16, 2021																														
2021		04/17	04/18	04/19	04/20	04/21	04/22	04/23	04/24	04/25	04/26	04/27	04/28	04/29	04/30	05/01	05/02	05/03	05/04	05/05	05/06	05/07	05/08	05/09	05/10	05/11	05/12	05/13	05/14	05/15	05/16	Average
12:00 AM	0.017						0.018				0.021	0.017									0.020			0.018	0.020	0.019	0.019	0.019	0.019			
01:00 AM	0.017					0.015	0.016			0.022	0.020	0.016			0.021						0.020			0.018	0.020	0.019	0.019	0.019	0.019			
02:00 AM	0.020					0.016	0.018			0.020	0.021	0.015									0.019			0.018	0.021	0.019	0.019	0.019	0.019			
03:00 AM	0.019					0.017	0.018			0.022	0.020	0.015			0.021						0.019			0.021	0.019	0.018	0.019	0.019	0.019			
04:00 AM	0.018					0.016	0.015			0.021	0.019	0.016									0.020			0.022	0.021	0.020	0.018	0.019	0.019			
05:00 AM	0.020					0.017	0.015			0.021	0.018	0.015			0.022						0.020			0.022	0.019	0.020	0.017	0.019	0.019			
06:00 AM		0.020				0.016				0.021	0.017	0.015								0.019			0.021	0.019	0.020	0.019						
07:00 AM		0.019				0.017				0.022	0.018	0.017													0.021	0.019	0.018	0.019				
08:00 AM		0.018				0.017				0.023	0.018	0.016								0.021					0.022	0.020	0.019	0.019				
09:00 AM	0.018					0.019	0.017			0.018	0.021									0.020					0.021	0.021	0.020	0.019				
10:00 AM	0.018					0.019	0.017			0.023	0.021	0.019							0.021					0.021	0.019	0.022	0.021	0.020				
11:00 AM	0.021					0.018	0.015			0.022										0.016			0.021	0.021	0.020	0.019	0.019					
12:00 PM	0.021					0.021	0.018			0.024										0.022			0.021	0.022	0.022	0.021	0.021					
01:00 PM		0.020				0.018														0.021					0.022	0.021	0.020	0.020				
02:00 PM		0.021				0.019														0.022					0.019	0.022	0.018	0.021				
03:00 PM	0.023					0.019	0.024			0.021	0.025									0.020					0.021	0.022	0.018	0.021				
04:00 PM	0.023					0.019				0.021									0.018					0.023	0.024	0.019	0.020	0.021				
05:00 PM	0.024					0.020				0.020	0.024									0.019					0.023	0.023	0.019	0.021				
06:00 PM	0.023					0.020				0.019									0.019					0.023	0.022	0.019	0.021	0.019				
07:00 PM	0.024					0.021				0.020	0.024									0.018					0.021	0.022	0.019	0.021				
08:00 PM	0.023					0.022				0.020	0.024									0.020					0.024	0.022	0.021	0.021	0.022			
09:00 PM		0.023				0.022				0.024									0.019					0.022	0.021	0.022	0.019	0.022				
10:00 PM	0.018					0.021				0.023	0.023									0.018					0.023	0.020	0.019	0.019	0.020			
11:00 PM	0.019					0.018				0.021									0.018					0.021	0.021	0.020	0.019	0.020				
AVG.	0.020					0.019	0.017			0.021	0.019	0.019			0.021					0.019					0.022	0.022	0.021	0.020	0.021	0.019	0.020	
Precip.:	0.00	0.01	0.05	0.00	0.09	0.00	0.00	0.19	0.12	0.00	0.00	0.00	0.77	0.13	0.00	0.00	0.69	0.17	0.39	0.00	0.11	0.01	1.09	0.01	0.00	0.00	0.00	0.00	0.00			



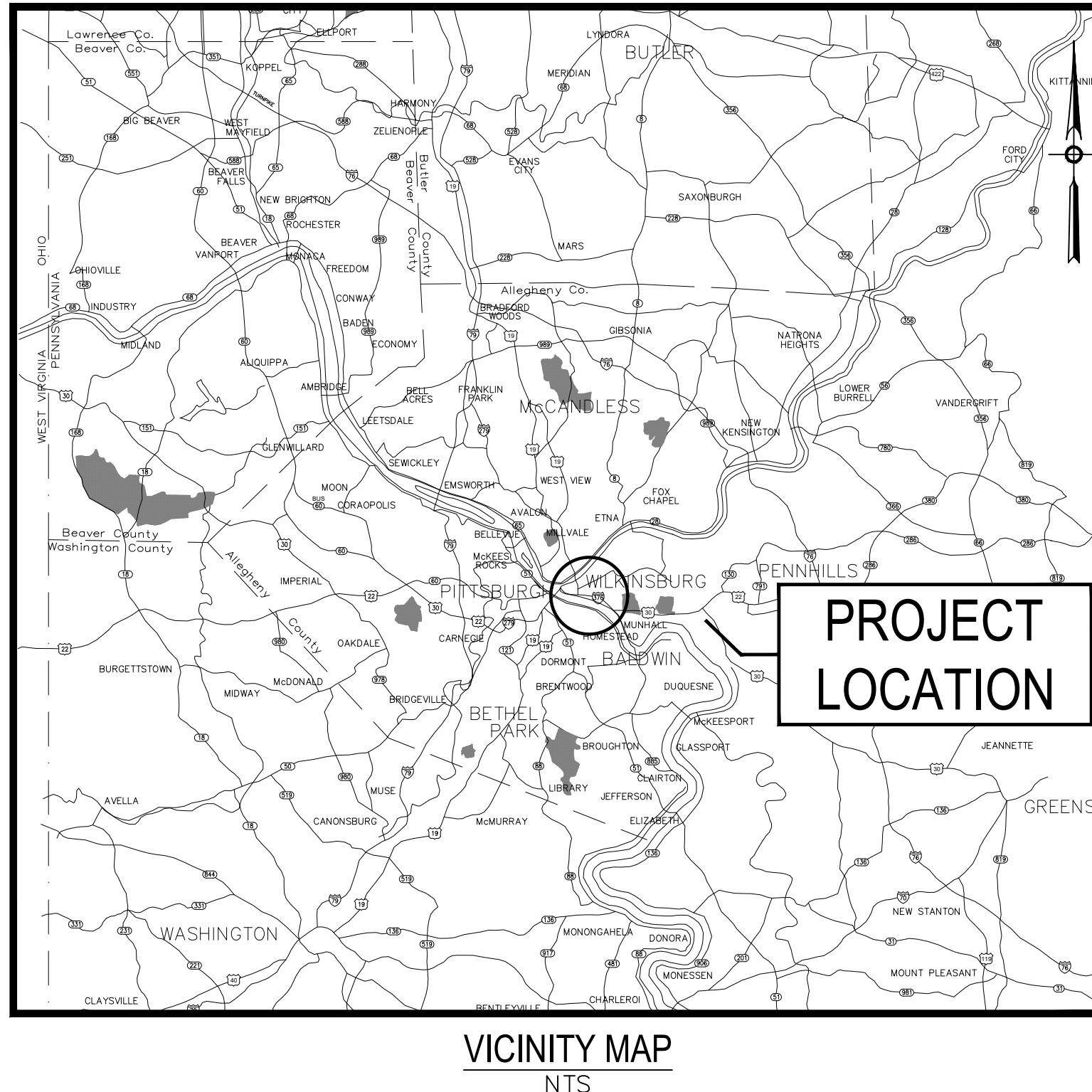
DRAWINGS

FIFTH AND DINWIDDIE DEVELOPMENT - WEST SITE

WATER AND SEWER TAP PLAN

PITTSBURGH WATER AND SEWER AUTHORITY

30% DESIGN DRAWINGS



VICINITY MAP
NTS



LOCATION MAP
NTS

JUNE 16, 2021

INDEX OF WATER AND SEWER TAP PLAN DRAWINGS

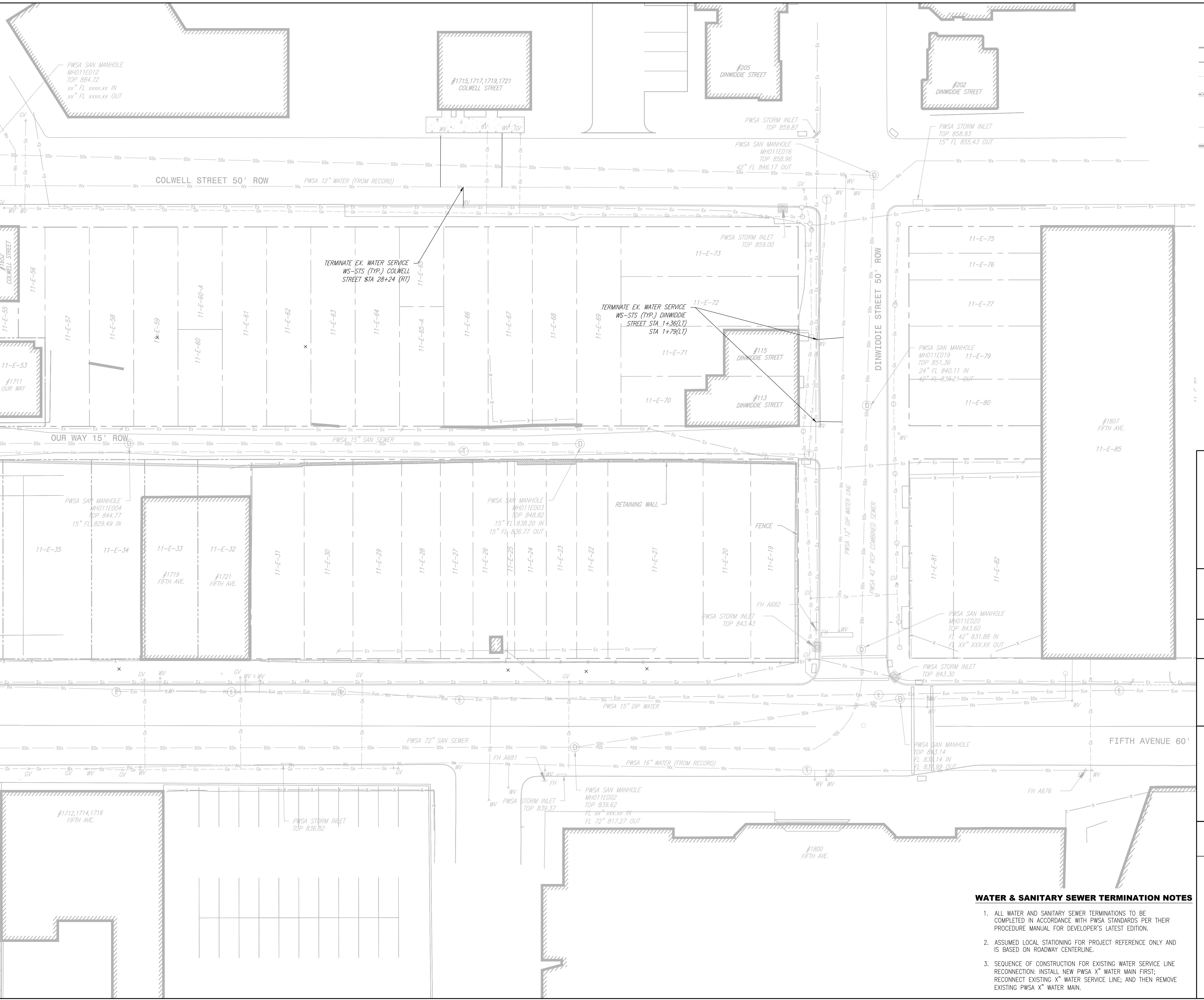
SHEET NO.	TITLE
1	WATER AND SEWER TAP PLAN - COVER SHEET
2	WATER AND SEWER TERMINATION PLAN - WATER & SANITARY SEWER - 1723 & 1807 FIFTH AVENUE; 115 DINWIDDIE STREET PITTSBURGH, PA 15219
3	WATER AND SEWER TERMINATION PLAN - WATER & SANITARY SEWER - SITE UTILITY DETAILS
4	WATER AND SEWER TAP PLAN - WATER & SANITARY SEWER - FIFTH AVENUE, DINWIDDIE STREET, COLWELL STREET, OUR WAY PITTSBURGH, PA 15219
5	WATER AND SEWER TAP PLAN - WATER & SANITARY SEWER - TAP-IN SCHEDULE
6	WATER AND SEWER TAP PLAN - WATER & SANITARY SEWER - SITE WATER UTILITY DETAILS
7	WATER AND SEWER TAP PLAN - WATER & SANITARY SEWER - SITE WATER UTILITY DETAILS
8	WATER AND SEWER TAP PLAN - STORM SEWER - FIFTH AVENUE, DINWIDDIE STREET, COLWELL STREET, OUR WAY PITTSBURGH, PA 15219
9	WATER AND SEWER TAP PLAN - STORM SEWER - PRIVATE STORM STRUCTURE DATA TABLES & ENLARGED STORM SEWER PLANS
10	STORM SEWER PROFILES
11	WATER AND SEWER TAP PLAN - STORM SEWER - SITE STORM UTILITY DETAILS

HYDRANT FLOW TEST RESULTS <i>To be completed by the Applicant:</i>	
DATE OF TEST 09/09/2020	
HYDRANT PERMIT NUMBER	
PERFORMED BY MICHAEL BAKER.INTERNATIONAL	
FLOW HYDRANT	
HYDRANT NUMBER A681 NE CORNER OF MILTENBERGER LOCATION AND 5TH AVE	
FLOW OBSERVED, GPM 1,454	
PRESSURE HYDRANT	
HYDRANT NUMBER A676 ACROSS 5TH AVE FROM LOCATION 1807 5TH AVE	
STATIC PRESSURE, PSI 82	
RESIDUAL PRESSURE, PSI 80	
CALCULATIONS	
PROJECTED FLOW AT 20 PSI, GPM	
SPRINKLER SYSTEM DESIGN INFORMATION <i>To be completed by the Applicant:</i>	
LOCATION(S):	
TYPE OF SYSTEM (Check one)	
<input type="checkbox"/> 13D	
<input type="checkbox"/> 13R	
<input type="checkbox"/> 13	
<input type="checkbox"/> OTHER:	
SYSTEM CONFIGURATION (Check one)	
<input type="checkbox"/> STAND-ALONE SPRINKLER SYSTEM	
<input type="checkbox"/> MULTI-PURPOSE SPRINKLER SYSTEM	
HOSE DEMANDS (N/A for 13D systems)	
INSIDE HOSE DEMAND, GPM	
OUTSIDE HOSE DEMAND, GPM	
Project Number: 176433	
Drawn By: BRF	
THE PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK <i>To be completed by the Applicant:</i> (Check all that apply)	
<input checked="" type="checkbox"/> NEW WATER CONNECTION(S)	
<input checked="" type="checkbox"/> NEW SEWER CONNECTION(S)	
<input type="checkbox"/> REUSE EXISTING WATER CONNECTION(S)	
<input type="checkbox"/> REUSE EXISTING SEWER CONNECTION(S)	
<input checked="" type="checkbox"/> TERMINATE EXISTING WATER CONNECTION(S)	
<input type="checkbox"/> TERMINATE EXISTING SEWER CONNECTION(S)	
<input type="checkbox"/> PRIVATE CONSTRUCTION OF PUBLIC FACILITIES	
To be completed by the PWSA: (Required for ALL approvals)	
REVIEWER	
CHIEF OF OPERATIONS (Required for "Private Construction of Public Facilities" ONLY)	
DIRECTOR OF ENGINEERING AND CONSTRUCTION	
PWSA PROJECT NUMBER	
TAP C RECORD NUMBER	
Signatures / Approval by PWSA are for the physical connection(s) to the water and/or sewer system only. Responsibility for the design and work depicted by the drawings, including the flow design for the facilities, is by the Professional Engineer shown by the seal and signature affixed to the drawing. The PWSA does not represent or warrant that the water supply to the facilities is sufficient to support the design.	
FIFTH AND DINWIDDIE DEVELOPMENT, LLC	
FIFTH AND DINWIDDIE DEVELOPMENT - WEST SITE WATER AND SEWER TAP PLAN	
COVER SHEET	
SCALE: AS SHOWN SHEET ACCESSION No. _____	
DATE: 06/16/2021 1 OF 12 CASE No. _____	

PEAK DAILY FLOW DEMANDS <i>To be completed by the Applicant:</i>			
TYPE OF FLOW	SANITARY, GPD	WATER, GPD	STORM, CFS
PROJECT FLOW			
EXISTING FLOW			
NET FLOW		NOT REQUIRED	
PWSA W&S USE APPROVAL DATE (If required)			
DEP SFPM APPROVAL DATE (If required)			

PEAK OPERATING WATER DEMANDS <i>To be completed by the Applicant:</i>								
METER INFORMATION				DOMESTIC SYSTEM		FIRE SYSTEM		
I.D.	QUANTITY	SIZE	TYPE	USE	FLOW, GPM	PRESSURE, PSI	FLOW, GPM	PRESSURE, PSI
[A]								
[B]								
[C]								
[D]								
[E]								
METER SIZE: 5/8", 5/8"x3/4", 3/4", 1", 2", 3", 4", 6", 8", 10", 12", 16"								
METER TYPE: POSITIVE DISPLACEMENT, COMPOUND, ELECTROMAGNETIC, ULTRASONIC, TURBINE								
METER USE: DOMESTIC, FIRE, COMBINATION								

\\moonpalcl1.bkr.mbakercorp.com\CE&E\5th and din development - 499325\176433 - fifth and dinw



WATER & SEWER TERMINATION

Michael Baker
I N T E R N A T I O N A L
100 Airside Drive
Moon Township, PA 15108
Phone: 412-269-6300
Fax: 412-375-3977

OWNER:
Fifth and Dinwiddie Development, LLC

CIVIL ENGINEER:
Michael Baker International

ARCHITECT:
GBBN Architects

**MASTER PLANNERS /
LANDSCAPE ARCHITECT:**
evolveEA



DRAWN BY:

MORITZ APPROVAL BLOCK

- CTION(S)
CTION(S)
NNECTION(S)
NNECTION(S)

1

1

"facilities" ONLY)

INTRODUCTION

1

*nnection(s) to the water and/or sewer
icted by the drawings, including the
eer shown by the seal and signature
r warrant that the water supply to the*

WATER & SANITARY SEWER TERMINATION NOTES

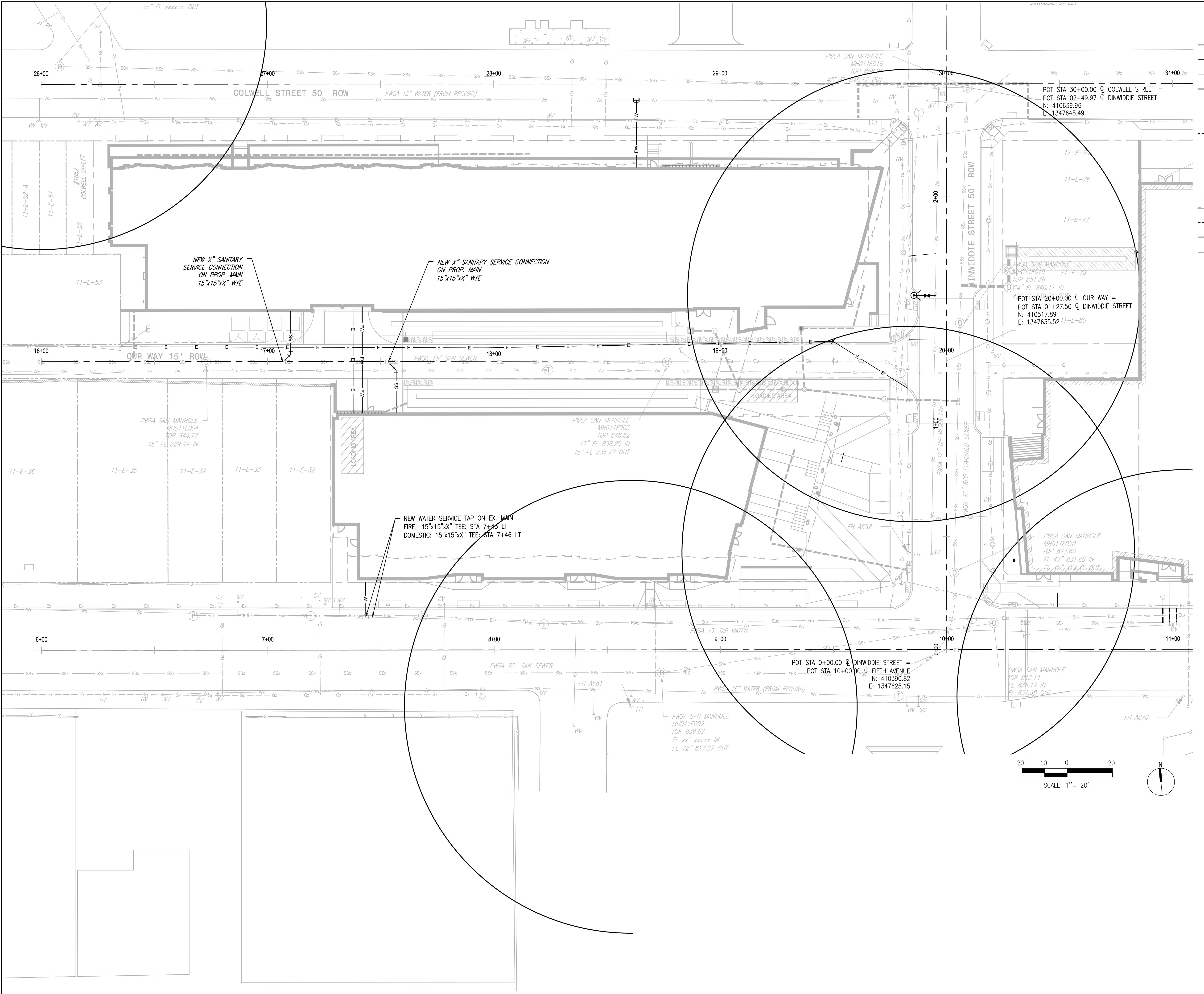
1. ALL WATER AND SANITARY SEWER TERMINATIONS TO BE COMPLETED IN ACCORDANCE WITH PWSA STANDARDS PER THEIR PROCEDURE MANUAL FOR DEVELOPER'S LATEST EDITION.
 2. ASSUMED LOCAL STATIONING FOR PROJECT REFERENCE ONLY AND IS BASED ON ROADWAY CENTERLINE.
 3. SEQUENCE OF CONSTRUCTION FOR EXISTING WATER SERVICE LINE RECONNECTION: INSTALL NEW PWSA X" WATER MAIN FIRST; RECONNECT EXISTING X" WATER SERVICE LINE; AND THEN REMOVE EXISTING PWSA X" WATER MAIN.

FIFTH AND DINWIDDIE DEVELOPMENT - WEST SITE WATER AND SEWER TERMINATION PLAN

*35th AVE., 115 DINWIDDIE ST., 1807 5th AVE
PITTSBURGH, PA 15219*

OWN SHEET ACCESSION No. _____
021 2 OF 12 CASE No. _____

PLOT DATE: 7/21/2021 9:23 PM
\\moonpac1cl1.bkr.mbakercorp.com\CE&E\5th and din development - 499325\176433 - fifth and dinwiddie\06 drawings\Civil\sheets files\PWSA Tap Plan - West Site\176433_TAP_CU101.dwg



WATER & SANITARY SEWER LEGEND

Michael Baker
I N T E R N A T I O N A L
100 Airside Drive
Moon Township, PA 15108
Phone: 412-269-6300
Fax: 412-375-3977

OWNER: Fifth and Dinwiddie Development, LLC
CIVIL ENGINEER: Michael Baker International
ARCHITECT: GBRN Architects

**MASTER PLANNERS /
LANDSCAPE ARCHITECT:
evolveEA**



Drawn By:

APPROVAL BLOCK

PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK

completed by the Applicant:
(check all that apply)

- NEW WATER CONNECTION(S)
 - NEW SEWER CONNECTION(S)
 - REUSE EXISTING WATER CONNECTION(S)
 - REUSE EXISTING SEWER CONNECTION(S)
 - TERMINATE EXISTING WATER CONNECTION(S)
 - TERMINATE EXISTING SEWER CONNECTION(S)
 - PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

*completed by the PWSA:
required for ALL approvals)*

EWER

A PROJECT NUMBER _____
C RECORD NUMBER _____

**FIFTH AND DINWIDDIE DEVELOPMENT - WEST SITE
WATER AND SEWER TAP PLAN**

WATER & SANITARY SEWER

*FIFTH AVENUE; DINWIDDIE STREET
PITTSBURGH, PA. 15219*

LE: AS SHOWN SHEET ACCESSION No. _____
E: 06/16/2021 4 OF 12 CASE No. _____

SUMMARY OF BUILDING SERVICE ADDRESSES AND WATER / SANITARY SEWER TAPS

Michael Baker

I N T E R N A T I O N A L
100 Airside Drive
Moon Township, PA 15108
Phone: 412-269-6300
Fax: 412-375-3977

OWNER: Fifth and Dinwiddie Development, LLC
CIVIL ENGINEER: Michael Baker International
ARCHITECT: GBBN Architects
MASTER PLANNERS / LANDSCAPE ARCHITECT: evolveEA



Project Number:	176433
Drawn By:	BRF

Drawn By: BRF

<u>THE PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK</u>	
<i>To be completed by the Applicant:</i>	
(Check all that apply)	
<input checked="" type="checkbox"/>	NEW WATER CONNECTION(S)
<input checked="" type="checkbox"/>	NEW SEWER CONNECTION(S)
<input type="checkbox"/>	REUSE EXISTING WATER CONNECTION(S)
<input type="checkbox"/>	REUSE EXISTING SEWER CONNECTION(S)
<input checked="" type="checkbox"/>	TERMINATE EXISTING WATER CONNECTION(S)
<input type="checkbox"/>	TERMINATE EXISTING SEWER CONNECTION(S)
<input type="checkbox"/>	PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

THE PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK

to be completed by the Applicant

- Check all that apply)

 - NEW WATER CONNECTION(S)
 - NEW SEWER CONNECTION(S)
 - REUSE EXISTING WATER CONNECTION(S)
 - REUSE EXISTING SEWER CONNECTION(S)
 - TERMINATE EXISTING WATER CONNECTION(S)
 - TERMINATE EXISTING SEWER CONNECTION(S)
 - PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by the PWSA:
(Required for ALL approvals)

REVIEWER

CHIEF OF OPERATIONS

to be completed by the PWSA:

(Required for ALL approvals)

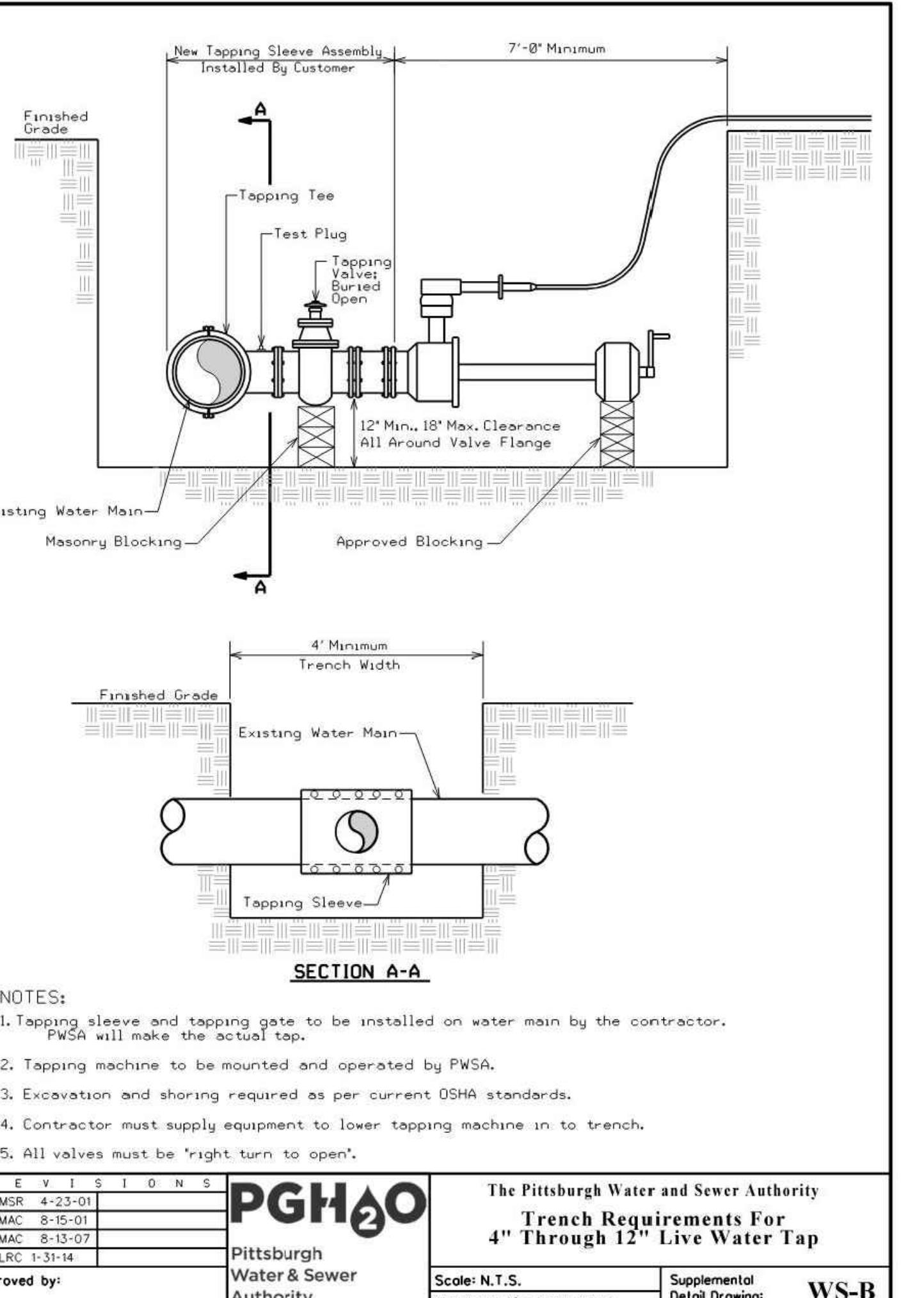
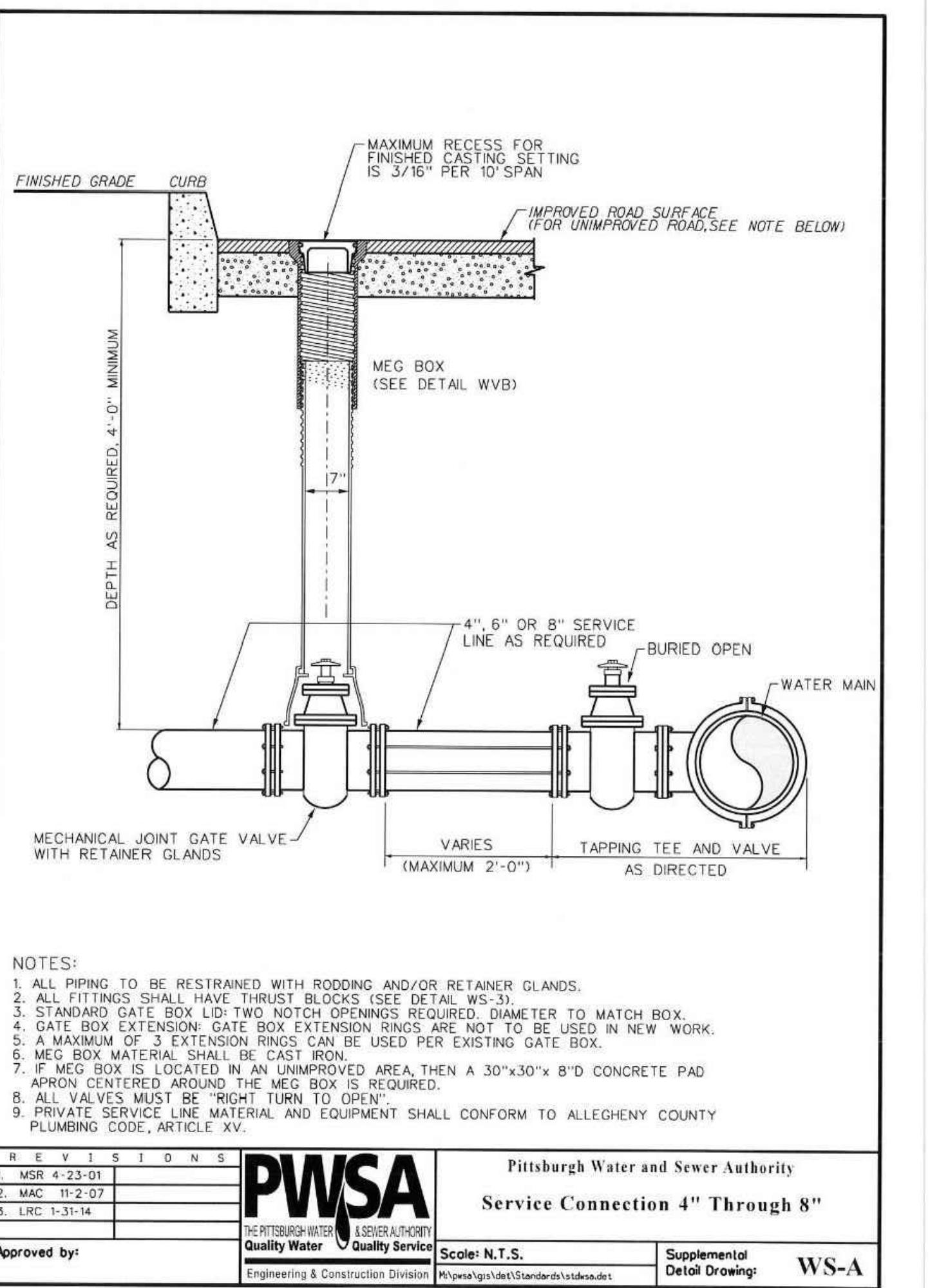
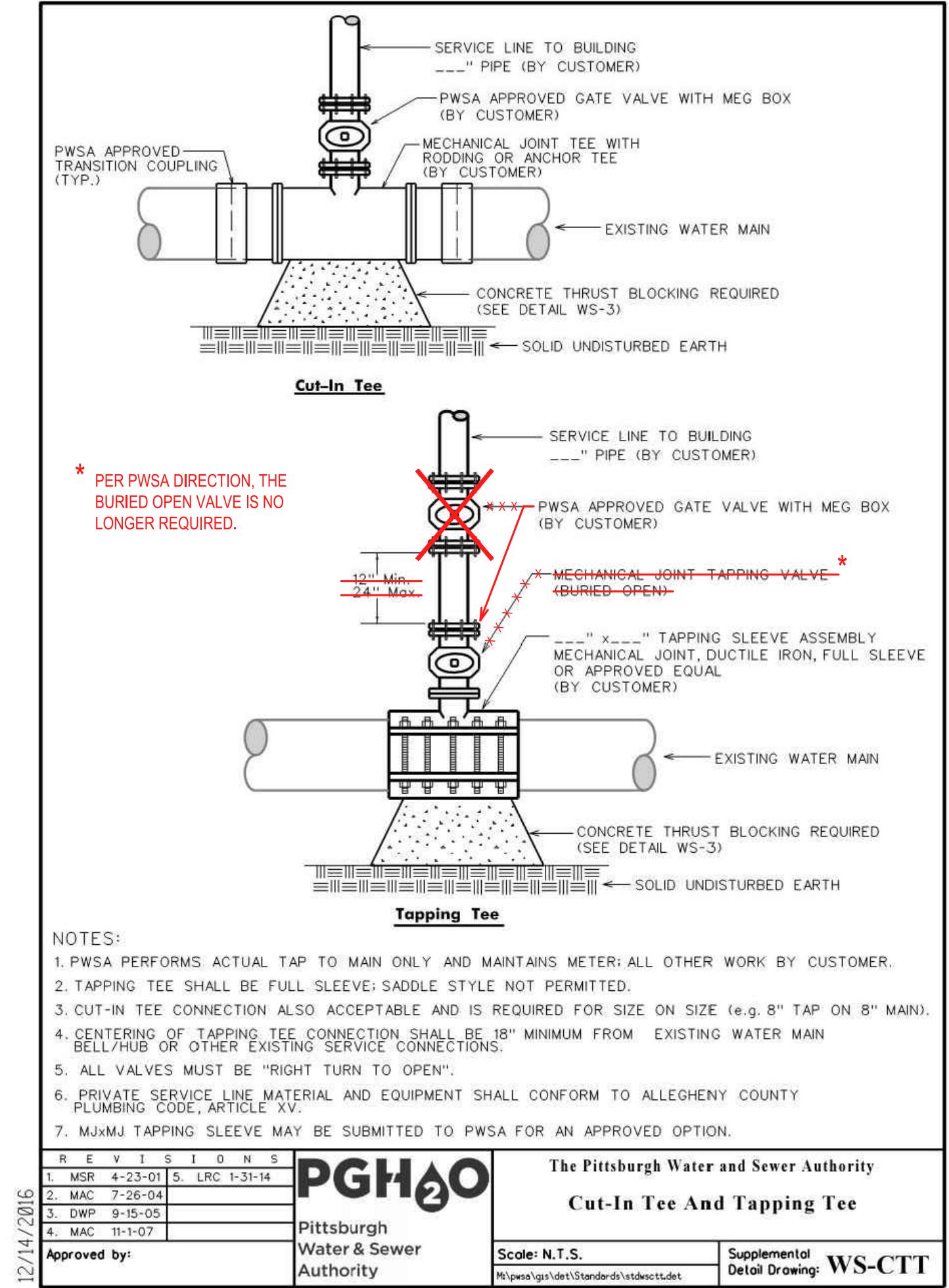
DIRECTOR OF ENGINEERING AND CONSTRUCTION

Signatures / Approval by PWSA are for the physical connection(s) to the water and/or sewer system only. Responsibility for the design and work depicted by the drawings, including the flow design for the facilities, is by the Professional Engineer shown by the seal and signature affixed to the drawing. The PWSA does not represent or warrant that the water supply to the facilities is sufficient to support the design.

FIFTH AND DINWIDDIE DEVELOPMENT - WEST SITE
WATER AND SEWER TAP PLAN
WATER & SANITARY SEWER

SAP IN SCHEDULE

CALE: AS SHOWN SHEET ACCESSION No.



Michael Baker
I N T E R N A T I O N A L
100 Airside Drive
Moon Township, PA 15108
Phone: 412-269-6300
Fax: 412-375-3977

OWNER: Fifth and Dinwiddie Development, LLC
CIVIL ENGINEER: Michael Baker International
ARCHITECT: GBBN Architects
MASTER PLANNERS / LANDSCAPE ARCHITECT: evolveEA



THORITY APPROVAL BLOCK

- NEW WATER CONNECTION(S)
 - NEW SEWER CONNECTION(S)
 - REUSE EXISTING WATER CONNECTION(S)
 - REUSE EXISTING SEWER CONNECTION(S)
 - TERMINATE EXISTING WATER CONNECTION(S)
 - TERMINATE EXISTING SEWER CONNECTION(S)
 - PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

*Completed by the PWSA:
or ALL approvals)*

3

Approval by PWSA are for the physical connection(s) to the water and/or sewer. Responsibility for the design and work depicted by the drawings, including the for the facilities, is by the Professional Engineer shown by the seal and signature e drawing. The PWSA does not represent or warrant that the water supply to the sufficient to support the design.

FIFTH AND DINWIDDIE DEVELOPMENT, LLC

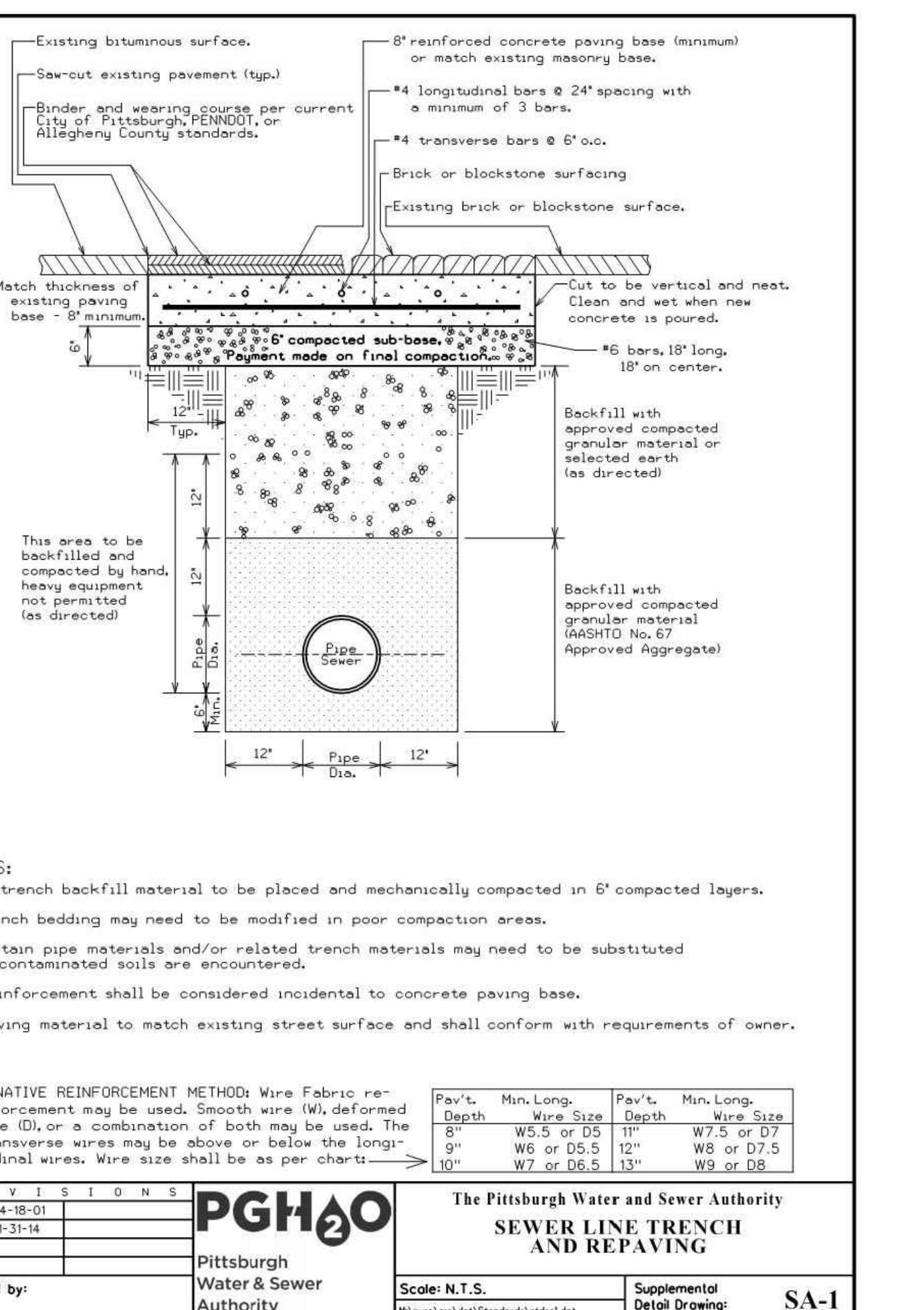
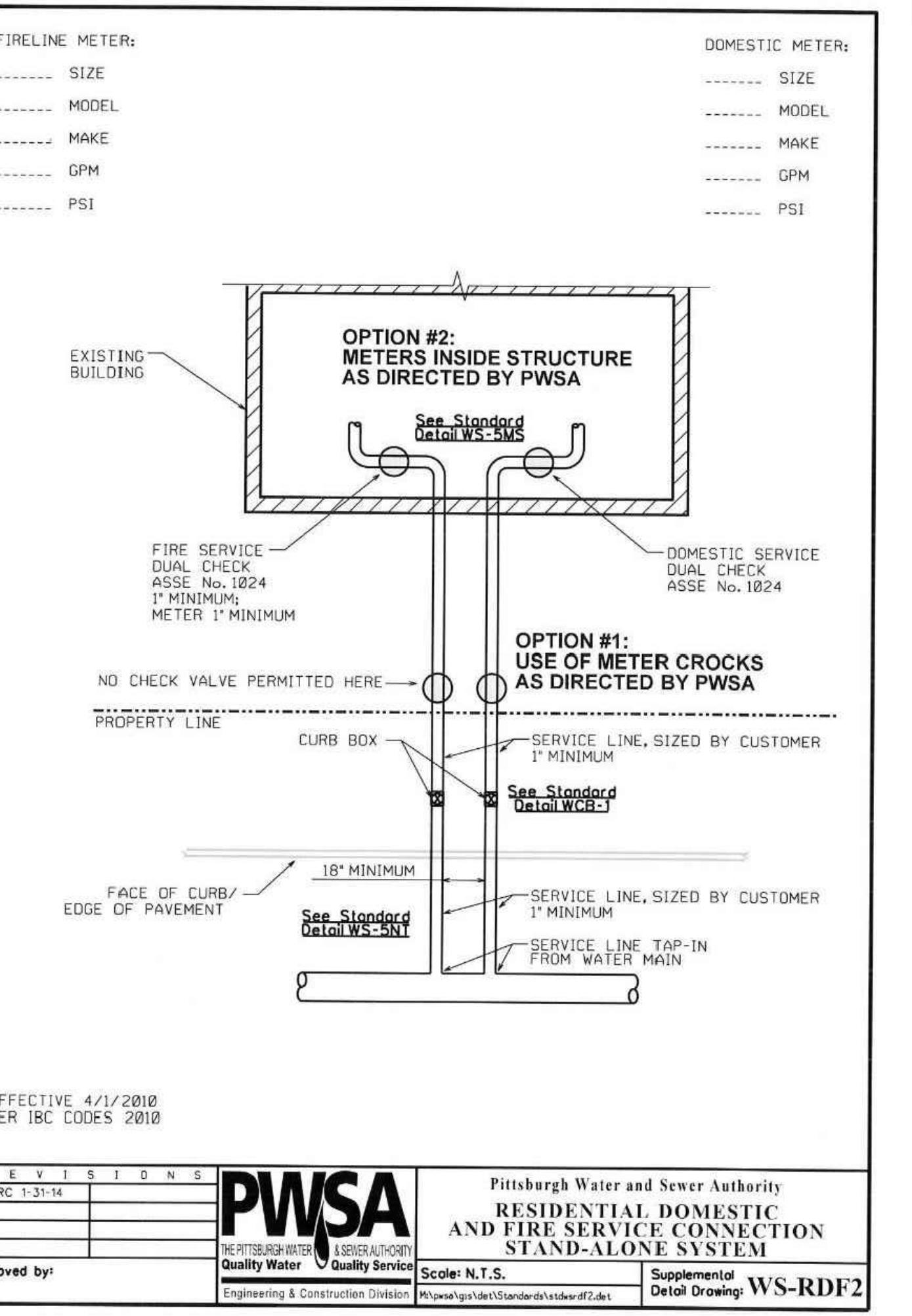
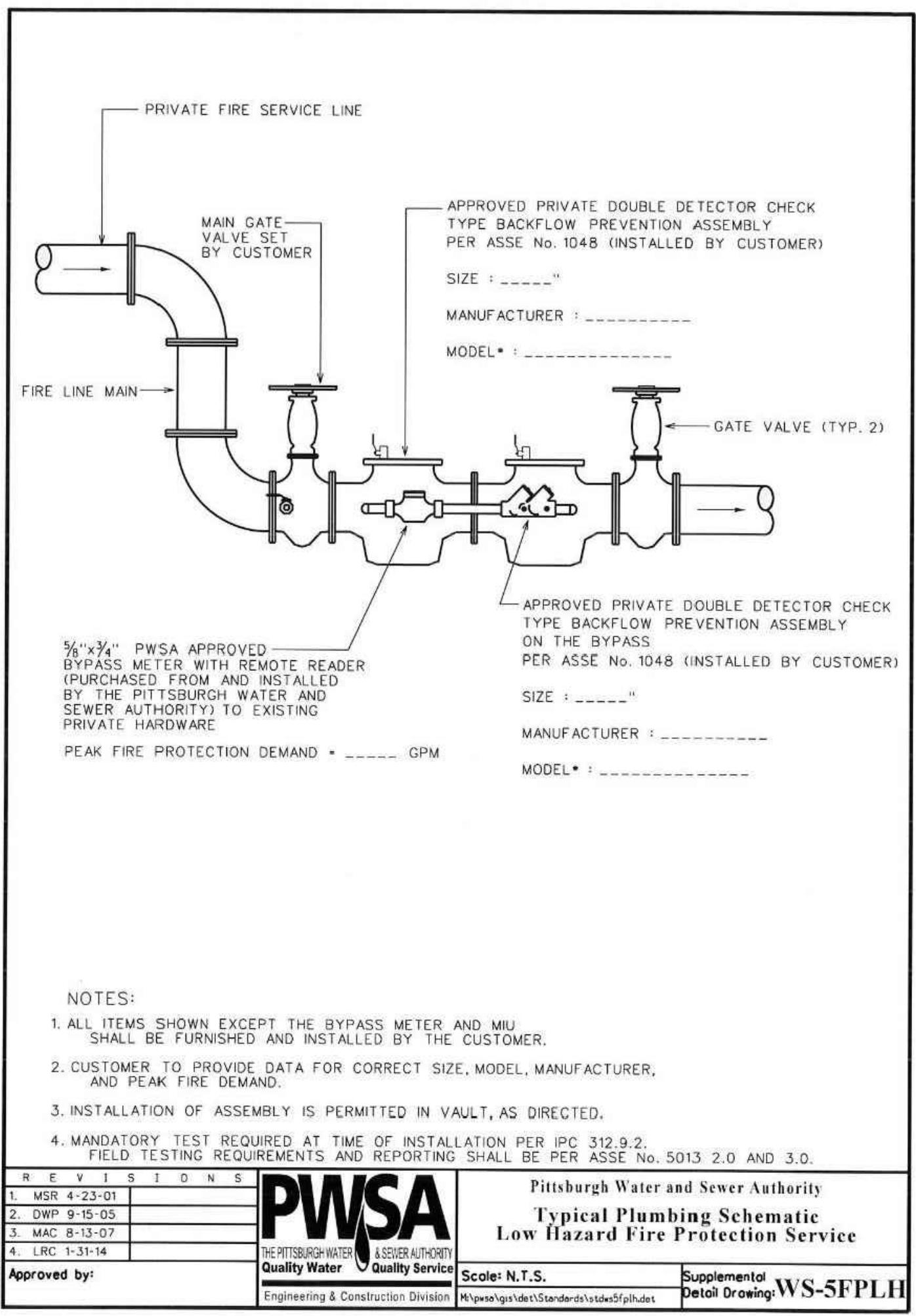
H AND DINWIDDIE DEVELOPMENT - WEST SITE WATER AND SEWER TAP PLAN

WATER & SANITARY SEWER

Y DETAILS

ACCESSION No. _____

CASE No. _____



Michael Baker

I N T E R N A T I O N A L
100 Airside Drive
Moon Township, PA 15108
Phone: 412-269-6300
Fax: 412-375-3977

OWNER:
th and Dinwiddie Development, LLC
VIL ENGINEER:
ichael Baker International
RCHITECT:
BBN Architects
ASTER PLANNERS /
ANDSCAPE ARCHITECT:
olveEA



Project Number:	176433
Drawn By:	BRF

PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK

Completed by the Applicant:
(all that apply)

- NEW WATER CONNECTION(S)
 - NEW SEWER CONNECTION(S)
 - REUSE EXISTING WATER CONNECTION(S)
 - REUSE EXISTING SEWER CONNECTION(S)
 - TERMINATE EXISTING WATER CONNECTION(S)
 - TERMINATE EXISTING SEWER CONNECTION(S)
 - PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

*Completed by the PWSA:
ed for ALL approvals)*

WER

ed for "Private Construction of Public Facilities" ONLY)

RECORD NUMBER _____

Permit / Approval by PWSA are for the physical connection(s) to the water and/or sewer only. Responsibility for the design and work depicted by the drawings, including the design for the facilities, is by the Professional Engineer shown by the seal and signature to the drawing. The PWSA does not represent or warrant that the water supply to the facility is sufficient to support the design.

FIFTH AND DINWIDDIE DEVELOPMENT, LLC

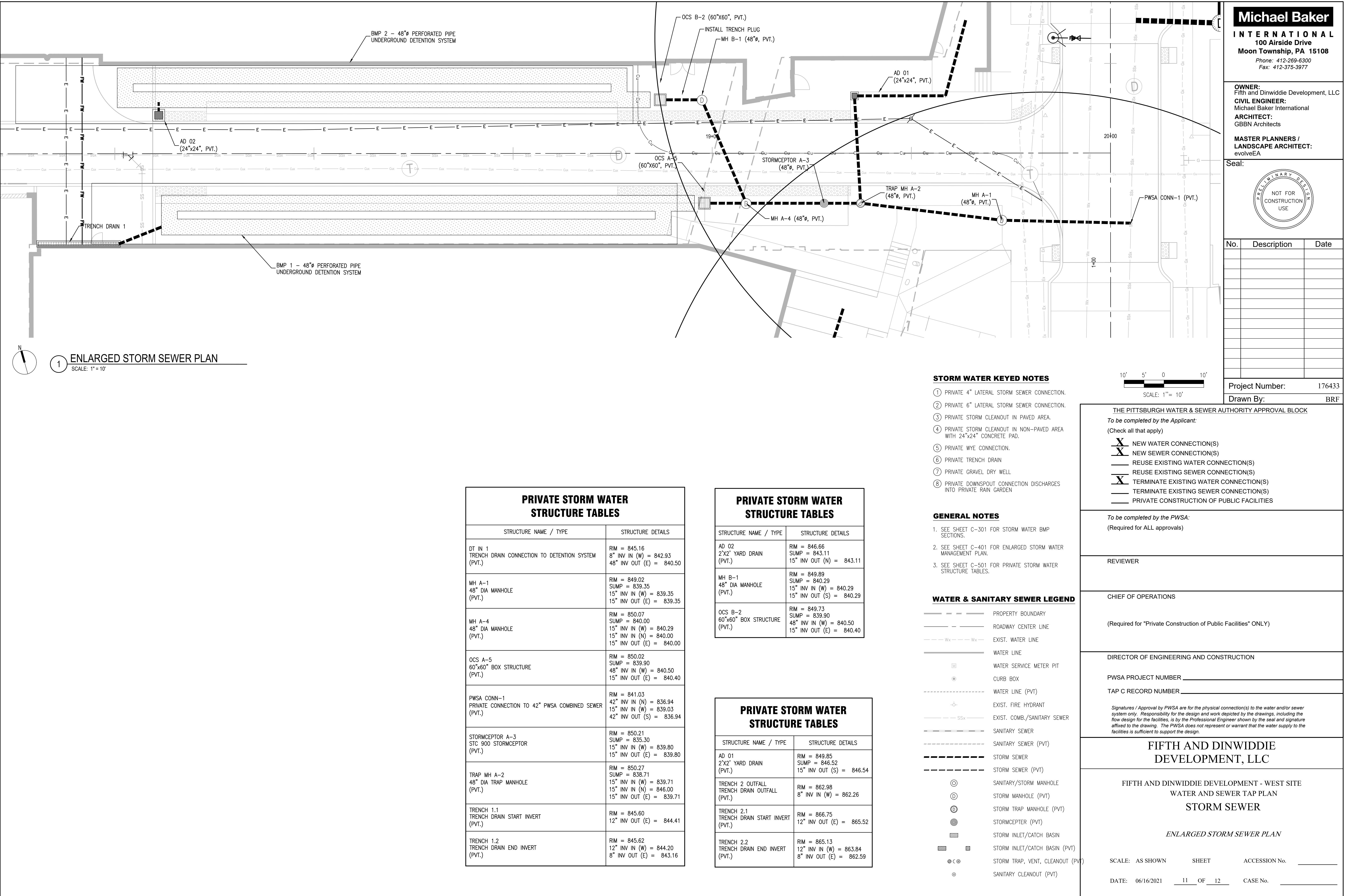
**FTH AND DINWIDDIE DEVELOPMENT - WEST SITE
WATER AND SEWER TAP PLAN**

WATER & SANITARY SEWER

SITE UTILITY DETAILS

: AS SHOWN SHEET **ACCESSION No**

06/16/2021 9 OE 12 CASE No.



Michael Baker

INTERNATIONAL

100 Airside Drive

Moon Township, PA 15108

Phone: 412-269-6300

Fax: 412-375-3977

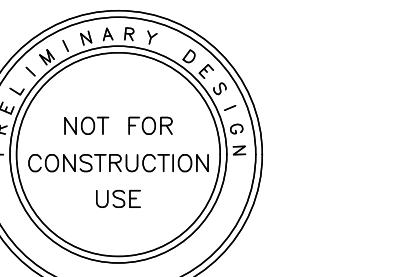
OWNER: Fifth and Dinwiddie Development, LLC

CIVIL ENGINEER: Michael Baker International

ARCHITECT: GBBN Architects

MASTER PLANNERS / LANDSCAPE ARCHITECT: evolveEA

Seal:



No. Description Date

Project Number: 176433

Drawn By: BRF

THE PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK

To be completed by the Applicant:
(Check all that apply)

- NEW WATER CONNECTION(S)
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- TERMINATE EXISTING WATER CONNECTION(S)
- TERMINATE EXISTING SEWER CONNECTION(S)
- PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by the PWSA:
(Required for ALL approvals)

REVIEWER

CHIEF OF OPERATIONS

(Required for "Private Construction of Public Facilities" ONLY)

DIRECTOR OF ENGINEERING AND CONSTRUCTION

PWSA PROJECT NUMBER _____

TAP C RECORD NUMBER _____

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FIFTH AND DINWIDDIE DEVELOPMENT, LLC

FIFTH AND DINWIDDIE DEVELOPMENT - WEST SITE
WATER AND SEWER TAP PLAN

STORM SEWER

STORM SEWER PROFILES

SCALE: AS SHOWN SHEET ACCESSION No. _____

DATE: 06/16/2021 12 OF 12 CASE No. _____

