



# GATEWAY

On Call. On Time. On Target.

C-41638-0000

June 2023

## RIDC Fairywood

Beechnut Drive, Mazette Road, and  
Broadhead Fording Road  
City of Pittsburgh  
Allegheny County, PA

### PREPARED FOR

RIDC  
611 William Penn Place, Suite  
600  
Pittsburgh, PA 15219-6926

### SUBMITTED BY

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SEWAGE FACILITIES  
PLANNING MODULE



A FULL-SERVICE CIVIL ENGINEERING FIRM

## **EXHIBITS**

EXHIBIT A. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities

EXHIBIT B. Project Narrative

EXHIBIT C. USGS Site Location Map

EXHIBIT D. Sewage Flow Calculations

EXHIBIT E. Flow Calculations (Signed and Sealed)

EXHIBIT F. Plot Plan

**EXHIBIT A.**

**Sewage Facilities Planning Module – Component 3 – Sewage Collection  
and Treatment Facilities**



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 RIDC Fairywood

2. Brief Project Description The project consists of demolition of existing pavements and utilities, and overlot grading to accommodate two pad ready lots. Major Amendment: The project will include installation of two new (2) warehouse buildings with adjacent loading docks, parking areas, utilities, storm sewer conveyance system, and two underground stormwater management facilities.

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

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

**C. SITE INFORMATION** (See Section C of instructions)

**Site (Land Development or Project) Name**

Fairywood

Site Location Line 1

Beechnut Drive, Mazette Road, and Broadhead Fording Road (2006 Broadhead Fording Road)

Site Location Line 2

Site Location Last Line -- City

Pittsburgh

State

PA

ZIP+4

15205

Latitude

40°26'55"N

Longitude

80°05'05"W

Detailed Written Directions to Site From I-376, follow Exit 64A, I-79N and PA-60 S/Steubenville Pike to Woodmere Drive in Pittsburgh. Continue to Woodmere Drive. Take Industrial Highway to Beechnut Drive.

Description of Site Development of warehouse building with adjacent loading docks, parking areas, utilities, storm sewer conveyance

**Site Contact (Developer/Owner)**

Last Name

Kanspedos

First Name

Kelsey

MI

Suffix

Phone

412-471-3939

Ext.

Site Contact Title

Site Contact Firm (if none, leave blank)

Regional Industrial Development Corporation (RIDC)

FAX

Email

kelseyk@ridc.org

Mailing Address Line 1

611 William Penn Place, Suite 600

Mailing Address Line 2

Mailing Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15219-6926

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

Last Name

Donnelly

First Name

Sean

MI Suffix

M P.E.

Title

Project Manager

Consulting Firm Name

The Gateway Engineers, Inc.

Mailing Address Line 1

100 McMorris Road

Mailing Address Line 2

Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15205

Country

United States

Email

sdonnelly@gatewayengineers.com

Area Code + Phone

412-921-4030

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.

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 38

Connections 1

Name of:

existing collection or conveyance system Broadhead Fording Road 48" Combination Sewer  
owner PWSA

existing interceptor Ohio River Interceptor (C-07)  
owner 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

NPDES Permit Number for existing facility 25984

Clean Streams Law Permit Number \_\_\_\_\_

Location of discharge point for a new facility. Latitude 40° 27' 00" N      Longitude 800459

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  
(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 Joe Fedor

Agent Signature [Signature]      Date 6-23-23

(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](http://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](http://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 \_\_\_\_\_.

## 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 15000 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	60255211	210893237	434000	3582000	1079100	3776850
Conveyance		646,000	181,000	212,000	213,000	244,000
Treatment	250,000,000	250,000,000	194,200,000	250,000,000	248,800,000	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.  YES  NO 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 PWSA

Name of Responsible Agent Robert Herring

Agent Signature  Robert Herring  
2023.06.15 16:02:28 -0400 Date 6/15/2023

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joe Fedor

Agent Signature Joe Fedor

Date 6-23-23

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

- a.  YES  NO 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 Joe Fedor

Agent Signature Joe Fedor

Date 6-23-23

**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 (IRSIS)) 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 sponser), 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.

Sean M. Donnelly, P.E.

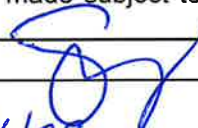
Name (Print)

Project Manager

Title

100 McMorris Blvd. Pittsburgh, PA 15205

Address



Signature

6/16/23

Date

(412) 889-6984

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 \$3,750 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.

$$\#38 \text{ _____ Lots (or EDUs) X } \$50.00 = \$ \underline{1,900}$$

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:

$$\begin{aligned} & \$ 1,500 \text{ per submittal (non-municipal)} \\ & \$ 500 \text{ per submittal (municipal)} \end{aligned}$$

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

$$\# \text{ _____ Lots (or EDUs) X } \$35.00 = \$ \text{ _____}$$

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:

$$\begin{aligned} & \$ 1,500 \text{ per submittal (non-municipal)} \\ & \$ 500 \text{ per submittal (municipal)} \end{aligned}$$



June 23, 2023

**Members of the Board**

Sylvia C. Wilson  
*Chair Person*

Shannah Tharp-Gilliam, Ph.D.  
Harry Readshaw  
Emily Kinkead  
Paul Klein  
Theresa Kail-Smith  
Darrin Kelly

Arletta Scott Williams  
*Executive Director*

Douglas A. Jackson, P.E.  
*Director  
Operations & Maintenance*

Michelle M. Buys, P.E.  
*Director  
Environmental Compliance*

Kimberly N. Kennedy, P.E.  
*Director  
Engineering & Construction*

Karen Fantoni, CPA, CGMA  
*Director  
Finance*

Michael Lichte, P.E.  
*Director  
Regional Conveyance*

Jeanne K. Clark  
*Director  
Governmental Affairs*

Joseph Vallarian  
*Director  
Communications*

Julie Motley-Williams  
*Director  
Administration*

Phil Cole  
*Chief Information Officer  
Information Technology*

Shannon L. McCullough  
Gateway Engineers  
100 McMorris Road  
Pittsburgh, PA 15205

**Re: RIDC Fairywood  
City of Pittsburgh – Allegheny County  
PA DEP Sewage Facilities Planning Module  
ALCOSAN Regulator Structure C-15-00**

Dear Ms. McCullough,

We have reviewed the Component 3 Planning Module for the referenced project to be located at the intersections of Beechnt Drive, Mazette Road, and Broadhead Fording Road – City of Pittsburgh. The project will generate a peak flow of 15,000 gpd in the ALCOSAN Chartiers Creek Interceptor and Woods Run Treatment Plant.

The capacity of the ALCOSAN C-15-00 regulator structure is 0.646 MGD. The estimated peak dry weather flow is approximately 0.212 MGD. Therefore, dry weather capacity exists for this connection. However, the Chartiers Creek Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated 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. If you have any questions regarding this matter, please contact me at 412-734-8365.

Sincerely,

**ALLEGHENY COUNTY SANITARY AUTHORITY**

  
Joe Fedor

**Attachment**

cc: C. Dean (w/o attachment) Robert Herring/PWSA (w/o attachment)  
D. Thornton (w/o attachment) Mahuba Iasmin/PADEP (w/o attachment)  
M. Lichte (w/o attachment) Gina Caliguri/ACHD (w/o attachment)

EXHIBIT B.

**Project Narrative**



## **Project Narrative**

RIDC & URA Fairywood  
Beechnut Drive, Mazette Road, and Broadhead Fording Road, 28<sup>th</sup> Ward, City of Pittsburgh

The proposed Fairywood project, owned by Regional Industrial Development Corporation (RIDC) and Urban Redevelopment Association (URA), consists of the construction of two (2) warehouse buildings, including adjacent loading docks, parking, two (2) underground storage facilities, and associated utilities/stormwater sewer conveyance system. These areas are intended for employee use only and will not be open to the public. The site currently contains pavements and utilities which will be demolished. The project site is 22.8 acres spanning two lots (Parcels 107-H-100 and 70-E-300).

The proposed floor plans and peak flows provided in Table 2-1 of PWSA's Developers Manual were utilized to determine the proposed peak sewage flow/water consumption. The existing flows are assumed to be zero as the existing lot is vacant. In the proposed floor plans, two buildings to be used as warehouse and office space will be constructed, which will total a net flow of 15,000 GPD or 38 EDUs. Refer to the enclosed calculation sheet and floor plans for details regarding the breakdown of the peak sewage flow/water consumption estimates.

*The proposed storm and sanitary connections will be separated on site and will wye into the PWSA-owned sewer.* The proposed sanitary lateral will tie into the existing PWSA-owned 48" combination gravity sewer in Broadhead Fording Road. The sewer connects into the Ohio River Interceptor (O-07) Sewer and then to ALCOSAN's treatment plant where it receives final treatment.

## **Flow Calculation Summary**

### Present Flows – Flow Monitoring

One month of flow monitoring was completed by Drnach Environmental in MH070E002 to determine the existing average and peak flows present in the sewer of interest. Flow monitoring began on 4/5/2023 and ended on 5/4/2023. **Analysis of the received data reports and existing average flow of 0.434 MGD and an instantaneous peak of 3.582 MGD.**

### Design Capacity

The existing sewer's average and peak hydraulic capacity were calculated by determining the existing slope of the sewer of interest, using Gateway Engineers' survey data, between the monitoring manhole (MH070E002) and the next upstream manhole (MH070E017), as well as the horizontal distance between the identified manhole lid locations. The sewer was analyzed under full flow conditions, and a peaking factor of 3.5 (combined sewer) was applied to obtain the peak hydraulic capacity per the PWSA Developer's Manual. **The average hydraulic capacity was calculated to be 60.255 MGD and the peak hydraulic capacity was calculated to be 210.893 MGD.**

### Five-Year Projected Flow

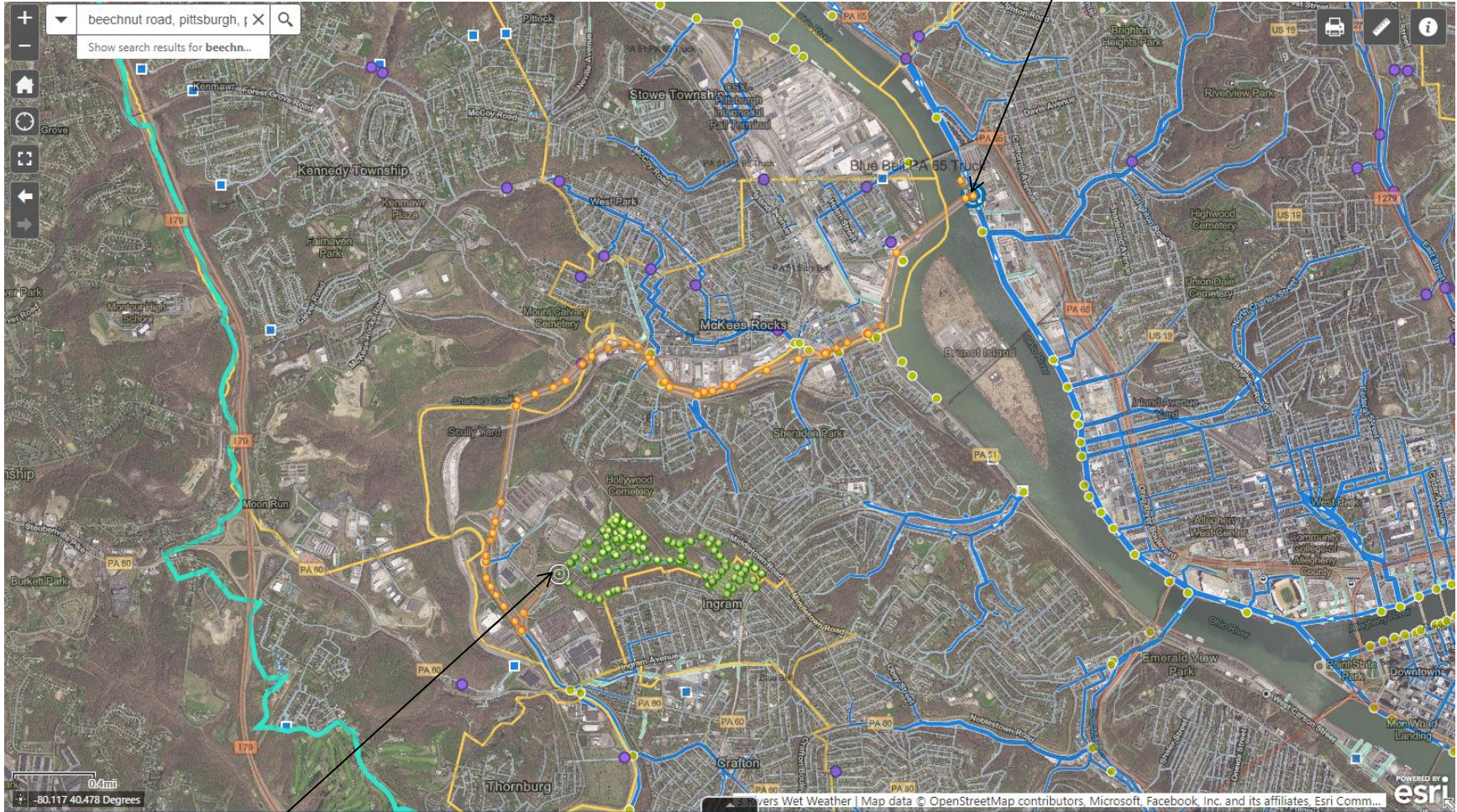
Using the equations in the PWSA Developer's Manual, the project flow, 15,000 GPD, was added to the present average and peak flows to determine the projected flow in five (5) years. **The projected average flow is estimated to be 1.079 MGD and the projected peak flow is estimated to be 3.777 MGD.** Since the five-year flows are less than the calculated design capacity of the sewer, the additional flow due to the construction of RIDC and URA's Fairywood development will not overload the sewer.

# Sewer Flow Mapping

RIDC Fairywood

Mazette Road, 28<sup>th</sup> Ward, City of Pittsburgh

ALCOSAN Treatment Plant

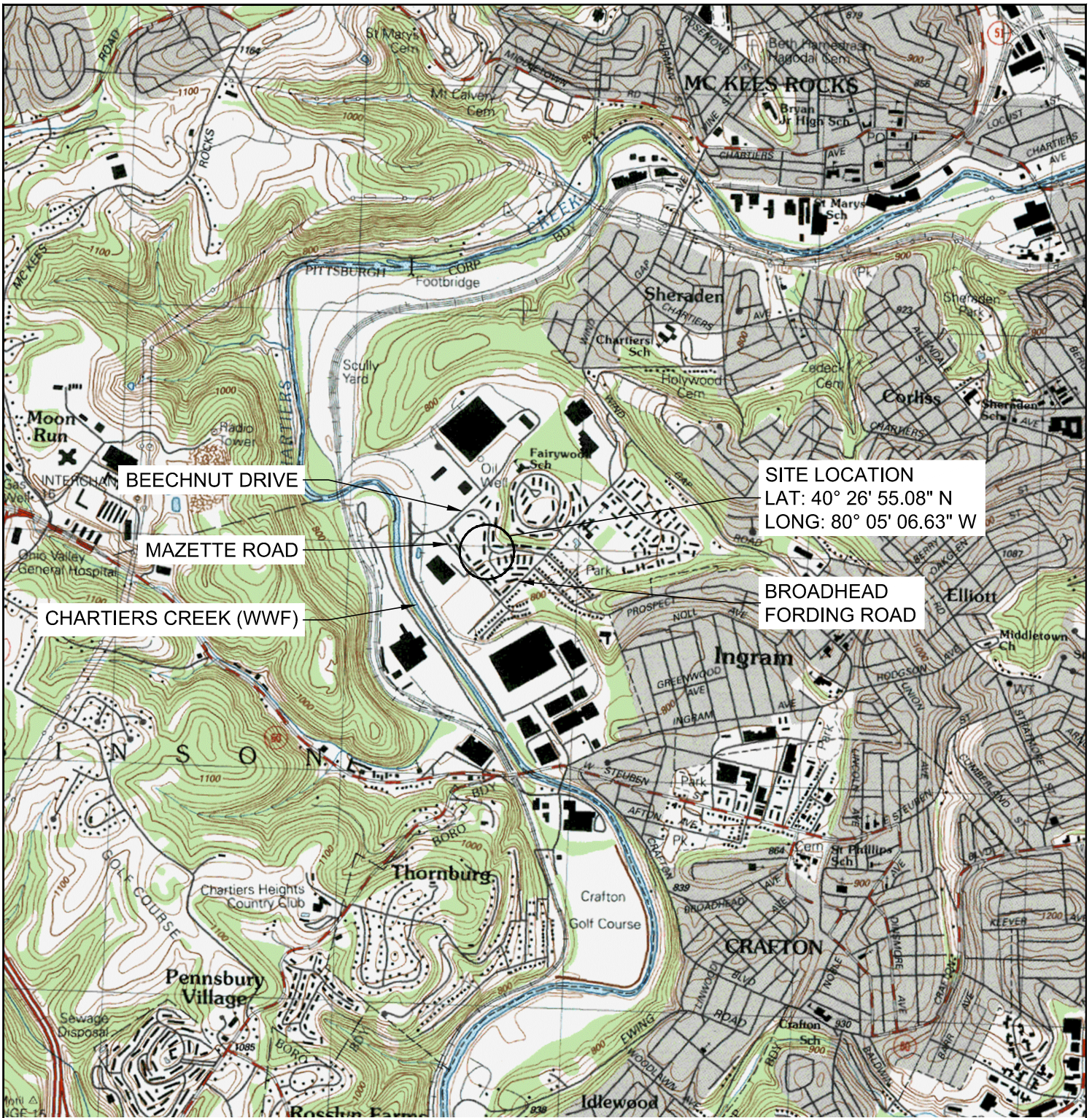


Source: 3 River's Wet Weather Sewer Atlas

Project Location

EXHIBIT C.

**USGS Site Location Map**



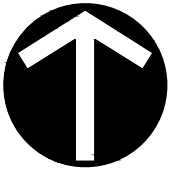
BEECHNUT DRIVE

MAZETTE ROAD

CHARTIERS CREEK (WWF)

SITE LOCATION  
 LAT: 40° 26' 55.08" N  
 LONG: 80° 05' 06.63" W

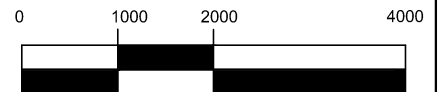
BROADHEAD  
 FORDING ROAD



NORTH

USGS SITE LOCATION MAP  
 PITTSBURGH WEST  
 QUADRANGLE

GRAPHIC SCALE



( IN FEET )  
 1 inch = 2,000 ft.

SITE LOCATION MAP

**RIDC & URA FAIRYWOOD**

MAZETTE ROAD  
 PITTSBURGH, PA 15205

PREPARED FOR:

**RIDC**

611 WILLIAM PENN PLACE, SUITE 600  
 PITTSBURGH, PA 15219

Date	No	REVISION RECORD
2022-11-23	08	RFI QUESTION
2022-11-30	09	LOADING DOCK & PATIO UPDATES
2022-12-12	10	RFI QUESTION 4
2023-02-02	11	DOMI COMMENTS
2023-02-02	12	UPDATED WATER METER LOCATION PER PA AMERICAN
2023-03-20	13	UPDATED SANITARY LAYOUT FOR BUILDING 1
2023-03-27	14	UPDATED PIPE RUN INLET 20 TO MH 7 & SANITARY LINE FOR BUILDING 1
2023-05-11	15	BULLETIN #1 - ADDED FOUNDATION DRAINS



**GATEWAY**<sup>®</sup>

The Gateway Engineers, Inc.  
 Full-Service Civil Engineering & Surveying  
 Pittsburgh, PA  
 gatewayengineers.com 855-634-9284

Project Number: C-41638-0000  
 Drawing Scale: 1" = 2000'  
 Date Issued: AUGUST 2022  
 Index Number: \_\_\_\_\_  
 Drawn By: ASN  
 Checked By: SMD  
 Project Manager: SMD

USGS

EXHIBIT D.

**Sewage Flow Calculations**

**Anticipated Sewage Flow Calculations**  
RIDC & URA Fairywood  
Broadhead Fording Road, 28<sup>th</sup> Ward, City of Pittsburgh

**Existing Conditions**

**Summary:**

The existing lot is currently vacant.

---

**Proposed Conditions**

*Warehouse & Office Buildings*

**Summary:**

One building utilized as warehouse/office space will be constructed. The building will be 150,000 sf. with warehouse and office space proposed evenly in both buildings.

**Flow Calculations:**

2015 IBC Table 1004.1.2 Maximum Floor Area Allowance per Occupant

- Warehouse: 500 gross SF/occupant
- Business Area: 100 gross SF/occupant

PWSA Table 3.1 Water Use and Sanitary Flow Estimate

- Warehouse: 50 GPD/employee
- Office: 10 GPD/employee

Calculations

- Warehouse:  $[(75,000 \text{ SF}) / (500 \text{ SF/occupant})] \times (50 \text{ GPD/occupant}) = 7,500 \text{ GPD}$
- Office:  $[(75,000 \text{ SF}) / (100 \text{ SF/occupant})] \times (10 \text{ GPD/occupant}) = 7,500 \text{ GPD}$

Total Proposed Peak Sanitary Flow = **15,000 GPD**

---

**Net Flow**

Net Sanitary Flow = Total Proposed Peak - Total Existing Peak

Net Sanitary Flow = 15,000 GPD – 0 GPD = **15,000 GPD**

EXHIBIT E.

**Flow Calculations (Signed and Sealed)**



# Channel Report

## Sewer Design Capacity - Broadhead Fording - MH070E002

### Circular

Diameter (ft) = 4.00

Invert Elev (ft) = 756.54

Slope (%) = 5.16

N-Value = 0.013

### Calculations

Compute by:

Known Depth (ft)

Known Depth

= 4.00

FULL FLOW

### Highlighted

Depth (ft) = 4.00

Q (cfs) = 326.29

Area (sqft) = 12.57

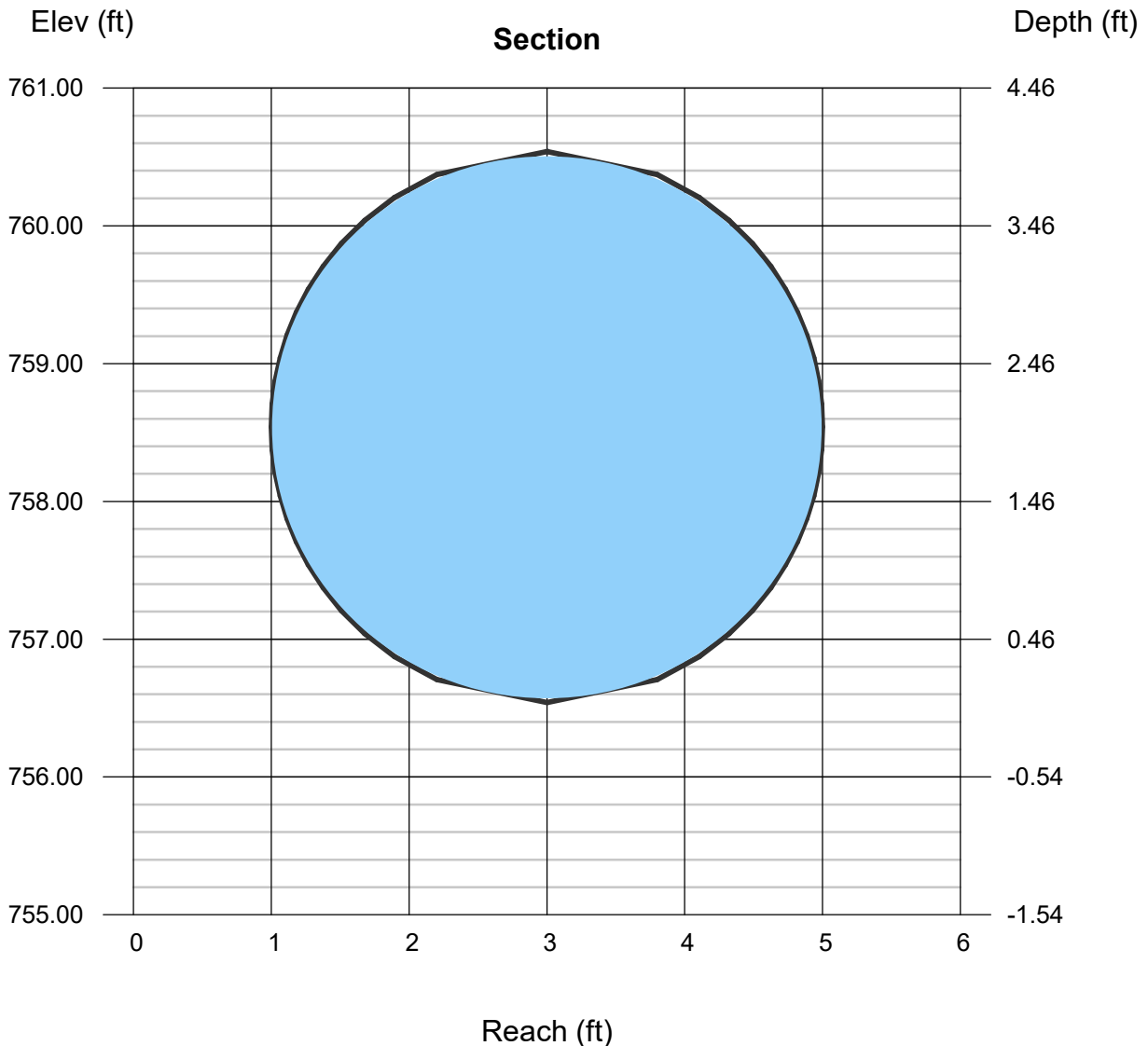
Velocity (ft/s) = 25.97

Wetted Perim (ft) = 12.57

Crit Depth, Yc (ft) = 3.98

Top Width (ft) = 0.00

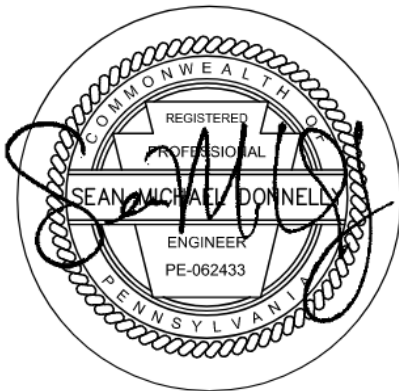
EGL (ft) = 14.48



Fairywood - MH070E002		
Sewage Capacity Calculations		
Pipe Diameter (per Flow Monitoring Report) =	48	in
Upstream Invert Elevation (per Gateway Survey) =	764.12	
Downstream Invert Elevation (per Gateway Survey) =	756.54	
Pipe Length (per Gateway Survey) =	147	ft
Slope =	5.16	%
Mannings n =	0.013	(RCP)
Design Capacity		
Sewer Type (Combined/Separate)	Combined	
Peaking Factor	3.5	
Peak Hydraulic Capacity (Using Mannings Equation full-flow)	326.3	cfs
	210,893,237	GPD
Average Hydraulic Capacity (Peak Capacity divided by Peaking Factor)	60,255,211	GPD
Present Flows - MH070E002		
Present Average Flows (Flow data, refer to "Data Analysis" spreadsheet)	0.434	MGD
	434,000	GPD
Present Peak Flows (Flow data, refer to "Data Analysis" spreadsheet)	3.582	MGD
	3,582,000	GPD
Project Flow		
Project Flow	15,000	GPD
Projected Flows		
Projected Peak [(Present Peak Flow + Project Flow) x 1.05]	3,776,850	*GPD
Projected Average (Projected Peak Flow divided by Peaking Factor)	1,079,100	*GPD

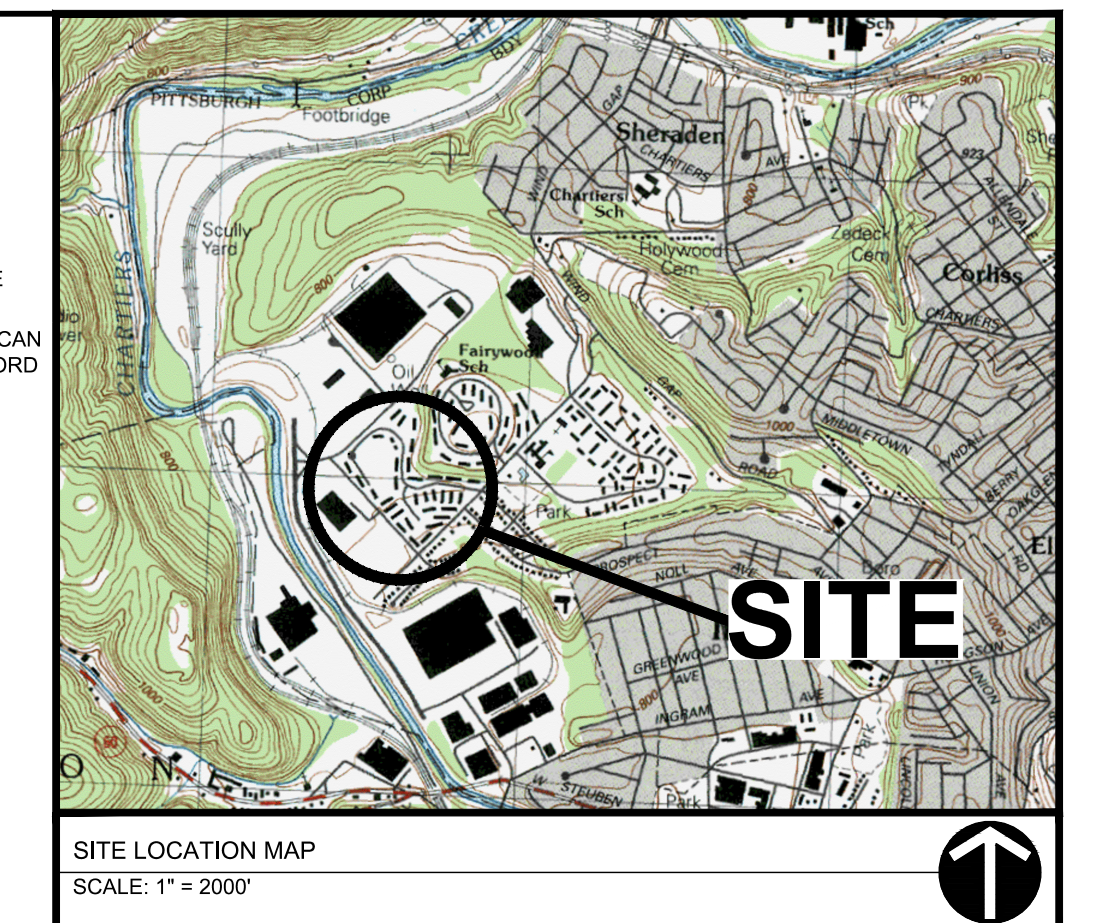
\*Projected Flows are less than the Design Capacity

Input  
 Output

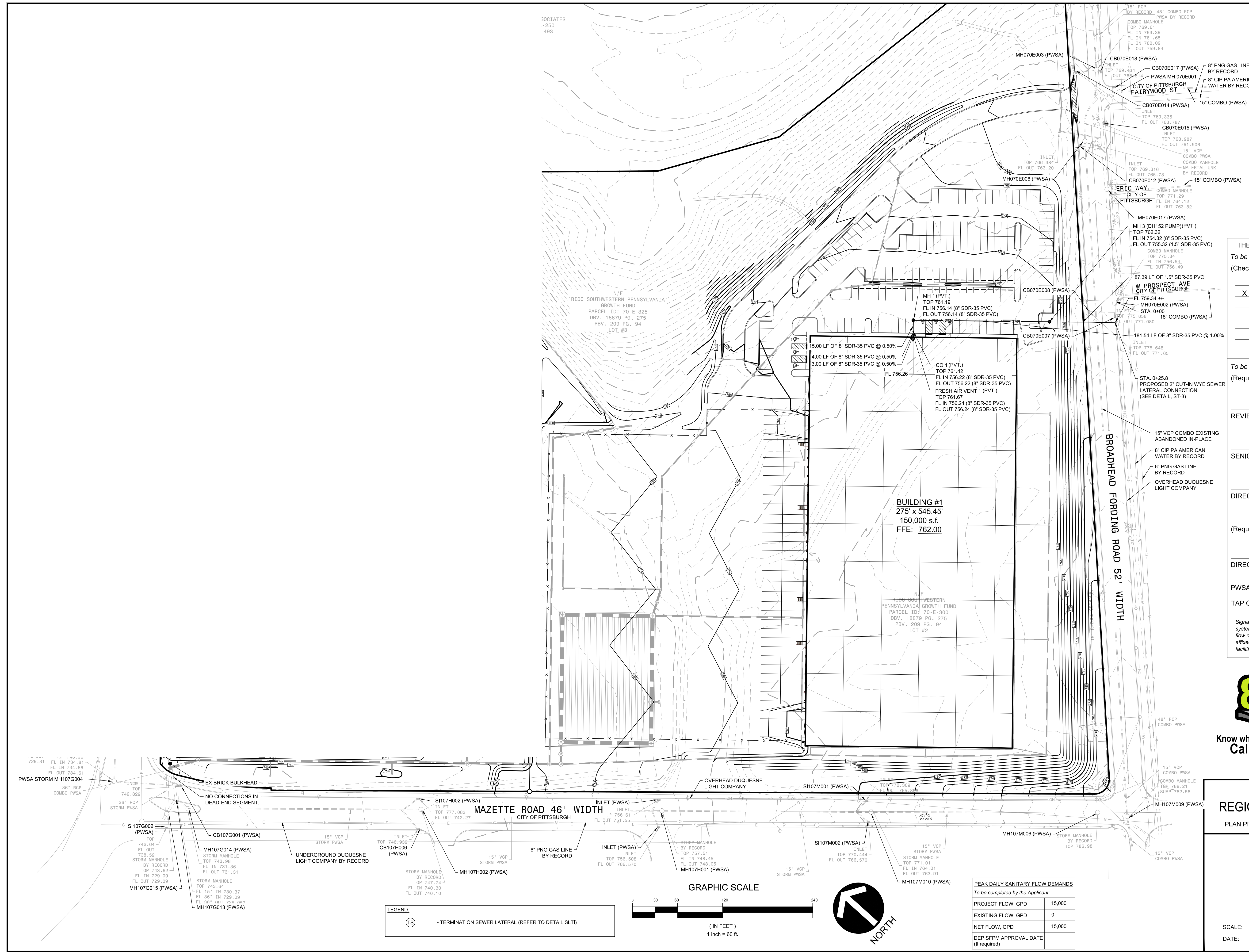


**EXHIBIT F.**

**Plot Plan**



SITE LOCATION MAP  
SCALE: 1" = 200'



- 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, DEPT. OF ENGINEERING AND CONSTRUCTION

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

DIRECTOR OF OPERATIONS

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

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

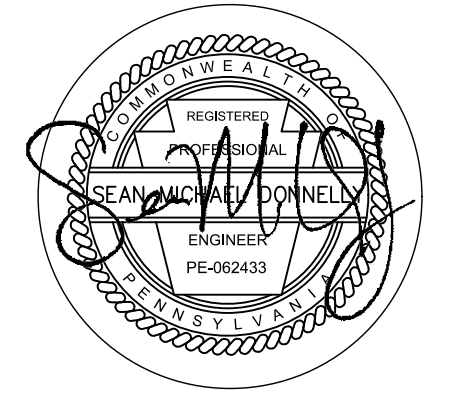
PWSA PROJECT NUMBER

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.



Know what's below.  
Call before you dig.  
Serial No. 20220311553



ENGINEER

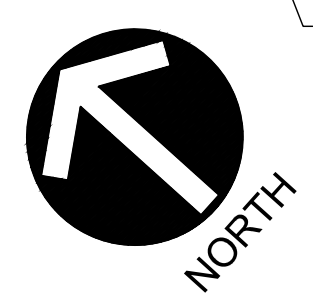
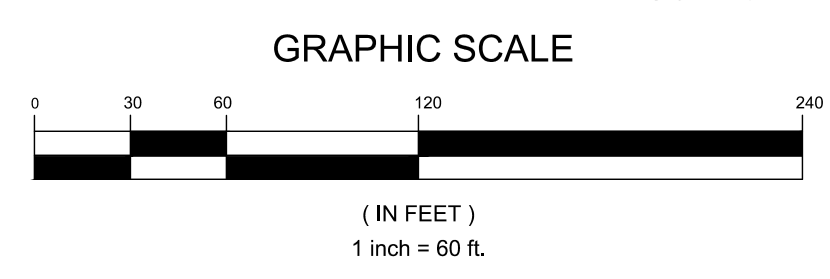
**RIDC & URA FAIRYWOOD REGIONAL INDUSTRIAL DEVELOPMENT GROUP**  
PLAN PREPARER: THE GATEWAY ENGINEERS, INC. (CONTACT: SEAN DONNELLY)  
412-409-2288 SDONNELLY@GATEWAYENGINEERS.COM

**SANITARY TAP IN PLANS**

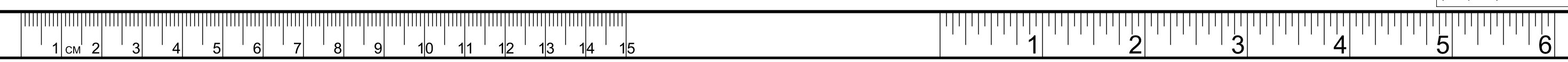
**MAZETTE ROAD  
PITTSBURGH, 15205**

SCALE: 1"=60' SHEET NO. 1 OF 2 ACCESSION NO. \_\_\_\_\_  
DATE: MAY 2023 CASE NO. \_\_\_\_\_

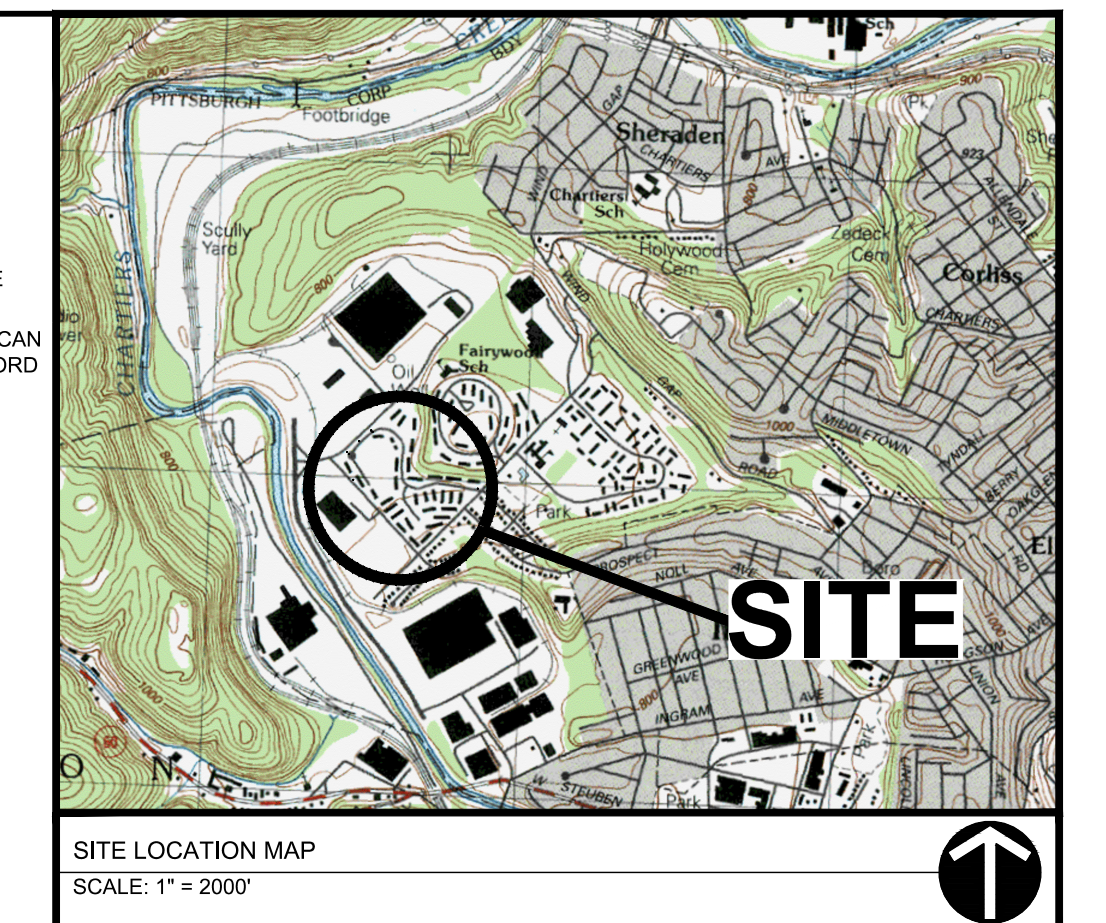
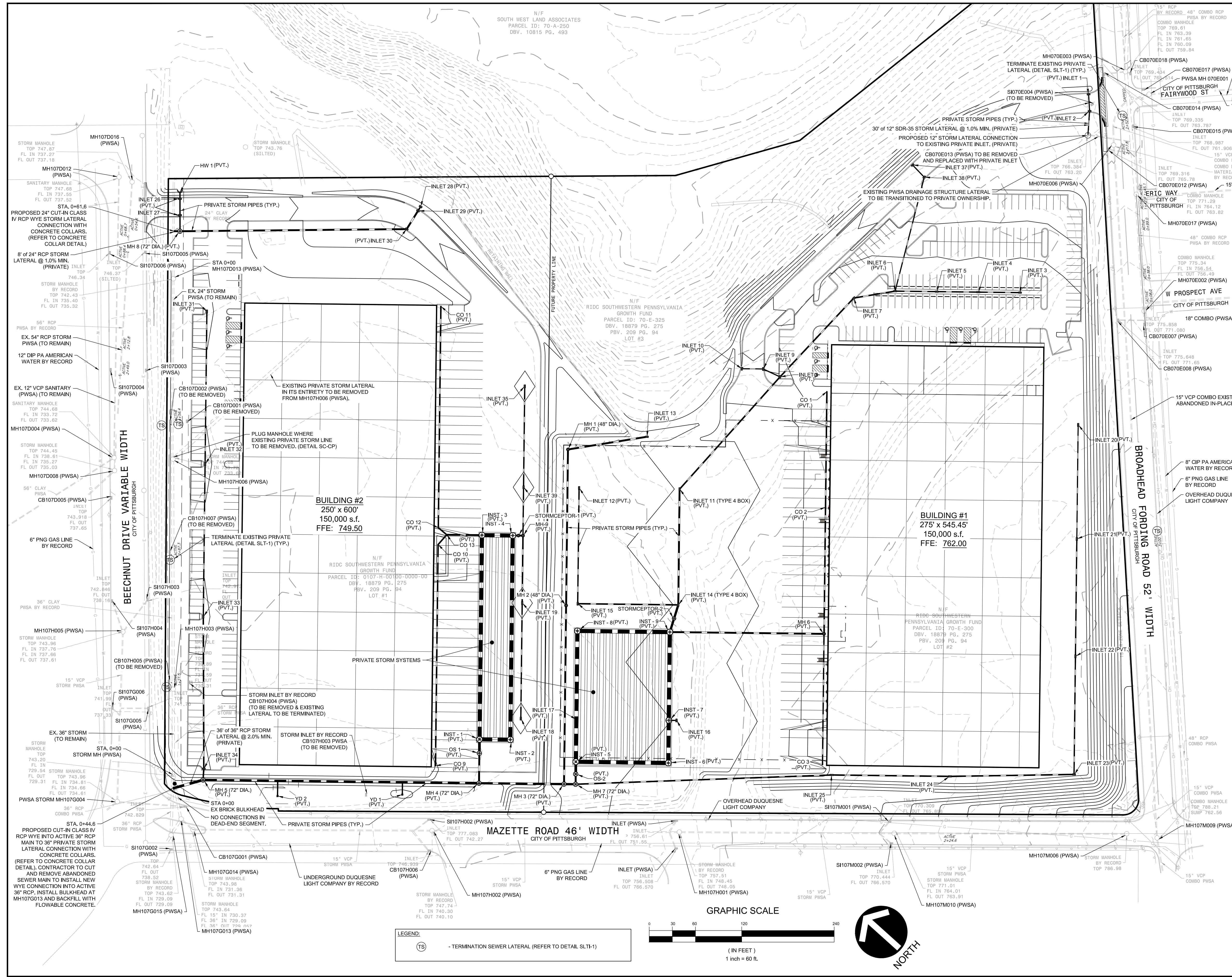
PEAK DAILY SANITARY FLOW DEMANDS	
To be completed by the Applicant:	
PROJECT FLOW, GPD	15,000
EXISTING FLOW, GPD	0
NET FLOW, GPD	15,000
DEP SFPM APPROVAL DATE (if required)	



LEGEND:  
Ⓣ - TERMINATION SEWER LATERAL (REFER TO DETAIL SLT1)



E:\p\1\Projects\10204\_1636\_ridc\_ura\_fairywood-0000\DWG\02-Sheet\PWSA\TAP In Plan - Sewer Building #1.dwg  
 25/05/2023 2:38 PM Quincy R. Stamer, E.I.T.  
 Save Date: 5/22/2023 2:35 PM



**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, DEPT. OF ENGINEERING AND CONSTRUCTION

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION

*[Signature]*  
 Director of Operations

DIRECTOR OF OPERATIONS

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

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION

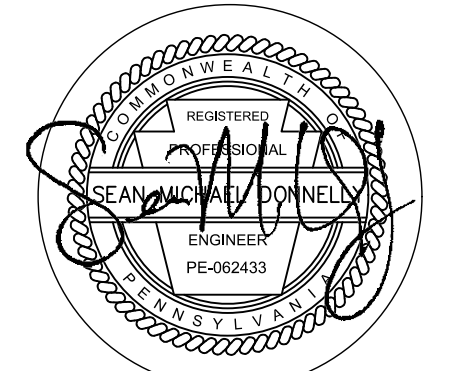
PWSA PROJECT NUMBER DEW-221-0123

TAP C RECORD NUMBER 3052

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.



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ENGINEER

**RIDC & URA FAIRWOOD**  
**REGIONAL INDUSTRIAL DEVELOPMENT GROUP**  
 PLAN PREPARER: THE GATEWAY ENGINEERS, INC. (CONTACT: SEAN DONNELLY)  
 412-409-2288 SDONNELLY@GATEWAYENGINEERS.COM

**STORM SEWER TAP IN PLANS**

**MAZETTE ROAD**  
**PITTSBURGH, 15205**

SCALE: 1"=60' SHEET NO. 1 OF 2 ACCESSION NO. \_\_\_\_\_  
 DATE: JANUARY 2023 CASE NO. \_\_\_\_\_

C-41638-0000

DWG. NO. -

E:\p\p\Projects\102004\102004\_102004\_102004\_SheetPWSA\Tap In Plans - Storm Sewer.dwg  
 Save Date: 01/20/23 2:55 PM  
 User: R. Stamer, E.I.T.