# Sewage Facilities Planning Module Application Package

for

## FIFTH AVENUE TOWNHOMES

City of Pittsburgh Allegheny County, PA

May 10, 2018

Amended January 28, 2019

Final March 1, 2019

Prepared for:

RRG 5135, LLC 2501 LIBERTY AVENUE #2E PITTSBURGH, PA 15222

Prepared by:

FAHRINGER, McCARTY, GREY, INC. LANDSCAPE ARCHITECTS & ENGINEERS 1610 Golden Mile Highway Monroeville, PA 15146 (724) 327-0599

Job No. 5060

#### **Table of Contents**

- ♦ Sewage Facilities Planning Module Component 3 (Form 3800-FM-WSFR0353)
- Section C Availability of Drinking Supply
  - Availability Letter from PWSA dated January 8, 2018
- ❖ Section F Project Narrative
  - Written Narrative
  - Location Map
- Section G Proposed Wastewater Disposal Facilities
  - Item 3. Plot Plans Sanitary Sewer (Sheet 1 of 1)
  - Item 3. Plot Plans Water Connections (Sheet 1 of 1)
  - Item 7. Protection of Rare, Endangered or Threatened Species
    - o Pennsylvania Natural Diversity Inventory
- ❖ Section H Project Alternatives Analysis
  - Written Narrative
- ❖ Section J Consistency Determination
- Consistency Components
  - Component 4A Municipality Planning Agency Review
  - Component 4C County Health Agency Review

 SEWAGE FACILITIES	PLANNING MODULE -
	COMPONENT 3

.

#### **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 **E**.

#### PROJECT INFORMATION (See Section A of instructions)

- Project Name FIFTH AVENUE TOWNHOMES
- 2. Brief Project Description

THE PROJECT PROPOSES TO CONSTRUCT SIX RESIDENTIAL TOWNHOMES.

B. CLIENT (MUNICIPALITY) INFO	RMATION (S	See Section B	of instruction	ns)			
Municipality Name	County		City		Boro		Twp
PITTSBURGH	ALLEGH	ENY	X				
Municipality Contact Individual - Last Name	First Name		МІ	Suffix	Title		
Additional Individual Last Name	First Name		MI	Suffix	Title		
SMUTS	Marken	)			ASSEC.	MS	
Municipality Mailing Address Line 1 PENN LIBERTY PLAZA, 1200 PE	NN AVENUE	Mailing Addr	ress Line 2				
Address Last Line - City			State	ZIP	+4		
PITTSBURGH			PA	152	222		
Area Code + Phone + Ext. 412-255	FAX (optional) 412-393-0		Email	(optional	)		

C. SITE INFORMATION (Se	e Section C of instruction	ons)			
Site (Land Development or Project FIFTH AVENUE TOWNHOMES	) Name				
Site Location Line 1 5135 FIFTH AVENUE		Site Location	Line 2		
Site Location Last Line City PITTSBURGH	State PA		232	Latitude	Longitude
Detailed Written Directions to Site SITE IS LOCATED AT 5135	5 FIFTH AVENUE	, PITTSBUR	RGH, PE	NNSYLVANIA	
Description of Site EXISTING SITE CONTAINS AN UBUILDING AND / OR RESIDENCE	NOCCUPIED BUILDIN	NG THAT WAS	FORMERL	Y A PROFESSION	AL OFFICE
Site Contact (Developer/Owner) Last Name CASEY	First Name JOSEPH	MI R	Suffix	Phone	Ext.
Site Contact Title		Site Contact Fig RRG 5135,		, leave blank)	
FAX		Email			
Mailing Address Line 1 2501 LIBERTY AVENUE #2B		Mailing Addres	s Line 2		
Mailing Address Last Line City PITTSBURGH		State PA	<b>ZIF</b> 15	2+4 222	
D. PROJECT CONSULTAN	T INFORMATION (	See Section D	of instructi	ions)	
Last Name ALMETER	First Na BRIA			IM J	Suffix
Title PROJECT MANAGER	Consult FAHR	ting Firm Name INGER,Mc(	CARTY,	GREY, INC.	
Mailing Address Line 1 1610 GOLDEN MILE HIGHWA		Mailing Addres	s Line 2		
Address Last Line – City MONROEVILLE	State PA	<b>ZIP+</b> 151	4 .46	Country USA	
Email Area ALMETER@FMGINC.US 724	Code + Phone .327.0599	Ext.		Area Code 724.733	
E. AVAILABILITY OF DRIN	KING WATER SUF	PLY			
The project will be provided with Individual wells or cistems.  A proposed public water sure if existing public water sure from the water company st	upply. upply. upply is to be used, proving that it will serve the	ride the name one project.	of the wate	r company and atta	
Name of water company:	MINISTRAL CHINA VA	LAW BOOKENING	D SEWE	R AUTHORITY	gergleding was
F. PROJECT NARRATIVE				and in attached	
A narrative has been preparative has been preparative has been preparative.  The applicant may choose					of the instructions

3.	PR	OPO	DSED WASTEWATER DISPOSAL FACILITIES (See Section G of instructions)
	serv	/ed.	Il boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU This information will be used to determine consistency with Chapter 93 (relating to wastewater treatment ents).
	1.	CC	DLLECTION SYSTEM
		a.	Check appropriate box concerning collection system
			New collection system Pump Station Force Main
			Grinder pump(s)
		Çle	ean 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 6
			Connections 1
			Name of: existing collection or conveyance system 15" COMBINED SEWER IN 5TH AVE
			owner THE PITTSBURGH WATER AND SEWER AUTHORITY
			existing interceptor
			owner
	2.	WA	STEWATER TREATMENT FACILITY
		ser 92	eck all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's ved. This information will be used to determine consistency with Chapter(s) 91 (relating to general provisions) (relating to national Pollution Discharge Elimination System permitting, monitoring and compliance) and 93 ating 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 PA0025984
			Clean Streams Law Permit Number
			Location of discharge point for a new facility. Latitude 80°02'44" Longitude 80°02'44"
		b.	The following certification statement must be completed and signed by the wastewater treatment facility permitee or their representative.
			As an authorized representative of the permittee, I confirm that the (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 / Wall D. Luller
			Agent Signature Date 7/12/19
			(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.
- 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.
- 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.
- Flood plains or Flood prone areas, floodways, (Federal Flood Insurance Mapping)
- m. Prime Agricultural Land.
- n. Any other facilities (pipelines, power lines, etc.)
- Orientation to north.
- 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.
- Topographic lines with elevations when a land based system is proposed

#### 4. WETLAND PROTECTION

5.

6.

	YES	NO	
a.		X	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.		X	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.
PR	ME A	GRICI	JLTURAL LAND PROTECTION
YE	S N	10	
	2	₹	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?
HIS	TORK	C PRE	SERVATION ACT
YE	s N	10	
	5	€	Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 <i>Implementation of the PA State History Code</i> (available online at the DEP Web site at <a href="https://www.dep.state.pa.us">www.dep.state.pa.us</a> , 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.

		PRO eck or	TECTION OF RARE, ENDANGERED OR THREATENED SPECIES ne:
	X	sea	e "Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from march of the PNDI database and all supporting documentation from jurisdictional agencies (when necessary are attached.
		(PN atta mo and	ompleted "Pennsylvania Natural Diversity Inventory (PNDI) Project Planning & Environmental Review Form, iDI Form) available at <a href="www.naturalheritage.state.pa.us">www.naturalheritage.state.pa.us</a> , and all required supporting documentation is ached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning dule will be considered incomplete upon submission to the Department and that the DEP review will not begin that processing of my planning module will be delayed, until a "PNDI Project Environmental Review Receipt" all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.  Applicant or Consultant Initials
Н,	AL	TERI	NATIVE SEWAGE FACILITIES ANALYSIS (See Section H of instructions)
	X		alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions Ils attached to this component.
			applicant may choose to include additional information beyond that required by Section H of the attached ructions.
I.	CO Sec	MPL tion I	IANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS (See of instructions) (Check and complete all that apply.)
	1.	Wa	ters 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.	Pen	nsylvania 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.	inte	rstate 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	Trib	utaries 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:
			Initials of Responsible Agent (See Section G 2.b)
		3	See Special Instructions (Form 3800-FM-WSFR0353-1) 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 2400 gpc
- 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 Perr 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	1,243,447	4,527.063	453,831	1,583,164	477,169	1,670,092	M
Conveyance		31.2 met	8.81mg	10.8mm	8.89 mut	10.81 mg	
Treatment		250 mit	1948m	250	194.8mg	25000	1

Collection and Conveyance Facilities

b.

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.

Collection System  Name of Agency, Authority, M	unicipality PWSA				
Name of Responsible Agent	unicipality	DIRECT	My of	ENG NEER ING	
Agent Signature		Date	1/18	/19	

J. CHAPTER 94 CONSISTENCY DETERMINATION (Continued)
c. Conveyance System
Name of Agency, Authority, Municipality
Name of Responsible Agent had to Lichte
Agent Signature
Date 2   19
4. Treatment Facility
The questions below are to be answered by a representative of the facility permittee in coordination with th information in the table and the latest Chapter 94 report. The individual signing below must be legally authorize to make representation for the organization.
YES NO
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 CAI 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 ACCOAU
Name of Responsible Agent
Agent Signature
Date 7/12/19
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.
<ul> <li>2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.</li> </ul>
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.
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.

	I. DET	AILED HYDROGEOLOGIC STUDY (See Section N of instructions)
	☐ Th	e detailed hydrogeologic information required in Section N. of the instructions is attached.
0.	SEW	AGE MANAGEMENT (See Section O of instructions)
		pletion by the developer(project sponser), 4-5 for completion by the non-municipal facility agent and ation by the municipality) 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.
	to assi	respond to the following questions, attach the supporting analysis, and an evaluation of the options available ure long-term proper operation and maintenance of the proposed non-municipal facilities. If No, skip the der of Section O.
2.	Project	t Flows gpd
	Yes	No
3.		Is the use of nutrient credits or offsets a part of this project?
		attach a letter of intent to puchase the necessary credits and describe the assurance that these credits and will be available for the remaining design life of the non-municipal sewage facility;
(For	comple	tion by non-municipal facility agent)
4.	Collect	ion and Conveyance Facilities
		restions below are to be answered by the organization/individual responsible for the non-municipal collection inveyance facilities. The individual(s) signing below must be legally authorized to make representation for the zation.
	-	No  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?
		es, this sewage facilities planning module will not be accepted for review by the municipality, delegated local ncy and/or DEP until this issue is resolved.
	to in	o, a representative of the organization responsible for the collection and conveyance facilities must sign below idicate that the collection and conveyance facilities have adequate capacity and are able to provide service to proposed development in accordance with Chapter 71 §71.53(d)(3) and that this proposal will not affect that us.
	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

### 3800-FM-BPNPSM0353 1/2013 Form

5.	Tre	atment	Facility						
	The questions below are to be answered by a representative of the facility permittee. The individual signing to 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 agenc	, this pla y and/or l	nning module for sewage facilities will not be reviewed by the municipality, delegated local DEP until this issue is resolved.					
		capac	ity and is	ment facility permittee must sign below to indicate that this facility has adequate treatment able to provide wastewater treatment services for the proposed development in accordance 3) and that this proposal will not impact that status.					
	b.	Name	of Facility						
				nsible Agent					
(For	com	oletion	by the m	unicipality)					
6.		The Si	ELECTEI unicipal fa	O OPTION necessary to assure long-term proper operation and maintenance of the proposed acilities is clearly identified with documentation attached in the planning module package.					
P.	PU	BLIC I	NOTIFIC	ATION REQUIREMENT (See Section P of instructions)					
	new deve loca appl notif	spaper elopmer I agend icant or y the m	of genera at projects by by pub an application	completed to determine if the applicant will be required to publish facts about the project in a all circulation to provide a chance for the general public to comment on proposed new land at the control of the provided by the applicant or the applicant's agent, the municipality or the dication in a newspaper of general circulation within the municipality affected. Where an ant's agent provides the required notice for publication, the applicant or applicant's agent shall yor local agency and the municipality and local agency will be relieved of the obligation to a content of the publication notice is found in Section P of the instructions.					
	To o	complete cation is	e this sec s required	ction, each of the following questions must be answered with a "yes" or "no". Newspaper I if any of the following are answered "yes".					
	Y	es No							
	1. [			ne project propose the construction of a sewage treatment facility?					
	2.		per day						
	3. [	_ <u>×</u>	of \$100	·					
	4. [	_ X	within t	e project lead to a major modification of the existing municipal administrative organizations ne municipal government?					
	5. [		Will the municip	e project require the establishment of <i>new</i> municipal administrative organizations within the real government?					
	6. [	X	Will the	project result in a subdivision of 50 lots or more? (onlot sewage disposal only)					

P.	PI	UBLIC	NOTIFICATION REQUIREMENT	cont'd. (See Section P of instructions)
	7. 8.			nge in established growth projections?  Ind use pattern than that established in the municipality's Official
	9. 10.			ge volume onlot sewage disposal systems (Flow > 10,000 gpd)? of a conflict between the proposed alternative and consistency 5)(i), (ii), (iii)?
	11.		Will sewage facilities discharge into h	igh quality or exceptional value waters?
		Attach	ed is a copy of:	
			public notice,	
		_	comments received as a result of the notion	ce,
		∐ the	municipal response to these comments.	
		No cor	nments were received. A copy of the pub	lic notice is attached.
Q.	FA	LSE S	WEARING STATEMENT (See Sec	tion Q of instructions)
bel	ef. I	underst	statements made in this component are and that false statements in this comporn falsification to authorities.	true and correct to the best of my knowledge, information and nent are made subject to the penalties of 18 PA C.S.A. §4904
BR	IAN	J. AI	METER - AGENT FOR OWNER	Buch Chule
-			Name (Print)	Signature
		T MAN		05/10/7018 Date
161	.0 GO	LDEN M	Title ILE HWY MONROEVILLE PA 15146	(724) 327-0599
			Address	Telephone Number
R.	RE	VIEW	FEE (See Section R of instructions)	
pro mo "de	ject ai dule p legate	nd invoice prior to seed local	ce the project sponsor <b>OR</b> the project sp submission of the planning package to D	lanning module review. DEP will calculate the review fee for the consor may attach a self-calculated fee payment to the planning EP. (Since the fee and fee collection procedures may vary if a project sponsor should contact the "delegated local agency" to
X	I requ	rest DE s review	P calculate the review fee for my project of my project will not begin until DEP rec	and send me an invoice for the correct amount. I understand eives the correct review fee from me for the project.
	instru PA, I receiv	ictions. DEP". I ves the	I have attached a check or money order i nclude DEP code number on check. I fee and determines the fee is correct. If	g the formula found below and the review fee guidance in the n the amount of \$ payable to "Commonwealth of understand DEP will not begin review of my project unless it the fee is incorrect, DEP will return my check or money order, and DEP review will NOT begin until I have submitted the correct
	lot ar subdi	nd is the vision o	only lot subdivided from a parcel of la	review fee because this planning module creates <b>only</b> one new and as that land existed on December 14, 1995. I realize that all disqualify me from this review fee exemption. I am furnishing my fee exemption.
	Coun	ty Reco	rder of Deeds for ALLEGHENY	County, Pennsylvania
	Deed	Volume	10421	Book Number
	Page	Numbe	r 161	Date Recorded

R.	REVIEW FEE (continued)	N
Form	nula:	

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.

#\_\_\_\_\_ Lots (or EDUs) X \$50.00 = \$ \_\_\_\_\_

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:

#\_\_\_\_\_ Lots (or EDUs) X \$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)

_SECTION C -	AVILABILITY	OF DRINKING SUPP	LY
 _SECTION C -	AVILABILITY	OF DRINKING SUPP	L

s ·



January 8, 2018

Mr. Sean Naylor Red Swing Group One Monroeville Center 3824 Northern Pike, Suite 800 Monroeville, PA 15146

RE:

Water and Sewer Availability

PGH Developers

5127-5137 5th Avenue - 15232

Dear Mr. Naylor:

In response to your inquiry on 1/2/2018 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

We wish to advise you that, if it is your desire to tap our water and sewer mains for service, your plans and Water and Sewer Use Application must be approved by the Authority, complete with detail showing the type of connection, meter, and backflow device before any work is performed.

Please note that the Authority in no way guarantees that the available lines have the capacity or pressure adequate for your project's needs. It is the responsibility of the project developer, design consultant, and/or architects to determine, at their expense, the adequacy of the existing water system to fulfill their needs.

If you plan to make modifications to the water or sewer system, please submit design drawings to The Pittsburgh Water and Sewer Authority for approval.

Refer to the Pittsburgh Water and Sewer Authority (PWSA) website (www.pgh2o.com) for the complete "Procedure Manual for Developers". All tap in plans and applications must be submitted according to the manual.

If you have any questions please feel free to contact me at (412) 255-0841. Thank you.

Sincerely

Michelle E. Carney

Engineering Technician III

MEC

cc: PWSA File

Penn Liberty Plaza I 1200 Penn Avenue Pittsburgh PA 15222 Info@pgh2o.com T 412.255.2423 F 412.255.2475 www.pgh2o.com
@@pgh2o

Customer Service / Emergencies: 412.255.2423



#### PITTSBURGH WATER AND SEWER AUTHORITY

# WATER AND SEWER AVAILABILITY LETTER REQUEST FORM

All persons planning to perform construction, demolition, or renovation work that will involve water and/or sewer services are recommended to complete this form and submit to PWSA. PWSA will review the request and reply to indicate if PWSA-owned water and/or sewer utilities are present at the site of the proposed work.

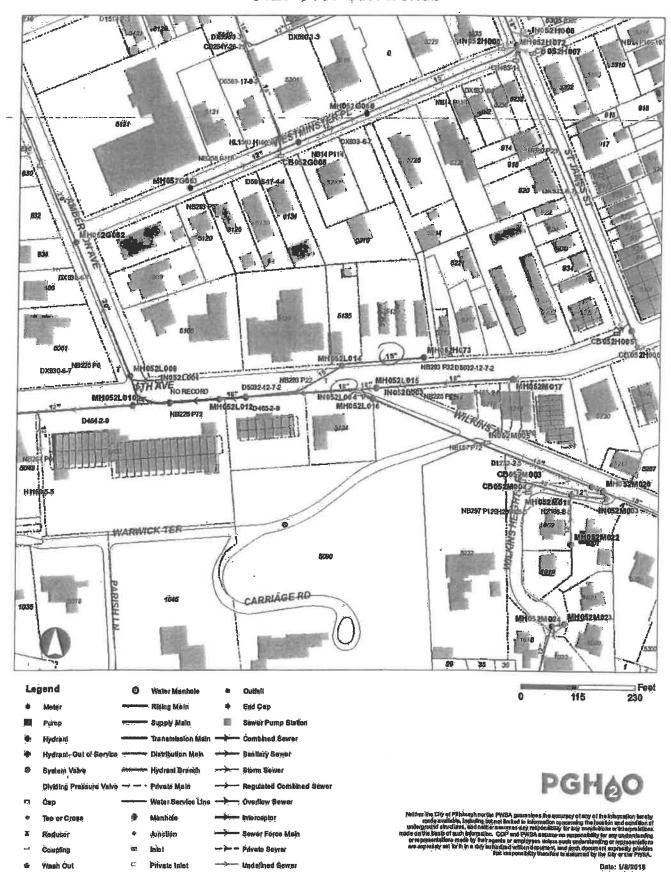
This request form is <u>required</u> for all of the following types of development. (Please note that the term "sewer" refers to sanitary sewers, combined sewers, and storm sewers.)

- 1. New water and/or sewer tap(s) for all approved/recorded subdivisions.
- 2. Change of Use and/or increase in water and/or sewer flows for residential development(s), commercial, industrial and institutional developments (i.e. total project sanitary flow is greater than 799 gallons per day).
- 3. New water and/or sewer tap(s) for all residential, commercial, industrial, and institutional developments.

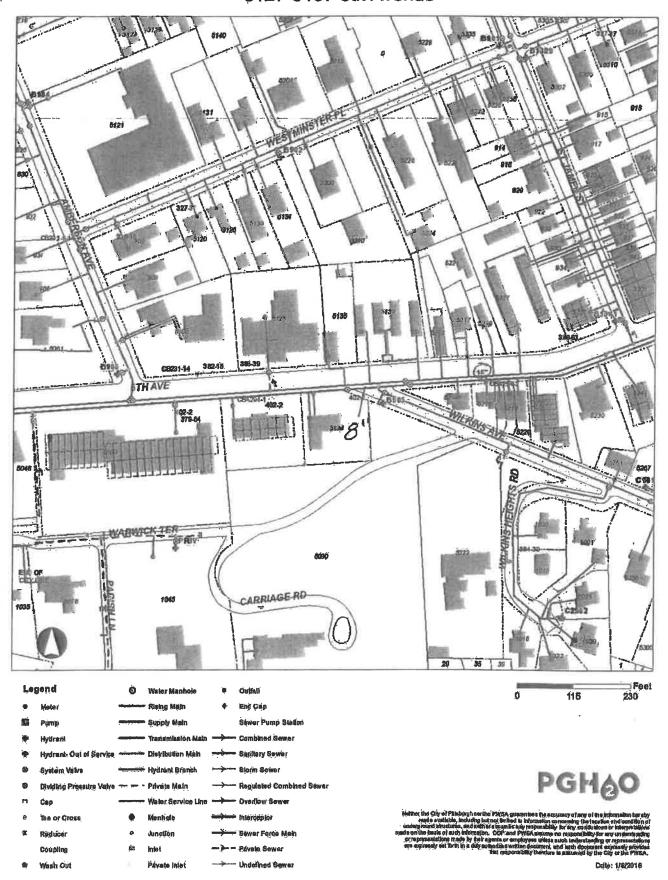
Information to be s	abmitte	d by the Applic	cântr	24		
Property Owner Nam	ie:	PGH Develope	ers		177	
Address of Property:	5127	7-5137 5th Aver	nue, Pittsburg	gh, PA 15232	<u> </u>	526-133
Proposed Use of Site	: Six	c-unit, attached,	single family	building project Resid	lential development	
Closest street intersec	ction to	the property:	5Th Avenu	e & Wilkins Avenue	-	
				9		•
Requestor Name:	Sean 1	laylor- Red Swi	ing Group		Date of Request:	01/02/2018
Requestor Address:	One	Monroeville C	enter 3824 No	orthern Pike, Suite 800	Monroeville, PA 151	46
Requestor Phone Nur	nber:	(724) 325-12	115			
Please submi	t the co	mpleted form t	to:	Pittsburgh Water an Engineering and Co 1200 Penn Avenue Pittsburgh, PA 152	instruction Division	M JAN O 8 2018
PWSA Use Only		WAY.		Attn: Ms. Michelle	Carney (mcarney@)	Septem MON W
PWSA Water Service	Aveila	oje. A Yesi	EI-NO.	Size #Location: 16	118 5	h Avenge
PWSA Sewer Service	Ayaila	ble Aves	, D No	Size/Location: 15	",18" 5h	enco.
Applicant must conta	ot sepañ	ate agency for v	vater service:	Yos	Q No.	
Name of separate age	ney:		K)	Arm		Tara Maria
PWSA Approval Aut	hocity	Signature am		challo Ca	name of Calaba and	1-2-00/6
		Name (printe	d) _/	chelle Cai	med a	
ST. WILL	N. A.	Title	1. 2	musormy 7	ech is a	Consider the Constitution of

Disclaimer: The information provided by PWSA does not guarantee capacity of the PWSA-owned water and/or sewer lines to satisfy the needs of the proposed development. The permit application process required by PWSA evaluates the water demand and rever flows of the development, as provided by the Applicant, and renders a decision on the capacity of the PWSA facilities.

#### 5127-5137 5th Avenue



#### 5127-5137 5th Avenue



SECTION	$\mathbf{F} - \mathbf{I}$	PROJECT	NA	RR	TIVE

# PROJECT NARRATIVE and FLOW CALCULATION SHEET

# For the Fifth Avenue Townhomes

Applicant: Brian J. Almeter, Fahringer, McCarty, Grey Inc.

Agent for: Property Owner, RRG 5135, LLC and Eos Studio Arc, LLC

#### Project Site Location, Zoning Classification and Proposed Use:

The site to be developed is located at 5135 Fifth Avenue. The property consists of Tax Parcel 052-G-00130 and 052-G-00133 and is currently owned by RRG 5135, LLC in Deed Book Volume 17113 Pages 117 inclusive. The total area of the project is 11,790 sq. ft. or 0.27 Acres. The existing building within the develop area is currently unoccupied. But was previously used as a professional office space and/or residential dwelling, as well as a utility maintenance building.

The project site is located in a Multi-Unit Residential Zoning District. The anticipated use, by Zoning Ordinance definition, is Multi-Unit Residential of four or more dwelling units on a single parcel and are contained within a single building.

The proposed development includes the demolition of two existing buildings which will be replaced by six (6) townhomes and associated driveways. In order to create marketable and leasable units, the proposed development will include vehicular access to individual garages for each unit. Stormwater will be collected in the proposed inlets to minimize impact to the adjacent properties.

#### Estimated Stormwater Flows for the Existing and Proposed Conditions:

The existing estimated storm flows were calculated based on the Rational Method, Q=CIA using the 25 year storm event. These calculations are based on the entire property being covered by building roof or pavement. The existing storm flows are as follows:

#### Where:

O = maximum rate of runoff, cubic feet per second (cfs)

C = coefficient of runoff based on type and character of surface.

i = average rainfall intensity, inches per hour (5.8" per hour for 25 year storm.)

A = drainage area in acres.

Q (Existing) = CiA Q =  $0.66 \times 5.8 \times 0.27 = 1.00 \text{ cfs}$ 

Q (Proposed) = CiA Q =  $0.85 \times 5.8 \times 0.27 = 1.3 \text{ cfs } *$ 

\* Please note that the proposed development will utilize inlets and pipes to convey the stormwater runoff from the proposed site. The majority of the overland runoff, however, will flow into the yard area.

#### Water Consumption and Sewage Flow Estimates:

In order to quantify the difference in the prior water and sewage flows versus the proposed uses, the following is an estimate of flows from the building areas occupied prior to being vacated. It is assumed that this was a professional office and/or residential home prior to being "abandoned." Therefore, the existing sewage generated was 400 gallons per day.

The proposed water consumption and sanitary flow estimates for the proposed six (6) unit condominium and is as estimated below. Please note that it is anticipated that these individual units will use considerably less water per unit than as estimated below based on similar apartment units that have been of similar bedroom mix and unit counts.

Condominiums (6 units total) 400 gal/day x 6 dwelling units =

2,400 gallons per day

Total Sanitary Flow per day = 2,400 gallons or 6 EDU's Total Water Usage per day = 2,400 gallons per day

Net increase of sanitary and water flow per day is =

2,000 gallons per day

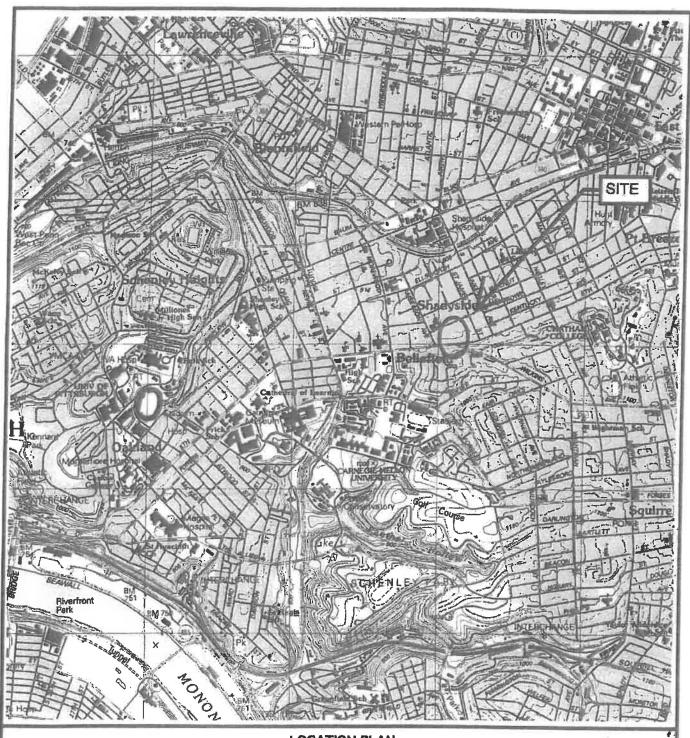
ZUGO GPD

(NO OREDIT FOR PREGLAS

PLANS BECAUSE HAS

BEEN NACOUT FOR MUTTIPLE

UEARS)



#### - LOCATION PLAN -

#### FIFTH AVENUE TOWNHOMES

City of Pittsburgh Allegheny County PA

SCALE:

1" = 2,000'

SOURCE:

Pittsburgh East PA - USGS Quadrangle

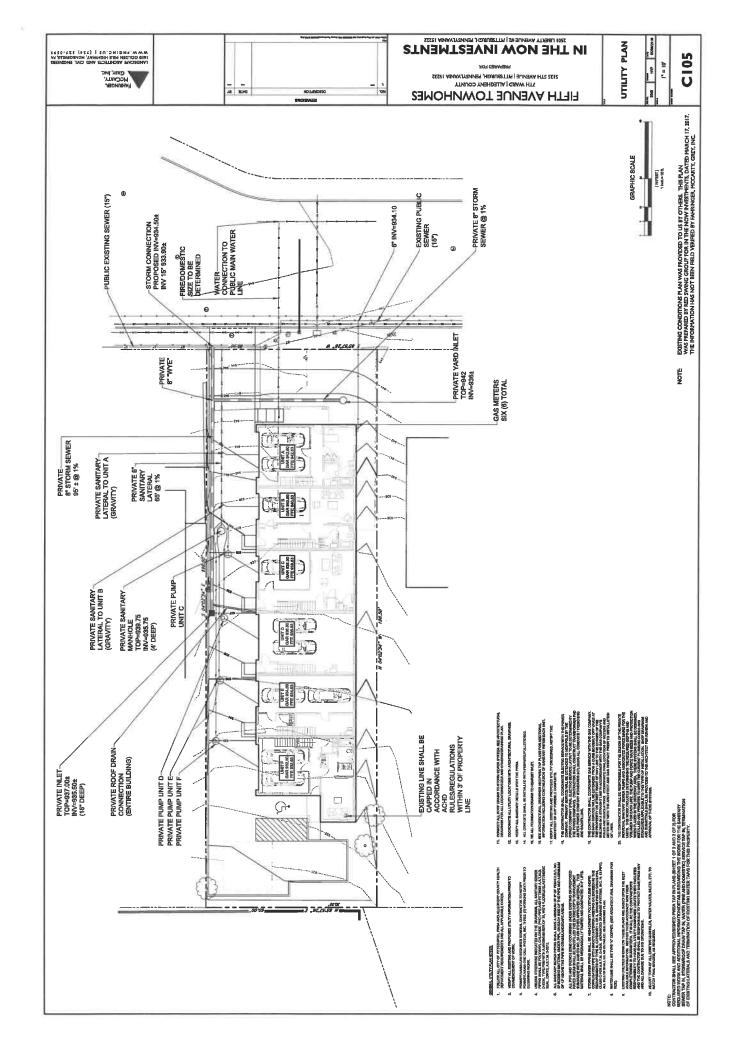
FAHRINGER, McCARTY, GREY, INC.

LANDSCAPE ARCHITECTS AND ENGINEERS

1610 Golden Mile Highway, Monroeville, PA 15146-2010

JN 5060

PROPOSED WASTEWATER DISPOSAL FACILITIES
ITEM 3: PLOT PLANS



PROPOSED WASTEWATER DISPOSAL FACILITIES ITEM 7: PNDI SEARCH

#### 1. PROJECT INFORMATION

Project Name: Townhomes on Fifth Date of Review: 4/23/2018 03:23:04 PM

Project Category: Development, New commercial/industrial development (store, gas station, factory)

Project Area: 0.41 acres County(s): Allegheny

Township/Municipality(s): PITTSBURGH

ZIP Code: 15232

Quadrangle Name(s): PITTSBURGH EAST Watersheds HUC 8: Lower Allegheny

Watersheds HUC 12: Allegheny River-Ohio River

Decimal Degrees: 40.448149, -79.937430

Degrees Minutes Seconds: 40° 26' 53.3360" N, 79° 56' 14.7478" W

#### 2. SEARCH RESULTS

PA Game Commission No Known Impact No Further Review I PA Department of Conservation and No Known Impact No Further Review I Natural Resources	A Tree
Natural Resources	equired
	North Control
PA Fish and Boat Commission (No Further Review F	equired
U.S. Fish and Wildlife Service No Known Impact No Further Review F	equired

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or 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.

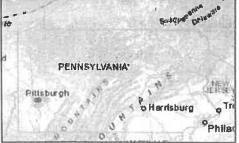
#### Townhomes on Fifth



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), awastopo, Mapmyindia, O OpenStreetMap contributors, and the GIS User Community Esri, HERE, Garmin, O OpenStreetMap contributors, and the GIS user community



#### Townhomes on Fifth



#### **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: The project will affect 1 to 39 acres of forests, woodlots and trees.

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 Départment 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.

#### Project Search ID: PNDI-655647

#### 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 <a href="https://conservationexplorer.dcnr.pa.gov/content/resources">https://conservationexplorer.dcnr.pa.gov/content/resources</a>.

,Page 5 of 6

#### 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 (<a href="www.naturalheritage.state.pa.us">www.naturalheritage.state.pa.us</a>). 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

Name: DANIEL GRAPER

applicant/project proponent signature

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Paxes Please

PA Game Commission
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat

Protection

2001 Elmerton Avenue, Harrisburg, PA 17110-9797

date

Email: RA-PGC\_PNDI@pa.gov

**NO Faxes Please** 

#### 7. PROJECT CONTACT INFORMATION

Company/Business Name: FAHRINGER MECAR	TY GREY INC.
Address: 1610 GOLDEN MILE HWY	
City, State, Zip: MONPOEVILLE PA 15146	
Phone:(724) 327 - 0599 Fax:(	724 ) 733-4577
Email: DERAPER @ FMGINC.US	
8. CERTIFICATION I certify that ALL of the project information contained size/configuration, project type, answers to questions location, size or configuration changes, or if the answichange, I agree to re-do the online environmental rev	s) is true, accurate and complete. In addition, if the project type, vers to any questions that were asked during this online review
Don't have	4/23/2018

	SECTION H -
ALTERNATI	VE ANALYSIS

#### PROJECT ALTERNATIVES ANALYSIS

# For the FIFTH AVENUE TOWNHOMES

Applicant: Brian J. Almeter, Fahringer, McCarty, Grey Inc.

Agent for: Property Owner, RRG 5135, LLC and Eos Studio Arc, LLC

#### **Sewage Conveyance and Treatment Alternatives:**

The proposed 6 individual condominium dwelling units are proposed to be serviced by connecting to the existing public system located in the adjacent public street. This private service line will be gravity flow to the main publically owned lines. The proposed private lateral location was chosen to provide direct discharge from the building into this existing public system.

The adjacent land uses include existing multi-story dwelling units, and single family residences that are typical of a mixed urban environment. The property is proposed to be developed in its entirety with no additional future development occurring on adjacent tracts. This project is considered an "urban" redevelopment.

This project is a private development. The adjacent public systems are adequately sized to accept the flows from the 6 dwelling units as well as the existing uses surrounding this development. Improvements to the existing public system are not necessary or proposed at this time.

This method of sewage disposal is consistent with PWSA's standards. The existing building or site does not allow for on-lot sewage treatment or an individual treatment facilities. In addition, the soil conditions are not conducive to perk sewer from the individual dwelling units. No other sewage conveyance or treatment options are available for this urban in-fill residential project.

	CTION J –
CHA	APTER 94 -
CONSISTENCY DETER	MINATION

•





To:

Barry King

From:

Matt Smuts MAS

Date:

January 18, 2019

Subject:

DEP Sewage Planning Module - Section J. Chapter 94

Consistency Determination, Calculation Review for:

**Fifth Avenue Townhomes** 

Upon review of the submittal by Fahringer, McCarty, Grey, Inc. for the above referenced development I have determined that the projected flows are less than the design capacity of the PWSA sewers and, therefore the sewers should have adequate capacity for the proposed development.

Section J. Chapt	Section J. Chapter 94 Consistency Determination	rtion	Anna	Calculation Review
	PROJECT NAME: Fifth Avent	Fifth Avenue Townhomes		by. IVI. Siliuts
	PROJECT FLOW:	2,400 gpd		
Formulas				
Manning Equation:	on:		Q, flow, cfs	
, O	$Q = (1.49/n)*A*R^{(2/3)}*S^{(1/2)}$		n, roughness coefficient	
0	O= 2 arccos ((r-d/r))		S, slope from PWSA records (ft/ft)	t/ft)
A=	$A = r^2(\Theta - \sin \Theta)/2$		D, sewer diameter, ft	
P.W.	P <sub>w</sub> = r*⊙		d, depth of flow measured, ft , (SUBMITTED WITH REPORT)	(SUBMITTED WITH REPORT)
R <sub>H</sub> =	$R_H = A/P_w$		Θ, central angle, radians	
			A, cross sectional area, ft^2	
			P <sub>w</sub> , wetted perimeter, ft	
			R <sub>H</sub> , hydraulic radius, ft	
SEWER PROPERTIES	TIES			Peaking Factor
=U	0.012		1.25 ft	3.5 combined sewers
S.	0.01	Material: VCP		3 sanitary sewers
DESIGN PEAK FI	DESIGN PEAK FLOW (FLOWING FULL)		AVERAGE DESIGN FLOW	
Q <sub>FULL</sub> =	4,527,063 gpd		(Average flow is design peak	(Average flow is design peak flow divided by peaking factor)
=O	1.250		Q <sub>FULL</sub> , avg= 1,293,447	pdg 41
!!	0.625 ft	**		
=0	6.28			
₩	1,23 ft^2			
P <sub>w</sub>	3.93年	*		
R <sub>H</sub> =	0.313			
Q	7.02 cfs			
PRESENT AVERAGE FLOW	AGE FLOW		PRESENT PEAK FLOW	
•	( ) ( )		Donk flow is monthing frame	(Dool flow is manified fraction times the property and the state

ò

R <sub>H</sub> =       0.1597 ft         Q=       0.703 cfs         PROJECTED AVERAGE FLOW       QANG, PROJECTED=         QANG, PROJECTED=       Qpe         VALUES BY ENGINEER       % D         Q,full       4,534,053         Qfull, avg       1,293,447	ak proje 477,1	iking factor	PROJECTED PEAK FLOW  QPK, PROJECTED= (Present Peak flow + Project Flow) * 1.05  QPEAK, PROJECTED= 1,670,092 gpd  *Design and/or Permitted Capacity Peak in gpd
Qavg         453,831           Qpeak         1,588,164           Qavg,proj         477,169           Opeak proj         1,670,092	%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	Projected bea	Projected neak flow not neak design flow

1610 Golden Mile Highway Monroeville, Pennsylvania 15146 Phone (724) 327-0599 Fax (724) 733-4577

E-mail: design1@fmginc.us Web Site: www.fmginc.us

Ms. Michelle Carney Pittsburgh Water and Sewer Authority Penn Liberty Place Plaza I 1200 Penn Avenue Pittsburgh, PA 15222 September 25, 2018

DECISIVE N SEP 2 7 2018

BY: PUSA MC DEP AM

Re: Dry Flow Calculations Sewage Facilities Planning Module Fifth Avenue Townhomes 5135 5th Avenue, Pittsburgh PA 15232

### Dear Michelle:

7

We are writing as per your response letter dated May 31, 2018 regarding the above reference project; specifically related to the Dry Weather Capacity of the existing system in 5<sup>th</sup> Avenue. It is our understanding that this analysis is required prior to PWSA "sign-off" on Section 3B in the Sewage Facilities Planning Module as requested by PA DEP in their review of the submitted documents.

That being said, we have determined the dry weather flow for the sewer conveyance system between MH 052L012 (downstream) to MH052L014 (at subject property) and MH 052H073 (upstream end of run) adjacent to and along 5th Avenue. In order to determine the flow, we have referenced Manning's Formula for flow in a conduit, which was slightly modified with basic trigonometry to calculate the flow for a partially filled conduit. With a known dry weather flow depth of 1.5 inches as noted by Insight Pipe on July 31, 2018 (by CCTV) and the pipe being a 15 inch diameter terra cotta pipe with a slope of 1.00%, the dry weather flow was calculated to be 0.702 cfs. It was previously estimated that the flow from the development will be 2,400 gallons per day, or approximately 0.004 cfs. At full flow, the capacity of the pipe was calculated to be 7.02 cfs.

To meet the requirement set forth by PA DEP and PWSA, 350% of the dry weather flow (or 2.457 cfs) plus the flow from the development (0.004 cfs) has to be less than the capacity of the pipe (7.02 cfs). Based on these calculations, it was concluded that the 15 inch diameter pipe satisfactorily meets this requirement. Please see the attached summary table for your review and consideration.

Therefore, we have attached the original Sewage Facilities Planning Module – Component 3 for this project. Should you have any questions, please feel free to call this office.

Sincerely,

Brian J. Almeter

mollmeter

BJA/bja Enclosure

### **SECTION J. Part 2**

### a. Design and/or Permitted Capacity (gpd)

### Peak Design Flow Calculation:

Using Manning's Equation, Peak Design Flow =

7.017 cfs = 4534855 gpd

Existing Length of Pipe along 5th Avenue that proposed flow will be conveyed to:

Pipe Diameter = 15-inch Pipe Material = Clav "n" coefficient = 0.012

Slope = 0.0100 ft/ft Area = 1.227 sf Perimeter = 3.927 ft Hydraulic Radius = 0.313 ft

Average Design Flow Calculation:

3.5 FM COMBINED SEWERS

Peak Design Flow divided by 3.0 for Sanitary Sewers-

-= 1511618 gpd- 1, 299, 447 ap

### b. Present Flows (gpd)

### Average Present Flow Calculation:

Present flow of 3.20-inch

Explanation: Flow Depth based on Insight Pipe CCTV video noting 10% flow depth at Manhole 52-L-014 on July 31, 2018.

Using Manning's Equation, Average Present Design Flow =

0.702 cfs = 453831 gpd

Existing Length of Pipe along 5th Avenue that proposed flow will be conveyed to:

Pipe Diameter = 15-inch Pipe Material = Clay "n" coefficient = 0.012

Slope = 0.0100 ft/ft Area =  $D^2/8$  ( $\pi\Theta$  /180 -  $\sin\Theta$ ) Area = 0.192 sf Perimeter =  $(\pi D \Theta)/360$ Perimeter = 1.201 ft D= 1.25 feet ⊕ =110.10 Hydraulic Radius = 0.160 ft

#### Peak Present Flow Calculation:

Peak Present Flow is 3.0 times the Average Measured Flow for Sanitary Sewers = 453831 gpd X 3.67 = 4361492 gpd

1,588,164 20)



### c. Projected Flow in 5 years (gpd) (2 years for Pump Stations)

The projected flow should represent a 5% increase from the sum of the present flow and the project flow due to increased density (per PWSA Procedures Manual for Developers Version 6 - Issued 03/14)

Average Projected Flow Calculation: = PEAK PROJECTED FLOW / 3.5 PRAYING FACTURE

Average Present Flow:

= 453831 gpd

Project Flow:

Sum of Present and Project Flow:

= 2400 gpd = 456231 gpd

X 5% = 22812 gpd

=479042 gpd 477.169 gp

= (PRESENT PEARL From + PROJECT PROM) × 1.05

Peak Present Flow:

= 1361492 gpd

Project Flow:

= 2400 gpd

Sum of Present and Project Flow:

= 1369912 gpd

X 5% = 68496 gpd

= 4438407 gpd 1,670,092 gpd

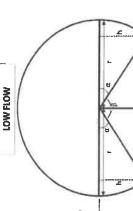
			1						Manning's Equation for:	's Equal	tion for:									
			100						CIRC	CIRCULAR PIPE	E E									
Metric or English (M/E)?	U		Radius, r	Radhe, r Siope, S Depth, y (R) (R/R) (ff)	Depth, y	Above, Below, or Equal to Midhelith?	Height Above or Below Micheight, h	a (degrees)	(degrees) Width, w Area, A	Width, w	Area, A (ft/2)	Wetted Mydraulic Valadty, Flow, Q (R) (R)	Mydraufic Radius, R (ft)	Velocity, V (ft/s)	Flow, Q (cfs)	350% Low Flow, Q (d9)	Flow from Development (gpd)	Flow from Flow from 1.5" Dis. @ Development 5.00% Pipe (GS) Capacity (ds)	15" Dis. @ 1.00% Pipe Capadhy (ds)	Sufficient?
	1.49	0.012	0.625	0.010	0.27	BELOW	9	35	110.103	1.025	0.192	1.201	0.160	3.656	0.702	2,456	2400	0.004	7.0.7	¥
	1.49	0.012	0.625	0,010	1.25	ABOVE	0.625	06	0000	0000	1227	3,927	0.313	5.718	7:017					

Pipe Ofmensions 15° de 1.3° de 8° rad 63° rad

Low Flow Depth Explanation: Low Flow Depth based on Insight Pipe CCTV video 3.20° and 10° 31.2018.

Z67 noting 10% flow depth at Manhole 52-L-014 on July 31, 2018.

MIDHEIGHT ---



Sufficient Capacity Formula: (Dry Westher Flow x 350%) + (Flow from Development) < Pipe Capacity

Manning's Equation for a Partially Filled Pipe Bosed Off of Manning's Formula:  $V \approx \frac{c}{n} \frac{2}{n} \frac{2}{35}$ 

Q = VAand

 $Q = \frac{c}{n} A R^{\frac{2}{3}} S^{\frac{1}{3}}$ thus

r = Radlus

Wetted Perimeter Hydraulic Radius A = Area of Pipe 

Slope of Pipe Conversion Factor

Known Aent? P=2mr R=4/P Known 1.49 for English or 1.0 for Metric Known

c = Conversion Factor n = Manning's Roughness Coefficient

Pine Filled Below Midhelaht - Manning's Equation Alterntions

(Please refer to LOW FLOW Diagram above)  $Q = \frac{c}{n} A R^{\frac{3}{2}} S^{\frac{1}{2}}$ 

A, P, and thus R change, based off of the smaller flow arc þirt

A = Area of Pipe MON

P = Wetted Perimeter

y = Depth of Flow h = Height Below Midheight α = Outer Angle where

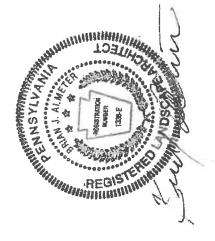
β ≈ Central Angle w ≈ Surface Width of Flow

Explanation: Area of the pipe is equal to the area of the inner are less the area of the inner triangle Explanation: Vetted perimeter is equal to the perimeter of

 $A = \pi r^2 \frac{\beta}{360} - \frac{1}{2} wh$  $P = 2\pi r \frac{\beta}{360}$ 

Explanation: Outer angle found by trigonometry and then converted from radians to degrees

Known h = r - y  $\alpha = \frac{1}{\pi} \arcsin\left(\frac{h}{r}\right) 180^{o}$   $\beta = 180^{o} \cdot (2\alpha)$   $w = 2\sqrt{r^{2} - h^{2}}$ 





May 31, 2018

Mr. Brian J. Almeter Fahringer, McCarty, Grey, Inc. 1610 Golden Mile Highway Monroeville, PA 15146

RE:

Fifth Avenue Townhomes 5135 5th Avenue - 15232

**PA DEP Sewage Facilities Planning Module** 

Dear Mr. Almeter:

The Pittsburgh Water and Sewer Authority (PWSA) is in receipt of your submission of the DEP Sewage Facilities Planning Module Component 3. PWSA is returning the package due to it being incomplete.

The DEP Component 3 package must be submitted with all information completed including Section J, Item #2 Flow Table, "Collection Flow Data". You must submit the Dry Weather Calculations sealed by a PA Professional Engineer.

Also before submission of the DEP Component 3, you must complete the PWSA Water and Sewer Use Application, Project Narrative and Flow Calculations for our review and approval.

Refer to the PWSA Procedure Manual for additional information (www.pgh2o.com).

If you have any questions, please feel free to contact me at (412) 255-0841.

Sincerely,

Michelle E. Carney

**Engineering Technician III** 

MEC

Attachment

cc:

Joseph Casey – RRG 5135, LLC Thomas Flanagan – PA DEP Michael Lichte - ALCOSAN PWSA File



January 8, 2018

Mr. Sean Naylor Red Swing Group One Monroeville Center 3824 Northern Pike, Suite 800 Monroeville, PA 15146

RE:

Water and Sewer Availability

**PGH** Developers

5127-5137 5th Avenue - 15232

Dear Mr. Naylor:

In response to your inquiry on 1/2/2018 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

We wish to advise you that, if it is your desire to tap our water and sewer mains for service, your plans and Water and Sewer Use Application must be approved by the Authority, complete with detail showing the type of connection, meter, and backflow device before any work is performed.

Please note that the Authority in no way guarantees that the available lines have the capacity or pressure adequate for your project's needs. It is the responsibility of the project developer, design consultant, and/or architects to determine, at their expense, the adequacy of the existing water system to fulfill their needs.

If you plan to make modifications to the water or sewer system, please submit design drawings to The Pittsburgh Water and Sewer Authority for approval.

Refer to the Pittsburgh Water and Sewer Authority (PWSA) website (www.pgh2o.com) for the complete "Procedure Manual for Developers". All tap in plans and applications must be submitted according to the manual.

If you have any questions please feel free to contact me at (412) 255-0841. Thank you

Sincerely,

Michelle E. Carney

Engineering Technician III

MEC

cc: PWSA File

Penn Liberty Plaza I 1200 Penn Avenue Pittsburgh PA 15222 info@pgh2o.com T 412.255.2423 F 412.255.2475 www.pgh2o.com ¥ @pgh2o

Customer Service / Emergencies: 412.255.2423



### PITTSBURGH WATER AND SEWER AUTHORITY

# WATER AND SEWER AVAILABILITY LETTER REQUEST FORM

All persons planning to perform construction, demolition, or renovation work that will involve water and/or sewer services are recommended to complete this form and submit to PWSA. PWSA will review the request and reply to indicate if PWSA-owned water and/or sewer utilities are present at the site of the proposed work.

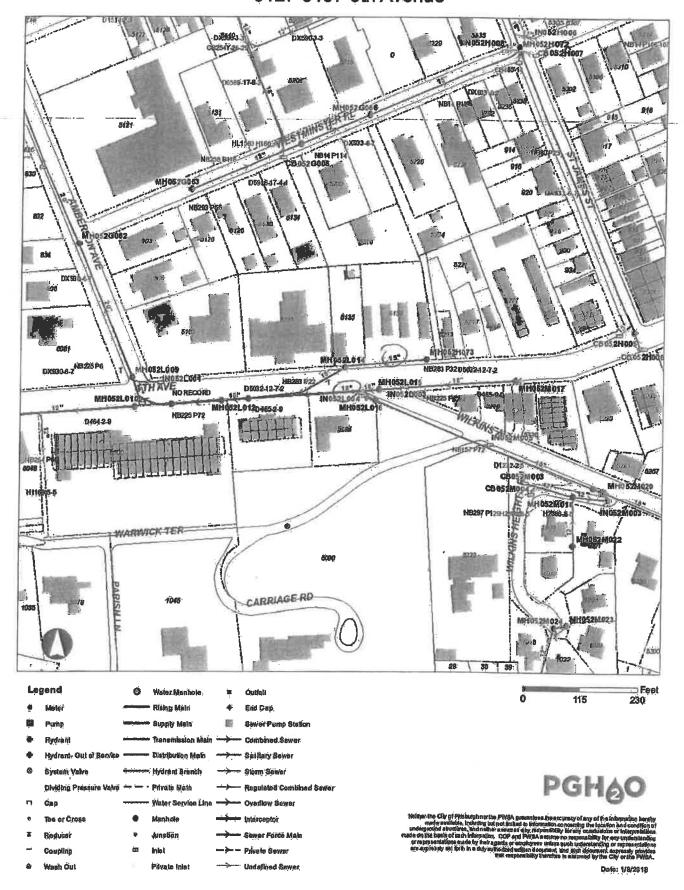
This request form is <u>required</u> for all of the following types of development. (Please note that the term "sewer" refers to sanitary sewers, combined sewers, and storm sewers.)

- 1. New water and/or sewer tap(s) for all approved/recorded subdivisions.
- 2. Change of Use and/or increase in water and/or sewer flows for residential development(s), commercial, industrial and institutional developments (i.e. total project sanitary flow is greater than 799 gallons per day).
- 3. New water and/or sewer tap(s) for all residential, commercial, industrial, and institutional developments.

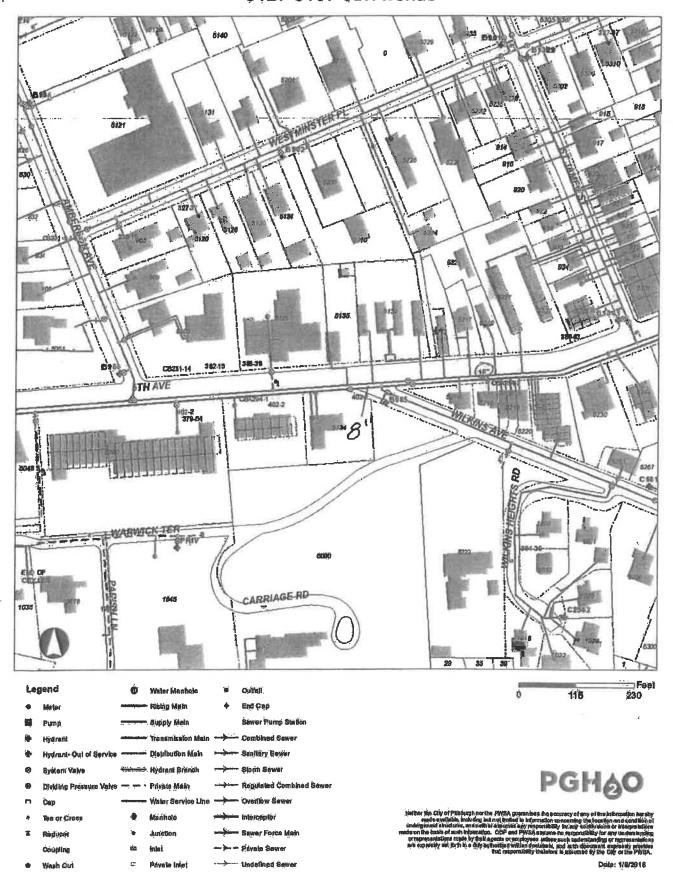
Information to be su	bmitted by the Appl	icants				
Property Owner Name	e; PGH Develop	cns	1	•		
Address of Property:	5127-5137 5th Ave	nue, Pittsburgh, PA 15232		52-6-133		
Proposed Use of Site:	Six-unit, attached	, single family building project Resider	ntial development			
Closest street intersec	tion to the property:	5Th Avenue & Wilkins Avenue	•	: 11		
Requestor Name:	Sean Naylor- Red Sy	ring Group	Date of Request:	01/02/2018		
Requestor Address:	Requestor Address: One Monroeville Center 3824 Northern Pike, Suite 800, Monroeville, PA 15146					
Requestor Phone Num	iber: (724) 325-1	215				
	the completed form	to: Pittsburgh Water and		OFGETAR		
		Engineering and Con 1200 Penn Avenue		AN 0 8 2018 L		
		Pittsburgh, PA 15222 Attn: Ms. Michelle C		ogh <b>par</b> com) Pu SA MC		
PWSA Use Only:	The state of the state of			A VIEW TO THE		
PWSA Water Service		Water	18" 8	ha private		
T WOM WALES DERVICE	Available:	Sower	i sain re	The state of the s		
PWSA Sewar-Scrivice	Available: Wes	No. Size/Location: 5"	,18" 5has	cocaria		
Applicant must contact	x separate agency for	water service: Yes	No.			
Name of separate age	ICV	L WA		A Section to		
	Signature a	nd Section 1				
PWSA Approval Aut	ionity: Date	MARCHAELLAND	COUNTY OF THE STATE OF	1-8-2018		
Maria State	Name (prim	ed) Dicheller (Gr	Mary Ser			
and the state of t	Title	Supplied to the supplied of th		in gold suggested against a service		

Disclaimer: The information provided by PWSA does not guarantee capacity of the PWSA-owned water and/or sewer lines to satisfy the needs of the proposed development. The permit application process required by PWSA evaluates the water demand and sewer flows of the development, as provided by the Applicant, and renders a decision on the capacity of the PWSA facilities.

### 5127-5137 5th Avenue



## 5127-5137 5th Avenue



CONSISTENCY COMPONENT	
COMPONENT 4A – MUNICIPALITY PLANNING AGENCY REVIEW	
COMPONENT 4C – COUNTY HEALTH AGENCY REVIEW	



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Point and Non-Point Source Management

DEP	Code	#:		

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

Note to	Proje	ct Sp	consor: To expedite the review of your proposal, one copy of your completed planning module
planning	sign	ev for	their comments
SECTIO	N A	PR	DEOT NAME (See Section A of Instructions)
Project	Vame	S. Inc. Act	22-11 TACULT PROPERTY OF A PROPERTY OF THE PRO
5131	Fil	The	Dense
SECTIO	NB.	FEV	/EW SCHEDUIE (See Section B of Instructions)
1. Date	plan r	ecelv	ed by municipal planning agency. (A) 24.7018
12. Date	raviev	V CODY	model by opening Maria Sala
SECTION	Nc.	Μď	Ney A REVIEW, (See Section C. of Instructions)
	风	1,	ls there a municipal comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101, et seq.)?
DIALE	7	2.	Is this proposal consistent with the comprehensive plan for land use?
not.			If no, describe the inconsistencies
X		3.	is this proposal consistent with the use, development, and protection of water resources?
			If no, describe the inconsistencies
		4.	Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land
	M	5.	Does this project propose encroachments, obstructions, or dams that will affect wetlands?
			If yes, describe impacts
	SÍ.	6,	Will any known historical or archaeological resources be impacted by this project?
	50.00		if yes, describe impacts
	X	7.	Will any known andersoned on the standard and the standar
	-		Will any known endangered or threatened species of plant or animal be impacted by this project?
			If yes, describe impacts
X		8.	is there a municipal zoning ordinance?
	M	9.	is this proposal consistent with the ordinance?
			If no, describe the inconsistencies In Millia
	X	10.	Does the proposal require a change or variance to an existing comprehensive plan or zoning
	X	11,	Have all applicable zoning approvals been obtained?
X		12.	is there a municipal subdivision and land development ordinance?
			A STATE OF THE PROPERTY OF THE

## 3800-FM-BPNPSM0362A 11/2012

Yes	No		ICY REVIEW (continued)
	X	13.	is this proposal consistent with the ordinance?
			If no, describe the inconsistencies A. M. VI Lea
A		14.	
			If no, describe the inconsistencies
	K	15.	Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
	14		If yes, describe
	X	16,	Has a walver of the sewage facilities planning requirements been requested for the residue tract of this subdivision?
			if yes, is the proposed waiver consistent with applicable ordinances?
		17,	Name, title and signature of planning agency staff member completing this section:
			Title: Assistant Director Signature: Aware De
			Date: May 1, 201P
			Name of Municipal Planning Agency: CAL AF PHISOKS Debt of City Planting
		i	Address 200 Rock St Life Clan Prits Dick PA 1514
			Telephone Number: 417 237 AVA
CTION	D. AC	DITIC	NATE COMMENTE (Sec Section Diol instructions)
ils Com levancy eets.	ponent of the pr	does ropos	not limit municipal planning agencies from making additional comments concerning the sid plan to other plans or ordinances. If additional comments are desired, attach additional
e planni	ng agend	y mus	st complete this Component within 60 days.
is compo	onent an	any .	additional comments are to be returned to the project sponsor.





### ALLEGHENY

February 13, 2019

Brian J. Almeter Fahringer, McCarty, Grey, Inc. 1610 Golden Mile Highway Monroeville, PA 15146

RE: SEWAGE FACILITIES PLANNING MODULE, FIFTH AVENUE TOWNHOMES, CITY OF PITTSBURGH

Dear Mr. Almeter:

Enclosed is a signed copy of Component 4C, County or Joint County Health Department Review, for the above-referenced development located on Fifth Avenue. This Planning Module Component was received on May 14, 2018. The project proposes the following:

Project Description:

6 residential townhomes

Sewage Flow:

2,400 GPD

Conveyance:

PWSA collection system to POC

Sewer's Owner:

Pittsburgh Water and Sewer Authority

Name of Sewage Treatment Plant:

ALCOSAN Sewage Treatment Plant

Please be advised that a permit must be obtained from the Allegheny County Health Department's (ACHD) Plumbing Section prior to commencing any plumbing work for the proposed project. Plumbing work for which an ACHD Plumbing Permit must be obtained includes any plumbing work done on the site and any sewers, which will not be owned and operated by a municipality or a sewer authority. In addition, it should be noted that the approval of this sewage facilities planning module does not include approval of pipe size and/or type. Approval for pipe size and/or type must be obtained by filing a specific plumbing plan with the ACHD's Plumbing Section. If you should have any questions relative to ACHD's plumbing requirements, please contact Ivo Miller, Plumbing Program Manager at 412-578-8393.

The ACHD has no objection to the approval of this project. If you have any questions, please call me at 412-578-8388.

Sincere

Michael Scheer

Environmental Health Administrator II

Water Pollution Control & Solid Waste Management

Enclosure

cc: Thomas Flanagan, PA Department of Environmental Protection w/attachment Ivo Miller, ACHD w/attachment



KAREN HACKER, MD, MPH, DIRECTOR
ALLEGHENY COUNTY HEALTH DEPARTMENT



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATION

DEP Code #

# SEWAGE FACILITIES PLANNING MODULE COMPONENT 4C - COUNTY OR JOINT HEALTH DEPARTMENT REVIEW

Note to Project Sponsor: To exp package and one copy of this <i>Planni</i> department for their comments.	edite the review of your proposal, one copy of your completed planning module ng Agency Review Component should be sent to the county or joint county health
SECTION A. PROJECT NAME (Se	ee Section A of instructions)
Project Name	
Fifth Ave. Townhomes	
SECTION B. REVIEW SCHEDULE	(See Section B of instructions)
Date plan received by county or	joint-county health department. May 14, 2018
Agency name Allegheny Count	y Health Department (ACHD)
2. Date review completed by agen	Sy <u>February 11, 2019</u>
SECTION C. AGENCY REVIEW (	See Section C of instructions)
	an consistent with the municipality's Official Sewage Facilities Plan?
☐ ☑ 2. Are there any wa	inconsistencies?
If yes, describe _	
☐ ☑ 3. Is there any know	n groundwater degradation in the area of the proposed subdivision?
If yes, describe _	
	nt county health department recommendation concerning this proposed plan is as commends approval. See attached letter.
5. Name, title and sign	gnature of person completing this section:
Name: <u>Michael S</u>	cheer
Title: <u>Environmer</u> Signature:	Al Health Agministrator II
Date: February 1	3, 2019
Name of County H	lealth Department: ACHD
Address: 3901 Pe	enn Avenue, Building #5, Pittsburgh PA 15224-1318
Telephone Number	er: <u>412-578-8388</u>
SECTION D. ADDITIONAL COMM	ENTS (See Section D of instructions)
This Component does not limit county the proposed plan to other plans or ord	planning agencies from making additional comments concerning the relevancy of linances. If additional comments are needed, attach additional sheets.
The county planning agency must com This Component and any additional co	plete this Component within 60 days. mments are to be returned to the applicant.