

SEWAGE FACILITIES PLANNING MODULE COMPONENT 3

201 ARSENAL PHASE II RESIDENTIAL LAND DEVELOPMENT

SITUATE IN:

SIXTH WARD, CITY OF PITTSBURGH ALLEGHENY COUNTY, PENNSYLVANIA

PREPARED FOR:

MILHAUS 460 Virginia Avenue Indianapolis, IN 46203

161530

May 28, 2019

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

Code	e No.	
Cou	E NO.	

SEWAGE FACILITIES PLANNING MODULE

Component 3.	Sewage Coll	ection and	Treatment F	acilities
(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)

- Project Name 201 ARSENAL PHASE II RESIDENTIAL LAND DEVELOPMENT
- 2. Brief Project Description MULTI-UNIT RESIDENTIAL BUILDING WITH MICRO, STUDIO, 1 BR, 2 BR, AND 3 BR APARTMENTS, AS WELL AS ASSOCIATED INFRASTRUCTURE AND INTEGRAL STRUCTURED PARKING.

B. CLIENT (MUNICIPALITY) INFO	ORMATION (S	See Section B of instruct	ions)	
Municipality Name	County	City	В	ого Тwp
PITTSBURGH	ALLEGHE	NY 🗵		
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
SMUTS	MATTHEW			ASSOCIATE PROJECT MANAGER
Additional Individual Last Name	First Name	MI	Suffix	Title
ASCIOLLA	JULIE	_		BusinessDevelopment RelationsManager
Municipality Mailing Address Line 1		Mailing Address Line 2		
PENN LIBERTY PLAZA 1		1200 PENN AVENUE		
Address Last Line City		State	ZIP+4	
PITTSBURGH		PA	15222	
Area Code + Phone + Ext.	FAX (optional)	Ema	il (optional)	
412-255-8800 x 2663	412-393-0517	MSM	/UTS@PGH	20.COM

C. SITE INFORMATION (See Section	n C of instruction	inc)			
Site (Land Development or Project) Name		115)			
201 ARSENAL PHASE II RESIDENTIAL LAI		IENIT			
Site Location Line 1	AD DEVELOT IV	Site Location	Line 2		
135 39 TH STREET					
Site Location Last Line City	State		P+4	Latitude	Longitude
PITTSBURGH	PA		201	40.46929N	
Detailed Written Directions to Site FOLLOW TURN LEFT ONTO E OHIO ST TO MERGE ACROSS THE 40 TH ST BRIDGE. TURN RIG	ONTO PA-28N	(TOWARD E	TNA). TAK	KE EXIT 3A AND CON	TINUE
Description of Site MULTI-FAMILY 5-STOR AND OUTDOOR AMENITY SPACES INCLUBUTLER ST TO THE SOUTHEAST, 39TH ST Site Contact (Developer/Owner)	DING A DOG F	PARK; BOUNE	DED BY 40	TH ST TO THE NORTI	HEAST,
	Name	MI	Suffix	Phone	Ext.
SANDERS ALE		IVII	Sullix	(317)226-9500	EXI.
Site Contact Title		Site Contact F	irm (if none	(317)220-9500 e, leave blank)	
		BUTLER & 40	•	, touto blanky	
FAX		Email	,		
	,	ALEX.SANDE	RS@MILH	AUS.COM	
Mailing Address Line 1		Mailing Addres			
460 VIRGINIA AVE					
Mailing Address Last Line City	(State	ZIF	P+4	
INDIANAPOLIS	I	N	46	203	
D. PROJECT CONSULTANT INFO	DRMATION (See Section D	of instruct	ions)	======
Last Name	First Na			MI	Suffix
GOLAN	MAURE			S	
Title		ing Firm Name	e		
EIT	PVE, LL	_C			
Mailing Address Line 1		Mailing Addres	ss Line 2	-	
2000 GEORGETOWN DRIVE - SUITE 101					
Address Last Line - City	State	ZIP+	-4	Country	
SEWICKLEY	PA PA	1514	43	USA	
Email Area Code + MGOLAN@PVE-LLC.COM 724-444-1100		Ext. 531		Area Code +	FAX
E. AVAILABILITY OF DRINKING					
The project will be provided with drinki	na water from th	ne following so	ource: (Ch	eck appropriate boy)	
Individual wells or cisterns.	ilg water from ti	ie ioliowing sc	ource. (On	eck appropriate box)	
A proposed public water supply.					
An existing public water supply.		:	-£ 454-		
If existing public water supply is to from the water company stating the			or the wate	er company and attacr	documentation
Name of water company: <u>PITTSB</u>	URGH WATER	AND SEWER	RAUTHOR	RITY	
F. PROJECT NARRATIVE (See Se	ction F of instru	ctions)			
A parrative has been prepared as	described in Sec	ction E of the i	nstructions	and is attached	

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

G.	PRO	OPC	OSED 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's. This information will be used to determine consistency with Chapter 93 (relating to wastewater treatmenents).
	1.	CC	DLLECTION 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
		Cle	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's155
			Connections1
			Name of: existing collection or conveyance system 40th Street (MH049A016) owner Pittsburgh Water and Sewer Authority (PWSA) existing interceptor Allegheny River owner Allegheny County Sanitary Authority (ALCOSAN)
	2.	W	ASTEWATER TREATMENT FACILITY
		ED pro	eck all boxes that apply, and provide information on collection, conveyance and treatment facilities and U's served. This information will be used to determine consistency with Chapter(s) 91 (relating to generally significantly), 92 (relating to national Pollution Discharge Elimination System permitting, monitoring and mpliance) and 93 (relating to water quality standards).
		a.	Check appropriate box and provide requested information concerning the treatment facility
			☐ New facility
			Name of existing facility ALCOSAN Woods Run WWTP
			NPDES Permit Number for existing facility PA 0025984
			Clean Streams Law Permit Number
			Location of discharge point for a new facility. Latitude 40°28'34" N Longitude 80°02'44" W
		b.	The following certification statement must be completed and signed by the wastewater treatment facility permitee or their representative.
	*0		As an authorized representative of the permittee, I confirm that the <u>ALCOSAN Woods Run</u> (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 <u>ALCOSAN</u>
			Name of Responsible Agent Shawn P. McWilliams, EIT
			Agent Signature Date 7/19/19
			(Also see Section I. 4.)

G.	PROPOSED	WASTEWATER	DISPOSAL	FACILITIES	(Continued)
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3.	DI	.OT	DI	ΑI	М
J.				a.	ч

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.

- Any designated recreational or open space area.
- 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.
- 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

		YES	NO	
	a.		\boxtimes	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.	PR	IME A	AGRIC	ULTURAL LAND PROTECTION
	ΥE	S I	NO	
			\boxtimes	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.
		١		Have prime agricultural land protection issues been settled?
6.	HIS	STOR	IC PRE	ESERVATION ACT
	ΥE	S i	NO	
	\boxtimes	1		Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 Implementation of the PA State History Code (available

online at the DEP website at www.dep.state.pa.us, select "subject" then select "technical guidance"). As a minimum this includes copies of the completed Cultural Resources Notice

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

		eck one:				
		my s	"Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from search of the PNDI database and all supporting documentation from jurisdictional agencies (when essary) is/are attached.			
		Form is attracted by the plant will no Review	empleted "Pennsylvania Natural Diversity Inventory (PNDI) Project Planning & Environmental Review n," (PNDI Form) available at www.naturalheritage.state.pa.us , and all required supporting documentation tached. I request DEP staff to complete the required PNDI search for my project. I realize that my ning module will be considered incomplete upon submission to the Department and that the DEP review not begin, and that processing of my planning module will be delayed, until a "PNDI Project Environmental ew Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are ived by DEP.			
Н.	ΔΙΤ	FRN	Applicant or Consultant Initials ATIVE SEWAGE FACILITIES ANALYSIS (See Section H of instructions)			
		An a	alternative sewage facilities analysis has been prepared as described in Section H of the attached actions and is attached to this component.			
		The	applicant may choose to include additional information beyond that required by Section H of the attached actions.			
l.			ANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS (See finstructions) (Check and complete all that apply.)			
	1.	Wate	ers 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.	Peni	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.	Inter	state 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: 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 permitee. The permitee 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)			
			Special Instructions (Form 3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay rshed 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 61650 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						
Conveyance	-	2.42 MGD	0.282 MGD	0.335 MGD	0.347 MGD	0.401 MGD
Treatment		250.0 MGD	194.8 MGD	250.0 MGD	194.8 MGD	250.0 MGD

Collection and Conveyance Facilities

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

	YES	NO	
a.			This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?
	If ves.	this se	ewage facilities planning module will not be accepted for review by the municipality, delegated

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

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

b.	Collection System			
	Name of Agency, Authority, Municipality	(%)		
	Name of Responsible Agent			
	Agent Signature		Date	

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

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 61650 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.).

- 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	9195400	32184000	419000	1466500	458445	1604558
Conveyance						
Treatment	30					

Collection and Conveyance Facilities

Ь.

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.		\boxtimes	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?
	15	Alede ex	

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, Municipality PITTSBURGH V	
Name of Responsible Agent Barry King P.E.	- Director of Engineering
Agent Signature	Date 6/24/19
Contract of the second	7 911

DEP Sewage Factilities Planning Module Chapter 94 Consistency Determination Hydraulic Calculations Review

LEGEND:

Input Data

Output Data

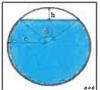
PROJECT NAME: PROJECT LOCATION: TIE-IN LOCATION: PWSA REVIEWER: DATE:

201 Arsenal Phase II	
135 39th Street, Pittsburgh, PA 15201	
30-inch VCP Combined Sewer on 40th Street	
Rob Herring, P.E.	Vern

Section A: Manning Equation for Partially Filled Pipes







Variable	Units	Description	
Q	ft ¹	Volumetric flowrate	
п	Unitiess	Manning Roughness Coeff.	
A	ft²	Cross-Sectional Area of Flow	
R	ft	Hydraulic Radius	
5	ft/ft	Slope of Hydraulic Grade Line	
P	ft	Wetted Perimeter of "A"	
r	ft	Radius	
h	ft	Depth of Flow or Headspace	
0	radians	Central Angle	

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

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

$$Q = \left(\frac{1.49}{n}\right) \times A \times R^{2/3} \times S^{1/2} \qquad \qquad R = \frac{A}{P} \qquad \qquad \Theta = 2 \times \cos^{-1}\left(\frac{r-h}{r}\right)$$

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

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

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

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

Section B: Data for Calculations

Variable	Value	Units
n	0.014	unitless
Material	VCP	
S	0.017	ft/ft
h	0.200	ft
D	2.50	ft
h/D	0.08	ft/ft
P.F.	3.5	unitless

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

Prop	osed Project	Flows
Variable	Value	Units
Q.	61,650	Rod

Section C: Design Flow Calculations

Variable	Description	Definition	
Q _{d, peak} Design Peak Flow full p		full pipe flow conditions	
Q4 ave	Design Avg. Flow	Flow full pipe flow conditions divided by the peaking factor	

Pe	iles	
Variable	Value	Unit
D	2,500	ft
r	1.250	ft
Α	4:909	ft^2
P	7.854	ft
R	0.625	ft
Q _{d, prok}	50	cfs
Cid pook	32,182,376	gpd

Average Design Flow Calcs			
Variable	Value	Unit	
Q _{d, ove}	9,194,965	gpd	

Section D: Existing Flow Calculations

Variable	Description	Definition
Class, avg	Existing Avg. Flow	existing flow conditions based on flow depth measurement
Q _{ex, peak}	Existing Peak Flow	the average existing flow multiplied by the peaking factor

Exist	ing Average Flow	Calcs
Variable	Value	Unit
D	2 500	ft
r	1.250	ft
0	1.15	rad
Α	0.18	ft^2
P	1 43	ft
R	0,128	ft
Q _{ex, peak}	1,000	cfs
Que peak	418,742	gpd

Existing Peak Flow Calcs										
Variable	Value	Unit								
Q _{en, imp}	1,469,098	gpd								

Section E: Projected Flow Calculations

Variable	Description	Definition
Q _{proj. posts}	Projected Peak Flow	$= \{Q_{ex, peak} + Q_{e}\} \times 1.05$
Claroj, avg	Projected Avg. Flow	= Q _{orol, peak} + P.F.

Projected Flow Calculations									
Variable	Value	Unit							
Q _{proj, peak}	1,607,285	gpd							
Q _{proL ave}	459,224	gpd							

Section F: Compare Results with Applicant's Submission

Variable	PWSA Caics, and	Applic. Calcs, gpd	Difference, gpd	Difference, %
Q _{d, peak}	32,182,376	32,184,000	1,624	0%
Q _{d, ave}	9)194)965	9,195,400	-435	0%
Q _{ex, peak}	1,469,098	1,466,500	2,598	0%
Q _{es, ave}	419,742	419,000	742	0%
Oproj, pesis	1,607,285	1,604,558	2,727	0%
Oproj. avg	459,224	458,445	779	0%

☑ J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)
c. Conveyance System
Name of Agency, Authority, Municipality ALCOSAN
Name of Responsible Agent Shawn P. McWilliams, EIT
Agent Signature ACR MUSEUM
Date
4. Treatment Facility
The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.
YES NO *ALCOSAN IS UNDER A CONSENT DECREE TO ADDRESS WET WEATHER OVERFLOWS.
a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?
If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.
If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.
b. Name of Agency, Authority, Municipality ALCOSAN
Name of Responsible Agent Shawn P. McWilliams, EIT
Agent Signature A West Comment of the American Signature
Date 7/19/19
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.
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.
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. DETA	AILED HYDROGEOLOGIC STUDY (See Section N of instructions)											
	☐ The	detailed hydrogeologic information required in Section N. of the instructions is attached.											
0.	SEWA	GE MANAGEMENT (See Section O of instructions)											
		pletion by the developer(project sponser), 4-5 for completion by the non-municipal facility agent and tion by the municipality)											
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 assu	Yes, respond to the following questions, attach the supporting analysis, and an evaluation of the options available assure long-term proper operation and maintenance of the proposed non-municipal facilities. If No, skip the emainder of Section O.											
2.	Project	Flows <u>61,650</u> gpd											
	Yes	No											
3.		Is the use of nutrient credits or offsets a part of this project?											
	If yes, a offsets v	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	complet	ion by non-municipal facility agent)											
4.		on and Conveyance Facilities											
	The que and con organiza	estions below are to be answered by the organization/individual responsible for the non-municipal collection veyance facilities. The individual(s) signing below must be legally authorized to make representation for the ation.											
	Ye	· · · · · ·											
	a. [overload on any existing collection or conveyance facilities that are part of the system?											
	If yes agen	s, this sewage facilities planning module will not be accepted for review by the municipality, delegated local cy and/or DEP until this issue is resolved.											
	to ind	a representative of the organization responsible for the collection and conveyance facilities must sign below dicate 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 s.											
	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 Rev. 2/2015 Form

5.	Tre	Treatment Facility													
	The	st be	legall	ly author	are to be answered by a representative of the facility permittee. The individual signing below ized to make representation for the organization.										
		Ye	S	No											
	a.				this project proposes the use of an existing non-municipal wastewater treatment plant for e disposal of sewage, will this action create a hydraulic or organic overload at that facility?										
		lf y age	es, tl	his plan and/or Di	ning module for sewage facilities will not be reviewed by the municipality, delegated local EP 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	e SEL n-mun	ECTED	OPTION necessary to assure long-term proper operation and maintenance of the proposed cilities is clearly identified with documentation attached in the planning module package.										
P.	PU	BLI	C NO	OTIFIC	ATION 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 newspaper of general circulation to provide a chance for the general public to comment on proposed new lan 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 a applicant or an applicant's agent provides the required notice for publication, the applicant or applicant's agent sha 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 pub	com licati	plete on is :	this sec required	tion, each of the following questions must be answered with a "yes" or "no". Newspaper if any of the following are answered "yes".										
	•	Yes	No												
		_			e project propose the construction of a sewage treatment facility? project change the flow at an existing sewage treatment facility by more than 50,000 gallons										
	3.		\boxtimes		project result in a public expenditure for the sewage facilities portion of the project in excess										
	4.		\boxtimes	Will the within th	project lead to a major modification of the existing municipal administrative organizations ne municipal government?										
	5.		\boxtimes	Will the municip	project require the establishment of <i>new</i> municipal administrative organizations within the al government?										
	6.		\boxtimes	Will the	project result in a subdivision of 50 lots or more? (onlot sewage disposal only)										
	7.		\boxtimes	Does th	e project involve a major change in established growth projections?										
	8.		\boxtimes	Does the Sewage	e project involve a different land use pattern than that established in the municipality's Official Plan?										

Р.	PUBLIC NOTIFICATION REQUIREMENT C	ont,d. (See Section P of instructions)											
	 9. \[\subseteq \] Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)? 10. \[\subseteq \] 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. \[\subseteq \] 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	on Q of instructions)											
bel	erify that the statements made in this component are trief. I understand that false statements in this componenting to unsworn falsification to authorities.	rue and correct to the best of my knowledge, information and ent are made subject to the penalties of 18 PA C.S.A. §4904											
MA	UREEN S. GOLAN	Maureen & Golan											
	Name (Print)	Signature											
EN	GINEER IN TRAINING	April 10, 2019											
200 SE	Title 00 GEORGETOWNE DRIVE - SUITE 101, WICKLEY, PA 15143	724-444-1100											
	Address	Telephone Number											
R.	REVIEW FEE (See Section R of instructions)												
mo "de	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 a DEP's review of my project will not begin until DEP received.	and send me an invoice for the correct amount. I understand ives the correct review fee from me for the project.											
\boxtimes	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 \$7.750 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.												
	lot and is the only lot subdivided from a parcel of lan	review fee because this planning module creates only one new and as that land existed on December 14, 1995. I realize that I disqualify me from this review fee exemption. I am furnishing by fee exemption.											
	County Recorder of Deeds for	County, Pennsylvania											
	Deed Volume	Book Number											
	Page Number	Date Recorded											

R. REVIEW FEE (continued)

Formula:

 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.

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:

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)

COMPONENT 3 APPENDIX



Pennsylvania Corporate Headquarters

Waterfront Corporate Park III Suite 101 2000 Georgetowne Drive Sewickley, PA 15143 724.444.1100 www.pve-llc.com

Civil Engineering • Energy • Environmental • Land Development • Landscape Architecture • Municipal • Structure Design • Survey

CERTIFIED MAIL

June 26, 2019 161530

Mr. Michael Lichte, P.E., Manager of Planning Allegheny County Sanitary Authority (ALCOSAN) 3300 Preble Avenue Pittsburgh, PA 15233

RE: Sewage Facilities Planning Module for

201 Arsenal Phase II Residential Land Development

City of Pittsburgh, Allegheny County

Mr. Lichte:

Please find enclosed the Planning Module Component 3 prepared for the above referenced project for you to review. If the information provided is acceptable, please include your flow data in Section J and sign in the appropriate locations.

The 201 Arsenal Phase II Residential Land Development will be located along Butler Street between 40th and 39th Streets, in the 6th Ward of the City of Pittsburgh. The proposed multi-unit residential buildings, with associated integral structured parking and amenity space will be serviced by a gravity operated collection system which will be owned and operated by the Pittsburgh Water and Sewer Authority to an existing ALCOSAN Interceptor. From this point sewage is then conveyed to the ALCOSAN sewage treatment plant. The proposed development will generate approximately an additional 61,650 gallons per day into the system. Please note that CEC submitted an SFPM in 2016, which has been allocated for Phase 1 construction.

Once we receive the signed and completed Component 3 and the completed Municipal and County reviews (Components 4A & 4C), we will make the appropriate number of copies and mail the entire Planning Module package to the City of Pittsburgh along with the required Resolution for Adoption by Council.

If you have any questions or require additional information, please do not hesitate to call.

Sincerely, PVE, LLC

Maureen Golan, EIT

Mauran Glan

Enclosures

New York 48 Springside Avenue Poughkeepsie, NY 12603 845.454.2544 Manhattan 708 West 39th Street Suite 500 New York, NY 10018 646.602.4999 West Virginia 1700 MacCorkle Avenue, S.E. Charleston, WV 25314 304.340.4821 Ohio 1156 E. State Street Salem, OH 44460 330.332.5200 **Texas** 10550 Richmond Avenue Sulte 160 Houston, TX 77042 713.375.1400 ext. 456



July 19, 2019

Members of the Board

Sylvia C. Wilson Chair Person

Jack Shea Rep. Harry Readshaw John Weinstein Corey O'Connor Brenda L. Smith Shannah Tharp-Gilliam, Ph.D.

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Director
Environmental Compliance

Jeanne K. Clark
Director
Governmental Affairs

Joseph Vallarian
Director
Communications

Ms. Maureen Golan, EIT PVE, LLC Waterfront Corporate Park III, Suite 101 2000 Georgetown Drive Sewickley, PA 15143

201 Arsenal Phase II – City of Pittsburgh, 6th Ward PA DEP Sewage Facilities Planning Module ALCOSAN Regulator Structure A-27-00

Dear Ms. Golan:

We have reviewed the Component 3 Planning Module for the referenced project to be located in 6th Ward of the City of Pittsburgh. The project will generate a peak flow of 61,650 gpd in the ALCOSAN Allegheny River Interceptor and Woods Run Treatment Plant.

The capacity at the ALCOSAN A-27-00 Diversion Structure is 2.42 MGD. The daily peak dry weather flow is approximately 0.335 MGD. Sufficient dry weather capacity exists for this connection. However, the ALCOSAN Allegheny River Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated by the tributary communities during wet weather periods. This limitation will be analyzed further as ALCOSAN implements its Clean Water Plan.

ALCOSAN has completed and signed the sections required in the Component 3 module and requests that this letter be made part of the planning module submission. If you have any questions regarding this matter, please contact me at 412-732-8053.

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Shawn P. McWilliams, EIT

Civil Engineer

attachment

CC

C. Dean (w/o attachment)

D. Thornton (w/o attachment) M. Lichte (w/o attachment)

Matt Smuts/ PWSA (w/o attachment)

T. Flanagan/ PADEP (w/o attachment)

M. Scheer/ ACHD (w/o attachment)



June 25, 2019

Ms. Maureen Golan, E.I.T. PVE, LLC Waterfront Corporate Park III, Suite 101 2000 Georgetowne Drive Sewickley, PA 15143

Subject:

DEP Sewage Facilities Planning Module - Component 3

Chapter 94 Consistency Determination

201 Arsenal Phase II Submitted: June 3, 2019

Dear Ms. Golan:

Pursuant to your request, we have reviewed the DEP Sewage Facilities Planning Module for the 201 Arsenal Phase II (Project) located at 135 39th Street, Pittsburgh, PA 15201. We have determined that the proposed Project will not create a dry-weather hydraulic overload within the next five (5) years for any collection facility owned by the Pittsburgh Water and Sewer Authority (PWSA). Please refer to the enclosed and approved "Section J — Chapter 94 Consistency Determination". A copy of the DEP-approved Sewage Facilities Planning Module shall be provided to the PWSA prior to the issuance of the Tap-In Permit for connection to the existing waterline and/or sewerline.

Please be advised that the Sewage Facilities Planning Module shall not be considered complete by the DEP until approved by the Allegheny County Sanitary Authority (ALCOSAN) and Pittsburgh City Council (Council). For additional information, please contact Michael Lichte (412-734-6209) at ALCOSAN or Leslie Stevens (412-255-2005) at the City of Pittsburgh Law Department. Please note that a City Resolution shall be requested prior to Council approval.

Our review was based on information provided by your firm under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at 412-255-8580 or RHerring@pgh2o.com.

Sincerely

Robert Herring, P.E

Engineering Consultant

Enclosures

cc:

Kate Mechler, P.E. - PWSA (via email)

Julie Asciolla – PWSA (via email)

Thomas Flanagan – DEP (via email)

Leslie Stevens - City of Pittsburgh-Law-Department (via email)

Michael Lichte, P.E. - ALCOSAN (via email)

PWSA File (via,email)

Penn Liberty Plaza I 1200 Penn Avenue Pittsburgh PA 15222

Infodpgh2o.com T 412 255 2423 F 412 255 2475 www.pgh2a.com **y** ⊕pgh2a Customer Service / Emergencies: 412.255.2423



MEMO

То:	Barry King, P.E.						
From:	Robert Herring, P.E.						
Date:	June 20, 2019						
Subject:	DEP Sewage Facilities Planning Module – Component 3						
	Chapter 94 Consistency Determination						
	Hydraulic Calculation Review						
	201 Arsenal Phase II						

Dear Barry,

Pursuant to your request, we have reviewed the DEP Sewage Facilities Planning Module — Component 3 as submitted by PVE, LLC (Applicant) for the 201 Arsenal Phase II Project (Project) located at 135 39th Street, Pittsburgh, PA 15201. In accordance with Title 25 of the Pennsylvania Code, the Pittsburgh Water and Sewer Authority (PWSA) is required to prepare an annual Wasteload Management Report on the collection and conveyance of wastewater relative to available capacity. Our review was conducted to understand how the proposed Project will impact available dry-weather capacity and whether the proposed flows will contribute to a dry-weather hydraulic overload within the next five (5) years. Please note that a dry-weather hydraulic overload shall require denial of the Sewage Planning Module and submission of a Corrective Action Plan to the PaDEP.

Based on the foregoing, we have determined that the proposed Project will not contribute to a dry-weather hydraulic overload within the next five years. Please refer to the enclosed hydraulic calculations for the proposed tie-in location. Upon your approval, please sign the enclosed "Section 1 - Chapter 94 Consistency Determination" from the DEP Sewage Facilities Planning Module – Component 3, as indicated.

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

Yours truly,

Robert Herring, P.E. Engineering Consultant

Enclosures

Pennsylvania Corporate Headquarters



Waterfront Corporate Park III Suite 101 2000 Georgetowne Drive Sewickley, PA 15143 724.444.1100 www.pve-llc.com

Civil Engineering • Energy • Environmental • Land Development • Landscape Architecture • Municipal • Structure Design • Survey

CERTIFIED MAIL

May 28, 2019 161530

Pittsburgh Water & Sewer Authority Engineering and Construction Division Penn-Liberty Plaza 1 1200 Penn Avenue Pittsburgh, PA 15222

RE: Sewage Facilities Planning Module for

201 Arsenal Phase II Residential Land Development

City of Pittsburgh, Allegheny County

Mr. Matthew Smuts:

Please find enclosed the Planning Module Component 3 prepared for the above referenced project for you to review. If the information provided is acceptable, please include your flow data in Section J and sign in the appropriate locations.

The 201 Arsenal Phase II Residential Land Development will be located along Butler Street between 40th and 39th Streets, in the 6th Ward of the City of Pittsburgh. The proposed multi-unit residential buildings, with associated integral structured parking and amenity space will be serviced by a gravity operated collection system which will be owned and operated by the Pittsburgh Water and Sewer Authority to an existing ALCOSAN Interceptor. From this point sewage is then conveyed to the ALCOSAN sewage treatment plant. The proposed development will generate approximately an additional 61,650 gallons per day into the system. Please note that CEC submitted an SFPM in 2016, which has been allocated for Phase 1 construction.

Once we receive the signed and completed Component 3 and the completed Municipal and County reviews (Components 4A & 4C), we will make the appropriate number of copies and mail the entire Planning Module package to the City of Pittsburgh along with the required Resolution for Adoption by Council.

If you have any questions or require additional information, please do not hesitate to call.

Sincerely, PVE, LLC

Maureen Golan, EIT

Mauren Islan

Enclosures

New York 48 Springside Avenue Poughkeepsie, NY 12603 845.454.2544 Manhattan 708 West 39th Street Suite 500 New York, NY 10018 646.602.4999 West Virginia 1700 MacCorkle Avenue, S.E. Charleston, WV 25314 304.340.4821 Ohio 1156 E. State Street Salem, OH 44460 330.332.5200 **Texas** 10550 Richmond Avenue Suite 160 Houston, TX 77042 713,375.1400 ext. 456



August 1, 2019

Maureen Golan, EIT PVE Engineering Waterfront Corporate Park III, Suite 101 2000 Georgetowne Drive Sewickley, PA 15143

RE: SEWAGE FACILITIES PLANNING MODULE;

201 Arsenal Phase II Residential Land Development,

City of Pittsburgh, ALLEGHENY COUNTY

Dear Ms. Golan:

Enclosed is a signed copy of Component 4C, County or Joint County Health Department Review, for the above-referenced development. This Planning Module Component was received on July 30, 2019. The project proposes the following:

Project Description: 201 Arsenal Phase II Residential Land

Development. Proposing to construct a new multiunit residential building (second phase) with associated integral structured parking and amenity space located along Butler Street between 40th and 39th in the City of Pittsburgh, Allegheny County.

Sewage Flow: 61,650 GPD

Conveyance: The flow from this site will be conveyed to the

Pittsburgh Water & Sewer Authority collection system to ALCOSAN POC A-27 to the Allegheny River interceptor and then to the ALCOSAN

Treatment Plant at Woods Run.

Sewer's Owner: PWSA (collection) and ALCOSAN (interceptor)

Name of Sewage Treatment Plant: ALCOSAN

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, you can call 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 412-578-8046

Sincerely,

Freddie Fields, M.B.A.

Environmental Health Engineer III

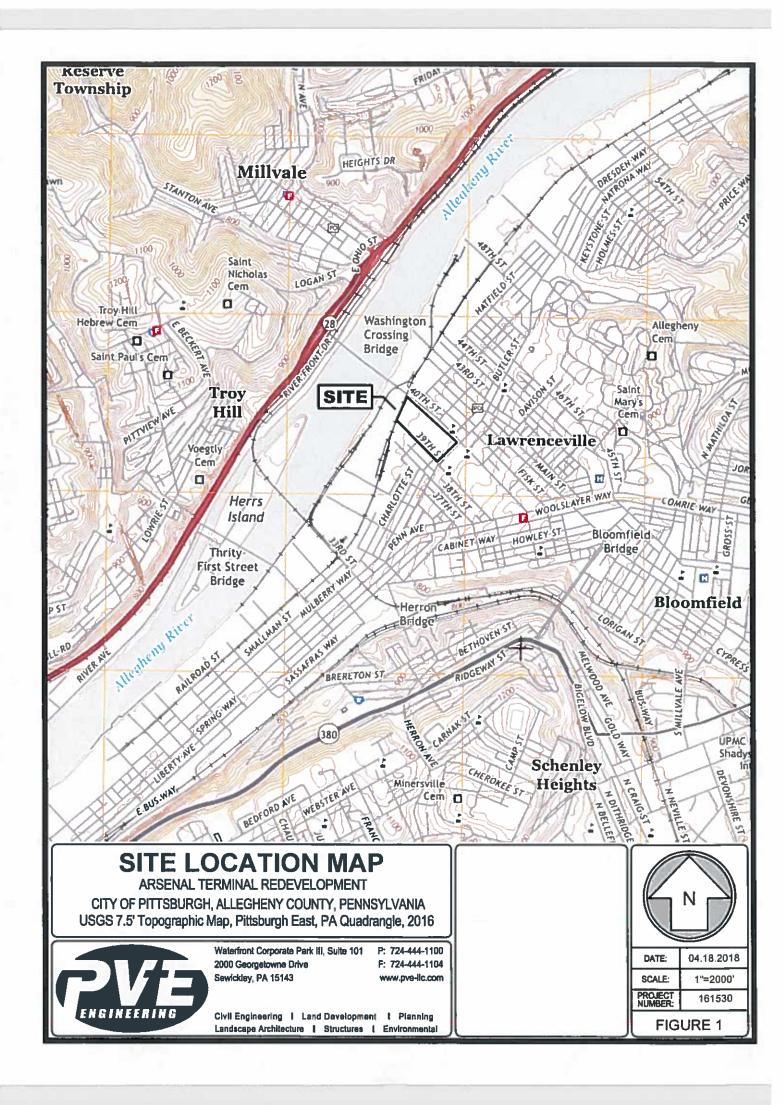
Water Pollution Control & Solid Waste Management

FF/cb Enclosure

cc: Thomas Flanagan, PA DEP w/attachment (electronically)

Ivo Miller, ACHD w/attachment (electronically)

SITE LOCATION MAP



SOILS MAP



MAP LEGEND

Spoil Area	Stony Spot	Very Stony Spot	_	Wet spot	∆ Other	Special Line Features	Water Features	Streams and Canals	Transportation	+ Rails	Interstate Highways	US Routes	Major Roads	Local Roads	Background	Aerial Photography			
Area of Interest (AOI)	Area of Interest (AOI)		Soil Map Unit Polygons	Soil Map Unit Lines	Soil Map Unit Points	Special Point Features		ĕ		Clay Spot	Closed Depression	Gravel Pit	Gravelly Spot	Landfill	Lava Flow Baci	Marsh or swamp	Mine or Quarry	Miscellaneous Water	Perennial Water
Area of In		Soils		1		Special	(9)) ⊠	3	×		×	**	•	٨	4	*	0	C

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Altegheny County, Pennsylvania Survey Area Data: Version 12, Oct 27, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 5, 2014—Aug 28, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Eroded Spot

ø

Slide or Slip

Д

Sinkhole

Sodic Spot

Sandy Spot

Saline Spot

Rock Outcrop

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UB	Urban land	7.5	43.7% 56.3%
URB	Urban land-Rainsboro complex, gently sloping	9.7	
Totals for Area of Interest		17.1	100.0%

WATER AVAILABILITY LETTER FROM PITTSBURGH WATER AND SEWER AUTHORITY (PWSA)



February 16, 2018

Mr. Joel Papcunik PVE 2000 Georgetowne Drive, Suite 101 Sewickley, PA 15143

RE:

Water and Sewer Availability

Arsenal Terminal Warehouses - Phase 2

39th Street - 15201

Dear Mr. Papcunik:

In response to your inquiry on 2/12/2018 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.pgb2o.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



PGH40 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.

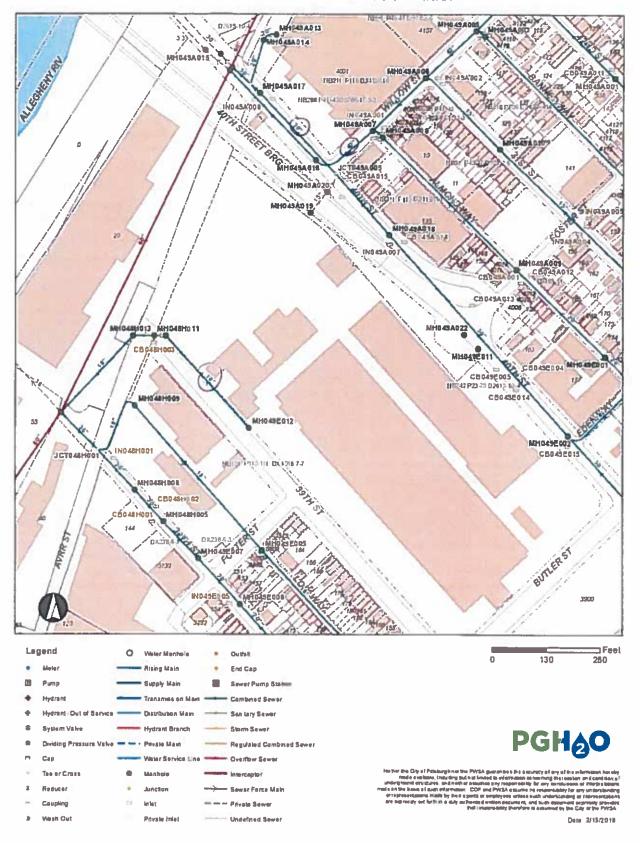
This request form is required for all of the following types of development. (Please note that the term "sewer" refers to sanitary sewers, combined sewers, and storm sewers.)

- 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.

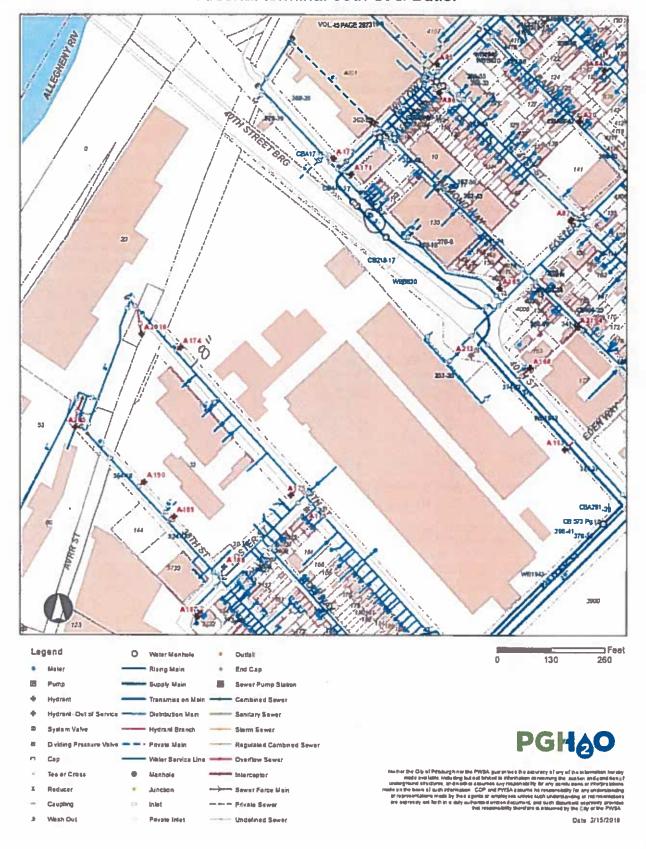
Information to be subsided	I has Aban All although					
Information to be submitted	Dy the Applicant					
Property Owner Name: Ar	rsenal Terminal W	/arehouses, Inc				
Address of Property: 39 Str	eet, Pittsburgh P/	A 15201	- ·			
Proposed Use of Site: 2 bu	uilding, 244 unit, 5	story Residential Developmen	t			
Closest street intersection to the	he property:	low Street / 39th Street				
Requestor Name: Joel Papcunik			Date of Request:	Feb 12, 2018		
Requestor Address: 2000 (2000 Georgelown Drive, Suite 101 Sewickley PA 15143					
Requestor Phone Number:	724-444-1100 x5	541		MEVISOS!		
Please submit the cor	mpleted form to:	Pittsburgh Water and Engineering and Con 1200 Penn Avenue Pittsburgh, PA 15222 Attn: Ms. Michelle C	struction Division	(11)		
PWSA Use Only: PWSA Water Service Available PWSA Sewer Service Available	ble: Ox Yes	Water No Size/Location: 8!! Sewer No Size/Location: 18!	Total Control of the	0"i42"40thst 12" 40th st 30"40thst		
Applicant must contact separa Name of separate agency:	ate agency for water	r and/or sewer service:	es PNo	remape ARA of the Artificial Institution in parts in group as the day of the Artificial Institution in the Artificial Institution In		
PWSA Approval Authority:	Signature and Date Name (printed)	Michelle Carne Encure Tech	40	152018		

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.

Arsenal terminal 39th St & Butler



Arsenal terminal 39th St & Butler



SECTION F PROJECT NARRATIVE

Section F - Project Narrative

201 ARSENAL PHASE II RESIDENTIAL LAND DEVELOPMENT

Proposed Method of Sewage Service:

Butler & 40th, LLC is proposing to construct a new multi-unit residential building, with associated integral structured parking and amenity space. This is the second phase of a multiphase project. The project has an approved Planning Module (submitted by CEC, Inc. in 2016 on behalf of Butler & 40th, LLC), but due to modified lot lines and parcel uses, PVE, LLC is submitting a new Planning Module for Phase II of the project (parcels 2-5). In accordance with both PADEP and PWSA standards, the 2016 approved EDUs stay with Parcel 1. This Parcel was fully constructed during the completed Phase 1 of the project. Flows are calculated using PA Code, Title 25, 73.17 (see Tables 1 & 2 below).

201 Arsenal is located in the 6th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania (see Figure 1), in Lawrenceville. The project is located along Butler Street between 40th and 39th Street, extending the entire block to the railroad tracks adjacent to the Allegheny River. The total property boundary is approximately 13 acres of which approximately 5 acres will be disturbed during Phase II. The subject area includes 6 parcels of land, of which parcels 1, 5 and 6 will remain unchanged during this phase. Construction on Phase II is scheduled to begin in Fall 2019.

The proposed flows from the development will be serviced by a gravity operated collection system which will be owned and operated by the Pittsburgh Water and Sewer Authority to an existing ALCOSAN interceptor. From this point sewage is then conveyed to the ALCOSAN sewage treatment plant.

Justification of Anticipated Flows:

Table 1 - Parcels to Remain Unchanged

	Pare	cel 1 (Completed Phase I)			
Use	No. Units	PWSA Flow Category	GPD/Unit	Total GPD	
Micro	31	Apartment (Efficiency) 150 4,65		4,650	
Studio	Studio 39 Apartment (Efficiency) 150		5,850		
1 Bedroom	100	Apartment (1 Bedroom)	150	15,000	
2 Bedroom	63	Apartment (2 Bedroom)	300	18,900	
3 Bedroom	10	Apartment (>2 Bedroom)	400	4,000	
Amenity/Lobby/Retail	ty/Lobby/Retail 12 Store (per Public Toilet) 400		4,800		
Total				53,200	
	Parcel	5 (Existing Legget Building	()		
Use	No. Units	PWSA Flow Category	GPD/Unit	Total GPD	
Warehouse			1,610		
Total			1,610		
	Pai	cel 6 (Existing Rite Aid)			
Use	No. Units	PWSA Flow Category	GPD/Unit	Total GPD	
Retail	3	Stores (per Public Toilet)	400	1,200	
Total				1,200	

Table 2 – Parcels Proposed for Construction During Phase II

Parcel 2 (P	roposed Apar	tment Building & Existing	Officers Qua	rter)		
Use	No. Units	PWSA Flow Category	GPD/Unit	Total GPD		
Micro	32	Apartment (Efficiency)				
Studio			150	11,400		
1 Bedroom 183 Apartment (1 Bedroom) 15				27,450		
2 Bedroom						
3 Bedroom	5	Apartment (>2 Bedroom)	400	2,000		
Amenity/Office/Retail	2	Public Toilet 400		800		
Total				60,850		
	Parcel 3 (I	Proposed Future Developm	ient)			
Use	No. Units	PWSA Flow Category	GPD/Unit	Total GPD		
Undeveloped	1	N/A	400	400		
Total				400		
	Pa	rcel 4 (Proposed Park)				
Use	No. Units	PWSA Flow Category	GPD/Unit	Total GPD		
Dog Park	1	N/A	400	400		
Total				400		

Therefore, the total anticipated peak flow rate from the 201 Arsenal, Phase II is the sum of the total flow rates presented in Table 2 (parcels 2,3 and 4), or 61,650 GPD in order to account for the subdivided parcels. This equites to an equivalent domestic unit (EDU) of 155. This estimate was passed upon the PaDEP standard for average daily flows and for Equivalent Domestic Units of 1 EDU = 400 gallons per day for the proposed residential development. (Please note that for PWSA tap-in purposes, an EDU is equivalent to 300 gallons per day and as such the proposed construction is anticipated to create 206 EDUs.)

The existing flows on Parcels 1, 5 and 6 amount to 56,010 GPD, or 140 PADEP EDUs and 187 PWSA EDUs. These flows are accounted for in the original Planning Module and tap-in plans/fees for the Phase I parcels.

Assumptions include:

- Warehouse sewage flow is 35 gallons per day per employee (PA Code, Title 25, 73.17.b.)
- Residential apartment sewage flow ranges from 150-400 gallons/unit/day (PA Code, Title 25, 73.17.a.)
- Officers Quarters flow is 400 gallons/public restroom/day (PA Code, Title 25, 73.17.b.)
- All parcels must have at least 1 (one) EDU associated with it for lot line/subdivision purposes.
- All non-listed amenities and residential areas are for the sole use of residents and will not contribute any additional flows.

WETLAND PROTECTION

Section G.4 - Wetland Protection

201 ARSENAL PHASE II RESIDENTIAL LAND DEVELOPMENT

No wetlands are known to exist in the area to be developed for this project. The Allegheny River (classified as R2UBH - Riverine - by the National Wetlands Inventory) is approximately 475 feet away from the nearest perimeter point of the subject property. **PHMC DOCUMENTS**

Section G.6 - Historic Preservation

201 ARSENAL PHASE II RESIDENTIAL LAND DEVELOPMENT

Preservation correspondence was completed in 2015 with the original masterplan, which remains unchanged in regards to historic preservation on the project site. See attached correspondence for The Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic more information.



Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Hemisburg, PA 17120-0093
www.phmc.state.pa.us

June 3, 2015

Jim Snyder MA, RPA Civil & Environmental Consultants 530 East Ohio Street, Suite G Indianapolis, IN 46204

TO EXPEDITE REVIEW USE BHP REFERENCE NUMBER

Re:

File No. ER 2015-2076-003-A DEP Chapter 105; NPDES; Act 537 Permits: 40th & Butler, LLC, Arsenal Terminal Warehouse Property Redevelopment, City of Pittsburgh, Allegheny County

Dear Mr. Snyder:

Thank you for submitting information concerning the above referenced project. The Bureau for Historic Preservation (the State Historic Preservation Office) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources:

Archaeology

Please plan to conduct a historical documents study to assess this property's potential for significant archaeological resources. This study would consist of a thorough review of all available historic through recent maps and other documentary sources which may provide information on past land use within the project area. If this research suggests that potentially significant archaeological resources may be present, then proceed to develop a Phase I archaeological testing plan to identify such resources. Include a comprehensive geomorphological assessment in the Phase I work plan. The purpose of the geomorphological investigation is to define the depths of disturbed and fill soils and to assess the potential for buried archaeological deposits. The report must include specific recommendations concerning the archaeological potential of the project area and how any areas of such potential will be investigated. Submit the completed report and work plan to our office for review and comment.

Historic Structures

Your request does not include sufficient information. We are unable to proceed with our review for historic structures until the information on the attached form is

Page 2 June 3, 2015 Jim Snyder MA, RPA

If you need further information regarding archaeological resources, please contact Kira Heinrich at (717) 705-0700. If you need further information concerning historic structures, please contact Barbara Frederick at (717) 772-0921.

Sincerely,

Douglas C. McLearen, Chief Division of Archaeology &

Protection

Attachment DCM/tmw

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION BUREAU FOR HISTORIC PRESERVATION

http://phmc.info/historicpreservation.

ADDITIONAL INFORMATION REQUEST SHEET

(Revised May 2014)

Please submit checked items for PHMC-BHP to proceed with project review.

A. FUNDING/PERMITTING/LICENSING/APPROVAL PROGRAM () 1. Identify the Federal/State Agency and funding program or permit/license
 B. PROJECT DESCRIPTION 1. Narrative description of the project and related actions resulting from the project Proposed boundary of the project's Area of Potential Effect (APE). Provide Justification of APE. Remember to consider visual impacts Architectural plans of existing conditions (as-built or as-found) Preliminary architectural drawings or plans (floor plans, elevations, specifications) Work write-ups Site plans of existing conditions Site plans of proposed development For linear project: highlight any portion of the alignment that is located outside of current road/railroad or buried utility Right-of-Way (ROW)
C. PROJECT LOCATION () 1. U.S.G.S 7.5 min. series quadrangle with the PROJECT LOCATION(S) AND LIMITS CLEARLY MARKED using a colored pen. Please include the name of the quadrangle. Map must include nearest place name. () 2. Street map (for properties in densely populated areas) () 3. Street map showing location and historic district boundaries (if appropriate) () 4. Street address of property () 5. Municipality in which project is located (not mailing address location)
 D. PROJECT SIZE (supply as appropriate for project) () 1. Acreage of project area () 2. Miles/feet of project area and Right-of-Way (ROW) width () 3. Extent and nature of ground disturbing activities (i.e. grading, trenching, foundation excavation)
E. PHOTOGRAPHS (No photocopies. Clear, color, high resolution digital images preferred) () 1. Exterior of all building(s)/structures in project area () 2. Interior of building(s) in project area () 3. Interior of building(s) illustrating the proposed work areas/features () 4. Buildings, streetscape, setting of features in Area of Potential Effect (APE) () 5. Views of project area
 F. CULTURAL RESOURCE IDENTIFICATION () 1. Pennsylvania Historic Resource Survey Form(s) for all properties 50 years or older within the Area of Potential Effect (APE) (see our website at: http://phmc.info/historicpreservation, Select () 2. Historical background, context report, information for historic resources Identified Apply this context, available on our website:
G. EFFECTS () 1. How will the project affect building(s) over 50 years old? National Register listed/eligible property(s) exist in project area. How will the project affect this historic property(s)?
Lawrenceville Historic District



Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

8 July 2015

James Snyder Civil & Environmental Consultants 530 E. Ohio Street, Suite G Indianapolis, IN 46204

Re:

ER# 2015-2076-003-B

DEP: Documentation of Archaeological Monitoring, Arsenal Terminal Warehouse Property, Pittsburgh, Allegheny County

Dear Mr. Snyder:

Thank you for submitting information concerning the above referenced project. The Bureau for Historic Preservation (the State Historic Preservation Office) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Thank you for submitting documentation of the archaeological monitoring you performed for the geotechnical soil borings and backhoe trenches. The information you have provided in this submission, specifically the historic mapping of the project area, in our opinion further solidifies the need for Phase IB archaeological testing throughout this project area. Please provide a work plan for the additional archaeological testing to our office for our review. Please include the information provided in the above-reference document as part of the full Phase I archaeological survey report.

If you need further information in this matter please consult Kira Heinrich at (717) 705-0700.

Sincerely.

Douglas C. McLearen, Chief

Division of Archaeology & Protection

DCM/kmh



Commonwealth of Pennsylvania Pennsylvania Historical and Museum Commission Bureau for Historic Preservation Commonwealth Keystone Building, 2nd Floor 400 North Street Harrisburg, PA 17120-0093 www.phmc.state.pq.us

5 October 2015

James Snyder Civil & Environmental Consultants 530 E. Ohio Street, Suite G Indianapolis, IN 46204

ER# 2015-2076-003-C

DEP: Phase IB Work Plan, Arsenal Terminal Warehouse Property,

Pittsburgh, Allegheny County

Dear Mr. Snyder:

The Bureau for Historic Preservation (the State Historic Preservation Office) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Thank you for providing this work plan for the Phase IB survey of the above-referenced project area. We concur with the methodology presented in this plan. Based on the information provided to date, however, we do not feel that the level of effort proposed will adequately document the presence or absence of archaeological remains within this project area. It is our opinion that the level of effort should be increased, potentially to as much as twice what is proposed here. Trenches should be placed based on the results of the historic research, remote sensing, and current condition of the project area. All un-tested areas should be justified, and all areas not tested because of the presence of substantial disturbance should document that disturbance as justification.

If you need further information in this matter please consult Kira Heinrich at (717) 705-0700.

Sincerely,

Douglas C. McLearen, Chief

Division of Archaeology & Protection

DCM/kmh

THREATENED SPECIES (PNDI)

1. PROJECT INFORMATION

Project Name: Arsenal Terminal Redevelopment

Date of Review: 4/20/2018 08:20:20 AM

Project Category: Development, Residential, Subdivision containing more than 2 lots and/or 2 single-family

units

Project Area: 17.66 acres County(s): Allegheny

Township/Municipality(s): PITTSBURGH

ZIP Code: 15201

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

Watersheds HUC 12: Allegheny River-Ohio River

Decimal Degrees: 40.469300, -79.964500

Degrees Minutes Seconds: 40° 28' 9.4800" N, 79° 57' 52.1984" W

2. SEARCH RESULTS

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

Pennsylvania Natural Diversity Inventory (PNDI) records indicate that while threatened and endangered and/or special concern species and resources are in the project vicinity and that recommended Conservation Measures should be implemented in their entirety to avoid and minimize impacts to these species, no further coordination is required with the jurisdictional agencies. If a DEP permit is required for this project, DEP has the discretion to incorporate one or more Conservation Measures into its permit. This response does not reflect potential agency concerns regarding potential impacts to other ecological resources, such as wetlands.

Arsenal Terminal Redevelopment



Project Boundary

Buffered Project Boundary

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

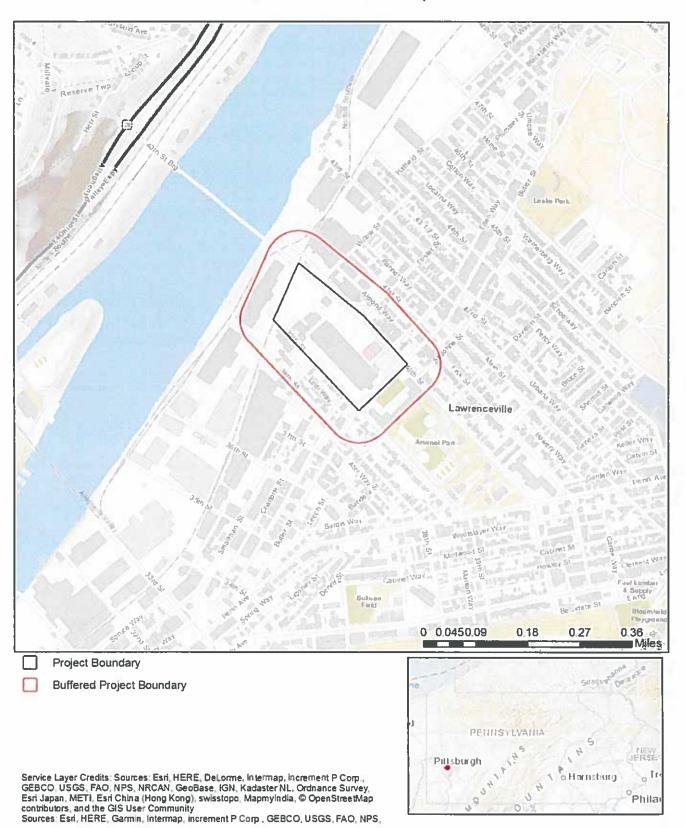
Page 2 of 6

Phila

Harrisburg

Pitt burgh

Arsenal Terminal Redevelopment



RESPONSE TO QUESTION(S) ASKED

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

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

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

Your answer is: No

3. AGENCY COMMENTS

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

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

PA Game Commission

RESPONSE:

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

PA Department of Conservation and Natural Resources

RESPONSE:

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

PA Fish and Boat Commission

RESPONSE:

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

U.S. Fish and Wildlife Service

RESPONSE:

Conservation Measure: Voluntary implementation of the following recommendations will contribute to the conservation and recovery of endangered and threatened species. — In order to maintain or improve water quality for endangered aquatic species, retain (or restore, if not already present) a 100- to 300-foot wide buffer on each side of the waterway (river, stream, creek) or waterbody (lake). Avoid construction, earth disturbance, and chemical application in this buffer. The buffer should be vegetated with native plant species. When adequately vegetated, this upland buffer will act to stabilize the streambanks (preventing or minimizing erosion), and filter pollutants (e.g., sediment, fertilizers, pesticides, road salt, oil). Where streambanks have become badly eroded (e.g., due to removal of native riparian vegetation), streambank fencing and/or bioengineering restoration techniques are recommended (geotextile, root wads, vegetative stabilization), rather than riprapping the streambanks; removing gravel bars; or attempting to dredge, ditch, channelize, or widen the stream.

Project Search ID: PNDI-655446

4. DEP INFORMATION

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

5. ADDITIONAL INFORMATION

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

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

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

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

PA Fish and Boat Commission

Name:

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

MAUREEN GOLAN Company/Business Name: PVE, LLC

Address: 2000 GEORGETOWNE DRIVE, SUITE 101

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

PA Game Commission

Bureau of Wildlife Habitat Management Division of Environmental Planning and Habitat

2001 Elmerton Avenue, Harrisburg, PA 17110-9797

Email: RA-PGC PNDI@pa.gov

NO Faxes Please

7. PROJECT CONTACT INFORMATION

City, State, Zip: SEVVICKLEY, PA, 15143	
Phone (724) 444-1100 Fax (724) 444-1104	
Email: mgolan@pve-ltc.com	
8. CERTIFICATION	
I certify that ALL of the project information contained in this receipt (includir size/configuration, project type, answers to questions) is true, accurate and location, size or configuration changes, or if the answers to any questions to	complete. In addition, if the project type
change, I agree to re-do the online environmental review.	
Maureen & Gelan	Spril 20, 2018
applicant/project proponent signature	date

SECTION H ALTERNATIVE ANALYSIS

Section H – Alternative Sewage Facilities Analysis 201 ARSENAL PHASE II RESIDENTIAL LAND DEVELOPMENT

Proposed Method of Sewage Disposal

The proposed 201 Arsenal Phase II development will be serviced by a gravity operated collection system which will be owned and operated by Pittsburgh Water and Sewer Authority (PWSA). The flows will be conveyed into an existing ALCOSAN interceptor and into the ALCOSAN sewage treatment plant.

Alternative Methods Considered

An alternative method of sewage disposal includes an individual septic system. Various factors such as failure rates of septic systems, desirability of developed lot, and size of the developed lot are all deterrents to installing a septic system.

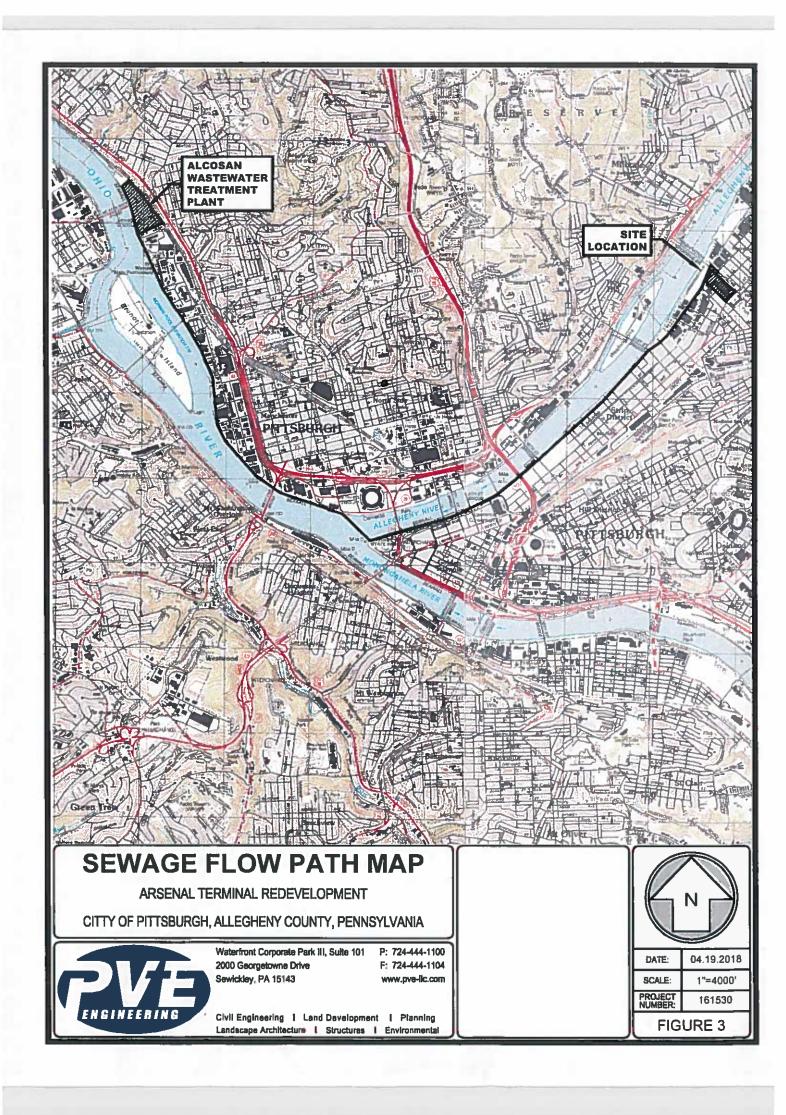
Alternative Alignments Considered

In keeping with the proposed method of sewage disposal, which is to construct a gravity sewer, different alternatives are available with respect to connection point to the existing system. The proposed alignment which will convey sewage from the proposed site to the existing ALCOSAN sewage system was determined to be the optimal layout based on distance, slope, and elevation.

Conclusion

The proposed method of providing sewer service to the proposed 201 Arsenal Terminal Phase II development is considered ultimate. The fact that an existing sewage interceptor and sewage treatment plant is nearby greatly reduces the justification for thoroughly considering various alternative methods.

SEWAGE FLOW PATH MAP



SECTION J FLOW TABLE FOOTNOTES AND DRY WEATHER FLOW CALCULATION

Section J – Chapter 94 Consistency Determination Footnotes 201 Arsenal Phase II Terminal Redevelopment

- (1) Design/Permitted collection system average design capacity computed using static Manning's analysis based on existing 30" vitrified clay sewer, with slope of 1.7%, Manning's n-value of 0.014 and full flow depth, divided by a peaking factor of 3.5 for combination sewers = 9.195,400 gpd.
- (2) Design/Permitted collection system peak design capacity computed using static Manning's analysis based on existing 30" vitrified clay sewer, with slope of 1.7%, Manning's n-value of 0.014 and full flow depth = 32,184,000 gpd.
- (3) Present collection system average flow computed using static Manning's analysis based on existing 30" vitrified clay sewer, with slope of 1.7%, manning's n-value of 0.014 and measured flow depth of 2.4 inches = 419,000 gpd.
- (4) Present collection system peak flow computed using the present average flows computed in Footnote 3, multiplied by a peaking factor of 3.5 for combination sewers = 1,466,500 gpd.
- (5) Projected collection system average flow computed using the present average flows computed in Footnote 6, divided by 3.5 = 458,445 gpd.
- (6) Projected collection system peak flow computed using the present peak flows computed in Footnote 4 plus project flows of 61,650 gpd, see calculations in the project narrative section F of Component 3, multiplied by a 5% growth factor = 1,604,558 gpd.

Note: An overview of the Manning's equation calculations reference above are provided on the subsequent page.



Dry Weather Flow and Design Capacity Calculations

Arsenal Terminal Redevelopment

Given: 30" Vitrified Clay Combination Sewer at a slope of 1.7% (S). Manning's N Value = 0.014.

Dry Weather Flow Calculation:

Flow Depth measure in downstream manhole = 2.4 inches or 0.20 feet (h).

Area of Flow in Pipe =
$$\frac{r^2(\theta-\sin\theta)}{2}$$
 where, $\theta=2\cos^{-1}\left(\frac{r-h}{r}\right)$

$$\theta = 2\cos^{-1}\left(\frac{1.25 - 0.20}{1.25}\right) \quad \theta = 1.147 radians$$

therefore, Area of Flow in Pipe =
$$\frac{1.25^{2}(1.147-\sin(1.147))}{2}$$
 A = 0.184 ft²

Wetted Perimeter
$$(P) = r\theta$$
, therefore $P = 1.25(1.147) = 1.434$ ft

Hydraulic Radius
$$(R_h) = \frac{A}{P}$$
 , therefore $R_h = \frac{0.184}{1.434} = 0.128\,ft$

$$Q = \frac{1.49}{n} (R_h)^{\frac{2}{3}} (S)^{\frac{1}{2}} A(0.64632), therefore$$

$$Q = \frac{1.49}{0.014} (0.128)^{\frac{2}{3}} (0.017)^{\frac{1}{2}} (0.184) (0.64632), \ Q = 0.419 \ mgd$$

Design Capacity of Pipe Calculation:

Full Flow Capacity, Depth = 30 inches or 2.5 feet (h).

Area of Flow in Pipe =
$$\frac{\pi D^2}{4}$$
, therefore $A = \frac{\pi 2.5^2}{4}$ $A = 4.909 \, ft^2$

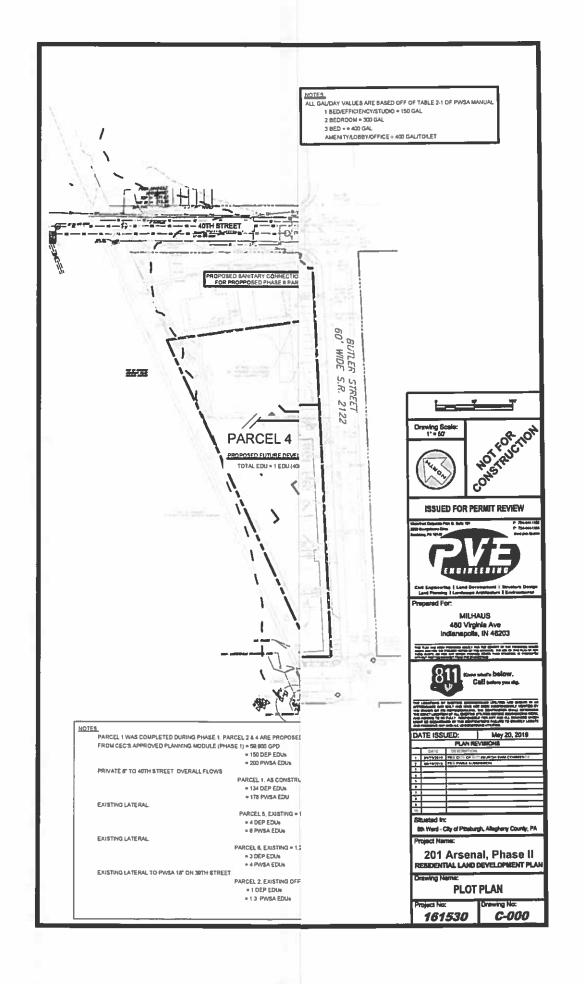
Wetted Perimeter =
$$\pi D$$
, therefore $P = \pi(2.5) = 7.854 \, ft$

Hydraulic Radius
$$(R_h) = \frac{A}{P}$$
, therefore $R_h = \frac{4.909}{7.854} = 0.625\,ft$

$$Q = \frac{1.49}{n} (R_h)^{\frac{2}{3}} (S)^{\frac{1}{2}} A(0.64632), therefore$$

$$Q = \frac{1.49}{0.014} (0.625)^{\frac{2}{3}} (0.017)^{\frac{1}{2}} (4.909) (0.64632), \ Q = 32.184 \ mgd$$

PLOT PLANS FOR SEWAGE FACILITY PLANNING PURPOSES



PUBLIC NOTIFICATION REQUIREMENT

Section P – Public Notification Requirement

201 ARSENAL PHASE II TERMINAL REDEVELOPMENT

PUBLIC NOTICE

Public notice is hereby given that Butler & 40th LLC will be submitting a Sewage Facilities Planning Module with revised lot lines/plot plans to the City of Pittsburgh and the Pennsylvania Department of Environmental Protection. The following information is provided for the proposed project in accordance with PADEP Component Three: 1. Name of Project: 201 Arsenal, Phase II 2. Type of development: multi-unit residential with private amenity and integral parking 3.Location: Butler Street (SR 2122), between 39th and 40th Streets, 6th Ward of the City of Pittsburgh, Allegheny County. 4. Acreage and EDU: 6.07 acres, 162 EDUs; the future phase on "parcel 3" is 1.5 acres and 1 EDU. 5. Sewage Disposal: Utilize the newly constructed 8" private sanitary sewer and tie into existing PWSA System, flow will be further conveyed to ALCOSAN for treatment 6.Publication requirement: the project proposes change to flow by more than 50,000 gallons per day 7&8. The public is invited to review the Sewage Facilities Planning Module and provide written comments during the 30-day comment and review period from April 15, 2019 - May 27, 2019. 9. a copy of the Sewage Facilities Planning Module is available for public review from 8:30 AM-4:30PM at the City of Pittsburgh Office of City Clerk, 414 Grant Street, Suite 510 City County Building, Pittsburgh, PA 15219 (ph 412-255-2138). Interested parties should submit written comments at the location for consideration.

Proof of Publication of Notice in Pittsburgh Post-Gazette

Under Act No 587, Approved May 16, 1929, PL 1784, as last amended by Act No 409 of September 29, 1951

Commonwealth of Pennsylvania, County of Allegheny, ss K. Flaherty, being duly sworn, deposes and says that the Pittsburgh Post-Gazette, a newspap of general circulation published in the City of Pittsburgh, County and Commonwealth aforesaid, was established in 1993 by the merging of the Pittsburgh Post-Gazette and Sun-Telegraph was established in 1960 and the Pittsburgh Post-Gazette was established in 1927 by the merging of the Pittsburgh Gazette established in 1786 and the Pittsburgh Post, established in 1842, since whi date the said Pittsburgh Post-Gazette has been regularly issued in said County and that a copy of said printed notice or publication is attached hereto exact as the same was printed and published in the Pittsburgh Post-Gazette edition and issues of the said Pittsburgh Post-Gazette a newspaper of gener circulation on the following dates, viz:

15 of April, 2019

Affidavit further deposes the he/she is an agent for the PG Publishing Company, a corporation and publisher of the Pittsburgh Post-Gazette, that, as such agent, affiant is duly authorized to verify the foregoing statement under oath, that affiant is not interested in the subject matter of the aforesaid notice or publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

and an	is statement as to mine, place and character of publical
	PG Publishing Company Swom to and subscribed before me this day of: May 22, 2019
	Ela beth Rhmung
	Commonwealth of Pennsylvania - Notary Seal Elizabeth R. Chmura, Notary Public Allegheny County My commission expires February 8, 2022 Commission number 1326781 Member, Pennsylvania Association of Notaries
	STATEMENT OF ADVERTISING COSTS PVE Sheffler LLC 2000 Georgetown Dr Ste 101 Waterfront Corporate Park III SEWICKLEY, PA 15143-8992
	To PG Publishing Company
	Total \$ 344.50
CI	lent:
Publisher's Receipt	for Advertising Costs

PG PUBLISHING COMPANY, publisher of the Pittsburgh Post-Gazette, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid advertising and publication costs and certifies that the same have been fully paid.

Office 2201 Sweeney Drive Clinton, PA 15026 Phone 412-263-1338 PG Publishing Company, a Corporation, Publisher of the Pittsburgh Post-Gazette, a Newspaper of General Circulation

Ву

I hereby certify that the foregoing is the original Proof of Publication and receipt for the Advertising costs in the subject matter of said notice.

COPY OF NOTICE OR PUBLICATION

Public notice is hereby given that Butler & 40th LLC will be submitting a Sewage Facilities Planning Module with revised lot lines/plot plans to the City of Pittsburgh and the Perusylvania Department of Environmental Protection, The following information is provided for the proposed project in accordance with PADEP Component Three: 1.Name of Project 201 Arsemal, Phase II. 2.Type of development: multi unit residential WILL private amenty and integral parking 3.Location: Butter Street (SR 2122), between 39th and 40th Streets, 6th Ward of the City of Pittsburgh, Allegheny County.
4-Acrospe and EDU: 6.07
acres, 162 EDUs; the future
phase on "parcel 3" is 15
acres and 1 EDU: 5 Servage Disposal Utilize the nevily constructed 8° private sanitary sewer and tie into existing PVSA System, flow will be further conveyed to ALCOSAN for treavnent 6 Publication requirement; the project proposes change to flow by more than 50,000 gallons per day. 78.8.The public is invited to review the Servage Facilities Planning Module and provide written comments during the 30-day comment and review period from April 15, 2019 - May 27, 2019, 9. A copy of the Sewage Facilities Plaining Module is available for public review from 8:30 AM-1:30PM at the City of Pittsburgh Office of City Clerk, 414 Grant Street, Scale 510 City County Buking, Patisburgh, Ph 15219 (ph 412 255-2128). Interested parties should submit written comments at the location for consideration

Attorney For

Invoice

Pittsburgh Post-Gazette

Invoice #:

22206

Invoice Date:

4/30/2019

Terms:

30 days

Client Account #:

5279

Invoice Inquiries:

Tessie Foley

412-263-2602

tfoley@post-gazette.com

PVE Sheffler LLC

2000 Georgetown Dr Ste 101 Waterfront Corporate Park III

SEWICKLEY, PA, 15143-8992

Order number Order name		Order PO #					
37324	201 Arse	enal SFPM Po	ıblic Notice				
Ad type	Ad number	Ad PO#	Ad name	Description	Gross	Discount	Net Amoun
Print	300880			Issue Date: 4/15/2019; Edition: PPG; Section: All Other I Size: 53.00	\$ 344.50 Notices;		\$ 344.50
-			75725		Total Amount :		\$ 344.5

PAYMENT and ADVERTISING TERMS & CONDITIONS:

Please provide payment details or detach and return the Remittance Advice with your payment

Remittance Advice

Invoice Date	Invoice No.	Account No.	Amount Due
5/6/2019	22206	5279	\$ 344.50

Bill to:

PVE Sheffler LLC 2000 Georgetown Dr Ste 101 Waterfront Corporate Park III SEWICKLEY, PA, 15143-8992

Make Payments Payable to:

PITTSBURGH POST-GAZETTE ATTN: FINANCE DEPARTMENT 2201 SWEENEY DRIVE CLINTON, PA 15026

COMPONENT 4A MUNICIPAL PLANNING AGENCY REVIEW



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

	_
DEP Code #:	
SHUMBLE	

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

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning module package and one copy of this Planning Agency Review Component should be sent to the local municipal planning agency for their comments. PROJECT NAME (See Section A of instructions) SECTION A. **Project Name** Phase II 201 Arsenal SECTION B. REVIEW SCHEDULE (See Section B of instructions) 1. Date plan received by municipal planning agency 8-27-19 Date review completed by agency SECTION C. **AGENCY REVIEW (See Section C of instructions)** Yes X Is there a municipal comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101, et seq.)? Is this proposal consistent with the comprehensive plan for land use? If no, describe the inconsistencies X Is this proposal consistent with the use, development, and protection of water resources? If no, describe the inconsistencies Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land Preservation? Does this project propose encroachments, obstructions, or dams that will affect wetlands? If yes, describe impacts Will any known historical or archaeological resources be impacted by this project? If yes, describe impacts Will any known endangered or threatened species of plant or animal be impacted by this project? If yes, describe impacts Is there a municipal zoning ordinance? Is this proposal consistent with the ordinance? If no, describe the inconsistencies _ 10. Does the proposal require a change or variance to an existing comprehensive plan or zoning ordinance? 11. Have all applicable zoning approvals been obtained? 12. Is there a municipal subdivision and land development ordinance?

SECTIO	N.C. A	GEN	CY REVIEW (continued)
Yes	No		
ÌX.		13.	Is this proposal consistent with the ordinance?
			If no, describe the inconsistencies
DA.		14.	Is this plan consistent with the municipal Official Sewage Facilities Plan?
			If no, describe the inconsistencies
	×	15.	Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
			If yes, describe
	×	16.	Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
			If yes, is the proposed waiver consistent with applicable ordinances?
			If no, describe the inconsistencies
		17.	Name, title and signature of planning agency staff member completing this section. Name: Marting Battistone
			Title: SR. Environmental Planner
			Signature: MBatteton
			Date: 8-27-19
			Name of Municipal Planning Agency: Dept City Planning, Pittsburgh
			Address 200 Ross St. 4th Floor Pittsburgh, PA 15219 Telephone Number: (412) 255-2516
		94.	
SECTIO	ND. A	DDIT	ONAL COMMENTS (See Section D of instructions)
This con	ponent o	ioes n lan to	ot limit municipal planning agencies from making additional comments concerning the relevancy other plans or ordinances. If additional comments are needed, attach additional sheets.
The plan	ning age	ncy m	ust complete this component within 60 days.
This con	ponent a	and an	y additional comments are to be returned to the applicant.

COMPONENT 4C COUNTY HEALTH DEPARTMENT REVIEW



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 expedite the review of your proposal, one copy of your completed planning module package and one copy of this <i>Planning Agency Review Component</i> should be sent to the county or joint county health department for their comments.
SECTION A. PROJECT NAME (See Section A of instructions)
Project Name
201 Arsenal Phase II Residential Land Development
SECTION B. REVIEW SCHEDULE (See Section B of instructions)
Date plan received by county or joint-county health department. <u>July 30, 2019</u>
Agency name Allegheny County Health Department (ACHD)
2. Date review completed by agency August 1, 2019
SECTION C. AGENCY REVIEW (See Section C of instructions)
Yes No
1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?
If no, what are the inconsistencies?
Are there any waste water disposal needs in the area adjacent to the new land development that should be considered by the municipality?
If yes, describe
3. Is there any known groundwater degradation in the area of the proposed subdivision?
If yes, describe
4. The county or joint county health department recommendation concerning this proposed plan is as follows: <u>ACHD recommends approval</u> . See attached letter.
5. Name, title and signature of person completing this section:
Name: <u>Freddie Fields</u>
Title: Environmental Health Engineer III
Signature: July
Date: August 1, 2019
Name of County Health Department: ACHD
Address: 3901 Penn Avenue, Building #5, Pittsburgh PA 15224-1318
Telephone Number: 412-578-8046
SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)
This Component does not limit county planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.
The county planning agency must complete this Component within 60 days. This Component and any additional comments are to be returned to the applicant.