
DEP Code No. 02001-19-001
SEWAGE FACILITIES PLANNING MODULE

for

**The Commonwealth Building
1st Ward
City of Pittsburgh
Allegheny County, Pennsylvania**

Prepared For:

**Pitt Commonwealth Owner, LLC
408 Boulevard of the Allies
Pittsburgh, PA 15219**

Prepared By:

Langan Engineering and Environmental Services, Inc.

**2400 Ansys Drive, Suite 403
Canonsburg, Pennsylvania 15317**

LANGAN

**March 2019
250063301**

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APPENDIX A

Transmittal Letter and Correspondence



**TRANSMITTAL LETTER
 FOR SEWAGE FACILITIES PLANNING MODULE**

DEP USE ONLY				
DEP CODE #	APS ID #	CLIENT ID #	SITE ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency)
 PA DEP Southwest Regional Office
 400 Waterfront Drive
 Pittsburgh, PA 15222-4745

Date _____

Dear Sir:

Attached please find a completed Sewage Facilities Planning Module prepared by _____ (Name)

Langan Engineering and Environmental Services, Inc. (Title) for Commonwealth Building (Name)

a subdivision, commercial, or industrial facility located in the City of Pittsburgh

Allegheny (City, Borough, Township) County.

Check one

- (i) The Planning Module, as prepared and submitted by the applicant, is approved by the municipality as a proposed revision supplement for new land development to its "Official Sewage Facilities Plan", and is adopted for submission to the Department of Environmental Protection transmitted to the delegated local agency for approval in accordance with the requirements of Chapter 71 and the Sewage Facilities Act, OR
- (ii) The Planning Module will not be approved by the municipality as a proposed revision or supplement for new land development to its "Official Sewage Facilities Plan" because the project described therein is unacceptable for the reason(s) checked below.

Check Boxes

- Additional studies are being performed by or on behalf of this municipality which may have an effect on the Planning Module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- The Planning Module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- Other (attach additional sheet giving specifics)

Municipal Secretary: Indicate below by checking appropriate boxes which components are being transmitted to the Approving Agency.

- | | | |
|---|--|--|
| <input type="checkbox"/> Resolution of Adoption | <input type="checkbox"/> 3. Sewage Collection/Treatment Facilities | <input type="checkbox"/> 4.A. Municipal Planning Agency Review |
| <input type="checkbox"/> 2. Individual and Community Onlot Disposal of Sewage | <input type="checkbox"/> 3s Small Flow Treatment Facilities | <input type="checkbox"/> 4.B. County Planning Agency Review |
| <input type="checkbox"/> 2m. Sewage Management Program | | <input type="checkbox"/> 4.C. County or Joint Health Department Review |

 Municipal Secretary (print)

 Signature

 Date

Note: Please remove and recycle the Instructions portion of the Sewage Facilities Planning Module prior to mailing the appropriate completed components and supporting documents to the approving agency.

CORRESPONDENCE

August 28, 2018

Michelle Carney
The Pittsburgh Water and Sewer Authority
Penn Liberty Plaza – 1200 Penn Avenue
Pittsburgh, PA 15222

**Re: Water and Sewer Availability Request
Commonwealth Building
Pittsburgh, Pennsylvania
Langan Project No.: 250063301**

Dear Michelle:

This letter serves as a request for written verification of available water and sewer service to determine the feasibility of a residential conversion of the existing Commonwealth Building located within the Golden Triangle district in the City of Pittsburgh. The site is located at 316 Fourth Avenue. Please see attachment for the USGS Site Location Map.

The existing building has 20 stories plus a penthouse with a total GSF around 126,000 to 130,000 square feet. The proposed improvements will include ground floor retail or restaurant with lobby space. The 2nd and 3rd floors will be a mmix of amenity space and apartments. It is anticipated that there will be 150 apartments created.

We would like to confirm that sewer and water service is available for use at the site. Please reply by returning a copy of the form along with known Facility Mapping that would help us in this endeavor. Thank you for your attention to this matter.

Please contact me at (724) 514-5125 or by email at bhunter@langan.com if you should have any questions or need any additional information to review the submission.

Sincerely,

Langan Engineering and Environmental Services, Inc.



Benjamin Hunter, PE, LEED AP
Senior Project Manager

Enclosures: Water and Sewer Availability Letter Request Form
Site Location Map



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.

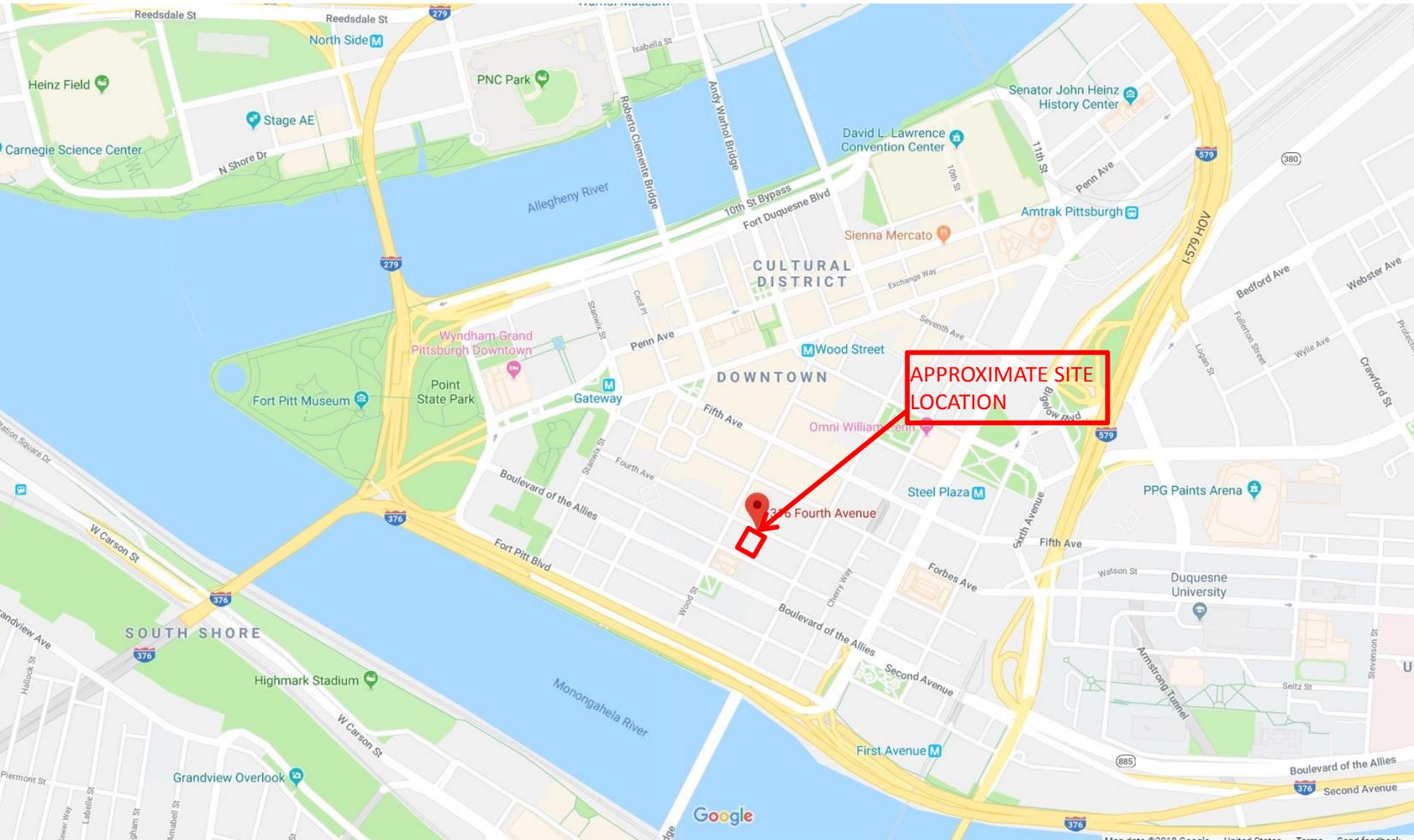
Information to be submitted by the Applicant:			
Property Owner Name:	JON KNUDSEN		
Address of Property:	316 FOURTH AVENUE, PITTSBURGH, PA 15222		
Proposed Use of Site:	MIXED-USE DEVELOPMENT		
Closest street intersection to the property:	WOOD ST. AND FOURTH AVE.		
Requestor Name:	BENJAMIN HUNTER (LANGAN)	Date of Request:	08/30/2018
Requestor Address:	2400 ANSYS DRIVE, CANONSBURG, PA 15317		
Requestor Phone Number:	724-514-5125		

Please submit the completed form to:

Pittsburgh Water and Sewer Authority
 Engineering and Construction Division
 1200 Penn Avenue
 Pittsburgh, PA 15222
 Attn: Ms. Michelle Carney (mcarney@pgh2o.com)

PWSA Use Only:	
PWSA Water Service Available:	<input type="checkbox"/> Yes <input type="checkbox"/> No Water Size / Location: _____
PWSA Sewer Service Available:	<input type="checkbox"/> Yes <input type="checkbox"/> No Sewer Size / Location: _____
Applicant must contact separate agency for water and/or sewer service:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Name of separate agency:	_____
PWSA Approval Authority:	Signature and Date _____
	Name (printed) _____
	Title _____

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.



**APPROXIMATE SITE
LOCATION**

326 Fourth Avenue

Google

Map data ©2018 Google, United States, Terms, Send feedback



Pittsburgh
Water & Sewer
Authority

September 13, 2018

Mr. Ben Hunter
Langan Engineering
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

**RE: Water and Sewer Availability
316 Fourth Avenue - 15222
Mixed Use Development**

Dear Mr. Hunter:

In response to your inquiry on 8/30/2018 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

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

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

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

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

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

Sincerely,


Michelle E. Carney
Engineering Technician III

MEC

cc: PWSA File

Penn Liberty Plaza I
1200 Penn Avenue
Pittsburgh PA 15222

info@pgh2o.com
T 412.255.2423
F 412.255.2475

www.pgh2o.com
@pgh2o

Customer Service /
Emergencies:
412.255.2423



PITTSBURGH WATER AND SEWER AUTHORITY

WATER AND SEWER AVAILABILITY LETTER REQUEST FORM

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

This request form is 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 submitted by the Applicant:
Property Owner Name: JON KNUDSEN
Address of Property: 316 FOURTH AVENUE, PITTSBURGH, PA 15222
Proposed Use of Site: MIXED-USE DEVELOPMENT
Closest street intersection to the property: WOOD ST. AND FOURTH AVE.
Requestor Name: BENJAMIN HUNTER (LANGAN) Date of Request: 08/30/2018
Requestor Address: 2400 ANSYS DRIVE, CANONSBURG, PA 15317
Requestor Phone Number: 724-514-5125

Please submit the completed form to:

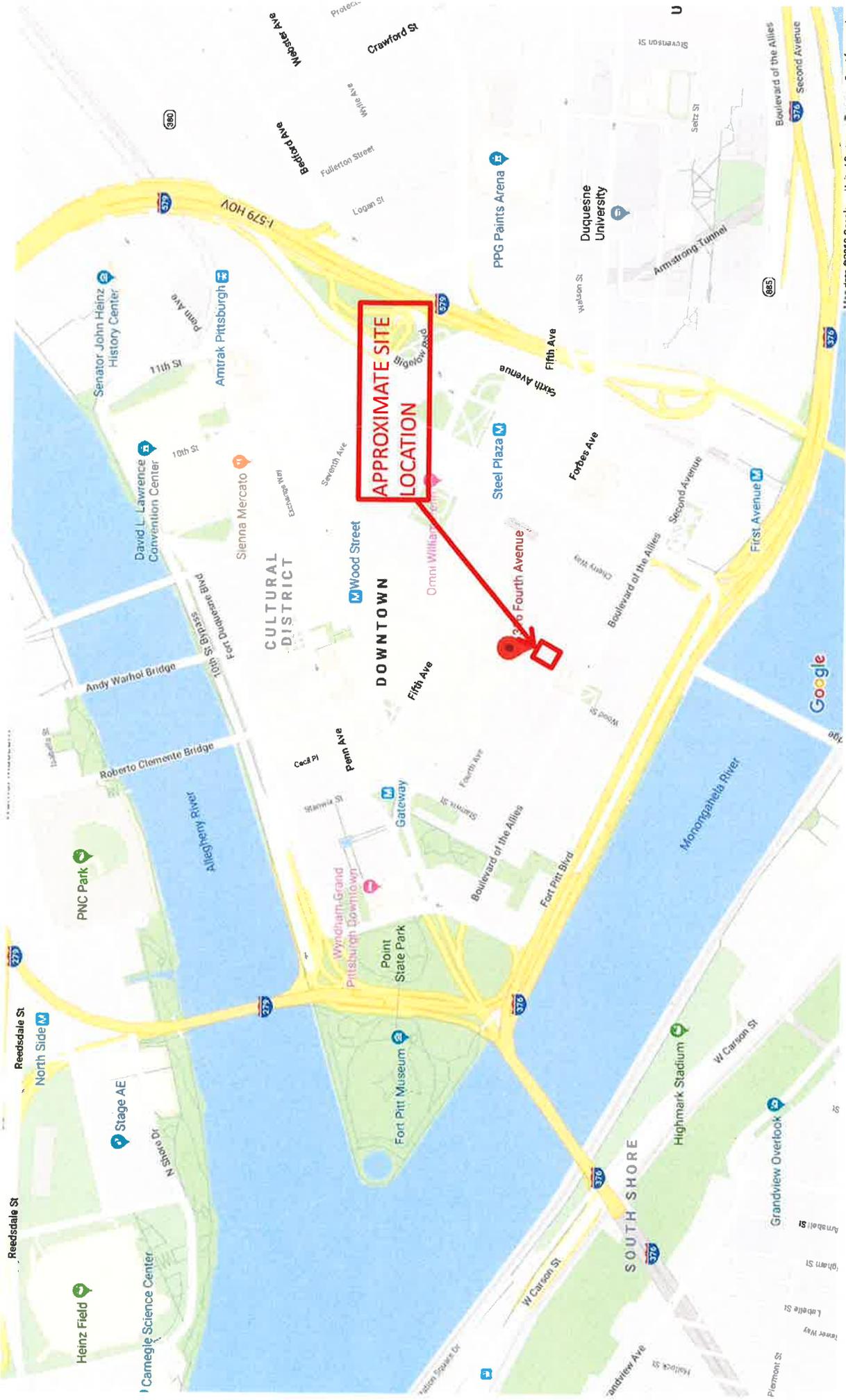
Pittsburgh Water and Sewer Authority
Engineering and Construction Division
1200 Penn Avenue
Pittsburgh, PA 15222
Attn: Ms. Michelle Carney (mcarney@pgh2o.com)

RECEIVED
SEP 05 2018

BY: PWSA mc

PWSA Use Only:
PWSA Water Service Available: [X] Yes [] No Size / Location: 12" 4th Avenue
PWSA Sewer Service Available: [X] Yes [] No Size / Location: 36" 4th Avenue
Applicant must contact separate agency for water and/or sewer service: [] Yes [X] No
Name of separate agency: N/A
PWSA Approval Authority: Signature and Date: Michelle E Carney 9-13-2018
Name (printed): Michelle Carney
Title: Engineering Tech 3

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.



**APPROXIMATE SITE
LOCATION**

360 Fourth Avenue

**CULTURAL
DISTRICT**

DOWNTOWN

SOUTH SHORE

Google

BY: PWSA MC

August 28, 2018

Michelle Carney
The Pittsburgh Water and Sewer Authority
Penn Liberty Plaza – 1200 Penn Avenue
Pittsburgh, PA 15222

**Re: Water and Sewer Availability Request
Commonwealth Building
Pittsburgh, Pennsylvania
Langan Project No.: 250063301**

Dear Michelle:

This letter serves as a request for written verification of available water and sewer service to determine the feasibility of a residential conversion of the existing Commonwealth Building located within the Golden Triangle district in the City of Pittsburgh. The site is located at 316 Fourth Avenue. Please see attachment for the USGS Site Location Map.

The existing building has 20 stories plus a penthouse with a total GSF around 126,000 to 130,000 square feet. The proposed improvements will include ground floor retail or restaurant with lobby space. The 2nd and 3rd floors will be a mix of amenity space and apartments. It is anticipated that there will be 150 apartments created.

We would like to confirm that sewer and water service is available for use at the site. Please reply by returning a copy of the form along with known Facility Mapping that would help us in this endeavor. Thank you for your attention to this matter.

Please contact me at (724) 514-5125 or by email at bhunter@langan.com if you should have any questions or need any additional information to review the submission.

Sincerely,

Langan Engineering and Environmental Services, Inc.



Benjamin Hunter, PE, LEED AP
Senior Project Manager

Enclosures: Water and Sewer Availability Letter Request Form
Site Location Map

316 4th Avenue



Legend

Meter	Water Manhole	Outfall
Pump	Rising Main	End Cap
Hydrant	Supply Main	Sewer Pump Station
Hydrant - Out of Service	Transmission Main	Combined Sewer
System Valve	Distribution Main	Sanitary Sewer
Dividing Pressure Valve	Hydrant Branch	Storm Sewer
Cap	Private Main	Regulated Combined Sewer
Tee or Cross	Water Service Line	Overflow Sewer
Reducer	Manhole	Interceptor
Coupling	Junction	Sewer Force Main
Wash Out	Inlet	Private Sewer
	Private Inlet	Undefined Sewer



Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and neither assumes any responsibility for any conclusions or interpretations made on the basis of such information. COP and PWSA assume no responsibility for any misunderstanding or representations made by their agents or employees unless such understanding or representations are expressly set forth in a duly authorized written document, and such document expressly provides that responsibility therefore is assumed by the City or the PWSA.

Date: 9/13/2018

316 4th Avenue



Legend

- | | | |
|---------------------------|----------------------|----------------------------|
| ● Meter | ○ Water Manhole | □ Outfall |
| ⊠ Pump | — Rising Main | ◆ End Cap |
| ⊕ Hydrant | — Supply Main | ■ Sewer Pump Station |
| ⊕ Hydrant- Out of Service | — Transmission Main | — Combined Sewer |
| ⊗ System Valve | — Distribution Main | — Sanitary Sewer |
| ⊗ Dividing Pressure Valve | — Hydrant Branch | — Storm Sewer |
| □ Cap | — Private Main | — Regulated Combined Sewer |
| ⊕ Tee or Cross | — Water Service Line | — Overflow Sewer |
| ⊕ Reducer | ● Manhole | — Interceptor |
| — Coupling | ● Junction | — Sewer Force Main |
| ⊕ Wash Out | — Inlet | — Private Sewer |
| | — Private Inlet | — Undefined Sewer |



Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and either or assumes any responsibility for any conclusions or interpretations made on the basis of such information. COP and PWSA assume no responsibility for any understanding or representations made by their agents or employees unless such understanding or representations are expressly set forth in a duly authorized written document, and such document expressly provides that responsibility therefore is assumed by the City or the PWSA.

February 27, 2019

Mr. Benjamin Hunter
Langan Engineering and Environmental Services, Inc.
2400 Ansys Dr., Suite 403
Canonsburg, PA 15317

**RE: Commonwealth Building
316 Fourth Avenue - 15222
PWSA Water and Sewer Use Application**

Dear Mr. Hunter:

The Pittsburgh Water and Sewer Authority (PWSA) is in receipt of the submittal for the above referenced project.

PWSA agrees with your proposed new flows and has approved the "PWSA Water and Sewer Use Application".

Please contact Tom Flanagan at (412) 442-4047 to obtain the correct DEP Sewage Facilities Planning Module (SFPM) form(s) to complete. You must submit the DEP SFPM completed with PA Professional Engineer sealed calculations to PWSA for review and approval. After PWSA and ALCOSAN approve the DEP SFPM you will need to contact the City Law Department to prepare the SFPM Resolution to be approved by City Council. The approved Resolution will need to then be submitted with the completed DEP Sewage Facilities Planning Module to DEP for final review and approval.

Be advised PWSA is not permitted to approve the final water and sewer tap in plans nor issue PWSA permits without the DEP SFPM approved.

Refer to the comments listed below as you move forward:

1. A "Water and Sewer Availability Request Form" needs to be submitted. This form should normally be submitted prior-to/with the Water and Sewer Use Application.
2. Per Section 2.4 (p. 2-10) of the PWSA Developer's Manual, Plumbing floor plans need to be provided.
3. Question 23 of the "Technical Checklist for Water Tap-in Drawings" asks about contact with the city regarding fire protection. Will the change in use of the building change the required fire flow requirements?
4. Page 3 of 4 of the project narrative has a footnote "6" referenced in the title of Table 2. I was unable to locate the explanation of said footnote elsewhere in the document. Please provide details clearly or remove if unnecessary.



If you have any questions, please feel free to contact me at (412) 255-8800 x 5512.

Sincerely,

Brett McAllister
Associate Project Manager

BRM

cc: PWSA File

Project No.

(PWSA USE ONLY)

**THE PITTSBURGH WATER AND SEWER AUTHORITY
ENGINEERING AND CONSTRUCTION DIVISION**

WATER AND SEWER USE APPLICATION FORM

(Return completed submittal package to The Pittsburgh Water and Sewer Authority (PWSA), Engineering and Construction Division

This application is used for commercial or residential projects that propose connecting to the PWSA water or sewer system or propose changing the amount of PWSA water consumed and/or flows discharged to the PWSA sewer system.

A. GENERAL INFORMATION

1. Name of Land Development Project Commonwealth Building
 Location of land development project. *Use landmark or address, if available (e.g., north side of Liberty Ave 75 ft. east of intersection of Liberty Ave and 6th St.)* 316 Fourth Avenue, Pittsburgh, PA 15222

2. Nature of Development. Check appropriate box and provide total flows.

	Total Water Consumption (gpd)	Total Sanitary Flows (gpd)	Total Storm Flows (cfs)
<input checked="" type="checkbox"/> Residential	<u>22,650</u>	<u>22,650</u>	
<input checked="" type="checkbox"/> Commercial	<u>4,362</u>	<u>4,362</u>	<u>1.22</u>
Total	<u>27,012</u>	<u>27,012</u>	

3. Acreage of development 0.18 acres

4. Allegheny County Block & Lot Nos. 1-H-330 (1st Ward)

5. Ownership of Land Development

Name <u>Justin Shaw</u>	Address <u>44 Homestead Ave.</u>
<u>Pitt Commonwealth Owner, LLC</u>	<u>Stamford, CT 06902</u>

6. Applicant (Subdivider, Developer, or Responsible Project Agent)
 Name Ben Hunter Firm/Agency Name Langan Engineering
 Address 2400 Ansys Drive, Suite 403, Canonsburg, PA 15317
 Telephone 724-514-5125 Cell 412-518-0858 Email Bhunter@langan.com

B. WASTEWATER AND STORMWATER FACILITIES

Provide information on collection and treatment facilities.

1. **COLLECTION SYSTEM**
- a. Number of proposed connections (sanitary and/or storm) 1 sanitary, 1 storm
 - b. Name of existing collection or conveyance system Fourth Avenue
 - c. Name of interceptor Monongahela River
 - d. Name of treatment facility Allegheny County Sanitary Authority (ALCOSAN)

2. **SITE PLAN (24" x 36" maximum size accepted)**
 The following information is to be submitted on a site plan of the proposed subdivision.
- a. Existing building.
 - b. Lot lines and lot sizes.
 - c. Remainder of tract.
 - d. Orientation to North.
 - e. Show proposed sewer line to the point of connection to existing collection system. Including all components (collection & conveyance lines, pumps, etc.)
 - f. Existing and proposed right(s)-of-way.
 - g. Existing and proposed street, roadway, etc.
 - h. Water bodies and wetland areas.

 <hr style="width: 80%; margin: 0 auto;"/> <p>Applicant Signature</p>	<p><u>10/17/2018</u></p> <hr style="width: 80%; margin: 0 auto;"/> <p>Date</p>
--	---

PROJECT NARRATIVE

Existing Conditions

The project site is located at 316 Fourth Avenue in the 1st Ward of the City of Pittsburgh, Allegheny County, Pennsylvania. The project site consists of the City of Pittsburgh parcel number 1-H-330, having a total area of 0.19 acres. The project site is generally bound by Fourth Avenue to the north, a 13-story existing brick building *The Pittsburgh Tech Center Bunker* to the east, two existing brick buildings and a vacant lot to the south, and a 21-story existing brick building *The Union Bank Building* to the west. It is located in the Golden Triangle A (GT-A) District. The site currently consists of a 20-story brick office building known as *The Commonwealth Building*.

Proposed Development

Pitt Commonwealth Owner, LLC is proposing to renovate the existing Commonwealth Building. The project consists of a residential conversion of existing office space in the Commonwealth Building. The proposed improvements will include ground floor retail or residential with lobby space and 2nd and 3rd floor amenity space and apartments. It is anticipated that the existing curb will remain and be reused and all existing dry utilities for the building will remain and provide adequate service for the proposed improvements.

Sewer and Water Use

The existing project site contains a 20-story brick building. The existing site has estimated combined daily sanitary sewage flow of 12,809 gallons per day, or 42.70 EDUs (see Table 1). Following the proposed renovation, the building will have an estimated combined daily sanitary sewage flow of 27,012 gallons per day, or 90.04 EDUs (see Table 2). The proposed increase in combined daily sanitary sewage flow as a result of the proposed improvements is 14,203 gallons per day, or 47.34 EDUs.

The existing sanitary service for the project site is provided via a combined gravity lateral that connects to the existing 36-inch PWSA combination sewer in Fourth Avenue. This service will be terminated.

The proposed sanitary services for the project site will be provided via a 10-inch private sanitary gravity lateral located in Fourth Ave. The 10-inch lateral in Fourth Ave. will connect into the existing 36-inch PWSA combined sewer, north of the *Commonwealth Building*.

The existing storm sewer service for the project site is provided via a combined gravity lateral that conveys stormwater to the existing 36-inch PWSA combination sewer in Fourth Avenue.

The proposed storm sewer service for the project site will be provided via a 10-inch private gravity storm sewer lateral. The proposed storm lateral will convey stormwater to the existing 36-inch PWSA combined sewer in Fourth Ave.

The total area of disturbance for the development will be less than 10,000 square feet; therefore, per Section 1003.04.C of the City of Pittsburgh Code, the project is exempt from stormwater management regulations.

Using the rational method based on the 25-year storm, the stormwater discharge rate for the existing site conditions is 1.22 cubic feet per second, and the stormwater discharge rate for the proposed site conditions will also be 1.22 cubic feet per second, as the site conditions are remaining the same.

PWSA records indicate that the existing water service for the project site is provided by two existing water laterals. One 4-inch and one 6-inch lateral that both connect into the existing 12-inch PWSA water main in Fourth Avenue. There is also a possible 1.5-inch existing water service that may connect to the existing 12-inch PWSA water main in Third Ave. The existing water consumption is estimated to be the same as the existing combined daily sanitary sewage flow, 12,809 gallons per day, or 42.70 EDUs. The existing water lines to the building will be terminated.

Water service to the site will be provided via two proposed private water laterals. The fire service is provided via an 8-inch water lateral that connects to the existing 12-inch PWSA main in Fourth Ave. The domestic water services for the site will be provided via a proposed 6-inch water lateral that connects into the existing 12-inch PWSA water line in Fourth Avenue.

The proposed water demand is 27,012 gallons per day, or 90.04 EDUs; therefore, the proposed increase in water demand as a result of the proposed improvements is 14,203 gallons per day, or 47.34 EDUs.

TABLE 1: EXISTING PWSA SANITARY SEWAGE FLOW ESTIMATION
EXISTING SEWAGE FLOW ESTIMATION

Unit Description	Number of Units	Anticipated Average Rate (GPD/Units)¹	Anticipated Average Sewage Flow (GPD)
Office	1273	10	12,730
HVAC Condensate	-	-	79
Proposed GPD =			12,809
Proposed EDUs² =			42.70

1 – Rate is based on the flow estimate defined in Table 2-1 of the PWS Procedures Manual for Developers.

2 – EDUs are based on 300 GPD/EDU.

TABLE 2: PROPOSED PWSA SANITARY SEWAGE FLOW ESTIMATION

PROPOSED SEWAGE FLOW ESTIMATION			
Unit Description	Number of Units	Anticipated Average Rate (GPD/Units)¹	Anticipated Average Sewage Flow (GPD)
Apartment: 1 Bedroom	129	150	19,350
Apartment: 2 Bedroom	11	300	3,300
Office (per employee)	8	10	80
Restaurants (toilet and kitchen wastes per patron)	423	10	4,230
HVAC Condensate	-	-	52
Proposed GPD =			27,012
Proposed EDUs² =			90.04

1 – Rate is based on the flow estimate defined in Table 2-1 of the PWSA Procedures Manual for Developers.

2 – EDUs are based on 300 GPD/EDU.

Proposed Sanitary Flows

Flow Comparison

The additional sanitary flow contribution from the proposed improvements relative to the capacity of the existing 36-inch combined sewer in Fourth Avenue is provided in Appendix A. The 36-inch combined sewer in Fourth Avenue has sufficient capacity for the proposed improvements.

Proposed Sanitary Pipe Capacity

The verification of adequate pipe capacity for the proposed sanitary flows is based on Manning’s equation, as summarized in Appendix A.

Proposed Stormwater Pipe Capacity

Stormwater discharge rates for the existing and proposed development are based on the Rational Method described within the PWSA Procedures Manual for Developers. The proposed renovations will not result in any increased impervious areas so the pre-development and post-development 25-year storm discharge rates are the same. Both the existing and proposed site conditions have a 25-year storm peak discharge of 1.22 cubic feet per second. Refer to Table 4 and 5 for summarized results using the Rational Method. Stormwater runoff from the site will discharge into the existing 36-inch PWSA combined sewer in Fourth Avenue (see Drawing GI-102 for combined sewer location).

Rational Method

This study was prepared using methods contained in the PWSA Procedures Manual for

Developers. The Rational Method was used to estimate the maximum rate of runoff (Q) from the site for a 25-year design storm.

The Rational Method for calculating the quantity of stormwater is defined by the following equation:

EQUATION 1: RATIONAL METHOD

$$Q = CIA$$

*PWSA Procedures Manual for Developers -
 PWSA Basic Information for Calculation of
 Stormwater Flow Using the Rational Method -
 Publication Version 6 - Issued 04/15.

The value for the average rainfall intensity (I) was taken from the NOAA Atlas 14 for the 25-year, 5-minute storm event. Values for area (A), time of concentration (Tc), and coefficient of runoff (C) were entered for the existing and proposed watersheds. An average C was chosen based on the percentage of each type of land cover using the following coefficients:

TABLE 3: RUNOFF COEFFICIENT VALUES

LAND COVER	C
Impervious Area (Building, hardscape)	0.95
Improved Surface (concrete, asphalt, brick, surface treated)	0.95

*Values from the PWSA Procedures Manual for Developers – Table 2-2 Values for the Coefficient of Runoff - Publication Version 6 - Issued 01/18.

The peak stormwater runoff rates using the rational method are summarized in Table 4.

TABLE 4: SUMMARY OF EXISTING STORMWATER PEAK DISCHARGES RATES

LAND COVER	DRAINAGE AREA (SF)	DRAINAGE AREA (AC)	INTENSITY (IN/HR)	RUNOFF COEFFICIENT "C"	PEAK FLOW (CFS)
Impervious Area	7,956	0.18	7.13	0.95	1.22
SITE RUNOFF					1.22

TABLE 5: SUMMARY OF PROPOSED STORMWATER PEAK DISCHARGES RATES

LAND COVER	DRAINAGE AREA (SF)	DRAINAGE AREA (AC)	INTENSITY (IN/HR)	RUNOFF COEFFICIENT "C"	PEAK FLOW (CFS)
Impervious Area	7,956	0.18	7.13	0.95	1.22
SITE RUNOFF					1.22



Pittsburgh
Water & Sewer
Authority

May 17, 2019

Mr. Benjamin Hunter
Langan Engineering and Environmental Services
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

**RE: Commonwealth Building
316 Fourth Ave - 15222**

Dear Mr. Hunter:

The Pittsburgh Water and Sewer Authority (PWSA) has reviewed your submitted PA DEP Sewage Facilities Planning Module Component 3.

PWSA has approved your submittal and signed Section J and is returning to you for processing to ALCOSAN for final signature. Contact Leslie Stevens at the City of Pittsburgh Law Department at (412-255-2005) to prepare the required City Resolution that Council will need to approve for this project.

Once you receive City Council Resolution, you must submit the complete package to the DEP for final review and approval. You must include all documentation including the approved City of Pittsburgh Council Resolution and any review fees.

Once PWSA receives a copy of the approved Sewage Facilities Planning Module from the DEP, PWSA will process the tap in plan. PWSA is not permitted to issue final approval or a PWSA Permit for connection to the water and/or sewer mains until approval from DEP is granted.

If you have any questions specific to PWSA feel free to contact me. For any general questions regarding the Planning Module you must contact the DEP.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Matthew Smuts', is written over the word 'Sincerely,'.

Matthew Smuts
Associate Project Manager

CC (via email): Thomas Flanagan – DEP
Kate Mechler – PWSA
Julie Ascioia - PWSA
Leslie Stevens – City of Pittsburgh Law Department
Michael Lichte - ALCOSAN
PWSA File

Penn Liberty Plaza I
1200 Penn Avenue
Pittsburgh PA 15222

info@pgh2o.com
T 412.255.2423
F 412.255.2475

www.pgh2o.com
@pgh2o

Customer Service /
Emergencies:
412.255.2423



Pittsburgh
Water & Sewer
Authority

MEMO

To: Barry King 

From: Matt Smuts 

Date: May 15, 2019

Subject: **DEP Sewage Planning Module – Section J. Chapter 94
Consistency Determination, Calculation Review for:
Commonwealth Building**

Upon review of the submittal by Langan Engineering and Environmental Services for the above referenced development I have determined that the projected flows are less than the design capacity of the PWSA sewers and, therefore the sewers should have adequate capacity for the proposed development.

May 17, 2019

Mr. Thomas Flanagan
Sewage Planning Specialist Supervisor
PA Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222

RE: Commonwealth Building
316 Fourth Avenue - 15222
Sewage Facilities Planning Module
Sewer Tap Allocation

Dear Mr. Flanagan:

The Pittsburgh Water and Sewer Authority (PWSA) would like to authorize the use of the 2019 Sewer Tap Allocations for the following project:

Commonwealth Building
316 Fourth Ave - 15222
4th Ward - City of Pittsburgh
27,012 Gallons Per Day = 67.53 DEP EDU's (400gpd/EDU)

If you have any questions, please feel free to contact me at (412) 255-8800 x 2663

Sincerely,



Matthew Smuts
Associate Project Manager

CC (via email): Benjamin Hunter - Langan
Regis Ryan - PA DEP
William Vincett - PA DEP
Kate Mechler - PWSA
Julie Ascioffa - PWSA
PWSA File

alcosan



allegheny county
sanitary authority
TM

Members of the Board

Sylvia C. Wilson
Chair Person

Gregory A. Jones
Jack Shea
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Arletta Scott Williams
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Arthur M. Tamilya, Esq.
*Director
Environmental Compliance*

William H. Inks, CPA
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Jan M. Oliver
*Director
Regional Conveyance*

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

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

Jeanne K. Clark
*Director
Governmental Affairs*

Joseph Vallarian
*Director
Communications*

Mr. Ben Hunter, PE
LANGAN
2400 Ansys Drive
Suite 403
Canonsburg, PA 15317

**Re: Commonwealth Building – City of Pittsburgh
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure M-03-00**

Dear Mr. Hunter:

We have reviewed the Planning Module Component 3 for the referenced project to be located in the City of Pittsburgh. The project will generate an estimated flow of 27,012 GPD in the ALCOSAN Monongahela Interceptor and Woods Run Treatment Plant.

The capacity at the M-03-00 Regulator Structure is approximately 16.6 MGD. The monitored peak dry weather flow is approximately 1.72 MGD. Dry weather capacity exists for this connection. However, the ALCOSAN Monongahela Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated during wet weather periods. This limitation will be addressed as ALCOSAN implements the Clean Water Plan.

ALCOSAN requests that this letter be made part of the planning module submission. The signed Component 3 Planning Module is attached. The sewers in this project are to be designed as separated sanitary and storm sewers. If you have any questions regarding this matter, please contact me at 412-732-8004.

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Michael Lichte, P.E.
Manager of Planning

Attachment

cc: Tina Dean (w/o attachment)
D. Thornton (w/o attachment)
Shawn McWilliams (w/o attachment)
Barry King, PWSA (w/o attachment)
T. Flanagan, PADEP (w/o attachment)
M. Scheer, ACHD (w/o attachment)

APPENDIX B

Resolution for Plan Revision for New Land Development

Resolution No. _____

CITY OF PITTSBURGH

Introduced: Bill No:

Committee: Intergovernmental Affairs Committee Status:

Sponsored by:

Resolution adopting Plan Revision to the City of Pittsburgh's Official Sewage Facilities Plan for The Commonwealth Building, 316 Fourth Avenue, Pittsburgh, PA 15222.

WHEREAS, SECTION 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the rules and regulations of the Pennsylvania Department of Environmental Protection (the "Department") adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the City of Pittsburgh to adopt an Official Sewage Facilities Plan (the "Official Plan") providing for sewage services adequate to prevent contamination of waters of the Commonwealth and/or environmental health hazards from sewage wastes, and to revise said plan whenever it is necessary to determine whether a proposed method of sewage disposal for a new development conforms to a comprehensive program of pollution control and water quality management; and

WHEREAS, Pitt Commonwealth Owner, LLC has proposed the development of a certain parcel of land 316 Fourth Avenue, Pittsburgh, PA 15222, Allegheny County, at lot and block 1-H-330, in the 1st Ward of the City of Pittsburgh and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by a sewer tap-in to the City of Pittsburgh sewage systems; and

WHEREAS, the Pittsburgh Water Sewer Authority, the Allegheny County Sanitary Authority, the City of Pittsburgh Planning Department and the Allegheny County Health Department have reviewed the respective components of the attached Planning Module in regard to each authority/department's expertise and have approved the respective components as explained in the attached Planning Module.

WHEREAS, based upon the approval of the above authorities and departments, the City of Pittsburgh finds that the project described in the attached Planning Module for land development conforms to applicable zoning, subdivision, other municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF PITTSBURGH AS FOLLOWS:

SECTION 1. The City of Pittsburgh hereby adopts and submits to the Department of Environmental Protection for its approval as a Plan Revision to the City of Pittsburgh's Official Sewage Facilities Plan, the above-referenced Planning Module for land development, which is attached hereto as **Exhibit A**.

Said Planning Module includes the proposed Commonwealth Building, 316 Fourth Avenue, Pittsburgh, PA 15222, Allegheny County, at lot and block 1-H-330, in the 1st Ward of the City of Pittsburgh.

Finally, that any Ordinance or Resolution or part thereof conflicting with the provisions of this Resolution, is hereby repealed so far as the same affects this Resolution.

Effective Date: _____

Passed in Council: _____

Approved: _____

Recorded in R.B. ___ page _____ in City Clerk's Office.

Summary of Proposed Legislation

Bill # / Title	Sewage Facilities Planning Module – Commonwealth Building
Department:	Law Department
Contact Person:	Benjamin Smith – (412) 255-2014

<i>Ordinance</i>	<i>Contract Authorization</i>	<i>Capital Budget Amendment</i>	<i>Capital Encumbrance</i>	<i>Proclamation</i>	<i>Other</i>
					X

DESCRIPTION/PURPOSE:

Pitt Commonwealth Owner, LLC has proposed the development of a certain parcel of land identified the Commonwealth Building 316 Fourth Avenue, Pittsburgh, PA 15222, Allegheny County at 1-H-330, in the First Ward of the City of Pittsburgh and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by a sewer tap-in to the City of Pittsburgh sewage systems; and

The City of Pittsburgh must adopt and submit to the Department of Environmental Protection for its approval, as a Plan Revision to the City of Pittsburgh’s Official Sewage Facilities Plan, the Planning Module for land development.

HISTORY:

SECTION 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the rules and regulations of the Pennsylvania Department of Environmental Protection (the “Department”) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, requires the City of Pittsburgh to adopt an Official Sewage Facilities Plan (the “Official Plan”) providing for sewage services adequate to prevent contamination of waters of the Commonwealth and/or environmental health hazards from sewage wastes, and to revise said plan whenever it is necessary to determine whether a proposed method of sewage disposal for a new development conforms to a comprehensive program of pollution control and water quality management.

The Pittsburgh Water Sewer Authority, the Allegheny County Sanitary Authority, the City of Pittsburgh Planning Department and the Allegheny County Health Department have reviewed the respective components of the Planning Module in regard to each authority/department’s expertise and have approved the respective components as explained in the Planning Module.

Based upon the approval of the above authorities and departments, the Planning Module for land development conforms to applicable zoning, subdivision, other municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

BUDGETARY IMPACT:

N/A

ATTACHMENTS AND/OR EXHIBITS:

Attach additional information such as maps, pictures, spreadsheets, studies, correspondence or any other supporting documents for this legislation.

Seven Priorities of the Joint Council- Mayor Proclamation

- 1. Identify operational efficiencies through shared or consolidated services.*
- 2. Reduce the legacy costs associated with Pittsburgh's city government for future generations.*
- 3. Guarantee excellence in service and equity of provision through performance measures and standards.*
- 4. Increase access to, pride of and confidence in all city services by ensuring equity in the provision of those services to all Pittsburghers.*
- 5. Improve the quality of life for future generations by identifying current land use opportunities and challenges facing the City of Pittsburgh.*
- 6. Reduce the impact on the environment of Pittsburgh city government's operations and services.*
- 7. Ensure the ethical operation of the offices of the Mayor and City Council.*

City of Pittsburgh
Sewer Facilities Planning Module Questionnaire

PROJECT NAME: Commonwealth Building

1) What was the previous permitted use for this property?

Commercial, office building

2) What is the proposed use for the property?

Mixed use, retail and residential

3) How is green stormwater mitigation being integrated into the proposed project?

The proposed stormwater management system includes inlets and underground stormwater laterals for conveyance. The proposed site improvements will create less than 10,000 square feet of disturbance, and therefore is exempt from implementing a stormwater management plan.

4) Will the development result in a net positive or net negative change in stormwater flow?

After the implementation of the proposed stormwater management system, the development will result in a net neutral change in stormwater flow.

APPENDIX C

Component 3, Narrative Description of Project, Supporting Documentation

Code No.



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

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

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

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

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

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

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

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name Commonwealth Building

2. Brief Project Description Pitt Commonwealth Owner, LLC is proposing to renovate the existing Commonwealth Building. The project consists of a residential conversion of existing office space. The proposed improvements will include ground floor retail or residential with lobby space and 2nd and 3rd floor amenity space and apartments. It is anticipated that the existing curb will remain and be reused and all existing dry utilities for the building will remain and provide adequate service for the proposed improvements. Existing storm, sanitary, and water service to the building will be terminated and replaced with proposed laterals. Storm and sanitary laterals will extend from the building and connect into the PWSA 24-in combination sewer in Fourth Ave (North of the site) in order to provide adequate service for the proposed improvements. Proposed water service to the site will be provided via an 8-inch fire water service line and a 6-inch domestic water service line that will connect from the building to the PWSA main located north of the site in Fourth Avenue.

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

Municipality Name	County	City	Boro	Twp
City of Pittsburgh	Allegheny	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
King	Barry			Director of Engineering
Additional Individual Last Name	First Name	MI	Suffix	Title
Smuts	Matthew	C		Associate Project Manager

Municipality Mailing Address Line 1	Mailing Address Line 2
-------------------------------------	------------------------

Pittsburgh Water and Sewer Authority (PWSA)		Penn Liberty Plaza I, 1200 Penn Avenue	
Address Last Line -- City		State	ZIP+4
Pittsburgh		PA	15222
Area Code + Phone + Ext.	FAX (optional)	Email (optional)	
412-255-8800		bking@pgh2o.com	

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Commonwealth Building

Site Location Line 1		Site Location Line 2		
316 Fourth Ave.				
Site Location Last Line -- City	State	ZIP+4	Latitude	Longitude
Pittsburgh	PA	15222	40°26'20.5"N	80°0'2.7"W

Detailed Written Directions to Site: Head south on Waterfront Drive and continue onto the 30th Street Bridge. Turn left onto River Avenue and then bear left to General Robinson St. Make a quick left onto Anderson St followed by a quick right onto Isabella St and then make a left onto the 7th St/Andy Warhol Bridge and continue straight onto 7th St. Continue on 7th St until it becomes 6th St. Once on 6th St make a right onto Wood St. Continue on Wood St for 0.2 miles and then make a left on Fourth Ave and the destination is on your right.

Description of Site The existing project site contains a twenty-story brick office building known as *The Commonwealth Building*. The exterior of the site consists of sidewalks and additional site features (i.e. street lights, underground vaults, etc.)

Site Contact (Developer/Owner)

Last Name	First Name	MI	Suffix	Phone	Ext.
Houck	Brent			412-391-2884	
Site Contact Title	Site Contact Firm (if none, leave blank)				
Principal	Pitt Commonwealth Owner, LLC				
FAX	Email				
412-391-1657	bhouck@pwwgarch.com				
Mailing Address Line 1	Mailing Address Line 2				
408 Boulevard of the Allies					
Mailing Address Last Line -- City	State	ZIP+4			
Pittsburgh	PA	15219-1301			

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

Last Name	First Name	MI	Suffix
Rowland	Scott		
Title	Consulting Firm Name		
Senior Associate/Vice President	Langan Engineering & Environmental Services		
Mailing Address Line 1	Mailing Address Line 2		
2400 Ansys Drive	Suite 403		
Address Last Line -- City	State	ZIP+4	County
Canonsburg	PA	15317	Washington
Email	Area Code + Phone	Ext.	Area Code + FAX
srowland@langan.com	724-514-5123		724-514-5101

E. AVAILABILITY OF DRINKING WATER SUPPLY

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

- Individual wells or cisterns.
- A proposed public water supply.
- An existing public water supply.

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

Name of water company: PWSA

F. PROJECT NARRATIVE (See Section F of instructions)

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

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

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

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

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

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

Clean Streams Law Permit Number _____

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 68

Connections 2 (1 sanitary, 1 storm)

Name of:

existing collection or conveyance system Fourth Ave. 36-inch combined sewer.

owner PWSA

existing interceptor Monongahela Interceptor

owner Allegheny County Sanitary Authority (ALCOSAN)

2. WASTEWATER TREATMENT FACILITY

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

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

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

Name of existing facility Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility

NPDES Permit Number for existing facility PA 0025984

Clean Streams Law Permit Number PA 0025984

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

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

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

Name of Permittee Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Michael D. Lichte

Agent Signature [Signature] Date 5/30/19

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

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

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

4. WETLAND PROTECTION

YES NO

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

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

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

6. HISTORIC PRESERVATION ACT

YES NO

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

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

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

Applicant or Consultant Initials _____.

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

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

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

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

1. Waters designated for Special Protection

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

2. Pennsylvania Waters Designated As Impaired

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

3. Interstate and International Waters

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

4. Tributaries To The Chesapeake Bay

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

Name of Permittee Agency, Authority, Municipality _____

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

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

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

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

1. Project Flows 27,012 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	16,749,831	58,624,409	1,256,465	4,397,629	1,347,651	4,716,779
Conveyance		16.6 mgd	1.31 mgd	1.72 mgd	1.43 mgd	1.84 mgd
Treatment		250 mgd	194.8 mgd	250 mgd	194.8 mgd	250 mgd

3. Collection and Conveyance Facilities

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

YES NO

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

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA

Name of Responsible Agent BARRY KWO

Agent Signature [Signature]

Date 5/17/19

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Michael D. Lichts

Agent Signature [Signature]

Date 5/30/19

4. Treatment Facility

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

YES NO

- a. 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 Michael D. Lichts

Agent Signature [Signature]

Date 5/30/19

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.
- 4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

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

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

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

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

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

O. SEWAGE MANAGEMENT (See Section O of instructions)

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

Yes No

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

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

2. Project Flows _____ gpd

Yes No

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

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

(For completion by non-municipal facility agent)

Q. Collection and Conveyance Facilities

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

Yes No

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

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

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

- b. Collection System
Name of Responsible Organization _____
Name of Responsible Agent _____
Agent Signature _____
Date _____
- c. Conveyance System
Name of Responsible Organization _____
Name of Responsible Agent _____
Agent Signature _____
Date _____

5. Treatment Facility

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

Yes No

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

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

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

- b. Name of Facility _____
Name of Responsible Agent _____
Agent Signature _____
Date _____

(For completion by the municipality)

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

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

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

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

Yes No

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

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

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

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

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

Ben Hunter, P.E.



Name (Print)	Signature
Senior Project Manager	3/5/2019
Title	Date
2400 Ansys Drive, Suite 403	
Canonsburg, PA 15317	724-514-5125
Address	Telephone Number

R. REVIEW FEE (See Section R of instructions)

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

- I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.
- I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of \$ 3,400.00 payable to "Commonwealth of PA, DEP". Include DEP code number on check. I understand DEP will not begin review of my project unless it receives the fee and determines the fee is correct. If the fee is incorrect, DEP will return my check or money order, send me an invoice for the correct amount. I understand DEP review will NOT begin until I have submitted the correct fee.
- I request to be exempt from the DEP planning module review fee because this planning module creates **only** one new lot and is the **only** lot subdivided from a parcel of land as that land existed on December 14, 1995. I realize that subdivision of a second lot from this parcel of land shall disqualify me from this review fee exemption. I am furnishing the following deed reference information in support of my fee exemption.

County Recorder of Deeds for _____ County, Pennsylvania
Deed Volume _____ Book Number _____

Page Number _____ Date Recorded _____

R. REVIEW FEE (continued)

Formula:

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

$$\# \underline{68} \text{ Lots (or EDUs)} \times \$50.00 = \$ \underline{3,400}$$

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:

$$\# \underline{\hspace{2cm}} \text{ Lots (or EDUs)} \times \$35.00 = \$ \underline{\hspace{2cm}}$$

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)

NARRATIVE DESCRIPTION OF PROJECT

SECTION F SEWAGE FACILITIES PLANNING MODULE COMPONENT 3

**Re: Project Narrative
Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250063301**

The project site is located at 316 Fourth Avenue between Wood Street and Smithfield Street, in the Golden Triangle Subdistrict A (GT-A) District within the City of Pittsburgh, Allegheny County, Pennsylvania. Pitt Commonwealth Owner, LLC is proposing to redevelop an approximately 0.19 acre parcel, parcel number 1-H-330. The proposed development will include ground floor retail or residential with lobby space and 2nd and 3rd floor amenity space and apartments. The proposed development will be owned and operated by Pitt Commonwealth Owner LLC.

Pitt Commonwealth Owner, LLC is proposing to renovate the existing building. The existing building has 20 stories plus a penthouse with a total GSF around 126,000 to 130,000 square feet. It is anticipated that the existing curb will remain and be reused and all existing dry utilities for the building will remain and provide adequate service for the proposed improvements. New storm, sanitary and water laterals are being proposed in order to provide adequate service for the proposed improvements.

The existing site has an estimated combined daily sanitary sewage flow of 12,809 gallons per day. Following the proposed renovation, the building will have an estimated combined daily sanitary sewage flow of 27,012, daily sanitary sewage flow calculations can be found in Appendix C. The proposed increase in combined daily sanitary sewage flow as a result of the proposed improvements is 14,203 gallons per day.

The proposed storm and sanitary service for the site will be provided by two separate private 10-inch PVC gravity laterals that will connect to the existing 36-inch PWSA combined sewer in Fourth Avenue (north of the site).

The existing water consumption is estimated to be the same as the existing combined daily sanitary sewage flow, 12,809 gallons per day. The proposed water demand is 27,012 gallons per day; therefore, the proposed increase in water demand as a result of the proposed improvements is 14,203 gallons per day. The existing municipal system is expected to adequately meet proposed demands. A copy of the water availability letter from PWSA can be found in Appendix C.

Two proposed water laterals will provide water service to the site. Domestic water service will be provided via a 6-inch water lateral and fire water service will be provided via an 8-inch water lateral. Both water laterals will connect to the existing 12-inch PWSA main in Fourth Avenue.

**ANTICIPATED SEWAGE
FLOW REFERENCE**

TABLE 1: EXISTING PWSA SANITARY SEWAGE FLOW ESTIMATION

EXISTING SEWAGE FLOW ESTIMATION			
Unit Description	Number of Units	Anticipated Average Rate (GPD/Units)¹	Anticipated Average Sewage Flow (GPD)
Office	1273	10	12,730
HVAC Condensate	-	-	79
Existing GPD =			12,809
Existing EDUs² =			33

1 – Rate is based on the flow estimate defined in PA Code Title 25 Chapter 73 Paragraph 73.17.

2 – EDUs are based on 400 GPD/EDU.

TABLE 2: PROPOSED PWSA SANITARY SEWAGE FLOW ESTIMATION

PROPOSED SEWAGE FLOW ESTIMATION			
Unit Description	Number of Units	Anticipated Average Rate (GPD/Units)¹	Anticipated Average Sewage Flow (GPD)
Apartment: 1 Bedroom	129	150	19,350
Apartment: 2 Bedroom	11	300	3,300
Office (per employee)	8	10	80
Restaurants (toilet and kitchen wastes per patron)	423	10	4,230
HVAC Condensate	-	-	52
Proposed GPD =			27,012
Proposed EDUs² =			68

1 – Rate is based on the flow estimate defined in PA Code Title 25 Chapter 73 Paragraph 73.17.

2 – EDUs are based on 400 GPD/EDU.

**PROPOSED SANITARY PIPE CALCULATIONS
COMMONWEALTH BUILDING**

Q_{max}	Based on Total Units Discharging
Q_{design}	$3.5 * Q_{max}$
Q_{full}	$1.49/n * A_{pipe} * R^{2/3} * S^{1/2}$
Q_{half}	FLOW AT HALF FULL = $0.48 * Q_{full}$
V_{max}	VELOCITY AT 80% FULL = $1.15 * Q_{full} / A_{pipe}$
V_{half} , (fps)	VELOCITY OF FLOW AT HALF FULL = $Q_{half} / (A_{pipe} * 0.5)$
PIPE SIZED ACCORDINGLY	CHECKS IF Q_{design} IS LESS THAN Q_{half}

FROM BLDG TO EXISTING SYSTEM IN FOURTH AVENUE

MINIMUM SLOPE WITHIN THIS ENTIRE RUN = 1.0%

MATERIAL	PVC	Q_{full} , cfs	Q_{full} , gpd	Q_{half} , cfs	Q_{half} , gpd	V_{max} , fps	V_{half} , fps
LENGTH, ft	20	2.60	1,677,200	1.25	805,056	5.47	4.76
DIAMETER, in	10						
SLOPE	1.00%	PIPE SIZED ACCORDINGLY: TRUE					
n	0.011	$V_{max} < 10$ fps: TRUE					
Q_{max} , gpd	27,012	$V_{half} > 2$ fps: TRUE					
Q_{design} , gpd	94,542						

COMMONWEALTH BUILDING
Fourth Ave 36-IN PWSA Combination Sewer
Dry Flow Comparison Calculations

Given Information	
Pipe Location:	Fourth Avenue
*Pipe Type:	Brick
Pipe Diameter (IN):	36
*Slope:	2.5%
Depth of Flow (IN) ⁽¹⁾ :	3.65
Manning's n Value:	0.015

Solve for Dry Flow	
Radius of Pipe, r (IN):	18
Circular Segment Height, h (IN):	3.65
Central Angle, θ :	74.269
Flow Area, K (IN ²):	54.058
Wetted Perimeter (IN):	23.332
Hydraulic Radius (IN):	2.317
Hydraulic Radius (FT):	0.193
Velocity (FT/S):	5.180
Flow (CFS):	1.944
Flow (GPD):	1,256,465

Solve for Full Flow	
Flow (CFS):	90,723
Flow (GPD):	58,624,409

Solve for Present Peak Flow	
Peak Factor:	3.5
Flow (GPD):	4,397,629

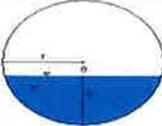
Solve for Average Design/Permitted Capacity	
Flow (GPD):	16,749,831

Summary	
Anticipated Flow Contribution (GPD) ⁽²⁾ :	27,012
Present Average Flow (GPD):	1,256,465
Present Peak Flow (GPD):	4,397,629
Design/Permitted Average Capacity (GPD):	16,749,831
Design/Permitted Peak Capacity (GPD):	58,624,409
Average Projected Flow (GPD)	1,347,651
Peak Projected Flow (GPD)	4,716,779

$$V = \frac{k}{n} R^{2/3} S^{1/2} \quad k=1.4859 \text{ ft}^{1/3} / \text{s} \quad Q = VA$$

*Information and values not field verified

- Information estimated using the Flow Monitoring Report prepared by DRNACH Environmental, Inc.
- Information estimated using Table 2-1 of the PWSA Procedures Manual of Developers.

step	solve for	<i>if flow depth < radius</i>
		
1	circular segment height	$h = d$
2	central angle	$\theta = 2 \arccos \left(\frac{r-h}{r} \right)$
3	circular segment area	$K = \frac{r^2}{2} (\theta - \sin \theta)$
4	arc length	$s = r \theta$
5	flow area	$A = K$
6	wetted perimeter	$P_w = s$
7	hydraulic radius	$R_h = \frac{A}{P_w}$



**Fourth Avenue - 36 Inch PWSA Combined
Sewer Flow Reading Data**

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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11/07/2018	12:00 AM			0.00
	1:00 AM			0.00
	2:00 AM			0.00
	3:00 AM			0.00
	4:00 AM			0.00
	5:00 AM			0.00
	6:00 AM			0.00
	7:00 AM			0.00
	8:00 AM			0.00
	9:00 AM			0.00
	10:00 AM	4.04	0.44	0.110
	11:00 AM	3.91	0.41	0.095
	12:00 PM	3.90	0.37	0.085
	1:00 PM	4.00	0.32	0.077
	2:00 PM	3.94	0.39	0.096
	3:00 PM	3.79	0.35	0.078
	4:00 PM	3.85	0.42	0.096
	5:00 PM	3.79	0.34	0.075
	6:00 PM	3.77	0.30	0.066
	7:00 PM	3.75	0.29	0.062
	8:00 PM	3.71	0.27	0.058
	9:00 PM	3.86	0.30	0.070
	10:00 PM	3.75	0.23	0.049
	11:00 PM	3.68	0.25	0.052

MIN	3.68	0.23	0.049	MIN	0.00
MAX	4.04	0.44	0.110	MAX	0.00
AVE	3.84	0.33	0.076	TOTAL	0.00

11/08/2018	12:00 AM	3.59	0.24	0.048	0.00
	1:00 AM	3.54	0.21	0.041	0.00
	2:00 AM	3.50	0.20	0.038	0.00
	3:00 AM	3.46	0.18	0.034	0.00
	4:00 AM	3.46	0.16	0.031	0.00
	5:00 AM	3.55	0.22	0.043	0.00
	6:00 AM	3.68	0.25	0.052	0.00
	7:00 AM	3.86	0.30	0.069	0.00
	8:00 AM	3.80	0.29	0.065	0.00
	9:00 AM	3.85	0.31	0.072	0.00
	10:00 AM	3.73	0.27	0.058	0.00
	11:00 AM	3.79	0.42	0.093	0.00
	12:00 PM	3.79	0.42	0.093	0.00
	1:00 PM	3.74	0.37	0.079	0.00
	2:00 PM	3.75	0.41	0.089	0.00
	3:00 PM	3.68	0.43	0.091	0.00
	4:00 PM	3.81	0.37	0.083	0.00
	5:00 PM	3.77	0.32	0.069	0.00
	6:00 PM	3.71	0.33	0.070	0.00
	7:00 PM	3.71	0.37	0.079	0.00
	8:00 PM	3.67	0.40	0.084	0.00
	9:00 PM	3.56	0.34	0.068	0.00
	10:00 PM	3.63	0.40	0.083	0.00
	11:00 PM	3.61	0.39	0.079	0.00

MIN	3.46	0.16	0.031	MIN	0.00
MAX	3.86	0.43	0.093	MAX	0.00
AVE	3.68	0.32	0.067	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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11/09/2018	12:00 AM	3.51	0.32	0.062	0.00
	1:00 AM	3.49	0.32	0.062	0.00
	2:00 AM	3.50	0.33	0.063	0.00
	3:00 AM	3.46	0.28	0.053	0.00
	4:00 AM	3.39	0.20	0.037	0.00
	5:00 AM	3.54	0.34	0.069	0.00
	6:00 AM	5.09	1.33	0.495	0.12
	7:00 AM	4.43	1.03	0.306	0.05
	8:00 AM	4.13	0.78	0.203	0.01
	9:00 AM	4.73	1.20	0.388	0.07
	10:00 AM	4.77	1.21	0.391	0.06
	11:00 AM	4.78	1.15	0.373	0.06
	12:00 PM	5.07	1.46	0.521	0.08
	1:00 PM	4.80	1.24	0.408	0.06
	2:00 PM	4.68	1.22	0.385	0.06
	3:00 PM	4.19	0.94	0.246	0.02
	4:00 PM	4.01	0.71	0.178	0.02
	5:00 PM	3.71	0.54	0.114	0.00
	6:00 PM	3.66	0.51	0.107	0.00
	7:00 PM	3.63	0.44	0.091	0.00
	8:00 PM	3.58	0.36	0.073	0.00
	9:00 PM	3.58	0.36	0.072	0.00
	10:00 PM	3.62	0.35	0.071	0.00
	11:00 PM	3.63	0.50	0.102	0.00

MIN	3.39	0.20	0.037	MIN	0.00
MAX	5.09	1.46	0.521	MAX	0.12
AVE	4.04	0.71	0.203	TOTAL	0.61

11/10/2018	12:00 AM	3.51	0.45	0.089	0.00
	1:00 AM	3.51	0.45	0.088	0.00
	2:00 AM	3.45	0.34	0.065	0.00
	3:00 AM	3.38	0.28	0.051	0.00
	4:00 AM	3.35	0.25	0.044	0.00
	5:00 AM	3.36	0.25	0.045	0.00
	6:00 AM	3.37	0.26	0.047	0.00
	7:00 AM	3.34	0.26	0.047	0.00
	8:00 AM	3.44	0.33	0.062	0.00
	9:00 AM	3.65	0.61	0.128	0.00
	10:00 AM	3.62	0.60	0.124	0.00
	11:00 AM	3.71	0.65	0.138	0.00
	12:00 PM	3.52	0.49	0.095	0.00
	1:00 PM	3.67	0.62	0.129	0.00
	2:00 PM	3.53	0.50	0.099	0.00
	3:00 PM	3.67	0.61	0.128	0.00
	4:00 PM	3.61	0.58	0.122	0.00
	5:00 PM	3.56	0.60	0.119	0.00
	6:00 PM	3.49	0.52	0.100	0.00
	7:00 PM	3.44	0.46	0.088	0.00
	8:00 PM	3.37	0.38	0.070	0.00
	9:00 PM	3.46	0.51	0.099	0.00
	10:00 PM	3.51	0.60	0.117	0.00
	11:00 PM	3.50	0.57	0.111	0.00

MIN	3.34	0.25	0.044	MIN	0.00
MAX	3.71	0.65	0.138	MAX	0.00
AVE	3.50	0.47	0.092	TOTAL	0.00

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
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11/11/2018	12:00 AM	3.37	0.37	0.067	0.00
	1:00 AM	3.42	0.47	0.087	0.00
	2:00 AM	3.38	0.36	0.066	0.00
	3:00 AM	3.38	0.36	0.066	0.00
	4:00 AM	3.32	0.29	0.050	0.00
	5:00 AM	3.32	0.29	0.051	0.00
	6:00 AM	3.29	0.26	0.044	0.00
	7:00 AM	3.24	0.23	0.038	0.00
	8:00 AM	3.32	0.33	0.060	0.00
	9:00 AM	3.56	0.56	0.112	0.00
	10:00 AM	3.77	0.78	0.170	0.00
	11:00 AM	3.80	0.74	0.163	0.00
	12:00 PM	3.74	0.94	0.202	0.00
	1:00 PM	3.87	0.81	0.186	0.00
	2:00 PM	3.79	0.71	0.159	0.00
	3:00 PM	3.75	0.61	0.132	0.00
	4:00 PM	3.87	0.72	0.165	0.00
	5:00 PM	3.84	0.71	0.160	0.00
	6:00 PM	3.85	0.72	0.164	0.00
	7:00 PM	3.76	0.72	0.157	0.00
	8:00 PM	3.77	0.61	0.135	0.00
	9:00 PM	3.77	0.54	0.117	0.00
	10:00 PM	3.77	0.50	0.110	0.00
	11:00 PM	3.71	0.49	0.104	0.00

MIN	3.24	0.23	0.038	MIN	0.00
MAX	3.87	0.94	0.202	MAX	0.00
AVE	3.61	0.55	0.115	TOTAL	0.00

11/12/2018	12:00 AM	3.68	0.45	0.095	0.00
	1:00 AM	3.62	0.42	0.085	0.00
	2:00 AM	3.59	0.41	0.083	0.00
	3:00 AM	3.58	0.39	0.079	0.00
	4:00 AM	3.57	0.40	0.080	0.00
	5:00 AM	3.62	0.43	0.088	0.00
	6:00 AM	3.68	0.41	0.086	0.00
	7:00 AM	3.84	0.47	0.105	0.00
	8:00 AM	3.82	0.69	0.154	0.00
	9:00 AM	3.72	0.64	0.137	0.00
	10:00 AM	3.74	0.62	0.135	0.00
	11:00 AM	3.78	0.62	0.137	0.00
	12:00 PM	3.77	0.55	0.121	0.00
	1:00 PM	3.88	0.73	0.170	0.00
	2:00 PM	3.73	0.70	0.151	0.00
	3:00 PM	3.69	0.66	0.140	0.00
	4:00 PM	3.85	0.79	0.179	0.00
	5:00 PM	3.82	0.58	0.130	0.00
	6:00 PM	3.65	0.35	0.073	0.00
	7:00 PM	3.61	0.32	0.065	0.00
	8:00 PM	3.68	0.32	0.068	0.00
	9:00 PM	3.79	0.47	0.105	0.00
	10:00 PM	3.75	0.43	0.095	0.01
	11:00 PM	3.65	0.28	0.058	0.00

MIN	3.57	0.28	0.058	MIN	0.00
MAX	3.88	0.79	0.179	MAX	0.01
AVE	3.71	0.51	0.109	TOTAL	0.01

Time	Head inches	Velocity fps	Flow MGD	Precip. inches
------	----------------	-----------------	-------------	-------------------

11/13/2018	12:00 AM	3.98	0.57	0.143	0.01
	1:00 AM	4.43	0.78	0.224	0.04
	2:00 AM	4.32	0.72	0.199	0.02
	3:00 AM	4.24	0.70	0.189	0.03
	4:00 AM	4.11	0.68	0.172	0.03
	5:00 AM	3.78	0.62	0.137	0.00
	6:00 AM	3.61	0.52	0.105	0.00
	7:00 AM	3.80	0.52	0.115	0.00
	8:00 AM	3.76	0.43	0.093	0.00
	9:00 AM	3.94	0.36	0.087	0.00
	10:00 AM	3.92	0.46	0.112	0.00
	11:00 AM	3.81	0.30	0.067	0.00
	12:00 PM	3.79	0.22	0.049	0.00
	1:00 PM	3.83	0.23	0.052	0.00
	2:00 PM	3.84	0.25	0.057	0.00
	3:00 PM	3.84	0.22	0.049	0.00
	4:00 PM	3.76	0.16	0.035	0.00
	5:00 PM	3.74	0.16	0.035	0.00
	6:00 PM	3.69	0.14	0.031	0.00
	7:00 PM	3.74	0.17	0.036	0.00
	8:00 PM	3.63	0.17	0.035	0.00
	9:00 PM	3.64	0.18	0.036	0.00
	10:00 PM	3.62	0.17	0.034	0.00
	11:00 PM	3.63	0.18	0.038	0.00

MIN	3.61	0.14	0.031	MIN	0.00
MAX	4.43	0.78	0.224	MAX	0.04
AVE	3.85	0.37	0.089	TOTAL	0.13

11/14/2018	12:00 AM	3.54	0.16	0.031	0.00
	1:00 AM	3.39	0.14	0.026	0.00
	2:00 AM	3.36	0.13	0.023	0.00
	3:00 AM	3.33	0.13	0.023	0.00
	4:00 AM	3.31	0.13	0.023	0.00
	5:00 AM	3.36	0.12	0.022	0.00
	6:00 AM	3.54	0.15	0.029	0.00
	7:00 AM	3.74	0.25	0.054	0.00
	8:00 AM	3.80	0.37	0.081	0.00
	9:00 AM	3.77	0.36	0.079	0.00
	10:00 AM	3.74	0.32	0.070	0.00
	11:00 AM	3.80	0.70	0.155	0.00
	12:00 PM	3.79	0.69	0.153	0.00
	1:00 PM	3.80	0.68	0.152	0.00
	2:00 PM	3.71	0.58	0.125	0.00
	3:00 PM	3.81	0.63	0.144	0.00
	4:00 PM	3.78	0.66	0.146	0.00
	5:00 PM	3.85	0.64	0.147	0.00
	6:00 PM	3.80	0.67	0.149	0.00
	7:00 PM	3.72	0.65	0.140	0.00
	8:00 PM	3.75	0.73	0.158	0.00
	9:00 PM	3.63	0.61	0.127	0.00
	10:00 PM	3.53	0.51	0.101	0.00
	11:00 PM	3.51	0.47	0.093	0.00

MIN	3.31	0.12	0.022	MIN	0.00
MAX	3.85	0.73	0.158	MAX	0.00
AVE	3.64	0.44	0.094	TOTAL	0.00

**DOCUMENTATION
FROM UTILITY COMPANIES**

September 13, 2018

Mr. Ben Hunter
Langan Engineering
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

**RE: Water and Sewer Availability
316 Fourth Avenue - 15222
Mixed Use Development**

Dear Mr. Hunter:

In response to your inquiry on 8/30/2018 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

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

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

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

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

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

Sincerely,


Michelle E. Carney
Engineering Technician III

MEC

cc: PWSA File



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 submitted by the Applicant:
Property Owner Name: JON KNUDSEN
Address of Property: 316 FOURTH AVENUE, PITTSBURGH, PA 15222
Proposed Use of Site: MIXED-USE DEVELOPMENT
Closest street intersection to the property: WOOD ST. AND FOURTH AVE.
Requestor Name: BENJAMIN HUNTER (LANGAN) Date of Request: 08/30/2018
Requestor Address: 2400 ANSYS DRIVE, CANONSBURG, PA 15317
Requestor Phone Number: 724-514-5125

Please submit the completed form to:

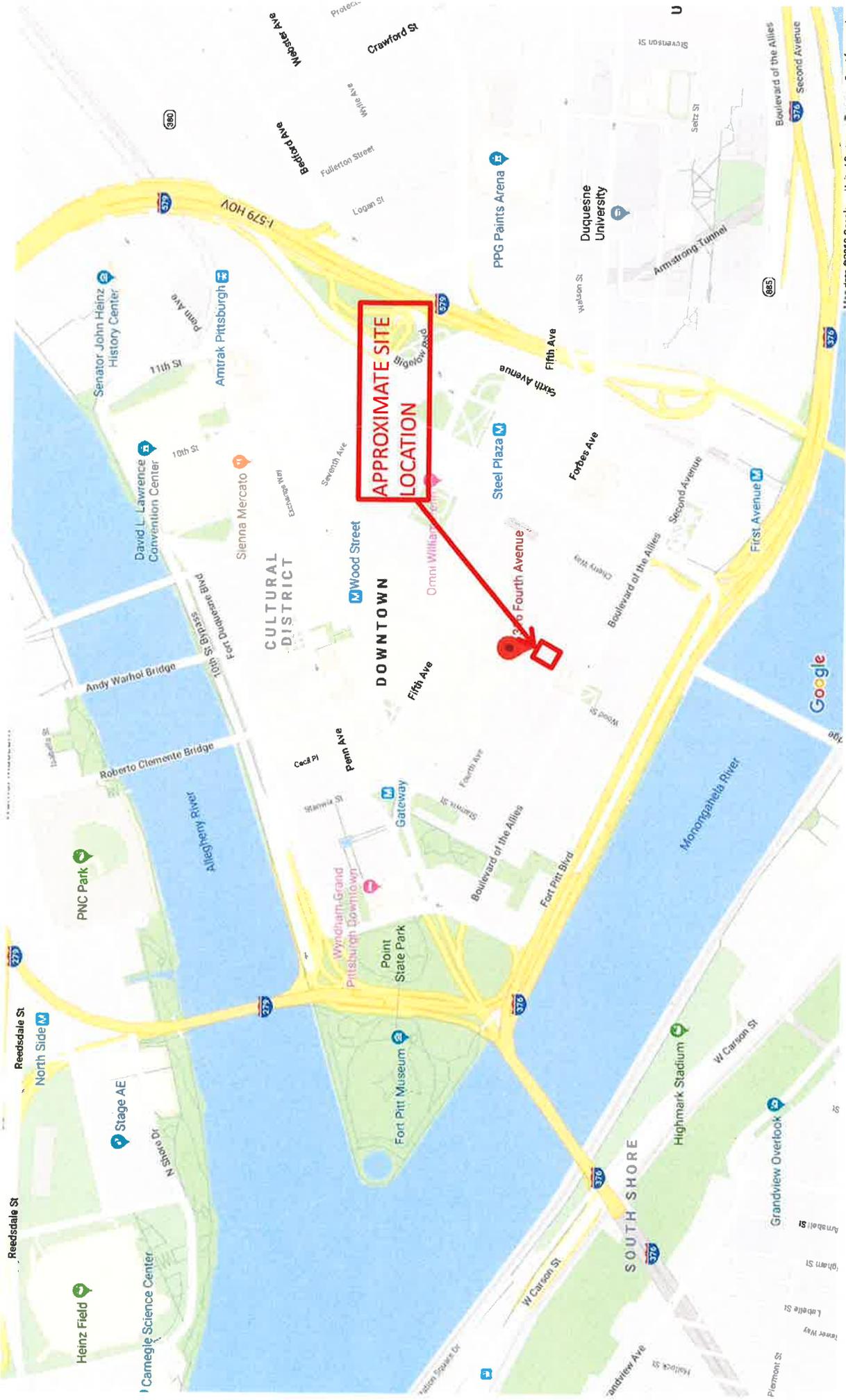
Pittsburgh Water and Sewer Authority
Engineering and Construction Division
1200 Penn Avenue
Pittsburgh, PA 15222
Attn: Ms. Michelle Carney (mcarney@pgh2o.com)

RECEIVED
SEP 05 2018

BY: PWSA MC

PWSA Use Only:
PWSA Water Service Available: [X] Yes [] No Size / Location: 12" 4th Avenue
PWSA Sewer Service Available: [X] Yes [] No Size / Location: 36" 4th Avenue
Applicant must contact separate agency for water and/or sewer service: [] Yes [X] No
Name of separate agency: N/A
PWSA Approval Authority: Signature and Date: Michelle E Carney 9-13-2018
Name (printed): Michelle Carney
Title: Engineering Tech 3

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.



**APPROXIMATE SITE
LOCATION**

360 Fourth Avenue

CULTURAL DISTRICT

DOWNTOWN

SOUTH SHORE

Google

BY: PWSA MC

August 28, 2018

Michelle Carney
The Pittsburgh Water and Sewer Authority
Penn Liberty Plaza – 1200 Penn Avenue
Pittsburgh, PA 15222

**Re: Water and Sewer Availability Request
Commonwealth Building
Pittsburgh, Pennsylvania
Langan Project No.: 250063301**

Dear Michelle:

This letter serves as a request for written verification of available water and sewer service to determine the feasibility of a residential conversion of the existing Commonwealth Building located within the Golden Triangle district in the City of Pittsburgh. The site is located at 316 Fourth Avenue. Please see attachment for the USGS Site Location Map.

The existing building has 20 stories plus a penthouse with a total GSF around 126,000 to 130,000 square feet. The proposed improvements will include ground floor retail or restaurant with lobby space. The 2nd and 3rd floors will be a mix of amenity space and apartments. It is anticipated that there will be 150 apartments created.

We would like to confirm that sewer and water service is available for use at the site. Please reply by returning a copy of the form along with known Facility Mapping that would help us in this endeavor. Thank you for your attention to this matter.

Please contact me at (724) 514-5125 or by email at bhunter@langan.com if you should have any questions or need any additional information to review the submission.

Sincerely,

Langan Engineering and Environmental Services, Inc.



Benjamin Hunter, PE, LEED AP
Senior Project Manager

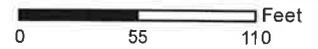
Enclosures: Water and Sewer Availability Letter Request Form
Site Location Map

316 4th Avenue



Legend

Meter	Water Manhole	Outfall
Pump	Rising Main	End Cap
Hydrant	Supply Main	Sewer Pump Station
Hydrant - Out of Service	Transmission Main	Combined Sewer
System Valve	Distribution Main	Sanitary Sewer
Dividing Pressure Valve	Hydrant Branch	Storm Sewer
Cap	Private Main	Regulated Combined Sewer
Tee or Cross	Water Service Line	Overflow Sewer
Reducer	Manhole	Interceptor
Coupling	Junction	Sewer Force Main
Wash Out	Inlet	Private Sewer
	Private Inlet	Undefined Sewer



Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and neither assumes any responsibility for any conclusions or interpretations made on the basis of such information. COP and PWSA assume no responsibility for any misunderstanding or representations made by their agents or employees unless such understanding or representations are expressly set forth in a duly authorized written document, and such document expressly provides that responsibility therefore is assumed by the City or the PWSA.

Date: 9/13/2018

316 4th Avenue



Legend

- | | | |
|-------------------------|--------------------|--------------------------|
| Meter | Water Manhole | Outfall |
| Pump | Rising Main | End Cap |
| Hydrant | Supply Main | Sewer Pump Station |
| Hydrant- Out of Service | Transmission Main | Combined Sewer |
| System Valve | Distribution Main | Sanitary Sewer |
| Dividing Pressure Valve | Hydrant Branch | Storm Sewer |
| Cap | Private Main | Regulated Combined Sewer |
| Tee or Cross | Water Service Line | Overflow Sewer |
| Reducer | Manhole | Interceptor |
| Coupling | Junction | Sewer Force Main |
| Wash Out | Inlet | Private Sewer |
| | Private Inlet | Undefined Sewer |



Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and either or assumes any responsibility for any conclusions or interpretations made on the basis of such information. COP and PWSA assume no responsibility for any understanding or representations made by their agents or employees unless such understanding or representations are expressly set forth in a duly authorized written document, and such document expressly provides that responsibility therefore is assumed by the City or the PWSA.



Pittsburgh
Water & Sewer
Authority

May 17, 2019

Mr. Benjamin Hunter
Langan Engineering and Environmental Services
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

**RE: Commonwealth Building
316 Fourth Ave - 15222**

Dear Mr. Hunter:

The Pittsburgh Water and Sewer Authority (PWSA) has reviewed your submitted PA DEP Sewage Facilities Planning Module Component 3.

PWSA has approved your submittal and signed Section J and is returning to you for processing to ALCOSAN for final signature. Contact Leslie Stevens at the City of Pittsburgh Law Department at (412-255-2005) to prepare the required City Resolution that Council will need to approve for this project.

Once you receive City Council Resolution, you must submit the complete package to the DEP for final review and approval. You must include all documentation including the approved City of Pittsburgh Council Resolution and any review fees.

Once PWSA receives a copy of the approved Sewage Facilities Planning Module from the DEP, PWSA will process the tap in plan. PWSA is not permitted to issue final approval or a PWSA Permit for connection to the water and/or sewer mains until approval from DEP is granted.

If you have any questions specific to PWSA feel free to contact me. For any general questions regarding the Planning Module you must contact the DEP.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Matthew Smuts', is written over a horizontal line.

Matthew Smuts
Associate Project Manager

CC (via email): Thomas Flanagan – DEP
Kate Mechler – PWSA
Julie Ascioia - PWSA
Leslie Stevens – City of Pittsburgh Law Department
Michael Lichte - ALCOSAN
PWSA File

Penn Liberty Plaza I
1200 Penn Avenue
Pittsburgh PA 15222

info@pgh2o.com
T 412.255.2423
F 412.255.2475

www.pgh2o.com
@pgh2o

Customer Service /
Emergencies:
412.255.2423

May 17, 2019

Mr. Thomas Flanagan
Sewage Planning Specialist Supervisor
PA Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222

RE: Commonwealth Building
316 Fourth Avenue - 15222
Sewage Facilities Planning Module
Sewer Tap Allocation

Dear Mr. Flanagan:

The Pittsburgh Water and Sewer Authority (PWSA) would like to authorize the use of the 2019 Sewer Tap Allocations for the following project:

Commonwealth Building
316 Fourth Ave - 15222
4th Ward - City of Pittsburgh
27,012 Gallons Per Day = 67.53 DEP EDU's (400gpd/EDU)

If you have any questions, please feel free to contact me at (412) 255-8800 x 2663

Sincerely,



Matthew Smuts
Associate Project Manager

CC (via email): Benjamin Hunter - Langan
Regis Ryan - PA DEP
William Vincett - PA DEP
Kate Mechler - PWSA
Julie Ascioffa - PWSA
PWSA File



Pittsburgh
Water & Sewer
Authority

MEMO

To: Barry King 
From: Matt Smuts 
Date: May 15, 2019
Subject: **DEP Sewage Planning Module – Section J. Chapter 94
Consistency Determination, Calculation Review for:
Commonwealth Building**

Upon review of the submittal by Langan Engineering and Environmental Services for the above referenced development I have determined that the projected flows are less than the design capacity of the PWSA sewers and, therefore the sewers should have adequate capacity for the proposed development.

DEP Sewage Planning Module										Date: 5/15/2019
Section J. Chapter 94 Consistency Determination										Calculation Review
										By: M. Smuts
	PROJECT NAME:	Commonwealth Building, 316 4th Ave								
	PROJECT FLOW:	27,012 gpd								
<u>Formulas</u>										
Manning Equation:										Q, flow, cfs
	$Q = (1.49/n) * A * R^{2/3} * S^{1/2}$									n, roughness coefficient
	$\Theta = 2 \arccos((r-d/r))$									S, slope from PWSA records (ft/ft)
	$A = r^2(\Theta - \sin \Theta)/2$									D, sewer diameter, ft
	$P_w = r * \Theta$									d, depth of flow measured, ft, (SUBMITTED WITH REPORT)
	$R_H = A/P_w$									Θ , central angle, radians
										A, cross sectional area, ft^2
										P_w , wetted perimeter, ft
										R_H , hydraulic radius, ft
SEWER PROPERTIES										Peaking Factor
	n=	0.015					D=	3.00 ft		3.5 combined sewers
	S=	0.025					Material:	Brick		3 sanitary sewers
DESIGN PEAK FLOW (FLOWING FULL)										AVERAGE DESIGN FLOW
	$Q_{FULL} =$	59,125,281	gpd							(Average flow is design peak flow divided by peaking factor)
	D=	3.000	ft							$Q_{FULL}, avg =$ 16,892,937 gpd
	r =	1.500	ft							
	$\Theta =$	6.28	rad							
	A=	7.07	ft^2							
	$P_w =$	9.42	ft							
	$R_H =$	0.750	ft							
	Q=	91.64	cfs							
PRESENT AVERAGE FLOW										PRESENT PEAK FLOW
	$Q_{AVG} =$	1,269,235	gpd							(Peak flow is peaking factor times the present average flow)

d=	0.304	ft	*Flow Depth	Q _{peak} =	4,442,322	gpd
r =	1.500	ft				
Θ=	1.30	rad				
A=	0.3751	ft ²				
P _w =	1.944	ft				
R _h =	0.1930	ft				
Q=	1.967	cfs				
PROJECTED AVERAGE FLOW						
	Q _{AVG, PROJECTED} =	Qpeak projected / peaking factor		PROJECTED PEAK FLOW		
				Q _{PK, PROJECTED} = (Present Peak flow + Project Flow) * 1.05		
	Q _{AVG, PROJECTED} =	1,340,800	gpd	Q _{PEAK, PROJECTED} =	4,692,801	gpd
VALUES BY ENGINEER						
Q _{full}	58,624,409		% DIFFERENCE			
Q _{full, avg}	16,749,831		-1%			
Q _{avg}	1,256,465		-1%			
Q _{peak}	4,397,629		-1%			
Q _{avg,proj}	1,347,651		1%			
Q _{peak,proj}	4,716,779		1%			
				*Design and/or Permitted Capacity Peak in gpd		
				Projected peak flow, not peak design flow		

APPENDIX D

Alternative Sewage Facilities Analysis

SECTION H SEWAGE FACILITIES PLANNING MODULE COMPONENT 3

**Re: Alternative Sewage Facilities Analysis
Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250063301**

The project site is located at 316 Fourth Avenue between Wood Street and Smithfield Street, in the Golden Triangle Subdistrict A (GT-A) District within the City of Pittsburgh, Allegheny County, Pennsylvania. Pitt Commonwealth Owner, LLC is proposing to redevelop approximately 0.19 acres within Lot 1-H-330. The proposed development will include ground floor retail or residential with lobby space and 2nd and 3rd floor amenity space and apartments. The proposed development will be owned and operated by Pitt Commonwealth Owner LLC.

The project site is generally bounded by Fourth Avenue to the north, a 13-story existing brick building *The Pittsburgh Tech Center Bunker* to the east, two existing brick buildings and a vacant lot to the south, and a 21-story existing brick building *The Union Bank Building* to the west. The existing site currently consists of a 20-story brick building and impervious sidewalk area.

The sanitary services for the proposed site consists of one 10-inch private on-site gravity lateral located in Fourth Ave. north of the site. The 10-inch lateral in Fourth Ave. will connect into the existing 36-inch PWSA combined sewer. The existing 36-inch PWSA combined sewer is conveyed to the Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility in Pittsburgh, PA. This proposed method will provide adequate disposal of the total combined daily flow of 27,012 gallons per day, or 68 EDUs. The proposed net increase in combined daily sanitary sewage flow from existing to proposed conditions is 14,203 gallons per day, or 36 EDUs. A reference for the approximate sewage flow for the proposed development can be found in Appendix C. The proposed private sanitary line will remain private and will not create any undue financial burdens to the City of Pittsburgh, PWSA, or ALCOSAN.

Alternative methods of sewage disposal that could be considered include on-site subsurface disposal systems (septic systems) and an individual package wastewater treatment plant. The existing developments in the area are all currently connected to the public sewer system; therefore, an on-site septic system would not be consistent with the neighboring buildings, nor would it be a practical solution to provide adequate service for the site. The nearest discharge point from the site for a stream discharge is the Monongahela River, approximately 0.18 miles southwest of the site. A package wastewater treatment plant with discharge to the Monongahela River is not feasible due to the size and cost of the site.

APPENDIX E

Public Notice

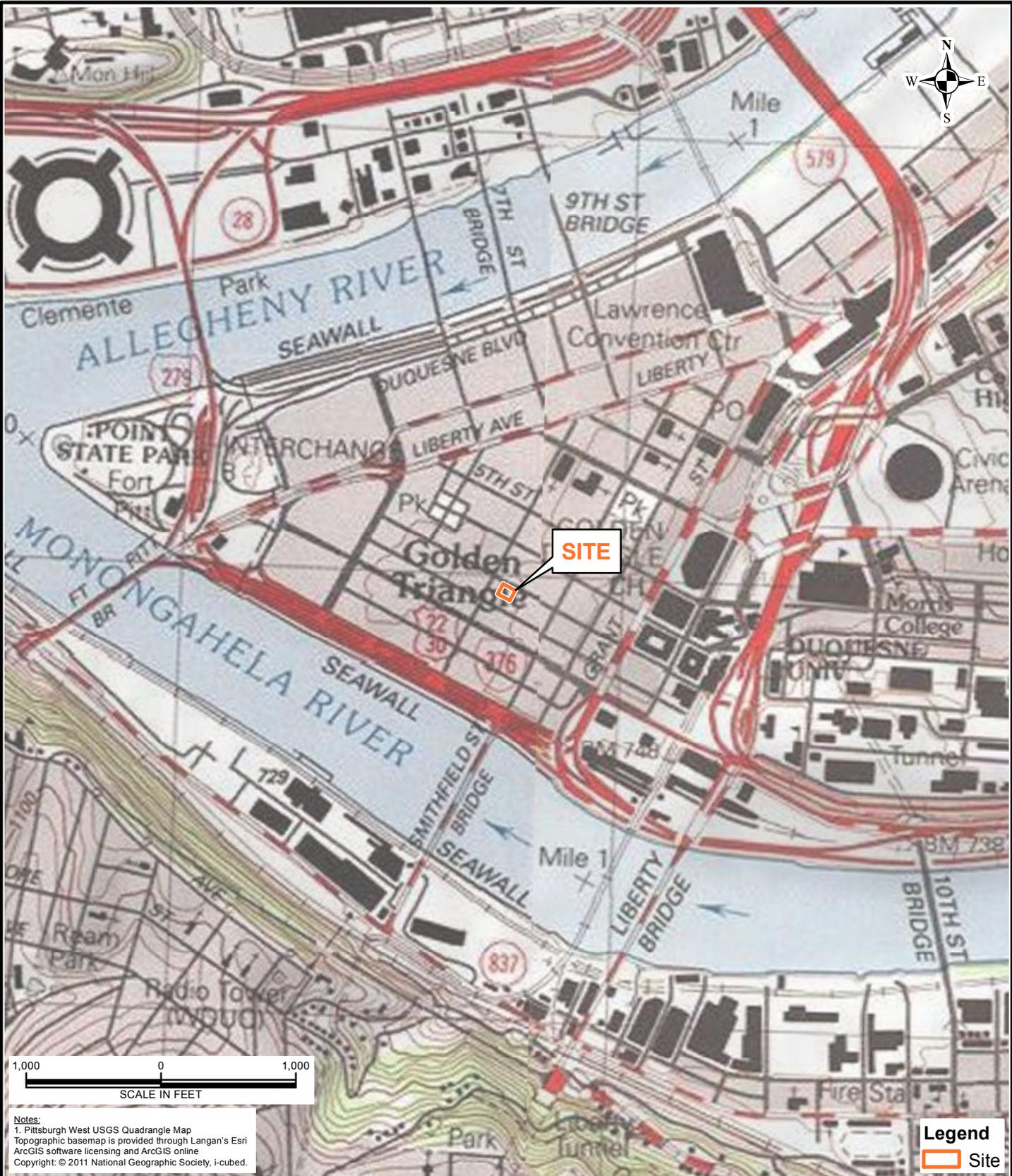
**SECTION P
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3**

**Re: Public Notice
Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250063301**

A public notification is not required for this project since no items in Section P of Component 3 (Appendix C) were applicable to this project.

APPENDIX F

USGS Map and Plot Plans



Notes:
 1. Pittsburgh West USGS Quadrangle Map
 Topographic basemap is provided through Langan's Esri
 ArcGIS software licensing and ArcGIS online
 Copyright: © 2011 National Geographic Society, I-cubed.

Legend
 Site

LANGAN
 2400 Ansys Drive, Suite 403
 Canonsburg, PA 15317
 T: 724.514.5100 F: 724.514.5101 www.langan.com

Langan Engineering & Environmental Services, Inc.
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 Langan International LLC
 Collectively known as Langan

Project
**COMMONWEALTH
 BUILDING**
 PITTSBURGH

ALLEGHENY
 COUNTY PENNSYLVANIA

Drawing Title
**SITE
 LOCATION
 MAP**

Project No.
 250063301
 Date
 10/10/2018
 Scale
 1" = 1,000'
 Drawn By
 BLA

Figure
1

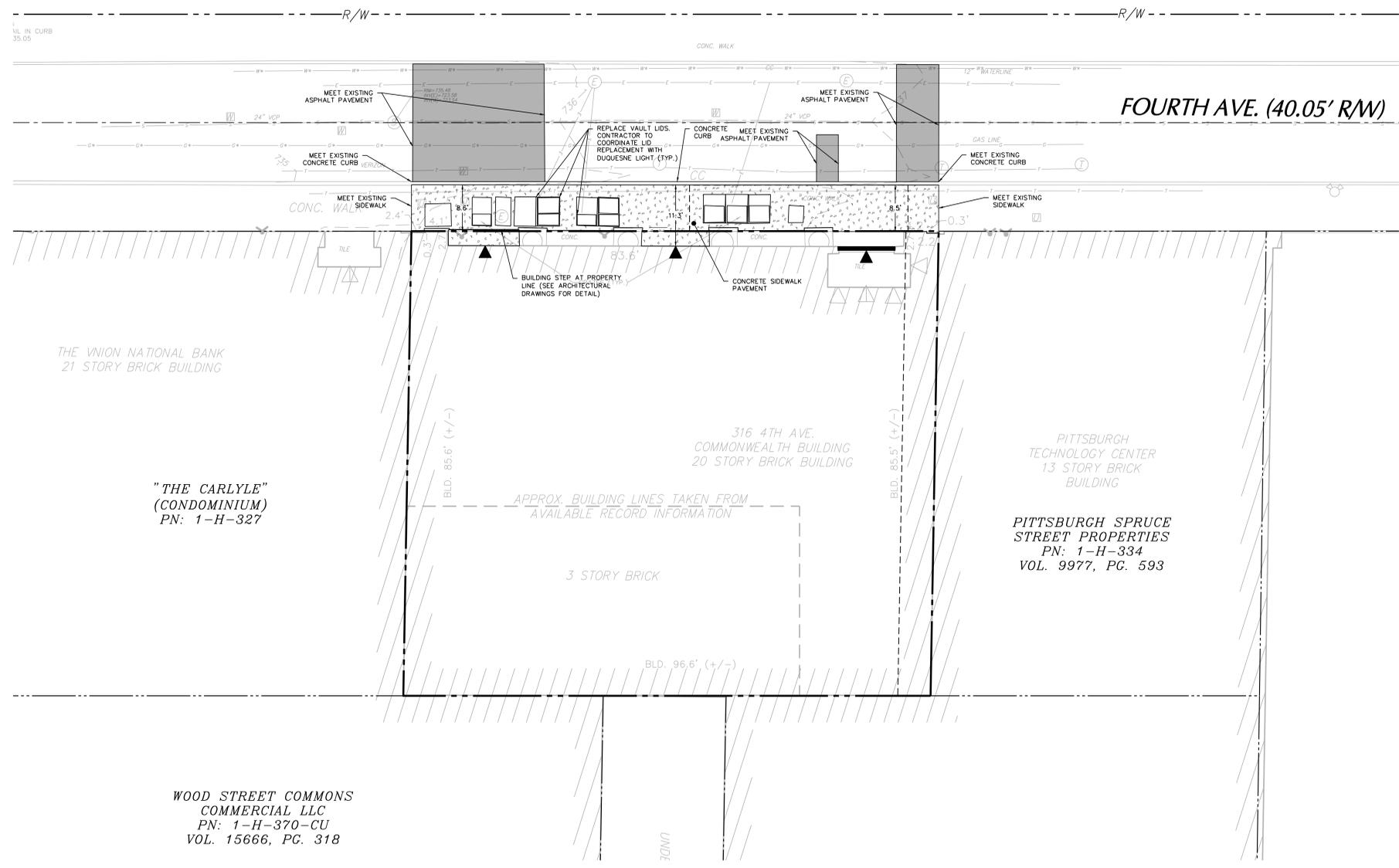
NOT FOR CONSTRUCTION

GENERAL NOTES

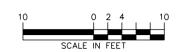
- EXISTING BOUNDARY AND TOPOGRAPHY IS BASED ON A PLAN TITLED "ALTA/NSPS LAND TITLE SURVEY" FOR THE "COMMONWEALTH BUILDING" PROJECT SITUATED IN "ALLEGHENY COUNTY, PENNSYLVANIA," PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC., DATED AUGUST 3, 2018.
- THESE PLANS REPRESENT THE OVERALL SITEWORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- REPAIR ALL PAVEMENT AND CURBS AS NECESSARY.

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
BUILDING LINE	---	---
BUILDING ENTRY	▲	▲
CONCRETE CURB	---	---
MANHOLE (TYPE AS LABELED)	⊙	⊙
ELECTRIC VAULT/GRATES	⊠	⊠
FIRE HYDRANT	⊕	⊕
WATER VALVE	⊕	⊕
EXPOSED AGGREGATE 6" CONCRETE SIDEWALK	▨	▨
ASPHALT PAVEMENT	▨	▨



FOURTH AVE. (40.05' R/W)



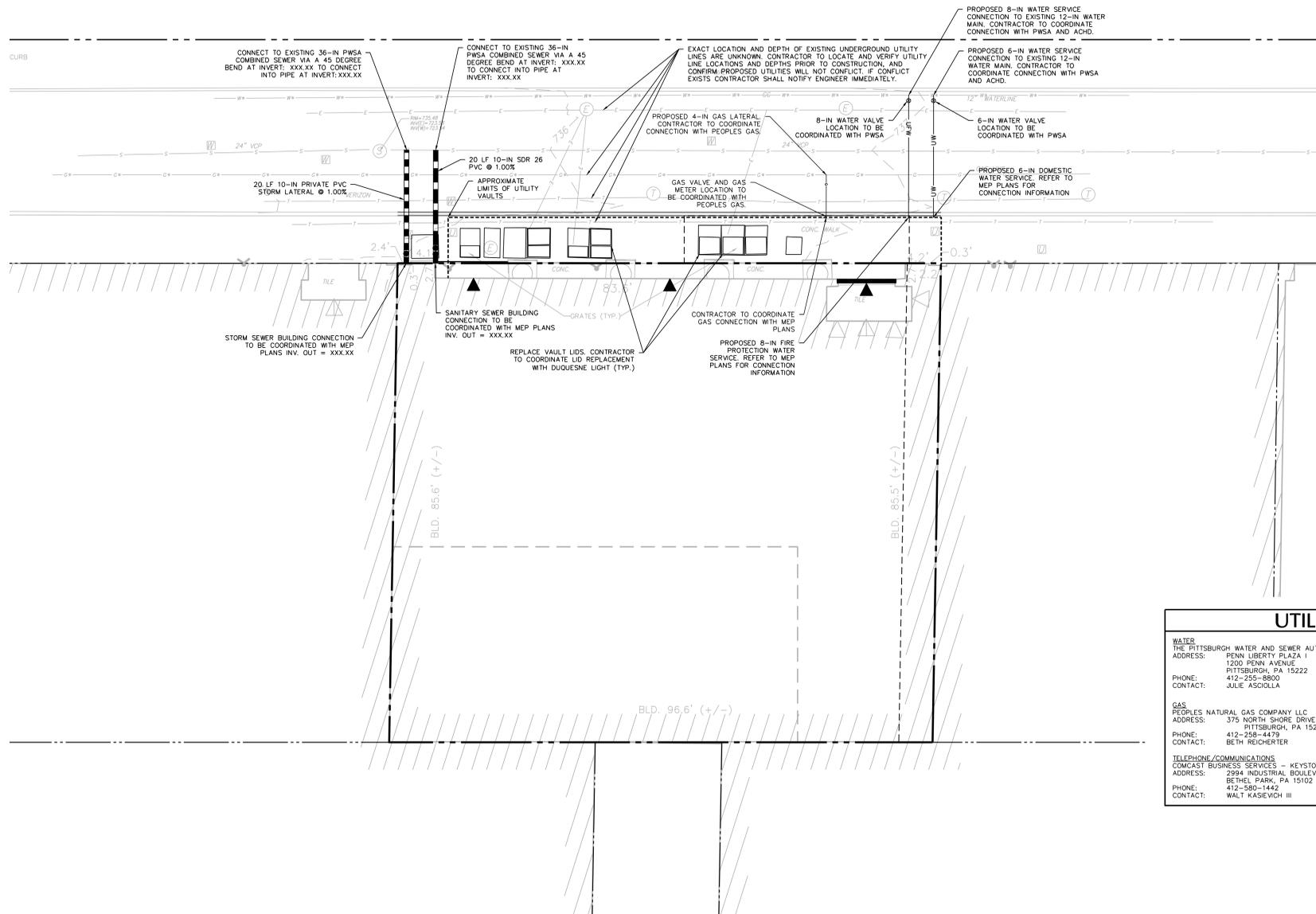
PWWG PROJECT NUMBER	21816.00
DESIGN DEVELOPMENT	02/19/2019
REVISIONS	
NO.	DESCRIPTION
DATE	

COMMONWEALTH BUILDING
316 FOURTH AVE
PITTSBURGH, PA 15219
PITT COMMONWEALTH OWNER, LLC
SITE PLAN

NOT FOR CONSTRUCTION

UTILITY NOTES

- EXISTING BOUNDARY AND TOPOGRAPHY IS BASED ON A PLAN TITLED "ALTA/NSPS LAND TITLE SURVEY" FOR THE "COMMONWEALTH BUILDING" SITUATED IN "ALLEGHENY COUNTY, PENNSYLVANIA," PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC., DATED AUGUST 3, 2018.
- THE CONTRACTOR IS RESPONSIBLE TO BECOME THOROUGHLY FAMILIAR WITH THE ENGINEERING, DRAINAGE, AND UTILITY STANDARDS OF THE LOCAL MUNICIPALITY AND COUNTY THAT THE PROJECT IS LOCATED IN. ALL LOCAL MUNICIPALITY AND COUNTY STANDARDS WILL TAKE PRECEDENCE OVER THE DETAILS, SPECIFICATIONS, AND NOTES PROVIDED ON THESE DRAWINGS, UNLESS SPECIFICALLY ADDRESSED OTHERWISE BY LANGAN DURING THE PROJECT UPON REQUEST FROM THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY ONE CALL OF PENNSYLVANIA, AND ANY OTHER UTILITY COMPANIES NOT REPRESENTED BY ONE CALL OF PENNSYLVANIA, 72 HOURS PRIOR TO CONSTRUCTION FOR LOCATION OF EXISTING UTILITIES. NOTIFY ONE CALL OF PENNSYLVANIA AT 1-800-242-1776.
- TRENCH DEPTH REQUIREMENTS MEASURED FROM FINISHED GRADE SHALL MEET THE FOLLOWING:
 - SANITARY SEWER: DEPTHS, ELEVATIONS AND GRADES AS INDICATED ON DRAWINGS.
 - WATER MAINS: 48 INCHES TO TOP OF PIPE BARREL OR 6 INCHES BELOW THE FROST LINE OR ESTABLISHED BY THE LOCAL BUILDING OFFICIAL OR WATER COMPANY, WHICHEVER IS DEEPER.
 - GAS MAINS AND SERVICE: 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
- UTILITY TESTING INCLUDING (BUT NOT LIMITED TO) WATER PRESSURE TESTING, WATER SYSTEM FLUSHING, BACTERIOLOGICAL TESTING, VIDEO CAMERA TESTING, MANDREL TESTING, OR ANY OTHER TESTING REQUIRED BY LOCAL, COUNTY, OR STATE AGENCIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT AND CERTIFICATE OF OCCUPANCY BEING ISSUED SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE ENGINEER OF RECORD SHALL BE GIVEN 48 HOURS NOTICE PRIOR TO ALL TESTING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO CONTACT AND COORDINATE THE LOCAL AND COUNTY OFFICIALS THAT ARE REQUIRED TO BE PRESENT AT ALL INSPECTIONS. LOCAL FIRE INSPECTORS SHALL BE INVITED TO INSPECT ALL FIRE SERVICE LINES PRIOR TO BACKFILLING OF TRENCHES.
- THE LOCATIONS (VERTICAL AND HORIZONTAL) OF ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO CONSTRUCTION. ANY UTILITIES (WHETHER THEY ARE SHOWN OR NOT SHOWN ON THE DRAWINGS) DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT HIS COST.
- WHERE CONFLICTS ARISE BETWEEN EXISTING OR PROPOSED WATER LINES AND OTHER UTILITIES, STORMWATER CONVEYANCE SYSTEMS OR STRUCTURES, THE WATER LINES SHALL BE ADJUSTED BENEATH OR AROUND THE CONFLICT AS NECESSARY IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- PVC POTABLE WATER MAINS SHALL BE SOLID BLUE IN COLOR. DUCTILE IRON WATER MAINS SHALL BE PAINTED WITH BLUE BANDS. CONTRACTORS SHALL INSTALL ALL NEW OR ALTERED WATER PIPES IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS AND / OR ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS, LATEST REVISIONS. HYDROSTATIC TESTING FOR PVC MAINS SHALL BE 150 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C-605. DUCTILE IRON MAINS SHALL BE TESTED AT 150 PSI FOR 2 HOURS AND MEET AWWA STANDARD C-600. ALL NEW MAINS SHALL BE DISINFECTED PER AWWA STANDARD C-651. BACTERIOLOGICAL TESTS FOR 2 CONSISTENTLY SHALL BE APPROVED PRIOR TO PLACING SYSTEM INTO SERVICE. CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER OF RECORD WITH AWWA C906 AND NSF-61 CERTIFICATIONS.
- ALL WATER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING THE BACKFILLING 2 FEET ABOVE PIPE AND 2 FEET BELOW FINISHED GRADE DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION WATER PIPE" TAPE. THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE IN COLOR. PROTECTION TAPE SHALL BE TERRA-TAPE OR APPROVED EQUAL.
- ALL SANITARY SEWER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING BACKFILLING AT LEAST 2 FEET ABOVE THE PIPE, AT LEAST 2 FEET BELOW THE FINISHED GRADE, AND AT MOST 4 FEET BELOW THE FINISHED GRADE. THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "SEWER". THE PROTECTION TAPE MUST BE ELECTRONICALLY LOCATABLE AND BE BRIGHTLY COLORED PLASTIC. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PWSA PROCEDURES MANUAL.
- ALL GAS LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE MUST BE INSTALLED DURING THE BACKFILLING APPROXIMATELY 6 INCHES BELOW THE FINISHED GRADE. THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION-GAS PIPE BELOW". THE PROTECTION TAPE SHALL BE 6 INCH WIDE YELLOW PLASTIC PAIRED WITH A SOLID COPPER TRACER WIRE WITH YELLOW THERMOPLASTIC COATING OF AT LEAST #12 AWG. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE AND TRACER WIRE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PEOPLE'S NATURAL GAS SERVICE LINE INSTALLATION STANDARDS (INSTALLER'S GUIDE).
- AT THE POINT WHERE THE PROPOSED SANITARY SEWER CONSTRUCTION MEETS A LIVE OR EXISTING SEWER, THE NEW SANITARY SEWER SHALL BE SECURELY PLUGGED UNTIL THE ENTIRE NEW SANITARY SEWER CONSTRUCTION IS COMPLETED AND READY FOR FINAL INSPECTION.
- SANITARY SEWER CLEANOUTS SHALL BE PROVIDED WITHIN 5 FEET OF ALL BUILDING CONNECTIONS FOR ALL SEWER CONNECTIONS TO COMBINED SEWERS.
- GRAVITY SANITARY SEWER LINES SHALL BE TESTED FOR INFILTRATION BY MEASURING FLOW OVER A V-NOTCH OR TESTED FOR EXFILTRATION BY FILLING THE LINE WITH WATER TO 10 FEET ABOVE THE INVERT OF THE MANHOLE. THE LIMITING RATE OF INFILTRATION SHALL NOT EXCEED 200 GALLONS PER 1-INCH DIAMETER PER HOUR. AN ALTERNATE TESTING METHOD SHALL BE AIR PRESSURE TESTING AT 5 PSI FOR A DURATION OF 10 MINUTES YIELDING NO OBSERVED DROP IN PRESSURE.
- ANY UTILITY CONFLICTS WITH 18 INCHES OR LESS VERTICAL SEPARATION BETWEEN OUTSIDE OF PIPE AND OUTSIDE OF PIPE SHALL BE CONCRETE ENCASED.
- ONCE EXISTING UTILITIES TO REMAIN ARE LOCATED, ANY POTENTIAL CONFLICTS WITH OTHER UTILITIES, RELOCATED UTILITY POLES, ETC. SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL ALL THE APPROPRIATE UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAYS AT LEAST 72 HOURS BEFORE ANY EXCAVATION OR GRADING TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, DEPTHS AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THESE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. CALL PENNSYLVANIA ONE CALL SYSTEM: 1-800-242-1776.
- ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND ANY LOCAL AUTHORITIES.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
- STREET PAVEMENT AFFECTED BY TRENCHING OR OTHER CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL AND PROPER CONDITION. ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY AND ALL RESTORATION OF STREET PAVEMENTS SHALL ABIDE BY THE POLICIES SET FORTH IN THE CITY OF PITTSBURGH RIGHT-OF-WAY PROCEDURES.
- CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION ALL UTILITY INSTALLATION REQUIREMENTS AND SPECIFICATIONS WITH EACH UTILITY PROVIDER.
- ALL UTILITY CONNECTIONS AND UTILITY SERVICES FOR THE PROPOSED IMPROVEMENTS, INCLUDING CONDUIT LOCATIONS, UTILITY VAULTS, UTILITY VAULT LOCATIONS, JUNCTION BOXES, ETC. TO BE COORDINATED WITH MEP PLANS AND UTILITY AUTHORITIES.



UTILITY PROVIDERS

WATER THE PITTSBURGH WATER AND SEWER AUTHORITY ADDRESS: PENN LIBERTY PLAZA I 1200 PENN AVENUE PITTSBURGH, PA 15222 PHONE: 412-255-8800 CONTACT: JULIE ASCIOLLA	SEWER THE PITTSBURGH WATER AND SEWER AUTHORITY ADDRESS: PENN LIBERTY PLAZA I 1200 PENN AVENUE PITTSBURGH, PA 15222 PHONE: 412-255-8800 CONTACT: JULIE ASCIOLLA
GAS PEOPLES NATURAL GAS COMPANY LLC ADDRESS: 375 NORTH SHORE DRIVE PITTSBURGH, PA 15212 PHONE: 412-258-4479 CONTACT: BETH REICHERTER	ELECTRICITY DUQUESNE LIGHT COMPANY ADDRESS: 2825 NEW BEAVER AVENUE PITTSBURGH, PA 15233 PHONE: 412-393-7816 CONTACT: GREG ALAN
TELEPHONE/COMMUNICATIONS COMCAST BUSINESS SERVICES - KEYSTONE REGION WEST ADDRESS: 2994 INDUSTRIAL BOULEVARD BETHEL PARK, PA 15102 PHONE: 412-580-1442 CONTACT: WALT KASIEVICH III	COMMUNICATIONS VERIZON OF PA ADDRESS: 3151 PIONEER AVENUE PITTSBURGH, PA 15226 PHONE: 412-237-2291 CONTACT: DANIEL BARREN

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
BUILDING LINE		---
SANITARY SEWER	---	---
SANITARY MANHOLE	⊙	⊙
STORM SEWER	---	---
WATER LINE (REFERENCE)	---	---
WATER LINE	---	---
WATER LINE FOR FIRE SERVICE	---	---
FIRE HYDRANT	⊙	⊙
STAND PIPE	⊙	⊙
CLEAN OUT	⊙	⊙
WATER VALVE	⊙	⊙
GAS LINE	---	---
GAS LINE (REFERENCE)	---	---
UNDERGROUND ELECTRIC LINE	---	---
ELECTRIC METER	⊙	⊙
COMMUNICATIONS LINE	---	---
COMMUNICATIONS MANHOLE	⊙	⊙
UNKNOWN VALVE	⊙	⊙



PWWG PROJECT NUMBER	21816.00	
DESIGN DEVELOPMENT	02/19/2019	
REVISIONS		
NO.	DESCRIPTION	DATE

COMMONWEALTH BUILDING
316 FOURTH AVE
PITTSBURGH, PA 15219
PITTSBURGH COMMONWEALTH OWNER, LLC

UTILITY PLAN

CU101

APPENDIX G

Cultural Resource Notice

**SECTION G
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3**

**Re: Cultural Resources Notice (CRN)
Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250063301**

Per DEP Document #0120-PM-PY0003a – Section F, a Cultural Resource Notice is not required for this project because the project area is less than 10 acres, and does not contain any demolition of existing buildings.

APPENDIX H

PNDI

December 11, 2018

Ms. Olivia Braun
Pennsylvania Game Commission – Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue
Harrisburg, PA 17110-9797

**Re: Pennsylvania Natural Diversity Index No. 649137
Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250063301**

Dear Ms. Braun:

The project site is located at 316 Fourth Avenue in the 1st Ward of the City of Pittsburgh, Allegheny County, Pennsylvania. The project site consists of the City of Pittsburgh parcel number 1-H-330, having a total area of 0.19 acres. The project site is generally bound by Fourth Avenue to the north, a 13-story existing brick building *The Pittsburgh Tech Center Bunker* to the east, two existing brick buildings and a vacant lot to the south, and a 21-story existing brick building *The Union Bank Building* to the west. It is located in the Golden Triangle A (GT-A) District. The site currently consists of a 20-story brick office building known as *The Commonwealth Building*.

Pitt Commonwealth Owner, LLC is proposing to renovate the existing Commonwealth Building. The project consists of a residential conversion of existing office space in the Commonwealth Building. The proposed improvements will include ground floor retail or residential with lobby space and 2nd and 3rd floor amenity space and apartments. It is anticipated that the existing curb will remain and be reused and all existing dry utilities for the building will remain and provide adequate service for the proposed improvements.

A search of the Pennsylvania Natural Diversity Inventory (PNDI) system administered by the Pennsylvania Natural Heritage Program was finalized on December 11, 2018. The PNDI receipt (Project Search ID: PNDI-672497) indicated a "Potential Impact" by the Pennsylvania Game Commission (PGC) for the Peregrine Falcon (*Falco peregrinus*). The PNDI receipt is included as Attachment A. We request the project be further reviewed to resolve the potential impact to the Peregrine Falcon.

We appreciate the timely review of this project. If you have any questions or require additional information, please do not hesitate to contact me at 724-514-5153.

Sincerely,

Langan Engineering & Environmental Services, Inc.



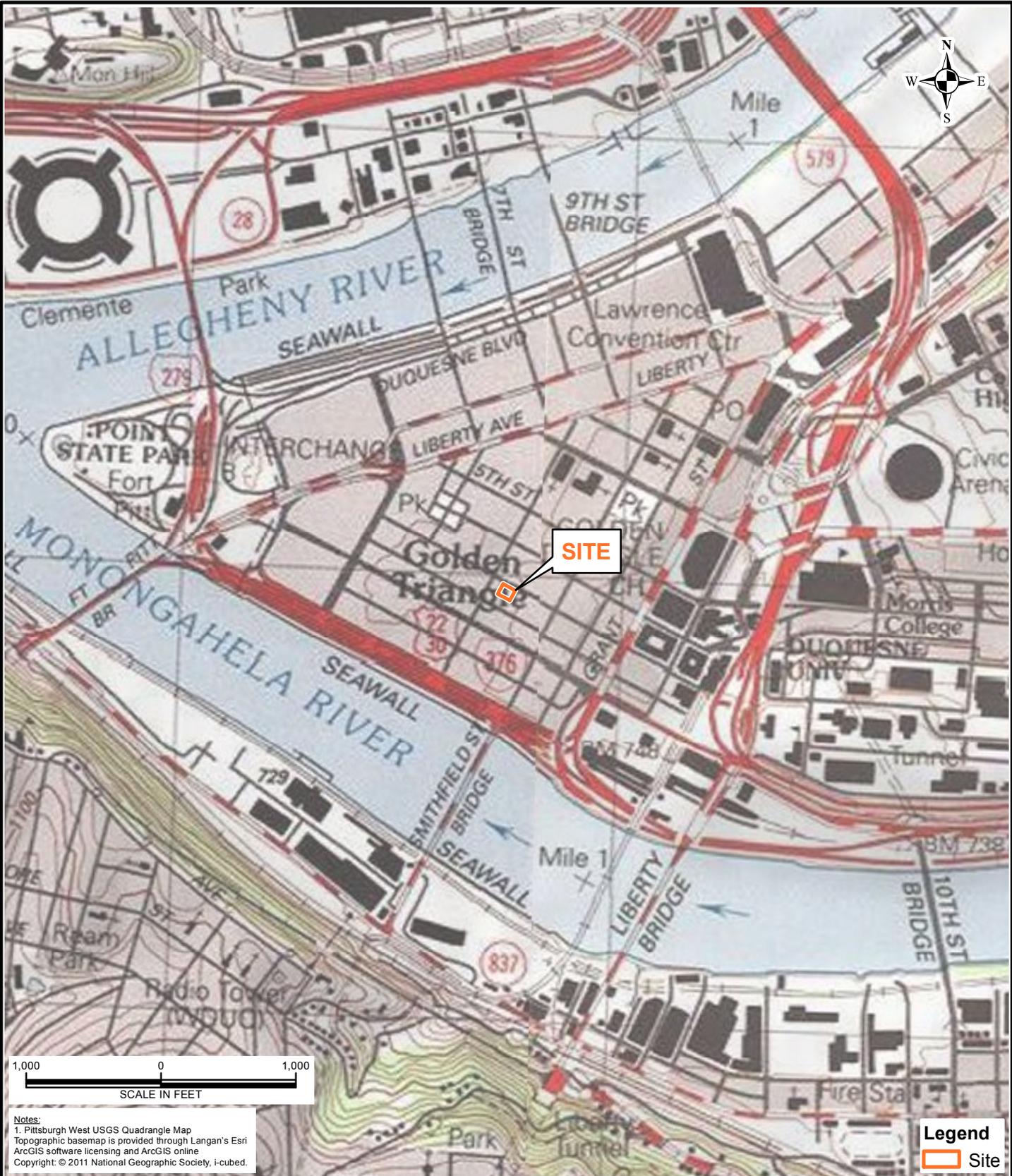
Andrew Rampado
Staff Engineer

Enclosures: Figure 1
Attachment A

USGS Site Location Map
PNDI Receipt

FIGURE 1

USGS SITE LOCATION MAP



Notes:
 1. Pittsburgh West USGS Quadrangle Map
 Topographic basemap is provided through Langan's Esri
 ArcGIS software licensing and ArcGIS online
 Copyright: © 2011 National Geographic Society, I-cubed.

Legend
 Site

LANGAN
 2400 Ansys Drive, Suite 403
 Canonsburg, PA 15317
 T: 724.514.5100 F: 724.514.5101 www.langan.com
 Langan Engineering & Environmental Services, Inc.
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 Langan International LLC
 Collectively known as Langan

Project
**COMMONWEALTH
 BUILDING**
 PITTSBURGH
 ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title
**SITE
 LOCATION
 MAP**

Project No.
 250063301
 Date
 10/10/2018
 Scale
 1" = 1,000'
 Drawn By
 BLA

Figure
1



February 4, 2019

Mr. Andrew Rampado
Langan Engineering and Environmental Services
2400 Ansys Drive, Suite 403
Canonsburg, Pennsylvania 15317
arampado@langan.com

PNDI Receipt File: *project_receipt_commonwealth_building_672497_FINAL_1.pdf*
Re: Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania

Dear Mr. Rampado,

Thank you for submitting Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt *project_receipt_commonwealth_building_672497_FINAL_1.pdf* for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

Potential Impact Anticipated

PNDI records indicate species or resources of concern are located within the vicinity of the project. The PGC has received and thoroughly reviewed the information that you provided to this office, as well as PNDI data, and has determined that potential impacts to the following threatened, endangered, and species of special concern birds and mammals may be associated with your project. Therefore, additional measures may be necessary to avoid potential impacts to the species listed below.

Scientific Name	Common Name	PA Status
<i>Falco peregrinus</i>	Peregrine Falcon	ENDANGERED

Next Steps

The PNDI review revealed the presence of an active peregrine falcon nest within 1,000 feet of the project area. Therefore, the following seasonal restriction should be incorporated into the project plans in an effort to avoid impacts to the nesting pair:

- All work required on the exterior of the building as well as any activities which may require the use of cranes should be completed between August 1 and February 14 to avoid impacts to the nesting pair. Such activities should not occur during nesting season, February 15 through July 31.

This response represents the most up-to-date summary of the PNDI data files and is valid for two (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,



Olivia A. Braun
Environmental Planner
Division of Environmental Planning & Habitat Protection
Bureau of Wildlife Habitat Management
Phone: 717-787-4250, Extension 3128
Fax: 717-787-6957
E-mail: Olbraun@pa.gov

A PNHP Partner



OAB/oab

cc: Schnupp
Brauning
Murphy
Barber
Librandi Mumma
Fazi
Trusso
File

1. PROJECT INFORMATION

Project Name: **Commonwealth Building**

Date of Review: **12/11/2018 04:23:48 PM**

Project Category: **Development, Additions/maintenance to existing development facilities**

Project Area: **0.33 acres**

County(s): **Allegheny**

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

ZIP Code: **15222**

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

Watersheds HUC 8: **Lower Monongahela**

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

Decimal Degrees: **40.439027, -80.000828**

Degrees Minutes Seconds: **40° 26' 20.4962" N, 80° 0' 2.9791" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

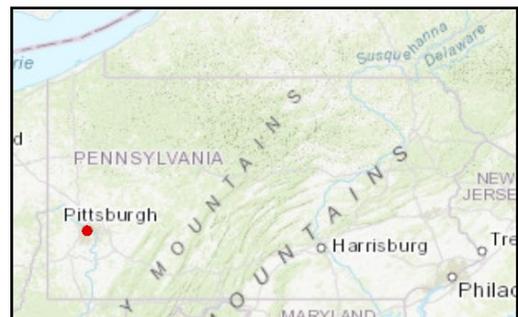
As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Commonwealth Building

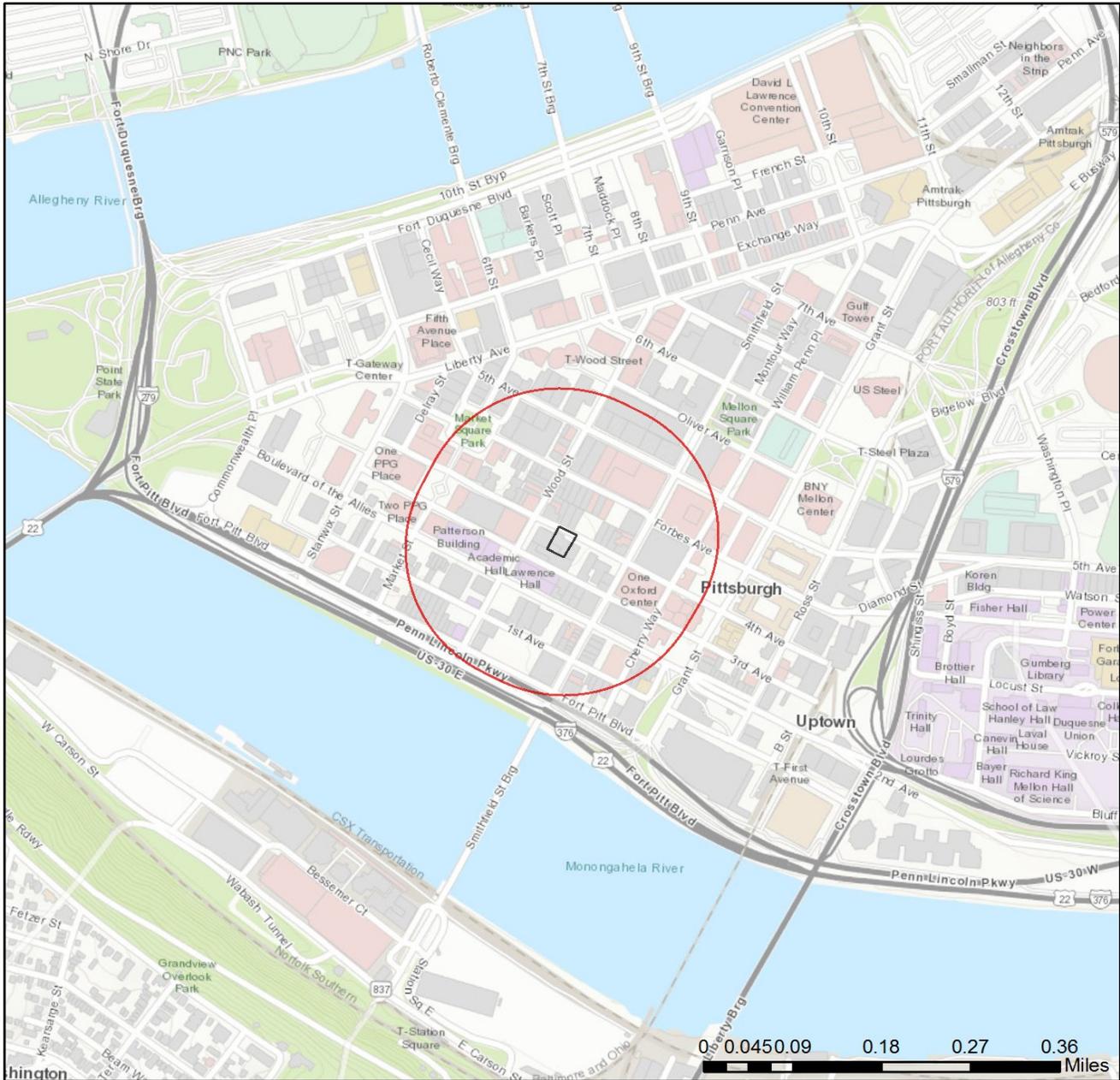


- Project Boundary
- Buffered Project Boundary

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

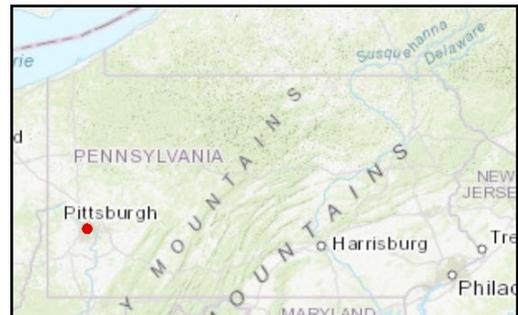


Commonwealth Building



- Project Boundary
- Buffered Project Boundary

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



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:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PGC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Falco peregrinus	Peregrine Falcon	Endangered

PA Department of Conservation and Natural Resources

RESPONSE:

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

PA Fish and Boat Commission

RESPONSE:

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

U.S. Fish and Wildlife Service

RESPONSE:

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

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

___ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

___ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

___ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

___ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

___ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

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

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

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

7. PROJECT CONTACT INFORMATION

Name: Andrew Rampado
Company/Business Name: Langan Engineering
Address: 2400 Ansys Drive
City, State, Zip: Lanonsburg, PA, 15317
Phone: (724) 514-5153 Fax: ()
Email: arampado@langan.com

8. CERTIFICATION

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

Andrew Rampado
applicant/project proponent signature

12/11/2018
date



March 22, 2019

Mr. Andrew Rampado
Langan Engineering and Environmental Services
2400 Ansys Drive, Suite 403
Canonsburg, Pennsylvania 15317
arampado@langan.com

PNDI Receipt File: *project_receipt_commonwealth_building_672497_FINAL_1.pdf*
Re: Commonwealth Building
City of Pittsburgh, Allegheny County, Pennsylvania

Dear Mr. Rampado,

Thank you for submitting Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt *project_receipt_commonwealth_building_672497_FINAL_1.pdf* for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

Potential Impact Anticipated

PNDI records indicate species or resources of concern are located within the vicinity of the project. The PGC has received and thoroughly reviewed the information that you provided to this office, as well as PNDI data, and has determined that potential impacts to the following threatened, endangered, and species of special concern birds and mammals may be associated with your project. Therefore, additional measures may be necessary to avoid potential impacts to the species listed below.

Scientific Name	Common Name	PA Status
<i>Falco peregrinus</i>	Peregrine Falcon	ENDANGERED

The project involves the renovation of an existing 21-story building, known at the Commonwealth Building. The proposed renovations include both interior and exterior work with the final uses of the building anticipated to be for residential and retail purposes.

The PNDI review revealed the presence of an active peregrine falcon nest within 1,000 feet of the project area. Based on the proximity to the nest and the limited project information provided, the PGC initially requested that all exterior building work (including the use of cranes) be completed outside of the nesting season, between August 1 and February 14.

Shortly thereafter the PGC was contacted by the project proponent who explained that exterior building work was proposed during the nesting season. They inquired if any such work could be

completed during the nesting seasons to facilitate the timely completion of the project. The PGC suggested that additional information about any such exterior activities (including the use of cranes) proposed during the nesting season be provided for PGC review. An initial submittal was made on February 27, 2019 that detailed what work was to occur on both the 3rd Avenue and 4th Avenue sides of the building. Specifically, the submittal described that a mechanical equipment hoist was required on the 3rd Avenue side of the building and would require use of a crane to install it. Additionally, this proposal detailed that the existing roof of the building would be replaced. After a review of this information, the PGC offered feedback to the project proponent on March 5, 2019.

On March 21, 2019, the PGC received an updated submittal from the project proponent that incorporated much of the PGC's prior feedback into the project plans and now includes delaying multiple portions of the project until after the 2019 nesting season. Based upon a review of this information and discussions with the project proponent, the following measures have been incorporated into the project plans to ensure that impacts to the falcons are avoided and/or minimized.

Avoidance Measures

- The project includes the cleaning and pointing of the brick exterior of the building using scaffolding or a swing stage. All such façade work, including the use of scaffolding or a swing stage will be completed between August 1st and February 14th, outside of the nesting season.
- The project requires that the existing roof of the building be replaced. This work has been rescheduled to occur between August 1st and February 14th, outside of the nesting season.

Minimization Measures

- A debris chute is required to extend to the 20th floor and will be located on the 4th Avenue side of the building to facilitate the interior demolition and renovations. The chute will be installed from the interior of the building and cranes will not be used during the installation.
- A mechanical hoist will be required in order to transport equipment and personnel during the interior demolition and renovation work. This hoist has been repositioned to be on the 4th Avenue side of the building and extend parallel to the debris chute. Two cranes will be required however they will also be positioned on the 4th Avenue side of the building in an effort to minimize impacts to the nesting pair. Immediately upon completing the necessary work, all cranes will be removed from the project area. Crane use during the nesting season (February 15th – July 31st) is limited to the hoist installation along 4th Avenue only.
- Work required on the roof the building during nesting season (February 15th – July 31st) is limited to the disconnection of one cellular antenna and the dismantlement and removal of 4 mechanical roof-top units. The PGC requests that this work be completed during April 2019 concurrent with the installation of the mechanical hoist. Furthermore, this work should start that the point closest to the nest and progress away from the nest location.
- Work proposed on the 3rd Avenue side of the building has been limited to the use of a drywall truck or extension boom within an existing alleyway with ingress at 3rd Avenue.

The boom will extend to the 3rd floor of the building to deliver necessary materials for the interior building work.

- All window replacements that are required during the nesting season (February 15th – July 31st) will occur from the building interior.

Based upon the implementation of the above measures, a review of the PGC's species specific information and discussions with the project proponent, the PGC had determined that impacts to nesting peregrine falcons will be avoided and minimized to the greatest extent possible. However, in the event that the falcons should exhibit agitated behavior such as excessive vocalization, the PGC should be contacted immediately to evaluate the situation and determine the appropriate next steps.

This response represents the most up-to-date summary of the PNDI data files and is valid for two (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,



Olivia A. Braun
Environmental Planner
Division of Environmental Planning & Habitat Protection
Bureau of Wildlife Habitat Management
Phone: 717-787-4250, Extension 3128
Fax: 717-787-6957
E-mail: Olbraun@pa.gov

A PNHP Partner



OAB/oab

cc: Schnupp
Brauning
Murphy
Barber
Librandi Mumma
Fazi
Trusso
File

APPENDIX I

Component 4A



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP Code #:

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

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

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

Project Name
Commonwealth Building

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

1. Date plan received by municipal planning agency 3-5-19
2. Date review completed by agency 3-11-19

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

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

SECTION C. AGENCY REVIEW (continued)

Yes No



13. Is this proposal consistent with the ordinance?

If no, describe the inconsistencies _____



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: Martina Battistone

Title: Senior environmental planner

Signature: MBattistone

Date: 3-11-19

Name of Municipal Planning Agency: City of Pittsburgh, Planning

Address: 200 Ross St. 4th Floor Pittsburgh, PA 15219

Telephone Number: (412) 255-2516

SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)

This component does not limit municipal planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.

The planning agency must complete this component within 60 days.

This component and any additional comments are to be returned to the applicant.

APPENDIX J

Component 4C

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

March 18, 2019

Benjamin Hunter, P.E.
Langan Engineering and Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

**RE: SEWAGE FACILITIES PLANNING MODULE
COMMONWEALTH BUILDING
CITY OF PITTSBURGH**

Dear Mr. Hunter,

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 March 13, 2019. The project proposes the following:

Project Description:	Redevelop existing building at 316 Fourth Avenue between Wood Street and Smithfield Street. Building has mix of retail and apartment units.
Sewage Flow:	27,012 GPD
Conveyance:	Private PVC gravity lateral that will connect to the existing PWSA 36-inch combined sewer in Fourth Avenue. Flow to ALCOSAN Monongahela Interceptor and then to the ALCOSAN sewage treatment plant
Sewer's Owner:	PWSA
Name of Sewage Treatment Plant:	ALCOSAN sewage treatment

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, Ivo Miller, Plumbing Program Manager at 412-578-8393.

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

Sincerely,

Michael W. Scheer
Environmental Health Administrator II
Water Pollution Control & Solid Waste Management

MWS/ge
Enclosure

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



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

WATER POLLUTION CONTROL & SOLID WASTE MANAGEMENT
3901 PENN AVENUE • BUILDING 5 • PITTSBURGH, PA 15224-1318
PHONE: 412.578.8040 • FAX: 412.578.8053 • WWW.ACHD.NET





**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 *Planning Agency Review Component* 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

Commonwealth Building

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

1. Date plan received by county or joint-county health department. March 13, 2019

Agency name Allegheny County Health Department (ACHD)

2. Date review completed by agency March 18, 2019

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

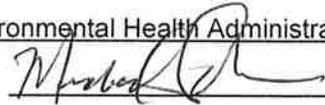
Yes No

1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?
If no, what are the inconsistencies? _____
2. 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: ACHD recommends approval. See attached letter.

5. Name, title and signature of person completing this section:

Name: Michael Scheer

Title: Environmental Health Administrator II

Signature: 

Date: March 18, 2019

Name of County Health Department: ACHD

Address: 3901 Penn Avenue, Building #5, Pittsburgh PA 15224-1318

Telephone Number: 412-578-8388

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.

APPENDIX K

Completeness Checklist

Checklist



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

Completeness Checklist

The individual completing the component should use the checklist below to assure that all items are included in the module package. The municipality should confirm that the required items have been included within 10 days of receipt, and if complete, sign and date the checklist.

Sewage Collection and Treatment Facilities

- Name and Address of land development project.
- U.S.G.S. 7.5 minute topographic map with development area plotted.
- Project Narrative.
- Letter from water company (if applicable).
- Alternative Analysis Narrative.
- Details of chosen financial assurance method.
- Proof of Public Notification (if applicable).
- Name of existing collection and conveyance facilities.
- Name and NPDES number of existing treatment facility to serve proposed development.
- Plot plan of project with required information.
- Total sewage flows to facilities table.
- Signature of existing collection and/or conveyance Chapter 94 report preparer.
- Signature of existing treatment facility Chapter 94 report preparer.
- Letter granting allocation to project (if applicable).
- Signature acknowledging False Swearing Statement.
- Completed Component 4 (Planning Agency Review) for each existing planning agency and health department.
- Information on selected treatment and disposal option.
- Permeability information (if applicable).
- Preliminary hydrogeology (if applicable).
- Detailed hydrogeology (if applicable).

Municipal Action

- Component 3 (Sewage Collection and Treatment Facilities).
- Component 4 (Planning Agency Comments and Responses).
- Proof of Public Notification.
- Long-term operation and maintenance option selection.
- Comments, and responses to comments generated by public notification.
- Transmittal Letter

Signature of Municipal Official

Date submittal determined complete