DEP Code No. TBD

SEWAGE FACILITIES PLANNING MODULE

for

DUQUESNE UNIVERSITY COLLEGE OF OSTEOPATHIC MEDICINE
Parcel 02-L-42
City of Pittsburgh
Allegheny County, Pennsylvania

Prepared For:

Duquesne University
600 Forbes Avenue
Pittsburgh, PA 15282

Prepared By:

Langan Engineering and Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, Pennsylvania 15317

LANGAN

July, 2020
Revised November, 2020
250110101

TABLE OF CONTENTS

APPENDIX A

Transmittal Letter and Correspondence

3850-FM-BCW0355 Rev. 5/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

TRANSMITTAL LETTER FOR SEWAGE FACILITIES PLANNING MODULE

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) USE ONLY				
DEP CODE #	CLIENT ID #	SITE ID #	APS 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/Madam:

Attached please find a completed sewage facilities planning module prepared by _____ *(Name)*

Langan Engineering and Environmental Services, Inc, _____ for Duquesne University College of Osteopathic Medicine
(Title) *(Name)*

a subdivision, commercial ,or industrial facility located in the City of Pittsburgh, 1st Ward

Allegheny _____ County.
(City, Borough, Township)

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 (Official Plan), and is ☒ adopted for submission to DEP ☐ transmitted to the delegated LA for approval in accordance with the requirements of 25 *Pa. Code* Chapter 71 and the *Pennsylvania Sewage Facilities Act* (35 P.S. §750),

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 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, 25 *Pa. Code* 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.

☐ Resolution of Adoption
☐ Module Completeness Checklist
☐ 2 Individual and Community Onlot Disposal of Sewage
☐ 3 Sewage Collection/Treatment Facilities
☐ 3s Small Flow Treatment Facilities
☐ 4A Municipal Planning Agency Review
☐ 4B County Planning Agency Review
☐ 4C County or Joint Health Department Review

Municipal Secretary (print) *Signature* *Date*

CORRESPONDENCE

alcosan
allegheny county sanitary authority

January 27, 2021

Mr. Scott Levit, P.E.
Langan Engineering
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

Re: Duquesne University – College of Osteopathic Medicine
City of Pittsburgh – 1st Ward, Allegheny County
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure M-05-00

Dear Mr. Levit:

We have reviewed the Component 3 Planning Module for the referenced project to be located in the City of Pittsburgh, 1st Ward. The project will generate a peak flow of 1,025 gpd in the ALCOSAN Monongahela River Interceptor and Woods Run Treatment Plant.

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

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

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Shawn P. McWilliams, EIT
Civil Engineer

Attachment

cc: Christina Dean (w/o attachment)
Dan Thornton (w/o attachment)
Michael Lichte (w/o attachment)
Barry King/ PWSA (w/o attachment)
Thomas Flanagan/ PADEP (w/o attachment)
Fred Fields/ ACHD (w/o attachment)

The Pittsburgh Water and Sewer Authority Form GEN – Customer Application

20-0126

1. Property Owner's Name Vocational Rehabilitation Center
   Customer's Name (if different) Duquesne University of the Holy Ghost
   Lateral/Service Address 1323 Forbes Avenue
   City Pittsburgh State PA Zip 15219
   Contact Mailing Address (if different) 2400 Ansys Drive, Suite 403
   City Canonsburg State PA Zip 15317
   Contact Phone Number (724) 514-5128
   Contact Email slevit@langan.com (Scott Levit)

2. Allegheny County Block and Lot No(s). 2-L-42 Ward No. 1

3. Acreage of Development or Lot Size(s) 1.20

4. Nature of Development: Residential ☐ Multi-Unit ☐ Commercial ☐ Institutional ☒
   Building Permit No. _____ Zoning Approved For _____

5. Plot Plan or Tap-In Drawing:
   Plot Plan Included? Yes ☐ No ☒ Tap-In Drawing Included? Yes ☐ No ☒
   Check Type(s) of Tap-In Drawings, if included: Sewer ☐ Drawing No. _____
   Water ☐ Drawing No. _____

6. Type of Permit (check one):
   NEW METER ☐ NEW HOUSE ☐ SHUT ☐ HYDRANT FLOW TEST ☒ HYDRANT WITH METER ☐
   NEW WATER TAP ☐ NEW SEWER TAP ☐ PARTY LINE SEPARATION ☐ TERMINATION ☐ TAP C ☐

7. Applicant agrees that it shall be fully responsible for any damage to the hydrant, attached meter, or any personal injury or property damage sustained as a result of the applicant's use of the hydrant. Applicant further agrees to indemnify, defend and hold harmless the PWSA, its officers, agents and employees from and against all demands, claims, damages, losses, costs and expenses, including attorney's fees and cost of defense for bodily injury, death or property damage, or the loss of use thereof, caused or allegedly caused in whole or in part from the applicant's use of the hydrant. This permit is not transferable.

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

Scott L

Property Owner's Signature

06/02/2020

Date

PWSA Form HYD No. | | | — | | | | | 20-0126

PWSA Hydrant Permit No. | |

PWSA Form SWR No. | | | — | | | | |

PWSA Form WTR No. | | | — | | | | |

PWSA Form TERM No. | | | — | | | | |

Hydrant Permit No. _____

Form HYD No. 20-0126

(PWSA Use Only)

The Pittsburgh Water and Sewer Authority
Form HYD – Hydrant Permit

GENERAL REQUIREMENTS

The PWSA shall regulate the use of water from all fire hydrants and outlets, including private hydrants.

A. PERMIT FOR USE: No person shall use any fire hydrant without first applying to the PWSA which may issue a permit upon evaluation of the request. The permit fee shall include costs for compensation of inspection by Authority personnel and those costs incurred for billing.

B. RESTRICTIONS & RESPONSIBILITY: This permit is restricted to the hydrant(s) listed below, and it is understood the permission for these fire hydrants will be granted only to responsible persons/firms.

C. PROHIBITED USES: The use of fire hydrant(s) in freezing weather or when the ground is frozen is not permitted. The outside air temperature must be at least 40º F and rising.

D. CANCELLATIONS: The PWSA may cancel this permit in cases of water shortage, cold weather, damage to private or City property resulting from hydrant use, or whenever the public interest requires.

E. Applicant agrees that it shall be fully responsible for any damage to the hydrant, attached meter, or any personal injury or property damage sustained as a result of the applicant's use of the hydrant. Applicant further agrees to indemnify, defend and hold harmless the PWSA, its officers, agents and employees from and against all demands, claims, damages, losses, costs and expenses, including attorney's fees and cost of defense for bodily injury, death or property damage, or the loss of use thereof, caused or allegedly caused in whole or in part from the applicant's use of the hydrant.

FEE SCHEDULE

1. HYDRANT FLOW TEST: For hydrant flow tests, PWSA will determine the applicable flow hydrant and residual hydrant for testing.

☒ Flow Test

Date/Time Requested: 06/11/2020 @ 10am

	FLOW HYDRANT	PRESSURE HYDRANT
Hydrant Number:	A1322	A1321
Location:	FORBES AVE	FORBES AVE
Static Pressure (psi)	XXXXXXXXXXXXXX	110
Residual Pressure (psi)	XXXXXXXXXXXXXX	105
Flow Observed (gpm)	1620	XXXXXXXXXXXXXX

HYDRANT FEE: ☒ 1 (No. of Days) x $500.00 = $500.00

2. HYDRANT USE WITH METER (CONSTRUCTION / TEMPORARY USE):

☐ Hydrant Use with Meter

Date/Time Requested: _____

Fire Hydrant No. and Location _____

HYDRANT FEE: Cost includes Meter, Adaptors, Installation and Deposit

☐ _____ (No. of Days) x $500.00 = _____

****Meter for hydrant use:**

☐ 5/8" or 5/8" x ¾" _____ x $ 680.00 = _____

☐ ¾" _____ x $ 780.00 = _____

☐ 1" _____ x $ 960.00 = _____

☐ Fire Hydrant Meter (2½" meter) _____ x $1,039.50 = _____

PAYMENT PRIOR TO WORK: All charges shall be paid prior to performance of the applicable work.

COMPUTATION: Fees shall be computed on the basis of prevailing costs incurred by the PWSA and taking into account wages paid, fringe benefits, overhead, and other costs that might accrue. The PWSA shall issue regulations listing such charges and shall update them as necessary.

EFFECTIVE DATE: All standard charges shall become effective on the day they are filed with the PWSA.

TOTAL OWED: $ $500.00

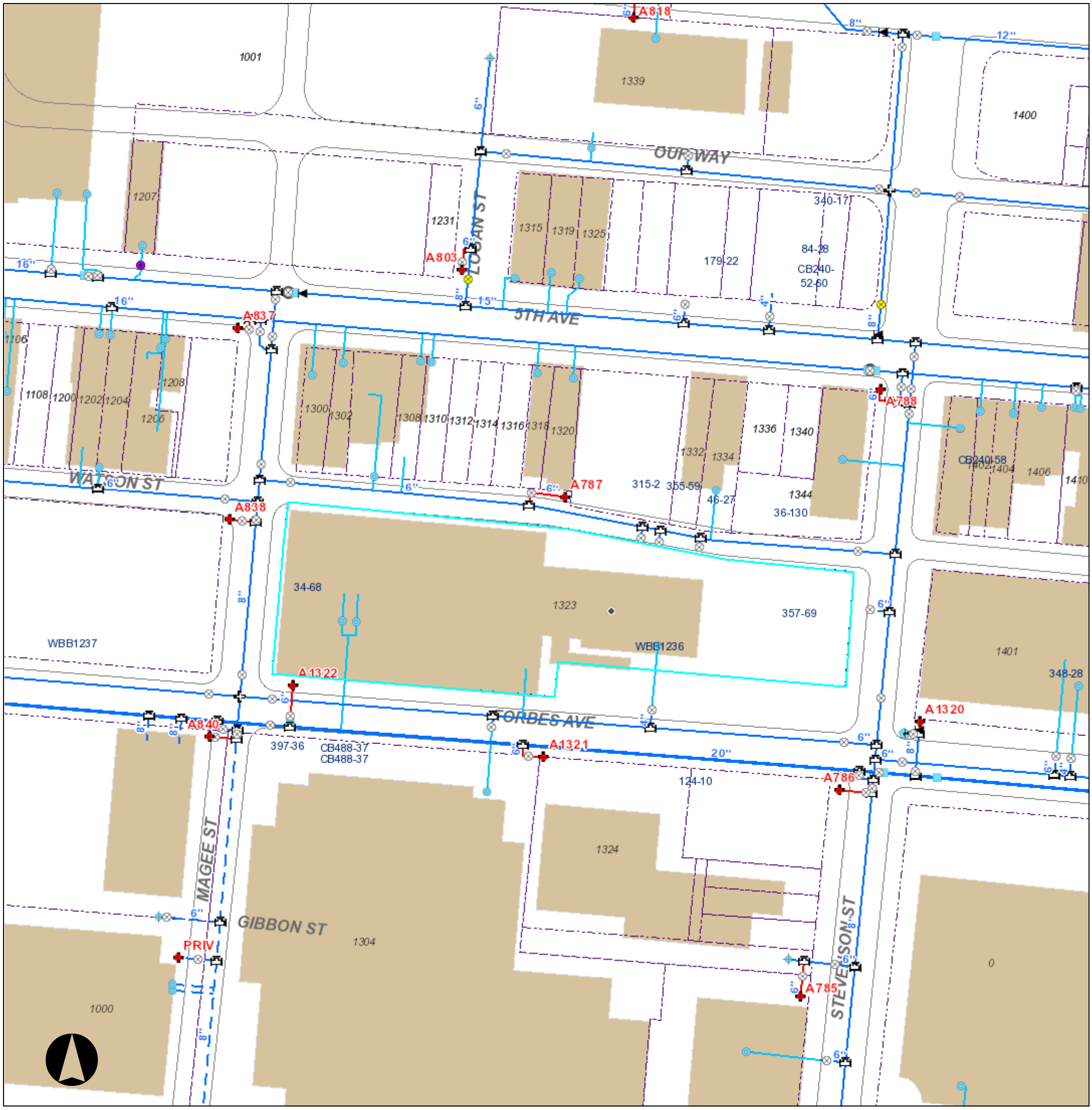
3. Make Check Payable to: ***The Pittsburgh Water and Sewer Authority or PWSA***

Payment Received Date: 6/9/2020 Check Number: 53444 Check Amount: $500.00

Michelle Solomon — Permit Application Clerk Signature

6/9/2020 — Date

1323 FORBES AVE - WATER



Legend

	WATER	Pressure Monitoring Station	Private Inlet
Meter		Water Manhole	Outfall
Curb Box		Rising Main	End Cap
Water System Pump		Supply Main	Sewer Pump Station
Hydrant		Transmission Main	Combined Sewer
System Valve		Distribution Main	Sanitary Sewer
Dividing Pressure Valve		Hydrant Branch	Storm Sewer
Coupling		Private Main	Regulated Combined Sewer
Tee		Water Service Line	Overflow Sewer
Cross			Interceptor
Reducer		**SEWER**	Sewer Force Main
End Cap		Manhole	Private Sewer
Wash Out		Junction	Undefined Sewer
		Inlet	Green Infrastructure Underground Facilities

0 0.015 0.03 mi

PGH2O

Date: 6/9/2020

Pittsburgh Water & Sewer Authority

July 1, 2020

Scott Levit
Langan Engineering
2400 Ansys Drive
Canonsburg, PA 15317

Subject: Water and Sewer (W/S) Use Approval
Project Name: 20013.53 DU College of Osteopathic Medicine
PWSA Project No.: 20013.53

Dear Scott:

Pursuant to your request, we have reviewed the W/S Use Application (Application) for the aforementioned Project. This letter shall serve as confirmation that the Application has been approved. Please see below for the approved flows:

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	13163	13163	8.37
Existing Flow	12138	12138	9.94
Net Flow	1025	1025	

Please be advised that the need for sewage planning shall be determined by the Department of Environmental Protection (DEP). After issuance of this letter, the PWSA shall email the Preliminary Determination on the Need for Sewage Planning Letter to the DEP. Typically, the DEP will respond via email with the Final Determination on the Need for Sewage Planning. Sewage planning is likely required, we have enclosed for your use the location of the most limited capacity sewer.

Our review was based on information provided by the Applicant under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at 412-255-8800 x5543 or BGrunauer@pgh2o.com.

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer II

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

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

Water and Sewer (W/S) Use Application Form

Instructions The complete W/S Use Application shall be uploaded via e-builder. To obtain an e-builder project folder, please make a request on our website at www.pgh2o.com/permits. In addition, please refer to the Developer's Manual for detailed information on application requirements.

Requirements

- ☒ Application Fee
- ☒ Application Form
- ☒ Narrative
- ☒ Flow Calculations
- ☒ Site Plan
- ☒ Floor Plan

Project Info

Project Name: Duquesne University College of Osteopathic Medicine

Address: Parcel 02-L-42

NE of the intersection of Forbes Ave. and Magee St., Pittsburgh PA

Is the Project located on a lot created prior to May 15, 1972? ☒ YES ☐ NO

Owner/Developer

Name: Duquesne University

Address: 600 Forbes Avenue

Pittsburgh, PA 15282

Email: barnettk@duq.edu

Phone Number: 412-576-9892

Consultant

Firm Name: Langan

Address: 2400 Ansys Drive

Canonsburg, PA 15317

Contact Name: Scott Levit

Email: slevit@langan.com

Phone Number: 724-514-5128

Flow Data

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	13,163	13,163	8.37
Existing Flow	12,138	12,138	9.94
Net Flow	1,025	1,025	Not Required

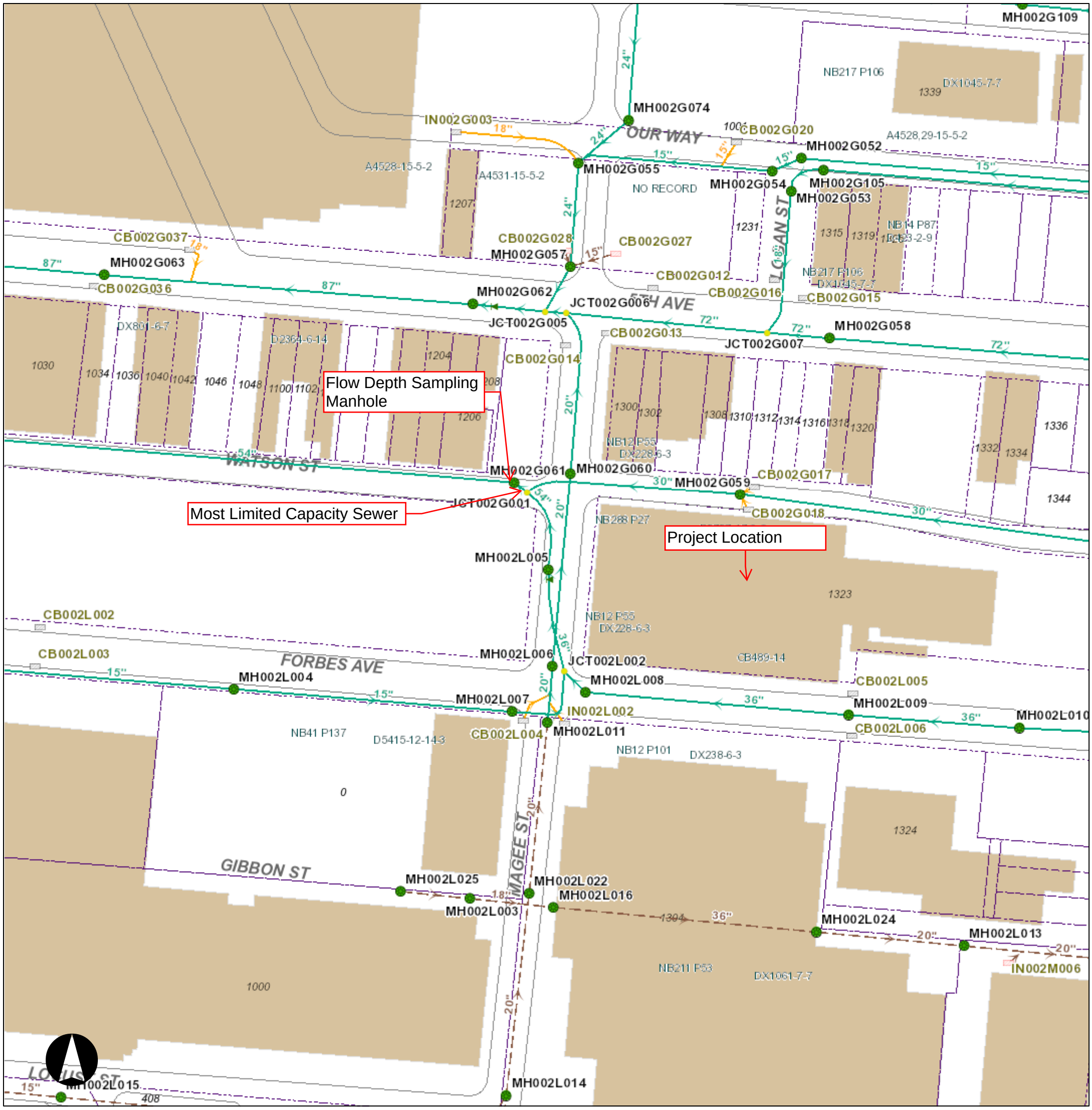
Signature By signing below, I hereby certify, to the best of my knowledge, that the information provided within the Water and Sewer Use Application is true, complete and accurate.

Name, printed: Scott Levit

Signature: Scott S

Date: 06/24/2020

Most Limited Capacity Sewer Map



Legend

		Pressure Monitoring Station	Private Inlet
	WATER	Water Manhole	Outfall
Meter		Rising Main	End Cap
Curb Box		Supply Main	Sewer Pump Station
Water System Pump		Transmission Main	Combined Sewer
Hydrant		Distribution Main	Sanitary Sewer
System Valve		Hydrant Branch	Storm Sewer
Dividing Pressure Valve		Private Main	Regulated Combined Sewer
Coupling		Water Service Line	Overflow Sewer
Tee			Interceptor
Cross		**SEWER**	Sewer Force Main
Reducer		Manhole	Private Sewer
End Cap		Junction	Undefined Sewer
Wash Out		Inlet	Green Infrastructure Underground Facilities

0 0.015 0.03 mi

PGH2O

Date: 7/1/2020

Most Limited Capacity Sewer (MLCS) Spreadsheet

PROJECT NAME:	20013.53 DU College of Osteopathic Medicine
PWSA PROJECT NUMBER:	20013.53
PWSA REVIEWER:	Benjamin Grunauer, E.I.T.
DATE:	July 1st, 2020

LEGEND:

Output Data
Input Data
Questionable Data
Hydraulically Limited Sewer

Upstream MH	Downstream MH	Upstream Invert	Downstream Invert	Length, ft	Diam., in.	Material	n	Area, sf	Wetted P, ft	Slope	Flow, gpd
MH002G059	JCT002G001	781.29	769.36	178.16	30	Brick	0.016	4.91	7.854	6.70%	55,888,057
JCT002G001	MH002G061	768.82	768.73	13.34	54	Brick	0.016	15.90	14.137	0.65%	83,608,658
JCT002G054	MH002G064	767.51	763.02	337.91	54	Brick	0.016	15.90	14.137	1.33%	119,358,133
MH002G064	JCT002G002	763.02	761.07	176.93	54	Brick	0.016	15.90	14.137	1.10%	108,703,924
JCT002G002	MH002G065	760.64	758.22	82.78	87	Brick	0.016	41.28	22.777	2.92%	631,533,684
MH002G065	JCT002G003	758.21	756.68	77.46	87	Brick	0.016	41.28	22.777	1.98%	519,128,264
JCT002G003	RD002G001	756.68	756.48	19.69	96	Brick	0.016	50.27	25.133	1.02%	484,050,889
RD002G001	MH002F129	756.48	754.32	89.19	96	Brick	0.016	50.27	25.133	2.42%	747,392,281
MH002F129	MH002F130	754.15	750.33	298.99	96	Brick	0.016	50.27	25.133	1.28%	542,839,772
MH002F130	JCT002F004	750.18	749.38	80.85	96	Brick	0.016	50.27	25.133	0.99%	477,724,439
JCT002F004	MH002F126	749.38	748.34	16.83	96	Brick	0.016	50.27	25.133	6.18%	1,194,008,159
MH002F126	MH002F125	748.34	746.61	107.07	96	Brick	0.016	50.27	25.133	1.62%	610,448,867
MH002F125	JCT002F006	746.42	745.73	37.30	96	Brick	0.016	50.27	25.133	1.85%	653,192,244
JCT002F006	MH002F122	745.73	742.88	155.22	96	Brick	0.016	50.27	25.133	1.84%	650,753,760
MH002F122	JCT002F005	742.85	742.43	26.75	96	Brick	0.016	50.27	25.133	1.57%	601,786,800
JCT002F005	MH002F120	742.43	741.49	55.49	96	Brick	0.016	50.27	25.133	1.69%	625,037,137
MH002F120	JCT002K002	741.34	739.37	141.63	96	Brick	0.016	50.27	25.133	1.39%	566,398,432
JCT002K002	MH002K048	739.37	738.44	32.20	96	Brick	0.016	50.27	25.133	2.89%	816,182,749
MH002K048	MH002K067	738.44	737.09	81.80	72	Brick	0.016	28.27	18.850	1.65%	286,798,238
MH002K067	MH002K068	738.44	735.79	78.53	72	Brick	0.016	28.27	18.850	3.38%	409,722,531
MH002K068	MH002K047	738.44	732.96	171.17	72	Brick	0.016	28.27	18.850	3.20%	398,999,059
MH002K047	JCT002J015	732.96	730.80	95.49	78	Brick	0.016	33.18	20.420	2.26%	415,193,586
JCT002J015	RD002J001	730.80	728.38	193.63	78	Brick	0.016	33.18	20.420	1.25%	308,616,798
RD002J001	MH002J030	728.38	727.79	63.35	94	Concrete	0.013	48.19	24.609	0.93%	539,292,208
MH002J030	JCT002J006	727.79	723.20	131.33	94	Concrete	0.013	48.19	24.609	3.50%	1,044,704,549
JCT002J006	JCT002J005	723.20	722.72	17.30	94	Concrete	0.013	48.19	24.609	2.77%	930,842,875
JCT002J005	MH002J032	722.72	718.34	115.72	94	Concrete	0.013	48.19	24.609	3.79%	1,087,182,751
MH002J032	JCT002N001	717.70	715.98	35.19	94	Concrete	0.013	48.19	24.609	4.89%	1,235,514,074
JCT002N001	MH002N063	715.98	709.79	200.80	94	Concrete	0.013	48.19	24.609	3.08%	981,131,378
MH002N063	MH002N062	709.79	706.63	186.14	96	Concrete	0.013	50.27	25.133	1.70%	770,141,041
MH002N062	ADC002NM05	706.63	703.95	139.21	96	Concrete	0.013	50.27	25.133	1.93%	820,113,583

COUNTY OF ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

August 27, 2020

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

RE: SEWAGE FACILITIES PLANNING MODULE; ALLEGHENY COUNTY
Duquesne University College of Osteopathic Medicine, City of Pittsburgh

Dear Mr. Levit:

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 August 26, 2020. The project proposes the following:

Project Description:	Duquesne University College of Osteopathic Medicine. Proposing to demolish the existing four-story Life's Work building with attached one-story dormitories and construct a five-story College of Osteopathic Medicine building located at 1323 Forbes Avenue in the City of Pittsburgh, Allegheny County.
Sewage Flow:	1,025 GPD
Conveyance:	The flow from this site will be conveyed to the Pittsburgh Water & Sewer Authority (PWSA) collection system to the ALCOSAN POC M-05 to the Monongahela interceptor and then to the ALCOSAN Treatment Plant at Woods Run.
Sewer's Owner:	PWSA (collection) and ALCOSAN (interceptor)
Name of Sewage Treatment Plant:	ALCOSAN

Please be advised that a permit must be obtained from the Allegheny County Health Department's (ACHD) Plumbing Section prior to commencing any plumbing work for the proposed project. Plumbing work for which an ACHD Plumbing Permit must be obtained includes any plumbing work done on the site and any sewers, which will not be owned and operated by a municipality or a sewer authority.

In addition, it should be noted that the approval of this sewage facilities planning module does not include approval of pipe size and/or type. Approval for pipe size and/or type must be obtained by filing a specific plumbing plan with the ACHD's Plumbing Section. If you should have any questions relative to ACHD's plumbing requirements, you can contact Ivo Miller, Plumbing Program Manager at 412-578-8393.

The ACHD has no objection to the approval of this project. If you have any questions, please call me at 412-578-8046.

Sincerely,

Freddie Fields, M.B.A.
Environmental Health Engineer III
Water Pollution Control and Solid Waste Management

FF:cb
Enclosure

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

Pittsburgh Water & Sewer Authority

November 30, 2020

Scott Levit, P.E.
Langan Engineering, Inc.
2400 Ansys Dr
Canonsburg, PA 15317

Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: 20013.53 DU College of Osteopathic Medicine (Project)
PWSA Project No.: 20013.53

Dear Scott,

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

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

Sincerely,

Ben Grunauer
Benjamin Grunauer, E.I.T.
Engineer III

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

PGH2O Pittsburgh Water & Sewer Authority

MEMO

To: Barry King, P.E. - Director of Engineering and Construction

From: Benjamin Grunauer, E.I.T.

Date: November 30, 2020

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

Chapter 94 Consistency Determination

Project Name: 20013.53 DU College of Osteopathic Medicine (Project)

Project Address: Forbes Ave. and Magee St.

PWSA Project Number: 20013.53

Dear Barry,

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

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

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

Yours truly,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

Enclosures
cc: Robert Herring, P.E. - PWSA
e-Builder – Filing System

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

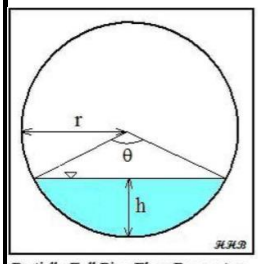
Customer Service /
Emergencies:
412.255.2423

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

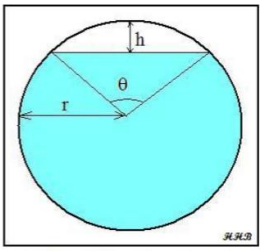
PROJECT NAME:	20013.53 DU College of Osteopathic Medicine
PWSA PROJECT NUMBER:	20013.53
PWSA REVIEWER:	Benjamin Grunauer
DATE:	November 30, 2020

LEGEND: Input Data | Output Data

Section A: Manning Equation for Partially Filled Pipes



Partially Full Pipe Flow Parameters (Less Than Half Full)



Partially Full Pipe Flow Parameters (More Than Half Full)

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

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

$$A_{<50\%\ Full} = \frac{r^2(\Theta - \sin\Theta)}{2} \qquad P_{<50\%\ Full} = r \times \Theta$$

OR

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

Section B: Data for Calculations

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

Proposed Project Flows		
Variable	Value	Units
Q_p	13,163	gpd

Variable	*Value*	*Units*
Material	Brick	
n	0.016	unitless
S	0.007	ft/ft
h	0.333	ft
D	4.50	ft
P.F.	3.5	unitless

Section C: Calculations for Design and/or Permitted Capacities

Variable	*Description*	*Definition*
$Q_{d,\ avg}$	Design Capacity, Average	= full pipe flow conditions / peaking factor
$Q_{d,\ peak}$	Design Capacity, Peak	full pipe flow conditions

Design Capacity, Average		
Variable	*Value*	*Unit*
$Q_{d, avg}$	23,851,572	gpd

Design Capacity, Peak		
Variable	*Value*	*Unit*
D	4.500	ft
r	2.250	ft
A	15.904	ft^2
P	14.137	ft
R	1.125	ft
$Q_{d, peak}$	129	cfs
$Q_{d, peak}$	83,480,503	gpd

Section D: Calculations for Present Flows

Variable	*Description*	*Definition*
$Q_{ex, avg}$	Present Flows, Average	existing flow conditions per site investigations
$Q_{ex, peak}$	Present Flows, Peak	= existing flow conditions x peaking factor

Present Flows, Average		
Variable	*Value*	*Unit*
D	4.500	ft
r	2.250	ft
Θ	1.10	rad
h/D	0.074074074	ft/ft
A	0.53	ft^2
P	2.48	ft
R	0.214	ft
$Q_{ex, avg}$	1	cfs
$Q_{ex, avg}$	925,104	gpd

Present Flows, Peak		
Variable	*Value*	*Unit*
$Q_{ex, peak}$	3,237,862	gpd

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

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

Projected Flow Calculations		
Variable	*Value*	*Unit*
$Q_{proj, avg}$	975,308	gpd
$Q_{proj, peak}$	3,413,577	gpd

Section F: Compare Results with Applicant's Submission

Variable	*PWSA, gpd*	*Applicant, gpd*	*Difference, gpd*	*Difference, %*
$Q_{d, avg}$	23,851,572	24,211,002	-359,430	-2%
$Q_{d, peak}$	83,480,503	84,738,507	-1,258,004	-2%
$Q_{ex, avg}$	925,104	936,460	-11,356	-1%
$Q_{ex, peak}$	3,237,862	3,277,611	-39,749	-1%
$Q_{proj, avg}$	975,308	997,105	-21,797	-2%
$Q_{proj, peak}$	3,413,577	3,489,866	-76,289	-2%

☒ 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 1,025 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilties" 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	24,211,002	84,738,507	936,460	3,277,611	997,105	3,489,866
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

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

YES NO

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

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA

Name of Responsible Agent Barry King, PE, PMP / Director of Engineering and Construction

Agent Signature _____ Date 11/30/2020

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 Parcel 02-L-42, Pittsburgh, PA 15219.

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, Duquesne University has proposed the development of a certain parcel of land Parcel 02-L-42, Pittsburgh, PA 15219, Allegheny County, at lot and block 02-L-42, 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 Parcel 02-L-42, Pittsburgh, PA 15219, Allegheny County, at lot and block 02-L-42, 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.

Fiscal Impact Statement

Department	Law Department	
Preparer	Benjamin Smith	
Contact	Scott Levit (LANGAN) 724-514-5128	
Type of Initiative	☒ Legislation	☐Executive Order
Type of Legislation	Other	

Duquesne University has proposed the development of a certain parcel of land Parcel 02-L-42, Pittsburgh, PA 15219, Allegheny County, at lot and block 02-L-42, 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

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.

Total Cost	$ 0			
Frequency of Expenditure	☐One-Time		☐ Multi-Year	
Funding Source	☐Operating	☐Capital	☐Grant	☐Trust Fund
Is this item budgeted?	☐Yes		☐No	

JDE Account Information
N/A

Additional Costs
N/A

Impact on City Revenue
N/A

Attachments
If required, include any additional attachments and/or exhibits

City of Pittsburgh

Sewer Facilities Planning Module Questionnaire

PROJECT NAME: Duquesne University College of Osteopathic Medicine

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

Vocational rehabilitation center, dormitory, parking lot

2) What is the proposed use for the property?

The proposed property will consist of a new educational building and improved landscaping.

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

The proposed stormwater management system includes inlets, underground stormwater laterals for conveyance, and a detention vault. The total area of disturbance for the development will be greater than 10,000 square feet; therefore, per Section 1003.04.C of the City of Pittsburgh Code, the project will require a stormwater management plan. Due to this, multiple Best Management Practices (BMPs) will be implemented going forward, including an underground detention vault. Stormwater will be managed on site to the greatest extent possible by maximizing greenspace on site.

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

3800-FM-BPNPSM0353 Rev. 2/2015
Form

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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 Duquesne University College of Osteopathic Medicine

2. Brief Project Description Duquesene University is proposing to construct a five-story educational building with a footprint of approximately 17,815 SF. The proposed project includes a 8-inch sanitary sewer connection from the proposed building to existing 30-inch combination sewer in Watson Street via a proposed wye. The proposed project also includes a 12-inch storm sewer connection and a 15-inch storm sewer connection from the proposed building to the existing 30-inch combination sewer in Watson Street via two separate proposed wye connections. The proposed project will reuse the existing 6-inch water lateral, which taps to the existing 20-inch water main in Forbes Avenue. The 6-inch reused line will have a proposed tee-off after the curb for a proposed 4-inch domestic service line and 6-inch proposed fire service line.

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

Municipality Name	County	City	Boro	Twp
City of Pittsburgh	Allegheny	☒	☐	☐

Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Battistone	Martina			Senior Environmental Planner

Additional Individual Last Name	First Name	MI	Suffix	Title

Municipality Mailing Address Line 1	Mailing Address Line 2
Department of City Planning	200 Ross St., 4th Floor

Address Last Line -- City	State	ZIP+4
Pittsburgh	PA	15219

Area Code + Phone + Ext.	FAX (optional)	Email (optional)
412-255-2516		Martina.battistone@pittsburghpa.gov

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Duquesne University College of Osteopathic Medicine

Site Location Line 1	Site Location Line 2
Parcel 02-L-42	

Site Location Last Line -- City	State	ZIP+4	Latitude	Longitude
Pittsburgh	PA	15219	40°26'16.7"N	79°59'23.6"W

Detailed Written Directions to Site: From PA-28 S take exit 1A for I-579 S/I-376E then continue onto I-579 S. From I-579 take the 7th/6th Ave. exit toward downtown, then follow signs for PPG Arena 6th Ave. and merge onto Bigelow Blvd. Turn left onto 6th Avenue, then turn left onto Forbes Ave. Continue on Forbes Ave., you should find your destination on the left immediately after the intersection of Forbes Ave. and Magee St.

Description of Site The existing project site consists of a four-story Life's Work building and adjacent one-story dormitory building. The site also consists of a ±33 space surface parking lot located east of Stevenson Street, loading dock access along Watson Street, and a brick pavement driveway loop with access from Forbes Avenue.

Site Contact (Developer/Owner)

Last Name	First Name	MI	Suffix	Phone	Ext.
Barnett	Katrina			412-576-9892	

Site Contact Title	Site Contact Firm (if none, leave blank)
Owner	

FAX	Email
	barnettk@duq.edu

Mailing Address Line 1	Mailing Address Line 2
600 Forbes Avenue	

Mailing Address Last Line -- City	State	ZIP+4
Pittsburgh	PA	15282

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

Last Name	First Name	MI	Suffix
Rowland	Scott		

Title	Consulting Firm Name
Principal/Vice President	Langan Engineering & Environmental Services, Inc.

Mailing Address Line 1	Mailing Address Line 2
2400 Ansys Drive	Suite 403

Address Last Line – City	State	ZIP+4	Country
Canonsburg	PA	15317	USA

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 3

Connections 3 (1 SANITARY, 2 STORM)

Name of:

existing collection or conveyance system Watson Street 30-inch Brick 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 permitee 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 SHAWN P. MCWILLIAMS, EIT

Agent Signature [signature] Date 01/27/2021

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. **PLOT PLAN**

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

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

4. **WETLAND PROTECTION**

	YES	NO	
a.	☐	☒	Are there wetlands in the project area? If yes, ensure these areas appear on the plot plan as shown in the mapping or through on-site delineation.
b.	☐	☒	Are there any construction activities (encroachments, or obstructions) proposed in, along, or through the wetlands? If yes, Identify any proposed encroachments on wetlands and identify whether a General Permit or a full encroachment permit will be required. If a full permit is required, address time and cost impacts on the project. Note that wetland encroachments should be avoided where feasible. Also note that a feasible alternative **MUST BE SELECTED** to an identified encroachment on an exceptional value wetland as defined in Chapter 105. Identify any project impacts on streams classified as HQ or EV and address impacts of the permitting requirements of said encroachments on the project.

5. **PRIME AGRICULTURAL LAND PROTECTION**

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

6. **HISTORIC PRESERVATION ACT**

YES	NO	
☐	☒	Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code* (available online at the DEP website at www.dep.state.pa.us, select "subject" then select "technical guidance"). As a minimum this includes copies of the completed Cultural Resources Notice (CRN), a return receipt for its submission to the PHMC and the PHMC review letter.

7. **PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES**

Check one:

☒ The "Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from my search of the PNDI database and all supporting documentation from jurisdictional agencies (when necessary) is/are attached.

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

Applicant or Consultant Initials_____.

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 permitee. The permitee has determined that the additional TN and TP to be contributed by this project (as modified by credits and/or offsets to be provided) will not cause the discharge to exceed the annual total mass limits for these parameters. Documentation of compliance with nutrient allocations is attached.

Name of Permittee Agency, Authority, Municipality_____

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

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 1,025 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilties" 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	24,211,002	84,738,507	936,460	3,277,611	997,105	3,489,866
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

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

YES NO

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

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA

Name of Responsible Agent Barry King, PE, PMP / Director of Engineering and Construction

Agent Signature _____ Date 11/30/2020

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature Shawn P. McWilliams

Date 01/27/2021

4. Treatment Facility

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

*ALCOSAN IS UNDER A CONSENT DECREE TO ADDRESS WET WEATHER OVERFLOWS.

	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 Shawn P. McWilliams, EIT

Agent Signature Shawn P. McWilliams

Date 01/27/2021

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

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

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

☐ 1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.

☐ 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.

☐ 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.

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

☐ L. PERMEABILITY TESTING (See Section L of instructions)

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

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

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

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

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

O. SEWAGE MANAGEMENT (See Section O of instructions)

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

	Yes	No	
1.	☐	☒	Is connection to, or construction of, a DEP permitted, non-municipal sewage facility or a local agency permitted, community onlot sewage facility proposed.

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

2. Project Flows _____ gpd

	Yes	No	
3.	☐	☐	Is the use of nutrient credits or offsets a part of this project?

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

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

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

	Yes	No	
a.	☐	☐	If this project proposes sewer extensions or tap-ins, will these actions create a hydraulic overload on any existing collection or conveyance facilities that are part of the system?

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

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

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

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

5. Treatment Facility

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

	Yes	No	
a.	☐	☐	If this project proposes the use of an existing non-municipal wastewater treatment plant for the disposal of sewage, will this action create a hydraulic or organic overload at that facility?

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

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

b. Name of Facility_____

Name of Responsible Agent_____

Agent Signature _____

Date_____

(For completion by the municipality)

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

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

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

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

	Yes	**No**	
1.	☐	☒	Does the project propose the construction of a sewage treatment facility ?
2.	☐	☒	Will the project change the flow at an existing sewage treatment facility by more than 50,000 gallons per day?
3.	☐	☒	Will the project result in a public expenditure for the sewage facilities portion of the project in excess of $100,000?
4.	☐	☒	Will the project lead to a major modification of the existing municipal administrative organizations within the municipal government?
5.	☐	☒	Will the project require the establishment of *new* municipal administrative organizations within the municipal government?
6.	☐	☒	Will the project result in a subdivision of 50 lots or more? (onlot sewage disposal only)
7.	☐	☒	Does the project involve a major change in established growth projections?
8.	☐	☒	Does the project involve a different land use pattern than that established in the municipality's Official Sewage Plan?

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

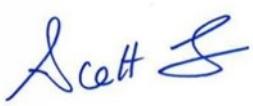
9. ☐ ☒ Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)?
10. ☐ ☒ Does the project require resolution of a conflict between the proposed alternative and consistency requirements contained in §71.21(a)(5)(i), (ii), (iii)?
11. ☐ ☒ Will sewage facilities discharge into high quality or exceptional value waters?

☐ Attached is a copy of:
- ☐ the public notice,
- ☐ all comments received as a result of the notice,
- ☐ the municipal response to these comments.

☐ No comments were received. A copy of the public notice is attached.

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

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

Scott Levit, P.E.	
Name (Print)	Signature
Project Engineer	08/24/2020
Title	Date
2400 Ansys Drive, Suite 403 Canonsburg, PA 15317	724-514-5128
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 $ 150.00 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.

   # 3 Lots (or EDUs) X $50.00 = $ 150.00

   The fee is based upon:

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

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

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

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

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

   #_____ Lots (or EDUs) X $35.00 = $_____

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

   The fee is based upon:

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

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

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

NARRATIVE DESCRIPTION OF PROJECT

SECTION F
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Project Narrative
Duquesne College of Osteopathic Medicine
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250110101

The project site is located along Forbes Avenue between Magee Street and Stevenson Street, in the 1st Ward in the City of Pittsburgh, Allegheny County, Pennsylvania. Duquesne University is proposing to develop approximately 1.24 acres within Parcel 02-L-42. The proposed development is to construct a five-story College of Osteopathic Medicine building with a footprint of approximately 17,000 square feet. The proposed development will be owned and operated by Duquesne University.

The existing project site consists of the four-story Life's Work building with attached one-story dormitories, in which the existing combined daily sanitary sewage flow is 12,138 gallons per day. Following the proposed development, the building will have an estimated combined daily sanitary sewage flow of 13,163 gallons per day; therefore, the proposed increase in sewage demand as a result of the proposed improvements is 1,025 gallons per day. The proposed project provides a 6-inch sanitary sewer connection from the proposed building to the existing 30-inch combination sewer line in Watson Street, east of existing PWSA MH002G059, via a proposed wye connection.

Reference documents for the calculation of the proposed estimated combined daily sanitary sewage flow can be found in Appendix C. The dry flow hydraulic capacity calculation for the proposed project is based on the limited capacity sewer found between JCT002G001 and MH002G061 located in Watson Street. The measurement for dry flow was completed on October 22, 2020 at approximately 6:00 pm. The weather conditions were partly cloudy with temperatures in the mid 60's. In order to get a measurement due to the depth of the existing manhole (± 30 feet deep), a rope with a weight was slowly lowered down into the manhole. Upon hitting the bottom, it was brought back up and a measurement of the water line was taken from the rope. Five measurements every fifteen minutes were taken over the course of one hour (measurement at 6:00 pm, 6:15 pm, 6:30 pm, etc.). The maximum flow measurement was found to be 4 inches. For use in the dry flow hydraulic capacity calculation, 4 inches was used. The slope of the limited capacity sewer between JCT002G001 and MH002G061 was calculated using the MLCS Spreadsheet provided by PWSA. Given the upstream and downstream invert, the slope of the limited capacity sewer is approximately 0.67% (refer to the MLCS Spreadsheet in Appendix C).

The total area of disturbance for the development will be greater than 10,000 square feet; therefore, per Section 1303.01.A of the City of Pittsburgh Code, the project must adhere to stormwater management regulations. The proposed project includes both a 15-inch storm sewer connection and a separate 12-inch storm sewer connection, which will discharge

stormwater runoff from the site into the existing 30-inch PWSA combined brick sewer in Watson Street.

The current site consists of five existing water service connections. Two water laterals connect to the 6-inch PWSA water main in Watson Street and two water laterals connect to the 6-inch PWSA water main in Forbes Avenue; these four water laterals will be terminated. The remaining existing 6-inch water lateral connects from the existing building to the 20-inch PWSA water main in Forbes Avenue. This 6-inch lateral will be reused in the proposed condition.

The proposed project includes a tee-off at the curb from the existing 6-inch lateral to a proposed 6-inch fire service line and a proposed 4-inch domestic service line. Both proposed lines will extend to connect to the proposed building. The proposed water demand is estimated to be the same as the proposed combined daily sanitary sewage flow, 13,163 gallons per day; therefore, the proposed increase in water demand as a result of the proposed improvements is 1,025 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.

ANTICIPATED SEWAGE FLOW REFERENCE

TABLE 1: SANITARY SEWAGE FLOW ESTIMATION

Existing Conditions					
PWSA Customer #	**Type of Establishment**	**Total Consumption (1000 gal.)**	**Time Monitored (Days)**	**Existing Average Sewage Flow (GPD)[1]**	**Existing Peak Sewage Flow (GPD)[2]**
1013518	Ex. Vocational Rehab Center	1,772	365	4,855	12,138
			Existing EDUs[6] =	16	40

Proposed Conditions							
Floor	**Type of Establishment**	**Area (SF)**	**Area per Person (SF/Person)**	**Size**	**Unit**	**Anticipated Peak Daily Rate (GPD/Unit)[3]**	**Anticipated Peak Daily Sewage Flow (GPD)**
LL	Proposed Office[4] (Business)	5,851	150	39	Per Person	10	390
LL	Proposed Classroom[5]	1,978	15	132	Per Person	15	1,978
LL	Proposed Lab[6]	4,933	150	33	Per Person	15	495
1	Proposed Office (Business)	8,220	150	55	Per Person	10	550
1	Proposed Classroom	3,680	15	245	Per Person	15	3,680
1	Proposed Lab	2,575	150	17	Per Person	15	255
2	Proposed Office (Business)	5,380	150	36	Per Person	10	360
2	Proposed Classroom	3,649	15	243	Per Person	15	3,645
3	Proposed Office (Business)	10,677	150	71	Per Person	10	710
4	Proposed Office (Business)	13,217	150	82	Per Person	10	820

5	Proposed Office (Business)	4,209	150	28	Per Person	10	280
					Required Proposed GPD =		13,163
					Required Proposed EDUs[7] =		44

Summary of Flow Estimation		
	Existing GPD =	12,138
	Proposed GPD =	13,163
	Total Net Proposed GPD =	**1,025**
	Total Net EDUs[7] =	**3**

1 – Rate is based on existing 2016 PWSA Water bills and usage for 1323 Forbes Avenue, Pittsburgh, PA. Refer to Appendix C Supporting Flow Calculations.
2 – Peak rate is based on a peaking factor of 2.5. Refer to Appendix C Supporting Flow Calculations.
3 – Rate is based on the flow estimate defined in Table 2-1 of the PWSA Procedures Manual for Developers.
4 – "Proposed Office (Business)" represents any space representative of a working environment including but not limited to offices, conference rooms, and business spaces.
5 – "Proposed Classroom" represents any space representative of a learning environment including but not limited to classrooms, lecture halls, and study spaces.
6 – "Proposed Lab" represents space labeled "Lab" on the Fire Safety Plans.
7 – EDUs are based on 400 GPD/EDU.

PROPOSED SANITARY PIPE CALCULATIONS
Duquesne University College of Osteopathic Medicine

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 WATSON STREET
MINIMUM SLOPE WITHIN THIS ENTIRE RUN = 1.0%

		Q_{full}, cfs	Q_{full}, gpd	Q_{half}, cfs	Q_{half}, gpd	V_{max}, fps	V_{half}, fps
MATERIAL	**PVC**						
LENGTH, ft	**19**	0.94	607,440	0.45	291,571	5.51	4.79
DIAMETER, in	**6**						
SLOPE	**2.00%**						
n	**0.011**						
Q_{max}, gpd	**13,163**						
Q_{design}, gpd	**46,071**						

PIPE SIZED ACCORDINGLY: TRUE
V_{max} < 10 fps: TRUE
V_{half} > 2 fps: TRUE

Scott D. Rowland, P.E.
Professional Engineer License No. PE-080536-E

Duquesne University College of Osteopathic Medicine
Watson Street 54-IN PWSA Sanitary Sewer
Dry Flow Comparison Calculations

Given Information	
Pipe Location:	Watson St.
Pipe Type:	Brick
Pipe Diameter (IN):	54
Slope:	0.7%
Depth of Flow (IN):	4
Manning's n Value:	0.016

Solve for Dry Flow	
Radius of Pipe, r (IN):	27
Circular Segment Height, h (IN):	4
Central Angle, Θ:	63.173
Flow Area, K (IN²):	76.618
Wetted Perimeter (IN):	29.769
Hydraulic Radius (IN):	2.574
Hydraulic Radius (FT):	0.214
Velocity (FT/S):	2.724
Flow (CFS):	1.449
Flow (GPD):	936,460

Solve for Full Flow	
Flow (CFS):	131.136
Flow (GPD):	84,738,507

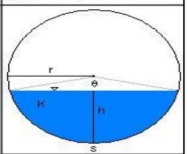
Solve for Present Peak Flow	
Peak Factor:	3.5
Flow (GPD):	3,277,611

Solve for Average Design/Permitted Capacity	
Flow (GPD):	24,211,002

Summary	
Anticipated Flow Contribution (GPD)[1]:	13,163
Present Average Flow (GPD):	936,460
Present Peak Flow (GPD):	3,277,611
Design/Permitted Average Capacity (GPD):	24,211,002
Design/Permitted Peak Capacity (GPD):	84,738,507
Average Projected Flow (GPD)	997,105
Peak Projected Flow (GPD)	3,489,866

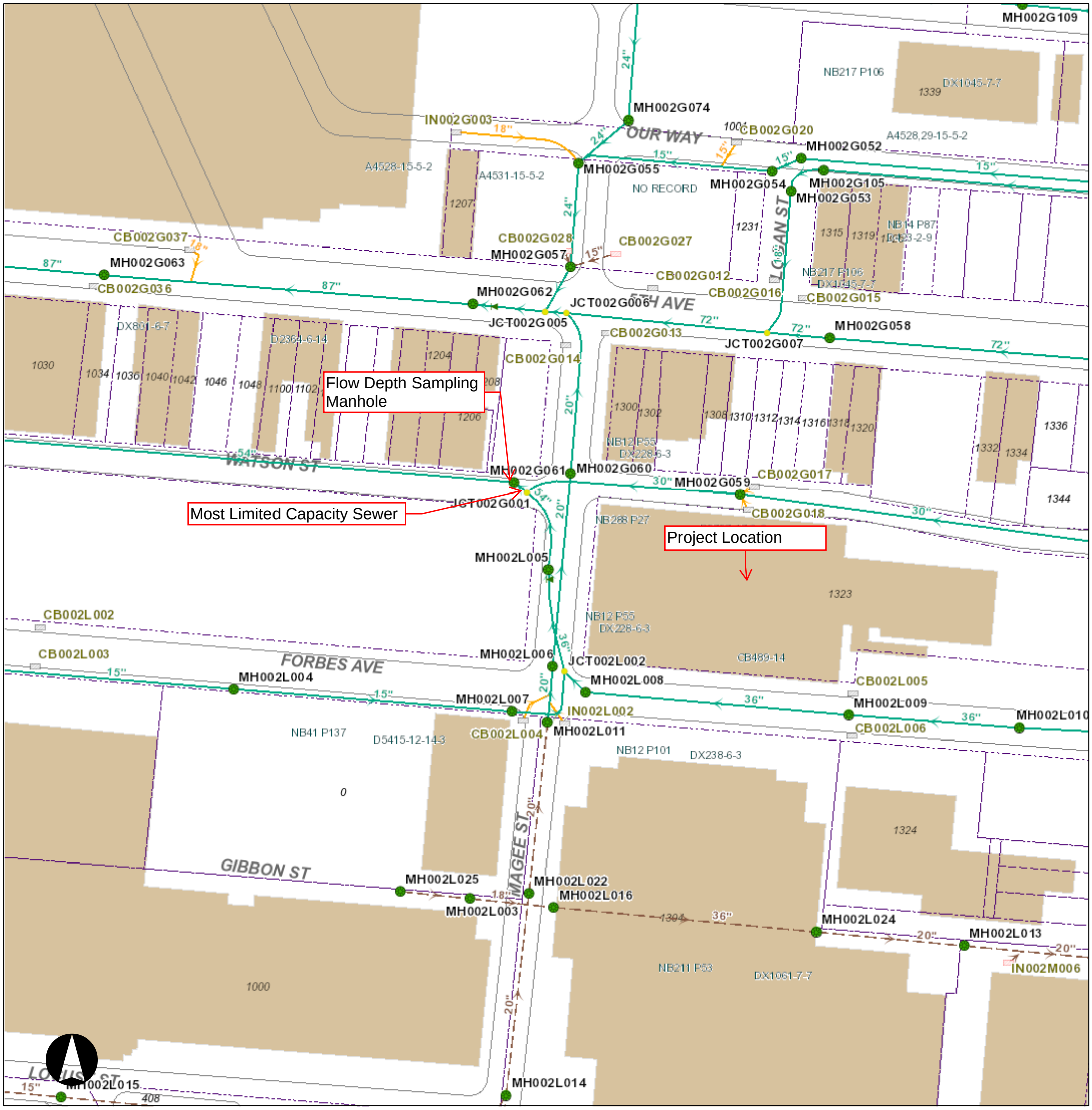
$V = \frac{k}{n} R^{2/3} S^{1/2}$ $k = 1.4859 ft^{1/3}/s$ $Q = VA$

1. Flow estimation provided by DLR Group, based on PA Code Title 25, Chapter 73, Paragraph 73.17

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

Scott D. Rowland, P.E.
Professional Engineer License No. PE-080536-E

Most Limited Capacity Sewer Map



Legend

		Pressure Monitoring Station	Private Inlet
	WATER	Water Manhole	Outfall
Meter		Rising Main	End Cap
Curb Box		Supply Main	Sewer Pump Station
Water System Pump		Transmission Main	Combined Sewer
Hydrant		Distribution Main	Sanitary Sewer
System Valve		Hydrant Branch	Storm Sewer
Dividing Pressure Valve		Private Main	Regulated Combined Sewer
Coupling		Water Service Line	Overflow Sewer
Tee			Interceptor
Cross		**SEWER**	Sewer Force Main
Reducer		Manhole	Private Sewer
End Cap		Junction	Undefined Sewer
Wash Out		Inlet	Green Infrastructure Underground Facilities

0 0.015 0.03 mi

PGH2O

Date: 7/1/2020

Most Limited Capacity Sewer (MLCS) Spreadsheet

PROJECT NAME:	20013.53 DU College of Osteopathic Medicine
PWSA PROJECT NUMBER:	20013.53
PWSA REVIEWER:	Benjamin Grunauer, E.I.T.
DATE:	July 1st, 2020

LEGEND:

Output Data
Input Data
Questionable Data
Hydraulically Limited Sewer

Upstream MH	Downstream MH	Upstream Invert	Downstream Invert	Length, ft	Diam., in.	Material	n	Area, sf	Wetted P, ft	Slope	Flow, gpd
MH002G059	JCT002G001	781.29	769.36	178.16	30	Brick	0.016	4.91	7.854	6.70%	55,888,057
JCT002G001	MH002G061	768.82	768.73	13.34	54	Brick	0.016	15.90	14.137	0.65%	83,608,658
JCT002G054	MH002G064	767.51	763.02	337.91	54	Brick	0.016	15.90	14.137	1.33%	119,358,133
MH002G064	JCT002G002	763.02	761.07	176.93	54	Brick	0.016	15.90	14.137	1.10%	108,703,924
JCT002G002	MH002G065	760.64	758.22	82.78	87	Brick	0.016	41.28	22.777	2.92%	631,533,684
MH002G065	JCT002G003	758.21	756.68	77.46	87	Brick	0.016	41.28	22.777	1.98%	519,128,264
JCT002G003	RD002G001	756.68	756.48	19.69	96	Brick	0.016	50.27	25.133	1.02%	484,050,889
RD002G001	MH002F129	756.48	754.32	89.19	96	Brick	0.016	50.27	25.133	2.42%	747,392,281
MH002F129	MH002F130	754.15	750.33	298.99	96	Brick	0.016	50.27	25.133	1.28%	542,839,772
MH002F130	JCT002F004	750.18	749.38	80.85	96	Brick	0.016	50.27	25.133	0.99%	477,724,439
JCT002F004	MH002F126	749.38	748.34	16.83	96	Brick	0.016	50.27	25.133	6.18%	1,194,008,159
MH002F126	MH002F125	748.34	746.61	107.07	96	Brick	0.016	50.27	25.133	1.62%	610,448,867
MH002F125	JCT002F006	746.42	745.73	37.30	96	Brick	0.016	50.27	25.133	1.85%	653,192,244
JCT002F006	MH002F122	745.73	742.88	155.22	96	Brick	0.016	50.27	25.133	1.84%	650,753,760
MH002F122	JCT002F005	742.85	742.43	26.75	96	Brick	0.016	50.27	25.133	1.57%	601,786,800
JCT002F005	MH002F120	742.43	741.49	55.49	96	Brick	0.016	50.27	25.133	1.69%	625,037,137
MH002F120	JCT002K002	741.34	739.37	141.63	96	Brick	0.016	50.27	25.133	1.39%	566,398,432
JCT002K002	MH002K048	739.37	738.44	32.20	96	Brick	0.016	50.27	25.133	2.89%	816,182,749
MH002K048	MH002K067	738.44	737.09	81.80	72	Brick	0.016	28.27	18.850	1.65%	286,798,238
MH002K067	MH002K068	738.44	735.79	78.53	72	Brick	0.016	28.27	18.850	3.38%	409,722,531
MH002K068	MH002K047	738.44	732.96	171.17	72	Brick	0.016	28.27	18.850	3.20%	398,999,059
MH002K047	JCT002J015	732.96	730.80	95.49	78	Brick	0.016	33.18	20.420	2.26%	415,193,586
JCT002J015	RD002J001	730.80	728.38	193.63	78	Brick	0.016	33.18	20.420	1.25%	308,616,798
RD002J001	MH002J030	728.38	727.79	63.35	94	Concrete	0.013	48.19	24.609	0.93%	539,292,208
MH002J030	JCT002J006	727.79	723.20	131.33	94	Concrete	0.013	48.19	24.609	3.50%	1,044,704,549
JCT002J006	JCT002J005	723.20	722.72	17.30	94	Concrete	0.013	48.19	24.609	2.77%	930,842,875
JCT002J005	MH002J032	722.72	718.34	115.72	94	Concrete	0.013	48.19	24.609	3.79%	1,087,182,751
MH002J032	JCT002N001	717.70	715.98	35.19	94	Concrete	0.013	48.19	24.609	4.89%	1,235,514,074
JCT002N001	MH002N063	715.98	709.79	200.80	94	Concrete	0.013	48.19	24.609	3.08%	981,131,378
MH002N063	MH002N062	709.79	706.63	186.14	96	Concrete	0.013	50.27	25.133	1.70%	770,141,041
MH002N062	ADC002NM05	706.63	703.95	139.21	96	Concrete	0.013	50.27	25.133	1.93%	820,113,583

DOCUMENTATION
FROM UTILITY COMPANIES

Hydrant Permit No. _____

Form HYD No. 20-0126

(PWSA Use Only)

The Pittsburgh Water and Sewer Authority
Form HYD – Hydrant Permit

GENERAL REQUIREMENTS

The PWSA shall regulate the use of water from all fire hydrants and outlets, including private hydrants.

A. PERMIT FOR USE: No person shall use any fire hydrant without first applying to the PWSA which may issue a permit upon evaluation of the request. The permit fee shall include costs for compensation of inspection by Authority personnel and those costs incurred for billing.

B. RESTRICTIONS & RESPONSIBILITY: This permit is restricted to the hydrant(s) listed below, and it is understood the permission for these fire hydrants will be granted only to responsible persons/firms.

C. PROHIBITED USES: The use of fire hydrant(s) in freezing weather or when the ground is frozen is not permitted. The outside air temperature must be at least 40º F and rising.

D. CANCELLATIONS: The PWSA may cancel this permit in cases of water shortage, cold weather, damage to private or City property resulting from hydrant use, or whenever the public interest requires.

E. Applicant agrees that it shall be fully responsible for any damage to the hydrant, attached meter, or any personal injury or property damage sustained as a result of the applicant's use of the hydrant. Applicant further agrees to indemnify, defend and hold harmless the PWSA, its officers, agents and employees from and against all demands, claims, damages, losses, costs and expenses, including attorney's fees and cost of defense for bodily injury, death or property damage, or the loss of use thereof, caused or allegedly caused in whole or in part from the applicant's use of the hydrant.

FEE SCHEDULE

1. HYDRANT FLOW TEST: For hydrant flow tests, PWSA will determine the applicable flow hydrant and residual hydrant for testing.

☒ Flow Test

Date/Time Requested: 06/11/2020 @ 10am

	FLOW HYDRANT	PRESSURE HYDRANT
Hydrant Number:	A1322	A1321
Location:	FORBES AVE	FORBES AVE
Static Pressure (psi)	XXXXXXXXXXXXXX	110
Residual Pressure (psi)	XXXXXXXXXXXXXX	105
Flow Observed (gpm)	1620	XXXXXXXXXXXXXX

HYDRANT FEE: ☒ 1 (No. of Days) x $500.00 = $500.00

2. HYDRANT USE WITH METER (CONSTRUCTION / TEMPORARY USE):

☐ Hydrant Use with Meter

Date/Time Requested: _____

Fire Hydrant No. and Location _____

HYDRANT FEE: Cost includes Meter, Adaptors, Installation and Deposit

☐ _____ (No. of Days) x $500.00 = _____

****Meter for hydrant use:**

☐ 5/8" or 5/8" x ¾" _____ x $ 680.00 = _____

☐ ¾" _____ x $ 780.00 = _____

☐ 1" _____ x $ 960.00 = _____

☐ Fire Hydrant Meter (2½" meter) _____ x $1,039.50 = _____

PAYMENT PRIOR TO WORK: All charges shall be paid prior to performance of the applicable work.

COMPUTATION: Fees shall be computed on the basis of prevailing costs incurred by the PWSA and taking into account wages paid, fringe benefits, overhead, and other costs that might accrue. The PWSA shall issue regulations listing such charges and shall update them as necessary.

EFFECTIVE DATE: All standard charges shall become effective on the day they are filed with the PWSA.

TOTAL OWED: $ $500.00

3. Make Check Payable to: ***The Pittsburgh Water and Sewer Authority or PWSA***

Payment Received Date: 6/9/2020 Check Number: 53444 Check Amount: $500.00

Michelle Solomon — Permit Application Clerk Signature

6/9/2020 — Date

Pittsburgh Water & Sewer Authority

July 1, 2020

Scott Levit
Langan Engineering
2400 Ansys Drive
Canonsburg, PA 15317

Subject: Water and Sewer (W/S) Use Approval
Project Name: 20013.53 DU College of Osteopathic Medicine
PWSA Project No.: 20013.53

Dear Scott:

Pursuant to your request, we have reviewed the W/S Use Application (Application) for the aforementioned Project. This letter shall serve as confirmation that the Application has been approved. Please see below for the approved flows:

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	13163	13163	8.37
Existing Flow	12138	12138	9.94
Net Flow	1025	1025	

Please be advised that the need for sewage planning shall be determined by the Department of Environmental Protection (DEP). After issuance of this letter, the PWSA shall email the Preliminary Determination on the Need for Sewage Planning Letter to the DEP. Typically, the DEP will respond via email with the Final Determination on the Need for Sewage Planning. Sewage planning is likely required, we have enclosed for your use the location of the most limited capacity sewer.

Our review was based on information provided by the Applicant under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at 412-255-8800 x5543 or BGrunauer@pgh2o.com.

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer II

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

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

APPENDIX D

Alternative Sewage Facilities Analysis

SECTION H
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Alternative Sewage Facilities Analysis
Duquesne University College of Osteopathic Medicine
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250110101

The project site is located along Forbes Avenue between Magee Street and Stevenson Street, in District 6 within the City of Pittsburgh, Allegheny County, Pennsylvania. The site consists of approximately 1.24 acres within Lot 02-L-42. Duquesne University is proposing to construct the proposed College of Osteopathic Medicine building to provide classrooms, meeting spaces, and offices for students and faculty. The proposed 5 story building will consist of approximately 80,000 gross square feet with impervious pedestrian walkways, landscaped areas, and associated site features. The proposed development will be owned and operated by Duquesne University.

The site is generally bound by Watson Street to the north, Forbes Avenue to the south, Magee Street to the west, and Stevenson Street to the east. The site is located within Lot 02-L-42, and currently consists of the existing 4-story Life's Work building, 1-story dormitory, and landscape/hardscape areas. The existing combined daily sanitary sewage flow is 12,138 gallons per day.

The proposed project provides a 6-inch sanitary sewer, a 15-inch storm sewer connection, and a separate 12-inch storm sewer connection to the existing 30-inch PWSA combined brick sewer in Watson Street. The existing 30-inch PWSA combined sewer on site is ultimately conveyed to the Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility in Pittsburgh, PA. This alternate method will provide adequate disposal of the total combined daily flow of 13,163 gallons per day (33 EDUs). The proposed net increase in combined daily sanitary sewage flow from existing to proposed conditions is 1,025 gallons per day, or 3 EDUs. A reference for the approximate sewage flow for the proposed development can be found in Appendix C. The proposed 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 0.27 miles south 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.

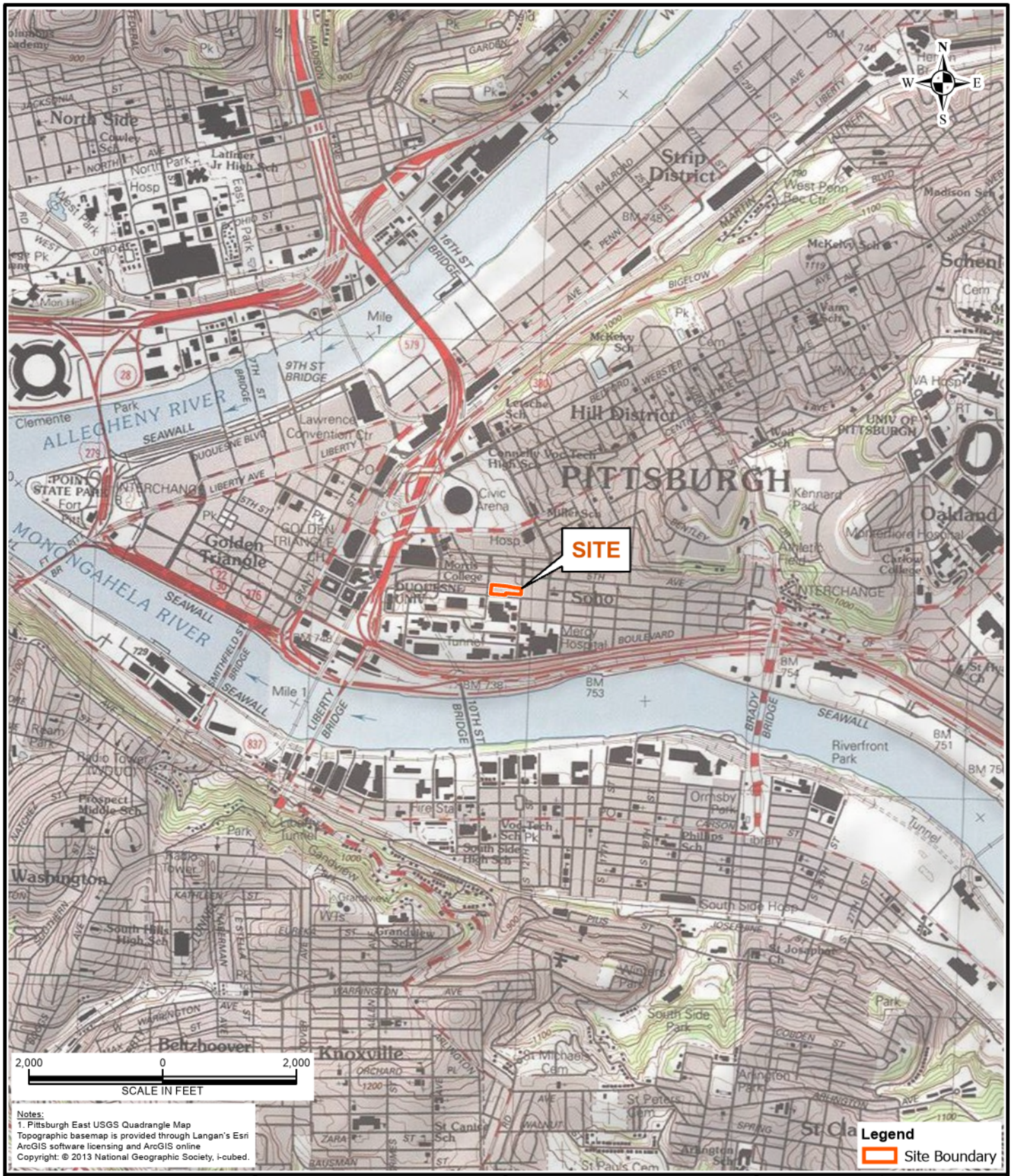
APPENDIX E
Public Notice

SECTION P
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Public Notice
Duquesne University College of Osteopathic Medicine
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250110101

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



LANGAN

Langan Engineering and Environmental Services, Inc.

2400 Ansys Drive, Suite 403
Canonsburg, PA 15317-9540

T: 724.514.5100 F: 724.514.5101
www.langan.com

Project	DUQUESNE UNIVERSITY PITTSBURGH ALLEGHENY COUNTY PA
Drawing Title	SITE LOCATION MAP
Project No.	250110101
Date	4/21/2020
Scale	1" = 2,000 feet
Drawn By	BLA
Figure	1

Path: C:\Users\Barrington\Desktop\GIS_Projects\PIT\250110101\250110101.aprx

APPENDIX G
Cultural Resource Notice

SECTION G
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Cultural Resources Notice (CRN)
Duquesne University College of Osteopathic Medicine
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250110101

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.

APPENDIX H
PNDI

1. PROJECT INFORMATION

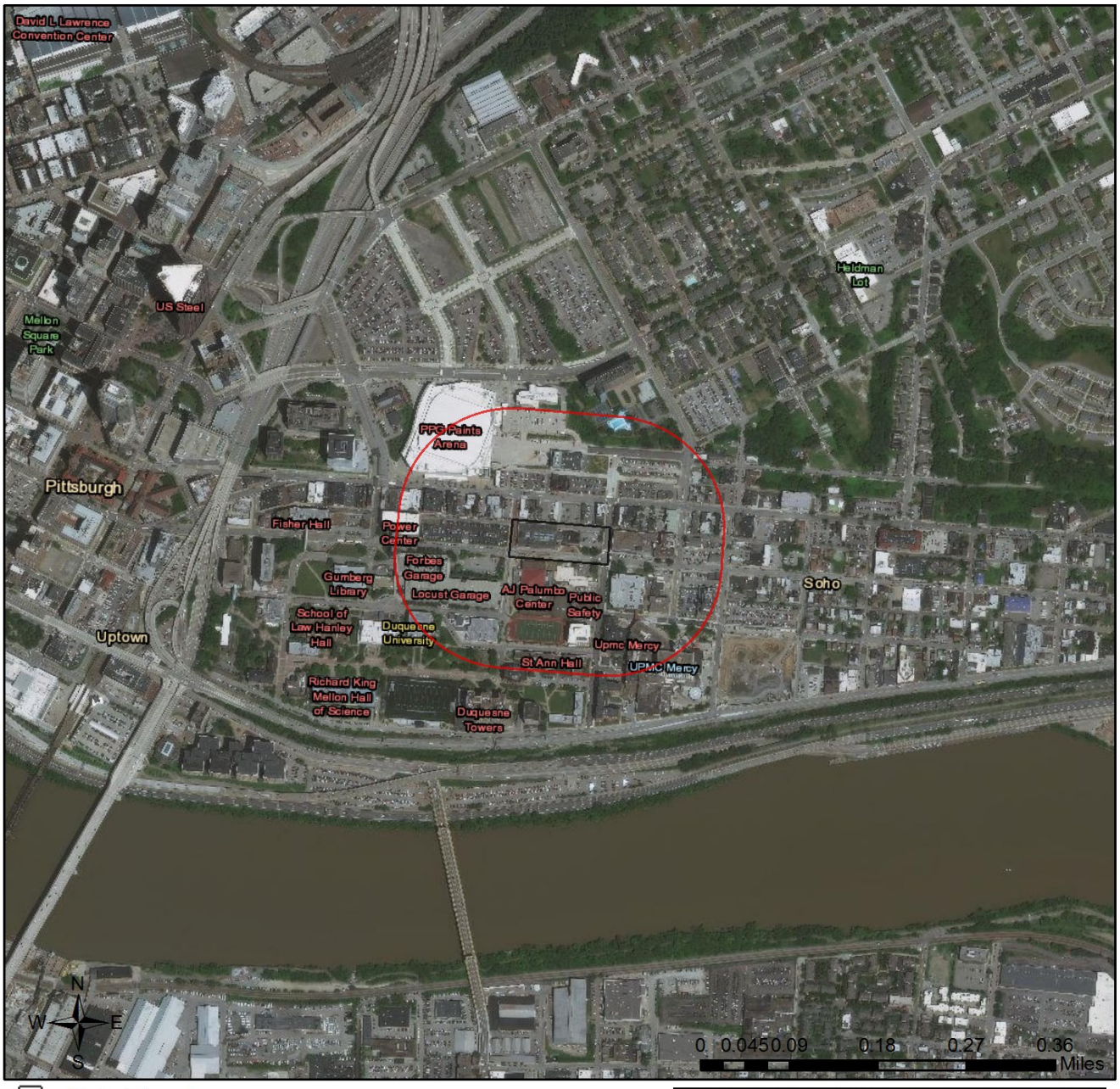
Project Name: **Duquesne University College of Osteopathic Medicine**
Date of Review: **8/12/2020 03:49:21 PM**
Project Category: **Development, New public/community development (school, library, church, museum)**
Project Area: **2.49 acres**
County(s): **Allegheny**
Township/Municipality(s): **PITTSBURGH**
ZIP Code: **15219; 15282**
Quadrangle Name(s): **PITTSBURGH EAST**
Watersheds HUC 8: **Lower Monongahela**
Watersheds HUC 12: **Streets Run-Monongahela River**
Decimal Degrees: **40.437995, -79.987418**
Degrees Minutes Seconds: **40° 26' 16.7827" N, 79° 59' 14.7037" W**

2. SEARCH RESULTS

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

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

Duquesne University College of Osteopathic Medicine

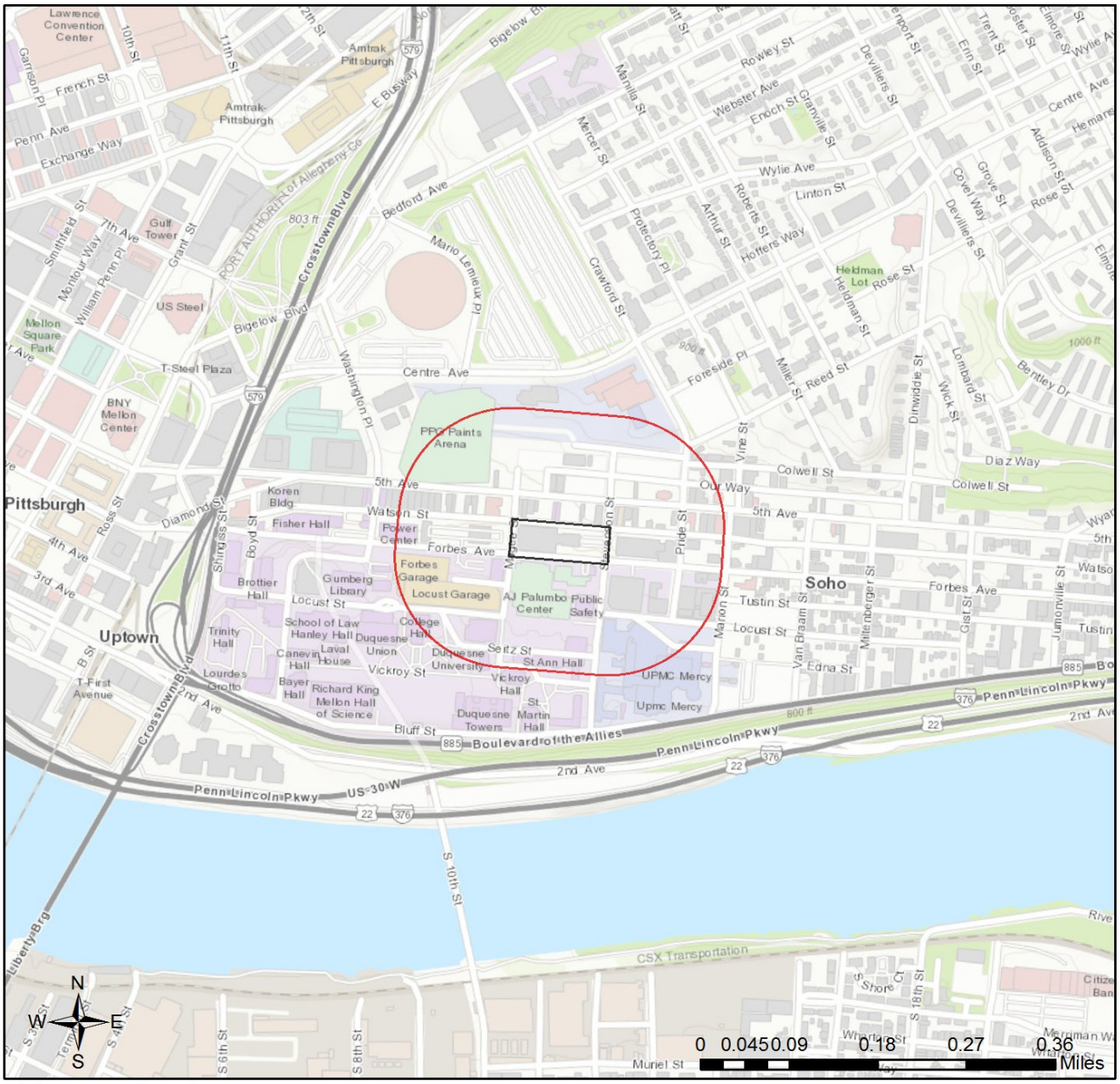


Project Boundary

Buffered Project Boundary

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China

Duquesne University College of Osteopathic Medicine



Project Boundary

Buffered Project Boundary

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

RESPONSE TO QUESTION(S) ASKED

Q1: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).
Your answer is: No forests, woodlots or trees will be affected by the project.

Q2: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?
Your answer is: No

3. AGENCY COMMENTS

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

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

PA Game Commission
RESPONSE:
No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources
RESPONSE:
No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission
RESPONSE:
No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

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

4. DEP INFORMATION

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

5. ADDITIONAL INFORMATION

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

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

6. AGENCY CONTACT INFORMATION

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

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
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: Scott Levit
Company/Business Name: Langan
Address: 2400 Ansys Drive, Suite 403
City, State, Zip: Canonsburg, PA, 15317
Phone: (724) 514-5128 Fax: (724) 514-5100
Email: slevit@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.

Scott L

applicant/project proponent signature

08/12/2020
date

APPENDIX I

Component 4A

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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
Duquesne University College of Osteopathic Medicine

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

1. Date plan received by municipal planning agency August 25, 2020
2. Date review completed by agency August 27, 2020

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

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

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 Enviornmental Planner

Signature: Martina Wolf Battistone

Date: August 27, 2020

Name of Municipal Planning Agency: City of Pittsburgh Department of City Planning

Address 200 Ross Street 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

3850-FM-BCW0362C 6/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP Code #:

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

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning module package and one copy of this *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

Duquesne University College of Osteopathic Medicine

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

1. Date plan received by county or joint county health department August 26, 2020

   Agency name Allegheny County Health Department (ACHD)

2. Date review completed by agency Augusrt 27, 2020

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 wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe
☐	☒	3.	Is there any known groundwater degradation in the area of this proposal? 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: Freddie Fields

Title: Environmental Health Engineer III

Signature: Freddie Fields

Date: August 27, 2020

Name of County Health Department: ACHD

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

Telephone Number: 412-578-8046

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

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

The county planning agency must complete this component within 60 days.
This component and any additional comments are to be returned to the applicant.

APPENDIX K

Completeness Checklist

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

- [X] Name and Address of land development project.
- [X] U.S.G.S. 7.5 minute topographic map with development area plotted.
- [X] Project Narrative.
- [X] Letter from water company (if applicable).
- [X] Alternative Analysis Narrative.
- [ ] Details of chosen financial assurance method.
- [X] Proof of Public Notification (if applicable).
- [X] Name of existing collection and conveyance facilities.
- [X] Name and NPDES number of existing treatment facility to serve proposed development.
- [X] Plot plan of project with required information.
- [X] 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).
- [X] Signature acknowledging False Swearing Statement.
- [ ] Completed Component 4 (Planning Agency Review) for each existing planning agency and health department.
- [X] 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