



A FULL-SERVICE CIVIL ENGINEERING FIRM

C-41184-0001

September 2021

The Julian

419 Melwood Avenue
5th Ward, City of Pittsburgh
Allegheny County, PA

PREPARED FOR

Hudson Melwood, LP
2450 Shenango Valley Freeway
Hermitage, PA 16148

SUBMITTED BY

Kelley R. Harrington, E.I.T.
The Gateway Engineers, Inc.
100 McMorris Road
Pittsburgh, PA 15205
412.921.4030 PHONE
412.921.9960 FAX
www.gatewayengineers.com
kharrington@gatewayengineers.com

SEWAGE FACILITIES PLANNING MODULE



EXHIBITS

- EXHIBIT A. DEP Mailer Response
- EXHIBIT B. PWSA Water and Sewer Use Approval Letter
- EXHIBIT C. PWSA Water and Sewer Availability Letter
- EXHIBIT D. Project Narrative and Flow Map
- EXHIBIT E. Plot Plan
- EXHIBIT F. Flow Calculations (Signed and Sealed)
- EXHIBIT G. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities
- EXHIBIT H. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities – PWSA Approval Documents
- EXHIBIT I. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities – ALCOSAN Approval Letter
- EXHIBIT J. PWSA Tap Allocation Letter
- EXHIBIT K. Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review
- EXHIBIT L. Alternatives Analysis
- EXHIBIT M. Sewage Facilities Planning Module – Component 4A – Municipal Planning Agency Review
- EXHIBIT N. Sewage Facilities Planning Module – Component 4C – County of Joint Health Department Review

EXHIBIT A.
DEP Mailer Response

Shannon L. McCullough, GIP

From: Kelley Coey <KCoey@hudsoncompanies.net>
Sent: Wednesday, June 2, 2021 11:26 AM
To: Michael G. Albright, P.E.
Cc: Jonathan Hudson; Kelley R. Harrington, E.I.T.
Subject: FW: The Jullian Sewage Planning Documents Submittal
Attachments: Comp3Form.pdf; Comp4A.PDF; comp4bform.pdf; comp4cform.pdf; Resolution.pdf; Transmittal.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Mike, FYI. Thanks, Kelley

Kelley Coey

Development Coordinator
Hudson Companies



www.hudsoncompanies.net

C (724) 734-3330 | O (724) 981-1204 X106
F (724) 981-4810 | [My Bio](#)

2450 Shenango Valley Freeway
Hermitage, PA 16148



BEST PLACES to work in **PA** 2018

Confidentiality Note: This e-mail and any attachments are confidential and may be protected by legal privilege. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of this e-mail or any attachment is prohibited. If you have received this e-mail in error, please notify us immediately by returning it to the sender and delete this copy from your system. Thank you for your cooperation.

From: Ryan, Regis <reryan@pa.gov>
Sent: Wednesday, June 2, 2021 11:01 AM
To: Kelley Coey <KCoey@hudsoncompanies.net>
Subject: The Jullian Sewage Planning Documents Submittal

CAUTION: This email originated from outside of Hudson Companies. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please fill out the attached planning documents and submit them to DEP via the On Base Application. Below is the link to the web page that contains instructions, the link to the on-line submittal form, and a printable form to submit a paper check for payment. **Please use the DEP# 02001-21-022.**

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

To find the correct document type for submission, search using the DEP form number. If you are unable to locate an applicable form name, you may use “other” and provide a brief description of the uploaded document in the comment field of the on-line submittal form.

Hard copies are not required to be sent in addition to the upload. All documents can be uploaded, including maps.

The only paper submission necessary is the payment form and the paper check. Checks are to be mailed to the appropriate regional office.

As stated earlier, once received we have 10 business days to review the Planning Module for completeness, and then another 60 days (residential) 120 days (Commercial) to review the technical aspect of the project. Please let me know if you have any questions, and be sure to share this information with your group.

Thank you!

-REGIS

Regis M Ryan

Sewage Planning Specialist

Department of Environmental Protection | Clean Water

SouthWest Regional Office

400 Waterfront Drive | Pittsburgh, PA 15222

Phone: 412.442.4052 | Fax: 412.442.5885

DEP is now accepting permit and authorization applications, as well as other documents and correspondence, electronically through the OnBase Electronic Forms Upload tool. Please use the link below to view the webpage, get instructions, and submit documents:

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

EXHIBIT B.

PWSA Water and Sewer Use Approval Letter

6/15/2021

Kelley Harrington
 The Gateway Engineers, Inc
 100 McMorris Rd.
 Pittsburgh PA 15205

Subject: Water and Sewer (W&S) Use Approval
 Project Name: The Julian – 419 Melwood Ave. (Project)
 PWSA Project No.: 20014.60

Dear Kelley:

The W&S Use Application for the Project has been approved, as summarized below:

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
<i>Project Flow</i>	31,050	31,050	2.87
<i>Existing Flow</i>	82	82	2.87
<i>Net Flow</i>	30,968	30,968	

The PWSA shall request the Department of Environmental Protection (DEP) to issue a Final Determination on the Need for Sewage Planning. If sewage planning is required, we have enclosed for your use the location of the most limited capacity sewer (MLCS). The hydraulic capacity of the MLCS shall be determined via the following method:

- Peak Flow Depth Measurements (Sanitary Net Flow ≤ 2,000 gpd)
- Flow Monitoring (Sanitary Net Flow > 2,000 gpd)

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 412-255-8800 x8899 or daltintas@pgh2o.com.

Sincerely,



Duygu Altintas
 Associate Project Manager

Enclosure(s)

cc: Barry King, PE, PMP – PWSA (via email)
 Kate Mechler, PE – PWSA (via email)
 Robert Herring, PE, PMP – PWSA (via email)
 eBuilder – Filing System (via email)



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: The Julian

Address: 419 Melwood Ave
Pittsburgh, PA 15213

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

Owner/Developer

Name: Hudson Melwood, LP

Address: 2450 Shenango Valley Freeway
Hermitage, PA 16148

Email: KCoey@hudsoncompanies.net

Phone Number: (724) 981-1204 X106

Consultant

Firm Name: The Gateway Engineers, Inc.

Address: 100 McMorris Road
Pittsburgh, PA 15205

Contact Name: Kelley Harrington

Email: kharrington@gatewayengineers.com

Phone Number: 412-409-2302

Flow Data

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	31,050	31,050	2.87
Existing Flow	82	82	2.87
Net Flow	30,968	30,968	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: Kelley R. Harrington

Signature:

Date: 05/25/2021

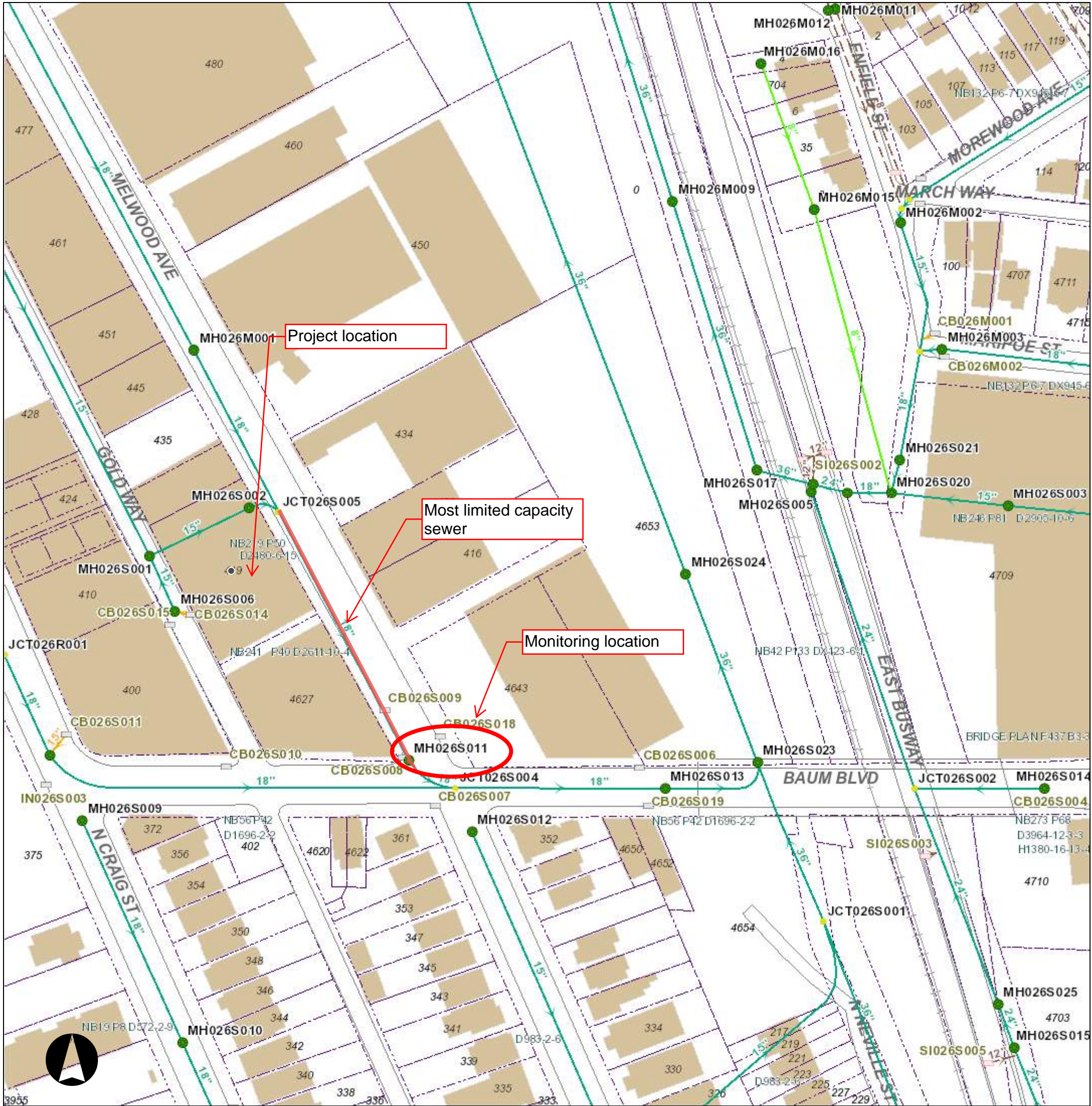
Most Limited Capacity Sewer (MLCS) Spreadsheet

PROJECT NAME:	The Julian - 419 Melwood Ave
PWSA PROJECT NUMBER:	20014.6
PWSA REVIEWER:	Duygu Altintas
DATE:	April 29, 2021

LEGEND:	Output Data
	Input Data
	Questionable Data
	Hydraulically Limited Sewer

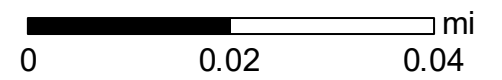
Upstream MH	Downstream MH	Upstream Invert	Downstream Invert	Length, ft	Diam., in.	Material	n	Area, sf	Wetted P, ft	Slope	Flow, gpd
MH026M001	JCT026S005	904.48	900.40	189.21	18	VCP	0.015	1.77	4.712	2.16%	8,663,468
MH026S001	MH026S002	908.31	902.02	114.29	15	VCP	0.015	1.23	3.927	5.50%	8,511,987
MH026S002	JCT026S005	902.02	900.40	33.47	15	VCP	0.015	1.23	3.927	4.85%	7,987,061
JCT026S005	MH026S011	900.40	898.79	290.08	18	VCP	0.015	1.77	4.712	0.55%	4,388,496
MH026S011	JCT026S004	898.79	897.81	58.15	18	VCP	0.015	1.77	4.712	1.69%	7,663,199
JCT026S004	MH026S013	897.81	880.74	217.14	18	VCP	0.015	1.77	4.712	7.86%	16,542,693
MH026S013	JCT026S003	880.74	848.60	115.02	18	VCP	0.015	1.77	4.712	27.95%	31,188,287
MH026S024	MH026M005	837.10	789.69	897.93	36	BR	0.016	7.07	9.425	5.28%	80,698,390
MH026S023	MH026S024	837.10	789.69	897.93	36	BR	0.016	7.07	9.425	5.28%	80,698,390
MH026M005	JCT026H006	789.69	776.54	577.44	36	BR	0.016	7.07	9.425	2.28%	52,998,408
JCT026H006	MH026H022	775.20	774.80	27.20	129	RCP	0.013	90.76	33.772	1.47%	1,575,981,722
MH026H022	MH026G003	774.80	763.23	735.47	129	RCP	0.013	90.76	33.772	1.57%	1,630,089,404
MH026G003	JCT026C011	763.09	759.77	345.35	129	RCP	0.013	90.76	33.772	0.96%	1,274,288,301
JCT026C011	JCT026C010	759.77	758.82	76.67	78	RCP	0.013	33.18	20.420	1.24%	378,195,040
JCT026C011	JCT026C012	759.77	759.42	30.66	129	RCP	0.013	90.76	33.772	1.14%	1,388,621,145
JCT026C012	JCT026C006	759.42	758.49	70.93	78	RCP	0.013	33.18	20.420	1.31%	389,041,356
JCT026C010	MH026C002	758.82	758.66	13.55	141.3	RCP	0.013	108.90	36.992	1.18%	1,800,417,402
MH026C002	JCT026C006	758.66	758.49	13.85	141.3	RCP	0.013	108.90	36.992	1.23%	1,835,857,725
JCT026C006	MH026C006	758.49	750.84	675.97	141.3	RCP	0.013	108.90	36.992	1.13%	1,762,654,786
MH026C006	MH026B002	750.84	744.36	749.73	141.3	RCP	0.013	108.90	36.992	0.86%	1,540,407,998
MH026B002	JCT026B003	744.36	742.20	190.05	141.3	RCP	0.013	108.90	36.992	1.14%	1,766,413,320
JCT026B003	MH026A010	742.20	737.09	580.49	141.3	RCP	0.013	108.90	36.992	0.88%	1,554,580,161
MH026A010	JCT026A001	737.09	733.11	533.84	141.3	RCP	0.013	108.90	36.992	0.75%	1,430,659,196
JCT026A001	MH026A009	733.11	730.54	246.78	141.3	RCP	0.013	108.90	36.992	1.04%	1,690,879,176
MH026A009	MH025D015	730.54	726.94	400.99	141.3	RCP	0.013	108.90	36.992	0.90%	1,569,949,426
MH025D015	JCT025D009	726.94	725.76	121.38	141.3	RCP	0.013	108.90	36.992	0.97%	1,633,716,407
JCT025D009	JCT025D008	725.76	724.68	87.33	141.3	RCP	0.013	108.90	36.992	1.24%	1,842,612,767
JCT025D008	MH025D004	724.68	722.91	225.28	141.3	RCP	0.013	108.90	36.992	0.79%	1,468,663,174
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!
								0.00	0.000	#DIV/0!	#DIV/0!

419 Melwood Ave



Legend

	WATER		SEWER	
--	--------------	--	--------------	--



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

Date: 4/29/2021

EXHIBIT C.

PWSA Water and Sewer Availability Letter



WATER AND SEWER AVAILABILITY LETTER REQUEST

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

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

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

Please email the completed form to: permitinfo@pgh2o.com

Information to be submitted by the Applicant:			
Property Owner Name:	Famous Management Services LTD		
Address of Property:	419 Melwood Ave, Pittsburgh, PA 15213		
Proposed Use of Site:	Apartment building		
Closest street intersection to the property:	Baum Blvd and Melwood Ave		
Requester Information			
Name:	Kelley Harrington	Date of Request:	02/16/2021
Address:	100 McMorris Road, Pittsburgh, PA 15205		
Phone Number:	412-409-2302		
Email Address:	kharrington@gatewayengineers.com		
Preferred Method of Delivery:	<input checked="" type="checkbox"/> Email	<input type="checkbox"/> Mail	
PWSA Use Only:			
PWSA Water Service Available	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Size / Location: <u>8" Melwood Avenue</u>
PWSA Sewer Service Available:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Size / Location: <u>18" Melwood Avenue, 15" Gold Way</u>
Applicant must contact separate agency for water and/or sewer service:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Name of separate agency:	_____		
PWSA Approval:	Signature and Date	<u>Wendy M. Dean</u>	
	Name (printed)	<u>Wendy M. Dean 2/18/2021</u>	
	Title	<u>Engineering Tech II</u>	

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

February 18, 2021

Kelley Harrington
100 McMorris Road
Pittsburgh, PA 15205

RE: Water and Sewer Availability
419 Melwood Avenue

Dear Ms. Harrington:

In response to your inquiry on 2/16/2021 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

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

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

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

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

If you have any questions, please feel free to contact me at (412) 255-8800 x 8030. Thank you.

Sincerely,



Wendy M. Dean
Engineering Tech II

cc: PWSA File

419 Melwood Avenue - Sewer



419 Melwood Avenue - Water

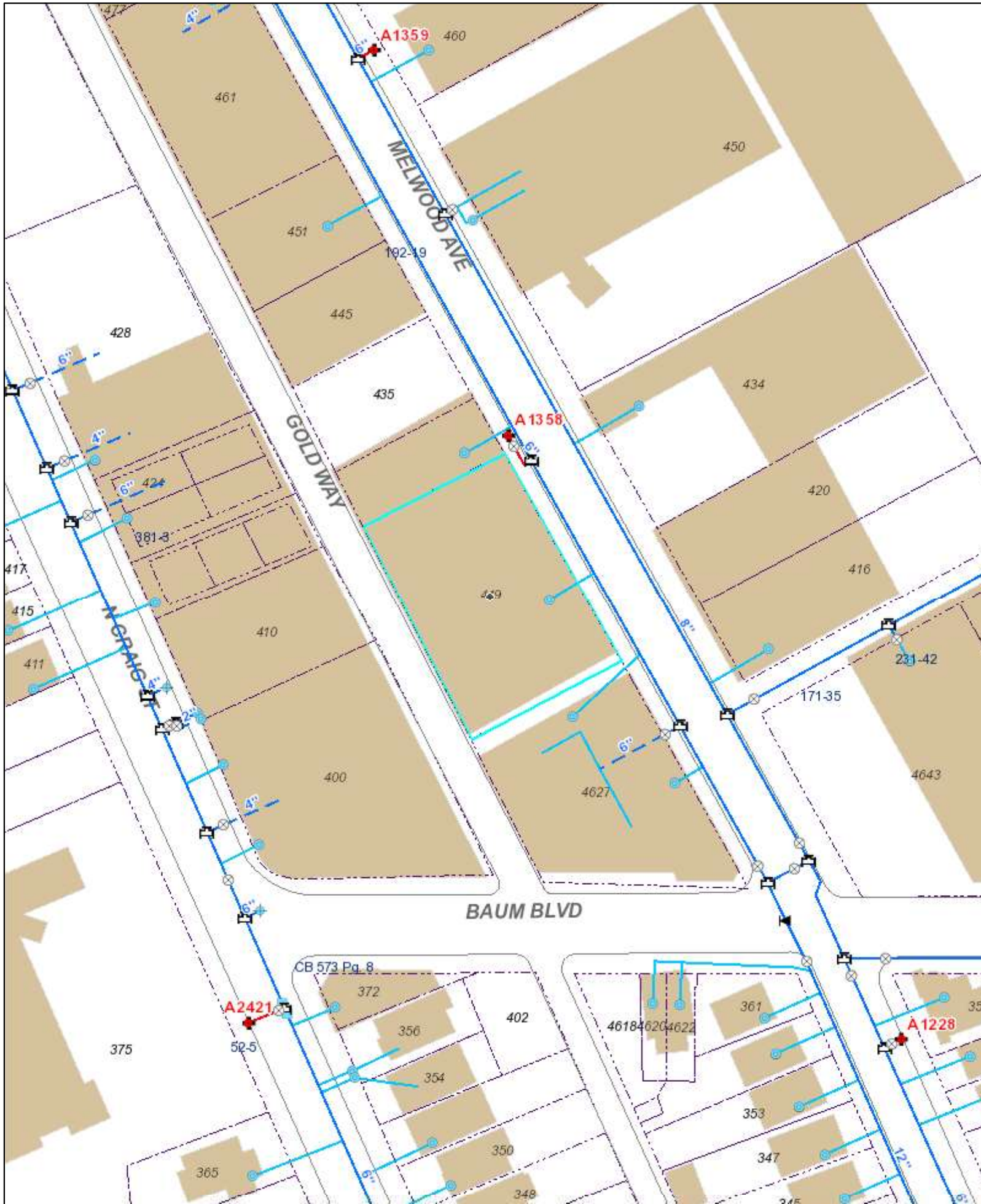


EXHIBIT D.

Project Narrative and Flow Map

Project Narrative
The Julian
419 Melwood Ave, 5th Ward, City of Pittsburgh

The proposed The Julian project consists of the construction of a 10-story apartment building with 148 apartment units of varying size on floors 2 - 10 and a parking garage on the 1st floor and one level below ground. The building will be constructed at 419 Melwood Ave where an existing warehouse facility is located. The property of interest is Lot 135 of Block 26-S in the 5th Ward of the City of Pittsburgh and is currently owned by Hudson Melwood LP per the Allegheny County GIS viewer. The project area encompasses the entire 0.42 acre lot.

The project site will experience an increase in water consumption and sanitary flow due to the construction of the apartment building where the warehouse currently exists. An existing water bill spreadsheet was obtained from PWSA for the warehouse and used to determine the existing peak water consumption and sewage flow for the site within the past 5 years. A total peak consumption/flow of 82 GPD exists for this warehouse.

The proposed floor plans and peak flows provided in Table 2-1 of PWSA's Developers Manual were utilized to determine the proposed peak sewage flow and water consumption for the apartment building. In the proposed floor plans, the apartment will contain 97 one-bedroom units and 51 two-bedroom units. At the request of the developer, four additional two-bedroom units were included as contingency, totaling 55 two-bedroom units, in the sewage flow calculations. A total peak flow of 31,050 GPD is proposed for The Julian. Removing the existing flow from the warehouse results in a peak net flow of 30,968 GPD (77.42 EDUs).

This project will require the termination of existing, active taps as well as the construction of a new domestic water service lateral, fire service line, sanitary sewer laterals, storm sewer lateral, and the relocation of an

existing 15” VCP PWSA owned combination gravity sewer that currently runs beneath the warehouse. Based off the pre-development meeting held with PWSA, it has been determined that the 15” VCP sewer will need to be relocated, if feasible. This sewer relocation will be completed using PWSA’s “Construction of Public Facilities” procedure. All water service lateral connections required for the apartment building will be made using the existing public facilities located in Melwood Ave. The storm and sanitary lateral connections may be made into the relocated 15” PWSA owned sewer. Associated tap-in plans for the private water, storm, and sanitary connections will be submitted to PWSA for review and approval.

The sanitary sewer in Melwood Ave is an 18” PWSA owned RCP combination gravity sewer and connects into the Allegheny River Interceptor Sewer A-22 and then to ALCOSAN’s treatment plant where the sewage receives final treatment. Domestic water and fire service will be provided off the existing 8” PWSA owned water main located in Melwood Ave.

Flow Calculation Summary

Present Flows – Flow Monitoring

One month of flow monitoring was completed by Drnach Environmental in MH026S011 to determine the existing average and peak flows present in the sewer of interest. Flow monitoring began on 6/5/21 and ended on 7/4/21. **Analysis of the received data reports an existing average flow of 0.037 MGD and an peak hourly flow of 2.686 MGD.**

Design Capacity

The existing sewer’s average and peak hydraulic capacity were calculated by determining the existing slope of the sewer of interest using as-built information and the 3RWW Atlas between the monitoring manhole (MH026S011) and the next upstream manhole (MH026M001). The minimum slope of this sewer per the 1913 sewer as-built plan is 0.53%. The sewer was analyzed under full flow conditions, and

a peaking factor of 3.5 (combined sewer) was applied to obtain the peak hydraulic capacity per the PWSA Developer's Manual. **The average hydraulic capacity was calculated to be 1.223 MGD and the peak hydraulic capacity was calculated to be 4.281 MGD.**

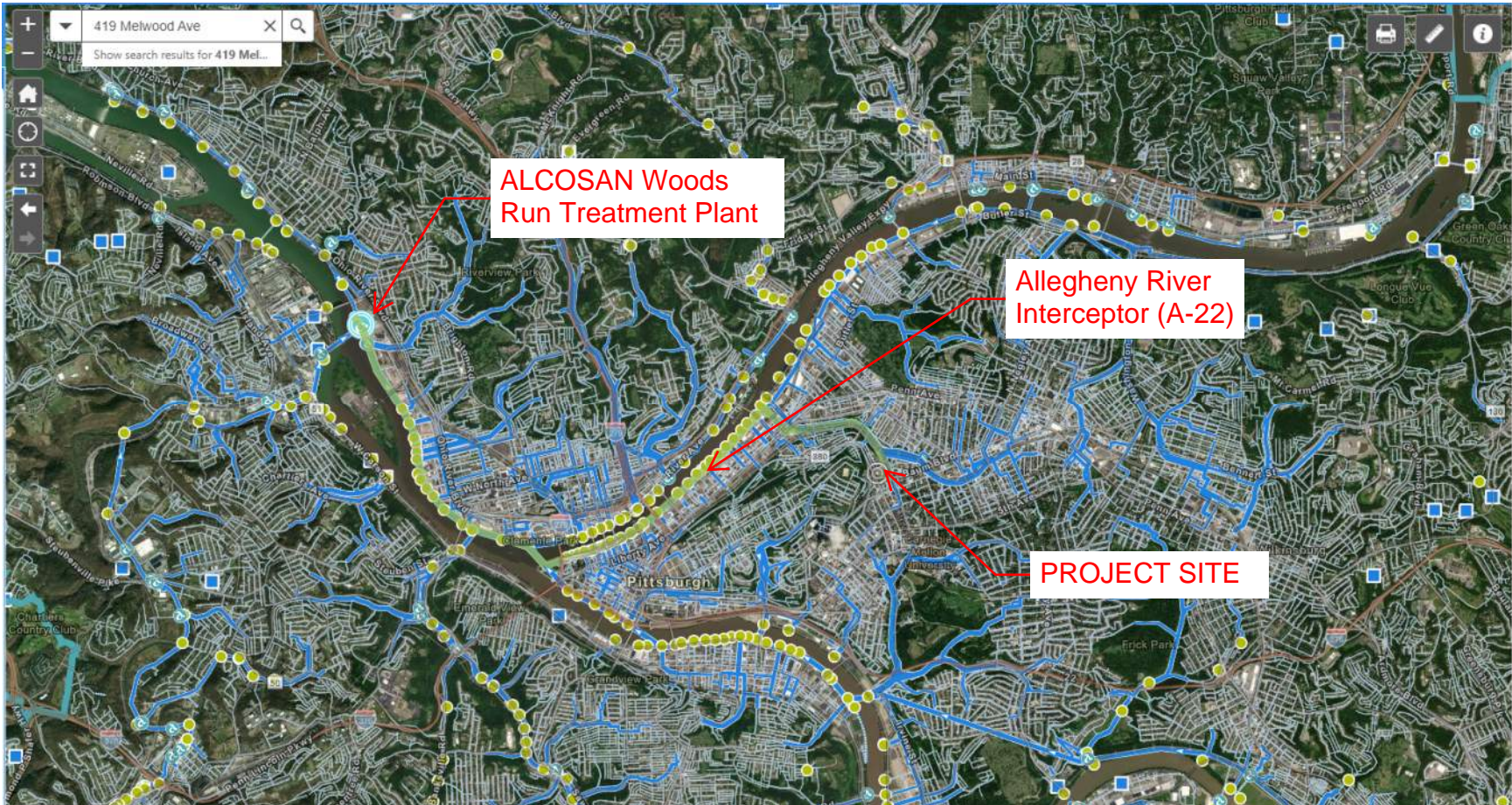
5-Year Projected Flow

Using the equations in the PWSA Developer's Manual, the net flow, 30,980 GPD, was added to the present average and peak flows to determine the projected flow in 5 years. **The projected average flow is estimated to be 0.815 MGD and the projected peak flow is estimated to be 2.853 MGD.** Since the 5-year flows are less than the calculated design capacity of the sewer, the additional flow due to the construction of The Julian will not overload the sewer.

Sewer Mapping

The Julian

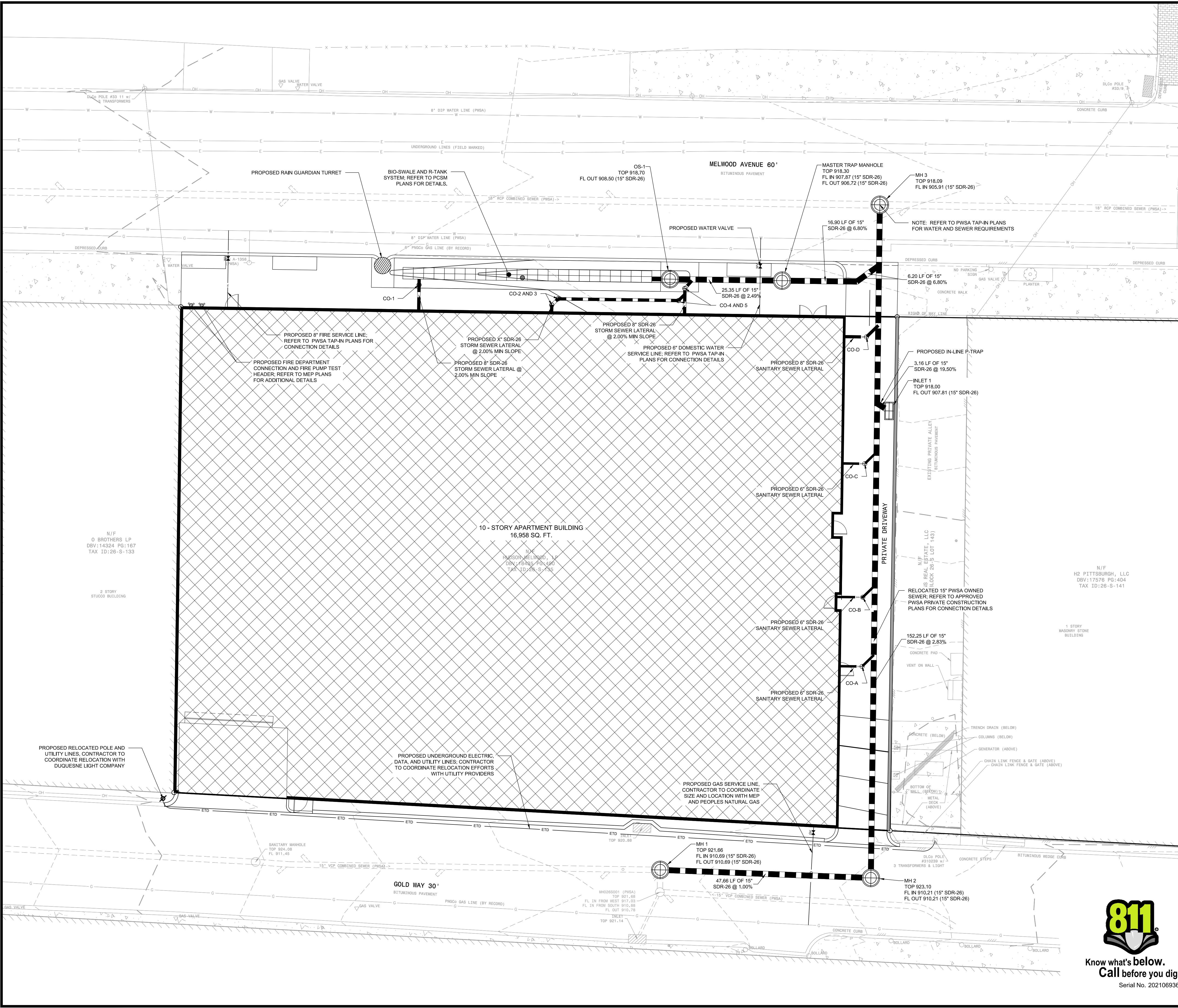
419 Melwood Avenue, 5th Ward, City of Pittsburgh



Source: 3RWW Sewer Atlas

EXHIBIT E.

Plot Plan



UTILITY LEGEND

SAN	PROPOSED SANITARY LINE
SS	PROPOSED STORM LINE
WL	PROPOSED WATER LINE
ETD	PROPOSED ELECTRIC, TELEPHONE, & DATA LINE
GAS	PROPOSED GAS LINE
U	PROPOSED UTILITY POLE
FD	PROPOSED FIRE DEPARTMENT CONNECTION OR FIRE PUMP TEST HEADER (AS LABELED)
GV	PROPOSED GAS VALVE
WV	PROPOSED WATER VALVE

UTILITY ABBREVIATIONS

MH	MANHOLE
OS	OUTLET STRUCTURE
CO	CLEANOUT

- UTILITY PLAN NOTES:**
- THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSIDERED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
 - BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL CONTACT PENNSYLVANIA ONE CALL SYSTEMS, INC. AT 811. THE LOCATION OF UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF PROPOSED UTILITIES CONSTRUCTION.
 - UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
 - ALL CABLE, ELECTRIC, GAS, STORM AND SANITARY SEWER, TELEPHONE AND WATER SERVICE LINE TRENCHES LOCATED UNDER PROPOSED PAVEMENT AREAS SHALL BE BACKFILLED WITH 100% STONE MATERIAL TO THE PROPOSED PAVING SECTION IN ACCORDANCE WITH THE DETAIL SHOWN ON THE CONSTRUCTION DETAIL SHEETS.
 - THERE SHALL BE NO CONSTRUCTION OF ELECTRIC TRANSFORMERS, TELEPHONE OR CABLE JUNCTION BOXES, GAS METERS OR SIMILAR DEVICES PLACED OVER ANY OTHER UNDERGROUND UTILITY.
 - CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES AND INLETS.
 - AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
 - ALL STORM PIPE SHALL BE HDPE, SMOOTH INTERIOR, CORRUGATED POLYETHYLENE PIPE UNLESS OTHERWISE NOTED. ALL STORM SEWER CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH PENNDOT SPECIFICATIONS. ALL JOINTS SHALL BE WATERTIGHT.
 - THE CONTRACTOR SHALL ASSURE THAT THERE IS POSITIVE DRAINAGE TO THE EXISTING INLETS UPON PLACEMENT OF NEW PAVEMENT.
 - CONTRACTOR TO COORDINATE WITH THE BUILDING PLUMBING AND SITE ELECTRICAL PLANS TO ASSURE ACCURACY OF THE UTILITY CONNECTIONS TO THE BUILDING.
 - CONDUIT LOCATIONS TO SITE LIGHT POLES TO BE COORDINATED WITH THE SITE ELECTRICAL PLAN.
 - THE ALLEGHENY COUNTY HEALTH DEPARTMENT SHALL BE CONTACTED FOR INSPECTION OF ALL PRIVATE SANITARY SEWERS, WATER LINES, AND STORM SEWER LINES WHERE THEY CONNECT TO A PUBLIC SEWER SYSTEM. ALL WATER AND SEWER LINES MUST BE INSTALLED BY A REGISTERED PLUMBER.
 - THE ROOF COLLECTOR SYSTEM SHALL BE TRAPPED PRIOR TO CONNECTING TO THE SITE STORM SEWER SYSTEM.
 - THE WATERLINE SHALL HAVE A MINIMUM OF 48" OF COVER AND BE AT LEAST 1 FOOT ABOVE THE SANITARY SEWER IF WITHIN 10 FEET OF THE HORIZONTAL DISTANCE OF THE SEWER.

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

REVISION RECORD

Date	No	By	DD	DD	SET
2021-06-23	01				ISSUED FOR BID
2021-07-09	02				
	03				
	04				
	05				
	06				
	07				
	08				

THE JULIAN, A HUDSON PROPERTY
 419 MELWOOD AVENUE
 PITTSBURGH, PA 15213
HUDSON MELWOOD, LP
 2450 SHENANGO VALLEY FREEWAY
 HERMITAGE, PA 16148

UTILITY PLAN
 Project Number: C-41184-0001
 Drawing Scale: 1" = 10'
 Date Issued: JULY 2021
 Index Number: -
 Drawn By: KRH
 Checked By: MGA
 Project Manager: MGA
C300

811
 Know what's below.
 Call before you dig.
 Serial No. 20210693638

GRAPHIC SCALE
 0 5 10 20 40
 (IN FEET)
 1 inch = 10 ft.

P:\Bim & Fileman\Projects\41000-41184 The Julian\001 C:\DWG\02-Sheet\C300 UTILITY PLAN.dwg
 18/07/2021 10:53 AM Kelly R. Harrington, E.L.T.
 Save Date: 09/02/2021 12:58 PM

EXHIBIT F.

Flow Calculations (Signed and Sealed)

Anticipated Sewage Flow Calculations

The Julian
419 Melwood Ave, 5th Ward, City of Pittsburgh

Peak Existing Flow

Average consumption / year = 12 Tgal = 12,000 gal / year

(Refer to enclosed existing water bill spreadsheets)

Average daily consumption = (12,000 gal / year) x (1 year / 365 days) = 32.9 GPD

Used 2.5 multiplier to obtain peak flow/consumption

Peak Consumption = (32.9 GPD) x (2.5 multiplier)

Peak Consumption = 82.3 GPD \approx 82 GPD

Peak Proposed Flow

Unit Summary

1 bedroom apartments:

Micro = 9 units

Studio = 8 units

1 bedroom = 80 units

Total = 97 units

2 bedroom apartments:

2 bedroom = 51 units

2 bedroom contingency* = 4 units

Total = 55 units

*4 additional 2-bedroom units have been included as a contingency at the request of the developer.

Water Use and Sanitary Sewage Flow Estimate

Flows from Table 1 of Section 3 within the PWSA Developer's Manual:

1 bedroom = 150 GPD/unit

2 bedrooms = 300 GPD/unit

Peak Flow Calculation:

$[97 \text{ units} \times (150 \text{ GPD/unit})] + [55 \text{ units} \times (300 \text{ GPD/unit})] =$
31,050 GPD

Net Sewage Flow / Water Consumption

Net Sewage Flow = Peak Proposed Flow – Peak Existing Flow

Net Sewage Flow = 31,050 GPD – 82 GPD

Net Sewage Flow = 30,968 GPD (77.42 EDUs)

Net Sewage Flow = Net Water Usage

Net Water Usage = 30,968 GPD (77.42 EDUs)

The Julian		
Sewage Capacity Calculations		
Pipe Diameter (per Flow Monitoring Report) =	18	in
Upstream Invert Elevation =	N/A	
Downstream Invert Elevation =	N/A	
Pipe Length =	N/A	ft
Slope (per 1913 as-built) =	0.53	%
Mannings n =	0.015	(VCP)
Design Capacity		
Sewer Type (Combined/Separate)	Combined	
Peaking Factor	3.5	
Peak Hydraulic Capacity (Using Mannings Equation full-flow)	6.625	cfs
	4,281,850	GPD
Average Hydraulic Capacity (Peak Capacity divided by Peaking Factor)	1,223,386	GPD
Present Flows - MH026S011		
Present Average Flows (Flow data, refer to "Data Analysis" spreadsheet)	0.037	MGD
	37,000	GPD
Present Peak Flows (Flow data, refer to "Data Analysis" spreadsheet)	2.686	MGD
	2,686,000	GPD
Project Flow		
Project Flow	30,968	GPD
Projected Flows		
Projected Peak [(Present Peak Flow + Project Flow) x 1.05]	2,852,816	*GPD
Projected Average (Projected Peak Flow divided by Peaking Factor)	815,090	*GPD

*Projected Flows are less than the Design Capacity

	Input
	Output



MH026S011

June 5, 2021 through July 4, 2021

Line Size:	18 "	Manhole Depth:	0 "			
Date	Average Daily Flow (MGD)	Minimum Hourly Flow (Time)	Minimum Hourly Flow (MGD)	Maximum Hourly Flow (Time)	Maximum Hourly Flow (MGD)	Total 24 hr. Precip. (inches)

06/05/2021	0.008	3:00 AM	0.005	12:00 PM	0.015	0.00
06/06/2021	0.012	2:00 AM	0.005	7:00 PM	0.028	0.00
06/07/2021	0.031	2:00 AM	0.007	6:00 PM	0.369	0.03
06/08/2021	0.017	2:00 AM	0.007	10:00 AM	0.025	0.00
06/09/2021	0.049	3:00 AM	0.013	4:00 PM	0.356	0.01
06/10/2021	0.016	11:00 PM	0.007	12:00 AM	0.027	0.31
06/11/2021	0.011	2:00 AM	0.006	9:00 AM	0.017	0.00
06/12/2021	0.153	1:00 AM	0.005	6:00 PM	2.686	0.00
06/13/2021	0.024	5:00 AM	0.013	3:00 PM	0.126	0.26
06/14/2021	0.017	12:00 AM	0.011	7:00 AM	0.024	0.19
06/15/2021	0.014	11:00 PM	0.009	11:00 AM	0.022	0.00
06/16/2021	0.014	4:00 AM	0.007	11:00 AM	0.024	0.00
06/17/2021	0.013	4:00 AM	0.009	9:00 AM	0.021	0.00
06/18/2021	0.060	3:00 AM	0.008	5:00 AM	0.992	0.00
06/19/2021	0.011	5:00 AM	0.007	10:00 AM	0.019	0.12
06/20/2021	0.162	6:00 AM	0.005	4:00 PM	1.276	0.00
06/21/2021	0.036	11:00 PM	0.008	5:00 AM	0.072	0.48
06/22/2021	0.013	2:00 AM	0.004	4:00 PM	0.023	0.52
06/23/2021	0.011	1:00 AM	0.006	10:00 AM	0.015	0.00
06/24/2021	0.010	5:00 AM	0.004	11:00 AM	0.016	0.00
06/25/2021	0.010	6:00 AM	0.005	6:00 PM	0.024	0.00
06/26/2021	0.009	6:00 AM	0.006	10:00 AM	0.016	0.00
06/27/2021	0.012	4:00 AM	0.006	11:00 AM	0.021	0.00
06/28/2021	0.012	11:00 PM	0.006	3:00 PM	0.026	0.00
06/29/2021	0.230	1:00 AM	0.006	7:00 PM	1.315	0.00
06/30/2021	0.090	4:00 PM	0.016	7:00 AM	0.494	0.39
07/01/2021	0.024	7:00 PM	0.009	11:00 AM	0.041	0.79
07/02/2021	0.016	2:00 AM	0.011	12:00 PM	0.027	0.02
07/03/2021	0.016	1:00 AM	0.013	6:00 AM	0.024	0.00
07/04/2021	0.014	9:00 PM	0.007	2:00 PM	0.026	0.00

Average	0.037	0.008	0.272
---------	-------	-------	-------

Minimum	0.008	0.004	0.015
Maximum	0.230	0.016	2.686

Total Flow 1.115 MG

3.12 Total

EXISTING AVERAGE FLOW

EXISTING HOURLY PEAK FLOW

Channel Report

Sewer Design Capacity - MH026M001/MH026S011

Circular

Diameter (ft) = 1.50

Invert Elev (ft) = 900.40

Slope (%) = 0.53

N-Value = 0.015

Calculations

Compute by: Known Depth

Known Depth (ft) = 1.50 ← FULL FLOW

Highlighted

Depth (ft) = 1.50

Q (cfs) = 6.625

Area (sqft) = 1.77

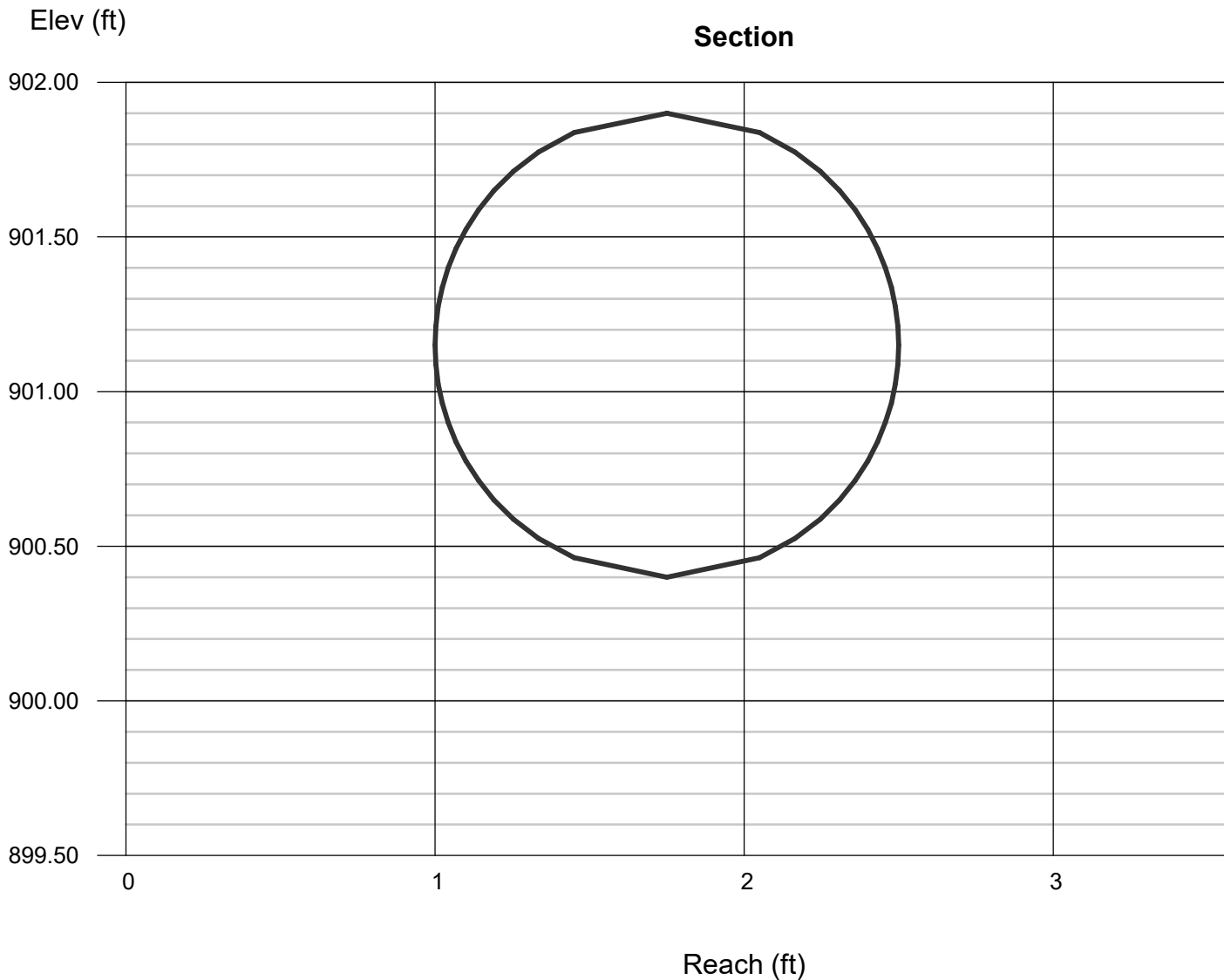
Velocity (ft/s) = 3.75

Wetted Perim (ft) = 4.71

Crit Depth, Yc (ft) = 1.00

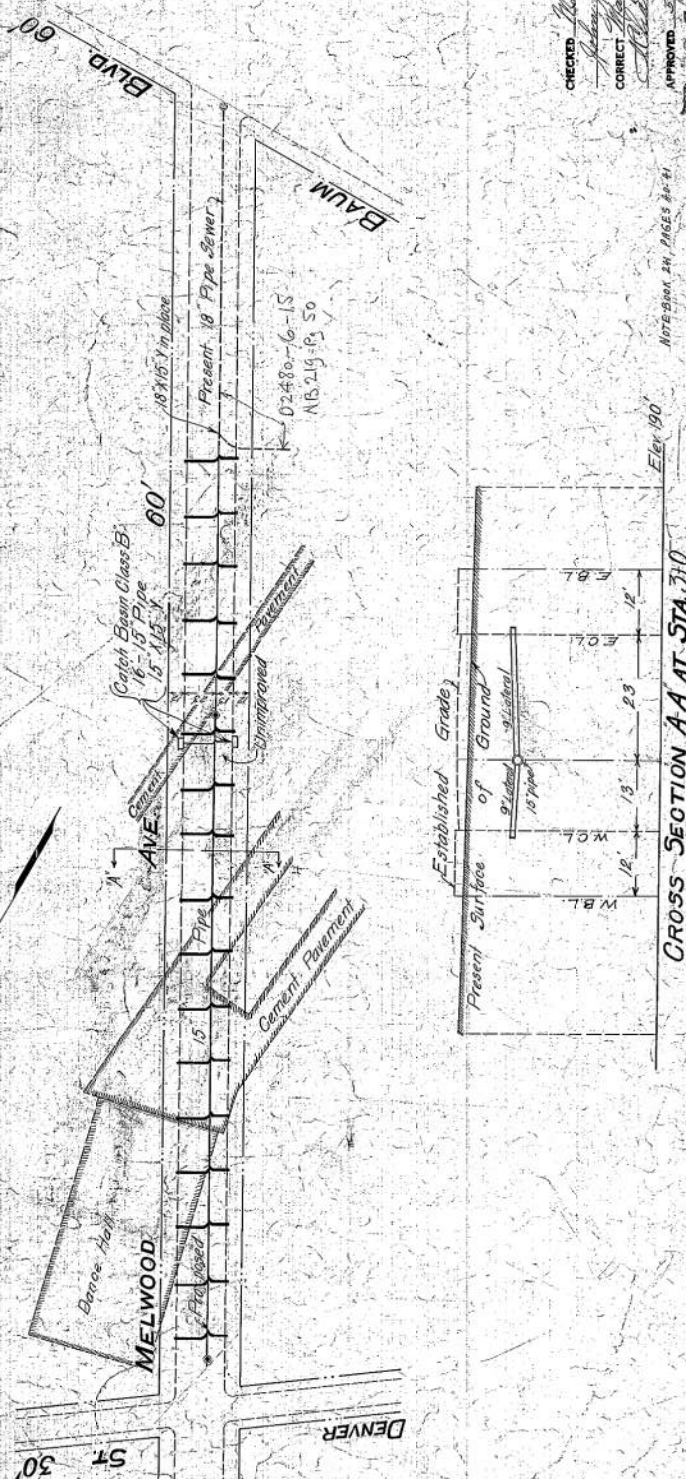
Top Width (ft) = 0.00

EGL (ft) = 1.72

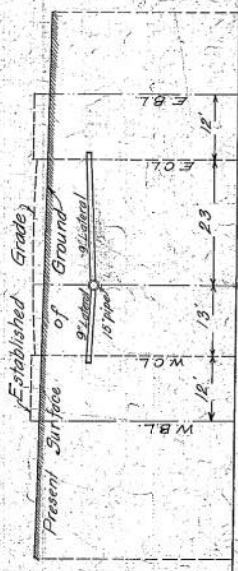




PROFILE OF SEWER



CROSS SECTION A-A AT STA 310



ESTIMATE

- ① 674 Linear ft. of Combined 15" Pipe Sewer including 34'-10" x 19'-1/4" Manholes
- ② 612 Linear ft. of 9" Pipe Sewer-house Laterals
- ③ 2 Manholes
- ④ 1-Additional 15" x 15" Y connection
- ⑤ 1-Additional 15" x 19" Y connection
- ⑥ 5-Cu yds of additional excavation
- ⑦ 2-Cu yds of additional concrete in place
- ⑧ 1000-Ft. B.M. of Hamlock lumber in place
- ⑨ 2-0.75 cu. Basins Class B
- ⑩ 324 linear ft. of 16" Pipe Sewer for C.B. including specials in place

NOTES

The price bid for item #1 shall include making connection with present 16" pipe sewer on Melwood Street.
 All work to be done in accordance with Standards and Specifications for Construction of Sewers and conform to the requirements for Combined Sewers.

The 9" pipe sewer house laterals shall extend from main sewer to points 1ft. inside of curb lines and rise 1/8 inch per ft. Each lateral to be connected to the 15" x 19" Y with 9" x 1/8 bend as shown on page 19 of the Standards for Street and Sewer Construction the same to be included in price bid for item #2

NBS 241 189 40-41

WORK DONE BY PRIVATE CONTRACT
 CITY OF PITTSBURGH
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF CONSTRUCTION

15 INCH PIPE SEWER
MELWOOD AVE.
 FROM PT 20 SO OF DENVER
 ST. TO PRES. SEWER
 ON MELWOOD AVE

CHECKED May 23, 1919
 Approved
 CORRECT
 APPROVED
 APPROVED

NOTE: BOOK 241, PAGES 38-41

EXHIBIT G.

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



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

Code No.

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

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

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

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

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

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

A. PROJECT INFORMATION (See Section A of instructions)

- Project Name The Julian
- Brief Project Description Development of a 148 multi-unit apartment complex with an indoor parking garage.

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

Municipality Name	County	City	Boro	Twp
Pittsburgh	Allegheny	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
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 Street, Suite 4

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

Area Code + Phone + Ext.	FAX (optional)	Email (optional)
412-255-2516		

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

The Julian

Site Location Line 1
419 Melwood Avenue

Site Location Line 2

Site Location Last Line -- City	State	ZIP+4	Latitude	Longitude
Pittsburgh	PA	15213	40°27'16.68"	79°57'09.94"

Detailed Written Directions to Site From Bigelow Boulevard, continue onto N. Crag Street. Turn left onto Baum Boulevard and then turn left onto Melwood Avenue. The project site will be on the left.

Description of Site Development of a 148 multi-unit apartment complex with an indoor parking garage.

Site Contact (Developer/Owner)

Last Name	First Name	MI	Suffix	Phone	Ext.
Coey	Kelley			724-981-1204	106
Site Contact Title		Site Contact Firm (if none, leave blank)			
Development Coordinator		Hudson Melwood, LP			
FAX		Email			
724-981-4810		kcoey@hudsoncompanies.net			
Mailing Address Line 1		Mailing Address Line 2			
2450 Shenango Valley Freeway					
Mailing Address Last Line -- City		State	ZIP+4		
Hermitage		PA	16148		

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

Last Name	First Name	MI	Suffix
Albright	Michael	G	P.E.
Title		Consulting Firm Name	
Project Manager		The Gateway Engineers, Inc.	
Mailing Address Line 1		Mailing Address Line 2	
100 McMorris Road			
Address Last Line -- City		State	ZIP+4
Pittsburgh		PA	15205
Country		U.S.	
Email	Area Code + Phone	Ext.	Area Code + FAX
malbright@gatewayengineers.com	412-921-4030	117	

E. AVAILABILITY OF DRINKING WATER SUPPLY

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

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

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

Name of water company: Pittsburgh Water and Sewer Authority (PWSA)

F. PROJECT NARRATIVE (See Section F of instructions)

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

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

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

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

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

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

Clean Streams Law Permit Number _____

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 77.4

Connections 5 (1 storm, 4 sanitary)

Name of:

existing collection or conveyance system Melwood Ave - 18" VCP

owner PWSA

existing interceptor Allegheny River Interceptor (A-22)

owner ALCOSAN

2. WASTEWATER TREATMENT FACILITY

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

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

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

Name of existing facility ALCOSAN

NPDES Permit Number for existing facility PA0025984

Clean Streams Law Permit Number _____

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

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

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

Name of Permittee Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joseph R. Feder Jr

Agent Signature Joseph R. Feder Jr Date 9-10-21

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

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

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

4. WETLAND PROTECTION

YES NO

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

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

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

6. HISTORIC PRESERVATION ACT

YES NO

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

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

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

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

Applicant or Consultant Initials _____.

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

- An alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions and is attached to this component.
The applicant may choose to include additional information beyond that required by Section H of the attached instructions.

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

1. Waters designated for Special Protection

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

2. Pennsylvania Waters Designated As Impaired

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

3. Interstate and International Waters

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

4. Tributaries To The Chesapeake Bay

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

Name of Permittee Agency, Authority, Municipality _____

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

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

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

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

1. Project Flows 30968 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	1223386	4281850	37000	2686000	815090	2852816
Conveyance		31,700,000	9,810,000	10,900,000	8,960,000	10,970,000
Treatment	250,000,000	250,000,000	190,200,000	250,000,000	219,021,000	295,000,000

3. Collection and Conveyance Facilities

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

YES NO

- a. YES NO This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA _____
 Name of Responsible Agent Barry King, PE, PMP
 Agent Signature [Signature] Date 8/27/2021

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joseph R Fedor JR

Agent Signature Joseph R Fedor Jr

Date 9-10-21

4. Treatment Facility

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

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joseph R Fedor Jr

Agent Signature Joseph R Fedor Jr

Date 9-10-21

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

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

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

1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

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

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

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

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

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

O. SEWAGE MANAGEMENT (See Section O of instructions)

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

Yes No

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

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

2. Project Flows _____ gpd

Yes No

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

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

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

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

Yes No

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

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

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

- b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

- c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

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

Yes No

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

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

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

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

(For completion by the municipality)

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

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

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

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

Yes No

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

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

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

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

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

Michael G. Albright	<i>Michael G. Albright</i>
Name (Print)	Signature
Project Manager	7-20-21
Title	Date
100 McMorris Road, Pittsburgh, PA 15205	412-921-4030
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 \$3871 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.

$$\#77.42 \quad \text{Lots (or EDUs)} \times \$50.00 = \$ 3,871$$

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:

$$\# \quad \text{Lots (or EDUs)} \times \$35.00 = \$$$

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)

EXHIBIT H.

**Sewage Facilities Planning Module – Component 3 – Sewage Collection
and Treatment Facilities – PWSA Approval Documents**

8/30/2021

Shannon L. McCullough, GIP
The Gateway Engineers, Inc.
100 Morris Road
Pittsburgh PA 15205

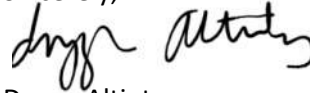
Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: The Julian – 419 Melwood Ave. (Project)
PWSA Project No.: 20014.60

Dear Shannon:

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 x8899 or daltintas@pgh2o.com.

Sincerely,



Duygu Altintas
Associate Project Manager

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)

To: Barry King, PE, PMP - Director of Engineering and Construction

From: Duygu Altintas

Cc: Robert Herring, PE, PMP; e-Builder

Date: 08/27/2021

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

Chapter 94 Consistency Determination

Project Name: The Julian (Project)

Project Address: 419 Melwood Ave.

PWSA Project Number: 20014.60

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.

Enclosures

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 30968 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	1223386	4281850	37000	2686000	815090	2852816
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. YES NO This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA _____

Name of Responsible Agent Barry King, PE, PMP _____

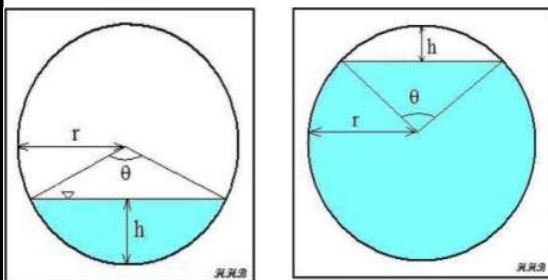
Agent Signature  Date 8/27/2021

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

PROJECT NAME: 419 Melwood Ave - The Julian
PWSA PROJECT NUMBER: 20014.60
PWSA REVIEWER: Duygu Altintas
DATE: August 27, 2021

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

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

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

$$\theta = 2 \times \cos^{-1} \left(\frac{r-h}{r} \right)$$

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

OR

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

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

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

Section B: Data for Calculations

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

Proposed Project Flows		
Variable	Value	Units
Q _p	30,610	gpd

Variable	Value	Units
Material	VCP	
n	0.015	unitless
S	0.005	ft/ft
h	0.020	ft
D	1.50	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}	1,227,167	gpd

Design Capacity, Peak		
Variable	Value	Unit
D	1.500	ft
r	0.750	ft
A	1.767	ft ²
P	4.712	ft
R	0.375	ft
Q _{d, peak}	7	cfs
Q _{d, peak}	4,295,084	gpd

Section D: Calculations for Present Flows

Variable	Description	Definition
Q _{ex, avg}	Present Flows, Average	determined via flow monitoring data
Q _{ex, peak}	Present Flows, Peak	determined via flow monitoring data

Present Flows, Average		
Variable	Value	Unit
Q _{ex, avg}	37,000	gpd

Present Flows, Peak		
Variable	Value	Unit
Q _{ex, peak}	2,686,000	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}	814,983	gpd
Q _{proj, peak}	2,852,441	gpd

Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
Q _{d, avg}	1,227,167	1,223,386	3,781	0%
Q _{d, peak}	4,295,084	4,281,850	13,234	0%
Q _{ex, avg}	37,000	37,000	0	0%
Q _{ex, peak}	2,686,000	2,686,000	0	0%
Q _{proj, avg}	814,983	815,090	-107	0%
Q _{proj, peak}	2,852,441	2,852,816	-376	0%

EXHIBIT I.

**Sewage Facilities Planning Module – Component 3 – Sewage Collection
and Treatment Facilities – ALCOSAN Approval Letter**



September 10, 2021

Members of the Board

Corey O'Connor
Chair Person

Harry Readshaw

Sylvia C. Wilson

Shannah Tharp-Gilliam, Ph.D.

Jack Shea

John Weinstein

Arletta Scott Williams
Executive Director

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

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

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

Karen Fantoni, CPA, CGMA
*Director
Finance & Administration*

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

Jeanne K. Clark
*Director
Governmental Affairs*

Joseph Vallarian
*Director
Communications*

Kelley R. Harrington
Gateway Engineers
100 McMorris Road
Pittsburgh, PA 15205

**Re: The Julian
City of Pittsburgh – Allegheny County
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure A-22-00**

Dear Ms. Harrington:

We have reviewed the Component 3 Planning Module for the referenced project to be located at 419 Melwood Avenue in the City of Pittsburgh. The project will generate a peak flow of 31,050 gpd in the ALCOSAN Allegheny River Interceptor and Woods Run Treatment Plant.

The capacity at the A-22-00 Regulator Structure is approximately 31.2 MGD. The estimated peak dry weather flow is approximately 10.8 MGD. Dry weather capacity exists for this connection. However, the Allegheny River Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated during wet weather periods. This limitation will be addressed as ALCOSAN implements its Clean Water Plan.

ALCOSAN requests that this letter be made part of the planning module submission. The signed Component 3 Planning Module is attached. 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 412-734-8735.

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Joe Fedor

Attachment

cc: C. Dean (w/o attachment) B. King/PWSA (w/o attachment)
D. Thornton (w/o attachment) Thomas Flanagan/PADEP (w/o attachment)
M. Lichte (w/o attachment) Fred Fields/ACHD (w/o attachment)

EXHIBIT J.

PWSA Tap Allocation Letter

6/15/2021

Mr. Thomas Flanagan
PA Department of Environmental Protection
Clean Water Program
400 Waterfront Drive
Pittsburgh, PA 15222

Subject: Tap Allocation Authorization Letter

Dear Mr. Flanagan:

Please be advised that the Pittsburgh Water and Sewer Authority (PWSA) authorizes the tap allocations associated with the following Project:

Project Name:	The Julian
Project Address:	419 Melwood Ave Pittsburgh PA 15213
Net Flow, gpd:	30,968
EDU's, 400gpd/EDU:	77.4

Our review is 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 x8899 or daltintas@pgh2o.com.

Sincerely,



Duygu Altintas
Associate Project Manager

cc: Barry King, P.E. – PWSA (via email)
Kate Mechler, P.E. – PWSA (via email)
Robert Herring, P.E. – PWSA (via email)
Kelley Harrington - Applicant (via email)
Regis Ryan – DEP (via email)
eBuilder – Filing System (via email)

EXHIBIT K.

**Pennsylvania Natural Diversity Inventory (PNDI)
Environmental Review**

1. PROJECT INFORMATION

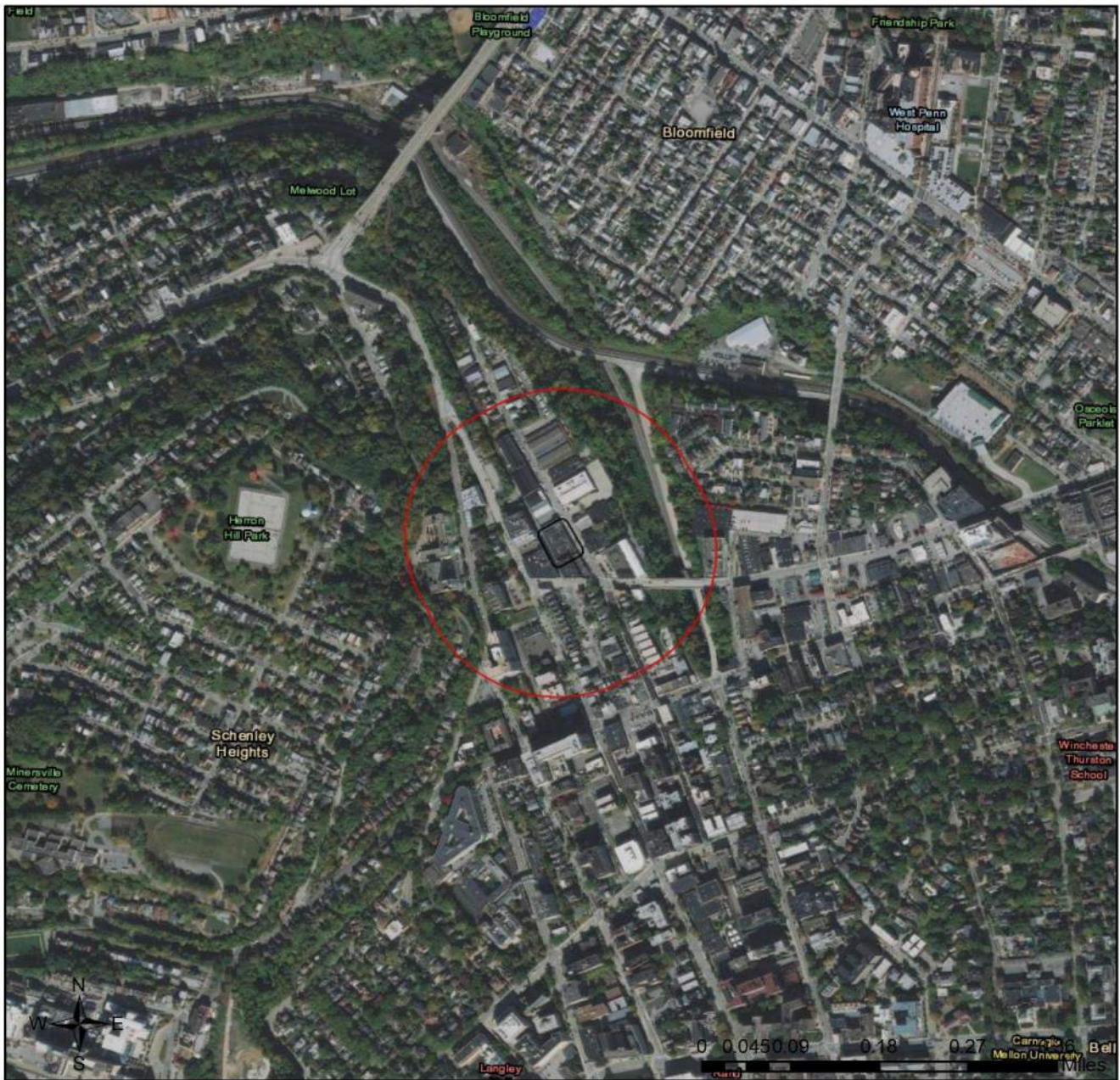
Project Name: **The Julian**
Date of Review: **4/21/2021 11:44:58 AM**
Project Category: **Development, Other**
Project Area: **0.91 acres**
County(s): **Allegheny**
Township/Municipality(s): **PITTSBURGH**
ZIP Code:
Quadrangle Name(s): **PITTSBURGH EAST**
Watersheds HUC 8: **Lower Allegheny**
Watersheds HUC 12: **Allegheny River-Ohio River**
Decimal Degrees: **40.454629, -79.952749**
Degrees Minutes Seconds: **40° 27' 16.6645" N, 79° 57' 9.8977" W**



2. SEARCH RESULTS

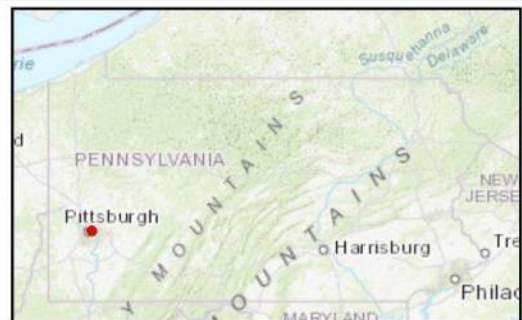
Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No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

The Julian

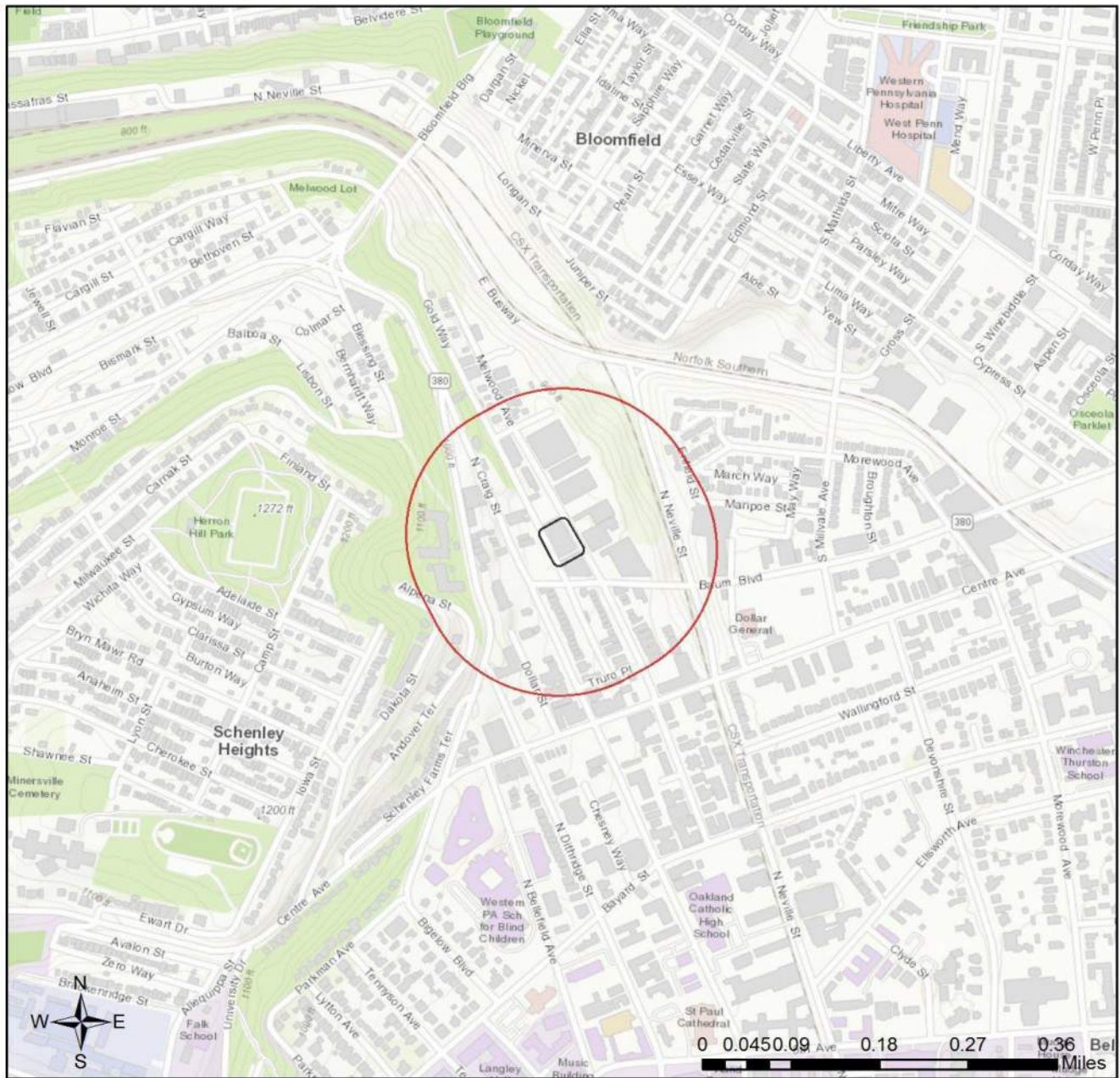


-  Project Boundary
-  Buffered Project Boundary



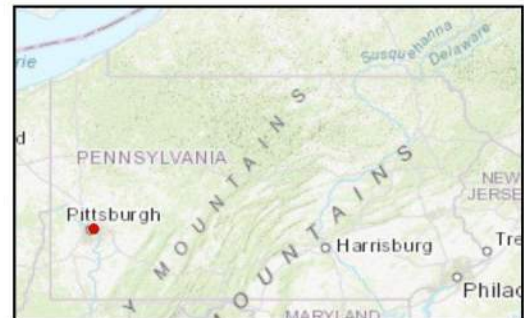
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,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

The Julian



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, Garmin, Intemap, 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

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@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 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: Michael G. Albright, P.E.
Company/Business Name: The Gateway Engineers, Inc.
Address: 100 McMorris Road
City, State, Zip: Pittsburgh, PA 15205
Phone: (412) 921-4030 Fax: (412) 921-9960
Email: malbright@gatewayengineers.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.

Michael G. Albright
applicant/project proponent signature

4/21/2021
date

EXHIBIT L.

Alternatives Analysis

Alternatives Analysis
The Julian
419 Melwood Ave, 5th Ward, City of Pittsburgh

The proposed short-term and long-term ultimate method of sanitary sewage conveyance and treatment of the total project flow of 31,050 GPD (net flow of 30,968 GPD) from The Julian multi-unit residential apartment building will involve the use of adequately designed sanitary sewer laterals, owned and maintained by the property owner, connecting into the PWSA combination sewer system located in Melwood Avenue. This PWSA sewer system connects into ALCOSAN's Allegheny River Interceptor Sewer at the A-22 Regulator Structure and sewage flows via gravity to ALCOSAN's Woods Run Treatment Plant.

The project site and adjacent properties are located within the Urban Industrial (UI) Mixed Use Zoning District within the City of Pittsburgh. The two adjacent establishments, one warehouse and one auto sales and service facility, utilize the existing PWSA sewer system as their ultimate sewage disposal conveyance system and the Woods Run Treatment Plant as their ultimate sewage treatment method.

There are no feasible sewage disposal alternatives because access to the public sewer system is available, and the proposed building and a required PWSA easement encompass the entire property. If public sewers were not available, sewage could be temporarily stored using on-site holding tanks and trucked to an off-site facility; however, this alternative is not permissible as a long term disposal solution according to 25 Pa. Code §71.63(c) because the proposed flow exceeds 800 GPD. Additionally, an on-lot treatment system cannot be utilized because there is no available area to install a system that would be able to treat sewage generated by the 148 apartments. Finally, there are no streams located on or near the project site; therefore, a stream discharge system cannot be used to dispose of the apartment building's sewage.

EXHIBIT M.
**Sewage Facilities Planning Module – Component 4A – Municipal
Planning Agency Review**



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

The Julian 419 Melwood Ave.

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

1. Date plan received by municipal planning agency September 16, 20212. Date review completed by agency September 17, 2021

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

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

SECTION C. AGENCY REVIEW (continued)

- | Yes | No | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. Is this proposal consistent with the ordinance?
If no, describe the inconsistencies _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. Is this plan consistent with the municipal Official Sewage Facilities Plan?
If no, describe the inconsistencies _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
If yes, describe _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision? |
| <input type="checkbox"/> | <input type="checkbox"/> | 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 Wolf Battistone
 Title: Principal Environmental Planner
 Signature: *Martina Wolf Battistone*
 Date: September 17, 2021
 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.

EXHIBIT N.
**Sewage Facilities Planning Module – Component 4C – County of Joint
Health Department Review**

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

September 16, 2021

Kelley R. Harrington, E.I.T.
The Gateway Engineers, Inc.
100 McMorris Road
Pittsburgh, PA 15205

**RE: SEWAGE FACILITIES PLANNING MODULE; ALLEGHENY COUNTY
The Julian, City of Pittsburgh**

Dear Ms. Harrington:

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 September 13, 2021. The project proposes the following:

Project Description:	The Julian. Proposing to demolish the existing warehouse on Lot 135 of Block 26-S and construct a 10-story apartment building with 148 apartment unit on floors 2-10 and a parking garage on the 1st floor and one level below ground located at 419 Melwood Avenue in the City of Pittsburgh, Allegheny County.
Sewage Flow:	30,968 GPD
Conveyance:	The flow from this site will be conveyed to the Pittsburgh Water and Sewer Authority (PWSA) collection system to the ALCOSAN POC A-22 to the Allegheny River interceptor and then to the ALOSAN 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.



DEBRA BOGEN, MD, DIRECTOR
ALLEGHENY COUNTY HEALTH DEPARTMENT

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

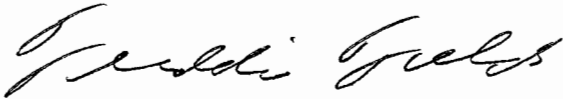


Kelley R. Harrington, E.I.T.
September 16, 2021
Page 2

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 & Solid Waste Management

FF/cb
Enclosure

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

**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.

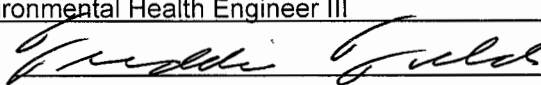
SECTION A. PROJECT NAME (See Section A of instructions)

Project Name
 The Julian

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

1. Date plan received by county or joint county health department September 13, 2021
 Agency name Allegheny County Health Department (ACHD)
2. Date review completed by agency September 16, 2021

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

- | | | |
|-------------------------------------|-------------------------------------|--|
| Yes | No | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?
If no, what are the inconsistencies? _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
If yes, describe _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3. Is there any known groundwater degradation in the area of this proposal?
If yes, describe _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. The county or joint county health department recommendation concerning this proposed plan is as follows: <u>ACHD recommends approval. See attached letter.</u> |
| | | 5. Name, title and signature of person completing this section:
Name: <u>Freddie Fields</u>
Title: <u>Environmental Health Engineer III</u>
Signature: <u></u>
Date: <u>September 16, 2021</u>
Name of County Health Department: <u>ACHD</u>
Address: <u>3901 Penn Avenue, Building #5, Pittsburgh, PA 15224-1318</u>
Telephone Number: <u>412-578-8046</u> |

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.