DEP Code No. TBD

SEWAGE FACILITIES PLANNING MODULE

for

CARNEGIE MELLON UNIVERSITY – HEALTH WELLNESS & ATHLETICS CENTER
Tech Street,
City of Pittsburgh,
Allegheny County, Pennsylvania

Prepared For:

Carnegie Mellon University
417 Craig Street, 3rd Floor
Pittsburgh, PA 15213

Prepared By:

Langan Engineering and Environmental Services, Inc.

2400 Ansys Drive, Suite 403
Canonsburg, Pennsylvania 15317

May 2021
250111201

LANGAN

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APPENDIX A

Transmittal Letter and Correspondence

3850-FM-BCW0355 Rev. 5/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

TRANSMITTAL LETTER FOR SEWAGE FACILITIES PLANNING MODULE

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) USE ONLY				
DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency) Date _____

_____
_____
_____

Dear Sir/Madam:

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

Langan Engineering & Environmental Services *(Title)* for CMU - Health Wellness & Athletics Center *(Name)*

a subdivision, commercial ,or industrial facility located in Pittsburgh

Allegheny *(City, Borough, Township)* County.

Check one

☐ (i) The planning module, as prepared and submitted by the applicant, is approved by the municipality as a proposed ☐ revision ☐ supplement for new land development to its Official Sewage Facilities Plan (Official Plan), and is ☐ adopted for submission to DEP ☐ transmitted to the delegated LA for approval in accordance with the requirements of 25 *Pa. Code* Chapter 71 and the *Pennsylvania Sewage Facilities Act* (35 P.S. §750),

OR

☐ (ii) The planning module will not be approved by the municipality as a proposed revision or supplement for new land development to its Official Plan because the project described therein is unacceptable for the reason(s) checked below:

Check Boxes

☐ Additional studies are being performed by or on behalf of this municipality which may have an effect on the planning module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.

☐ The planning module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, 25 *Pa. Code* Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.

☐ Other (attach additional sheet giving specifics).

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

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

Municipal Secretary (print) *Signature* *Date*

CORRESPONDENCE

Pittsburgh Water & Sewer Authority

April 28, 2021

Scott Levit, P.E.
Langan
2400 Ansys Drive
Canonsburg, PA 15317

Subject: Water and Sewer (W&S) Use Approval
Project Name: 20014.17 Tech Street and Margaret Morrison (Project)
PWSA Project No.: 20014.17

Dear Scott:

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

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	15,905	15,905	6.87
Existing Flow	3,263	3,263	6.83
Net Flow	12,642	12,642	

The PWSA shall request the Department of Environmental Protection (DEP) to issue a Final Determination on the Need for Sewage Planning. Sewage planning is likely required, we have enclosed for your use the location of the most limited capacity sewer (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 x5543 or BGrunauer@pgh2o.com.

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

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

- [x] Application Fee
- [x] Application Form
- [x] Narrative
- [x] Flow Calculations
- [x] Site Plan
- [x] Floor Plan

Project Info

Project Name: CMU Health Wellness & Athletic Center

Address: Parcel 53-B-50

SE of intersection of Tech St. and Margret Morrison St., Pittsburgh PA

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

Owner/Developer

Name: Carnegie Mellon University

Address: 417 Craig Street, 3rd Floor

Pittsburgh, PA 15213

Email: karsh@cmu.edu

Phone Number: 412-268-8716

Consultant

Firm Name: Langan

Address: 2400 Ansys Drive

Canonsburg, PA 15317

Contact Name: Scott Levit

Email: slevit@langan.com

Phone Number: 724-514-5128

Flow Data

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	15,905	15,905	6.87
Existing Flow	3,263	3,263	6.83
Net Flow	12,642	12,642	Not Required

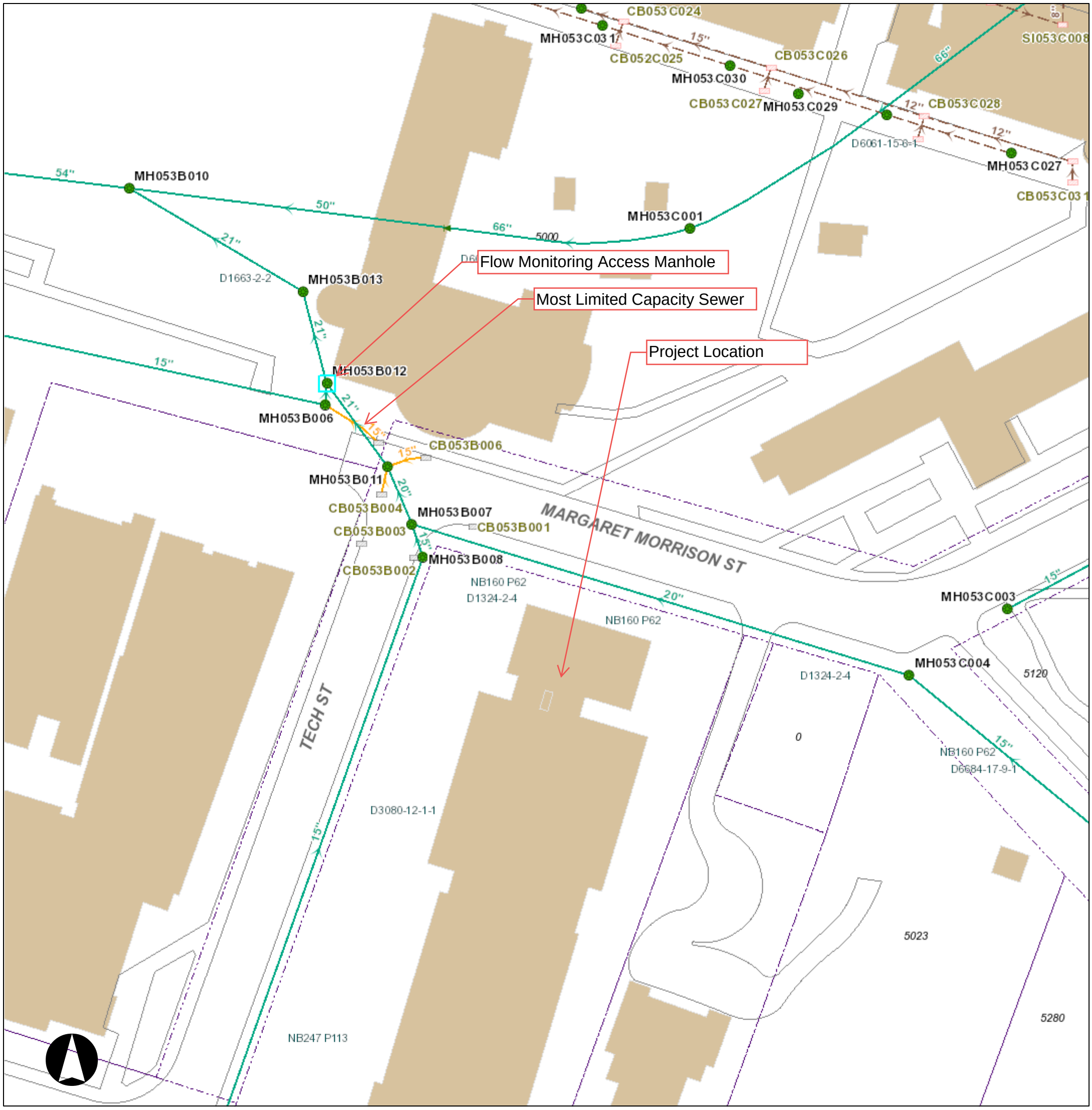
Signature By signing below, I hereby certify, to the best of my knowledge, that the information provided within the Water and Sewer Use Application is true, complete and accurate.

Name, printed: Scott Levit

Signature: Scott S

Date: 03/25/2021

MLCS Map



Legend

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

0 0.0125 0.025 mi

Date: 4/28/2021

Most Limited Capacity Sewer (MLCS) Spreadsheet

PROJECT NAME:	20014.07 Tech Street and Margaret Morrison
PWSA PROJECT NUMBER:	20014.07
PWSA REVIEWER:	Benjamin Grunauer, E.I.T.
DATE:	April 28, 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
MH053B007	MH053B011	927.44	923.00	43.59	20	VCP	0.015	2.18	5.236	10.19%	24,939,225
MH053B011	MH053B012	923.00	919.16	71.16	21	Concrete	0.013	2.41	5.498	5.40%	23,860,239
MH053B012	MH053B013	919.16	914.69	65.60	21	Concrete	0.013	2.41	5.498	6.80%	26,777,465
MH053B013	MH053B010	914.69	865.01	139.81	21	Concrete	0.013	2.41	5.498	35.54%	61,215,596
MH053B010	MH053B003	865.01	847.45	553.80	54	Brick	0.016	15.90	14.137	3.17%	184,385,908
MH053B003	JCT052N024	847.45	839.59	306.10	54	Brick	0.016	15.90	14.137	2.57%	165,892,731
JCT052N024	MH052N042	839.59	827.70	362.34	54	Brick	0.016	15.90	14.137	3.28%	187,569,715
MH052N042	JCT052N001	827.70	825.70	63.02	54	Brick	0.016	15.90	14.137	3.17%	184,456,167
JCT052N001	MH052N041	825.70	821.75	119.07	54	Brick	0.016	15.90	14.137	3.32%	188,686,692
MH052N041	JCT052N020	821.75	810.10	250.58	54	Brick	0.016	15.90	14.137	4.65%	223,224,309
JCT052N020	MH052N040	810.10	809.94	43.75	68	Brick	0.016	25.22	17.802	0.37%	115,787,111
MH052N040	BK053A001	809.94	799.84	173.32	68	Brick	0.016	25.22	17.802	5.83%	462,202,571
BK053A001	MH053A001	799.84	794.34	303.46	68	Brick	0.016	25.22	17.802	1.81%	257,770,088
MH053A001	MH028H030	794.34	784.10	577.32	68	Brick	0.016	25.22	17.802	1.77%	255,026,828
MH028H030	BK028H003	784.10	781.86	65.71	81	Concrete	0.013	35.78	21.206	3.41%	693,403,813
BK028H003	MH028H001	781.86	780.18	95.10	81	Concrete	0.013	35.78	21.206	1.77%	499,388,155
MH028H001	JCT028H099	780.18	780.00	6.56	81	Concrete	0.013	35.78	21.206	2.74%	622,167,669
JCT028H099	MH028H015	780.00	774.62	350.38	81.5	Concrete	0.013	36.23	21.337	1.54%	473,334,992
MH028H015	JCT028H005	774.54	772.10	46.69	88	Concrete	0.013	42.24	23.038	5.22%	1,071,237,207
JCT028H005	MH028M002	772.10	765.57	579.54	88	Concrete	0.013	42.24	23.038	1.13%	497,496,022
MH028M002	MH028M010	765.57	757.45	502.68	91	Concrete	0.013	45.17	23.824	1.62%	651,373,265
MH028M010	MH028S002	757.45	751.36	397.11	91	Concrete	0.013	45.17	23.824	1.53%	634,676,929
MH028S002	MH029D036	751.36	745.72	441.92	91	Concrete	0.013	45.17	23.824	1.28%	578,981,124
MH029D036	JCT029D024	745.72	743.60	174.05	91	Concrete	0.013	45.17	23.824	1.22%	565,629,075
JCT029D024	MH029D034	743.60	740.90	202.03	91	Concrete	0.013	45.17	23.824	1.34%	592,481,530
MH029D034	BK029D002	740.90	736.10	347.73	98	Concrete	0.013	52.38	25.656	1.38%	733,707,508
BK029D002	MH029H074	736.10	729.55	579.91	98	Concrete	0.013	52.38	25.656	1.13%	663,687,033
MH029H074	MH054E003	729.55	726.07	311.74	98	Concrete	0.013	52.38	25.656	1.12%	659,811,611
MH054E003	JCT054J004	726.08	720.53	580.91	101	Concrete	0.013	55.64	26.442	0.96%	661,628,028

Pittsburgh Water & Sewer Authority

April 28, 2021

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

Subject: Preliminary Determination on the Need for Sewage Planning
Project Name: 20014.17 Tech Street and Margaret Morrison
PWSA Project No.: 20014.17

Dear Mr. Flanagan:

Please be advised that the Pittsburgh Water and Sewer Authority has approved the Water and Sewer (W/S) Use Application for the aforementioned Project. We have enclosed the W/S Use Approval Letter and the supporting documentation. The approved sanitary flows are summarized below:

Type of Sanitary Flow	Definition	Flow, gpd
Project Flow	Peak daily flow associated with the Project	15,905
Existing Flow	Peak daily flow within the past five years	3,263
Net Flow	= Project Flow – Existing Flow	12,642

Please see below for our Preliminary Determination on the Need for Sewage Planning:

☒ Yes, we believe the Project requires sewage planning
☐ No, we believe the Project does not require sewage planning

Based on the foregoing, please provide a Final Determination on the Need for Sewage Planning.

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 x5543 or BGrunauer@pgh2o.com.

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

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

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Emergencies:
412.255.2423

PROJECT NARRATIVE

Existing Conditions

The project site is located on Parcel 53-B-50, which is located southeast of the intersection of Tech Street and Margret Morrison Street in the Squirrel Hill neighborhood of the City of Pittsburgh. The site is generally bound by Margret Morrison Street to the north, Frew Street to the south, Tech Street to the west, and Parcel 53-C-170 (refer to figure 1). The site is currently occupied by the existing Skibo Gym and surrounding landscape/hardscape areas.

Proposed Development

Carnegie Mellon University is proposing to construct the Health Wellness and Athletic Center (HWAC) to provide space for the university's health, counseling and psychological services, meeting spaces, offices, and athletic spaces for students and faculty. A portion of the southern end of the existing Skibo Gym will be renovated and included in the final HWAC building. The proposed 4 story building will consist of approximately 160,000 gross square feet with impervious driveways and pedestrian walkways, landscaped areas, and associated site features. The proposed site will also provide loading access from Margret Morrison Street.

Proposed Water and Sewer Use

The proposed project includes two sanitary lateral connections. One 6-inch sanitary lateral will connect from the proposed building to the existing 20-inch PWSA combination sewer line in Margret Morrison Street, east of existing PWSA Manhole #053B007, via a proposed wye connection. A separate 8-inch sanitary lateral will connect from the proposed building to the existing 15-inch PWSA combination sewer line in Tech Street, south of existing PWSA Manhole #053B007. See Table 1 for proposed sanitary sewage flow estimation computations. The proposed sanitary demand is anticipated to be 12,642 gallons per day, or 42 EDUs.

The proposed water facilities for the HWAC will consist of one 8-inch fire service connection to the existing private CMU campus water main located on the west side of Tech Street. The existing campus water main in Tech Street will be upsized from a 6-inch line to an 8-in DIP water main. A 6-inch domestic service line will then tee off of the 8-inch fire service line. Both the 6-inch domestic service line and the 8-inch fire service line will then connect to the proposed building. The proposed water demand is anticipated to be 12,642 gallons per day, or 42 EDUs.

The proposed storm facilities for the development include on-site gravity storm system, including inlets, underground storm sewer pipes, and underground detention systems. Stormwater from the proposed site will be directed to the proposed BMPs, to be detained and released at an allowable rate determined from the existing conditions model and as outlined in Section 1303.04 of the City of Pittsburgh Code. Stormwater will discharge from five separate points in the stormwater system; three 12-inch stormwater laterals will connect to the existing 20-inch PWSA combination sewer in Margaret Morrison Street, and two 12-in stormwater laterals will connect to the existing 15-in combination sewer in Tech Street.

Stormwater discharge rates for the proposed development are based on the Rational Method described within the PWSA Procedures Manual for Developers. Based on calculations using the Rational Method, the site has a pre-development 25-year storm discharge of 13.12 cubic feet per second, and a post-development 25-year storm discharge of 15.82 cubic feet per second. The calculations are as follows:

Pre-development Discharge = [1.41(0.95) + 1.25(0.4)]*7.13 = 13.12 cfs

Post-development Discharge = [2.10(0.95) + 0.56 (0.4)]*7.13 = 15.82 cfs

Based on calculations using the SCS Method described later in this narrative, the site has a storm flow of 6.87 cubic feet per second for the pre-development 25-year storm, and a flow of 11.31 cubic feet per second for the post-development 25-year storm, without the use of stormwater management controls. The use of stormwater best management practices (BMPs) will be implemented to ensure the post-development storm flow does not exceed the pre-development storm flow. Per the SCS Method, the site has a post-development storm flow of 6.83 cubic feet per second with stormwater management controls for the 25-year storm. Refer to Table 3, Table 4, Table 5, and Appendix A for detailed calculations using the SCS Method.

At this time, the project will not receive public funding; therefore, it is not subject to Section 1303.03.a.3 and 1303.b.3 of the City of Pittsburgh Code. Stormwater runoff from parking areas on-site will either be passed through water quality devices or will infiltrate through the amended soils within bioretention areas. Since the project area to be disturbed is greater than one acre, a General NPDES Permit will be obtained.

The existing municipal system is expected to meet the proposed demands for water, sanitary sewer, and storm sewer services for the development.

Proposed Best Management Practices

To meet the water quality requirements of the City of Pittsburgh and the Pennsylvania Department of Environmental Protection, the stormwater runoff from the proposed building will be directed to various water quality management devices/features, which will remove the required stormwater pollutants associated with runoff (i.e., TSS, oil, and grease).

FLOW CALCULATION SHEETS

Proposed Water Consumption and Sanitary Flows

The calculations of the total anticipated sanitary flows are based on a combination of existing data and the flow estimates found in Table 2-1: Sanitary Flow Estimates in the PWSA Procedures Manual for Developers. Existing flow data for the existing Skibo Gym was provided by PWSA on October 14th, 2020. Langan has utilized the water use data from 2019 to estimate the existing average daily flows (refer to Appendix C Supporting Flow Documents for tabulated water consumption data).

The anticipated sanitary flows for the proposed building are based on Table 2-1: Sanitary Flow Estimates in the PWSA Procedures Manual for Developers. The proposed flows were

calculated in three different conditions: Proposed Daytime, Proposed Nighttime, and Proposed Afternoon Overlap. The Proposed Daytime (8am – 5pm) condition represents all offices, treatment rooms, and athletic spaces except for the arena to be in use. The Proposed Nighttime (6pm-10pm) condition represents only the arena in use, and assumes that all bathrooms, locker rooms, showers, etc. will be in use by the attendees, staff, and athletes occupying the arena. The Proposed Afternoon Overlap (5pm - 6pm) condition represents the time period when students and staff occupy the treatment rooms and offices and the arena is at 50% occupancy. As shown in Table 1, the anticipated peak daily sewage flow for the proposed development is 12,642 gallons per day, or 42 EDUs. The proposed net water consumption is expected to be the same as the proposed sanitary flows for the office building (12,642 gallons per day).

TABLE 1: SANITARY SEWAGE FLOW ESTIMATION

Existing Conditions					
PWSA Account #	**Type of Establishment**	**Total Consumption (1000 gal.)**	**Time Monitored (Days)**	**Existing Average Sewage Flow (GPD)[1]**	**Existing Peak Sewage Flow (GPD)[2]**
5034322-1002140	Ex. Skibo Gym	476	365	1,304	3,263
			Existing EDUs[3] =	4	11

Proposed Conditions – Daytime Usage (8am – 5pm)				
Floor	**Type of Establishment**	**Occupancy**	**Anticipated Peak Daily Rate (GPD/Person)[4]**	**Anticipated Peak Daily Sewage Flow (GPD)**
1	Office[5]	51	10	510
1	Locker Rooms[6]	248	25	6,200
1	Gym, Weights, Athletic[7]	72	10	720
2	Office	78	10	780
2	Locker Rooms	104	25	2,600
2	Gym, Athletic	66	10	660
3	Office	95	10	950
3	Skibo Gym	50	10	500
4	Office	36	10	360
			Proposed Daytime Flow =	13,280
			Proposed Daytime EDUs[3] =	43

Proposed Conditions – Nighttime Usage (6pm – 10pm)				
Floor	**Type of Establishment**	**Occupancy**	**Anticipated Peak Daily Rate (GPD/Person)**	**Anticipated Peak Daily Sewage Flow (GPD)**
2	Arena[8]	1,050	5	5,250

	Proposed Nighttime Flow =	5,250
	Proposed Nighttime EDUs =	18

Proposed Conditions – Afternoon Overlap Usage (5pm – 6pm)		
Area of Building		**Anticipated Peak Daily Sewage Flow (GPD)**
Offices, Classrooms, and Athletic spaces		13,280
Arena (50% Capacity)		2,625
	Proposed Overlap Flow =	15,905
	Proposed Overlap EDUs =	53

Summary of Proposed Conditions		
Proposed Maximum Flow		15,905
Proposed Maximum EDUs		53
Existing Flow		3,263
Existing EDUs		11
	Proposed Net Flow =	12,642
	Proposed Net EDUs =	42

1 – Rate is based on existing 2019 PWSA Water bills and usage for Parcel 53-B-50, Pittsburgh, PA. Refer to Appendix C Supporting Flow Calculations.
2 – Peak rate is based on a peaking factor of 2.5. Refer to Appendix C Supporting Flow Calculations.
3 – EDUs are based on 300 GPD/EDU.
4 – Rate is based on the flow estimate defined in Table 2-1 of the PWSA Procedures Manual for Developers.
5 – "Office" represents any space representative of a working environment including but not limited to offices, conference rooms, and wellness spaces.
6 – "Locker Rooms" represent any locker room space for any sport and includes any sinks, toilets, showers, and other water and sewer facilities within these spaces. Flow rate estimate based on "Schools, day with gyms and showers" defined in Table 2-1 of the PWSA Procedures Manual for Developers.
7 – "Gym, Weights, Athletic" represents all athletic spaces including weight rooms, gyms (except the Arena), athletic lounges or healthcare, and athletic offices. Flow rate based on office space per day-to-day use.
8 – "Arena" represents all athletes, staff, and attendees using the arena and building facilities during night time hours. Flow rate estimate based on "Movie Theaters" and "Fairgrounds and parks" in the Pennsylvania Code Title 25 §73.17.

Proposed Stormwater Flows

The stormwater management design for this site follows Section 906.07 of the City of Pittsburgh Code and Chapter 7 of the Pennsylvania Department of Transportation Publication 584, which was adopted and approved in accordance with the Pennsylvania Storm Water Management Act.

TR-55 SCS Method

This study was prepared using methods contained in the USDA Soil Conservation Service Publication TR-55 "Urban Hydrology for Small Watersheds". TR-55 outlines procedures for calculating peak rates of runoff resulting from precipitation events and for developing runoff hydrographs. The storm flow estimates discussed in this narrative reflect the TR-55 results.

The TR-55 procedure simulates a watershed as a series of overland flows, channel flows, and inflow and outflow structures for its contribution to runoff. Values for area, curve number (CN), and time of concentration (Tc) were calculated for each watershed.

The CN is a land sensitive coefficient that dictates the relationship between total rainfall depth and direct storm runoff. Based on the coverage of soil groups and land use in the area, an average CN was determined for each watershed for existing and proposed conditions. The CN calculations for existing and proposed conditions can be found in the Appendix A.

Using the Soil Conservation Service Soil Survey for Allegheny County the soils within the watershed were divided into hydrologic soil groups (A, B, C, and D). The SCS classification system evaluates the runoff potential of a soil according to its infiltration and transmission rates. "A" soils have the lowest runoff potential and "D" soils have the greatest runoff potential.

The Tc is defined as the time for runoff to travel from the hydraulically most distant point of the watershed to a point of interest. Due to short flow paths, values of the time of concentration for existing and proposed conditions are equal to the minimum of five (5) minutes.
The design storm used for this study is the 24-hour SCS, Type II cumulative rainfall distribution. The following rainfall totals were used in the design:

TABLE 2: SCS 24-HOUR RAINFALL DISTRIBUTION

Storm Frequency*	Rainfall Intensity
1 year	1.98 inches
2 year	2.36 inches
5 year	2.88 inches
10 year	3.31 inches
25 year	3.92 inches
50 year	4.42 inches
100 year	4.93 inches
*Values from National Oceanic and Atmospheric Administration data source	

Rainfall hydrographs developed from TR-55 methods were then routed through the proposed connections to the existing combined sewer system. Based off of the results summarized in the following tables below, stormwater BMPs will be designed so that the post-development discharge rates do not exceed the pre-development discharge rates. More detailed calculations can be found in the appendices.

TABLE 3: SUMMARY OF EXISTING PEAK DISCHARGES

EXISTING DISCHARGE RATE (CFS)*							
	1-YEAR	**2-YEAR**	**5-YEAR**	**10-YEAR**	**25-YEAR**	**50-YEAR**	**100-YEAR**
EXISTING	1.45	2.35	3.73	4.98	6.87	8.49	10.19
*Values include a minimum 20 percent meadow cover for existing conditions per §1303.04.b.2 of the City of Pittsburgh Zoning Code							

TABLE 4: SUMMARY OF PROPOSED PEAK DISCHARGES (WITHOUT BMP)

PROPOSED DISCHARGE RATE (CFS)							
	1-YEAR	**2-YEAR**	**5-YEAR**	**10-YEAR**	**25-YEAR**	**50-YEAR**	**100-YEAR**
PROPOSED	4.63	5.90	7.68	9.18	11.31	13.07	14.45

TABLE 5: SUMMARY OF PROPOSED PEAK DISCHARGES (WITH BMP)

PROPOSED DISCHARGE RATE (CFS)							
	1-YEAR	**2-YEAR**	**5-YEAR**	**10-YEAR**	**25-YEAR**	**50-YEAR**	**100-YEAR**
PROPOSED	1.07	1.44	2.32	4.64	6.83	8.11	10.12

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Pittsburgh Water & Sewer Authority

April 28, 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:	20014.17 Tech Street and Margaret Morrison
Project Address:	417 Craig Street, 3rd Floor Pittsburgh, PA 15213
Net Flow, gpd:	12,642
EDU's, 400gpd/EDU:	31.61

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 x5543 or BGrunauer@pgh2o.com.

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

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

Pittsburgh Water & Sewer Authority

October 27th, 2021

Scott Levit
Langan Engineering, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: 20014.17 Tech Street and Margaret Morrison (Project)
PWSA Project No.: 20014.17

Dear Scott:

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

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

Sincerely,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

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

PGH2O Pittsburgh Water & Sewer Authority

MEMO

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

From: Benjamin Grunauer, E.I.T.

Date: October 27, 2021

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

Chapter 94 Consistency Determination

Project Name: 20014.17 Tech Street and Margaret Morrison (Project)

Project Address: Tech Street, Pittsburgh, PA 15213

PWSA Project Number: 20014.17

Dear Barry,

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

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

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

Yours truly,

Ben Grunauer

Benjamin Grunauer, E.I.T.
Engineer III

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

Penn Liberty Plaza I
1200 Penn Avenue
Pittsburgh PA 15222

info@pgh2o.com
T 412.255.2423
F 412.255.2475

www.pgh2o.com
@pgh2o

Customer Service /
Emergencies:
412.255.2423

☒ 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 12,642 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

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

   a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.

   b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.

   c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

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

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	**Peak**	**Average**	**Peak**	**Average**	**Peak**
Collection	6,816,325	23,857,138	61,000	213,500	67,843	237,449
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

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

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

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

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

   b. Collection System

   Name of Agency, Authority, Municipality PWSA

   Name of Responsible Agent Barry King, PE, PMP

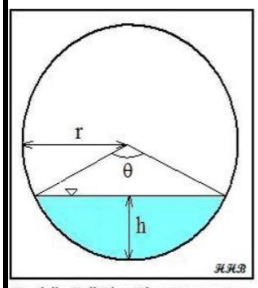
   Agent Signature BKK Date 10/27/2021

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

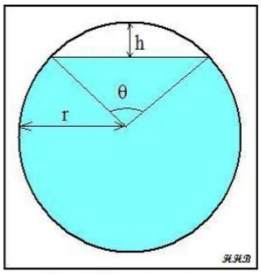
PROJECT NAME:	20014.17 Tech Street and Margaret Morrison
PWSA PROJECT NUMBER:	20014.17
PWSA REVIEWER:	Benjamin Grunauer
DATE:	October 27, 2021

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

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

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

OR

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

Section B: Data for Calculations

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

Proposed Project Flows		
Variable	Value	Units
Q_p	12,642	gpd

Variable	*Value*	*Units*
Material	RCP	
n	0.013	unitless
S	0.054	ft/ft
h	-	ft
D	1.75	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*
$Q_{d, avg}$	6,817,659	gpd

Design Capacity, Peak		
Variable	*Value*	*Unit*
D	1.750	ft
r	0.875	ft
A	2.405	ft^2
P	5.498	ft
R	0.438	ft
$Q_{d, peak}$	37	cfs
$Q_{d, peak}$	23,861,806	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*
$Q_{ex, avg}$	61,000	gpd

Present Flows, Peak		
Variable	*Value*	*Unit*
$Q_{ex, peak}$	213,500	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*
$Q_{proj, avg}$	67,843	gpd
$Q_{proj, peak}$	237,449	gpd

Section F: Compare Results with Applicant's Submission

Variable	*PWSA, gpd*	*Applicant, gpd*	*Difference, gpd*	*Difference, %*
$Q_{d, avg}$	6,817,659	6,816,325	1,334	0%
$Q_{d, peak}$	23,861,806	23,857,138	4,668	0%
$Q_{ex, avg}$	61,000	61,000	0	0%
$Q_{ex, peak}$	213,500	213,500	0	0%
$Q_{proj, avg}$	67,843	67,843	0	0%
$Q_{proj, peak}$	237,449	237,449	0	0%

alcosan
allegheny county sanitary authority

November 1, 2021

Scott Levit
Langan
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

Re: CMU Health Wellness & Athletic Center
Pittsburgh– Allegheny County
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure M-29-00

Dear Mr. Levit:

We have reviewed the Component 3 Planning Module for the referenced project to be located at Tech Street and Margaret Morrison. The project will generate a peak flow of 12,642 gpd in the ALCOSAN Monongahela River Interceptor and Woods Run Treatment Plant.

The capacity at the M-29-00 Regulator Structure is approximately 44.9 MGD. The estimated peak dry weather flow is approximately 6.83 MGD. Dry weather capacity exists for this connection. However, the Monongahela 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)
D. Thornton (w/o attachment)
M. Lichte (w/o attachment)
B. King/PWSA (w/o attachment)
Thomas Flanagan/PADEP (w/o attachment)
Fred Fields/ACHD (w/o attachment)

COUNTY OF ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

November 9, 2021

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

RE: SEWAGE FACILITIES PLANNING MODULE
CMU Health Wellness and Athletics Center
City of Pittsburgh, ALLEGHENY COUNTY

Dear Mr. Levit:

Enclosed is a signed copy of Component 4C, County or Joint County Health Department Review, for the above-referenced development. This Planning Module Component was received on November 5, 2021. The project proposes the following:

Project Description:	CMU Health Wellness and Athletics Center. Proposing to construct the 4 story Health Wellness and Athletic center (HWAC) on Parcel 53-B-50 to provide space for the University's health, counseling and psychological services, meeting spaces, offices, and athletic spaces for students and facility with a portion of the Southern end of the existing Skibo Gymnasium to be renovated mand included in the final HWAC building located on Tech Street in the City of Pittsburgh.
Sewage Flow:	12,642 GPD
Conveyance:	The flow from this site will be conveyed to the Pittsburgh Water and Sewer Authority (PWSA) collection system to ALCOSAN POC M-29 to the Monongahela River Interceptor and then to the ALCOSAN Treatment Plant at Woods Run.
Sewer's Owner:	PWSA (collection) and ALCOSAN (interceptor)
Name of Sewage Treatment Plant:	ALCOSAN.

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

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

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

APPENDIX B

Resolution for Plan Revision for New Land Development

Resolution No. _____

CITY OF PITTSBURGH

Introduced: Bill No:

Committee: Intergovernmental Affairs Committee Status:

Sponsored by:

Resolution adopting Plan Revision to the City of Pittsburgh's Official Sewage Facilities Plan for the CMU Health Wellness & Athletics Center, Tech Street, Pittsburgh, PA 15213.

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

WHEREAS, the CMU Health Wellness & Athletics Center has proposed the development of a certain parcel of land southeast of the intersection of Tech Street and Margaret Morrison Street, Pittsburgh, PA 15213, Allegheny County, on parcel 53-B-50 in the 14th Ward of the City of Pittsburgh and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by a sewer tap-in to the City of Pittsburgh sewage systems; and

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

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

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

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

Said Planning Module includes the proposed CMU Health Wellness & Athletics Center, located southeast of the intersection of Tech Street and Margaret Morrison Street, Pittsburgh, PA 15213, Allegheny County, on parcel 53-B-50 in the 14th Ward of the City of Pittsburgh.

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

Effective Date: _____

Passed in Council: _____

Approved: _____

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

Fiscal Impact Statement

Updated 1/29/2020 to satisfy City Code §219.07

Department	Law
Preparer	Ben Smith
Standing Committee Representative	Scott Levit (LANGAN) 724-514-5128
Type of Legislation	Other

Description of Legislation

Carnegie Mellon University (CMU) has proposed the development of a certain parcel of land the CMU Health Wellness & Athletics Center, southeast of the intersection of Tech Street and Margaret Morrison Street, Pittsburgh, PA 15213, Allegheny County, on parcel 53-R-50 in the Fourteenth Ward of the City of Pittsburgh and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by use of existing connections to the City of Pittsburgh sewage systems; and

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

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

JDE Account Information

N/A

Additional Operational Costs

N/A

Impact on City Revenue

N/A

If the resolution authorizes a professional services contract, complete this page:

Method of Procurement *Select one.*	☐ RFP	☐ Signed Waiver from OMB	☐ Amendment to Existing Contract *Do not fill out the rest of the form.*

Name of Vendor and Award Justification
List the name of the awarded vendor and its qualifications.

Other Respondents
List the other respondents. If there were none, clearly state that.

Selection Criteria
Describe the selection or scoring criteria.

Selection Committee Representation
List the department(s) or bureau(s) represented on the committee. Do not list individual names.

Waiver Justification
If a waiver was granted, explain the justification.

EORC Synopsis
Insert synopsis that was presented.

Date Presented at EORC: Insert date.	☐ Approved	☐ Not Approved

*Per §219.07 of the City Code, you **must** include an electronic copy of the solicitation or your signed waiver with your submission to the Office of Management and Budget.*

Attachments

- *Please attach any additional documents and/or exhibits.*

Summary of Proposed Legislation

Bill # / Title	Sewage Facilities Planning Module – Carnegie Mellon University Health Wellness & Athletics Center
Department:	Law Department
Contact Person:	Ben Smith

Ordinance	*Contract Authorization*	*Capital Budget Amendment*	*Capital Encumbrance*	*Proclamation*	*Other*
					X

DESCRIPTION/PURPOSE:

Carnegie Mellon University (CMU) has proposed the development of a certain parcel of land the CMU Health Wellness & Athletics Center, southeast of the intersection of Tech Street and Margaret Morrison Street, Pittsburgh, PA 15213, Allegheny County, on parcel 53-R-50 in the Fourteenth Ward of the City of Pittsburgh and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by a sewer tap-in to the City of Pittsburgh sewage systems; and

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

HISTORY:

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

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

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

BUDGETARY IMPACT:

N/A

ATTACHMENTS AND/OR EXHIBITS:

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

Seven Priorities of the Joint Council-Mayor Proclamation

1. *Identify operational efficiencies through shared or consolidated services.*

2. *Reduce the legacy costs associated with Pittsburgh's city government for future generations.*

3. *Guarantee excellence in service and equity of provision through performance measures and standards.*

4. *Increase access to, pride of and confidence in all city services by ensuring equity in the provision of those services to all Pittsburghers.*

5. *Improve the quality of life for future generations by identifying current land use opportunities and challenges facing the City of Pittsburgh.*

6. *Reduce the impact on the environment of Pittsburgh city government's operations and services.*

7. *Ensure the ethical operation of the offices of the Mayor and City Council.*

City of Pittsburgh

Sewer Facilities Planning Module Questionnaire

PROJECT NAME: Carnegie Mellon University Health Wellness & Athletics Center

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

Skibo Gymnasium

2) What is the proposed use for the property?

CMU Health Wellness & Athletics Center

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

The proposed stormwater management system includes green infrastructure practices such as managed release concepts and detention vaults

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

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

APPENDIX C

Component 3, Narrative Description of Project, Supporting Documentation

3800-FM-BPNPSM0353 Rev. 2/2015
Form

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Code No.

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

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

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

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

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

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

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

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name CMU Health Wellness & Athletics Center

2. Brief Project Description Carnegie Mellon University is proposing to construct an approximately 160,000 GSF Health Wellness and Athletics Center (HWAC) building. A portion of the existing Skibo Gymnasium on the south side of the site will remain and be incorporated into the proposed building. Additionally, the surrounding site will consist of landscaping, sidewalks and patio space, as well as loading dock access from Margaret Morrison Street.

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

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

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

Additional Individual Last Name	First Name	MI	Suffix	Title

Municipality Mailing Address Line 1	Mailing Address Line 2
200 Ross Street	Suite 400

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

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

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

CMU Health Wellness & Athletics Center

Site Location Line 1	Site Location Line 2
Tech Street	

Site Location Last Line -- City	State	ZIP+4	Latitude	Longitude
Pittsburgh	PA	15213	40.440985	-79.941420

Detailed Written Directions to Site: From Interstate 376 exit at Forbes Avenue exit. Proceed east and turn right onto Schenley Drive and remain on Schenley Drive for approximatley 0.8 miles and turn right onto Tech Street.

Description of Site The site is currently occupied by the Skibo Gymnamsium which is owned by Carnegie Mellon University. The site is approximately 2.62 acres and consists of a two tiered surface parking lot and landscaping.

Site Contact (Developer/Owner)

Last Name	First Name	MI	Suffix	Phone	Ext.
Ghildyal	Utkarsh				

Site Contact Title	Site Contact Firm (if none, leave blank)
Principal Project Manager	Carnegie Mellon University
FAX	Email
	karsh@cmu.edu

Mailing Address Line 1	Mailing Address Line 2
417 S. Craig Street, 3rd Floor	

Mailing Address Last Line -- City	State	ZIP+4
Pittsburgh	PA	15213

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

Last Name	First Name	MI	Suffix
Levit	Scott		

Title	Consulting Firm Name
Project Manager	Langan Engineering & Environmental Services, Inc.

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

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

Email	Area Code + Phone	Ext.	Area Code + FAX
slevit@langan.com	724-514-5128		724-514-5101

E. AVAILABILITY OF DRINKING WATER SUPPLY

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

☐ Individual wells or cisterns.

☐ A proposed public water supply.

☒ An existing public water supply.

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

Name of water company: PWSA

F. PROJECT NARRATIVE (See Section F of instructions)

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

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

instructions.

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

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

1. **COLLECTION SYSTEM**

a. Check appropriate box concerning collection system

☐ New collection system ☐ Pump Station ☐ Force Main

☐ Grinder pump(s) ☒ Extension to existing collection system ☐ Expansion of existing facility

Clean Streams Law Permit Number _____

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 32

Connections 2

Name of:

existing collection or conveyance system 20-inch combination sewer in Margaret Morrison Street and 15-inch combination sewer in Tech Street.

owner PWSA

existing interceptor Monongahela Interceptor

owner Allegheny County Sanitary Authority (ALCOSAN)

2. **WASTEWATER TREATMENT FACILITY**

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

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

☐ New facility ☒ Existing facility ☐ Upgrade of existing facility ☐ Expansion of existing facility

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

NPDES Permit Number for existing facility 25984

Clean Streams Law Permit Number PA 0025984

Location of discharge point for a new facility. Latitude _____ Longitude _____

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

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

Name of Permittee Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joe Fedor

Agent Signature Joe Fedor Date 11/1/21

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

Name of Permittee Agency, Authority, Municipality_____

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

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

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

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

1. Project Flows 12,642 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

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

   a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.

   b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.

   c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

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

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	**Peak**	**Average**	**Peak**	**Average**	**Peak**
Collection	6,816,325	23,857,138	61,000	213,500	67,843	237,449
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

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

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

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

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

   b. Collection System

   Name of Agency, Authority, Municipality PWSA

   Name of Responsible Agent Barry King, PE, PMP

   Agent Signature BKK Date 10/27/2021

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joe Fedor

Agent Signature Joe Fedor

Date 11/1/21

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 Joe Fedor

Agent Signature Joe Fedor

Date 11/1/21

☐ 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 12,642 gpd

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

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

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

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

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

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

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

b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

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

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

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

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

b. Name of Facility_____

Name of Responsible Agent_____

Agent Signature _____

Date_____

(For completion by the municipality)

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

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

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

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

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

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

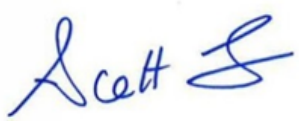
9. ☐ ☒ Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)?
10. ☐ ☒ Does the project require resolution of a conflict between the proposed alternative and consistency requirements contained in §71.21(a)(5)(i), (ii), (iii)?
11. ☐ ☒ Will sewage facilities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

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

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

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

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

Scott Levit	
Name (Print)	Signature
Project Manager	10/13/2021
Title	Date
2400 Ansys Drive, Suite 403 Canonsburg, PA 15317	724-514-5128
Address	Telephone Number

R. REVIEW FEE (See Section R of instructions)

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

☐ I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.

☒ I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of $ 1,600.00 payable to "Commonwealth of PA, DEP". Include DEP code number on check. I understand DEP will not begin review of my project unless it receives the fee and determines the fee is correct. If the fee is incorrect, DEP will return my check or money order, send me an invoice for the correct amount. I understand DEP review will NOT begin until I have submitted the correct fee.

☐ I request to be exempt from the DEP planning module review fee because this planning module creates **only** one new lot and is the **only** lot subdivided from a parcel of land as that land existed on December 14, 1995. I realize that subdivision of a second lot from this parcel of land shall disqualify me from this review fee exemption. I am furnishing the following deed reference information in support of my fee exemption.

County Recorder of Deeds for _____ County, Pennsylvania

Deed Volume_____ Book Number_____

Page Number_____ Date Recorded_____

R. REVIEW FEE (continued)

Formula:

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

   # 32 Lots (or EDUs) X $50.00 = $ 1,600.00

   The fee is based upon:

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

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

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

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

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

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

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

   The fee is based upon:

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

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

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

SECTION F
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Project Narrative
CMU Health Wellness & Athletics Center
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250111201

The project site is on City of Pittsburgh parcel 53-B-50. The project site is located between Frew Street to the south, City of Pittsburgh Parcel 53-C-170 to the east, Margaret Morrison Street to the north, and Tech Street to the west. The site is currently occupied by the existing Skibo Gymnasium and surrounding landscape/hardscape areas. CMU is proposing to redevelop approximately 2.62 acres of the site to a four-story an approximately 160,000 GSF Health Wellness and Athletics Center (HWAC) building. A portion of the existing Skibo Gymnasium on the south side of the site will remain and be incorporated into the proposed building. Additionally, the surrounding site will consist of landscaping, sidewalks and patio space, as well as loading dock access from Margaret Morrison Street. The proposed development will be owned and operated by Carnegie Mellon University.

Section J of Component 3 was completed using the calculation methodology and procedures outlined by the PWSA Developer's Manual, revised April 24th, 2020. Method #2 Flow Monitoring from the Developer's Manual was implemented to estimate the Present Peak Flow based on flow measurements at the most limited capacity sewer (between PWSA MH053B011 to PWSA MH053B012) for 30 days from August 27, 2021 to September 25, 2021. The most limited capacity sewer (between PWSA MH053B011 to PWSA MH053B012) was determined by PWSA. As PWSA MH053B012 is downstream of PWSA MH053B011, PWSA MH053B012 was chosen as the flow monitoring location. The flow meter was installed inside PWSA MH053B012 for the duration of the flow monitoring – August 27, 2021 to September 25, 2021 – with measurements of the head and the velocity of the water taken every five minutes. A peak average dry flow of 0.061 MGD was observed on September 3, 2021 and used as the present average dry flow. Present peak flow, projected peak flow, and projected average flow are based off of the observed dry flow measurement of 0.061 MGD.

Data from the flow monitoring can be found in Appendix C under Anticipated Sewage Flow Reference. Pipe capacity information provided by PWSA was used in conjunction with Manning's Equation to estimate the Peak Design Capacity, and a Peak Factor of 3.5 was used to estimate the Average Design Capacity. The Projected Peak Flow was calculated by multiplying the sum of the Present Peak Flow and the Anticipated Flow Contribution for the project by a factor of 1.05 to estimate the projected flow in 5 years. The Projected Average Flow was calculated by dividing the Projected Peak Flow by the Peak Factor of 3.5. Based on these calculations, it has been determined that the anticipated flow contribution for the proposed project will not create undue stress on the existing PWSA system's capacity.

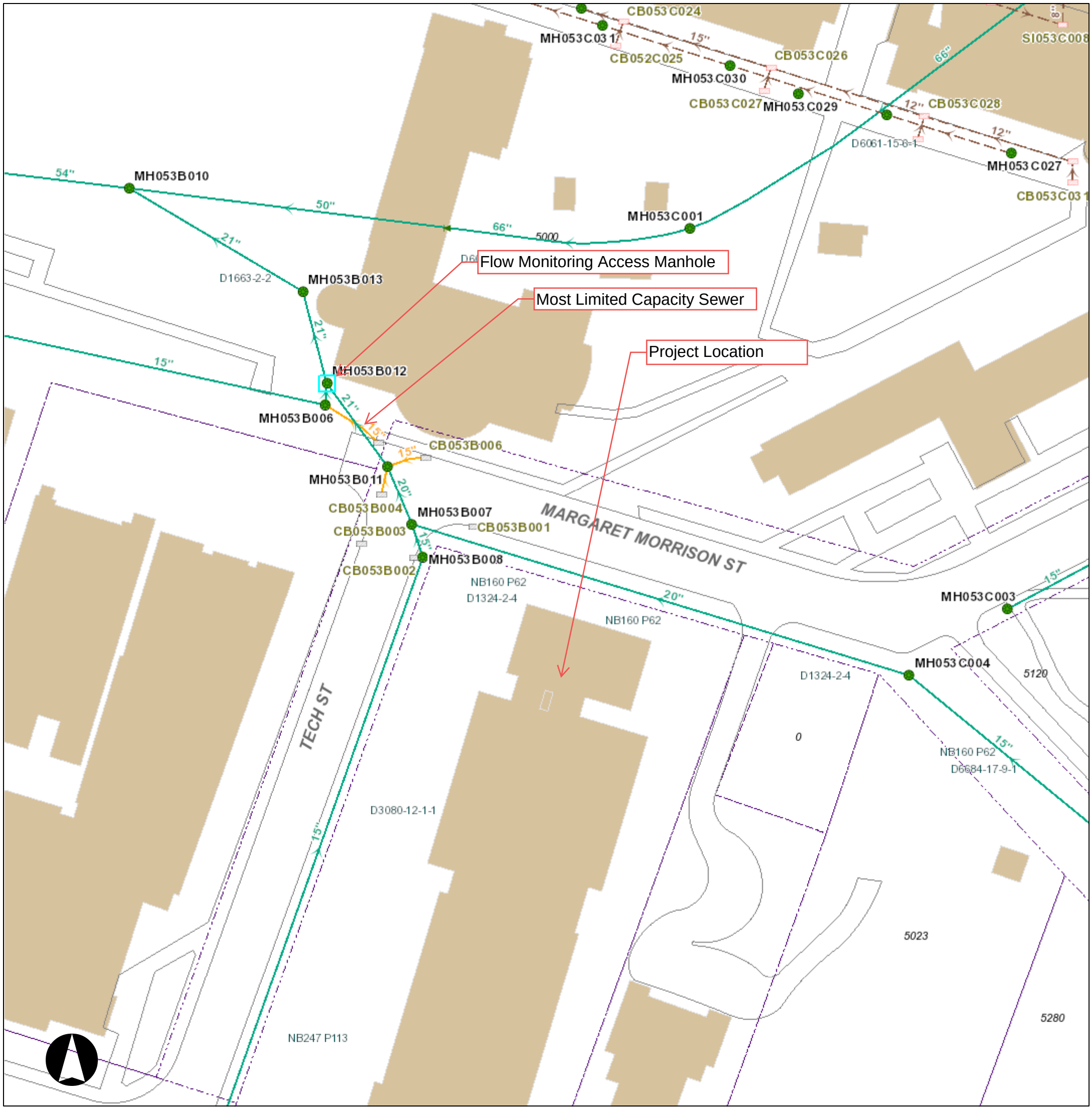
The sanitary service for the project will be provided by two proposed on-site gravity sewer laterals. One 6-inch sanitary lateral will connect from the proposed building to the existing 20-

inch PWSA combination sewer line in Margaret Morrison Street. A separate 8-inch sanitary lateral will connect from the proposed building to the existing 15-inch PWSA combination sewer line in Tech Street. Sewage is ultimately conveyed to the Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility in Pittsburgh, PA. This ultimate method (to serve the development in the long term, five years or more) will provide for disposal of the total combined daily flow of 12,642 gallons per day (32 EDU's). A reference for the approximate sewage flow for the proposed development can be found in Appendix C. The proposed lateral and private sanitary line will remain private and will not create any undue financial burdens to the City of Pittsburgh, PWSA, or ALCOSAN.

The proposed water facilities for the HWAC will consist of one 8-inch fire service connection to the existing private CMU campus water main located on the west side of Tech Street. The existing campus water main in Tech Street will be upsized from a 6-inch line to an 8-in DIP water main. A 6-inch domestic service line will then tee off of the 8-inch fire service line. Both the 6-inch domestic service line and the 8-inch fire service line will then connect to the proposed building. The proposed water demand is anticipated to be 12,642 gallons per day, or 32 EDUs.

ANTICIPATED SEWAGE FLOW REFERENCE

MLCS Map



Legend

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

0 0.0125 0.025 mi

Date: 4/28/2021

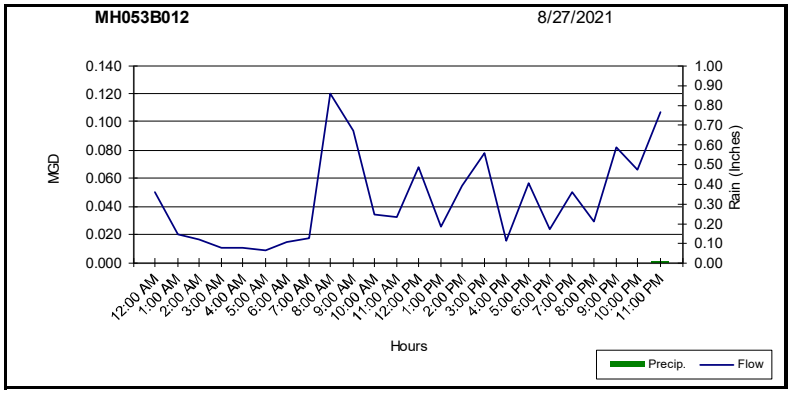
Most Limited Capacity Sewer (MLCS) Spreadsheet

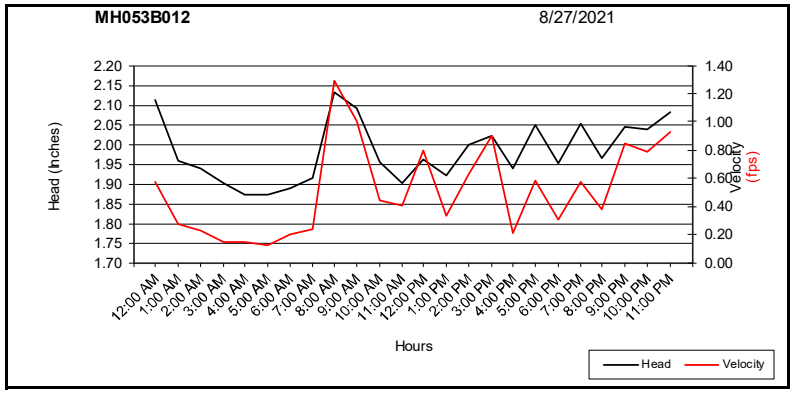
PROJECT NAME:	20014.07 Tech Street and Margaret Morrison
PWSA PROJECT NUMBER:	20014.07
PWSA REVIEWER:	Benjamin Grunauer, E.I.T.
DATE:	April 28, 2021

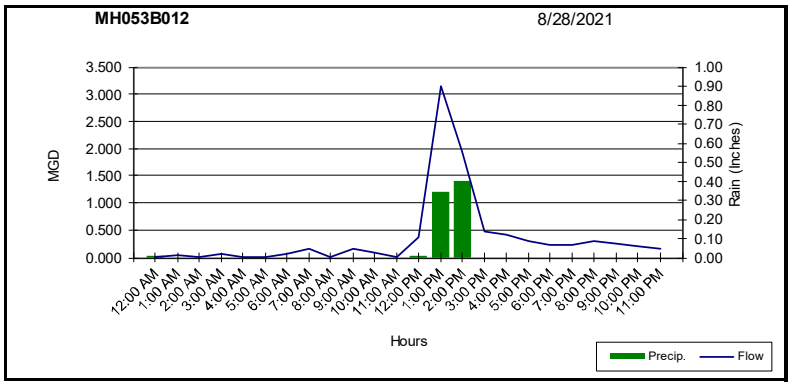
LEGEND:

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
MH053B007	MH053B011	927.44	923.00	43.59	20	VCP	0.015	2.18	5.236	10.19%	24,939,225
MH053B011	MH053B012	923.00	919.16	71.16	21	Concrete	0.013	2.41	5.498	5.40%	23,860,239
MH053B012	MH053B013	919.16	914.69	65.60	21	Concrete	0.013	2.41	5.498	6.80%	26,777,465
MH053B013	MH053B010	914.69	865.01	139.81	21	Concrete	0.013	2.41	5.498	35.54%	61,215,596
MH053B010	MH053B003	865.01	847.45	553.80	54	Brick	0.016	15.90	14.137	3.17%	184,385,908
MH053B003	JCT052N024	847.45	839.59	306.10	54	Brick	0.016	15.90	14.137	2.57%	165,892,731
JCT052N024	MH052N042	839.59	827.70	362.34	54	Brick	0.016	15.90	14.137	3.28%	187,569,715
MH052N042	JCT052N001	827.70	825.70	63.02	54	Brick	0.016	15.90	14.137	3.17%	184,456,167
JCT052N001	MH052N041	825.70	821.75	119.07	54	Brick	0.016	15.90	14.137	3.32%	188,686,692
MH052N041	JCT052N020	821.75	810.10	250.58	54	Brick	0.016	15.90	14.137	4.65%	223,224,309
JCT052N020	MH052N040	810.10	809.94	43.75	68	Brick	0.016	25.22	17.802	0.37%	115,787,111
MH052N040	BK053A001	809.94	799.84	173.32	68	Brick	0.016	25.22	17.802	5.83%	462,202,571
BK053A001	MH053A001	799.84	794.34	303.46	68	Brick	0.016	25.22	17.802	1.81%	257,770,088
MH053A001	MH028H030	794.34	784.10	577.32	68	Brick	0.016	25.22	17.802	1.77%	255,026,828
MH028H030	BK028H003	784.10	781.86	65.71	81	Concrete	0.013	35.78	21.206	3.41%	693,403,813
BK028H003	MH028H001	781.86	780.18	95.10	81	Concrete	0.013	35.78	21.206	1.77%	499,388,155
MH028H001	JCT028H099	780.18	780.00	6.56	81	Concrete	0.013	35.78	21.206	2.74%	622,167,669
JCT028H099	MH028H015	780.00	774.62	350.38	81.5	Concrete	0.013	36.23	21.337	1.54%	473,334,992
MH028H015	JCT028H005	774.54	772.10	46.69	88	Concrete	0.013	42.24	23.038	5.22%	1,071,237,207
JCT028H005	MH028M002	772.10	765.57	579.54	88	Concrete	0.013	42.24	23.038	1.13%	497,496,022
MH028M002	MH028M010	765.57	757.45	502.68	91	Concrete	0.013	45.17	23.824	1.62%	651,373,265
MH028M010	MH028S002	757.45	751.36	397.11	91	Concrete	0.013	45.17	23.824	1.53%	634,676,929
MH028S002	MH029D036	751.36	745.72	441.92	91	Concrete	0.013	45.17	23.824	1.28%	578,981,124
MH029D036	JCT029D024	745.72	743.60	174.05	91	Concrete	0.013	45.17	23.824	1.22%	565,629,075
JCT029D024	MH029D034	743.60	740.90	202.03	91	Concrete	0.013	45.17	23.824	1.34%	592,481,530
MH029D034	BK029D002	740.90	736.10	347.73	98	Concrete	0.013	52.38	25.656	1.38%	733,707,508
BK029D002	MH029H074	736.10	729.55	579.91	98	Concrete	0.013	52.38	25.656	1.13%	663,687,033
MH029H074	MH054E003	729.55	726.07	311.74	98	Concrete	0.013	52.38	25.656	1.12%	659,811,611
MH054E003	JCT054J004	726.08	720.53	580.91	101	Concrete	0.013	55.64	26.442	0.96%	661,628,028


MH053B012
8/27/2021
MGD
Rain (Inches)
Hours
Precip.
Flow


MH053B012
8/27/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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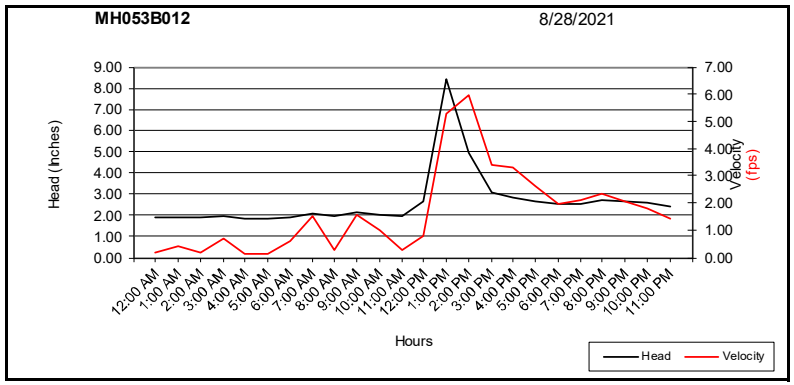
8/28/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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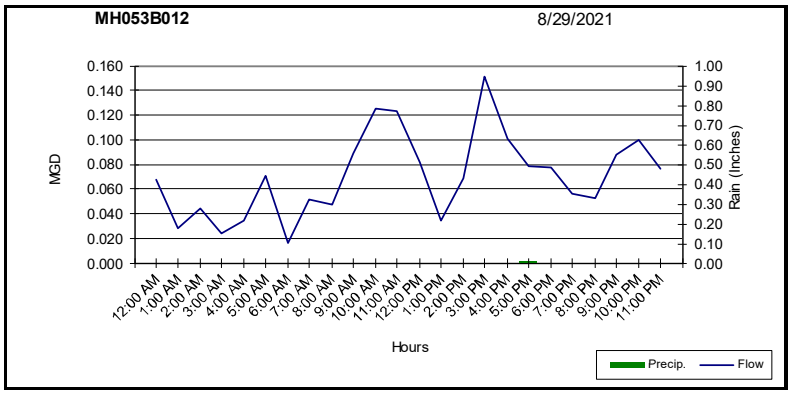
8/28/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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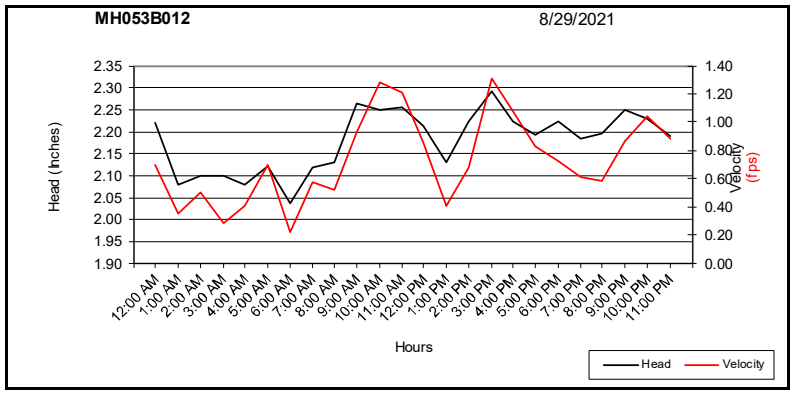
8/29/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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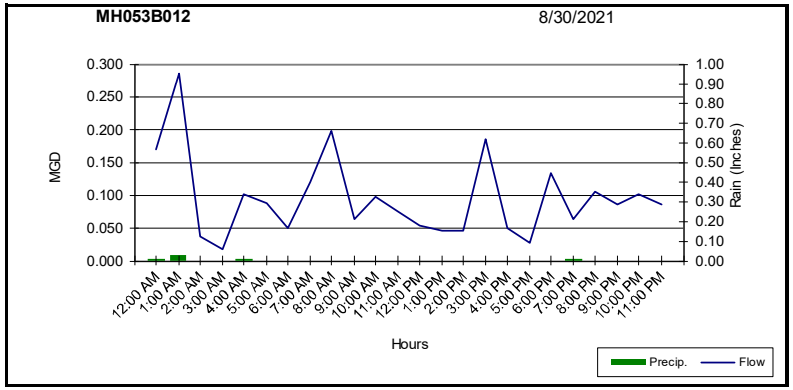
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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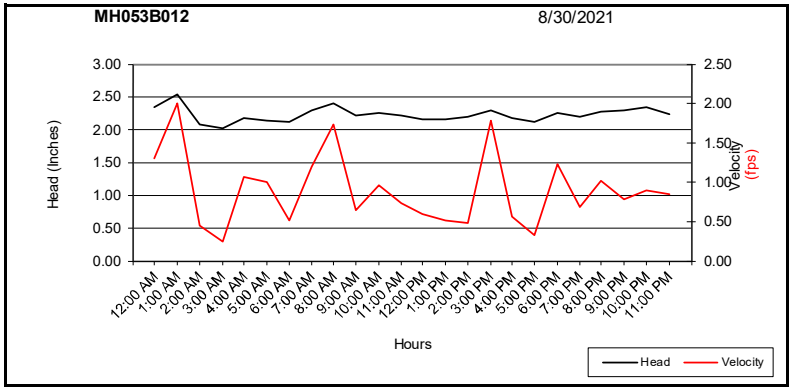
8/30/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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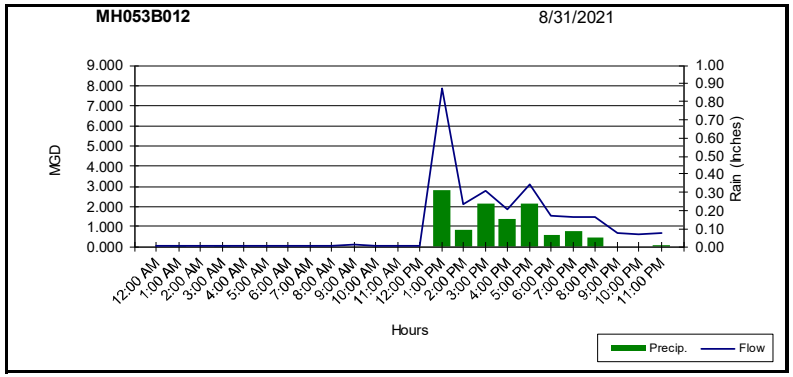
8/30/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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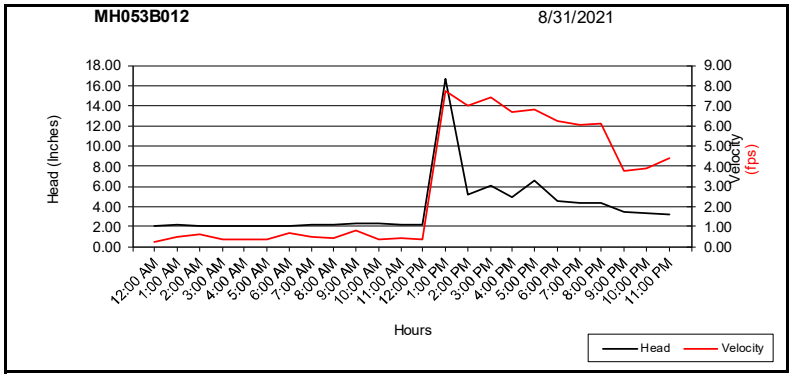
8/31/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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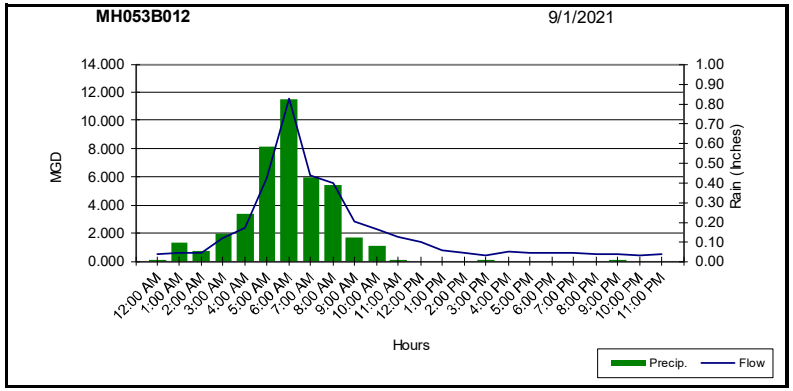
8/31/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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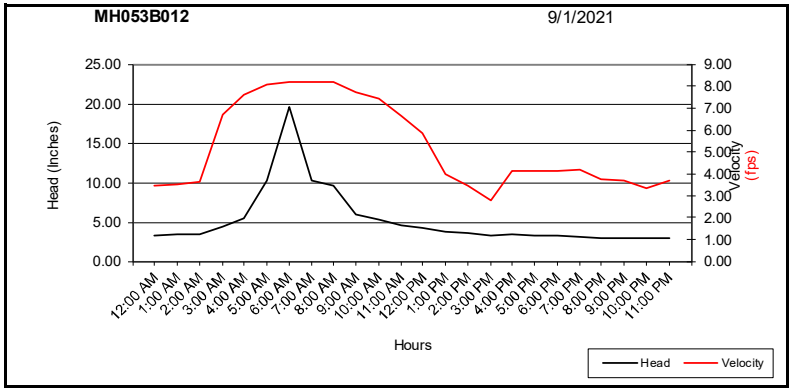
9/1/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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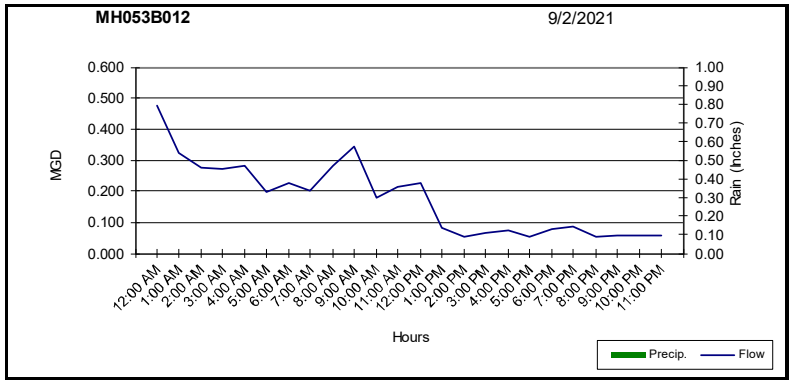
9/1/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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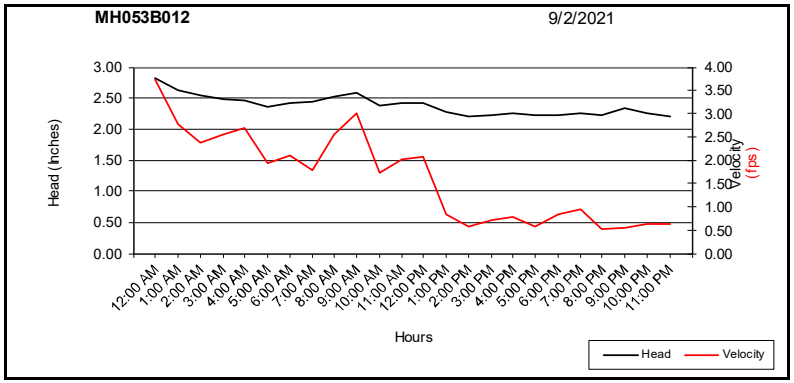
9/2/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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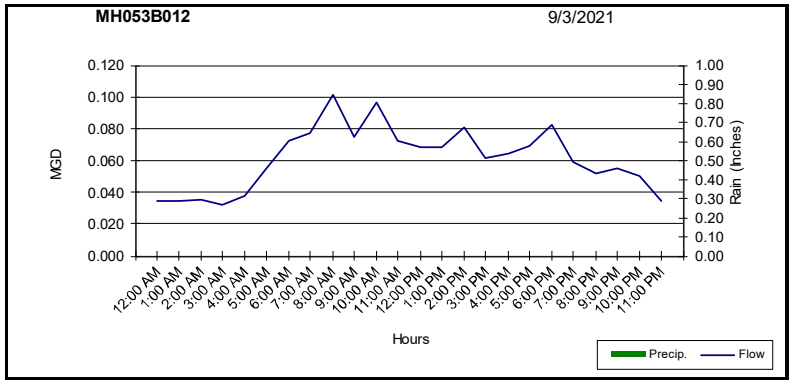
9/2/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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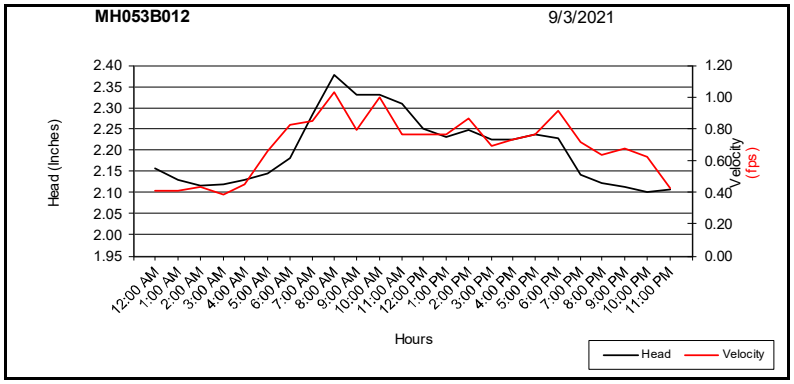
9/3/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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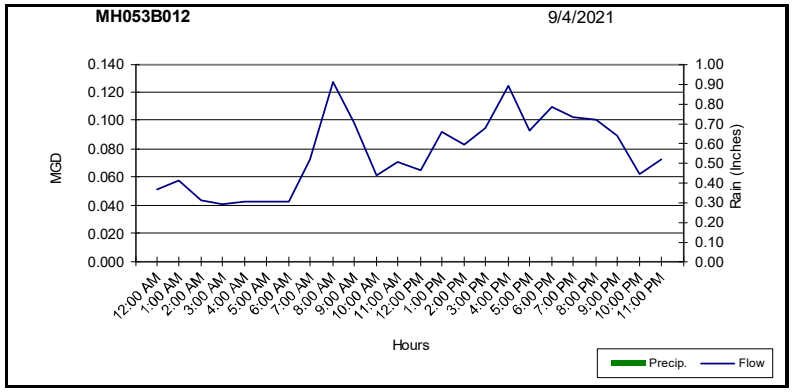
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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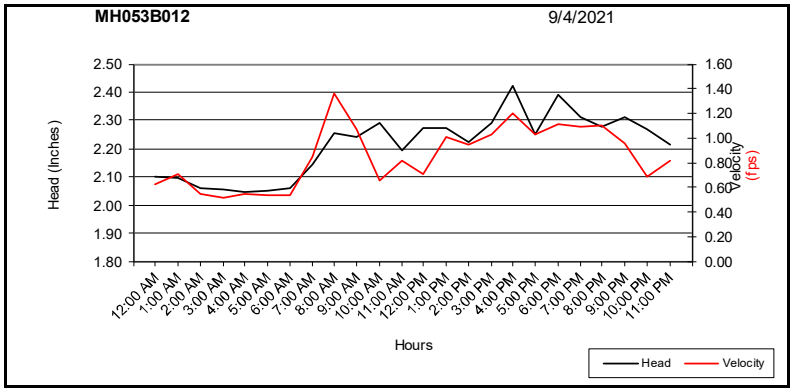
MGD
Rain (Inches)
Hours
Precip.
Flow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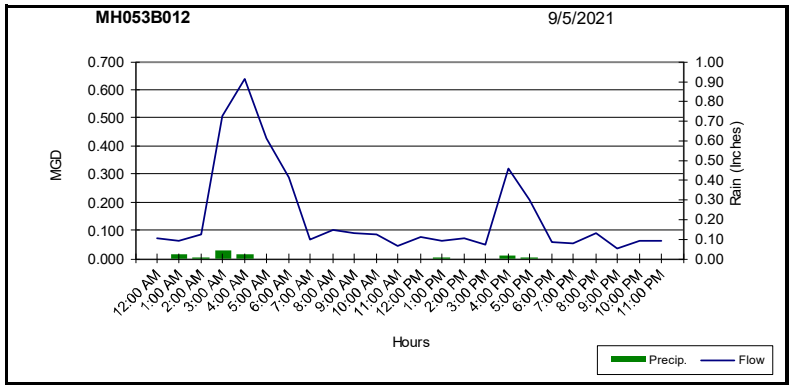
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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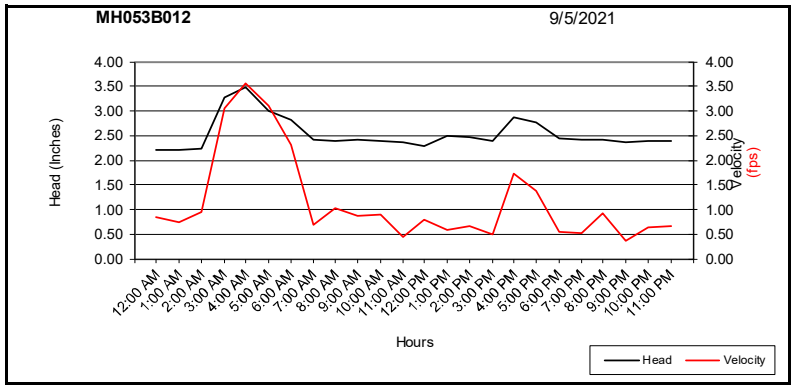
9/5/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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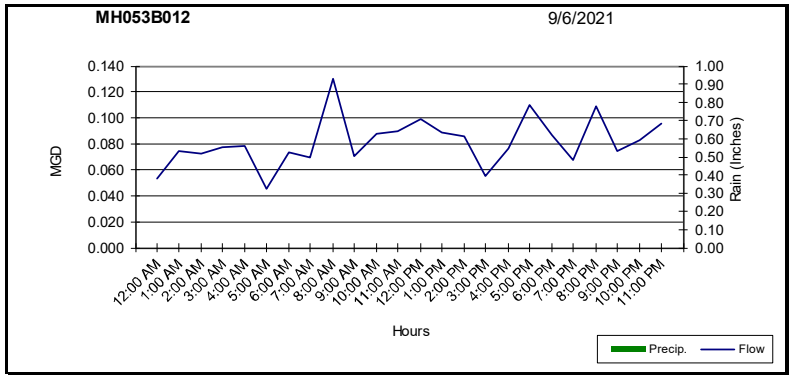
9/5/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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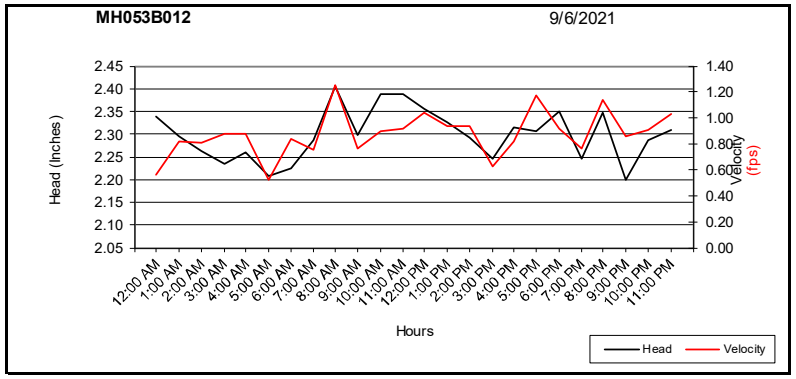
9/6/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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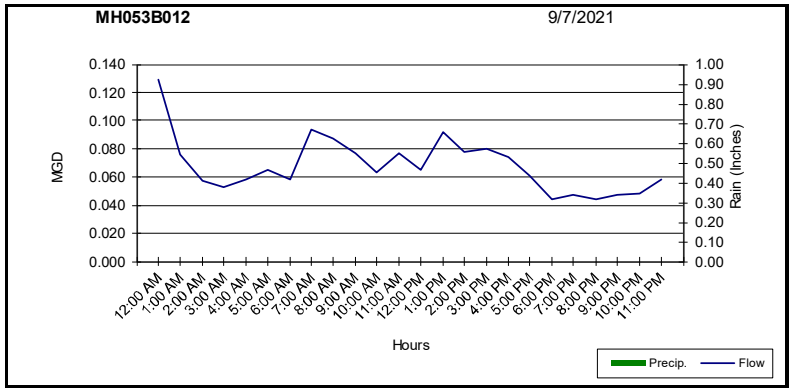
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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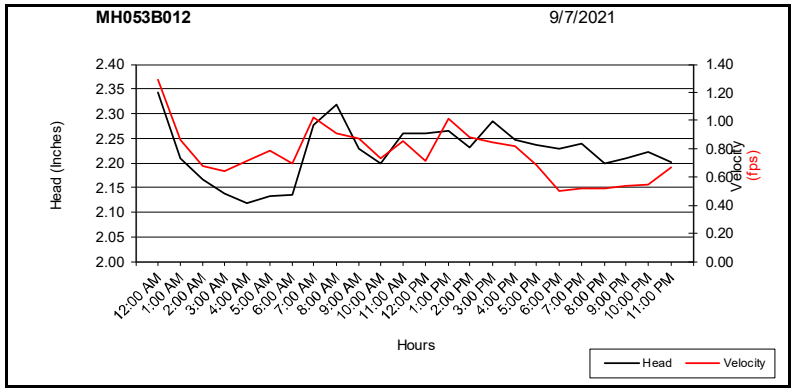
9/7/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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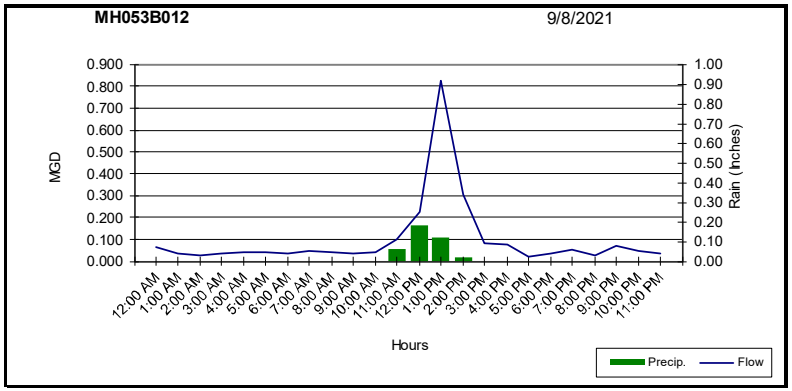
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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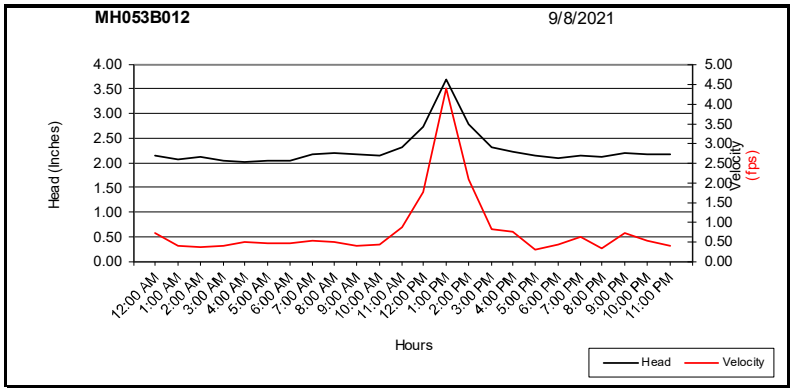
9/8/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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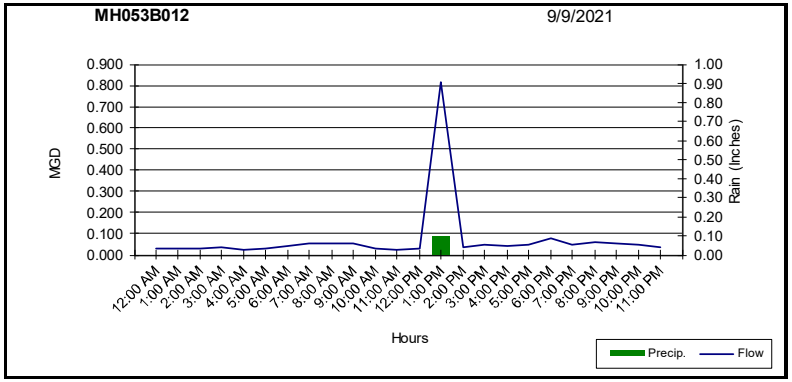
9/8/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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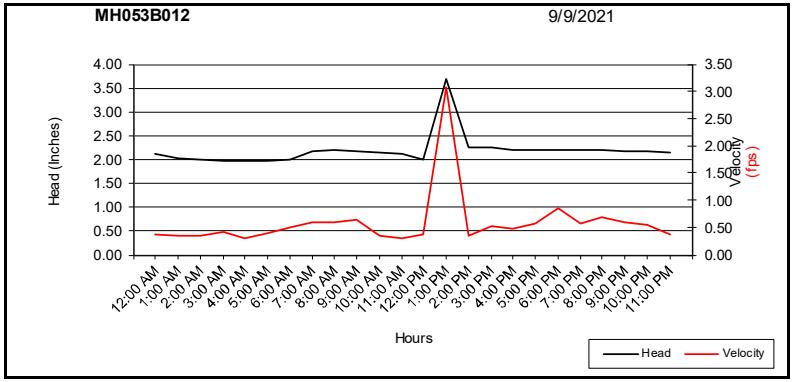
9/9/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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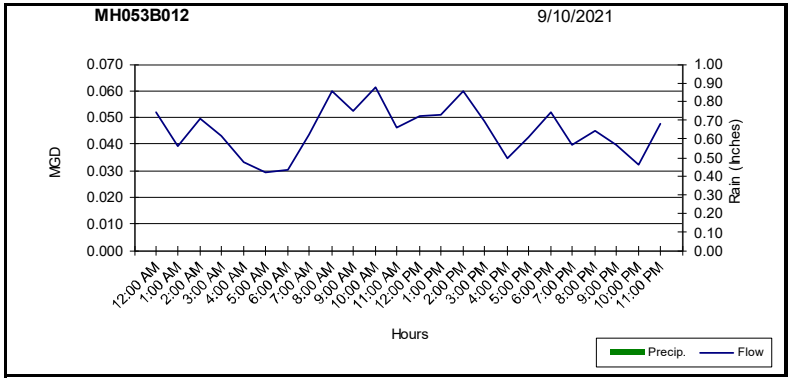
9/9/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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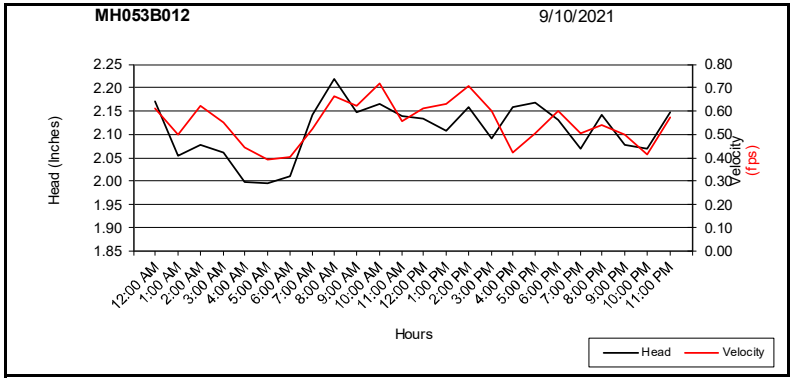
9/10/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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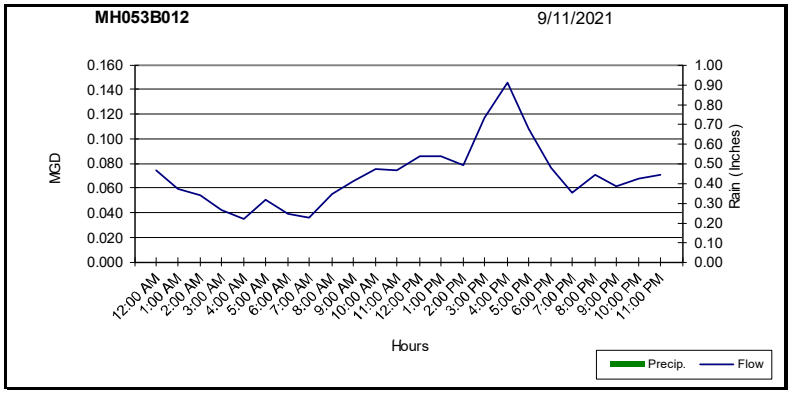
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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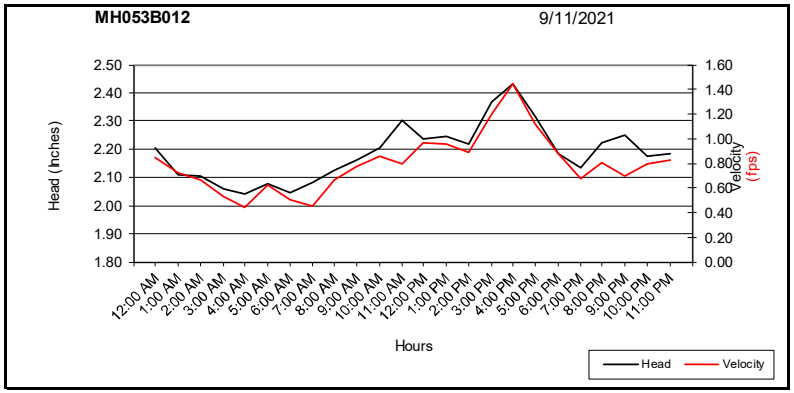
9/11/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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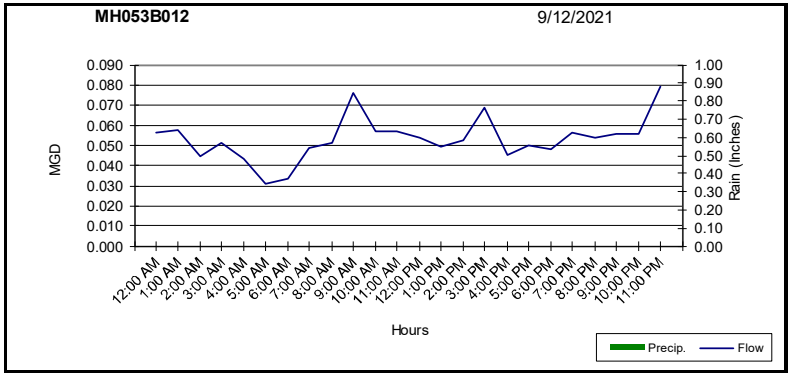
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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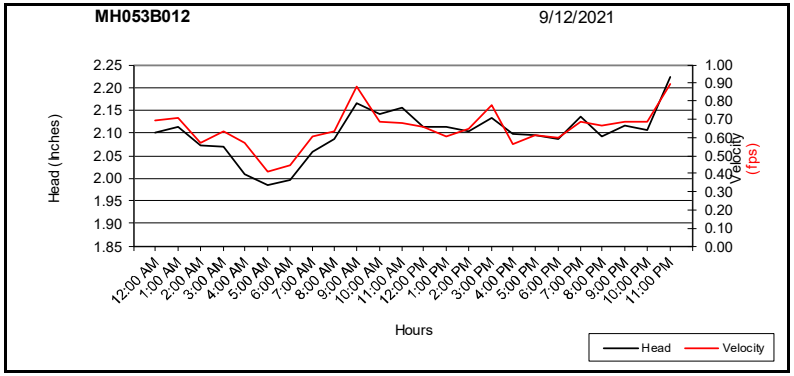
9/12/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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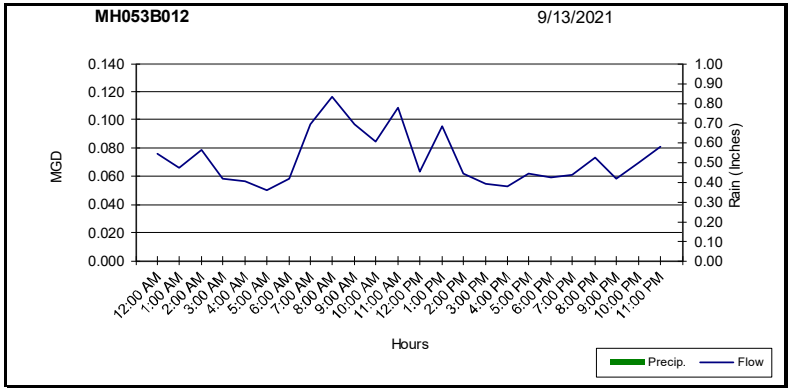
9/12/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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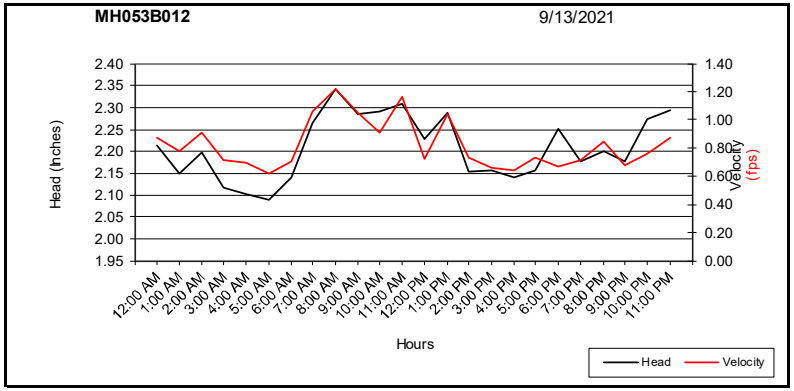
9/13/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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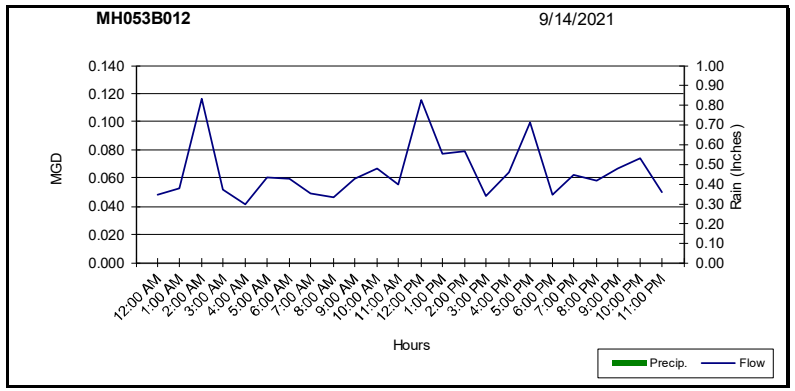
9/13/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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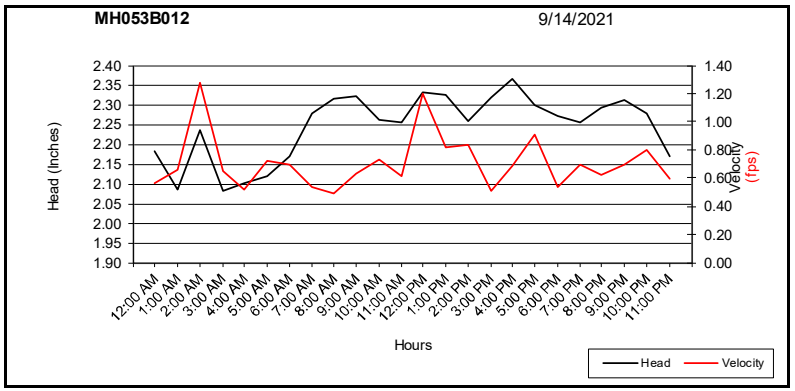
9/14/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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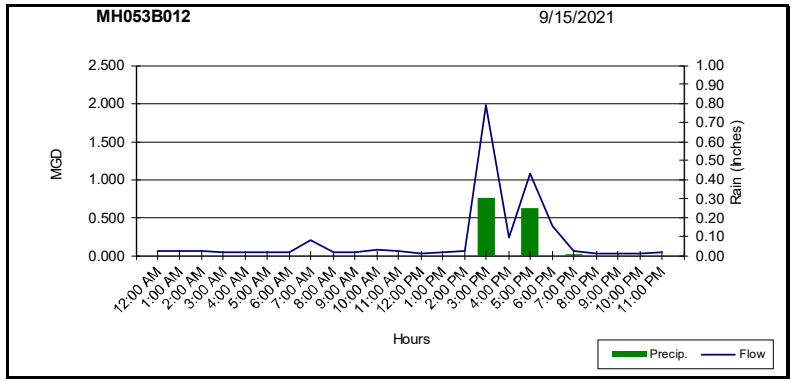
9/14/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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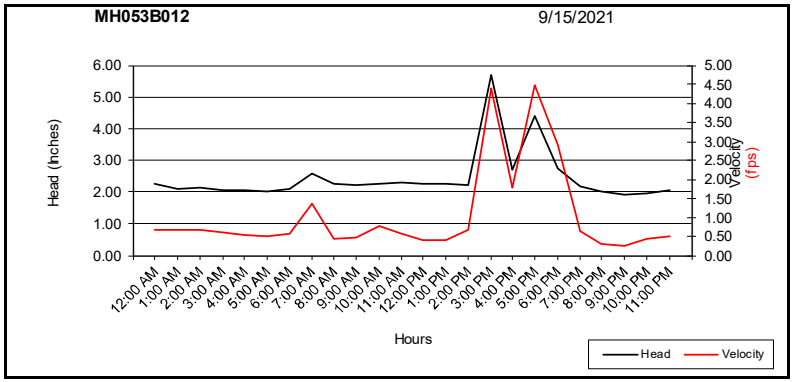
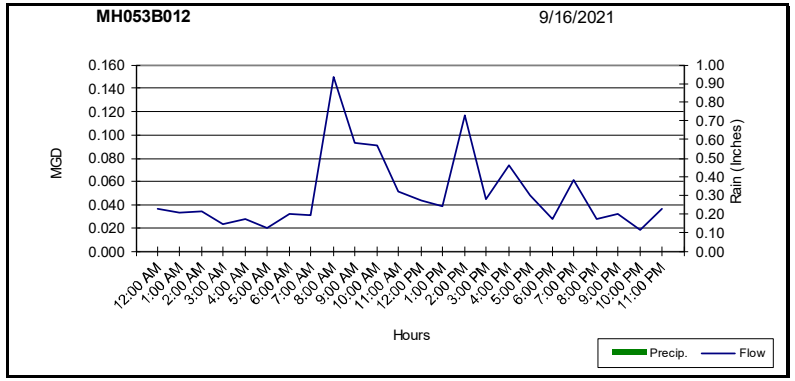
MGD
Rain (Inches)
Hours
Precip.
Flow


MH053B012
9/15/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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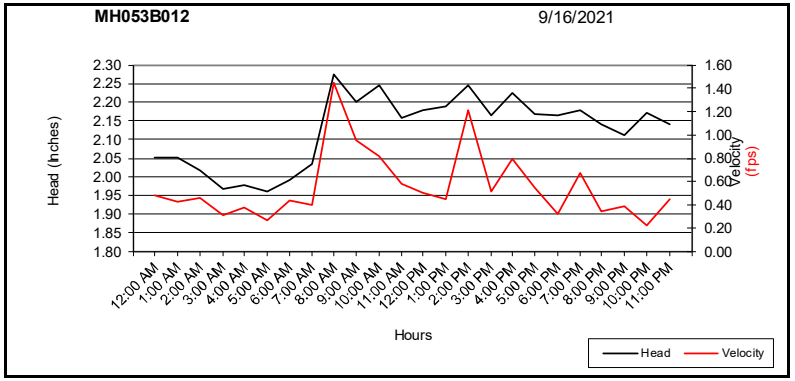
9/16/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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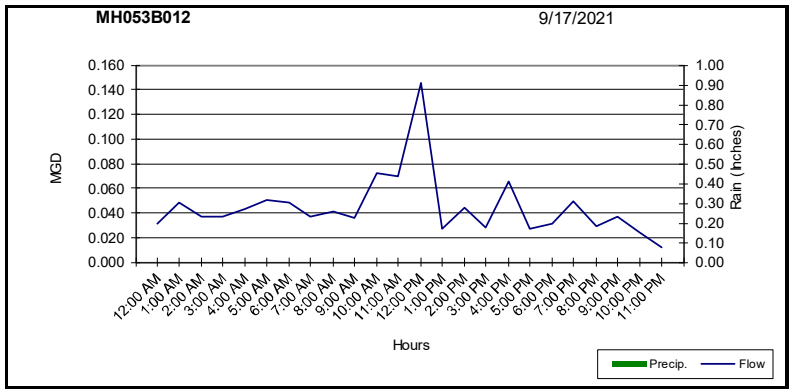
Velocity (fps)
Hours
Head
Velocity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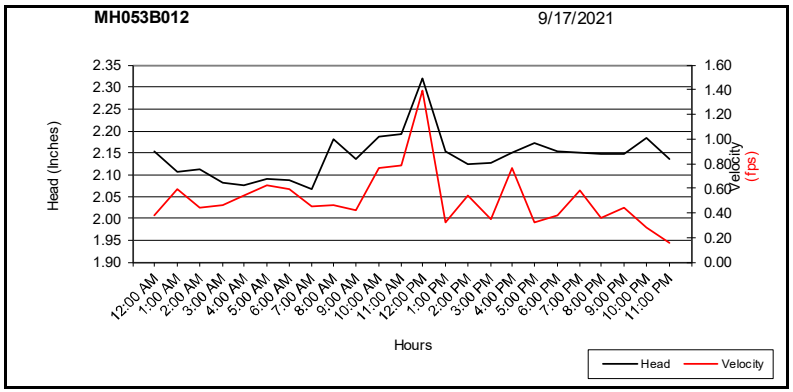
MGD
Rain (Inches)
Hours
Precip.
Flow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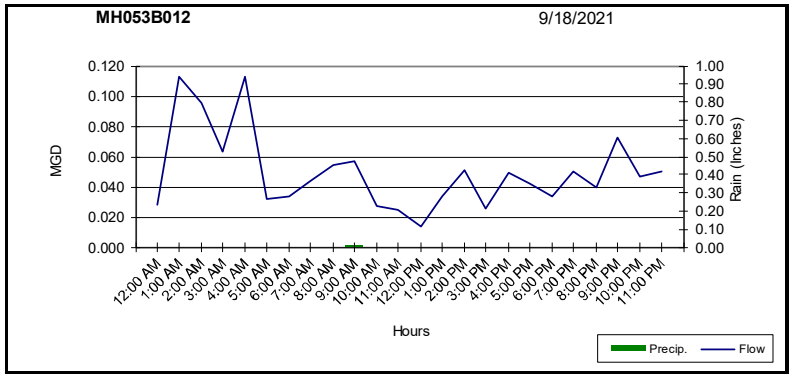
Velocity (fps)
Hours
Head
Velocity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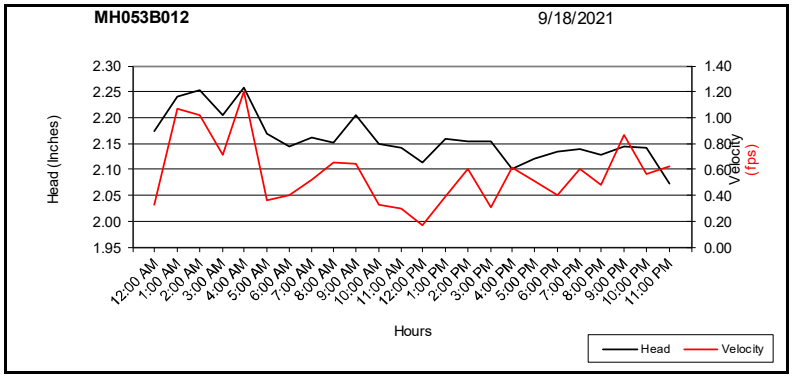
9/18/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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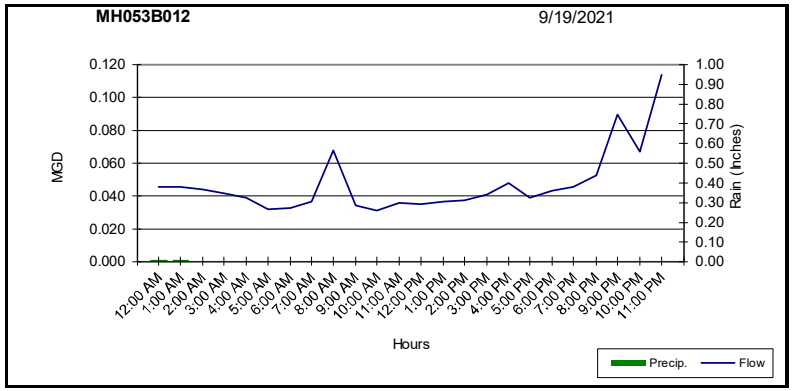
9/18/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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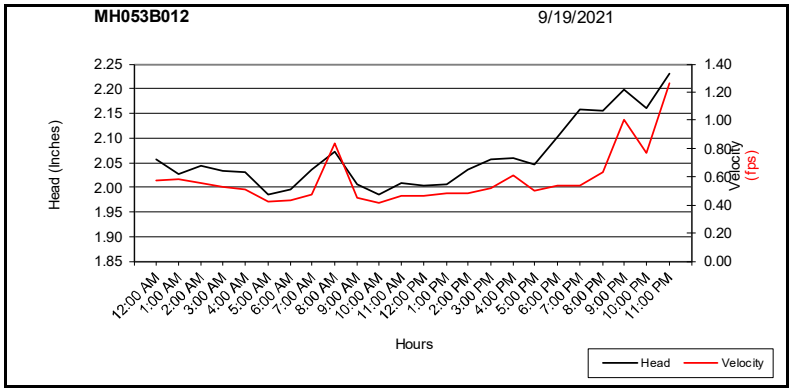
9/19/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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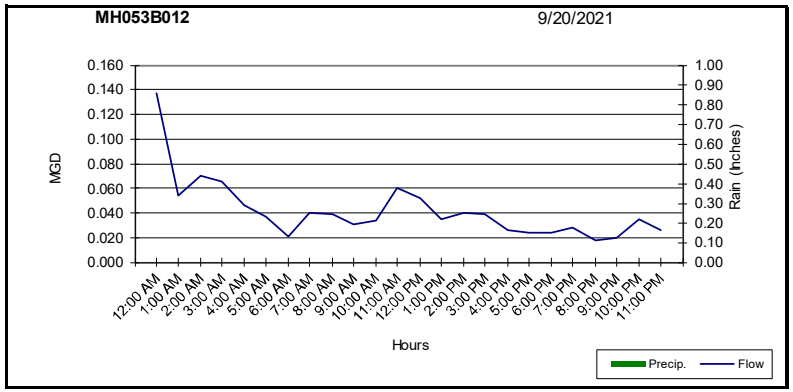
9/19/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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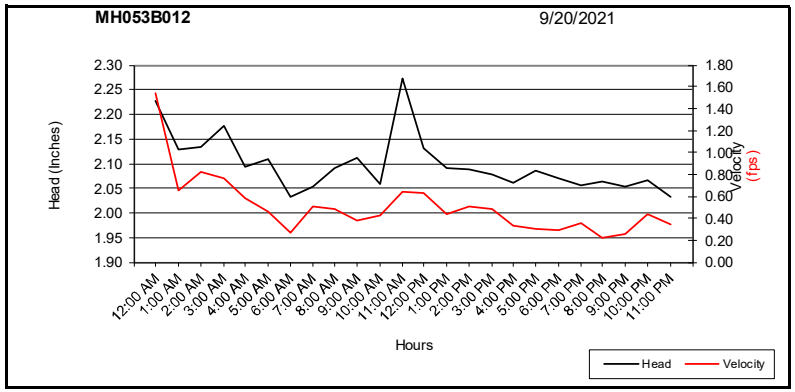
9/20/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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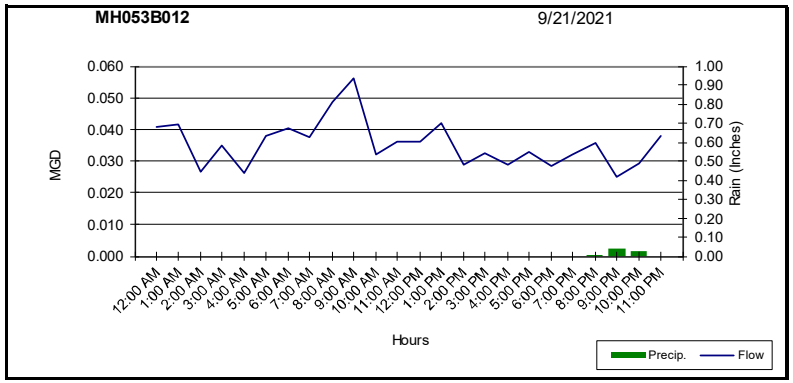
9/20/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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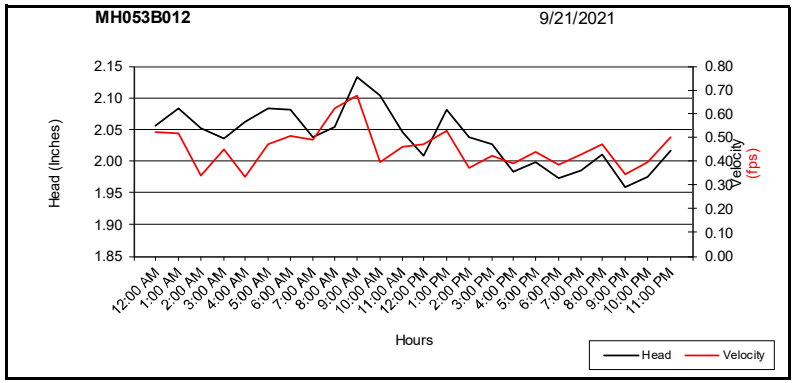
9/21/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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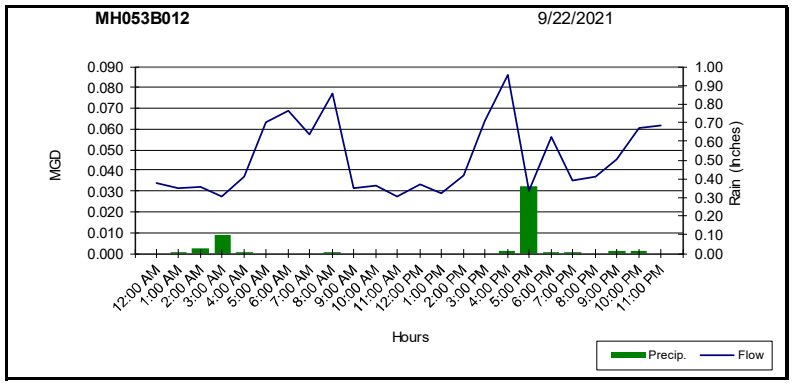
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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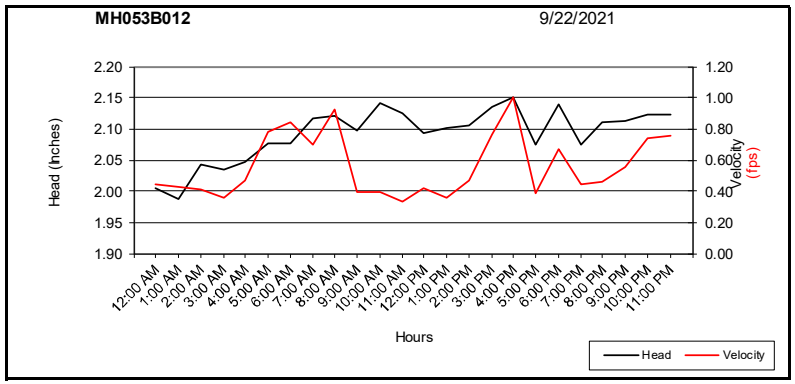
9/22/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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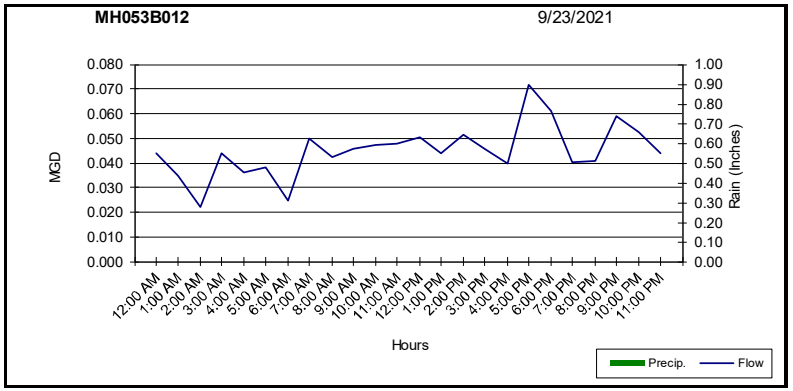
9/22/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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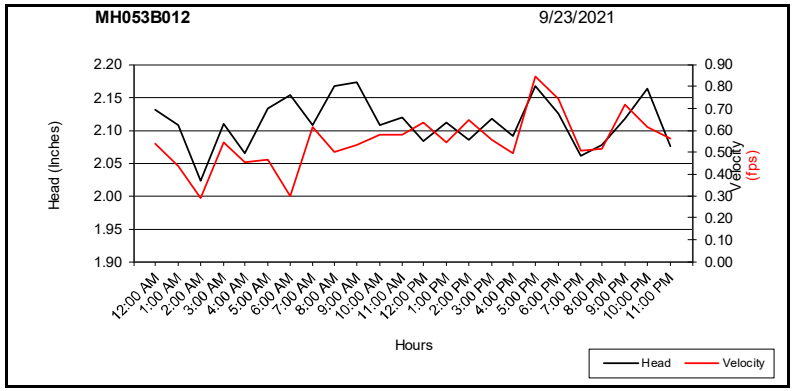
9/23/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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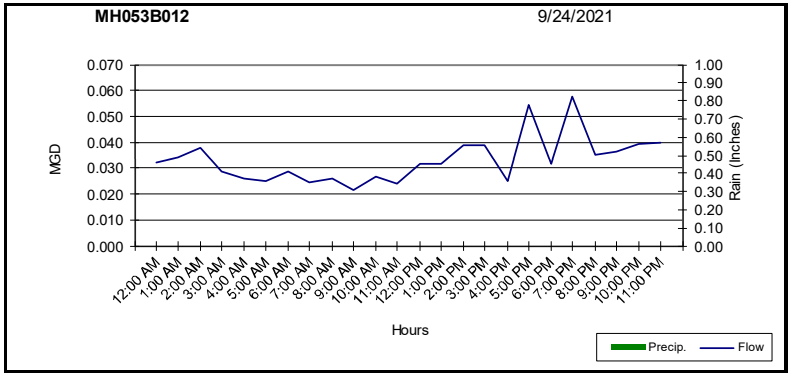
9/23/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity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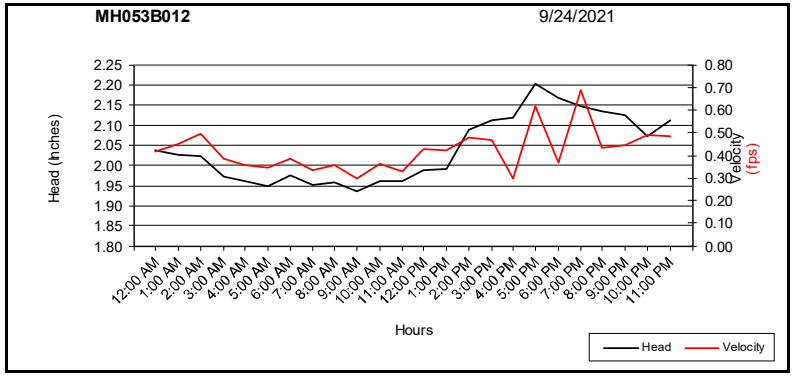
9/24/2021
MGD
Rain (Inches)
Hours
Precip.
Flow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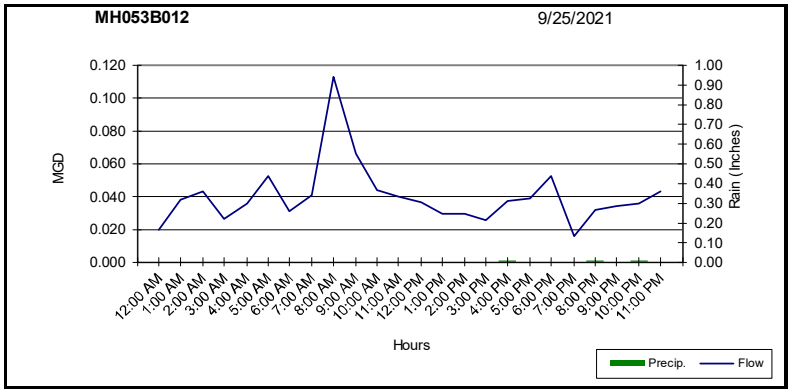
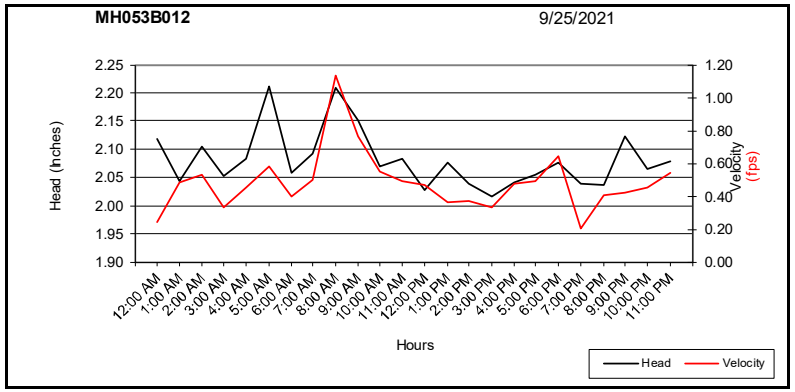
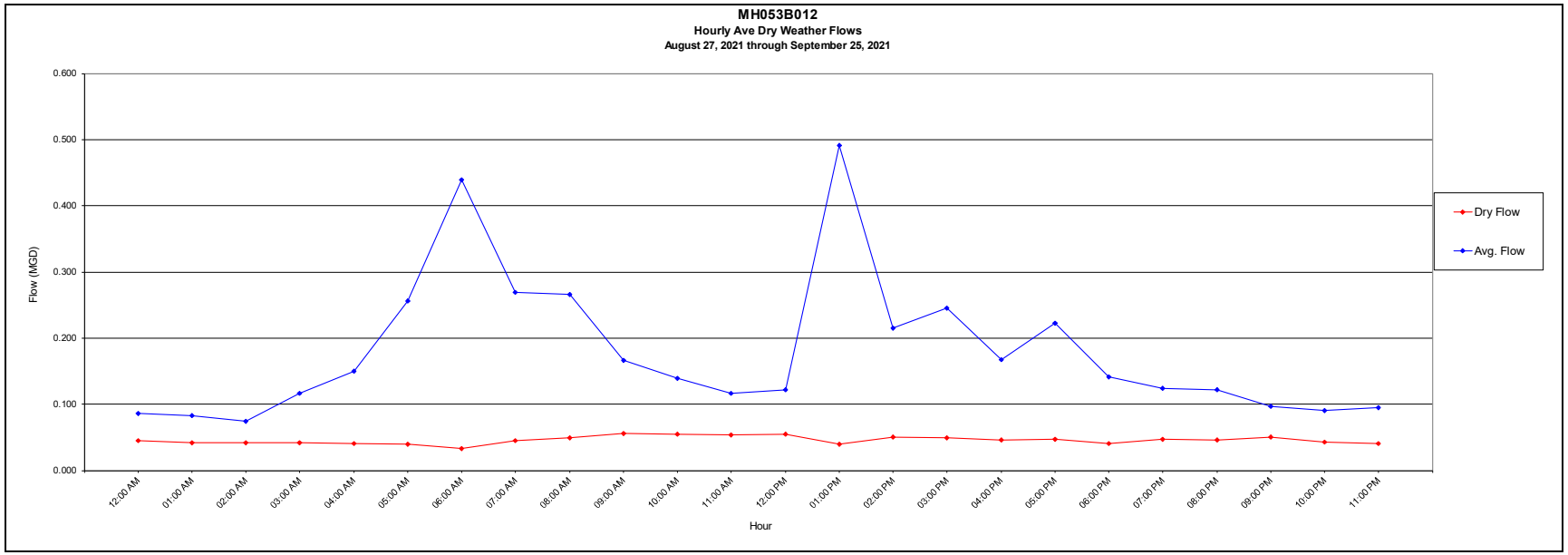
9/24/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity


MH053B012
9/25/2021
MGD
Rain (Inches)
Hours
Precip.
Flow


MH053B012
9/25/2021
Head (Inches)
Velocity (fps)
Hours
Head
Velocity

Average Hourly Dry Flow August 27, 2021 through September 25, 2021

2021	08/27	08/28	08/29	08/30	08/31	09/01	09/02	09/03	09/04	09/05	09/06	09/07	09/08	09/09	09/10	09/11	09/12	09/13	09/14	09/15	09/16	09/17	09/18	09/19	09/20	09/21	09/22	09/23	09/24	09/25	Average
12:00 AM								0.034	0.051		0.054				0.052		0.056		0.048			0.032							0.032		0.045
01:00 AM								0.034							0.039				0.053		0.033	0.048			0.053				0.034		0.042
02:00 AM								0.035	0.044						0.050	0.054	0.045				0.035	0.037							0.038		0.042
03:00 AM								0.032	0.040			0.053			0.043	0.042	0.051	0.059	0.052		0.023	0.037							0.029		0.042
04:00 AM								0.037	0.043			0.059			0.033	0.035	0.043	0.057	0.042		0.028	0.043			0.046			0.036	0.026		0.041
05:00 AM								0.055	0.042		0.046				0.029	0.050	0.031	0.050			0.020	0.050			0.037			0.038	0.025		0.039
06:00 AM									0.042						0.030	0.039	0.033				0.032	0.048			0.021			0.025	0.029		0.033
07:00 AM									0.072		0.069				0.043	0.036	0.049		0.049		0.031	0.037			0.040			0.050	0.024		0.045
08:00 AM												0.087			0.060	0.055	0.051		0.046			0.041			0.039			0.042	0.026		0.050
09:00 AM								0.075			0.071	0.077			0.052	0.066	0.076		0.060			0.035			0.031			0.045	0.021		0.055
10:00 AM									0.061			0.063			0.061		0.057		0.066			0.072			0.033			0.047	0.027		0.054
11:00 AM									0.071						0.046		0.057		0.055		0.051	0.070			0.061			0.047	0.024		0.054
12:00 PM								0.068	0.065			0.065			0.050		0.054	0.063			0.043				0.052			0.051	0.032		0.054
01:00 PM															0.051		0.049				0.039	0.027			0.035			0.044	0.032		0.040
02:00 PM							0.052								0.060		0.052	0.062				0.044			0.041			0.051	0.039		0.050
03:00 PM							0.065	0.062			0.055				0.048		0.069	0.055	0.047		0.044	0.029			0.039			0.045	0.039		0.050
04:00 PM								0.064							0.035		0.045	0.052	0.064			0.065			0.026			0.040	0.025		0.046
05:00 PM							0.053					0.062			0.043		0.050	0.062			0.048	0.027			0.024				0.055		0.047
06:00 PM												0.044			0.052		0.048	0.059	0.048		0.027	0.032			0.024				0.031		0.041
07:00 PM												0.047			0.040	0.056	0.057					0.050			0.028			0.040	0.057		0.047
08:00 PM							0.051	0.052				0.045			0.045	0.071	0.054	0.073	0.058		0.028	0.029			0.018			0.041	0.035		0.046
09:00 PM							0.056	0.055			0.075	0.047			0.040	0.062	0.056	0.058	0.066		0.032	0.037			0.020			0.059	0.036		0.050
10:00 PM							0.059	0.050	0.062			0.048			0.032		0.056				0.019	0.024			0.035			0.052	0.039		0.043
11:00 PM							0.059	0.034				0.059			0.048				0.050		0.037	0.013			0.027			0.044	0.040		0.041
AVG.							0.056	0.049	0.054		0.061	0.058			0.045	0.052	0.052	0.059	0.054		0.033	0.040			0.035			0.044	0.033		**0.046**
Precip. :	0.00	0.75	0.00	0.03	1.24	2.97	0.00	0.00	0.00	0.10	0.00	0.00	0.37	0.10	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.08	0.55	0.00	0.00	0.01	



Existing and Proposed Sanitary Pipe Calculations
CMU Health Wellness & Athletic Center
MARGARET MORRISON ST. & TECH ST. 21-IN PWSA Sanitary Sewer
Dry Flow Comparison Calculations

Given Information	
Pipe Location:	Margaret Morrison St. & Tech St.
Pipe Type:	RCP
Pipe Diameter (IN)[1]:	21
Slope[2]:	5.4%
Manning's n Value:	0.013

Solve for Present Average Dry Flow	
Flow (GPD):	**61,000**

Solve for Present Peak Flow	
Peak Factor:	3.5
Flow (GPD) [3]:	**213,500**

Solve for Peak Design Capacity (Present)	
Flow (CFS):	36.920
Flow (GPD):	**23,857,138**

Solve for Average Design Capacity (Present)	
Peak Factor:	3.5
Flow (GPD):	**6,816,325**

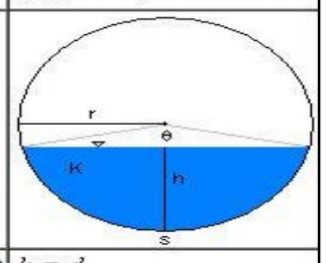
Solve for Projected Peak Flow in 5 Years	
PWSA 5-year Factor	1.05
Anticipated Flow Contribution (GPD)[4]:	12,642
Flow (GPD):	**237,449**

Solve for Average Flow in 5 years	
Flow (GPD):	**67,843**

Summary	
Anticipated Peak Flow Contribution (GPD)[4]:	12,642
Present Average Flow (GPD):	61,000
Present Peak Flow (GPD):	213,500
Average Design Capacity (GPD):	6,816,325
Peak Design Capacity (GPD):	23,857,138
Average Projected Flow (GPD)	**67,843**
Peak Projected Flow (GPD)	**237,449**

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

1. Sewer slope referenced from PWSA output data provided April 28, 2021
2. Sewer diameter measured during flow monitoring gage installation
3. Present flow based on peak hourly average dry flow as monitored in PWSA Manhole MH053B012 for 30 days between August 27, 2021 through September 25, 2021
4. Flow estimation calculation based on floor plans provided by Bohlin Cywinski Jackson

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

PROPOSED SANITARY PIPE CALCULATIONS
CMU Health Wellness & Athletic Center

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

FROM BLDG TO EXISTING 20-INCH IN MARGRET MORRISON STREET
MINIMUM SLOPE WITHIN THIS ENTIRE RUN = 1.0%

		Q_{full}, cfs	Q_{full}, gpd	Q_{half}, cfs	Q_{half}, gpd	V_{max}, fps	V_{half}, fps
MATERIAL	**HDPE**	1.49	961,220	0.71	461,386	8.71	7.58
LENGTH, ft	**26**						
DIAMETER, in	**6**						
SLOPE	**5.96%**			PIPE SIZED ACCORDINGLY: TRUE			
n	**0.012**			V_{max} < 10 fps: TRUE			
Q_{max}, gpd	**15,905**			V_{half} > 2 fps: TRUE			
Q_{design}, gpd	**4,544**						

FROM BLDG TO EXISTING 15-INCH IN TECH STREET (N)
MINIMUM SLOPE WITHIN THIS ENTIRE RUN = 1.0%

		Q_{full}, cfs	Q_{full}, gpd	Q_{half}, cfs	Q_{half}, gpd	V_{max}, fps	V_{half}, fps
MATERIAL	**HDPE**	1.90	1,228,794	0.91	589,821	6.27	5.45
LENGTH, ft	**22**						
DIAMETER, in	**8**						
SLOPE	**2.10%**			PIPE SIZED ACCORDINGLY: TRUE			
n	**0.012**			V_{max} < 10 fps: TRUE			
Q_{max}, gpd	**15,905**			V_{half} > 2 fps: TRUE			
Q_{design}, gpd	**4,544**						

CMU Health Wellness & Athletics Center
Average Sewage Flow Calculations

Last Revised: May 14, 2021

Existing Conditions					
PWSA Account #	**Type of Establishment**	**Total Consumption (1000 gal.)**	**Time Monitored (Days)**	**Existing Average Sewage Flow (GPD)[1]**	**Existing Peak Sewage Flow (GPD)[2]**
5034322-1002140	Ex. Skibo Gym	476	365	1,304	3,263
			Existing EDUs[3] =	4	11

Proposed Conditions – Daytime Usage (8am – 5pm)				
Floor	**Type of Establishment**	**Occupancy**	**Anticipated Peak Daily Rate (GPD/Person)[4]**	**Anticipated Peak Daily Sewage Flow (GPD)**
1	Office[5]	51	10	510
1	Locker Rooms[6]	248	25	6,200
1	Gym, Weights, Athletic[7]	72	10	720
2	Office	78	10	780
2	Locker Rooms	104	25	2,600
2	Gym, Athletic	66	10	660
3	Office	95	10	950
3	Skibo Gym	50	10	500
4	Office	36	10	360
		Proposed Daytime Flow =		13,280
		Proposed Daytime EDUs[3] =		43

Proposed Conditions – Nighttime Usage (6pm – 10pm)				
Floor	**Type of Establishment**	**Occupancy**	**Anticipated Peak Daily Rate (GPD/Person)**	**Anticipated Peak Daily Sewage Flow (GPD)**
2	Arena[8]	1,050	5	5,250
		Proposed Nighttime Flow =		5,250
		Proposed Nighttime EDUs =		18

Proposed Conditions – Afternoon Overlap Usage (5pm – 6pm)		
Area of Building		**Anticipated Peak Daily Sewage Flow (GPD)**
Offices, Classrooms, and Athletic spaces		13,280
Arena (50% Capacity)		2,625
	Proposed Overlap Flow =	15,905
	Proposed Overlap EDUs =	53

Summary of Proposed Conditions	
Proposed Maximum Flow	15,905
Proposed Maximum EDUs	53
Existing Flow	3,263
Existing EDUs	11

	Proposed Net Flow =	12,642
	Proposed Net EDUs =	42

1 – Rate is based on existing 2019 PWSA Water bills and usage for Parcel 53-B-50, Pittsburgh, PA. Refer to Appendix C Supporting Flow Calculations.
2 – Peak rate is based on a peaking factor of 2.5. Refer to Appendix C Supporting Flow Calculations.
3 – EDUs are based on 300 GPD/EDU.
4 – Rate is based on the flow estimate defined in Table 2-1 of the PWSA Procedures Manual for Developers.
5 – "Office" represents any space representative of a working environment including but not limited to offices, conference rooms, and wellness spaces.
6 – "Locker Rooms" represent any locker room space for any sport and includes any sinks, toilets, showers, and other water and sewer facilities within these spaces. Flow rate estimate based on "Schools, day with gyms and showers" defined in Table 2-1 of the PWSA Procedures Manual for Developers.
7 – "Gym, Weights, Athletic" represents all athletic spaces including weight rooms, gyms (except the Arena), athletic lounges or healthcare, and athletic offices. Flow rate based on office space per day-to-day use.
8 – "Arena" represents all athletes, staff, and attendees using the arena and building facilities during night time hours. Flow rate estimate based on "Movie Theaters" and "Fairgrounds and parks" in the Pennsylvania Code Title 25 §73.17.

APPENDIX D

Alternative Sewage Facilities Analysis

SECTION H
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Alternative Sewage Facilities Analysis
CMU Health Wellness & Athletics Center
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250111201

The project site is on City of Pittsburgh parcel 53-B-50. The project site is located between Frew Street to the south, City of Pittsburgh Parcel 53-C-170 to the east, Margaret Morrison Street to the north, and Tech Street to the west. The site is currently occupied by the existing Skibo Gymnasium and surrounding landscape/hardscape areas. CMU is proposing to redevelop approximately 2.62 acres of the site to a four-story an approximately 160,000 GSF Health Wellness and Athletics Center (HWAC) building. A portion of the existing Skibo Gymnasium on the south side of the site will remain and be incorporated into the proposed building. Additionally, the surrounding site will consist of landscaping, sidewalks and patio space, as well as loading dock access from Margaret Morrison Street. The proposed development will be owned and operated by Carnegie Mellon University.

The sanitary service for the project will be provided by two proposed on-site gravity sewer laterals. One 6-inch sanitary lateral will connect from the proposed building to the existing 20-inch PWSA combination sewer line in Margaret Morrison Street. A separate 8-inch sanitary lateral will connect from the proposed building to the existing 15-inch PWSA combination sewer line in Tech Street. Sewage is ultimately conveyed to the Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility in Pittsburgh, PA. This ultimate method (to serve the development in the long term, five years or more) will provide for disposal of the total combined daily flow of 12,642 gallons per day (32 EDU's). A reference for the approximate sewage flow for the proposed development can be found in Appendix C. The proposed lateral and private sanitary line will remain private and will not create any undue financial burdens to the City of Pittsburgh, PWSA, or ALCOSAN.

Alternative methods of sewage disposal that could be considered include on-site subsurface disposal systems (septic systems) and an individual package wastewater treatment plant. The existing developments in the area are all currently connected to the public sewer system; therefore, an on-site septic system would not be consistent with the neighboring buildings, nor would it be a practical solution to provide adequate service for the site. The nearest discharge point from the site for a stream discharge is the Panther Hollow Stream in Schenley Park, approximately 0.5 miles southwest of the site. The distance, topography, and improvements between the site and stream discharge point make this option not feasible. A package wastewater treatment plant with discharge to the Panther Hollow Stream is not feasible due to the size and cost of the system relative to the project size.

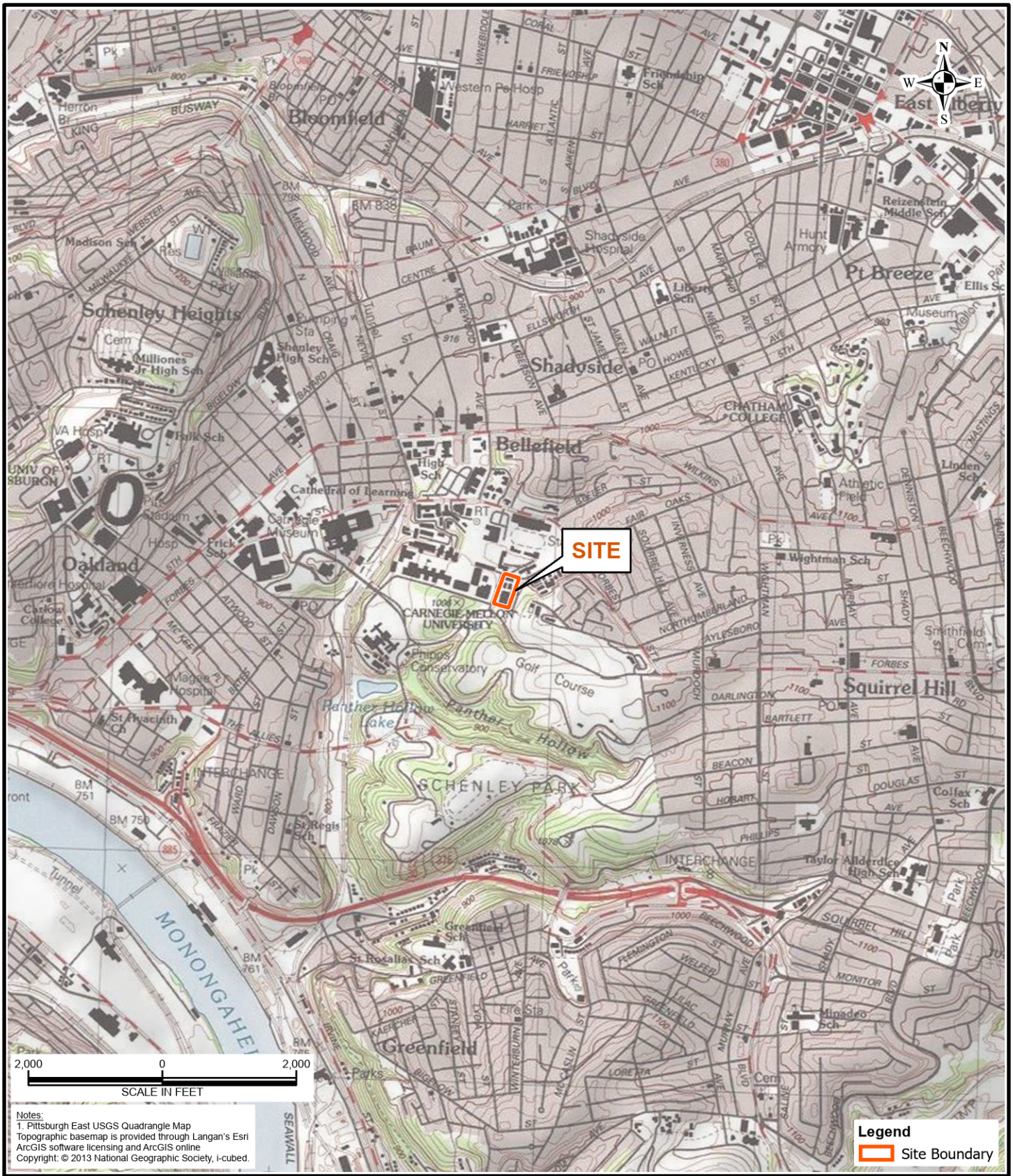
APPENDIX E
Public Notice

SECTION P
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Public Notice
Carnegie Mellon University – Health Wellness & Athletics Center
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250111201

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

APPENDIX F
USGS Map and Plot Plans



LANGAN

Langan Engineering and Environmental Services, Inc.

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

T: 724.514.5100 F: 724.514.5101
www.langan.com

Project	CMU HIGHMARK HEALTH WELLNESS & ATHLETICS CENTER PITTSBURGH ALLEGHENY COUNTY PA
Drawing Title	SITE LOCATION MAP
Project No.	250111201
Date	1/18/2021
Scale	1" = 2,000 feet
Drawn By	LDB
Figure	1

Path: C:\Users\lbalch\Desktop\GIS_Projects\PIT\250111201\250111201\250111201.aprx

APPENDIX G
Cultural Resource Notice

SECTION G
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3

Re: Cultural Resources Notice (CRN)
Carnegie Mellon University – Health Wellness & Athletics Center
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250111201

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

APPENDIX H
PNDI

1. PROJECT INFORMATION

Project Name: **CMU - Health Wellness and Athletic Center**
Date of Review: **3/30/2021 11:34:29 AM**
Project Category: **Development, New commercial/industrial development (store, gas station, factory)**
Project Area: **4.10 acres**
County(s): **Allegheny**
Township/Municipality(s): **PITTSBURGH**
ZIP Code:
Quadrangle Name(s): **PITTSBURGH EAST**
Watersheds HUC 8: **Lower Monongahela**
Watersheds HUC 12: **Streets Run-Monongahela River**
Decimal Degrees: **40.441049, -79.941448**
Degrees Minutes Seconds: **40° 26' 27.7779" N, 79° 56' 29.2126" W**

2. SEARCH RESULTS

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

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

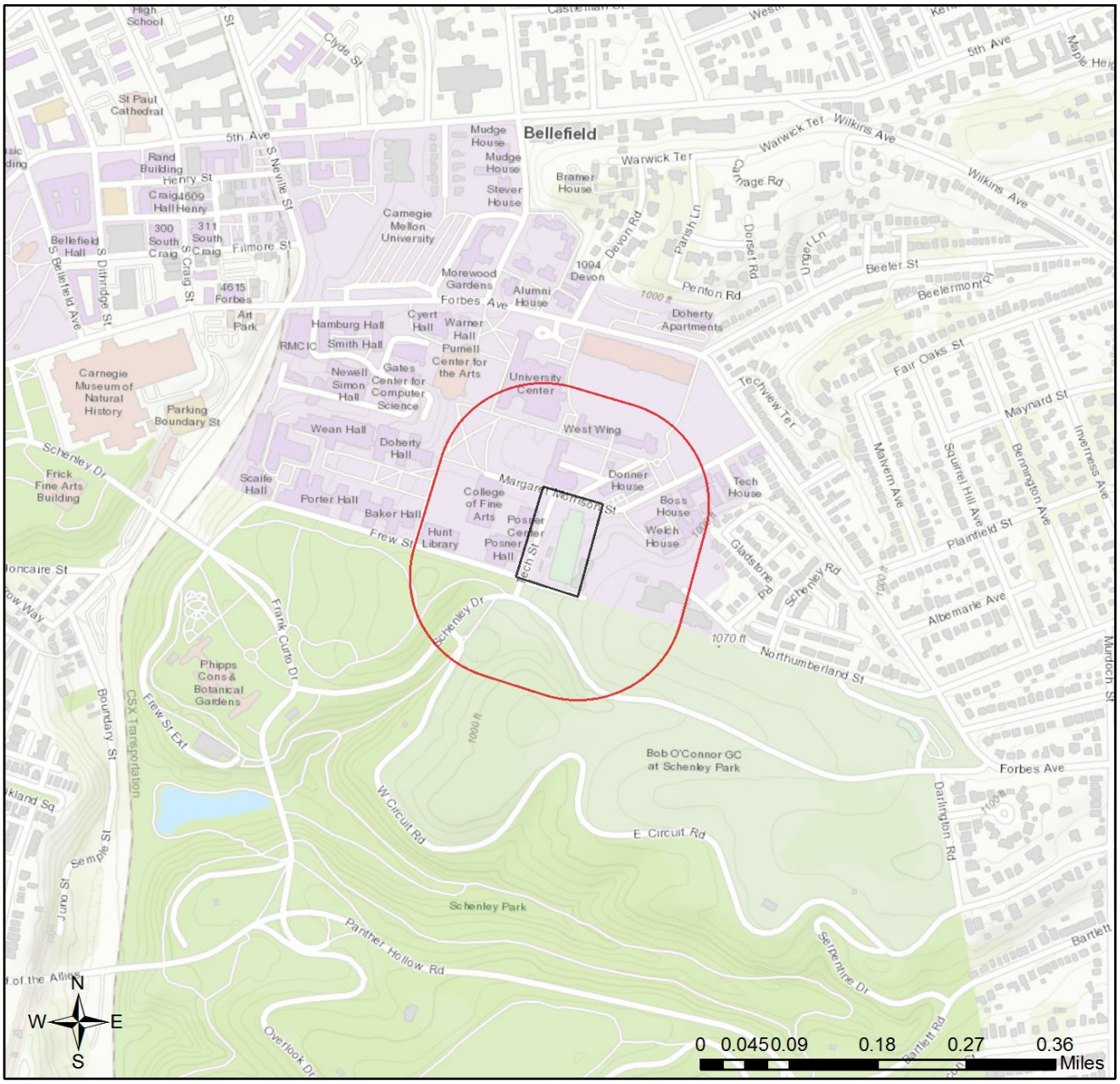
CMU - Health Wellness and Athletic Center

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

CMU - Health Wellness and Athletic Center



Project Boundary

Buffered Project Boundary

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

RESPONSE TO QUESTION(S) ASKED

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

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

3. AGENCY COMMENTS

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

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

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

PA Department of Conservation and Natural Resources
RESPONSE:
Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

DCNR Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here: https://conservationexplorer.dcnr.pa.gov/content/survey-protocols)

Scientific Name	Common Name	Current Status	Proposed Status	Survey Window
Ptelea trifoliata	Common Hop-tree	Threatened	Threatened	Flowers late May - early June; fruits July - September

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

U.S. Fish and Wildlife Service
RESPONSE:

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

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.
** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found here. This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION). For projects showing "Potential Impacts" with USFWS, please send project information to that agency by email IR1_ESPenn@fws.gov *(preferred) or regular mail.*

Check-list of Minimum Materials to be submitted:
____Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.
____A map with the project boundary and/or a basic site plan(particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)
In addition to the materials listed above, USFWS REQUIRES the following
____**SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.
____Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)
____Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

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

5. ADDITIONAL INFORMATION

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

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

6. AGENCY CONTACT INFORMATION

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

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

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

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

7. PROJECT CONTACT INFORMATION

Name: Scott Levit, PE
Company/Business Name: Langan Engineering and Environmental Services, Inc.
Address: 2400 Ansys Drive, Suite 403
City, State, Zip: Canonsburg, PA 15317
Phone:(724) 514-5128 Fax:(724) 514-5101
Email: slevit@langan.com

8. CERTIFICATION

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

Scott S

applicant/project proponent signature

04/05/2021
date

pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

BUREAU OF FORESTRY

March 30, 2021

PNDI Number: 730634
Version: Final_1; 3/30/21

Nathaniel King
Langan
2400 Ansys Drive
Canonsburg, PA 15317
Email: nking@langan.com (hard copy will not follow)

Re: CMU - Health Wellness and Athletic Center
City of Pittsburgh, Allegheny County, PA

Dear Nathaniel King,

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number **730634**. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

No Impact Anticipated

PNDI records indicate species or resources under DCNR's jurisdiction are located in the vicinity of this project. However, based on the information you submitted concerning the scope of work, the immediate location, and our detailed resource information, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. Should the proposed work continue beyond the period covered by this letter and a permit has not been acquired, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative, description of project changes and accurate map). As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

Should you have any questions or concerns, please contact Megan Pulver, Ecological Information Specialist, by phone (717-705-2819) or via email (c-mpulver@pa.gov).

Sincerely

Greg Podniesinski

Greg Podniesinski, Section Chief
Natural Heritage Section

APPENDIX I

Component 4A

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

INSTRUCTIONS FOR COMPLETING COMPONENT 4A
MUNICIPAL PLANNING AGENCY REVIEW

Remove and recycle these instructions prior to mailing component to the approving agency.

Background

This component, Component 4, is used to obtain the comments of planning agencies and/or health departments having jurisdiction over the project area. It is used in conjunction with other planning module components appropriate to the characteristics of the project proposed.

Who Should Complete the Component?

The component should be completed by any existing municipal planning agency, county planning agency, planning agency with areawide jurisdiction, and/or health department having jurisdiction over the project site. It is divided into sections to allow for convenient use by the appropriate agencies.

The project sponsor must forward copies of this component, along with supporting components and data, to the appropriate planning agency(ies) and health department(s) (if any) having jurisdiction over the development site. These agencies are responsible for responding to the questions in their respective sections of Component 4, as well as providing whatever additional comments they may wish to provide on the project plan. After the agencies have completed their review, the component will be returned to the applicant. The agencies have 60 days in which to provide comments to the applicant. If the agencies fail to comment within this 60 day period, the applicant may proceed to the next stage of the review without the comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the module package to the agencies will document a date of receipt.

After receipt of the completed Component 4 from the planning agencies, or following expiration of the 60 day period without comments, the applicant must submit the entire component package to the municipality having jurisdiction over the project area for review and action. If approved by the municipality, the proposed plan, along with the municipal action, will be forwarded to the approving agency (Department of Environmental Protection or delegated local agency). The approving agency, in turn, will either approve the proposed plan, return it as incomplete, or disapprove the plan, based upon the information provided.

Instructions for Completing Planning Agency and/or Health Department Review Component

Section A. Project Name

Enter the project name as it appears on the accompanying sewage facilities planning module component (Component 2, 2m, 3, 3s or 3m).

Section B. Review Schedule

Enter the date the package was received by the reviewing agency, and the date that the review was completed.

Section C. Agency Review

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.

2. Complete the name, title, and signature block.

Section D. Additional Comments

The Agency may provide whatever additional comment(s) it deems necessary, as described in the form. Attach additional sheets, if necessary.

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP Code #:

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

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

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

Project Name
CARNEGIE MELLON UNIVERSITY – HEALTH WELLNESS & ATHLETICS CENTER

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

1. Date plan received by municipal planning agency June 17, 2021
2. Date review completed by agency July 1, 2021

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

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

SECTION C. AGENCY REVIEW (continued)

Yes	No		
☒	☐	13.	Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
☒	☐	14.	Is this plan consistent with the municipal Official Sewage Facilities Plan? If no, describe the inconsistencies _____
☐	☒	15.	Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
☐	☒	16.	Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
☐	☐		If yes, is the proposed waiver consistent with applicable ordinances? If no, describe the inconsistencies

17. Name, title and signature of planning agency staff member completing this section:

Name: Martina Wolf Battistone

Title: Principal Environmental Planner

Signature: Martina Wolf Battistone

Date: July 1, 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.

APPENDIX J

Component 4C

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

INSTRUCTIONS FOR COMPLETING COMPONENT 4C
COUNTY OR JOINT HEALTH DEPARTMENT REVIEW

Remove and recycle these instructions prior to mailing component to the approving agency.

Background

This component, Component 4, is used to obtain the comments of planning agencies and/or health departments having jurisdiction over the project area. It is used in conjunction with other planning module components appropriate to the characteristics of the project proposed.

Who Should Complete the Component?

The component should be completed by any existing municipal planning agency, county planning agency, planning agency with areawide jurisdiction, and/or health department having jurisdiction over the project site. It is divided into sections to allow for convenient use by the appropriate agencies.

The project sponsor must forward copies of this component, along with supporting components and data, to the appropriate planning agency(ies) and health department(s) (if any) having jurisdiction over the development site. These agencies are responsible for responding to the questions in their respective sections of Component 4, as well as providing whatever additional comments they may wish to provide on the project plan. After the agencies have completed their review, the component will be returned to the applicant. The agencies have 60 days in which to provide comments to the applicant. If the agencies fail to comment within this 60 day period, the applicant may proceed to the next stage of the review without the comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the module package to the agencies will document a date of receipt.

After receipt of the completed Component 4 from the planning agencies, or following expiration of the 60 day period without comments, the applicant must submit the entire component package to the municipality having jurisdiction over the project area for review and action. If approved by the municipality, the proposed plan, along with the municipal action, will be forwarded to the approving agency (Department of Environmental Protection or delegated local agency). The approving agency, in turn, will either approve the proposed plan, return it as incomplete, or disapprove the plan, based upon the information provided.

Instructions for Completing Planning Agency and/or Health Department Review Component

Section A. Project Name

Enter the project name as it appears on the accompanying sewage facilities planning module component (Component 2, 2m, 3, 3s or 3m).

Section B. Review Schedule

Enter the date the package was received by the reviewing agency, and the date that the review was completed.

Section C. Agency Review

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.

2. Complete the name, title, and signature block.

Section D. Additional Comments

The Agency may provide whatever additional comment(s) it deems necessary, as described in the form. Attach additional sheets, if necessary.

3850-FM-BCW0362C 6/2016

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP Code #:

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

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

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

Project Name

CMU Heath Wellness and Athletics Center

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

1. Date plan received by county or joint county health department November 5, 2021

   Agency name Allegheny County Health Department (ACHD)

2. Date review completed by agency November 9, 2021

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

Yes	No		
☒	☐	1.	Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?
			If no, what are the inconsistencies?
☐	☒	2.	Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
			If yes, describe
☐	☒	3.	Is there any known groundwater degradation in the area of this proposal?
			If yes, describe
☒	☐	4.	The county or joint county health department recommendation concerning this proposed plan is as follows: ACHD recommends approval. See attached letter.
		5.	Name, title and signature of person completing this section:

Name: Freddie Fields

Title: Environmental Health Engineer III

Signature: Freddie Fields

Date: November 9, 2021

Name of County Health Department: ACHD

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

Telephone Number: 412-578-8046

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

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

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

APPENDIX K

Completeness Checklist

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Completeness Checklist

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

Sewage Collection and Treatment Facilities

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

Municipal Action

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

_____
Signature of Municipal Official

_____
Date submittal determined complete