

Date

Name 7/12/2021

Address BARRY ISETT & ASSOCIATES, INC  
85 SOUTH ROUTE 100  
ALLENTOWN, PA 18106

RE: Planning Module for New Land Development

Subdivision DAVINCI Discovery Center

COMMERCIAL 8967 GPD

City of Allentown, Lehigh County

DEP Code No: 2-39001259-3

Dear:

In response to your postcard application, enclosed are the applicable planning modules required for the proposed development. Please submit the completed planning module and supporting information to the municipality(ies) in which the project is located. The Department must receive 3 copies. Please answer all questions. Do Not answer "N/A" or "Not Applicable". If you find a question does not apply, explain all reasons to support that answer.

A copy of the letter MUST be attached to the planning module when resubmitted through the municipality to the Department. This letter is to be used as a completion checklist and guide to completing the planning modules and does not supersede the rules and regulations found in Chapter 71. The municipality must submit the complete module package to the Department, (see end of letter for certification statement).

Effective December 15, 1995 Act 149 required the Department to assess planning module review fees. This fee is based on the type of development and total equivalent dwelling units proposed. The applicant will be billed upon Department approval or denial of the project.

If you are applying for a planning module exemption for this project, the exemption was not granted for the following reason(s):

<u>Materials required</u>	<u>Municipal Checklist</u>		<u>DEP Completeness Review</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Department cover/Checklist letter	_____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transmittal letter, completed and signed by the Municipal Secretary.	_____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resolution of Adoption completed and signed by the Municipal Secretary and containing the municipal seal.	_____
<input type="checkbox"/>	<input type="checkbox"/>	Component 2-Follow attached guidance.	_____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Component 3-Follow attached guidance.	_____
<input type="checkbox"/>	<input type="checkbox"/>	Component 3s-Follow attached guidance.	_____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Component 4a-Municipal Planning Agency Review	_____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Component 4b-County Planning Agency Review	_____
<input type="checkbox"/>	<input type="checkbox"/>	Potential Impact(s) has occurred based on your search of the PA Natural Diversity Inventory. These issues must be resolved with each agency before the Department's review of Planning Modules can occur.	_____
<input type="checkbox"/>	<input type="checkbox"/>	Sewage management program as per 25 Pa. Code Subsection 71.72	_____
<input type="checkbox"/>	<input type="checkbox"/>	Hydrogeologic Study – Analysis of interbasin transfer of water between a Special Protection watershed into a Non-Special Protection watershed.	_____
<input type="checkbox"/>	<input type="checkbox"/>	Delaware River Basin Commission Notice of Applications Received (NAR) for projects with sewage flows exceeding 10,000 GPD.	_____
<input type="checkbox"/>	<input type="checkbox"/>	Preliminary hydrogeology	_____
<input type="checkbox"/>	<input type="checkbox"/>	Permeability testing, to be determined at site testing	_____
<input type="checkbox"/>	<input type="checkbox"/>	Detailed hydrogeologic study	_____

\_\_\_\_\_      \_\_\_\_\_      Socio-economic justification

\_\_\_\_\_      \_\_\_\_\_      If the project is located in a Special Protection Watershed, please submit an Antidegradation Analysis meeting the Requirement of Chapter 93.4(b), 93.4(a) and 93.4c(b)(2)

In all cases, address the immediate and long range sewage disposal needs of the proposal and comply with 25 Pa. Code, Chapter 71, Subchapter C relating to New Land Development Plan Revisions.

Please note that the Department will return the planning module package if an incomplete revision is submitted.

Sincerely,



Robert T. Corby, Jr.  
Sewage Planning Specialist  
Clean Water Program

CERTIFICATION STATEMENT

I certify that this submittal is complete and includes all requested items. Failure to submit a complete module package will result in return of package.

Municipal Address \_\_\_\_\_

Municipal Telephone Number \_\_\_\_\_

Signed: \_\_\_\_\_, Municipal Secretary

List below any individuals and address that should be copied if the planning module is returned to the municipality (if address is not provided, no copy will be sent):

\_\_\_\_\_  
\_\_\_\_\_



## Checklist



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

## Completeness Checklist

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

### Sewage Collection and Treatment Facilities

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

### Municipal Action

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

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Signature of Municipal Official

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Date submittal determined complete



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

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

## INSTRUCTIONS FOR COMPLETING COMPONENT 3 SEWAGE COLLECTION AND TREATMENT FACILITIES

### How to Obtain Planning Module Components

Planning module components appropriate to your project can be obtained by completing an "Application for Sewage Facilities Planning Module" mailer and sending it to the agency responsible for final review of your project (or the "approving agency"). This "approving agency" may be either DEP or a "delegated local agency" which is a local agency that has received planning approval delegation from DEP under Act 537. If you are unsure of where to send your mailer, contact the DEP regional office serving your county for help. **Do not use this component unless you have received a properly code-numbered copy from DEP or the delegated local agency.** You may obtain an Application for Sewage Facilities Planning Module mailer from the municipality, the delegated local agency, a DEP Regional Office or on DEP's website at [www.dep.state.pa.us](http://www.dep.state.pa.us), Keyword: "Wastewater".

Upon receipt of the mailer, the "approving agency" (DEP or delegated local agency) will determine if your project is required to complete sewage facilities planning under Act 537. If planning is not required under Act 537, you will be informed by letter. If planning is required, the agency will assign a code number to your project and provide you with the correct planning module forms and instructions.

### When Should You Use Component 3?

This component is used when any of the following are proposed: 1) a subdivision served by sewage collection, conveyance or treatment facilities, 2) a tap-in to public sewers with flows on a lot of 2 Equivalent Dwelling Units (EDUs) or more, or 3) the construction or modification of wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. A sewer **EXTENSION** is defined as the construction of a sewage collection system to serve more than one tap-in. Sewer lines that cross property lines are also sewer extensions. A **TAP-IN** is defined as a connection to an existing sewage collection system.

### Who Should Complete the Component?

This component should be completed by a consultant, engineer, or surveyor who is familiar with the municipality's Official Plan and available sewage disposal methods in the municipality in which the development project is proposed. Municipal and sewage authority officials should be consulted in the development of the project. Sections A through I, and Sections O through R must be completed for all projects. Section J, K, L, M and/or N should be completed only if applicable or marked. The following instructions provide general guidelines on completing the component.

### Instructions for Completing Component 3

#### SECTION A. PROJECT INFORMATION

**Project Name.** In the "Project Name" block, enter the name by which this proposed land development project is, or will be, known, such as "Smith Subdivision".

**Brief Project Description.** Briefly describe the intended project in the space provided.

## SECTION B. CLIENT (MUNICIPALITY) INFORMATION

**Municipality Name, County, Municipality Type.** Enter the name of the client municipality and the name of the county in which the municipality is located. Check the appropriate block indicating the municipality type, whether **City, Boro,** or **Township (Twp).**

**Municipality Contact Individual Last Name, First Name, MI, Suffix, Title.** Enter the requested information for the client contact in this block. The municipal client contact is often the municipal secretary, but may be another official, such as the chairman of the board of supervisors. Please indicate the appropriate title of the client contact in the Title block.

**Alternative Individual Last Name, First Name, MI, Suffix, Title (optional).** This is an optional block to be used by municipalities that wish to provide an alternate client contact. Enter the requested information only if an alternate contact name is desired.

**Mailing Address.** This is the mailing address of the client municipality identified above. It should not include locational data that is not appropriate for a standard mail address. In addition to the street number and name, PO Box number, RR number, Box number, or Highway Contract number designations, use any appropriate designation and number to further define the mailing address. Use these standard abbreviations:

e.g.,    APT      (Apartment)      FLR    (Floor)  
         BLDG    (Building)          RM     (Room)  
         DEPT    (Department)        STE    (Suite)

**City, State, ZIP+4, Phone Information.** Do *not* use abbreviations for the city name. Use the two-character abbreviation for the state. Include the four-digit extension to the ZIP code, if known.

## SECTION C. SITE INFORMATION

DEP needs to be able to accurately locate your site and to understand the physical nature of the surrounding area. Therefore, the application must be accompanied by a 7.5 minute topographic map published by the US Geological Survey or a clear copy that includes the quadrangle name. These maps can usually be obtained from most map distributors or hunting and fishing supply stores. On the topographic map, draw the outline of the development site.

**Site Name.** The name of the site at the specific physical location. This should be similar to the project name in A.1. **DO NOT** use abbreviations, acronyms, etc.

**Site Location.** Provide the physical address of the location where the permitted activities will occur. **DO NOT** use PO Box numbers for site location information. Provide the city (or municipality), state, and the ZIP+4, if known.

**Detailed Written Directions to Site.** When providing written directions, **DO NOT** use PO Box address data. Include landmarks and approximate distances from the nearest highway.

**Description of Site.** Provide a written description of the proposed project.

**Site Contact (Developer/Owner) Information.** Provide the name of the person having overall responsibility for environmental matters at the site. This person is often the landowner or the landowner's agent. Include the individual's name, title, firm, email address (optional), mailing address, and daytime phone numbers. This individual will ultimately be responsible for paying the DEP review fee.

## SECTION D. PROJECT CONSULTANT INFORMATION

If this form was completed by someone other than the applicant, such as a consultant, engineer or contractor, that individual should complete this section of the form.

## SECTION E. AVAILABILITY OF DRINKING WATER SUPPLY

Indicate the intended source of the project's drinking water by checking the appropriate box. If a public water supply will be used, provide written documentation that the water supplier is aware of the project, possesses capacity to serve the project and is willing to serve the project. A public water supply is defined as a system that provides water to the public for human consumption that could serve 15 or more connections, or serve 25 or more people daily at least 60 days out of the year.

## SECTION F. PROJECT NARRATIVE

The following information is required to be provided in narrative (paragraph) form and attached to the module package. Title the attachment "**Project Narrative**".

1. Indicate the nature of the development project. (*Residential, Commercial, Institutional, Industrial, etc.*) If the project is commercial, institutional or industrial, describe the activity, such as light manufacturing, private hospital, or heavy manufacturing.
2. Enter the number of lots or EDUs in the development project. Lots refer to single family residential dwellings and for purposes of flow calculation are assumed to generate a minimum of 400 gallons per day (gpd). If larger residential flows are anticipated, these flows should be used. The residual tract, if any, is also counted as a lot. For commercial, industrial, and institutional facilities, the number of lots in a subdivision is determined by using EDUs. Divide the total flow for these facilities by 400 to determine the number of EDUs.
3. Describe the proposed sewage disposal method (municipal treatment facility, package plant, etc.) including a description of collection and conveyance facilities, if applicable. Include a general map showing the path of the sewage to the treatment facility.
4. Specify the projected population to be served and sewage flows in gpd and how these figures were calculated. Flow figures should be consistent with those found in DEP's *Domestic Wastewater Facilities Manual* available on the DEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us), Keyword: "Wastewater" unless adequate justification for lower per capita flows is provided and/or has been previously approved by DEP.
5. Describe the location of the discharge, disposal point or land application, if applicable.
6. List the total acreage of the proposed land development project.
7. Describe the use of any acreage or parcels under the same ownership and adjacent to the property. (Such as: for future development, recreational, agriculture, open space, etc.) If the land is proposed for future development, or is part of a phased project, determine if there will be adequate sewage disposal facilities to serve those phases.
8. Provide information on any previous Act 537 planning completed for the site and any other information that the applicant believes is important for the Department's review of the project.

## SECTION G. PROPOSED WASTEWATER DISPOSAL FACILITIES

This section requires the applicant to provide information on collection, conveyance and treatment facilities proposed for the development project.

### 1. Collection System

To complete this section, check the appropriate box to indicate if the collection system is a new system, an extension to an existing system or a tap-in to an existing system. For each of these cases, indicate the number of EDU's or tap-ins that will be served by the collection system and the name of the collection or conveyance system and the interceptor to be used. A sewer **EXTENSION** is defined as the construction of a sewage collection system to serve more than one tap-in. Sewer lines that cross property lines are also sewer extensions. A **TAP-IN** is defined as a connection to an existing sewage collection system.



## 2. Wastewater Treatment Facility

The second part of the section requires information on the treatment facility. See *Special Instructions And Information For Component 3 Planning Modules Proposing New Or Expanded Discharges Within The Chesapeake Bay Watershed* form (3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay watershed requirements.

- a. Indicate by checking the appropriate box whether the facility is new construction or if it is an existing facility. If the facility requires upgrading or expansion to serve the development, the appropriate box should be checked. New construction includes any proposal that will require the issuance of a Clean Streams Law permit. For existing facilities, provide the name and NPDES permit number of the facility. Contact the facility for that information.
- b. Indicate that all applicable technology and water quality standards will be achieved following this project by completing the required information and obtaining the permittee's authorized representative's signature on the confirmation statement.

## 3. Plot Plan

Submit a plot plan of the proposed subdivision that contains the information listed below. The scale of the plot plan should be sufficient to show the development and adjacent areas and allow the municipality and approving agency to easily identify the required information. The plot plan must be prepared by a registered surveyor prior to submittal to the approving agency. Some of the information required can be found in the municipality's Official Plan. Other information can be found in tax maps, zoning maps, soil maps, Federal Emergency Management Agency (FEMA) floodplain maps, wetland maps and on-site surveys.

- a. Existing and proposed buildings. All buildings on the tract and adjacent lots (including properties across streets) must be plotted.
- b. Lot lines of individual lots and size of lots in the proposed development.
- c. Adjacent lots.
- d. Remainder of tract. Any property that is not included in the plan but is under the same ownership and is adjacent must be plotted.
- e. Existing sewage facilities on adjacent lots and proposed sewage facilities to serve the development project. (location of collection lines, pump stations, etc.). These areas may be identified by use of a legend. Actual locations of tap-ins, sewer extensions, force mains, or pump stations that will be utilized by the project should be identified.
- f. The point of connection to the existing collection system. All proposed collection lines must be shown to the point of connection to the existing system.
- g. Existing and proposed water supplies (wells, reservoirs, etc.) and surface water (ponds, detention facilities, lakes, streams) on the adjacent land and proposed development.
- h. Existing and proposed rights-of-way. Proof of legal recording of rights-of-way may be required when the right-of-way is necessary to implement the sewage facilities alternative.
- i. Existing and proposed buildings, streets, roads, access roads, highways, etc.
- j. Open space areas designated within the proposed development and any parks, state forests or other state land adjacent to the development.
- k. Wetland areas. DEP is required to protect the wetlands of the Commonwealth from unnecessary destruction. Show any wetland areas on the plot plan as they are identified by hydric soils in USDA Natural Resources Conservation Service maps and by National Wetland Inventory mapping. If there is disagreement with the mapping, or wetlands are present and they are not shown in the mapping, plot the results of actual in-field delineation of the wetlands on the plan. Use the delineation process required by Title 25 of the Pennsylvania Code, Chapter 105, §105.451, Identification and Delineation of Wetlands-Statement of Policy.

If wetlands are present, the applicant may be required to obtain permits for any construction activities such as encroachments (fill, roads, utility lines) or obstructions (bridges, walls, piers) in, along, or across the wetlands. Contact the DEP regional office for further information.

Full delineation may be required as a condition of permit issuance, including issuance of onlot system permits, Clean Streams Law permits, or encroachment or obstruction permits for construction activities in, along, or across wetlands. The plot plan must distinguish between in-field delineations and transcribed mapping from existing sources.

- l. Flood Plains. These areas should be plotted on the plan as they are indicated in Federal Emergency Management Agency Flood Plain mapping or USDA Natural Resources Conservation Service mapping.
- m. Prime agricultural land listed by the USDA Natural Resources Conservation Service as "Pennsylvania Prime Farmland Soils", or soils listed as Capability Classification I, II or III in the USDA Natural Resources Conservation Service Soil Survey.
- n. Existing onlot or sewerage systems, pipelines, transmission lines, etc. Show any facilities currently in use or abandoned.
- o. Orientation to north, usually shown by a directional arrow.
- p. Show the locations of any sites where tests were performed in accordance with Sections K, L, M and/or N (if applicable). All soil profile test pit evaluations and slope measurements should be recorded on "Site Investigation and Percolation Test Report" forms (3800-FM-BPNPSM0290A, formerly known as "Appendix A").
- q. Show soil types and boundaries when a land based system is proposed.
- r. Show topographic lines with elevation when a land based system is proposed.

#### 4. Wetland Protection

- a. DEP is required to protect the wetlands of the Commonwealth from unnecessary destruction. The applicant is required to answer "yes" or "no" to the question of whether there are any wetlands in the project area. If yes, show these areas on the plot plan as they are identified by hydric soils in USDA Natural Resources Conservation Service maps or by National Wetlands Inventory mapping. If there is disagreement with the mapping, or if wetlands are present and are not shown on the mapping, plot the results of actual in-field identification of the wetlands on the plan. Use the identification process required by Title 25 PA Code Chapter 105, §105.451, Identification and Delineation of Wetlands - Statement of Policy.
- b. If wetlands are present, indicate with a yes or no answer if the project is proposing any construction activities such as encroachments (fill, roads, utilities) or obstructions (bridges, walls, piers) in, along or across the wetlands. If any of these are proposed, please contact the DEP regional office for further information. Full delineation may be required as a condition of permit issuance, including issuance of Clean Streams Law permits, encroachment or obstruction permits for construction activities in, along, or across wetlands. The plot plan must distinguish between in-field delineations and transcribed mapping from existing sources.

#### 5. Prime Agricultural Land Protection

Indicate whether the project involves the disturbance of prime agricultural lands. If the project will result in the disturbance of these lands, it must be consistent with policies and procedures established for protection of prime agricultural lands by the municipality. The project sponsor and local officials must rectify land use problems prior to submission of the sewage facilities planning module package to DEP for review.

## 6. Historic Preservation Act

Coordination with the Pennsylvania Historic and Museum Commission (PHMC) is necessary for proposals meeting conditions specified in DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code*. Specific documentation required to be submitted with this planning module package is found in the Technical Guidance, available online available on line in the eLibrary at DEP's website address at [www.dep.state.pa.us](http://www.dep.state.pa.us). 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, Threatened or Endangered Species

DEP's technical guidance document "Policy for Pennsylvania Natural Diversity Inventory (PNDI) Coordination During Permit Review and Evaluation," (400-0200-001) requires DEP to ensure that requests for authorizations, are coordinated with the Department of Conservation and Natural Resource's (DCNR) Pennsylvania Natural Diversity Inventory (PNDI).

Conducting a search of the PNDI database and providing a copy of a "PNDI Project Environmental Review Receipt" for the proposed project and, if potential impacts are identified by the search, any clearance or recommendation letters from the jurisdictional agency responsible for the particular species identified by a search, satisfies this requirement.

To avoid project delay, self explanatory, self conducted "PNDI Project Planning Environmental Review" searches are initiated at [www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us). This interactive, online search will ask questions about the proposed project and provide the appropriate receipt, instructions or additional information regarding coordination with jurisdictional agencies.

As an alternative to the self conducted search, project sponsors may request DEP staff to conduct the search by providing a completed "PNDI Project Planning & Environmental Review Form" (PNDI Form). The form is available at [www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us). Individuals making this request should be aware that, due to the nature of the search software, DEP staff may need to contact them for additional information to successfully complete the search and that exclusive of any other items, their sewage planning module submission is considered incomplete by DEP, until the appropriate receipt, clearance or recommendation letters are received.

For more information, see to the "Policy for Pennsylvania Natural Diversity Inventory (PNDI) Coordination During Permit Review and Evaluation," (400-0200-001), available on line in the eLibrary at DEP's website address [www.dep.state.pa.us](http://www.dep.state.pa.us).

## SECTION H. ALTERNATIVE SEWAGE FACILITIES ANALYSIS

This section is used to document that the proposed sewage disposal method is appropriate for the project both over the short-term (5 years) and long-term (beyond 5 years). Local government officials should be consulted in completing this analysis. The analysis consists of a narrative that describes land uses, sewage disposal methods, sewage management programs and a comparison of existing methods of sewage disposal in the area with the proposed method of sewage disposal. The analysis is used by the municipality and approving agency to determine if the chosen disposal method will have an impact on future municipal sewer service to these areas, and whether other potential methods of sewage disposal could better serve the sewage facilities needs of the area as a whole. Attach the narrative to the planning module and title it "**Alternatives Analysis**".

To complete the analysis, include the information listed below.

1. Describe the chosen disposal method, its location, the daily flow proposed and if the method is an interim method (to be replaced by the ultimate method in 5 years or less), or is an ultimate method (to serve the development in the long term, for 5 years or more). Provide a description of how the chosen method will provide compliance with effluent limitations. Also provide the number of lots or EDU's that will be served.
2. Describe the types of land uses adjacent to the project area (Agricultural, Residential, Commercial etc.) and the type of sewage disposal method serving each of those land uses.

Properties adjacent to the project must be described by indicating present land uses and zoning designations. Describe the sewage disposal methods being used for each of those adjacent land uses (onlot, municipal treatment, etc.) and if those methods are intended for interim or ultimate use.

3. Indicate if the sewage facilities described in (2) are in need of improvement due to noncompliance with effluent limitations, high rates of onlot malfunction or overloaded public sewers. Is there a potential for a combined public/private project?

If any of the sewage facilities described above are in need of improvement in order to attain or maintain compliance with effluent limitations (including Nitrogen and Phosphorus cap loads, where appropriate), overloaded treatment facilities or high onlot malfunction rates, a combined sewage disposal alternative that proposes to upgrade or construct facilities to serve these needs areas as well as the proposed project area may be more viable than a method intended to serve only the current project.

4. Determine and indicate what sewage disposal method is proposed for the development area in the municipality's Official Sewage Facilities Plan (such as: onlot disposal systems, public sewers, etc.).
5. Describe any existing sewage management program(s) in the area, and/or any sewage management program(s) that this project would be required to participate in, and that program's requirements.

When the alternatives analysis includes the potential construction of DEP-permitted **non-municipal** sewage treatment facilities, the municipality is required to implement a sewage management program that must include one of the management options outlined in Title 25, Pennsylvania Code, §71.72 (available at [www.pacode.com](http://www.pacode.com)). These options range from financial assurances to municipal ownership of the facility. The applicant should describe which option will be proposed, how it will be implemented, and why it was chosen over the other methods outlined in §71.72. Details of the chosen option must be included.

Any new or expanded point source discharges which are proposed in the Chesapeake Bay watershed, must not add to amount of nutrients discharging to the Bay waters. This is known as a nutrient cap load. See *Special Instructions And Information For Component 3 Planning Modules Proposing New Or Expanded Discharges Within The Chesapeake Bay Watershed form* (3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay watershed requirements. Maintaining the cap load for new sources can be accomplished through such methods as land application of effluent, recycle and reuse, acquiring offsets for loads from replacement, reduction or retirement of existing sources, or the purchasing of credits elsewhere (trading). Your alternatives selection proposal must clearly demonstrate that this requirement has been met.

6. Describe any potential alternative sewage disposal methods that are available for the project. Consider all reasonable possibilities for sewage disposal, such as a stream discharge or an alternate method of land disposal. The municipality, delegated local agency or DEP may also require consideration of particular types of sewage disposal methods in the analysis. The chosen method must assure that applicable water quality standards are attained.
7. Describe why the proposed method was chosen over any of the other methods described in the alternatives analysis. Environmental, administrative, and financial concerns may be addressed. Also indicate how the chosen method will guarantee adequate sewage disposal, including compliance with applicable water quality standards and effluent limitations, for the development in both the short-term (up to 5 years) and long-term (beyond 5 years) by describing the adequacy of the proposed facilities (organic and hydraulic loading) and the ability of the facility to accept additional flows or loads.
8. Indicate who will be the owner of the facility, and who will be responsible for operation and maintenance of the facility and ultimately compliance with applicable water quality standards and effluent limitations.

To assure adequate long-term sewage disposal for the project, the disposal system must be properly operated and maintained. The applicant must indicate in the analysis who will be the owner of the facility and who will be responsible for the operation and maintenance of the facility. This may be a private individual, a municipality, a sewer authority or a management agency; however, the ultimate responsibility lies with the municipality. The delegated local agency or DEP may require a more extensive analysis of the available choices relative to ownership and operation of the facility. If the project will be required to participate in an **EXISTING** municipal sewage management program or if a sewage management program is to be created, describe the program's requirements. Sewage management programs can consist of requirements for tank pumping, ordinances requiring maintenance of systems, or financial arrangements (fees, taxes, etc.) guaranteeing long-term operation of the treatment facilities.

9. Finally, the applicant may use the narrative to describe any special considerations or provide any additional information that supports the choice of disposal method. The alternatives analysis must be attached to the planning module package for review by the municipality and approving agency.

## **SECTION I. COMPLIANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS**

The selected sewage disposal alternative identified through evaluation under Section H. above must comply with applicable water quality standards, effluent limitations established to meet those standards and other technical requirements. Documentation must be submitted with the Planning Module that shows that, in addition to statewide water quality standards, the selected method of sewage treatment and disposal also complies with any applicable water quality standards or treatment requirements for the following waters: (Check and complete all that apply.)

### **1. Waters Designated for Special Protection**

Title 25, Pennsylvania Code, Section 93.4c. of the DEP regulations requires that sewage facilities proposing to discharge or increase an existing discharge into High Quality Waterways complete a Social or Economic Justification (SEJ) and publish a public notice as part of the sewage facilities planning process. Please refer to specific requirements that may be found in Section 93.4c(c), available online at [www.pacode.com](http://www.pacode.com) or from your local DEP office. Additional information is available as Technical Guidance 391-0300-002 also available online at [www.dep.state.pa.us](http://www.dep.state.pa.us).

### **2. Pennsylvania Waters Designated as Impaired**

Under Title 25, Pennsylvania Code, Section 96.4 of the DEP regulations, DEP has identified surface waters or portions thereof that are impaired, and thus require TMDL development under Section 303(d) of the federal Clean Water Act. Water quality based effluent limitations for discharges to these waters may be more stringent than those applicable to meet statewide water quality standards. Applicants should review their proposal and the DEP list of impaired waters, which can be found online at [www.dep.state.pa.us](http://www.dep.state.pa.us) under 'Mapping' and 'eMap'. Select the 'Streams Integrated List' layer. Applicants, municipalities or authorities proposing new or increased sewage discharges to impaired waters should contact the appropriate DEP regional office to schedule a pre-planning meeting prior to proceeding with their project.

### **3. Interstate and International Waters**

Title 25, Pennsylvania Code, Section 93.9(b) of the DEP regulations provides for exceptions to statewide water quality standards where interstate commissions, international commissions or downstream states have adopted different water quality regulations or standards. Applicants, municipalities or authorities proposing new or increased sewage discharges to interstate or international waters have the option to contact the appropriate DEP regional office to schedule a pre-planning meeting prior to proceeding with their project.

### **4. Tributaries to the Chesapeake Bay**

Title 25, Pennsylvania Code, 92.2(b)(14) incorporates by reference federal regulations under the Clean Water Act, which require that NPDES permits meet all water quality standards, including those of downstream states. In addition, 25 Pa. Code 92.73(5) specifically precludes the issuance, modification, renewal or reissuance of an NPDES permit "when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states."

Maryland amended its water quality standards in August, 2005, as part of a multi-jurisdictional effort to address impairment of the Chesapeake Bay from nutrients and sediment. In accordance with the federal Clean Water Act and Pennsylvania regulations, Maryland's changes result in the need for nutrient reductions in Pennsylvania to comply with the new standards.

DEP has developed a plan to meet these requirements. First, in anticipation of the new water quality standards, DEP issued its Chesapeake Bay Tributary Strategy (CBTS) in July, 2004. This Strategy includes special allocations for nutrient discharges that apply to new and expanding sewage discharges within the Susquehanna and Potomac drainage basins in Pennsylvania. Documentation of compliance with these allocations must be submitted with planning modules proposing new or expanding discharges in these drainage basins. See *Special Instructions And Information For Component 3 Planning Modules Proposing New Or Expanded Discharges Within The Chesapeake Bay Watershed* form (3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay watershed requirements. Applicants, municipalities or authorities proposing new or expanding sewage discharges to these waters should contact the appropriate DEP regional office for special instructions on completing Component 3, and to schedule a pre-planning meeting prior to proceeding with their project. More information on Pennsylvania's strategy for achieving the nutrient reductions can be found on the DEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us), Keyword: "Chesapeake Bay" or for the special instructions use Keyword "Wastewater" and select "Act 537 Sewage Facilities Electronic Forms."

## SECTION J. CHAPTER 94 (MUNICIPAL WASTELOAD MANAGEMENT) CONSISTENCY

*(Complete if box is marked in component)*

Owners of municipal sewage systems are required to prepare annual Wasteload Management reports in accordance with Title 25 of the Pennsylvania Code, Chapter 94. The reports provide detailed information on collection, conveyance and treatment system flows and organic loads relative to available capacity. Loads and flows are projected 5 years into the future based on planned development. If the system or any part of the system shows or projects an overload, a **corrective action plan (CAP)** to address the need is developed. Overloaded systems result in prohibitions and bans on additional connections. It is important that the applicant know how the project will impact or change the wasteload management of the system to which his/her project will connect.

To complete this section:

1. List the anticipated project flows in gallons per day (gpd).
2. When providing "treatment facility" 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. Provide the design maximum monthly average and peak flows for proposed facilities, or the permitted average and peak capacity for existing facilities that will serve the project. This information can be obtained from the system designer or facility permittee.
  - b. Provide the present maximum monthly average flows and peak flows in gallons per day for the critical (most hydraulically restricted) sections of existing facilities. The facility permittee can provide this information.
  - c. Provide the projected maximum monthly average and peak flows in five years (two years for pump stations) through the critical sections of existing facilities. Include existing, proposed and future projects. In this fashion, consideration is given to present flow, flows from other approved projects, allocated capacity, and the proposed project flows. This information can be obtained from the facility's Chapter 94 report. If the project will affect more than one municipality or authority, please provide this information for each.

The values entered in the table for existing facilities should represent flows through those areas of the sewage pathway that are most restricted in hydraulic carrying capacity. Contact the facility permittee or the individual responsible for preparing the Chapter 94 report for this information. If information is not available from these sources, a physical inspection of the facilities may be required. Based on this inspection, carrying capacity may be calculated using slope and diameter of the collection or conveyance system and the size of such facilities as pump stations and treatment facilities. If flow information on critical sections cannot be determined based on calculations, flow measurements may be conducted for a representative period of time (to include both wet and dry weather conditions) for a minimum of seven days. This information must then be used to determine the flow through these sections. Proposed facilities must use design values to complete the table for design and projected flows. **COLLECTION** refers to pipelines and conduits. **CONVEYANCE**

refers to pump stations and force mains, interceptors, trunk sewers, or any other appurtenant facility used for conveying sewage to a plant. **TREATMENT** refers to the sewage treatment plant to be used.

3. & 4. The person responsible for preparing the Chapter 94 report for each of the collection, conveyance and treatment systems that are planned for use must sign the form. In most cases, the Chapter 94 report preparer is an employee or representative of the treatment facility permittee. Contact the owner or permittee of each facility to determine if this is the case for your project. The signoff will indicate that there is adequate capacity available for the project's sewage disposal needs as required in § 71.53(d)(3), and that the additional load will not negatively impact the Chapter 94 status of the facility, taking into account projected loads and any previously allocated capacity. If the project will negatively impact the Chapter 94 status of the facility, the project cannot be approved. In some cases, DEP has approved a CAP for the allocation of connections to systems where flow or loading problems exist. Where CAPs are in effect, the project may be approved based on these allocations. If this is the case, the Chapter 94 report preparer should attach a letter that grants these allocations to the project. In some cases, municipalities have an approved list of projects for the allocation of connections; in other instances, a municipality has a general allocation. The letter should indicate if the allocation is from an approved list or is part of a general allocation.

## SECTION K. TREATMENT AND DISPOSAL OPTIONS

*(Complete if marked in component or if the project will propose a discharge of treated effluent)*

Four options are available for the disposal of treated sewage effluent: (1) spray irrigation or other land application, (2) recycle and reuse, (3) discharge to an intermittent or ephemeral stream, or (4) discharge to a perennial surface water body. Each of the four options has technical requirements that must be met before the planning module can be approved. The following paragraphs describe the type of information that must be included for each of the four discharge alternatives. Select all appropriate treatment and disposal options being proposed, indicate the selection by checking the corresponding checkbox in Section K and attach all necessary documentation to support the selection(s). Note that where technically feasible land application and reuse alternatives are preferable to discharge alternatives.

1. Spray Irrigation or other Land Application

The Department's technical guidance, "*Manual For Land Treatment of Wastewater*" DEP ID: 362-2000-009 (available in the eLibrary on the DEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us)), and the EPA documents "Guidelines for Water Reuse" (EPA/625/R-92/004) and "Land Treatment of Municipal Wastewater" (EPA/625/1-81-013), provide the necessary instructions for proposals. The planning elements as outlined in those documents should be included with the Component 3.

2. Recycle and Reuse

The Department's technical guidance, "*Reuse of Treated Wastewater Guidance Manual*" DEP ID: 362-0300-009 (available in the eLibrary on the DEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us)), and the EPA documents "Guidelines for Water Reuse" (EPA/625/R-92/004) and "Land Treatment of Municipal Wastewater" (EPA/625/1-81-013), provide the necessary instructions for proposals. The planning elements as outlined in those documents should be included with the Component 3.

3. Discharge to Intermittent or Ephemeral Stream, Drainage Channel, Swales, or Storm Sewer

The Department's technical Guidance, "*Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers*" DEP ID: 391-2000-014 (available in the eLibrary on the DEP website at [www.dep.state.pa.us](http://www.dep.state.pa.us)), provides the necessary instructions for proposals involving a discharge to intermittent or ephemeral streams, drainage channels, swales, or storm sewers. The planning elements as outlined in that document should be included with the Component 3. If the proposed discharge flow extends to point of first use (POFU) Section I above must be addressed.

4. Discharge Perennial Stream (Surface Water)

If a discharge to perennial surface waters is proposed, Section I above MUST be addressed. In addition:

- a. On a 7.5' USGS topographic map, show the property lines of the development and the point of discharge to the stream. Label the stream name. If the discharge is to an unnamed tributary of a stream, label the first-named body of water on the map.

- b. Specify the quality and rate at which sewage effluent will be discharged to the stream. DEP will evaluate the stream flow and current quality of the stream to determine if the level of treatment proposed is sufficient, or if additional treatment is needed. Seasonal variations in the discharge flows should also be discussed if they are proposed.
- c. Contact the appropriate regional office regarding determination of preliminary effluent limits. Evaluate the treatment facilities and alternatives for meeting effluent limitations and water quality standards.

## **SECTIONS L, M, N. PERMEABILITY AND HYDROGEOLOGY**

*(Complete if marked in component or appropriate for the project)*

In certain situations, permeability testing and hydrogeology studies must be completed for the proposed development. These sections should be completed if marked. Sections M and/or N should be completed and sealed by a registered professional geologist familiar with the requirements of these sections. This person should contact the DEP Regional Hydrogeologist for further guidance.

### **SECTION L. PERMEABILITY TESTING**

*(Complete if marked in component or if the conditions in number 1 (below) apply)*

1. Completion of this section may be required when any of the following exist:
  - a. An onlot system with a total absorption area greater than 5,000 square feet will be used.
  - b. DEP has determined that the soil, underlying parent material, geology at the site, or volume of the discharge may cause adverse groundwater mounding or inadequate sewage treatment.
2. The following information is to be submitted:
  - a. Description of the soils and geology at the site and the characteristics of these which may limit the horizontal or vertical movement of sewage.
  - b. Description, location and results of any permeability testing performed, including:
    - (1) Identification and description of restrictive layers of soil, parent material and bedrock.
    - (2) Rate of flow through and laterally over those restrictive layers (in inches per hour).
    - (3) Calculation of potential groundwater mounding expected from the additional flows.
  - c. Recommendations on system design modifications needed because of poor permeability, including absorption area sizing or placement and dosing rates for onlot overland flow.

Note: DEP may require more detailed hydrogeologic information based on the information submitted in this section.

### **SECTION M. PRELIMINARY HYDROGEOLOGIC STUDY**

*(Complete if marked in component or if the condition from number 1 (below) apply)*

**Hydrogeologic work requires an appropriate professional signature and seal.**

1. This section must be completed when soil-dependent treatment methods are proposed and any of the following apply:
  - a. A large volume system (a system designed for flows greater than 10,000 gpd) will be used.
  - b. A subdivision of more than 50 EDUs with a density of more than one EDU per acre is proposed.
  - c. DEP has determined that water supplies within  $\frac{1}{4}$  mile of the proposed development site exceed 5 parts per million (ppm) nitrate-nitrogen (NO<sub>3</sub>-N).
  - d. DEP has determined that known geological conditions at the proposed site may contribute to the potential for groundwater pollution from such systems.



2. The following information is to be submitted on a copy of the topographic map of the area and in narrative form:
  - a. Results of background sampling for total coliform, fecal coliform, pH, and nitrate-nitrogen.
  - b. If as a part of a Preliminary Hydrogeologic Study a well is drilled to assess the background nitrate-nitrogen concentrations in the shallow groundwater, the hydrogeologist shall provide a log of the well or wells. The log or logs shall provide the date of drilling, total well depth, depth to bedrock, depth to bottom of casing, depth to all water bearing zones, and the static water level. The well logs do not need to be graphical. In addition, the report should contain a discussion of the well purging protocol used prior to well sampling. The protocol must assure that a fresh sample is obtained from the shallow aquifer.
  - c. Topographic location of the proposed system(s).
  - d. Estimated area of impacted groundwater (dispersion plume and mixing zone within the dispersion plume) calculated from the surface topography and known geologic conditions.
  - e. Identification of existing and potential groundwater uses within the dispersion plume.

Note: Based on the information submitted in this section, DEP may require more detailed hydrogeologic information (Section N, below).

## SECTION N. DETAILED HYDROGEOLOGIC STUDY

*(Complete if marked in component or if DEP determines during the planning proves that the additional study is necessary)*

**Hydrogeologic work requires an appropriate professional signature and seal.** A detailed hydrogeologic study must be completed when the proposed system(s) may degrade groundwater or surface water to the point that existing or potential groundwater uses or designated stream uses may not be protected. Often specific tasks listed in the detailed hydrogeologic study will satisfy DEP concerns. Since the level of study necessary for a particular site may vary, it is recommended the DEP regional hydrogeologist be contacted to determine the level of study necessary for a project.

### A. Content of Detailed Hydrogeologic Study

The following information must be included in the detailed hydrogeologic study using narrative and/or maps as appropriate.

1. Type of discharge to groundwater. This includes:
  - a. Dry stream channel
    - (1) Intermittent stream (dry under low flow conditions)
    - (2) Stormwater drainage ditch (flow in wet season or during and immediately after storms)
  - b. Onlot subsurface disposal
    - (1) Individual onlot systems
    - (2) Community onlot systems
    - (3) Large Volume onlot systems
  - c. Land Application
    - (1) Spray irrigation
    - (2) Unlined wetland cell
    - (3) Groundwater infiltration
2. Plot the topographic location of the discharge.
3. The relationship between surface water and groundwater flow.
4. Investigate, describe and plot geologic and hydrogeologic characteristics influencing groundwater flow. These characteristics include but are not limited to the following:
  - a. Bedrock formations, lithologic description and range of depth

- b. Bedding features, the frequency and direction of dominant joints and fractures
  - c. Faults, lineaments and earth fracture traces
  - d. Karst features such as open and closed sinkholes, closed depressions, known solution channels, pinnacles or other specific features
  - e. Unconsolidated material characteristics (soil, glacial materials, fluvial materials, etc.)
  - f. Unconsolidated bedrock characteristics (saprolite, weathered zones)
  - g. Elevation of the permanent groundwater table, anticipated water table fluctuation and groundwater flow direction
  - h. Unconfined or confined aquifer characteristics
  - i. Aquifer flow characteristics as quantified through pump testing or other characterization methodology (i.e., hydraulic conductivity, storage coefficient, transmissivity, etc.)
  - j. Existing, planned and potential down-gradient groundwater uses including, but not limited to: all water supply locations; the volume of water used at these locations; the estimated horizontal extent of each well's cone of depression; and the influence of pumping upon the natural groundwater gradient, the direction of flow and including both existing and potential water supplies.
5. Groundwater/surface water characteristics, including:
- a. If as part of a Detailed Hydrogeologic Study a well is drilled to assess the background nitrate-nitrogen concentrations in the shallow groundwater, the hydrogeologist shall provide a log of the well or wells. The log or logs shall provide the date of drilling, total well depth, depth to bedrock, depth to bottom of casing, depth to all water bearing zones, and the static water level. The well logs do not need to be graphical. In addition, the report should contain a discussion of the well purging protocol used prior to well sampling. The protocol must assure that a fresh sample is obtained from the shallow aquifer.
  - b. Existing groundwater quality and quantity, including, but not limited to, the following analyses:
    - 1) Total coliform
    - 2) Fecal coliform
    - 3) pH
    - 4) Total iron
    - 5) Turbidity
    - 6) Alkalinity
    - 7) Nitrate-Nitrogen
    - 8) Chloride
    - 9) Ammonia-Nitrogen
    - 10) Total manganese
    - 11) Sodium
    - 12) Magnesium
    - 13) Calcium
    - 14) Potassium
    - 15) Sulfate
    - 16) Total Dissolved Solids
    - 17) Hardness
    - 18) Volatile Organic Compounds
  - c. The name, location, flow characteristics, flow volume (cfs), existing water quality and designated use of any potentially impacted surface water (receiving stream). Include all surface water uses as listed for the water body in Chapter 93.
  - d. Influence of surface water runoff and groundwater recharge on groundwater characteristics.
  - e. Designation of any watershed area that is utilized for a water supply, recreation, or agricultural irrigation.
  - f. Any other information necessary to adequately analyze the hydrogeologic impact by the proposed facility.

## B. Detailed Hydrogeological Study Analysis and Report

Using the information gathered, describe and analyze the proposed facility's impact. Use narrative and mapping where appropriate. A complete study should include, but not be limited to, the following items:

1. Discuss pre-treatment system components proposed to decrease effluent contaminant levels prior to groundwater discharge. Include design and testing data submitted to support any long-term, consistent, reliable, and measurable treatment claims.
2. Delineate any dispersion plume in which the existing water quality will be degraded. Include all identified contaminant and hydrogeological variables from the site in this analysis.
3. Describe any natural condition and/or artificial control that confines dispersion plume flow.
4. Delineate a mixing zone within the dispersion plume where any chemical or biological concentrations will exceed rates in Federal Drinking Water Quality Standards.
5. Identify a buffer zone for the dispersion plume and mixing zone and also discuss the effects of seasonal weather conditions on this zone.
6. Discuss impacts on existing, planned and potential groundwater uses in the delineated dispersion plume, mixing zone and buffer zone.
7. Discuss any surface water bodies that may intercept, or interact with the dispersion plume.
8. Predict and quantify any impacts the identified dispersion plume will have upon the uses listed for that surface water body.
9. Predict any effects of the dispersion plume on all existing, planned or future groundwater uses.
10. Predict the extent and height of any groundwater/wastewater mound resulting from restrictive layers in the subsurface. Restrictive layers may include, but are not limited to restrictive soil horizons, unconsolidated geological materials, weathered bedrock materials, low permeability bedrock, or a permanent groundwater table.
11. Discuss any physical, chemical or biological impact to groundwater, surface water or treatment facility function resulting from the formation of a groundwater/wastewater mound. Soil is often part of the treatment process and for analysis purposes may be considered part of the treatment facility.
12. Discuss and propose any system change or recommendations deemed necessary to mitigate the effects of the identified groundwater/wastewater mounding.
13. Discuss any groundwater monitoring program necessary to guard against adverse impacts from the facility. The program should include proposed monitoring well locations, appropriate groundwater sampling methodologies, appropriate chemical and biological sampling parameters, and appropriate monitoring frequencies. If appropriate, include monitoring considerations to protect existing surface water uses.
14. Discuss authority for controlling groundwater uses within the mixing and buffer zones. Such items as, groundwater easements and access rights that are necessary for mitigation or abatement purposes, should be discussed.
15. Discuss contingency plan to abate pollution if groundwater monitoring reveals a problem.

## SECTION O. SEWAGE MANAGEMENT

This section is to be completed by the developer, representatives of the non-municipal treatment facilities and the municipality.

1. & 2. (Developer) List the anticipated project flows in gallons per day (gpd).

3. (Developer) Each permittee is responsible for assuring that concentration and load based discharge limits are not exceeded. This requires that the permittee and local government properly manage connections, properly operate and maintain treatment facilities and establish assurances for the continuing operation and maintenance of the facilities. Assurances take many forms. When a proposal includes the use of nutrient credits or offsets to achieve zero net increase in nutrient loads, the proposal must describe the methods to ensure that the credits and/or offsets will be available for the duration of the project. These assurances must be clearly described in the documentation for this section and appropriate letters of intent between the parties attached.
4. & 5. (Non-municipal Facility Agent) The person responsible for the collection, conveyance, and treatment system (normally the facility permittee) planned for use must answer the questions and sign the form. Attach the analysis necessary to properly answer the capacity questions. Evaluate the various options available to the municipality to assure long-term proper operation and maintenance of the proposed non-municipal facilities.
6. (Municipality) DEP permitted non-municipal sewage facilities and community onlot sewage systems permitted by a local agency require long-term operation and maintenance to keep them working correctly and to prevent public health hazards or pollution caused by a discharge of inadequately treated sewage effluent. When these systems fail due to lack of adequate operation or maintenance, DEP holds both the property owner and the municipal government responsible to either repair or replace the improperly functioning system. The municipality should protect itself from potential future liabilities associated with improperly operated or maintained sewage disposal systems by assuring that guarantees of long-term operation and maintenance are properly evaluated and in place before use of the facility is approved.

DEP regulations, § 71.72 requires that all planning modules proposing non-municipal and community onlot systems include an evaluation of the options available to assure long-term proper operation and maintenance of the proposed facilities. Prior to adoption of the planning module the municipality shall require one or more or a combination of the following:

1. A bond or escrow account sufficient to cover the costs of future operation and maintenance of the sewage facilities under local ordinances. Bonding, escrow or other security shall be forfeited to the municipality upon notice by DEP of continuing noncompliance of the system with the operation and maintenance standards established through a condition in the permit issued by DEP or the local agency. (For additional details on this option refer directly to §71.72(a)(1)).
2. A maintenance agreement between the property owner and an individual, firm or corporation experienced in the operation and maintenance of sewage treatment systems.
3. A maintenance agreement between the property owner and municipality or its designated local agency which establishes the property owner's responsibility for operating and maintaining the system and the responsibility of the municipality or local agency for oversight of the system.
4. A municipal ordinance which requires the system to be operated and maintained through a maintenance agreement between the property owner and an individual, firm or corporation experienced in the operation and maintenance of sewage treatment systems.
5. Establishment of a properly chartered association, trust or other private entity which is structured to manage the system.
  - a. **ASSOCIATIONS** must meet the following minimum requirements to be considered adequate:
    - (1) The association must be nonprofit and incorporated or must be a co-op under the Public Utility Commission's jurisdiction.

- (2) Articles of Incorporation and Bylaws must:
  - (a) limit the purpose of the association and stipulate that funds collected for sewerage services be disbursed only in payment for expenses of these systems.
  - (b) provide for membership and voting rights for each owner of an improved property in the development.
  - (c) provide for suspension of service to property owners for non-payment of bills.
  - (d) stipulate that the corporation owns the sewerage facilities.
  - (e) establish the capability of the association to:
    - keep records and an accounting/auditing system
    - collect fees for services provided
    - disburse funds
    - contract with public or private agencies for labor or other services
    - employ personnel to operate and maintain sewage facilities
    - establish contingency funds for use in repairing system components
    - have elected officer and bylaws.
  - (f) establish association membership as a deed restriction and condition of sale of the property.
  - (g) establish the legal right to enter upon property for routine inspections or maintenance and to respond to emergencies.
  - (h) establish assurance that adequate operation and maintenance funds are available from the start of the sewerage system operation.
- b. Properly chartered **TRUSTS** must meet the following minimum requirements to be considered adequate:
  - (1) The sewage facilities are legally conveyed to a third party (trustee) through a trust deed.
  - (2) The trust deed contains specific provisions which require the original owner of the facilities to:
    - (a) Maintain the sewage system in accordance with normally accepted operation and maintenance standards and permit conditions at all times.
    - (b) Provide continued service to each property connected to the sewage facilities.
    - (c) Provide service at a rate established in the trust deed or by action or regulation of the Public Utilities Commission.
  - (3) The Trust Deed states that upon the original owner's default on any of the Trust Deed provisions, the Trustee named has the authority and responsibility to take possession, operate and manage the sewage facilities.
6. Municipal ownership of the system.
7. Establishment of, or inclusion of, the system under a management agency through existing municipal codes, including but not limited to municipal authorities, sanitary boards and boards of health.
8. Establishment of, or inclusion of, the system under a management agency through the adoption of local ordinances under municipal codes.

## SECTION P. PUBLIC NOTIFICATION REQUIREMENTS

If publication is required under Section 71.53(d)(6), the published notice must contain certain facts about the project in a newspaper of general circulation within the municipality affected to provide a chance for the general public to comment on proposed new land development projects. The applicant or the applicant's agent, the municipality or the local agency, may provide this notice. 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 that municipality or local agency will be relieved of the obligation to publish.

**Contents of Publication Notice.** The following items must be contained in the notice:

1. Name of project.
2. Type of development (residential, multi-residential, commercial, industrial).
3. Location, including road and street markers, municipality and county.
4. Acreage under development and number of equivalent dwelling units proposed.
5. Type of sewage disposal proposed (individual, community or large volume onlot, holding tanks).
6. Reason why publication was necessary.
7. Establishment of a 30 day comment and review period.
8. Where and when the Sewage Facilities Planning Module can be seen for comment and review (preferably, the municipal office).
9. Address of municipal office where comments will be accepted.

All comments, the municipal responses to comments, and proof of publication shall be submitted with the Sewage Facilities Planning Module package. If no comments were received, attach a copy of the public notice and check the appropriate box in Section P.

## SECTION Q. FALSE SWEARING STATEMENT

The final requirement of the component requires the person who has completed the component to provide the requested information and acknowledge the false swearing statement by signing and dating the form.

## SECTION R. REVIEW FEES

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.) After consideration of the options available, please check the appropriate box in the Component 3 form attached.

Planning module review fees for a Component 3 submission may be determined using the following formulae:

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.

# \_\_\_\_\_ Lots (or EDUs) X \$50.00 = \$ \_\_\_\_\_

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.

2. For a surface and 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)

## OTHER REQUIREMENTS

### Planning Agency Review

Component 4 *Planning Agency Review* forms (3800-FM-BPNPSM0362 A, B & C) and a copy of the entire planning module package must be forwarded by the applicant to each existing municipal, county or areawide planning agency, and any existing county or joint county health department for their comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the package to the agencies will provide proof of receipt. These agencies are required to provide comments within 60 days of receipt of the module package. The planning agencies will review the package for consistency with municipal and county official sewage facilities plans, municipal comprehensive plans, zoning, and land use designations. They will also determine consistency of the plan with wetland protection, storm water management, archaeological and historical resources, and prime agricultural land protection as indicated in the comprehensive plan for the area. Proof that the package has been in front of these agencies for 60 days without comment will satisfy the review requirement. When the agencies return the package to the applicant, or if 60 days have passed without comment, the package may be submitted to the municipality for their action.

### Municipal Review

1. For **REVISIONS** to the Official Plan (Approving agency: DEP)

The municipality must determine if the planning module package is complete within 10 days of its receipt. If it is complete, the municipality must sign and date the checklist following this guidance to document the date of receipt of a complete module package. Incomplete packages are to be returned to the applicant for completion.

The municipality must act upon a complete Component 3 planning module package within 60 days of receipt or within such additional time as the applicant and municipality may agree to in writing. Failure of the municipality to act within 60 days or within the agreed time extension will cause the planning module to be deemed approved by the municipality. The complete planning module, along with the signed and dated completeness checklist, may then be sent to DEP by the municipality or applicant for final review and approval.

Municipal actions can include adoption of the planning module as a revision to the municipality's Official Plan, adoption of the revision with modifications, or denial of the revision. If the plan is adopted, the municipality forwards the revision, along with the signed and sealed Resolution for Plan Revision form and signed Transmittal Letter form, to DEP. Denied revisions are to be returned to the applicant with the reason(s) for denial. DEP must also be informed of the reasons for denial of the revision.

2. For **SUPPLEMENTS** to the Official Plan (Approving agency: delegated local agency)

The municipality must determine if the planning module package is complete within 10 days of its receipt. If it is complete, the municipality must sign and date the checklist following this guidance to document the date of receipt of a complete module package. Incomplete packages are to be returned to the applicant for completion.

The municipality must act upon a complete Component 3 planning module package within 60 days of receipt or within such additional time as the applicant and municipality may agree to in writing.

Municipal actions include approval of the planning module as a supplement to the municipality's Official Plan, approval of the supplement with modifications, or denial of the planning module as a supplement to the Official Plan. If the supplement is approved, the municipality sends it to the delegated local agency serving the municipality for final review. If the supplement is denied, it is returned to the applicant with the reason(s) for denial. The delegated local agency and DEP must also be informed of the reasons for denial.

**Approving Agency (DEP or Delegated Local Agency) Review**

1. For **REVISIONS** to the Official Plan (Approving agency: DEP)

DEP must determine if the planning module is complete within 10 days of receipt. If it is complete, DEP will do a technical review of the revision. DEP must approve or disapprove the planning module revision within 120 days of receipt, unless the planning module is for a residential subdivision plan, which requires DEP action within 60 days of receipt of a complete submission. If DEP fails to act within this 120 day period (60 days for residential subdivision plans), the planning module is deemed to be approved, unless DEP informs the municipality before the end of the review period that an extension of time is necessary to complete the plan review. This time extension may not exceed 60 days.

The municipality and applicant will receive a letter informing them of DEP action. If the plan is disapproved, the municipality and applicant will also be notified of the reason(s) for the disapproval.

2. For **SUPPLEMENTS** to the Official Plan (Approving agency: Delegated local agency)

The delegated local agency must determine if a proposed plan supplement is complete within 10 days of receipt. If it is complete, the delegated local agency must approve or disapprove the proposed plan supplement within 60 days or within an additional time that the applicant and delegated local agency agree to in writing. No additional approval by DEP is required unless the plan supplement proposes service by sewerage facilities requiring a new or modified permit from DEP under the Clean Streams Law. In this case, the plan supplement must be forwarded to the DEP for final action.





**TRANSMITTAL LETTER  
FOR SEWAGE FACILITIES PLANNING MODULE**

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) USE ONLY				
DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH. ID #
2-39001259-3				

TO: Approving Agency (DEP or delegated local agency)  
Bethlehem District Office – Attn: Robert Corby  
4530 Bath Pike  
Bethlehem, PA 18017-9074

Date August 9, 2021

Dear Sir/Madam:

Attached please find a completed sewage facilities planning module prepared by Barry Isett & Associates, Inc.  
*(Name)*  
Consulting Engineers for Da Vinci Discovery Center – 18 North 8<sup>th</sup> Street  
*(Title)* *(Name)*  
a subdivision, commercial, or industrial facility located in the City of Allentown

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

**Check one**

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

OR

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

**Check Boxes**

- Additional studies are being performed by or on behalf of this municipality which may have an effect on the planning module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- The planning module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, 25 Pa. Code Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- Other (attach additional sheet giving specifics).

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

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

Municipal Secretary (print)

Signature

Date

## RESOLUTION FOR PLAN REVISION FOR NEW LAND DEVELOPMENT

RESOLUTION OF THE ~~(SUPERVISORS)~~ ~~(COMMISSIONERS)~~ (COUNCILMEN) of Allentown  
(TOWNSHIP) ~~(BOROUGH)~~ (CITY), Lehigh COUNTY, PENNSYLVANIA (hereinafter "the municipality").

**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 (DEP) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, require the municipality to adopt an Official Sewage Facilities 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 land development conforms to a comprehensive program of pollution control and water quality management, and

**WHEREAS** Da Vinci Science City, LLC has proposed the development of a parcel of land identified as  
land developer

Da Vinci Discovery Center – 18 North 8<sup>th</sup> Street, and described in the attached Sewage Facilities Planning Module, and  
name of subdivision

proposes that such subdivision be served by: (check all that apply),  sewer tap-ins,  sewer extension,  new treatment facility,  individual onlot systems,  community onlot systems,  spray irrigation,  retaining tanks,  other, (please specify). \_\_\_\_\_

**WHEREAS**, City of Allentown finds that the subdivision described in the attached  
municipality

Sewage Facilities Planning Module conforms to applicable sewage related zoning and other sewage related municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

**NOW, THEREFORE, BE IT RESOLVED** that the ~~(Supervisors)~~ ~~(Commissioners)~~ (Councilmen) of the ~~(Township)~~ ~~(Borough)~~ (City) of Allentown hereby adopt and submit to DEP for its approval as a revision to the "Official Sewage Facilities Plan" of the municipality the above referenced Sewage Facilities Planning Module which is attached hereto.

I \_\_\_\_\_, Secretary, \_\_\_\_\_  
(Signature)

~~Township Board of Supervisors~~ ~~(Borough Council)~~ (City Councilmen), hereby certify that the foregoing is a true copy of the ~~Township~~ ~~(Borough)~~ (City) Resolution # \_\_\_\_\_, adopted, \_\_\_\_\_, 20\_\_\_\_.

Municipal Address:

City of Allentown  
435 Hamilton Street  
Allentown, PA 18101  
Telephone \_\_\_\_\_

Seal of  
Governing Body



**LEHIGH COUNTY AUTHORITY**

1053 SPRUCE ROAD \* P.O. BOX 3348 \* ALLENTOWN, PA 18106-0348  
610-398-2503 \* FAX 610-398-8413 \* www.lehighcountyauthority.org  
email: service@lehighcountyauthority.org

August 20, 2021

Irene Woodward  
Director of Planning  
City of Allentown  
435 Hamilton Street  
Allentown, PA 18101

RE: Da Vinci Discovery Center – 18 North 8<sup>th</sup> Street, City of Allentown  
Sewer Module - Chapter 94 Consistency Determination – Appendix A

Dear Mrs. Woodward:

This letter and approval for the attached Sewage Facilities Planning Module is based on the current estimate of available wastewater capacity. This letter does not promise, guarantee or assure any future conveyance or treatment allocation without compliance with all applicable rules and regulations, payment of all necessary fees and availability of the respective allocation at that time.

In accordance with the Interim Act 537 Plan submitted by the Kline’s Island Sewer System (KISS) municipalities to the Pa. Department of Environmental Protection and approved on June 25, 2021, an amount equal to the property or development’s wastewater flow will be allocated from the Connection Management Plan at the time of approval of the Sewage Facilities Planning Module. This property or development’s wastewater flow need, as represented in the attached Sewage Planning Module, is 8,967 gallons per day. Therefore, the Connection Management Plan balance will be adjusted as follows:

2020 Connection Management Plan Allocation (all numbers in gallons per day)	1,500,000
2021-2025 Connection Management Plan Allocation	3,117,129
Previously allocated from prior planning module submissions (since 1/17/20)	-1,552,011
This submission	-8,967
<b>Remaining Allocation in KISS Connection Management Plan (as of 8/20/2021)</b>	<b>3,056,151</b>

Please contact me if you have any questions about this information.

Sincerely,

Liesel M. Gross  
Chief Executive Officer

cc: Scott Novatnak, DEP  
Robert Corby, DEP  
Craig Messinger, COA  
Phil DePoe, LCA  
Philip Schiebel, Barry Isett & Associates, Inc.



**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 #
2-39001259-3				

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 Da Vinci Discovery Center - 18 North 8<sup>th</sup> Street

---

2. Brief Project Description Da Vinci Science is proposing construction of an approximate 80,000-sf (3-story) science museum and associated site improvements.

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

Municipality Name	County	City	Boro	Twp
City of Allentown	Lehigh County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Woodward	Irene			Director of Planning
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1		Mailing Address Line 2		
435 Hamilton Street				
Address Last Line -- City		State	ZIP+4	
Allentown		PA	18101	
Area Code + Phone + Ext.	FAX (optional)	Email (optional)		
610-437-7611		Irene.Woodward@allentownpa.gov		

**C. SITE INFORMATION** (See Section C of instructions)

**Site (Land Development or Project) Name**

Da Vinci Discovery Center – 18 North 8th Street

Site Location Line 1

18 North 8th Street

Site Location Line 2

Site Location Last Line -- City

Allentown

State

PA

ZIP+4

18101

Latitude

40.602250

Longitude

-75.474350

Detailed Written Directions to Site Turn Left onto Union Street from Lehigh Street. Travel approx. 0.17 mile and turn right onto 8th Street. Travel approx. 0.26 mile and the subject site will be on the left.

Description of Site Project site is currently developed with an asphalt pavement parking lot

**Site Contact (Developer/Owner)**

Last Name

Lin

First Name

Erickson

MI

Suffix

Phone

484-664-1002

Ext.

Site Contact Title

Site Contact Firm (if none, leave blank)

Da Vinci Science City, LLC

FAX

Email

Mailing Address Line 1

3145 Hamilton Blvd. Bypass

Mailing Address Line 2

Mailing Address Last Line -- City

Allentown

State

PA

ZIP+4

18103

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

Last Name

Schiebel

First Name

Philip

MI

Suffix

R

Title

Sr. Environmental Scientist

Consulting Firm Name

Barry Isett & Associates, Inc.

Mailing Address Line 1

85 S. Route 100

Mailing Address Line 2

Address Last Line – City

Allentown

State

PA

ZIP+4

18106

Country

USA

Email

pschiebel@barryisett.com

Area Code + Phone

610-398-0904

Ext.

Area Code + FAX

610-481-9098

**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: Lehigh County Authority

**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 N/A

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 23

Connections 1

Name of:

existing collection or conveyance system City of Allentown

owner Lehigh County Authority - Lessee (City of Allentown)

existing interceptor Jordan Creek Interceptor

owner Lehigh County Authority - Lessee (City of Allentown)

**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 Kline's Island WWTP (City of Allentown)

NPDES Permit Number for existing facility PA0026000

Clean Streams Law Permit Number N/A

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 permittee or their representative.

As an authorized representative of the permittee, I confirm that the Kline's Island WWTP (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 City of Allentown, LCA - Agent

Name of Responsible Agent Liesel M. Gross

Agent Signature Liesel M. Gross Date 8/20/2021

(Also see Section I. 4.)

**G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)**

**3. PLOT PLAN**

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

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

**4. WETLAND PROTECTION**

YES NO

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

**5. PRIME AGRICULTURAL LAND PROTECTION**

YES NO

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

**6. HISTORIC PRESERVATION ACT**

YES NO

- Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code* (available online at the DEP website at [www.dep.state.pa.us](http://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](http://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 PRS

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

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

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

**1. Waters designated for Special Protection**

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

**2. Pennsylvania Waters Designated As Impaired**

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

**3. Interstate and International Waters**

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

**4. Tributaries To The Chesapeake Bay**

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

Name of Permittee Agency, Authority, Municipality \_\_\_\_\_

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

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



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

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

1. Project Flows 8,967 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

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

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

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

	a. Design and/or Permitted Capacity (gpd) MGD		b. Present Flows (gpd) MGD		c. Projected Flows in 5 years (gpd) MGD (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	0.72	2.89	0.15	0.64	0.36	1.49
Conveyance	58	81	30	78 <sup>(1)</sup>	31	80 <sup>(1)</sup>
Treatment	40	40	32.3	40	33.4	42

3. Collection and Conveyance Facilities

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

YES NO

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

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

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

b. Collection System

Name of Agency, Authority, Municipality City of Allentown, LCA - Agent

Name of Responsible Agent Liesel M. Gross

Agent Signature *Liesel M. Gross* Date 8/20/2021

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

c. Conveyance System

Name of Agency, Authority, Municipality City of Allentown, LCA - Agent

Name of Responsible Agent Liesel M. Gross

Agent Signature *Liesel M. Gross*

Date 8/20/2021

4. Treatment Facility

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

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 City of Allentown, LCA - Agent

Name of Responsible Agent Liesel M. Gross

Agent Signature *Liesel M. Gross*

Date 8/20/2021

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

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

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

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

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

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

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

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

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

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

**O. SEWAGE MANAGEMENT** (See Section O of instructions)

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

Yes No

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

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

2. Project Flows \_\_\_\_\_ gpd

Yes No

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

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

**(For completion by non-municipal facility agent)**

4. Collection and Conveyance Facilities

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

Yes No

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

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

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

- b. Collection System

Name of Responsible Organization \_\_\_\_\_

Name of Responsible Agent \_\_\_\_\_

Agent Signature \_\_\_\_\_

Date \_\_\_\_\_

- c. Conveyance System

Name of Responsible Organization \_\_\_\_\_

Name of Responsible Agent \_\_\_\_\_

Agent Signature \_\_\_\_\_

Date \_\_\_\_\_

5. Treatment Facility

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

Yes No

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

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

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

- b. Name of Facility \_\_\_\_\_  
Name of Responsible Agent \_\_\_\_\_  
Agent Signature \_\_\_\_\_  
Date \_\_\_\_\_

(For completion by the municipality)

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

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

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

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

Yes No

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

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

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

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

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

Philip R. Schiebel	<i>Philip R. Schiebel</i>
Name (Print)	Signature
Sr. Environmental Scientist w/ Barry Isett & Associates	July 16, 2021
Title	Date
85 S. Route 100, Allentown, PA 18106	610-398-0904
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 \$1,150 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.

$$\#23 \text{ Lots (or EDUs) X } \$50.00 = \$ 1,150.00$$

The fee is based upon:

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

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

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

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

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

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

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

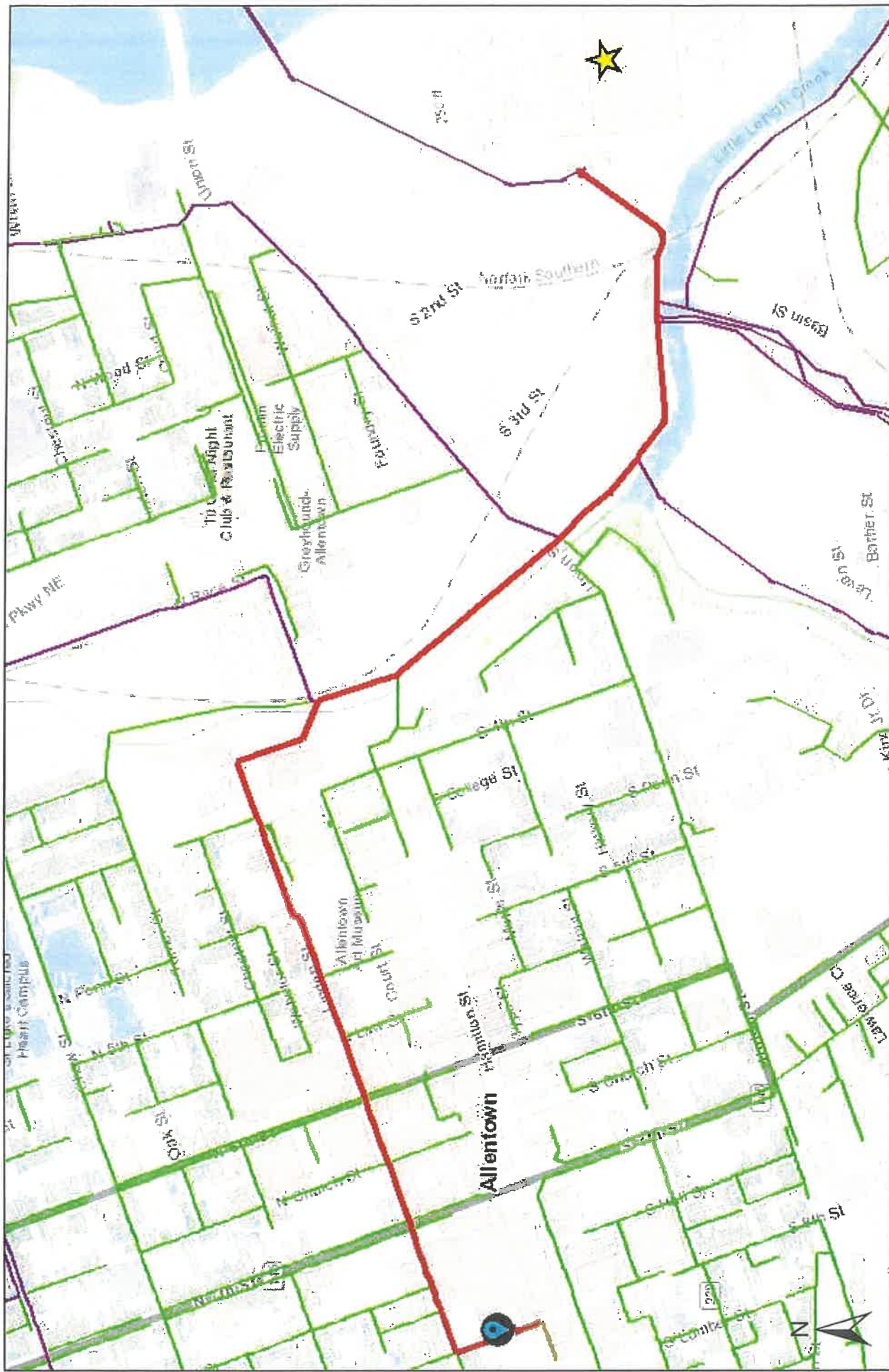
The fee is based upon:

- 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

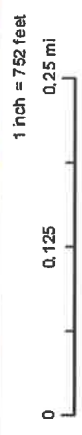
- C. A sub-surface discharge system that requires a permit under The Clean Streams Law will use a flat fee:







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

# LCA FLOW MAP - 18 N 8th St



8/19/2021, 2:59:39 PM



- Legend
-  Kline's Island WWTP
  -  Sanitary Mains
  -  Collector
  -  Sanitary Main
  -  Interceptor
  -  Sanitary Main





**LEHIGH COUNTY AUTHORITY** 1053 SPRUCE ROAD \* P.O. BOX 3348 \* ALLENTOWN, PA 18106-0348  
610-398-2503 \* FAX 610-398-8413 \* [www.lehighcountyauthority.org](http://www.lehighcountyauthority.org)  
email: [service@lehighcountyauthority.org](mailto:service@lehighcountyauthority.org)

June 22, 2021

Mrs. Irene Woodward  
Planning Director  
City of Allentown  
435 Hamilton Street  
Allentown, PA 18101

SUBJECT: Land Development – 18 North 8<sup>th</sup> Street  
Will Serve - Water Service

Dear Mrs. Woodward:

Lehigh County Authority (LCA) is willing to provide public water service in the requested amount of 8,967 GPD to the proposed Da Vinci Science Center building to be located at 18 North 8th Street.

LCA has ample capacity to provide water service to this development and the service is presently available in the adjacent streets.

Tapping fees, connection fees, and meter fees are based upon the City of Allentown's ordinances and LCA's schedule of rate fees. Any abandoned lines must be properly capped.

Water service is conditioned upon the following:

1. LCA approval of the site, plumbing and fire protection system plans.
2. Developer obtaining any road opening permits from the municipality and/or PA-DOT to construct the water mains and/or services.
3. Developer executing a Developer's Water System Agreement or a Construction Permit with LCA for construction of the water mains and/or services.
4. Developer installation of water mains and/or services in accordance with the approved plans and applicable LCA policies and regulations, including the current General Specifications for Water System Construction.
5. Developer compliance with the terms and conditions of LCA's Rules and Regulations for Water Service, including completion of an Application for Water Service and payment of all applicable fees. Tapping fees shall be paid to LCA prior to building permits being provided by the City.



Sincerely,

A handwritten signature in black ink that reads "Jacob Hunsicker". The signature is written in a cursive, slightly slanted style.

Jacob Hunsicker  
Capital Works Project Specialist

cc: Lin Erickson – Da Vinci Science Center  
Adam Smith, PE – Barry Isett & Associates Inc.



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF CLEAN WATER

DEP Code #:  
2-39001259-3

**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

Da Vinci Discovery Center - 18 North 8<sup>th</sup> Street

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

1. Date plan received by municipal planning agency September 3, 2021  
2. Date review completed by agency September 7, 2021

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

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

**SECTION C. AGENCY REVIEW (continued)**

Yes No

13. Is this proposal consistent with the ordinance?

If no, describe the inconsistencies \_\_\_\_\_

14. Is this plan consistent with the municipal Official Sewage Facilities Plan?

If no, describe the inconsistencies \_\_\_\_\_

15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?

If yes, describe \_\_\_\_\_

16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision? N/A

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: Irene Woodward

Title: Director of Planning

Signature: Irene Woodward

Date: 9/7/21

Name of Municipal Planning Agency: City of Allentown

Address 435 Hamilton Allentown, PA 18101

Telephone Number: 610-437-7611

**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.



GREG ZEBROWSKI  
Chair

STEVEN GLICKMAN  
Vice Chair

PAMELA PEARSON  
Treasurer

BECKY A. BRADLEY, AICP  
Executive Director

September 21, 2021

Mr. Philip Schiebel  
Barry Isett & Associates, Inc.  
85 South Route 100  
Allentown, PA 18106

**Re: Act 537 Review - Sewage Facilities Planning Module  
Da Vinci Science Center Downtown Allentown  
City of Allentown, Lehigh County  
DEP Code No. 2-39001259-3**

Dear Mr. Schiebel:

The Lehigh Valley Planning Commission (LVPC) reviewed the above-referenced planning module according to the requirements of Act 537, the Pennsylvania Sewage Facilities Act. We offer the following comments.

This sewage facilities planning module is intended for a proposed three-story, 80,000 square foot science center on approximately 1.3 acres at 18 North 8<sup>th</sup> Street. The development is proposed to be served by public sewage disposal, with ultimate treatment at the Kline's Island wastewater treatment plant. This sewage facilities planning module exhibits consistency with *FutureLV: The Regional Plan*. According to *FutureLV*, the proposed project is located in an area designated for Development in the General Land Use Plan and aligns with the *FutureLV* action to 'promote development in areas with public sewer and water capacity' (under Policy 3.2).

Enclosed please find an executed Module Component 4b. Please call me if you have any questions regarding this review.

Sincerely,

Susan L. Rockwell  
Senior Environmental Planner

Enclosure

cc: Irene Woodward, AICP, Director of Planning, City of Allentown  
Robert Corby, PA Department of Environmental Protection

## SEWAGE FACILITIES PLANNING MODULE COMPONENT 4B - COUNTY PLANNING AGENCY REVIEW

(or Planning Agency with Areawide Jurisdiction)

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

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

Project Name

Da Vinci Science Center Downtown Allentown

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

1. Date plan received by county planning agency ---
2. Date plan received by planning agency with areawide jurisdiction September 16, 2021  
Agency name Lehigh Valley Planning Commission
3. Date review completed by agency September 21, 2021

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

- | Yes                                 | No                                  |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1. Is there a county or areawide comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101 <i>et seq.</i> )?  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 2. Is this proposal consistent with the comprehensive plan for land use? <i>See attached MRC review letter dated 7/14/2021</i>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3. Does this proposal meet the goals and objectives of the plan?<br>If no, describe goals and objectives that are not met ---  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 4. Is this proposal consistent with the use, development, and protection of water resources?<br>If no, describe inconsistency ---  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 5. Is this proposal consistent with the county or areawide comprehensive land use planning relative to Prime Agricultural Land Preservation?<br>If no, describe inconsistencies: --- |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 6. Does this project propose encroachments, obstructions, or dams that will affect wetlands?<br>If yes, describe impact ---  |
| <input type="checkbox"/>            | <input type="checkbox"/>            | 7. Will any known historical or archeological resources be impacted by this project? <i>PHMC determination</i><br>If yes, describe impacts ---                                       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | 8. Will any known endangered or threatened species of plant or animal be impacted by the development project? <i>See PNB I results</i><br>If yes, describe impacts ---               |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 9. Is there a county or areawide zoning ordinance?   |
| <input type="checkbox"/>            | <input type="checkbox"/>            | 10. Does this proposal meet the zoning requirements of the ordinance? <i>N/A</i><br>If no, describe inconsistencies ---  |

**SECTION C. AGENCY REVIEW (continued)**

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained? <i>N/A</i>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Is there a county or areawide subdivision and land development ordinance? <i>Not applicable to City of Allentown</i>
<input type="checkbox"/>	<input type="checkbox"/>	13. Does this proposal meet the requirements of the ordinance? <i>N/A</i> If no, describe which requirements are not met ---
<input type="checkbox"/>	<input type="checkbox"/>	14. Is this proposal consistent with the municipal Official Sewage Facilities Plan? <i>See municipal interpretation</i> If no, describe inconsistency ---
<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe ---
<input type="checkbox"/>	<input type="checkbox"/>	16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision? <i>N/A</i>
<input type="checkbox"/>	<input type="checkbox"/>	If yes, is the proposed waiver consistent with applicable ordinances. If no, describe the inconsistencies ---
<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Does the county have a stormwater management plan as required by the Stormwater Management Act?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	If yes, will this project plan require the implementation of storm water management measures?
18. Name, Title and signature of person completing this section:		
Name: <u>Susan L. Rockwell</u>		
Title: <u>Senior Environmental Planner</u>		
Signature: <u><i>S. L. Rockwell</i></u>		
Date: <u>September 21, 2021</u>		
Name of County or Areawide Planning Agency: <u>Lehigh Valley Planning Commission</u>		
Address: <u>961 Marcon Boulevard, Suite 310 Allentown, PA 18109</u>		
Telephone Number: <u>610-264-4544</u>		

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

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

The county planning agency must complete this component within 60 days.

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



Lehigh Valley Planning Commission



GREG ZEBROWSKI  
Chair

STEVEN GLICKMAN  
Vice Chair

PAMELA PEARSON  
Treasurer

BECKY A. BRADLEY, AICP  
Executive Director

July 14, 2021

Irene Woodward, AICP  
Director of Planning & Zoning  
City of Allentown  
435 Hamilton Street  
Allentown, PA 18101

**RE: Da Vinci Science Center Downtown Allentown –  
Land Development and Subdivision  
City of Allentown  
Lehigh County**

Dear Ms. Woodward:

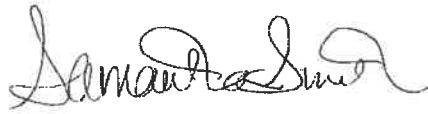
The subject application proposes to remove an existing surface parking lot and construct an 80,000-square-foot Da Vinci Science Center with a block-long, one-way public road and related improvements. The proposal is located at 18-22 North 8<sup>th</sup> Street (parcel number 640700215957, 640700228694 and 640700248455). The proposal is located within a Development area of the General Land Use Plan and exhibits consistency with *FutureLV: The Regional Plan* because it serves to 'create public spaces in underserved areas' and 'support cultural and social programs' (of Policy 5.2).

As determined by the *LVPC 2020 Equity Analysis*, the proposal is in an area with very low access to opportunity based on – among other factors – 92% of households being renters, 29% of household speaking English 'less than very well' and preschool enrollment rate of just 4%. The Da Vince Science Center locating in this area will 'promote education that improves social and economic opportunities' (of Policy 4.3) and the design serves to 'integrate visual and performing art into public space' (of Policy 5.4). The LVPC recommends that the applicant consider reduced or free admission for neighborhood residents for these reasons.

Municipalities, when considering subdivision/land developments, should reasonably attempt to be consistent with *FutureLV: The Regional Plan*, as required by the Pennsylvania Municipalities Planning Code (MPC) [Article 1§105, Article III§303, §304 & §306(a), Article VI§603(j)]. The LVPC review does not include an in-depth examination of plans relative to subdivision design standards or ordinance requirements since these items are covered in the municipal review.

Please call or email myself or another Community Planning staff person for information on how to obtain LVPC signatures on the final plans.

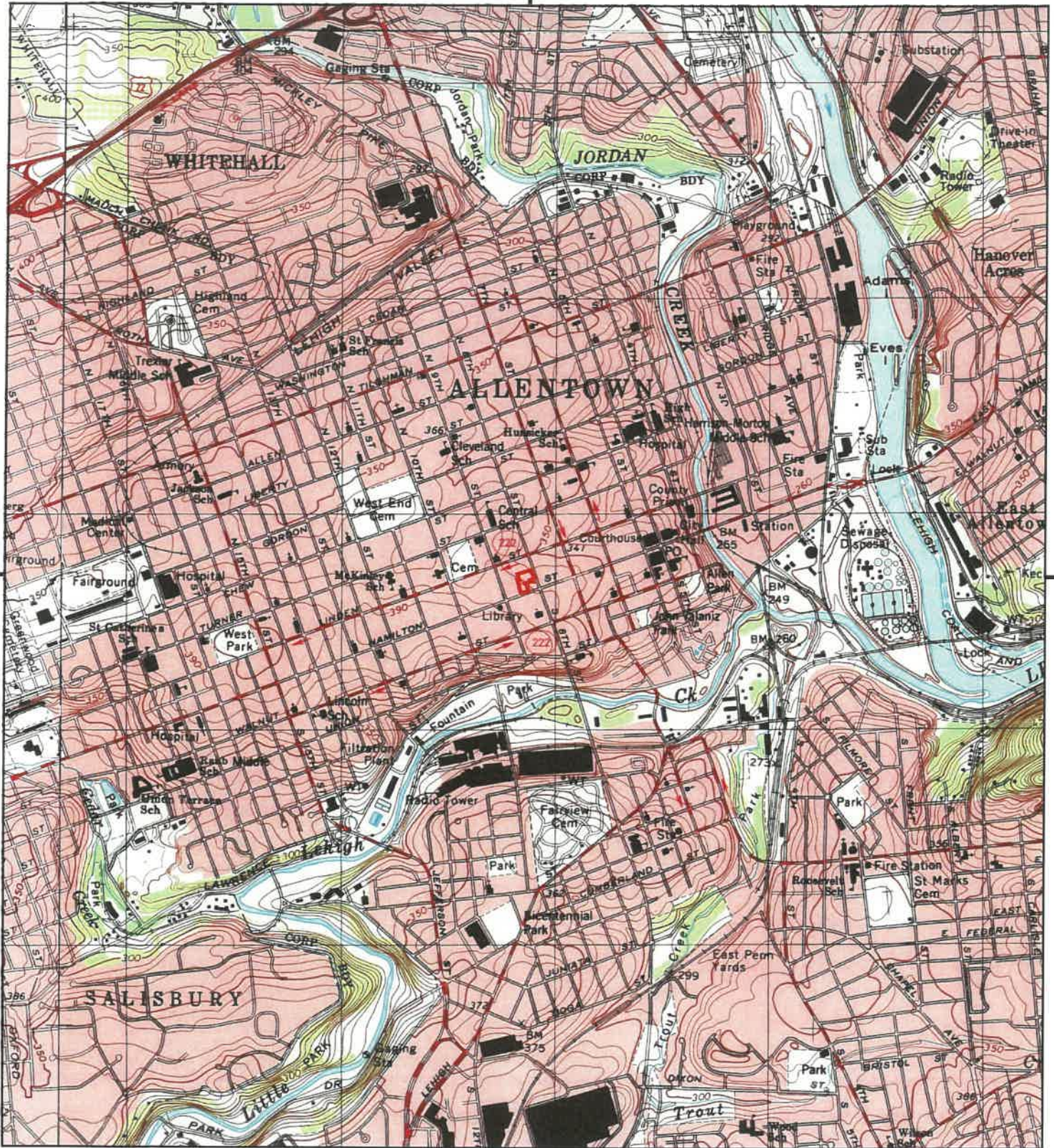
Sincerely,

A handwritten signature in cursive script that reads "Samantha Smith". The signature is written in black ink and is positioned above the printed name and title.

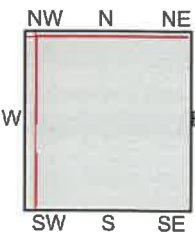
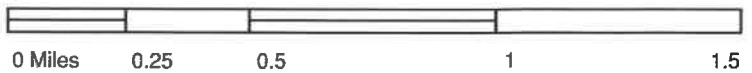
Samantha Smith  
Chief Community Planner

cc: Craig Messinger, City of Allentown Director of Public Works; Da Vinci Science City, LLC, Owner/Applicant; Adam Smith, PE, Barry Isett & Associates, Inc.





This report includes information from the following map sheet(s).



- TP, Allentown East, 1999, 7.5-minute
- N, Catasauqua, 1999, 7.5-minute
- SW, Allentown West, 1999, 7.5-minute
- NW, Cementon, 1999, 7.5-minute

**SITE NAME:** Allentown- Three Parcels  
**ADDRESS:** 18 North 8th Street  
 Allentown, PA 18101  
**CLIENT:** Barry Isett and Associates



## **SECTION F: PROJECT NARRATIVE**

FOR

### **Da Vinci Discovery Center – 18 North 8<sup>th</sup> Street**

City of Allentown, Lehigh County, Pennsylvania

Da Vinci Science City, LLC (Da Vinci Science), located at 3145 Hamilton Blvd. Bypass in the City of Allentown, Pennsylvania, is planning to develop a property, located at 18 North 8<sup>th</sup> Street (Lehigh County parcel IDs: 640700215957 1, 640700228694 1, 640700248455 1), in the City of Allentown, Lehigh County, Pennsylvania. The site location is shown on the attached topographic map (Allentown East, PA Quadrangle). Da Vinci Science is proposing construction of an approximate 80,000-sf (3-story) commercial science museum and associated site improvements. The subject site is currently developed with an asphalt pavement parking lot. A portion of mowed grass can be observed in the southwest corner of the subject site.

Site development to construct the proposed science museum and associated site improvements is anticipated to disturb approximately 1.32 acres. A copy of the utilities plan is attached for reference.

The project will be served by municipal water and sanitary sewer service, both provided by Lehigh County Authority. Da Vinci Science generated an attendance analysis that shows average visitation rates for each day of the week for each month. The busiest day of the week, Saturdays, will have a peak of 1,700 visitors per day. The facility will average 1,095 visitors per day. In addition to the visitors, a maximum of 41 staff members will be onsite. In order to accurately estimate the peak flows, water meter bills from a 12-month period (December 2018 through December 2019) and attendance records were reviewed from the existing Da Vinci Science Center, located at 3145 Hamilton Blvd Bypass, Allentown, PA 18103. The proposed Da Vinci Science Center will operate in a similar manner as the existing Hamilton Blvd facility.

A review of water meter bills and attendance records revealed a peak flow of 5.15 GPD/individual. Using the peak attendance (1,741 Individuals) and the peak flow per individual (5.15 GPD), Anticipated peak flow for this project is 8,967 GPD or 22.42 equivalent (DEP) dwelling units (EDUs), where 1 EDU = 400 GPD. For the City of Allentown, the flows amount to approximately 38 EDUs, where 1 EDU=238 GPD. A copy of the water meter bills, and summary table are attached to this narrative.

The project proposes a single sewer tap-in directly to the existing sanitary sewer in North 8<sup>th</sup> Street (depicted on the utility plan). The City of Allentown's collection system conveys to the Jordan Creek Interceptor. Ultimately, sewage will be treated at the Kline's Island Wastewater Treatment Plant (NPDES #0026000), which is operated by Lehigh County Authority. The

proposed system shall be the "ultimate method" of sewage disposal, serving the development longer than 5 years.

# Da Vinci Science Center Comparable Flow

Da Vinci Science Center - Hamilton Blvd Location

Read Period	Total Gallons	Days*	GPD	Individuals
12/27/2018 - 1/31/2019	25,325.00	35	724	7,888
1/31/2019 - 3/01/2019	19,474.00	29	672	8,268
3/01/2019 - 3/29/2019	27,221.00	28	972	11,228
3/29/2019 - 5/01/2019	29,290.00	33	888	10,775
5/01/2019 - 6/04/2019	33,229.00	34	977	11,427
6/04/2019 - 6/28/2019	22,373.00	24	932	10,276
6/28/2019 - 7/29/2019	28,828.00	31	930	11,809
7/29/2019 - 8/28/2019	24,888.00	30	830	9,761
8/28/2019 - 10/01/2019	14,622.00	34	430	5,064
10/01/2019 - 10/30/2019	15,563.00	29	537	6,489
10/30/2019 - 11/26/2019	20,958.00	27	776	8,051
11/26/2019 - 12/27/2019	17,082.00	31	551	7,247

\*end date not included

Total Gallons	Total Individuals	Avg. Gallons/Individual
278,853	108,283.00	2.575224181

Peak Flows (Average *2)	5.15
-------------------------	------



LEHIGH COUNTY AUTHORITY  
PO BOX 3758  
ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
LCA Allentown Division - Water / Sewer Bill

LCA0215A AUTO SCH 5-DIGIT 18101  
7000000450 00.0002.0180 405/1



CEDAR CREST COLLEGE  
DAVINCI DISCOVERY CENTER  
3145 HAMILTON BLVD BYPASS  
ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 02/15/2019  
Account Number: 64613  
Bill Number: 1652210  
Service To: 100 COLLEGE DR  
ALLENTOWN, PA 18104  
Due Date: 03/10/2019  
Amount Due Now: \$ 234.84

**BILLING SUMMARY**

Days in Bill Cycle 35  
Total New Charges: \$ 234.84  
Previous Balance: 169.36  
Penalties: 0.00  
Payments: 169.36  
Total Amount Due: \$ 234.84

**TOTAL PAYMENT DUE BY 03/10/2019 \$ 234.84**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
12/27/2018	01/31/2019	1,475,611	1,500,936	ACTUAL	25,325	25,325

**CONSUMPTION HISTORY**

12/27/2018	11/29/2018	10/30/2018	10/01/2018
16,468	18,169	16,813	18,508

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	90.43
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	7.08
S ALLENTOWN WW - COMMERCIAL - FL	65.15
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0315A AUTO SCH 5-DIGIT 18101  
 7000001509 00.0005.0110 1454/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 03/15/2019  
 Account Number: 64613  
 Bill Number: 1668103  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 04/10/2019  
 Amount Due Now: \$ 197.37

**BILLING SUMMARY**

Days in Bill Cycle 29  
 Total New Charges: \$ 197.37  
 Previous Balance: 234.84  
 Penalties: 0.00  
 Payments: 234.84  
**Total Amount Due: \$ 197.37**

**TOTAL PAYMENT DUE BY 04/10/2019 \$ 197.37**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
01/31/2019	03/01/2019	1,500,936	1,520,410	ACTUAL	19,474	19,474

**CONSUMPTION HISTORY**

01/31/2019	12/27/2018	11/29/2018	10/30/2018
25,325	16,468	18,169	16,813

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	70.01
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	5.44
S ALLENTOWN WW - COMMERCIAL - FL	50.44
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0416A AUTO SCH 5-DIGIT 18101  
 7000000925 00.0004.0286 791/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 04/15/2019  
 Account Number: 64613  
 Bill Number: 1698252  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 05/10/2019  
 Amount Due Now: \$ 248.39

**BILLING SUMMARY**

Days in Bill Cycle 28  
 Total New Charges: \$ 248.39  
 Previous Balance: 197.37  
 Penalties: 0.00  
 Payments: 197.37  
 Total Amount Due: \$ 248.39

**TOTAL PAYMENT DUE BY**

05/10/2019

\$ 248.39

**CONSUMPTION HISTORY**

Service Dates	From	To	Current	Type	Volume (Gallons)	Billed Usage (Gallons)
03/01/2019	01/31/2019	12/27/2018	11/29/2018			
	19,474	25,325	16,468		18,169	

**CURRENT METER INFORMATION**

Service Dates	From	To	Previous	Current	Type	Volume (Gallons)	Billed Usage (Gallons)
03/01/2019	03/29/2019	1,520,410	1,547,631	ACTUAL	27,221	27,221	

**NEW CHARGES**

LCA Service Description	Charge
W=Water; S=Sewer; F=Fee	
W ALLENTOWN - INDUSTRIAL - VOLUM	97.87
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	7.61
S ALLENTOWN WW - COMMERCIAL - FL	70.50
S ALLENTOWN WW - COMMERCIAL - FI	17.89



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0515A AUTO SCH 5-DIGIT 18101  
 7000000457 00.0002.0180 404/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 05/15/2019  
 Account Number: 64613  
 Bill Number: 1710825  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 06/10/2019  
 Amount Due Now: \$ 262.02

**BILLING SUMMARY**

Days in Bill Cycle 33  
 Total New Charges: \$ 262.02  
 Previous Balance: 248.39  
 Penalties: 0.00  
 Payments: 248.39  
 Total Amount Due: \$ 262.02

**TOTAL PAYMENT DUE BY 06/10/2019 \$ 262.02**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
03/29/2019	05/01/2019	1,547,631	1,576,921	ACTUAL	29,290	29,290

**CONSUMPTION HISTORY**

Service Dates	From	To	Volume (Gallons)	Charge
03/29/2019	03/01/2019	01/31/2019	12,277,2018	
	27,221	19,474	25,325	16,468

**NEW CHARGES**

LCA Service Description	Charge
W=Water; S=Sewer; F=Fee	
W ALLENTOWN - INDUSTRIAL - VOLUM	105.31
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	8.19
S ALLENTOWN WW - COMMERCIAL - FL	75.86
S ALLENTOWN WW - COMMERCIAL - FI	17.69





LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0614A AUTO SCH 5-DIGIT 18101  
 7000001518 00.0005.0119 1463/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 06/15/2019  
 Account Number: 64613  
 Bill Number: 1726908  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 07/10/2019  
 Amount Due Now: \$ 287.95

**BILLING SUMMARY**

Days in Bill Cycle 34  
 Total New Charges: \$ 287.95  
 Previous Balance: 262.02  
 Penalties: 0.00  
 Payments: 262.02  
**Total Amount Due: \$ 287.95**

**TOTAL PAYMENT DUE BY: 07/10/2019 \$ 287.95**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
05/01/2019	06/04/2019	1,576,921	1,610,150	ACTUAL	33,229	33,229

**CONSUMPTION HISTORY**

05/01/2019	03/29/2019	03/01/2019	01/31/2019
29,290	27,221	19,474	25,325

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	119.47
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	9.29
S ALLENTOWN WW - COMMERCIAL - FL	86.06
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0715A AUTO SCH 5-DIGIT 18101  
 7000000926 00.0004.0284 793/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 07/15/2019  
 Account Number: 64613  
 Bill Number: 1747858  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 08/10/2019  
 Amount Due Now: \$ 216.47

**BILLING SUMMARY**

Days in Bill Cycle 24  
 Total New Charges: \$ 216.47  
 Previous Balance: 287.95  
 Penalties: 0.00  
 Payments: 287.95  
 Total Amount Due: \$ 216.47

**TOTAL PAYMENT DUE BY: 08/10/2019 \$ 216.47**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
06/04/2019	06/28/2019	1,610,150	1,632,523	ACTUAL	22,373	22,373

**CONSUMPTION HISTORY**

06/04/2019	05/01/2019	03/29/2019	03/01/2019
33,229	29,290	27,221	19,474

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	80.44
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	6.25
S ALLENTOWN WW - COMMERCIAL - FL	57.95
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0815A AUTO SCH 5-DIGIT 18101  
 7000000441 00.0002.0174 394/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 08/15/2019  
 Account Number: 64613  
 Bill Number: 1769704  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 09/10/2019  
 Amount Due Now: \$ 258.98

**BILLING SUMMARY**

Days in Bill Cycle 31  
 Total New Charges: \$ 258.98  
 Previous Balance: 216.47  
 Penalties: 0.00  
 Payments: 216.47  
 Total Amount Due: \$ 258.98

**TOTAL PAYMENT DUE BY: 09/10/2019 \$ 258.98**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
06/28/2019	07/29/2019	1,632,523	1,661,351	ACTUAL	28,828	28,828

**CONSUMPTION HISTORY**

06/28/2019	06/04/2019	05/01/2019	03/29/2019
22,373	33,229	29,290	27,221

**NEW CHARGES**

LCA Service Description	Charge
W=Water, S=Sewer, F=Fee	
W ALLENTOWN - INDUSTRIAL - VOLUM	103.65
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	8.06
S ALLENTOWN WW - COMMERCIAL - FL	74.67
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
PO BOX 3758  
ALLENTOWN, PA 18106-0758

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**ACCOUNT INFORMATION**

Statement Date: 09/15/2019  
Account Number: 64613  
Bill Number: 1793051  
Service To: 100 COLLEGE DR  
ALLENTOWN, PA 18104  
Due Date: 10/10/2019  
Amount Due Now: \$ 233.03



LCA0913A AUTO SCH 5-DIGIT 18101  
7000001506 00.0005.0111 1455/1



CEDAR CREST COLLEGE  
DAVINCI DISCOVERY CENTER  
3145 HAMILTON BLVD BYPASS  
ALLENTOWN PA 18103-3686

**BILLING SUMMARY**

Days in Bill Cycle 30  
Total New Charges: \$ 233.03  
Previous Balance: 258.98  
Penalties: 0.00  
Payments: 258.98  
Total Amount Due: \$ 233.03

**TOTAL PAYMENT DUE BY 10/10/2019 \$ 233.03**

**CONSUMPTION HISTORY**

Service Dates	From	To	Previous	Current	Type		
07/29/2019	06/28/2019	06/04/2019	05/01/2019	28,828	22,373	33,229	29,290

**NEW CHARGES**

LCA Service Description	Charge
W=Water; S=Sewer; F=Fee	
W ALLENTOWN - INDUSTRIAL - VOLUM	89.48
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	6.96
S ALLENTOWN WW - COMMERCIAL - FL	64.46
S ALLENTOWN WW - COMMERCIAL - FI	17.69

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Billed Usage (Gallons)
	From	To	
07/29/2019	08/28/2019	1,661,351	1,686,239
		ACTUAL	24,888
			24,888



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA1015A 781 1 AV 0.383  
 7000000910 00.0004.0285 781/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 10/15/2019  
 Account Number: 64613  
 Bill Number: 1806815  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 11/10/2019  
 Amount Due Now: \$ 165.43

**BILLING SUMMARY**

Days in Bill Cycle 34  
 Total New Charges: \$ 165.43  
 Previous Balance: 233.03  
 Penalties: 0.00  
 Payments: 233.03  
**Total Amount Due: \$ 165.43**

**TOTAL PAYMENT DUE BY 11/10/2019 \$ 165.43**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Billed Usage (Gallons)			
	From	To		Current	Type	
08/28/2019	10/01/2019	1,686,239	1,700,861	ACTUAL	14,622	14,622

**CONSUMPTION HISTORY**

08/28/2019	07/29/2019	06/28/2019	06/04/2019
24,888	28,828	22,373	33,229

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	52.57
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	4.09
S ALLENTOWN WW - COMMERCIAL - FL	37.87
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA1115A AUTO SCH 5-DIGIT 18101  
 700000428 00.0002.0170 384/1



CEGAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 11/15/2019  
 Account Number: 64613  
 Bill Number: 1828701  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 12/10/2019  
 Amount Due Now: \$ 171.62

**BILLING SUMMARY**

Days in Bill Cycle 29  
 Total New Charges: \$ 171.62  
 Previous Balance: 165.43  
 Penalties: 0.00  
 Payments: 165.43  
 Total Amount Due: \$ 171.62

**TOTAL PAYMENT DUE BY: 12/10/2019 \$ 171.62**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
10/01/2019	10/30/2019	1,700,861	1,716,424	ACTUAL	15,563	15,563

**CONSUMPTION HISTORY**

10/01/2019	08/28/2019	07/29/2019	06/28/2019
14,622	24,888	28,828	22,373

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	55.95
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	4.35
S ALLENTOWN WW - COMMERCIAL - FL	40.31
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCAL216B AUTO SCH 5-DIGIT 18101  
 7000001490 00.0005.0096 1440/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 12/15/2019  
 Account Number: 64613  
 Bill Number: 1851888  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 01/10/2020  
 Amount Due Now: \$ 207.15

**BILLING SUMMARY**

Days in Bill Cycle 27  
 Total New Charges: \$ 207.15  
 Previous Balance: 171.62  
 Penalties: 0.00  
 Payments: 171.62  
**Total Amount Due: \$ 207.15**

**TOTAL PAYMENT DUE BY 01/10/2020 \$ 207.15**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
10/30/2019	11/26/2019	1,716,424	1,737,382	ACTUAL	20,958	20,958

**CONSUMPTION HISTORY**

	10/01/2019	08/28/2019	07/29/2019
15,563	14,622	24,888	28,828

**NEW CHARGES**

LCA Service Description W=Water; S=Sewer; F=Fee	Charge
W ALLENTOWN - INDUSTRIAL - VOLUM	75.35
W ALLENTOWN - INDUSTRIAL - FIXED	51.46
W ALLENTOWN CAPITAL COST - WATER	5.86
S ALLENTOWN WW - COMMERCIAL - FL	54.28
S ALLENTOWN WW - COMMERCIAL - FI	17.69



LEHIGH COUNTY AUTHORITY  
 PO BOX 3758  
 ALLENTOWN, PA 18106-0758

For LCA Customer Service Call: 610-437-7515.  
 LCA Allentown Division - Water / Sewer Bill

LCA0115A AUTO SCH 5-DIGIT 18101  
 7000000912 00.0004.0280 784/1



CEDAR CREST COLLEGE  
 DAVINCI DISCOVERY CENTER  
 3145 HAMILTON BLVD BYPASS  
 ALLENTOWN PA 18103-3686



**ACCOUNT INFORMATION**

Statement Date: 01/15/2020  
 Account Number: 64613  
 Bill Number: 1874879  
 Service To: 100 COLLEGE DR  
 ALLENTOWN, PA 18104  
 Due Date: 02/10/2020  
 Amount Due Now: \$ 183.70

**BILLING SUMMARY**

Days in Bill Cycle 31  
 Total New Charges: \$ 183.70  
 Previous Balance: 207.15  
 Penalties: 0.00  
 Payments: 207.15  
 Total Amount Due: \$ 183.70

**TOTAL PAYMENT DUE BY: 02/10/2020 \$ 183.70**

**CURRENT METER INFORMATION**

Service Dates	Meter Readings		Volume (Gallons)	Billed Usage (Gallons)		
	From	To			Previous	Current
11/28/2019	12/27/2019	1,737,382	1,754,464	ACTUAL	17,082	17,082

**CONSUMPTION HISTORY**

11/26/2019	10/30/2019	10/01/2019	08/28/2019
20,958	15,563	14,622	24,888

**NEW CHARGES**

LCA Service Description	Charge
W=Water; S=Sewer; F=Fee	
W ALLENTOWN - INDUSTRIAL - VOLUM	61.42
W ALLENTOWN - INDUSTRIAL - FIXED	51.53
W ALLENTOWN CAPITAL COST - WATER	5.88
S ALLENTOWN WW - COMMERCIAL - FL	44.24
S ALLENTOWN WW - COMMERCIAL - FI	17.72





## Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

July 29, 2021

Philip Schiebel  
Barry Isett & Associates  
85 South Route 100  
Allentown PA 181060000

RE: ER Project # 2021PR05229.001, Da Vinci Discovery Center - 18 North 8th Street 18 North 8th Street, City of Allentown, Lehigh County, Pennsylvania , Department of Environmental Protection, Allentown City, Lehigh County

Dear Philip Schiebel:

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

### **Above Ground Resources**

*More Information Requested - New Attachment*

Since the proposed new construction is occurring within the National Register-eligible Allentown City Historic District, please provide photographs of the adjacent buildings and streetscapes. In addition, please provide renderings of the new construction if available. Please submit the requested materials to the PA SHPO through PA-SHARE using the link under SHPO Requests More Information on the Response screen.

For questions concerning above ground resources, please contact Emma Diehl at [emdiehl@pa.gov](mailto:emdiehl@pa.gov).

### **Archaeological Resources**


*No Archaeological Concerns - Environmental Review - No Historic Properties - Archaeological*

Thank you for submitting information concerning the above-referenced project. In our opinion and based on the information received and available in our files, there are no archaeological historic properties (resources listed in or eligible for listing in the National Register) present within the area of potential effect. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to

notify the PA SHPO at [pashare@pa.gov](mailto:pashare@pa.gov) and provide the revised designs for review and comment.

For questions concerning archaeological resources, please contact Casey Hanson at [chanson@pa.gov](mailto:chanson@pa.gov).

Sincerely,

A handwritten signature in black ink that reads "Andrea MacDonald". The signature is written in a cursive style with a large initial 'A' and a distinct 'M'.

Andrea MacDonald  
Director, State Historic Preservation Office



**Pennsylvania State Historic Preservation Office**  
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

August 5, 2021

Philip Schiebel  
Barry Isett & Associates  
85 South Route 100  
Allentown PA 181060000

RE: ER Project # 2021PR05229.002, Da Vinci Discovery Center - 18 North 8th Street 18 North 8th Street, City of Allentown, Lehigh County, Pennsylvania , Department of Environmental Protection, Allentown City, Lehigh County

Dear Philip Schiebel:

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

**Above Ground Resources**

*No Above Ground Concerns - Environmental Review - No Adverse Effect Without Conditions - Above Ground*

Thank you for submitting information concerning the above-referenced project. In our opinion and based on the information received, the project as proposed will have no adverse effect on the following historic properties: Allentown City Historic District (Resource # 2004RE01929). Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to notify the PA SHPO at pashare@pa.gov and provide the revised designs for review and comment.

For questions concerning above ground resources, please contact Emma Diehl at emdiehl@pa.gov.

Sincerely,

Andrea MacDonald  
Director, State Historic Preservation Office

## 1. PROJECT INFORMATION

Project Name: **Da Vinci Science Center**

Date of Review: **6/21/2021 11:58:03 AM**

Project Category: **Development, New public/community development (school, library, church, museum)**

Project Area: **2.51 acres**

County(s): **Lehigh**

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

ZIP Code:

Quadrangle Name(s): **ALLENTOWN EAST**

Watersheds HUC 8: **Lehigh**

Watersheds HUC 12: **Lower Jordan Creek**

Decimal Degrees: **40.602106, -75.474507**

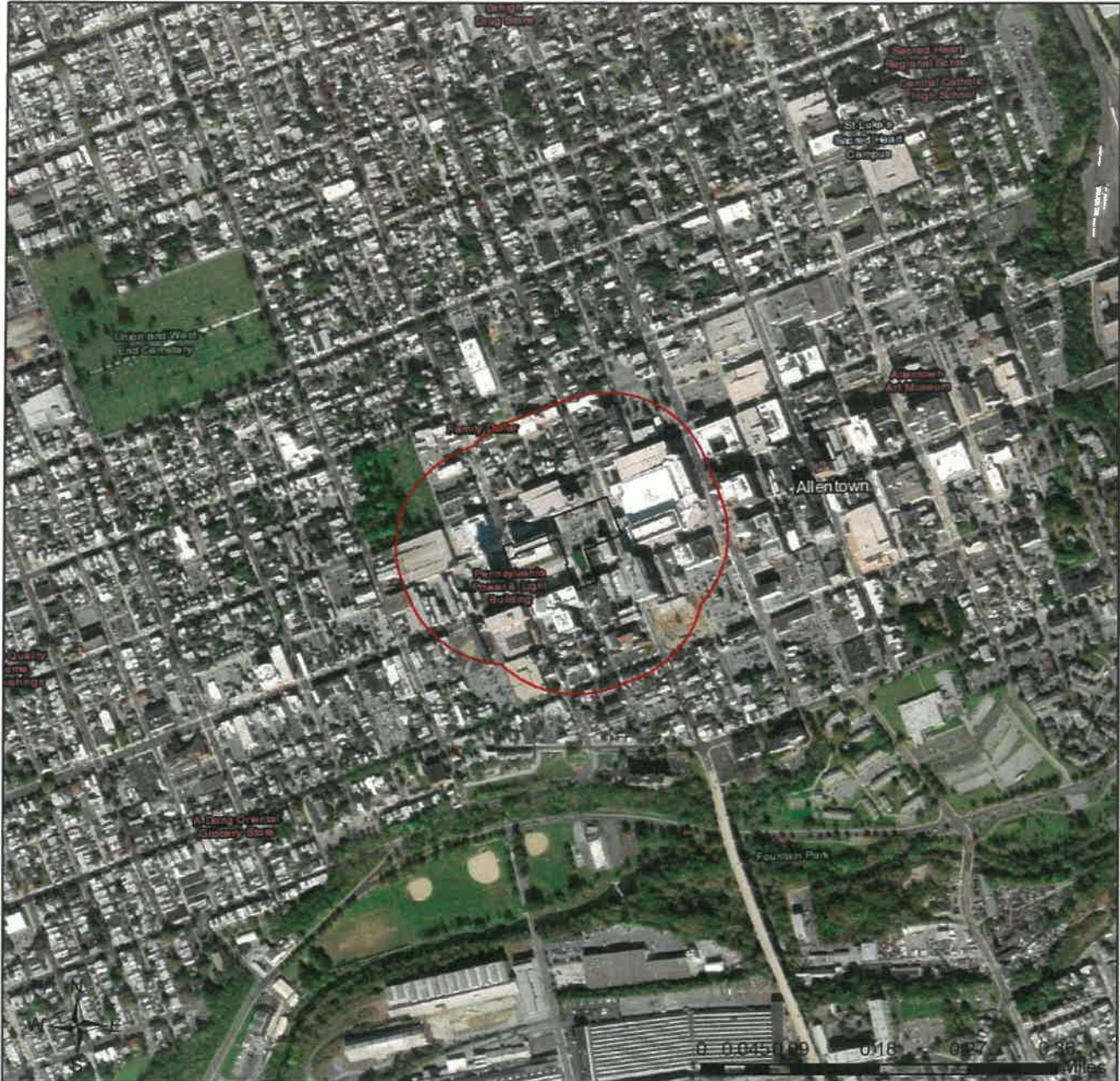
Degrees Minutes Seconds: **40° 36' 7.5799" N, 75° 28' 28.2235" W**

## 2. SEARCH RESULTS

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

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

## Da Vinci Science Center

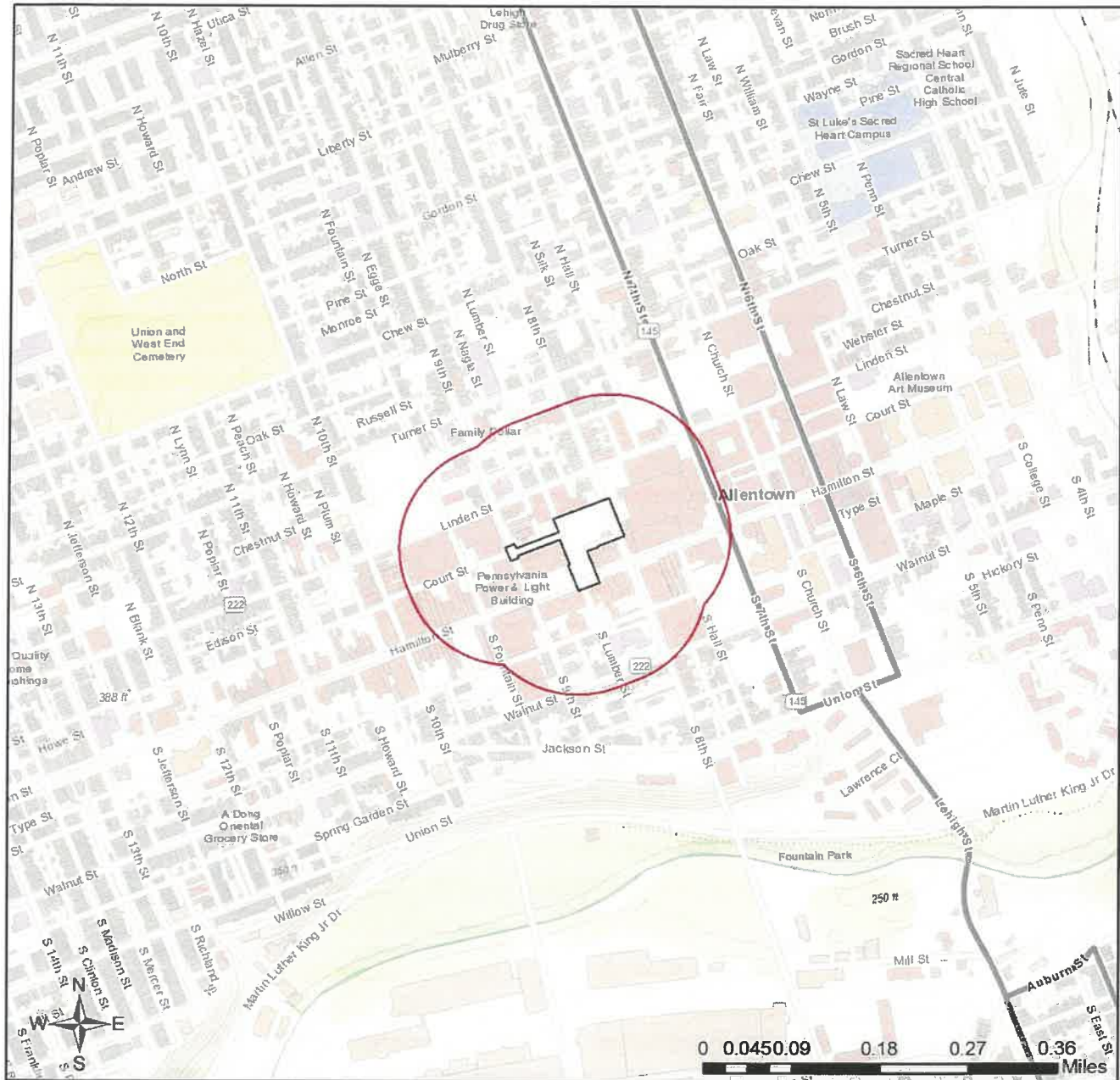


- Project Boundary
- Buffered Project Boundary



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

### Da Vinci Science 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:

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

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

Scientific Name	Common Name	Current Status
Falco peregrinus	Peregrine Falcon	Threatened

#### PA Department of Conservation and Natural Resources

##### RESPONSE:

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

#### PA Fish and Boat Commission

##### RESPONSE:

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

#### U.S. Fish and Wildlife Service

##### RESPONSE:

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

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

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

## WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload\* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). 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 (but not USFWS).

\*If information was requested by USFWS, applicants must email, or mail, project information to [IR1\\_ESPenn@fws.gov](mailto:IR1_ESPenn@fws.gov) to initiate a review. USFWS will not accept uploaded project materials.

### 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](http://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](mailto: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](mailto: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](mailto: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](mailto:RA-PGC_PNDI@pa.gov)  
NO Faxes Please

## 7. PROJECT CONTACT INFORMATION

Name: Cody Callahan  
Company/Business Name: Barry Isett & Associates, Inc.  
Address: 85 S Route 100  
City, State, Zip: Allentown, PA, 18106  
Phone: ( 610 ) 398-0904 Fax: (          )  
Email: ccallahan@barryisett.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.

  
\_\_\_\_\_  
applicant/project proponent signature

6/21/21  
\_\_\_\_\_  
date



2001 Elmerton Avenue  
Harrisburg, PA 17110-9797

Wildlife Habitat Management  
(717) 787-6818

July 23, 2021

Luke Alexy  
Barry Isett & Associates  
85 S Route 100  
Allentown, PA 18106  
lalex@barryisett.com

Project Search ID: PNDI-722849  
PNDI Receipt File: *project\_receipt\_da\_vinci\_science\_center\_722849\_FINAL\_1.pdf*  
Re: Da Vinci Science Center  
Allentown, Lehigh County, Pennsylvania

Dear Mr. Alexy,

Thank you for submitting the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt *project\_receipt\_da\_vinci\_science\_center\_722849\_FINAL\_1.pdf* for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

#### **No Impact Anticipated – PNDI Species**

PNDI records indicate species or resources of concern are located within the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no further PNDI coordination with the PGC will be necessary for this project at this time.

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

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

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

Sincerely,

*Matthew Caccese*

Matthew J. Caccese  
Division of Environmental Planning & Habitat Protection  
Bureau of Wildlife Habitat Management  
Phone: 717-787-4250, Extension 73615  
Fax: 717-787-6957  
E-mail: [mcaccese@pa.gov](mailto:mcaccese@pa.gov)

A PNHP Partner



Pennsylvania Natural Heritage Program

## **SECTION H: ALTERNATIVES ANALYSIS**

FOR

### **Da Vinci Discovery Center – 18 North 8<sup>th</sup> Street**

City of Allentown, Lehigh County, Pennsylvania

The project involves the construction of an approximate 80,000-sf (3-story) science museum, along with associated site improvements. A copy of the utilities plan is attached for reference. The anticipated peak flow for this project is 8,967 GPD (23 DEP EDUs or 38 City of Allentown EDUs).

The project site is located within an area that is served by the municipal sewage system as the “ultimate method” of sewage disposal. Therefore, this project proposes a single sewer tap-in directly to the existing sanitary sewer in North 8<sup>th</sup> Street (depicted on the utility plan). The City of Allentown’s collection system conveys to the Jordan Creek Interceptor. Ultimately, sewage will be treated at the Kline’s Island Wastewater Treatment Plant (NPDES #0026000), which is operated by Lehigh County Authority (LCA). The project will also be served by public water.

Adjoining properties to the north, east and west also utilize connections to the municipal sewage system as the “ultimate method” of sewage disposal, serving the adjoining properties longer than 5 years.

Onlot sewage disposal for a project of this nature is impractical and the construction of an onsite wastewater treatment plan is neither practical nor cost-effective given the fact that the municipal sewer systems and WWTP already exist. Further, disposal to the municipal sewer is consistent with the City of Allentown’s Act 537 Official Sewage Facilities Plan for this area.

Da Vinci Science City, LLC will be responsible for the operation and maintenance of the building’s sewers/utility connections up to the City of Allentown’s right-of-way.